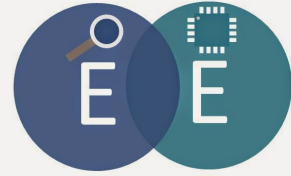


Explore Embedded

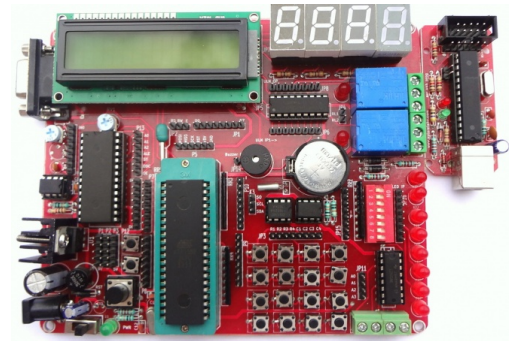


Workshop on 8051 Interfacing and Applications.

A hands on approach to learning the famous 8051 MCU with lots of actual hardware interfacing and fun! This is supplemented by detailed video tutorials for you to practice at your place.

Take Away:

1. 8051 Ultra Development Board with ICs
2. USB Programmer
3. USB RS232 Cables and connecting wires
4. Power Adapter
5. LCD 16x2



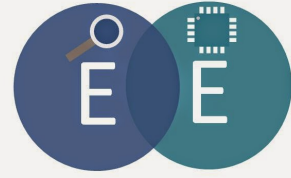
2 Days-16 Hours

Venue: Explore Embedded



Fees

1. Rs 2500 with Kit
2. Rs 500 without Kit



Workshop Contents:

Session-1: Basics and Background

- Why learn about MCUs?
- Features: Speed, Programmable and versatile.
- MCUs in real time application
- Generic Classification and choice
- What really is a ALU?
- Why 8051 is still relevant?
- 8051 Architecture in brief.
- Covering the C basics.
- Setting up the tools.

Session-2 : Interfacing.

1. Blinking LEDs
2. Reading Switches and some logical operations
3. Interfacing 7 Segment display
4. Interfacing Hex Keypad
5. Interfacing 16x2 LCD.
6. Introduction to 8051 Timers and Counters
 - a. Generating Delay with timers
 - b. Counting objects with counters
7. Introduction to serial communication
 - a. RS232
 - b. Sending/Receiving chars, strings and processing data
8. Basics of I2C
 - a. Interfacing Real time clock DS130
 - b. Interfacing EEPROM AT24HC02/04
9. Interfacing DC/Stepper Motors with L293D
10. Interfacing Relays
11. Interfacing Buzzer
12. Interfacing ADC0808
 - a. Read a potentiometer
 - b. Interfacing Temperature sensor LM35
 - c. Measuring Light with LDR

