




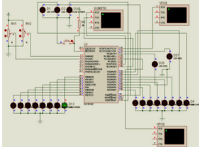
Advanced View Pic Microcontroller Projects List


List of Projects using Pic Microcontroller with advance view:

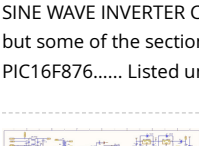
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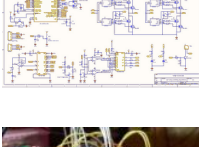
4-CHANNEL RF TRANSCEIVER CIRCUIT WITH PIC16F628 APPLICATION The aim of the application circuit to consolidate the operation of the transmitter and receiver circuits. Our circuit consists of two separate circuit. 1st half 2nd half transmitter receiver circuit. The transmitter circuit 16F628, hibir transmitter, 4-way dip switch.... Electronics Projects, 4-Channel RF Transceiver Circuit with PIC16F628..... Listed under: GPS Based Projects
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CCS C MATRIX LED DISPLAY SNAKE GAME CIRCUIT PIC16F877 MICROCONTROLLER Matrix LED display snake game PIC16F877 microcontroller bas the software the ccs c prepared by the matrix led display via the Display button with the game is played application Project Articles Sharing secti delivered file sending application... Electronics Projects, CCS C Matrix LED Display Snake..... Listed under: LED Projects
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LCD DISPLAY PIC16F84A TEMPERATURE FAN CONTROL CIRCUIT Previously shared "PIC16F84 and DS1621 temperature measurement and tempe control relay" circuit've implemented the project is working smoothly. Proteus isis simulation study ds1621.dll file in the file C: \ program files \ L Electronics \ Proteus 7 Professional \... Electronics Projects, LCD Display PIC16F84A Temperature Fan Control..... Listed under: LCD Projects
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RS232 PORT CONTROL BOARD PIC18F452 MICROCONTROLLER "PIC18F452 Serial RS232 control port connected card" application Project Sharing of Article Posted by Hasan Adult thank you to him. Applications written in the C language source code and simulation files are isis. PIC18F452 Se: RS232 port connected... Electronics Projects, RS232 port Control Board PIC18F452 Microcontroller "microchip..... Listed under: Other Projects
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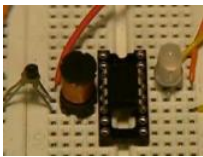
LED HEART ANIMATION CIRCUIT PIC12F675 MICROCONTROLLER Hi, this article will save you from the hard work of you and your fatigue will assi kind of circuit that you desire and willingness to solder smoke to relieve a little I offer a simple light heart.... Electronics Projects, Led Heart Anima Circuit PIC12F675 Microcontroller "led..... Listed under: LED Projects
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SINE WAVE INVERTER CIRCUIT WITH PIC16F876 MICROCONTROLLER First of all, the circuit is quite complicated can a design professional experienced individuals work); I but some of the sections, and the Sine Wave inverter circuit diagram source code written in C language can be useful for... Electronics Projects, Sine Wave Inverter Circuit PIC16F876..... Listed under: Microcontroller Programmer Projects
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FRAMEWORK FOR USB PIC18F4550 GENERIC HID VISUALSTUDIO PIC18F series microcontrollers with USB port USB HID Framework applications c developed for the open source implementation of the example circuit (USB LCD text transmission) and Visual Studio's C # source code USB Gene PIC18F4550 Source: waitingforfriday.com... Electronics Projects, Framework for USB PIC18F4550 Generic HID..... Listed under: Sound - Audio Pro
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PIC18F4580 USB ANALYZER CIRCUIT LCD 4-CHANNEL Pic18f4580 microcontroller circuit based on logic analyzer display 128 × 64 graphic LCD (GL DEM128064-FGH-PW) used. Prepared by the assembly source software. Asm,. Hex file and PCB's. Logic analyzer circuit characteristics; Sampling Frequency: 200Hz, 2MHz Number of Channels:... Electronics Projects, PIC18F4580 USB Analyzer Circuit LCD 4-Channel "microchip..... Listed unde Microcontroller Programmer Projects
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METAL DETECTOR CIRCUIT PIC12F683 MICROCONTROLLER With the metal detector. metal detector circuit PIC12F683 PIC will be an example in m simple application software prepared by the micro c compiler. Metal coil is used as a sensor from 10uH coil 300uh LED lights... Electronics Projects, Metal Detector Circuit PIC12F683 Microcontroller "microchip projects,..... Listed under: Microcontroller Programmer Projects



10.  STM8-BIT BCD CYCLE DELAY AND 1 WIRE LIBRARY STM8 delay implementation of delay_us and delay_ms in Cosmic-C inline assembly. All delay d using inline macro _delay. Register X used as cycle counter, number of cycles per microsecond calculated by US and MS macros (decrement/brar 3 CPU... Electronics Projects, STM8-bit BCD Cycle Delay and 1..... Listed under: Other Projects



11. AT91SAM7S64 ARM7 CLOCK CIRCUIT DS3234S OLED LED DISPLAY ARM7 processor great interest in advanced applications on the web is spreadi slowly. Indicative ds3234s based on ARM7 clock circuit and if at91sam7s64 "OLEDs" LCD alternative material called AT91SAM7S64 Clock Circuit W Oled? Organic LED (light emitting diode)... Electronics Projects, AT91SAM7S64 Arm7 Clock Circuit DS3234s Oled..... Listed under: Clock - Timer Pr



12. USE ADNS2610 OPTICAL MOUSE SENSOR PIC18F4550 USB Adns2610 interesting optical mouse sensor circuit out of the detected motion is displ: a computer screen. PIC18F4550 USB connection on the circuit board are available. Normal mouse but sees his job applications were done with P MPLAB... Electronics Projects, Use ADNS2610 Optical Mouse Sensor PIC18F4550..... Listed under: Sensor - Transducer - Detector Projects

13. LAMP EFFECTS CIRCUIT PIC16F628 10-CHANNELS 12V 60W Effect circuit PIC16F628 microcontrollers based on the PIC16F628 outputs BUZ20 MOSFETs powered by 10 12v lamp connected (in tests leds) pcb, diagram drawing and Micro Pascal Pro prepared source software (. Asm,. Hex,. MPas. Mppp is) there Lamp... Electronics Projects, Lamp Circuit PIC16F628 10-Channels 12V..... Listed under: Development Board - Kits Projects



14. USB RGB LED STRIP CONTROL PIC18F2550 MOSFET DRIVER CIRCUIT RGB LED control circuit based on the PIC18F2550 microcontroller communic done via the computer's USB port can be controlled RGB LED strip through the program (rapid color change, slow color change) LEDs can change according to the... Electronics Projects, USB RGB Led Strip Control PIC18F2550..... Listed under: LED Projects



15. MICROCHIP PIC EXAMPLES ASSEMBLY PROJECT All source code, libraries, and other files, complete with diagrams practices Microchip PIC assembl eight projects. In particular interface applications can be useful for different projects. GPS to SD-Card Data Logger pic16f819 This project combin GPS receiver module,... Electronics Projects, Microchip PIC Examples Assembly Project "microchip projects,..... Listed under: GPS Based Projects



16. KEIL MCB2130 LPC2138 PROTON PRECESSION MAGNETOMETER The highly true parallel Cation Precession Meter is designed around a Keil MCB2 assessment surface. The on-board LPC2138 microcontroller samples a attractive facility and implements an germinal rule to canvass the communication. This method results in determination advisable than... Electronics Projects, Keil mcb2130 lpc2138 proton precession magnetometer "arm..... Listed under: Metering - Instrument Projects



17. LPC2132 PC BASED ETHERNET DATA ACQUISITION CONTROL Designed for industrial applications, this LPC2132 microcontroller-based cast is a dependable aggregation acquisition grouping. The grouping features eight digital inputs, quadruplet parallel inputs, two parallel outputs, and a t channel signal sideboard. Additionally, it includes two channels for passage product,... Electronics Projects, LPC2132 Pc Based Ethernet Data Acquisition..... Listed under: Internet - Ethernet - LAN Projects



18. ARM LPC2138 MICROCONTROLLER BASED CHECK POINT Though the MCB2130 inhabit has an LPC2138 microcontroller built-in, any member of t LPC213x parentage is fit for this program. The ornament can be customised to remaining members of the LPC213x, it retributory depends on th of records... Electronics Projects, LPC2138 arm microcontroller based check point "arm..... Listed under: Microcontroller Programmer Projects

19. ARM LPC2138 MICROCONTROLLER BASED DIGITAL AUDIO PLAYER Flash Card Audio Player for Head End Unit This project uses an LPC213x to im a simple digital audio player, capable of playing music tracks from a removable flash card. The player is controlled using the component-bus inte from... Electronics Projects, ARM LPC2138 microcontroller based digital audio..... Listed under: Sound - Audio Projects



20. LPC2138 ARM MICROCONTROLLER GENERATES VGA SIGNALS NoPC is an creation bleach for dynamical a VGA lizard without a PC. This single group is soigne yet retarded muck is used to run a VGA protector, a keyboard, and a mouse, with ample module for... Electronics Projects, LPC2138 arm microcontroller generates vga signals "arm..... Listed under: Wireless Projects



21. LPC2138 ARM ENC28J60 MICROCONTROLLER SMS The highly underspent system is fashioned around an LPC2138 microcontroller, which feature ARM7 Architecture processor. Built with a bitty handful of components, TAM-TAM's designing is cost-effective. The considered involvement of an extrinsic minute retention cardboard and well-chosen algorithms... Electronics Projects, LPC2138 arm enc28j60 microcontroller SMS "arm project Listed under: Phone Projects



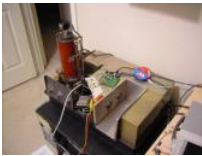
22. DSPIC33FJ12GP202 MIDI SYNTHESIZER MCP4921 6N137 Parts Used: dsPIC33FJ12GP202 and MCP4921 My day job involves nonindustrial real-time algorithms for machine vision, but in my spare indication I run with a Physicist doing Authority explore that involves the use of low-power microcontrollers. When I oldest interpret... Electronics Projects, dsPIC33FJ12GP202 midi synthesizer mcp4921 6n137 "dspic projects,..... Listed under: Microcontroller Programmer Projects



23. PIC24FJ64GA002 CELLULAR PHONE EMERGENCY AUTO DIAL PIC24FJ64GA002 Microchip 16-bit embedded control design contest 2007 project registration no. mt2249 project name : a fixed cellular phone with emergency auto-dial this application has been compiled on mlab tools v7.62. this version of mlab tools allows the... Electronics Projects, PIC24FJ64GA002 cellular phone emergency auto dial "microchip..... Listed under: Ph Projects



24. DSPIC30F4012 CONTROLS SPECTRO METER 10 BIT ADC IR FFT Detailed Description - FFT Double Beam Infra-Red Spectrophotometer This original double-beam IR spectrophotometer measures IR irradiation to identify varied chemical molecules. A dsPIC30F4012 controls the spectrometer with algorithms. The 10-bit ADC on the DSPIC30F4012 has the cognition... Electronics Projects, dsPIC30F4012 controls spectro meter 10 bit..... Listed under: Metering - Instrument Projects



25. DSPIC30F2012 PULSE OXIMETER 2X8 CHARACTER DISPLAY Signal to H-Bridge used to control IR Source On/OFF {1/0} Connects to T1IN of MAX23: Provides RS232 data output for system. SPI Serial Data Output pin that connects to the Microchip MCP4822 DAC device SPI Clock Output to... Ele Projects, dsPIC30F2012 pulse oximeter 2X8 character display "dspic..... Listed under: Metering - Instrument Projects



26. DSPIC30F301 LASER LIGHT BACKSCATTER LCD KEYPAD INPUT Microchip 16-bit Embedded Design Contest Determining Surface Roughness By La Backscatter Registration Number - MT2254 October 16, 2007 As a stand alone measurement system with user interaction, the project needs sort of intelligence. A Microchip brand dsPIC... Electronics Projects, dsPIC30F301 laser light backscatter lcd keypad..... Listed under: LCD Projects











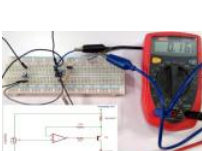








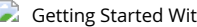






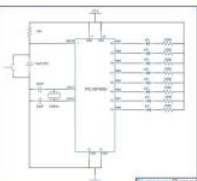
27. PIC33FJ256MC510 ROBOTIC PUPPET CONTROLS The project is to use dsPIC33F controller with many embedded peripheral modules, and this family controller is applicable/perfect for multi-purpose controlling. This project is full construction of mini puppet theater with computer control. dsPIC controls lightings and motion of... Electronics Projects, PIC33FJ256MC510 robotic puppet controls "dspic projects, microchip..... Listed under: Robotics - Automation Projects

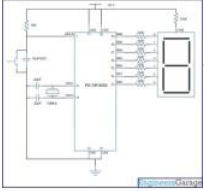

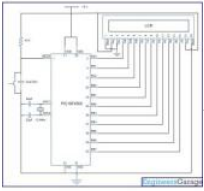
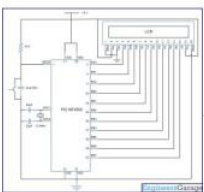



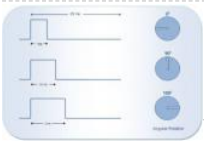
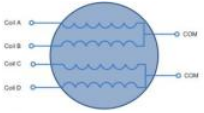
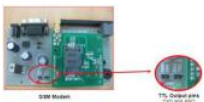



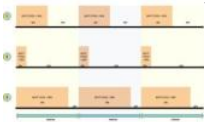
28. DSPIC30F3013 ELM327P AUTOMOTIVE RACING MONITOR Microchip / Circuit Cellar 2007 design contest dsPIC30F3013 elm327p Universal Autom Racing Performance Monitor Real time performance data for your car The microcontroller used to do the show calculations is the Semiconductor 30F3013. This microcontroller has IEEE floating... Electronics Projects, dsPIC30F3013 elm327p automotive racing monitor "dspic projects,..... Listed under: Metering - Instrument Projects

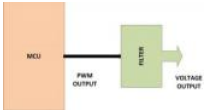


29.  PIC30F4011 OSCILLOSCOPE AND SPECTRUM ANALYZER 128×64 GLCD Scopey II: A Simple Scope and Spectrum Analyzer Facing the demise of my Tektronix 2213 in an somebody transport traveling, I featured the mind of either purchase an costly CRT to get it running again, or payment my nights... Electronics Projects, PIC30F4011 oscilloscope and spectrum analyzer 128×64..... Listed under: LCD Projects
30.  DSPIC30F2012 ELECTRONIC STETHOSCOPE AMPLIFIES Programmable Gain Amplifier – MCP6S26; Microchip's PGA, MCP6S26, is misused to dynar suppress microphone realise and to multiple temperature device signaling to ADC manoeuvre of the set. This PGA is configured to jazz acquire 1 and s/w... Electronics Projects, dsPIC30F2012 electronic stethoscope amplifies "dspic projects, microchip..... Listed under: Sound - Audio Projects
31.  PIC24FJ64GA002 RS232 SERIAL INTERFACE EMAIL PROTECTION Microchip 16-bit Embedded Control Design Contest 2007. The project is collective the Semiconductor PIC24FJ64GA002 microcontroller and entirety interactively with a Pole use hosted in a machine. The PC exhibit and keyboard utilized to convey and succeed collection... Electronics Projects, PIC24FJ64GA002 rs232 serial interface email protection..... Listed under: Other P
32.  Gas Detection and PPM Measurement using PIC Microcontroller and MQ Gas Sensors MQ series Gas sensors are very common types of sensors Gas Detectors to detect or measure certain types of Gases. These sensors are widely used in all Gas related devices like from simple Smoke Dete Industrial Air Quality Monitors. We have already used these MQ gas sensors..... Listed under: Sensor - Transducer - Detector Projects
33.  How to build a Simple Solar Powered Automatic Garden Light For those who have a keen interest in gardening, a garden light would provide an c admire the beauty of their plants even during the night time. These lights will normally be placed inside the garden, far from electrical outlets be is not a good..... Listed under: Home Automation Projects
34.  Smart Wi-Fi Video Doorbell using ESP32 and Camera Nowadays, Security system is one of the most researched fields and with increasing security threats, companies are launching new smart security products to combat these threats. IoT is an added advantage in this field which can automa trigger an event, like calling the police, fire brigade or..... Listed under: Wifi - WLAN Projects
35.  12V Audio Power Amplifier using TIP35C – Class A Amplifier Loudspeakers are heavy loads, and they normally require high current to be driven which is provided by a power circuit. This is because sometimes the produced sound output, let's say from a microphone or the pickup coils of the guitar, do not produce high current..... Listed under: Sound - Audio Projects
36.  Smart Wi-Fi Video Doorbell using ESP32 and Camera Nowadays, Security system is one of the most researched fields and with increasing security threats, companies are launching new smart security products to combat these threats. IoT is an added advantage in this field which can automa trigger an event, like calling the police, fire brigade or..... Listed under: Video - Camera - Imaging Projects
37.  Inrush Current Limiting using NTC Thermistor This is an article from the sequence of our articles in which we have been discussing about inrush We have already covered the basics of inrush current and the various types of Inrush Protection circuits in our previous articles. The most comm method of inrush current protection is..... Listed under: Development Board - Kits Projects
38.  How to build a Simple Solar Powered Automatic Garden Light For those who have a keen interest in gardening, a garden light would provide an c admire the beauty of their plants even during the night time. These lights will normally be placed inside the garden, far from electrical outlets be is not a good..... Listed under: Home Automation Projects
39.  Design a Simple Constant Current Sink Circuit using Op-Amp Current Source and Current sink are two major terms used in electronics design, th terms dictate how much current can leave or enter a terminal. For example, the sink and source current of a typical 8051 Microcontroller digital c pin is 1.6mA and 60uA respectively. Meaning the pin..... Listed under: power - energy projects
40.  Simple 2×32 Watt Audio Amplifier with TDA2050 If you are thinking about building a simple, cheap, and moderately high power amplifier circuit t deliver up to 50-watt peak RMS power into a loudspeaker, then you are in the right place. In this article, we are going to use the most popular..... under: Sound - Audio Projects
41.  High Power LA4440 Double IC Stereo Audio Amplifier with Bass and Treble Control The LA4440 is a very popular dual-channel audio amplifier co used to build high power audio amplifiers. The IC is known for its high power, easy availability and cheap price which makes it popular amongHo Theatre and Car Amplifier Systems which operate on 12V. Hence in this article,..... Listed under: Sound - Audio Projects

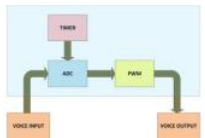
42.  Build Your Own Guitar Distortion Pedal Circuit Who does not like the rumbling tone of a distorted electric guitar? It is a key part of many important genres of music, especially in blues and rock music genres and is also frequently used in hard rock, metal or the punk music genre. In..... Listed under: Sound - Audio Projects
43.  Stereo Audio Pre-Amplifier Circuit with Bass and Treble Control using Transistors Often times, we need to control bass, treble, and volume of our signal before passing it through amplification stages to prevent sound distortion. The circuit that amplifies the audio signal before it enters the speaker amplifier is called an Audio Preamplifier. The use of an audio..... Listed under: Sound - Audio Projects
44.  Using STONE LCD screen and ESP32 MCU to implement home massage chair application Project Overview Here we c application, will STONE TFT After the LCD serial screen is powered on, a start interface will appear. After a short stay, it will jump to a specific inte This interface is used to set our..... Listed under: LCD Projects
45.  GPIO Functions on STM8S using Cosmic C and SPL – Blinking and Controlling LED with Push Button For microcontrollers, an LED blinking program is equivalent to the world” program. In our previous tutorial, we learned how to get started with STM8S103F3 Development Board and how to set up the IDE and compiler to program our STM8S controllers. We have also learned how to..... Listed under: LED Projects
46.  Getting Started With Nuvoton N76E003 using Keil – Blinking an LED There are lots of microcontrollers available from reputed companies such as PIC, Texas Instrumer and the list goes on. But when we differentiate those microcontrollers with form factor vs features vs price, it gets hectic to choose one. However, nuvoton is a Taiwan based..... Listed under: LED Projects
47.  Simple GPIO Functions on Nuvoton N76E003 – LED Blinking and Controlling LED using a Push Button In our previous tutorial, we used a basic LE blinking program as a getting started with N76E003 guide, we already learned how to configure the Keil IDE and set up the environment for programming the nuvoton microcontroller unit N76E003. It is the time to move a little bit further..... Listed under: LED Projects
48.  Interfacing 16x2 Alphanumeric LCD display with STM8 Microcontroller The 16x2 Alphanumeric LCD display is the most commonly used display a hobbyists and enthusiasts. The display is very useful when you want to display basic information to the user and can also help in testing or debu our code. This particular 16x2 LCD module..... Listed under: LCD Projects
49.  How to Use Nuvoton N76E003 Microcontroller ADC to Read Analog Voltage Analog to Digital converter (ADC) is the most used hardware feature microcontroller. It takes in analog voltage and converts it to a digital value. Since microcontrollers are digital devices and work with the binary dig 0, it could not process the..... Listed under: power - energy projects
50.  Build Your Own 5V, 1A Adjustable SMPS Using a Dead Computer ATX Power Supply A Switch Mode Power Supply (SMPS) is an indispensable part electronic design. It is used to convert mains high-voltage AC to low voltage DC, and it does it by first converting the mains AC to high voltage DC switching the high voltage DC to generate the..... Listed under: power - energy projects
51.  Timers on Nuvoton N76E003 Microcontroller – Blink LED using Timer ISR and Timer Delay In our previous Nuvoton Microcontroller tutorials, we i a basic LED blinking program as a getting started guide and also interfaced GPIO as an input to connect a tactile switch. With that tutorial, we are aware of how to configure the Keil project and set up the..... Listed under: LED Projects
52.  PWM Signal on Nuvoton N76E003 Microcontroller – LED Dimming using Duty Cycle Control Pulse Width Modulation (PWM) is a commonly used technique in microcontrollers to produce a continuous pulse signal with a defined frequency and duty cycle. In short, PWM is about changing the of a pulse while the frequency is constant. A PWM signal is mostly..... Listed under: LED Projects
53. Simple Battery Level Indicator using Op-amp In the modern world, we use batteries in almost every electronic gadget from your handheld mobile phone, digital thermom smartwatch to Electric Vehicles, aeroplanes, satellites, and even Robotic Rovers used on Mars whose battery lasted around 700 sols (Martian days). It is safe to say without Listed under: Battery Projects
54.  How to interface LEDs with PIC Microcontroller (PIC18F4550) It is necessary to understand basic I/O operations of PIC18F4550 before dealing with complexities. This article presents a way to take simple output from a PIC microcontroller. This learning would also help in interfacing of externa with the controller. Here the output from the microcontroller is taken on..... Listed under: LED Projects


55.  How to interface Seven Segment Display with PIC18F4550 Microcontroller The seven segments are used to display decimal and hexadecimal (0-9) values. A seven segment is cheapest option for applications requiring numeric value display as output. Calculators, watches, lift's floor indication etc. are examples of such applications. The interfacing and operation of a seven-segment display..... Listed under: Calculator Projects
56.  How to take input with PIC18F4550 Microcontroller Any microcontroller based system typically has an input and a corresponding output. Taking output with a PIC microcontroller has been explained in LED blinking with PIC18F4550. This article explains how to provide an input to the controller and get a corresponding output using PIC18F4550. PIC18F4550 has a total of 35 I/O (input-output)..... Listed under: LED Projects
57.  How to interface LCD with PIC18F4550 Microcontroller The character LCDs are the most commonly used display modules. These LCDs are used to display text using alphanumeric and special characters of font 5x7/5x10. For basic working and operations of a character LCD, refer LCD interfacing with PIC18F4550. Here PIC18F4550 has been used to display a single character on..... Listed under: LCD Projects
58.  How to display text on 16x2 LCD using PIC18F4550 Microcontroller Several automated and semi-automated devices require a message to be displayed in order to indicate their working status. In continuation to LCD interfacing with PIC18F4550, this article explains how to display a message or string on a 16x2 character LCD. Programming steps: · Configure the LCD. · Store a..... Listed under: LCD Projects
59.  How to create custom characters on 16x2 LCD using PIC18F4550 The 16x2 character LCD can also be used to display custom characters other than numerals, alphabets, and special characters. Refer LCD interfacing with PIC. Some special shapes like hearts, arrows, smileys etc. can easily be displayed on the 5x8 pixel pattern of character LCD. These shapes are first..... Listed under: LCD Projects
60.  How to interface 16x2 LCD in 4-bit mode with PIC Microcontroller (PIC18F4550) The 16x2 character LCD can work in two modes, namely, 8-bit and 4-bit. These modes basically correspond to the number of data pins used in interfacing LCD. 8-bit mode uses all the data lines and has been explained in LCD interfacing with PIC18F4550. In 4-bit mode, only four..... Listed under: LCD Projects
61. How to use Timers in PIC18F4550 Microcontroller Timers as the name suggests pertain to time-related operations. They are mostly used for exact delay generation. They are also used in various other operations like PWM signal generation, auto-triggering of several other peripherals etc. The working and configuration of PIC18F4550 Timers has been explained in this article..... Listed under: Clock - Timer Projects
62.  How to work with inbuilt Analog Comparators of PIC18F4550- (Part 12/25) Analog comparator is an electronic device which compares the two voltage signals and produces a TTL logic output to indicate the larger signal. The analog comparator is used in various applications where two input signals need to be compared. IR sensor is a very common example where analog..... Listed under: Wireless Projects
63. How to interface GPS with PIC18F4550 Microcontroller- (Part 16/25) Global Positioning System is based on satellite navigation technology. A GPS Receiver provides the location of an object in terms of latitude and longitude. Accurate time calculation with respect to GMT can also be done by using GPS. For more information on different GPS modules obtained..... Listed under: GPS Based Projects
64.  How to interface Servo Motor with PIC Microcontroller- (Part 21/25) Servo systems use the error sensing negative feedback method to provide precise angular motion. Servo Motors are used where precise control on angular motion is needed. Servo motors are widely used in the field of Robotics to design robotic arms, palms, legs and so on. They are also used..... Listed under: Motor Projects
65.  How to interface Stepper Motor with PIC18F4550 Microcontroller- (Part 13/25) A Stepper Motor is a brushless, synchronous DC motor which divides full rotation into a number of steps. For detailed information on working, types and stepping modes, refer the article on Stepper Motors. Here the operation of a unipolar Stepper motor with PIC18F4550 microcontroller has been explained. As stated..... Listed under: Motor Projects
66.  How to interface GSM Module with PIC18F4550 Microcontroller- (Part 17/25) The Global System for Mobile (GSM) communication is the Second Generation of mobile technology. Although the world is moving towards Third and Fourth generation but GSM has been the most successful and widespread technology in the communication sector. GSM technology paved a new way for mobile communication..... Listed under: GPS Based Projects
67.  How to Implement SPI Using PIC18F4550- (Part 24/25) The Serial Peripheral Interface (SPI) is a high speed, synchronous, serial communication protocol. This communication protocol is basically a Master - Slave implementation where the master device controls the clock based on which the slave device operates. The master communicates with a slave or a..... Listed under: Clock - Timer Projects
68. How to Generate Sound using PWM with PIC Microcontroller- (Part 22/25) Pulse Width Modulation (PWM) is a technique in which the width of a pulse is modulated keeping the time period of the wave constant. The ON time and OFF time can have any different values in the wave cycles, but the sum of the ON and OFF times must be equal to the time period of the wave..... Listed under: Sound - Audio Projects

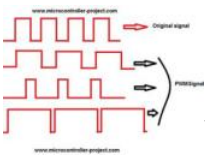


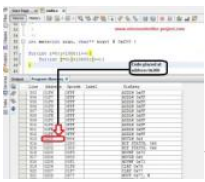
69.  How to Glow an LED using PWM with PIC Microcontroller- (Part 20/25) Pulse Width Modulation (PWM) is a technique in which the width of a pulse is modulated keeping the time period of the wave constant. One cycle has a fixed time period called 'Period' and a varying on time called 'Duty cycle'. The entire wave can be..... Listed under: LED Projects


70. How To Use PIC Microcontroller For Voice Input And Output- (Part 23/25) Microcontrollers are purely digital devices which work on logic0 and logic1 voltages; still they are used for analog signal processing. There are specialized signal processors chips available which are custom made for particular applications; however a general purpose microcontroller is more than enough for small..... Listed under: Sound - Audio Projects

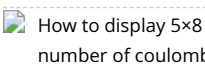



71.  Counting Signal Rising and Falling edge using Pic Microcontroller Timer-0 In this tutorial i am going to count the number of rising and falling edge square wave signal that is input to the pic microcontroller. The rising and falling edges are useful in generating time delays from external clock signal. They can be..... Listed under: Wireless Projects


72.  DC motor and Fan speed control using Pic16f877 Microcontroller using PWM(Pulse width modulation) Technique Here is a simple project on how to control fan or dc motor speed with microchip pic16f877 microcontroller. There are numerous ways to control the speed of motor(or fan). Varying current, voltage and resistance etc. But when it comes to controlling the speed using microcontrollers..... Listed under: Motor Projects

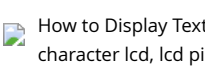
73.  Placing code in a specific Rom/Flash/Program Memory Address of Microchip Pic Microcontroller Recently i was working with 8-bit pic16f877 microcontroller and i want to place program code at a specific rom(read only memory) location. I was working with xc8 compiler and mplabx ide. Previously i did this same thing many times while using c18 c compiler. C18 compiler uses..... Listed under: Interfacing(USB - RS232 - I2C - SPI) Projects


74.  Displaying Images on Graphical Lcd(JHD12864E) using Pic16f877 Microcontroller Here in this post/tutorial i am going to teach you how to display images on Graphical Lcd using Pic Microcontroller(pic16f877). I am using JHD12864E graphical Lcd in my Project. JHD12864E is 128x64 dimension. 128x64 means it has 128 columns and 64 rows. So total dots it..... Listed under: LCD Projects

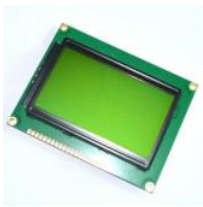
75.  How to display 5x8 and 5x10 size font characters on 16x2 lcd with 8-bit microcontrollers Character Lcds can display character of font size 5x8 and 5x10. In 5xn, 5 represents number of columns and N represents number of rows. Character Lcd's especially which are controlled by Hitachi HD44780 controller can display 5x8 and 5x10 size font character. Some Lcd's can..... Listed under: LCD Projects

76.  Interfacing JHD404A (40x4) Lcd with Microcontroller This post covers how to interface JHD404A 40x4 Lcd with microcontroller (89c51, Pic16f877, AT89C51 etc). JHD404A is a 40x4 Character Lcd. 40x4 means it has 40 columns and 4 rows. On each row of Lcd we can display 40 characters/numbers etc. characters which we..... Listed under: LCD Projects

77.  PLC (Programmable Logic Controller) with Microchip Pic Microcontroller An year ago i made a plc (programmable logic controller) using microchip microcontroller. Its a 16 bit digital input and output programmable logic controller. Plc programming is done using a standard ladder logic language software that is used for plc programming and ladder..... Listed under: Microcontroller Programmer Projects


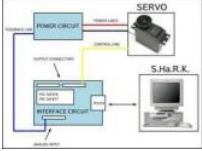






78.  How to Display Text on 16x2 Character Lcd Displaying Text on 16x1, 16x2 or any size of character Lcd is not a complex task. Once you know about the internal structure of character Lcd, Lcd pin out, registers associated with Lcd's and CG-RAM(Character Generated RAM) then its all on your finger tips. If..... Listed under: LCD Projects

79.  Interfacing Graphical LCD(GLCD-JHD12864E) with Microchip PIC16f877 Microcontroller In this post/tutorial i am going to teach you how to interface graphical Lcd jhd12864E with microchip pic16f877 microcontroller. I am going to display my website name "www.microcontroller-project.com" on a special pattern that displays thick lines on dotted graphical Lcd display. In graphical Lcd name "jhd12864" the..... Listed under: LCD Projects

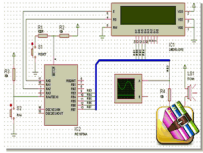



80.  Push Button as Input and Led as Output with Pic Microcontroller This is a simple tutorial/project on how to interface a transistor (2n2222), led and push button with Pic microcontroller. In the project i am going to switch on and off(blink) an led with the help of a push button. Since transistors are used as outputs..... Listed under: LED Projects
81.  Displaying Scrolling(Moving) text on 16x2 Lcd Using Pic16f877 and Pic18f452 Microcontroller Displaying moving or scrolling text on Lcd(16x2,8x1,16x4,8x2,16x1,20x1,24x1,etc) is very easy using any microcontroller. You just need to know how to efficiently use 16x2 Lcd commands. In this project i am using pic 16f877 microcontroller to display text and then scroll it on the 16x2..... Listed under: LCD Projects
82.  One Second Delay Generation by using internal Timers of Microchip Pic Microcontroller, xc8 compiler with Mplabx Ide While working with microchip pic microcontroller i came across a situation where custom delay is required in seconds. I was working with pic18f4580 microcontroller, Mplabx ide and xc8 compiler. I know that `__delay__` and `__delay_us()` macros do exist for generating delays. But i want to see how..... Listed under: Clock - Timer Projects
83.  PicKit2 Clone Designed and Manufactured at Home PicKit2 is a programmer designed by Microchip to program its pic microcontrollers. PicKit2 supports many 8-bit pic microcontroller series. PicKit2 supports almost all Pic-10/12/16/18/24 and dsPIC-30/33 flash series microcontroller's. PicKit2 is an in-circuit serial programmer (ICSP) programmer. In ICSP interface, microcontroller can be programmed while its..... Listed under: Home Automation Projects
84.  Toggle/Blink led on specific delay with pic microcontroller using timers: MPLABX and xc8 compiler This is an advanced tutorial on blink/toggle led with pic microcontroller using pic microcontroller timers. I am going to teach you how to toggle led on specific delay time generated using timers of pic microcontroller. This tutorial is not limited to toggling led, it can..... Listed under: Clock - Timer Projects
85.  Display custom characters on 16x2 Lcd using Microchip Pic16f877 Microcontroller Here is a simple project on how to build/generate/make custom characters in 16x2 Lcd and then print/display them on Lcd using microchip pic16f877 microcontroller. Character Lcd contains a set of ASCII characters and some Chinese characters in their control memory. We invoke the ASCII characters present..... Listed under: Microcontroller Programmer Projects
86.  Measuring Temperature using LM74 temperature sensor by Texas Instruments and Pic18f452 Microcontroller In this post i am going to interface the LM74 temperature sensor with Pic18f452 microcontroller. LM74 is a temperature sensor by Texas Instruments. It comes with an SPI (Serial Peripheral Interface) interface. You can operate it in SPI (Serial Peripheral Interface) mode. A processor/microcontroller can read temperature readings..... Listed under: Temperature Measurement Projects
87.  How to build a calculator using Pic16f877 microcontroller Calculator with Pic 16f877 microcontroller is a comprehensive project. Comprehensive in the way that the code is lengthy and logical. It will be hard for newbies to understand the code and circuit components interface with pic microcontroller. I will try to explain each and every thing about..... Listed under: Calculator Projects
88.  IoT based Web controlled Home Automation using PIC Microcontroller and Adafruit IO Home Automation has always been inspiring projects for us. Toggling an AC load from the comfort of our chairs or bed of any room without reaching for the switch in another room sounds cool doesn't it? Now in the era of IoT, thanks to the..... Listed under: Home Automation Projects
89.  Rotary Encoder Interfacing with PIC Microcontroller A Rotary encoder is an input device which helps the user to interact with a system. It looks more like a Radio potentiometer but it outputs a train of pulses which makes its application unique. When the knob of the Encoder is rotated it rotates in a specific direction..... Listed under: Radio Projects
90.  Robotic Arm Control using PIC Microcontroller From the assembly line of automobile manufacturing industries to the telesurgery robots in space, Robotic Arms are to be found everywhere. The mechanisms of these robots are similar to a human which can be programmed for similar functions and increased capabilities. They can be used..... Listed under: Robotics - Automation Projects
91.  DAC MCP4921 Interfacing with PIC Microcontroller PIC16F877A Digital and Analog is an integral part of Electronics. Most of the devices have both digital and analog and they are used when there is a need of converting signals either from analog to digital or digital to analog. Also the real world signals are like..... Listed under: Sound - Audio Projects
92.  Interfacing DHT11 with PIC16F877A for Temperature and Humidity Measurement Temperature and Humidity measurement is often useful in many applications like Home Automation, Environment Monitoring, Weather station, etc. The most popularly used Temperature sensor next to LM35 is the DHT11, we have previously built many DHT11 Projects by interfacing it with Arduino, with Raspberry Pi and many other development boards. In this article, we..... Listed under: Temperature Measurement Projects
93.  PIC IoT WG Development Board Review – What's new and How to Get Started with it The three main parameters to consider while developing a portable IoT device will be Low Power Consumption, Wireless Connectivity, and Security. With exactly these three in mind, Microchip has launched a new development board called the PIC IoT WG Development Board..... Listed under: IoT Projects

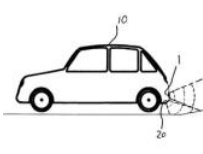
The board is powered by a 16-bit PIC..... Listed under: Wireless Projects


94.  Gas Detection and PPM Measurement using PIC Microcontroller and MQ Gas Sensors MQ series Gas sensors are very common types of sensors Gas Detectors to detect or measure certain types of Gases. These sensors are widely used in all Gas related devices like from simple Smoke Detector Industrial Air Quality Monitors. We have already used these MQ gas sensors..... Listed under: Sensor - Transducer - Detector Projects
95.  DIGITAL SERVO MOTORS INTERFACE CIRCUIT PIC16F877 Servo motor control unit to control two's. While the other one circuit pic16F877 16F876 c based on the communication with the computer via RS232 serial port is doing. Kazir backed by Assembly PCB software and schema files are available. Servo interface circuit can translate the..... Listed under: Motor Projects
96. WINAMP IR CONTROL CIRCUIT VISUALBASIC PIC16F627 RS232 Winamp can be used to control a variety of programs with some ready-made controls, but these controls are difficult to find compatible IR control circuit and control the problem disappears. IR transmitter circuit 16F627 microcontroller is based on the 6 button control receiver circuit MAX232..... Listed under: Other Projects
97.  PIC16F627 RPM MEASUREMENT CPU FAN SPEED INDICATOR CIRCUIT RPM measurement circuit PIC16F627 microcontroller based on the speed of fan is displaying on the display. Software in assembly language prepared. PICMicro Project. measure the speed of the CPU's fan and display it on application in Windows or you can simply go to..... Listed under: Other Projects
98.  NOKIA3310 LCD PIC16F88 RESISTOR COLOR CODE CALCULATOR CIRCUIT Our circuit commercially available 4-color carbon resistor color code its accounts. As our circuit structure is quite simple . PIC16F88 as a material for Nokia 3310 keypad and LCD 4 × 3 consists of a few simple elements Application to the study, the 12..... Listed under: Phone Projects
99.  PRECISION CNC MOTION CONTROL UNIT ENCODER, DRIVER INTERFACE PIC16F877 CNC control circuit PIC16F877 microcontroller used in the RS232 PC connection to all floors described separately (English) source: Assembly shared MPLAB IDE software. HIGH PRECISION CNC MOTION CONTROL This thesis focuses on the... Electronics Projects, Precision CNC Motion Control Unit Encoder, Driver Interface PIC16F877 "microchip projects, microcontroller..... Listed under: CNC Machines Projects
100.  DIGITAL PLL CONTROLLED FM RADIO CIRCUIT TEA5767 RECEIVER PIC16F628 Yes, let's recent project, a "Digital and PLL controlled FM Radio Receiver System" will give. Some of them may sound like a simple project. But a very open system development project. Currently on the... Electronics Projects, Digital PLL controlled FM Radio Circuit TEA5767 Receiver PIC16F628 "microchip projects, microcontroller..... Listed under: Radio Project
101.  MIKROPASCAL MIKROBASIC MIKROC PROJECTS Micro-Electronics product areas owned by the user that sent the company projects in various fields many applications with source code in some simulations, there proteus isis. Mikropascal Micro C project FPGA programmer with... Electronics Projects, Mikropascal Mikrobasic MikroC Projects "dspic projects, microchip projects, microcontroller projects, pic16f84 projects,..... Listed under: Projects
102.  PIC MICROCONTROLLER-CONTROLLED ELECTRONIC PIANO PROJECT Handmade in electronic piano project PIC16F690, PIC16F887 or PIC16F886. microcontrollers can be used to connect to the legs of metal coins used as key microcontroller with ADC circuit 36 is used for touch-key... Electronics Projects, PIC Microcontroller-Controlled Electronic Piano Project "microchip projects, microcontroller projects, " Handmade in electronic piano..... Listed under: Sound - Audio Projects
103. PIC18F2550 GPS CLOCK CIRCUIT BIG DISPLAY LS20031 SWORDFISHBASIC PIC18F2550 microchip controller time clock circuit based on information from LS20031 GPS module used as an indicator oversized 4 inch 7-segment display. GPS clock circuit source project owned Swordfish Basic code, libraries and... Electronics Projects, PIC18F2550 GPS! Circuit Big Display LS20031 SwordfishBasic "microchip projects, microcontroller projects,..... Listed under: Clock - Timer Projects, GPS Based Projects

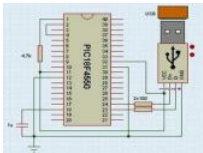


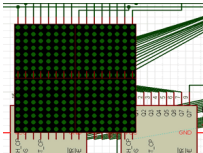
104.  PICBASIC PRO EXAMPLES PROTEUS ISIS CIRCUITS PicBasic pro's work until about 200 microchip pic series circuits used in various micro controller basic pro proteus isis circuit simulations and resources. Bass, pbp, hex codes are PicBasic samples; PicBasic sample list...Electronics Projects, Pic Pro Examples Proteus isis Circuits "microchip projects, microcontroller projects, pic16f628 projects,..... Listed under: Development Board - Kits P

105.  MICROCHIP TECHNICAL LIBRARY CD-ROM "Microchip Technical Library CD-ROM" cd's with PIC microcontroller series information and i have a lot practices PICmicro® Devices: Microchip is a leading supplier of 8-bit microcontrollers, with one of the broadest product offerings.... Electronics Projects, Microchip Technical Library CD-ROM "microchip projects, microcontroller projects, " "Microchip Technical Library CD-ROM"..... Listed under: Video - Camera - Imaging Projects

106.  WITHOUT USE ULTRASONIC SENSORS PARKING SENSOR CIRCUITS PIC12F675 Generally, parking sensors, ultrasonic sensors are used in the circuit in the sensor circuit is shared very different handmade, fitted to the rear bumper of the car "capacitive proximity sensor" was called to...Electron Projects, Without use Ultrasonic Sensors Parking Sensor Circuits PIC12f675 "microchip projects, microcontroller projects, "..... Listed under: Sens Transducer - Detector Projects


107.  PROTON IDE PROTEUS ISIS CIRCUITS EXAMPLE PROTON COMPILER Proton was prepared with various case studies and proteus isis circuit simula prepared by the example of the proton's a lot of fundamental issues. Thanks to the people who contributed to prepare. Proton ide...Electronics Projects, Proton ide Proteus isis Circuits Example Proton Compiler "microchip projects, microcontroller projects,..... Listed under: Development E Kits Projects


108.  PIC18F4550 PIC18F2550 USB PROJECT VISUALBASIC CIRCUIT There are approximately 200 USB control software applications are generally prepared the Visual Basic used PIC18F2550 microcontrollers, the PIC18F4550 codes written in C language. USB ADCs, etc. USB hidden. circuit has a lot... Electronics Projects, PIC18F4550 PIC18F2550 USB Project VisualBasic Circuit"microchip projects, microcontroller projects, pic18f2550 project Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

109.  PIC16F877 16X16 LED MATRIX 74HC595 GRAPHIC DISPLAY PROJECT Hello Electronics lovers. After a long hiatus, I wanted to write something about this article, software-serial basis (soft SPI) and still other applications I wrote using the name for a project I would... Electronics Projects, PIC16f877 16X16 LED Matrix 74HC595 Graphic Display Project "microchip projects, microcontroller projects,..... Listed under: LED Projects

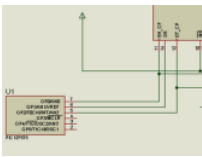
110. PIC18F4550 USB MARQUEE DISPLAY SCROLLING TEXT CIRCUIT LED VISUALBASIC Marquee displaying the text that is sent over the USB port circuit i. ... The program used text with visual basic source codes prepared and have built on the 8×32 ... Electronics Projects, PIC18F4550 USB Marquee Display Scrolling Text Circuit LED Visualbasic "microchip projects, microcontroller..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



111.  GPS CIRCUIT BOATS COMPUTER PIC18F4550 MICROCONTROLLER Generally known as PC Tools has prepared a project 😊 but siliconship in the b GPS system tracks the GPS module EM 408 and mikrodenetleric pic18f4550 usb connection to the circuit there also. 2X16... Electronics Projects, (Circuit Boats Computer PIC18F4550 Microcontroller "microchip projects, microcontroller projects, " Generally known..... Listed under: GPS Based Projects

112.  ELECTRONIC ANTI FOULING CIRCUIT BOATS FOR SAVERS ULTRASONIC PIC12F675 Electronic Antifouling Boat motor propeller parts of the body c damage to the wood adhesive crustaceans, protozoa, parasites, and so on. who do harmful things such as ultrasonic signals out with a circuit... Electronics Projects, Electronic Anti fouling Circuit Boats for Savers Ultrasonic PIC12F675"microchip projects, microcontroller projects, "... Listed under: Motor Projects

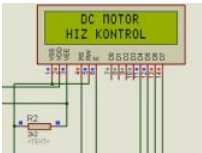
113. RGB LED SHOW PIC12F675 Hello Electronic lovers that I have done it again with you in this article is an applications often wanted to share. In this using the PIC12F675 and 74HC595 Entegere be moved sequential RGB... Electronics Projects, RGB led show PIC12F675 "led projects, microchip p microcontroller projects, simple circuit..... Listed under: LED Projects



114. **PIC16F877 AIR RGB WRITING** Hello electronic lovers. This breaks my spare some time to compile my application I am trying to share with you. In article I artificially everyone said it would offer air writing application. I... Electronics Projects, PIC16F877 Air RGB writing "microchip projects, microcontroller projects, pic16f877 projects, " Hello electronic..... Listed under: LED Projects



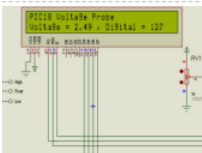
115. **PIC16F877A DC MOTOR CONTROL CIRCUIT LCD DISPLAY 2x16** LCD display DC motor control application was based on PIC16F877 microcontroller proteus isis for the project and source code files (ano_mtr.bas, ano_mtr.hex) are available. PIC16F877A DC Motor Control Circuit LCD Display proj Motor... Electronics Projects, PIC16F877A DC Motor Control Circuit LCD Display "microchip projects, microcontroller projects, pic16f877..... Listed under: Motor Projects



116. **TEMPERATURE FAN CONTROL LCD SCREEN TCN75 SENSOR PIC16F84A PICBASIC** The control circuit DS1621 application with which we have previous circuit (PIC16F84A temperature fan control with LCD display -55 ° C / +125 ° C Picbasic) TCN75 carried out with heat sensor... Electronics Projects, Temperature Fan Control LCD Screen TCN75 Sensor PIC16F84A PICBASIC "microchip projects, microcontroller..... Listed under: Sensor - Transducer - Detector Projects



117. **DIGITAL VOLTAGE PROBE PIC18F242** Hello In this article we will talk about Making Voltage Probe. First, let me explain what is the voltage probe. Voltage Probe, displays the amount of voltage at one point. In addition to a... Electronics Projects, Digital Voltage Probe PIC18F242 "microchip projects, microcontroller projects, " Hello In this article. Listed under: Development Board - Kits Projects



118. **WEEKLY SCHEDULED WATERING FLOWERS CIRCUIT PICBASICPRO PIC16F876** I applied before the project @ ferhatyol friend revealed is a modified version of the project. 3 irrigation functions available in the program. Applications for pic16f876 microcontroller based on the 2 x 16 LCD... Electronics Projects, Weekly Scheduled Watering Flowers Circuit PicBasicPro PIC16F876 "microchip projects, microcontroller projects, pic16f876..... Listed under: Development Board - Kits Projects



119. **SIX-LEGGED BASIC STAMP2 SPIDER ROBOT PROJECT** Spider robot mechanically quite a detailed project control system based on pic microcontroller Stamp 2 module is provided with circuit 7.2 Volt NiCad batteries in addition to the fed with the RC5 remote... Electronics Projects, Six-Legged Basic Stamp2 Spider Robot Project "microchip projects, microcontroller projects, " Spider robot mechanically..... Listed under: Robotics - Automation Projects



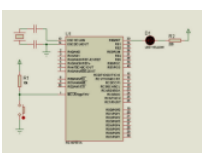
120. **SUMO ROBOT PROJECT PIC16F877 CONTROL CIRCUIT L293D** Mini sumo robot design is very stylish robot pic16f877 microcontroller used in motor for the l293d kullanılmş software crafted with the C language. Mini densedede very detailed all of the resources that are... Electronics Projects, Sumo Project PIC16F877 Control Circuit L293D "microchip projects, microcontroller projects, pic16f877..... Listed under: Robotics - Automation Projects



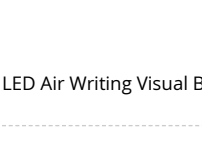
121. **PIC16F877 CELL PHONE CALL DRUG USE MONITORING SYSTEM** Medical electronics, medical electronics interesting for people who are interested in different application circuits during specified hours of the patient is receiving drug control if the relevant person is taking medication with mobile... Electronics Projects, PIC16F877 Cell Phone Call Drug Use Monitoring System "microchip projects, microcontroller projects,..... Listed under: Phone Projects



122. **SIMPLE LED LIGHT FLIP FLOP CIRCUIT HI TECH C EXAMPLE** The first Hi Tech C example is an example of the classic Hello world in C. Of course, this example is adapted to the world of the microcontroller. A 5V supply voltage for the... Electronics Projects, Simple Led Light Flip Flop Circuit Hi Tech Example "hi tech..... Listed under: LED Projects



123. **RGB LED AIR WRITING VISUAL BASIC CCS C PIC16F877** According to the air a lot of writing applications with a superior visual basic application program prepared with the required text, printed in specified rek. PIC16F877 microcontroller used in the air circuit writing... Electronics Projects, LED Air Writing Visual Basic CCS C PIC16F877 "led projects, microchip..... Listed under: LED Projects





124. PIC16F88 HUMIDITY CONTROL CIRCUIT SHT11 Seensierion company produces heat and moisture sensor SHT11 humidity measurement and control circuit is made with. circuit can be used in many different purposes. For example, agricultural irrigation, soil humidity, according to the... Electronics Projects, PIC16F88 Humidity Control Circu SHT11 "microchip projects, microcontroller projects, pic16f88 projects, picbasic..... Listed under: Sensor - Transducer - Detector Projects



125. PIC10F200 MAUS MODIFICATION FOR THE GAME CONSTANTLY KEYPRESSES To use the browser-based games, especially online custom modified and are selling a game for this circuit have keyboards I've heard has been placed into the online circuit mausmaus, depending on the...Electronic Projects, PIC10F200 Maus modification for the game constantly keypresses "microchip projects, microcontroller projects, simple..... Listed under Entertainment Projects



126. OSCILLOSCOPE CIRCUIT WITH MAX492 PIC16F877 GRAPHIC LCD Oscilloscope circuit project pic16f877-20 (20 MHz) microcontroller based on X 1, entries MAX492 Rail-to-Rail Op Amp input via grilimi 5v indicator as 128 × 64 glcd (PG12864) graphic lcd. Oscilloscope circuit power... Electronics Projects, Oscilloscope Circuit with MAX492 PIC16F877 Graphic LCD "microchip projects, microcontroller projects, pic16f877..... Listed under: Development Board - Kits Projects



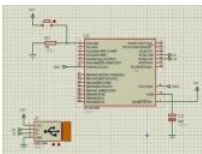
127. SECURITY ALARM CIRCUIT WITH PIC16F877 LCD Security Alarm project 16f877 microcontroller Board 2×16 lcd indicator alarm circuit connected t keypad on the necessary adjustments can be made. Circuit diagram pcb drawings, asm source, hex codes, alarm installation, lcd menu... Electror Projects, Security Alarm Circuit with PIC16F877 LCD "microchip projects, microcontroller projects, pic16f877 projects, "..... Listed under: Clock - Ti Projects, Security - Safety Projects



128. LCD SWR METER CIRCUIT PIC16F877 SWR meter circuit pic16f877 microcontroller with lcd display displays the information on a printed circuit bo with 2 × 16, schema diagrams in the C source code library files (adc. c, lcd8 c, swrm.... Electronics Projects, LCD SWR Meter Circuit PIC16F877 "mic projects, microcontroller projects, pic16f877 projects, " SWR..... Listed under: LCD Projects



129. LCD MENU INTERFACE PROJECT PIC18F2620 C18 NOKIA6100 PIC18F2620 Nokia 6100 lcd screen has a lot of Menu interface examples made with with applications typically microchip PIC series popular in this application is a useful example of how to create a... Electronics Projects, LCD Menu interface Project PIC18F2620 C18 Nokia6100 "microchip projects, microcontroller projects, " PIC18F2620..... Listed under: LCD Projects












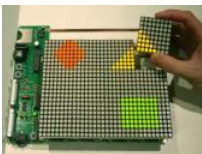
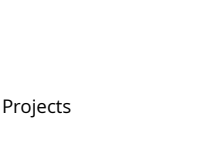
130. PIC18F2550 USB HID PROJECT CSHARP CCS C USB Hid project microcontroller used in Pic18f2550 software is a computer program designed with sharp (Visual Studio 2010). All source code has been given a simple usb hid example also prepared...Electronics Projects, PIC18F2550 USB Hid pr Csharp CCS C "microchip projects, microcontroller projects, pic18f2550..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

131. ROBOTIC ARM PROJECT PIC16F877 CCS C VISUALBASIC COMPUTER-CONTROLLED The robotic arm project and all resources are quite detailed PIC16F877 microcontroller control unit in the project has been kullail communicate with the computer is done via the RS232 serial port interface...Electronics Projects, Robotic ARM Project PIC16F87 VisualBasic Computer-controlled"microchip projects, microcontroller projects,..... Listed under: Robotics - Automation Projects



132. PIC16F877 VERY FAST LINE FOLLOWING ROBOT PROJECTS ORANGUTAN B-328 Line following robot design in two different models, one that's "Ba Orangutan B-328 Robot" control module based on this on the module tb752a1 motor drive and ATMEGA48 or ATmega328 microcontroller's All n SMD because... Electronics Projects, PIC16F877 Very Fast Line Following Robot Projects Orangutan B-328 "microchip projects, microcontroller..... under: Robotics - Automation Projects



133.  PWM MOTOR CONTROL CIRCUIT HPWM PIC16F876 FREQUENCY MODULATED Hello friends. Recent studies have adjustable frequency PWM motor control circuit that I want to share with you. Circuit is designed using pic16f876 and HPWM hardware. I used IRF540N MOSFETs in the payload. Mosfet... Electronics Projects, PWM Motor Control Circuit HPWM PIC16F876 Frequency Modulated "microchip projects, microcontroller projects,... under: Motor Projects
134.  433MHZ RF RELAY CONTROL CIRCUIT PIC16F628 RF relay control circuit PIC16F628 microcontroller used in the donor card 433MHz RF transceiver module with 8 buttons (433.92 MHz) command is sent to the recipient. Sadder still used in the RF receiver in... Electronics Projects, 433MHz RF relay control circuit pic16f628 "microchip projects, microcontroller projects, pic16f628 projects, " Listed under: Development Board - Kits Projects
135.  NICD NIMH BATTERY CHARGING CIRCUIT PIC16F876 DELTA-PEAK Control the battery charging circuit with PIC16F876 150 mA power in 6000 NiCd batteries can be recharged circuit 50 to the power of 2 amps. pic output 2 MOSFETs (irf9540, smp60n) used battery... Electronics Projects, Nicd Ni Battery Charging Circuit PIC16F876 Delta-Peak "battery charger circuit, microchip projects,..... Listed under: Battery Projects
136.  SPEED CALCULATION CIRCUIT PIC18F4680 PICBASIC Speed calculation circuit pic18f4680 used optionally pic18f4585 microcontroller used in the input signal FPS, MPH as the calculate and 4 x 16 LCD screen displays the software picbasic pro prepared by the source.... Electronics Projects, Speed Calculation Circuit PIC18F4680 PicBasic "microchip projects, microcontroller projects, picbasic pro examples, " Listed under: Calculator Projects
137.  IR RF TRANSCEIVER CIRCUITS 8 CHANNEL REMOTE CONTROL IR and RF transceiver circuits PIC16F628 microcontroller based on the software assembly prepared by the donor of the above değişiklik without just sitting with IR or RF controls can be made 8-channel and 4-channel... Electronics Project Transceiver Circuits 8 Channel Remote Control "microchip projects, microcontroller projects,..... Listed under: Wireless Projects
138.  SIMPLE AUTO ROBOT PIC16F628 H-BRIDGE MOTOR DRIVER CIRCUIT Microchip PIC series microcontrollers prepared with a very robotic circuit's this circuit compared to others a bit more simple, right, left controls the keys is done with the development of an open car... Electronics Projects, Simple Auto Robot PIC16F628 H-Bridge Motor Driver Circuit "microchip projects, microcontroller projects,..... Listed under: Robotics - Automation Projects
139.  PIC24F64GA002 VIDEO REMOTE ENVIRONMENTAL MONITORING ENC28J60 TCP/IP STACK Custom designed hardware, presented using the eligible Microchip 16-bit MCU PIC24F64GA002, has been developed for the Microchip design contest to implement a video-based remote environmental monitoring system for use in critical areas. The... Electronics Projects, PIC24F64GA002 Video Remote Environmental Monitoring ENC28J60 TCP/IP stack "microchip projects, microcontroller projects, " Custom..... Listed under: Video - Camera - Imaging Projects
140.  PS2 MOUSE CONTROL PIC16F726 TEST CIRCUIT Maus PS2 mouse designed to test a circuit according to the movements led display beautiful various shapes can be removed pic16f726 microcontroller circuit is realized with software ps2 prepared by assembly the... Electronics Projects, PS2 mouse control PIC16F726 test circuit "microchip projects, microcontroller projects, " Maus PS2..... Listed under: chipKIT Projects
141.  WINAMP TOUCH SENSOR INTERFACE AD7142ACPZ USB HID PIC18F2550 Winamp control made for an interesting project PIC18F2550 USB HID to sensor card belonging to the PCB and information computer software CCS C source code eagle printed circuit board PCB diagram drawings, etc. All... Electronics Projects, Winamp Touch Sensor Interface AD7142ACPZ USB HID PIC18F2550 "microchip projects, microcontroller projects,..... Listed under: Sensor - Transducer - Detector Projects
142.  LED PIXELS PIC24FJ64GA004 DYNAMIC TILE DISPLAY The tiles are based on 2" square 8x8 LED displays. Each pixel in the display has a red and green LED. The LEDs are arranged in a matrix, with the red and green LEDs... Electronics Projects, LED pixels PIC24FJ64GA004 Dynamic Tile Display "microchip projects, microcontroller projects, " The tiles..... Listed under: LED Projects
143.  MICROCHIP PIC BLUETOOTH COMMUNICATION RN-41 Microchip PIC series microcontroller and Bluetooth module of the communication prepared sample module circuit eagle prepared by the PCB files and C programming examples are also over the mobile phone led, motor,... Electronics Projects, Microchip PIC Bluetooth Communication RN-41 "microchip projects, microcontroller projects, " Microchip PIC series..... Listed under: Bluetooth Projects

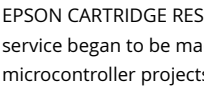


144.

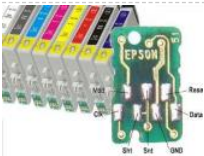


RF IR REMOTE GARAGE DOOR CONTROL PROJECTS PIC16F628 PIC16F84 Garage door to check the projects prepared Microchip PIC series microcontrollers prepared by RF Modules with remote-controlled garage door control PIC16F628 (C language / udede rf module) IR infrared gara control PIC16F84 (PBUH)... Electronics Projects, RF IR Remote Garage Door Control Projects PIC16F628 PIC16F84 "microchip projects, microcontr Listed under: Security - Safety Projects

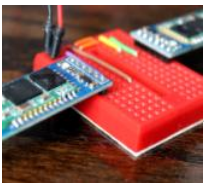
145.



EPSON CARTRIDGE RESET CIRCUIT PIC12F629 The printer of the original cartridge prices excessively expensive when soon cartridge refill, renovation works a lot in techni service began to be made even just engaged in this business there are places many...Electronics Projects, Epson Cartridge Reset Circuit PIC12F629 "microchip projects, microcontroller projects, " The printer of..... Listed under: Development Board - Kits Projects



146.



HC-05 Bluetooth module interfacing with PIC microcontroller projects Here is the list of related HC-05 Bluetooth module interfacing with PIC microcontroller projects: HC-05 Bluetooth link with zero code HC-05 Bluetooth link with zero code So you want to two HC-05 modules to automa connect together, as soon as they're powered up and with zero..... Listed under: Bluetooth Projects, Projects

147.



VIDEO SELECTOR CIRCUIT NJM2246 PIC16F84 LM1881 Video selector circuit 4 channels (NAV1, CAM1, CAM2, aux) inputted video signals via a sing output giving as video selection buttons is done with circuit PIC16F84 microcontroller is carried out with help other integrated... Electronics Projects, Video selector circuit NJM2246 PIC16F84 LM1881 "microchip projects, microcontroller projects, pic16f84 projects, "..... Listed under: Video Camera - Imaging Projects

148.



SOLAR BATTERY CHARGE CIRCUIT PIC16F88 4 8-volt 500mA solar battery is charged using the 12 charging the battery charge and desars statu ((and discharge control) that control PIC16F88 made using a circuit that require minimal power available in...Electronics Projects, Solar Battery Charge Circuit PIC16F88 "battery charger circuit, microchip projects, microcontroller projects,..... Listed under: Battery Projects

149.



FACE ROBOT PIC18F452 SERVO MOTOR CONTROL Robot facial project PIC18F452 carried out with 5 servo motors by controlling the eyebrow, eye movements is provided circuit is more complex, but a breadboard based on the software in C language prepared by...Electronics Projects, Face R PIC18F452 Servo Motor Control "microchip projects, microcontroller projects, " Robot facial..... Listed under: Robotics - Automation Projects

150.



RGB LED DRIVER CIRCUIT PIC12F629 PWM RGB LED driver circuit can be controlled with PIC12F629 pic12f675 As an alternative, can be used PIC1 PIC GP0, GP1, GP2 STP36NF06 in output MOSFETs are driven by PWM technique internal oscillator of the...Electronics Projects, RGB LED Driver C PIC12F629 PWM "led projects, microchip projects, microcontroller projects,..... Listed under: LED Projects

151.









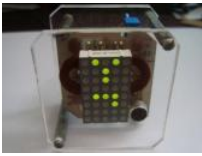




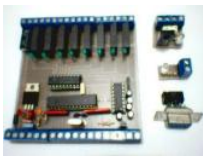
DOORBELL CIRCUIT 32 MELODY PIC16F876 Ringtones circuit very detailed crafted all the resources exist, particularly ringtone program for differ projects can be useful, I'm not sure, but the sound codes with this program produced half of the asm, hex...Electronics Projects, Doorbell Circuit : Melody PIC16F876 "microchip projects, microcontroller projects, pic16f876 projects, " Ringtones..... Listed under: Security - Safety Projects

152.



RINGTONES CIRCUIT PIC16F84A POLICE, AMBULANCE, MORSE SOUNDS The melody has 5 audio circuit, made with pic16f84a American police sound ambulance siren, the sound, the sound of Morse code, according to a previous 32 tune Melody a simpler design. due to...Electronics Projects, Ringtones Circuit PIC16F84A Police, Ambulance, M Sounds "microchip projects, microcontroller projects, pic16f84..... Listed under: Sound - Audio Projects

153.  PIC18F4520 UNIPOLAR STEPPER MOTOR DRIVER CIRCUIT Unipolar stepper motor driver circuit lcd graphics display control PIC18F4520 GLCD with WG12864B is provided. To the use of MOSFETs in the output irfz44 12-24 volts engines can take up to 4.5 amps. Take...Electronics Projects, PIC18 Unipolar Stepper Motor Driver Circuit "microchip projects, microcontroller projects, " Unipolar stepper..... Listed under: Motor Projects
154.  PIC18F2550 8 AXIS JOYSTICK FOR FLIGHT SIMULATOR 8 axis joystick circuit flight simulator designed to be used on computers running simulator programs can work with flight simulator info because I have so I can not discuss, but the person concerned useful... Electronics Projects, PIC18F2 axis joystick for Flight Simulator "microchip projects, microcontroller projects, pic18f2550..... Listed under: Game - Entertainment Projects
155.  OPEN SOURCE USB OSCILLOSCOPE PROJECT FT245RL PIC16F690 CPLD Software and hardware all resources are shared open source USB oscilloscope implement the project's source C code (PIC16F690), CPLD Logic files, computer programs belonging to the codes (REALbasic) eagle schematics and drawings... Electronics Projects, Open Source USB Oscilloscope Project FT245RL PIC16F690 CPLD "microchip projects, microcontroller projects, ".. Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
156.  COUNTER CIRCUITS JALV2 PIC16F628 Circuits PIC16F628 microcontrollers are based on the screening method using the program, the language is with Jalv2. When the circuit board with resistors inside the blue frame on the right side, just because...Electronics Projects, Counter Circuits Jalv2 pic16f628 "microchip projects, microcontroller projects, pic16f628 projects, " Circuits PIC16F628 microcontrollers are..... Listed under: Other Projects
157.  CAPACITY METER CIRCUIT PIC16F873A Capacity meter circuit 5pF and 2600uf between the condenser capacity can gauge the pic16f873 microcontroller and a few passive element and the circuit formed values of 2×16 LCD screen is displayed on... Electronics Projects, Capacity meter circuit PIC16F873A "microchip projects, microcontroller projects, " Capacity meter circuit 5pF..... Listed under: Metering - Instrument Projects
158.  RF ROBOT PROJECT PIC16F877 Robot project PIC16F877 microcontroller used ARX34 AND ATX34 RF modules and remote kontrol can be 3 servo run software ccs written in c receiver, transmitter section if our writers Aykut my brother "PIC16F628... Electronics Projects, RF Robot project PIC16F877 "microchip projects, microcontroller projects, pic16f877 projects, " Robot project PIC16F877 microcontroller..... Listed under: Robotics Automation Projects
159.  HEATER CONTROL CIRCUIT PID RTOS CCS C PIC18F2550 I think most computationally one of the subjects PID control on the web application also does not have much project PIC18F2550 microcontroller based on the PID temperature control made information on the...Electronics Projects, Heater Control Circuit PID Rtos CCS C PIC18F2550 "microchip projects, microcontroller projects,..... Listed under: Temperature Measurement Projects
160.  LED CUBE CIRCUIT 5X5X5 PIC16F688 Led cube pic16f688 microcontroller used in the output driver circuit in the CA4016 LED (adjustable driver 16 channel flow) is being integrated over. Prepared with PIC16F688 assembly source software. Asm, pcb printed circuit... Electronics Projects, Led Circuit 5x5x5 pic16f688 "led projects, microchip projects, microcontroller projects, " Led..... Listed under: LED Projects
161.  TALKING ROBOT PROJECT MICROCHIP PIC24F16KA102 Based on previously prepared with CCS C Is a shared application software (Pic18f2455 PIC speaking Robot CCS C) this application according to him is a good example of resource for more advanced pic24 series... Electronics Projects, Talking Robot Project Microchip PIC24F16KA102 "microchip projects, microcontroller projects, " Based on previously..... Listed under: Robotics - Automation Projects
162.  LED ANIMATION CIRCUIT PIC16F628 Led animated LED signs circuit , especially in circuit , made to be used in advertising applications PIC16F628 microcontroller is used in solid control software for PicBasic prepared by the PIC output MOSFETs (...Electronics Projects, Led Animation Circuit PIC16F628 "led projects, microchip projects, microcontroller projects, pic16f628 projects,..... Listed under: LED Projects
163.  PROGRAMMABLE AUTOMATION PIC16F87X ELECTRONIC PLC CIRCUIT Several automation, control circuits I've seen, but so far so many features that existing application the first time I met with microcontroller plc have done .. especially smart home alarm or for different... Electronics Projects, Programmable Automation PIC16F87X Electronic PLC Circuit "microchip projects, microcontroller projects, pic16f876 projects,..... Listed under: Other Projects



164.



EXAMPLE HALL EFFECT SENSOR PIC16F876 TACHOMETER CIRCUIT Hall Effect Sensor for me an alien element, but especially microcontrollers pec dealing with a lot of for the project may be used in one of the materials in the sample application pic16f876 based... Electronics Projects, Exampl Effect Sensor PIC16F876 Tachometer Circuit "microchip projects, microcontroller projects, pic16f876..... Listed under: Metering - Instrument Proj

165.

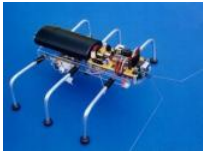


LCD OSCILLOSCOPE CIRCUIT PROJECT PIC18F4520 Oscilloscope circuit PIC18F4520 microcontroller based on the indicators used for the 128x64 I schematics and source code for the project given all menu.c, etc. glcd.c. in different projects such as files can be... Electronics Projects, LCD Oscill Circuit Project PIC18F4520 "microchip projects, microcontroller projects, " Oscilloscope circuit PIC18F4520 microcontroller..... Listed under: LCD F

166. PIC16F648 LED ANIMATED CLOCK CIRCUIT PICBASIC Find the alarm clock circuit pcb design feature quite well around the display indicator is blinking LEDs with various ef PicBasic source code for ares proteus isis simulations and PCB files have. We also... Electronics Projects, PIC16F648 Led Animated Clock Circuit Picbasic "led projects, micr projects, microcontroller projects,..... Listed under: LED Projects



167.



SIX-LEGGED BASIC STAMP2 SPIDER ROBOT PROJECT Spider robot mechanically quite a detailed project control system based on pic microcontrol Stamp 2 module is provided with circuit 7.2 Volt NiCad batteries in addition to the fed with the RC5 remote...Electronics Projects, Six-Legged Basi Stamp2 Spider Robot Project "microchip projects, microcontroller projects, " Spider robot mechanically..... Listed under: Robotics - Automation P

168.



8-CHANNEL RF RELAY CONTROL CIRCUIT RS232 PC PIC16F628 Relay control circuit is built on a computer via the rs232 port com pic16f628 microcontroller RF modules (433 mhz) can be controlled wirelessly with 8 relay with rs232 communication max232 project belongs to isis...Electr Projects, 8-Channel RF Relay Control Circuit RS232 PC Pic16f628 "microchip projects, microcontroller projects,..... Listed under: Development Board - Kits Projects

169.



MICROCONTROLLER CONTROLLED VU METER CIRCUIT KA2281 integrated circuits, LM3914, etc. According to the vu meter circuits with this circui been built on microcontroller circuit pic16f88 stereo really super 2x16 total 32 or mono 16 led, 40 can be... Electronics Projects, Microcontroller Controlled VU Meter Circuit "led projects, microchip projects, microcontroller projects, pic16f88..... Listed under: LED Projects

170.



ENJ28J60 TCP IP CONTROL CIRCUIT PIC18F67J60 Microcontroller controlled internet TCP IP applications typically used in Ethernet the Ethernet pa ENJ28J60 control IC PIC18F67J60 control this part there is the project internally using the TCP-IP Stack, Microchip's internet page... Electronics Projects, ENJ28J60 TCP IP Control Circuit PIC18F67J60"microchip projects, microcontroller projects, " Microcontroller controlled..... Listed under: Development Board - Kits Projects

171.



PID MOTOR CONTROL CIRCUIT PIC18F2550 LABVIEW PID motor control circuit based on Labview PID Motor Control microcontroller pic18f2550 Pic18f2550 program can be used with pic18f2550 rc2/ccp1 motor is controlled with kublör opto isolated port irf540 mosfet with motor control. PID... Electronics Projects, PID motor control circuit PIC18F2550 Labview"microchip projects, microcontroller projects, pic18f2550 projects, "..... L under: Motor Projects

172.



BEAUTIFUL DECOR PIC12F629P RGB LED LAMP GLASS GLOBE An application known as the bottles in the RGB DIY Mood vases made by placing d RGB led effect circuits, especially in the dark, they look very nice decors. The author has placed the... Electronics Projects,Beautiful Decor PIC12F RGB Led Lamp Glass Globe "microchip projects, microcontroller projects, "..... Listed under: LED Projects

173. PWM MOTOR CONTROL CIRCUIT PIC12C509 Especially RC model, model to the application type has been designed motor control circuits printed circuit sizes too small ... different a few versions all there in the PIC12C509 mükrödenetleyic used PIC12C509 output is... Electronics Projects, PWM Motor Control Circuit PIC12C509 "microchip pr microcontroller projects, motor control circuit,..... Listed under: Motor Projects



174. **PIC18F46K20 6-LEGGED ROBOT PROJECT** 6-Legged Robot Project PIC18F46K20 microcontroller and XBee modules based on two robot's body, leg so on. parts such as printed circuit boards prepared with a plaque. Processing is easier for plaque PCBs are...Electronics Projects, PIC18F46K20 6 Robot Project "microchip projects, microcontroller projects, " 6-Legged Robot Project PIC18F46K20..... Listed under: Robotics - Automation Projects



175. **USB INTERFACE CIRCUIT PIC18F2550 DELPHI** The project is written with delphi program microcontroller used USB interface Pic18f2550 control th variety of commands on the card may be sent 4 channel button input, 4-channel led output, 2 x 16...Electronics Projects, USB Interface Circuit Pic18f2550 Delphi "microchip projects, microcontroller projects, pic18f2550 projects, " The..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Pr



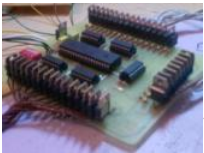
176. **COMPUTER CONTROLLED ROBOT PROJECT PIC16F877** Computer-controlled robot circuit special program is moving according to the shapes draw further action can be achieved by giving the coordinates instead of drawing circuit PIC16F877 microcontroller used robot communication between computers via... Electronics Projects, Computer Controlled Robot Project PIC16F877 "microchip projects, microcontroller projects, pic16f877 proj Computer-controlled..... Listed under: Robotics - Automation Projects



177. **8 CHANNEL 24 AMP TRIAC ANIMATION CIRCUIT PIC16F628** Hello Friends For a long time I did not do my share. I looked at my little library amuse park six months ago I prepared for bi TRIAC 8 Channel 24 saw the animated... Electronics Projects, 8 Channel 24 Amp Triac Animation Circuit PIC16F628 "microchip projects, microcontroller projects,..... Listed under: Other Projects



178. **40 CHANNEL ANIMATION LED CIRCUIT PIC18F452** Especially those used in LED signage is an enhanced version of the animation card has 40 outp the circuit board PIC18F452 microcontroller outputs 5 sadder 74ls595 irf540n MOSFETs are used in the multiplexed... Electronics Projects, 40 Cha Animation Led Circuit PIC18F452 "led projects, microchip projects, microcontroller projects,..... Listed under: LED Projects



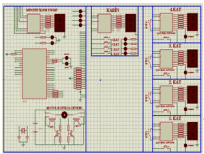
179. **12V 100W LAMP WITH MAGNIFIER LENS DISCO EFFECT SYSTEM** Disco effects of the system control circuit PIC16F628 on board but the basic parts: 100-watt lamp and a magnifying lens (one in the header extend more than you;) PIC16F628 with stepper... Electronics Projects, 12V 100W Lamp 1 Magnifier Lens Disco Effect System "microchip projects, microcontroller projects,..... Listed under: Other Projects



180. **8X8 MATRIX LED SCROLLING TEXT CIRCUIT RS232 SENDING TEXT** 8x8px LED matrix marquee project pic16c52p microcontroller based on the circuit program prepared fo RS232 port negotiation make up to 128 characters font can send 8 x 8 TA23-11EW A – matrix screens...Electronics Projects, 8X8 Matrix LED Scrolling Text Circuit RS232 Ser Text "microchip projects, microcontroller..... Listed under: LED Projects



181. **4TH FLOOR ELEVATOR CONTROL CIRCUIT PIC16F877** Hello Friends . In high school I have done an elevator control circuit I want to share with you designed a 4-story elevator . What floor is the elevator on each floor,... Electronics Projects, 4th Floor Elevator Control Circuit PIC16F877 "microch projects, microcontroller projects, pic16f877 projects, "..... Listed under: Development Board - Kits Projects




182. **LINE FOLLOWING ROBOT CIRCUIT PIC12F508 MC68HC908QB8** Line following robot project, control of MC68HC908QB8 and PIC12F508 microcont Motor drive circuit used the L298. The system is complicated and cumbersome, but there's a different robot projects useful sections PIC12F508- American SFH506-36 IR receiver... Electronics Projects, Line Following Robot Circuit PIC12F508 MC68HC908QB8 "microchip projects, microcontro projects, " Line following..... Listed under: Robotics - Automation Projects




183. **USC LCD COMPUTER CPU RAM INDICATOR PIC18F2550** For the first version of my Open Source Framework for USB Generic HID devices based o PIC18F and Windows I made a USB interface for an LCD. Now that I've finished the second version of the library I thought it would be fun to enh LCD..... Listed under: LCD Projects




184.  ANTENNA ANALYZER CIRCUIT 31MHZ 1.3MHZ PIC16F873 1.3 MHz 31MHz Antenna Analyzer circuit based on Pic16f873a microcontroller is able to measure between the frequencies of 1.3 MHz 31MHz 2 x 16 lcd on the frequency, omaj, swr, etc displays the information....Electronics Projects, A Analyzer Circuit 31mhz 1.3MHz PIC16F873 "microchip projects, microcontroller projects, " 1.3 MHz..... Listed under: Radio Projects




185.  433.92 MHZ RF RELAY CONTROL CIRCUIT PIC16F84 RF relay control circuit of the TWS-B53 433.92 MHz rf transmitter and RWS-371-6 433.92 MHz receiver modules are used. RF relay control circuit of the receiver is used in all of the relays... Electronics Projects, 433.92 MHz RF relay control circuit PIC16F84 "microchip projects, microcontroller projects, pic16f84..... Listed under: Radio Projects




186.  PIC16F690 BQ2018 BATTERY MONITOR CIRCUIT Battery monitor PIC16F690 microcontroller based on the circuit current sensors on the floor BQ: entreee is used shunt resistance taken over by the value on the LCD display battery voltage, use percentage (battery, battery... Electronics Projects, PIC16F690 BQ2018 Battery Monitor Circuit "battery charger circuit, microchip projects, microcontroller projects, "..... Listed under: Batt Projects

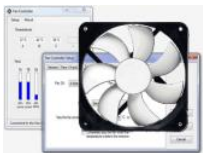
187. MULTI FUNCTION RC5 REMOTE RGB LED CONTROL CIRCUIT PIC16F737 PIC16F737 RGB led control circuit based on microcontroller for remote control (RC5 Protocol) can with different modes according to the color of the color change of the environment with the photo sensor a905013.... Electronics Projects, Multi function RC5 Remote RG Control Circuit PIC16F737"microchip projects, microcontroller..... Listed under: LED Projects




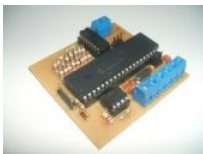
188.  ULTRASONIC SONAR RADAR ROBOT SAA1027 PIC18F2420 FT232 PIC18F2420 microcontroller board radar robot project for detection msu5 user:
sensor module this module is used instead of the alternative ultra sonic by adding other modules or op amp amplifier circuits, 40 kHz ultrasonic... Electronics Projects, Ultrasonic Sonar Radar Robot SAA1027 PIC18F2420 FT232"microchip projects, microcontroller projects, " PIC18F2420..... Listed under: Robotics - Automation Projects




189.  4 CHANNEL USB FAN CONTROL CIRCUIT PIC18F2550 LM335Z Fan control circuit on a Board of Directors established the computer control program through Pic18f2550 microcontroller 4 channel can be set independently of the rotation speed of the fans is connected. Temperature sensor is... Electronics Projects, 4 Channel USB Fan Control Circuit PIC18F2550 LM335Z"microchip projects, microcontroller projects,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects




190.  THERMOCOUPLE READING CIRCUIT PIC16F877 Thermocouple reading circuit PIC16F877 microcontroller based on the C source software, isis pro simulation files and eagle diagram, printed circuit boards have drawings. Thermocouple voltage 0V (0 ° C) and 42.92mv (760 ° C)... Electronics Projects, Thermocouple Reading Circuit PIC16F877 "microchip projects, microcontroller projects, pic16f877 projects, " Thermocouple reading..... under: Temperature Measurement Projects



191.  TETRIS GAME CIRCUIT WITH PIC18F4520 A tetris game circuit to play Tetris costly software and hardware part of the business, but may be useful persons concerned could limp PIC18F4520 microcontroller circuit board on the transform matrix to...Electronics Projects, Tetris game circuit with PIC18F4520 "microchip projects, microcontroller projects, " A tetris game..... Listed under: Game - Entertainment Projects



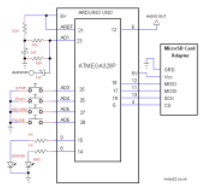
192.  VOLT AMP METER CIRCUIT PIC16F877 graphic Lcd Volt amp meter circuit pic16f877 microcontroller Board, with the addition of the mc34063 dc-dc converter circuits and the I5973 used in the screenshot Im324 opamp GLCD MTG-12864B current and voltage information displaying.... [Electronics Projects, Volt amp meter circuit PIC16F877 "microchip projects, microcontroller projects, pic16f877 projects, " graphic..... Listed under: Metering Instrument Projects](#)



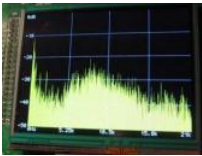
193. USB THERMOMETER CIRCUIT CCS C PIC18F4550 Hi All You Guys. How long have you been working on CCS C. CCS will be able to see my level, so i longer something to do after arrival. In this article,... Electronics Projects, USB Thermometer Circuit CCS C PIC18F4550 "microchip projects, microcontroller projects. " Hi All..... Listed under: Interfacing(USB - RS232 - I2c - ISP) Projects



194. SD CARD SOUND RECORDING, PLAYBACK CIRCUIT PIC16F876A SD/SDHC CARD SOUND RECORDER For SD with PETIT FAT File System see SD Bitmap project For sound pla with EEPROM see Doorbell The PIC16F876A's ADC digitizes the sound and store it in the SD or SDHC card. The firmware works for SD or SDHC cards only, for old SD..... Li under: Other Projects



195. PIC32 SPECTRUM ANALYZER CIRCUIT TFT PIC24 PIC32 EXAMPLES Spectrum Analyzer application PIC32 series from PIC32MX360F512L performed imaging the 3.5 TFT LCD (16.7m. Color) 320X240 screen using software Microchip MPLAB C32 compiler prepared with ssd192x driver (SSD1928L includes all the source... Electronics Projects, PIC32 Spectrum Analyzer Circuit TFT PIC24 PIC32 Examples "microchip projects, microcontroller projects, "..... Listed under: LCD Projects



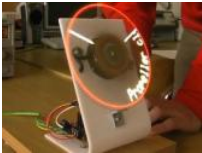
196. BATTERY CHARGE CIRCUIT 12V 12AH Lead Acid 12V 12AH battery charging circuit PIC16F876 microcontroller based on the 16f876 LEDs and batte show and start, stop doing their work forces in the sight of the voltage, current, adjustable L200...Electronics Projects, Battery Charge Circuit 12V 12AH "battery charger circuit, microchip projects, microcontroller projects,..... Listed under: Battery Projects



197. SCROLLING TEXT CIRCUIT LED MATRIX PIC16F628 74HC595 Marquee circuit built on the pic16f628 microcontroller circuit 8 X 80 LED matrix used being prepared with the source software assembly circuits 74HC595. asm, cod, etc. have proteus isis simulation file. marquee... Electronics Projects, Scrolling Text Circuit LED Matrix PIC16F628 74HC595 "microchip projects, microcontroller projects, pic16f628..... Listed under: LCD Proj



198. DSPIC PROPELLER CLOCK CIRCUIT Air Time or propeller clock Propeller Clock much more simple microcontrollers with can be done but the a... project quite a quality job had removed to check DSPIC30F6015 microcontroller is used BLDC motors from... Electronics Projects, DSPIC Propeller Clock Circuit "dspic projects, microchip projects, microcontroller projects, " Air Time..... Listed under: Clock - Timer Projects



199. STEPPER MOTOR DRIVER WITH PIC16F628A L297 L298 CIRCUIT Hello, friends. I have designed at the request of a teacher stepper motor driver ci want to share with you. System is going to start actually quite a few. But barely was able... Electronics Projects, Stepper Motor Driver with PIC16F L297 L298 Circuit "microchip projects, microcontroller projects,..... Listed under: Motor Projects



200. 60 SECONDS STOPWATCH CIRCUIT Authors at the bowling alley I have to use a 60-second timer circuit rules should prepare 60sec. ball in the nee throw 😊 Anyway circuit pic16f876 microcontroller based on the output of the... Electronics Projects,60 Seconds Stopwatch Circuit "microchip prc microcontroller projects, pic16f876 projects, " Authors at..... Listed under: Clock - Timer Projects



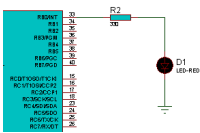
201. MICROCHIP LED LIGHTING APPLICATIONS DESIGN GUIDE Microchip produced by PIC microcontrollers, LED drivers, LED control ICs prepared for sample application, designer notes .. Documents in the finest detail to given information (in English) source code and in the schemes's... Electron Projects, Microchip LED Lighting Applications Design Guide "led projects, microchip projects, microcontroller projects, "..... Listed under: LED Pro



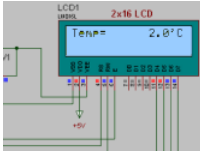
202. PICBASIC TFT TOUCH LCD PROJECT PIC16F628A SSD1289 ADS7843 Nowadays Touch TFT LCD control when a lot of people interested in microcon programming first thought the Pic18, Pic24, Pic32, ARM, etc ... but a little advanced microcontrollers and application uğraştırsa is a very... Electro Projects, Picbasic TFT Touch LCD project PIC16F628A SSD1289 ADS7843"microchip projects, microcontroller projects,..... Listed under: LCD Proj



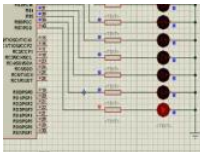
203. CCS BUTTONS WITH LED CONTROL PIC16F877 CCS C simple application Buttons with LED Control circuit. This program B0 connected to the port connected to RA0 input is controlled by a button. Button-LED Control Simulation Test Proteus isis Schematic Button-LED... Electronics Projects, C Buttons with LED Control PIC16F877 "ccs c examples, microchip projects, microcontroller..... Listed under: LED Projects



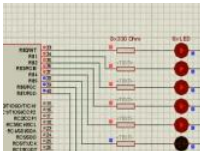
204. **PIC16F628 12 CHANNEL RF RELAY CONTROL (RR10 MODULE)** 12 channel RF relay control circuit, the receiver and transmitter circuits built on 80 pic16f628a microcontroller.100 meters can be seamlessly used said outdoor area also more important aerial circuit, I don't know, but the... Elect Projects, PIC16F628 12 Channel RF Relay Control (RR10 Module)"microchip projects, microcontroller projects,..... Listed under: Development Boa Projects



205. **CCS LM35 TEMPERATURE SENSOR EXAMPLE WITH PIC16F877 LCD** PIC16F877 and LM35 Temperature Sensor Application simple CCSC Example PIC16F877 10-bit ADC isbe used. Read the ADC result and the information is transferred to the 2X16 LCD temperature value is printed LM35 Digital... Electronics Projects, CCS LM35 Temperature Sensor Example with PIC16F877 LCD "ccs c examples, microchip projects,..... Listed under: Transducer - Detector Projects



206. **WALKING LED LIGHT CCS EXAMPLE PIC16F877** CCS C Walking LED Light using pic16f877 picmicro 8 LED Walking effect (As king rider led circuit) 10 delay Walking LED Circuit Schematic Walking LED Simulation Video Walking LED Light project proteus isis...Electronics Projects, Walking LED Light Example PIC16F877 "ccs c examples, microchip projects, microcontroller..... Listed under: LED Projects

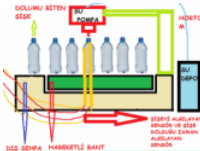


207. **CCS TOGGLE LED EXAMPLE PIC16F877** PIC16F877 Led Toggle CCS C This program connected to the port-B with 8 LED TOGGLE command 500 ms order is flash LED the. CCS CToggle Led Schematic Diagram CCS CToggle Led Simulation Video...Electronics Projects, CCS Toggle Led Example PIC16F877 "ccs c examples, microchip projects, microcontroller projects,..... Listed under: LED Projects

208. **ENCODER, ANGLE MEASUREMENT CCS C PIC16F628 SAMPLE APPLICATION** Hi Friends, In this article I will mention the use of incremental enkoderlerin. These encoders w precisely how to angle measurement or position determination to do it. Market the Absolute (absolute) Encoders and Incremental... Electronics Projects, Encoder, angle measurement CCS C Pic16f628 sample application"microchip projects, microcontroller projects,..... Listed under: Temperature Measurement Projects



209. **PIC16F877 WITH BOTTLE FILLING SYSTEM** In this article, and a student friend, talk about his work with a bottle filling machine from the block sch system easier. Block diagram of bottle filling machine; 1: Tape engine starts to spin.... Electronics Projects,Pic16f877 With Bottle Filling System "m projects, microcontroller projects, pic16f877 projects, picbasic..... Listed under: Other Projects



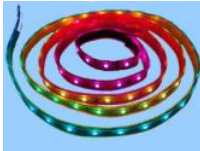
210. **ELECTRONIC PIANO USING PIC MICROCONTROLLER (PIC18F4550)** Electronic piano circuit PCB printed circuit board drawing upon the Pic18f4550 microcontroller PIC has been a regular speaker on the card directly to number 2 in the pin of this RA0-Pic18f4550 AN0 pine bjt,...Electronics Projects, Electronic Piano Using PIC microcontroller (PIC18F4550) "microchip projects, microcontroller projects, " Electronic piano..... Listed unde - Audio Projects



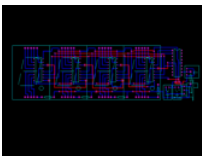
211. **3X3X3 LED CUBE WITH PIC16F628 MICROCONTROLLER CIRCUIT** The market plenty of 4 x 4 x 4 led cube was made. I have made 3 x 3 x 3 led cube also differ. Led cube in each layer is made up... Electronics Projects, 3x3x3 LED Cube with PIC16F628 microcontroller circuit"led projects, microch projects, microcontroller..... Listed under: LED Projects




212. **PIC16F84 RGB LED STRIP ANIMATION CIRCUIT** PIC made with 8-channel moving light circuit. Combine some of this circuit outputs a rgb led Ribbo result satisfying. Three different buttons animation circuit. Which if you hold that the animation comes in....Electronics Projects, Pic16f84 RGB Le Animation Circuit "led projects, microchip projects, microcontroller projects,..... Listed under: LED Projects




213. **WITH 4 DIGIT 7 SEGMENT TIME DS18B20 THERMOMETERS** PIC16F628 Pic16f628 microcontroller-DS18B20 sensor clock thermometer based on tl project has been very useful and detailed narration. Pic16f628-DS18B20 On the streets, the streets often started to see their side – instantly clair your dependability or... Electronics Projects, With 4 Digit 7 Segment Time DS18B20 Thermometers pic16f628 "microchip projects, microcontroller Listed under: Electronics News and Updates, Temperature Measurement Projects

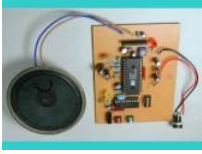



214.  DISCO LIGHT EFFECTS SYSTEM WITH PIC16F876 It is a circuit for the circuit only show animation, colored lights and sound in proportion to the se a circuit to change the animation speed, also have created this. Usually known as... Electronics Projects, Disco Light Effects System with PIC16F876 "microchip projects, microcontroller projects, pic16f876 projects, "..... Listed under: LCD Projects


215. PIC16F873 WITH LCD DISPLAY CALCULATOR CIRCUIT Made with PIC16F873 microcontroller calculator project .. keypad buttons are used for standard HD44780 LCD assem prepared with the software. Asm. Hex code there. Addition, subtraction, multiplication, division, decimal and hexadecimal number systems, computing... Electronics Projects, PIC16F873 with LCD Display Calculator Circuit "microchip projects, microcontroller projects, " Made with PIC16F873..... Listed under: LCD Projects





216.  CM8870 REMOTE DEVICE CONTROL VIA TELEPHONE DTMF PIC16F628 PIC16F628 microcontroller and DTMF CM8870 integrated circuits based on 2, 4 relay has versions with PCB printed circuit drawings are proteus software prepared by the Picbasic. Source code, the PCB according to... Ele Projects, CM8870 Remote device control via telephone DTMF pic16f628 "microchip projects, microcontroller projects,..... Listed under: Phone Pro

217.  ISD2560 VOICE RECORDING PLAYBACK PROJECT PIC16F84 CONTROLLED ISD2560 to directly control the PIC16F84A, audio recordings and multipl will be able to play. LSI can be driven directly speakers also, in view of the lack of volume, only added to the... Electronics Projects, ISD2560 Voice Recording Playback Project PIC16F84 Controlled "ccs c examples, microchip projects,..... Listed under: Sound - Audio Projects

218.  PIC16F88 LCD TACHOMETER CIRCUIT PIC16F88Rpm analog voltage output that is, PWM signal so that only the output filter will depend on 'VD' V there, press the switch, use the calibration and output voltage range equivalent to the rotation....Electronics Projects, PIC16F88 LCD Tachometer Circuit "microchip projects, microcontroller projects, pic16f88 projects, " PIC16F88Rpm analog..... Listed under: LCD Projects

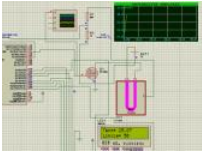
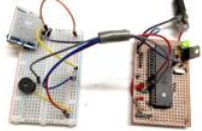
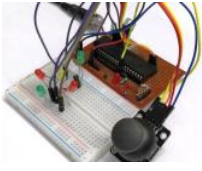
219.  PIC16F876 CONTROL OF 8 SERVOS MOTOR 5 ANALOG CHANNELS I2C BUS Microcontroller PIC16F876 4Mhz Controlled by the I2C slave module a analog servos technical report describes the design, both from the electronic point of view, as a computer control board for I2C bus 8 standard... Electronics Projects, PIC16F876 Control of 8 Servos Motor 5 Analog Channels I2C bus "microchip..... Listed under: Motor Projects

220.  ELECTRONIC DICE CIRCUIT WITH PIC12F629 the PIC12F629 on a microcontroller based electronic dice. electronic DICE with 14 LEDs dual membra prepared for application software mikroc used to give random results when a button is pressed for 3 seconds if... Electronics Projects, Electronic Circuit With PIC12F629 "microchip projects, microcontroller projects, " the PIC12F629 on a microcontroller..... Listed under: LED Projects

221.  COLOR DETECTION CIRCUIT PIC18F252 In the new version issued to 10 The number of colors, color identification and color separation feature w developed and added to a method for the sensitivity has been increased. Also feature full contact...Electronics Projects, Color Detection Circuit PIC18F252 "microchip projects, microcontroller projects, " In the new version..... Listed under: Development Board - Kits Projects

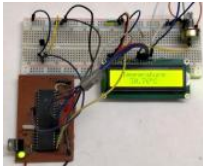
222. HIGH VOLTAGE INSECT TRAP PIC16F675 Control circuit designed with microcontroller is done with high voltage to incapacitate an interesting insects pic16f675 a bug it wc in normal operation for power saving high-voltage circuit on the PCB when solid... Electronics Projects, High Voltage Insect Trap PIC16F675 "microchip projects, microcont projects, " Control circuit designed..... Listed under: Other Projects



223.  CAR INFO PANEL WITH PIC16F873 In the car Frost Alarm (warning sound) , outdoor lamp, alarm, temperature, battery voltage, date, overcharging information, such as a pic16f873 microcontroller which allows it to be displayed on a LCD display 4x20... Electronics Projects, Car Info Panel with PIC16F873 "microchip projects, microcontroller projects, " In the car Frost..... Listed under: Car Projects
224.  DSPIC30F2010 PWM MOTOR DRIVER CIRCUIT DRV8402 DRV8402 Motor Driver Circuit The main component is the microcontroller dsPIC30F2010, its activities needs outside of the power supply voltage also a source of accurate clock pulses. In order to achieve the... Electronics Projects, dsPIC30F2010 PWM Motor Driver Circuit DRV8402 "dspic projects, microchip projects, microcontroller projects,..... Listed under: Motor
225.  FLOWCODE EXAMPLES Flowcode pic programming pic about the program in the form of flow diagrams of the easiest programs you can write eas the market, still us is very simple, although it was touted as... Electronics Projects, Flowcode Examples "microchip projects, microcontroller projec circuits, " Flowcode pic programming pic about..... Listed under: Other Projects
226.  CCS C APPLICATIONS PROTEUS SIMLATIONS Previously shared CCS C sample application circuit code archive (C and Hex Isis) is a large archive wit source codes and proteus simulation circuits such as CCS C projects shared in the font.... Electronics Projects, CCS C Applications Proteus Simulations "microchip projects, microcontroller projects, pic16f876 projects, pic16f877..... Listed under: Other Projects
227.  4 PLAYER PONG GAME PIC18F4550 The PIC18f4550 microprocessor based pong game PIC18f4550 The first player to reach 20 points in the Pong wins the fireworks animation with leds. The PIC18f4550 works at 8MHz, the display is made up... Electronics Projects, 4 Player Pong Game PIC18f4550 "microchip projects, microcontroller projects, " The PIC18f4550 microprocessor based pong game PIC18f4550..... Listed under: Game Entertainment Projects
228.  Digital Ammeter Circuit using PIC Microcontroller and ACS712 Measuring the voltage and current will always be helpful while making or debuggin electrical system. In this project we are going to make our own Digital Ammeter using PIC16F877A Microcontroller and current sensor ACS712. This project can measure both AC and DC current with a..... Listed under: Metering - Instrument Projects
229.  Interfacing Ultrasonic Sensor HC-SR04 with PIC Microcontroller For any project to come alive, we need to use sensors. Sensors acts as the eyes a for all embedded application, it helps the digital Microcontroller to understand what is actually happening in this real Analog world. In this tutorial will be learning..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
230.  Interfacing GPS Module with PIC Microcontroller GPS is the short-form of Global Positioning System. It is a system which provide accurate Altitude, Latitude, Longitude, UTC time and many more information, which are taken from 2, 3, 4 or more satellite. To read data from GPS, we need some Microcontroller and we..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
231.  Interfacing PIR Sensor with PIC Microcontroller Today we are simple going to interface PIR with PIC Microcontroller PIC16F877A. In this circuit if s moving objects comes in the range of PIR sensor, the buzzer will start beeping. Material Required PicKit 3 PIR Sensor. PIC16F877A IC 40 - Pin IC h Perf board 20..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
232.  Digital Thermometer using a PIC Microcontroller and DS18B20 Generally, the LM35 temperature sensor is used with microcontrollers to measure temperature because it is cheap and easily available. But LM35 gives analog values and we need to convert them into digital using ADC (Analog to Converter). But today we are using DS18B20 temperature..... Listed under: Metering - Instrument Projects
233.  Interfacing Joystick with PIC Microcontroller Input devices play a vital role in any electronics projects. These input device help the user to interact the digital world. An input device can be as simple as a push button or as complicated as a touch screen; it varies based on the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
234. Implementing serial communication in embedded systems Serial communication was once the most widely used method of transferring data between computers. Many computing devices that you have used over time employ serial communication. Some of the terms associated with this type of transfer are FTDI chip, COM interface, the RS232 protocol,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

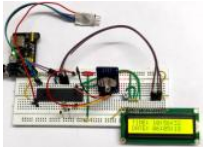


235.



