

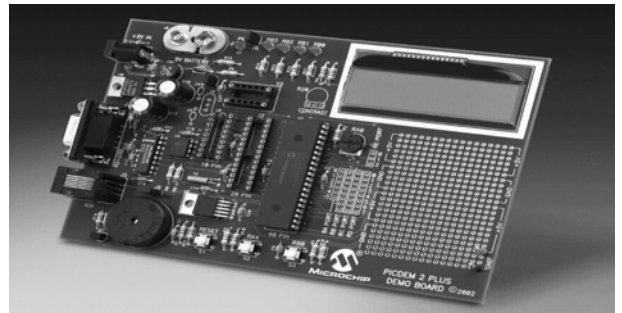


## Microchip - DM163022- DM163022 Microcontroller Development Kit

### Product Overview:

PICDEM. 2 Plus demonstration board from Microchip Technology Incorporated. The PICDEM 2 Plus is a simple board that demonstrates the capabilities of the 18, 28 and 40-pin PIC16 and PIC18 devices.

The PICDEM 2 Plus can be used stand-alone with a programmed part, with an in-circuit emulator (for example, MPLAB® ICE) or with an in-circuit debugger (such as MPLAB ICD 2). Sample programs are provided to demonstrate the unique features of the supported devices.



### Kit Contents:

The PICDEM 2 Plus kit comes with the following:

- PICDEM 2 Plus demonstration board
- Sample devices
- CD-ROM that contains:
  - Sample programs
  - PICDEM. 2 Plus User's Guide
  - Application Notes

### Key Features:

The PICDEM 2 Plus demonstration board has the following hardware features:

- 18, 28 and 40-pin DIP sockets (although three sockets are provided, only one device may be used at a time)
- On-board, +5V regulator for direct input from 9V, 100 mA AC/DC wall adapter or 9V battery, or hooks for a +5V, 100 mA regulated DC supply
- RS-232 socket and associated hardware for direct connection to an RS-232 interface
- In-Circuit Debugger (ICD) connector
- 5 k $\Omega$  pot for devices with analog inputs

- Three pushbutton switches for external stimulus and Reset
- Green power-on indicator LED
- Four red LEDs connected to PORTB
- Jumper J6 to disconnect LEDs from PORTB
- 4 MHz, canned crystal oscillator
- Unpopulated holes provided for crystal connection
- 32.768 kHz crystal for Timer1 clock operation
- Jumper J7 to disconnect on-board RC oscillator (approximately 2 MHz)
- 32K x 8 Serial EEPROM
- LCD display
- Piezo buzzer
- Prototype area for user hardware
- Microchip TC74 thermal sensor

## Ordering Information:

### Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
DM163022	Microchip	3992925	73C6547

### Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
PIC18F4520-I/PT	Microchip	IC, SM 8-BIT FLASH MCU, WAFFLE80	1528362	89H0676
PIC16F877A-I/PT	Microchip	8BIT FLASH MCU, SMD, 16F877, TQFP44	9761454	89C2873

### Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DV164036	Microchip	PICDEM 2 Plus Demo Board w/ MPLAB ICD 3	PIC18F4520	1771303	25R7376
DV164122	Microchip	ANALYSER KIT, SERIAL, PICKIT	PIC16F886	1439719	26M9206
DM183032	Microchip	KIT, DEMO BOARD, PICDEM PIC18	PIC18	1615691	07P9073

## Document List:

### Datasheets:

Part Number	Description	Size
DM163022	<a href="#">PICDEM 2 PLUS Demonstration Board User's Guide</a>	1.24MB
PIC18F4520	<a href="#">PIC18F2420/2520/4420/4520 Data Sheet</a>	6.20MB
PIC16F877A	<a href="#">PIC16F87XA Datasheet</a>	4.2KB

### Application Notes:

File Name	Size
<a href="#">AN1066 - MiWi Wireless Networking Protocol Stack</a>	635KB
<a href="#">AN1095 - AN1095, Emulating Data EEPROM for PIC18 and PIC24 MCUs and dsPIC DSCs</a>	369KB
<a href="#">AN1204 - Microchip MiWi P2P Wireless Protocol</a>	371KB
<a href="#">AN1229 - Class B Safety Software Library for PIC MCUs and dsPIC DSCs</a>	399KB
<a href="#">AN1310 - High-Speed Boot loader for PIC16 and PIC18 Devices</a>	484KB

### Hardware & Software:

File Name	Size
<a href="#">PIC18F Development Tools Product Overview</a>	97KB
<a href="#">PICDEM 2 Plus sample files (latest version: RoHS update)</a>	238KB
<a href="#">PICDEM 2 Plus Sample Files (old version)</a>	37KB
<a href="#">PICDEM 2 Plus Schematics (latest version: RoHS update)</a>	113KB
<a href="#">AN937 - Implementing a PID Controller Using a PIC18 MCU</a>	267KB
<a href="#">AN953 - Data Encryption Routines for PIC18 Microcontrollers</a>	356KB
<a href="#">AN1229 Source Code</a>	133KB

### Others Resources:

File Name	Size
<a href="#">Corporate Product Selector Guide</a>	536KB
<a href="#">MPLAB Integrated Development Environment (IDE) Brochure</a>	371KB
<a href="#">AN914 - Dynamic Memory Allocation for the MPLAB® C18 C Compiler</a>	-