



8051 MICROCONTROLLERS

Course Certification: Certified by Nutan Infotronics Pvt. Ltd.

Course Duration: 16 Hr.

Introduction

- Introduction to Embedded systems
- Detail about Microcontroller and Microprocessor
- Other Microcontroller Families (AVR, PIC, ARM)
- 8051 Architecture, overview and Features

8051 Programmer's Model

- 8051 Development Board and introduction
- Power supplies
- Oscillator

Practical Session I

- Programming Language: Assembly, C
- Hardware Interfacing with C language
- Introduction to Keil uVISION IDE
- I/O in AT89S51
- LED Interfacing and Different Patterns

Peripherals

- LCD Interfacing
- LED Interfacing
- DC Motor Interfacing
- Relay Interfacing
- Keypad Interfacing

Sensor Interfacing

- Analog and Digital sensors
- Digital Sensor Interfacing
- External ADC (0804) interfacing
- Analog Sensor Interfacing

Communication and Different Protocols

- Serial Communication
- UART Communication
- PC to Microcontroller Communication
- GSM Interfacing
- Wireless Communication through ZigBee