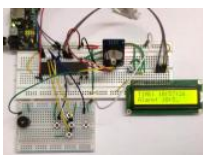
Digital Thermometer using LM35 and PIC Microcontroller In this tutorial, we are making a Digital Thermometer using PIC microcontroller and LM35 Temperature Sensor. In this project, we will sense the temperature using LM35 and display it on 16x2 LCD. LM35 Temperature Sensor is accurate and cheaper and doesn't require any external calibration. The output voltage..... Listed under: Metering - Instrument Projects

236.

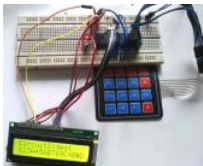


Interfacing RTC Module (DS3231) with PIC Microcontroller: Digital Clock Almost all embedded devices are designed to interact with the real world and act as a bridge to communicate between the digital world and the real world. To make this process easier and efficient, the digital world would sometimes need to keep track of the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

PIC16F877A Microcontroller Based Digital Alarm Clock The digital Revolution started in 1950 changes all the existing mechanical and analog electronic structures into digital computers. Since the growth of digital electronics has been exponential, today it is almost impossible for a person to resist using any electronic equipment. Starting from alarm..... Listed under: Clock - Timer Projects



238.



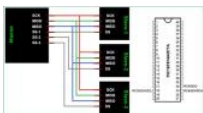
4x4 Matrix Keypad Interfacing with PIC Microcontroller Keypads are widely used input devices being used in various electronics and embedded projects. They are used to take inputs in the form of numbers and alphabets, and feed the same into system for further processing. In this tutorial we are going to interface a 4x4 matrix keypad..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

239.



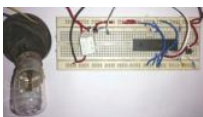
PIC to PIC Communication using RF Module Hello everyone, Today in this project, we will interface RF Receiver and Transmitter module with PIC Microcontroller and communicate between two different pic microcontrollers wirelessly. In this project we will do following things:- We will use PIC16F877A for the Transmitter and PIC18F4520 for the Receiver section. We will interface Keypad..... Listed under: Other Projects

240.



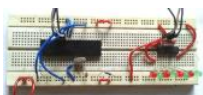
SPI Communication with PIC Microcontroller PIC16F877A PIC Microcontrollers are a powerful platform provided by microchip for embedded projects. Its versatile nature has enabled it to find ways into many applications and is yet to grow a lot. If you have been following our PIC tutorials then you will have noticed we have already..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

241.



Relay Interfacing with PIC Microcontroller In this project we will interface a Relay with PIC Microcontroller PIC16F877A. Relay is a mechanical device that can control high voltage, high current appliances 'ON' or 'OFF' from lower voltage levels. Relay provides isolation between two voltage levels and it is generally used to control AC appliances. From..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

242.



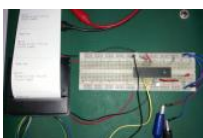
Interfacing 74HC595 Serial Shift Register with PIC Microcontroller There are possibilities in embedded design where you do not have enough I/O pins available in your microcontroller. That can be due to any reason, maybe your application needs multiple LEDs or you want to use multiple 7-segment displays, but you don't have required I/O..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

243.



RFID Interfacing with PIC Microcontroller RFID stands for Radio Frequency Identification. RFID module can read or write small amount of data into a Passive RFID tag, which can be used in identification process in various systems like Attendance system, security system, voting system etc. RFID is a convenient and easy technology. To read the Passive..... Listed under: RFID - NFC Projects

244.

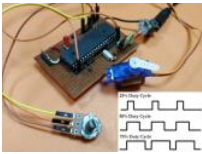







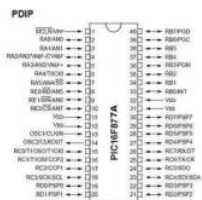

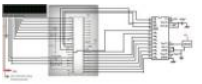



Thermal Printer interfacing with PIC16F877A Thermal printer is often referred as receipt printer. It is widely used in restaurants, ATM, shops and other places where receipts or bill is required. It is a cost-effective solution and very handy to use from the user's side as well as from the developer's side. Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

245.



Heart Beat Monitoring using PIC Microcontroller and Pulse Sensor Heart Beat rate is most important parameter in monitoring any person's health. In the modern era of wearable devices, there are a lot of devices which can measure heartbeat, blood pressure, footsteps, calories burnt and a lot of other things. These devices have a pulse sensor inside them..... Listed under: Medical - Health based Projects

246.  Generating PWM signals on GPIO pins of PIC Microcontroller PWM signal generation is a vital tool in every embedded engineers arsenal, they cor very handy for lot of applications like controlling the position of servo motor, switching few power electronic ICs in converters/invertors and ever a simple LED brightness control. In PIC microcontrollers..... Listed under: PWM Projects
247.  I2C COMMUNICATION WITH PIC MICROCONTROLLER I love the Atmel AVR microcontrollers! Since building the Ghetto Development System desc this Instructable, I've had no end of fun experimenting with the AVR ATtiny2313 and the ATmega168 in particular. I even went so far as to write a Instructable on using switches as inputs,..... Listed under: Sensor - Transducer - Detector Projects
248.  Timers of PIC microcontroller How to generate delay PIC microcontrollers are a very useful and versatile tool for use in many electronic projects. are very inexpensive and easy to find. They are also very powerful and many are capable of speeds up to 64 MIPS using the internal oscillator blc about 16..... Listed under: Clock - Timer Projects
249.  USE INPUT OUTPUT PORTS OF PIC18F452 MICROCONTROLLER This guide hopefully will show you how to write C code that will allow you to read analog input (AI) value to your PIC microcontroller. I am using a PICKit 3 programmer with a PICKit 2 18-pin demo board. The microcontroller is a. Listed under: Development Board - Kits Projects, Microcontroller Programmer Projects
250.  Object Detecting Android Bluetooth Robot Using PIC16F877A Bluetooth Controlled Robot using pic microcontroller Today I came up with another engineering project for electronics and communication students, Android and Bluetooth controlled robot using PIC Microcontroller with object detecting capability. After installing MikroElectron's Robo Control App from Play Store you should be able to control the robot with your android phone/ tablet..... Listed under: Bluetooth Projects, Robot Automation Projects
251.  555 timer in different modes of operation with circuit diagram This tutorial provides sample circuits to set up a 555 timer in monostable, astable bistable modes as well as an in depth discussion of how the 555 timer works and how to choose components to use with it. The 555 timer is a c Listed under: Clock - Timer Projects, Development Board - Kits Projects
252.  Vehicle Tracking System Through GPS-GSM Modules The project is based on a Gsm/Gps/Gprs. Its main function is to detect a illegal entry and communicate its own geographical position using, on the choice, the cellular phone reference system or the GPS. I use the recent product by IN SIM908 which operate..... Listed under: Car Projects, GPS Based Projects
253.  Electric Energy Theft Intimation System Using PIC Microcontroller In this instructable , I 'll show you how to build a PIC 16F917Microcontrollerprogramming circuit. This Microcontroller is a very nice Microcontroller chip form the famous chip manufacturer Microchip.This Microcontroller is easy to program and powerful to use.The photo above shows the programmer circuit after completion.Note:This circuit uses the serial port..... Listed under: power - energy projects
254.  How to use input output ports 8051 microcontroller| LED blinking PIC16F877A Pin out & Descriptions There are 5 ports that provide parallel I/O I PORTA, PORTB, PORTC, PORTD, PORTE Each port provides 8 bidirectional digital I/O lines which are connected to PIC16F877A pins provided that alternate functions are not selected on that..... Listed under: LED Projects
255.  Interfacing Fingerprint Sensor with PIC Microcontroller Finger Print Sensor, which we used to see in Sci-Fi movies a few years back, is now become common to verify the identity of a person for various purposes. In present time we can see fingerprint-based systems everywhere in our daily lif for attendance..... Listed under: Interfacing(USB - RS232 - I2c - ISP) Projects
256.  Prepaid Energy Meter with GSM Modem using pic microcontroller In this tutorial will learn how to interface ADC0804(Analog to Digital Converter 8051(89C51,89C52) microcontroller. 8051 microcontrollers are pretty old and don't have a build in analog to digital converter in them unlike their rivals(Arduino, Pic microcontroller and many more). Hence we can not..... Listed under: Metering - Instrument Projects
257.  Bluetooth module HC 05 interfacing with pic microcontroller In this tutorial, we'll control the PIC microcontroller using a smartphone and a PC via Bluetooth. So as not to overload this tutorial, we'll postpone the communication of 2 PIC microcontrollers via Bluetooth in which the 1st one is a and the 2nd one is a..... Listed under: Bluetooth Projects

258.  Esp8266 based home automation system using wifi Esp8266 based home automation system using wifi It is also cheap and be used for making projects connected to the Internet .Learn how to make a simple IOT Project with it .The ESP8266 WiFi Module is a self contained SOC with integrated TCP/IP protocol..... Listed under: Home Automation Projects, Wifi - WLAN Projects
-
259.  INTERFACING LCD WITH 8051 MICROCONTROLLER with code Introduction LCDs (Liquid Crystal Displays) are used for displaying status or parameters in embedded systems. LCD 16x2 is a 16 pin device which has 8 data pins (D0-D7) and 3 control pins (RS, RW, EN). The remaining 5 pins are for supply and backlight for the LCD..... Listed under: LCD Projects
-
260.  DC MOTOR INTERFACING WITH 8051 MICROCONTROLLER In this project, we will learn about L293D and L298N Motor Drivers and also about interfacing a DC Motor with 8051 Microcontroller with the help of both L293D and L298N. When we talk about controlling the robot, the first thing that comes into mind is controlling..... Listed under: Motor Projects
-
261.  STEPPER MOTOR INTERFACING WITH 8051 MICROCONTROLLER Stepper motor is a brushless DC motor, which can be rotated in small angles, these angles are called steps. Generally a stepper motor uses 200 steps to complete 360 degree rotation, means it rotates 1.8 degree per step. Stepper motors are used in many devices which need precise..... Listed under: Motor Projects
-
262.  How to Use "MikroC PRO for PIC" to Program PIC Microcontrollers PIC microcontrollers are a very useful and versatile tool for use in many electronic projects. They are inexpensive and easy to find. They are also very powerful and many are capable of speeds up to 64 MIPS using the internal oscillator block, about 16MHz..... Listed under: Microcontroller Programmer Projects
-
263.  How to Use PICKit3 to upload code to pic microcontroller For programming PIC microcontrollers we require a piece of hardware that can communicate with the microcontroller known as a programmer. There are several programmers available out there but we will be using PICKit3 for this example because of its versatility. One important note before we..... Listed under: Microcontroller Programmer Projects
-
264.  ESP8266 wifi module interfacing with pic microcontroller Introduction ESP8266 module is a low cost standalone wireless transceiver that can be used as an end-point IoT development. ESP8266 module enables internet connectivity to embedded applications. It uses TCP/UDP communication protocols to connect with server/client. To communicate with the ESP8266 module, the microcontroller needs to use..... Listed under: Wifi - WLAN Projects
-
265.  EXPERIMENT BOARD FOR 40-PIN PIC-MICROCONTROLLERS DEVELOPMENT Experiment with a lot of features for free pic development board PCB diagram drawing and painting has been completed state. 40 PIC series can be used for serial port interface (MAX232) button link 2... Electronics Projects, Experiment Board for 40-pin PIC-Microcontrollers Development "pic development board," Experiment with a..... Listed under: Development Board - Kits Projects
-
266.  PIC16F84 DEVELOPMENT BOARD PLAY-PIC New to PIC programming a circuit that will be beneficial to your friends. Designed to work with PIC16F84 the board has buttons, LEDs and is available in seven segments. Thus, when a trial program is executed it can be observed. Electronics Projects, PIC16F84 Development Board PLAY-PIC "pic development board, pic16f84 projects," New to PIC..... Listed under: Development Board - Kits Projects
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267.  PIC DEVELOPMENT BOARDS PIC16F84 PIC16F873 A PCB with firmware to exploit and test all the functions in this PIC microcontroller. The board includes a LCD, keyboard, piezo sounder, Real Time Clock with backup power, I2C bus, potentiometer for A/D... Electronics Projects, PIC Development Boards PIC16F873 "avr development board, pic development board, pic16f84..... Listed under: Development Board - Kits Projects
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268.  SIMPLE DSPIC EXPERIMENT DEVELOPMENT BOARD Beginner level LEDs, buttons, analog input, 24Cxx EEPROM and serial communication with the PIC. I did try a little experiment where you can make your own set. Wishing to be helpful. Simple DSPIC Development...Electronics Projects, Simple DSPIC Experiment Development Board "dspic projects, pic development board," Beginner level..... Listed under: Development Board - Kits Projects
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269.  MICROCHIP PIC16F, PIC18F DEVELOPMENT BOARDS This is a two-in-one PIC programmer and Experiment board for 40 pin PIC Micro devices. It enables you to develop your program without insert/remove PIC micro. You just program your code and then download to this board... Electronics Projects, Microchip PIC16F, PIC18F Development Boards "pic development board," This is a two-in-one..... Listed under: Development Board - Kits Projects

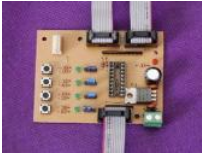
270. **PROTOTYPING BOARD FOR PIC16F876 PROGRAMMER, EXPERIMENT** Prototyping Board for PIC 16F876 testing for PIC16F876 With this circuit board, you can program you microcontrollers from 16F87X family and the 18FXXX comprising 28 pins. this arrangement allows you to test its operation... Electronics Projects, Prototyping Board for PIC16F876 Programmer, Experiment "pic development board, pic16f876 projects, " Prototyping..... Listed under: Development Board - Kits Projects



271. **MICROCHIP PIC16F877 TESTING, EXPERIMENT BOARD PIC16F877** Experiment board ACCEL P-CAD PCB PCB and schema files V14.00.3 asm code 1 the sample has been prepared by the addition You will find on this page all the elements to achieve a...Electronics Projects, Microchip PIC16F877 Experiment Board "pic development board, pic16f877 projects, " PIC16F877 Experiment board..... Listed under: Development Board - Kits Projects



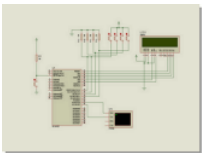
272. **18-PIN MICROCHIP PIC EXPERIMENT BOARDS PROJECT** A Microchip PIC16F628 PIC16F648 PIC16F628 PIC16F84A PIC16F84A 18 pin PIC16F648 PIC simple handy series of experiment, development board 18-pin microcontrollers, and is the reason for this project. including the number 16F628, 16F628A, 16F648,... Electronics Projects, 18-Pin Microchip PIC Experiment Boards Project "pic development board, " A Microchip PIC16F628 PIC16F628..... Listed under: Development Board - Kits Projects



273. **PIC16F84 PROGRAMMER EXPERIMENT BOARD** Useful simple PIC16F84 experiment and programming circuitry features the PORTB on the LED an seven-segment display ULN2803 connected with PORTA on the four buttons switch-controlled buzzer circuit DC 15 volt 500 mA power supply... Electronics Projects, PIC16F84 Programmer Experiment Board "pic development board, pic16f84 projects, " Useful simple PIC16F84 exp and..... Listed under: Development Board - Kits Projects



274. **PIC16F877 PIC16F84 PROTEUS ISIS PICMICRO DEVELOPMENT BOARD SIMULATIONS** The code for 16F877 microcontroller 16f84 written ready for test circuit in Proteus ISIS additional 3 pcs 5 pcs assembly application (king rider, walking light flashers) have source <http://www.projearsivim.com/download/DeneyKarti.zip> Proteus isis Picmicro Development... Electronics Projects, PIC16F877 PIC16F84 Proteus is Picmicro Development Board Simulations "pic development board, pic16f84..... Listed under: Development Board - Kits Projects



275. **PIC16F628 EXPERIMENT BOARD PROJECT** Picmicro for programming restart my first choice PIC16F628 was testing for Breadboard use challenge in simple test circuit was necessary did some research where the circuit I like a simple, cost, low beginners suitable... Electronics Projects, PIC16F628 Experiment Board Project "pic development board, pic16f628 projects, " Picmicro for programming..... Listed under: Development Board - Kits Projects



276. **MULTI-PURPOSE PICMICRO TEST BOARDS** 18 pin 28 pin 40 pin microcontroller series for a very pic usb rs232 multi-purpose development, test ci ISCP has links with the on-board outputs can be connected upside additional apparatus has all the...Electronics Projects, Multi-Purpose Picmicro Boards "avr development board, pic development board, " 18 pin..... Listed under: Development Board - Kits Projects



277. **DSPIC DEVELOPMENT BOARD** Try dspic30f6010 Microchip microcontroller development board on the UART (max233), can (mcp2551) and so on. find all entry and exit po the unit diagram and PCB design drawing eagle resources are also made... Electronics Projects, dsPIC Development Board "dspic projects, pic development board, " Try dspic30f6010 Microchip microcontroller..... Listed under: Development Board - Kits Projects



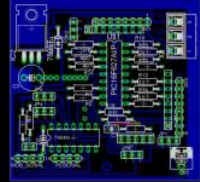


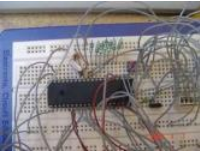
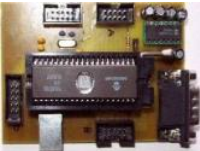
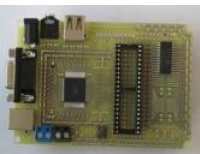



278. **DEVELOPMENT BOARD PIC18F2550 PIC18F4550 PIC18F4550 and PIC18F2550** prepared for the experiment set of circuit than the regular seems s each chapter PCBs indicated on the layout also pretty good easily can be selected power source, LEDs, buttons, op...Electronics Projects, Develop Board PIC18F2550 PIC18F4550 "pic development board, pic18f2550 projects, " PIC18F4550 and PIC18F2550 prepared for..... Listed under: Development Board - Kits Projects



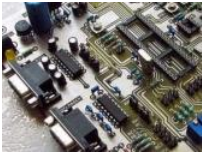
279. **PIC18F4550 DEVELOPMENT BOARD AND PIC18F4550 EXAMPLES** PIC18F4550 for a simple handy trial development board and various application are also circuits Eagle prepared by the PCB diagram drawings and PIC C language prepared by the software (MPLAB, C. Hex, Mcw,... Electronics Projects, PIC18F4550 Development Board and PIC18F4550 Examples "avr development board, pic development board, "..... Listed under: Development Board - Kits Projects



280.  PIC18F4550 USB DEVELOPMENT BOARD PROJECT CCS C Microchip PIC18F4550 PIC18F series microcontroller with a quality test kit to test the code provide great convenience USB SD / MMC card slot so the LCD connection. 's. CCS C Software and protel...Electronics Projects, PIC18F4550 USB Development Board Project CCS C "pic development board, " Microchip PIC18F4550..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
281.  PIC18F2550 DEVELOPMENT BOARD CIRCUIT USB BOOTLOADER PCB Unlike other applications that attempt PIC18F2550 development board "USB bootloader" option for the project for which you want to apply with the PIC18F2550 keep a circuit will provide great convenience for. PIC18F2550 Application Board... Electronics Projects, PIC18F2550 Development Board Circuit USB Bootloader PCB "pic development board, pic18f2550 project Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
282.  PIC18F452 , PIC16F877 SERIES MICROCONTROLLER EXPERIMENT BOARD THIS IS THAT WOULD BE A SUCCESSFUL FOR BEGINNERS, NIGHTS OF BIT ANALOG INPUTS 16 OUTSIDE BUFFERS RS232 IN BLACK WITH BLACK SUPPORT KROZ MCS ONBOARD LCD AND MORE THAN MANY BITCHES THE STORY IS BECAUSE YOU WANT TO MAKE A CUT 20 YEARS..... Listed under: Development Board - Kits Projects
283.  MULTI-FUNCTIONAL PICMICRO DEVELOPMENT BOARD (BREADBOARD SUPPORTED) quite an advanced picmicro trial, testing, project development a lot of functions all resources shared also the circuit for testing c language prepared test program at (pic_board_test.c) had the most excellent o the...Electronics Projects, Multi-functional PICmicro Development Board (Breadboard Supported) "avr development board, pic development board Listed under: Development Board - Kits Projects
284. PIC18F2520 SD MMC DEVELOPMENT BOARD CIRCUIT Try SD MMC card Pickit2 Clone pic18f2520 microcontroller based on the links in the section for the programmer's s exists in a source swordfish PIC18F2520 Development Board SD MMC Source: <http://digital-diy.com> SD MMC Development... Electronics Projects, PIC18F2520 SD MMC Development Board Circuit "pic development board, pic18f2550 projects, " Try..... Listed under: Development Board - Kits Projects
285.  PIC16F877 EXPERIMENT BOARD CIRCUIT PIC PROGRAMMING PIC TUTORIAL BOOK A useful test development PIC16F877 circuit pcb printed circuit design was quite nice small in size but has a lot of features. Serial RS232 connection, sensors, servos, PWM, I2C connector and so on.... Electronics Projects, PIC16F877 Experiment Board Circuit PIC Programming PIC Tutorial Book "pic development board,..... Listed under: Development Board Projects
286.  PIC16F874P PROJECT DEVELOPMENT TEST CIRCUIT Try the card installed on board bred PIC16F874P test used in various robotics projects, etc. RS connection LCD output. features are also RS232, motor, LCD testing in the Software (asm, hex) there. "PICboard" module... Electronics Projects, PIC16F874P Project Development Test Circuit "pic development board, " Try the card installed..... Listed under: Development Board - Kit Projects
287.  USB DEVELOPMENT BOARD PIC16C765 Microcontrollers are not good with explanations will not do much about the circuit 😊 but prepared for the project with eagle pcb, diagrams, and Visual C++ asm prepared program my PC (have... Electronics Projects, USB Development Board PIC16C765 development board, " Microcontrollers are not good with..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
288.  ALL-IN-ONE MICROCONTROLLER EXPERIMENT PCB A very well designed specifically for microcontroller projects useful test card can be used in many different kiliflarda integrated standard input output ports that can be used for a long period of time, a... Electronics Projects, All-in-One Microcontroller Experiment PCB "pic development board, " A very well designed specifically..... Listed under: Microcontroller Programmer Projects
289.  PIC24 DEVELOPMENT BOARD BREAKOUT BOARD development on the board64 pin pic24fj64ga006 pic24hj128gp506 the same leg connection with PIC24 series microcontrollers available on the circuit inputs and outputs for connection and Pickit2 Clone header for used FTDI TTL 232R... Electronics Projects, PIC24 Development Board Breakout board "pic development board, " development on the board64..... Listed under: Development Board Projects
290. OPEN SOURCE PROJECT DEVELOPMENT PLATFORM JALUINO JALV2 PIC18F4550 One Arduino named hunting, ca based on the development project carried out was very popular a lot like made additional modules say in every country a system used was Sebastien Lelong same job jalv2...Electronics Projects, Open Source Project Development Platform Jaluino Jalv2 PIC18F4550 "avr development board, pic..... Listed under: Development Board - Kits Projects



291. MICROCHIP DEVELOPMENT TEST BOARD PIC18F452 Microchip microcontroller users is quite a useful experiment to work you need a Pic18f452 development Board this v small-sized double-sided printed circuit board drawing a lot of property has been added ... max232 rs232... Electronics Projects, Microchip Development Test Board PIC18F452 "pic development board, " Microchip microcontroller users is..... Listed under: Development Board - Kits Projects



292. 8-40 PIN DIP ADAPTER FOR MICROCHIP PIC SERIES Microchip PIC microcontroller to program the tar socket Series programlaycı ICSP programme convenience, but also do not have these facilities on a shared circuit DIP adapter between 8 40 Pin PIC microcontroller... Electronics Projects, { DIP Adapter for Microchip PIC Series "pic development board, " Microchip..... Listed under: How To - DIY - Projects



293. GSM based home devices control system The project aims at a system allowing user to control home based appliances through Sms along with acknowledgements. Here user need not switch home appliances on and off manually. Our system allows user to operate these devices through also the status weather the device..... Listed under: Phone Projects



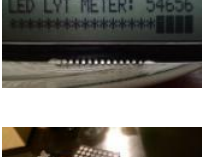
294. HUMANOID robotic ARM using pic microcontroller From the assembly line of automobile manufacturing industries to the telesurgery robots in s Robotic Arms are to be found everywhere. The mechanisms of these robots are similar to a human which can be programmed for similar functio increased capabilities. They can be used..... Listed under: Robotics - Automation Projects



295. Electronic lock using pic microcontroller Security is a prime concern in our day-today life. Everyone wants to be as much secure as possible. As a control for doors forms a vital link in a security chain. The microcontroller based digital lock for Doors is an access control system that allows..... Listed under: LCD Projects



296. Digital multimeter circuit using pic microcontroller Hello everyone, thank you for checking out my first Instructable. I have enjoyed seeing your cr over the years and love what all of you are contributing. This project is a spin off of one that I recently saw here and I need to give a shout out to Bot1398 because..... Listed under: LCD Projects



297. What is Led matrix? Types of Dot matrix display with working Interfacing on a 8x8 dot matrix can be fun and is easy to play with, so let's get strai it! Step 1: What You Will Need: AT89C51 MICRONTROLLER 8X8 DOT MATRIX A DEVELOPMENT BOARD OR DOT MATRIX MODULE Step 2: Principle Need to..... Listed under: LED Projects



298. Receive sms gsm module using pic microcontroller GSM modules are fascinating to use especially when our project requires remote access. These modules could make actions that our normal mobile phone could do, like making/receiving a call, sending/receiving a SMS, connecting to internet using GPRS etc. You can also connect a norm microphone..... Listed under: Phone Projects



299. contactless tachometer circuit with code A Tachometer is a device which measures the speed of a rotating object like an electric motor or a crank of a vehicle engine. Speed of an electric motor is determined by the number of revolutions made by the motor in one minute. In..... Listed under Projects



300. password based circuit breaker using pic microcontroller A circuit breaker is an automatically operated electrical switch designed to protect an electrical circuit from dam caused by overload or short circuit. Its basic function is to detect a fault condition and interrupt current flow. Unlike a fuse, which operates once and then must be..... Lis



under: Security - Safety Projects

301.



Tv remote controlled home automation system In this project, we are using IR based wireless communication for controlling home appliances. In project, Arduino is used for controlling whole the process. We send some commands to the controlling system by using IR TV/DVD/MP3 remote f controlling AC home appliances. After receiving..... Listed under: Home Automation Projects

302.



wireless electronics notice board using gsm with code Wireless notice board is very selective term for this project, as it has a very wide scope ratl just being a simple notice board. First we should understand the purpose of this project, in this system we can display a message or notice to..... under: Wireless Projects

303.



parking management system project using pic microcontroller In this tutorial, we will discuss the parking management system project using pic microcontroller that how we can manage our parking with the pic microcontroller. Items used in this project: Hardware components Res Thin Fil Ohm 1% 3/5W $\pm 50\text{ppm}/^\circ\text{C}$ Conformal AXL Thru-Hole Ammo Pack..... Listed under: LED Projects

304.



RFID based electronic lock using pic microcontroller [embed]<https://youtu.be/eb15tMjaxyQ/>[embed] In these days we're here with our subseque assignment that is RFID and keypad primarily based security machine. This assignment is implemented by means of the use of 8051. often we ar to see RFID tags or card in metro teach when we're..... Listed under: LCD Projects, Security - Safety Projects

305. Three phase voltage measurement using pic microcontroller In our day-to-day life, we consume electrical energy for various purposes such as for powering electrical appliances, gadgets, devices, machines, and so on. So, it is essential to measure the amount of power consumed to generate electricity bill which is usually done by energy meter..... under: Microcontroller Programmer Projects

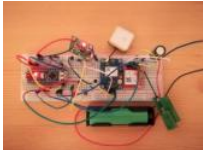


306.



Esp8266 based home automation system using wifi In this post we will learn Esp8266 based home automation system using wifi: ESP8266 is a gr thing for starting to Wifi And IOT. ESP8266 is a great thing for starting to Wifi And IOT It is also cheap and be used for making cool..... Listed unde Bluetooth Projects, Wifi - Wlan Projects

307.



Vehicle Tracking System Through GPS-GSM Modules So you have got a GSM module lying around like me? Also a GPS-tracker? We think the same instructables, I will try to guide you how to accomplish your goal from a newbie's perspective. As I had no previous electrical engineering knowler (to..... Listed under: Car Projects

308.



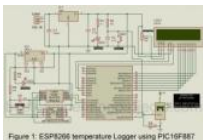
accelerometer Based Hand Gesture Controlled Robot using Xbee With this robot, you control everything with your hand, even the robotic arm! T gestures can be programmed differently. Long range with Xbee communication! Step 1: Parts Needed Arduino Uno x2 - http://store.arduino.cc/index.php?main_page=produc... Xbee S2 x2 - <https://www.sparkfun.com/products/11217> Xbee shield for Arduino Uno x: - <https://www.sparkfun.com/products/12847> Xbee..... Listed under: Robotics - Automation Projects

309.



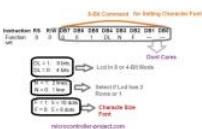
Efficient Energy Management System with Smart Grid In this post we will discuss Efficient Energy Management System with Smart Grid. Smart Er Management is the system, which uses communication and control centre for simplifying and upgrading the power system. In this paper, differe of energy management systems are discussed and also..... Listed under: power - energy projects

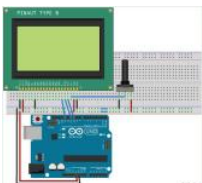
310.



IOT Based Temperature data logger using esp8266 and pic microcontroller In this post we will learn IOT based temperature data logger using esp and pic microcontroller: The project ESP8266 Temperature Logger using PIC16F887 is build up using PIC16F887 microcontroller (MCU), ESP8266 module and a ThingSpeak API. Previously, we posted Arduino and ESP8266 based webserver and..... Listed under: Temperature Measurement P

311.  Home security system using PIR sensor and GSM module In this project, we are going to develop a PIR sensor and GSM based home security system. This project is developed using 8051 microcontroller. It can be used to detect any intrusion in houses and offices and send the alerts on cell phone as you know..... Listed under: Security - Safety Projects
312.  GPS based clock using pic microcontroller In this article I'll show you one way to use a PIC microcontroller to get the time and date from a GPS module. Use a PIC microcontroller to get time and date from a GPS module. Requirements Computer with MPLAB X, and the XC8 compiler. PICKIT 3.5..... Listed under: Clock - Timer Projects
313.  Display GPS Co-ordinates on LCD using pic microcontroller This project describes how you can build a mobile real time GPS tracker with integrated Google Maps. I began this project mainly to see if I can integrate all the different pieces of hardware and software to make a workable solution, and it took some..... Listed under: LCD Projects
314.  GPS based speedometer using pic microcontroller My company car that I normally drive tends to have a "small" problem from time to time, the speedometer falls to 0 Km/h when driving (after some time it resumes again). Normally this is not a big issue since if you know how to drive..... Listed under: Wireless Projects
315.  gsm based dc motor speed control using pic microcontroller Hey friends this is my 3rd year BE project "Speed control of DC motor" which I could share with you. In this you will learn how to interface LCD, hex keypad and motor. The code is written in assembly to simplify I have..... Listed under: Motor Projects
316.  XBee Based Temperature and Gas Monitoring System Using Pic Microcontroller Air pollution has become a common phenomenon everywhere. In the urban areas, air pollution is a real-life problem. In the urban areas, the increased number of petrol and diesel vehicles and the presence of industrial areas at the outskirts of the major cities are..... Listed under: Temperature Measurement Projects
317.  DsPIC33F microcontroller based pure sine wave inverter In this post we will briefly discuss DsPIC33F microcontroller based pure sine wave inverter. In the majority of the technological devices used with the development of the technology use the network voltage (220V-50Hz). Conversion must be done to obtain the mains voltage from the DC storage..... Listed under: Wifi - WLAN Projects
318.  MPPT Based Charge Controller Using Pic Microcontroller In this post we will briefly discuss about MPPT Based Charge Controller Using Pic Microcontroller. Photovoltaic is one of the renewable energy resources that recently has become broader in nowadays technology. The electric generation of photovoltaic (PV) panels are strongly related with insolation and temperature..... Listed under: Phone Projects
319.  Heart beat pulse sensor interfacing with pic microcontroller Heart Beat rate is most important parameter in monitoring any person's health. In the modern era of wearable devices, there are a lot of devices which can measure heartbeat, blood pressure, footsteps, calories burnt and a lot of other things. These devices have a pulse sensor inside them..... Listed under: Sensor - Transducer - Detector Projects
320. How to display 5x8 and 5x10 size font characters on 16x2 Lcd with 8-bit microcontrollers Character Lcds can display character of font size 5x8 and 5x10. In 5xn, 5 represents number of columns and N represents number of rows. Character Lcd's especially which are controlled by Hitachi HD44780 controller can display 5x8 and 5x10 size font character. Some Lcd's can..... Listed under: Microcontroller Programmer Projects



321.  Interfacing Graphical LCD (GLCD-JHD12864E) with Microchip PIC16f877 Microcontroller In this post/tutorial I am going to teach you how to interface a graphical LCD JHD12864E with a microchip PIC16f877 microcontroller. I am going to display my website name "www.microcontroller-project.com" and a special pattern that displays thick lines on a dotted graphical LCD display. In graphical LCD name "JHD12864" the..... Listed under: LCD Projects

322.  Real time clock & calendar with PIC18F4550 and DS3231 Interfacing PIC18F4550 with DS3231 RTC The DS3231 is a low cost , extremely accurate time clock with a built-in crystal oscillator. The characteristics of the DS3231 make it one of the best choices for real time clock chips. This project how to build..... Listed under: Clock - Timer Projects
323.  Interfacing LM35 temperature sensor with PIC18F4550 microcontroller Interfacing PIC18F4550 with LM35 This small topic shows the circuit diagram CCS C code of the interfacing of LM35 temperature sensor with PIC18F4550 microcontroller. The LM35 temperature sensor is three pin device (V and GND) with an output voltage linearly related to Centigrade..... Listed under: Temperature Measurement Projects
324.  Wave player using PIC18F4550 microcontroller Making an audio player (.wav files) using PIC microcontroller is not complicated especially when it has a PWM module. This topic shows how to build an audio player using PIC18F4550 microcontroller where the file is stored in an SD card with FAT16 or..... Listed under: Sound - Audio Projects
325.  Remote controlled USB mouse using PIC18F4550 Building a USB mouse using PIC18F4550 microcontroller and CCS C compiler is easy as shown in the link below: USB Mouse using PIC18F4550 microcontroller Also, it is not hard to add an infrared remote control to the previous USB project. This project shows how to do it..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects
326.  MMC/SD Card raw data read with PIC16F887 microcontroller Interfacing MMC/SD card with PIC16F887 This small example shows how to read SD card raw data (bytes, sectors ...). SD card raw data means that there is no use of system files like FAT16 or FAT32. Serial monitor is used to display the data after..... Listed under: Phone Projects
327. Read text files from FAT16 SD card with PIC16F887 Interfacing PIC16F887 with FAT16 SD card After reading raw data (bytes and sectors) from SD card, now I'm going to use the file system to read and print text file located in 2 GB SD card. Read SD card raw data topic: MMC/SD Card raw..... Listed under: Phone Projects
328.  Real time clock and temperature monitor using PIC16F887 and DS3231 The last interfacing of the PIC16F887 microcontroller and DS3231 RTC is the building of a simple real time clock and calendar with two buttons for setting time and date. Project link is the one below: Interfacing DS3231 with PIC16F887 microcontroller In this topic I'm going..... Listed under: Clock - Timer Projects
329.  Wave audio player using PIC16F887 microcontroller This small project shows how to make a simple wave audio player using PIC16F887 microcontroller and SD card. The WAV audio file used in this project is 8000 Hz, 8-bit stereo (2 channels). Hardware Required: PIC16F887 microcontroller SD card (formatted with FAT16 or FAT32..... Listed under: Sound - Audio Projects
330.  DC motor control with PIC16F84A and L293D Low power DC motors can be easily controlled with half H-bridge IC L293D. This IC is 16-pin IC which can control 2 motors in both directions. This topic shows how to control DC motor speed and direction with PIC16F84A and L293D motor drive integrated circuit..... Listed under: Motor Projects
331.  PIC16F84A + DHT11 Proteus simulation Interfacing PIC16F84A microcontroller with DHT11(RHT01) sensor This topic shows how to interface DHT11 (RHT01) digital relative humidity and temperature sensor with PIC16F84A microcontroller, and how to simulate this interfacing using Proteus. Note that for the simulation Proteus version should be 8.1 or higher. With these..... Listed under: Sensor - Transducer - Detector Projects
332.  PIC16F84A + DHT22(AM2302, RHT03) sensor Proteus simulation DHT22 Proteus simulation This topic shows how to interface DHT22 (AM2302, RHT03) digital relative humidity and temperature sensor with PIC16F84A microcontroller, and how to simulate this interfacing using Proteus. Note that for simulation Proteus version should be 8.1 or higher. With these versions there..... Listed under: Sensor - Transducer - Detector Projects
333. NEC Remote control decoder with PIC16F84A The NEC protocol uses pulse distance encoding of the bits. Each pulse is a 562.5μs long with a carrier frequency of 38KHz. Logic bits are transmitted as follows: Logic 0: 562.5μs pulse burst followed by a 562.5μs space, with a total transmit time of 1125μs..... Listed under: Clock - Timer Projects

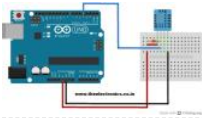


334.



Interfacing PIC16F84A with SD card This topic shows a simple interfacing of 2 GB micro SD card with PIC16F84A microcontroller. I used the PIC16F84A to read the SD card raw data which doesn't require a microcontroller with high RAM or ROM. In this interfacing I used software SPI because the.....
under: Phone Projects

335.



DHT11 Interfacing with PIC12F1822 microcontroller In this blog there are some topics talking about the DHT11 relative humidity and temperature sensor and how to interface it with different types of PIC microcontrollers. The datasheet of the DHT11 sensor shows its characteristics and how it works. Also the following topic shows..... Listed under: Sensor - Transducer - Detector Projects

336.



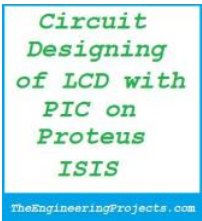
Getting Started With Proteus Hello readers, today's post is the first regular post on Proteus tutorial. In today's tutorial, I am gonna share Getting Started with Proteus. Today's tutorial is for beginners who don't have much knowledge of Proteus but wants to start working with it. We don't design.....
under: power - energy projects

337.



IR Remote control transmitter and receiver using PIC12F1822 microcontroller 5-Channel IR remote control system using PIC microcontroller This shows how to make a simple infrared (IR) remote control system using the microcontroller PIC12F1822. This IR system has two circuits as known transmitter circuit and IR receiver circuit. Both circuit based on the..... Listed under: Other Projects

338.



Circuit Designing of LCD with PIC Hello friends, hope you all are fine and enjoying good health. Today I am posting the next part of Proteus tutorial is Interfacing of LCD with PIC Microcontroller. . In the previous post of this tutorial, we have seen the basics of Proteus and..... Listed under: LCD Projects

339.



PIC12F1822 ADC and PWM modules This topic gives a short descriptions about PIC12F1822 microcontroller ADC and PWM module and how to use using CCS PIC C compiler. For more details go to PIC12F1822 datasheet. PIC12F1822 ADC Module: PIC12F1822 microcontroller has a 10-bit ADC (Analog to Digital Converter) module. 4 Pins..... Listed under: Clock - Timer Projects


340.

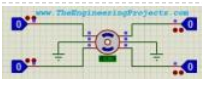


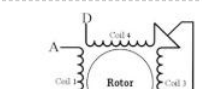
Real Time Clock/Calendar with Remote Control Remote Controlled Real Time Clock/Calendar with PIC12F1822, DS1307 It is good idea to build a simple and low cost DIY remote controlled real time clock/calendar using simple components. This post show how to make a remote controlled real time clock using PIC12F1822 microcontroller, DS1307 RTC..... Listed under: Clock - Timer Projects

341. DC Motor Drive Circuit in Proteus ISIS Hello friends, hope you all are fine and enjoying good health. In the previous posts, we have seen How to design a 5V DC power supply in Proteus ISIS and after that we have also discussed How to design a variable DC Power supply using..... Listed under: Motor Projects




342.  RC5 IR Remote Control Decoder with PIC12F1822 Microcontroller This topic shows an easy and effective way for decoding IR (Infra-Red) remote c that use Philips RC-5 communication protocol, but first we've to understand how the RC5 protocol works. This Wikipedia links has good infos abo RC5 protocol. The RC-5 protocol was developed..... Listed under: LCD Projects

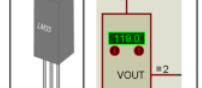
343.  Stepper Motor Drive Circuit in Proteus ISIS Hello friends, hope you all are healthy, wealthy and wise. Today's topic is about the control of stepper In the last post we have seen How to control DC motor in Proteus, and now we are gonna see How to design a Stepper Motor..... Listed under: Motor Projects

344.  Unipolar Stepper Motor Control Example with PIC12F1822 Microcontroller This topic shows how to drive 5V unipolar stepper motor in 3 modes (phase, two-phase and half step. The microcontroller used in this project is Microchip PIC12F1822 and the motor drive circuit is ULN2003. Usually unipolar stepper motor has 5 wires one for motor..... Listed under: Motor Projects


345.  PICMicro PWM TMR0 Calculators Microchip PIC microcontroller series of Pwm Tmr0 Time Delay code calculations for programs PICMicro Pwm Ca Oscillator frequency settings when TMR2 PR2 identify values Actual values automatically gives frequency resolution Bits PICMicro Tmr0 Time... Electronics Projects, PICMicro PWM TMR0 Calculators "electronics software tools, " Microchip..... Listed under: Clock - Timer Projects

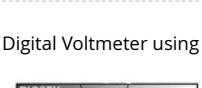
346.  Digital Thermometer using PIC16F877A and LM35 This is a simple project showing you how to read LM35 analog temperature sensor using a PIC microcontroller and six seven segment (common cathod).In this tutorial we will make a practical use of multiplexed seven segment displays. We use them to show current temperature..... Listed under: Temperature Measurement Projects

347.  DS1307 Based Hand Clock with seven segment display using PIC16F877A DS1307 Based Hand Clock with seven segment display using PIC16F877A (Code) //-----Project by { ZAKI }--"facebook.com / Zaki Semel"-----// //-----Project { Clock Hand }---For Pic16f877a & 7 Segment 4, Anode-----// //*****// char second, minute, hour, day, date, month, year, second_d1, second_d2, minute_d1, minute_d2, hour_d1,..... Listed under: Clock - Timer Projects

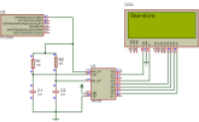
348.  Digital Voltmeter using PIC16F877a This is a simple project showing you how to make a digital voltmeter of range 0-20V using microcontroller PIC16F877A and a Liquid Cr Display 16x4 HD44780 LCD in Proteus ISIS. The microcontroller PIC 16F877A has 8 analog input channels for the in-built 10-bit ADC. In..... Listed under: Metering - Instrument Projects


349.  Double sensor interface Indoor/OutdoorThermometer using PIC16F877A Microcontroller This is a simple project showing you how to read LM35 temperature sensor using a PIC microcontroller and LCD 4x20 in Proteus ISIS. In this tutorial we will make a practical use of the ADC. We will use show current temperature using..... Listed under: Temperature Measurement Projects

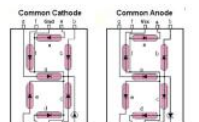
350.  Automatic traffic light using PIC16F877A Microcontroller The objective of this project is to design a traffic light control system. This traffic light co is used at the intersection that consists of a main road and two side roads. A four way traffic light control system with count down timers is to..... under: LED Projects

351.  AUTOMATIC WATER LEVEL CONTROLLER USING MICRO-CONTROLLER PIC18F45K22 The objective of this project is to design an automatic water l control system. It indicates the level of water in the tank and automatically controls it by using PIC Microcontroller and water level sensors. Wate [caption id="attachment_15251" align="aligncenter" width="500"] Water Sensor/[caption] Water level..... Listed under: Robotics - Automation Projects

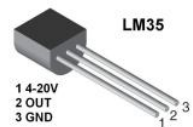


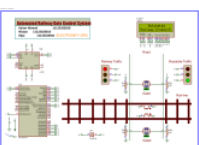
352.  How to make own serial LCD display for PIC12F683 Microcontroller Alphanumeric LCD generally HD44780 model is very popular display . This LC pins for data display and three pin for control and AL together 16 pin . There will be problem on project if we have to connect numbers of comp in single..... Listed under: LCD Projects

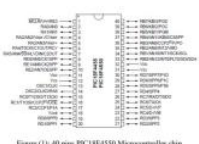
353.  Home Security Alarm System using PIC18F45K22 AND PIR Motion Sensor2 This project describes a home security alarm based on a Passive Infra sensor module (HC-SR501) and PIC18F45K22 . PIR sensor is used to detect motion in the environment and is commonly known as motion sensor the microcontroller detects the PIR sensor is triggered, it..... Listed under: Security - Safety Projects


354.  Multiplexing 7 Segment Display using PIC18F2550 Microcontroller This tutorial describes how to implement decimal counter which will incremer 0000 to 9999 ; in multiplexed seven segment display using PIC18F2550 in PROTEUS ISIS. Multiplexing is required when we want to interface 3 or even more such displays with MCU ssince..... Listed under: LCD Projects

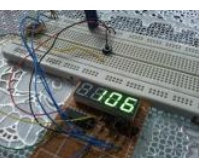
355. Display temperature on Graphic Liquid Crystal Display using PIC16F877A Microcontroller Hello everybody welcome back . Today I'm gonna tell how you can display temp with bar graph on Graphic LCD using PIC microcontroller . The project is very simple to understand if you have concept of Graphic LCD .The prog this project is written..... Listed under: Temperature Measurement Projects





356.  Automatic Railway Gate Control System Using PIC16F877A microcontroller Generally railway gates are closed or opened manually by gatekeeper prevent collision between road traffic and train . Time schedule and other information are sent from the main controller station manually in this we will try to make a railway line which has..... Listed under: Other Projects

357.  SKIN TEMPERATURE MEASUREMENT Abstract: This report represents the design and implementation of a skin temperature measurement system system aims to measure the skin temperature from a sensor and send it to the PC using a USB cable to display on screen. The data needs to be updated..... Listed under: Temperature Measurement Projects

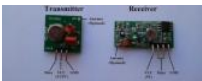
358.  Time-Controlled Switch Using PIC16F72 A time controlled switch is an automatic timer switch that turns an appliance 'on' for the desired time du After the preset time duration, the timer automatically switches off, disconnecting the appliance from the power supply. The time duration for w appliance should be..... Listed under: Clock - Timer Projects

359.  Interfacing 7-segment display with PIC12F1822 using CCS PIC C compiler The easiest way to interface 7-segment display with PIC12F1822 microcontroller is to add a serial-in parallel-out shift register. The adding of the shift register minimizes the number of pins used by the 7-segme display. This topic shows how to make a 3-digit digital counter with multiplexing and..... Listed under: LED Projects

360.  Unipolar Stepper Motor Control From IR Remote Control Using PIC18F4550 This project shows how to control a 5V unipolar stepper motor from remote control uses NEC protocol with PIC18F4550 microcontroller. This controller controls the stepper motor speed and direction of rotation. If want to see how to drive the unipolar stepper motor using..... Listed under: Motor Projects

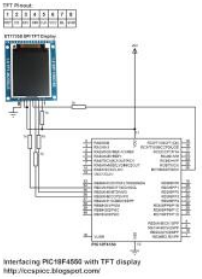
361.  CD-ROM BLDC motor controller using PIC18F4550 and L293D In the following topic URL we've seen how to control BLDC motor speed and direct rotation using PIC18F4550 microcontroller and 3-phase bridge circuit:CD-ROM Spindle motor (BLDC) control with PIC18F4550 microcontroller Th shows how to make the same controller using L293D motor driver instead..... Listed under: Motor Projects

362. 433MHz RF remote control system based on PIC microcontroller 5-Channel RF (Radio Frequency) remote control transmitter/receiver using PIC18F4550 microcontroller T modules are widely used in many applications (wireless data transmission, quadcopter, car remote control....). This project shows how to use low cost 433MHz RF



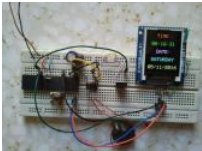
transmitter/receiver modules to build a 5-channel wireless RF remote..... Listed under: Development Board - Kits Projects

363.



Interfacing PIC18F4550 with 1.8" TFT display This post shows how to connect ST7735S TFT display to PIC18F4550 microcontroller and display different things (numbers, text, lines, circles). The compiler used is CCS PIC C. To interface PIC18F4550 with the ST7735 TFT display we need a small library (driver) which can be..... Listed under: LCD Projects

364.



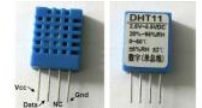
Real time clock with remote control and ST7735 TFT display (Some knowledge about RC-5 protocol is required) This project shows how to build a controlled real time clock with TFT display using PIC18F4550 microcontroller. In this project DS1307 RTC is used as a real time clock chip and the control is an IR..... Listed under: Clock - Timer Projects

365.



Display BMP images from SD card on ST7735 TFT screen This example shows how to display Bitmap (BMP) image files from SD card on ST7735 1 (128x160) TFT screen using PIC18F4550 microcontroller and CCS PIC C compiler. To build this project we need the ST7735 TFT driver, SD card driver, FAT16 library. The three..... Listed under: Memory - Storage Projects

366.



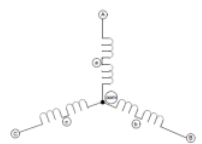
Interfacing PIC16F877A with DHT11 (RHT01) sensor Proteus simulation PIC16F877A + DHT11 (RHT01) Proteus simulation This topic shows how to interface DHT11 (RHT01) digital relative humidity and temperature sensor with PIC16F877A microcontroller, and how to simulate this interfacing in Proteus. Note that for the simulation Proteus version should be 8.1 or higher. With these versions..... Listed under: Sensor - Transducer - Detector Projects

367.



Interfacing PIC16F877A with DHT22(AM2302-RHT03) sensor using CCS PIC C Interfacing PIC16F877A with DHT22(AM2302-RHT03) digital humidity and temperature sensor This topic shows how to interface PIC16F877A microcontroller with DHT22 sensor with hardware circuit. Related topic: The following topic shows PIC16F877A microcontroller and DHT22 Proteus simulation and some details about this sensor. PIC16F877A and DHT22(AM2302, RHT03)..... Listed under: Sensor - Transducer - Detector Projects

368.



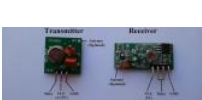
Sensored brushless DC (BLDC) motor control with PIC16F877A microcontroller Sensored BLDC motor control using PIC16F877A - CCS PIC C compiler This topic shows an easy way to drive a Cd-Rom sensed brushless DC motor (BLDC motor) using PIC16F877A microcontroller with CCS PIC C code. This motor is a three phase motor, it has three stator..... Listed under: Sensor - Transducer - Detector Projects

369.



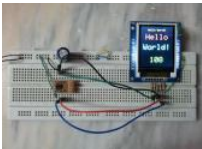
4-Digit 7-Segment display with 74HC595 shift register There are many topics in this blog talking about the 7-segment display and how to interface different types of PIC microcontrollers. One of these topics shows how to interface PIC16F877A with a multiplexed 4-digit 7-segment display with shift register 74HC164N. There are..... Listed under: LED Projects

370.



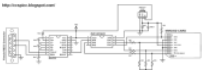
433MHz Radio Frequency (RF) transmitter and receiver using PIC12F1822 433MHz RF Remote control system with PIC microcontroller This project uses 433MHz RF transmitter/receiver modules to build a 5-channel wireless RF remote control system using 2 x PIC12F1822 microcontrollers. The modules in this project are cheap and easy..... Listed under: Radio Projects

371.



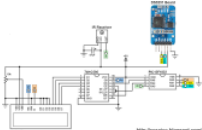
Interfacing PIC12F1822 with ST7735 SPI TFT display This post shows how to interface PIC12F1822 microcontroller with ST7735 SPI TFT display using the CCS PIC C compiler. For this interfacing we need a driver for the TFT display. Driver topic at the following link: ST7735 SPI TFT Display Driver for CCS PIC C compiler..... Listed under: LCD Projects

372.



Interfacing SD card with PIC12F1822 (Raw data read) With the tiny microcontroller PIC12F1822 we can read raw data (sectors) stored in the SD card. The SD card can work in SPI mode which makes our interfacing more better since the PIC12F1822 MCU has a built-in SPI module (MSSP module). This shows how..... Listed under: Other Projects

373.



PIC12F1822 + DS3231 + Remote Control PIC12F1822 is a small microcontroller has only 8 pins which is not enough for building a real time clock with DS3231 with set buttons because the DS3231 needs 2 pins and the LCD screen needs 3 pins, therefore I've only 1 free pin. I connected..... Listed under: Blog, Wireless Projects

374.

Real time clock with 2 alarms and temperature sensing using PIC18F4550 and DS3231 After the simple interfacing of the PIC18F4550 microcontroller with the DS3231 RTC, now let's add the alarms functionality and temperature monitor to our previous project. Interfacing PIC18F4550 with DS3231 project link: Real time clock & calendar with PIC18F4550 and DS3231 As written in the datasheet..... Listed under: Clock - Timer Projects

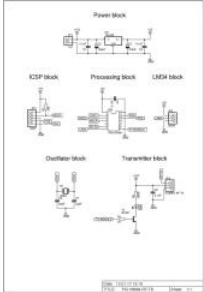


375.



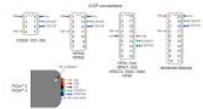
Interfacing PIC16F84 with DS3231 RTC This post shows how to make a real time clock and calendar using PIC16F84 and DS3231 RTC. The DS3231 I2C protocol to interface with the master device which is in this example the PIC16F84A MCU. In this project software I2C is used because the..... under: LCD Projects

376.



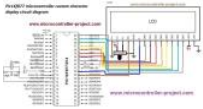
Make a Wireless Thermometer with a PIC Microcontroller ntroduction In this article, I'll show you one way to make a wireless thermometer using microcontrollers. One microcontroller, the PIC16F688, will measure voltage from an LM34, convert it to an ADC value, and transmit some data. T receiver will receive the data, and display..... Listed under: Wireless Projects

377.

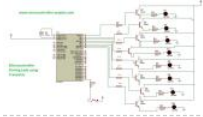


PickIt2 Clone Designed and Manufactured at Home PickIt2 is a programmer designed by Microchip to program its pic microcontrollers. PickIt2 su many 8-bit pic microcontroller series. PickIt2 supports almost all Pic-10/12/16/18/24 and dspic-30/33 flash series microcontroller's. Pickit 2 is an circuit serial programmer) programmer. In icsp interface, microcontroller can be programmed while..... Listed under: Other Projects

378. Display custom characters on 16x2 lcd using Microchip Pic16f877 Microcontroller Here is a simple project on how to build/generate/make custom characters in 16x2 lcd ; then print/display them on lcd using microchip pic16f877 microcontroller. Character lcd contains a set of ascii characters and some Chinese char in their controllers. We invoke the ascii characters present..... Listed under: LCD Projects



379.



Push Button as Input and Led as Output with Pic Microcontroller This is a simple tutorial/project on how to interface a transistor (2n2222), led ar button with Pic microcontroller. In the project i am going to switch on and off(blink) an led with the help of a push button. Since transistors and u outputs..... Listed under: Other Projects

380.



Interfacing ESP8266 with PIC16F877A Microcontroller Interfacing PIC16F877A Microcontroller with ESP8266 In this article, let us discuss how to interface WIFI module ESP8266 with a PIC microcontroller. So far you might have been using the ESP8266 module as a standalone microcontroller. You might have been using it with the Arduino library. But,..... Listed under: Wifi - WLAN Projects

381.



IR Remote Controlled Home Automation using PIC Microcontroller R Remote Controlled Home Automation using PIC Microcontroller In this project are going to use a PIC microcontroller to remotely control few AC loads by just using an IR remote. A similar project IR remote controlled Home automation has already been done with Arduino..... Listed under: Wireless Projects

382.



How to Send E-mail using PIC Microcontroller and ESP8266 In this tutorial let us learn how to send E-mails from PIC Microcontroller using famous module the ESP8266. This tutorial uses PIC16F877A IC and MPLABX and XC8 compiler for programming. At the end of this tutorial you will be able to send E-mail from any..... Listed under: Wifi - WLAN Projects

383.



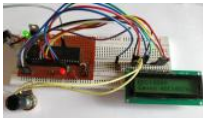
High/Low Voltage Detection and Protection Circuit using PIC Microcontroller High and Low Voltage Power Detector Circuit with Message Alert using PIC Microcontroller We often see voltage fluctuations in electricity supply at our home, which may cause malfunction in our home AC appliances. Today we are building a low cost High and Low Voltage Protection..... Listed under: power - energy projects

384.



Digital Speedometer and Odometer Circuit using PIC Microcontroller Digital Speedometer and Odometer Circuit using PIC Microcontroller Measuring the speed/rpm of a Vehicle or a motor has always been a fascinating project for us to try. So, in this project we are going to build one using the readily available PIC microcontrollers. We will..... Listed under: LCD Projects


385.




How to Save Data using EEPROM in PIC16F877A Microcontroller Saving Data using EEPROM in PIC16F877A In this tutorial we will learn how easy it is to save data using the EEPROM present in the PIC16F877A Microcontroller. In most real time projects we might have to save some data which should not be erased even..... Listed under: LCD Projects

386. How to Use Interrupts in PIC16F877A Microcontroller How to Use Interrupts in PIC16F877A Microcontroller In this tutorial we will learn how to use an External Interrupt in PIC16F877A Microcontroller and why/where we will need them. This is a part of the sequence of PIC Tutorials in which we started learning PIC Microcontrollers..... Listed under: LCD Projects




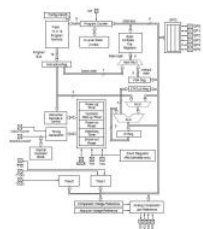
387.  GSM module Interfacing with PIC Microcontroller – Make and Receive Calls GSM Interfacing with PIC Microcontroller PIC16F877A - Make and Rec Calls GSM modules are fascinating to use especially when our project requires remote access. These modules could make all actions that our mobile phone could do, like making/receiving a call, sending/receiving a SMS, connecting..... Listed under: Phone Projects



388.  Obstacle Avoiding Robot using PIC Microcontroller Obstacle Avoiding Robot using PIC Microcontroller Obstacle Avoider Robot is another famous which spices up embedded projects. For those who are new Obstacle avoider robot, it is just a normal wheeled robot which could navigate its way without hitting on any obstacles. There are..... Listed under: Robotics - Automation Projects




389.  Line Follower Robot using PIC Microcontroller A Line Follower Robot is a simple yet fascinating robot for most students/hobbyists to build. In this we will learn How a Line Follower Robot Works and how we can build one using the PIC Microcontroller PIC16F877A. PIC16F877A is a 40-pin Multipurpose MCU from..... Listed under: Robotics - Automation Projects




390. PROJECT FINAL WRITE-UP Our efforts in this project were to create a version of a Microchip mid-range PIC microcontroller in verilog to run on an DE2 board. It was primarily planned to create a machine that would follow a set of pre-determined instructions and perform computation, interpretation,..... Listed under: LCD Projects




391.  A PIC16F84A Alarm Clock Here is a simple PIC16F84A alarm clock. This page summarizes this discussion (in french) in my forum, where Sarin (ak numerique1) requested for help to build a weekly alarm clock for his school. Many thanks to him for his tests and patience. This clock counts..... under: Clock - Timer Projects, Projects




392.  Programmer using PIC16F84 microcontroller Build a low-cost and very simple serial programmer for a PIC16F84 Microchip Flash Microcontroller picture is my personal writer for F84 chip, it works very nice with Nigel WPicProg V1.20. Introduction I finally found a very nice universal window software designed to work..... Listed under: Microcontroller Programmer Projects, Projects




393.  Garage car detector without a microcontroller At the end of this instructable you will be able to detect your car as it approaches the wall inside your garage. The car is inside far enough so you can close the door. Most car sensors will use a microprocessor to..... Listed under: Car Projects



394.  Adapter for small size PIC/AVR chip programming This is a homemade adapter I made for programming SOIC/QFN size microchips that I use in my RC airplanes (<http://maxoffsky.com/tech-blog/rc-micro-spitfire-airplane-build-log/>). I had trouble connecting the chips any other way so I made my own universal adapter. This could also be used to do In-Circuit programming..... Listed under: Microcontroller Programmer Projects



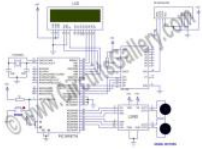
395.  IR Tracking Turret with PIC and C This is a good learning project that is fun to build - I got a lot out of making it. I think this has been done quite a few times already, but I did not find a straightforward way of doing this with PICs. When I..... Listed under: Other Projects

396. Red Light for Astronomy Observing using PIC12F683 When doing astronomy observing at night preserving night vision is critical. This requires using the minimum amount of light that makes the sky charts readable. What is this minimum level depends on how dark are your surroundings, how much time you have spent in darkness,..... Listed under: Other Projects



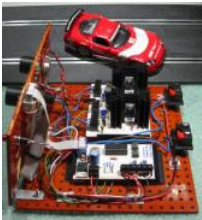
Home Automation Projects, LED Projects, Projects

397.



How to make a computer controlled Robot Project Using PIC16F877A? using pic microcontoller After a short break, we're back to the DIY robot pr series and I am sure you'll love this one too. Before that I suggest you to go through all our earlier simple robotics projects for engineering stude well. This time, major difference is..... Listed under: Robotics - Automation Projects

398.



Scalextric Sport Race Start Controller using PIC16F627A Overview I developed this after my nephews got a Scalextric Sport slot car racing set for Christmas. The set included a lap timer and counter but one thing that was missing was a way to start a race. Having someone say "3-2-1-Go" w really doing..... Listed under: Car Projects, Game - Entertainment Projects, Projects

399.



Development system for PIC and AVR microcontrollers After testing many systems development for PIC and AVR microcontrollers, none satisfy m created this system with breadboard that has satisfied me. Step 1: More space free In this development system, I put two protoboards turned 18 degrees from each other. The space..... Listed under: Development Board - Kits Projects, Microcontroller Programmer Projects

400.



Search Results for: Temperature Controlled Fan using 8051 Microcontroller ... Temperature Controlled Fan Report - SlideShare - Temperature cor circuits, 33 thoughts on " temperature controlled fan regulator " siddhu march 12, 2015 at 7:00 am. i didn't find 100k ptc,5k ptc where are they av and does the. Android controlled..... Listed under: Temperature Measurement Projects

401.



Breakout board for 18-pin PIC16F series microcontrollers The 18-pin microcontrollers from PIC16F series have always been my favorite prc ce so are small in size (so occupies less area on the circuit board), and are very easy to use. Besides they are capable enough to do most projects that require a large..... Listed under: Development Board - Kits Projects

402.



Skateboard with PIC microcontroller and LEDs What do you get when an Electrical Engineer builds a Skateboard from scratch for a 13 year old's Christmas present? You get a skateboard with eight white LEDs (headlights), eight red LEDs (taillights) all controlled via PIC microcontroller! And I mi one very happy..... Listed under: LED Projects

403.



IR Digital Thermostat for FAN Introduction This circuit measures temperature in Celsius scale and displays it on an alphanumeric LCD screen Wh temperature rise to 40 C an alarm is activated and at the same time a relay is also activated which drives a fan to keep the temperature at..... Lis under: Temperature Measurement Projects

404.



Tutorial: Building cool projects with MCUs (Part 3) Tutorial: Building cool projects with MCUs (Part 3) As we proceed onto the third portion of this microcontroller tutorial, let's first revisit what we have accomplished thus far. In Part 1, we defined what a microcontroller actually was. I wanted everybody on-board (no pun intended)..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects

405.



COFFEE POWER MANAGER using PIC16F628 Introduction The problem was this...at Redeeming Grace Church we were meeting in a public school moving in to our permanent facility. Each Sunday morning we would bring in three large percolating coffee pots to brew regular, decaf, and hot v for the mid-service..... Listed under: Home Automation Projects, Projects

406.



Smart doorbell System Introduction On request I have built a microcontroller-based doorbell system which is being used in an industrial environ This is the basic function: When you push the bell-button, a horn will sound for about 10 seconds. At the same time a light, which keeps burning Listed under: Home Automation Projects

407. Sonar range finder using PIC16F88 Microcontroller The PIC sonar range finder works by transmitting a short pulse of sound at a frequency inaudible to the ear (ultrasonic or ultrasound). Afterwards the microcontroller listens for an echo. The time from transmission to echo reception lets you calculate the distance from the..... Listed under Projects, Sensor - Transducer - Detector Projects



Item	Quantity	Reference	Part
1	1	C1	200kPOT or 10kP
2	1	C2	100nF
3	1	C3	100kPOT or 10kP
4	1	C4	100kPOT or 10kP
5	1	C5	100kPOT or 10kP
6	1	C6	100kPOT or 10kP
7	1	C7	100kPOT or 10kP
8	1	C8	100kPOT or 10kP
9	1	C9	100kPOT or 10kP
10	1	C10	100kPOT or 10kP
11	1	C11	100kPOT or 10kP
12	1	C12	100kPOT or 10kP
13	1	C13	100kPOT or 10kP
14	1	C14	100kPOT or 10kP
15	1	C15	100kPOT or 10kP
16	1	C16	100kPOT or 10kP
17	1	C17	100kPOT or 10kP
18	1	C18	100kPOT or 10kP
19	1	C19	100kPOT or 10kP
20	1	C20	100kPOT or 10kP
21	1	C21	100kPOT or 10kP
22	1	C22	100kPOT or 10kP
23	1	C23	100kPOT or 10kP
24	1	C24	100kPOT or 10kP
25	1	C25	100kPOT or 10kP
26	1	C26	100kPOT or 10kP
27	1	C27	100kPOT or 10kP
28	1	C28	100kPOT or 10kP
29	1	C29	100kPOT or 10kP
30	1	C30	100kPOT or 10kP
31	1	C31	100kPOT or 10kP
32	1	C32	100kPOT or 10kP
33	1	C33	100kPOT or 10kP
34	1	C34	100kPOT or 10kP
35	1	C35	100kPOT or 10kP
36	1	C36	100kPOT or 10kP

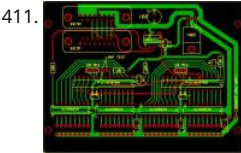
Ponyprog Circuit for AVR & PIC16F84 Comments: All resistors are 1/4W.The circuit is powered by 9...15V DC or AC. When In Circuit Programming (connectors are used, is possible the programmer to be powered from target's power source. Diodes D2 and D6 protect the regulator LM7805, w target's power is used..... Listed under: Development Board - Kits Projects



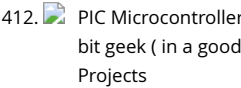
Microcontroller based Data Logger Description: This project is a fine combination of analog and digital electronics. This project is designed so as the requirements of the industry applications, home applications. The project consists of parameters monitoring, parameter storage. PC interfac of the main features of..... Listed under: LCD Projects



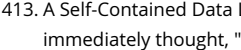
Microcontroller Tutorial 4/5: Creating a Microcontroller Circuit Board We are now in the fourth part of the microcontroller tutorial. We have a microcontroller circuit diagram ready. It's time to make a circuit board. I love this part. This is the "magical" step that takes the idea we started wit turns it into..... Listed under: Development Board - Kits Projects



microcontroller based projects circuit free Analogue electronics, digital circuits and microcontrollers simulation, all in one. Another free Espresso minimisation tool. PLD and FPGA project flow Electronics circuit diagrams and projects based on microcontroller. 8051-BASED EEPROM MICROCONTROLLERS. HUM-FREE BATTERY ELIMINATOR Please I need a circuit diagram of a speed checker on..... Listed under: Development Board - Kits Projects



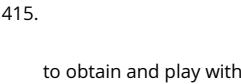
PIC Microcontroller project – 24 hour clock and thermometer displayed via 16f690 microcontroller and LCD programmed in C I got to thinking that an interest in hi-fi bit geek (in a good way) so I thought one of my latest geek projects might be of interest to some of you. You could build the project 'as is' without..... Listed under: LCD Projects



A Self-Contained Data Logging Anemometer I love collecting and analyzing data. I also love building electronic gadgets. A year ago when I discovered the Arduino product immediately thought, "I'd like to collect environmental data." It was a windy day in Portland, OR, so I decided to capture wind data..... Listed under: Motor Projects



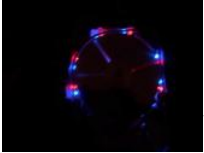
SUN TRACKER'S WINGS The giant (by radio control standards) servos above are shown adjacent to a Nokia 3310 mobile phone to give an idea of scale. The arms are 12cm long - perfect for lifting a bank of solar panels (wing). Our local Model Aerodrome in Seaside..... Listed under: Phone Projects



Pimp My Rocket (Espresso Machine) Combining Coffee and Electronics – An Idea for a Project Having played around with fixed function logic ICs, the Johnson counter used in the Spindicator project, I was keen to move on and experiment with programmable microcontrollers. I decided to obtain and play with some..... Listed under: LED Projects

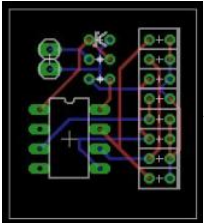


416.



Hard Drive Clock using PIC16F628 ave an old hard drive that no longer works? As long as it still spins up chances are you could build a clock out of an old hard drive! You will need some electronic knowledge, some common electronic components and a bit of patience. The..... Listed under: Clock Projects, Projects

417.

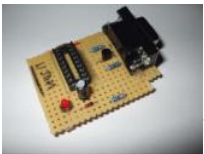


Knight Rider Light computer – version 2 This knight rider light computer is a successor of my first version of the Knight Rider. This version is much smaller and justifies the use of a microcontroller. The project is based on the PIC 12F629 microcontroller. The hardware part Unlike my previous this..... Listed under: LED Projects

418. RGB REMOTE (pinguino+web+linksys) using PIC18F2550 microcontroller RGB REMOTE (pinguino+web+linksys) This project has several uses, it is basically a way to control LED group (tricolor with common ground) via a web page to select which color we want to show. It may be a way to harmonize a room, change..... Listed under: LED Projects



419.



Cheap PIC Programmer This programmer works only with PIC16F84 but it's great because it never causes errors and works with almost all computers, unlike some other homemade programmers. Step 1: Step one : Materials For this programmer you won't need many materials. In fact, you will find all you..... Listed under: LED Projects

420.



Microcontroller controlled Home Entertainment System This Instructable will take you on my journey to replace my old Netflix/Vudu Blu-ray player with a PC-based entertainment station for my LCD projector. I wanted to be able to access and control Netflix, Hulu, Youtube, Crackle, NBC, ABC, and the Weather Channel using..... Listed under: Home Automation Projects

421.



Easy Way to Design an Automatic Driverless Train Every one in the metro cities like Kolkata, Delhi enjoying the luxuries of the metro train ever stop thought about the train? No, then let me give you a brief idea about the driverless automatic driven and controlled train. But before that let us..... Listed under: LED Projects

422.



A brief overview of Allegro ACS712 current sensor. Part 2 – Interface the sensor with a PIC microcontroller In the first part of this discussion, the features of the ACS712 device were briefly discussed. Now we will use that theory to implement the ACS712 sensor to make a simple DC current meter. The output voltage from the sensor is measured through an ADC..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Sensor - Transducer - C Projects

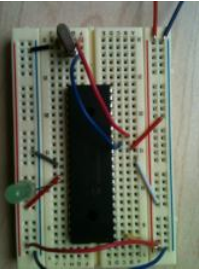
423.  PIC12F675 external interrupt code and Proteus simulation This post provides the external interrupt code for PIC12F675 microcontroller (e-g whe need to control servo motor which has position encoder, with your PIC microcontroller). As we know, PIC12F675 microcontroller has one GP2/IN which can be used to service external interrupts. This code is written..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
424. Video Clock Superimposer using PIC16C711 About the Project As a followup to my VCR Pong project, here is a gadget that is actually useful in the Real World! It superim time of day, in "HH MM SS" format, in the bottom right-hand corner of an existing video signal. My..... Listed under: Clock - Timer Projects, Projects
425.  Interfacing16X2 LCD with PIC Microcontroller In this session we will see how to interface 16x2 LCD to PIC18F4550 microcontroller which is of fam PIC18F. You can get information of 16x2 LCD in the session How to Interface 16X2 LCD with 8051 Microcontroller Features of PIC18F4550: PIC18F belongs to the PIC18F family;..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
426.  How to take input with PIC18F4550 Microcontroller Any microcontroller based system typically has an input and a corresponding output. Taking output with a PIC microcontroller has been explained in LED blinking with PIC18F4550. This article explains how to provide an input to the contrc get a corresponding output using PIC18F4550. PIC18F4550..... Listed under: LED Projects, Projects
427.  Project Board using PIC18F2550 microcontroller The new PIC18F2550 Project Board was designed as the development platform for student proje board features MCU: PIC18F2550 with external xtal, ADC: one channel 0-2.5V sigma-delta converter, Linear Technology LTC2400/LTC2420, 6-char bit ADC 0-5V, Display: Two connectors for text LCD or GLCD, USB: onchip..... Listed under: Development Board - Kits Projects, Projects
428.  PIC microcontroller Beginner's guide: Basic connection circuit What is a pic microcontroller? The PIC microcontroller is a low cost 'computers on a chip' manufactured by Microchip. They allow electronic designers and hobbyists impart intelligence and logic to a single chip for special purpose applications and products. The PIC micro programming is done using..... Listed under: Development Board - Kits Projects
429.  Cooper Bills (csb88) and Anish Borkar (ab673) Introduction The Handy Lab Buddy is a tool every ECE should have. The four features of this tool ir talking voltmeter, logic probe, voltage averager, and frequency measurer. As a cheap and accurate device that outputs whatever being measured through speakers, it's one of..... Listed under: LED Projects
430.  Voltage programmable simple logic device using PIC12F675 Description Here's another daft yet interesting PIC12F675 idea I came up with. When wanted to show someone how logic gates worked I could only find a NAND gate which wasn't very handy for demonstrating AND's OR's, NOR's a ExOR's. I also wanted to have..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
431.  VCR Pong using PIC16C711 Microcontroller About the Project Here is a fascinating and nostalgic project that kept me up many, many nights last : (creating it, not playing the game!). I had long thought it would be exciting to try to generate video from a PIC, and with built-in A/D..... Listed unc Projects, Video - Camera - Imaging Projects
432.  Electronic Code locking system using PIC 16F877 Mircocontroller Electronic code locking system is extremely useful in protecting our precious possessions and can be installed anywhere with bit of engineering in it. We are widely familiar with the Password based e-locks and might have i in our house. But we are going for Electronic..... Listed under: Microcontroller Programmer Projects
433.  Quozl's Temperature Sensor Project using PIC12C509 Introduction Just a handful of components builds an 8-pin microcontroller based circuit for temperature logging via a serial port; small, fast, and acceptably accurate. Features provides real-time data to your computer via serial port, inte up to four DS1820 temperature sensors, absolute accuracy near 0.5..... Listed under: Projects, Sensor - Transducer - Detector Projects, Temperat Measurement Projects

434.



