M51-02
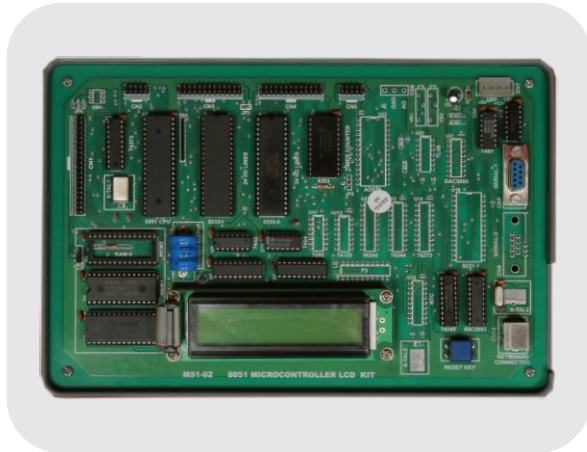## 8051 Microcontroller Trainer Kit

M51-02 is a single board Microcontroller Trainer Kit based on 8 bit 8051 Microcontroller, which is widely used to train engineers to develop on software/hardware for any industrial process & control. Kit has power-full Monitor EPROM, RAM, I/O Lines, Timer/Counter, Serial, LCD Display, Keyboard for Man to Machine Interface.

Features

✓ *16K Bytes of EPROM with 32K bytes of Battery Backup RAM.*

✓ *48 I/O Lines, Three Channel Timer/Counter, PC Serial Interface using USART, 12 bit ADC, DAC, RTC.*

✓ *20x2 LCD Display with 101 ASCII Keyboard.*

✓ *Power-full Command like Single Stepping, Break Point, Full Clock Execution, Examine Memory/ Registor.*

✓ *Uploading & Downloading to and from PC in Windows98/XP/NT.*

✓ *In-Built Power Supply.*

Specifications

● 8051/89C52/89C51RD2/89C61X2 CPU operating @11.0592MHz.

● 32K user RAM using 6264 with Battery Backup using NICD Battery.

● One socket is provided for RAM expansion up to 64K.

● 16K bytes of powerful monitor EPROM using 27512.

● 48 I/O lines using 2 Nos. of 8255 brought at 26 Pins FRC Connector to interface with IC-XX Series.

● Three Channel Timer/Counter using 8253.

● 20x2/40x2/20x4 Alphanumeric LCD Display with Backlite

● 101 ASCII Keyboard interface using 89c2051 operating @ 12MHz

● On-board Single Line Assembler & Disassembler.

● Two External interrupts INT0 & INT1 are available at 40 pin FRC connector.

● RS-232C using RX/TX of 8051.

● Two modes of operation:
  - Keyboard Mode, Serial Mode.

● Powerful Commands like Examine/ Edit Memory, Examine/Edit Register, Single stepping, Execution, Break Point can be used through ASCII keyboard or PC serial mode.

● Facility for Downloading/Uploading files from/to PC.

● All Address, Data, Control & Port lines are available on 40 Pins & 20 Pins FRC Connector.

● All IC's are mounted on IC Sockets.

● Bare board Tested Glass Epoxy SMOBC PCB is used.

● In-Built Power Supply of +5V/1.5A, ±12V/250mA

● Attractive ABS Plastic enclosures.

● User's Manual with sample programs.

Optional

☞ On-board ISP (In-system Progra-mming) Facility.

☞ PRINTER INTERFACE to interface with DOT MATRIX Printer.

☞ RS-232C interface using 8251.

☞ On-board 12 Bit ADC using Ad574.

☞ On-board 8 bit DAC using DAC-0800.

☞ On-board Real Time Clock using 6242.

Note : Specifications can be altered without notice in our constant efforts for improvement.