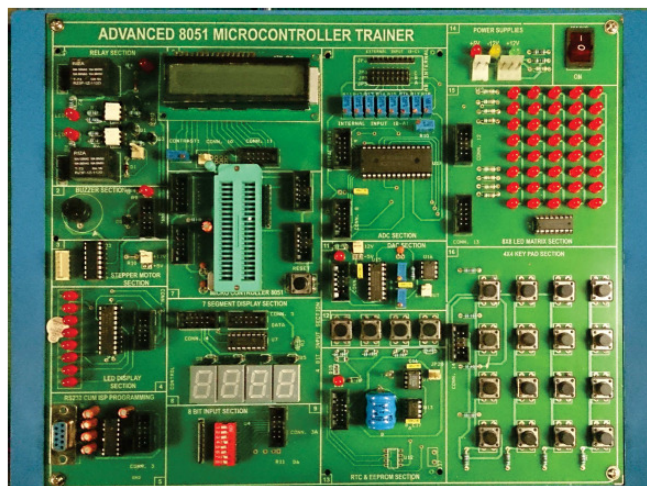# ADVANCE MICROCONTROLLOR TRAINER
Model : VTPL – 8051

8051 Universal Development Platform is a full featured development system for 8051 microcontrollers. It is an ideal platform to implement and test the designs both for the beginners and the experts. It comes with 20 Keys Hex keypad with 16x2 LCD for user programming mode. It also supports PC based programming for large size program code. Using , a range of projects in various domains like telecommunication, robotics, consumer electronics, etc can be make It gives designers a quick start to develop code on controller with on board programmer and on board breadboard facility. The flexibility of connectors allows user to make external connections.

Technical Specifications

- Communication : RS232
- Programming mode : PC mode, Hex keypad mode
- MCU : 8051 core
- Crystal Frequency : 11.0592 MHz
- DC Power Supplies : +12V, -12V, +5V
- Programmer : Ready to run programmer will program 8051 devices
- Interconnection for modules : 2 mm patch cords and FRC cables
- Dimensions (mm) : W 326 x D 252 x H 52
- Power Supply : 110V - 260V AC, 50/60Hz
- Weight : 1.5Kg (approximately)
- Operating Conditions : 0-40 C, 85% RH
- Included Accessories : Mains cord, Patch cords, 20 Pin FRC cable

Features

- 8051 Microcontroller With 4 Input/output Ports.
- Inbuilt 3 Power Supplies +5v/1a, +12v-500ma, -12v-50ma.
- Serial Programming Through Isp Interface (max232)
- Adc Section
- Dac Section
- Rtc & Eeprom Section
- Display (lcd) Section 16x2
- Display (led) 8 Bit With Latching Output
- Multiplexed 4 Seven Segment Display
- Input Switches Push Button 4 Bit Section
- 8 Bit Dip Switches
- 4x4 Keyboard Matrix
- One Reset Push Button
- Stepper Motor Interface
- 2 Channel (Isolated With Op-to Coupler) Relay Interface Section
- Buzzer Section
- 8x5 Led Metrix

Scope of Learning

- Decimal Addition of two numbers.
- Hexadecimal Addition of two numbers.
- Hexadecimal Multiplication of two numbers.
- Hexadecimal Division of two numbers.
- Hexadecimal Subtraction of two numbers.
- Logical Operation AND, OR, XOR, NOR, NAND, and NOT.
- Factorial calculation
- Timer/Interrupt example.
- Square wave generation on port
- Ascending and descending order.
- Fibonacci series
- LCM calculation
- HCF calculation
- Multiplication by shifting
- Multiplication by adding
- Square root calculation of a byte.
- Square calculation of a byte
- 8 bit Array addition
- Split bytes into two nibbles and display on LCD
- Program to find even or odd of a byte
- Interface various external MCXX series modules.

Note: There may be any change in specification due to continuous R & D without notice.

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