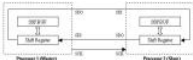
IO Controller with serial port CLI using PIC16F627A This code runs on a PIC 16F627A or 628A (and A.F.A.I.K 627/628 parts). It uses the serial USART to communicate with a PC. Through this a simple CLI (Command Line Interface) is implemented that allows commands to be sent to the PIC. Listed under: Other Projects, Projects

435.



Basic PIC circuit is not working I have just begun in the world of micro-controllers, and the first micro-controller. I chose to work with was the PIC Microchip. The PIC I am using is the PIC16F877A. I am using MPLAB IDE and HI-TECH C. I am trying to make an..... Listed under: Development Board - Kits Projects

436.



Lecture 45 : PIC Serial Communication using Serial Peripheral Interface (SPI) Objective To establish serial communication between two PIC16F877A microcontrollers Description In this experiment, 8-bit digital input is applied at Port-B to one of the PIC16F877A microcontroller which acts as a master in serial communication. The input value is transmitted by the master serially via Serial..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

437.



Treslie – A 3-phase speaker system for Leslie emulation using PIC18F26K20 This post describes the design and construction of a 3-phase loudspeaker intended for Leslie Speaker emulation. The unit is intended to be driven by a 3-channel audio amplifier The Brute, which in turn is controlled by a micro-controller based control system, the construction of..... Listed under: Projects, Sound - Audio Projects

438.



How to Program a PIC Microcontroller to Build a Project The recent trends in the advanced technology are helpful in developing most advanced electronic gadgets. Most of these electronic devices are developed using microcontrollers. The microcontroller is an electronic component, which is programmed to perform various control operations. There are various kinds of microcontrollers available,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

439.



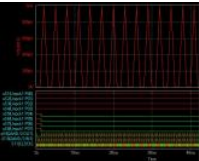
Interfacing with UART of PIC microcontroller This post provides the solution for using the PIC controller UART interface (e-g to connect PIC controller with PC using serial adapter). Complete code and simulation can be downloaded from the 'Downloads' section at the bottom of this post. The figure shows the result..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

440.



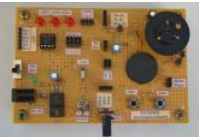
How to display text on 16x2 LCD using PIC18F4550 Microcontroller Several automated and semi-automated devices require a message to be displayed in order to indicate their working status. In continuation to LCD interfacing with PIC18F4550, this article explains how to display a message or string on a 16x2 character LCD. Programming steps: · Configure the..... Listed under: LCD Projects

441.



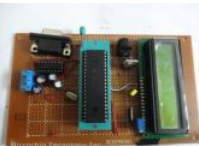
Microcontroller Based Password Verification System Aim: - To simulate a circuit using microcontroller 8051 for verifying password. Theory: - The block diagram for microcontroller based password verifying system is shown. The purpose of the circuit is to verify the password entered by the user. The password is the input..... Listed under: Other Projects

442.



Learning Board for PIC12F683 Microchip Introduction Electronics is my hobby. When I was in college I had some experience with microcontroller projects with Atmel's AT89C51. Recently, I have grown interest on PIC microcontrollers, and I thought I should start with 8-pin microchips. I purchased a PIC12F683 microchip. This..... Listed under: Development Board - Kits Projects, Microcontroller Programmer Projects

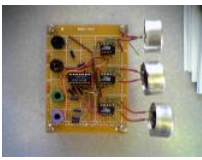
443.



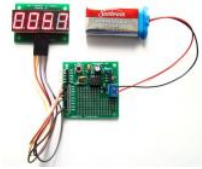
PIC16F877A (with LCD) not working I have designed a PIC16F877A micro controller project to read temperature from an LM35 using ADC, display the temperature on a LCD and transmit it to a serial port. When the program starts, sometimes it shows a startup message - sometimes it doesn't display anything. Also, it doesn't transmit the temperature data. Listed under: LCD Projects, Temperature Measurement Projects

444.

Ultrasonic Position System The ultrasonic position system uses ultrasonic transmitters/receivers to triangulate position of the robots used in GE2000. Each of three transmitters uses a distinct frequency: 23 kHz, 31 kHz, and 40 kHz. The 2812 DSP is used to measure signal timing and calculate position based on..... Listed under: Development Board - Kits Projects



445.



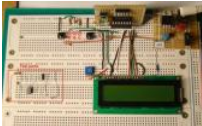
PIC12F microcontroller project board The 12F series of PIC microcontrollers are handy little 8-pin devices designed for small embedded applications. They do not require too many I/O resources, and where small size is advantageous. These applications include a wide range of everyday products such as dryers, electric toothbrushes,..... Listed under: Development Board - Kits Projects, Projects

446.



Standalone BreadBoard Breakout for PIC Microcontrollers I wanted to make a breadboard breakout for PIC microcontrollers after seeing this and a breadboard breakout from adafruit. This product is fully standalone and yet has very small footprint so that it can be conveniently plugged into a breadboard. The most amazing part was that it still had..... Listed under: Development Board - Kits Projects

447.



Microcontroller based Diode and Bipolar Junction Transistor (BJT) tester Introduction Most of the digital multimeters these days have built-in features for testing diodes and sometimes transistors. The purpose of this project is to demonstrate a simple way to construct a testing device for diodes and bipolar junction transistors (BJTs) using a microcontroller. The testing..... Listed under: Development Board - Kits Projects

448.



Single-Tube nixie clock | Microcontroller Project Here is the nixie clock ! PIC16F84A microcontroller Single-digit Nixie, sequential hours, minutes and seconds display DCF-77 atomic clock, with automatic or manual time set-up high voltage power supply for Nixie with only 4 components 24 hour programmable extinction time no MikroC compiler licence needed !..... Listed under: Clock - Timer Projects

449.



MTM Scientific, Inc... PIC Project for CATV Tuner The CATV Tuner sold by MTM Scientific, Inc can be used for wideband audio and video reception, as described on our other project pages such as the FM Wideband Receiver and Radio Telescope Project. A common requirement in all these projects is the need to..... Listed under: Other Projects

450.



IC-Based H-Bridge Tutorial An alternative to using a transistorized H-Bridge circuit is the L298 Dual Full-Bridge Driver. It is very easy to control a motor and doesn't require any calculation. Simply knowing your motor's required current and the IC's current capacity is enough. For a price though. In order to..... Listed under: Motor Projects


451.

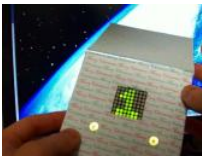


PIC 16F88 Digital Thermometer Light Meter and resistance ohm meter. PIC 16F88 Digital Thermometer Light Meter and resistance ohm meter. My original idea for this project was simply to try and interface the WINTeK WD-C2401P LCD panel to the PIC (see my previous post). I figured it would be fun to add a couple of..... Listed under: Metering - Instrument Projects

452. TD-USB-02 interface with touchpad sensor board and WinAmp interface using PIC18F2550 TD-USB-02 interface with touchpad sensor board and WinAmp interface. This is an example USB project showing how to interface a touchpad sensor (the AD7142ACPZ) with a standard XP/Vista computer. The TD-USB-02 board with a PIC18F2550 communicates with the PC: USB 2.0 through a mini-B connector..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Projects, Sensor - Transducer - Detector Projects



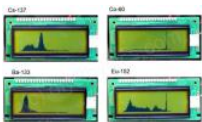
453.  New Microchip PIC32 Microcontrollers Run at 72MHz CHANDLER, Ariz., Nov. 5, 2007 - Microchip Technology today announced the new Microchip family of MIPS 32-bit microcontrollers (MCUs). The Microchip PIC32 is based upon the MIPS32 M4K Core, a high performance core with 32 core r that are each 32-bits. Microchip has extended..... Listed under: Development Board - Kits Projects



454. Christmas card with inbuilt retro video game for under \$10 Hello all and welcome to my second Christmas related project. Have you ever receive really boring Christmas card? Have you ever sat there and thought to yourself "If only there were a little video game on this card that I could play ponder..... Listed under: Game - Entertainment Projects

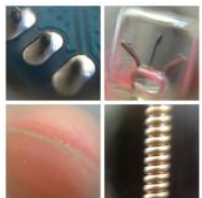


455. Kaossilator 2 hack: hands free (part 1/2) This is my first instructable.... ever. So here it goes. I own a Kaossilator 2 (KO2). It's fun little phrase synth and simple looper. But it has this awkward issue with mic button. When you want to record something from microphone you have to hold..... Lis under: Microcontroller Programmer Projects, Sensor - Transducer - Detector Projects



456. d.i.y. Handheld Multichannel Analyzer (MCA) based on 16F877 PIC Microcontroller and LCD Some time ago I was developing a medical instr under required histogramming, which got me in the mood to retake my own PIC MCA project(http://home.comcast.net/~prutchi/index_files/scint.htm). the variable RAM in the microcontroller (16F877), so I limited the number of channels to 95 and let..... Listed under: LCD Projects



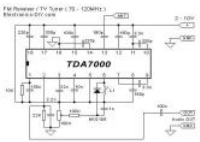







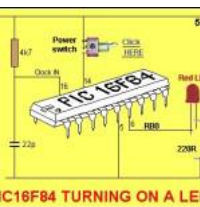
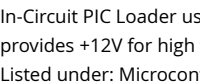
457. Chromation Systems RGB LED Tube Light Built utilizing a 24 Channel High Current USB LED Controller to control 12 volt RGB LED Light Strip, in 8 separate groups. Each gr individual 8-bit PWM which can create over 16 million colors. And is driven at full current for maximum color saturation and accuracy. Using..... Listed under: LED Project




458. Incredible DIY iPhone Macro After taking apart dozens of disposable cameras over the years, I found myself with a lot of lenses of varying sizes a nothing to use them for... until now! By making a simple carriage that would hold the lens and attach to my iPhone via..... Listed under: Phone P



459. Interfacing DS1307 to PIC Microcontroller with C code and Circuit Diagram This tutorial will help you to interface DS1307 RTC with PIC16F877 Microcontroller. The project is compiled in CCS Compiler and simulated with Proteus. The Real Time Clock is interfaced with PIC controller via I2C a 2 wire communication protocol. I2C is used for..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects

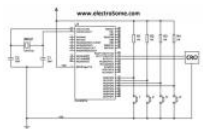
460.  PIC16F84A MemoSound Game Game rules You will have to memorize a melody, made of up to 62 steps. A step is one of the four tones available game system. In order to help you, each tone is associated to a color LED (yellow, green, orange, red)..... Listed under: LED Projects
461.  Dual 4-digit seven segment LED display with SPI interface using PIC12F This project is an extension of my previous MAX7219 based SPI seven seg LED display module. The new display features eight 7-segment displays arranged in two rows of four digits. The on-board MAX7219 driver enable to easily add eight 7-segment LED displays to your..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LED Projects, Projects
462.  TDA7000 FM Receiver / TV Tuner / Aircraft Receiver using pic microcontroller Parts: 1x TDA7000 IC - FM Receiver 1x 3.5 Turns Variable Coil (L1) 1x - Varicap Diode ANT - Telescopic Antenna or a piece of wire 1x 100K Potentiometer 1x 100K Resistor 1 x 22K Resistor 3x 100nF Capacitor 1x 22nF Capacitor 1x 10nF..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Sensor - Transducer - Detector Projects
463.  Mini PIC Dev Board using PIC18F452 For one reason or another I really like to use breadboards for building prototype designs. The breadboard o superior flexibility in that you can change a single electrical connection at any time, as long as you have a long enough wire. One of the draw..... under: Development Board - Kits Projects, Projects
464.  Refrigerator Temperature Controller Project (Save Your Electricity Bill) In This Post we discuss about How to build a Refrigerator Temperature Controller using Microcontr This Project is Development of Thermo meter project. Suggested Page>> Microcontroller Based Thermo meter project Mainly we use Mikro C Programming Language in this Project and ISIS Proteus Software use..... Listed under: Temperature Measurement Projects
465.  IR Remote Controlled Tracked Robot Step 1: Assembling the Double Gearbox A basic hobby motor turning at 12,300 RPM is basically useless with good gearbox. Just touching the shaft will stall the motor. I obtained a Tamiya double gearbox kit for under \$10, which through a series of gears. Listed under: Robotics - Automation Projects
466.  Single microcontroller based 12v to 230v inverter with intelligent battery charging Single microcontroller based 12v to 230v inverter with intelligence battery charging (Made by me) Here I describe the circuit as: *single microcontroller/controller (ATMEGA16/32) *no op-amps, only chips are the r opto-couplers and regulator (7805) *low-battery/overload/short-circuit protection *thyristor controlled battery charger, using the MOSFET body diode..... Listed under: power - energy projects
467.  5 LED CUBE Controller for PIC16F688 Circuit Description The LED cube is made up from 125 LEDs arranged into 5 layers of 25 LEDs each. The dis itself is multiplexed so instead of requiring 125 connections it requires one to each of the five layers and 25 to each LED in..... Listed under: LED Projects
468.  Record Infrared Codes of Any Remote Control Unit for Usage with Linux Infrared Remote Control (LIRC) on Raspberry Pi Introduction The remote controls that are orphaned when the device they control stopped working are reusable on your Raspberry Pi. After completing this instructable, may be interested in trying out the following instructables: Reuse Unwanted Remote Control to Shutdown and Reboot Raspberry Pi Reuse..... Lis under: Other Projects
469.  Compact PIC18F1320 Microcontroller Board When I started building Microcontroller projects I built a lot of them using the same PIC microcontro board. These were based on the PIC18F1320 chip since I bought a lot of them. There are many other chips in the PIC family that would be equal Listed under: Development Board - Kits Projects, Projects
470.  Complete Intro To PIC's - Make an LED Flash Video As the title suggests, this guide is targeted for those who are new to the world of PIC microcontrollers. I cover the basics from hardware to software along with programming the device and a few hints along the way. I do assume a bit..... Listed under: LED Projects, Projects
471.  In-Circuit PIC Loader using PIC18F458 microcontroller This loader connects the PC printer port and works with WinPic800. The loader gets DC supply from application bo. provides +12V for high voltage programming mode. We can use it for programming many PIC chips easily. Hardware Schematic The In-circuit serial programming for PIC.. Listed under: Microcontroller Programmer Projects, Projects



472.  NU32: Introduction to the PIC32 using pic-microcontroller The Microchip PIC32 is a family of complex and powerful microcontrollers that can be purchased for less than \$10 in quantities of one. This microcontroller offers many peripherals useful for mechatronics purposes, such as several channels for analog-to-digital conversion, digital I/O, synchronous and asynchronous serial..... Listed under: Video - Camera - Imaging Projects



473. USB Project :- USB Interface Board Using PIC18F4550 USB PROJECT: - USB INTERFACE BOARD USING PIC18F4550 Microcontroller CONTROL - 6 LE software (4.0 .net framework) PIC18F4550 Firmware - for 6 LED's. TUTORIAL FOR BEGINNERS It's a low cost USB interface Board that provides co interface to your computer and it can..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



474. Generating PWM with PIC Microcontroller using CCP Module PWM is a technique used to generate analog output signal using digital signals. It is commonly used to control average power delivered to a load, motor speed control, generating analog voltage levels and for generating analog waveforms. CCP Modules are available with a number of..... Listed under: PWM Projects



475. How to use inbuilt EEPROM of PIC18F4550 Microcontroller The EEPROM (ELECTRICALLY ERASABLE PROGRAMMABLE READ ONLY MEMORY) is a v useful memory which can be used for storing data. The data storing and retrieving from any EEPROM memory is very simple compared to other memories. As the name suggest the memory is..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



476. Weather meter using PIC 16F877 Microcontroller Weather monitoring systems are available in plenty and these are pretty handy gadgets we use daily life for weather forecasting and other purposes. But these kinda gadgets might be expensive and may not be available for customization to specified purpose. To overcome..... Listed under: Temperature Measurement Projects



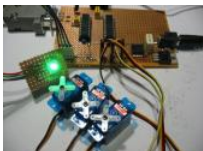
477. Remote Control Server One of my friends asked me if I could design a circuit for him to be able to remotely power up a server. He has 2 servers, didn't want to keep them both on whilst he travelled. He wanted to be able to..... Listed under: Wireless Projects



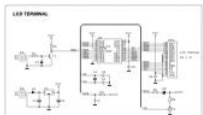
478. MIDI Chord Button Keyboard Using PIC18F4620 part 3 Connections The following table documents the connecting leads and molex pin-header n tying the various interfaces together. Header Pin no. Signal/Function Direction Header Pin no. Signal/Function Chord Controller-SV1 1 RD7 ——> Decoder-SV4 1 Chord Sel. C Chord Controller-SV1 2 RD6 ——> Matrix Decoder-SV4 2..... Listed under: Projects, Sound - Audio Projects



479. POV Christmas Tree using PIC12F689 microcontroller POV Christmas Tree Still don't have a tree for this holidays?, Don't worry here you have a sr for your holiday needs. This project started as a SMD soldering tutorial for a course i've made in electronics, so it's meant to be..... Listed under: Projects, Projects

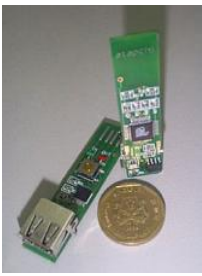



480. Serial Addressable RGB PWM LED Driver using PIC16F628A Overview Ever since I made the serial controlled RGB LED PWM driver I've had many requests for an addressable driver. Well I've finally got round to producing one. The code is now completed and tested and the prototype board fully working. The design process..... Listed under: LED Projects, Projects, PWM Projects



481. Easy Debugging Terminal using PIC16F84 Introduction This LCD terminal provide two modes of operation by selecting jumper J1. When J1 is open terminal operate as a normal ascii display terminal, when J1 is closed the terminal displays the input serial data in hexadecimal format. This moc useful for..... Listed under: LCD Projects, Projects

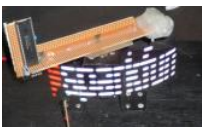
482. World's Smallest Low-speed USB Analyzer using pic16f877 [Any] idea is dead without a good application for it. So "California Dreamin'" USB virtu peripheral could be a very nice sample of academic research, but hardly anybody is going to build a keyboard or mouse using it. I have been thin a while..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



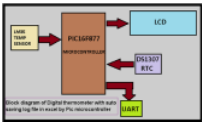
483.  Arduino powered temperature sensing RGB LED nightlight using PICaxe About a year ago I started on a project to make a temperature controlled nightlight. I was inspired by seeing these lovely LED lamps styled as mushrooms growing out of pieces of wood. Those mushrooms were made of glass, which was somewhat beyond my..... Listed under: Home Automation Projects, LED Projects, Projects, Temperature Measurement Projects



484. Soundtrack using PIC16F688 Microcontroller This project uses a microcontroller to drive a speaker and play one of two songs: Yakety Sax (the ch song from the Benny Hill Show) and Entrance of the Gladiators (the clown juggling unicycle song). The tunes are stored as a series of distinct not Listed under: Projects, Sound - Audio Projects



485. The 'One Chip Spinning RGB POV Display' with conversion software using PIC18f4680 The 'One Chip Spinning RGB POV Display' with conversion software. If you have been on the look out for a project that combines, RGB LED's, a motor, a microcontroller and a ridiculous amount of hot me then you have certainly come to the right..... Listed under: Other Projects



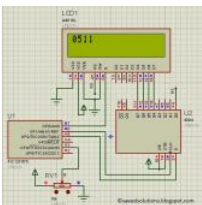
486. Digital thermometer with auto saving log file in excel by Pic microcontroller Digital thermometer with auto saving log file in excel by Pic microcon vary advance, useful and realistic project. The implementation filed of this project is wide. Now a day's atmospheric prediction saves lots of life. A getting wright prediction we have to analysis..... Listed under: Temperature Measurement Projects



487. Serial Data Transfer to PC(Personal Computer) using PIC16f877 Microcontroller USART Here is a simple project on How to transmit serial data to using built in usart(universal Synchronous-Asynchronous receiver transmitter)of PIC 16f877 microcontroller. The data Transmitted by PIC microcon received by computer through its (Serial)DB-9 Port and is displayed on Hyperterminal window. Since microcontrollers..... Listed under: Interfacing RS232 - I2c -ISP) Projects



488. Underground locator generator for Radiodetection using PIC16F628 Introduction I obtained an early vintage Radiodetection® RD400 "LLTS" Line Trace unit for a very low price through eBay. The RD400 is the receiver portion of a transmitter/receiver pair that comprise an underground locator system. Because the matching transmitter was not available (hence..... Listed under: Projects, Radio Projects, Sensor - Transducer - Detection Projects



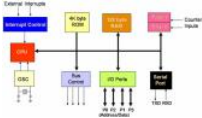
489. PIC12F675 ADC code and Proteus simulation This post provides the ADC code using PIC12F675 microcontroller. This code is written in C language MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you know how to interface..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

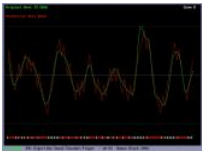


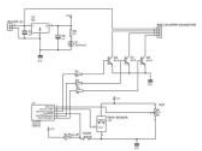
490. PIC12F675 internal EEPROM code and Proteus simulation This post provides the internal EEPROM reading and writing code for PIC12F675 microcontroller. As we know, PIC12F675 microcontroller has 128 bytes of built in EEPROM data space with an address range of 0x00 to 0x7F. This written in C language using MPLAB with HI-TECH..... Listed under: Memory - Storage Projects, Projects

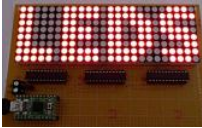
491. Life Size Operation Game using PIC16F877 microcontroller Life Size Operation Game As a child I loved the Milton Bradley Operation game, the board always scared me when it went off, but it was fun. The object of the Operation game is to remove a body part with out touching the tweezers to.. Listed under: Game - Entertainment Projects, Projects




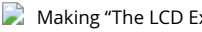
492.  Major Electronic Peripherals Interfacing to Microcontroller 8051 Interfacing is one of the important concepts in microcontroller 8051 because the can perform some operation on a data and gives the output. However to perform the operation we need an input device to enter the data and it turn..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects


493.  Record+play fast 1 bit sound on a PIC! BTC "Binary Time constant" algorithm. A system to record and/or play sound in a bitstream format using ju digital output pin. This is a sound playback system for a PIC or any other microcontroller. It uses a clever encoding system to mathematically mo the..... Listed under: Sound - Audio Projects

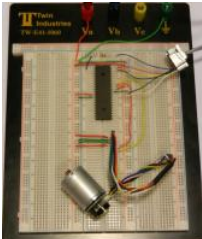
494.  Multifunction RGB LED controller using PIC12F675 multifunction RGB LED controller using low cost PIC12F675 microcontroller. features: 1, 4+1 operation a single potentiometer and single button switch used for multiple operation 2, EEPROM Memory option for mode selection :- the la will be saved . 3, mode1 automatic hue saturation..... Listed under: LED Projects


495.  One-chip 11x10 LED matrix. using pic microcontroller This project is pretty cool for a few reasons, and driving a huge LED matrix with a single 8-b controller is just one of them. The idea was born when I bought 120 LEDs of the wrong type, and decided to do something with them..... Listed LED Projects


496.  How to Simulate PIC Microcontroller in Proteus Design Suite 8 This is our PIC Microcontroller tutorial series. We have already discussed basic guide to PIC. Now let's see how to simulate the PIC microcontroller?PIC simulation is the important step that you should do before practical implementation of any microcontroller projects. As Circuits Gallery covers..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects


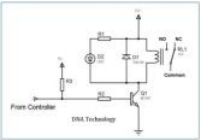
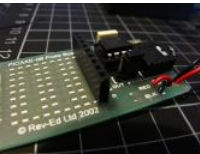

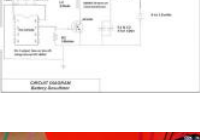






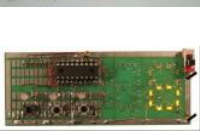
497.  Making "The LCD Expansion Board" for PIC18F4520 using pic microcontoller In this tutorial I you show you how to make a very useful expansion board for our PIC development board. It will be a Do It Your self (DIY) LCD Expansion board. The expansion board can be plugged into the PIC development board to add..... Listed und Projects

498.  Lecture 43 : Interfacing PIC16F877 Microcontroller with an LCD Aim To interface LCD (Displaytech 162A) with PIC16F877microcontroller and to di "IITK" in the Liquid Crystal Display (LCD). Components/Softwares MPLAB IDE (PIC microcontrollers simulator) PIC BURNER 3 with software to loac code LCD (Displaytech 162A) Computer System with Windows operating system and RS 232..... Listed under: LCD Projects

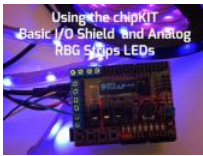
499.  How to Program a PIC Microcontroller & Read an Encoder Introduction: From electronic toys & games to microwave ovens, microcontrollers can found just about anywhere these days! But how can we make these small computers work for our own electronics projects? That's where this tu comes in - with detailed instructions showing you what to..... Listed under: Microcontroller Programmer Projects

500.  10MHz DDS Sine/Square Function Generator based on the AD9835 using PIC16F628 An extremely simple and low cost Sine/Square wave genera AD9835 Direct Digital Synthesis (DDS) Generator chip. The frequency can be set for any frequency from 1Hz to 10MHz in 1Hz resolution steps! Al with three push buttons and a..... Listed under: Clock - Timer Projects, Projects

501.  24 Channel USB Connected LED Controller, upto 1A per Channel using PIC18F4550 24 Channel USB Connected LED Controller, upto 1A per Chan device is designed to be a versatile high-current LED controller, with the ability to sink or/and source currents up to 1A per channel with dissipati up to 2.5w per channel. The various jumpers..... Listed under: Game - Entertainment Projects, Home Automation Projects, Interfacing(USB - RS2: ISP) Projects, LED Projects, Projects

502.  The VGA Test Box using pic18f452 Microcontroller The goal of this project is to create a device that is capable of outputting VGA signals to a CRT n in order to display figures, text and characters. Timing is a core essential in this project. If the signal is off by even 1 microsecond,..... Listed under: Automation Projects, Video - Camera - Imaging Projects
503.  Interfacing Relay to Microcontroller Figure 1 shows the basic relay driver circuit. As you can see an NPN transistor BC547 is being used to control relay. The transistor is driven into saturation (turned ON) when a LOGIC 1 is written on the PORT PIN thus turning ON the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
504.  Programming a Picaxe 08m chip After I got my Arduino I felt the urge to brush up on my general electronics knowledge. The last time I'd really pl with any circuits was back in about 1994 when I was studying my Technology GCSE – which now is quite a long..... Listed under: Projects
505.  Simple USB to RS232 adapter on pic18f2455 Overview This adapter allows you to interface with your car's OBD-II bus. It provides you a USB interface using the ELM327 command set and supports all major OBD-II standards: SAE J1850 PWM SAE J1850 VPW ISO 9141-2 ISO 14230-4 ISO 15765-4 CAN Hardware You do..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
506.  PIC12F629 Lead-Acid Battery Desulfator Hi everyone, After reading so many articles on Battery desulfator i've decided to come out with my versi Battery desulfator using Microchip base micro-controller using PIC12F629 or PIC 12F675. "Please pardon my english" .I don't really have time to c for minor grammatical errors..... Listed under: Battery Projects
507.  Laser show for poor man using PIC18F1220 microcontroller Laser show for poor man Here's another useless but cool looking "must build" gadg every romantic geek. Let me introduce PIC microcontroller based three axis laser spirograph. Step 1 Gathering stuff Design is quite simple and e regular parts and components but you are..... Listed under: Medical - Health based Projects, Motor Projects, PWM Projects
508.  Simple 3 Resistor PIC Programmer Micro-controllers play a very important role in electronics, as they are able to perform tasks in automation, control, image processing, others. Their usage is immense. There are various families of micro-controllers, one of those is the Microchip's PIC (Peripheral Interface Controller) are very..... Listed under: Microcontroller Programmer Projects
509.  RF Modem Robotics Project using PIC16F84 microcontroller RF is just way too cool not to use in your designs. But if you're a newbie like me it is c to successfully build solid RF transmitters and receivers. When I started out I didn't realize that the larger breadboard I was working off..... Listed under: Projects, Robotics - Automation Projects
510.  Serial Data Logger using PIC16F688 The data logger consists of a simple op-amp amplifier circuit that amplifies the signal and sends it to be digit a PIC16F688 microcontroller, serialized, and sent to the computer's serial port via a MAX232 serial driver: I guess you are already wondering abo some..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
511.  Cheap PIC controlled Helmet Camera using Sony LANC (Good for Extreme Sports) using PIC16F690 Cheap PIC controlled Helmet Camera using S LANC (Good for Extreme Sports) This Instructable will show you how to make a cheap Helmet Camera which can be controlled via a remote so yc main camera can stay safely in your ruck sack. The controller can..... Listed under: Other Projects, Projects
512.  Building A Robot: Motor Control Since we now have a beautiful robotic chassis, we're ready to continue our Building A Robot series, and get serio some motor control. This second part of building a robot is perhaps the most crucial as it will define what type of control we..... Listed under: Motor Projects, Robotics - Automation Projects
513.  Stroop Game using PIC16F628 Microcontroller This project has been adapted from an experiment by John Ridley Stroop, who published his work 1935. Basically it is a "trick." It is a trick in that you are required to answer a question at a "second level of thinking." In our test..... Listed under: Entertainment Projects, Projects

514.



Using the ChipKIT Basic I/O Shield With Analog RGB Strip LEDs A few months ago I wrote a blog post about the chipKIT Basic I/O Shield and used RGB Strips to demonstrate the the open drain FETs. This post is to give details on how to wire up the strip LEDs to the I/O Shield..... Listed under chipKIT Projects

515. COMBINATION LOCK FOR SAFE using PIC16F628 Introduction This program is a simple combination lock that I designed for an old Sentry® fire safe that was given to me any lock electronics. I created a front panel with a keyboard and microprocessor with a six-digit combination sequence. Details The LED flashes..... Listed under: Projects, Security - Safety Projects



516.



Using LabVIEW LINX and ChipKIT WF32 to Control an LED Strip This Instructable will go over the steps involved in controlling the WS2812 LED str LabVIEW, LabVIEW MakerHub LINX, and chipKIT WF32. Note - This project can be done using the LabVIEW Physical Computing Kit which contains LabVIEW Home Bundle and chipKIT WF32 here..... Listed under: chipKIT Projects

517.



The Weeder Frequency Counter using PIC16F84 This is a port by Peter Cousens to the PIC 16F84 of the 50Mhz Frequency counter kit {originally available} from Weeder Technologies . Since it uses a base PIC that is easily programmable, and provides a usefull bit of bench test equipment at low..... Listed under: Clock - Timer Projects, Projects

518.



ChipKIT Parking Obstacle Sensor I've always thought it would be nice to have a car with a parking sensor. I don't want to spend that kind of money to pay off my student loans. However I do have the materials to make one myself thanks to a class..... Listed under: chipKIT Projects

519.



Uploading Firmware to Your ChipKIT Boards There may come a time in your chipKIT explorations when you have to put some new firmware onto board. Well, fear not. This Instructable will go through how to load firmware onto your board. (We're gonna be using the WF32) In order for us... under: chipKIT Projects

520.



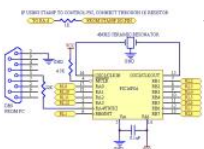
Closed-Caption Decoder using PIC16C84 This is a closed-caption decoder with serial output based on a Microchip PIC16F628A. The internal components of the PIC16F628A are used to implement a peak detector and data slicer. The hardware was designed by Richard Ottosen, and the firmware was written by Eric Smith. This..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

521.



Addressable LEDs (WS2812) on ChipKIT There has not been a simple addressable LED library for PIC32 microcontrollers until now! The PICxel library an MPIDE library that handles the timing required to use addressable LEDs (WS2812, WS2811) or more commonly known as Adafruit Neopixels. through through a couple steps..... Listed under: chipKIT Projects

522. Using PicBasic with the PIC16F84 PIC Microcontroller This article shows how to use the PIC16F84 microcontroller with PicBasic to design a quick & effective, serially controlled I/O-Expander. Using PicBasic makes developing handy single-chip devices like this extremely simple. If you're spending all your time programming in assembler, you'll appreciate how simple PicBasic..... Listed under: Other Projects



523.

Electronic Security System With RTC and User Define Pin Code Hi Guys! This is a project that I made using pic microcontroller its an Electronic PIN Security System with real time clock and user define pin code features, this page contains all the details to make one yourself. ITS WORKING AND CONCEPT: Well by..... Listed under: Security - Safety Projects



524.



Using WS2812 LEDs With ChipKIT Max32 With all LEDs you will need a power supply, some sort of way to send a signal (usually a microcontroller method of connecting the LED to your system... Admittedly, that sort of explanation is all things pretty vague (as a description), so instead it's..... under: chipKIT Projects

525.



PIC PAL Video Library using pic18f4620 If you are into PICs, you maybe tried one day or another to build a software video processor, either for fun or for a project. If you tried to generate video signals, you surely know some of this web pages : Rickard Gunees PIC PONG page..... Listed under: Video Camera - Imaging Projects

526.



HDD Clock – Persistence of Vision 1. Quite a few POV clocks out there, why is this special? Well, mainly because it's mine. There are quite a few POV clocks out there on the web using all sorts of display mechanisms, chassis, controllers. The one I decided to build isn't exactly..... Listed under: Clocks - Timer Projects

527.



IRK! Infrared Remote Controlled USB Keyboard Without Keys using PIC18F2550 IRK! Infrared Remote Controlled USB Keyboard Without Keys IRK! Infrared Remote Controlled USB keyboard, without keys, that you can operate just by using your LEARNINGinfrared remote control.I created it to allow me to control my MythTV home theater PC with my LEARNING infrared remote control instead of..... Listed under: Interfacing(USB - RS232 - I2C - I2S) Projects, Interfacing - LAN Projects, Projects

528.



Setting Up LabVIEW to Interface With ChipKIT This instructable is meant to be a quick tutorial on installing LabVIEW, and hooking it up to a chipKIT board. Documentation on how to do this already exists at LabVIEW Hacker.com. This instructable links to the information presented in the source, and is a good instructable..... Listed under: chipKIT Projects

529. Getting Started With the ChipKIT WF32 (LabVIEW) This in-depth guide will go over the steps required to connect the chipKIT WF32 to LabVIEW using LabVIEW MakerHub. LabVIEW is used to interact with common embedded platforms like Arduino, chipKIT and myRIO. Digilent sells a bundle that includes the chipKIT WF32 and LabVIEW..... Listed under: chipKIT Projects



530.



Programming Your Chipkit Dp32 Using the Arduino IDE chipKIT boards typically have far more memory and computing power than many Arduino boards, and as a result, they are so much better at manipulating data. On the other side, the Arduino IDE is easy to use and understand. So what could..... Listed under: chipKIT Projects

531.



How to Install ChipKIT Core For those of you with a chipKIT board, I have good news! If you like using the Arduino IDE instead of MPIDE, your dream has become a reality with chipKIT-core (currently in beta). You can now program all of the chipKIT boards directly from within..... Listed under: chipKIT Projects



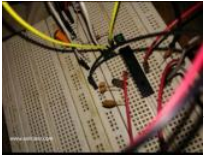
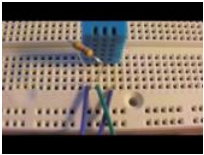
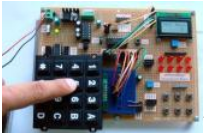
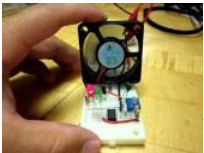
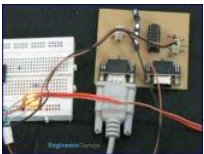
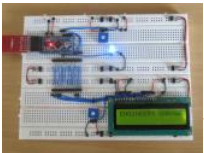

532.



Ultrasonic Obstacle-avoiding Robot This is my attempt at designing and building an obstacle avoiding robot! RekaBot (named after a fairy (:)) can avoid obstacles with an ultrasonic sensor that can move around with help from a servo. Based on the measurements she takes, the tracks are driven..... Listed under: Robotics - Automation Projects

533.

Starting a Project in MPLAB X for ChipKIT Products This tutorial comes right after my Installing MPLAB X tutorial, so if you haven't installed MPLAB X, check that one out first. In Arduino, programming a board is as simple as selecting that board, and picking the port it's using. That's..... Listed under: chipKIT Projects

534.  Making of PIC18F452 Micro-Controller Development/Generic Board Our instructable shows how to create a generic board of PIC18 micro-controller which is further used in advanced embedded projects as there is a number of PIC micro-controller applications .e.g. microwave ovens, multimed devices, medical and health based equipment e.g. blood-pressure meter, UPS, Power..... Listed under: Development Board - Kits Projects
535.  How to create custom characters on 16x2 LCD using PIC18F4550 The 16x2 character LCD can also be used to display custom characters other than numerals, alphabets & special characters. Refer LCD interfacing with PIC. Some special shapes like hearts, arrows, smileys etc. can easily be displayed on the 5x8 pixel pattern of character LCD. These..... Listed under: LCD Projects, Projects
536.  Pinguino Project (a PIC Microcontroller Based Arduino #No Programmer Required) Hey Guys i am Back after 2 months with Awesome Project, This is a Complete tutorial to make PIC Microcontroller based Arduino ,which can run Arduino Programs on PIC18F4550 or PIC18F2550 Microcontroller , the advantage on this microcontroller is ,it does'nt require any External Programmers, Since..... Listed under: Microcontroller Programmer Projects
537.  DHT22 (AM2302) Digital Humidity and Temperature Sensor Proteus Simulation Like the DHT11, the DHT22 is a digital humidity and temperature sensor which has more benefits than DHT11 like: High precision and range. If we want to understand this topic we have to read the DHT22 datasheet and see how this device works and its..... Listed under: Temperature Measurement Projects
538.  Interfacing LCD and Keypad with PIC16F877A Microcontroller Interfacing LCD and Keypad are one of the important interfacing concepts of PIC16F877A microcontroller since both the input and output element can form a complete embedded system design. This tutorial is about teaching you how to read input values from keypad by polling method..... Listed under: LCD Projects
539.  Temperature controlled fan using PIC 16F877A You might have come across several applications where we need to control a specific device based on an analog parameter. This Embedded system works in a similar concept where we are about to control the speed of a DC motor using a fan based on the external temperature..... Listed under: Temperature Measurement Projects
540.  Transmitting and receiving data using UART protocol PIC Microcontroller UART or serial communication is one of the important protocols used by Microcontrollers to transmit and receive data from the external devices. Almost every controller is equipped with this protocol to make transmission and reception easier just using two pins. This tutorial will teach..... Listed under: LCD Projects
541.  4 Bit LCD interfacing and programming with PIC Microcontroller LCD displays operate in two modes 4 bit and 8 bit mode. We all might have been familiar with 8 bit mode which is used widely in several systems. But 4 bit mode is something which many of us are not aware of. This mode..... Listed under: LCD Projects
542.  Remote controlled LED lighting effects LED's have become the most important component in the lighting industry due to their miniature size and less power consumption. Also LED lights are a lot more attractive than the primitive lights used once. This project focused on building an remote controlled LED lighting with multiple lighting effects. Imagine..... Listed under: LED Projects
543. A brief overview of Allegro ACS712 current sensor using PIC16F1847 (Part 1) Sensing and controlling current flow is a fundamental requirement in a wide variety of applications including, over-current protection circuits, battery chargers, switching mode power supplies, digital watt meters, programmable current sources, etc. One of the simplest techniques of sensing current is to place a small..... Listed under: Projects, Sensor - Transducer - Detector Projects



544.

Tiny Remote for iRobot Roomba using PIC12F629
Description The Tiny Remote is a very compact infrared remote control with only two buttons to control an iRobot Roomba. It produces three different infrared control signals that the robot interprets as Clean, Spot and Virtual Wall/Lighthouse circuit is built mostly using SMD components to..... Listed under: Projects, Robotics - Automation Projects



545.

PICJazz 20PIN Learning and Development Board
The PICJazz 20PIN board from ermicro is designed to be used both as the Microchip PIC microcontroller learning and development board. The PICJazz 20PIN board is a stand-alone microcontroller module equipped with the latest 8-bit class Microchip microcontroller and high performance such as PIC16F690 or..... Listed under: Development Board - Kits Projects



546.

PIC16F84A software UART (bit banging) code and Proteus simulation
This post provides the software UART (Bit Banging) code for PIC16F84A microcontroller (e.g. to connect PIC controller with PC using serial adapter). As we know, PIC16F84A microcontroller doesn't have built-in UART module so we can create UART functionality in its software. This post provides the details of how..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects



547. **Programmable IR remote control using PIC16LF877** NEC-SIRCS-JAPAN-RC5-SAMSUNG compatible, multiprotocol infrared remote control. Replaces up to 6 existing remote controls into one. With manual learning function, LED display and/or LCD. 2V6-3V2, low power (sleep function) More protocols will be added later if needed (DENON, DAEE, MOTOROLA, RECS80.) Components: PIC16LF877-04/L (4Mhz PLCC Package),..... Listed under: Internet - Ethernet - LAN Projects, Projects, Sensor - Transducer - Detector Projects



548.



PIC Analog to Digital Converter C Programming The PIC16F690 microcontroller is one of Microchip midrange 8-bit microcontroller that has a built-in bit resolution of Analog to Digital Converter (ADC) peripheral. The ADC is one of the important features that enable us to digitize our analog world. Usually we use the electronic..... Listed under: Microcontroller Programmer Projects

549.



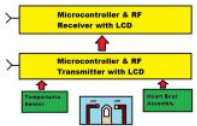
Lab 4: Interfacing a character LCD using PIC16F688 Description HD44780 based LCD displays are very popular among hobbyists because they are easy to use and they can display characters. Besides they are very easy to interface with microcontrollers and most of the present-day high-level compilers have built-in library routines for them. Today, we will..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, LCD Projects, Projects

550.



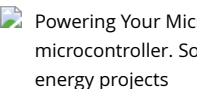
Introduction to the Microchip PIC C Programming The PIC microcontroller is quite popular in industrial and hobbyist, some of the newest 8-bit microcontrollers. Microchip PIC microcontroller with nanoWatt technology is PIC16F690, this 20-pin microcontroller has built-in peripherals such as ADC, UART, I2C, analog comparator and with 7KBytes program..... Listed under: Microcontroller Programmer Projects

551.



PIC based wireless temperature and heartbeat read-out Microcontroller based wireless temperature and heartbeat read-out suitable for a small office/home environment. This system is suitable to operate with Visual LCD. Many individuals or organizations may, for various reasons, use electronic surveillance technique at some time or another. This idea is to..... Listed under: Wireless Projects

552.



Powering Your Microcontroller's Base Project A good power supply is an essential subject to the microcontroller's base project; it's like a heart that gives a life to our microcontroller. Sometimes we take it for granted the importance of having an adequate power supply to our microcontroller project and this can..... Listed under: power energy projects

553.



A DIY indoor thermometer plus hygrometer using PIC16F688 This project is about building a microcontroller-based digital room thermometer plus hygrometer that displays temperature and relative humidity on 4 large (1 inch) seven-segment LED displays which adjust their brightness level according to the surrounding illumination. It consists of a closed-loop system that..... Listed under: How To - DIY - Projects, Metering - Instrument Projects, Projects, Temperature Measurement Projects

554.



Seven Segment Display Thermometer with PIC Microcontroller The seven-segment display is one of the most popular numeric displays used in microcontroller applications because it's cheap, robust and reliable. The seven segments actually consist of 8 LED (Light Emitting Diode) and it's available with various sizes suitable for various numeric display..... Listed under: LCD Projects

555.



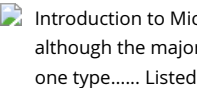
Large Dancing Robot using PIC16f877A microcontroller Large Dancing Robot Build a large dancing robot. This was supposed to be a walking robot that would more kinda beebopped around. video on last step. Build a Prototype First, The _Prototype_: Before you make a large, high-power robot, it's good to make a..... Listed under: Projects, Robotics - Automation Projects

556.



How to make (build) a Calculator using Pic16f877 microcontroller calculator with Pic 16f877 microcontroller is a comprehensive project. Comprehensive the way that code is lengthy and logical. It covers all the aspects of programming and interfacing of 16x2 LCD and 4x4 keypad with PIC microcontroller. So you should be good in programming, if..... Listed under: Calculator Projects

557.



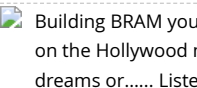
Introduction to Microchip PIC Assembler Language - Part 1 Learning the assembler language is one of the essential skills that are still required in the embedded system, although the major drawback using the assembler language is; it requires more learning curve time compared to the higher-level language but once you acquaint yourself with one type..... Listed under: Phone Projects

558.



Traffic Message Channel receiver using PIC18F8722 Main roads traffic status and incident report and display. Technical specifications: Dual display: color road map (left) and detailed text messages (right) both with LED backlight. Up to 120 TMC messages are stored in memory. Auto/manual message scrolling. GPS position locator/follower optional. Map navigation..... Listed under: Car Projects, Interfacing(USB - RS232 - I2C -ISP) Projects, Projects, Security - Safety Projects

559.



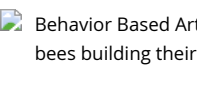
Building BRAM your first Autonomous Mobile Robot using Microchip PIC Microcontroller - Part 1 Have you ever thought that most of our perception about the robot on the Hollywood movie! The famous 3CPO and R2D2 from Star Wars until the little cute garbage compacting robot named WALL-E; all of these machines are examples of dreams or..... Listed under: Robotics - Automation Projects

560.




LED flasher using PIC16C84 Microcontroller This is my first simple PIC program. It will flash an LED continuously at approximately 1Hz. It is a very simple loop that delays for 500 milliseconds (half a second) with the LED on, and then delays for 500ms with the LED off. Thus, the..... Listed under: LED Projects, Projects

561.




Behavior Based Artificial Intelligent Mobile Robot with Sharp GP2D120 Distance Measuring Sensor - BRAM Part 2 What is the intelligent anyway; could we categorize bees building their tiny hexagonal compound nest, ants searching for their food or birds migration using precision navigation over continental areas as the intelligent acts..... Listed under: Robotics - Automation Projects

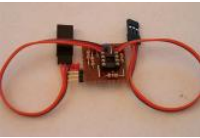
562.



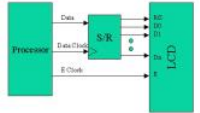
TRACK CONTROLLER FOR AWANA® GRAND PRIX using PIC16F628 Introduction This project is for the hobbist who wants to build a measuremer Grand Prix® track (also known as a Pinewood Derby track.) The racetrack for which I designed this unit is a 4-car track. A car is approximately..... under: Other Projects, Projects
563.




Introduction to the Embedded System with PICAXE Microcontroller These days we are living and surrounding by many tiny computers called em products. Unlike the general purpose desktop computer that we use for browsing or typing our email, this tiny computer is designed to do only a specific task. We could easily found..... Listed under: Other Projects
564.




Servo Camera Switch using PIC12F675 microcontroller This document describes the complete design for a camera switch that uses a servo to ac the shutter. This page include links to the complete circuit diagram, the .HEX file required to program the 12F675, and complete construction det The switch consists of a PIC..... Listed under: Projects, Video - Camera - Imaging Projects
565.




2-wire LCD interface using PIC16CF84 Alphanumeric LCD displays have become very popular for microcontroller applications because they can a to a project in a variety of different ways. A text message giving the user instructions as well as feedback can make the application seem much m "professional" and Listed under: LCD Projects
566.




PIC18 Pulse Width Modulation (PWM) DC Motor Speed Controller with the RPM Counter Project Equipped with sophisticated Enhanced Capture/Compare/PWM (ECCP) peripheral the Microchip PIC18F14K50 microcontroller could produce up to four PWM channels output. The enh PWM (Pulse Width Modulation) mode in ECCP peripheral is capable to drive the full bridge DC Motor circuit directly both in forward or reverse.... under: Motor Projects
567.




TIMED DISCHARGE ADAPTER using PIC16F628 Introduction This program is an experimental timed-discharge adapter for a Vericom control panel with an Orenco Systems AdvanTex® wastewater treatment system (sewage filtration system) marketed by Wastewater Technologies, Inc. Although Vericom firmware is capable of modification to provide timed-discharge capability by a firmware..... Listed under: Clock - Timer Projects, Projects
568.




Build Your Own Simple and Easy PICAXE Microcontroller Based Photovore Robot Building a simple and easy microcontroller based robot is always fascinating topic to be discussed, especially for the robotics newbie enthusiast. On this tutorial I will show you how to build your own microcontr based robot which known as a photovore or you could..... Listed under: Robotics - Automation Projects
569.



An Arduino me-too-alike for PIC16F873A We've all done it – looked sideways with not a little envy at a range of add-ons for a power tool, and wish the one we bought. There is no 'standard' footprint for a PIC Micro-controller development/experimental board. Vendors have..... Listed under: Development Board - Kits Projects, Projects
570.



Building your own Simple Laser Projector using the Microchip PIC12F683 Microcontroller The 8 pins PIC12F683 microcontroller is one of the sma members of the Microchip 8-bit microcontroller families but equipped with powerful peripherals such as ADC and PWM capabilities. This make t microcontroller is suitable for controlling the DC motor speed. In order to demonstrate..... Listed under: Motor Projects
571.



PIC based WWVB clock Introduction There are many DIY versions of WWVB clock designs available on the web. Commercial "atomic" clocks are inexpensive and widely available, but I wanted to try my hand at designing one to gain insight into WWVB reception and to learn a little about programming..... Listed under: Clock - Timer Projects

572.



Stepping Into the 16-bit World with the Microchip 16-bit PIC24F16KA102 Family Microcontroller One of the commonly asked questions when we the bigger and powerful 16-bit microcontroller is do we really need it? As the 8-bit microcontroller is already suite almost all of our needs from a blinking LED to more sophisticated embedded application such..... Listed under: Other Projects

573.



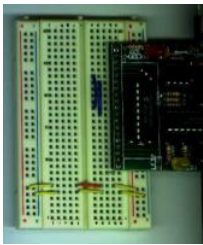
PIC16F84A discolight effect with bass beat control Introduction External circuit converts bass beat of music into pulses.The motor is controlled by If theres bass beat recognised then the motor rotates one direction(in full stepping) for a predefined time then stops. If the second beat comes i rotates again for..... Listed under: Motor Projects

574.



The LM324 Quad Op-Amp Line Follower Robot with Pulse Width Modulation Designing a simple and yet functional Line Follower Robot (LFR) is al fascinating and challenging subject to be learned, the LFR actually could be implemented in many ways start from a simple two transistors to a sophisticated PID (Proportional, Integrate and Differential) which take..... Listed under: Robotics - Automation Projects

575. Bit-Banging Serial Interfaces for the Low-End and Mid-Range PICMicros using PIC16F84 When I designed the "YAP" for the "YAP" PICMicro programmer presented in "Programming and Customizing the PIC Microcontroller", I felt that the serial interface provided in "execution mode" of the programmer would be very useful for people developing their own software. With this interface, the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



576.



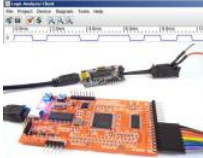
How Seven Segment Display Multiplexing with PIC Microcontroller for Electronic Sign Hi there, today I'm gonna to give you some PIC interfacing c We have already seen how to connect LCD display to PIC MCU which has a great role in electronic display board industry. By the way how clo We interface 7 segment displays to..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

577.



The Line Follower Robot with Texas Instruments 16-Bit MSP430G2231 Microcontroller When Texas Instruments (TI) introduced their new value lir microcontroller complete with the programmer and development board named MSP430 Value Line LaunchPad in the mid of 2010 for only USD 4 include the shipping cost, this make it as the cheapest programmer and development..... Listed under: Robotics - Automation Projects

578.



Prototype: Openbench Logic Sniffer logic analyzer using pic microcontoller Openbench Logic Sniffer is an open source logic analyzer. It's designe support the SUMP logic analyzer software at the lowest possible cost. Download the source and design files from the Gadget Factory project pag project started in the comments on a post. Initial..... Listed under: Other Projects

579.



Logic Probe Plus using PIC12F683 This project is based on a probe logic states, capable of measuring levels from TTL (5v) to state levels of PLC's (For this we have employed the use of the PIC 12F683 microcontroller, which by its nature is capable of operating at low voltages,..... Listed unde Metering - Instrument Projects, Projects

580.



Interfacing the Microchip PIC18F Microcontroller Master Synchronous Serial Port (MSSP) to various I2C Devices The Inter-Integrated Circuit or I2C as I square C) bus has been introduced in 1980 by Philips, and has become a de-facto world standard for data exchange between Microcontrole various devices such as temperature sensor, ADC (analog to digital converter), DAC (digital to..... Listed under: Other Projects

581.

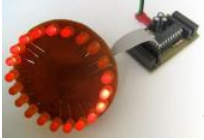


PIC Based Message wand The project uses flashing LEDs to present shot message in the air by swinging a wand around above the head. A perfbx used to construct the circuit that is powered by 2 coin cells type CR2016. The power fluctuations from excessive load on the..... Listed under: LEC Projects

582. H-Bridge Microchip PIC Microcontroller PWM Motor Controller One of the advantages using the Microchip PIC microcontroller Pulse Width Modulation or PWM for short PWM peripheral circuit is designed to control the DC motor using the full bridge mode PWM feature. The PWM peripheral works by supplying the correct signal to..... List under: PWM Projects



583. LEDactus using PIC18F1320 Microcontroller The LEDactus is my version of a dry climate niche dweller like a cactus. LEDactus is immobile and att to survive by creating a pleasant display. This is of course in the hopes that passersby will be so entranced that they will build the LEDactus'..... L under: LED Projects, Projects



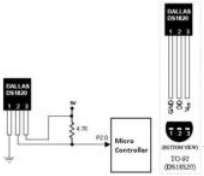
584. Controlling a Servo with a PICAXE and an IR Sensor Learn how to combine a PICAXE, IR sensors, and a servo motor to create a device that respon moving stimulus. Spoilers: I hook it up to eyeballs that can follow a finger. Related Information Servo Motor Control with an Arduino Servo Contr with..... Listed under: Motor Projects



585. Bootloader for 16F87x PIC Microcontrollers A bootloader enables download of hex-files directly into the flash-memory of a PIC or other microcon The bootloader receives the user program via the PIC's UART and writes it directly to the program memory (self programming). This feature grea speeds up the development process, because..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



586. DS18S20 interfacing with pic and avr microcontroller Microcontroller BoardsRead the temperature in PIC16F/18F Primer Board from temperatur ds1820. The PIC16F/18F Primer board uses the ADC pin for reading temperature from temperature sensor ds1820. The reading output is display PC through UART. PIC16F/18F Development Board The PIC16F/18F Development Board is specifically designed to..... Listed under: Sensor - Trans Detector Projects



587. A Versatile PIC16F876A Based Robot Design Summary: Our group designed and manufactured a miniature robotic vehicle that conquers va terrains. The vehicle was designed with a track system which is powered by two DC motors. The motors use a Quadruple half H-Driver order to drive the motors in both directions. The track system incorporates a four bar linkage for each tread..... Listed under: Projects, Robotics Automation Projects



588. IMAR-3 PC-KEYBOARD ADAPTER FOR SPECTRUM using pic16f84 While I was writing some tips to solve problems about Spectrum' keyboard, som asked me for the possibility of using a PC-keyboard coupled by adapter. One market solution was launched by 'Sintech', but isn't available the sc nor the program used by inner microcontroller..... Listed under: RFID - NFC Projects



589. F1 Gantry Race Start Lights using PIC16F684 Description Featured in Electronics Weekly Gadget Freak (15/08/2008) The Control board for this pro now available in kit form or fully assembled and tested. Please visit the Picprojects on-line shop for more details This project provides an simple motor racing style 5 light race..... Listed under: LED Projects, Projects



590. How to drive an rgb led using PIC16F877A The RGB LED contains three LEDs encased in one shell: Red, Green and Blue (some contain an extra b less output intensity (candela) per mA). It looks like a single white led except that it has four leads -..... Listed under: How To - DIY - Projects, LED Projects



591. Automatic control of street lights Did you ever think that how the street lights automatically turn ON in the night and turn OFF automatically at n Is there any person who comes to ON/OFF these lights? The following circuit that described below which perform this job automatically. This circ employed..... Listed under: Sensor - Transducer - Detector Projects

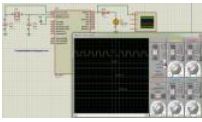


592. PlayPIC Tutorial Board for the PIC16F84A Microcontroller This is a new design of a tutorial board based on the popular PIC16F84A microcontrolle features eight single leds, a 7-segment display, an LCD display and five push buttons. It is an ideal solution for the beginner to take his/her first programming steps in..... Listed under: Development Board - Kits Projects, Projects



593.  PIC12F675 timer0 code and Proteus simulation This post provides the timer0 code for PIC12F675 microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you know how to blink an LED..... Listed under: Clock - Timer Projects, Projects
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594.  PIC12F675 timer1 code and Proteus simulation This post provides the timer1 code for PIC12F675 microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you know how to blink an LED..... Listed under: Clock - Timer Projects, Projects
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595.  Digital humidity sensor using PIC microcontroller The percentage of water present in the air is termed as humidity. Water as gaseous state called vapor. As the temperature of the air increases more water vapor can be generated. Humidity measurement in industries is critical because it may affect the business cost of..... Listed under: Sensor - Transducer - Detector Projects
-
596.  Make your own motion sensor alarm with SMS feature using PIC18F2550 MikroElektronika demonstrates how to build a simple home alarm system that has the capability of sending SMS to a predefined cell phone number when intrusion is detected. This project is based on StartUSB for PIC, a small development board for PIC18F2550, which is preprogrammed..... Listed under: Home Automation Projects, Phone Projects, Projects, Sensor - Transducer - Detector Projects
-
597. Temperature sensor using PIC16F877A microcontroller In this tutorial, we are making a Digital Thermometer using PIC microcontroller and LM35 Temperature Sensor. In this project, we will sense the temperature using LM35 and display it on 16x2 LCD. LM35 Temperature Sensor is accurate and cheaper and doesn't require any external calibration. The output voltage..... Listed under: Temperature Measurement Projects
-
598.  Photo film processor On this page you will find the technical information for building the electronic control unit of my homemade film processing machine. To see the rest of this film developing apparatus, look at the relevant article in the photography section of this site. Developing a color film..... Listed under: Video - Camera - Imaging Projects
-
599.  Digital frequency meter using PIC microcontroller Here you will see how easily we can make Digital frequency meter by PIC microcontroller using PIC16F877. To make this project we need clear idea on timer 1 module of PIC16F877 microcontroller. We need to know how we can configure timer 1 module..... Listed under: Metering - Instrument Projects
-
600.  Interfacing 16x2 Lcd With 8051 Circuit Pin Diagrams Microcontroller based electronic circuit diagrams, Electronic circuit diagrams / circuit schematics. If you would like general assistance with a specific design question you may like to try the electrical engineering. Interfacing LCD modules with PIC microcontrollers., In this tutorial we will see how we can..... Listed under: LCD Projects
-
601.  PIC16F84A internal EEPROM code and Proteus simulation This post provides the internal EEPROM reading and writing code for PIC16F84A microcontroller. As we know, PIC16F84A microcontroller has 64 bytes of built-in EEPROM data space with an address range of 0x00 to 0x3F. This code is written in C language using MPLAB with HI-TECH C compiler..... Listed under: Memory - Storage Projects, Projects
-
602.  AC Voltage measurement using PIC16F877A microcontroller Note: Microcontroller PIC16F73 can be used instead of PIC16F877a. This time we will know how to measure AC voltage parameters with the help of microcontroller. First we will know about AC voltage parameters, then we will do the work step by step. What is AC(Alternating Current)..... Listed under: Metering - Instrument Projects
-
603.  Transmit & Receive Infrared Signals With Your PC Serial Port using PIC12F508 We no longer manufacture or sell the original Air-Byte IR transceiver, so we're releasing the code & circuit design here for hobbyists and students looking to build a simple IR transceiver. Note that the parts used here are critical. I.E. the NPN darlington transistor..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Internet - Ethernet - LAN Projects, Projects

604.



PIC16F877 timer0 code and Proteus simulation This PIC16F877 microcontroller tutorial answers the question, " How to use timer0 of PIC16F877 how to handle its interrupts? " Using PIC16 simulator (Proteus) you can verify this PIC timer0 code and change it according to your needs. This code is written in C language..... Listed under: Clock - Timer Projects, Projects

605.



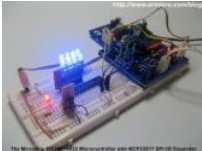
Digital logic probe for troubleshooting TTL and CMOS circuits using PIC12F683 A logic probe is considered as a stethoscope for engineers and technicians for debugging digital logic circuits that consists of logic gates, memories, registers, etc. A digital multimeter (DVM) can also be used for analytical purposes but it gives you the numeric value of..... Listed under: Metering - Instrument Projects, Projects

606.



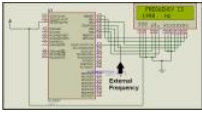
LEARN HARDWARE FIRMWARE AND SOFTWARE DESIGN – BRIEF DESCRIPTION Edition 5 of LHFSD [ISBN 978 606 92185 32] has been specifically designed to become an educational/pedagogical manual for teachers, instructors, and also for ordinary citizens. Have no fear, dear readers: LHFSD is still addressed to beginners, since EVERYTHING starts from a white page, and..... Listed under: Development Board - Kits Projects

607.



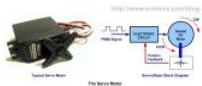
Using Serial Peripheral Interface (SPI) with Microchip PIC18 Families Microcontroller The Serial Peripheral Interface (SPI) is one of the popular embedded serial communications widely supported by many of today's chip manufacturers and it is considered as one of the fastest serial data transfer interfaces in the embedded system. Because of its special in/out register configuration, the..... Listed under: PWM Projects

608.



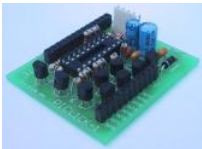
Digital frequency meter by PIC microcontroller using timer 1 (0-9999 Hz) Here you will see how easily we can make a Digital frequency meter by PIC microcontroller using timer 1. To make this project we need a clear idea on timer 1 module of PIC16F877 microcontroller. We need to know how to configure timer 1 module to..... Listed under: Metering - Instrument Projects

609.



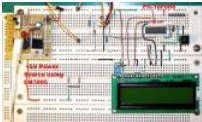
Basic Servo Motor Controlling with Microchip PIC Microcontroller The servo motor is widely used in model hobbyists such as airplane R/C model for moving the rudder, ailerons, elevators and acceleration control or in the car R/C model for steering and acceleration control. In this tutorial we will see how to control the servo..... Listed under: Motor Projects

610.



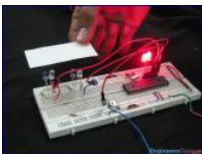
PIC LICK-1 using PIC16F84 Microcontroller This module is so simple, I'm surprised it has not been thought of before. You can fit a PIC16F84A or PIC16F628 and it becomes a "buffered PIC chip." Look at the circuit diagram first to see what the module is doing. It's buffering 5 of..... Listed under: Development Board - Kits Projects, Projects

611.



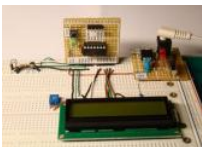
PIC-based Digital Voltmeter (DVM) Introduction This project will describe how to make a simple digital voltmeter (DVM) using a PIC16F688 microcontroller. The range of this DVM is 0-20V, but you can easily increase or decrease the range of input voltage as your requirements after you understand the voltage scaling..... Listed under: Metering - Instrument Projects

612.

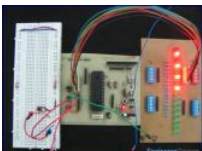


How to work with inbuilt Analog Comparators of PIC18F4550 Analog comparator is an electronic device which compares the two voltage signals and provides TTL logic output to indicate the larger signal. The analog comparator is used in various applications where two input signals need to be compared. IR sensor is a very common example..... Listed under: How To - DIY - Projects, Projects, Tutorials

613. A Digital temperature meter using an LM35 temperature sensor Introduction A digital thermometer is a good choice of project for beginners who just stepped in to the world of microcontrollers because it provides an opportunity to learn using sensors to measure the real world signals that are analog in nature. This article describes a..... Listed under: Sensor - Transducer - Detector Projects



614.





How to work with External (Hardware) Interrupts of PIC18F4550 Interrupts are special events that require immediate attention. They cause the processor to cease the running task to serve a special task for which the interrupt event had occurred. After the special task is over, the processor resumes performing the original task. The processor can..... Listed under: How To - DIY - Projects, Projects, Tutorials

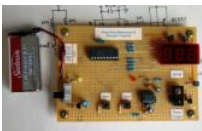
615.


Programmable digital timer switch using a PIC Microcontroller Digital timer switches are used to control the operation of electrical devices based on a programmed schedule. This project describes a programmable digital timer based on the PIC16F628A microcontroller that can be programmed to schedule the on and off operation of an electrical appliance. The..... Listed under: LED Projects



616.  AquaCont – Aquarium Control using pic microcontroller The AquaCont is an electronic system witch permits to manage and to monitor most of t parameters of all the electrics devices that can be found in a aquarium. The PIC18F4520 used to realize it, combines a real time clock and a temp sensor in..... Listed under: Sensor - Transducer - Detector Projects


617.  How to interface 16x2 LCD in 4-bit mode with PIC18F4550 The 16x2 character LCD can work in two modes, namely, 8-bit and 4-bit. These modes basically correspond to the number of data pins used in interfacing LCD. 8-bit mode uses all the data lines and has been explained in LCD interfa with PIC18F4550. In 4-bit..... Listed under: LCD Projects, Projects


618.  Heart rate measurement from fingertip Heart rate measurement indicates the soundness of the human cardiovascular system. This project demonstrates a technique to measure the heart rate by sensing the variation of the blood volume inside a finger artery, which is caused by the p action of the heart. It consists of an..... Listed under: Sensor - Transducer - Detector Projects


619.  Pocket Programmer <http://www.bubblesoftonline.com/pocket/pocket.html> HOT! Tony Nixons Pocket Programmer. The Pocket Programmer is a s alone serial programmer that can program most of the PICmicro®MCU range of microprocessors. (12C6xx, 16Cxxx, 16Fxxx, 18Cxxx) It works for single 18VDC supply or with 2 X 9 volt batteries. Combine this..... Listed under: Microcontroller Programmer Projects

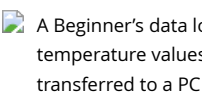
620. Business Card PIC Programmer using PIC12F629 microcontroller Business Card PIC Programmer This was my entry for the Hack A Day business card size circuit contest. I zipped up the files and put them on my website. I'm posting it here because all the other entries seem to be on a blog..... Listed under: Other Projects, Projects




621.  A new multi-function power supply unit for my Embedded Lab One important parameter in embedded system designing is power consumption. parameter is directly related to the battery lifetime, if the system is to be powered from a battery. In order to determine the power rating of your designed system, you need to know how..... Listed under: LCD Projects

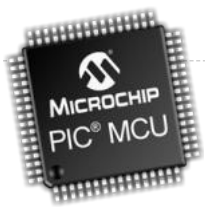
622.  RC5 remote control using PIC12F629 All remote controlled projects from this site can be controlled with remote controls which use the RC5 protc the TV-remotes from Philips. When all buttons from such a remote are in use then you could make a remote control by yourself. Your own build. Listed under: Home Automation Projects, How To - DIY - Projects, Projects

623.  How to use the EQ PIC Development Board Video EQ PIC DEVELOPMENT BOARD. ON-BOARD MODULES. HOW TO CREATE A PROJECT IN MPLAB > DOWNLOAD THE CODE ONTO THE EQ PIC DEVELOPMENT BOARD USING A BOOTLOADER. Ghana movies HOW TO CREATE A PROJECT IN MPLAB DOWNLOAD THE HEX FILE ONTO THE EQ..... Listed under: Development Board - Kits Projects, Projects

624.  A Beginner's data logger project using PIC12F683 microcontroller It is a very simple data logger project based on PIC12F683 microcontroller. The microcontroller read temperature values from a temperature sensor on a regular interval basis and stores them into its internal EEPROM memory. The recorded temperatures can be late transferred to a PC through..... Listed under: Temperature Measurement Projects

625.  Having fun with HC08 using pic microcontroller Here is a nice little project for a rainy weekend, all this can be accomplished over a weekend and under USD 15. This page has gone through several rewrites, mainly to get rid of my 'rant mode' writing, but it seems I just need..... Listed under: Entertainment Projects

626.

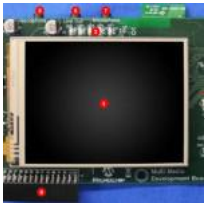


PIC-Microcontroller C Tool flow Video this video explain about Micro C software for PIC programming ... Listed under: Microcontroller Programm Projects, Projects

627. How to make a contact-less digital tachometer using IR-light reflection technique Tachometer is a device that measures the rotational speed of any shaft or disc. The unit measurement is usually revolutions per minute or RPM. The traditional method of measuring RPM of a rotating shaft was based on velocity feedback concept where a dc Listed under: Metering - Instrument Projects



628.



PIC32 Multimedia Expansion Board Review Video Review of the Multimedia Expansion Board for the PIC32 Start Kits from Microchip. In this review going to show the board and its peripherals, and then I will show a couple of demonstration applications.... Listed under: Development Board - Kit Projects, LCD Projects, Projects

629.



Experimenter's board for enhanced mid-range PIC microcontrollers (PIC16F1827 and PIC16F1847) The PIC16F628A has always been my first choice for microcontroller projects. It is simple, inexpensive, and easily available. Due to its compact size (18 pins) it occupies lesser space on the circuit board, and meanwhile, it is powerful enough to serve most of a hobbyist's..... Listed under: Sensor - Transducer - Detector Projects

630.



Build a PIC controlled DDS VFO, 0 to 6 MHz using pic microcontroller Files contained in MINIDDS.ZIP: readme.txt Read this first! compplac.pdf Component placement in PDF format schema.pdf Schematic diagram in PDF format top.ps PCB top copper layer in Postscript format bottom.ps bottom copper layer in Postscript format ad9832_4.asm PIC assembly source code p16f84.inc Needed for assembly..... Listed under: LCD Projects, Projects

631.



PIC 18F4550 Motor Controller Video Project In this video, we cover how to breadboard and write the firmware for a motor controller (controlling 2 DC motors, and a stepper) with the PIC 18F4550. A few notes on this video: -I recorded most of the video during the evening of..... Listed under: Motor Projects, Projects

632.



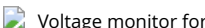
LM386 based stereo audio amplifier with digital volume control Due to its simplicity (requires minimum external components) and high availability LM386 is very popular among hobbyists for use in low-voltage audio amplification applications. Most of the time a potentiometer is used at the input side of LM386 to provide a volume control in the..... Listed under: Sound - Audio Projects

633.



A video game with software generated video signal ! Introduction I have made the game pong using a pic 16F84 running @ 12MHz. The game Pong is the world's first video game in the early 70's, this is a modern version of it, made with a little bit less hardware than the original version..... Listed under: Game - Entertainment Projects

634.



Voltage monitor for car's battery and its charging system My 2010 Equinox has got every feature that a modern automobile should have. However, one thing that I personally find missing is the real-time monitoring of voltage across the car's battery terminals. This may not seem to be that important but one of the most..... Listed under: Car Projects

635. Low cost temperature data logger using PIC and Processing This project describes an easy and inexpensive way of adding a digital thermometer and data logging feature



It involves a PIC microcontroller that gets the surrounding temperature information from the Microchip MCP9701 sensor, and sends it to a PC through an USB-UART..... Listed under: Temperature Measurement Projects

636.

Simple RS232 to logic level converter for PIC microcontroller The circuit shown will convert logic level voltages to and from RS232 serial voltages For basic serial comms between a Microchip PIC and a PC or other device you generally only need to connect the Gnd, Txd and Rxd lines. This little circuit will..... Listed under: Development Board - Kits Projects, Projects

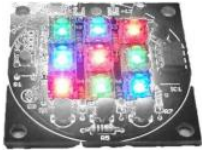


637.



Revised version of LM35 based digital temperature meter This is a revised version of my LM35 based digital thermometer project that I posted la Although it is one of the simplest projects, it is very popular among newbies who are just starting to learn microcontrollers. There was a little flav original..... Listed under: Temperature Measurement Projects

638.



RGB LED Mood Light Standalone PWM controller for RGB LEDs using PIC12F629 This project is an update to the original RGB LED PWM Driver. T version allows the use of either 5mm LEDs or the square bodied Superflux / Piranah style LEDs. The circuit now uses bipolar transistors rather tl MOSFETs which make it more suitable..... Listed under: Home Automation Projects, LED Projects, Projects, PWM Projects

639.



New Earth Time (NET) digital clock in recycled retro-modern case using PIC16F627A Ever get confused by GMT, or just wish you had a cooler way track of time? Build a New Earth Time clock! Using a PIC microcontroller, some code, and a couple discrete parts, you too can have a unique timekeeping device to keep..... Listed under: Clock - Timer Projects, Projects

640.



00 to 99 minute timer using PIC16F628A microcontroller Last week I was browsing my old backup hard drive and I found a source code for a very PIC based digital timer that I made a couple of years ago. The actual hardware of the project isn't with me anymore. I might have..... Listed unde Timer Projects

641.

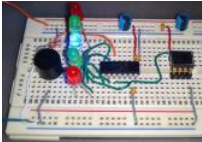


Universal High-Power LED Driver with 3D-printable Case using PIC16F1823 *** There's a firmware update. Please check out! *** LEDs are taking conventional lighting every day. High-power LEDs over 1W are becoming more and more affordable, and I wanted to start using them to replace lighting fixtures around me. However I realize that..... Listed under: LED Projects, Projects

642. IKEA Mood-light Conversion using PIC12F683P Introduction This little project was one of my first projects with microcontrollers. First, I made the circuit then, for years, I v wondering what I could do with it, until one day I came across this IKEA plastic bag dispenser. I knew immediately, it would..... Listed under: Home Automation Projects, Projects



643.



Build a digital spirit level using a SCA610 accelerometer A bubble or spirit level meter is a handy tool to find whether a surface is horizontal or ve is often carried by civil engineers, mechanical engineers, surveyors, carpenters, and many other professionals whose work involve precise alignn horizontal and vertical planes. Original spirit levels..... Listed under: Metering - Instrument Projects

644.



LED Microcontroller Debug Module using PIC18F4420 When it comes to debugging a microcontroller circuit, there aren't a lot of simple options. microcontroller circuit might have multiple things going on at the same time, measuring voltages with a DMM isn't an option. Using an compute Circuit-Debugger solution is expensive and..... Listed under: LED Projects, Projects

645.



Pingbot - Micro RC Rechargeable Musical Robot Pal using PICAXE Pingbot is a very small (38mm diameter), usb rechargeable, programmable, mus remote control robot designed for maximum fun and danceability. I've built a few experimental robots in the past and, to be honest, they all look part. They were nothing more than circuit boards..... Listed under: Projects, Robotics - Automation Projects

646.



TrH Meter: A DIY indoor thermometer plus hygrometer with adaptive brightness control implemented to 7-segment LED displays This project is building a microcontroller-based digital room thermometer plus hygrometer that displays temperature and relative humidity on 4 large (1 inch) : segment LED displays which adjust their brightness level according to the surrounding illumination. It consists of a closed loop system that..... Listed under: Metering - Instrument Projects

647.



How-to: Bus Pirate v1, improved universal serial interface using PIC24FJ64GA002 We use the Bus Pirate to interface a new chip without writing code designing a PCB. Based on your feedback, and our experience using the original Bus Pirate to demonstrate various parts, we updated the design new features and cheaper components. There's also..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

648.



Making a digital capacitance meter using microcontroller Capacitors are one of the most common passive electrical components that are extensively used in all kinds of electronic circuits. In this project, we will discuss a technique of building a digital capacitance meter using a PIC microcontroller project can measure capacitance values from..... Listed under: Metering - Instrument Projects

649. How to drive a lot of LEDs using PIC12F microcontroller How to drive a lot of LEDs from a few microcontroller pins. Using the fact that many microcontroller pins have three states (+V, GND, or "high impedance", you can drive $N \times (N-1)$ LEDs from N pins. So the little 8 pin microcontroller like a PIC12Fxxx or..... Listed under: LED Projects, Project

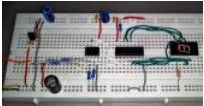


650.



PIC RC Motor Controller (and example lego robot) Step 1: Parts List General: RC transmitter/receiver set with at least 3 channels. As is this code also works with stacked PWM signals. I can only say for sure that it will work with traxxas receivers. With modification it could work with any PWM timer Listed under: Motor Projects

651.



Digital logic probe for troubleshooting TTL and CMOS circuits A logic probe is considered as a stethoscope for engineers and technicians for debugging digital logic circuits that consists of logic gates, memories, registers, etc. A digital multimeter (DVM) can also be used for such analytical purposes but gives you the numeric value of..... Listed under: Other Projects

652.



Message Pump using PIC16F687 microcontroller Brief: The Message Pump A.K.A. the USB to LCD Backpack is a device that allows you to connect a display directly to your computer. It uses a PIC micro-controller, to drive the LCD and a FTDI USB to serial chip to connect to your..... Listed under: Projects, Projects

653.



Temperature and relative humidity display with adaptive brightness control The objective of this project is to illustrate a technique of implementing adaptive brightness control to seven segment LED displays. It consists of a closed loop system that continuously assesses ambient light conditions using an inexpensive light-dependent resistor (LDR) and uses that information to adjust..... Listed under: Temperature Measurement Projects

654.



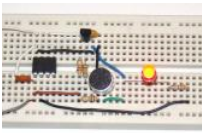
LED Infinity Mirror Controller, 32 LEDs, Multiple Patterns using PIC12F675 LED Infinity Mirror Controller, 32 LEDs, Multiple Patterns UPDATE: This version is discontinued please see the new version, 8 Channel LED Controller v.3, the development files are still available to build this version. As simple as it can be. A 12F675 controls a high-power shift register,..... Listed under: LED Projects, Projects

655.

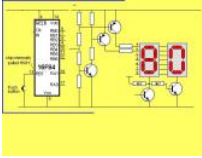


Interfacing of PIC12F675 with (i2c based) 24LC64 EEPROM (code + Proteus simulation) This post provides the code for interfacing 24LC64 EEPROM with PIC12F675 microcontroller. This 24LC64 EEPROM has i2c based interface and PIC12F675 doesn't have any built-in i2c modules, so software i2c modules were created in the code. This code is written in C language using MPLAB with HI-TECH C..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Interfacing - Storage Projects, Projects

656. Making a simple clap switch A clap switch is a fun project for beginners. It switches on and off electrical appliances with a sound of clapping hands. Today we will discuss making a simple clap switch that operates when it detects two clapping sounds in a row. It uses..... Listed under: Other Projects



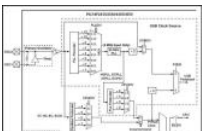
657. **2 Digit Counter using PIC12F629 Microcontroller** This article describes a 2-Digit Counter using a Microchip PIC12F629. It shows what can be done with an 8-pin chip having just 5 output lines and one input line. The chip drives two 7-segment displays and this would normally require 7 lines to drive the segments..... Listed under: Clock - Timer Projects, Projects



658. **Running LED dice** Tons of LED dice projects with different output forms have been published online. The most common output configuration in these projects is a 3-1-3 setup (two rows of three LEDs and one LED at the top in the middle) of seven LEDs, which simulates the actual patterns..... Listed under: LED Projects



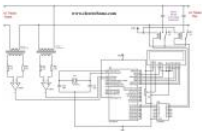
659. **PIC USB HID (Human Interface Device) Interfacing** For long time, UART is the only and best way to interface with PC. It is easy to adapt and handle. Though some devices (like: GSM modem etc.) have UART on themselves, but for interfacing with PC, there is only one thing now and that..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



660. **Line follower robot using microcontroller** A line following robot is a versatile machine utilized to detect and take after the dark lines that are drawn on the white surface. As this robot is produced utilizing a breadboard, it will be exceptionally easy to build. This system can be fused into..... Listed under: Robotics - Automation Projects



661. **Automatic Power Factor Controller using Microcontroller** The thirst for new sources of energy is unquenchable, but we seldom realize that we are wasting a part of the electrical energy every day due to the lagging power factor in the inductive loads we use. Hence there is an urgent need to avoid..... Listed under: power - energy projects



662. **8049 Spy using pic microcontroller** What do you do when you have to read the internal ROM contents of a 8048 or 8049 processor and you don't have a programmer for those devices? You simply build this 8049 spy of course! That is exactly what I did when I wanted..... Listed under: Microcontroller - Programmer Projects



663. **Interfacing Relay with PIC Microcontroller** A relay is an electromagnetic switch which is used to switch High Voltage/Current using Low power circuits. Relay isolates low power circuits from high power circuits. It is activated by energizing a coil wound on a soft iron core. For detailed working of relay please..... Listed under: Other Projects



664. **Breadboard using dsPIC30F2012 microcontroller** Bernard introduces us to the dsPIC microcontroller. He shows us his Arduino like project board for dsPIC and gives advice on software development tools. This article was submitted by Bernard Klinc as part of the "Hobby parts for articles" program. Bernard received a graphic..... Listed under: Development Board - Kits Projects, Projects



665. **How to use PIC18F4550 as a SPI Slave Transmitter** The Serial Peripheral Interface (SPI) is a high speed, synchronous, serial communication standard. The SPI communication protocol is basically a Master Slave implementation where the master device controls the clock based on which the slave devices operate. The master can communicate with one or more slave in..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



666. **Low Cost Solar Lighting Controller** Solar Lighting Controller based on PIC12F675 micro controller to be used with a Solar Panel, Battery and a LED Light, it has built with affordable materials and its ready to use, just plug your devices and its done, this controller will function by itself..... Listed under: LED Projects

LED Projects



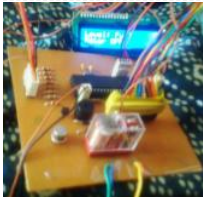
667. 28 Pin PIC Terminal Development Board Replacement: None. We do not have a direct replacement for this board. This page is for reference only. Description: A fun package full of potential projects! Development board for 28 pin PIC microcontrollers with power supply circuit, crystal oscillator circuit, RS232 port, ICSP/ICD port, 16x2..... Listed under: Development Board - Kits Projects, Projects



668. PIC16F877A-Based Temperature Monitoring System Temperature monitoring and control is important in industry environments. Sensors are widely used for measurement of temperature. Usually, a temperature sensor converts the temperature into an equivalent voltage output. IC LM35 is such a sensor. Here we describe a simple temperature measurement and display system..... Listed under: Temperature Measurement Projects



669. Water Level Indicator and Controller using PIC Microcontroller Here is a simple, versatile project which indicates the level of water and automatically controls it by using PIC Microcontroller. The Water Level Sensing Section senses the level of water in the tank and sends it (wireless) to the Receiver Section. Receiver Section is connected to the..... Listed under: Sensor - Transducer - Detector Projects



670. PURPIC, the wearable PICkit2 clone using PIC12F508 programmer PURPIC, the wearable PICkit2 clone PIC programmer based on a design by David Tait using through-hole transistors and resistors glued to a piece of cardboard. Oh, how times have changed. And as usual, I'm still 7* years behind those changed times latest project..... Listed under: Microcontroller Programmer Projects, Projects



671. Digital Clock using PIC Microcontroller and DS1307 RTC A Digital Clock can be made easily by using PIC Microcontroller, DS1307 and a 16x2 LCD. I already posted about Interfacing DS1307 RTC with PIC Microcontroller. The DS1307 RTC can work either in 24-hour mode or 12-hour mode with a 12-hour indicator. It automatically adjusts..... Listed under: Clock - Timer Projects



672. PICMAN prototyping board using PIC18LF4553 For a long time now I've been wanting to make my own microcontroller-based prototyping board. My original motivation was the unjustified high costs for even the simplest boards (a basic Arduino for \$30 - why???) and the challenge of designing something that anyone can make..... Listed under: Blog, Development Board - Kits Projects, Projects



673. Interfacing Ultrasonic Distance Sensor : ASCII Output with PIC Microcontroller In some of our projects, we may want to measure the distance of an object from a point. Ultrasonic Distance Sensors are the best sensor which provides stable, accurate, precise, non-contact distance measurement from 2cm to 4m. Ultrasonic Sensors can be used to measure distance between moving..... Listed under: Sensor - Transducer - Detector Projects



674. Pic-Plot2 GPIB to USB converter Pic-plot now goes to USB! A perfect low cost solution to quickly get screen plots of your GPIB instrument on your PC without complex software. It emulates the HP7470A operation on the GPIB side, and outputs the HP-GL data at the USB port to..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Projects



675. Turntable Photography Equipment using PIC16F84A A friend asked me if I could build him a device that would allow him to take photos of his product in 360 degrees. That kind of photo is actually an animation that consists of several photos of the same product but from different angles..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Projects, Video - Camera - Imaging Projects





676. Interfacing HC-SR04 Ultrasonic Sensor with PIC Microcontroller HC-SR04 Ultrasonic Distance Sensor is a popular and low cost solution for non-contact distance measurement function. It is able to measure distances from 2cm to 400cm with an accuracy of about 3mm. This module includes ultrasonic transmitter, ultrasonic receiver and its control circuit. HC-SR04 module..... Listed under: Sensor - Transducer - Detector Projects




677. Color Globe using PIC16F688 Microcontroller This was a fun little project I put together in a few hours for a homemade-themed gift exchange this Christmas. I had on-hand "Full Color LED" from Radio Shack (part 276-0028) which caught my eye on my last visit there. The LED has a..... Listed under: Game - Entertainment Projects, Home Auto Projects, Projects

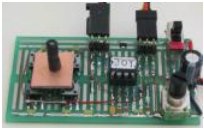



678.  Using Multiplexed 7 Segment Displays – PIC Microcontroller Tutorial A four digit seven segment display. The image above shows a four digit seven segment display. This type of displays are widely used to present numerical data to users. Example includes clocks, panel meters, microwave ovens, refrigerators etc. As you can see in a few examples. Listed under: LED Projects

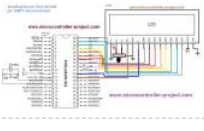
679.  AT Keyboard Interface V1.04 using PIC16F84 Introduction Sometimes you only need a simple and cheap RS232 terminal to get sufficient control over a PC or a RS232 device. There is no need, no space or even no power to place a monitor, a computer case and a keyboard. Maybe there exists..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Projects


- 680.

