MICROCHIP

Part Number: DM183032
PIC18 Explorer Board

This low-cost demo board is for evaluation of our PIC18 MCU families. The PIC18 is our highest performance 8-bit architecture and has three different families: standard PIC18, PIC18 J-series and PIC18 K-series. This single development board supports dozens of the general purpose PIC18 families using various processor Plug-In Modules (PIMs). PICtail daughter boards enable many different accessory boards to connect to the PIC18 Explorer board for a flexible and complete development environment. This board is the ideal complement to the MPLAB® ICD 2 debugger and programmer for a full-featured, economical, PIC18 development environment.

The PIC18 Explorer features a PIC18F8722 microcontroller --the superset of our standard PIC18 general purpose 5V family. This board also includes the PIC18F87J11 processor PIM, which is the superset of our PIC18 J-series of 3V MCUs for cost-sensitive applications.

The PIC18 Explorer board makes it easy to demonstrate, evaluate and design applications incorporating our PIC18 products. With the PIC18 Explorer Board, it's easy to migrate within the PIC18 portfolio from 18 to 100 pins --up to 128KB Flash –and up to 16 MIPS performance with various integrated peripherals, including CAN, Ethernet, USB and LCD.

Features
● Multiple PIC18 processors, both a PIC18F8722 on board (128KB Flash, 80 pins, superset of traditional PIC18 family), and a PIC18F87J11 Plug-In Module (128KB Flash, 80-pins, superset of J-series, PIM adjusts to accommodate 3V device). A switch selects the desired processor.
● Supports many other PIC18 J-series devices with Plug-In Modules, supporting 28 to 80-pin PIC18 devices via PIMs
● PICtail ™ daughter board connector for connection to standard expansion boards such as Ethernet, speech playback, and the many different sensors
● Expansion connector accesses full device pin-out and breadboard prototype area
● Convenient connection for MPLAB ICD 2 (In-Circuit Debugger) or MPLAB REAL ICE for in-circuit programming and debugging
● Alpha-numeric LCD display
● USB interface for USB to RS-232 communication
● 25LC256 SPI EEPROM
● Crystal oscillator
● Potentiometer (connected to 10-bit A/D, analog input channel)
● Analog output temperature sensor
● LEDs
● RS-232 port
● Power supply connector and programmable voltage regulator, capable of operation from 2.0V to 5.5V (requires any standard 9-12V power supply, available separately)
● Demo software including temperature sensor demo included (illustrates Microchip's analog temperature sensor MPC9701A) and 32 kHz crystal for Real Time Clock demonstration