



**OMEGA TYPE OE-5002** 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. OE-5002 is a single microcontroller development Board. The OE-5002 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 OE-5002 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(mm)	: 175 X 67 X 8 mm
Test Points	: 41 nos
DC Power Supplies	: $\pm 12V$ and $\pm 5V$ 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  $\pm$  10% AC, 50/60Hz

Dimensions : W415 x H165 x D315 (mm)

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:

OMEGA makes MCM Series extension module to interface with this Board.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

## OMEGA ELECTRONICS

#### Works:

28E & F, Malviya Industrial Area,  
Jaipur-302 017 (INDIA)  
Phone: 0141-2751559

E-mail : info@omegaelectronics.net  
omegajipur62@gmail.com

[www.omegaelectronics.net](http://www.omegaelectronics.net)

#### Marketing Division:

B-28, Fateh Singh Scheme, Opp. Rajputana  
Palace Sheraton, Jaipur-302006 (INDIA)  
Phone : 091-141-2375647, 2379223