681.  Joy Stick Controller using PIC12F629 This project controls two servo motors - both clockwise and anticlockwise and has variable speed. You can use a Joy Stick to "pan and tilt" a remote camera or provide "left-right-up-down" action for a crane or an animation on your model layout. The project also includes a joystick. Listed under: Game - Entertainment Projects, Projects

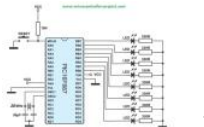


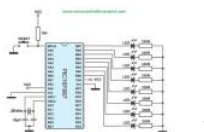
682.  Displaying Scrolling(Moving) text on 16x2 Lcd Using Pic16f877 and Pic18f452 Microcontroller Displaying moving or scrolling text on a 16x2 LCD (16x2, 8x1, 16x4, 8x2, 16x1, 20x1, 20x2 etc) is very easy. You just need to know how to efficiently use LCD commands. In this project I am using a PIC16F877 microcontroller to display text and then scroll it on the LCD. The LCD which I am..... Listed under: LCD Projects



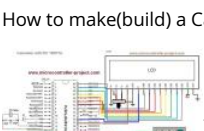
683.  Mars Clock using PIC16F877A microcontroller What do you do if you have a spare LCD module with backlight, a weird 16 button keyboard, and a PIC16F877A microcontroller gathering dust? A monster Martian Clock immediately springs to mind. You are probably thinking "There are hundreds of PIC clocks on the Net..... Listed under: Clock - Timer Projects, Projects




684.  Toggle/Blink LED on specific delay with PIC microcontroller using timers: MPLABX and XC8 compiler This is an advanced tutorial on blink/toggle LED with a microcontroller. In this tutorial I am going to teach you how to toggle an LED on a specific delay. This tutorial is not limited to only toggling an LED, it can be utilized at many other places. Like generating..... Listed under: LED Projects




685. How to make(build) a Calculator using Pic16f877 microcontroller Calculator with Pic 16f877 microcontroller is a comprehensive project. Comprehensive in the way that it is lengthy and logical. It covers all the aspects of programming and interfacing of a 16x2 LCD and a 4x4 keypad with PIC microcontrollers. So you should be good in programming, if..... Listed under: Calculator Projects




686.  LED Christmas Cards using PIC 10F200 This is an instructable on how to build an LED Christmas card using the PIC 10F200 microcontroller. As the PIC 10F200 has six pins and is the size of an SMD transistor, it is ideal for low profile applications and can easily be reprogrammed as and..... Listed under: LED Projects





687.  Interfacing Matrix Keypad with PIC Microcontroller This tutorial explains 'What is a Matrix Keypad?' and 'How to Interface Matrix Keypad with PIC Microcontroller?'. Matrix Keypad Matrix Keypad is a very useful and user-friendly when we want to design certain applications like Calculator, Telephone, etc. Matrix Keypad is made by arranging push buttons..... Listed under: Calculator Projects





688.  The simple Joule Thief The Joule Thief is such an easy and simple device, but what it does is amazing. It can use a battery that is not usable in any electronic device and give it life again. It can even take a battery that won't even power..... Listed under: LED Projects
689.  Interfacing Real Time Clock (RTC) DS1307 with PIC Microcontroller DS1307 is a low power serial real time clock with full binary coded decimal (BCD) clock/calendar plus 56 bytes of NV SRAM (Non Volatile Static Random Access Memory). Data and Address are transferred serially through a bidirectional I2C bus. The RTC provides year, month, date, hour, minute and..... Listed under: Clock - Timer Projects
690.  Aurora 48 - 48 RGB LED Sequencer using PIC24FV16KA304 Aurora 48 is a compact and thin profile full-color LED sequencer. It's built entirely with surface mount components, so the profile is nice and clean. Features Capable of individually controlling 48 Full color LEDs. Each LED can be fade bit per channel - 2,097,152..... Listed under: LED Projects, Projects
691.  DC Motor Speed Control using PWM with PIC Microcontroller I already posted about Interfacing DC Motor with PIC Microcontroller. In our robotic applications we may have to control the speed of the DC Motor. In this tutorial we will see how to control the speed of a DC Motor using Pulse Width Modulation (PWM)..... Listed under: Motor Projects
692.  Interfacing Stepper Motor with PIC Microcontroller Introduction A Stepper Motor is a brushless, synchronous DC electric motor, which divides its rotation into a number of equal steps. It finds great application in field of microcontrollers such as robotics. Please refer the article Stepper Motor Step Motor for detailed information about working..... Listed under: Motor Projects
693.  Voltmeter and Ammeter using PIC Microcontroller Voltmeter and Ammeter can be easily made using PIC Microcontroller having ADC (Analog to Digital Converter). I am using PIC16F877A and the result is displayed on an LCD Display. PIC16F877A is enough if you do this project only for testing purposes suggest to use..... Listed under: Metering - Instrument Projects
694.  HandySwipe portable magnetic card reader using PIC16F688 The HandySwipe provides a portable magnetic card reader interface and displays card data from a "Type 2" card reader (shown here), and displays the data on a small character LCD screen. Type 2 stripes are by far the most common in use, such..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Projects, Sensor - Transducer - Detector Projects
695.  Interfacing LCD with PIC Microcontroller - MPLAB XC8 In this tutorial we will see How to Interface a 16x2 character LCD module with PIC 16F877A Microcontroller using MPLAB X IDE and MPLAB XC8 C Compiler. 16x2 Character LCD is a very basic and low cost LCD module which is commonly used in electronics..... Listed under: LCD Projects
696.  LED message system on a Strida folding bicycle wheel using PIC12F675 LED message system on a Strida folding bicycle wheel After I've bought my folding bicycle, one of the first things I've done was to check out instructables.com for any strida related projects. And quite astonished to see there wasn't any. So I've planned..... Listed under: Game - Entertainment Projects, LED Projects, Projects
697.  Schematic PIC Data Logger with Delta-Sigma Converter Labels: circuit >> data logger >> MICROCONTROLLER >> PIC >> Project >> schematic The project is to build a lab-grade data logger with PIC18F45K20 microcontroller and a 20-bit delta-sigma converter. It's named as G5 Data Logger new data converter technology using..... Listed under: Other Projects
698.  Interfacing LCD with PIC Microcontroller - Hi Tech C 16x2 Character LCD is a very basic LCD module which is commonly used in electronics projects and products. It has 2 rows that can display 16 characters. Each character is displayed using 5x8 or 5x10 dot matrix. It can be easily interfaced with a microcontroller..... Listed under: LCD Projects
699.  4 ALARM SOUNDS using PIC12F629 This project is a miniature 1-chip alarm. All you need is a tilt switch, battery and piezo to produce a complete alarm. If you want a very high output, you can add a Darlington buffer transistor, piezo tweeter and a 10mH choke. The chip does..... Listed under: Project Security - Safety Projects


700.  Custom Characters on LCD using PIC – MPLAB XC8 I hope that you already go through our tutorial, Interfacing LCD with PIC Microcontroller – MPLAB XC8. HD44780 compatible controllers used in these LCDs allows us to define 8 custom characters in addition to the standard pre-programmed characters. In this tutorial we will learn how..... Listed under: LCD Projects


701.  Single Chip Temperature Data Logger Introduction A data logger is a device that records measurements over time. The measurements could be a physical variable like temperature, pressure, voltage, humidity, etc. This project describes how to build a mini logger that records surrounding temperature values. It has following features: - Uses..... Listed under: Temperature Measurement Projects


702.  Interfacing Servo Motor with PIC Microcontroller – MPLAB XC8 Servo Motor is an ordinary geared dc motor equipped with closed loop servo mechanism which uses position feedback to control exact angular position of the rotor. These are commonly used in robotic arms, legs etc. Servo Motors do not rotate continuously, their rotation is limited..... Listed under: Motor Projects


703.  Using Push Button Switch – MPLAB XC8 I hope that you already go through the first tutorial of MPLAB XC8, Getting Started with MPLAB XC8 – LED Blinking. In that tutorial we learn how to use an output pin by driving an LED. In this we will learn how to read an..... Listed under: LED Projects

704.  LED Strobe for PIC12F629 Description This project functions as a simple strobe for driving an LED. The use of an output transistor allows it to pulse the strobe LED with current up to 100mA. Four jumpers provide options for changing the pulse width, strobe repeat interval and single..... Listed under: LED Projects, Projects

705.  How to make a contact-less digital tachometer using IR-light reflection technique Tachometer is a device that measures the rotational speed of a motor or disc. The unit of the measurement is usually revolutions per minute or RPM. The traditional method of measuring RPM of a rotating shaft was by using a velocity feedback concept where a dc..... Listed under: Metering - Instrument Projects


706.  Digital Thermometer using PIC Microcontroller and LM35 Temperature Sensor Thermometer can be easily constructed using a PIC Microcontroller and LM35 Temperature Sensor. LM35 series is a low cost and precision Integrated Circuit Temperature Sensor whose output voltage is proportional to Centigrade temperature scale. Thus LM35 has an advantage over other temperature sensors calibrated in Kelvin as the..... Listed under: Sensor Transducer - Detector Projects


707.  Programmable relay switch using PIC MCU (revised version) Programmable relays are key elements in numerous automation applications such as automatic street light control, watering and pump control, HVAC, home automation, power plants automation in industries, etc. This article describes a DIY programmable relay switch using PIC16F1847 (PIC16F628A can also be used) microcontroller. It is a..... Listed under: Clock - Timer Projects

708.  PICs in Space Features Full colour Animated invaders High-resolution display High-quality stereo sound effects Non-volatile high score table High scrolling score Mother ship with random score Progressively increasing speed and difficulty Realistic shield damage Bonus lives Compatible with 60 line/50Hz televisions that have an RGB SCART input Uses standard..... Listed under: Video - Camera - Imaging Projects

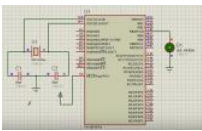
709. Using Easy Pulse mikro with MPLAB Xpress board Easy Pulse mikro is our new educational pulse sensor in a mikroBus form factor. Like our previous Easy Pulse sensors (Easy Pulse and Easy Pulse Plugin), it is also based on the principle of transmittance photoplethysmography (PPG) applied to a fingertip. The sensor consists of..... Listed under: chipKIT Projects, Sensor - Transducer - Detector Projects




710.  RDS/RBDS decoder with optional FM stereo receiver using PIC18F452 This project supports both RDS (Europe) and RBDS (USA) Tuner FM band 88-108 MHz (Europe and USA.) You can choose between a 4x20 character LCD or a smaller graphical LCD to display data. A simple RS232 interface can also be used. A 4x20 character LCD..... Listed under: Projects, Radio Projects

711.  Infra-Red Transmitter using PIC12F675 microcontroller Description This project uses a Microchip PIC microcontroller and an Infra-Red LED to act as a controlled cable TV changer. Operation The purpose of this is so that my MythTV Personal Video Recorder (PVR) can change channels on the cable set-top box when making a..... Listed under: Internet - Ethernet - LAN Projects, Projects, Radio Projects

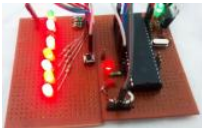
712. Writing Your First Program with PIC Microcontroller and Setting up Configuration Bits This is the second tutorial of our PIC Tutorial Series. In our previous tutorial Getting started with PIC Microcontroller: Introduction to PIC and MPLABX, we learnt the basic stuff about our PIC microcontroller and also installed the required software and purchased a new PicKit 3..... Listed under: LED Projects



713.  An LED Persistence Of Vision Name Badge using PIC16F88 An LED Persistence Of Vision Name Badge This Instructable shows a name badge that built for my daughter. I have seen the Defcon badges, and thought they were cool. Why cant my kids have one as well - but specially built for the Listed under: LED Projects, Projects



714. LED Blinking with PIC Microcontroller In our previous two tutorials we discussed How to Get Started with PIC using MPLABX and XC8 compiler, w also made our First LED Blinking Program with PIC and verified it by simulation. Now it's time for us to get our hands on to..... Listed under: LED



715. LED Blinking Sequence using PIC Microcontroller In our previous tutorial, we learnt about Blinking a LED using PIC microcontroller and built the s circuit on Perf board. Then we used PICKit 3, ICSP and MPLAB IPE for dumping the program onto our Perf board. Now, in this tutorial we will adv Listed under: LED Projects

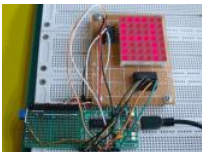


716. Understanding Timers in PIC Microcontroller with LED Blinking Sequence This will be the fifth tutorial in our PIC Tutorial Series, which will help yc learn and use Timers in PIC16F877A. In our previous tutorials, we had started with Introduction to PIC and MPLABX IDE, then we wrote our first F program to blink..... Listed under: Clock - Timer Projects

717. PIC Based Car Battery Voltage Monitoring System In this project we are going to make a PIC based Car Battery Monitoring system on PCB. Here we have designed a PCB u EASYEDA online PCB simulator and designer. This Car Battery Monitoring Circuit is used to monitor the power of Car Battery by..... Listed under: Car Projects



718. Basics of LED dot matrix display. Part 1. Theory using pic microcontoller LED dot matrices are very popular means of displaying information a it both static and animated text and images. Perhaps, you have encountered them at gas stations displaying the gas prices, or in the public places alongside highways, displaying advertisements on large dot..... Listed under: LED Projects



719. LCD Interfacing with PIC Microcontroller using MPLABX and XC8 This is our sixth tutorial in our PIC Tutorial Series, in this tutorial we learn Interfa 16x2 LCD with PIC Microcontroller. In our previous tutorials we have learnt the basics of PIC using some LED blinking Programs and have also lea How to use Timers..... Listed under: LCD Projects



720. PIC16F88 Delorme Tripmate GPS Logger This project focused on creating a simple serial data logger for the Delorme Tripmate (also known as the GPSTripmate). The Tripmate is an older GPS receiver that can be purchased on eBay for <\$20. I happen to have one that my family used a couple Listed under: GPS Based Projects, Projects





721. Dspic-Servo Project using PIC30F4012 microcontroller Project Description This project was developed as an inexpensive way to drive small dc brv motors as positioning servos for use on a desktop sized CNC machine. The board is interfaced to the PC through 2 pins of a parallel port. The dri signal on..... Listed under: Other Projects, Projects



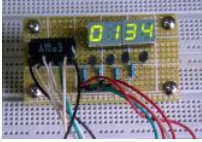
722. Display Custom Characters on 16x2 LCD using PIC Microcontroller and XC8 In our previous tutorial, we have learnt How to Interface a 16*2 LCD v Microcontroller. We recommend you to go through it before going any further, if you are beginner in PIC microcontroller. Previously we have als the basics of PIC using LED blinking..... Listed under: LCD Projects





723.  LCD interface with Microcontroller PIC: Beginner's guide using pic microcontoller How to interface LCD (Liquid Crystal Display) display module to PIC microcontroller? passive component, that is it does not make any light but just modifies the light passing through it for alphanumeric displays. LCD is exclusively manufactured to be u with microcontrollers,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects

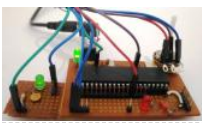
724.  7 Segment Display Interfacing with PIC Microcontroller This is our 8th tutorial of Learning PIC microcontrollers using MPLAB and XC8. We have covered all the way from installing MPLABX to using a LCD with PIC MCU. If you are new here, then look at previous tutorials where you can learn timers,. Listed under: LCD Projects


725. LabVIEW motion controller using pic microcontroller In Lab 6, we discussed about interfacing a seven segment LED display to a PIC microcontroller. The seven segments are driven individually through separate I/O pins of the microcontroller. If we do just like that then for 4 seven segment LED displays, 28 I/O pins..... Listed under: LED Projects

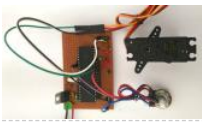



726.  Using ADC Module of PIC Microcontroller with MPLAB and XC8 This is our 9th tutorial of Learning PIC microcontrollers using MPLAB and XC8. Till now we have covered many basic tutorials like getting started with MPLABX, LED blinking with PIC, Timers in PIC, interfacing LCD, interfacing 7-segment display. If you are an absolute beginner, then please..... Listed under: LED Projects

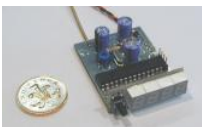
727.  DIY Microcontroller – Hand Dynamometer Did this DIY Hand Dynamometer as a sensor for PICAXE micro-controller. It also can be used for Arduino micro-controller too. List of the materials I used to make Hand Dynamometer : 1) Hand Exerciser from Amazon - 1 pc 2) Flex Sensor 2.2"..... Listed under: How To - DIY - Projects

728.  Generating PWM using PIC Microcontroller with MPLAB and XC8 This is our 10th tutorial of Learning PIC microcontrollers using MPLAB and XC8. Till now we have covered many basic tutorials like LED blinking with PIC, Timers in PIC, interfacing LCD, interfacing 7-segment, ADC using PIC etc. If you are an absolute beginner, then please visit the complete list of PIC tutorials..... Listed under: PWM Projects

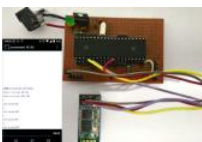
729.  GPS REPEATER/SYSTEMS MONITOR using PIC16F876 Introduction This circuit is a repeater for GPS data. It is intended to connect to Garmin-38 (a similar) hand held GPS receivers that don't have external antennas. The purpose for the repeater is to allow the GPS to be outside, exposed to the satellite view,..... Listed under: GPS Based Projects, Projects

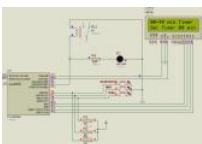
730.  Interfacing Servo Motor with PIC Microcontroller using MPLAB and XC8 This is our 11th tutorial of Learning PIC microcontrollers using MPLAB and XC8. In this tutorial we will learn How to control Servo Motor with PIC Microcontroller. If you have already worked with Servo motors you can skip the first half of this tutorial but..... Listed under: Motor Projects


731.  UART Communication using PIC Microcontroller In this tutorial we learn to Enable UART communication with PIC Microcontroller and how to transfer data to and from your Computer. So far, we have covered all basic modules like ADC, Timers, PWM and also have learnt how to interface LCD and 7-segment displays. Listed under: Other Projects

732.  50 MHz frequency counter, voltage meter & SWR/PWR indicator using PIC16C71 Circuit schematic PCB HEX code, V1.11 (operates with 4,000 MHz quartz) Hex code, V1.12 (operates with 4,1943 MHz quartz) PIC config bits Photo - Top view Photo - Bottom view Photo - Latest PCB version with TO-92 package 78L05 housing - Top view (132)..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Metering - Instrument Projects, Projects

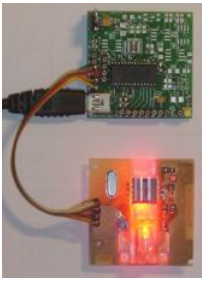
733. Interfacing Bluetooth Module HC-06 with PIC Microcontroller In this tutorial we will learn How to make our PIC projects wireless by interfacing a Bluetooth Module (HC-06). In our previous tutorial we have already learnt How to use USART module in our PIC Microcontroller and established communication between PIC and Computer. If you..... Listed under: Other Projects



734.  Digital Count Down Timer using PIC Microcontroller In this article, our author Mithun has developed a 0 – 99 min counter using PIC microcontroller 16F628A. So basically this is a digital count down timer ideal for engineering and diploma students for their project requirements. We have given the complete circuit diagram of the..... Listed under: Other Projects

735.  Humidity and temperature measurements with Sensirion's SHT1x/SHT7x sensors using PIC18F2550 (Part 2) In Part 1 of this tutorial, we discussed Sensirion's SHT1x and SHT7x series of humidity sensors, their interface specifications, the communication protocol used for transferring data in and out of the sensor, and the equations to convert their digital outputs to actual physical quantities..... Listed under: Projects, Sensor - Transducer - Development Projects, Temperature Measurement Projects

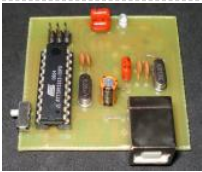
736.  Tiny PIC bootloader using PIC16F microcontroller Tiny Bootloader This is a bootloader for the Microchip PIC microcontrollers. It is the smallest bootloader, taking less than 100 words of program space; Supports families of PIC devices: 16F, 18F, dsPIC30 (those devices that support self-programming) Does not support yet PIC24, dsPIC33, PIC18xxJy Download..... Listed under: Projects, RTOS - OS Projects
737.  DIY Digital Clock with Temperature Display using PIC Controller One of the most enjoyable part of being an electronics person is creating your own gadgets and using them in daily life. In this article, we are building one of those with the help of SoloPCB design tools, a digital desk clock with temperature display..... Listed under: Clock - Timer Projects
738.  motor controller for R/C models Technical specification Supply voltage: 6 to 10 V Supply current: <5 mA Max. output current: 40 A Processor: PIC Connection: 3-pin plug Application: model boat, car, plane Versions: unidirectional or bidirectional Motor brake: internal with unidirectional version Thermal protection: at 120°C Radio-controlled (R/C) modelling seems..... Listed under: Motor Projects
739.  LED Heart PWM Fading using PIC18F252 With my Grandma's birthday fast approaching I wanted to put something together that was not too complicated but still sweet enough to make for a cool widget gift. Since fading LEDs never seem to go out of style and grandmas always love to see Listed under: Game - Entertainment Projects, LED Projects, Projects, PWM Projects
740.  An AVR microcontroller based Ethernet device Ethernet has traditionally been a quite complex interface. All Ethernet chips until today had 100 p more, where difficult to find in small quantities and difficult to use from a small microcontroller with little memory. Microchip has changed the way with their new ENC28J60..... Listed under: Internet - Ethernet - LAN Projects
741.  Temperature controlled fan using PIC 16F877A You might have come across several applications where we need to control a specific device based on analog parameter. The Embedded system works in a similar concept where we are about to control the speed of a DC motor using based on the external temperature... Listed under: Other Projects
742.  Making a simple clap switch using PIC12F683 A clap switch is a fun project for beginners. It switches on and off electrical appliances with a sound of clapping hands. Today we will discuss about making a simple clap switch that operates when it detects two clapping sounds in a row. It uses... Listed under: Metering - Instrument Projects, Projects
743.  Simple Power Guard – PIC12F683 This is a very simple and accurate power guard circuit. This circuit is useful to guard the electronic or electrical load from mains transients and spikes. Very high spikes can develop at power on due to sparking in the switch and more serious effects occur..... Listed under: Metering - Instrument Projects
744.  Interfacing LCD and Keypad with PIC16F877A Microcontroller Interfacing LCD and Keypad are one of the important interfacing concepts of PIC microcontroller since both the input and output element can form a complete embedded system design. This tutorial is about teaching you how to input input values from keypad by polling method..... Listed under: LCD Projects
745.  TD-USB-01 interface with mouse sensor board using PIC18F2550 This is an example USB project showing how to interface an optical mouse sensor (ADNS-2620) with a standard XP/Vista computer. The TD-USB-01 board with a PIC18F2550 communicates with the PC: USB 2.0 through a mini-B connector. the mouse sensor board: SPI over 4-wire flatcable..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Projects, Sensor - Transducer Detector Projects



746. IR On/Off Switch Using Microcontroller Turn ON or OFF electrical devices using remote control is not a new idea and you can find so many different devices doing that very much. For realization of this type of device, you must make a receiver, a transmitter and understand their way of..... Listed under: Home Automation Projects



747. Mädchen Machen Technik The "Mädchen Machen Technik" workshop is designed to give high school students an introduction to microcontrollers. The students will learn about flashing light pattern and/or a counter-timer. In the process of building this project, the students will learn about microcontrollers and digital electronics. Here is..... Listed under: Other Projects



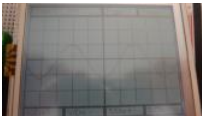
748. 8051-PIC MICROCONTROLLER PROJECTS USB AVR In-System-Programmer (ISP) - The AVR firmware was written by: Klaus Leidinger - The PCB was designed by: Dimitris Porlidas - The schematic diagram was drawn by: Dimitris Porlidas - The AvrOspII software was written by: Mike Henning - Some modifications in firmware and..... Listed under: Microcontroller Programmer Projects



749. Leon's Mini Random Number Generator Sales Pitch Are you confused by choices? Who isn't? There are just so many things to decide. White, rye, wheat? Pinstripes or polka dots? Feast or fast? Well, don't worry because help is on the way! I'm introducing the world's first, portable, handheld random number generator. Listed under: Calculator Projects



750. The Magnetometer using PIC16F688 I found several different magnetometer designs on Internet, but I tend to be very picky. None of those was suitable - something that is sensitive enough to record the small magnetic field variations where I live (San Jose, California), robust enough to work in a noisy environment. Listed under: Metering - Instrument Projects, Projects



751. PIC based Oscilloscope I have seen many examples of microcontroller oscilloscopes on the web and have had an itch to build one myself. In order to accomplish this my initial thought is to sample an input (ADC) at constant time increments and then display the waveform on a small LCD. Listed under: Other Projects




752. Digital clock ds1307 using PIC microcontroller Step 1: COMPONENTS REQUIRED 6 components needed : 1. Microcontroller (I have used AT89S52-28 pin DIP package), any programmable microcontroller can be used. 2. 7 segment display 3. Crystal oscillator (12MHz) 4. Capacitor (10uF, 33pF/22pF) 5. LEDs 6. resistances (330 Ohm) 7. buzzer (piezo) 8. push switches And I'm not including soldering iron, wire, flux..... electricity !!!..... Listed under: Clock - Time Projects

753. pic-microcontroller Home Alarm System PIC16F84A Alarm Clock Analog data recording and playback unit Animated LED Signboard Capacitance measurement Capacitance measurement using PIC16F877A Christmas Light Flasher Microcontroller PIC16F877A is one of the PICMicro Family microcontroller which is popular at this moment, start from beginner until all professional projects. Because very..... Listed under: Microcontroller Programmer Projects



754. MEASURING HEART RATE USING A PHOTOPLETHYSMOGRAPHIC CARDIOTACHOMETER ABSTRACT The heart rate is an important measure of health and physical fitness. Medical professionals rely heavily on the rate as a measure of health status and use it to prescribe treatment to individuals. Athletes use the heart rate highly as a tool for regulating..... Listed under: Medical - Health based Projects



755.  Roll and Temperature sensor applications using PIC18F2550 This page will show you how to use the TD-CMP modules in a way which fits you mo Here are the technical specifications of the modules: Compass: Resolution: 1° - Accuracy: 3° Tilt/Roll: (TD-CMP02 and TD-CMP03 only) Resolution Accuracy: 5° Temperature: (TD-CMP03..... Listed under: Projects, Sensor - Transducer - Detector Projects, Temperature Measurement Projects



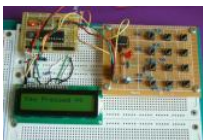
756. An Introduction to Brushless DC Motor Control The brushless DC (BLDC) motor is becoming increasingly popular in sectors such as automotive (particularly electric vehicles (EV)), HVAC, white goods and industrial because it does away with the mechanical commutator used in traditional m replacing it with an electronic device that improves the reliability..... Listed under: Motor Projects



757. PIC-Programmer 2 for PIC16C84 etc. This Programmer is powered by the RS-232 and it works with RS-232 levels at only $\pm 8.6V$. It programs PIC1 12C67X, 24CXX, 16C55X, 16C61, 16C62X, 16C71, 16C71X, 16C8X, 16F8X and ISO-CARD's with ASF. Other serial programmable chips by adapter. Th Vpp is obtained by..... Listed under: Development Board - Kits Projects



758. THE SIMPLE ROVERBOT Construction Concepts and Goals Construct a vehicle powered only by a standard 9 Volt battery that can avoid obstacles left and on the right. The vehicles will have two buttons mounted on the front (left and right). For example, if the vehicle hits..... Listed under: Ro Automation Projects



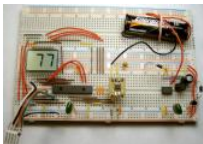
759. 2-Wire Keypad Interface Using a 555 Timer using PIC16F628A Keypads are a very commonly used input device in microcontroller-based systems. keypad, multiple switches are arranged in rows and columns so that they could be interfaced to a microcontroller with a minimum number of I/O pins. For example, a 12-key keypad is arranged..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



760. Matrix Keypad interfacing with PIC microcontroller. Matrix keypads are very useful when designing certain systems which needs user input. These arranging push button switches in rows and columns as shown in Fig.1. Scanning keypad to detect pressed keys involves several steps and there several methods to..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



761. Spooky Led Lamp using PIC12F675 microcontroller Spooky Led Lamp This is a hollowed out light bulb filled with fluorescent liquid and two UV le one red led immersed in the liquid. When turned on the light bulb flickers for a while then starts to pulsate randomly with the UV leds..... Listed LED Projects, Projects

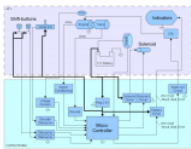


762. Driving LCD directly from PIC This project is one another thermometer application that uses the TCN75A digital sensor from Microchip. The sens provides digital temp conversion in the range $-40^{\circ}C$ - $125^{\circ}C$ ($-40^{\circ}F$ - $257^{\circ}F$) and has maximum resolution $0.0625^{\circ}C$. However, the LCD that I used digits model LCD-S2X1C50TR..... Listed under: LCD Projects



763. Wireless PICAXE-based water tank level sensor Over the last few months I have prototyped and built a water tank level sensor for my 9000L rain tank. The design is based entirely on Silicon Chip's PIC-Based Water-Tank Level Meter, but instead of programming PICs, I prototyped using an ar and built..... Listed under: Sensor - Transducer - Detector Projects, Wireless Projects

764. Electrical Subsystem The goal of the electrical design was to streamline an automatic shift control while keeping manual user input in a fast, user friendly way. The electrical design was driven by the complexity required by the mechanical system. The system takes in rider input in the form... under: Other Projects



765.



pic18f2550 Microcontroller Project Board The new PIC18F2550 Project Board was designed as the development platform for student projects. Th features MCU: PIC18F2550 with external xtal, ADC: one channel 0-2.5V sigma-delta converter, Linear Technology LTC2400/LTC2420, 6-channel 10 0-5V, Display: Two connectors for text LCD or GLCD, USB: onchip..... Listed under: LCD Projects

766.



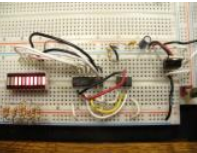
Worlds Most Useless Machine Rebuild The Original Build Back in 2009 I build my first copy of a "worlds most useless machine" from a video I fou wimp.com, it is no longer posted, which was a copy of the real original by Claude Shannon called the ultimate machine. The..... Listed under: Ba Projects

767.



Another DIY function generator using PIC16F628 An extremely simple and low cost Sine/Square wave generator based on the Analog Devices AD (DDS) Generator chip. The frequency can be set for any frequency from 1Hz to 10MHz in 1Hz resolution steps! All this with three push buttons ar Listed under: How To - DIY - Projects

768.



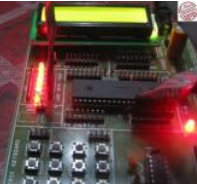
How to use a 74HC595 Shift Register with a AVR ATtiny13 Intro: How to use a 74HC595 Shift Register with a AVR ATtiny13 If you have been playing microcontrollers and electronics then you have likely seen LED dot matrix displays and other projects that use shift registers like 7-segment disp more. This instructable goes..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

769.



RFM12 - Wireless Transceiver Module Demo using pic microcontoller Description Hardware Software Running the RFM12 Demo Download Links Description This project shows how to do wireless communication with the RFM12 transceiver modue in combination with a PIC microcontroller. RFM12 is a low costing ISM band FSK transceiver module. There are different module variants..... Listed under: Wireless Projects

770.



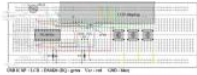
LED Interfacing with PIC Microcontroller: Embedded C program with circuit using pic microcontoller How to interface LED with Microchip's PIC microcontroller? How to connect LEDs to a PIC microcontroller? LED interfacing is the stepping stone for microcontroller development. This is a s embedded program for PIC 16F877A to interface LEDs, suitable for beginners who wish to study basics..... Listed under: Interfacing(USB - RS232 ISP) Projects, LED Projects

771.



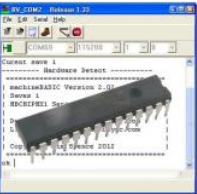
Wireless 10 channel receiver using PIC16F630 This project can steer 10 different things wireless with the use of a normal TV-remote-control with protocol, from manufacturers like Philips, Grundig and Marantz. If the Proton PIC Basic compiler is available, then you can ofcourse change the nur channels. Use it..... Listed under: Internet - Ethernet - LAN Projects, Projects

772.



DS1820 Temperature regulator using PIC16F628 This simple project uses a Dallas DS1820 one wire temperature sensor and a pic 16f628 microprocessor. A simple temperature regulator where a LED symbolizes the Fan. Data derived from the DS18s20 is a 9bit centigrade temperatu measurement. As mentioned the temperature sensor communicates over a one Wire..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects Metering - Instrument Projects, Projects, Sensor - Transducer - Detector Projects, Temperature Measurement Projects

773.

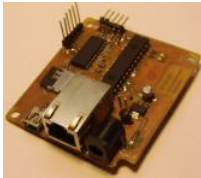


\$15.00 BASIC Computer using PIC32MX1 microcontroller \$15.00 BASIC Computer? Imagine a microcontroller that you can connect a serial termir to get an ok prompt? What would happen if you changed one of the control registers can I see the effect straight away? Is it really possible to dov programs..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Other Projects, Projects, RTOS - OS Projects

774. **How to Wire a PIC Microcontroller?** I'm completely new to the world of PIC Microcontrollers and electrical engineering so please go easy Anyway, I managed to program n 16f627 to turn on three LEDs when push button (trigger button) is pressed and start a shut down sequence (basically each LED..... Listed under: Microcontroller Program Projects

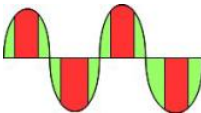


775.



WEBSID using PIC24F microcontroller WEBSID This is a development board for the PIC24F series of microchip, with: USB (plug it to any computer) Ethernet (plug it to the internet) SD card (save and read all data you will need) I developed this thing as a learning platform,..... Listed under: Int Ethernet - LAN Projects, Projects

776.



Control AC load with microcontroller. As per the title of this question i'm trying to control an ac resistive load. So far i had little success and i'm experiencing "strange", to me at least, behaviour from the triac(s) i tried. first of all i post a schematic of my test. Listed under: Other Projects

777.



PIC12F675 LCD Interfacing Code and Proteus Simulation This post provides the LCD[1] interfacing code using PIC12F675 microcontroller. This co written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this pag assumed that you know how to..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, Projects

778.



Versatile SOIC PIC Programming Header using PIC18F88 A small PCB allows for the out-of-circuit programming of 18 & 28 pin SOIC PIC Microcont from either an ICSP programmer or ZIF socket. A recent article in a popular electronics magazine presented a small printed circuit board for programming 18-pin SOIC PICs from a..... Listed under: Microcontroller Programmer Projects, Projects

779.



10-minute sewable iPod remote using PIC10F222 microcontroller 10-minute sewable iPod remote There are a lot of really cool iPod remote conti projects: some have simple buttons, some react to heartbeat or body motion, and others are designed to interface directly with software runninr computer. However, not one of them is truly..... Listed under: Other Projects, Projects

780.



Execute Open-Source Code in a PIC Microcontroller Using the MPLAB IDE The PIC32 single-board computer is a de facto standard tool for clevto microcomputer applications within the hobbyist and educational communities. It provides an open-source hardware (OSH) environment based on a simple microcontroller board, as well as an open-source (OS) development environment for writing software for..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

781.



3-Wire Serial LCD using a Shift Register Introduction HD44780 based character LCDs require at least 6 I/O lines from microcontroller to display d: Therefore, they are not suitable for low-pin microcontrollers like PIC12F series microchips. In this project, I am going to show how to drive an HD based LCD display with..... Listed under: LCD Projects

782. Simple Digital Current Meter (DCM) using PIC microcontroller (Schematic + code + Proteus simulation) This post would provide a working example of how to make a simp Current Meter (DCM) using 16bit PIC microcontroller and a series shunt resistance. We have very precise ammeter current measurement with a ADC and with a tolerance of $\pm 10\text{mA}$. You may download..... Listed under: Metering - Instrument Projects



783.



Interfacing Ultrasonic Distance Sensor : ASCII Output with PIC Microcontroller In some of our projects, we may want to measure the distance of a object from a point. Ultrasonic Distance Sensors are the best sensor which provides stable, accurate, precise, non-contact distance measuremen 2cm to 4m. Ultrasonic Sensors can be used to measure distance between moving..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

784.



j. ICSP Programmer for PIC32 microcontroller family PIC32 ICSP Programmer v1.0 is based on a simple PIC32MX270F256B microcontroller basic c connects to a PC via USB 2.0 port and therefore needs no external power supply. It may be used to program a PIC32 microcontroller on a circuit interface or..... Listed under: Microcontroller Programmer Projects

785. CITROEN Saxo Vehicle Touch Sensitive switches using PIC16F84A Project Summary The CITROEN Saxo Vehicle Touch Sensitive switches For operating Hazards and two pe devices If you want to change the look of your dash board inside a vehicle, maybe just fancy some of modern electronics This could be the design for you Project..... Liste



under: Car Projects, Projects, Sensor - Transducer - Detector Projects

786.



PIC16F690 Microcontroller Circuit- How to Drive an LED Display In this article, we will show how to drive a 7 segment LED Display using a PIC16F690 microcontroller. This PIC16F690 microcontroller chip is actually a part of the PIC2 Starter Kit, so we will actually be using this starter kit to drive the Display..... Listed under: LED Projects

787.



PIC18F452 LED Blinking Code and Proteus Simulation This post provides the LED blinking code (compiled in MPLAB + HI-TECH C) for PIC18F452. Complete project code and the proteus simulation can be downloaded from the Downloads section at the bottom of this post. The following diagram shows the required circuit. In this project a crystal of..... Listed under: LED Projects, Projects

788.



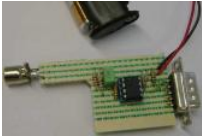
Ultra-easy use of 64-pin TQFP PIC18F6620 using TQFP-to-DIP PCB from VOTI A while ago I purchased a batch of 18F6620 TQFP PIC Microcontroller at a ridiculously low price. The barrier to use of TQFP packages is, of course mounting these SMD packages effectively alongside the 'normal' components that enthusiasts tend to use. At the time I set..... Listed under: Development Board - Kits Projects, Projects

789.



A Minimal USB CDC ACM aka Virtual Serial Port This page introduces a minimal firmware that implements a USB Virtual Serial Port for Microchip PIC18F4550 processor. The code has been optimized to use minimal amount of memory (both Flash and RAM) and tuned to work well with the FreeRTOS C-compiler. The code size..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects

790.



PIC12F675 Microcontroller 8-PIN PONG This project is based on ideas from Rickard's electronic projects page and David B. Thomas VCR Pong. However, we have developed the simplicity even further, eliminating most of the external components. Using microcontrollers with internal 4MHz clock generator there is no need for the xtal..... Listed under: Game - Entertainment Projects

791.



Using Microcontrollers (Microchip PIC) Many people using Arduino or some other development board in their projects, instead of making their own board with microcontroller because they simply don't know how to design PCB with microcontrollers. What microcontrollers need in order to be programmed? This time I will be focusing on..... Listed under: Development Board - Kits Projects

792.



Quick & Easy RGB-LED Tester using PIC16F627 microcontroller Quick & Easy RGB-LED Tester Have you ever built a project with a lot of LEDs, and then found out that one of the LEDs was defective? Although it's somewhat rare, there are some defective LEDs when you go through hundreds of them. I found out that..... Listed under: LED Projects, Metering - Instrument Projects, Projects

793.



MIDI Chord Button Keyboard Using PIC18F4620 part 2 How chords are formed Before discussing the processor board and software, it is worth mentioning how the chords are composed. I have provided the table below which shows the installed chords together with the intervals/notes they are constructed from, and examples of each in the..... Listed under: Projects, Sound - Audio Projects

794.



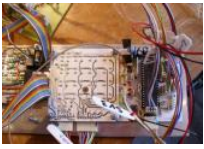
Embedded System for Automatic Washing Machine using Microchip PIC18F Series Microcontroller The design uses the PIC18F series microcontroller. The control functionalities of the system are built around this. Upgradeability is the unique feature of this system. Control card hardware and software allows the manufacturer to add or remove the features as per customer requirement and..... Listed under: Home Automation Projects

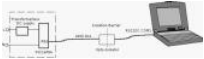
795.



Embedded System for Automatic Washing Machine using Microchip PIC18F Series Microcontroller The design uses the PIC18F series microcontroller. The control functionalities of the system are built around this. Upgradeability is the unique feature of this system. Control card hardware and software allows the manufacturer to add or remove the features as per customer requirement and..... Listed under: Development Board - Kits Projects

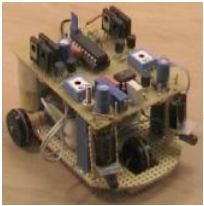
796. MIDI Chord Button Keyboard Using PIC18F4620 part 1 Every time I sit down to document one of my projects, I try to remember the occasions in the past when looking at a finished web page, I might say 'Well, I won't do that again!', because despite how many drafts I've gone through, there..... Listed under: Projects, Sound - Audio Projects



797.  Isolated RS232C for PIC16F84 Another method that helps program development besides a dot LED as the output device is a serial bit. With a serial transmission to a terminal emulator program, developer may then test program running easier than a dot LED. One of my circuit uses PIC16F84 having..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



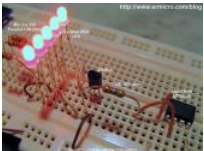
798. Bluetooth-Controlled Guitar FX Amplifier As part of our final project for ECE 4760: Digital Systems Design Using Microcontrollers, we built a guitar amplifier with remote distortion and digital effects capabilities controlled from a smartphone via bluetooth. Musicians often need to modify the configuration of their amplifiers when performing in..... Listed under: Sound - Audio Projects



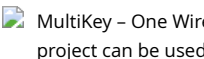
799. Small 3-wheel ROBOT with PIC16F84 brain & InfraRed eyes. General description erberes is a small three wheel robot that avoids obstacles which senses with its active infrared sensors. Each rear wheel has its own motor, the single front wheel is not powered. The robot steers "like a tank" by rotating the rear wheels..... Listed under: LED Projects




800. Miniature Real-Time Controller using PIC16F84 Introduction The F84 MRTC was my second design of a miniature real-time controller. This version PIC16F84 running with a low power X-tal 32,768Hz. The scheduler for 6-channel output was saved in EEPROM. No terminal for serial downloading scheduler. It's suitable for fixed..... Listed under: Clock - Timer Projects, Projects



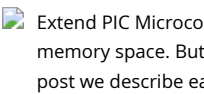
801. Using Transistor as a Switch Most of microcontrollers work within 5 volt environment and the I/O port can only handle current up to 20mA; there we want to attach the microcontroller's I/O port to different voltage level circuit or to drive devices with more than 20mA; we need to..... Listed under: Other Projects




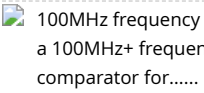
802.  MultiKey - One Wire Keypad Introduction This is a simple and easy to make serial keypad. The microcontroller will output the number of the push button pressed. This project can be used for many different purposes. Probably the most used application would be to interface to any electronic project that..... Listed under: Projects




803. 2 Digit 99 Seconds Timer 2 Digit Count Down Timer is a utility Count Down timer project for upto 99 seconds of countdown time. This project can many uses in your shack and home. The relay output remains on during the Count Down period, allowing you to interface load..... Listed under: Timer Projects



804.  Extend PIC Microcontroller's RAM by without using EMI Introduction Virtually all PIC microcontrollers have some banking mechanism to extend addressing to additional memory space. But this external data memory is not directly addressable (except in some high versions of PIC18 devices, which include PIC18F8520, PIC18F6620, etc. post we describe easy to..... Listed under: Memory - Storage Projects




805.  100MHz frequency counter with PIC16F628A - LCD Display This project shows how to build a very simple yet very useful tool that every DIY enthusiast should have in a 100MHz+ frequency counter. The schematic is fairly simple and straightforward and uses a PIC16F628A microcontroller for measuring frequency and a high speed comparator for..... Listed under: LCD Projects





806. DTMF Phone Dialer using PIC16F690 The company I work for recently upgraded their phone system. They got a new IP phone system that can supposedly do everything - the new phones have big LCD screens with fancy menus, lots of different modes, PC connection for remote control of phone,..... Listed under: Phone Projects, Projects




807. Animatronic Robot Head I've improved the old robot head project which can be found at the old articles link.. The head will be powered by servo and will be built from sheet plastic, metal or plywood. The template which can be used for cutting sheet material can be..... Listed under: Robotics Automation Projects

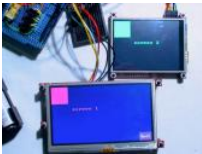
808.  12 DIGIT RUNNING SIGN using PIC16F628 It's 1970 and a 12 digit LED Display for pocket calculators has just been released. Nation Semiconductor in the forefront of designing miniature displays for calculators and have a range from 2-digit to 16-digit displays. The actual 7-segment displays a small it takes..... Listed under: Game - Entertainment Projects, LED Projects, Projects


809.  100MHz frequency counter with PIC16F628A – LED Display Couple of weeks ago I purchased from eBay one of these amazingly cheap and useful modules with MAX72 driver and 8 digit LED display. It is ideal for frequency counter project. The problem was the absence of library for PIC microcontrollers. Luckily, I found..... Listed under: Projects


810.  Mini GSM localizer without GPS using pic microcontroller It's not the first time that we present a localizer without GPS. We remake the old device with a cheaper SimCom module SIM900. In the previous post we present the GSM section and now we can present the complete localizer. Introduction system allows for..... Listed under: GPS Based Projects

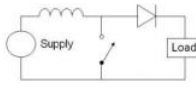
811.  Basic circuit for PIC18F24J50 or PIC18F26J50 to work over USB The basic circuit below will work with any PIC18F2xJ50 microcontroller. You just have to upload the app firmware. Go to Downloads section to find firmware hex files for the microcontroller and the resonator you would like to use. PIC18F24J50 firmware v2.6.3 - all subversions.zip contain..... Listed under: Internet - Ethernet - LAN Projects


812. Serial LCD Library using PIC16C84 Here is a library to interface your PIC code to an LCD that is controlled via a serial line. One such LCD is available from Scott Edwards Electronics. There are many others, and the code shown here can easily be adapted to other LCD displays..... Listed under: LCD Projects, Projects




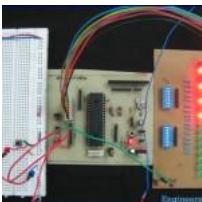
813.  USB PIC Programmer This page is dedicated to everybody who needs to program a PIC (Microchip) device via USB port. Looking on the web for ready-made projects, I found a good one called Open Programmer, coming with several schematics, PCBs and Open Source code. The original link is http://openprog.altervista.org/OP_ita.html What concerned..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects

814.  LCD Serial Terminal using PIC16F84 LCD Serial Terminal Introduction: In the 1980s a serial terminal was a big thing with a picture tube and keyboard used to communicate with a computer by RS-232 cable or with a modem. In this century, we still sometimes have need for a..... Listed under: LCD Projects, Projects

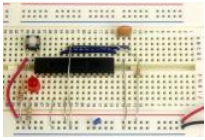
815.  Boost converter using IR2110 and pic microcontroller For a recent project, I needed to boost the output from a USB (high ampage charging) port 5V up to 18V to power an amplified speaker. I decided to try rolling my own boost converter (mainly because playing with big inductors sounded like my first attempt..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects

816.  PIC Stroboscope using PIC12F675 microcontroller PIC Stroboscope You have probably been to a party where there is a strobe and it delays every day. Today we are going to use this principle to "slow" stuff (fans) down. Maybe you have seen one using 555 timers, the Arduino and maybe even the PIC. Listed under: Other Projects, Projects

817.  18 PIN PIC Development Board The PIC 18 PIN (DIP) Development / Evaluations Board demonstrates the capabilities of Microchip's 8-bit microcontrollers, specifically, 18 Pin PIC16F1847. It can be used as a standalone demonstration board with a programmed part. With this board you can develop and prototype with all Microchip's 18..... Listed under: Development Board - Kits Projects


818.  PIC 18F4550 Timer And Interrupt Example Video Project Welcome back everybody! This video covers multitasking via timers and interrupts with the PIC18F4550. A few notes on this video: -To keep the pace of the video going I added fast forwarding more than in the previous videos. Please let me know what you think..... Listed under: Clock - Timer Projects, Projects

819. An LDmicro Tutorial In this tutorial, I will show you how to write a very simple program. I am assuming that you have written ladder logic before, and that you have some familiarity with microcontrollers, but that you have never used LDmicro. If you don't know very..... Listed under: LED Projects



820. **Homemade temperature LED display for PC using PIC16F876** Since I started my watercooling prejoect, I have been verry interested in how well it perform, the only way is to measure all temperatures before and after, The motherboard temperature sensors is useless unacurate, so I'm using By using this LM50B sensor I get..... Listed under: How To - DIY - Projects, LED Projects, Projects, Temperature Measurement Projects



821.  **PIC 18F – 28 PIN PIC Development Board Description** This is a versatile, configurable, and cost effective Development Board designed for the 18F 28 pin series of Microcontroller from Microchip. The board is simplest form with all the Port pins terminating in a header connector for easy connection to the outside world..... List under: Development Board - Kits Projects



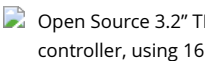
822. **Heavy duty portable charger for usb devices (phones, iPad, etc.) using PIC12F683** Heavy duty portable charger for usb devices (phones, iPad, etc. needed to charge your phone on the go? Can't find a wall socket to charge your iPod? Whenever I'm away from home for an extended period of I would charge my phone and mp3..... Listed under: Battery Projects, Projects




823. **FailureBot 5 – A Line Following Robot Introduction** The objectives of the FailureBot project originated simply as "build a line-following robot". How somehow evolved into a 3-year robotics experiment. My first attempt to build a robot was such a complete failure that I jokingly called it "Failure The name seemed quite..... Listed under: Robotics - Automation Projects



824. **PIC RGB Power Board using PIC12F629 microcontroller Description** Power Pic RGB is a circuit that generates random RGB colors using a pownwfu RGB LED and fades between them. The initial project goal was to develop the fading algorithm which was successfully achieved. This time the de to drive a Prolight..... Listed under: Battery Projects, Projects



825.  **Open Source 3.2" TFT Smart Display** This project is an open source 3.2" Smart TFT display board. The board is based on a PIC32 and a 3.2' TFT with touchscreen (ILI93 controller, using 16bits PMP). The software has two main parts. One that produces the 2D functions and a GUI with..... Listed under: LCD Projects

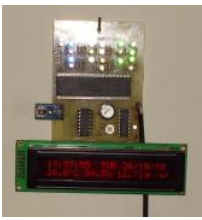
826. **PIC'ing the MAX3100: Adding USB to a PIC Microcontroller Using the MAX3100 UART using pic microcontroller** Abstract: USB has just become easy to implement. This app note eases equipment designers into USB by allowing them to continue to transmit and receive data using the familiar UART frames of the MAX3100 UART. A UART-to-US converter IC and operating system driver will take care..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects





827. **Re-Doing my Design for a circuit to control an invention using a Microchip PIC microcontroller chips.** In a previous article I described how I design circuitry to control functions of the asparagus harvester. After bread boarding up a test circuit and doing some initial programming I decided a r was in order. I found I had a lot of unnecessary..... Listed under: Development Board - Kits Projects




828. **Digital & Binary clock with thermometer & hygrometer** Here we have a clock. It's not "another clock". It has digital and binary output. It also has a thermometer and a hygrometer. It's not "another thermo-hygrometer". It display's absolutely humidity (gr/m3) also. Schematic MCU I build it ar Microchip PIC16F917, with internal Oscillator..... Listed under: Clock - Timer Projects




829.  USB:- DC Motor Controller using PIC18F4550 (keyboard) USB:- DC Motor Controller using PIC18F4550 (keyboard) Hello friends, Requirements USB interface Board L293D motor controller chip Schematic This a small project on controlling D.C motor with USB pic18f4550 interface board with L293D motor Driver. A small application [C#] is controlling my pic18f4550 USB..... Listed under: Motor Projects


830.  Build your Own PCB Exposure Box with Fluorescent Lamps and Countdown System Introduction Tired of spending hours and hours in wire soldering? Do your circuits look ugly and you are looking for a way to produce professional-like PCBs? Then you had better try photoetching. And the first step to do that is to have the right equipment..... Listed under: Development Board - Kits Projects


831.  Use a PIC Microcontroller to Control a Hobby Servo This instructable describes how to integrate hobby servos (the kind used in RC planes, cars, etc.) into your microcontroller projects. Step 1: How Servos are Different from Regular Motors In a regular DC motor, the amount of torque the motor exerts on the shaft is..... Listed under: Microcontroller Programmer Projects


832. Microcontroller Clapper Switch Introduction I always thought the clapper so cool. For those who are lazy like me, turn on or off the bedroom light without getting out of bed. A simple clap your hands is amazing. Thinking about it I projected one for me. Several projects of clappers..... Listed under: Microcontroller Programmer Projects

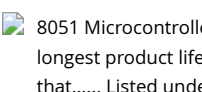


833.  Using the MAX6955 LED Display Driver with a PIC Microcontroller to Scroll Messages Abstract: A circuit and program listing for using the MAX6955 LED display driver with a PIC microcontroller and 14-segment displays. The MAX6955 is an LED display driver with an I2C™-compatible, serial interface capable of supporting Fast Mode speeds up to 400kHz. It is capable of driving..... Listed under: LED Projects

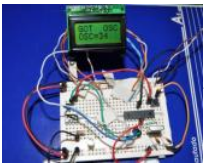
834.  Ultra low cost solar-rechargeable persistence of vision display using PIC10F206 Ultra low cost solar-rechargeable persistence of vision display This produces a bright and eye catching display to write text and small images through the air. It uses under £2 (approx \$3.20 US at the time of writing) parts, and is a nice little..... Listed under: Battery Projects, Projects

835.  LED UV exposure box Introduction I have been using the toner transfer method for about 9 years with great results. Occasionally I would need a board with finer traces and I would use UV method. My exposure setup allowed only a single sided board to be made and it..... Listed under: LED Projects

836.  Smart Button using PIC10F microcontroller Smart Button This is a button a little bit smarter. (Microcontrollers and coffee, who doesn't like) I'm not going to fill my Coffeemaker with water. This way its a little bit more fun and i always get the same amount of water. Its a simple project,..... Listed under: Home Automation Projects

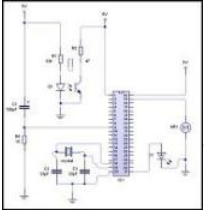
837.  8051 Microcontroller Overview & Hardware – Tutorial #1 The intel 8051 series 8bit microcontroller, originally introduced in 1980, remains popular and has had perhaps the longest product life of all such devices. It has become the industry standard for real-time and Boolean control applications. While some (who should know better) have said that..... Listed under: LED Projects

838.



OSCCAL Value Finder Introduction When working with microcontrollers that require a factory calibrated oscal value stored in memory, it's very that once in a while this setting could be lost during an upload of a new program or when accidentally erasing the device. I'm no exception and.. Listed under: Projects

839.



APPLICATION OF MICROCONTROLLER IN AUTO DETECT DOOR OPEN AND PAPER JAM ERROR using pic microcontoller Microcontroller was invent Intel sometimes in the 80s ever since that invention other Electronics companies such as Atmel, Microchip and Motorola etc have manufactured different brands of Microcontroller like AT89, PIC16F and 68H All microcontrollers performs specific task based on the set of instructions..... Listed under: Home Automation Projects

840.



PIC-based Digital Voltmeter (DVM) Introduction This project will describe how to make a simple digital voltmeter (DVM) using a PIC16F688 microcontroller. The range of this DVM is 0-20V, but you can easily increase or decrease the range of input voltage as your requirements after you understand the voltage scaling..... Listed under: Metering - Instrument Projects

841.



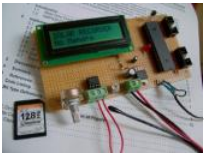
Interfacing LCD Modules with PIC Microcontrollers. A large number of embedded project require some type of user interface. This includes displ numerical, textual and graphical data to user. For very simple numerical display we can use 7 segment displays. If the requirement is little more i that, like displaying some alphanumeric..... Listed under: LCD Projects

842.



USB Low Pin Kit Introduction USB is very common interface today. If you look around, many of devices today comes with a USB port. Computers printers, routers, usb keys, etc. All this devices have a USB controller inside. These devices can be divided in two groups: USB Host (like..... Listed Interfacing(USB - RS232 - I2c -ISP) Projects

843.



Solar Recorder using PIC18F458 microcontroller The device used for measuring daily insolation has been developed. The device was built with a PIC18F458 and the 128MB Multimedia Memory Card, MMC. The solar radiation is measured by a calculator solar cell. The PIC chip interfaces the using SPI mode. The interval..... Listed under: Memory - Storage Projects, Metering - Instrument Projects, Projects

844.



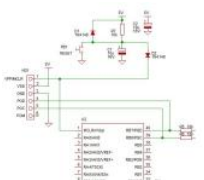
Interfacing RTC with Microcontroller Have you ever wondered how your PC and phones keep track of time even when the device is turned OFF? there is a Real Time Clock (RTC) that is kept powered even is the device is turned OFF. Once the device is turned ON..... Listed under: Interfacing(RS232 - I2c -ISP) Projects

845.



PIC based WWVB clock Introduction There are many DIY versions of WWVB clock designs available on the web. Commercial "atomic" clocks are inexpensive and widely available, but I wanted to try my hand at designing one to gain insight into WWVB reception and to learn a little about programming..... Listed under: Clock - Timer Projects

846. Details of PIC ICSP and how to use it for pic microcontrollers. PIC ICSP gives you a convenient way of programming PIC Micros without removing the chip from the develo or production board. Note: ICSP stands for In Circuit Serial Programming. All you need is a programmer that provides the ICSP connector (usually a six pin molex/duPont. Listed under: How To - DIY - Projects

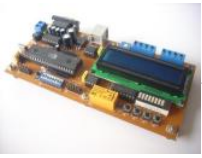


847.



PicChess This project is a micro controller chess game. The objective has to be able to play chess on a VGA monitor, including an intelligent comp play against. This all has been accomplished with a microcontroller. I started this as a project for the college..... Listed under: Game - Entertainm Projects, Microcontroller Programmer Projects

848.



89Sxx Development Board Introduction There are some 89Sxx development board, here is another one. I have designed this single side develop board to be used as a tool for learning MCS-51 Microcontrollers, and for easy microcontroller project development. The 89Sxx development board features : 89Sxx 40-DIP based design,..... Listed under: Development Board - Kits Projects

849.



Voltage monitor for car's battery and its charging system PIC16F1827 My 2010 Equinox has got every feature that a modern automobile should have. However, one thing that I personally find missing is the real-time monitoring of voltage across the car's battery terminals. This may not seem to be important but one of the most..... Listed under: Battery Projects, Car Projects, Metering - Instrument Projects, Projects

850.



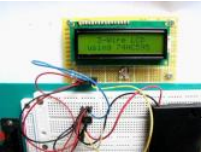
How to generate video signals in real-time using a PIC16F84 Background During the Christmas holidays 1997-1998, I started on a small project, to generate a video signal with a PIC16C84. I had seen some video clock generating video signals in software, and thought it was a quite interesting and wanted to take it..... Listed under: Video - Camera - Imaging Projects

851.



MCU controlled Bluetooth automation with infrared sensor The microcontroller used is 0822 zilog encore! 8k series (soic,28pin) as shown on the board. It is a programmable microcontroller, the functions used are the GPIO and the UART of the chip. GPIO is used on led indicators, and the UART is used for giving and..... Listed under: Sensor - Transducer - Detector Projects

852.



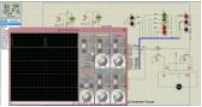
Serial LCDs you can make your own using PIC12F683 HD44780 based LCD displays are very popular for embedded projects because they are cheap, easy to interface, can display characters, consume power lot less than seven-segment displays, and most of the present day compilers have in-built library routines for them. However, the only disadvantage is..... Listed under: LCD Projects, Projects

853.



PIC18F452 to PC USB 2.0 interface with FT245BM Here is an example of how to interface a PIC18F452 to a PC via the USB port. The windows-PC (Windows 2000, XP, 2003) runs a program (C# application, Microsoft Visual Studio .NET 2003) to communicate with the USB interface, which transfers data to and from the PIC and..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

854.



Solar tracking system using pic microcontroller Step 1: Introduction The PV applications could be grouped according to the scheme of interaction with the utility grid: grid connected, stand alone, and hybrid. PV systems consist of a PV generator (cell, module, and array), energy storage devices (such as batteries), AC and DC consumers..... Listed under: Security - Safety Projects

855.



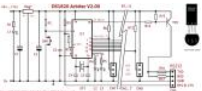
Low cost ICSP PIC-programmer using PIC16F648A Galvanic from PC isolated PIC programmer The Wisp648 from www.voti.nl is an In Circuit Serial Programmer to program a flash PIC which mostly can stay in your circuit. No irritating things like pulling the PIC out of the PCB, place it in the programmer, programming..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Microcontroller Programmer Projects, Projects

856.



Low cost LCD module interface with optional LED backlight using PIC18F452 Here are the technical specifications: LCD resolution: 128 x 64 pixels manufacturer: DisplayTech. LCD model 1: 64128COG-FA-BC (no backlight) LCD model 2: 64128G-FC-BW-3 (white LED backlight) On-glass LCD controller KS0713, with 30 pins connector. Very low power operation (less than 1mA @3V) Fast serial..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, LED Projects, Projects

857.




DS1820 Arbitrator V2.00 Schematic / Parts List RS232 Connection Notes See the RS232 reference to determine the wiring for either a 9-way or 25-way female D Type "sub-miniature" connector. RTS and CTS are connected together. RXD is used to steal a negative supply. You may have to connect RXD and DCD to DTR..... Listed under: Other Projects

858.





MOTM Compatible Dual Channel Quantizer Introduction: This describes my original design dual channel quantizer inspired by Chris List's ARP Studio Quantizer design. My new implementation is an intelligent design that exploits the programmability of a Microchip PIC16F84. It will quantize voltage by 1/12 volt (semitone) or 1 volt (octave)..... Listed under: Metering - Instrument Projects

859.  Build your Own PCB Exposure Box with Fluorescent Lamps and Countdown System Introduction Tired of spending hours and hours in wire solder Do your circuits look ugly and you are looking for a way to produce professional-like PCBs? Then you had better try photoetching. And the first st do that is to have the right equipment..... Listed under: How To - DIY - Projects

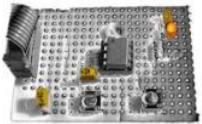
860. Single button code entry for a digital lock using PIC16F628A The Button Code is a system that allows a single button to act as a keypad. The user enters a 4 digit code into system using button taps. The button can be placed where the public can access it since like a keypad there..... Listed under: Projects, Security - Projects

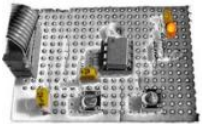



861.  Voltmeter Ammeter Kit – Blue Backlight LCD Voltmeter Ammeter is a great kit to measure voltage and current at the same time. It measures 0-70V 500V voltage with 100mV resolution and current from 0 to 10A. It's a perfect addition to any power supply, battery chargers and other electronic where..... Listed under: LCD Projects

862.  PIC micro Timer Code Here's the minimal code to make timer 1 (a 16 bit timer) work using PICBasic. General descriptions of PIC timer variables u control the timer: (you should be able to use these no matter what programming language you use): T1CON.0 is the first bit..... Listed under: Microcontroller Programmer Projects




863.  Long Period Astable Timer using PIC12F629 Description This software functions as a long period astable mutivibrator. The mark and space peric be set from 1 second up to a maximum 65535 seconds (18h12m15s). Using the internal 4Mhz RC oscillator delays with an accuracy of 99% or be achieved Listed under: Clock - Timer Projects, Projects

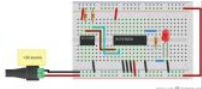


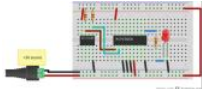
864.  Voltmeter Ammeter Kit Voltmeter Ammeter is a great kit to measure voltage and current at the same time. It measures 0-70V or 0-500V voltage with 100mV resolution and current from 0 to 10A. It's a perfect addition to any power supply, battery chargers and other electronic projects where..... Listed under: Metering - Instrument Projects



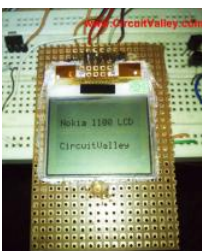
865.  Digital Meter Adapter – DMAD Adding a Digital Meter and Functions to Analog Geiger Counters The Digital Meter Adapter is a expansion module adding digital functions to Analog Geiger Counters that have a pulse output. If you're geiger counter outputs a ttl pulse for every radioactive part detects,..... Listed under: Metering - Instrument Projects




866.  TinyWireMCP23008 – MCP23008 library for ATtiny85 microcontroller If you want to know more... If you want to know more about ATtiny85 microcontroller and how to upload sketches to it, you may have a look to ATtiny85 vs ATmega328. About TinyWireMCP23008 was tested (and wo a 8 MHz ATtiny85 and I2C standard..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects



867. Nokia 1100 LCD Interfacing with Microcontroller Displaying content on a normal alphanumeric display is very limited ,we have to be limited with the font size and we can't display any graphics also. but convention Graphics lcd are really very expensive so here is the solution, you can use Nokia 1100 monochrome..... Listed under: Interfacing(USB - I2C -ISP) Projects, LCD Projects



868.  A PIC-Based Temperature Alarm using PIC16C84 Presented is a simple temperature alarm which uses a PIC16C84 microcontroller and a 2-line LCD display. The alarm displays current temperature in both Celsius and Fahrenheit degrees and features a 3-key keypad which allows the user to set independent high and low temperature alarm points..... Listed under: Projects, Security - Safety Projects



869.  Serial to PIC Interface using PIC Microcontroller One of the first things I like to do when creating a new project is to get the I/O working. This helps debugging the code as I write it. What about projects that do not have I/O? This device sneaks both input and output..... Listed under: Interfacing RS232 - I2c -ISP) Projects, Projects
-
870.  DIY, Microcontroller-Based Battery Monitor for RC Aircraft I've had good cause to be reading and perusing a few old Circuit Cellar articles every day the past several weeks. We're preparing the upcoming 25th anniversary issue of Circuit Cellar, and part of the process is reviewing the company's archives back to the..... Listed under: Battery Projects
-
871.  Whistle Key Finder using PIC12F629 This project uses one of the smallest chips in the PIC microcontroller range, the PIC12F629 and you can learn to program it and experience the thrill of making something yourself and see what goes into writing a program. Even a program as simple as this.... Listed under: Projects, Sensor - Transducer - Detector Projects
-
872.  Telephone operated remote control using PIC16F84A microcontroller This design controls up to 8 devices using a PIC microcontroller (PIC16F84A) connected to the phone line. The unique feature here is that unlike other telephone line based remote control, this device does not need the call answered at the remote end so..... Listed under: Home Automation Projects
-
873.  Serial communication with Matlab pic-microcontroller Overview Matlab has a "serial" function that allows it to communicate through a serial port. A project is to establish serial port connection with the PIC microcontroller and demonstrate bidirectional communication between the PIC and a Matlab program. For demonstration purposes, the PIC will send..... Listed under: LED Projects
-
874.  GPS to SD-Card Data Logger using PIC16F819 microcontroller Description This project combines a GPS receiver module, a Microchip PIC microcontroller and a Secure Digital memory card to make a GPS data logger. With a large capacity and reasonably long battery life it is a very useful device for logging GPS position for example for..... Listed under: GPS Based Projects, Memory - Storage Projects, Projects
-
875.  Interfacing HC-SR04 Ultrasonic Sensor with PIC Microcontroller HC-SR04 Ultrasonic Distance Sensor is a popular and low cost solution for non-contact distance measurement function. It is able to measure distances from 2cm to 400cm with an accuracy of about 3mm. This module includes ultrasonic transmitter, ultrasonic receiver and its control circuit. HC-SR04 module has..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Sensor - Transducer - Detector Projects
-
876.  PIC12F675 software UART (bit banging) code and Proteus simulation This post provides the software UART (Bit Banging) code for PIC12F675 microcontroller (e-g to connect PIC controller with PC using serial adapter). As we know, PIC12F675 microcontroller doesn't have built-in UART module so we can create UART functionality in its software. This post provides the details..... Listed under: How To - DIY - Projects, Projects
-
877.  PIC-Bot II On this page I hope to provide more details than I usually provide for those who wish to construct their own PIC-bot, realising that people actually try to make this stuff. Traditionally, my 'bot pages are for documenting the essentials, not in the kind of..... Listed under: Other Projects
-
878.  Original PICKIT-2 microcontroller programmer These days I was thinking about a better PIC programmer that can work with Microchip MPLAB IDE software so that I can write my own programs or edit someone else's programs. I found that there are numerous versions of the famous Microchip PICKit 2 on the..... Listed under: Microcontroller Programmer Projects
-
879. PIC 16C84 VT-52 Emulator for Linux Features Fits in one half height 5.25" drive bay. Back light 16 x 2 lines LCD (Hitachi Compatible) display. 4 Selection buttons, arranged so it looks like an ATM machine. RS232 19,200 baud connection to PC with Hardware handshaking (CTS). Uses a subset of..... Listed under: LCD Projects

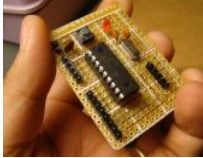


880.



SD/SDHC CARD SOUND RECORDER Updated on 30.6.2015 The PIC16F876A's ADC digitizes the sound and store it in the SD or SDHC card. The firr works for SD or SDHC cards only, for old SD (before 2009) use ver1 firmware. Do not use SDXC cards with this project because some..... Listed ur Sound - Audio Projects

881.



Breadboard module for PIC16F628A Here's another breadboard module that carries a PIC16F628A microcontroller. The power supply pins and th ports of the PIC16F628A microcontroller are accessed through male headers. It can be easily plugged into a breadboard and is very useful for qu prototyping. It frees up a..... Listed under: Development Board - Kits Projects, Projects

882.



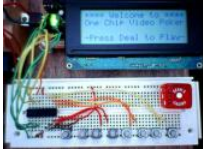
PIC programmers for parallel port uni5_a.bmp - PCB of parallel programmer UNIPROG V-A uni5_as1.bmp - schematic diagram of G.Tait's program with 4066 uni5_ao1.bmp - layout of components of G.Tait's programmer with 4066 List of components: 1 x slot for ISO card (eight pins are enoug female Centronix connector..... Listed under: Microcontroller Programmer Projects

883.



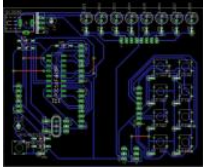
Fun with PCBs Last year I bought this Etch-Set For Electronic Circuits from Jaycar with the intention of having a go at making my own printed circ boards (PCBs). I'd had lots of experience working with those experimenter's Stripboards and Perfboards, which had been more than sufficient fo Listed under: Game - Entertainment Projects

884.



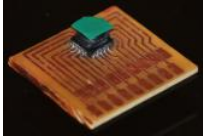
One Chip Video Poker using PIC16F628 microcontroller This is a simple video poker game for the PIC 16F628 and a 20x4 character LCD. It's writte assembly for MPASM. I started the project in 2002. I originally intended it as a birthday present for my brother, who is an enthusiastic if..... Listec Game - Entertainment Projects, Projects

885.



18 pin PIC Development Board using PIC16F62 18 pin PIC Development Board I have long been playing with Microchip PICs but have always mad without some form of development board. To that end I have designed a basic board that I was hoping to get some input for. I haven't yet..... is under: Other Projects, Projects

886.



PCB layouts using CAD Now the PCB kit I used described how I could draw my circuit layouts directly unto the copper clad board using an special with etch-resistant ink, however lacking the dexterity of an artist I chose to get myself some CAD software for generating PCB..... Listed under: O Projects

887.



Almost No Parts' 12/24hrs LED Clock using pic microcontroller A 12hr/24hr LED Clock with display control, uses a microcontroller PIC 16F84A or 1 and a few parts. (August 25, 2009) This LED clock may not be the easiest to build but surely it is the one with fewer parts that you can find, for..... under: Clock - Timer Projects

888. DIY Bluetooth RC Car Last year I started a project to convert my (then) four-year old's busted Radio Controlled (RC) car into Bluetooth controlled one which could be drive a smart phone or tablet. The original car, modeled after a "Fast and Furious" Nissan Silvia, was a pretty basic RC..... Listed under: Bluetooth Projects

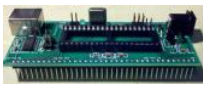


889.



How to Interface I2C External EEPROM 24LC64 to PIC Microcontroller Microcontrollers are standalone chips since they have memory and proces: embedded. The integrated memory of microcontrollers store embedded code and other temporary variables for the execution of program. CircuitsGallery published many microcontroller tutorials and PIC microcontroller projects. Sometimes we may use non-volatile memories (I2c devices)..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

890. Capacitance Meter MkII using PIC12F629 This project is specially designed to measure surface mount capacitors in the range 1p to 920n and electrolytics in the range 1u The biggest problem with surface mount capacitors . . . they are not identified! And you cannot determine their value by..... Listed under: Metering - Instrument Project



Projects

891.



SL4A Bluetooth Controller Having had a bit of an unproductive Easter break I think it's about time I got back to posting the concluding details of the transmitter for the Bluetooth RC was implemented. I built the PIC-based motor and servo controller before acquiring the BlueSMiRF module..... Listed under: Bluetooth Projects

892.



PIC PROGRAMMER MkV using PIC12F629 PIC Programmer MkV is designed to get you into PIC Programming for just a few dollars. It uses just 12 components. Most of them will be in your "junk-box" and the PC board is a small piece of matrix board. It's the cheapest way to..... Listed under: Microcontroller Programmer Projects, Projects

893.



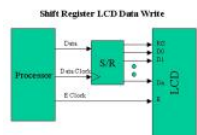
GSM Modem Interface with PIC 18F4550 Microcontroller GSM Modem Interface with PIC 18F4550 Micro controller: Description: In this project we use the PIC 18F4550 Micro controller in transmitter section keys are connected to PB0 to PB3. If we press the key PB0 the Pressed Key Value is transmitted to the micro controller section..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

894.



"Fluffy" – A Scenix (and PIC) Programmer I was trying to think of a suitable name for this project, and after literally seconds of careful deliberation I decided to call it Fluffy. Sorry. Anyway, Fluffy is a SX programmer for people who have already experimented with PIC chips, and want..... Listed under: Microcontroller Programmer Projects

895. Build your own "2-Wire LCD Interface" using the PIC16C84 microcontroller 2-Wire LCD Interface for the PICMicro Alphanumeric LCD displays have become very popular for microcontroller applications because they can add a lot to a project in a variety of different ways. A text message giving the user instructions as well as feedback can be added..... Listed under: LCD Projects



896.



8 Channel PWM LED Chaser for 16F628A and 16F88 Description This neat little circuit provides 8 LEDs directly driven from the PIC along with a single mode control switch. The firmware elsewhere on this page drives the LEDs with a 5 bit PWM signal providing each of the 8 LED channels with four levels..... Listed under: LED Projects

897.



Rubidium Atomic Clock Introduction In the 1970s I worked for a while for the UK Atomic Energy Authority (UKAEA) at a site in Winfrith, Dorset. As part of a lot of other interesting work, I used a gamma ray density gauge that amounted to a caesium-137 source, in its castle..... Listed under: Clock - Time Projects

898.



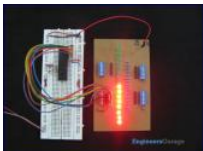
SMS Based Device Control using GSM Modem It has been a while since we published electronic engineering projects here due to the busy schedule I had in the past weeks, and this time we're up with another interesting project. Before going through the details of this one, you may as well check out the..... Listed under: Home Automation Projects

899.



0-5V LCD volt meter using PIC16F877A This PIC LCD volt meter project uses a PIC micro and an HD44870 LCD display. The analogue input is taken directly to the analogue input pin of the microcontroller without any other processing. So the input range is from 0V to 5V - the maximum..... Listed under: LCD Projects, Metering - Instrument Projects, Projects

900.



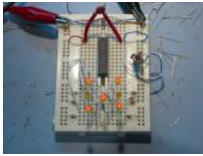
How to interface LEDs with PIC18F4550 Microcontroller It is necessary to understand basic I/O operations of PIC18F4550 before dealing with its complexities. This article presents a way to take simple output from a PIC microcontroller. This learning would also help in interfacing of external devices with the controller. Here the output from..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LED Projects, Projects

901.



