Product Name PIC Tutor and Development Board II (PIC-TDB II)



Product Information

Whether you are a first user or experienced hardware engineer the PIC-TDB II is a powerful support tool for the Arizona PIC Range of Microcontrollers. The board is designed with features which make it ideal as a first step educational board as well as an advanced and powerful hardware development platform.

With more than a dozen example programs using the many features on board, inexperienced users can familiarise themselves with the assembly language, program structure and internal operation of the PIC device. The documentation explains the main features of the basic 16C5X and 16F87X series devices, along with functions of some of the more powerful devices. Full listings are given for all examples, each providing at least one new useful function for you to adopt in your personal application. For example, driver routines exist for interfacing the PIC to LCD displays, 7 segmented LED displays, ADC's DAC's Matrix keyboards, Serial comm's interfaces EEPROMs and more.

The high configurability of the board also allows the user to bring in signals from other external circuits (if suitable circuitry is not already present on board) to suit user specific applications. The board is supplied with a programmed PIC microcontroller, which demonstrates some of the on board features.

The PIC-TDB II is designed for use alongside a PICSTART, PICPRO, ICEPIC, PICMASTER, MPLAB ICD or any other PIC system which includes a minimum of a PIC

assembler (such as a MPASM) and a PIC programmer (such as PICSTART, PICPRO, or PROMATE).

Note: Users will require the assembler (software) and a programmer as a minimum to develop programmes for the PIC tutor.

PIC-TDB II has been developed by the Electronics Design Support Centre, Staffordshire University, UK who offer a customisation service. For further details contact Amron Systems.

3. <u>Features</u>

• Supports PIC 12C5XX, PIC 16C5X, PIC 16C6X PIC 16C6XX, PIC 16C7X, PIC 16F8X PIC 17C4X, PIC 16F87X

- Provides a training/development platform for a wide range of PIC Devices
- LCD Display (16 x 2 characters with parallel interface)
- 4 x 3 Matrix keypad
- LED Display (2x7Segment)
- Real-Time Clock (Date, Day, Time etc) with serial interface cont/.....
- EEPROM (SPI serial interface)
- 12-bit ADC on board (serial interface)
- 12-bit DAC on board (serial interface)
- RS232 Interface Port
- 8 LED indicators
- 2 PWM analogue outputs
- On-board voltage regulator
- Can interface directly with the MPLAB ICD In-Circuit Debugger for in-circuit programming and debugging of Flash devices
- Highly configurable
- Supplied with software examples and comprehensive user manual on CD ROM