

# PICDEM™ HPC Explorer Board

## Summary

The PICDEM HPC Explorer Board is the latest 64/80 TQFP demonstration board for evaluating Microchip Technology's PIC18F and PIC18FXXJXX families of devices. It comes populated with a PIC18F8722 MCU. Direct connection support is available for the MPLAB® ICE 2000 and MPLAB ICE 4000 processor modules, plug-in modules and MPLAB ICD 2 In-Circuit Programmer.

## Software

The PIC18F8722 MCU is preprogrammed with demonstration software which displays information on the Windows® HyperTerminal program via the serial port.

Use the following settings:

- 57600 baud
- 8 data bits
- No Parity
- 1 Stop bit
- No Flow Control
- Autodetect terminal emulation

On power-up, PIC18F8722 will continuously display the LED states, potentiometer voltage, RB0 button state, temperature and relative time in minutes and seconds. NOTE: Pressing the RB0 button during power-up enables the bootloader. The LEDs can be toggled by pressing the 1 through 8 keys.

## Additional Features

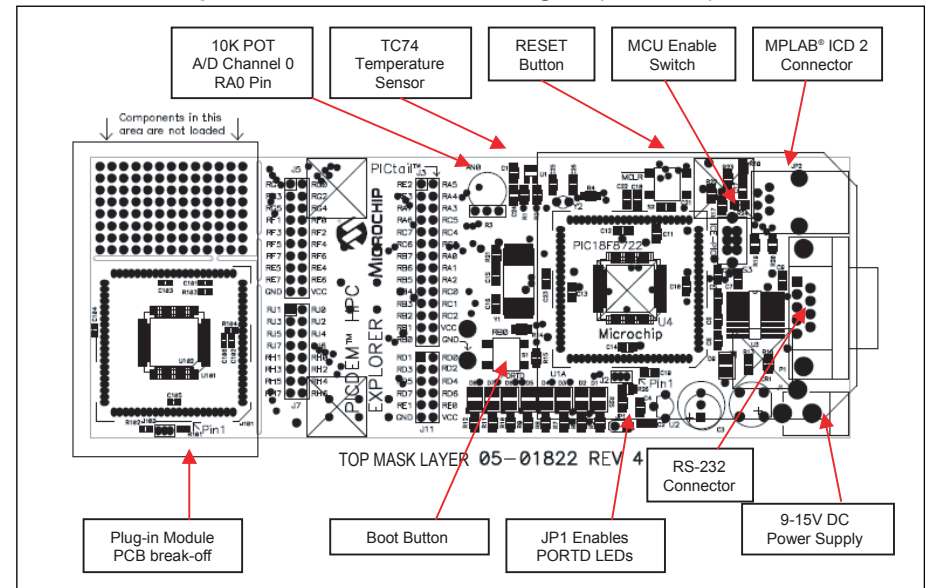
- PIC18F8722, 128K Flash, 80-pin TQFP microcontroller
- Full pin break-out for easy wire wrap/prototyping
- Daughter board and MPLAB ICE 2000/MPLAB ICE 4000 connector (with switch to disable on board processor)
- 10 MHz crystal oscillator (to be used with internal PLL to provide 40 MHz operation)
- Convenient 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 2.0-5.5V (requires any standard 9-15V power supply, also available separately)
- Potentiometer (connected to 10-bit A/D, analog input channel)
- Temperature sensor demo included (illustrates Microchip's award winning TC74 device)
- 8 LEDs (connected to PORTD with jumper disable)
- RS-232 port (9-pin D type connector, UART1)
- Reset button
- Bootloader button
- Extended PICtail™ connector, to allow connection to standard and extended expansion boards
- Serial bootloader ready (see AN851)
- 32 KHz crystal for Real-time Clock demonstration

To obtain the most recent and complete documentation for this demonstration board, including:

- User's Guide
- Board Description
- Board Schematics
- Source Code
- Application Examples
- Links to Web Seminars

Please refer to the following web site: <http://www.microchip.com/HPCEXplorer>

PICDEM™ HPC Explorer Board Parts Placement Diagram (DM183022)



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As of 2/10/05



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