Simple Digital GPS Speedometer Using PIC16F877A with LCD Display Speedometer is a speed measuring gauge used to calculate the speed of m vehicles. They are mainly of two types- electronics and mechanical. Digital speedometer measures the speed and mileage in vehicles. Normally k types work on the principle of electromagnetism, however they have a..... Listed under: LCD Projects, Metering - Instrument Projects

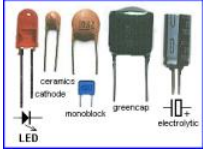
902. Electronic Die using PIC16F84 microcontroller Built using a PIC16F84, about 4 hours worth of code and a few bits on a breadboard. This was the first time I've worked wit so it was a learning exercise. I started with the 'Hello World' microcontroller equivalent i.e. Blinking LED, then tried..... Listed under: Development Board - Kits Projects, LI Projects, Projects



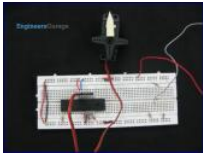
903. Servo Motor Control using Microcontroller PIC16F877A Servo motors are widely used in robotics and industries for motion control. They can be controlled by PWM signals where the required angle of rotation can be located by a particular PWM signal. So In this article we'll see in detail on servo control..... Listed under: Motor Projects



904. TAXI PHONE This project is a dedicated device. It dials a single phone number when the handset is lifted. There are two different modes of opera slide-switch on the PC board allows the project to operate in automatic or manual mode. If the switch is in..... Listed under: Phone Projects



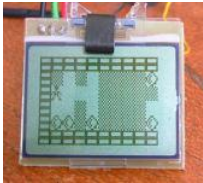
905. How to interface Servo Motor with PIC18F4550 Servo systems use the error sensing negative feedback method to provide precise angular motio Motors are used where precise control on angular motion is needed. Servo motors are widely used in the field of Robotics to design robotic arms, palms, legs and so on..... Listed under: How To - DIY - Projects, Motor Projects, Projects, Tutorials



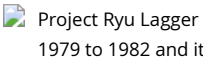
906. Getting started with PIC Microcontroller Programming What is a PIC Microcontroller? PIC (Peripheral Interface Controller) is a microcontroller an developed by the Microchip Technology. It plays important role in embedded systems.Low cost, serial programming capability, reprogramming o flash memory, availability of free developing tools, large user database, etc. are some..... Listed under: Microcontroller Programmer Projects



907. 3310 Nokia LCD & PIC12F683 Not long ago I saw this link for a 3310 temp probe. Now ive played with other LCD's lots, but this one caught my att because of the low power requirements (It runs from a single CR2032 Motherboard battery). I built the Temp probe as..... Listed under: Interfaci RS232 - I2c -ISP) Projects, LCD Projects, Projects



908. Project Ryu Lager – Guitar Effect Do you remember BOSS Slow Gear pedal? If your a guitarist you most likely do or at least you've heard of it. It was a great pedal sol 1979 to 1982 and it was made in Japan. The pedal would cut the attack of..... Listed under: Sound - Audio Projects



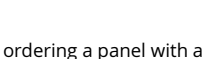
909. Rev 4.2.2 schematic and PCB A long while back I posted a version of the schematic for the electronics for my project to build a GPS-steered parac rocket recovery. Since then I've tweaked the board a bit, to the point where the hardware design is clean and bug-free (as..... Listed under: Devel Board - Kits Projects

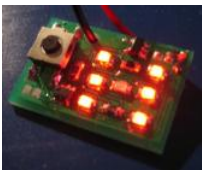



910. Enhanced 5/2-day Central Heating Programmer with serial computer interface using PIC16F628A Overview This project has come about from my to control my home heating from work. As I have a VPN between work and home a straightforward relay controlled from a PC would seem the e solution. However I also wanted a control unit that..... Listed under: Home Automation Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Microcontroller Programmer Projects, Projects, Temperature Measurement Projects



911. PIC10F200 based dice This page describes a PIC10F200-based electronic dice. The reason I made this was that I got a small corner left over when ordering a panel with a couple of other PCBs and thought I would rather use the corner for something fun than leave it..... Listed under: LED Projects





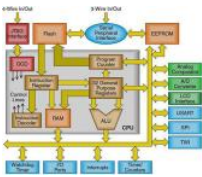
912.  Humidity and temperature measurements with Sensirion's SHT1x/SHT7x sensors using PIC18F2550 (Part 1) Temperature and relative humidity are two very important ambient parameters that are directly related to human comfort. Sometimes, you may be able to bear higher temperatures, if there is a lower relative humidity, such as in a dry desert-like environment. However, being in a..... Listed under: Projects, Sensor - Transducer - Detector Projects, Temperature Measurement Projects



913. Solar Recorder The device used for measuring daily insolation has been developed. The device was built with a PIC18F458 and the 128MB MultiMedia Card, MMC. The solar radiation is measured by a calculator solar cell. The PIC chip interfaces the MMC using SPI mode. The interval..... Listed under: Other Projects



914. Mechanically scanned RS232 display (with dynamic speed) Introduction After I made the clock, the pong and tetris games I thought that it also would be cool to connect the game system to a standard rs232 port and scroll text coming from the port. When I thought about it, I found that there..... Listed under: Metering - Instrument Projects



915. How to choose a MicroController using PIC16C84 microcontroller How to choose a MicroController It used to be that the number of different microcontroller chips available to the hobbyist was pretty limited. You got to use whatever you could manage to buy from the mail-order chip dealer and that narrowed down the choice to..... Listed under: Development Board - Kits Projects, LCD Projects, Projects



916. MikroElektronika's "Ready for PIC" board talks to "Processing" using PIC16F887 "Ready for PIC" is one of MikroElektronika's compact prototyping boards for 28 and 40 pin PIC microcontrollers. The board comes with PIC16F887 microcontroller which is preprogrammed with an UART bootloader firmware and thus eliminates the need of an external programmer. The on-board USB-UART module allows..... Listed under: Clock - Timer Projects, Development Board - Kits Projects, Other Projects, Projects

917. Virtual Tetris Introduction The idea to my mechanically scanned game system came from Bob Blick's mechanically scanned clock, so I thought that I also had to implement a clock on my virtual game system. The clock can simulate both a digital and an analog clock. Due to..... Listed under: Game - Entertainment Projects



918. PIC16F84A LCD interfacing code (using 3 pins only) + Proteus simulation This post provides the LCD[1] interfacing code using only 3 pins of PIC16F84A microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, LCD Projects, Projects





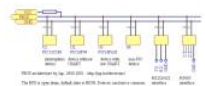







919. Virtual Tetris Introduction Tetris is a very simple, but elegant game. Blocks of four bricks each are falling down in a play field, and the player can rotate and move the block sideways. When the block hits ground or another block below, it stays there. If one..... Listed under: Game - Entertainment Projects




920. Virtual Pong. Introduction The game Pong was the world's first video game in the early 70's, it is a tennis lookalike game where a ball is played with two paddles, which are moved up and down by each player. The ball can bounce at the floor and..... Listed under: Game - Entertainment Projects

921. DIAL ALARM-1 This is the lowest cost dialing alarm on the market and shows what can be done with an 8-pin microcontroller. The complete circuit is shown below. You cannot see all the features of this project by looking at the circuit - most of them are contained in..... Listed under: Clock - Timer Projects

Hz	1209	1336	1477	1633
697	1	2	3	A
770	4	5	6	B
852	7	8	9	C
941	*	0	#	D

922.  Embedded Linux Controller using pic microcontroller An In-Circuit Debugger (ICD) is a very powerful and effective tool for real-time debugging of microcontroller-based system at hardware level. It allows you to run, halt and single step the program while the target microcontroller is embedd in the actual circuit. Once halted, the program variables, Special Function Registers..... Listed under: LCD Projects
923.  Virtual Game System – A game console with a mechanically scanned display. Introduction If you move a bright light fast by the eyes, it will leave a trail behind because the human brain and eyes are slow to interpret fast changes in light intensity, leaving an afterglow. If a row of LED's is moved side while the..... Listed under: Game - Entertainment Projects
924.  PBUS – an RS485-like multi-drop bus with half duplex serial protocol overview There are three PIC source versions: PB12 is for 12-bit slave device without interrupt PBUS is for slave devices with an interrupt, software UART implementation PB628 is for slave devices with an interrupt and a fr hardware UART PBUS assigns a unique device ID..... Listed under: Other Projects
925.  Build yourself flashing message on PIC16F877A with assembler Guys, in this step by step instruction, I wanna share my private experiment with language, I call it Build yourself flashing message on PIC16F877A with assembler Let's prepare the parts Step 1: The parts needed for this experim PIC 16F877A chip..... Listed under: Other Projects
926.  Displaying text on LCD by interfaced with PIC16F877 microcontroller in 4 bit mode Here I discuss on very good and simple project on displaying t LCD by interfaced with PIC16F877 microcontroller in 4 bit mode.to start with this project you need some Knowledge on how to start project on P controller I assumed you know that..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects
927.  SX-Pong After making the tetris game, it was very easy to make a Pong game. The game Pong was the world's first video game in the early 70s a modern version of it, made with a little bit less hardware than the original version..... Listed under: Game - Entertainment Projects
928.  Leaving home light using PIC12F675 Microcontroller Those days when I come home at night and strait into the darkness are finally over. This is a practical device and I built it so that it is a module to my Dual Channel IR Remote Control. Because of that I ended up..... Listed under: Home Automation Projects, Projects
929.  SX-Tetris The first game I made in color using SX-chips was Tetris. Tetris is an old Russian computer game where you should try to fit in block into field, quite simple but really fun. All blocks are built from four bricks (the name Tetris is..... Listed under: Game - Entertainment Projects
930.  Microchip PIC Microcontrollers Implementing ICSP requires connections to a minimum of 5 processor pins: VDD, VPP (also MCLR), SCLK (on RB6 (on RB7), and GND. VDD and GND are straightforward. In most applications, it is best to dedicate RB6 and RB7 for SCLK and SDAT. This avoids..... under: Development Board - Kits Projects
931.  Revised version of LM35 based digital temperature meter using PIC16F688 This is a revised version of my LM35 based digital thermometer proje posted last year. Although it is one of the simplest projects, it is very popular among newbies who are just starting to learn microcontrollers. The little flaw in the original..... Listed under: Metering - Instrument Projects, Projects, Temperature Measurement Projects
932. SX Game System This page describes a SX28-based color video game system I made during year 2002. Now, beginning of 2007, almost five years after I made the first de updated the layout of the PCB and added a version of the PCB that has built-in gamepads..... Listed under: Game - Entertainment Projects



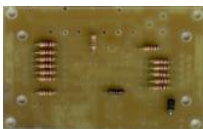
933.  Low cost temperature data logger using PIC and Processing using PIC12F1822 This project describes an easy and inexpensive way of adding a digital thermometer and data logging feature to a PC. It involves a PIC microcontroller that gets the surrounding temperature information from the MCP9701 sensor, and sends it to a PC through an USB-UART..... Listed under: Projects, Temperature Measurement Projects



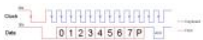
934. PIC-Tetris Introduction I have made the game Tetris using a PIC16F84 running @ 12MHz. Tetris is an old Russian computer game where you should fit in block into a play-field, quite simple but really fun. All blocks are built from four bricks (the name..... Listed under: Game - Entertainment Projects



935. Chronograph for Air Cannon using PIC16F628A microcontroller Intro: Chronograph for Air Cannon This chronograph project consists of a sensor assembly and timer circuit box that can be used to measure the muzzle velocity of a projectile fired from an air cannon. I originally built this setup use with a large air..... Listed under: Other Projects, Projects



936. Building the PIC16F84 based game system This text describes how to build my PIC16F84 based game system, before you start you should read the whole text one time. Note that many components are sensitive to too much heat and will get damaged if you heat them too much when soldering..... Listed under: Game - Entertainment Projects



937. Interfacing the AT keyboard. PC Keyboard Theory The IBM keyboard you most probably have sitting in front of you, sends scan codes to your computer. The scan codes tell your Keyboard Bios, what keys you have pressed or released. Take for example the 'A' Key. The 'A' key has..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects



938. Pulsing Hubby Detector using PIC12F683 microcontroller Pulsing Hubby Detector This project uses an RF receiver module to trigger a pulsing LED when the transmitter comes within range. I made this for my fiancée for Valentine's Day this year. I have yet to fully test the range, as I haven't had a chance to test it..... Listed under: LED Projects, Projects



939. PIC Game System This page describes a PIC16F84-based video game system I made and first published back in the beginning of 1998. Now, beginning in 2007, nine years later I've updated the layout of the PCB and also updated the source code to also be able to run..... Listed under: Game - Entertainment Projects



940. Poor man's counter using PIC16F84 microcontroller Background Most multimeters can measure frequency, but they are not sensitive and the max frequency is not always high. The same problem can be found with older frequency counters. This project will describe a prescaler which will work up to 2.5GHz and with very..... Listed under: Other Projects, Projects



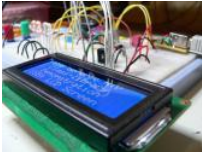
941. How to make a 'Propeller Display' using PIC microcontroller This is my first post related to Projects and today I will describe 'Propeller Display' project. Me and my friend Rushi, we both made 'Propeller Display' project during our under-graduation. Below is the photo of the project. Project uses PIC16F84A Microcontroller. Below is the..... Listed under: Development Board - Kits Projects



942. PIC 16F676 ICSP programming socket for the PICkit 2 programmer I'm trying to build this dual DC motor module for my robot project and I did not have space for placing an ICSP pin header on the PCB. So I quickly mocked up this design. Step 1: Getting the parts Well to build the..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Microcontroller Programmer Projects

943. Max the Spider – powered by LEGO and PIC microcontroller So Max the spider visited us in the lab today, and wanted to get into the Halloween spirit. "I like to drop down on people in the elevator," he smirked, in a way only a spider could. "I've got just the thing," I winked, and..... Listed under: Game - Entertainment Projects



944.  Open Source Framework for USB Generic HID devices based on the PIC18F and Windows Introduction If you've dabbled with PIC18F microcontroller and the USB Generic HID standard before (perhaps you've even tried my Building a PIC18F USB device project) then you will have noticed that there is a lot of complexity in supporting USB on both the PIC18F and the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



945. Mechanically scanned laser display using PIC17F877 Abstract This application is a very cheap solution for displaying text messages on a solid or semi-transparent surface by using a laser beam. The main goal was to verify the possibility to build a simple and cheap display for displaying large text. The idea..... Listed under: LCD Projects, Projects



946. LED dot matrix scrolling message - 14x5 - source code I have built various scrolling message badges for instance using the 16F57- 10x5 and 12x5. However, since these chips only have a small FLASH, there is not much flexibility. I don't really recommend these controllers for a scrolling message. Recently I have started a new..... Listed under: LED Projects



947. 2meter (144MHz) amateur radio transceiver I designed , built, tested and operated a 2m hamradio transceiver that includes all the necessary circuitry, in particular the voltage controlled oscillator (VCO) + phase-locked loop (PLL) for frequency synthesis, low noise amplifier (LNA) for the receiver front-end, power amplifier (PA) for the radio frequency. Listed under: Radio Projects



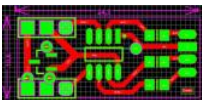
948. 9 Volt Battery Charger 9 Volt batteries extensively used in various electronics measurement equipment. Powering these devices with rechargeable batteries can be a cost effective solution. In this post a simple Lithium-ion 9 Volt Battery Charger design with overcharging protection will be presented. The charger is based on PIC16F876A microcontroller..... Listed under: Battery Projects



949. Car battery charger with PIC12F683 This time I'm starting off with a device I already built, unfortunately there won't be any photos from the actual device, just a quick article on how I imagined it and how it works. A short story about how the whole thing started My uncle..... Listed under: Battery Projects



950. Motion Activated Led Dice using PIC16F688 Introduction I've always wanted to build an electronic led dice, but something different from what was available on the internet. Making it motion controlled... now that's new! Many new cell phones that have accelerometers built in also have dice games. The dice move..... Listed under: LED Projects, Projects



951. Microprocessors Garland 1. Presentation For some time now, I think the commercially available garlands, are too boring, too repetitive with their three alternations of colored bulbs. I wanted to create a truly personalized one without ruin me either. Two ideas immediately came: - a microprocessor..... Listed under: LED Projects

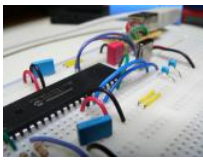


952. PIC16F84 Fundamentals The photo shows a PIC16F84 microprocessor board tethered, by ribbon cable, to a circuit having 8 LEDs and an 8-position switch. Learning a microprocessor's capabilities often demands such a setup where LEDs turn on/off, blink at desired rates and respond to switch. This tutorial..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



953. internetworking with microchip microcontroller pic18f+enc28j60 Description The ENC28J60 is Microchip's first incursion into the ethernet controller arena, this new device includes all MAC & PHY IEEE 802.3 10BaseT functions, 8KB of dual access RAM packet buffer and a SPI serial interface, all in a convenient 28-pin package (SPDIP, SOIC, SSOP)..... Listed under: Microcontroller Programmer Projects

954. Building a PIC18F USB device Introduction I get a number of emails every month asking about creating USB devices using the PIC18F microcontroller. After looking at projects such as my Atari Joystick USB Adaptor and C64 VICE Front-End there seems to be a demand for more information on how to build a PIC18F USB device. Listed under: Development Board - Kits Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



955. PIC 16F917 Gyroscope interface In this post we will study the ADC (Analog-to-Digital) Module of the Microcontroller PIC16F917 . We will study a real circuit of PIC16F917 interfacing to a semiconductor Gyroscope. The Gyroscope is a motion sensor that senses tilt in a certain direction . The..... Listed under: Microcontroller Programmer Projects



956. PIC12F1840 + I2C 24FC1025 EEPROM The 24FC1025 is a serial I2C EEPROM memory fabricated by microchip, it has 1024Kbits (128KB) of memory and it is divided in two parts each one of 512Kbits (64KB); the first part goes from address 0x0000 to 0xFFFF and the second part goes from..... Listed under: Memory - Storage Projects



957. Simplest Temperature Data Logger using PIC12F683 Introduction There are varieties of digital temperature logger projects available online based on different microcontrollers. The one I am going to talk about is based on a Microchip's 8-pin microcontroller, PIC12F683. It reads temperature value from a DS18B20 digital sensor and stores it in its internal..... Listed under: Projects, Temperature Measurement Projects



958. Quozl's Alarm Clock using PIC16F877 Old Alarm Clock Problems wake's Quozl's wife, a side-effect, needs to be armed each evening, 12-hour clock cannot be armed more than 11.5 hours before alarm time, triggers at plus or minus ten minutes, depending on how it was dropped, battery cover needs to be..... Listed under: Clock - Timer Projects, Projects



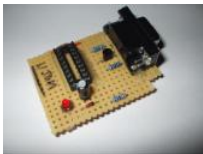
959. USB Audio Streamer A Microchip PIC based USB sound card INTRODUCTION The idea for creating a USB sound card based on a PIC came from discussions of other people creating one on the Microchip USB forum. The hardware of the card is based on all Microchip products. The software is a modified version of the..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Sound - Audio Projects



960. Using Digole 12864ZW LCD with PIC18F Digole 12864ZW is a 128x64 pixels graphic LCD that can be found at attractive prices and this is why it is appearing in projects across the web. It is based on ST7920 chip which is not so well known and to me it wasn't the..... Listed under: LCD Projects



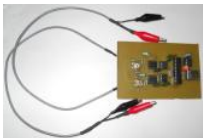
961. Cheap PIC Programmer using PIC16F84 microcontroller Cheap PIC Programmer This programmer works only with PIC16F84 but it's great because it never causes errors and works with almost all computers, unlike some other homemade programmers. Step 1: Step one : Materials For this program you won't need many materials. In fact , you will..... Listed under: Microcontroller Programmer Projects, Projects



962. PIC microcontroller ATA library This project started life a long time ago, with the intention to build an iPod clone, back when personal MP3 players were an expensive luxury long before you could buy them from China on ebay for less than a light bulb. The plan for..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects




963. Two-Channel PC Based Oscilloscope USB Introduction More and more experiments are now 'PC-assisted.' Also conventional acquisition systems are expensive. Since portable PCs are today common and a USB link is a better solution here we present an oscilloscope using the USB port of the PC that operates at up to 10 kHz with $\pm 16V$ input voltage. It has..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects



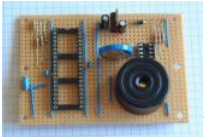
964. 3-Channel IR Relay Controller with user programmable IR commands for PIC12F629 Description This project is a 3 channel infrared (IR) remote controlled relay driver. It works with 12-bit SIRC IR signals as used by Sony remote controls. The controller also features the ability for the user to 'program' the commands it will respond to using the..... Listed under: Internet - Ethernet - LAN Projects, LED Projects, Projects



965.  Hello World Project With PIC Microcontroller – Part II Hello Friends, Welcome back. In the last tutorial we started working with MPLab and HI-TECH C Compiler and wrote our first C program to blink LED. After compiling the program we got the HEX file. Now, in this tutorial we will see how to transfer(burn) the..... Listed under: Microcontroller Programmer Projects



966. Balanced Line Attenuator In a home recording environment equipment often doesn't come in a large variety because of either limited budget or space... or both. I am presenting here an balanced attenuator which comes in between fixed gain preamp and recording device/soundcard. The of this device..... Listed under: Home Automation Projects



967. Alarm Clock using PIC16F74 microcontroller The idea for this project came from my youngest son who asked me to make him an alarm clock. I put together a simple PIC based design comprising of two interlinked vero-board cards. The design was created using New Wave Concepts' LiveWire allows you..... Listed under: Clock - Timer Projects, Projects



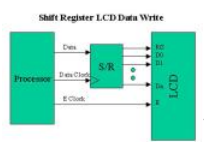
968. Ide To Usb Converter Circuit Diagram How to Make Phonecall From GSM Module Using pic18f2550 ... Mplab® ide – developer – wikidot, Mplab® integrated development environment (ide) is a software program that runs on a pc (windows®, mac os®, linux®) to develop applications for microchip. Ee times |..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



969. The Talking Breathalyzer Mark II using PIC18F1220 The Talking Breathalyzer Mark II Hi Folks! Thanks for having a gander! This is my second Brea project. IT TALKS TO YOU, and gives you an idea of how much you've had to drink! I made it specifically for for this contest. I hope you..... Listed under: Other Projects, Projects

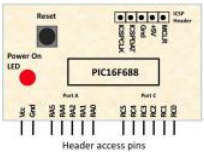
970. PIC 16F917 Microcontroller Programmer In this instructable , I'll show you how to build a PIC 16F917 Microcontroller programming circuit. This Microcontroller is a very n Microcontroller chip form the famous chip manufacturer Microchip. This Microcontroller is easy to program and powerful to use. The photo above shows..... Listed under: Microcontroller Programmer Projects



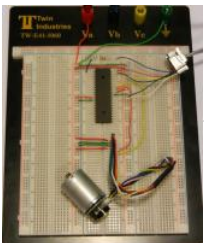
971.  2-wire LCD interface using PIC16CF84 Alphanumeric LCD displays have become very popular for microcontroller applications because they can a to a project in a variety of different ways. A text message giving the user instructions as well as feedback can make the application seem much m "professional" and..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects



972. Building the Inchworm ICD2 PIC Programmer / Debugger This instructable is an illustrated walk through building an ICD2 clone called the Inchworm a straight forward kit that lets you build an MPLAB ICD2 compatible Programmer and Debugger. There are lots of Programmers out there but ve include a debugger, (A debugger..... Listed under: Microcontroller Programmer Projects

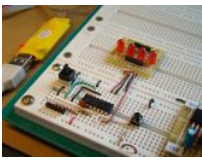


973. PIC16F688 breadboard module for quick prototyping This module is based upon the basic setup circuit for PIC16F688 that I have described in on PIC lessons, Getting ready for the first lab. I thought of soldering this circuit on a general purpose ptotyping board and use male headers to ac the..... Listed under: Development Board - Kits Projects, Projects



974. How to Program a PIC Microcontroller & Read an Encoder Introduction: From electronic toys & games to microwave ovens, microcontrollers can found just about anywhere these days! But how can we make these small computers work for our own electronics projects? That's where this tut comes in - with detailed instructions showing you what..... Listed under: Microcontroller Programmer Projects

975. Lab 3: Four bit binary counter using PIC16F688 Description Today's lab session is about binary counting LEDs. The binary 1 and 0 will be represser turning LEDs on and off. You will make a 4-bit binary counter (using 4 LEDs) that counts from 0 to 15 (0000-1111 binary). The four LEDs are..... Li under: Clock - Timer Projects, Projects



976.



PIC Based Oscilloscope Clock For those are not into electronics, you must know that an oscilloscope has basically only one timebase to move the horizontally from left to right with the same intensity. The vertical deviation is function to the input voltage. You understand immediately that you can't..... Listed under: Clock - Timer Projects

977.



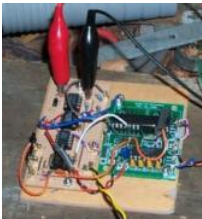
Rotating Sprocket Wheel Generator using PIC16F84 Background My friend Arthur, in his lifelong quest for circuits that don't really do anything but are really neat nonetheless, built a really neat Lissajous pattern generator. This Lissajous pattern is not your traditional circle, oval, or figure-eight circle with varying..... Listed under: Other Projects, Projects

978.



Fun with Voltage Regulators I've been spending a lot of time thinking about op amps and comparators lately. One of the common uses of an op amp is as a "unity gain" buffer, meaning that the output voltage is as close as possible to being the same as the..... Listed under: Game - Entertainment

979.



Water Wave/Tide/Level Meter 2.0 using PIC16F88 Capacitance Probe A simple probe can be made using insulated wire. The insulation is then the dielectric of an cylindrical capacitor with the inner conductor as one plate and the water as the other. The probe is not suitable for distilled or very pure water..... Listed under: Metering - Instrument Projects, Projects

980.



Mork Microchip PIC32MX ICSP Mork is adaptation of Nanu nanu Microchip PIC ICSP for the STM32 based vcc-gnd or Maple mini. Both STM32 boards are inexpensive boards which don't cost much more than the Nano 3.0 yet they are far more powerful. One complication though for the vcc-gnd is..... Listed under: Development Board - Kits Projects

981.



Introducing the BOLT PIC18F2550 Microcontroller Board using pic microcontroller The BOLT microcontroller board utilizes the Microchip 18F2550 built in USB capabilities. Utilizing a 2k 'boot loader' this leaves a great deal of flash RAM for C programming using MPLAB and the C18 compiler. The BOLT board comes in two versions. LITE which has..... Listed under: LCD Projects

982.



Ic meter capacitor inductimeter circuit pic 16f84 auto range Icmeter The good and high precision capacitor meter (Capacimeter) inductor meter (inductimeter) auto range Ic meter for pic 16f84 or pic 16f628 and display lcd by phill rice Construction of an apparatus that allows measure inductance (Inductimeter) and capacitors (Capacimeter), known like LC meter, using PIC..... Listed under: Metering - Instrument Projects

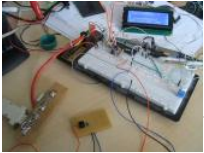
983. Picaxe Blending Nightlight using pic12f683 I had a few multicolor LEDs laying around and wanted to whip up a color-blending nightlight. I built 2 devices, each in its own 2 DIP socket without soldering. A 3-pin header is included so I can reprogram the light on-the-fly if desired. On..... Listed under: LED Projects




984.

automatic power factor controller using microcontroller The 230 V, 50 Hz is step downed using voltage transformer and current transformer is used to extract the waveforms of current. The output of the voltage transformer is proportional to the voltage across the load and output of current transformer is proportional to the..... Listed under: Microcontroller Programmer Projects




985.  LED-Guided Piano Instruction using pic microcontroller [Kay Choe] can't play the piano. Rather, he couldn't, until he converted his keyboard to inc LED-guided instruction. [Kay] is a microbial engineering graduate student, and the last thing a grad student can afford is private music lessons. V in components and a cell..... Listed under: Sound - Audio Projects




986.  PIC16C63 Midi controlled Light dimmer This is Ver2.0 of a finished project. I usually do projects about the same way every time. Product definition (10 min), Code outline (10 min), Schematic generation, Build prototype, Write code all at one sitting (This one took about 6 hours), Take a copy of..... Listed under: Home Automation Projects, Projects, Sound - Audio Projects




987.  Peltier-Powered Drink Cooler! desktop-sized can cooler From the "Something that Should be Made Department" comes this drink cooler. Ever since seeing peltier devices for sale I have wanted to put one to a cool use, and this is it. 😊 The heart of the device is of course..... Listed under: Home Automation Projects




988.  A simple 50 MHz diy microwattmeter using PIC16C84 Summary. A design for a simple microwattmeter. Input range -75 dBm to + 5 dBm. Frequency range 2 to 50 MHz. Level resolution is 0.1 dBm, frequency resolution is 10 kHz. Log-output about 0.5 - 3.5 Volt. Output for external counter. The project uses a..... Listed under: Metering - Instrument Projects, Projects




989.  Bicycle Persistence of Vision Light Display — February 2007 In February of 2007 I spent a little while prototyping a board that turns any bicycle wheel into a moving display billboard using a single string of LEDs. The idea was to do something that would be very visible, turn itself on and off automatically,..... Listed under: Home Automation Projects

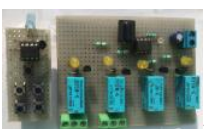
990. PICADC – a free, PIC based “intelligent” A/D converter using PIC16F84 This is an old design. Some of the components may be difficult to buy. If you would like to build a better and cheaper A/D converter, take a look at the new PICADC3 design. The PICADC is a simple 12-bit, 8-channel analog to digital..... Listed under: Interfacing(USB - RS I2c - ISP) Projects, Projects, Sensor - Transducer - Detector Projects

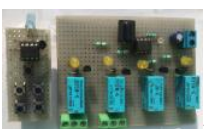


991.  PIC18F4550 – LCD display jhd162a (2x16) Interface Project : Display control on a LCD (jhd162a) Requirements jhd162a LCD PIC18f4550 Here in this project the running display of the screen is been controlled by a PIC18f4550 board which is interfaced to jhd162a lcd. jhd162a lcd is very easily available in any electronic..... Listed under: LCD Projects




992.  C# Software and Firmware, USB INTERFACE BOARD C# Software Application and Firmware for PIC18F4550 Board To continue further with this project you would need to download my version of Firmware to control 6 LED's and a Software application which is written in C# sharp, a project file has also enclosed with..... Listed under: Interfacing(USB - RS232 - I2c - ISP) Projects




993.  Infrared Remote Control with Microcontroller This little project will demonstrate how you can use NEC IR protocol based TV, DVD or VCR remote to control your home appliances like fan bulb or virtually anything. There are lots of projects out there to accomplish this task but I have to..... Listed under: Wireless Projects



994.  3-Switch Mini IR Remote Control for PIC10F200 Description This project is a 3 button mini IR remote control which transmits 12-bit SIRC IR signal used by Sony remote controls. It has been designed to work with both the 2-channel relay driver board and 3-channel relay driver board project on this..... Listed under: Internet - Ethernet - LAN Projects, Projects


995.



Temperature Recorder using PIC12F683 microcontroller


Description This project uses a MicrochipPIC microcontroller, a serial EEPROM and a the to create a temperature recorder. Performance The temperature is measured and stored at user programmable intervals; this can be from 1 sec 256 seconds. The time interval is set by programming..... Listed under: Projects, Temperature Measurement Projects

996.



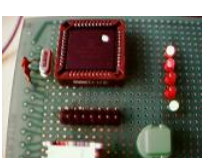
BOOTLOAD THE PIC18F4550 – FIRMWARE UPDATING BOOTLOAD PIC18F4550 – FIRMWARE UPDATING SETTING THE PIC18F4550 IN RD/WR (BOO MODE FOR BOOTLOADING Loading / updating new code into the USB INTERFACE BOARD can be done with a Bootloader Software. While searchi good bootloader, I found some nice tutorial on egeek.net..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

997.




USocket – USB controlled Socket with PIC18F4550 Introduction The idea of this project is to control (switch off/on) two power sockets with a com using its USB port. I've chosen USB in first place because I wanted to experiment with the PIC18F4550 microchip's microcontroller, and secondly the power supplied by..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

998.



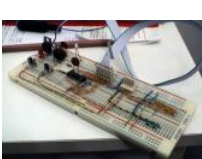
In circuit serial programmer for PIC16F87X Intro Here you can find all resources you need to build your own in-circuit serial PIC16F87X programm PIC16F84, time had come to move on to more powerful devices, such as the PIC16F871. These devices offer a low voltage programming (LVP) mo Listed under: Microcontroller Programmer Projects, Projects

999.




USB Interface Demo Board Using PIC18F4550 PIC18F4550 USB DEMO INTERFACE BOARD PROJECT This project / USB hardware is quiet easy to m home with few components, this piece of hardware will be detected by your computer like any other external device once it's completed. This is i USB demo..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1000.



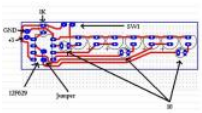
Schaer+ Programmer using PIC12F629 microcontroller Description Schaer is a generic programmer circuit capable of uploading and download:in firmware to/from several electronic devices like microcontrollers and eeproms. This and other programmers came to my attention when I was w in CAMBADA, the robotic soccer team from the University of Aveiro, and since all other..... Listed under: Microcontroller Programmer Projects, Projects

1001.




Stepper Motor Driver using PIC18F4550 Microcontroller Stepper Motor Tutorial In this tutorial we are going to drive a Single unipolar stepp ermc using PIC18F4550 Microcontroller in various different stepping modes. The source code and Project files are free to download at the end of this i Stepper motor due its excellent..... Listed under: Motor Projects

1002.



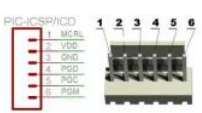
A modified version of the "Air diplay" adapted to be used in a bicycle using PIC12F629 microcontroller Anthony from Cumaná, Venezuela, made f "Persistence of vision" (POV) display, similar to my Air Display but it can be mounted on any bicycle wheels and it displays fifteen messages in Sp Here is the PCB with each part of the project. It uses..... Listed under: Other Projects, Projects

1003.




PIC18F4550 Tutorial: Blink LED – 2 Hi welcome to my 4th chapter of PIC18F4550 programming. Here we are going to learn another methodology technique for programming a pic18f microcontroller which would be helpful in future while dealing with complex coding. We are going to define own header file. We..... Listed under: LED Projects

1004.



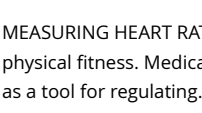
PIC18F4550 Tutorial: Blinking an LED TUTORIALS PIC18F4550 Programming Tutorial in Hardware C PIC Tutorial, Mplab IDE - C18 compiler toolsuit PIC18F4550, Looking the data sheet | Ports PIC18F4550 Programming Blink led method 1 PIC18F4550 programming Method 2 Blink led PIC18F4 Blink LED 20MHZ Oscillator | XC8 Mplab X IDE and..... Listed under: LED Projects

1005.



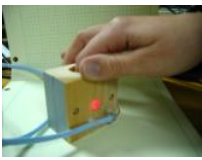
Using Fixed Voltage Reference (FVR) for A/D conversion in enhanced mid-range PIC microcontrollers The reference voltage plays a very importan any A/D conversion. It determines both the range and the resolution (Volt/Count) of the A/D conversion. Besides, the accuracy of the conversion depends upon how stable the reference voltage is. Usually in PIC microcontrollers, the..... Listed under: LED Projects

1006.

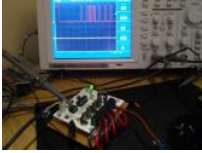


MEASURING HEART RATE USING A PHOTOPLETHYSMOGRAPHIC CARDIOTACHOMETER using pic-microcontroller ABSTRACT The heart rate is an important measure of hea physical fitness. Medical professionals rely heavily on the rate as a measure of health status and use it to prescribe treatment to individuals. Athletes value the heart rate as a tool for regulating..... Listed under: Medical - Health based Projects

Feedback / Suggestions



1007.



4 Channel DMX512 Driver for PIC16F688 Description This project is a 4 channel DMX512 driver board. It features four power MOSFETs that can be configured to operate in PWM mode or as on/off outputs. The driver can be configured to use any four consecutive addresses across the full 51 channel address..... Listed under: Development Board - Kits Projects

1008.



Frankenbear Synthamajig using PIC16F877 microcontroller Frankenbear Synthamajig Have you ever wanted a teddy bear that looks like Franken and makes sounds like "bleep bleep blooop de de bleep.... EHHHHHHHHHH..... dadadadadadadododododod bleep bleep bloop"? Look no far have found it! Now you can perform the nights away with your new..... Listed under: Game - Entertainment Projects, Projects

1009.



Daft Punk Table Replica Graphics Controller using PIC18f2550 Daft Punk Table Replica Graphics Controller This instructable presents a graphics controller card for something like the Daft Punk Table Replica. This should be used in conjunction with a driver board (output expander) like this which will drive the high loads presented by the..... Listed under: Other Projects, Projects

1010.



Interface single and Dual IR Infrared sensor with PIC18F4550 and LCD In this another tutorial on sensors for beginners, we are going to interface and multiple Infrared IR sensors with Arduino Uno development board, working simultaneously and have the status displayed either on an (4X1 LCD module (jhd162a) or an LED. We..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, Sensor - Transducer - Detector Pr

1011.



Very Accurate LC Meter based on PIC16F628A using pic microcontroller Accurate LC Meter Part's List: 1x 16x2 LCD Display with Green / Blue Back PIC16F628A Programmed Microcontroller 1x LM311 IC 1x Accurate LC Meter PCB with red solder mask 1x Enclosure 1x Gold Plated Machined i8 Socket 1x Gold Plated Machined 8..... Listed under: Metering - Instrument Projects

1012.



USB Interface Board Driver Installation PIC18F4550 USB Interface Board Driver Installation Connecting PIC18F4550 First Time This tutorial will explain how to make your interface development board to work for the first time. Without a Demo hex code inside PIC18F4550's flash memory, i respond even if we connect the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1013. **PIC16F877 based controllable digital clock using LCD display (Code+Proteus simulation)** This PIC16F877 microcontroller tutorial answers the question, " How to implemer controllable digital clock using PIC16F877 ? " Using PIC16 simulator (Proteus) you can verify this digital clock code and change it according to your needs. Using three pus buttons (As shown in figure..... Listed under: Clock - Timer Projects, LCD Projects, Projects



1014.



Infrared (IR) Object Detection Module Circuit Using IR LED and Photodiode How to make Infrared (IR) sensor Object Detection Module Circuit Usi LED and Photodiode The IR Object Detection sensor module is quiet easy to make. This sensor circuit below is a low cost - low range infrared obj detection module that you can easily..... Listed under: LED Projects

1015.


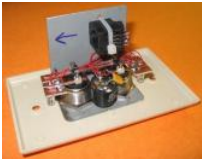



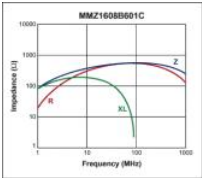
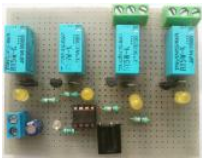




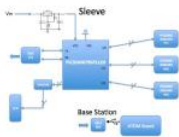
Experimenter's board for enhanced mid-range PIC microcontrollers (PIC16F1827 and PIC16F1847) The PIC16F628A has always been my first choi microcontroller-based projects. It is simple, inexpensive, and easily available. Due to its compact size (18 pins) it occupies lesser space on the circ board, and meanwhile, it is powerful enough to serve most of a hobbyist's..... Listed under: Development Board - Kits Projects, Projects

1016.



PIC16C74 Embedded 10BaseT Ethernet CS8900 Embedded ethernet enables microcontroller based projects to send and receive packets over the network. The board shown on the left is actual size and incorporates all the circuitry needed to enable 10BaseT communications. The board is de to minimize the pin count needed to interface..... Listed under: Internet - Ethernet - LAN Projects

1017.  Introduction to the PIC32 using pic-microcontroller The Microchip PIC32 is a family of complex and powerful microcontrollers that can be purchased for less than \$10 in quantities of one. This microcontroller offers many peripherals useful for mechatronics purposes, such as several channels for analog-to-digital conversion, digital I/O, synchronous and asynchronous serial..... Listed under: Video - Camera - Imaging Projects
1018.  STEAM GENERATOR using PIC16F873 Introduction This program is a steam generator controller that is intended for use in a residential steam shower. It controls water inlet and drain valves, power to the heating element, and various level and thermal sensors. Features Push button automated control of the steam shower..... Listed under: Home Automation Projects, Projects
1019.  Building the Mongoose Mechatronics Robot: Part 1 Chassis & Gearbox using PIC18F2525 Building the Mongoose Mechatronics Robot: Part 1 Chassis & Gearbox This is the first of a series of illustrated instructions for assembling the Mongoose Robot kit available from blueroomelectronics. Highlights: Powerful PIC18F2525 microcontroller (32KHz to 32MHz) Hardware PWM controlled SN754410 H-Bridge with thermal shutdown..... Listed under: Projects, Robotics - Automation Projects
1020.  Open Automaton Project The objective is to use readily available "off-the-shelf" low-cost consumer components where possible, and to design subsystems where such components are either not readily available or are too expensive. In terms of affordability, the overall goal is to design a robot that can be..... Listed under: Robotics - Automation Projects
1021. RGB LED PWM Driver for High Power 350mA LEDs V3 using PIC12F629 Description As featured in Electronics Weekly Gadget Freak (20/02/2008) The main reason I made this version is that I wanted to fit it in to the base of an Ikea Mylonit lamp. This lamp is made entirely from glass and has a small recess in..... Listed under: LED Projects, Projects, PWM Projects
1022.  LED fireflies prototype using PIC12F683 microcontroller LED fireflies prototype hello all, here's an attempt I made at something like an LED throwie. One problem (for me) with LED throwies is that they just consume their battery, and produce light.. but they could be better at doing both.. first you have to accept..... Listed under: LED Projects, Projects
1023.  PIC'ing the MAX5581: Interfacing a PIC Microcontroller with the MAX5581 Fast-Settling DAC MAX5581 Overview The MAX5581 is a 12-bit, fast-settling DAC featuring a 3-wire SPI™ serial interface. The MAX5581's interface can support SPI up to 20MHz with a maximum settling time of 3μs. This application note presents an application circuit and all the firmware required to interface..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects
1024.  IR(infrared) Remote Control Relay Board with PIC 12F675 Microcontroller Introduction This little project will demonstrate how you can use your computer to control a number of home appliances like fan bulb or virtually anything. Consumer IR protocols There are a number of consumer Infrared protocols out there and they have..... Listed under: Home Automation Projects
1025.  Programmable watch with four character display using PIC16F628A microcontroller Programmable watch with four character display You'll be the talk of the town when you wear this obnoxious, oversized, completely impractical wristwatch. Display your favourite foul language, song lyrics, prime numbers, etc. Inspired by the Microreader kit, I decided to make a giant watch using..... Listed under: LED Projects, Microcontroller Programmer Projects, Projects
1026.  Throbbling Apple Logo Sticker using PIC10F206 microcontroller Throbbling Apple Logo Sticker This little gizmo adds the iconic "sleeping Mac" to the ordinary Apple logo decal. The idea for this came about when passing by the Apple Store in Palo Alto, California late one night. After hours, when the store is "asleep,"..... Listed under: Battery Projects, LED Projects, PWM Projects
1027. Augustus's Lab Notebook using pic microcontroller Week 01 January 10, 2012 (1 hour): Met as a team after class to discuss preliminary project proposal. January 12, 2012 (2 hours): Met as a team after class to finish writing preliminary project proposal. WEEK 01 SUMMARY Accomplishments: Submitted preliminary project proposal. Weekly Work: Listed under: LCD Projects



1028.



Top 5 Wireless Ways to Communicate with your Controller One of the strongest trend we have seen this year at CES2015 is, as you can imagine e the IoT (Internet of Things) development. Consequently, the most important component needed is the "connection and communication" module enables the remote interaction between the device and..... Listed under: Wireless Projects

1029.



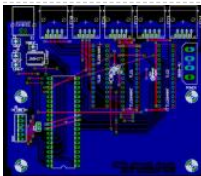
DCF77 clock-thermostat using PIC16F648A Always at the right time your house on temperature This project make use of a PIC16F648(A) and a Dc receiver from Conrad (Orderno. 64 11 38) With DCF77 runs the clock from the thermostat always on the right time. Synchronizing isn't necessary anymore. The temperaturesensor is a DS1820..... Listed under: Clock - Timer Projects, Home Automation Projects, Projects, Temperature Measu Projects

1030.



Nike+iPod reverse engineering (protocol too) using pic microcontroller UPDATE: code posted below Nike+iPod is a very interesting piece of hardv all kinds of reasons, not the least of which is that it as actually useful. It works by wirelessly transmitting data from a sensor (that is stored in you to a..... Listed under: Sensor - Transducer - Detector Projects

1031.



Misc Projects : High Power RGB LED Controller This is an ongoing project to control a number (currently 5) of Lamina Atlas high power (350-500m LEDs. Current progress includes: PCB artwork (in Eagle) with connections for 5 RGB LEDs. Firmware for a Microchip PIC16f887 microcontroller to interface between the FTDI 245R USB chip..... Listed under: LED Projects

1032.



Ways you can use the DDS Daughtercard How many ways can you use a self-contained, high-precision signal source contained on a 1" x 2" plug-i card? How about as a stand-alone VFO, a signal generator for your bench, a replacement LO for your Sierra or NC40 transceiver, or perhaps as th Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1033.



A Word Clock using PIC16F877 microcontroller A Word Clock ***** Major updates - A much better enclosure for this clock has been designed, and a better controller using an AtMega controller now exists. check http://www.instructables.com/id/The-Wordclock-Grew-Up/ ***** is a project to tell the time using words. I saw a cool..... Listed under: Clock - Timer Projects, Projects

1034. DC motor control with Joystick and PIC16F877A This is one project that i'm doing, now I'm going to show how to do it only for one motor, but i'm using and DEMUX to in t future use 4 motor. The project is simple, it uses the pic to control the DEMUX and..... Listed under: Motor Projects



1035.



Dialing Alarm using PIC16F628 Microcontroller This is the lowest-cost dialing alarm on the market and shows what can be done with a PIC microcontroller. The complete circuit is shown below. You cannot see all the features of this project by looking at the circuit - most of them are cc in the..... Listed under: Projects, Security - Safety Projects

1036.

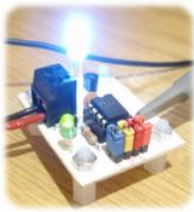



Whac-a-Veggie using PIC18F4550 microcontroller Whac-a-Veggie For this year's Trunk 'O' Treat game I wanted to make a something fun and excit kids to play so I choose a Whac- a-Mole type game called Whac-a-Veggie using the Veggie Tales characters. The Whac-a-Veggie game is played w foam..... Listed under: Development Board - Kits Projects, Game - Entertainment Projects, Projects

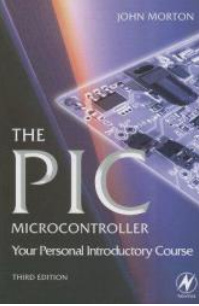
1037.


LED Strobe for PIC12F629 / 675 Description This project functions as a simple strobe for driving an LED. The use of an output transistor allows it pulse the strobe LED with a current up to 100mA. Four jumpers provide options for changing the pulse width, strobe repeat interval and single... under: LED Projects


Feedback / Suggestions

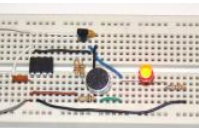



1038.  IRMimic™ Trainable IR Remote Control Transmitter using pic microcontroller IRMimic features: Simple to train - Can learn up to 16 IR commands, and each can be in a different format/protocol Two different operating modes - Keypad or MCU interface LED indicator output - Indicates training is complete Small size - 18 pin DIP IC..... Listed under: Other Projects


1039.  PIC16F84 Introduction The 16F84 is deserves looking at because it is the GranDaddy of PIC Microcontrollers but you should not use it for new dev (see Below)... The PIC16F84 is a the most well known and most well used of all the PIC microcontrollers - it is used..... Listed under: Microcontrol Programmer Projects


1040.  USB Voltmeter using pic microcontroller USB Voltmeter USB Voltmeter is a PC based dual channel voltmeter built around PIC18F2455 / PIC18F255 microcontroller that measures voltage from 0.00V up to 500.00V with 10mV resolution. USB Voltmeter sends measured data to PC via standard USB connection displaying data on a computer monitor..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Metering - Instrument Projects

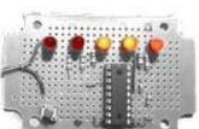
1041.  Aurora 9 bar – The Essence of Aurora using PIC24F08KA101 Aurora 9 bar - The Essence of Aurora Since the introduction of Aurora 9x18, I receive PCBs. I'm still quite undecided about making those available for a few reasons. However I really want other LED lovers (ok that might..... Listed u LED Projects, Projects

1042.  Microcontroller with single LED Project in Proteus This is a simulation project that shows how to write program in assembly language for PIC16F84 microcontroller that turns on a single LED and use it in Proteus VSM to stimulate the working of the microcontroller controlled LED. To do this, start creating a..... Listed under: LED Projects

1043.  Low cost OLED module interface using PIC18F452 Here are the technical specifications: OLED resolution: 96 x 64 pixels OLED manufacturer: OSR OLED model: Pictiva 1.1 inch OS096064PN11MY0B10 (San Diego.) On-board lcd controller SSD1303, with 31 pins connector, can be soldered dire Low power operation (less than 15-25mA @3V, depending on contrast/brightness setting)..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Pro LED Projects, Projects

1044.  A remote controlled power RGB LED mood light using PIC16F627A A remote controlled power RGB LED mood light. Control the colour of a power light beam with a remote control, store the colours and recall them at will. With this thing I can control the colour of a bright light into many different colours..... Listed under: Game - Entertainment Projects, Home Automation Projects, LED Projects, Projects

1045.  DIY plug-in modules to make microcontroller breadboarding easier Breadboards are a great tool for prototyping and testing electronics circuits. I am sharing with you some plug-in modules that I once made to make my breadboarding life easier. I have used these modules many times in the experiments described in this blog..... Listed under: Development Board - Kits Projects

1046.  Mini F1 race track Grid Start Lights using PIC12F627A (See big LED version here) My nephews got a Scalextric slot car racing circuit from Santa for Christmas. This was a blast-from-the-past for my brother and me and we were soon showing the kids how to race. However it quickly became apparent that "3-2-1-Go" wasn't..... Listed under: Game - Entertainment Projects, Projects

1047.



True USB GQ-4X Programmer using pic microcontroller <http://www.bubblesoftonline.com/pocket/pocket.html> {ed: Tony moved on, the web site is closed, but all the files are here: pocket.zip file containing all the files required to build the kit, install the Win32 application, setup the unit, and program chips. Also includes source code. This will extract to..... Listed under: Microcontroller Programmer Projects

1048.



ISD2560 Voice Recording Playback Project PIC16F84 Controlled ISD2560 to directly control the PIC16F84A, audio recordings and multiple block w driven directly speakers also, in view of the lack of volume, only added to the amplifier IC. This volume 10 minutes to drive the speakers. One..... under: Sound - Audio Projects

1049.



Aurora 48 - 48 RGB LED Sequencer Aurora 48 is a compact and thin profile full-color LED sequencer. It's built entirely with surface mount components so the profile is nice and clean. Step 1: Features Capable of individually controlling 48 Full color LEDs. Each LED can be faded in 7 bit per channel - 2,097,152..... Listed under: LED Projects

1050.



PIC Industrial and Domestic Timer (Relay Controller) Hi Friends, I hope everyone had a rocking New year I was suppose to give you all a New year uploading a new project, but unfortunately it got delayed 'coz I was busy with my *personal life* One of our site member, Jeswanth kumar..... Listed under: Clock - Timer Projects

1051.



Contactless Digital Tachometer using PIC Microcontroller Hey friends, I should have posted this project last month itself but there was some problem with the circuit. [link], author of this project did an excellent job. I have been watching him learning on this website. He came as a total noob but now he is a pro. Listed under: Security - Safety Projects

1052.



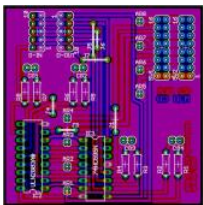
Rotary dialer PIC interface using PIC16F877 Rotary dialer PIC interface I have found myself with an abundance of rotary phones. In fact, they're everywhere I look. In hopes that I may someday see less of them, I've begun taking them apart and re-using the parts for other purposes. I found a reason..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Phone Projects, Projects

1053.



LED Sensors Things are moving along ... With my new understanding of I2C master/slave communications, I've started work on larger arrays and the best way to manage the array and communicate the data to the host PC. Above is the latest iteration of the project... and..... Listed under: LED Projects, Sensor - Transducer - Detector Projects

1054. Iron in the Fire II In my previous post, I write about an LED matrix for a marquee. The display itself is a two-board solution, the second board or 'daughterboard' piggy-backs some pin headers from the display board. This second PCB provides the control interface and logic for handling..... Listed under: Battery Projects



1055.

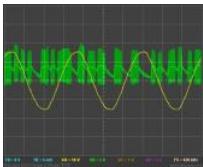


How to interpret the direction of rotation from a digital rotary switch with a PIC using PIC16F877A How to interpret the direction of rotation from a digital rotary switch with a PIC The objective for this Instructable is to illustrate how to interface a digital (quadrature coded) rotary switch with a microcontroller. Don't worry, I'll explain what [quadrature coded] means for us..... Listed under: How To - DIY - Projects, Projects

1056. Water Filter Controller As a fan of taking my dihydrogen monoxide in straight, uncut, uncorrupted liquid form, I purchased a six stage reverse osmosis filter some years ago. The filter is a few years old now, and the super calcium enriched water we have in Michigan has taken..... Listed under: Home Automation Projects



1057.



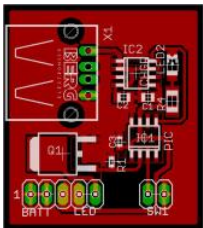
Interfacing with The Energy Detective using pic microcontroller I recently bought The Energy Detective (TED), a pretty inexpensive and friendly wa keep tabs on your whole house's electricity usage. It's a lot like having a more featureful version of your utility company's power meter, sitting on kitchen counter. It can estimate..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1058.



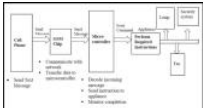
PIC Controlled Relay Driver using pic microcontroller We love to read emails from our visitors, Please let us know by clicking here if you find any k bug/error in our site. We will fix it as soon as possible. PIC Controlled Relay Driver This circuit is a relay driver that is..... Listed under: Other Proje

1059.



MintLite Part I MintLite – The Luxeon Powered Mint Tin Flashlight! This idea has been rattling around in my head for more than a month now, an finally have thought it out enough to do some doodling in Eagle. The basic idea is built around a six..... Listed under: Home Automation Projects

1060.



GSM based Control System by pic microcontroller GSM based Control System by pic microcontroller implements the emerging applications of th Technology. Using GSM networks, a control system has been proposed that will act as an embedded system which can monitor and control appl and other devices locally using built-in input and..... Listed under: Internet - Ethernet - LAN Projects

1061.



Interfacing of PIC16F84A with (i2c based) 24LC64 EEPROM (Code + Proteus simulation) This post provides the code for interfacing 24LC64 EEPROM PIC16F84A microcontroller. This 24LC64 EEPROM has i2c based interface and PIC16F84A doesn't have any built in i2c modules, so software i2c module created in the code. This code is written in C language using MPLAB with HI-TECH..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Me Storage Projects, Projects

1062.



LED Matrix Backpack I had purchased some huge (2") 5x7 matrix a while ago, as part of my led sensor research. They've basically been banging a the lab since, getting pins bent and such. So this past weekend, I decided to put them to some other use. Their..... Listed under: LED Projects

1063.



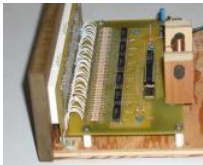
New Earth Time digital clock in recycled retro-modern case using PIC16F627A New Earth Time (NET) digital clock in recycled retro-modern case E confused by GMT, or just wish you had a cooler way to keep track of time? Build a New Earth Time clock! Using a PIC microcontroller, some code couple discrete parts,..... Listed under: Clock - Timer Projects

1064.



Reading Nintendo 64 controller with PIC microcontroller I have a few old N64 controllers lying around and figured that it would be pretty cool to them to control other things. In this article I will describe in detail every step I took to achieve this. I've used a PIC microcontroller, but..... Listed u Interfacing(USB - RS232 - I2c -ISP) Projects

1065.




PIC based WWVB clock Introduction There are many DIY versions of WWVB clock designs available on the web. Commercial "atomic" clocks are inexpensive and widely available, but I wanted to try my hand at designing one to gain insight into WWVB reception and to learn a little about programming..... Listed under: Clock - Timer Projects

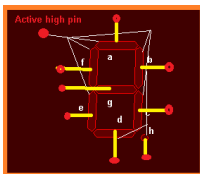
1066.





Prometheus/Pandora's Box using PIC12C508 microcontroller Prometheus/Pandora's Box Some of you monkeys out there think you can PWN me need to be Spanked. Here is an obfuscated ultraminimalized Monolith for you. It is enlightening and harmless, except to the devil, who really hat because I'm letting you have it..... Listed under: Other Projects, Projects, Radio Projects


1067.  A Real Time Clock IC (DS1307) project using the PIC micro. Making A Real Time Clock (RTC) is simple if you use a helper chip such as a DS1307 because you do not need to keep track of the length of each month or account for leap years. It is all done for you, plus you..... Listed under: Clock - Time Projects


1068. Interfacing 7 segment display with pic16f877 microcontroller This post will describe that how easily we can do Interfacing 7 segment display with pic16f877 microcontroller. A 7 segment display is a basically array of 7 leds with some proper arrangement. From this fig it can be seen that 7 leds arranged with an array..... Listed under: LED Projects





1069.  Implementation USB into microcontroller: IgorPlug-USB (AVR) using pic microcontroller Purpose of this article is to inform readers about implementation USB interface into singlechip microcontroller, which this interface directly not supports. Simply: implementation USB interface on a firmware level (similar as emulation of RS232 interface in microcontrollers, which not have RS232 support). This project includes development.... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects


1070.  RS232 Communication with PIC Microcontroller Description This article shows how to do a simple communication via a RS232 interface with a PIC microcontroller. RS232 is a standard for a serial communication interface which allows to send and receive data via at least three wires. With the interface it is..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

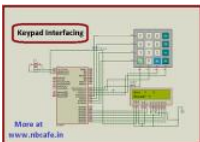
1071.  The Trickster – USB Computer Prank using PIC18F14K50 The Trickster - USB Computer Prank Plug The Trickster into your victim's computer, and randomly move their mouse while playing a game or using the desktop; Compatible with all operating systems Harmless fun: Acts as a second mouse and goes away when you..... Listed under: Game - Entertainment Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1072.  Four way traffic light signal using PIC16F84A microcontroller: Hi friends, today we are going to make a four way traffic light controller using a PIC microcontroller. In this project we will operate three LEDs (RED, YELLOW, and GREEN) according to the traffic rules. Illumination of the green light allows traffic to proceed in..... Listed under: LED Projects

1073.  How to adapt a NES clone controller to bluetooth using PIC12F675 How to adapt a NES clone controller to bluetooth I bought a Wireless Bluetooth RS232 TTL Transceiver Module from DX (SKU 80711) and wonder what i can do with it. So, I'm really nostalgic and decided to build a NES clone controller to bluetooth adapter,..... Listed under: Internet - Ethernet - LAN Projects, Projects

1074.  PIC16F877 ISA Ethernet Web Server Project The PIC16F877 microcontroller, prepared with activated an old ISA ethernet (3com ether! Link) Used for PIC internet connection with an application I'm not sure circuit aim could not understand the pic programming dealing with people who can solve resource assemblable asm PCBs (eagle) control program..... Listed under: Internet - Ethernet - LAN Projects

1075.  One PIC Microcontroller Platform Development Board One PIC Microcontroller Platform Development Board Develop firmware using Microchip 8/16/32-bit PIC® Microcontrollers all on one board! Each device comes preprogrammed with firmware to operate the LCD, LED and capacitive touch pads. In addition to three PIC® Microcontrollers, this board also has a dedicated..... Listed under: Development Board - Kits Projects

1076.  Keypad scanning and interfacing with PIC16f877 microcontroller Here I give you very important and simple project on Keypad / keyboard scanner interfacing with PIC16f877 microcontroller. To start big project you need to know small and necessary one first. So we start from basic. In my previous post I write on Scrolling..... Listed under: Security - Safety Projects

1077. "Mini-Beacon" miniature programmable LED Flasher that is based around a PIC12F629 microcontroller This project, called "Mini-Beacon", is a miniature programmable LED Flasher that is based around the PIC microcontroller. This project grew out of an idea and recommendation posted on RunRyder.com. The Mini-Beacon basically simulates



light emitted from a rotating light beacon such as those used in older..... Listed under: LED Projects



1078. Teddy nightlight multicolor using PIC16F84A microcontroller Teddy nightlight multicolor A nice night light multicolor, ideal for baby's room. For the realization I used: - Out of a pack of bubble bath for children in the shape of teddy bear - a nightlight with positive economic pressure - Complete with a..... Listed under: Game - Entertainment Projects, Home Automation Projects, LED Projects, Projects



1079. DIGITAL CLOCK CIRCUITS A Digital Clock can be made easily by using PIC Microcontroller, DS1307 and a 16*2 LCD. I have already posted about Interfacing DS1307 RTC with PIC Microcontroller. The DS1307 RTC can work either in 24-hour mode or 12-hour mode with AM/PM indicator. It automatically adjusts..... Listed under: Clock - Timer Projects

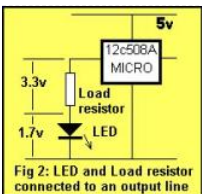


1080. Project on making calculator using PIC16F877 and Mikro C Pro Here I give you tutorial of Project on making calculator using PIC16F877 and Mikro Pro. After go through this project and learn the technique you can implement in your project. In my previous post I show you how to interface ke x 4 matrix's Listed under: Calculator Projects

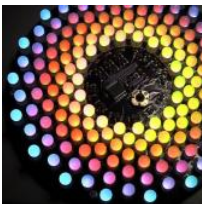


1081. Interfacing of PIC16F84A with DS1307 (RTC) code and Proteus simulation This post provides the code for interfacing DS1307 RTC with PIC16F84A microcontroller. This DS1307 RTC has i2c based interface and PIC16F84A doesn't have any built in i2c modules, so software i2c module created in the code. This code is written in C language using MPLAB with HI-TECH C compiler. You..... Listed under: Interfacing(USB - RS232 - I2c - Projects, Projects

1082. A discussion on the drive-current for the outputs of a PIC12C508A microcontroller Each of the output lines of a '508A microcontroller can deliver a maximum of 25mA. What does this mean? It means any device connected to the line must take 25mA or less. If it takes more than 25mA a buffer transistor (also called an amplifying..... Listed under: Projects



1083. POV Toy I recently had the urge to create some "eye candy"; Thinking along the lines of my LED Sign (it's not dead, just waiting on parts!), I chose to create a similar effect, using only a single line of leds, instead of a 5x7 array. Persistence..... Listed under: Game - Entertainment Projects



1084. Aurora 9x18 RGB LED art using PIC24F08KA101 microcontroller Aurora 9x18 RGB LED art *** Check out my blog for updated version of this project more! *** My obsession of LEDs has led me to this. Aurora 9x18 is a thing of beauty (if I can say so myself) - has 162 RGB-LEDs..... Listed under: Projects, Projects, PWM Projects

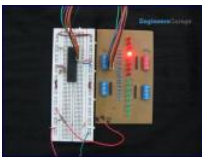


1085. PIC16C54 dual dice electronic project circuit An electronic dice project circuit can be designed in various modes, using logic circuit or using microcontrollers. This electronic project is based on the PIC16C54 microcontroller, manufactured by Microchip. This project is a simple dual dice electronic project, that use few external electronic parts..... Listed under: Development Board - Kits Projects



1086. A pic programmer circuit based on AN589. using pic microcontroller AN589 is microchip's application note for a parallel port pic programmer circuit which I chose as I wanted something reliable to get up and running quickly. It is really quite a simple circuit and its main objective is to provide IC connections to your pic..... Listed under: Microcontroller Programmer Projects

1087. How to use Timers in PIC18F4550 Microcontroller Timers as the name suggests pertain to time-related operations. They are mostly used for exact delay generation. Time is also used in various other operations like PWM signal generation, auto-triggering of several other peripherals etc. The working and configuration of PIC18F4550 Timers is



been explained..... Listed under: Clock - Timer Projects, Projects

1088.



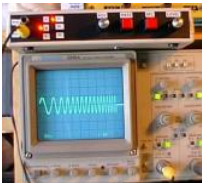
High res cap meter with PIC 16F628 High resolution capacitance meter measures in 0.01pF digits. Total range 0pF to 50uF. - 27th Jun 2011, Updated May 2013. Another PIC based capacitance meter? Although there are a few PIC based "pico" capacitance meters on the internet this design has several advantages over..... Listed under: Metering - Instrument Projects

1089.



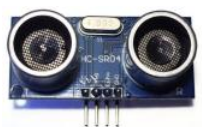
Time Display unit for a GPS module using pic microcontroller I decided to build a device to permanently display accurate time received from a GPS module installed in my workshop. Having obtained a PIC18F1320 microcontroller for experimentation, I wanted to learn about the new features of the PIC18F range using only minimal hardware to..... Listed under: Clock - Timer Projects, GPS Based Projects

1090.



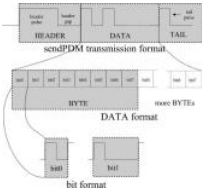
Sine Triangle Square Saw Burst Sweep Noise – runs on a PIC16F870 After the recent demise of our multifunction signal generator, we decided to build one of our own. The circuit uses a PIC16F870 (about \$3), an R/2R resistor ladder network (for a real fast and cheap D/A), and a few other parts. Check out..... Listed under: Metering - Instrument Projects

1091.



Object Detecting Android Mobile Phone Controlled Bluetooth Robot Using PIC Microcontroller 16F877A Last time we had a project on Arduino with Bluetooth and Android, and in that one our readers Mr. Paul asked how he can make an obstacle avoidance robot. So today I came up with an engineering project for electronics and communication students, Android and..... Listed under: Bluetooth Projects, Robotics - Automation Projects

1092.



Computer controlled infrared transmitter based on PIC description This is a programmable infrared (remote control) transmitter, which can be controlled from a computer serial port. It is capable of sending many remote control formats, including the Philips RC-5 standard. Exact format timing parameter names are shown on the pictures: operation..... Listed under: Metering - Instrument Projects

1093.



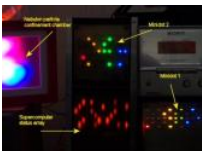
8x8 LED Array Multiplexed Infinity Mirror using PIC18F1320 microcontroller 8x8 LED Array Multiplexed Infinity Mirror A little bit different than a regular Infinity Mirror. Using a piece of mirrored acrylic for the back mirror, 8 rows of 8 holes are drilled into in a grid pattern. A LED is placed in each hole..... Listed under: LED Projects, Projects

1094.



Ways to Select a Best Microcontroller for Microcontroller based Projects Do you know how to select the best microcontroller for microcontroller projects? Selecting the proper microcontroller for a given application is one of the most critical decisions, which controls the success or failure of a task. There are different types of microcontrollers available and..... Listed under: Memory - Storage Projects

1095.



Minidot 2 – The holoclock using PIC16F88 microcontroller Minidot 2 - The holoclock Well maybe holoclock is a little bit inaccurate....it does use holographic dispersion film on the front to give a bit of depth. Basically this instructable is an update to my previous Minidot located here: <http://www.instructables.com/id/EEGLXQCSKIEP2876EE/> and re-using a lot of..... Listed under: Clock - Timer Projects, Game - Entertainment Projects

1096. embedded microchip Microchip Technology Inc. is a Leading Provider of Microcontroller and . (Nasdaq: MCHP) Manufactures and markets a variety of VLSI CMOS semiconductor components to support the embedded control market.www.microchip.com - 143k - CachedMicroch Microchip Technology Inc. is a Leading Provider of Microcontroller and . (Nasdaq:..... Listed under: Other Projects

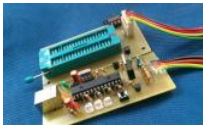


1097. Robot 1: "Little Jimmy" based on PICAXE-18M2 Robot 1: "Little Jimmy" based on PICAXE-18M2 I wanted to build this little robot to give me a fun and flexible platform for learning more about programming, RC (radio-control), drive trains (the mechanics that make it go) and the newest PICAXE processor, the 18M2. Under..... Listed under: Projects, F



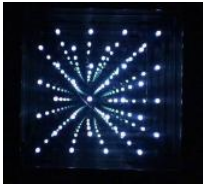
- Automation Projects

1098.



USB PIC Programmer : PICKit2 using pic microcontroller Microchip's PICKit2 is much more comfortable, reliable and powerful than the other programmers that we can find all over internet. It is a USB based ICSP (In Circuit Serial Programming) programmer. Since it is a first release, Micro published all the resources of PICKit2 public, which includes hardware..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1099.



8x8 LED Array Multiplexed Infinity Mirror using PIC18F1320 8x8 LED Array Multiplexed Infinity Mirror A little bit different than your regular Infinity Mirror. Using a piece of mirrored acrylic for the back mirror, 8 rows of 8 holes are drilled into in a grid pattern. A LED is then placed in each hole.. Listed under: LED Projects, Projects

1100.



picLink RS232 low cost development controller with ADC using PIC16F628A PicLink RS232 low cost development controller with ADC PICLink RS232: Embedded Controller The PICLink RS232 controller module affords any microcontroller enthusiast an easy to construct mini-microcontroller module. This embedded microcontroller is ICSP (in circuit serial) programmable and provides separate PORTA, PORTB, RS232 I/O ports, 4..... Listed under: Projects, Projects

1101.



DC Motor Control using Temperature Sensor & 8051 Microcontroller Microcontroller are widely used in electronics gadget and are one of the key element in developing any project and thus this project used 8051 microcontroller and will help in teaching about interfacing of temperature sensor with ATMEL microcontroller by means of ADC, to display the..... Listed under: Motor Projects, Sensor - Transducer - Detector Projects

1102. Small Virtual Wall for iRobot Roomba using PIC12F629 The Virtual Wall is a circuit to mimic the behaviour of the iRobot Virtual Wall/Lighthouse, provided with the robot. It produces the same infrared pattern and the robot sees it as another virtual wall, blocking its path, while vacuuming. This circuit was built mostly using SMD..... Listed under: Projects, Robotics - Automation Projects

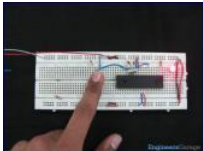


1103.



PIC Frequency Counter with Frequency Lock function Table of Content: Frequency Reference Frequency Actual Subtraction and Comparator Digit Outputs Integrator Transistors Q2....Q4 Connection to Oscillator How to tune? PIC SW in the frequency counter Final test RB2 Function Is this worth build it? Pictures are better readable locally with appropriate viewer,..... Listed under: Home Automation Projects

1104.



How to use PIC16F84A pin as input (Code+Proteus simulation) This post provides an example code to use PIC16F84A pins as inputs. After going through this example, you will understand how to make PIC16F84A pins as inputs and how to read their value in the code. This code is written in C language using MPLAB with..... Listed under: Other Projects, Projects

1105.



A Cheap Ultrasonic Range Finder HOW DOES IT WORK & CIRCUIT SCHEMATIC Everybody knows the speed of the sound in the dry air is around 340 m/s. Send a short ultrasonic pulse at 40 KHz in the air, and try to listen to the echo. Of course you won't hear anything,..... Listed under: LCD Projects

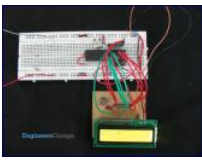
1106.




A Programmable Optical Slave Flash Trigger for Digital Cameras with Processor PIC 12F675 The synchronizer ensures a contact-free, optical synchronization of external photographic flashguns. The triggering of the external flash is derived from embedded flashes of a camera. It can be used for both digital and "analogous" cameras or for a remote synchronization of the actual flash units..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Video - Camera - Imaging Projects

1107.

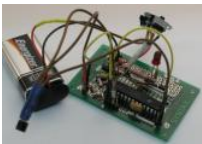
How to interface LCD with PIC18F4550 Microcontroller The character LCDs are the most commonly used display modules. These LCDs are used to display text using alphanumeric and special characters of font 5x7/5x10. For basic working and operations of a character LCD, refer LCD interfacing with 8051. Here PIC18F4550 has been used to..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, Projects





1108.  Car Anti theft System Project using Microcontroller PIC16f73 For a while we have been sharing many electronic projects for engineering students then we found out there was a huge demand for embedded projects, especially PIC microcontroller based projects. After a short break, here is a outstanding one that is not only suitable..... Listed under: Car Projects, Security - Safety Projects


1109. Car Anti theft System Project using Microcontroller PIC16f73 For a while we have been sharing many electronic projects for engineering students and then we found out there was a huge demand for embedded projects, especially PIC microcontroller based projects. After a short break, here is another outstanding one that is not only suitable... Listed under: Car Projects

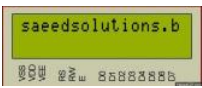



1110.  1-Chip 4-Channel PIC16F886 Data Logger This project has only a few modifications from the "Single Chip, Four Channel Datalogger" article by Da Gravatt in the 2008 January Issue of Nuts&Volts (page 42), so I won't go into much detail. Below is the schematic. The changes from Dan's datalogger that..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects


1111.  Converting a Proxxon MF70 Milling Machine To CNC – 4 using PIC24FJ64GB002 At the start of this series of posts, I said I did not want a PC to control Milling Operations, so some local delivery method of supplying the gcode files is required. Having said that, the system is 'open', and a simple XO terminal..... Listed under: CNC Machines Projects, Projects

1112.  Aurora 9 bar – The Essence of Aurora using PIC24F08KA microcontroller Aurora 9 bar - The Essence of Aurora Since the introduction of Aurora 9x18, I received many requests for the kits and PCBs. I'm still quite undecided about making those available for a few reasons. However I really want to thank the Aurora lovers (ok that might..... Listed under: Game - Entertainment Projects, LED Projects, Projects

1113.  Connect Flash Card with PIC18F4520 The Compact Flash Library provides routines for accessing data on Compact Flash card (abbr. CF) further in cards are widely used memory elements, commonly used with digital cameras. Great capacity and excellent access time of only a few microseconds make them very attractive..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

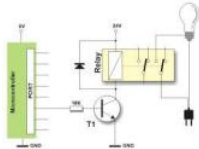
1114.  PIC16F877 LCD code and Proteus simulation This PIC16F877 microcontroller tutorial provides very detailed and comprehensive LCD[1] code. Using PIC16 simulator (Proteus) you can verify this LCD code and change it according to your needs. This code is written in C language using MPLAB with the TECH C compiler. You can download this code from..... Listed under: LCD Projects, Projects


1115.  Construction of personal Radar System using PIC Microcontroller PIC18f452 Personal Radar System using PIC Microcontroller PIC18f452 is a microcontroller hobby project. The circuit diagram of radar is attached here below seemed a little bit simple schematic but you need careful reading of PIC18f452 radar circuit to avoid any damage. The project of personal Radar..... Listed under: Sensor - Transducer - Detector Projects


1116.  01/Vatch using PIC16F913 microcontroller Intro: 01/Vatch The 01/Vatch, because... "there are 10 types of people in the world, those who read binary and those who don't" - a slashdot tag line. The 01/Vatch is a binary wrist watch with an LED display. Additional features are accessible through a scrolling..... Listed under: Projects


1117. Aurora mini 18 using PIC24FV16KA302 microcontroller Aurora mini 18 My obsession of this year is full-color LED. I have made Aurora 9x18 as a result. As much as I love the Aurora 9x18, I also wanted to have something smaller, perhaps something that can go on a costume? Here's..... Listed under: Other Projects, Projects




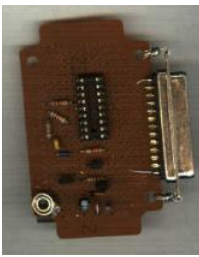
1118.  Connect to the PIC Microcontroller A Simple Development Board Ok, so you have now got your programmer, and you have a PIC or two. It is all v knowing how to program the PIC in theory, but the real learning comes when you try your code on a PIC..... Listed under: Development Board - Projects

1119.  SD Memory Card Interface using pic microcontroller SD memory cards, especially the ones under 1GB are cheap, relatively easy to interface and vast amounts of memory for imbedded control. This device lets you 'talk' to sd cards through your serial port. Communication is in ASCII so you j need a terminal..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Memory - Storage Projects

1120.  PIC12F675 Microcontroller Based Security Alarm Circuit Crime in general is still on the rise, and having a security alarm installed is no longer a pe of the wealthy! Here is a simple and compact security alarm system to protect your home/shop and valuables. The circuit is built around a tiny microcontroller..... Listed under: Security - Safety Projects


1121.  Tejas Kulkarni's Lab Notebook using pic microcontoller Week 01 August 15, 2010 (2 hours): Met as a team after class to finish writing preliminary proposal. January 17, 2010 (2 hour): Brained stormed the possibilities of developing a multi-touch table. The Multi-touch table would require an camera as an interface for..... Listed under: Video - Camera - Imaging Projects

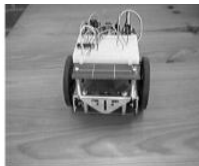
1122.  DMM Piggyback (add RS-232) using PIC16F688 microcontroller DMM Piggyback (add RS-232) There are mods that give a multimeter serial connec soldering some pins but, it only works if it already has RS-232 ability. So I decided rather than building a PIC multimeter from scratch, I would Pig off a \$4 DMM..... Listed under: Other Projects, Projects


1123.  PICMicro Programmer with the "ElCheapo" using PIC16F84 Since I first released this circuit for a serial PICMicro programmer, I have been getting feedback from people that have been building it as their first PICMicro programmer. It has been really nice to hear comments from people about experiences building the..... Listed under: Microcontroller Programmer Projects, Projects

1124. Right-left scrolling LEDs Project description: In this project, 8 LEDs are connected to PORT B of a PIC microcontroller. Also a push-button switch is connected to bit 0 of PIC using a pull-up resistor.. When the switch is pressed the LEDs scroll to the right. Hardware: The..... Listed under: LED Projects

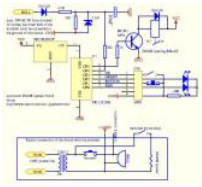


1125.  PC Interfacing a GameBoy Camera using PIC18F4620 microcontroller PC Interfacing a GameBoy Camera Here's another past project of mine from couple of years ago. At that time I was looking for a low-res camera for simple robotics image processing, and all I had experience with was PIC (' and 18) microcontrollers. So I didn't really..... Listed under: Game - Entertainment Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Projects, V Camera - Imaging Projects

1126.  Servomotor-based mobile robot control Project description: Mobile robots are used in many industrial, commercial, research, and hobby applic: This project is about the control of a mobile robot using servomotors. The robot used in this project is the base of a popular mobile robot known Bot, developed..... Listed under: Motor Projects, Robotics - Automation Projects

1127.  How-to: USB remote control receiver using pic microcontoller ow that we listen to MP3s, and watch XVIDs or x264s, a computer is the entertain center in at least one room of most homes. Unless you have a special HTPC, though, you're probably stuck using the keyboard to pause, change volume, and fast-forward..... Listed under: How To - DIY - Projects, Interfacing(USB - RS232 - I2c -ISP) Projects

1128. Door lock opener description This circuit can be used to operate an electric strike or an electromagnetic lock on a door. It is not the door being opened/closed, but a small electromagnetic strike which unlocks the door. The opener has the following features currently programmed in softw automatic..... Listed under: Home Automation Projects, LED Projects



1129.



PIC microcontroller development board using pic microcontroller Development board backplane Plug-in part by wave soldering process , the board is neat reverse . The curved surface of the pad foot , guaranteed not to scratch your desktop. The system uses a fully independent module design , leave enough space to the..... Listed under: Development Board - Kits Projects


1130.



Connect ADC with PIC16F877 ADC (Analog to Digital Converter) module is available with a number of PIC MCU modules. ADC is an electronic circuit that converts continuous signals to discrete digital numbers. ADC Library provides you a comfortable work with the module. Library Routines ADC_Init ADC_Get_Sample ADC_Read ADC_Init Prototype..... Listed under: Metering - Instrument Projects

1131. Connect ADC with PIC16F877 ADC (Analog to Digital Converter) module is available with a number of PIC MCU modules. ADC is an electronic circuit that converts continuous signals to discrete digital numbers. ADC Library provides you a comfortable work with the module. Library Routines ADC_Init ADC_Get_Sample ADC_Read ADC_Init Prototype..... Listed under: Metering - Instrument Projects



1132.  Connect CAN Protocol with PIC The mikroC PRO for PIC provides a library (driver) for working with the CAN module. The CAN is a very robust protocol that has error detection and signalization, self-checking and fault confinement. Faulty CAN data and remote frames are re-transmitted automatically, similar to the Ethernet..... Listed under: Internet - Ethernet - LAN Projects

1133.



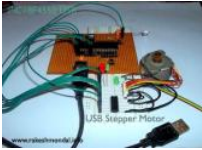
Connect CAN-SPI with PIC Controller The SPI module is available with a number of the PIC compliant MCUs. The mikroC PRO for PIC provides a library (driver) for working with mikroElektronika's CANSPI Add-on boards (with MCP2515 or MCP2510) via SPI interface. The CAN is a very robust protocol that has..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects

1134.



Real Time Clock Circuit using Microcontroller Here I am going to teach you a simple circuit of 24 hour digital clock display that can also be used in 12 hour format by simply loading the corresponding clock program. You can download the hex files for both 12 hour format and 24..... Listed under: Timer Projects

1135.



USB Stepper Motor Driver using pic microcontroller USB Stepper Motor Driver In this project we are going to drive a unipolar Stepper motor (5V) using USB interface from a PC Computer. This project is an application of the USB Interface Board PIC18F4550 which was published here in the project can..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Motor Projects

1136.



C-52EV Robot Controller Use a C-52 EVB for simple robot experiments. Build a simple two wheels robot with L293D H-Bridge driver and IR sensor. Write a C program controls robot tracked with black tape. Fun with VING-PEAW Competition 2543, course layout, day-by-day changed rule and score also included!..... Listed under: Robotics - Automation Projects

1137.



Building your own Simple Laser Projector using the Microchip PIC12F683 Microcontroller The 8 pins PIC12F683 microcontroller is one of the smallest members of the Microchip 8-bit microcontroller families but equipped with powerful peripherals such as ADC and PWM capabilities. This makes the microcontroller suitable for controlling the DC motor speed. In order to demonstrate..... Listed under: Other Projects

1138. Night Light Saver V3.2 (PIC12C508) A Microchip PIC12C508 8-pin CMOS Microcontroller turns a night light on and off with preset time everyday. Save Energy, No EMI, No ESD, Built-in Lamp Fixture, and Peak Shaving Introduction It's time for 8-pin microcontroller Microchip PIC12C508, the SAVER V3.2, my latest design of a..... Listed under: Home Automation Projects



1139.



Rainbow LED Chaser I was bored this past sunday, and needed something to ease my racing brain ... so I picked an easy project with lots of flash parts list: Eight Tri-Color or RGB leds ... each led package contains three LEDs Three 74HC595 Shift Registers Listed under: LED Projects

1140.



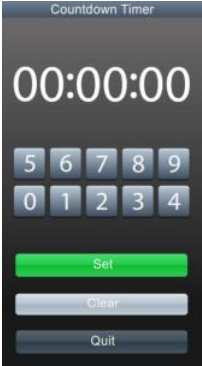
PIC based WWVB clock Introduction There are many DIY versions of WWVB clock designs available on the web. Commercial "atomic" clocks are inexpensive and widely available, but I wanted to try my hand at designing one to gain insight into WWVB reception and to learn a little about programming..... Listed under: Clock - Timer Projects

1141.



NJM2035 - HI-FI Stereo Encoder / Multiplexer using pic microcontroller Part's List: 2x 47K 1x 10K 1x 82K 1x 50K POT 1x 33uF 1x 10uF 3x 100nF (10 100pF (101) 1x 10pF (10) 1x NJM2035 IC 1x 38 KHz Crystal Technical Specifications: Voltage Supply: 1.2V - 3.6V MAX Current Draw: >3mA Channel Separation: <..... Listed under: Sound - Audio Projects

1142.



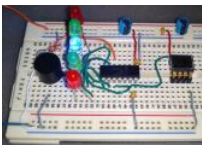
Countdown Timer using PIC16F690 microcontroller This is a simple countdown-timer-on-a-chip project - you program the PIC, attach some buttons, a pair of 2-segment LEDs, and you are done. I used this timer for one of my projects, but I tried to make that timer as generic as possible, so..... Listed under: Clock - Timer Projects, Projects

1143.



Introducing PIC Microcontroller projects PIC Microcontroller Development Tools History PIC microcontroller Development Board (Completed on 11/28) The ultimate PIC Microcontroller development board. After years of programming PIC microcontroller, I have finally design my super development board to program PIC microcontroller firmware. The automatic programming mode select and the 40..... Listed under: Microcontroller Projects

1144. Build a digital spirit level using a SCA610 accelerometer using PIC16F684 A bubble or spirit level meter is a handy tool to find whether a surface is horizontal or vertical. It is carried by civil engineers, mechanical engineers, surveyors, carpenters, and many other professionals whose work involve precise alignments of horizontal and vertical planes. Original spirit levels..... Listed under: Metering - Instrument Projects, Projects



1145.



Music player built on microcontroller AT91SAM7S256 with ARM core 1. The player allows: playback wav files in stereo format, 22,500Hz frequency, 16 bits of resolution, display the song titles, display time of songs, the possibility of stopping (pause) and switch songs, the possibility of change volume (-), read data from the MMC..... Listed under: Sound - Audio Projects

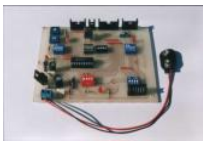
1146.



Seven Segment Display Thermometer with PIC Microcontroller The seven segment display is one of the most popular numeric displays used in many microcontroller applications because it's cheap, robust and reliable. The seven segments actually consists of 8 LED (Light Emitting Diode) and it's available with various sizes suitable for various numeric display..... Listed under: Metering - Instrument Projects

1147.

PIC16F84 Evaluation Board Introduction When I set, some time ago, about working with a PIC 16x84, I had immediately to face the problem to have a permanently and stably working circuit, without mounting the PIC on a prototype board every time. Searching on the net, I didn't find..... Listed under: Development Board - Kits Projects, Projects

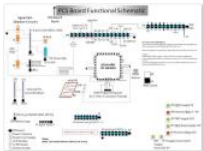


1148.



Microcontroller Controlled Metal Detector Projects Result of displays in the form of two scales, which are estimated to judge the material goal. In addition, the screen is small scale level of response and the current supply voltage. PIC18F252 The program is intended for controller PIC18F252 controller PIC16F873 (A) to this version..... Listed under: LCD Projects

1149.



Gen 3.2 PCS Board Design Gen 3.2 General Components GPS, SBC Configuration

Microservers, Vexel Microservers, Quick Reference, Data Acquisition, Middleware Listed under: Development Board - Kits Projects

1150.



Q-matic Circuit Application of PIC16F877 Microcontroller In this article I used in banks and hospitals will give information about the Q-matic s. I've routing circuit board (main board) and consists of three separate teller. Routing PIC16F877 on board, if the teller did not use pic16f876 in each. T as..... Listed under: LED Projects

1151. The Ultra-QP An Ultrasound QSO Party Rig Fun & Educational! Imagine veterans and potential radio licensees gathered in a classroom, seated side-by-side facing the front headphones on and a key at hand – both plugged into their QSO Party Rigs they each built the previous week - exchanging code as directed by designated net control!..... under: Game - Entertainment Projects



1152.



PIC16F628 4 RGB LED PWM Controller using pic microcontroller I am a big fan of LEDs. Bright, colorful, flashing LEDs. So, given my affinity for LEDs, I decided to work on a controller that me and a few of my friends could use as an art project/passive information display. I have posted videos on YouTube. Listed under: LED Projects

1153.



PIC18F2550 : Blink LED using XC8 Compiler Welcome to another chapter of PIC18F programming Tutorial. In this chapter we are going to program a simple 28 pin PIC18F2550 microcontroller using mplabx IDE and XC8 Compiler. The concepts for programming a pic18f2550 microcontroller is to be almost same as previous tutorials..... Listed under: LED Projects

1154.



RC Servo Switcher using pic microcontoller Introduction Some fellow members of The Abbenay Hackspace (an open hacker space based in Stockholm, Sweden) are embarked on an ambitious project with the aim of being the first to build an autonomous sailing robot which is capable of circumnavigating the Earth. The project is..... Listed under: Robotics - Automation Projects

1155.



USB Interface Board Tutorial Using PIC18F4550 USB Interface Development Board Tutorial -1 STAGE/PART-1 MAKING OF THE MAIN CIRCUIT BOARD CONTROL YOUR DEVICES FROM COMPUTER USING USB PORT – pic18f4550 + MPLAB IDE INTRODUCTION (USB PROJECT) : STEP 1 This project demonstrates a computer control interface using a USB Board. (USB..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1156.



Infrared IR Sensor Interface with PIC18F4550 Microcontroller IR Sensor Interface with PIC18F4550 In my previous project we have made a simple sensor Circuit. In this project, as promised before – we are going to demonstrate a PIC18F4550 microcontroller interface to IR sensor circuit. We are going to glow few on..... Listed under: Sensor - Transducer - Detector Projects

1157.




Stepper Motor Speed Control with PIC18F4550 Stepper Motor Drivers USB Stepper Motor Driver Stepper Motor Driver PIC18F4550 --Stepper Motor schematics Stepper Motor Speed Controller Stepper Motor driver PIC18F2550 IR Interinterface to Stepper Motor Stepper Motor Speed controller using PIC18F4550 This tutorial is all about tuning the speed of a stepper motor..... Listed under: Motor Projects

1158.

