



**Nvis 5002 PIC Microcontroller Development Platform** is a full featured development platform for microchip PIC16F877A microcontroller. It is an ideal platform to implement and test the designs both for the beginners and the experts. Nvis 5002 is a single microcontroller development platform. The Nvis 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 platform, a range of projects in various domains like telecommunication, robotics, consumer electronics etc can be done. The Nvis 5002 gives designers a quick start to develop code on controller with on platform programmer and on platform breadboard facility. The flexibility of connectors allows the user to make external connections. On platform breadboard allows making their own circuits and performing an experiment as they desire.

### Features

- PIC16F877A MCU clocked at 4 MHz
- Expansion connectors for plug in modules and prototyping area
- On platform programmer
- USB interface to PC for programming
- Every pin is marked in order to make work easier
- Master Reset/Restart Key for hardware reset
- Input/output & test points provided on platform
- On platform breadboard for connecting external components
- Self contained development platform with on platform DC Power Supply
- CD with sample project code, Programmer software & useful documents



### Scope of Learning

- Study of PIC Microcontroller architecture
- Pin to pin study of MCU.
- To study serial protocol(I2C/SPI).
- To study internal PWM.
- To study internal ADC
- To study RTC.
- Interface various external MC01- MC17 series modules.

### Technical Specifications

<b>Communication</b>	:	USB Port
<b>MCU</b>	:	PIC16F877A
<b>Crystal Frequency</b>	:	4 MHz
<b>Size of breadboard (mm)</b>	:	175 X 67 X 8 mm
<b>Test Points</b>	:	41 nos (Gold plated)
<b>DC Power Supplies</b>	:	+12V, -12V, +5V & -5V
<b>Programmer Unit</b>	:	Ready to run programmer will program PIC Devices
<b>Interconnection for modules</b>	:	2 mm patch cords and FRC cables
<b>Product Tutorial</b>	:	Online (Theory, procedure, reference results etc)
<b>Dimensions (mm)</b>	:	W 326 x D 252 x H 52
<b>Power Supply</b>	:	110V - 260V AC, 50/60Hz
<b>Weight</b>	:	1.5Kg (approximately)
<b>Operating Conditions</b>	:	0-40°C, 85% RH
<b>Included Accessories</b>	:	USB cable, SMPS , Mains cord, 20 Pin FRC cable, 10 Pin FRC cable, ICSP connector cable (female)

Other Microcontroller supports (optional)

PIC12FXX/16FXX/18FXX by using addon board

Suggested Module (optional)

Nvis MC 01 to MC 17 extension modules and Embedded Simtel for exhaustive learning.

