

**43556** PIC Microcontroller Development Board is a full featured development Board for microchip PIC16F877A microcontroller. It is an ideal Board to implement and test the designs both for the beginners and the experts. 43556 is a single microcontroller development Board. The 43556 is a convenient way to teach the principles of the family of microcontrollers through to programming and interfacing on the 16 series device.

Using the Board a range of projects in various domains like telecommunication, robotics, consumer electronics etc can be done. The 43556 gives designers a quick start to develop code on controller with on Board programmer and on Board breadboard facility. The flexibility of connectors allows the user to make external connections. On Board breadboard allows making their own circuits and performing an experiment as they desire.

**Objects**

- 01 Study of PIC Microcontroller architecture
- 02 Pin to pin study of MCU.
- 03 To study serial protocol(I2C/SPI).
- 04 To study internal PWM.
- 05 To study internal ADC
- 06 To study RTC.
- 07 Interface various external MCM series modules

**Features**

- 01 PIC16F887A MCU clocked at 4 MHZ
- 02 Expansion connectors for plug in modules and prototyping area
- 03 On Board programmer
- 04 USB interface to PC for programming
- 05 Every pin is marked in order to make work easier
- 06 Master Reset/Restart Key for hardware reset
- 07 Input/output & test points provided on Board
- 08 On Board breadboard for connecting external components
- 09 Self contained development Board with on Board DC Power Supply
- 10 CD with sample project code, Programmer software & useful documents

**Technical Specification**

- Communication : USB Port
- MCU : PIC16F887A
- Crystal Frequency : 4 MHZ
- Size of breadboard : 175 X 67 X 8 mm
- Test Points : 41 nos
- DC Power Supplies : +12V and +5V AT100mA
- Programmer Unit : Ready to run programmer will program PIC Devices
- Interconnection for modules : 2mm patch cords & FRC Cable provided.
- Product Tutorial : Theory, Procedure, Reference, Results etc.
- Power Supply : 230V + 10% AC, 50/60Hz
- Dimensions : W415 x H165 x D315mm

Note: Specifications are subject to change.



Weight : 1.5Kg (approximately)  
Operating Conditions : 0 - 40 C, 85% RH

**List of Accessories**

- 01 USB cable -----01
- 02 Serial Port Communication Cable -----01
- 03 10 Pin FRC cable -----02
- 04 20 Pin FRC cable -----05
- 05 Patch cord 2mm length 50cm Red & Black ----04

**Other Apparatus Required**

The comprehensive range of modules has been designed to aid the teaching of microcontroller interfacing to various peripherals. The module design enables students to easily understand each experiment section as it is worked upon. This plugin modules are supplied with the lab (Optional) :

- TCM-01 - Input interface module
- TCM-02 - ADC/DAC module
- TCM-03 - Computer interface module
- TCM-04 - Display module
- TCM-05 - Motor drive module
- TCM-06 - Elevator Control Module
- TCM-07 - TTL I/O Interface Module
- TCM-08 - Real Time Clock Module
- TCM-09 - Graphical Display Module
- TCM-10 - Display & Switch Module
- TCM-11 - Multi Interface Module
- TCM-12 - Infrared Communication Module
- TCM-13 - I<sub>2</sub>C ADC/DAC Interface Module
- TCM-16 - PWM Based Voltage Regulator