A DDS Module based on the AD9835 using PIC16F84 Table of contents Purpose Disclaimer Schematics PCB Pictures of the finished module Note comments SSTV Testgenerator Credits Purpose While working on a project I came across the DDS chips from Analog Devices. Especially the AD9835 is very attractive to me because of its super simple..... Listed under: Other Projects, Projects



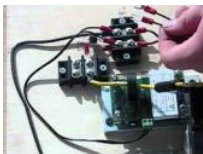
1159.  How to interface MAXIM's DS18B18 digital potentiometer with a PIC microcontroller Potentiometers find applications in many electrical devices. For example, a light dimmer uses a potentiometer to control the brightness of lamps. In amplifiers, they are used to control the output volume of the music, or change the bass level. In an adjustable power supply we..... Listed under: How To - DIY - Projects, Interfacing(USB - RS232 - I2c -ISP) Projects



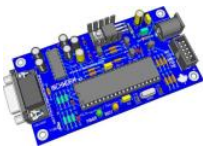
1160. PIC16F84A Gas Detector using GH-312 sensor Introduction This is a gas detecting circuit capable of sensing many different types of gases. The sensor used is the GH-312 and from the datasheet it is capable of sensing gases like smoke, liquefied gas, butane and propane, Methane, alcohol, hydrocarbons..... Listed under: Sensor - Transducer - Detector Projects



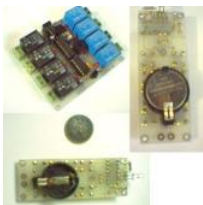
1161. Stepper Motor Driver using PIC18F4550 Microcontroller Stepper Motor Tutorial In this tutorial we are going to drive a Single unipolar stepper motor using PIC18F4550 Microcontroller in various different stepping modes. The source code and Project files are free to download at the end of this tutorial. Listed under: Motor Projects



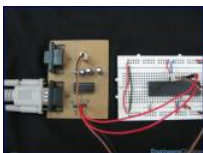
1162. Serial Data Logger with PIC microcontroller The data logger consists of a simple op-amp amplifier circuit that amplifies the signal and sends it to a computer via a PIC16F688 microcontroller, serialized, and sent to the computer's serial port via a MAX232 serial driver: I guess you are already wondering about some..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1163. Building the Inchworm ICD2 PIC Programmer / Debugger using PIC16F877 Building the Inchworm ICD2 PIC Programmer / Debugger This instructable provides an illustrated walk through building an ICD2 clone called the Inchworm. It's a straight forward kit that lets you build an MPLAB ICD2 compatible PIC Programmer and Debugger. There are lots of Programmers out there..... Listed under: Microcontroller Programmer Projects, Projects



1164. 8 Channel IR Remote Control This IR remote control that you can use to control other devices or circuits up to 8 devices. The control codes are in the RC5 format modulated to about 38 kHz carrier frequency. The IR transmitter is powered by the CR2016 which is a 3V button cell..... Listed under: Home Automation Projects



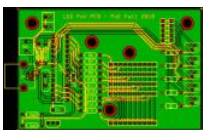
1165. How to configure EUSART in PIC18F4550 Both, Parallel and Serial modes of communication have certain advantages and disadvantages over one another. The serial communication is a preferred option due to its ability of long distance communication with error detection capability. The microcontrollers consist of an inbuilt hardware unit known as USART..... Listed under: How To - DIY - Projects, Projects, Tutorials



1166. Discolight effect with bass beat control using PIC16F84A Short description of the operation: External circuit converts bass beat of music into pulses which control an LED motor is controlled by them. If there's a bass beat recognised then the motor rotates one direction (in full stepping) for a predefined time then stops when the second beat comes..... Listed under: LED Projects



1167. PIC18F2550 Project Board using PIC microcontroller The new PIC18F2550 Project Board was designed as the development platform for student projects. The board features MCU: PIC18F2550 with external xtal, ADC: one channel 0-2.5V sigma-delta converter, Linear Technology LTC2400/LTC2420, 6-10-bit ADC 0-5V, Display: Two connectors for text LCD or GLCD, USB: on-chip..... Listed under: Development Board - Kits Projects

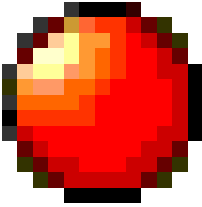



1168. LED Persistence of Vision Display Electrical The main components of the electrical system were the timing system and the LED control system for the LEDs using a single PIC. A schematic of the system is shown below (click for larger view): timing In order to time the display properly to..... Listed under: LED Projects

1169. USB & GLCD expansion board for 8051SBC using PIC microcontroller Simple expansion board for 8051SBC provides easy USB port and graphic LCD interface. I am planning to design the x86 board for some of my application that needs more computing capability. One of the features that I need to add to the x86 board is..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects




1170. Connect I²C with PIC The I²C full master MSSP module is available with a number of PIC MCU models. mikroC PRO for PIC provides library which supports the master mode. Important : Some MCUs have multiple I²C modules. In order to use the desired I²C library routine,..... Listed under: Interfacing(USB - RS232 - I²C -ISP) Projects




1171.  Digital DCF77 clock with LCD and gong using PIC16F628A Always the right time and date with DCF77 This project make use of a PIC16F628(A) and DCF77 receiver from Conrad (Orderno. 64 11 38) Optional there is a possibility to connect an electronic gong on it. Click for information about DCF77 the link underneath: The working..... Listed under: Clock - Timer Projects, Home Automation Projects, LCD Projects, Projects



1172.  The One Chip Spinning RGB POV Display with conversion software using PIC18F4680 microcontroller The 'One Chip Spinning RGB POV Display' w conversion software. If you have been on the look out for a project that combines, RGB LED's, a motor, a microcontroller and a ridiculous amount of melt glue, then you have certainly come to the right..... Listed under: Other Projects, Projects




1173.  Connect Matrix Keypad with PIC Controller Code The mikroC PRO for PIC provides a library for working with 4x4 keypad. The library routines can be used with 4x1, 4x2, or 4x3 keypad. For connections explanation see schematic at the bottom of this page. External dependencies of Keypad Library are as follows:
following variable..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects




1174. PIC Evaluation/Development Board Implementation using pic-microcontroller Abstract The objective of this project is to produce a PIC evaluation/development board to be used by future ECPE senior design project teams. Many project implementations call for some sort of microcontroller unit in the final product, and this need can often be met by..... Listed under: Development Board - Kits Projects




1175.  USB Indoor/Outdoor Thermometer using PIC18F4550 microcontroller USB Indoor/Outdoor Thermometer (or, 'My first USB device') This is a simple USB peripheral on the PIC 18Fs. There are a bunch of examples for the 18F4550 40 pin chips online, this design demonstrates the smaller '18F4550-20' pin version. The..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Temperature Measurement Projects

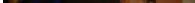


- | | | |
|-------|---|---|
| 1176. |  | <p>Connect Memory Card using PIC18F4520 Code The Multi Media Card (MMC) is a Flash memory card standard. MMC cards are currently available up to and including 32 GB and are used in cellular phones, digital audio players, digital cameras and PDA's. mikroC PRO for PIC provides a library Listed under: Memory - Storage Projects</p> |
|-------|---|---|




1177.  Connect USB HID with PIC18F4450 Code Universal Serial Bus (USB) provides a serial bus standard for connecting a wide variety of devices, including computers, cell phones, game consoles, PDA's, etc. USB Library contains HID routines that support HID class devices, and also the generic routine can be used with vendor..... Listed under: Interfacing(USB - RS232 - I2c - ISP) Projects

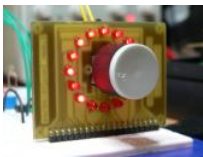



1178.  GSM Based Versatile Robotic Vehicle Using PIC Microcontroller This project is designed to develop as a robotic vehicle that can be controlled by a phones. DTMF commands from a phone send to another cell phone which is mounted on the robotic vehicle. These commands are fed to a PIC microcontroller of 8-bit..... Listed under: Robotics - Automation Projects



1179.  TechBot line following robot using PIC16F84 Design Goal: The TechBot1 is a small line following robot designed for for the 1998 Embedded Systems conference in San Jose California. It was built by Jerry Merrill and myself and was designed as a promotional robot that would follow a black line on..... Listed under: Projects, Robotics - Automation Projects

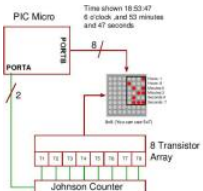
1180.  UART Communication using PIC Code The UART hardware module is available with a number of PIC compliant MCUs. The mikroC PRO for PIC U/L Library provides comfortable work with the Asynchronous (full duplex) mode. You can easily communicate with other devices via RS-232 protocol. For example with PC, see the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
-
1181.  Connect Ethernet controller with PIC Code The ENC28J60 is a stand-alone Ethernet controller with an industry standard Serial Peripheral Interface. It is designed to serve as an Ethernet network interface for any controller equipped with SPI. The ENC28J60 meets all of the IEEE 802.3 specifications and incorporates a number of..... Listed under: Internet - Ethernet - LAN Projects
-
1182. Create Musical Tone using PIC Code The mikroC PRO for PIC provides a Sound Library to supply users with routines necessary for sound signalization in their applications. Sound generation needs additional hardware, such as piezo-speaker (example of piezo-speaker interface is given on the schematic at the bottom of this page). Library..... Listed under: Sound - Audio Projects
-
1183.  Project Ryu Lager Guitar Pedal Take 3 using pic microcontroller It has been a quiet period but a very busy period, very active and very fruitful. I was launching the projectryu.com site soon with tons of free resources for the audio hobbyist. Getting back to the title of this post, I would like to..... Listed under: Sound - Audio Projects
-
1184.  Extend I/O Ports using PIC Microcontroller The mikroC PRO for PIC provides a library for communication with the Microchip's Port Expander MCP23S17 via SPI interface. Connections of the PIC compliant MCU and MCP23S17 is given on the schematic at the bottom of this page. Important : The library uses the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
-
1185.  Thermometer with PIC Microcontroller In the last tutorial we learn about the multiplexing technique used with seven segment displays. We learn how to save i/o line by using persistence of vision. Only one digit is lit at a time, but to a human eye it is too fast to..... Listed under: Metering - Instrumentation Projects
-
1186.  Multiple Servomotors Using a modified version of the last program, we can control as many servomotors as we have I/O lines on port B. In the next listing, we will control two servos in the same manner as we controlled a single servo in the previous program..... Listed under: Motor Projects
-
1187.  Intelligent Fan Controller. Part 1 – Schematic using pic microcontroller The Intelligent Fan Controller is designed to control the noise generated by fans inside your computer. It does this by varying their speed based on temperatures measured inside the case. When it is cool the fans will run slow and when it is hot they will only speed..... Listed under: Temperature Measurement Projects
-
1188.  Isolated RS232C for PIC16F84 Connect serial transmit bit of the transformerless supply PIC16F84 circuit with COM1 through the use of isolation capacitors. Protect your notebook from direct connection to power line. Another method that helps program development besides a dot LED as the output is using a serial bit..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
-
1189.  12F675 Tutorial 5 : A Temperature data logger using PIC EEPROM. using pic microcontroller EEPROM is useful for storing long term data such as temperature logger information and this PIC microcontroller EEPROM project saves the temperature from an LM35DZ IC to the PIC's internal long term data storage area. The project follows on from the last project using the..... Listed under: Temperature Measurement Projects
-
1190.  Rotary Encoders Rotary encoders are very versatile input devices for microcontroller projects. They are like potentiometers except of digital nature. Unlike analogue potentiometers they never wear down. Rotary encoders not only provide 360 degrees of rotational freedom they also allow digital positioning information to be gained..... Listed under: LED Projects, Motor Projects



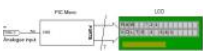
1191.  Universal Serial Infrared Receiver. using pic microcontroller You can use this Universal Infrared Receiver (UIR) project to control your PC: Starting Windows programs, setting the Windows volume control, even moving the mouse around the screen! All at the touch of a button - with your TV control in fact! It uses a..... Listed under: Wireless Projects



1192. Relay Timer with PIC16F628 Here is 0 to 99 minutes relay timer using PIC16F628 microcontroller and 16 character LCD display. The microcontroller PIC16F628A running at 4.0 MHz clock using an external crystal. An HD44780 based 16x2 character LCD is the main display unit of the project when you..... Listed under: Clock - Timer Projects, LCD Projects



1193. Making a binary clock using a PIC Microcontroller You can use a PIC microcontroller and an LED matrix to create a binary clock (or if you prefer you can wire up individual LEDs). This project uses an LED matrix block as it saves lots of wiring. So what is it? It's an..... Listed under: Clock - Timer Projects



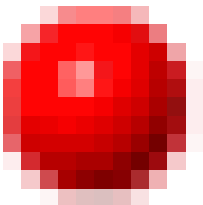
1194. Schematics and C code for a 0-5V PIC LCD Volt Meter. using pic microcontroller This PIC LCD volt meter project uses a PIC micro and an HD44870 display. The analogue input is taken directly to the analogue input pin of the microcontroller without any other processing. Specification Voltage 0V - 5V Input signal level TTL Maximum input..... Listed under: LCD Projects, Metering - Instrument Projects



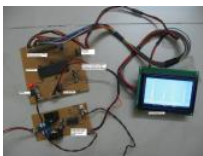
1195. Night Light Saver V3.2 (PIC12C508) Introduction It's time for 8-pin microcontroller Microchip PIC12C508, the SAVER V3.2, my latest design of a device that turns a night light on and off everyday. The circuit uses only a PIC12C508 8-pin CMOS microcontroller and a small triac, MAC97A6. The Saver V3.2 also demonstrates..... Listed under: LED Projects



1196. How to drive an rgb led using three microcontroller pins. using pic microcontroller The RGB LED contains three LEDs encased in one shell: Red, Green and Blue (some contain an extra blue led - as blue LEDs generate less output intensity (candela) per mA). It looks like a single white led except it has four leads -..... Listed under: LED Projects



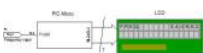
1197. Wisp628 an in-circuit flash PICmicro Programmer Features in-circuit programmer programs flash PICmicro's supports a rapid cycle of code/program/test prototype program. It takes power from the target circuit serial interface serial passthrough to the target. Foremost Wisp628 is an in-circuit programmer. The programmer is connected to a few pins of the target..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects



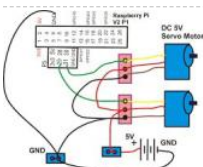
1198. A simple spectrum analyzer using dsPIC30F4011 This is a project for viewing the frequency spectrum of input signal using dsPIC. The hardware uses the following: - 1. dsPIC30F4011. 2. Opamp (any one, like LM358, TL084). 3. Power supply. Software includes the following: - 1. FFT library code from Microchip 2. Graphic..... Listed under: Projects, Sound - Audio Projects



1199. Hidden Radio Transmitter Controller PicCon is a PIC microcontroller based radio controller designed for hidden transmitter hunting. When combined with a radio transmitter, it will produce tone sequences and Morse code messages at user-programmed times. It is completely field programmable. DTMF tones, utilizes EEPROM for all programmed options..... Listed under: Radio Projects



1200. A PIC frequency counter operating up to about 50 MHz. using pic microcontroller This PIC frequency counter project uses an LCD to display the frequency and PIC timer 1 to measure the input signal and Timer0 to measure the timing period. It uses Timer 1 in 16 bit counter mode to count the input signal edges and overflows..... Listed under: Calculator Projects



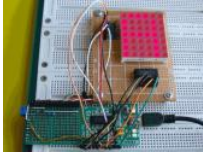
1201. First Servomotor Control Program In our first program, we will simply sweep the servomotor from CCW to CW and then sweep back. The program can be kept simple as to demonstrate the principles of controlling a servo with a PIC Basic language. The schematic can be seen..... Listed under: Projects

1202. Localizer with SIM908 module using PIC18LF6722 The device is based on a GSM/GPRS module with included GPS. Its main function is to detect and communicate its own geographical position using, on the choice, the cellular phone reference system or the GPS. Its small dimensions are due to the use, for the..... Listed under: GPS Based Projects



Phone Projects, Projects

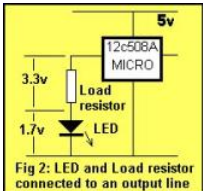
1203.



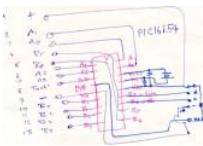
Led Display Boards InBulk using pic microcontoller We covered how to interface seven segment LED displays to a PIC microcontroller in two sect Lab 6 and Lab 11. Today, we will move on to interfacing an LED dot matrix display. LED dot matrices are very popular means of displaying inform it..... Listed under: LED Projects

1204.

A discussion on the drive-current for the outputs of a PIC12C508A microcontroller Each of the output lines of a '508A microcontroller can deliver a maximum of 25mA. W does this mean? It means any device connected to the line must take 25mA or less. If it takes more than 25mA a buffer transistor (also called an amplifying transistor) mu Listed under: Battery Projects, Interfacing(USB - RS232 - I2c -ISP) Projects



1205.



The Saltwater etch process using PIC16F54 microcontroller The Saltwater etch process This is a one-off process to produce one printed circuit bo removing unwanted copper by electrolysis in a saltwater solution. I shall illustrate the process by etching and building a board for 18-pin PIC (for PC16F54, but any 18..... Listed under: Other Projects, Projects

1206.



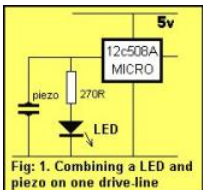
DS18S20 Dual Temperature Meter using pic microcontroller DS18S20 Dual Temperature Meter Component List: 1x 2x16 LCD with Backlight 1x 1 Female Header Connector 1x 16x1 LCD Male Header Connector 1x Programmed PIC16F628 2x DS18S20 1-Wire Digital Temperature Sensor 1x 1C Capacitor 1x 10K Pot (LCD Contrast) 1x 10K Resistor 2x 1K..... Listed under: Metering - Instrument Projects, Temperature Measurement Projects

1207.



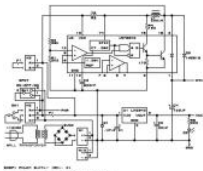
Automatic door opener with PIC12C508 Circuit Description This circuit can be used to operate an electric strike or an electromagnetic lock on a d not the door being opened/closed, but a small electromagnetic strike which unlocks the door. The opener has the following features curren programmed in software: automatic..... Listed under: Home Automation Projects

1208.



10 tricks for interfacing to the PIC16C508 Most of the ideas in this chapter can be found on the pages of this website, but just in case you want to over the capabilities of the '508A, we have brought them together. Quite often when you are programming, the first thing you..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LED Projects

1209.



EMDP1 — Extensible Multiple Device Programmer 1 (Rev. C) using pic microcontroller Table of Contents Table of Contents Introduction Schemati Printed Circuit Board Issues Introduction This is revision C of the EMDP1 mother board. It differs from revision B in that a 40-pin ZIF (zero insertic socket and an 80-pin 'universal' plug have been added. This..... Listed under: Microcontroller Programmer Projects

1210.

Very Accurate LC Meter based on PIC16F628A About Accurate LC Meter This is one of the most accurate and simplest LC inductance / capacitance Meters that one can fin one that you can easily build yourself. This LC Meter allows to measure incredibly small inductances starting from 10nH to 1000nH, 1uH..... Listed under: LCD Projects, M - Instrument Projects



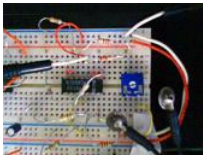
1211.

DIY MIDI controllers using PIC microcontrollers and Basic Stamps using pic microcontoller Introduction By combining a PIC microcontroller or Basic Stamp II with a few pa components it is not difficult to construct your own knob box, trigger box, or other MIDI input device. A knowledge of electronics may be required for interfacing to some



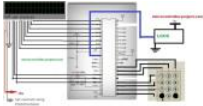
sensors. Both..... Listed under: How To - DIY - Projects

1212.



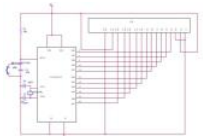
Talk:Wireless Affective Devices using pic microcontoller Contents 1 Project aims 2 Previous work 3 Project the device 3.1 Re-definition of the com work 3.2 Sensors Design 3.3 Microcontroller 3.4 Wireless Connection 4 Prototype realization [WIP (Work in Progress)] 4.1 Main board 4.2 USB int 4.3 BVP 4.4 GSR 4.5 Acceleration 4.6..... Listed under: Wireless Projects

1213.



Automatic door lock system using 8051(89c51,89c52) microcontroller Automatic door locks are becoming popular in industry and many compan industries are using automatic door locks systems for the safety of their rooms. They are popular in banks. Banks use automatic lock systems to security of their money stored in a single..... Listed under: Home Automation Projects

1214.



Interfacing 16X2 LCD with PIC Microcontroller In this session we will see how to interface 16×2 LCD to PIC18F4550 microcontroller which is of fan PIC18F. You can get information of 16×2 LCD in the session How to Interface 16X2 LCD with 8051 Microcontroller Features of PIC18F4550: PIC18F belongs to the PIC18F family;..... Listed under: LCD Projects

1215.



Obstacle Sensing Walking Stick for Visually Impaired Persons : Block Diagram From the block diagram given above you can see that this project h major parts. The Power Bank Finding a good power source for this project was a challenge, the power supply should have to be mobile, so that v cannot use power adapters..... Listed under: Sensor - Transducer - Detector Projects

1216.



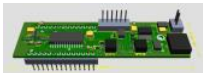
GPS-based universal clock generator using PIC16F628 GPS satellites and GPS Ground Segment need extremely accurate timing to allow GPS user know their own position on the Earth. Rubidium and Cesium clock generators are extensively used and maintained to synchronize and generate signals that our inexpensive navigator gets from the..... Listed under: Clock - Timer Projects, GPS Based Projects, Projects

1217.



Low cost temperature data logger using PIC and Processing This project describes an easy and inexpensive way of adding a digital thermometer per data logging feature to a PC. It involves a PIC microcontroller that gets the surrounding temperature information from the Microchip MCP9700 and sends it to a PC through an USB-UART..... Listed under: Temperature Measurement Projects

1218.



Self-made development board for the 32-bit PIC32MX220F032B Microcontroller Few months ago Microchip introduced smallest, lowest-cost PIC32 microcontrollers – new PIC32"MX1" and PIC32"MX2" families. PIC32 MX1 and MX2 MCUs include up to 32 KB of Flash and 8 KB of SRAM, two I2S interfaces for audio processing, 10-bit 1 Msps ADC, an 8-bit Parallel..... Listed under: Development Board - Kits Projects

1219.



Microchip – Let my robot see! using pic microcontoller I promised to post some of my past microcontroller vision projects. This one has a Microchip PIC directly samp video signal. 8 pins well used. Collapsible Quadruped Robot with Computer Vision, Laser Ranging, and Servo Control on a Single-Wire Network Photos and video capt Listed under: Robotics - Automation Projects

1220.



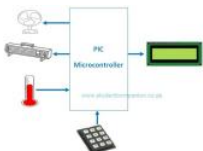
PIC – First Project Programming in PIC microcontroller can be done by using assembly language or by using Embedded C because of the ease of code.We have used done the programming through Embedded C language.For programming any microcontroller we need a IDE or Integrated Developement Enviroment. In case of..... Listed under: Other Projects

1221.



A simple programmer for PIC microcontrollers Perhaps this circuit is the simplest programmer for PIC microcontrollers you can build. It is conne serial port of your PC and it has a very similar design with the SI-Prog programmer for the AVR microcontrollers. With the help of adaptors you c extend..... Listed under: Microcontroller Programmer Projects

1222.



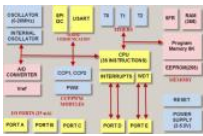
Automatic Temperature Control System using PIC Microcontroller – XC8 An automatic temperature control system has the ability to monitor and the temperature of a specified space without human intervention. The primary purpose is to manage the temperature of a given area based on by a user of the system. This project uses..... Listed under: Temperature Measurement Projects

1223.



Electronic Distance Meter using pic microcontoller Measure distance while riding bicycle. Direct display in meter unit. Battery operated with Nitr 68HC908QY4, 16-pin MCU. Figure 1: Prototype of Distance Meter. This project demonstrates the use of 16x1 line LCD module to interface with N pin MCU, 68HC908QY4. The original idea came from..... Listed under: LCD Projects, Metering - Instrument Projects

1224.



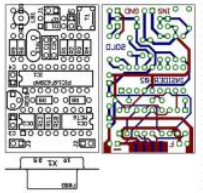
PIC Microcontroller Architecture and Applications PIC microcontroller was developed in the year 1993 by microchip technology. The term PIC stands for Peripheral Interface Controller. Initially this was developed for supporting PDP computers to control its peripheral devices, and therefore, named peripheral interface device. These microcontrollers are very fast..... Listed under: Microcontroller Programmer Projects

1225.

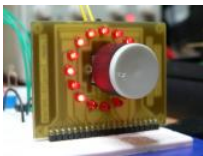


Circuit-Zone.com – Electronic Projects For a long time I needed a good programmer pussy, even if it is programming, so from time to time the application gets where it is used. So I decided to build the programmer. I chose between a couple of projects from different authors, but..... Listed under: LED Projects

1226. In-Circuit debugger, created by E.E. Atanasios Melimopoulos using PIC16F628 microcontroller This project was sent by Electrical Engineer Atanasios Melimopoulos (Copyright June 15, 2007) INTRODUCTION: In-Circuit-Debuggers, as you may already know, have become the PIC's debugging standard tool for many programmers because it's easy and handy interface to the target picplaced- board. They come..... Listed under: PWM Projects



1227.



Circuit-Zone.com – Electronic Projects Rotary encoders are very versatile input devices for microcontroller projects. They are like potentiometers of digital nature and unlike analogue potentiometers they never wear down. Rotary encoders not only provide 360 degrees of rotational freedom also allow digital positioning information to be gained..... Listed under: LED Projects

1228.



Electronic Quiz Buzzer Circuit Diagram using PIC Microcontroller Usually high level quiz competitions are very much time-oriented as it becomes significant to determine who has answered first. So here we'll see how to make a buzzer system that helps to decide the winners. Actually I designed a circuit of buzzer for quiz program..... Listed under: LED Projects

1229.



How to set up your B&W Zeppelin Air With the B&W Zeppelin Air being such a popular iPod docking station as well as a fantastic AirPlay compatible device we thought it would be a good idea to write a 'how to' on setting up your new Zeppelin Air. As of September 2012 newer..... Listed under: Audio Projects

1230.



PIC16F877 Development Board v. 1.2 The Development Board v. 1.1 connected to an LCD display. It is well visible (read further, in the description row of LEDs used to check the logic state of up to 8 I/O ports or external circuits' pins. Of course, if you own an..... Listed under: Development Boards Kits Projects, Projects

1231.








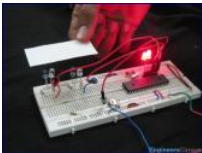
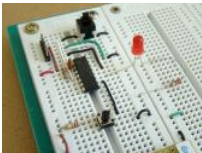



Marantz CD63SE laser transport mechanism replacement An elderly, but still sought after Marantz CD63SE was bought into the shop last week, with a fault reported that CD's would no longer play. After approximately 15 years of use, this is a common situation, as the laser power will gradually reduce over time..... Listed under: Video - Camera - Imaging Projects


1232. eDrum – Trigger MIDI Converter using PIC16F877 Introduction This page is about electronic drums. Here you will find detailed information on how to build an electronic Trigger to MIDI Converter module, based on PIC Microcontroller, and how to build the triggers. This project has been developed for many years now, and it..... Listed under: Project Sound - Audio Projects





1233.  Repair of Arcam CD73 laser mechanism This 2004 vintage Arcam CD73 came into us with the reported fault that it would no longer play CD's, or read the table of contents. Given that it is over eight years old and had plenty of use in that time, we were not..... Listed under: Video - Camera - Projects
1234.  Alchemist Forseti APD15A RC Integrated amplifier We recently had a customer present this faulty Alchemist Forseti integrated amp for repair - It's this dates from the 1990's and has been well looked after. It's a bit of a bruiser as you can see from the extensive heatsinking! Unfortunately it developed..... Listed under: Sound - Audio Projects
1235.  PIC Microcontroller project - 24 hour clock and thermometer displayed via 16f690 microcontroller and LCD programmed in C I got to thinking that an interest in hi-fi bit geek (in a good way) so I thought one of my latest geek projects might be of interest to some of you. You could build the project 'as is' without..... Listed under: LCD Projects
1236.  MRNet — Wired Cab Module (Revision A) using pic microcontroller Table of Contents Table of Contents Introduction Cab Design Goals Cab Elect Power and Cable Interface Microcontroller Seven Segment Display Buttons LED's Cab Printed Circuit Board Cab Software Summary Introduction {Introduction goes here.} Cab Design Goals The goals for the handheld cab are: Light weight..... Listed under: LED Projects
1237.  Infra red remote control tester for Philips RC5 protocol Philips invented the RC5 protocol for controlling electronic equipment such as CD players and audio amplifiers way back in the 1980's. The RC5 standard has been adopted and used with great success ever since, which means it is prob most common IR remote..... Listed under: LED Projects
1238.  LED Sign has a purpose! using pic microcontroller The single character LED sign I had been playing with now has a purpose! Shortly after discard several ideas of having it as a serial display for PC/Server status, or hooking it up to the internet and a webcam, I came up with an actual..... Liste under: LED Projects
1239.  Interfacing VFD with PIC Microcontroller Vacuum fluorescent display can be a good alternative to a Liquid-crystal displays in some applications. T advantages over LCD like extended temperature range and excellent contrast in high brightness environment. The main disadvantage is higher p consumption making them less attractive in..... Listed under: LCD Projects
1240.  Interfacing VFD with PIC Microcontroller Vacuum fluorescent display can be a good alternative to a Liquid-crystal displays in some applications. T have a number of advantages over LCD like extended temperature range and excellent contrast in high brightness environment. The main disad is higher power consumption making them less attractive in..... Listed under: LCD Projects
1241.  Serial communication with Pic 16f877 using UART Abstract of that project: Using UART port we can establish serial communication between any Here in my project Serial communication with Pic 16f877 using UART I will show you how easily we establish communication between two device project we know the pin..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
1242.  Photomultiplier Tube (PMT) Controller Circuit B using pic-microcontrolleroard The four channel PMT controller board is a PIC microcontroller bas device that communicates with a PC by USB as an HID device and with a PIC-based "hand unit" via PIC-to-PIC RS-232 protocol. These two externa (USB and RS-232) send strings to the PMT..... Listed under: Video - Camera - Imaging Projects
1243.  Low power temperature data logger using PIC18F27J53 Design Goals DIY Friendly – Something that the Make audience could easily build Improv reference design – Better measurement resolution, better timing, lower power, non-stop logging Minimal parts count – Lower cost and shorter b time Powered by a single 1.5 volt cell (AA)..... Listed under: Projects, Temperature Measurement Projects
1244.  Top Embedded Projects Ideas for Engineering Students Embedded system: An embedded system is designed to perform one function with real-t applications. Embedded systems are found in simple devices like calculators, microwave & television remote controls and also in more complicat devices such as a home security and neighborhood traffic control systems. Many..... Listed under: Other Projects

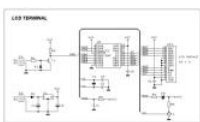
1245.  FM RDS Tuner Module for mobile applications using PIC18F46k20 Stereo FM band receiver with RDS decoding for mobile applications. Continuous RDS data output through RS232: RDS PS, PI, TA/TP/TMC, CT, TMC. Full Radio Text supported: 2x64 characters. Raw TMC data output. Low power operation with two AA (HR6) 1V2 Ni-Mh batteries or power..... Listed under: Phone Projects, Projects, Radio Projects
-
1246.  Wireless UART Wireless Infrared UART prototype can be built by using two PIC16F876A controllers. One as IR receiver with dedicated Infrared decoder like SFH505A, SFH506 or similar IR receiver IC and other microcontroller as a transmitter via IR LEDs. This is a relatively simple design and doesn't require much advance..... Listed under: Wireless Projects
-
1247.  Zeus: trigger your camera with lightning using pic microcontroller Introduction I have always been fascinated by photographs about lightnings. It's relatively easy to put a lightning strike in any photograph using image editing techniques 😊 I still prefer the real thing. Since photography is a hobby of mine, I wanted to be..... Listed under: Video - Camera - Imaging Projects
-
1248.  Solar Tracking System This is a simple PIC microcontroller based Solar Tracking system, only basic electronics skills are required. It uses 2 unipolar stepper motors and 4 IR-850nm LEDs as sensors to follow the sun maximizing solar panel illumination. The entire prototype frame was built from simple, cheap..... Listed under: LED Projects, Motor Projects
-
1249.  Universal Serial Infrared Receiver using PIC16F88 You can use this Universal Infrared Receiver (UIR) project to control your PC: Starting Windows programs, setting the Windows volume control, even moving the mouse around the screen! All at the touch of a button - with your TV remote control! It uses a..... Listed under: Internet - Ethernet - LAN Projects, Projects
-
1250.  martin lightjockey 2 free The new Martin Light Jockey II Lighting Software Kit is a new way to control your lighting. LightJockey Manager is a free-of-charge software add-on for our LightJockey Page 2 the interface. In control panel, the USB interface is recognized as USB. A: I did test the..... Listed under: Projects
-
1251.  pic microcontroller projects pdf General.. Title: McGraw-Hill-PIC Microcontroller Project Book File size: 13.4 MB Genre: E-Books Format: Pdf. Uploaded by RedDragon. Pages: 220 Pages Abstract: This project outlines the strategy adopted for establishing two kinds of. The principle task of this project is to program the AVR microcontroller Commercial,..... Listed under: Microcontroller Programmer Projects
-
1252.  PIC12F675 Comparator Code and Proteus Simulation This post provides the comparator code for PIC12F675 microcontroller. As we know, PIC12F675 microcontroller has one built-in op-amp, which can be used as a comparator. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Projects
-
1253.  Lab 2: Basic digital input and output Description Today we will learn how to read digital inputs from a push button switch. A digital input has only two values: 1 and 0. The configuration of the push button switch is the same as that of the reset switch except it goes to a..... Listed under: LED Projects
-
1254.  A complete guide for LED Blinking What is LED? A light-emitting diode (LED) is a semiconductor light source. LEDs have allowed new text, video displays, and sensors to be developed, while their high switching rates are also useful in advanced communications technology. What is LED Blinking? LED blinking is the same as..... Listed under: LED Projects

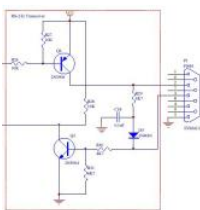


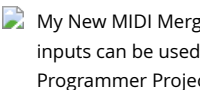
1255.  The PIC Elmer 160 Project Board using PIC16F628 Description -- What is the PIC-EL board and what can you do with it? Specification -- What features on the PIC-EL project board? Schematic -- Circuit diagram on this web page or in PDF format Builders' Notes -- Check here for special tips or..... Listed under: Development Board - Kits Projects, Projects

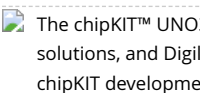
1256.  Speed control of DC motor by PWM in Proteus simulation Hello friends here is a proteus simulation of speed control of DC motor with the help of pulse width modulation (PWM) control, PWM signals are generated by 8051 microcontroller. As we have discussed earlier that proteus is a really good simulation software for beginners and..... Listed under: Motor Projects


1257.  Microdot - wrist watch LED pattern timepiece using PIC16F8 microcontroller Microdot - wrist watch LED pattern timepiece Another RGB Sunset Productions production! This project is a circuit board for making a wrist watch size version of my minidot clock: <http://www.instructables.com/id/EEGLXQCSKIEP2876EE/> with a few more functions more applicable to a portable device. A lot of help..... Listed under: Development Board - Kits Projects, LED Projects, Projects


1258.  Easy Debugging Terminal using pic microcontroller Build a simple 9600 BAUD 8n1 LCD terminal for debugging and testing the projects having RS485 output. Introduction This LCD terminal provide two modes of operation by selecting jumper J1. When J1 is open the terminal operate as a normal display terminal, when J1..... Listed under: LCD Projects

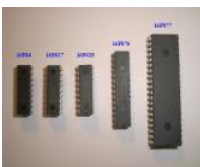
1259.  TTL to RS232 Signal Conversion Methods: Use a TTL HI output for the RS232 GND: Steve Walz of armory.com says "Use a TTL HI output for the RS232 *GROUND*!! Then you get +/-5VDC levels to fake out the RS232. When TTL-GND goes HI, then a TTL-XMT LO looks like -5VDC..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects


1260.  My New MIDI Merger uses 10 MIPS £1.00 PIC Microcontroller! This unit provides 4 autonomous MIDI inputs and 1 MIDI output. Note this is a 'proper' MIDI Merger, as all inputs can be used at the same time, unlike other 'designs'. The unit also provides an indication of the channel number being played,..... Listed under: Microcontroller Programmer Projects

1261.  The chipKIT™ UNO32™ and MAX32™ development boards for the Arduino™ Community Microchip Technology Inc., a leading provider of microcontroller, analog and solutions, and Digilent, Inc. announced expanded capabilities for the 32-bit PIC32 microcontroller-based chipKIT™ Development Platform for the Arduino™ community. The chipKIT development platform is a 32-bit Arduino solution that enables hobbyists and academics to..... Listed under: chipKIT Projects, Development Board - Kits Projects

1262.  A pic programmer circuit based on AN589 AN589 is microchip's application note for a parallel port pic programmer circuit which I chose as I wanted it to be and running quickly. It is really quite a simple circuit and its main objective is to provide ICSP connections to your pic..... Listed under: Microcontroller Programmer Projects, Projects

1263.  Application of Microcontroller in Science and Technology The rapid growth in science and technology offers several advantages of using integrated circuits, microprocessors, microcontrollers, embedded chips, etc., in designing electrical and electronics projects and circuits by reducing their size and complexity. Using these embedded chips and microcontrollers is increasing due to its..... Listed under: Robotics - Automation Projects

1264.  PIC Projects using pic microcontroller Some of the various PICs from Microchip, 16F84, 16F627, 16F628, 16F876 and a 16F877. So far, I have only played around with the PIC16F84 PIC chip, with exception to using a PIC16F876 with the HamHUD. I have found the most documentation is on the 16F84. Listed under: LED Projects

1265.  How to build a speed detector for a coilgun project If you are building a coilgun (or gauss gun) or rail gun, a necessary part of your project will likely be some sort of speed detector. Getting a coilgun to work is rewarding, but you can't continue the project without a reliable, accurate device to..... Listed under: Development Board - Kits Projects

1266. 5 transistor PIC programmer *Schematic added to step 9! Make your own PIC programmer for your computer's parallel port. This is a variation of David Tait's classic design, it is very reliable and there is good programming software available for free. I like IC-Prog and PICpgm programmer. Best of all, it uses just two..... Listed under: Microcontroller Programmer Projects



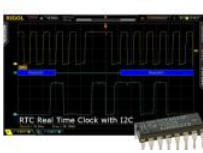
Programmer Projects

1267.



PlayPIC – A Tutorial Board for the PIC16F84A Microcontroller This is a new design of a tutorial board based on the popular PIC16F84A microcontroller. It features eight single LEDs, a 7-segment display, an LCD display and five push buttons. It is an ideal solution for the beginner to take his/her first programming steps in..... Listed under: LCD Projects

1268.



PCF8573P I2C Real Time Clock In this post I'm going to show you how to interface an I2C Real Time Clock – RTC with PIC microcontroller. Only a basic hardware configuration and a communication protocol are presented here. I'm planning to extend it to a more advanced design in a..... Listed under: Clock - Timer Projects

1269.



F84-Programmer using pic microcontroller Build a low-cost and very simple serial programmer for a PIC16F84 Microchip Flash Microcontroller. The picture is my personal writer for F84 chip, it works very nice with Nigel WPicProg V1.20. Introduction I finally found a very nice universal window software designed to work..... Listed under: Microcontroller Programmer Projects

1270.

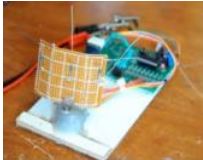


PIC Microcontroller Projects for Final Year Engineering Students The abbreviation of PIC is the “Peripheral Interface Controller”, and it is a family of microcontrollers manufactured by various companies like the microchip, NXP etc. This microcontroller comprises Analog to digital converters, memories, timers/counters, serial communication and interrupts assembled into a..... Listed under: Microcontroller Programmer Projects

1271.

Stepper Motor Interface PIC16F Here is a simple example for PIC microcontroller interfacing a Unipolar stepping motor with assembly code. Instead of using a dedicated stepper motor driver IC like the very popular L293D, a PIC16F with ULN2003A were used. Just 4 I/O Pins are required to drive each coil of the motor. By..... Listed under: Motor Projects

1272.



Single-Axis PIC Controlled Solar Tracker DIY Kit Hi All I'm not going into as much depth with this instructable due to my current time constraints. However, I fully plan on updating this instructable as time progresses with new algorithms and programs for optimization. Intro: I was messing around with some new..... Listed under: Sensor - Transducer - Detector Projects

1273.



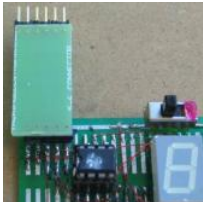
Serial LCD project using PIC16F877A Microcontroller This project shows you how to create a serial LCD module that you can drive from any serial interface. It uses a pure ASCII command set so you can control it easily from a terminal program such as Hyperterminal. There are no 'odd' command sequences..... Listed under: LCD Projects, Projects

1274.



PIC Waveform Recorder In this article I'll show you how you can use PIC microcontroller to record and store waveform patterns in its EEPROM memory and replay the sequence later. For this purpose we'll need a signal/waveform generator to produce the signal, PIC internal A/D converter to sample the signal..... Listed under: LCD Projects

1275.



LED FX using PIC12F629 Microcontroller This project produces a number of effects on a set of three LEDs. You can also produce your own sequence and store it by using the 3 buttons. You can build the project on Matrix Board or buy a complete kit with pre-programmed chip. You..... Listed under: LED Projects, Projects

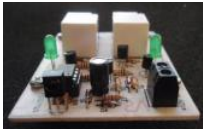
1276. **HC08 Fan Timer using pic microcontroller** Build a timer with Motorola Nitron MCU and using ICC08 to develop a C program. Loader schematic also included. New s-record for 68HC908QT2! My son got his fan in the bedroom. The fan has mechanical timer for 0-180mins. One day it broken. So I got..... Listed under: Clock - Timer Projects



1277. Top PIC Microcontroller Projects Ideas When we are choosing PIC microcontrollers for projects on electronics or electrical, there are many options ranging from eight bit to thirty-two bits, diverse micro-controllers are accessible to go well with projects and products of different complications and cost restraints. But if..... Listed under: Temperature Measurement Projects



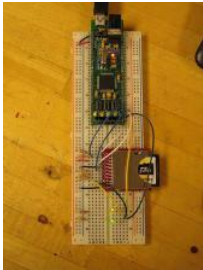
1278. PIC Microcontroller Basics and Applications for Engineering Students The microcontroller plays an essential role in the embedded industry after the development of Intel 8051. The research in the field of embedded industry gave high efficient, low power consumption microcontrollers. The AVR and PIC microcontrollers are the prime examples. These microcontrollers are getting..... Listed under: LCD Projects, LED Projects



1279. Power MOSFET RGB LED PWM Driver for PIC12F683 Description Since I published the original RGB LED driver (photo right) I've had many enquiries from people asking how they could make the original board work with more LEDs. I'd already made a couple of custom boards up for myself, so I finally decided it..... Listed under: LED Projects, Projects, PWM Projects



1280. PIC32MX: Interfacing to a Secure Digital (SD) Flash Card Original Assignment Do not erase this section! Your assignment is to create code that will enable the PIC32 to read and write data to a FAT32 SD card. The SD card should be able to be read by a PC after data has been written..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects



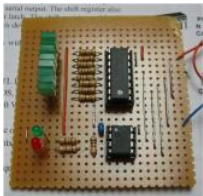
1281. Remote controlled LED lighting effects LED's have become most important component in lighting industry due to its miniature size and less power consumption. Also LED lights are lot more attractive than the primitive lights used once. This project focused on building a remote controlled LED lighting effects. Imagine..... Listed under: LED Projects



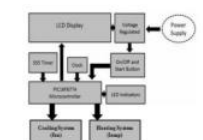
1282. Real Time Clock (RTC) Interfacing PIC18F Introduction to RTC: Real time clock also referred as RTC is an important device or integrated circuit which will keep the track of current time. RTC is mainly used in computers, mainframes servers and embedded applications (mobile phone, tablets, organizers, PDA etc). The main function..... Listed under: Timer Projects



1283. Test For Presence of Internal Oscillator Calibration Word for PIC12F629 Description The PIC 12F629 and 12F675 devices have an internal 4Mhz oscillator that enables the devices to be used without an external crystal or RC network. This frees up one or two pins for I/O use and allows the device to be used in minimum..... Listed under: Clock - Timer Projects, LED Projects, Projects



1284. Green house intelligent control system In this post we will discuss about Green house intelligent control system: With the people's living standards increasing, modern, a large number of agricultural production, such as vegetable using greenhouse to cultivate. The temperature and humidity monitoring are two key factors which used to control..... Listed under: Temperature Measurement Projects

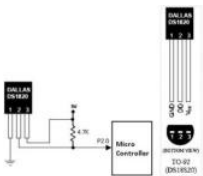


1285.



My New MIDI Merger uses 10 MIPS £1.00 PIC Microcontroller using PIC18F4320 This unit provides 4 autonomous MIDI inputs and 1 MIDI output. this is a 'proper' MIDI Merger – all 4 MIDI inputs can be used at the same time, unlike other 'designs'. The unit also provides an indication of the c number being played,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1286.



DS18S20 interfacing with pic and avr microcontroller In this article you will learn about DS18S20 interfacing with pic and avr microcontroller: AVR Development Board: The AVR Development Board is specifically designed to help students to master the required skills in the area of embedded systems. The kit is designed in such way..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1287.



WLoader – a 16f877 application loader using pic microcontroller If the piclist is an any indication the 16f877 seems to be the new favorite hobby microcontroller, a position that used to be occupied by the 16f84/16c84. Compared to is older brethren the 16f877 has much more to offer at ar twice the price. As..... Listed under: Microcontroller Programmer Projects

1288.



Emergency Vehicle LED Light Described here is a low-component count Emergency Vehicle LED Light circuit which can be used for capturing the attention of (or warning) drivers and pedestrians. These type of lighting gadgets kindle an instant response that makes people look up and pay a -an important consideration..... Listed under: LED Projects

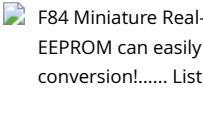
1289. Digital Thermometer using pic microcontroller and MCP9700 In this article you will learn, Digital Thermometer using pic microcontroller and MCP9700: [caption id="attachment_22217" align="alignnone" width="300"] Digital Thermometer using LM35 and PIC microcontroller[/caption] In this tutorial, we are making a Digital Therm using PIC microcontroller and LM35 Temperature Sensor. In this project, we will sense..... Listed under: LCD Projects



1290. PIC microcontroller led flasher circuit using PIC16F627A This is microcontroller led flasher circuit using PIC16F627A as first PIC microcontroller. I have of mine son. it is basic for really beginner. Important issue, we have to make The PIC micro controller is easier. Children 8 years old, he does not understand the computer language at..... Listed under: LED Projects



1291. F84 Miniature Real-Time Controller Build a simple real-time controller with PIC16F84 running at low power X-tal 32,768Hz. Daily scheduler for 6-channel reside in 64 EEPROM can easily be preprogrammed using Nigel PicProg. RTC2.C provides user programmable set current time without the need of recompilation. Fixed bug on m conversion!..... Listed under: LED Projects



1292. PIC MICROCONTROLLER PROJECTS AND LCD CIRCUITS Here is 0 to 99 minutes relay timer using PIC16F628 microcontroller and 16 character LC display. The microcontroller is PIC16F628A running at 4.0 MHz clock using an external crystal. An HD44780 based 16x2 character LCD is the main unit of the project where..... Listed under: LCD Projects



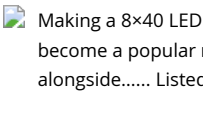
1293. Generic Automotive Light Effect PIC/Arduino Modules These are simple modules I made with a pic 12c508 microcontroller. I use them to create c effects. The Mosfets are capable of some decent current with very little heating. I have used these for sequential turn signals, flashing brake light alternating flashers, strobe effects..... Listed under: LED Projects



1294. C-52EVB Robot Controller Use a C-52 EVB for simple robot experiments. Build a simple two wheels robot with L293D H-Bridge driver and IR sensor. Write a C program controls robot tracked with black tape. Fun with Ving-Peaw Competition 2543, course layout, day-by-day changed rule and score included! Introduction One of..... Listed under: Robotics - Automation Projects



1295. Making a 8x40 LED matrix marquee using shift registers LED matrix displays provide flexibility to display text, graphics, animations, and video, and therefore, they have become a popular mean of displaying information these days. You can see them at gas stations displaying the gas prices, or in the public places displaying information alongside..... Listed under: LED Projects



1296. JavaBot1..... A line following robot Design Goal: The JavaBot1 is a small line following robot designed to follow a black line drawn on a dry era board. It is designed to follow very tight curves. The software still has lot's of room for improvement but works well as is..... Listed under: Robot Automation Projects



1297. Temperature and relative humidity display with adaptive brightness control The objective of this project is to illustrate a technique of implementing adaptive brightness control to seven segment LED displays. It consists of a closed loop system that continuously assesses ambient light condition using an inexpensive light-dependent resistor (LDR) and uses that information to adjust..... Listed under: LED Projects



1298. TrH Meter: A DIY indoor thermometer plus hygrometer with adaptive brightness control implemented to 7-segment LED displays This project is about building a microcontroller-based digital room thermometer plus hygrometer that displays temperature and relative humidity on 4 large (1 inch) 7-segment LED displays which adjust their brightness level according to the surrounding illumination. It consists of a closed loop system that..... Listed under: LCD Projects



1299. TrH Meter: A DIY indoor thermometer plus hygrometer with adaptive brightness control implemented to 7-segment LED displays This project is about building a microcontroller-based digital room thermometer plus hygrometer that displays temperature and relative humidity on 4 large (1 inch) 7-segment LED displays which adjust their brightness level according to the surrounding illumination. It consists of a closed loop system that..... Listed under: LCD Projects



1300. Emergency Excuse Generator using PIC16F690 This device is a must-have for any respected professional. Any time the need arises, you will have an original, freshly-generated excuse ready in seconds. One press of the button can get you out of a tight spot ensuring smooth sailing toward retirement and guaranteeing that..... Listed under: Other Projects, Projects



1301. LED scrolling Christmas tree ornament with built in video game! Hello all and welcome to this Christmas tree decoration instructable. This ornament is designed to hang on your Christmas tree just like any other decoration, but it's just that little bit more eye catching! When you turn it on it will scroll the "MERRY CHRISTMAS" message..... Listed under: LED Projects



1302. MIDI-Controlled Analog Music Synthesizer For my electrical engineering senior design project, I decided on designing an analog music synthesizer with MIDI control. I have to admit, this was what I wanted to do since high school and was my ultimate goal as a musician, artist, DIY person, and engineer..... Listed under: Sound - Audio Projects



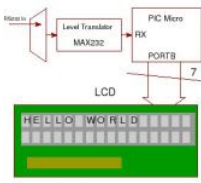
1303. MIDI-Controlled Analog Music Synthesizer For my electrical engineering senior design project, I decided on designing an analog music synthesizer with MIDI control. I have to admit, this was what I wanted to do since high school and was my ultimate goal as a musician, artist, DIY person, and engineer..... Listed under: Sound - Audio Projects



1304. Making a mini LED Christmas tree My two and a half year old son loves toys with flashing lights. For this Christmas I thought of making a mini LED Christmas tree for him. The project uses 22 multi-color LEDs which are driven by a PIC12F683 microcontroller using the Charlieplexing technique. The..... Listed under: LED Projects



1305. A PIC Serial LCD Project This project shows you how to create a serial LCD module that you can drive from any serial RS232 interface. You may be asking yourself why is this project using RS232 when computers are no longer even produced with a serial port as standard? There are..... Listed under: Projects



1306.



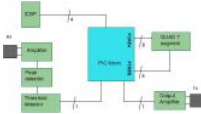
The Glowing Green Robot Robots look cooler when they have a sinister green glow. Better yet, when that glow exists for a functional purpose it's better! Here I show how to make a custom robot and use LED's to not only enhance line following, but also make it..... Listed under: Robotics - Automation Projects

1307.



Echo Mp3 DIY Audio player using PIC18F46K20 The EchoMp3 is a small DIY* Audio player. Mp3, Wav, Ogg-Vorbis, Wma and Mid formats are supported. 4, 8, 16 GB SDHC cards used as storage. FAT (FAT16) and FAT32 supported. Low power operation with two AA (HR6) 1V2 Ni-Mh batteries. Power input range is..... Listed under: How To - DIY - Projects, Projects, Sound - Audio Projects

1308.



A PIC Ultrasonic distance meter project using a Seven Segment display and a PIC micro. The PIC Ultrasonic distance meter works by transmitting pulse of sound at a frequency inaudible to the ear (ultrasonic sound or ultrasound). Afterwards the microcontroller listens for an echo. The time transmission to echo reception lets you calculate the distance from the..... Listed under: LCD Projects

1309.



The Rock This robot is controlled by a visual basic program (through the serial port), and can move in three different velocities by a pulse width modulated (PWM) signal generated by a PIC microcontroller (16F877). The robot can be operated in two modes, "normal control" and "light..... Listed under: Robotics - Automation Projects

1310.



Aurora 9x18 Kit *** There's an updated version of this kit available at <http://www.theledart.com/blog/store> *** Responding to many requests, the Aurora 9x18 Kit is now available, so this is the Instructable specific to building the kit. Please leave comments, especially tips for successful assembly. Identify the Parts First, identify..... Listed under: LED Projects

1311.



Analog Experiments Anywhere Two DIY micro-controller based USB connected electronic units which along with the Texas Instruments Analog Systems Lab Starter kit and a laptop permit you to conduct analog experiments anywhere. It would be wonderful if senior students and laboratory supervisors built these units so that they..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1312.



Serial LCD Controller I discovered a flaw in the current design that will only allow the controller to work with a connection to the computer and not a microcontroller. I've updated the schematic below and will fix the controller design. I've added a project file below that..... Listed under: LCD Projects

1313.



How to Create a Beer Bottle LED VU Meter Create your own Beer Bottle LED Volume Unit Meter! This instructable will show you how to create a Beer bottle VU Meter. A volume unit meter is a device that is used to display a relative volume of audio signals. Basically, sound gets converted..... Listed under: LED Projects

1314.



Cheap and Easy Dial Controlled High Power RGB LED(s) Driver There may be a lot of RGB LED Drivers out there, but this one is a bit different, it's versatile, small, cheap, and is simple to control. A potentiometer with built in switch is used for the controls. A quick press, switches between color cycling and..... Listed under: LED Projects

1315.

Microchip PIC16F877 Microcontroller Table of Contents Introduction 1.1 What is a Microcontroller? 1.2 Why are Microcontrollers used? 2 Getting started 2.1 Parts list and vendors 2.2 Connecting the equipment 3 PIC16F877 Microcontroller 3.1 Flash PIC development board 3.2 CCS PIC compiler 3.3 In Circuit Debugger/Programmer (ICD-S) 3.4 Embedded..... Listed under: LED Projects

Feedback / Suggestions

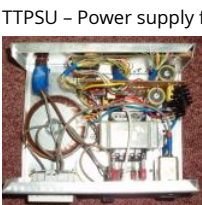


1316.



Pimp my Pong I get wind of this Think Geek hacks contest, a week late, frantically, I hit thinkgeek.com looking for a easy kill, budget and ideas both empty. What about that pong kit I bought from them ~2 years ago? ... hm when i first..... Listed under: Development Board - Kits Projects

1317.



TTPSU – Power supply for turntables with AC motors The power supply described here, is for turntables with 2 phase AC motor, like Linn, Rega, AR, Heybrook, Goldring and many, many more. The main features of the power supply are: X-tal controlled speed. The TTPSU can change speed by the push of a button..... Listed under: LCD Projects

1318.



Arduino solar charge controller + output control and data logging online with Xbee WiFi A while back I started working on a solar charge controller was based on a PIC microcontroller, a 20x4 characters display and the code was written in Assembly language. It did work well and was still working when I decided I wanted to add..... Listed under: LCD Projects

1319.



LED LYT Meter: LED, PIC Microcontroller, and Moving Average Code Hello everyone, thank you for checking out my first Instructable. I have enjoyed seeing your creations over the years and love what all of you are contributing. This project is a spin off of one that I recently saw here and I need a shout out to..... Listed under: Metering - Instrument Projects

1320.



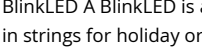
Vehicle security with GSM The main aim of making GSM Based Vehicle Theft Alert System is to apply the electronic theories, modern security, an embedded system, and modern age of science and technology for many kinds of transport machine. Moreover this GSM Based theft Alert System will reduce cost..... Listed under: LCD Projects

1321.



Leon's Mini Random Number Generator (mRNG) using pic microcontroller Sales Pitch Are you confused by choices? Who isn't? There are just so many things to decide. White, rye, or wheat? Pinstripes or polka dots? Feast or fast? Well, don't worry because help is on the way! I'm introducing the world's first, portable, hand held..... Listed under: LED Projects


1322.



BlinkLED A BlinkLED is a LED that has its own PIC microcontroller. Blink patterns and blink rates are programmable and BlinkLEDs can be used individually (for LED Throw in strings for holiday or special lighting. I made these because I wanted to trim my Christmas tree..... Listed under: LED Projects




1323.




RGB LED Color Cycling Circuit How to re purpose a the RGB LED color cycling circuitry from a Glade LightShow air freshener. I was in the process creating a red, green , blue color cycling circuit based on a PIC microcontroller when I spotted the Glade LightShow air freshener..... Listed unde Projects

1324.




Mirror "Tube" – LED Optical illusion One day, looking for interesting schemes with light effects to construct, came across this wonderful effect. Q liked the idea but did not know how to accomplish is, until one day found the way. Subsequently construct my own mirror that had to not only tr Listed under: LED Projects

1325.



One-chip sound player. The purpose of this project was to create a sound player that can play high quality sound using nothing but a single chip SD card for data storage). The chosen microcontroller was the PIC12F1840. It was chosen because of its fast clock rate..... Listed under: Sound - / Projects

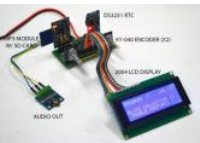
1326.




Interactive LED Beer Pong Table 2.0 (BPT X5) The nice thing about building one of these tables from a kit is that the more difficult parts of the prc have been completed (Electronic Design, PCBs made, etc.) but more importantly, you can fully customize the table to your liking. The photos that Listed under: LED Projects

1327.

An "Antique Radio" Christmas Present I happen to be part of the 5% that have the elusive awesome mother-in-law. For Christmas I wanted to make her an "antique radio" super simple to operate and that could play some "old time radio" type programming that she listened to when..... Listed under: LCD Projects




1328.




Remote Control mood light[/jar] I wanted to play around with something IR remote-controlled, so I decided to make a remote-control mood light were two parts to the project: making the remote and making the light. For the remote, I tore down a remote control for a floor fan,..... Listed un LED Projects

1329.



How to Create an Eye Catching Display (LED Style) This is not as much an instructable as a record of how I made a school project. While repeating what I did will probably not help y ou, this project can be modified to make almost any display more eye-catching. Step 1: Come up..... Listed unc Projects

1330.

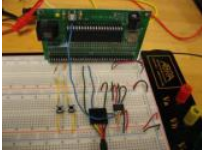


Xbee Wireless Servo Control using PIC18LF4520 Searching for a reliable wireless solution for your project can be a real pain if you're not familiar current wireless standards, data rates and reliability. The Xbee Modules that we will use in this article are widely available, use a very reliable wirr transmission..... Listed under: Motor Projects, Projects

1331.

Computer Controlled Star In this instructable I am going to show you how to build a Star with 64 LEDs. The Star operates by itself but the operati mode can be changed when connecting it to a computer via a serial (RS232) interface. After reconfiguring the Star via..... Listed under: LED Projects



1332.  Data logging with an EEPROM Contents 1 Original Assignment 2 Overview 3 Circuit 4 Code 4.1 PIC Code 4.2 Matlab Code 5 Example Output 6 File Reading Original Assignment Your task is to use the PIC to log data from an analog input on an EEPROM, and after the..... Listed under: Interfacing RS232 - I2c -ISP) Projects



1333. Arduino controlled light dimmer WARNING: Some people try to build this with an optocoupler with zerocrossing coz 'that is better' right? Some say it is better to use such an optocoupler. WRONG. This will only work with a random fire optocoupler: NOT igniting at..... Listed under: LED Projects



1334. Andy Robison's Lab Notebook using pic microcontroller Week 01 January 14 (2 hours): Met as a team after class to discuss preliminary project proposal. January 15, 2010 (1 hours): Met as a team to discuss design implementation and assign different components to research. WEEK 01 SUMMARY Accomplishments: Submitted preliminary project proposal. Weekly..... Listed under: LCD Projects



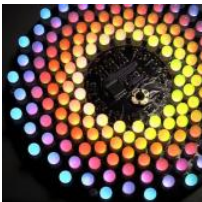
1335. Cheap Easy Solar Powered Robot Make a very cheap, relatively easy to construct robot which will wake up any time you shine a desk lamp on it. There are no sensors on it, although I suppose the solar panel can be called a sensor. I plan on adding solar panels..... Listed under: Robotics - Automation Projects



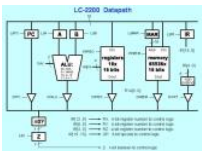
1336. RC5/RC6 codes on a LCD using PIC16F648A A simple project to test and display the transmitted codes from remote controls which work with the RC5 protocol, like the TV remotes from Philips, just aim the remote control at the TSOP1736 IR-receiver. If you only want to know the code from a remote control. Listed under: LCD Projects, Projects



1337. Towers of Hanoi Final report using pic-microcontroller Abstract: We have developed a mechatronic system to solve the famous Tower of Hanoi problem as part of a Carnegie Mellon University class. This class seeks solutions which solve the problem in under three minutes for the four disk case, using the minimum number of moves. Listed under: Development Board - Kits Projects



1338. Aurora 9x18 RGB LED art *** Check out my blog for updated version of this project and more! *** My obsession of LEDs has led me to this. Aurora is a thing of beauty (if I can say so myself) - has 162 RGB-LEDs in a circular configuration. The..... Listed under: LED Projects



1339. CS2200 Intro to Systems and Networks using pic-microcontroller, Download the project by clicking here. The zip file contains all the following files: prj1.html - You're reading it - contains the project description Assembler assemble16-win32.exe - a Windows-compiled HEX assembler to convert assembly code to HEX for your RAM. assemble16-linux.c - source code..... Listed under: Internet - Ethernet - LAN Projects

1340. eLab Hackerspace GSM Access Control System In this Instructable we'll show you how to make a GSM Access Control System for your hackerspace/garage/house/bedroom/dormroom/laboratory just like the one we built for eLab Hackerspace. We only used some scavenged parts but they can be replaced with similar parts with minor changes. This system..... Listed under: Phone Projects



1341.



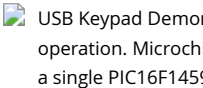
PIC MCUs: Hardware and Connections using pic-microcontroller Required Hardware In order to program and debug a PIC microcontroller, you will need a few pieces of hardware. ICD-U40 The ICD-U40 is an In-Circuit-Debugger/Programmer that allows the user, through CCS C Windows IDE, to program and interactively debug a PIC microcontroller. 5V DC Power..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects

1342.



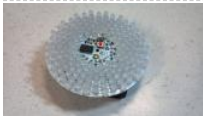
Lucid Dream/Dream Recall Machine using infrared. This is my first instructable, so I hope everything is clear and hoping you find it interesting, and I would appreciate any feedback, so here I go. I am still testing this device with other people, but personally I have found my dream recall has improved dramatically..... Listed under: LED Projects

1343.



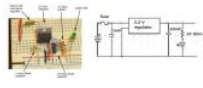
USB Keypad Demonstration – Crystal Free USB and mTouch™ Sensing Solutions using pic microcontroller The USB keypad reference design demonstrates crystal free operation. Microchip has partnered with Lumivatch to demonstrate a low-cost aesthetic design, with touch capability and LED lighting integrated. All features are driven by a single PIC16F1459 MCU. USB is one of the most common serial..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects

1344.



The ChromoDisk When I saw the Aurora LED 9x18 Instructable, I was inspired. However, it's built on the PIC microcontroller while I am most familiar with the AVR microcontrollers. Plus, I already have the development and programming environments for AVRs, so I set about a redesign as..... Listed under: LED Projects

1345.



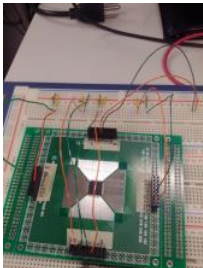
CSCI 255 Lab using pic-microcontroller Preparation In addition to the power supply that you created on your breadboard in Lab 2, you will need the following equipment/components to complete your PIC prototype board: (1) multimeter (1) PIC 24HJ32GP202 chip (2) alligator clip leads (1) LED (1) 10k Ohm resistor (1)..... Listed under: Home Automation Projects, Metering - Instrument Projects

1346.



Semi-Automatic NERF Longshot The first question I often get about this creation is "Why?." The answer is quite simple, I am an engineering student at Stony Brook University. We play a game on campus called "Humans vs. Zombies." That fact coupled with my over competitiveness, and my drive to create..... Listed under: Game - Entertainment Projects

1347.



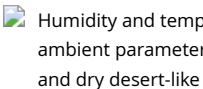
Joshua Marchi's Lab Notebook using pic microcontroller Week 01 January 11, 2012 (1 hour): Met with professor Talavage to discuss the basic functions of the headset sensor devices that will be used to collect data for this project. Discussed challenges of interfacing these devices to the base station using the USB protocol..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects

1348.



RFID Car immobiliser with PIC12629 Ok, so there are heaps of immobilisers out there but with most of them, if someone has your keys, they have your car. What good is a car alarm with 3+ point immobilisation if someone manages to get the keys and of course the alarm remote..... Listed under: NFC Projects

1349.



Humidity and temperature measurements with Sensirion's SHT1x/SHT7x sensors (Part 1) using pic microcontroller Temperature and relative humidity are two very important ambient parameters that are directly related to human comfort. Sometimes, you may be able to bear higher temperatures, if there is a lower relative humidity, such as in a dry desert-like environment. However, being in a..... Listed under: Temperature Measurement Projects

1350.



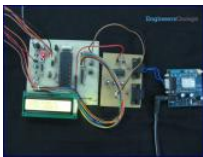
Hacking the Xbox CONTROLLER In this tutorial I show you step-by-step how I install a PIC microcontroller inside of an Xbox controller in order to perform custom functions. Now that you have the methods, all you have to do is go write some code and program a chip! Well..... Listed under: Game - Entertainment Projects

1351.



NES Controller iPod Remote By embedding a PIC microcontroller into an NES controller, it can be converted into a replacement for Apple's iPod remote (Only 3rd and 4th Generation iPods have this, it is the small oval port next to the headphone jack). Update (8/26/2011): It's been quite..... Listed under: Development Board - Kits Projects

1352.  2-Wire Keypad Interface Using a 555 Timer using pic microcontoller Keypads are a very commonly used input device in microcontroller-based systems. In a keypad, multiple switches are arranged in rows and columns so that they could be interfaced to a microcontroller with a minimum number of pins. For example, a 12-key keypad is arranged..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
1353.  Crossed IR Beam Camera/Flash Trigger This device will trigger a camera or flash unit to automatically take a picture when an object (target) enters a specific location. It uses two, crossed infrared light beams to detect the presence of the target and close a relay that trips the camera or..... Listed under: Video - Camera - Imaging Projects
1354.  GSM Voice Dialer with Automation Control using PIC18F46K20-I/PT Connected to a burglar alarm or fire alarm in the event of making phone calls or voice messages. Controlled via DTMF actuators can operate on the spot. In recent years we have introduced several telecontrols based on the SI4432 GSM module. We released schematics and..... Listed under: Home Automation Projects, Phone Projects, Projects
1355. Nixie Tube Ornament The Nixie Tube Ornament is a homage to the light-up&motion ornaments from the early 90's. The ornament looks cool on a tree and makes a great addition to any holiday decorations. Finally, a use for IN-12/15 top view tubes! I used an IN-15A symbol nixie in this ornament. An..... Listed under: power - energy projects
1356.  MikroElektronika's "Ready for PIC" board talks to "Processing" using pic microcontoller "Ready for PIC" is one of MikroElektronika's compact prototyping boards for 28-pin PIC microcontrollers. The board comes with PIC16F887 microcontroller which is preprogrammed with an UART bootloader firmware and thus eliminates the need for an external programmer. The on-board USB-UART module allows..... Listed under: LED Projects
1357.  Connecting multiple tact switches on a single input pin of a microcontroller Normally one tact switch requires one digital input pin of a microcontroller. Some designs implement keypad style multiplexing to get multiple switches on fewer inputs. However, there exist other techniques that allow you to connect many switches on a single input pin of a microcontroller..... Listed under: LED Projects
1358.  Multimeter Clock The Multimeter Clock consists of three multimeters, the first meter displays hours, the second displays minutes and the last displays seconds. A 16F628A PIC microcontroller keeps track of time and outputs a calculated current to each meter to display the current time. Get your own now! Listed under: Clock - Timer Projects
1359.  Expanding the number of I/O lines using Microchip MCP23008 using pic microcontoller A microcontroller comes with a limited number of general-purpose input and output (GPIO) ports. However, some applications may require more ports than are available on the microcontroller. In such a case, GPIO expanders can be used to increase the I/O capability of the microcontroller..... Listed under: LED Projects
1360.  Updated PIC 18F4550 USB Demo Board Video In this video we step through an updated version of the USB demo board. Changes include: -the demo board will only contain bare minimum parts to demonstrate USB communication from host to device and device to host -for both firmware and software, we will..... Listed under: Development Board - Kits Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
1361.  The Most Useless Machine EVER! And yet everyone wants one!!!? AKA: The Ultimate Machine! Get Your Useless Machine: Purchase Useless Machine Here! Update Oct 31, 2012: "Weird Al" Yankovic Sez: "I never realized till now how much I needed one of these." AS SEEN ON TV! Make Magazine's 'Most Useless Machine'..... Listed under: Video - Camera - Imaging Projects
1362. How to interface GPS with PIC18F4550 Microcontroller Global Positioning System is based on satellite navigation technology. A GPS Receiver provides the accurate location of an object in terms of latitude and longitude. Accurate time calculation with respect to GMT can also be done by using GPS. For more information on different data..... Listed under: GPS - Navigation Projects



GPS Based Projects, How To - DIY - Projects, Projects, Tutorials

1363.



SPI to 4 x UART Bridge (MULTIUART) If your a fan of electronics then you like me will often find it annoying on the lack of hardware serial ports or modern devices. Many modules like the Wifi ESP8266 and the Bluetooth HC-06 are available for peanuts but they each require a UART..... Listed under: Internet - Ethernet - LAN Projects

1364.



About the Temperature Sensor using pic microcontroller Temperature sensors are used in a wide range of electronic devices, including digital thermometers, home thermostats, ovens, and refrigerators. Figure 1 shows two devices with temperature sensors. Figure 1. Devices with temperature sensors. The temperature sensor provided in your kit is a precision analog sensor,..... Listed under: Sensor - Transducer - Detector Projects, Temperature Measurement Projects

1365.



Steam Turret Tank R/C PIC Servo Controller A Microchip PIC based servo controller offering many of the capabilities of digital servos for under \$9 controllers capture the r/c receiver output, optionally manipulate the samples, then regenerate new servo control signals. As such, they greatly e what is possible with cheap servos..... Listed under: Other Projects

1366.



OSOMCOM POCSAG BTS using pic microcontroller The BTS or Base Transmitter Station is the device that transmit the POCSAG messages to the p is the radio interface of the POCSAG network. THE HARDWARE The current version of the BTS hardware is a small board with a pic 18F microcontroller with..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1367.



Mini AV Test Box using pic microcontroller The notion of building a monitor/speaker AV tester came up in the forums a few weeks ago. Someone requested to see a project devoted to testing VGA displays and Speakers. The project I made many years ago: The VGA Test Box can be used to... under: Development Board - Kits Projects

1368.



DIY Datalocker How to turn an ordinary external harddrive into a datalocker using only a PIC microcontroller, a keypad and some various other components. Step 1: Parts The parts you need: - 3.5" SATA harddrive enclosure - 2.5" SATA harddrive NOTE: This will not work with a..... Listed under: Memory - Storage Projects

1369.



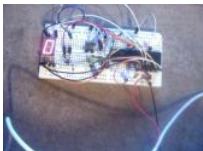
USB digital GPIO I/O extender using pic microcontroller description Add general purpose input/output lines to your computer based projects. This is a 12 pin digital GPIO interface using the Microchip PIC18F14K50 microcontroller which connects to an USB host port. The microcontroller is available through-hole DIP20 and SMD packages, too. Circuit diagram..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1370.



Granular Flow Rotating Sphere using pic-microcontroller Spring Quarter Update This zip file contains the documentation, MATLAB code/example code and circuit diagram. <http://hades.mech.northwestern.edu/wiki/images/3/3d/Tumbler.zip> Contact Scott McLeod for further questions. Team Members Brian Kephart - Electrical Engineering Class of 2009 Jonathan Shih - Mechanical Engineering Class of 2009 Kristi Bond - Mechanical..... Listed under: Home Automation Projects

1371.



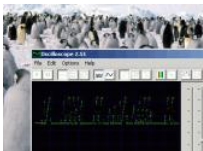
7 Segment LED display with PIC controller and Flowcode V5 First of all, if you have any questions, feel free to comment! I'd be more than happy to answer your question as good as possible!! Materials used : - PIC 18F452 Microcontroller (any PIC microcontroller with enough pins will do) - 7 Segment..... Listed under: LED Projects

1372.

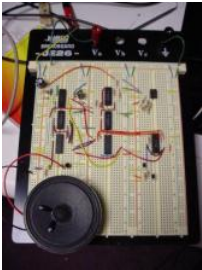
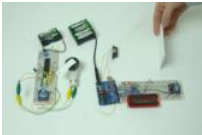

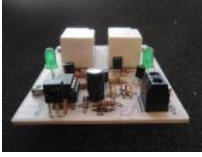






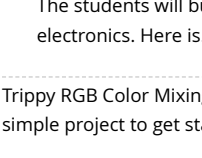


make your own wearable LED display using pic-microcontroller jump to a section:supplies about LED arrays design construction customizing/programming washing and wearing troubleshooting and FAQ **NOTE** As of Fall 2007, skip the ugly microcontroller programming buy the STK500 or the AVR chip)... Get a LilyPad Arduino instead. It's much easier to sew and..... Listed under: LED Projects

1373.



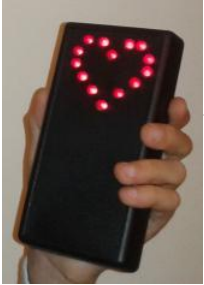
Oscilloscope clock An eight pin Microchip PIC microcontroller is programmed to operate from a 32768 Hz watch crystal and output waveforms when displayed on an oscilloscope, show the time in HH:MM:SS format. The screen capture shows winscope showing 12:46: ... Step 1: Design the character set..... Listed under: Clock - Timer Projects

1374.  Circuit design and electronics using pic-microcontroller I completed a 2-part assignment for this week. The first part was to build a sorta-random generator based on a schematic that Joe Paradiso made available. The second part was to build a circuit that could transmit MIDI messages - this towards..... Listed under: Sound - Audio Projects
-
1375.  Wireless Sensor Motor Control using PIC18LF4520 Last week we took a look at how you can wirelessly connect together two unrelated microcontrollers an Arduino UNO and a PIC. The week before that we showed you how to build Motor Control via Distance Sensing. This week, let's combine the two project together..... Listed under: Motor Projects, Projects, Sensor - Transducer - Detector Projects
-
1376.  00 to 99 minute timer using PIC16F628A microcontroller Last week I was browsing my old backup hard drive and I found a source code for a very PIC based digital timer that I made a couple of years ago. The actual hardware of the project isn't with me anymore. I might have..... Listed under: Timer Projects, Projects
-
1377.  2-Channel IR Relay Controller for PIC10F200 Description This project is a 2 channel infrared (IR) remote controlled relay driver with power saving works with 12-bit SIRC IR signals as used by Sony remote controls. The controller also features a power save feature which reduces the relay hold voltage to 50%..... Listed under: Internet - Ethernet - LAN Projects, LED Projects, Projects
-
1378.  Gas Cooker & Water Purifier Using Free Energy I originally wrote this for my final year project in 2005. I won't provide a parts list as certain technology has moved on such as the ease of Arduino for the electronics and solar cells are a lot better and readily available now. Also I..... Listed under: Other Projects
-
1379.  Temperature and relative humidity display with adaptive brightness control using PIC12F683 The objective of this project is to illustrate a technique implementing adaptive brightness control to seven segment LED displays. It consists of a closed loop system that continuously assesses ambient light condition using an inexpensive light-dependent resistor (LDR) and uses that information to adjust..... Listed under: Projects, Temperature Measurement Projects
-
1380.  Pinguino Egypt - PIC Based Arduino It's been eleven years since I first started learning and building my first Microchip PIC Microcontroller circuit like this Microcontroller family. Recently, I started reading and trying some Arduino. I really wished to build a similar circuit based on the Microchip PIC..... Listed under: Development Board - Kits Projects
-
1381.  Computer-Controlled Light-Up Water Fountain using pic-microcontroller System Overview La Fontaine Du Campus Est (The Fountain of East Campus) is a computer-controlled, servo-actuated, LED and halogen-lit, sump-pump powered water fountain. It features five streams of water that can each be individually controlled (on/off) as well as pivoted (90 degrees of freedom). Each..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects
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1382.  PIC KICK TWEET ! This is an Instructable showing you how to integrate Twitter in your embedded application. Watch this Instructable in Action <http://www.instructables.com/id/PIC-KICK-TWEET-1/> Working: A desktop application is created with ease for grabbing the latest tweet from a twitter account. The application then forwards the tweet to the serial..... Listed under: LCD Projects
-
1383.  USB Reprogrammable iButton door lock iButtons are small button like casings that communicate with only 2 wires. They are incredibly robust and have a unique serial number which is hardware written into the device and never repeated. They are cheap (about 1 Pound / 1,50 Euro/ \$2) This is a serial..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects
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1384.  Mädchen Machen Technik using pic-microcontroller The "Mädchen Machen Technik" workshop is designed to give high school students an introduction to microcontrollers. The students will build a flashing light pattern and/or a counter-timer. In the process of building this project, the students will learn about microcontrollers and digital electronics. Here is..... Listed under: LED Projects
-
1385. Trippy RGB Color Mixing NightLight Project is based on A Trippy Crystal Nightlight by Charles Platt in Make magazine volume 25, see URL below for additional details. A fun simple project to get started with PICAXE microcontrollers. <http://www.makezine.com/25/electronics> In this version an inexpensive (> \$2.50) AC USB charger..... Listed under: Projects



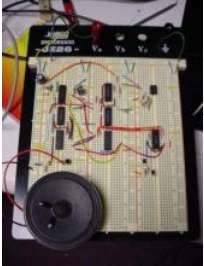
LED Projects

1386.



Electronic Heart (Flashing LEDs) – Mother's Day Project Mother's Day was approaching, and I am getting my 8 year old son started with electronic why not combine the two? In the next few pages we'll show you the project we did - a blinking heart with several effects, all driven by a..... Listed under: LED Projects

1387.



Circuit design and electronics using pic-microcontroller I completed a 2-part assignment for this week. The first part was to build a sorta-random generator based on a schematic that Joe Paradiso made available. The second part was to build a circuit that could transmit MIDI messages - this towards..... Listed under: Sound - Audio Projects

1388.



The perfect Remote, Programmable, Controller for interactive LED strips Since when white light emitting high brightness LED are available, the h from traditional lighting bulbs to the solid-state lighting has become irreversible: LEDs have an efficiency (expressed in lumens/watt) higher than almost all the traditional lamps (except, at the moment, the large..... Listed under: LED Projects

1389.



3D Printed Microcontroller Dice Roller This is a just-for-fun project I did in the Digilent MakerSpace. Usually whenever I play board games I use a rolling smartphone app since dice are so easy to lose. I thought I would try making my own hardware version though. It turned out really..... List under: chipKIT Projects, LED Projects

1390.

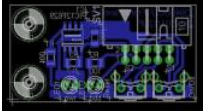


Microcontroller's based Password Locker Hello Everybody , the goal of this instructables is to learn how to do a simple locker for your room, or a which need to be safe. I've made it on a non-soldering card but there is the PCB if you want to make it..... Listed under: Calculator Projects

1391. Picaxe Projects #1: Making Fast Printed Circuit Modules Experimental circuit board modules can be made quickly and fairly easily. They have the advantage of being more twice as fast to build than a custom circuit board. They are also easy to test in a breadboard. The modules detailed here are ones I..... Listed under: Development Board - Projects



1392.



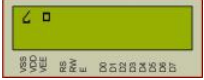
Intel D945GCLF Small Front Panel using PIC12F629 Description This is a simple circuit with two buttons and two LEDs to control the D945GCLF In motherboard. Both power and reset buttons are included as well as hard disc activity LED and power status LED. The special feature included is sleep effect of Apple..... Listed under: Projects, RTOS - OS Projects

1393.


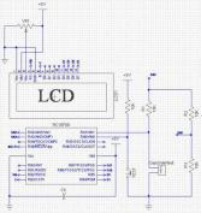


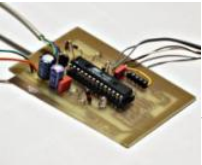




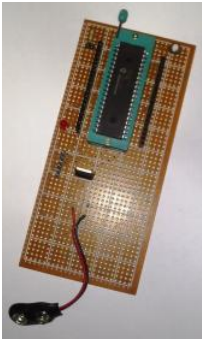
PIC18 Development Board with Ethernet and USB In this instructable I'm going to show you how to make your own PIC18 development board th features both Ethernet and Full Speed USB 2.0 at a low cost. Features: The development board is based on a PIC18LF4553 microcontroller. The microcontroller features a Full Speed..... Listed under: Development Board - Kits Projects

1394.



How to display custom characters on LCD using PIC16F877 This post explains the idea of creating custom characters on any LCD (e-g on 16x2 LC which has HD44780U controller in it. Almost all 16x2 or 20x2 LCDs have HD44780U controller in them[1]. This controller provides the functionalii CGRAM (Character Generator..... Listed under: LCD Projects, Projects

1395.  Build this microcontroller controlled rainbow flying disc – and then throw it! Hello all and welcome to this super simple and inexpensive instructa you like throwing frisbees AND you like flashing lights AND you like night time - then this instructable is for you! Have you ever waved a light or t around and found that it 'draws' lines..... Listed under: LED Projects
-
1396.  **BATTERY CHARACTERIZER using PIC18F252** Introduction This circuit is a battery characterizer that applies a fixed load to a charged NiCad or NiM and measures milliamp-hour capacity as it discharges. There is no single load that can be applied to a battery to measure milliamp-hours. It dep the..... Listed under: Battery Projects, Projects
-
1397.  Determine capacitance by measuring the charging time using PIC16F688 When TEST button is pressed, RA3 pin is set to "1". R2 and R3 are divide voltage to 1/2 Vra3 which is connected to RA2 pin to be a Vref for comparator. The C undertest is charging and the timer is start. When the..... Li under: Clock - Timer Projects, Metering - Instrument Projects, Projects
-
1398. **PIC 12F675 Programmable 12V Battery Monitor** Being an active outdoor guy, I have a few different types of 12V lights and a variety of battery types. - For flying RC planes quadcopters at night, we use sealed lead acid batteries to power our club tables. - For fishing, I have..... Listed under: Battery Projects
-
1399.  **RGB LED PWM Driver for High Power 350mA LEDs using PIC12F629** Description This project combines a PIC and three constant current 'buck' co to produce an RGB LED controller that will operate with the the high power 350mA LEDs using PWM to control the LED brightness. By driv ng the green and blue LEDs with varying pulse..... Listed under: LED Projects, Projects, PWM Projects
-
1400.  **Voice Activated Power Sockets (Home Automation)** Yet another voice controlled home automation system! As shown in the picture, the system c control any electrical appliance, by turning ON or OFF, that is connected into the electrical socket. The system does this using bespoke voice com The system uses a micro-controller board..... Listed under: Home Automation Projects
-
1401.  **A digital thermometer or talk I2C to your atmel microcontroller using pic microcontroller** Abstract: The Atmega8 microcontroller from Atmel has of digital and analog input/output lines. It is the ideal device to develop any kind of measurement equipment. In this article we see how to inter the microcontroller to a linux PC over a physical RS232 interface..... Listed under: Microcontroller Programmer Projects
-
1402.  **Bluetooth Wireless Voltage Meter using Wiimote + Pic Chip + Autolt** In this tutorial I'm going to be showing you how you can send voltage values pc using a Pic chip, Wiimote, and Autoit3 scripting language. The process works by wiring a pic chip to the button pads of a wiimote. Then using t Listed under: Wireless Projects
-
1403.  **Programmable Stiffness Joint using pic-microcontroller** Team Members Amanda Care (Senior in Mechanical Engineering, Northwestern Universit Nickel (Graduate Student in Biomedical Engineering, Northwestern University, BS in Biomedical Engineering from the Milwaukee School of Engin James Yeung (Junior in Electrical Engineering, Northwestern University) Overview The "Programmable Stiffness Joint" is a device..... Listed under: Microcontroller Programmer Projects
-
1404. **PIC16F1787 Programmer Board (for Almost all 40 pin 16Fxxx)** Intro This is my first Instructable so I'm sorry for mistakes. Critics are always welcome 😊 So in this project I development board for PIC16F1787. Now most of you guys aren't familiar with this particular model. Some might even think why I chose..... Listed under: Development E Kits Projects

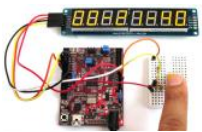


1405.



chipKIT Tutorial 7: Using Nokia 5110 LCD In Tutorial 4, we learnt interfacing an HD44780-based LCD to a chipKIT board for displaying alphanumeric output. Today, we will see how to connect a NOKIA 5110 graphical LCD (used in Nokia 5110 cell phones), which is a 84x48 pixel monochrome display about 1.5" diagonal in size. The display..... Listed under: chipKIT Projects, Development Board - Kits Projects

1406.



chipKIT Project 5: Digital stopwatch on seven segment LED display In this project, we will use the chipKIT Uno32 board to build a digital stopwatch capable of timing minutes, seconds, and 1/10th of seconds, and with a basic start and stop control feature. A MAX7219-driven 8-digit seven segment LED display is used to display the..... Listed under: chipKIT Projects, Development Board - Kits Projects

1407.



chipKIT Project 4: Digital light meter A light meter is used to measure the intensity of illumination in a given area. It is widely used in schools, warehouses, factories, hospitals, office buildings, museums, art-galleries, parking garages, stadiums, and many more, to measure and maintain lighting levels. The intensity of illumination is usually expressed..... Listed under: chipKIT Projects, Development Board - Kits Projects

1408.



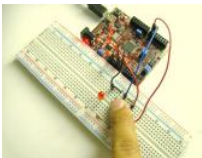
Universal Driver & Dev Board using PIC16F Description The simple 8 channel LED chaser has been a very popular project on Picprojects since it was published a couple of years ago. During that time there has been a demand for a board that could drive more LEDs so I started designing..... Listed under: Development Board - Kits Projects, Projects

1409.

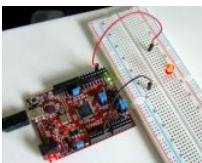


On-Board Satellite Controller using ARM Based Microcontroller Satellite Subsystems Irrespective of the intended application, is it a communication satellite or a weather satellite or even an Earth observation satellite, different subsystems comprising a typical satellite include the following: Mechanical structure Propulsion Thermal control Power supply Tracking, telemetry and command Attitude and orbit..... Listed under: Development Board - Kits Projects, Wireless Projects

1410. chipKIT Tutorial 1: Digital input and output Our first chipKIT tutorial is about reading and writing digital data (0 or 1) from and to an I/O pin of the chipKIT board. Digital input is useful to determine whether an incoming digital signal is logic HIGH or logic LOW. A simple application of..... Listed under: chipKIT Projects, Development Board - Kits Projects



1411.

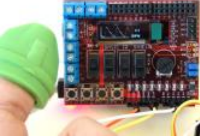
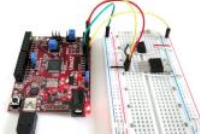
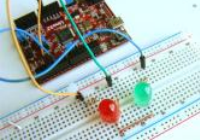



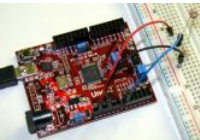

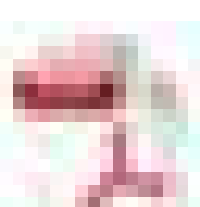



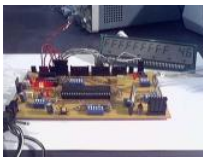
chipKIT Tutorial 2: Serial communication with PC The PIC32 processor on the chipKIT Uno32 board provides two hardware serial ports. One of them is used by the on-board FTDI chip to create a USB-UART interface that allows the MPIDE tool running on the PC to communicate with the Uno32 board through an..... Listed under: chipKIT Projects, Development Board - Kits Projects

1412.



What is Chipkit Development Board? In order to understand the chipKIT platform, it is important to talk about Arduino first. Arduino is an easy-to-use and powerful open source environment for developing microcontroller based applications. Chipkit Development Board It has gained huge amount of popularity in past few years, specially among hobbyists..... Listed under: chipKIT Projects, Development Board - Kits Projects, Featured

1413.  chipKIT Project 3: Easy Pulse Meter This is a third project in our chipKIT tutorial series and today we are going to construct a simple pulse rate meter using our Easy Pulse sensor with Digilent's chipKIT Uno32 board. Digilent's chipKIT Basic I/O shield is also used in this project for displaying the waveform..... Listed under: chipKIT Projects, Development Board - Kits Projects
1414.  chipKIT Tutorial 6: Inter-Integrated Circuit (I2C) communication I2C or IIC (Inter-Integrated Circuit) is a simple bidirectional serial interface, which only 2 signal lines for data transfer. It was originally developed by Philips in 1980's to provide easy on-board communications between a CPU and various peripheral chips in a TV set. Today,..... Listed under: chipKIT Projects, Development Board - Kits Projects
1415.  chipKIT Tutorial 5: Pulse width modulation (PWM) Pulse width modulation (PWM) is a technique of controlling the amount of power delivered to electronic load using an on-off digital signal. The key idea behind this technique is that the average DC value of the digital signal, and hence the power delivered to..... Listed under: chipKIT Projects, Development Board - Kits Projects
1416.  chipKIT Project 2: Temperature and relative humidity logger This project is about building a PC-based temperature and relative humidity logger using chipKIT Uno32 board and the DHT11 sensor. The project setup requires no additional wires (other than the USB cable) and components; the DHT11 sensor is directly plugged into four I/O pins..... Listed under: chipKIT Projects, Development Board - Kits Projects
1417. chipKIT Project 1: Digital thermometer using an LM34 sensor In Tutorial 3, we learnt how to use chipKIT ADC channels to read an external analog voltage and convert it into a digital number. We also discussed about interfacing a standard Hitachi 44780-based character LCD to the chipKIT Uno32 board in Tutorial 4. Now it's..... Listed under: chipKIT Projects, Development Board - Kits Projects
- 
1418.  chipKIT Tutorial 4: Interfacing a character LCD Liquid Crystal Displays (LCDs) are a very popular output device for displaying graphical and alphanumeric data in microcontroller based systems. They can also provide an interactive input interface to the users. The most common type of LCD controller used by hobbyists is the Hitachi 44780,..... Listed under: chipKIT Projects, Development Board - Kits Projects
1419.  chipKIT Tutorial 3: Analog-to-digital conversion [caption id="attachment_12035" align="alignnone" width="570"] Analog-to-digital conversion [caption id="attachment_12035" align="alignnone" width="570"] Theory Many embedded applications deal with physical variables such as motion, temperature, pressure, relative humidity, light intensity, and sound. Since a microcontroller cannot directly handle these entities because i) they are non-electrical signals, and, ii) they are analog quantities,..... Listed under: chipKIT Projects, Development Board - Kits Projects
1420.  Electrical Subsystem Schematics The goal of the electrical design was to streamline an automatic shift control while keeping manual user input in a user-friendly way. The electrical design was driven by the complexity required by the mechanical system. The system takes in rider input in the form of a button. Listed under: Sensor - Transducer - Detector Projects
1421.  Frequency Counter by PIC16F628 In this project we are building a basic and low cost frequency counter circuit. It can measure from 16Hz to 100 kHz signals with a maximum amplitude of 15V. The sensitivity is high, the resolution is 0.01Hz. The input signal can be a sine, a square wave, or a pulse..... Listed under: LCD Projects
1422.  Curiosity Development Kit Board Satisfy Your Curiosity Your next embedded design idea has a new home. Curiosity is a cost-effective, fully integrated development platform targeted at first-time users, Makers, and those seeking a feature-rich rapid prototyping board. Designed from the ground up to take full advantage of Microchip's MPLAB..... Listed under: Development Board - Kits Projects
1423.  Keypad 4x5 for microcontrollers v. 1.1 using PIC16F877 What's this? The circuit here described is a simple 4x5 keypad that can be used in particular with the PIC 16F877 microcontroller, for which it has been designed considering a supply of 5V, 16F877 I/O pins leakage current, the voltage level recommended by the manufacturer..... Listed under: Projects, RTOS - OS Projects



1424.



WHAT IS A PIC MICROCONTROLLER? WHAT CAN IT DO? PIC microcontrollers (Programmable Interface Controllers), are electronic circuits that can be programmed to carry out a vast range of tasks. They can be programmed to be timers or to control a production line and much more. They are found in most electronic devices such as..... Listed under: LCD Projects

1425.



Infrared Remote Controlled (RC) Steerable Vibrobot Created by Naghi Sotoudeh Vibrobots (and bristlebots) are simple robots that use a tiny pager or cellphone vibrator motor (with an eccentric weight) to randomly bounce around -- they are the subject of many Maker / DIY projects as well as some well-known commercial toys (such as the \$7.00..... Listed under: Featured, Robotics - Automation Projects

1426.



