PICDEM HPC Explorer Board



Summary

This low cost demo board is the ideal complement to the MPLAB[®] ICD 2 In Circuit Debugger to evaluate the performance of Microchip high-end 8-bit microcontrollers of the PIC18F series.

The board features a PIC18F8722 microcontroller, which is the superset of the entire 64- and 80-pin PIC18FXXXX general purpose family. A daughter board (mezzanine) is also part of the kit and allows different processors sharing the same pin out to be mounted and tested on the Explorer board.

The same connector allows MPLAB-ICE 4000 (and via an extension MPLAB-ICE 2000) real time in circuit emulators to be attached to the board.

Features

- PIC18F8722, 128K Flash, 80-pin TQFP microcontroller
- Full pin break-out for easy wire wrap/prototyping,
- Daughter board and MPLAB ICE2000/4000 connector (with switch to disable on board processor)
- 10 MHz crystal oscillator (to be used with internal PLL to provide 40MHz operation)
- Convenient connection for MPLAB ICD 2 (In-Circuit Debugger) for in-circuit programming and debugging
- Power supply connector and programmable voltage regulator, capable of operation from 2.0 to 5.5V (requires any standard 9-12V power supply, also available separately)
- Potentiometer (connected to 10-bit A/D, analog input channel)
- Temperature sensor demo included (illustrates Microchip's award winning TC77 device)
- 8 LEDs (connected to PORTD with jumper disable)
- RS-232 port (9 pin D type connector, UART1)
- Reset button
- Bootloader button
- PIC- Tail ™ connector, to allow connection to standard expansion boards
- Serial bootloader ready (see AN851)
- 32KHz crystal for Real Time Clock demonstration