PICDEM™ 4 Demonstration Board

Summary

The PICDEM™ 4 Demonstration Board supports Microchip's low pin-count PICmicro® FLASH microcontrollers, including the PIC16F and PIC18F families featuring nanoWatt Technology. NanoWatt Technology refers to Microchip's advanced PMOS Electrically Erasable Cell (PEEC) process technology, circuit design, manufacturing and application techniques.

The PICDEM 4 Demonstration Board can be used to evaluate and demonstrate the capabilities of Microchip's 8-, 14- and 18-pin PIC12F, PIC16F and PIC18F microcontrollers. The demonstration board showcases many features of low pin-count parts, including Local Interconnect Network (LIN) and motor control features using the enhanced capture/compare/PWM module (ECCP). Low-power operation is achieved with a supercapacitor circuit and jumpers allow the on-board hardware to be disabled to eliminate current draw in this mode.

Tutorial firmware and samples of a PIC16F and PIC18F FLASH microcontroller are included to assist the user in becoming familiar with the PICDEM 4 Demonstration Board and to demonstrate the unique features of the supported devices. For $129, designers receive a demonstration tool that offers multiple socket options for increased flexibility and immediate programming and debugging.

By connecting the PICDEM 4 Demonstration Board to an MPLAB® ICD 2, a designer can develop, simulate, debug and download code to the microcontroller using Microchip's powerful graphical MPLAB Interactive Development Environment (IDE). MPLAB IDE is a seamless, integrated software development environment that includes a MPASM™ macro assembler, MPLAB SIM software simulator with symbolic debugger, color-coded source editor, project manager with high-level language debugging and concurrent support for development tools, including low-cost in-circuit debuggers, full-featured real-time emulators and programmers. The consistent and easy-to-use graphic user interface of the MPLAB desktop allows for rapid switching between development, debugging and programming modes within a project. The MPLAB ICD 2 (DV164007) is available separately. Microchip's MPLAB IDE software can be downloaded free of charge from the Microchip web site.

Features:

Key features of the PICDEM 4 Demonstration Board include:

- RS-232 interface.
- 2x16 liquid crystal display
- In-circuit debugger (ICD) connector for programming via In-Circuit Serial Programming™ (ICSP™) technology or developing with the MPLAB ICD 2
- Eight (8) LEDs, four (4) potentiometers, three (3) push buttons
- PCB footprints for an EEPROM, H-Bridge motor driver and LIN transceiver
- Support for crystal, RC or canned oscillator modes.
- Support for either 9-volt power adapter or battery, or hooks for a 5-volt, 100 mA regulated DC supply
- Generous prototyping area and header for expansion.

MICROCHIP
Development Systems

Package Contents:

- PICDEM 4 PCB
- Serial cable
- Two PICmicro FLASH microcontroller samples
- CD-ROM containing sample programs, application notes and user's guide

Host System Requirements:

- PC Compatible system with an Intel Pentium® class or higher processor, or equivalent
- A minimum of 16 MB RAM
- A minimum of 40 MB available hard drive space
- CD-ROM drive
- Available serial port
- Microsoft Windows® 98, Windows 2000 or Windows XP

PICDEM 4 Product Offering			
Part Number	Description	Price	Availability
DM163014	Supported Devices: PIC12F629, PIC12F675, PIC16F630, PIC16F676, PIC16F684, PIC16F627A, PIC16F628A, PIC16F648A, PIC16F818, PIC16F819, PIC16F87, PIC16F88, PIC18F1220, PIC18F1320	$129	May 2003

Development Tools from Microchip	
MPLAB® IDE	Integrated Development Environment (IDE)
MPASM™ Assembler	Universal PICmicro macro-assembler
MPLINK™ Linker/MPLIB™ Librarian	Linker/Librarian
MPLAB C17	C compiler for PIC17CXXX MCUs
MPLAB C18	C compiler for PIC18CXXX MCUs
MPLAB SIM Simulator	Software Simulator
MPLAB ICD 2	In-Circuit Debugger
MPLAB ICE 2000	Full-featured modular in-circuit emulator
PICSTART® Plus Programmer	Entry-level development kit with programmer
PRO MATE® II Device Programmer	Full-featured, modular device programmer
KEELOQ® Evaluation Kit	Encoder/Decoder evaluator
KEELOQ Transponder Evaluation Kit	Transmitter/Transponder evaluator
microID™ Developer's Kit	125 kHz and 13.56 MHz RFID development tools
MCP2510 CAN Developer's Kit	MCP2510 CAN evaluation/development tool

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Asia/Pacific

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