Ultrasonic Range Finder Circuit AD605 PIC16F876 Ultrasonic distance measurement, detection circuit pic16f876 microcontroller and ad605 (Dual Noise Variable Gain Amplifier single supply) integrated circuit diagrams used are C and asm software also Resimlrdede oscilloscope's measurement 40kHz ultrasonic transducers used as sensors. I2C Sonar Ultrasonic Range Finder In many embedded systems..... Listed under: Development Boards - Kits Projects

1427.



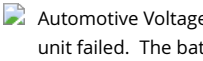
Amicus18: Arduino-style platform for PIC fans using PIC18F25K20 Arduino needs no introduction; it is an easy-to-use yet powerful open source embedded system development platform that has gained huge amount of popularity in past few years, specially among hobbyists. The standard hardware consists of an 8-bit Atmel AVR processor with on-board headers providing access..... Listed under: Development Board - Kits Projects,

1428.



RS232 - Infra-Red Interface Description This project is a Microchip PIC microcontroller with an RS232 serial interface on one side and an Infra-Red receive and transmit interface on the other. Important - All mention of RS232 on this page actually refers to RS232 waveforms operating at 5V TTL levels..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects

1429.



Automotive Voltage Monitor using PIC12F683 Description Recently I got a new motorbike and on my second trip out, with only 50 miles on the clock the rectifier/regulator unit failed. The battery on a bike is pretty small and with the head light permanently on and all the ECU, ignition and..... Listed under: Battery Projects, Car Projects, Feedback / Suggestions

1430.



Audio CRO using PIC12F675 Microcontroller This project is a miniature Audio CRO. For those not familiar with the abbreviation "CRO," it means "Cathode Ray Oscilloscope" and this is sometimes shortened to "SCOPE or O-Scope." A "CRO" is a piece of test equipment with a screen. It produces a visual indication..... Listed under: Projects, Sound - Audio Projects

1431.



Build a musical EKG with the Freescale FRDM-KL05 Short Introduction: I have been following the Battle of the DreamBoards Championship with interest and I enjoyed the variation of functionality features put together in each of the dreamboards. I especially had my attention attracted by the combination of audio inputs and outputs, analog to..... Listed under: Sound - Audio Projects

1432.



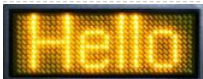
A new multi-function power supply unit for my Embedded Lab using PIC16F689 One important parameter in embedded system designing is power consumption. This parameter is directly related to the battery lifetime, if the system is to be powered from a battery. In order to determine the power rating of your designed system, you need to know how..... Listed under: How To - DIY - Projects, Projects

1433.



Top Microcontroller based Mini Projects for 3rd and 4th Year Engineering Students Microcontroller is a small and self-contained computer on-chip that can be used to build several low-cost and less-complex projects. As the microcontroller based mini projects are of low cost and can be implemented in less span of time, most of the students prefer this controller..... Listed under: Microcontroller Programmer Projects

1434.



LED Scrolling Display Project Working With Circuit Diagram We normally use a simple static LED display screen to convey a message. Earlier, when we wanted to display large data, we used to change message for every few instances. Now scrolling displays are more preferred to static. By using a programmed controller, we..... Listed under: LED Projects

1435.



Serial Data Received from PC and Displayed on 16x2 Using USART of Pic16f877 Microcontroller Here is a simple tutorial on how to receive serial data from PC(Personal Computer) Hyperterminal and display it on 16x2 Lcd using PIC16f877 microcontroller. It's not much difficult you just need to know how to use USART(Universal Synchronous-Asynchronous receiver transmitter) of PIC 16f877. Serial data..... Listed under: LCD Projects

1436.

TIC TAC TOE game using PIC16F628 This project is not to introduce Tic Tac Toe. Everyone knows this game. It's to introduce two features. Bi-colored LEDs, microcontrollers and the skill of writing an ALGORITHM. You can use the project to learn the skills of creating the Tic Tac Toe program or..... Listed under: Game - Entertainment Projects, Projects



1437.



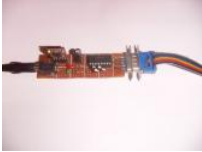
CELLPHONE OPERATED LAND ROVER I know the general rule of world that "reading makes man ready, writing makes man everyday but practice r man perfect." Only theoretical knowledge is not enough for an E.C (Electronics and communication engineering) student. A project is one of the s in which we have to..... Listed under: Phone Projects

1438.



Wireless controlled light dimmer using PIC12F629 The meaning from this design is to build it in -i.e. a shaded lamp- and to switch this lamp on an the normal way, just like it was switched before the dimmer was build in, then you could by exception dimming the lamp more..... Listed under: Featured, Home Automation Projects, Internet - Ethernet - LAN Projects, Projects

1439.



Simple mass storage for your microcontroller project Do you want gigabytes of storage for your microcontroller? Would you like a simple way to files from your PC to your picaxe or arduino or other micro project? This little projects demonstrates the uDrive that can be set up as an extra dr Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1440.



RFID Based Attendance System – Circuit, Working, Source Code Attendance in colleges is generally paper based which may sometimes cause err Taking attendance manually consumes more time. So the proposed attendance system uses RFID technology to take attendance. In this system, student is issued an RFID tag. Controlling unit is in the institute..... Listed under: LCD Projects

1441. Know the Procedure of GSM Modem Interfacing with 8051 The acronym of the GSM modem is Global System for Mobile Communications, it is a wireless communication module, used to make a computer or any processor to communicate over a network. This modem uses a variation of TDMA(Time Division Multi Access) and is the most..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

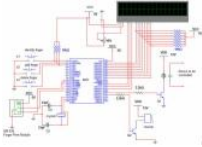


1442.



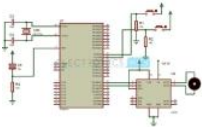
IN-8 single nixie tube clock using PIC16F84 After receiving one IN-8 tube from a friend (thanks), I decided to build myself a clock. This clock is as an ornament than a useful machine because it consists of just one digit (tube) so it displays current time every minute for three times. It..... Listed under: Clock - Timer Projects, Projects

1443.



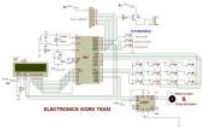
Latest Microcontroller Based Electronic Project Circuits in 2014 A microcontroller is a small computer on a single integrated chip that is program control the devices. Most of the embedded-based projects require knowledge about programming the microcontroller. Once students get an ide the circuit, schematics and their operations, it becomes really easy..... Listed under: Microcontroller Programmer Projects

1444.



Interfacing DC Motor with 8051 Microcontroller When we talk about controlling the robot, the first thing comes into the mind is controlling DC m Interfacing DC motor to the microcontroller is very important concept in Robotic applications. By interfacing DC motor to the microcontroller, we many things like controlling..... Listed under: Motor Projects

1445.



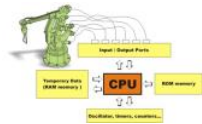
8051 MICROCONTROLLER 8051 Microcontroller based electronic locker system CIRCUIT DESCRIPTION Security is a prime concern in our day-tod. Everyone wants to be as much secure as possible. The issue of security is very paramount at home doors and safe. An access control for doors forms vital link in a security..... Listed under: LED Projects

1446.

PIC microcontroller power supply circuit by Chayapol This is 5V portable power supply circuit for pic microcontroller experiments. or PIC micro power supply circuit. As The PIC16F627A microcontroller use 5 volts DC power supply. My son need to build it as 5V portable power supply circuit because of the need for safe..... Listed under: Microcontroller Programmer Projects



1447. Chapter 1: PIC16F887 Microcontroller – Device Overview The PIC16F887 is one of the latest products from Microchip. It features all the components which modern microcontrollers normally have. For its low price, wide range of application, high quality and easy availability, it is an ideal solution in applications such as: the control of... Listed under: Memory - Storage Projects



1448. PIC16F84A timer0 code and Proteus simulation This post provides the timer0 code for PIC16F84A microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you know how to blink an LED..... Listed under: Clock - Timer Projects, Projects



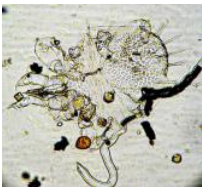
1449. How to work with inbuilt ADC Module of PIC18F4550 A microcontroller, a digital device, can read, execute and transmit only digital signals. On the contrary, the outputs of the most of the transducers are analog in nature. Thus it is hard to interface these transducers directly with controllers. An analog-to-digital converter (ADC) ICs are one..... Listed under: Projects, Sensor - Transducer - Detector Projects, Tutorials



1450. Digital Temperature Sensor Circuit Temperature sensors are widely used in electronic equipments to display the temperature. You can see the digital clock displaying the room temperature value. It is due to the temperature sensor embedded in it. Generally, temperature value is analog. It is converted to digital value and..... Listed under: LED Projects



1451. Air Sampler using PIC16F690 microcontroller Do you ever wonder what is in the air you breathe? Or maybe you have hay fever and want to know what kind of pollen makes you sneeze in spring? Questions like that prompted me to build a simple device for capturing airborne particles so..... Listed under: Medical - Health based Projects, Projects



1452. Breadboard module for 18-pin PIC16F microcontrollers (PCB version) Because of their compact size, ease of use and many built-in peripherals, the 18-pin PIC16F series processors (PIC16F628A, PIC16F88, and now PIC16F1827/47) have always been my favorite microcontrollers. Many of my project tutorials written in this blog also use PIC16F628A and PIC16F1827 microcontrollers. As..... Listed under: How To - DIY - Projects, Projects



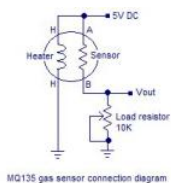
1453. Password Based Door Lock System using 8051 Microcontroller Traditional lock systems using mechanical lock and key mechanism are being replaced by new advanced techniques of locking system. These techniques are an integration of mechanical and electronic devices and highly intelligent. One of the prominent features of these innovative lock systems is their simplicity..... Listed under: LED Projects

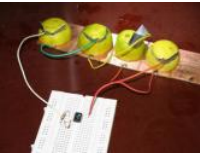


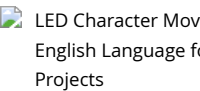
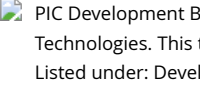
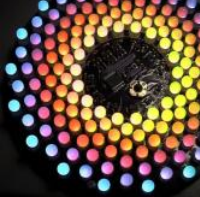


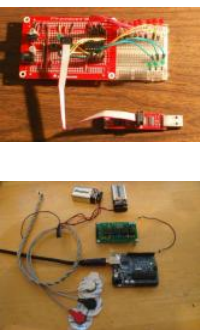
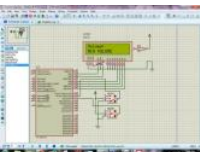





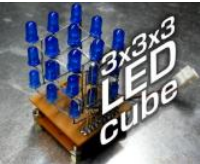



1454. IR-Sensor Circuit and Interfacing with PIC Microcontroller An IR sensor is an electronic device, that produces in order to detect some parts of the environment. An infrared sensor can measure the heat of an object as well as detect the motion. These sensors are used to measure only IR radiation rather than..... Listed under: Sensor - Transducer - Detector Projects



1455. Breathalyzer circuit using 8051 Last Updated on March 12, 2014 by admin in 8051 projects with 15 Comments Alcohol Breathalyzer circuit using 8051 microcontroller (AT89C51) This article is about a breathalyzer circuit using 8051 microcontroller which outputs the blood alcohol content (BAC) from the breath. The BAC is..... Listed under: Other Projects



1456.  Tiny AVR Microcontroller Runs on a Fruit Battery Some of the fruit and vegetables we eat can be used to make electricity. The electrolytes in man and vegetables, together with electrodes made of various metals can be used to make primary cells. One of the most easily available vegetable, ubiquitous lemon..... Listed under: Battery Projects
1457.  30 volts Panel Volt Meter Using PIC MCU This is a simple application of internal 10-bit ADC(analog to digital converter) of PIC16F676 microcontr can use this circuit to measure up to 30 v dc. the possible applications are on bench top power supply or as a panel meter in various system. C description Listed under: LED Projects
1458.  Interfacing DC Motor with PIC Microcontroller using L293D DC Motor and L293D We can't drive a DC Motor (depends) directly with a Microcontr DC Motors requires high current and high voltage than a Microcontroller can handle. Microcontrollers usually operates at +5 or +3.3V supply and pin can provide only up..... Listed under: Motor Projects
1459.  LED Character Moving English Font Display Project (8x16) LED Character moving play Project is Very popular and very valuable project in microcontroller field. In here English Language font on 8x16 play. You can Expand this 16 column to up to 32 column. We use 16 LED columns and 8 LED Rows in this play. We use..... Listed under: LED Projects
1460.  PIC Development Board - Hello World Project Hello friends, welcome to this exciting tutorial where we will begin our journey with latest PIC18F micros from Microchip Technologies. This tutorial will give you information on what software/hardware you will require and basic steps on how to get, install, configure and use them. After. Listed under: Development Board - Kits Projects
1461.  Aurora 9x18 RGB LED art My obsession of LEDs has led me to this. Aurora 9x18 is a thing of beauty (if I can say so myself) - has 162 RGB-LEDs in circular configuration. The color of each circle is controlled by a microcontroller using a twisted form of..... Listed under: LED Projects
1462. Wave JT - Larson Scanner with Joule Thief I love LED chasers. A bunch of LEDs neatly turning on and off on a precise timing - lights running one way, then the other way... relaxing, soothing, and hypnotic. There are so many LED chaser/scanner/sequencer circuits out there, some are made with discreet..... Listed under: LED Projects
1463.  DIY \$1 PIC 12f675 JDM Programmer (Cheap and Easy) Hi Everybody I am Again Doing something. and it is with PIC's! Almost Everybody do not use Arduino in their projects or to control a rgb led with Arduino uno? Enjoy Compressing your projects with PIC and Attiny too. but in this world..... Listed under: Development Board - Kits Projects
1464.  Development board for Attiny84 Microcontroller This is a development board for Attiny84 microcontroller. The Attiny84 chip has 11 pins address with the Arduino IDE, 8k of flash memory for program storage, and 512 bytes of RAM available for the stack and program variables. One feature Attiny84 that is..... Listed under: Development Board - Kits Projects
1465.  DIY Muscle Sensor / EMG Circuit for a Microcontroller Measuring muscle activation via electric potential, referred to as electromyography (EMG), traditionally been used for medical research and diagnosis of neuromuscular disorders. However, with the advent of ever shrinking yet more powerful microcontrollers and integrated circuits, EMG circuits and sensors have found their..... Listed under: Game - Entertainment Projects, Robotics - Automation Projects
1466.  PIC MicroController Volume Adjuster Program(Proteus 8 Stimulation) Hello everyone, The important aspect of every learning is to induce curiosity doing something meaningful to satisfy that. With the help of that curiosity, I'm here making a volume adjuster program which resembles the same most devices but not that much, Here the default..... Listed under: Sound - Audio Projects

1467.  LEDs sync to music (with pics of my awesome computer case mod) I'm finishing up my computer table i've been working on and one of the final is making LEDs sync to the speakers. I have some pics of my computer too. This project took me about 15 minutes and was free because i had t Listed under: LED Projects
1468.  How to get started with PICAXE 08M microcontroller This is instructable for how to get started with PICAXE 08M microcontroller. To get started, y need: - 08M Protoboard or same kind of board (Can be homemade) - A LED - AXE027 USB Cable - 3V Power supply Step 1: Connect the led to..... under: Other Projects
1469. Easy 16F84 Microcontroller Programmer – JDM In this instructable , I 'll show you how I built and tested this simple yet powerful circuit . The JDM Programmer is my favor Microcontroller programmer. It is a simple circuit and compatible with many software loaders. I 've built this circuit many years..... Listed under: Microcontroller Program Projects
1470.  PIC 16F917 Gyroscope interface In this post we will study the ADC (Analog-to-Digital) Module of the Microcontroller PIC16F917 . We will study a circuit of PIC16F917 interfacing to a semiconductor Gyroscope. The Gyroscope is a motion sensor that senses tilt in a certain direction . The..... L under: Interfacing(USB - RS232 - I2c -ISP) Projects
1471.  PIC 3x3x3 LED cube Here ´s my 3x3x3 LED cube, it's controlled by a PIC16F628A microcontroller. This is my first microcontroller project tha: fins all so i suppose is not that difficult to make for beginners. I hope you'll enjoy that instructable and even make your own LED cube! [embed]https://youtu.be/eOM3cuapjpU[/embed]..... Listed under: LED Projects
1472.  Wireless Radio Frequency Module Using PIC Microcontroller It's a Microcontroller Based DIY Electronics Project. Named Wireless RF Module Usin Microcontroller. The RF module is a small electronic circuit used to transmit, receive, or transceive radio waves on one of a number of carrier frequencies. RF modules are widely used in consumer..... Listed under: Radio Projects
1473.  Simple Button Keypad – Microcontroller Simple method for creating a custom button keypad that doesn't require separate hardware. Just your microcontroller buttons a few resistors. What we have here is 9 buttons and 6 signal lines (3 inputs, 3 outputs). The basic setup is in a grid patte where the three input..... Listed under: Other Projects
1474.  How to Interface LCD with PIC16F877A Slicker PIC16F/18F Slicker Board The PIC16F/18F Slicker board is specifically designed to help students to the required skills in the area of embedded systems. The kit is designed in such way that all the possible features of the microcontroller will be e used by the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects
1475. PIC16F84A LED blinking code + Proteus simulation This post provides the code to make an LED blink using PIC16F84A microcontroller. This code is written in C language t MPLAB with HI-TECH C compiler. This code is intended to be the first step in learning how to use PIC16F84A microcontroller in your projects..... Listed under: LED Project

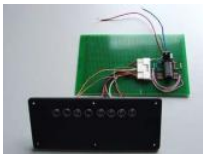


1476.



Interfacing Temperature Sensor with Microchip PIC16F876A The tutorial aims at providing the necessary information for interfacing an analog temperature sensor with a Microchip PIC Microcontroller. PIC (Peripheral Interface Controllers) was introduced in 1985. The PIC16F876A has 8K Program Memory, 368 bytes of Data Memory (RAM) and many other..... Listed under: Sensor - Transducer - Detector Projects

1477.



Schematic design with the PIC16F84A microcontroller Many circuits on the Internet are built with a CD4017 counter IC. I myself chose to use a microcontroller for this job: the PIC16F84A. A microcontroller increases the complexity but it allows you to build a very flexible light computer. It can be kept..... Listed under: LED Projects

1478.



Navigation Lights for Models for PIC12F629 Description This project was inspired from a post on the Picprojects forum where a member had added the RGB Moodlight project for use as a strobe and beacon for a model aircraft. I thought this would be of interest to others so I've put this..... Listed under: LED Projects, Projects

1479.



EnvStick USB Temperature Sensor using PIC12F683 The EnvStick is cheap, homemade temperature sensor that plugs into a USB port. It provides a simple way to collect a room's ambient temperature. I made it for fun. EnvStick Features: - Temp sensor (+/- .5 deg C) - USB 2.0 - Windows/Linux compatible..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Projects, Sensor - Transducer - Detector Projects

1480.



Fire Fighting Robotic Vehicle We all are well aware of the major fire accidents that frequently take place in nuclear power plants, petroleum refineries, gas tanks, chemical factories and other large scale industrial units and result in very serious consequences. Thousands of people have lost their lives due to..... Listed under: Robotics - Automation Projects

1481.



Digital thermometer with PIC16F84 circuit This electronic project is a very simple thermometer that is based on the PIC16F84A microcontroller, designed by Microchip. Why to use a thermometer that is designed using a microcontroller and not a classic analog thermometer? Because you can design a complex solution using few external components..... Listed under: Metering - Instrument Projects

1482. Text in the air with PIC16F84 Writing LEDs air Today, most electronic systems with complex functions, micro-controllers are designed using. Easily programlanabilmeleri, they can be cheaper and less due to external hardware requirements microcontrollers have an important place in the field of electronics. For example, Seeed Studio produced by the company Microchip..... Listed under: LED Projects

1483.



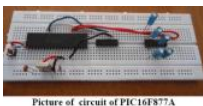
Tens Electronic Muscle Stimulation Device Circuit with PIC16F84 Television for a period, Frequently electronic muscle stimulation device radio advertisement saw the state of the PIC16F84 microcontroller gerçekleştirilmiş I used to be very similar to the device onarmıştım had a microcontroller pic16f84 and the circuit is very simple example of a useful in..... Listed under: Development Board - Kits Projects

1484.



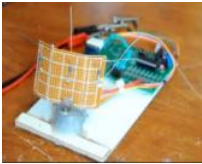


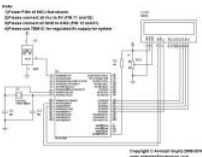







Unipolar Stepper Motor Control Circuit with PIC16F877 Hello friends, this article, unipolar stepper motor control circuit related work. The purpose of the circuit is connected to unipolar stepper motor I designed buttons, select the number of steps we determined the direction, speed, and with it a system that implements the step motor..... Listed under: Motor Projects

1485.



DC Motor Speed Control using Microcontroller PIC-16F877A Micro-controller is a very widely used electronic component and today we are showing another example of it. Today's project topic is "DC motor speed control using Microcontroller PIC16F877A" and we are sharing full project report. This is a very good project work..... Listed under: Motor Projects

1486. A Beginner's data logger project using PIC12F683 microcontroller It is a very simple data logger project based on PIC12F683 microcontroller. The microcontroller reads temperature values from a temperature sensor on a regular interval basis and stores them into its internal EEPROM memory. The recorded temperatures can be later transferred to a PC through..... Listed under: Sensor - Transducer - Detector Projects

1487.  Single-Axis PIC Controlled Solar Tracker DIY Kit using PIC18F1220 Single-Axis PIC Controlled Solar Tracker DIY Kit Hi All I'm not going into as much with this instructable due to my current time constraints. That said, I fully plan on updating this instructable as time progresses with new algorit and programs for optimization. Intro:..... Listed under: Other Projects, Projects
1488.  Shrieker using PIC16F676 Microcontroller Recently a cell phone ring tone was in the news - it's 17,000 Hertz and meant to be heard by teenagers inaudible to adults. Really got some people upset for some reason. It got me wondering - what frequencies can I hear? I made..... Listed under Projects, Sound - Audio Projects
1489.  Temperature Indicator using PIC microcontroller Hi friends, today we will see how to make temperature indicator using PIC microcontroller. The aim of this project is make you familiar with PIC microcontroller. It also explains how LM35 and 7 segment displays can be interfaced with PIC microcontroller. Components required: Following..... Listed under: Temperature Measurement Projects
1490.  Interfacing LM35 Temperature Sensor with PIC Microcontroller. The are many cool sensors available now a days, ranging from IR distance sensor modules, acceleromete humidity sensors, temperature sensors and many many more(gas sensors, alcohol sensor, motion sensors, touch screens). Many of these are ar nature. That means they give a voltage output..... Listed under: Featured, Robotics - Automation Projects, Sensor - Transducer - Detector Project:
1491.  2-Wire LCD Interface using PIC16C84 Alphanumeric LCD displays have become very popular for microcontroller applications because they can ac to a project in a variety of different ways. A text message giving the user instructions as well as feedback can make the application seem much m "professional" and..... Listed under: LCD Projects, Projects
1492.  Voltage, Temperature & Frequency Meter With PIC Micro controller Features... Voltage, Temperature and Frequency can switching to each others push buttons. Voltage Meter can measure DC voltage between 0v to 50v. Frequency Meter can measure frequency up to 65KHz. Temperature Me use between 00C to 1500C. Every functions can paused using push..... Listed under: Temperature Measurement Projects
1493.  Digital Count Down Timer using PIC Microcontroller In this article, our author Mithun has developed a 0 - 99 min counter using PIC microcontrol 16F628A. So basically this is a digital count down timer ideal for engineering and diploma students for their project requirements. We have given complete circuit diagram of the..... Listed under: Clock - Timer Projects
1494.  Low Resource Microcontroller - 3 Phase BLDC Motor Speed Controller This could form the basis where high performance is not required This art focuses on a minimal resource microcontroller implementation for a 3 phase BLDC motor, closed loop speed motor controller application based Microchip PIC12 device. It shows how minimisation techniques can reduce..... Listed under: Motor Projects
1495.  PIC16F877A timer0 code + Proteus simulation This PIC16F877A microcontroller tutorial answers the question, " How to use timer0 of PIC16F877/ how to handle its interrupts? " Using PIC16 simulator (Proteus) you can verify this PIC timer0 code and change it according to your needs. This co written in C language..... Listed under: LED Projects
1496.  Digital Clock using PIC Microcontroller Interrupt - XC8 A Real Time clock (Digital Clock) can be made easily by using Timer 1 of a PIC Microcontrol Timer1 module exists in most of the series of PIC, this module can be used to easily implement a real-time clock. Instead of an external real-time clock..... Listed under: Clock - Timer Projects
1497.  Interfacing xbee with PIC microcontroller using MikroC In this tutorial, I will show how to interface an xbee module with PIC microcontroller.Here Pro for PIC compiler is used to write the code. Xbee modules communicates with host devices using serial communication.Most of the PIC microcontroller have UART module to support serial..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
1498. Getting started with PIC18F Microcontrollers After writing quite a bit of experimental tutorials on PIC16F series of microcontrollers, I thought of moving forward to the en range family of PIC microcontrollers, the PIC18F, which was introduced by Microchip in late 90s. Although PIC16F series are excellent general purpose microcontrollers, ce



limitations..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1499.



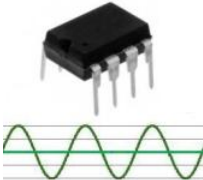
PIC 12F675 Microcontroller Tutorial. A tutorial on the 12F675 PIC microcontroller which shows you how to program and use it with a series of projects starting out with a simple LED flasher and progressing on to more advanced projects.To use the tutorial files you need to have a PIC..... Listed under: LED Projects

1500.



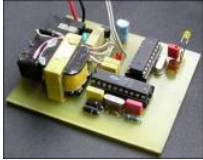
Digital Barometer using PIC Microcontroller and MPX4115A Pressure Sensor – XC8 The Motorola MPX4115A is an atmospheric pressure sensor powered by 5V and delivers an output from $-0.25V$ to $-4.75V$ based on the pressure detected at room temperature ($25^{\circ}C$). The device provides a linear output based on pressure. As the pressure rises, the output voltage of..... Listed under: Robotics - Automation Projects, Sensor - Transducer - Detector Projects

1501.



Metal detector robot using pic microcontroller This project describes hardware and software I have developed which allows a small 8 bit PIC microprocessor to function as a single frequency detector or tone decoder. Such a circuit can be used to detect the presence of a certain frequency within an analog signal,..... Listed under: Robotics - Automation Projects, Sensor - Transducer - Detector Projects

1502.



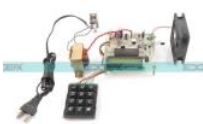
Alarm Phone Dialer with MT8880 and PIC 16F84A Just hook this Alarm Phone Dialer up to something you would like to monitor, for example, a home water alarm, low temperature alarm, back window, garage door, etc. When the system is activated it will call a number of programmed numbers you know..... Listed under: Phone Projects

1503.



Fire Fighting Controlling Robots Used in Dangerous Situations Robots can be used in many applications in industries, military, domestic. One of the major uses of Robots is an asset to human beings. Whether it is in any kind of hazardous situations like a fire breaking out or a place full of landmines, Robots can..... Listed under: Robotics - Automation Projects


1504.



Speed Synchronization of Multiple Motors In Industries using PIC Microcontroller The aim of this project is synchronization of multiple motors using wireless technology. This project uses radio frequency to synchronize motor speeds. This is applicable to many industries like textile mills, steel plants and paper plants wherein all the motors used on conveyor are desired..... Listed under: Motor Projects

1505. Mini project board for PIC12F series microcontrollers The 12F series of PIC microcontrollers are handy little 8-pin devices designed for small embedded applications that require too many I/O resources, and where small size is advantageous. These applications include a wide range of everyday products such as hair dryers, electric toothbrushes,..... Listed under: Development Board - Kits Projects, Projects





1506.  Interfacing LCD with PIC Microcontroller – CCS C In this tutorial we will see How to interface a 16x2 character LCD Module with PIC 16F877A Microcontroller using CCS C Compiler. 16x2 character LCD is a very commonly used LCD module in electronic projects and products. 16x2 means it can display 2 rows of..... Listed under: LCD Projects







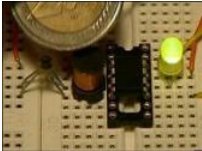



1507.



Up-Down counter on 16x2 LCD using 8051 microcontroller DESCRIPTION In this circuit 16x2 lcd is used to show the value of count using 8051 microcontroller. The maximum value of count is 99 because. In this circuit we are using 8051-microcontroller, 16x2 lcd, 2 switches for up counting button & down counting button. Data..... Listed under: LCD Projects, Microcontroller Programmer Projects

1508.  Programmable Ionization Smoke-Detector IC Ionization Smoke-Detector With Programmable Calibration Microchip Technology unveiled the RE46C180—the world's first Ionization Smoke-Detector with programmable calibration and programmable feature selection, and the first with horn synchronization and auto alarm locate. This Ionization Smoke-Detector ASIC also has expanded options for implementing hush operation, and more options for interconnect operation—including..... Listed under: Sensor - Transducer - Detector Projects

1509.  IRMimic2™ Trainable IR Remote Control Transmitter with Macros Features: Simple to train - Can learn up to 57 commands, and each can be in a different format/protocol Two different operating modes - Keypad or MCU interface Supports up to 32 keys in keypad mode Any key can be a macro (multiple command sequence)..... Listed under: Remote Control Projects

1510.  PIC Microcontroller Based Electronic Lock Security is a prime concern in our day-to-day life. Everyone wants to be as much secure as possible. An access control for doors forms a vital link in a security chain. The microcontroller based digital lock for Doors is an access control system that allows..... Listed under: LCD Projects
1511.  rtc microcontroller Interfacing an SPI-Interface RTC with a PIC Microcontroller - Maxim Application note describing how to interface an SPI-interface with a PIC microcontroller. . PIC, real time clock, RTC, spi interface, pic microcontroller . -> Using a D Interfacing an SPI-Interface RTC with a PIC.... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects
1512.  Complete Circuit Board Lab & POV Business Card using PIC12F508 microcontroller Complete Circuit Board Lab & POV Business Card Introduction Though there are many Instructables on some aspect of how to make circuit boards, this one is different. It's an instructable on how to make the you need to make circuit boards, specifically, a flamboyant..... Listed under: Development Board - Kits Projects, Projects
1513.  Mouse interfacing and communication using PIC16F877 Introduction On this page a circuit is described, making it possible to interface a PIC and a PS/2 mouse. If you see a request (read further), it is possible to obtain for free also the assembler program to communicate with the PS/2 mouse. The..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
1514.  0-9999 seconds count down timer using PIC12F683 microcontroller The goal of this project is to construct a simple 0-9999 seconds count down timer with an alarm and a display. The time is set through two tact switches and the count down seconds are displayed on a 4-digit seven segment LED display. The project..... Listed under: LED Projects
1515.  PIC16F877 I2c code and Proteus simulation This post provides the I2C code (using the I2C module built in the hardware[1]) for PIC16F877 microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
1516.  PicoDetector : a PIC-based simple and cheap metal detector A short video clip is sometimes better than a long explanation : The idea of this circuit is to hack PIC oscillator circuit, by replacing the crystal by a coil : the frequency of the oscillator then depends on presence of metal near the coil, just Listed under: LED Projects
1517.  Wireless Home Appliance Controller Project In this post we discuss about Microcontroller based Wireless Home Appliance Controller Project. You can Control Any Home Appliance Like Tv ,Radio Fan,Bulbs Using This Project. Mainly we use Mikro C Programming Language in this Project and ISIS Professional Software use for testing Purposes. Mikro C..... Listed under: Home Automation Projects, Wireless Projects
1518.  PIC16f628 DS18B20 Adjustable thermometer circuit A friend of mine and I want to share with you what I did to set the thermostat circuit. As I use a 1-wire circuit temperature sensor Ds18B20. 3-digit, 7 shows the screen with digit. Please note that the range of 0 to 99.9. When the..... Listed under: Development Board - Kits Projects
1519.  Rotary Encoder Interfacing with PIC Microcontroller i am currently working with some power supply design and i can say using conventional pots(potentiometer) and rotary switch to adjust the voltage and other stuff is quite old school. so i have decided to go for a bit high tech , actually digital. so here..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1520.



PIC16F877A LED blink The Microchip PIC16F877A has 40 pins 33 of them can be input or output. In this simple project I am going to configure the microcontroller to blink a 33 LED each LED is connected to one I/O pin. The PIC16F877A has 8 analog channels, so..... Listed under: LED Projects

1521.



Big 7-segment Digital Clock Using only 2 capacitors, 3 resistors, 4 BIG seven-segment Display, 1 xtal, 2 switches ,and 1 Microcontroller PIC, you can use this Digital Led Clock main circuit. you can use common anode or common cathode display, just select the display type. Here is the pinout..... Listed under: Clock - Timer Projects

1522.



RC5 Protocol Remote Control Decoder This project shows how to decode IR remote controls which uses Philips RC5 protocol with microchip PIC1 microcontroller. You can find details about RC5 on Wikipedia Related topics: Philips RC5 & LG TV Remote Control Decoder IR Remote Control Bas PIC Microcontroller The RC5 Listed under: Wireless Projects

1523.



PIC16F877 timer1 code and Proteus simulation This PIC16F877 microcontroller tutorial answers the question, " How to use timer1 of PIC16F877 how to handle its interrupts? " Using PIC16 simulator (Proteus) you can verify this PIC timer1 code and change it according to your needs. This code is written in C language..... Listed under: Clock - Timer Projects, Projects

1524.



Pic Projects With Schematics And Source Code Circuit-Zone.com - Electronic Projects, Electronic - Project list | pic microcontroller, »circuit digital (using pic16f628a microcontroller schematics » they act only ones – right then, when it 's really necessary » how to burn or program pic. Electronic projects circuits, Electroschematics.com: over 1050 top electronics..... Listed under: LCD Projects

1525.



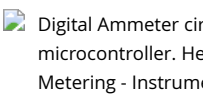
Solar energy measurement using pic microcontroller In this post we will discuss about the Solar energy measurement using pic microcontroller: solar energy marketplace is one of the most quickly growing renewable energy advertise in the United States. Currently, we have seen an important enhancement in requirements for remote monitoring and..... Listed under: power - energy projects

1526.



USB Human Interface Device Communication with PIC Microcontroller – MikroC Figure 1: USB Communication Circuit Diagram The HID device class is "0x03, this class is used for devices operated by human, devices like keyboard, mouse, joystick and so forth. The advantage of HID devices is that they don't require to install drivers, in most..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1527.



Digital Ammeter circuit using pic microcontroller In this project we have a tendency to design a circuit to build an electronic voltmeter while not making use of any microcontroller. Here we have a tendency to employing a very moderate IC for voltage activity particularly ICL7107/CS7107. Making use of ICL7107, we are..... Listed under: Metering - Instrument Projects

1528.



Top PIC Microcontroller Projects with Embedded C Programming Peripheral Interface controller (PIC) family is one of the most powerful advanced microcontroller which is developed by the microchip technology with Harvard architecture, i.e., it has a minimum set of instructions. The PIC microcontroller projects are programmed with the embedded C programming language. PIC devices..... Listed under: Microcontroller Programming Projects

1529.



MOTION SENSOR USING PIR SENSOR MODULE WITH PIC MICROCONTROLLER AND WITHOUT MICROCONTROLLER The circuit diagram is quite simple. I have powered my circuit with 4 AA batteries that gives 6 V supply. A diode is used in series to drop the voltage down to 5.4 V as the operating voltage of the PIC microcontroller should be below..... Listed under: Sensor - Transducer - Detector Projects

1530.




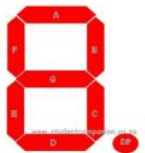
1. Serial interfacing LCD with Pic Microcontroller Parallel interfacing LCD with MCU at least need 6 I/O pins (4 bit mode) and maximum can go up to 16 pins (8 bit mode). The I/O pin can be cut down to 3 pins by serial interfacing using shift register. They were few shift..... Listed under: LCD Projects

1531.

Speed Control of DC Motor using Microcontroller by using PWM ECE Project This is a good Electronic project report on Speed Control of DC Motor using Microcontroller by using PWM. In this system, a micro controller is interfaced with a LCD, Keypad and DC motor driver. The Micro controller is used for controlling the DC motor by..... Listed under: Motor Projects



1532.  Password Based Circuit Breaker using PIC Microcontroller with C code Here i am going to explain you a simple Password based circuit Breaker Pr using PIC Microcontroller. This project is much similar to my previous one, "Password Based Door Locking System". Circuit breakers are electromechanical devices used in the power system to connect or disconnect..... Listed under: Development Board - Kits Projects



1533. Interfacing 7-Segment Display With PIC Microcontroller – MikroC The 7-segment display is the earliest type of an electronic display that uses 7 LE arranged in a way that can be used show the numbers 0 - 9. (actually 8 segments if you count the decimal point, but the generic name adopted i Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1534. HD44780 16x2 Char LCD Interfacing with microcontroller Project Description:- In this project we are going to learn various things about this chip and displaying text on this LCD. The HD44780 16x2 char LCD screen Use 8bit and 4 bit parallel interface with backlight. This Primary Objective in project are:- 1. Displaying "Hello Word!!..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects



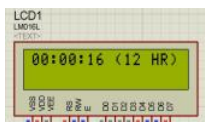
1535. Strobe Lights Project Stroboscopic effects of lights for nightclubs are realized by bringing into play old white Light Emitting Diodes (LEDs) swappir ejection lanterns/lamps for superior effectiveness at minimal cost. This control is achievable by instantaneously changing the Light Emitting Dioc off at elevated volts..... Listed under: LED Projects



1536. Home Security System with GSM Using 8051 Microcontroller Security is a big challenge everywhere because thefts are increasing day by day owi the unsafe and insecure security systems in homes, commercial complexes and industries. Several conventional technologies are available to ke home properties safe from intruders, but most common smart home security..... Listed under: Home Automation Projects, Security - Safety Proj



1537. How to interface RFID with PIC18F4550 Microcontroller RFID (Radio Frequency Identification and Detection) is widely used everywhere from High secured defense laboratories to school attendance system. By employing RFID, much secured entry systems can be developed without incurring costs. These are the reasons of excessive use of RFID technology. In this..... Listed under: How To - DIY - Projects, Projects, RFID - NFC Projects,Tu



1538. Digital Clock Using Microcontroller 89C52/89S52 Are you a beginner in micro controller projects?and are you stuck where to start from?if yes,the one of the simplest mini projects that you can start from . This mini project will give you a clear understanding of programming your micro contr we..... Listed under: Clock - Timer Projects



1539. Infrared IR Sensor Interface with PIC18F4550 Microcontroller In my previous project we have made a simple IR sensor Circuit. In this project, as promised before – we are going to demonstrate a PIC18F4550 microcontroller interface to IR sensor circuit. We are just going to glow few on the pic18f4550 as an example,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Wireless Projects



1540. Line following Robotic Vehicle using Microcontroller The project is designed to develop a robotic vehicle that follows a specific path. This project microcontroller of 8051 family for its operation. A pair of photo sensors comprising IR transmitter and photo diode is interfaced to the controller detect the specified..... Listed under: Robotics - Automation Projects



1541. PIC 16F88 Microcontroller PIC based Tengu Tengu derives its name from a mythical Japanese creature known for getting into mischief. Our Tengu however is more earthly in nature. It responds to voice and sounds and takes on different facial features depending on the intensity of the soun sound is heard for some..... Listed under: LED Projects



1542. LM386 based stereo audio amplifier with digital volume control using PIC18F2550 Due to its simplicity (requires minimum external components) high availability, LM386 is very popular among hobbyists for use in low-voltage audio amplification applications. Most of the time a potentiomete used at the input side of LM386 to provide a volume control in the..... Listed under: Projects, Sound - Audio Projects

1543. Microchip PIC Serial Port Programmer About the Programmer This is a Simple com port based Microchip PIC microcontroller Programmer,This Programmer is based on J programmer.The entire programmer is built around commonly available components Features Does not support the usb to serial converter. Wo most of PIC mcu. Works with 18F2550..... Listed under: Microcontroller Programmer Projects



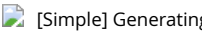
1544. How to Build your Own USB PIC Programmer? This DIY PIC programmer is a continuation of our PIC programming basics tutorial. By using this U programmer, you can program microchip PIC series of 10F, 12F, 16F, 18F, 24F, 30F. This is also an EEPROM programmer as it supports 12Cxx EEPI The main..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1545. Serial Controlled RGB LED PWM Driver PIC12F629 based PWM controller for RGB LEDs Description If you want to build your own multiple RGB LE display that you can control from either a PC or a dedicated controller then this project will let you do just that. The project on this page came ab when while I was developing..... Listed under: LED Projects, Projects, PWM Projects



1546. [Simple] Generating Pulse Width Modulation using PIC Microcontroller – Mikro C & Proteus Simulation How to generate Pulse Width Modulation (PWM) using PIC microcontroller? This is going to be a continuation of our microcontroller online tutorial series. This article covers the detailed explanation and simulation of PWM ge using PIC16F877A microcontroller.What is a Pulse Width Modulator? A PWM has series of..... Listed under: PWM Projects



1547. PWM DC Motor Speed Controller Circuit Using PIC16F877A Microcontroller In our last PIC online tutorial we have covered PWM generation using Microcontroller. As I told earlier PWM has wide application in electronics and robotics engineering.In this article I'm gonna show you one of the important applications of PWM in Robotics, it is called..... Listed under: Motor Projects



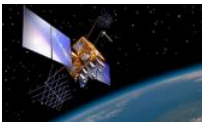
1548. DC Motor Interfacing With PIC Microcontroller Using L293 Motor Driver IC L293d is an H Bridge bidirectional motor driver IC used to interface DC and stepper motors to Microcontrollers. CircuitsGallery.com already discussed about the working principle of L293 IC with an example of bidding motor driver circuit.It is very easy to make a DC motor..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1549. GSM Based Digital Wireless Notice Board Using PIC16F877A Microcontroller Are you looking for Final year Electronics Engineering Project? Here CircuitsGallery presents GSM based electronics and telecommunication engineering projects for students. You can submit this as your final year project. Our project is nothing but a GSM based notice board using PIC that is capable of displaying..... Listed under: Wireless Projects



1550. Interfacing GPS Receiver with 8051 Microcontroller -AT89C52 How to interface GPS receiver with 8051 (AT89C52)? GPS receiver is an electronics d capable of receiving Global Positioning System (GPS) signals to decide the device's location on Earth. Today GPS receiver is popular in vehicles an navigation equipment. As we know that GPS..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1551. PIC16CXXX real time clock electronic project A very simple real time clock electronic project can be designed using the PIC16CXXX microcontroller designed by Microchip Technology . This real time clock electronic project uses the Timer1 module, from a mid-range PIC16CXXX microcontroller control a low-power real-time clock. Timer1 was..... Listed under: Clock - Timer Projects



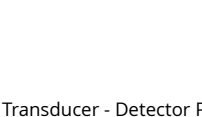
1552. Home Automation and Security System using Microcontroller ATMEGA8 with Arduino Programming Home automation and security systems have become very popular these days, today industrial automation techniques are widely adopted by luxurious homes and apartments. Here I'm going to give a worthy home automation security and monitoring project for engineering students. On the whole this microcontroller based..... Listed under: Home Automation Projects



1553. Digital DC Power supply using PWM with PIC microcontroller In our lab I saw many DC power supply which have a variable knob to regulate the voltage. I was dreaming to make such a project where I can regulate the voltage using push button.As I am not an industrial level expert so this project..... Listed under: PWM Projects



1554. Introducing Easy Pulse: A DIY photoplethysmographic sensor for measuring heart rate When I first built the Heart rate measurement through fingertip project, the infrared LED and photodiode used for finger photoplethysmography were actually from salvaged parts, and therefore, I could provide specifications for them in the article. As a result of that it takes quite a bit..... Listed under: Medical - Health based Projects, Projects, Sensors - Transducer - Detector Projects





1555.



Vehicle Theft Control System by Using GSM and GPS Systems At the present time, the rate of crime is increasing rapidly because it is a kind of evil from the actual fact that thefts became a matter of routine. Particularly these vehicles may incur huge losses on the part of the amount invested these..... Listed under: GPS Based Projects

1556.



Tampered Energy Meter Monitoring Conveyed to Control Room by GSM with User Programmable Number Features The main concept of this project to reduce the power theft by using an integrated energy meter such that whenever an energy meter is tampered, it sends an alert message to the concerned authorities through the GSM modem for indicating power theft. Day by..... Listed under: Metering - Instrument Projects

1557.



NETWORK EQUIPMENT RESETTER using PIC16F628 Introduction This program is a network power resetter. It controls a solid-state-relay that is in with 110VAC that supplies power to a satellite internet receiver, various routers, etc. Once every 24 hours it drops power for 10 seconds to allow receiver and routers..... Listed under: Internet - Ethernet - LAN Projects, Projects

1558.



Naked Clock using PIC16F877 Microcontroller Why have an enclosure? The enclosure of a clock doesn't tell you the time! So I built this PIC clock with no part that doesn't have an electrical function. The hanger is the ground. The microcontroller is the 40-pin PIC 16F877. I set it up,..... Listed under: Clock - Timer Projects

1559.



Converting a Proxxon MF70 Milling Machine To CNC – 2 using PIC18F4620 My layout is shown below. It may not be as intuitive or informative as the layout on a PC display, but contains everything I have found necessary for control of the Mill. (and previously the DRO's on my other Milling Machine Lathe.) I should..... Listed under: CNC Machines Projects, Projects

1560.



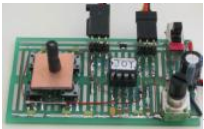
Digital stopwatch using microcontroller How much time this event will take to finish? OK, Let's countdown the time. So a stopwatch is the best solution. Just press the start button to start countdown then stop when the event completed. Now every cellphone has this feature but I was determined to make a digital..... Listed under: Clock - Timer Projects

1561.



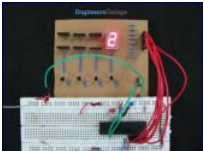
Bicycle Persistence of Vision Light Display using PIC16F84 In February of 2007 I spent a little while prototyping a board that turns any bicycle wheel into a moving display billboard using a single string of LEDs. The idea was to do something that would be very visible, turn itself on and off automatically..... Listed under: Game - Entertainment Projects, Home Automation Projects, LED Projects, Projects

1562.



Servo Motor Controller using PIC12F629 This project controls two servo motors - both clockwise and anticlockwise and has variable speed. You can use the Joy Stick to "pan and tilt" a remote camera or provide "left-right-up-down" action for a crane or an animation on your model layout. The project also..... Listed under: Motor Projects, Projects

1563.



How to interface Seven Segment Display with PIC18F4550 Microcontroller The seven segments are used to display decimal and hexadecimal (0-9) values. A seven-segment display is the cheapest option for applications requiring numeric value display as output. Calculators, watches, lift's floor indication etc. are examples of such applications. The interfacing and operation of a..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects

1564.



USB and PIC Microprocessors 16C745 and 18F2455 Introduction This page describes a project a colleague and I completed between September, 2000 and March, 2001 as part of the Engineering Physics degree program at the University of British Columbia. In summary this project involved building a USB device using the PIC 16C745 microprocessor..... Listed under: Featured, How To - DIY - Projects, Interfacing(USB - RS232 - I2C - ISP) Projects, Projects

1565. Using an LCD's for Graphics Animation using PIC16C84 This project uses Myke's 2-Wire LCD Interface from last week and will help teach you "Graphics Animation" using L
Last week, I showed how the PICMicro could be connected up to a Hitachi 44780 LCD using only two wires. This week, I wanted to use..... Listed under: LCD Projects, Proj



1566. A PIC16F819 DYMOLOCK I wanted to build a clock as simple as possible : built around a little 18 pins PIC no 7 segment display, only LEDs no de
no buffer, no driver for the LED display a cheap temperature sensor The solution of direct LED driving comes..... Listed under: LED Projects



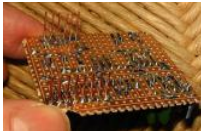
1567. Making a binary clock using a PIC16F88 You can use a PIC microcontroller and an LED matrix to create a binary clock (or if you prefer you can wir
individual LEDs). This project uses an LED matrix block as it saves lots of wiring. So what is it ? Its an..... Listed under: Clock - Timer Projects, Proj



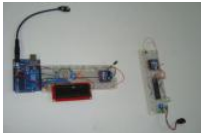
1568. dsPIC30F2012 breadboard Bernard introduces us to the dsPIC microcontroller. He shows us his Arduino like project board for a dsPIC and gives :
on software development tools. This article was submitted by Bernard Klinc as part of the "Hobby parts for articles" program. Bernard received a
graphic..... Listed under: Development Board - Kits Projects, Projects



1569. FTS-8 subtone encoder Many Yaesu transceivers from the 1990s and thereabouts could use an optional FTS-8 module, that provided subtone ge
for transmission, and subtone decoding for CTCSS reception. One of the radios that used this module was the FT-736 multiband, multimode full-
VHF-UHF rig. I bought one..... Listed under: Home Automation Projects



1570. Arduino to PIC Communication using PIC18LF4520 One very common thing in electronics is the need for two intelligent devices to communicate
each other. When you first see a PIC and Arduino you might think that they are two differeny systems and don't share much in common, but you
wrong!..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



1571. Voice controlled wheelchair The Project aims at controlling a wheelchair for handicaps by means of human voice. The speech recognition system
useful way of implementation and is easy to use programmable speech recognition circuit. Programmable, in the sense that user can train the w
vocal..... Listed under: Sound - Audio Projects



1572. Two way Simple Very Small Telephone Exchange This is a very small telephone exchange attached only two ordinary Tele phones. Fully bi-directional facility with an interc
system. When a phone is in off hook condition , Exchange will detect it & send ringing pulse to other phone. When it will be picked..... Listed under: Phone Projects



1573. How to interface keypad with PIC12F675 This post provides a simple method to interface any keypad (e-g 4x4 or 4x3 etc) with PIC12F675 microcc
The code for PIC12F675 is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section
bottom of this..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

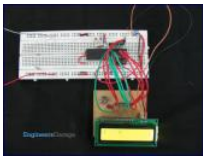


1574. How to implement free running counter in PIC16F84A using seven segment display This post provides the implementation of free running count
using c language) for PIC16F84A micro-controller. This code is written in such a way that, the counter starts from a value of '0' (displayed on the
segment) and then increments this..... Listed under: LCD Projects, Projects




1575. PIC16c71 four channel digital voltmeter This electronic circuit project is a simple four channel digital voltmeter with display and keyboard . This f
channel digital voltmeter is based on PIC16C71 manufactured by Microchip Technology . The PIC16C71 device's I/O ports have an improved sink/
specification. Each I/O pin can sink..... Listed under: Metering - Instrument Projects




1576.  PIC16F84A LCD interfacing code (In 4bit mode) and Proteus simulation This post provides the LCD[1] interfacing code in 4bit mode using PIC16F84A microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you know how to make an..... Listed under: Interfacing(USB - RS232 - I2c -ISP) LCD Projects, Projects

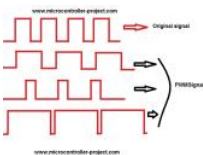


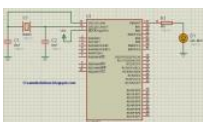
1577.  How to display custom characters on LCD using PIC16F84A This post explains the idea of creating custom characters on any LCD (e-g on 16x2 LCD which has HD44780U controller in it. Almost all 16x2 or 20x2 LCDs have HD44780U controller in them[1]. This controller provides the functionality CGRAM (Character Generator..... Listed under: LCD Projects, Projects




1578.  15x7 Display using a PIC16F628 Microcontroller This project is what you have been waiting for. Remember the scrolling signs you see in shops or advertising billboards? Now you can program your own moving sign with all the effects you can think of. We have provided a blank canvas in the Listed under: LED Projects, Projects

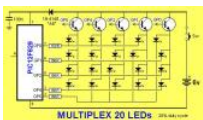
1579. DC motor and Fan speed control using pic 16f877 Microcontroller Here is a simple project on how to control fan or dc motor speed using pic 16f877 microcontroller. There are numerous ways to control the speed of motor(or fan). Varying current,voltage and resistance etc. But when it comes to controlling the speed using microcontrollers. Then Listed under: Motor Projects

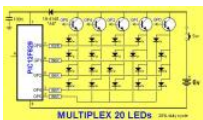


1580.  PIC16F877 LED blinking code and Proteus simulation This post provides the code to make an LED blink using PIC16F877 microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. This code is intended to be the first step in learning how to use PIC16F877 microcontroller in your projects. You can..... Listed under: Game - Entertainment Projects, LED Projects, Projects




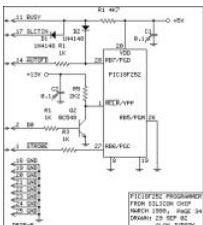
1581.  A memory game using a PIC16F84A microcontroller This article describes a game we all know. It is SIMON. It uses 4 switches, 4 colored lights and a speaker to produce a sequence of tones and flashes that has to be repeated. After each correct sequence, the computer adds another tone with Listed under: Game - Entertainment Projects, Projects

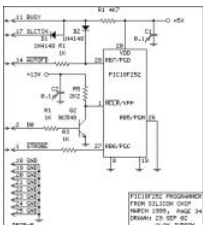



1582.  20 LED BADGE using PIC12F629 Microcontroller This project drives a number of LEDs via a very clever circuit. There are 3 ways to drive a LED from the output of a micro. The simplest is called "dump." This is where the LED is connected directly to the output via a resistor..... Listed under: LED Projects



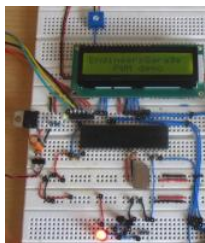
1583.  Displaying Images on Graphical Lcd(JHD12864E) using Pic16f877 Microcontroller Here in this post i am going to teach you how to display images on Graphical Lcd using Pic Microcontroller(16F877). I am using JHD12864E graphical Lcd in my Project. JHD12864E is 128x64 dimension Lcd. 128x64 Lcd has 128 columns and 64 rows. So total dots it..... Listed under: LCD Projects



1584.  PIC18F252 Programming 1. Introduction This investigation was started after I ordered the free sample kit for the Circuit Cellar contest, called Make for Flash Cash. There seems to be many ways to program the device. Here I have investigated two ways of programming the PIC18F252. 2..... Listed under: Microcontroller Programmer Projects

1585.  Getting Started with MPLAB XC8 Compiler – LED Blinking In this tutorial we will learn How to Blink an LED with PIC Microcontroller using MPLAB XC8 Compiler. Recently Microchip released a series of development tools including MPLAB X IDE and MPLAB XC Compilers. MPLAB X IDE is a software that runs on a computer..... Listed under: Projects

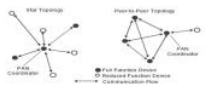
1586. How to Glow an LED using PWM with PIC Microcontroller Pulse Width Modulation (PWM) is a technique in which the width of a pulse is modulated keeping the time period constant. One cycle has a fixed time period called 'Period' and a varying on time called 'Duty cycle'. The entire wave can..... Listed under: LED Projects



1587. 3 LED Bike Light for PIC10F200 Description This project is a multi-function LED bike (cycle) light using 3 LEDs. It is based on a PIC10F200 baseline microcontroller, running from a supply voltage of 2 to 5 volts. In standby mode it consumes a current of less than 1µA making it perfect..... Listed under: Home Automation Projects, LED Projects, Projects



1588. Online Monitoring of Temperature of Conductors Using Zigbee and GSM Project Summary An on-line monitoring system of temperature of conductors and fittings based on GSM SMS and Zigbee is produced in this project, by which the temperature of conductors and fittings can be monitored in time and some accidents caused by the increased temperature can..... Listed under: Temperature Measurement Projects



1589. Android App Home Automation via Bluetooth Using PIC16F628A Microcontroller We have been posting several latest and advanced PIC microcontroller based projects and here is another wonderful wireless home automation project for Engineering/ Diploma students, Android Bluetooth Home Appliances Control System. Android phones are very popular today due to their limitless possibilities, have you thought about..... Listed under: Bluetooth Projects, Home Automation Projects



1590. Universal High-Power LED Driver – Firmware update using PIC16F1823 Here's the updated firmware for my Universal High-Power LED Driver. This version has on-board current set up function, so you can change the drive current without re-programming the PIC microcontroller. You can either download the ZIP file containing the whole project, or just the HEX file. After upgrading..... Listed under: LED Projects, Projects



1591. Digital Voltmeter Using PIC Microcontroller 16F877A and Seven Segments Display (0-30V) We are all aware of about voltmeters (voltage meter), which is nothing but a device used to measure voltage between given two terminals. Apart from the basic usage digital voltmeters are also employed as voltmeters for automation systems and robotics. There are analog and..... Listed under: Metering - Instrument Projects



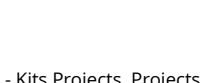
1592. Digital Clock using PIC Microcontroller and DS1307 RTC A Digital Clock can be made easily by using PIC Microcontroller, DS1307 and a 16x2 LCD. I have already posted about Interfacing DS1307 RTC with PIC Microcontroller. The DS1307 RTC can work either in 24-hour mode or 12-hour mode with AM/PM indicator. It automatically adjusts..... Listed under: Clock - Timer Projects



1593. PIC and EEPROM Programmer Project Summary In this project we are building a JDM programmer that can handle PIC12, PIC16 and PIC18 family microcontrollers and some popular 24C family EEPROMs. The programmer also provides ICSP feature that allows In-Circuit Serial Programming. If you desire, you will not have..... Listed under: Memory - Storage Projects, Microcontroller Programmer Projects, Projects



1594. PIC 16F877 / 16F874 Development Board The Development Board v. 1.1 connected to an LCD display. It is well visible (read further, in the description) the row of LEDs used to check the logic state of up to 8 I/O ports or external circuits' pins. Of course, if you own an..... Listed under: Development Boards - Kits Projects, Projects



Feedback / Suggestions

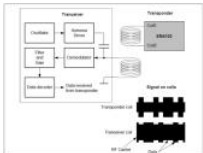


1595.



Microchip PIC16F877 to FTDI USB interface Introduction This is a simple design that interfaces a PIC 16F877 microcontroller to the USB bus using FTDI FT245 USB FIFO device. It has been designed using a simple single sided PCB with only one surface mount device, the USB chip itself. All schematics,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1596.



Interfacing EM-18 RFID Module with PIC Microcontroller EM-18 RFID Reader Module is the one the most commonly used module for Radio Frequency Identification Projects. It features Low Cost, Small Size, Low Power Consumption and Easy to use. It can be directly interfaced with microcontroller UART communication. Software UART can be used..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1597.



The Super-Simple pocket size mp3 player using PIC16LF877A It is based on the PIC 16LF877, with plenty of processor time to spare. There is a bare bones assembly version, and a new C version with more features and stability. It uses compact flash cards up to over 100 gigabytes (once they are) including..... Listed under: Projects, Sound - Audio Projects

1598.

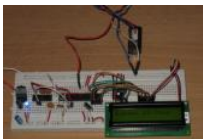


Introducing the Science of Microchip PIC14 Engineers of my generation in the UK will remember the Science of Cambridge Mk14. Intended to be Sinclair's first home computer kit for the general public, it served to train a generation of electronics engineers in how to program microprocessors. Mk14 was..... Listed under: Other Projects, Projects

1599. How to Implement SPI Using PIC18F4550 The Serial Peripheral Interface (SPI) is a high speed, synchronous, serial communication standard. This communication protocol is basically a Master – Slave implementation where the master device controls the clock based on which the slave devices operate. The master communicates with a slave controller. Listed under: How To - DIY - Projects

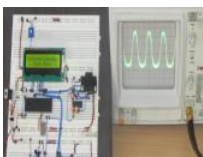


1600.



LCD Module Control over IR Link using PIC16F690 Recently I got my hands on a couple of HSDL-1100 based IR transceivers and a KS070B LCD display module. This was a nice opportunity to experiment with three things: (1) controlling an LCD module, (2) serial communication between two PIC microcontrollers, and (3) making this..... Listed under: LCD Projects, Projects

1601.



How to Generate Sound using PWM with PIC Microcontroller Pulse Width Modulation (PWM) is a technique in which the width of a pulse is modulated, keeping the time period of the wave constant. The ON time and OFF time can have any different values in the wave cycles, but the sum of the ON and OFF times is constant. Listed under: Sound - Audio Projects

1602.



How To Use PIC Microcontroller For Voice Input And Output Microcontrollers are purely digital devices which work on logic0 and logic1 voltages; they are widely used for analog signal processing. There are specialized signal processors chips available which are custom made for particular applications; however a general purpose microcontroller is more than enough for..... Listed under: PWM Projects

1603.



Alarm Clock Retrofit using PIC16F877 I had some beef with my (very) old alarm clock. It had a radio which was nice to wake up to, but two problems would be in bed and think "Wait, did I set the alarm?" I would have to get up, turn..... Listed under: Clock - Timer Projects, Projects

1604.



Generating PWM with PIC Microcontroller – MPLAB XC8 Pulse Width Modulation (PWM) is the one of the simple and most commonly used technique to produce analog voltages from digital signals. It has a wide variety of applications such as Digital to Analog Converter (DAC), DC Motor Speed Control, Sine Wave Inverters, Brightness control..... Listed under: PWM Projects

1605.



Projects on Speed Checker To Detect Rash Driving On Highways While driving on highways, drivers should not exceed the maximum speed limit permitted for their vehicle. However, accidents keep on occurring due to speed violations as drivers follow their speedometers and control their according to them, and reduce the speed if they find it to be..... Listed under: Metering - Instrument Projects

1606. Digital Thermometer and Clock Project (Version 1.0) This device uses two digital sensors (DS1620 or DS1820), measures the ambient temperature with 0,1 °C (0,2 °F) resolution and displays it on LCD 2x16 (LM016 etc.) screen. It has a clock, which is based on DS1302 timekeeping chip. This chip stores current date and..... Listed under: Clock - Time Projects



1607.



Picaxe LED night light This is a little night-light that comes on when it gets dark, to illuminate dark rooms or hallways. I'm sure you can buy these ready made but it's more fun to make your own, and this way it can be customised exactly how you..... Listed under: LED Projects

1608.



Digital DC watt meter project using pic microcontroller Measuring the voltage and current will always be helpful while making or debugging any electrical system. In this project we are going to make our own Digital Ammeter using PIC16F877A Microcontroller and current sensor ACS712. This project can measure both AC and DC current with accuracy..... Listed under: Metering - Instrument Projects

1609.



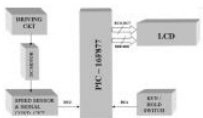
Nokia 3315 / 3310 LCD interfacing with Microcontroller Displaying content on a normal alphanumeric display is very limited, we have to be limited to the font size and we can't draw any graphics also. but conventional Graphics LCD are really very expensive so here is the solution, you can use Nokia 3310 monochrome LCD to display your..... Listed under: LCD Projects, Phone Projects

1610.



Cell Phone Detector Project Summary This is a mobile phone sniffer circuit that can detect the signals being used in the GSM (Global System for Communication) band at about 900 MHz. Since the signals are digitally encoded, it can detect only the signal activity, not the speech..... Listed under: Phone Projects

1611.



PIC 16f877 microcontroller based RPM Meter Summary: The speed of the motor is measured in Rotations per Minutes, RPM. The RPM Meter is to measure the running speed of Motor like DC MOTOR. Here the speed of the DC Motor is sensed with the help of a speed sensor and its signal..... Listed under: Metering - Instrument Projects

1612.



PC Based Digital Voltmeter Using PIC 16F877A This is a simple voltmeter which measures 0-5V at a precision of 4.8 mV. This is a simple design using the inbuilt ADC of PIC 16F877A. PIC 16F877A has 8 channel 10bit ADC. This is a computer interfaced project. Measured voltage is output in serial interface..... Listed under: Metering - Instrument Projects

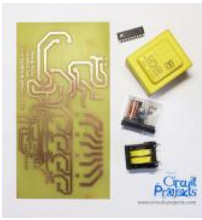
1613.



Sending SMS Text Message using PIC Microcontroller – Flowcode Figure 1: Controlling and Monitoring devices with a Cellphone A GSM modem is used with a GSM wireless network. GSM stands for Global System for Mobile communications, this architecture is used for mobile communication in many of the countries in the world..... Listed under: GPS Based Projects

1614.

PIC Controlled Relay Driver using PIC16F84A Project Summary This circuit is a relay driver that is based on a PIC16F84A microcontroller. The board includes four relays so this lets us to control four distinct electrical devices. The controlled device may be a heater, a lamp, a computer or a motor..... Listed under: Development Board - Kits Projects, Home Automation Projects, Projects



1615.



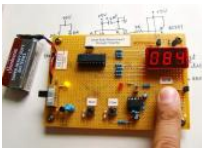
Design and Development of an Automated Home Control System Using Mobile Phone
Abstract This paper presents design and development of an Automated Home Control System (AHCS) using mobile phone. A cell (mobile) phone acts as a modem for the control of electrical home appliances is achieved when the mobile phone number is dialed and an appropriate..... Listed under: Home Automation Projects, Phone Projects

1616.



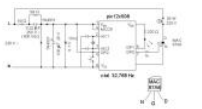
Single Pic Micro single shot bi stable Relay Project Summary
Build yourself a single shot Pic Micro Controlled by stable Relay
FEATURES 1. One to activated for on or off 2. Open connections for other sensors 3. 10 -12 volt operation 4. Led indicators for on off status 5. Can be Rf controlled.... under: Development Board - Kits Projects, How To - DIY - Projects, Projects

1617.



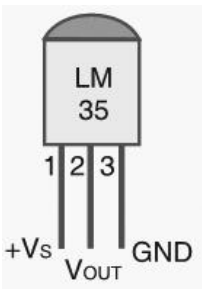
Microcontroller measures heart rate through fingertip
Step 1: Sensor assembly
 The sensor unit consists of an infrared light-emitting-diode (IR LE) photo diode, placed side by side, and the fingertip is placed over the sensor assembly, as shown below. The IR LED transmits an infrared light into the fingertip, a..... Listed under: Medical - Health based Projects

1618.



Night Light Saver V3.2 using PIC12C508
Introduction It's time for 8-pin microcontroller Microchip PIC12C508, the SAVER V3.2, my latest design of that turns a night light on and off everyday. The circuit uses only a PIC12C508 8-pin CMOS microcontroller and a small triac, MAC97A6. The Saver V3 demonstrates..... Listed under: Home Automation Projects, Projects

1619. **Temperature controlled fan using PIC 16F877A** You might have come across several applications where we need to control a specific device based on analog parameters. 1 Embedded system works in a similar concept where we are about to control the speed of a DC motor using based on the external temperature..... Listed under: Temperature Measurement Projects

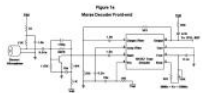


1620.



Autonomous Foosball Table I was contacted by somebody who suggested I should enter our senior design project here. Seeing as how we found used the AX-12s from Trossen Robotics, I figured this would be a great place to post. This project was our senior design, a semester..... Listed under: Robotics - Automation Projects

1621.

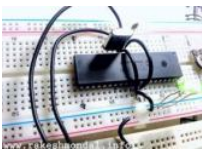


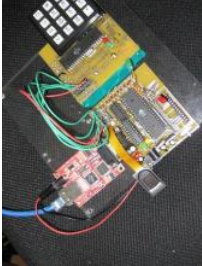
PIC16F84 Based Morse Code Reader So you want to become a HAM, or you've got one of those no-code licences, but like me feel somewhat lack not having obtaining that age old badge of proficiency that differentiated the HAM from other radio operators. However, like thousands and thousands of others,..... Listed under: Radio Projects

1622.




Harmonic Distortion Meter using PIC18F2550 The 3rd harmonic distortion meter has been designed for measuring the quality of AC supply. The built with a PIC18F2550 project board and the full wave rectifier front-end circuit. The AC power line, 220VAC is measured through the step down isolation transformer. The..... Listed under: Metering - Instrument Projects, Projects

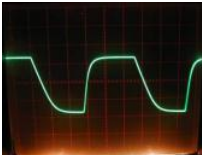
1623.  Blink LED with XC8 compiler using external Oscillator In the simple tutorial we are going to blink few simple led with PIC18F microcontroller, using external 20MHz crystal oscillator and the '___Delay ()' function of XC8 Compiler. Most of the previous tutorials here dealt with internal oscillator of pic18F4550 where mostly the delays..... Listed under: LED Projects

1624.  Microcontroller Adc Project Circuit The microcontroller projects resources., Pic microcontroller tutorials, resources and projects ranging from simple advanced designs with schematics and source code. free for non-commercial use.. Related Article Microcontroller Adc Project Circuit : The best microcontroller projects and resources. Pic microcontroller tutorials, resources and projects ranging..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

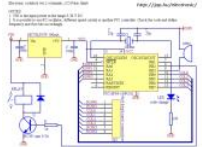
1625. MICROCONTROLLER BASED INTERFACE UNIT FOR 5KW MICROWAVE OVEN 1. Introduction Microwaves are maybe, one of the greatest discovers of the 20'th century. With wavelength between 30 cm and 3 mm and a power between 1 mW and 500 KW are practically used in all fields from medicine to industry. Microwave thermal and..... List under: Interfacing(USB - RS232 - I2c -ISP) Projects




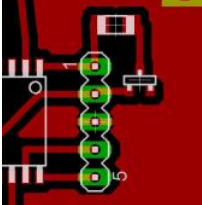
1626.  Homemade Scope Clock DG7 tube and PIC16F876 Powersupply and CRT deflection and microcontroller test circuit. I was lucky to purchase two us working DG7 tubes and a transformer cheap, one from Mullard and one from Phillips. Other CRT Cathode Ray Tube types can be used, you can rip one from..... Listed under: Clock - Timer Projects, Home Automation Projects, How To - DIY - Projects, Projects



1627. 100KHz Square Wave generator using PIC16C84 Following on from the LED flasher circuit, we can reduce the delay in the loop to 10uS (10 micros) and produce a 100Khz square wave. Given a 4 Mhz PIC 16C84, the program below will generate a 100Khz square wave on PORTA bit 0 (i.e..... Listed under: Other Projects, Projects

1628.  Electronic door code lock with PIC description This is my electronic code lock to use with an outdoor gate. The lock itself is implemented in software operates a relay (for example to open a door) for a few seconds if someone enters the valid code. The secret code can be changed..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1629.  Dual programmable keypad code lock using PIC18F452 Open electrical doors with your secret code only! Here are the technical specifications: Up to 4 keypads may be connected to drive both relay outputs. Professional, outdoor or other keypads may be used. Relay outputs are configurable: output voltage +6 to +24VDC (from power input)..... Listed under: Projects, Security - Safety Projects

1630.  Understanding ICSP for PIC Microcontrollers Programming microcontrollers isn't hard. Building a programmer makes a great first electronics project. The goal of this instructable is to explain the simple 'in circuit serial programming' method used with Microchip PICs. Step 1: Why ICSP? Programming a big DIP (through hole) chip is easy..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1631. Echo MP3 player using PIC18LF452 The EchoMp3 is a small DIY* MP3 player. It's cheap and of excellent quality. 64, 128, 256, 512MB and 1, 2, 4 GB MMC and SD(HC) cards as storage. FAT (FAT16) and FAT32 supported. Low power operation with a single AAA (HR03) 1V2 Ni-Mh..... Listed under: How To - DIY - Projects, Projects, Sound - Audio F



1632.



Touch Switch using PIC12F629 Microcontroller You can add this circuit to all sorts of projects that require on-off control. Our design allows up to sensors using a PIC12F629. The output of each touch sensor is active LOW and this can be connected to an additional circuit to control..... Listed under: DIY - Projects, Projects

1633.



SOLAR TRACKER-1 using PIC12F629 Microcontroller This project will improve the output of your solar panel by about 40%. It uses a motor and ge from a 3.6v power screwdriver, however a number of different voltage motors can be used. The project has its own 6v power-supply made from 1.2v..... Listed under: Home Automation Projects, Motor Projects, Projects

1634.



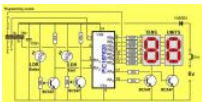
SKY WRITER using PIC12F629 Microcontroller We have seen many projects using a set of LEDs to produce words "in the air," but none have the c feature we have included. Most of the projects are "shaken in the air" and produce messages that are "all over the place." But if..... Listed under: Projects, Projects

1635.



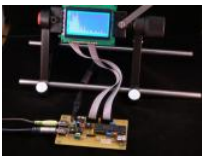
MUSIC BOX using PIC12F629 Microcontroller This project is an extension of a number of musical projects (Happy Birthday and It's a Small World) puts 11 melodies into a single design. It's called EVOLUTION. From the previous projects we learnt a lot about producing a tune. The first thing w Listed under: Game - Entertainment Projects, Projects

1636.

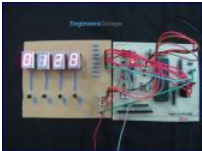


Lift Counter using PIC12F629 Microcontroller This project has been developed due to a request from Mr Moshweunyane (dmoshweunyane8@gmail.com). He asked for a circuit that would count up when someone entered a lift and count down when someone exited two infra-red sensors. All we had to do was take the..... Listed under: Clock - Timer Projects, Projects

1637. Audio spectrum analyzer using PIC18F4550 Introduction This project implements a real-time audio spectrum analyser using a PIC18F4550 8-bit microcontroller. The spec frequency analysis is performed by a highly optimised 16-bit Fast Fourier Transformation (FFT) routine coded entirely in C. The output from the FFT is displayed using a 1: graphical..... Listed under: Projects, Sound - Audio Projects



1638.



Seven Segment Multiplexing using PIC18F4550 Microcontroller As explained earlier, a seven segment interfaced with PIC uses almost an entire p (minimum 7 pins) to display a value. But a real time application, like watch, calculator etc., usually requires at least 3-4 seven segments. In such a is not advisable..... Listed under: Clock - Timer Projects, Projects

1639.




Precision Delay Timer for PIC16F628A Description This project is a crystal controlled precision timer providing accurate delays from 1 second to 1 45 minutes. The timer delay is set using a 10-way DIP switch. The timer is started by pressing a switch on the main PCB or from an..... Listed un Clock - Timer Projects, Projects

1640.

Automatic Charger Sharing for Motorcycle Battery Charger using PIC16F628A Description This project came about because I have three motorbil being a bit of a fair weather biker they don't get used much over the winter months. I have an OptiMate™ 4 charger that I connect to the bikes b needs me to..... Listed under: Battery Projects, Car Projects, Projects



1641.  PIC Harmonic Distortion Meter The 3rd harmonic distortion meter has been designed for measuring the quality of AC supply. The meter is built with PIC18F2550 project board and the full wave rectifier front-end circuit. The AC power line, 220VAC is measured through the step down isolation transformer. The..... Listed under: Memory - Storage Projects



1642. Breakout board for PIC16F1847 microcontroller This is an improved version of my 18-pin PIC16F series breadboard module that I have used in many of my PIC tutorials and projects published in this website. The new version has got a +5V power supply regulator on-board and a 2.1mm female power jack..... Listed under: Development Board - Kits Projects, Projects



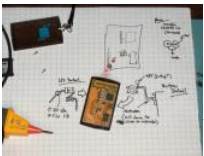
1643. Interface a HD44780 Character LCD with a PIC Microcontroller Introduction An HD44780 Character LCD is a liquid crystal display (LCD) display device designed for interfacing with embedded systems. These screens come in a variety of configurations including 8x1, which is one row of eight characters, 16x2, and 20x4. The most commonly manufactured configuration is..... Listed under: LCD Projects



1644. Revised version of the PIC12F microcontrollers breakout board The 12F series of PIC microcontrollers are handy little 8-pin devices designed for use in embedded applications that do not require too many I/O resources, and where small size is advantageous. These applications include a wide range of everyday products such as hair dryers, electric toothbrushes,..... Listed under: chipKIT Projects, Development Board - Kits Projects, Projects



1645. Serial LCD Module using PIC16F88 Many times when I'm working with a small MCU such as 8 pins or 18 pins MCU. I found that I don't have enough pins for parallel LCD display. So it's good to have a one-pin-require LCD module for experiment. Actually, serial LCDs are..... Listed under: LCD Projects



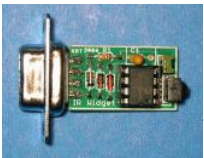
1646. Build your own Wireless Network detector using PIC12F629 What This Is This project is for a small electronic unit that allows the user to sense the presence and relative signal strength of wireless hotspots. It can be worn as a pendant or carried in a pocket. It is "always on" and communicates with the hotspots..... Listed under: How To - DIY - Projects, Internet - Ethernet - LAN Projects, Projects, Sensor - Transducer - Detector Projects



1647. DIY remote control based on PIC16F628 Control up to 8 devices by this easy constructable remote control. It can work as a radio or infrared remote control, depending on the components. Each device output can be configured to be momentary (turned on while you press the button) or latched outputs..... Listed under: Home Automation Projects, How To - DIY - Projects, Projects



1648. Blink a LED with Assembly Language & a PIC To state the blindingly obvious, there are many flavors of microcontroller in the world. There are innumerable applications for them too. This Instructable will cover the steps necessary to blink a LED using a PIC microcontroller and Microchip assembly language, showing you how to access..... Listed under: LED Projects



1649. The IR Widget Using pic12f629 Simple IR capture for multitasking operating systems The IR Widget captures the infrared signals used by remote controls. It operates in a way that makes it compatible with modern multitasking operating systems. It is able to determine the carrier frequency and demodulate the carrier in..... Listed under: RTOS - OS Projects



1650. PIC 16F84 Serial Programmer The Microchip PIC 16C84 was one of the first serial in-system programmable microcontroller. I saw PIC serial programmer published in Electronic magazines in 1993. Today, many PIC programmer circuits - for serial and parallel PC ports - are published on the Internet. It's somewhat..... Listed under: Microcontroller Programmer Projects, Projects

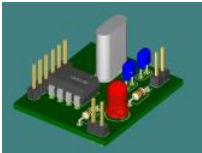
1651. A DCF77 Clock with RS232 Interface using PIC16F84 Description: The clock is synchronised via the German time signal DCF77. It has a display with automatic brightness control and a RS232 computer interface. Design Overview: The clock is built around a PIC16F84 microcontroller from Microchip. I chose this microcontroller since its FLASH memory is..... Listed under: Clock - Timer Projects, Projects



1652. Ir On-Off using PIC12F629 microcontroller Turn ON or OFF electrical devices using remote control is not a new idea and you can find so many different devices doing that well. For realization of this type of device, you must make a receiver, a transmitter and understand their way of..... Listed under: Other Projects, Projects



1653. 1Hz Clock Generator using PIC12F675 Based on the idea from http://www.josepino.com/pic_projects/?timebasel have created a 1Hz Clock Gener use PIC12F675 as it's available locally. Its price is just about US\$1. The concept is using 32.768kHz crystal as a clock for the PIC. Therefor, the inte instruction clock is $32768/4 = \dots$ Listed under: Clock - Timer Projects, Projects



1654. Pic-Plot2 GPIB to USB converter using PIC16F628 Pic-plot now goes to USB! A perfect low cost solution to quickly get screen plots of your GPIB instrument on your laptop PC without complex software. It emulates the HP7470A operation on the GPIB side, and outputs the HP-GL data at th port to..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



1655. How to build your own PIC-Programmer using PIC12C50x Which types of PIC microcontrollers and EPROM's are supported? You can use this PIC- for PIC12C50x, PIC12F62x, PIC16FFxx, PIC16F62x and EEPROM 24Cxx. This PIC-Programmer was tested with PIC12C508 (A), PIC12C509 (A), PIC12 PIC12F675, PIC16F84A, PIC16F627, and PIC16F628. The PIC-programmer is easy to build and compact..... Listed under: How To - DIY - Projects, Microcontroller Programmer Projects, Projects



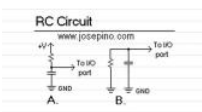
1656. PIC16F628 4 RGB LED PWM Controller I am a big fan of LEDs. Bright, colorful, flashing LEDs. So, given my affinity for LEDs, I decided to work on a controller that me and a few of my friends could use as an art project/passive information display. I have posted videos from..... Listed under: LED Projects, Projects, PWM Projects



1657. An Easy to build & multifunctional counter with 7-Segment Led Display using PIC16F628 microcontroller Just one PIC to use it as counter with mu functions. Here is the pin information: PIN FUNCTIONS: CLEAR/COUNT - GND to clear count, VSS to count. SAVE COUNT - GND start from zero o up, VSS continue last count. C CATHODE/C ANODE..... Listed under: Other Projects, Projects



1658. Read analog values without an ADC using PIC12F675 microcontroller Digital electronics and Analog electronics doesn't mix easily. A Microcontrol get analog values unless an Analog-to-Digital converter is used, however, you may find a little complicated the use of an ADC and it need lots of Input/Output ports. Some Microcontrollers, like the small..... Listed under: Projects, Sensor - Transducer - Detector Projects



1659. Pic RGB color generator using PIC12F629 Description PIC RGB is a circuit that generates random RGB colors using a RGB LED and fades between The idea for this circuit came from the candle simulator [1] and another project called TinyRGB [2] . The challenge was to create an algorithm tha Listed under: Game - Entertainment Projects, Projects


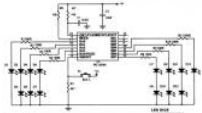






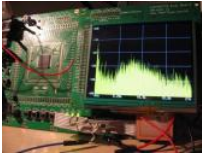





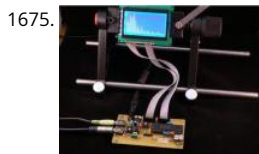
1660. Power Pic RGB with Infrared remote control using PIC12F675 Power Pic RGB with Infrared remote controlis a circuit that generates colors using a RGB LED and can be cor using any infrared remote controller capable compatible with the Sony® Sirc code. This circuit is the third evolution of Pic RGB project [1] in whic Listed under: Internet - Ethernet - LAN Projects, Projects



1661. Cooking Timer using PIC16F819 microcontroller Cooking Timer This is a school project but I thought it can be fun to all of you cooking people ou that still use old stoves without timers. The timer uses different formula for meat, chicken or egg, but also has a separate timer..... Listed under: Clock - Timer Projects, Home Automation Projects, Projects



1662.  Minty JDM PIC Programmer using PIC18F4550 microcontroller Minty JDM PIC Programmer This project details how to build a JDM style programmer program PIC Microcontrollers using Microchip's ICSP (In Circuit Serial Programming) and freeware software (PICPgm). Total project cost: less than \$10. This device has been tested on both the PIC16F877 and PIC16F877A. Listed under: Microcontroller Programmer Projects, Projects
1663.  An LED Dice using a PIC 16F84 (or 16F88) An LED Dice using a PIC 16F84 (or 16F88) This is a re-print of a project that I made a number of years ago when I was trawling the web, and discovered that others had been making it, so I decided to put the detail..... Listed under: LED Projects, Projects
1664.  Reverse Engineering to Emulate Ink Cartridges for a Epson Printer using PIC18F Reverse Engineering to Emulate Ink Cartridges for a Epson Printer In the past two years, I've been planning to build myself a 3D printer from some old Inkjet printers that I had collected over the years. But not until a few weeks ago had I actually..... Listed under: Other Projects, Projects
1665.  Analog to Digital Converter Using PIC16F877A Microcontroller – Beginners Guide using pic microcontroller What is meant by Analog to Digital Converter (ADC)? An ADC converts analog signal to its corresponding digital signal. How to convert analog signal to digital signal? CircuitsGallery.com has a tutorial posted ADC using LM324 IC, in that ADC tutorial I had already explained Analog to Digital..... Listed under: Sensor - Transducer - Detector Projects, Projects
1666.  JDM2 based PIC Programmer JDM2 based PIC Programmer Schematic & layout for an updated JDM2 PIC Programmer. Includes clock & data filter voltage divider for modern PIC microcontrollers (eg USB PIC 18F2455/4455). Prior to reading sites like www.hackaday.com & www.makezine.com I had worked only with the Atmel/AVR line..... Listed under: Microcontroller Programmer Projects, Projects
1667.  Traffic Light Controller using pic microcontroller 1.a History: The first single-chip microprocessor was the 4-bit Intel 4004 released in 1971. With the 8008 and more capable microprocessors available over the next several years. These however all required external chip(s) to implement a working system, raising total system cost, and making..... Listed under: LED Projects
1668.  Wooden LED clock using PIC16LF876A microcontroller Wooden LED clock I really like concept. So many different types of wooden clock have been already built. I've seen many of them but I still don't have my own. What a shame. I'm going to fix it right now. Project is very simple and..... Listed under: Clock - Timer Projects, LED Projects, Projects
1669.  Bluetooth Wireless Voltage Meter using PIC12F683 microcontroller Bluetooth Wireless Voltage Meter using Wiimote + Pic Chip + AutoIt In this tutorial I'm going to be showing you how you can send voltage values to your pc using a Pic chip, Wiimote, and AutoIt3 scripting language. The process works by wiring a pic..... Listed under: Metering - Instrument Projects, Projects
1670.  Audio spectrum analyzer on PIC32 using pic microcontroller This simple audio spectrum analyzer is based on PIC32 proto board on PIC32MX360F030G with 320x240px colour LCD (LVC75Z779 Eval Board). The analyzer can be connected to unamplified audio source like PC's sound card, MP3 player or a microphone. SSD1928 Module Schematic diagram The reference voltage..... Listed under: Sound - Audio Projects
1671. What is PIC Microcontroller coming up soon..... Listed under: Compilers, News & Updates, Programmers, Projects, Tutorials
1672.  Usbpicprog – A free and open source USB Microchip PIC programmer (Software and Hardware) for Linux, Windows and MAC Usbpicprog is an USB in circuit programmer for Microchip PIC processors family PIC10F, PIC12F, PIC16F, PIC18F, PIC24F, PIC32F and I2C Eeprom 24xx. The hardware is as simple as possible, the current version only contains one PIC18F2550, 4 mosfets, and besides the connectors a hand full..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects
1673.  Computer-Controlled Light-Up Water Fountain System Overview La Fontaine Du Campus Est (The Fountain of East Campus) is a computer-controlled servo-actuated, LED and halogen-lit, sump-pump powered water fountain. It features five streams of water that can each be individually controlled (on/off) as well as pivoted (90 degrees of freedom). Each..... Listed under: Robotics - Automation Projects
1674.  OPEN-DESIGN CHARGE REGULATOR PROJECT We have been wanting to design and build an open-design, relatively inexpensive but fully functional charge regulator for solar PV, wind, pedal and small hydro systems for a while now. The majority of off-grid renewable energy systems are based on lead acid batteries. Lead-acid batteries..... Listed under: power - energy projects



1675. Spectrum analyzer based PIC18F4550 The project demonstrates the implementation of the sound spectrum analyzer for 8-bit microcontroller PIC18F4550 manufactured by Microchip . Spectrum analysis is performed using an optimized fast Fourier transform algorithm (Fast Fourier Transformation, FFT), written entirely in C language. Data Visualization (spectrum) is carried out in..... Listed under: LCD Projects



1676. The Wooden Menace – a Mighty Robotic Arm Powered by Servos using pic microcontroller Introduction When I first started in the field of robotics electronics and sensors I had always wanted to make my own robotic arm. The idea of being able to make such an advanced idea come to life on simple parts found around the house..... Listed under: Robotics - Automation Projects



1677. Induction Heater with CKM005 Microcontroller UPDATE 11/7/12 – More pics of device and full disassembly uploaded by Ad. Thanks! A user nick "Ad" has taken some pictures of the inside of a new induction cooktop by Better China, see their original comments at this article. This device is interesting because..... Listed under: Metering - Instrument Projects



1678. Digital Alarm Clock Schematic using pic microcontoller Electronics lesson: electronic parts, electronic components, electronic projects, circuit diag and more Browse: Home / Search results for "Digital Alarm Clock Schematic" Digital Alarm Clock Schematic You are browsing the search results f "Digital Alarm Clock Schematic" Verilog & fpga project : digital clock alarm..... Listed under: Clock - Timer Projects

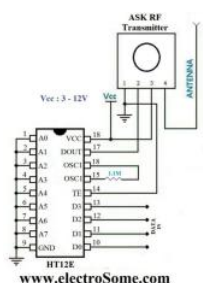


1679. 2.4GHz WiFi & ISM Band Scanner. Part 1 – Description and Schematic using pic microcontoller Have you ever wondered exactly what is going on 2.4GHz WiFi and ISM band around your house. What channel is it best to set your wireless router to? Why are you getting such poor performanc your WiFi network? Is your neighbour on..... Listed under: Wifi - Wlan Projects



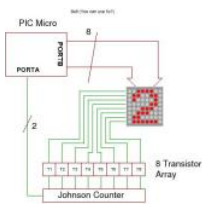
1680. Disco Lights Project using pic microcontoller What does it do? The Disco Lights project is what you get when you combine the fantastic beat de circuitry of my ever popular beat triggered strobe light with coloured halogen lamps! In other words, four coloured lights flash in a variety of patt in..... Listed under: LED Projects

1681. Water Level Indicator and Controller using PIC Microcontroller Here is a simple, versatile project which indicates the level of water and automatically controls it by using P Microcontroller. The Water Level Sensing Section senses the level of water in the tank and sends it (wireless) to the Receiver Section. Receiver Section is connected to the Listed under: Temperature Measurement Projects



1682. How to Interface GSM Module SIM300 with PIC 16F628A Microcontroller for sending SMS and making Calls using pic microcontoller We have seen Electronics Engineering projects use GSM Modem. GSM modems are widely integrated with GSM security system, GSM alarm to provide easy use interaction of user to the embedded project. What is a GSM module? A GSM module lets you to make calls,..... Listed under: Interfacing(USB - RS I2c -ISP) Projects

1683.



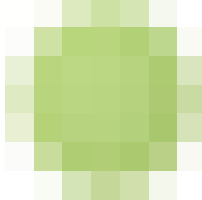
How to drive a Dot Matrix LED Display. using pic microcontroller Driving a 64 LED dot matrix LED display is quite simple and just requires ONE TR Here you can find out how to drive an led dot matrix with 64 LEDs (8 rows by 8 columns - 8x8 display) or less e.g. 35 LEDs (7 rows by 5..... Listed under: DIY - Projects, LED Projects

1684.



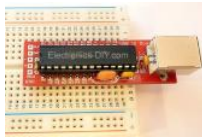
1Hz - 2MHz Function Generator with XR2206 using pic microcontroller 1Hz - 2MHz Function Generator with XR2206 Component List: XR2206 - Function Generator IC Function Generator PCB RCA Gold Plated Connector SW1 - 4-DIP Switch SW2 - (Sine / Triangle) / Square Switch SW2 - Sine / Triangle 1x 3-PIN Gold Plated Male Header..... Listed under: Radio Projects

1685.



USB 0-500MHz RF Power Meter with AD8307 using pic microcontroller AD8307 USB 0-500MHz RF Power Meter Component List: 1x PIC18F2550 Programmed Microcontroller 1x AD8307 RF Power Meter IC 1x RF Power Meter Probe PCB 1x USB IO Board PCB 1x USB Type B Connector 1x 20MHz Crystal Resonator 1x 470K Resistor (yellow purple yellow gold)..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Metering - Instrument Projects

1686.



USB IO Board PIC18F2455 / PIC18F2550 using pic microcontroller USB IO Board Component List: 1x PIC18F2455 / PIC18F2550 Programmed Microcontroller (MCU) 1x USB Type B Connector 1x 20MHz Crystal Resonator 2x 10K Resistor (brown black orange gold) 1x 470 Resistor (yellow purple brown gold) 1x 470nF Ceramic Capacitor 1x 100nF Ceramic Capacitor Technical Specifications:..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1687.



ESR Meter using pic microcontroller The ESR meter is perfect for any electronics repair technicians, engineers or hobbyist. This handy meter measures electrolytic capacitor equivalent series resistance (ESR) in the circuit. ESR is a very important characteristic of capacitors greater than 1 microfarad meter makes measurements which are often..... Listed under: Metering - Instrument Projects

1688.



BA1404 HI-FI Stereo FM Transmitter 88 - 108 MHz using pic microcontroller BA1404 Stereo FM Transmitter Components: BA1404 IC 38KHz Crystal Oscillator Turns Variable Coil 1x PCB 1x 38KHz Crystal Oscillator 1x DIP-18 IC Socket 1x 3.5T Variable Precision RF Coil 1x 10uH Inductor 4x 10uF/50V Gold Plated Capacitors 4x 1nF Ceramic Capacitors 2x 1nF..... Listed under: Radio Projects, Wireless Projects

1689.



Voltmeter Ammeter using pic microcontroller Voltmeter Ammeter Component List: 1x PIC16F876A - Programmed microcontroller 1x 2x16 LCD with Green or Blue Backlight 1x High quality PCB with red solder mask and plated through holes 1x 4MHz Resonator 1x LM7805 5V Voltage Regulator Gold Plated Female Header (PCB) 1x..... Listed under: Metering - Instrument Projects

1690.



60MHz Frequency Meter / Counter using pic microcontroller Component List: 1x 16x2 LCD Display with Green/Blue Backlight 1x PIC16F628A Programmed MCU 1x PCB 1x 18-DIP IC Socket 1x 4.000MHz Crystal 1x LM7805 5V Voltage Regulator 1x 1x16 Gold Plated Female Header (for PCE 1x16 Gold Plated Male Header (for LCD) 2x 1x2..... Listed under: Metering - Instrument Projects

1691.



Pickit 2 clone The Universal Microchip PIC Programmer /Debugger The PICKIT™ 2 Programmer/Debugger is a low-cost development tool with an easy-to-use interface for programming and debugging Microchip's Flash families of microcontrollers. The full featured Windows programming interface is available as a baseline, mid-range, PIC18, 8-bit, 16-bit, and 32-bit microcontrollers, and many Microchip Serial EEPROM products. With Microchip's powerful MPIC integrated..... Listed under: Microcontroller Programmer Projects

1692.

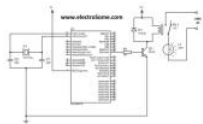


Circuit Digital Clock Using PIC16f628a Microcontroller Schematics Category : circuit » circuit Electronics » Electronic schematics » electronics » Elektor » MICROCONTROLLER » schematics This is a very basic digital clock that can be done using a microcontroller. I particularly used a PIC16f628a can also check my digital clock based..... Listed under: Clock - Timer Projects

1693. How to burn or program PIC Microcontroller? This DIY PIC programmer is a continuation of our PIC programming basics tutorial. By using this US programmer, you can program microchip PIC series of 10F, 12F, 16F, 18F, 24F, 30F. This is also an EEPROM programmer as it supports 12Cxx EEPI The main..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1694. Interfacing Relay with PIC Microcontroller A relay is an electromagnetic switch which is used to switch High Voltage/Current using Low power cir circuits from high power circuits. It is activated by energizing a coil wound on a soft iron core. For detailed working of relay please..... Listed ur Interfacing(USB - RS232 - I2c -ISP) Projects



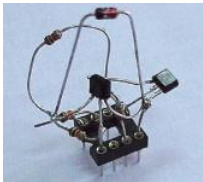
1695. Digital Thermometer using PIC Microcontroller and LM35 Temperature Sensor A Digital Thermometer can be easily constructed using a PIC Microcontroller and LM35 Temperature Sensor. LM35 series is a low cost and precision Integrated Circuit Temperature Sensor whose output volt proportional to Centigrade temperature scale. Thus LM35 has an advantage over other temperature sensors calibrated in Kelvin..... Listed under Sensor - Transducer - Detector Projects, Temperature Measurement Projects



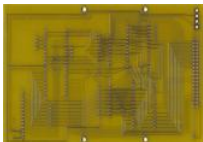
1696. Blinking LED using PIC Microcontroller with Hi-Tech C A lot of you may heard about microcontrollers and its applications. Well it is a bit difficult to learning microcontrollers. And the guides and tutorials also do not start from zero level which makes learning far more difficult than anticipated. tried to..... Listed under: LED Projects



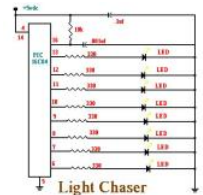
1697. Simple RS232C Level Converter using Transistors using pic microcontroller There're many, who built the Easy Programmer or C-52 EvaluationBoa asking for the RS232C level converter chip, DS275. Many have changed to MAX232 instead, because of not available in his home. Here is another: and cheap circuit using small signal transistor providing TTL to RS232C level converter..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Project



1698. The IDE Project 4 prototype boards arrived today. After going over them carefully, I found 4 lines that crossed each other. After some quick surge a knife and some solder and wire, the IDE project is now semi portable. The power supply is still out of a..... Listed under: LCD Projects



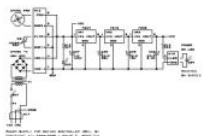
1699. PIC Light Chaser This month I am continuing with the PIC projects that I started in August. To be able to build this circuit you must build the AVR circuit which allows you the ability to program PIC's. The circuit this month is a simple 8 light chaser..... Listed under: LED Projects



1700. Interfacing DS1307 RTC Chip with AVR Microcontroller Real Time Clocks, as the name suggests are clock modules. They are available as integrated circuits (ICs) and manage timing like a clock. Some RTC ICs also manage date like a calendar. The main advantage is that they have a system of battery backup which..... Listed under: Interfacing(RS232 - I2c -ISP) Projects



1701. CNC Controller Motion Schematics (Rev. D) using pic microcontrollers Table of Contents Introduction Power Supply I/O Microcontroller RS422 and Switches X, Y, Z, and Z Axis Selenoid and Motor Control Printed Circuit Board Issues Introduction The parts list is kept in a separate file. Power Supply The power supply schematic is shown below:..... Listed under: CNC Machines Projects

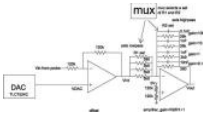


Feedback / Suggestions

1702. Remote-Control Light Dimmer using pic microcontroller The lamp in my bedroom is a very cheap lamp from Wal-Mart. It stands in one corner of room, opposite of the door. This is where the problem is: If it is dark, I have to walk across the room, not trip on anything..... Listed under: LED F



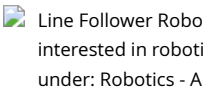
1703. USB data logger project using pic-microcontroller Introduction: In this project, PIC 18F4550 is programmed to perform the function of an oscilloscope. Communication is set up between the computer and the PIC through USB, so that bulk data transfer mode is implemented. Analogue circuits are carefully designed so the user can select..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



1704. XBee radio communication between PICs using pic-microcontroller Overview Typically, two pics communicate by RS-232, a wired transmission. However, it may be desirable to communicate via a wireless link. This wiki page demonstrates using XBee radio modems which conform to the IEEE 802.15.4 protocol. These radios will allow for wireless communication between two..... Listed under: Radio Projects



1705. Line Follower Robot – Build it from scratch using pic microcontroller Line Follower Robots are the most common type of robots that are built by hobbyists and students interested in robotics and embedded systems. The reason for the popularity of the Line Follower robot is the fact that it is simple to build and easy to understand..... Listed under: Robotics - Automation Projects



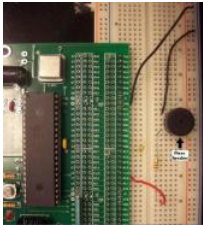
1706. Interfacing DHT11 humidity and temperature sensor with PIC16F877A using pic microcontroller After interfacing the DHT11 with an Arduino Uno board at the following post: ARDUINO Humidity & Temperature Measurement Using DHT11 Sensor Now we are going to see how to interface this sensor with a Microchip PIC16F877A. There are some descriptions of how this sensor works in the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Sensor - Transducer - Detector Projects



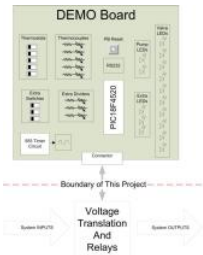
1707. SD-Card with CCS C Compiler using pic microcontroller Description This project shows how to use a SD-Card with FAT16 file system. It is based on an example MMC/SD-Card driver (mmc.c) and FAT file system driver (fat.c) delivered with the CCS C compiler. Unfortunately, the example didn't work properly for me. So I searched..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



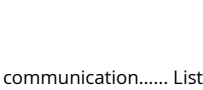
1708. Driving a piezo speaker with a PIC using pic-microcontroller, Overview A Pulse Width Modulation (PWM) output from a PIC microcontroller can be used to play tones on a piezo speaker. With this, musical scales and simple songs can be played on the piezo speaker. Piezoelectric speakers operate on the converse piezoelectric effect: when an..... Listed under: Sound - Audio Projects

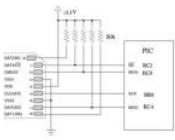


1709. Heat Control System using pic-microcontroller Introduction This project was the first stage of developing a controller for a radiant floor heat system. The microcontroller will use inputs from thermostats, thermocouples, a flow meter, and pressure switches to control the operation of the pumps and valves to achieve improved efficiency of..... Listed under: Sensor - Transducer - Detector Projects



1710. Interfacing with a Secure Digital (SD) card using pic-microcontroller Overview Secure Digital Cards, or SD cards, are used to hold information in many common electronic devices from digital cameras to mobile phones and come in sizes as small as 4 MB and as large as 8 GB. In this lab, we will see how to interface an SD card with a PIC microcontroller..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects



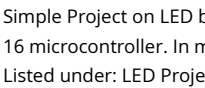


1711.

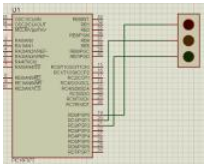


Switch Relay using pic-microcontroller INTRODUCTION: The Switch Relay was designed to give clients control over two different switch-activated using only one switch. Pressing and releasing the switch will directly control the first device. However, when the client presses the switch for a duration of time, the device..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1712.



Simple Project on LED blinking by PIC 16 Microcontroller using pic Microcontroller Today I will show you how easily you can build your first project on blinking LED by using 16 microcontroller. In my previous post Step by step Project guide on PIC Microcontroller I was mention that for start-up we need 1 Proteus 7 Professional (where we can make our project)..... Listed under: LED Projects

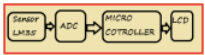


1713.



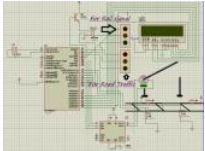
Scrolling Text on LCD by PIC Microcontroller Scrolling Text on LCD by PIC microcontroller is very simple but very important one. For moving forward we need basic knowledge on how to display the text on LCD by pic Micro controller. For that please see my previous post on that "Displaying text on LCD"..... Listed under: LCD Projects

1714.



Lm35 interfacing with pic 16f877 through adc0808 Here I discuss on very good project on digital thermometer. I made this project by Lm35 interfaced with pic 16f877 through adc0808. Pic16f877 microcontroller has inbuilt ADC (Analog to Digital Converter) but I use external ADC IC (adc0808) because of the simplicity of project if I use..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1715.



Automated Railway Gate Controlled by PIC16F877A Here I give you my project on Automated Railway Gate Controlled by PIC16F877A. It is very good project and if it is implemented by railway then they can save lots of money to paying salary for this purpose. For that project I use PIC16F877A..... Listed under: Home Automation Projects

1716.



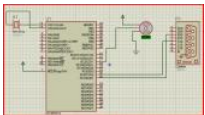
Interfacing GLCD with PIC16F877A Today I discuss on Interfacing GLCD with PIC16F877A. To overcome the limitation of LCD display we use GLCD (Graphical LCD). By using GLCD now we can display image draw line and shapes page by page which are not possible in normal LCD. So to know more..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1717.



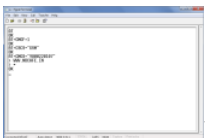
Interfacing Proteus with Matlab It is very important topic that how Interfacing Proteus with Matlab is done? And it is obvious that after interfacing with matlab lots of way is open for simulating microcontroller based project. We know that in Proteus there has lack of sensor so if we use..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1718.



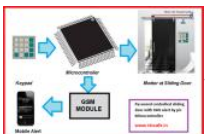
Servo motor control by Microcontroller PIC16F877 and MATLAB GUI Here you see how a Servo motor controls by Microcontroller PIC16F877 and MATLAB GUI? It is well known to us that now a day's use of servo motor extended in the field of Robotics. Servo motor can rotate with definite angle and speed easily..... Listed under: Motor Projects

1719.



Interfacing GSM module with PIC Microcontroller In connection with today's advance technology and field of embedded electronics project, interfacing a GSM module with pic microcontroller is very important for remote and wireless communication. GSM stands for Global system of mobile communication is widely used chip and reliable mobile network. If we done..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1720. Password controlled sliding door with SMS alert by pic Microcontroller In today's world implementation of any expert system with maximum data and networking security becomes a real necessity in home, academic organizations as well as in industrial communities. To provide this security here I give my project on "password controlled sliding door with SMS alert"..... Listed under: Home Automation Projects, Phone Projects, Security - Safety Projects



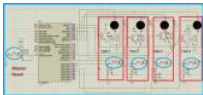
1721. Interfacing android with pic microcontroller via Bluetooth To forward our first step in the field of wireless communication by interfacing android with pic microcontroller via Bluetooth open lots of way to work on. Once we can send and receive data between a microcontroller and android mobile then use of android mobile we..... Listed under: Wireless Communication Projects

Feedback / Suggestions



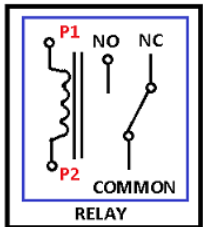
Internet - Ethernet - LAN Projects

1722.



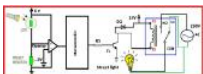
PIC microcontroller based fastest finger press quiz buzzer project The fastest finger press quiz buzzer is very popular in school, Collage, different show, different quiz competition. Here in my pic microcontroller based fastest finger press quiz buzzer project you will find four tables with push For any instant if four teams on..... Listed under: Sound - Audio Projects

1723.



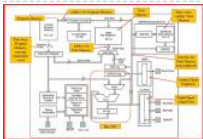
Interfacing Relay with PIC Microcontroller To control our high voltage device like home appliance by pic microcontroller, we have to have clear id interfacing relay with pic microcontroller. Here I try to answer your very important question with simulation that how to interface relay with pic microcontroller? To discuss..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1724.



Automatic street light control by pic microcontroller The main purpose of this project “automatic street light control by pic microcontroller” is to minimize the cost of electricity and also cost of man power to manually on- off the street light. In the field of modern embedded world this proje “automatic street light..... Listed under: Home Automation Projects

1725.



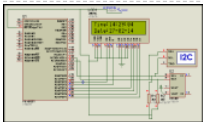
Interfacing Internal EEPROM with PIC Microcontroller In this project “ Interfacing internal EEPROM with PIC Microcontroller ”, we will see how we easily interface EEPROM, send data from microcontroller, store data in EEPROM and read data from EEPROM. In many time we feel that we need store some data..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Memory - Storage Projects

1726.



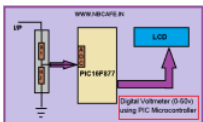
Interfacing external EEPROM with PIC Microcontroller In this project “Interfacing external EEPROM with PIC Microcontroller”, we will see how we easily interface EEPROM via I2C Protocol. The need of external EEPROM as a permanent storage of data in any project is enhanced. So now ques how to interface external EEPROM..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Memory - Storage Projects

1727.



Interfacing DS1307 Real time clock with PIC16f877 In any advance project we need real time clock synchronize with our work and for this purpos best option is DS1307 (RTC Ic). Interfacing DS1307 Real time clock with PIC16f877 is done by I2C communication. To know I2C protocol you may r previous..... Listed under: Clock - Timer Projects, Interfacing(USB - RS232 - I2c -ISP) Projects

1728. Digital Voltmeter (0-50v) using PIC Microcontroller If we know how inbuilt ADC work then we can easily build Digital Voltmeter using PIC Microcontroller. In my previous p can see how easily we build “Digital thermometer with auto saving log file in excel by Pic microcontroller”. Using the same principle here..... Listed under: Metering - Inter Projects

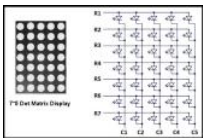


1729.



MCP4921 12 bit DAC interfacing with PIC16F877 microcontroller via SPI Connectivity In any real time project, MCP4921 12 bit DAC interfacing withl PIC16F877 microcontroller via SPI Connectivity is very essential. Because in real world most of the input sensors and output devices are analog. I want to work with those we need to know..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1730.



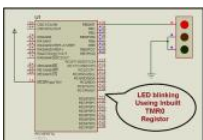
Interfacing Dot Matrix led Display with PIC Microcontroller To know about Interfacing Dot Matrix led Display with PIC Microcontroller, we have to about what is Dot Matrix Display? And how it work? Dot Matrix Display is an array of LED situated in a form of Matrix. See the architecture of a 7x8 Listed under: LED Projects

1731.



Interfacing Camera with PIC Microcontroller via Matlab GUI For project on security systems, Interfacing Camera with PIC Microcontroller via Matl GUI is mostly desirable. But size internal ROM and RAM of PIC16F877 is very small. So it is very difficult or other word imposible to direct Interfac Camera with PIC16F877 Microcontroller . But we..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Video - Camera - Imaging Projects

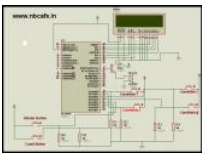
1732.



LED blinking using timer0 of pic16f877 microcontroller Here I discuss very good knowledge based project LED blinking using timer0 of pic16f877 microcontroller. You can see in my Earlier project “Simple Project on LED blinking by PIC 16 Microcontroller” where I have used delay program fo blinking. For LED blinking we have..... Listed under: LED Projects

1733.

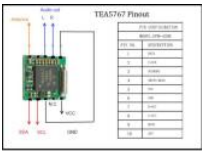
Electronic Voting Machine Using PIC Microcontroller Here you see how easily we can make Electronic Voting Machine Using PIC Microcontroller. I this machine we can conduct any voting function like audience poll in school, college quiz competition or any small scale general election. Projec Description: To make our project “Electronic..... Listed under: CNC Machines Projects



1734. LDR Based Line follower Robot Car using PIC Microcontroller Here I give you description of my project "LDR Based Line follower Robot Car using Microcontroller". This project is very interesting and the concept implementing for making this project is also very interesting. Project description project "LDR Based Line follower Robot Car..... Listed under: Robotics - Automation Projects



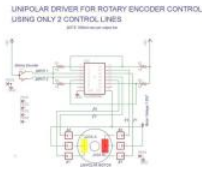
1735. FM radio using TEA5767 and PIC16F877A micro-controller TEA5767 single-chip FM stereo radio. ----- High sensitivity due to integrated low-noise RF input amplifier * FM mixer for conversion to IF of the US/Europe (87.5 MHz to 108 MHz) and Japara MHz to 91 MHz) FM band * Preset tuning to receive..... Listed under: Radio Projects



1736. Led matrix project using shift register and pic16f628a micro This is a project to move words on led matrix display we use 1-pic16f628a as microcontroller: cheap, program memory 2k, has internal oscillator, two ports A, B and a lot of things. 2-led matrix 8*8 rows common anode and columns common cathode 3-shift register I use 74ls164 it is simple than..... Listed under: LED Projects



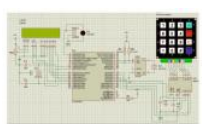
1737. Simple manual control of stepper motors without a PIC or PC This instructable will show you how to control stepper motors (Unipolar OR Bipolar) manually with a knob, without the use of a PIC or PC, so no programming is needed. The position of the knob determines the position of the motor shaft, which will stay..... Listed under: Motor Projects



1738. Servo Motor Control by using Microcontroller PIC16F877A PIC16F877A is an easy micro controller for the beginners Here in project: 1) How PIC controls servo motor forward and backward When we push one switch it goes to positive 90 degree, on second switch it moves backward to negative 90 degrees..... Listed under: Motor Projects



1739. Automatic School Bell This project is an Automatic School bell system. Such a system triggers a bell (or operates any other load) at predefined times. In this version some advanced features are introduced: - 16x2 LCD Display (Displays current date, time and day) - 4x4 Keypad for..... Listed under: Electronics News and Updates, Home Automation Projects



1740. DATA LOGGER measures and stores voltage using PIC16F876 Introduction This circuit is a data logger that records voltage samples at specific time intervals. I've used it to record the voltage discharge curve on NiCad battery packs. The data file can be dropped into a spreadsheet and plotted. I used it to record..... Listed under: Battery Projects, Metering - Instrument Projects, Projects



1741. WIRELESS REMOTE CONTROL for Raymarine ST4000 Autopilot using PIC16F628 I had designed a remote unit for my ST4000+ autopilot. It did prove the concept and I used it a lot, but it sported an unsightly coil cord (and of course unsightly coil cords have no place on boats) so I decided to build a wireless version. Listed under: Projects, Radio Projects



1742. Analog & Digital propeller clock using PIC16C84 An Analog & Digital propeller clock I made! It isn't real it's just because you're so awfully slow!!! 😊 based on an afterimage phenomenon, i.e. the reaction slowness of the retina, the illusion of reality our brains are "lying" Picture's made 12-12-1997 by Lubert Dijkman..... Listed under: Clock - Timer Projects, Projects



1743.



PIC Countdown Timer using PIC16f84a Description : The purpose of this timer is to provide a countdown time from 1 second to 99 minutes & 59 seconds. I use it to control the lighting for the Ultra-Violet exposure of photosensitive PCB material. The project provides also an audible alarm a Listed under: Clock - Timer Projects, Projects

1744.



Stepper Motor Controller using PIC16C84 For another project I started I needed to control the motion of a stepper motor. A stepper motor is use precision control of movement is needed. With each movement of the motor, the drive shaft steps a precise amount of distance (usually a few.... under: Motor Projects, Projects

1745.



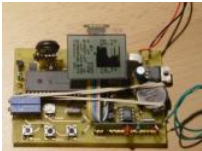
Digital Watt meter using PIC16F876 Updated 3. Sep. 2002. If you are from Denmark ! read the Danish version !! In the good old days I had some p but now This Wattmeter is in ELEKTOR MAGAZINE OKTOBER 2002, they will sell PIC and PCB The extra input B is..... Listed under: Metering - Instr Projects, Projects

1746.



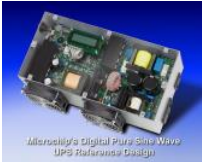
PIC programmer using PIC16F84A Microcontroller Essential when experimenting with PIC. Programs PIC16Fxxx and PIC18Fxxx series (8, 18, 28 & pins) 16F84A, 16F877A, 18F452 (DIL and PLCC) tested successfully with the IC-Prog software. 18F4550 (DIL) works fine with the PICPgm program software. Also programs EEPROMs (8 pins) type 24LCxx with..... Listed under: Microcontroller Programmer Projects, Projects

1747.



Weather station using PIC18F452 Microcontroller Weather station with pressure reading, relative humidity, indoor & remote outdoor temperatur display. Both Celsius or Fahrenheit & mbar/hPa or mm Hg supported. With calendar & clock. Easy 3-button user-menu. 42 hour-history display (Auto-memory & display of all high and low-values. PIC 18F452 running..... Listed under: CNC Machines Projects, Home Automation Projects, Proj

1748.



PIC based UPS Schematic / Firmware / PCB Layout Microchip's Digital Pure Sine Wave Uninterruptible Power Supply (UPS) Reference Design is ba the dsPIC33F "GS" series of digital-power Digital Signal Controllers (DSCs). This reference design demonstrates how digital-power techniques wha applied to UPS applications enable easy modifications through software, the use of smaller..... Listed under: Battery Projects, Blog, Projects, PWM Projects

1749. Making a Digital Clock using PIC16F628A Please check the update at === Digital Clock Updated Version === --- Original Version --- As I am a WIS so I built a clock as my first microcontroller project. The clock is controlled by PIC16F628A from the PIC book . The idea was making..... Listed under: Clock - Timer Projects, Projects

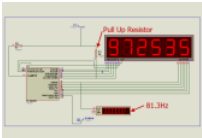


1750.



A Simple Clock using DS1307 and PIC16F877A Even I have posted about "DS1307 + PIC16F877A", I didn't have chance to make a real prototype of clock. I have done only on the simulation software. Today, I have received a comment about that post. ah_bear followed my code and schematic that..... Listed under: Clock - Timer Projects, Projects

1751.



6 Digits LED 7-Segment Multiplexing using PIC16F627A In the post 'LED 7-Segment Multiplexing', I have explained about the concept and benefit: multiplexing. Multiplexing implementation is very similar to driving Led Dot Matrix. I use Timer0 interrupt for switching through each digit. Timer TMR0 is an 8-bit timer which overflows every..... Listed under: LED Projects, Projects

1752.



Making your own Digital Clock using PIC16F887 Small LED dot matrix development board I was very busy for the past two months so this blog ju move. As you may know, the LED dot matrix display is my favorite device. I have designed a small development board for testing my led..... Liste Clock - Timer Projects, How To - DIY - Projects, Projects

1753. RGB LED Controller using PIC18F452 A very popular type of LED that has finally come about is the tri-color, RGB LED. The RGB stands for: red, green and blue since the LE capable of displaying all three colors, independently. This means that an RGB LED can display any color..... Listed under: LED Projects, Projects



1754.



PICKit3 Programming With MPLABX The PICKit3 is microchip's newest official PIC programmer and while people argue about how good it is, this programmer has never done me wrong. I upgraded away from the old ICD2 clone programmer that I had used for years when I saw that microc sells..... Listed under: Microcontroller Programmer Projects, Projects

1755.



IR Proximity Motor Control using PIC18F4520 Infrared proximity sensors are very fun to play with. In the past we have used them to make Digital Theremins and Control Robots, always using its proximity sensing (how far away an object is from the sensor) as the main feature. Today, we're g on..... Listed under: Motor Projects, Projects

1756.

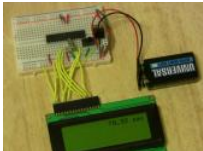


The Annoy - A Tiny Intelligent Buzzer using PIC10F202 A while back I made a blog post about a PIC10F200 Project: The Annoy. In this project they combined the simplicity in design along with the creativeness that I always look for, into a project with no real use other than for fun. However, t Listed under: Projects, Sound - Audio Projects

1757. How to drive an led display matrix using PIC16F88 Here you can find out how to drive an led matrix with 64 LEDs (8 rows by 8 columns - 8x8 display) or less e.g. 35 LEDs (by 5 columns - 5x7 dot matrix). It uses persistence of vision to let you drive the..... Listed under: How To - DIY - Projects, LED Projects, Projects



1758.



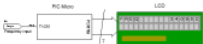
A Real Time Clock using PIC16F88 Microcontroller This PIC project uses an I2C Real Time Clock IC (DS1307) and a four digit seven segment display create a standard desk clock. Note: If you typed DS1703 Real Time Clock to find this page you probably mis-spelled the chip type. Anyway you ca find..... Listed under: Clock - Timer Projects, Projects

1759.



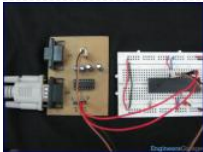
50MHz 7 segment frequency counter using PIC16F877A In the same way as the LCD project this frequency counter circuit uses TMR1 in 16 bit co mode to count the input signal edges. Counter overflows are accumulated to give the total count in multiples of 65536. Adding the current value counter..... Listed under: Metering - Instrument Projects, Projects

1760.



Frequency Counter using PIC16F877A Microcontroller A frequency counter is a useful addition to an engineer's toolbox and you can create the d described on this page for free. All you need is a PIC microcontroller (or any microcontroller that has a high speed timer input module) and a 2 li Listed under: LCD Projects, Metering - Instrument Projects, Projects

1761.



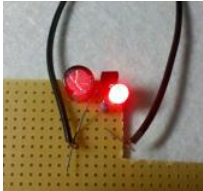
PIC18F452 UART code and Proteus Simulation This post provides the UART code (compiled in MPLAB + HI-TECH C) for PIC18F452 (e-g to connect PIC18F452 controller with PC using serial adapter). Complete project code and the proteus simulation can be downloaded from the Downloads s at the bottom of this post. The following diagram shows the..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1762.



PIC18F452 PWM Code and Proteus Simulation This post provides the PWM code (using C language) and Proteus simulation for PIC18F452 microcontroller CCP1 and CCP2 modules (written using MPLAB and HI-TECH C18 compiler). There are many uses for PWM signals, e-g you can contro motor speed using PWM. CCP..... Listed under: Projects, PWM Projects

1763.



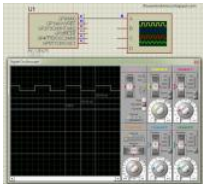
PIC12F675 LED blinking code and Proteus simulation This post provides the code to make an LED blink using PIC12F675 microcontroller. This cor written in C language using MPLAB with HI-TECH C compiler. This code is intended to be the first step in learning how to use PIC12F675 microcor in your projects..... Listed under: LED Projects, Projects

1764. Simple Digital Voltmeter (DVM) using PIC12F675 (Code+Proteus simulation) This post provides a simple digital voltmeter circuit using PIC12F675 microcontroller. This cod written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. In this post, it is assum



you..... Listed under: Metering - Instrument Projects, Projects

1765.



PIC12F675 PWM Code and Proteus Simulation This post provides the PWM code for PIC12F675 microcontroller using timer0. There are many use PWM signal, e-g you can control dc motor speed using PWM. Timer0 is initialized in the start of the main function and using timer0 interrupts, PV generated. This code is written..... Listed under: Projects, PWM Projects

1766.



PIC12F675 based digital clock using LCD display (Code + Proteus simulation) This post provides a simple digital clock implementation using PIC12 microcontroller and an LCD display. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from t 'Downloads' section at the bottom of this page. In this article, it..... Listed under: Clock - Timer Projects, LCD Projects, Projects

1767.



PIC12F675 based simple calculator (Code + Proteus simulation) This post provides a simple calculator project implementation for PIC12F675 microcontroller. This is a simple one digit[1] calculator which implements only 4 functions addition(+), subtraction(-), multiplication(x) and divisio code for PIC12F675 is written in C language using MPLAB with HI-TECH C compiler. You can download this..... Listed under: Calculator Projects, P

1768.



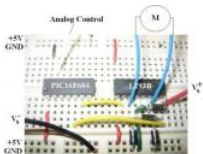
How to use PIC12F675 GPIO pin as input (Code + Proteus simulation) This post provides an example code to use PIC12F675 GPIO pins as inputs. going through this example, you will understand how to make PIC12F675 pins as inputs and how to read their value in the code. This code is writ language using..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1769.



PIC16F84A LED blinking code and Proteus simulation This post provides the code to make an LED blink using PIC16F84A microcontroller. This is o written in C language using MPLAB with HI-TECH C compiler. This code is intended to be the first step in learning how to use PIC16F84A mi-rotor in your projects..... Listed under: Game - Entertainment Projects, LED Projects, Projects

1770.



PIC16F84A PWM code and Proteus simulation This post provides the PWM code for PIC16F84A microcontroller using timer0. There are many use PWM signal, e-g you can control dc motor speed using PWM. Timer0 is initialized in the start of the main function and using timer0 interrupts, PV generated. This code is written in C..... Listed under: Projects, PWM Projects

1771.



PIC16F84A LCD interfacing code (In 8bit mode) + Proteus simulation This post provides the LCD[1] interfacing code using PIC16F84A microcontro language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assun you know how to make an..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, Projects

1772.



PIC16F84A based digital clock using LCD display (Code+Proteus simulation) This post provides a simple digital clock implementation using PIC16f microcontroller and an LCD display. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from t 'Downloads' section at the bottom of this page. In this article, it..... Listed under: Clock - Timer Projects, LCD Projects, Projects

1773.



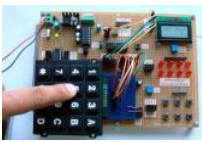
How to interface keypad with PIC16F84A This post provides a simple method to interface any keypad (e-g 4x4 or 4x3 etc) with PIC16F84A microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. In this..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1774.

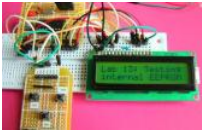
PIC16F84A based simple calculator (Code+Proteus simulation) This post provides a simple calculator implementation for PIC16F84A microcontro This is a simple one digit[1] calculator which implements only 4 functions addition(+), subtraction(-), multiplication(x) and division(/). The code for PIC16F84A is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the..... Listed under: Calculator Proj



1775.  PIC16F84A interrupt based software UART code and Proteus simulation This post provides the interrupt based software UART (Bit Banging) code PIC16F84A microcontroller. As we know, PIC16F84A microcontroller doesn't have built in UART module, so we can create UART functionality in it' software. This post provides the details of how to program software UART functionality in PIC16F84A. This code..... Listed under: Interfacing(USB - I2c -ISP) Projects, Projects
1776.  PIC16F84A i2c (bit banging) code and Proteus simulation This post provides the i2c bit banging code for PIC16F84A microcontroller. As we know[1], PIC16F84A microcontroller doesn't have any built in i2c modules, so we have to create it in the software. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
1777.  PIC12F675 interrupt based software UART code and Proteus simulation This post provides the interrupt based software UART (Bit Banging) code PIC12F675 microcontroller. As we know, PIC12F675 microcontroller doesn't have built in UART module, so we can create UART functionality in it's software. This post provides the details of how to program software UART functionality in PIC12F675. This code is..... Listed under: How To - DIY Projects, Projects
1778. PIC12F675 i2c (bit banging) code and Proteus simulation This post provides the i2c bit banging code for PIC12F675 microcontroller. As we know[1], PIC12F675 microcontroller doesn't have any built in i2c modules, so we have to create it in the software. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
1779.  Interfacing of PIC12F675 with DS1307 (RTC) code and Proteus simulation This post provides the code for interfacing DS1307 RTC with PIC12F675 microcontroller. This DS1307 RTC has i2c based interface and PIC12F675 doesn't have any built in i2c modules, so software i2c module is created in the code. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects
1780.  PIC16F877 PWM (2 channel) code and Proteus simulation This post answers the question, "How to make a pulse width modulator using PIC16F877" ? Also, using PIC16 simulator (Proteus) you can verify this PWM code and change it according to your needs. You can download the complete project and Proteus simulation from the 'Downloads' section at..... Listed under: Projects, PWM Projects
1781.  PIC16F877 external interrupt code and Proteus simulation This post answers the question, "How to capture a pulse to generate an interrupt in PIC16F877" ? Also, using PIC16 simulator (Proteus) you can verify this external interrupt code and change it according to your needs. This code is written in C language using MPLAB with..... Listed under: Other Projects, Projects
1782.  PIC16F877 UART code and Proteus simulation This post answers the question, "How to use interrupt based UART in PIC16F877" ? Also, using PIC16 simulator (Proteus) you can verify this UART code and change it according to your needs. This code is written in C language using MPLAB with HI-TECH C compiler. You..... Listed under: Other Projects, Projects
1783.  PIC16F877 LCD interfacing code (In 4bit mode) and Proteus simulation This PIC16F877 microcontroller tutorial answers the question, "How to interface LCD[1] in 4bit mode with PIC16F877" ? Also, using PIC16 simulator (Proteus) you can verify this LCD code and change it according to your needs. This code is written in C language using MPLAB with HI-TECH C compiler..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, Projects
1784.  PIC16F877 based digital clock using LCD display (Code+Proteus simulation) This PIC16F877 microcontroller tutorial answers the question, " How to implement a digital clock using PIC16F877 ? " Using PIC16 simulator (Proteus) you can verify this digital clock code and change it according to your needs. This code is written in C language using MPLAB..... Listed under: Clock - Timer Projects, Projects
1785. How to interface keypad with PIC16F877 This PIC microcontroller tutorial provides a simple method to interface any keypad (e-g 4x4 or 4x3 etc) with PIC16F877 microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



1786. PIC16F877 internal EEPROM code and Proteus simulation This post provides the internal EEPROM reading and writing code for PIC16F877 microcontroller. As we know[1], PIC16F877 microcontroller has 256 x 8 bytes of built in EEPROM data space with an address range of 0x000 to 0x7FF. This code is written in C language using MPLAB..... Listed under: Memory - Storage Projects, Projects



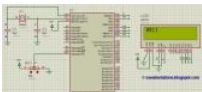
1787. Interfacing of PIC16F877 with (i2c based) 24LC64 EEPROM (Code + Proteus simulation) This post provides the code for interfacing 24LC64 EEPROM with PIC16F877 microcontroller. This 24LC64 EEPROM has i2c based interface. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Memory Storage Projects, Projects



1788. Interfacing of PIC16F877 with DS1307 (RTC) code and Proteus simulation This post provides the code for interfacing DS1307 RTC with PIC16F877 microcontroller. This DS1307 RTC has i2c based interface. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects



1789. PIC16F877 ADC code and Proteus simulation This post provides the ADC code using PIC16F877 microcontroller. This code is written in C language using MPLAB with HI-TECH C compiler. You can download this code from the 'Downloads' section at the bottom of this page. It is assumed that you know how to interface..... Listed under: Other Projects, Projects



1790. PIC16F877 stop watch code and Proteus simulation This PIC16F877 microcontroller tutorial answers the question, " How to implement a stop watch using PIC16F877 ? " Using PIC16 simulator (Proteus) you can verify this stop watch code and change it according to your needs. Using three push buttons (As shown in figure below)..... Listed under: Clock - Timer Projects, Projects



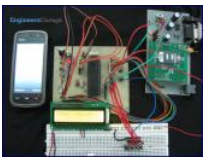
1791. PIC16F877 up down counter code and Proteus simulation This PIC16F877 microcontroller tutorial answers the question, " How to implement a up down counter using PIC16F877 ? " Using PIC16 simulator (Proteus) you can verify this counter code and change it according to your needs. Using one push button (Labeled as Count, as shown in..... Listed under: Clock - Timer Projects, Projects



1792. PIC16F877 based simple calculator project This PIC microcontroller tutorial provides a simple calculator implementation for PIC16F877 microcontroller. This is a simple 8 digit calculator which implements only 4 functions addition(+), subtraction(-), multiplication(x) and division(/). The code for PIC16F877 is written in C language using MPLAB with HI-TECH C compiler. You can download..... Listed under: Calculator Projects, Projects



1793. How to interface GSM Module with PIC18F4550 Microcontroller The Global System for Mobile (GSM) communication is the Second Generation of mobile communication technology. Although the world is moving towards Third and Fourth generation but GSM has been the most successful and widespread technology in the communication sector. GSM technology paved a new way for..... Listed under: How To - DIY - Projects, Internet - Ethernet - LAN Projects, Projects



1794.



How to display text on 16x2 LCD using PIC18F4550 Several automated and semi-automated devices require a message to be displayed in order to indicate their working status. In continuation to LCD interfacing with PIC18F4550, this article explains how to display a message or string on a 16 character LCD. In the previous article, a..... Listed under: LCD Projects, Projects

1795.



PIC Microcontroller timer Video Project PIC Microcontroller timer/counter by Dr. Tom Lombardo ... Listed under: Clock - Timer Projects, Projects

1796.



UFO round LED Chaser with speed control for PIC16F628A Description This is an updated version of the UFO LED Chaser project, revised to use the PWM LED Chaser code version 3.0.0 with support for variable chase speed. The basic LED chaser 'engine' firmware is the same as that used with the 481/483 LED chaser..... Listed under: LED Projects, Projects

1797.



UFO round LED Chaser Kit for PIC16F628A Description This page has been written to support construction of the UFO LED Chaser Kit #432K. The little circuit provides 8 LEDs directly driven from the PIC along with a single mode control switch. The firmware elsewhere on this page drives the LEDs..... Listed under: Development Board - Kits Projects, LED Projects, Projects

1798. 8 Channel PWM LED Chaser for PIC16F628A and PIC16F88 Description This neat little circuit provides 8 LEDs directly driven from the PIC along with a single mode control switch. The firmware elsewhere on this page drives the LEDs with a 5 bit PWM signal providing each of the 8 LED channels with four levels..... Listed under: LED Projects, Projects



1799.



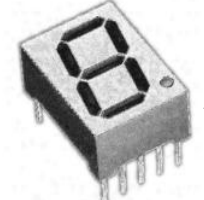
8 Channel PWM Power MOSFET LED Chaser for PIC16F628A Description Update: Variable chase speed option kit now available (see here for details) This neat little circuit provides 8 LEDs directly driven from the PIC along with a single mode control switch. The firmware elsewhere on this page drives the LEDs with a 5 bit..... Listed under: LED Projects, Projects, PWM Projects

1800.



8 Channel PWM LED Chaser for PIC16F628A Description Update: Variable chase speed option kit now available (see here for details) This neat little circuit provides 8 LEDs directly driven from the PIC along with a single mode control switch. The firmware elsewhere on this page drives the LEDs with a 5 bit..... Listed under: LED Projects, Projects, PWM Projects

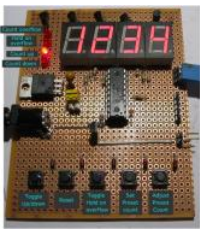
1801.



Binary/bcd to 7-segment decoder for PIC16F627A Overview This is a building block project I developed to try out a few ideas. It decodes a 4-bit binary word to outputs that will drive a 7-segment LED display. Functionality is similar to the 7447 BCD-to-seven-segment decoder/driver IC however, but it's implemented using a..... Listed under: LED Projects, Projects

1802.

4-digit Up/Down counter with preset, reset, hold and overflow output using PIC16F88 Overview A four digit decimal counter for the PIC 16F88 with the following features: Count up / down Reset Free running or hold on count over/underflow User count preset Over/underflow output Description 1 4 digit decimal counter which can operate as a free..... Listed under: Clock - Timer Projects, Projects

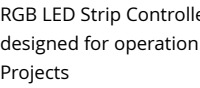


1803.



4 Channel DMX512 Driver for PIC16F1823 The original DMX512 driver project #800 is now redesigned to incorporate the optional address config switch on the main PCB. The no-switches in-band DMX configuration feature is still retained Double sided PCB has resulted in a more compact b size. Firmware has been updated to run..... Listed under: Development Board - Kits Projects, Projects

1804.



RGB LED Strip Controller high-side LED drive for PIC12F629 Recently I acquired a 5M length of RGB LED strip using SMD5050 RGB LEDs. It has built in current limit resisto designed for operation from a 12 volt supply. Having thought this would directly attach to the Picprojects MOSFET RGB LED driver project I went..... Listed under: LED Pr Projects

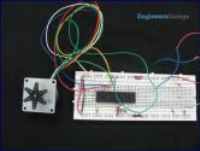


1805.



RGB LED PWM Driver Standalone PWM controller for RGB LEDs using PIC12F629 Want to build an RGB LED controller that you can program with own custom sequences and effects? Then read on. The RGB LED controller has proved to be very popular project and has been the most freque downloaded code on the site since it..... Listed under: LED Projects, Projects, PWM Projects

1806.



How to interface Stepper Motor with PIC18F4550 Microcontroller A Stepper Motor is a brushless, synchronous DC motor which divides a full rotation into a number of steps. For detailed information on working, types and stepping modes, refer the article on Stepper Motors. Here the operation of a unipolar Stepper motor with PIC18F4550 microcontroller has been..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Motor Projects, Projects

1807.



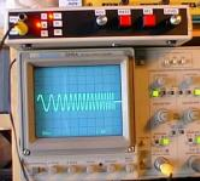
Pickit 2 Download & Develop Your own USB pickit ii programmer PICKit 2 Introduction: There are many PIC programmer available, commercial a devices. As Microchip introduces the new microprocessors the programming software got to be updated accordingly playing catch-up with the P manufacturer. That is the root of the problem with third-party PIC programmers..... Listed under: How To - DIY - Projects, Microcontroller Progr Projects, Programmers, Projects

1808.



OBD-II ELM327 compatible AllPro adapter using PIC18F2455 Overview This adapter allows you to interface with your car's OBD-II bus. It provides USB interface using the ELM327 command set and supports all major OBD-II standards: SAE J1850 PWM SAE J1850 VPW ISO 9141-2 ISO 14230-4 ISO 15765-4 CAN Hardware The adapter kit..... Listed under: Car Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

1809.



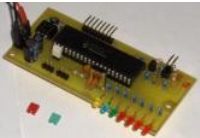
Function Generator using PIC16F870 microcontroller Sine Triangle Square Saw Burst Sweep Noise - runs on a PIC16F870 After the recent demise of a multifunction signal generator, we decided to make one of our own. The circuit uses a PIC16F870 (about \$3), an R/2R resistor ladder network (for fast..... Listed under: Metering - Instrument Projects, Projects

1810.



Tiny GSM alarm system using PIC16F84A After GSM call alarm and GSM SMS alarm as two independent modules, I introduce the Tiny GSM alarm system. The main characteristic of this new version is that this device can operate standalone or as a module for existing alarm system. In previous versions we had only the "enable" pin..... Listed under: Phone Projects, Projects, Security - Safety Projects

1811.





SMS Box project using PIC16F877A Microcontroller This device acts as interface between your microcontroller project and a GSM phone. It handles modem data communication between the GSM phone and your micro-project. The best thing is that it decodes PDU into TEXT on the fly! You can SMS-enable your any..... Listed under: Phone Projects, Projects

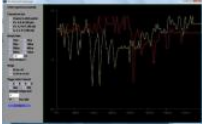
1812.


Home Automation and Safety via GSM Remote Objectives: To test a level of understanding for my final year project. To present about programming a gsm modem; the performance or what have been achieved. To improve myself, in term of knowledge, presentation and communication. Content: Procedure: Refer to FYP..... Listed under: Home Automation Projects, Projects

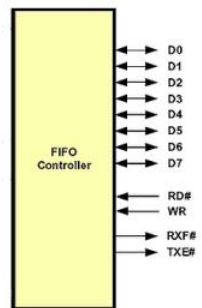



1813.  LC meter using PIC16F628A Microcontroller I needed a good LC meter for my one of my next projects so I went and built the famous LC meter by Rice. This LC meter design is pretty old but since it is a perfectly good device there was no need to..... Listed under: Metering - Instrument Projects

1814.  Build a digital clock with its digits levitating in the air using PIC16F84 Red digits on this photo appear to float in the air in front of the clock. This is based on inertia of a human eye. If LED-formed digits will periodically and frequently enough flash, they will appear solid and steady. And since the matrix..... Listed under: Clock - Timer Projects, Projects


1815.  Digital Oscilloscope using PIC16F688 Far and away my most ambitious project to date, this digital oscilloscope can sample up to four channels at up to 100kHz. And the best part? It only cost me about \$40 in components. The user interface is an application running on a..... Listed under: Measurement - Instrument Projects, Projects


1816.  Gear Clock using PIC16F676 Microcontroller I can't take credit for the design of this one. I bought the gear as a clock a few years ago. It was mounted on a frame and had one of those cheap clock units running it. The gear is designed to be driven by..... Listed under: Clock - Timer Projects, Projects

1817.  Microchip pic16f877 to FTDI USB interface Introduction This is a simple design that interfaces a PIC 16F877 microcontroller to the USB bus using FTDI FT245 USB FIFO device. It has been designed using a simple single sided PCB with only one surface mount device, the USB chip itself. All schematics,..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects

1818.  Rs 232 Relay Control Board using PIC16F84A Project Summary Computer Controlled, relay board designed to be either operated manually via switch on the board or nine way Type Connector via PC or laptop. Provision has been made for USB serial adaptor. The Project utilises PIC Micro technology with windows visual interface written..... Listed under: Development Board - Kits Projects, Projects

1819. Make your own PIC Programmer using PIC12C508 ezPIC is low cost serial port programmer for PIC microcontroller and I2C EEPROM. The programmer does not need external power supply and it takes all necessary power and signal from RS232 Serial Port. Features * No external power supply required * High quality 3M ZIF..... Listed under: Microcontroller Programmer Projects, Projects

1820.  Electronic combination lock based on PIC16F84 description This is my electronic combination lock to use with an outdoor gate. The functionality implemented in software. It turns on a relay (usually to open a door) for a few seconds if someone enters the valid code. Alternatively, it works as ON/OFF..... Listed under: Projects, Security - Safety Projects

1821.  Line following robot using PIC16F84 Design Goal: The JavaBot1 is a small line following robot designed to follow a black line drawn on a dry erase board. It is designed to follow very tight curves. The software still has a lot of room for improvement but works well as is. Motive..... Listed under: Robotics - Automation Projects

1822. Propeller Clock Mechanically Scanned LED Clock using PIC16C84 This is the first clock I ever built. I've built a few LED signs, but they get boring because already know the message. How this clock works: A motor spins the "propeller", and a small microprocessor keeps track of time and changes the pattern..... Listed under: Clock - Timer Projects, LED Projects, Projects



1823.



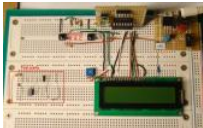
Digital Thermometer Using PIC16F688 microcontroller Digital thermometers are cool devices as they show temperatures in human readable form. This digital thermometer project is based on a PIC16F688 microcontroller and a DS1820 temperature sensor, and it displays temperature on a green LCD screen in both Celsius and Fahrenheit scales. I selected..... Listed under: Projects, Temperature Measurement Projects

1824.



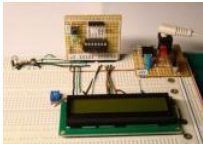
Wireless MultiMeter using PIC18F452 Microcontroller This project comes as a KIT. It includes these components: Low-cost DMM (digital multimeter) M830D TX (transmitter) circuit and wireless module TX-433. These are mounted within the DMM housing. RX (receiving) circuit with a wireless module RX-433, LCD and piezo buzzer. The general idea is to read..... Listed under: Metering - Instrument Projects, Projects, Radio Projects

1825.

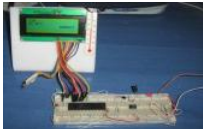


Microcontroller based Diode and Bipolar Junction Transistor (BJT) tester using PIC16F688 Introduction Most of the digital multimeters these days have built-in features for testing diodes and sometimes transistors. The purpose of this project is to demonstrate a simple way to construct a testing circuit for diodes and bipolar junction transistors (BJTs) using a microcontroller. The testing..... Listed under: Metering - Instrument Projects, Projects

1826. **A Digital temperature meter using an LM35 temperature sensor using PIC16F688** Introduction A digital thermometer is a good choice of project for beginners who just start in the world of microcontrollers because it provides an opportunity to learn using sensors to measure the real world signals that are analog in nature. This article describes..... Listed under: Metering - Instrument Projects, Projects, Sensor - Transducer - Detector Projects, Temperature Measurement Projects



1827.



Experimenting with a thermistor using PIC16F1937 Recently I won a bid for a batch of 10K thermistors. The only thing that I knew when I got them in my hand, was that those things are 10K thermistors. As far as I know, the 10K nominal resistance is at room temperature (25°C)..... Listed under: Metering - Instrument Projects, Projects, Temperature Measurement Projects

1828.



VGA display using PIC18F452 microcontroller For quite some time I've been wanting to create a device that outputs VGA signals. My main goal was of course to be able to display whatever I wanted on the monitor I was currently using. After extensively researching to see if this project had..... Listed under: LCD Projects, Projects

1829.



2 Digit up/down Counter using PIC16F628A This project comes via two circuits on 2 boards. The first circuit is designed around a PIC16F628A. It is presented on an experimental PC board using surface-mount components and was built in less than 1 hour, with about 2 hours to write and finalize. Listed under: Clock - Timer Projects, Projects

1830.



Wifi robot vehicle controlled by PIC16F628A Introduction Wifi Robot: A remote control car that can be driven over the internet or with a laptop from up to 500m away. It has a live-feed network camera so that it can be driven without line of sight and a horn so that..... Listed under: Internet - Ethernet - LAN Projects, Projects, Robotics - Automation Projects

1831.



Motion detection alarm using a PIR sensor module with a PIC12F635 Introduction This project describes a motion sensor alarm based on a Passive Infrared (PIR) sensor module. There are many vendors that manufacture the PIR sensor modules and almost all of them are pretty much the same in function. They have a single output that goes..... Listed under: Projects, Security - Safety Projects, Sensor - Transducer - Detector Projects

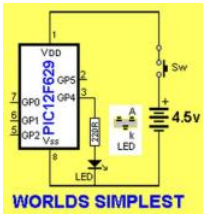
1832.





HAPPY BIRTHDAY using PIC12F629 Microcontroller Why spend \$10.00 on a Happy Birthday musical card when you can produce the tune yourself? This project uses just 4 components and a small prototype PC board to produce a project that will teach you a lot about programming. The circuit uses a piezo..... Listed under: Game - Entertainment Projects, Home Automation Projects, Projects


1833. **WORLD'S SIMPLEST PROGRAM using PIC12F629** This is where you start with programming. Build the PIC Programmer MkV and build the World's Simplest circuit on a PC board for a PIC12F629 chip, LED and resistor. When the World's Simplest Program is "burnt" into the chip, the LED will flash. This is..... Listed under: Microcontroller Programming Projects, Projects

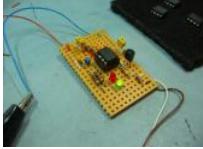
Feedback / Suggestions




1834.  PIC-2 USB BURNER using PIC18F2550 This project is a clone of PICKit-2, (the most successful and cheapest PIC programmer on the market). But F is being phased out and will not be available in the near future. The replacement is more expensive and has less features! PICKit-2 is fully assembl
Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Projects

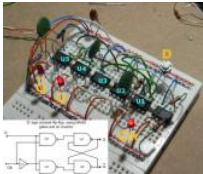
1835.  Programmable digital timer switch using a PIC16F628A Digital timer switches are used to control the operation of electrical devices based on a programmed schedule. This project describes a programmable digital timer based on a PIC16F628A microcontroller that can be programmed to schedule the on and off operation of an electrical appliance. The..... Listed under: Clock - Timer Projects, Projects


1836.  Digital alarm clock using PIC16F877 microcontroller This is an alarm clock I built. It was very effective during the sort time I used it, because I programmed it to play a very annoying tune through a speaker. I actually started to wake up before the alarm went of, so other people..... Listed under: Clock - Timer Projects, Home Automation Projects, Projects


1837.  Internal Oscillator Recalibration Utility for PIC12F629 Description The PIC 12F629 and 12F675 devices have an internal 4Mhz oscillator that enable devices to be used without an external crystal or RC network. This frees up one or two pins for I/O use and allows the device to be built into minimum..... Listed under: Clock - Timer Projects, Projects

1838.  IR Remote Control Repeater using PIC12F629 This circuit receives the signal from a IR remote control, like those used to control your TV or DVD player and allows the signal to be repeated in another location. To get a 40Khz carrier requires an output to be toggled on and off 40,000..... Listed under: Internet - Ethernet - LAN Projects, Projects

1839. PIC12F675 microcontroller as Flip Flop Code to make a 12F675 operate as a D-type or JK-type flip flop Since I implemented a D type flip flop using the PIC Logic Elements thought I might go the other way and implement an entire D type flip flop in a single..... Listed under: Other Projects, Projects



1840.  Heart rate measurement from fingertip using PIC16F628A Introduction Heart rate measurement indicates the soundness of the human cardiovascular system. This project demonstrates a technique to measure the heart rate by sensing the change in blood volume in a finger artery while the heart is pumping the blood. It consists of an infrared..... Listed under: Medical - Health based Projects, Projects

1841.  Build A Digital Tachometer/RPM Counter using PIC18F452 A tachometer is a tool that mechanics or engineers in general use very often. A normal tachometer will be able to tell you how fast something is moving in a complete rotation. A good example is on cars, you will see a tachometer connected to the..... Listed under: How To - DIY - Projects, Metering - Instrument Projects, Projects

1842.



A Beginner's data logger project using PIC12F683 microcontroller It is a very simple data logger project based on PIC12F683 microcontroller. The microcontroller reads temperature values from a temperature sensor on a regular interval basis and stores them into its internal EEPROM memory. The recorded temperatures can be later transferred to a PC through..... Listed under: Memory - Storage Projects, Projects, Temperature Measurement Projects

1843.



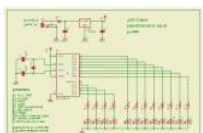
Radio Button Switch Control using PIC12F629 Overview The original purpose behind this circuit was to provide manual switching of three relays such that only one relay was on at any time. It was also a requirement that there was a specific overlap (or make-before-break) period. The code was further developed..... Listed under: Projects, Radio Projects

1844.



PWM DC Motor Controller for PIC12F683 Description There are lots of designs on the Internet for DC power controllers using Pulse Width Modulation (PWM) to control the speed of a motor or power to a resistive load. Most of these use analogue methods to generate the PWM signal which in turn controls the motor. Listed under: Motor Projects, Projects, PWM Projects

1845.



LED Chaser for PIC16F84A and PIC16F628A Description This simple circuit functions as a 12 LED chaser. A single illuminated LED 'walks' left and then right in a repeating sequence, similar to the effect seen on KITT, the car in the Knight Rider TV series. Fully commented source code and programmer ready HEX..... Listed under: LED Projects, Projects

1846.



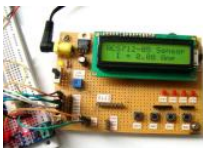
How to make a contact-less digital tachometer using IR-light reflection technique using PIC18F2550 Tachometer is a device that measures the rotational speed of any shaft or disc. The unit of the measurement is usually revolutions per minute or RPM. The traditional method of measuring RPM of a rotating shaft was based on velocity feedback concept where a dc motor's speed was controlled by a feedback loop. Listed under: CNC Machines Projects, Metering - Instrument Projects, Projects

1847.



Measurement of temperature and relative humidity using DHT11 sensor and PIC microcontroller using PIC16F628A Measurement and control of humidity finds applications in numerous areas. These days devices are available which have both temperature and humidity sensors with signal conditioning, ADC, calibration and communication interface all built inside them. The use of such smart sensors greatly simplifies the task..... Listed under: Projects, Sensor - Transducer - Detector Projects, Temperature Measurement Projects

1848.



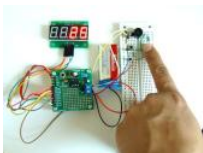
A brief overview of Allegro ACS712 current sensor using PIC16F1847 (Part 2) In the first part of this discussion, the features of ACS712 device were discussed. Now we will use that theory to implement the ACS712 sensor to make a simple DC current meter. The analog output voltage from the sensor is measured through an ADC..... Listed under: Projects, Sensor - Transducer - Detector Projects

1849.



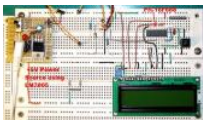
Making a digital capacitance meter using PIC16F628A Capacitors are one of the most common passive electrical components that are extensively used in all kinds of electronic circuits. In this project, we will discuss a technique of building a digital capacitance meter using a PIC microcontroller. The project can measure capacitance values from 1pF to 1000uF..... Listed under: Metering - Instrument Projects, Projects

1850.



0-9999 seconds count down timer using PIC12F683 microcontroller The goal of this project is to construct a simple 0-9999 seconds countdown timer with an alarm and a display. The time is set through two tact switches and the count down seconds are displayed on a 4-digit seven segment LED display. The project..... Listed under: Clock - Timer Projects, Projects

1851.



Digital Voltmeter (DVM) using PIC16F688 Introduction This project will describe how to make a simple digital voltmeter (DVM) using a PIC16F688 microcontroller. The range of this DVM is 0-20V, but you can easily increase or decrease the range of input voltage as your requirements after you understand the voltage scaling..... Listed under: Metering - Instrument Projects, Projects

1852.



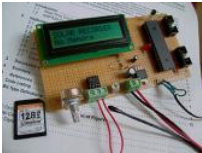
PIC16F84A Temperature Controller Ever needed to measure temperature and display it? This project details measuring temperature using a temperature sensor, an ADC and a Microcontroller PIC16F84a with schematics, codes and illustrations. You can also get the following kit, although based on the pic, which would make your life..... Listed under: Projects, Temperature Measurement Projects

1853.

pic12f683 Microcontroller based Programmable LED Alex Weber over at Instructables built a great programmable LED based on the AVR chip. Since I am tooled for PIC, I thought it would be fun to replicate what he has done. This simple project is fun and it provides a great building block..... Listed under: LED Projects



1854. pic18f458 Microcontroller based Solar Recorder The device used for measuring daily insolation has been developed. The device was built with a PIC18F458 and the 128M Multimedia Memory Card, MMC. The solar radiation is measured by a calculator solar cell. The PIC chip interfaces the MMC using SPI mode. The interval..... Listed under: - Transducer - Detector Projects



1855. PIC Based Speed Controller using PIC16C54 Introduction Real world applications often call for controlling small to medium sized DC motors from circuits. For smaller motors it is usually economically infeasible to buy a commercial speed controller as the cost of the controller will far outstrip cost of the motor..... Listed under: Game - Entertainment Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, Other Projects



1856. Stepper Motor Controller using pic16f628a Since I finished my degree in April, I have been looking for work. The search has been slow but hopeful soon I will be making the big bucks. To fill my spare time I decided to do something with the mounds of electronics and such..... Listed under: Motor Projects



1857. Make your own USB LCD controller using PIC18F2550 Hi everybody Ages and ages ago, I posted this and many people said they'd like a guide. So is! This is a guide for making an LCD that connects to your computer using USB, primarily intended to be external. You can see mine..... Listed under: How To - DIY - Projects, Interfacing(USB - RS232 - I2c -ISP) Projects, LCD Projects, Projects



1858. Intelligent NiCd/NiMH Battery Charger using PIC16C711 This cheap and easy to build NiCd/NiMH Battery Charger is suitable for automatically charging a wide range of batteries for many applications. Proper chargers are usually expensive and cheap chargers supplied with the original equipment often incorrectly charge the cells and dramatically shorten their life..... Listed under: Battery Projects, Projects



1859. 2.5 GHz Frequency counter using PIC16F870 Background It is time to update the frequency counter again. A frequency counter is one of the most important measuring tool we need as homebrewers of RF electronic. This frequency counter has very high performance and still is very easy to build and to use..... Listed under: Clock - Timer Projects, Projects



1860. Universal RC5/RC6 transceiver using PIC16F628 This project is an expansion from another project from this website. On the one side you can read RC5, RC5X and RC6 codes from remote controls on a LCD and on the other hand you can send all thinkable RC5, RC5X and RC6 codes..... Listed under: Projects, Radio Projects



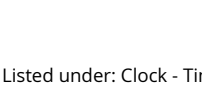
1861. Universal Infrared Receiver using PIC16F84 and PIC12C508 The UIR is a device that enables you to control your PC with ANY remote controller you have (TV, VCR, CD or Stereo). Original hardware & software was designed by Martinus & Ties Bos. You should check their site first. There it was, now it is. Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, Internet - Ethernet - LAN Projects, Projects, Radio Projects



1862. Darkroom Timer using PIC16F84 microcontroller Source Code for PIC16F84 and CD4511 decoder Also, there is an updated version with NPN drivers replacing the 4511 and new features by Brendon Archibald [websites - optusnet.com.au] DARKROOM TIMER The purpose of this project is to present a device that is useful and..... Listed under: Clock - Timer Projects, Projects



1863. IK3OIL 16F84 PIC Frequency Counter Files Caption (copied from the NorCal meeting listed in the links below): IK3OIL Frequency counter built by Wayne McFee. This is from IK3OIL's web site, and the cost of the counter was about \$2, minus the display, which was about \$7. Wayne got the source code from the NorCal meeting. Listed under: Clock - Timer Projects, Projects





1864.



Ir Light Dimmer v.1 adjusting lights with remote controller using PIC12F629 This is a device for adjusting lights in your home with any type of remote controller (tv, dvd, video,...). Today we are using many devices in our homes to improve quality of our life and this is another example on how you enhance a..... Listed under: Home Automation Projects, Projects

1865.



My GPS LCD Display Project using PIC16F84 This is a project that I started back late 2003 when I just starting to learn PIC programming. I wanted building something that actually did something useful. This project is based on a PIC16F84. I actually came up with this idea and then after..... List under: GPS Based Projects, LCD Projects, Projects

1866.



Simple RF/Microwave Frequency Counter using PIC16F876A 2. Counter The whole counter design is based on the PIC micro-controller 16F876A. The latter includes several peripherals and just a few of them are used in this project. The most important in this project are two internal, hardware counters/timers called TMR0 and TMR1. The..... Listed under: Clock - Timer Projects, Projects, Sensor - Transducer - Detector Projects

1867.



LCD Oscilloscope for Spectrum Analyzers using PIC16F876A 1. Spectrum-analyzer project 2007 update Since the development of the wide-band V almost 10 years ago, the whole spectrum-analyzer project with all related accessories: tracking generator, harmonic converter, storage-normaliz marker counter and accessories developed by other experimenters (Darko S57UUD) have been published in many different..... Listed under: LCI Projects, Projects

1868.



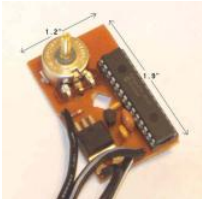
LM75 Temperature Sensor with 7 segment display output using PIC16F628 This is a test project built hastily on a solder less breadboard. It uses a PIC16F628 to read the current temperature via I2C and displays the result on three 7 segment displays. It uses a PIC16F628 with an internal 4 Mhz clock. The program was..... Listed under: Projects, Sensor - Transducer - Detector Projects, Temperature Measurement Projects

1869.



Medallion: Circle LED Animation PIC16F628A This project uses the Simple LED Animation Kit (SLAK post or page) with the LEDs arranged in a circle. I decided to do this project after picking up some red SMD LEDs at HSC in Santa Clara, CA, last week. Although the..... Listed under: Game - Interface Projects, Home Automation Projects, LED Projects, Projects

1870.



DC motor speed control using PWM using PIC16F876 If you do not have EAGLE, you can download a full working version from CadSoftUSA <http://www.cadsoftusa.com> Here is a zip file with the EAGLE schematics and PCB layout. <http://hans-w.com/MotorSpeedEAGLE.zip> New ! Source available C source code... requires CCS PCM compiler. PCM is available from..... Listed under: Motor Projects, Projects, PWM Projects

1871.



Caller Line Identification (CLI) using PIC16F628A 'Caller Line Identification' displays on a (2x16) LCD the phone number of the person who is ringing before you even answer. When start up the first few seconds appears the version number in the display. Direct after programming the PIC stays in mode. You..... Listed under: Phone Projects, Projects

1872.



Serial Port Servo Controller using PIC16F84 Revision History 28 Jan, 2002 - Bug found in 8 Servo motor variant, refer to 8 servo code page for details Oct, 2001 - Serial Transfer Bug found. Dec, 2005 - This project is no longer supported. The information is here for you to..... Listed under: Interfacing(USB - RS232 - I2c - ISP) Projects, Motor Projects, Projects

1873.

PIC Based Imaging Sonar using PIC16F84 microcontroller I've wanted to build a sonar for a while now, and I was hoping to be able to do it with a someone else had made, but alas, I've never had much luck. I've done many searches of web pages, and all that ever..... Listed under: Projects, Sensor - Transducer - Detector Projects, Video - Camera - Imaging Projects



1874.



Designing a PID Motor Controller using PIC16F876 Background From the first robot I ever made, I have always felt that when designing the motor wheels and drive train, it will almost always be important to know where you are - that is, to have some sort of encoder feedback. So the first..... under: Motor Projects, Projects

1875.



Direct Digital Synthesis (DDS) using PIC16F84 microcontroller Background DDS stands for Direct-Digital Synthesis. This synthesizer is simply a circuit that can create a sine-wave signal from a reference crystal and a programmable frequency-register. All this circuit needs is a reference oscillator (crystal) and some filter. See fig above: A crystal oscillator..... Listed under: Other Projects, Projects

1876.



DDS/PLL based VFO synthesizer using PIC16F876 DDS (Direct Digital Synthesized) VFO seems to be very popular among amateurs in last few years. There are plenty of different amateur designs, some of them also available in a KIT form. They mostly use..... Listed under: Other Projects, Projects

1877.



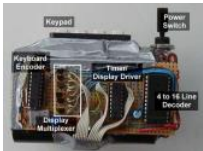
Brushed Motor ESC using PIC12F675 microcontroller Background There are a number of other projects that have been documented for brushed motor ESCs. The good starting point for other ESCs is this rcgroups thread. The information in the Microchip AN847 is also very useful. Most of these designs are very similar, the..... Listed under: Motor Projects, Projects

1878.



GTP USB PIC PROGRAMMER (Open Source) using PIC18F252 GTP USB PIC PROGRAMMER (Open Source) This work includes, GTP USB (not plus or minus) The schematic, photos and PCB have been developed by PICMASTERS based on some valuable works done before. This programmer supports PIC12F, 16C, 16F, 18F, 24Cxx Eeprom. Unfortunately, it works..... Listed under: Microcontroller Programmer Projects, Projects

1879.



Countdown Timer using PIC16F84 microcontroller It's a kitchen timer. Use it to time spaghetti, or maybe an egg. It uses two PICs, one acts as a keypad encoder, the other drives the display and supports the timer functions. You key in the desired time and press '#'. It's accurate to..... Listed under: Timer Projects, Projects

1880.



Grid Powered Battery Charger - The Plans using PIC16F676 You get a really good feeling when you plug in some lights and appliances and power them with your own electricity from the sun or wind. You get a really bad feeling when you run those items and the clouds come for days or weeks..... Listed under: Battery Projects, Projects

1881.



Infra/radio remote control transmitter/receiver with PIC16F630 description This is a general purpose remote control project with using programmable PIC microcontrollers. Schematics are shown for using infrared (IR) or radio (RF) media. If you are not familiar with microcontroller programming, use fixed encoder and decoder integrated circuits instead. Well-known such..... Listed under: Internet - Ethernet - LAN Projects, Projects, Radio Projects

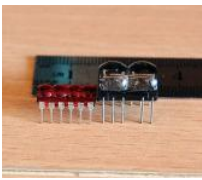
1882.



NOPPP, the "No-Parts" PIC Programmer using PIC16F83 NOPPP is a simple programmer for PIC16C84, PIC16F83, and PIC16F84(A) microcontrollers. It attaches to the parallel port of a PC. Plans were published in Electronics Now Magazine, September, 1998, and are included in shorter form in the downloadable ZIP file. An article about this programmer..... Listed under: Microcontroller Programmer Projects, Projects

1883. Classic LED 7-Segment Displays using PIC16F887 Just recently I have been addicted to old LED displays as they are small and bright and I love the classic look. We can see vintage calculators and vintage LED watches. However these displays consume significant amount of power, so they are not..... Listed under: LED Projects, Projects

Feedback / Suggestions



1884.



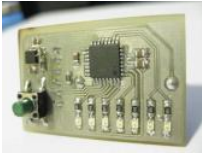
PIC sound player (PCM to PWM converter) using PIC18F1320 Description This project makes a PIC microcontroller play audio PCM sounds using modulation! Pulse-code modulation (PCM) is a digital representation of an analog signal where the magnitude of the signal is sampled regularly at uniform intervals, then quantized to a series of symbols in..... Listed under: Projects, Sound - Audio Projects

1885.



A 12hr/24hr LED Clock with display control using PIC16F628A microcontroller This LED clock may not be the easiest to build but surely it is the or fewer parts that you can find, for that reason I call it "The ANP LED Clock". (ANP stands for Almost No Parts.) Using the micro controller PIC 16F84 Listed under: Clock - Timer Projects, LED Projects, Projects

1886.



A simple display that uses the POV to display messages in the air using PIC12F629 microcontroller A simple rotating display. Just spin and enjoy. the "Air display" is rotating, it writes the message on the air. Because the "persistence of the vision", you will be able to read the message. Here is circuit: Download the HEX file HEREProgram the..... Listed under: Other Projects, Projects

1887.



PicPOV – Persistence of Vision with a PIC18F1220 Description PicPOV is a project based on "persistence of vision". A PIC microcontroller blinks 8 and off so that when waved through the air, a message appears to float in front of the viewer. Design and Implementation The design goals were simple..... Listed under: LED Projects, Projects

1888.



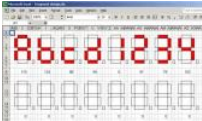
How to getting started with microcontrollers projects using PIC12F629 microcontroller Microcontrollers are, basically, a computer in a single chip contains memory, processor, I/O ports (I/O = Input/Output) and other peripherals. Can you believe a single chip does contain RAM, ROM, CPU, Ports, timers and other gadgets? It only needs a keyboard and display..... Listed under: Microcontroller Programmer Projects, Projects

1889.



Candle Simulator using PIC12F675 microcontroller Description The aim of this project is to create a credible simulation of the light of a candle. The light is usually warm and waves slowly with random oscillations caused by the air flowing in the surrounding environment. Using a random number generator to modulate..... Listed under: Game - Entertainment Projects, Home Automation Projects, Projects

1890.



7-Segment ASCII character Set A 127-character ASCII table for 7-segment LED or LCD displays using PIC16C84 I started to develop what I call my 'generation of microcontroller projects' (I have to find a name for that), so I needed a character set fully compatible with ASCII using only 7 segment displays. When I started to determine how many characters and..... Listed under: LCD Projects, LED Projects, Projects

1891.



Power Pic RGB with voltage control using PIC12F675 Power Pic RGB with voltage control is a circuit that generates many colors using a RGB LED a those colors can be changed using two independent voltages, supplied by some external device, in order to select the color (Hue) and its intensity (Value)! The idea originally came..... Listed under: Other Projects, Projects

1892.



I2C keypad using PIC18F4550 microcontroller I2C keypad This instructable explains how to interface with a 4x4 keypad over an I2C bus. I started project because I wanted some plug and play input and output modules for easy and fast prototyping of my electronics projects (mostly with PIC microcontrollers). Of course you..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects, Projects

1893.



LED Binary Clock using PIC16F628A microcontroller LED Binary Clock This is the second revision of my PIC based LED binary clock. The original version was the first PIC project I attempted, it used a PIC16F84A to do both the timekeeping and control the display matrix, unfortunately it didn't keep enough..... Listed under: Clock - Timer Projects, LED Projects, Projects

1894. Parallel Port 3 Axis CNC Driver, Opto-Isolated, Unipolar Steppers using PIC16F876A microcontroller Parallel Port 3 Axis CNC Driver, Opto-Isolated, Unipolar Steppers Controller for use with CNC Machines. Simple driver with automatic coil shutdown, to ensure efficient operation. Opto-isolated for protection of the P.C.

Feedback / Suggestions



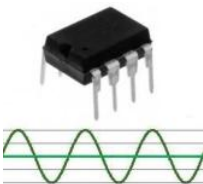
Supports most parallel port based CNC software, such as KCAM..... Listed under: Motor Projects, Projects

1895.



Twitter Watcher, the #twatch using PIC18F67J60 microcontroller The #twatch scrolls the latest trending topics from Twitter on an LCD screen. It's stand-alone network appliance that stays updated without a PC. It was awesome to watch #iranelection, Michael Jackson, and other historic events by while we developed the #twatch. This Instructable..... Listed under: LCD Projects, Projects

1896.



Frequency Detector using PIC 12F683 Processor Frequency Detector using PIC 12F683 Processor This project describes hardware and software I developed which allows a small 8 bit PIC microprocessor to function as a single frequency detector or tone decoder. Such a circuit can be used to detect the presence of a..... Listed under: Projects, Sensor - Transducer - Detector Projects

1897. PWM Fan Controller using PIC12F675 microcontroller PWM Fan Controller You can see the PWM Fan Controller project here. The heart of the PWM Fan Controller is a PIC microcontroller. This microcontroller is reading the analog output of a LM35 temperature sensor using a ADC (analog to digital converter) . The..... Listed under: Projects, Projects



1898.



Quick Key Adapter, 10 Button HID Keyboard using PIC18F14K50 Quick Key Adapter, 10 Button HID Keyboard This Instructable covers creating a USB connected Human Interface Device Keyboard that has 10 button inputs which are mapped to key combinations in the firmware. Key combinations can be quickly accessed without using the keyboard which may be inconvenient to use. Such as with a..... Listed under: Other Projects, Projects

1899.



Augmenting a Microcontroller using PIC16F886 Augmenting a Microcontroller Microcontrollers (MCUs) are fantastic little ICs that give an extra level of versatility to your electronics, robotics or other project. But they're really not much use on their own. To function, all MCUs need some sort of programming components, and a board..... Listed under: Other Projects, Projects

1900.



Remote controlled led dice using PIC12F629 microcontroller Remote controlled led dice I've always wanted to build an electronic led dice, but so different from what we see on the internet. Making it motion controlled... now that's new! I make remote controlled led dice please share with everyone and like my projects..... Listed under: Game - Entertainment Projects, Home Automation Projects, Internet - Ethernet - LAN Projects, Projects

1901.



ECG on your laptop using PIC16F876 microcontroller ECG on your laptop! That's right! This Instructable shows you how to build a device that enables you to do an electrocardiogram on yourself, your family or your friends! All you need is intermediate-level knowledge on electronics, access to Your Electronics Shoppe (or online..... Listed under: Medical - Health based Projects, Projects

1902.



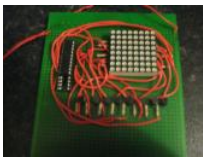
All pic programmer using 16F87X microcontroller All pic programmer DO YOU HAVE A PIC PROGRAMMER? NO. DO YOU NEED A PROGRAMMER? NO. DO YOU NEED A PROGRAMMER?(WITH ANGRY VOICE) I MEANT YES THAN THIS PROGRAMMER IS MADE FOR YOU Step 1: MICROCONTROLLERS First so about microcontrollers: 1.Intro to microcontrollers 2 How..... Listed under: Microcontroller Programmer Projects, Projects

1903.



PIC18F Based 6 Channel DMX Transmitter PIC18F Based 6 Channel DMX Transmitter Based on AN1076 - "Using a PIC® Microcontroller for DMX5 Communication". Modified and added to Microchip's code to use 6 AdC Channels for 6 channels of DMX data and the ability to offset its starting value via a 9-position DIP..... Listed under: Projects, Radio Projects

1904. 8x8 LED matrix using PIC16F690 microcontroller 8x8 LED matrix This instructable will show you how to make a 8x8 LED matrix in which you can control every single LED and display your own patterns as long as they only need 64 pixels to show them in one color.Update 25.09.10 I've added..... Listed under: Interfacing(USB - RS232 - I2C -ISP) Projects,



Projects, Projects

1905.



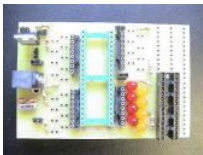
MATLAB to PIC serial interface using PIC16F877 microcontroller MATLAB to PIC serial interface some code to let MATLAB talk to a PIC16F877 via the serial port. This isn't that hard nor is it much code, but I spent a decent amount of time figuring it all out (starting from scratch), so I figured..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, Projects

1906.



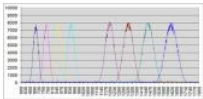
3x3x3 LED Cube using PIC16F690 microcontroller 3x3x3 LED Cube Here is my 3x3x3 LED Cube project. It runs using a PIC16F690. Along with the explanation of how to make it, I have also included the .asm file for the PIC and a piece of software written in VB.NET that you..... Listed under: Interfacing(USB - RS232 - I2C - ISP) Projects, LED Projects, Projects

1907.



PIC development/testing board using PIC16F877 microcontroller PIC development/testing board Here's a PCB design for a bare bones PIC16F877 development board. All you need is a 4MHz crystal, two 22pF caps, one 4.7k resistor, and eight 470 ohm resistors, a 7805 regulator (not necessarily necessary, read below), and some LEDs (you don't..... Listed under: Development Board - Kits Projects, Projects

1908.



DTMF Touch Tone Decoder Using Microchip PIC Microprocessor using PIC12F683 DTMF Touch Tone Decoder Using Microchip PIC Microprocessor project contains the details of using a Microchip PIC12F683 8 bit microprocessor to detect DTMF tones. The completed program allows the processor to be programmed with a string of DTMF tones to detect. If the programmed..... Listed under: Projects, Sensor - Transducer - Detector Projects, Sound Audio Projects

1909.



Control a Hobby Servo using PIC18F2455 microcontroller Use a PIC Microcontroller to Control a Hobby Servo This instructable describes how to integrate hobby servos (the kind used in RC planes, cars, etc.) into your microcontroller projects. How Servos are Different from Regular Motors Unlike a regular DC motor, the amount of torque..... Listed under: Other Projects, Projects

1910.



How to make a Clap-Clap on / Clap-Clap Off switch circuit! using PIC10F222 How to make a Clap-Clap on / Clap-Clap Off switch circuit! Hi all! This instructable not only gives the reader the information needed to create a clap-clap on/clap clap off switching circuit, but the logic used to make a hardware-only clap-on, clap off circuit. More..... Listed under: How To - DIY - Projects, Projects

1911.



DMX-512 RGB LED Wash Light Control Board using PIC16F688 DMX-512 RGB LED Wash Light Control Board A full featured driver board to control Green, & Blue LEDs. When paired with the correct output board, it can control any arrangement of LEDs. Common Cathode, Common Anode, six color LEDs. From 1/8 watt LEDs to..... Listed under: Game - Entertainment Projects, Home Automation Projects, Projects

1912.



DC motor control with Joystick and PIC16F877A DC motor control with Joystick and PIC16F877A This is one project that I'm doing, now I'm going to show how to do it only for one motor, but I'm using a DEMUX to in the future use 4 motor. The project is simple, it uses..... Listed under: Motor Projects

1913.



Simple JDM PIC Programmer using PIC16F84A microcontroller Simple JDM PIC Programmer I have built this project to burn my small PIC's This is a PIC programmer works on the RS232 (PC serial port), known as JDM Programmer, thanks to the site <http://pic16f84.hit.bg/> which contains the schematic and the programmer software..... Listed under: Other Projects, Projects

1914.



Mood vase using PIC12F683 microcontroller Intro: Mood vase I'm a fan of LEDs, lots of LEDs. So here's a slightly less crass way of using LEDs for decorative purposes. While this is by no means a neat and polished solution, and probably not the first of its kind, however the..... Listed under: Home Automation Projects, LED Projects, Projects



1915.



48 Channel Mono / 16 Channel RGB LED Controller using PIC18F2550 microcontroller 48 Channel Mono / 16 Channel RGB LED Controller The 48 Channel Mono/16 Channel RGB LED Controller by Chromation Systems can be used to independantly control 48 groups/channels (up to 120ma group) of mono-color LEDs or 16 groups/channels of common anode RGB LEDs. It..... Listed under: Interfacing(USB - RS232 - I2c -ISP) Projects, L

1916.



Pic 16F676 ICSP programing socket for the PICkit 2 prograner Pic 16F676 ICSP programing socket for the PICkit 2 prograner I'm trying to build th DC motor module for my robot project And I did not have the space for placing an ICSP pin header on the PCB. So i quickly mocked up this..... Li under: Microcontroller Programmer Projects, Projects

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- pic 16f876 programing
- pid pld control with labview project
- WWVB analog Clock gear motor
- pic16f 628a 8x8 led hex file