



Microchip - DM240001 Explorer 16 Development Board

Product Overview:

The Explorer 16 is a low cost, efficient development board to evaluate the features and performance of Microchip's new PIC24 Microcontroller, the dsPIC33 Digital Signal Controller (DSC) families, and the new 32-bit PIC32MX devices. Coupled with the MPLAB ICD 2 In Circuit Debugger or MPLAB REAL ICE, real-time emulation and debug facilities speed evaluation and prototyping of application circuitry. The **Explorer 16 100-pin** features two interchangeable Plug-In Modules (PIMs), one each for the PIC24FJ128GA010 and the dsPIC33FJ256GP710 DSC. The **Explorer 16 44-pin** features a Plug-In Module (PIM) for the PIC24FJ64GA004



Kit Contents:

The Explorer 16 Development Board Kit contains the following:

- The Explorer 16 Development Board.
- A pre-programmed PIC24FJ128GA010 Processor Installation Module (PIM), already installed to the board
- A pre-programmed dsPIC33FJ256GP710 PIM
- An RS-232 cable
- The Explorer 16 Development CD ROM, containing:
 - This User's Guide
 - Data Sheets for the PIC24FJ128GA family and dsPIC33FJ256GP family
 - Schematics and PCB drawing files for the PIM modules
 - Example programs for use with the PIC24 and dsPIC33F devices
 - Files detailing general purpose expansion boards that can be used with the Explorer 16 board (provided in Gerber format)

Key Features:

- Includes PIC24FJ128GA010 and the dsPIC33FJ256GP710 DSC Digital Signal Controller PIMs (100-pin version) or the PIC24FJ64GA004 PIM (44-pin version).
- Alpha-numeric 16 x 2 LCD display
- Interfaces to MPLAB ICD 2, MPLAB REAL ICE, USB, and RS-232
- Includes Microchip's TC1047A high accuracy, analog output temperature sensor
- Expansion connector to access full devices pin-out and bread board prototyping area
- PICTail™ Plus connector for expansion boards
- Full documentation CD includes user's guide, schematics and PWB layout

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
DM240001	Microchip	1146554	04M6008

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
AC164123	Microchip	DEMO BOARD, PICTAIL PLUS ETHERNET	1439831	16M5242
MA240012	Microchip	PIC24H 100P to 100P TQFP Plug-In Module use w/ Explorer 16 (DM240001 or DM240002)	NA	88K5499
MA330011	Microchip	dsPIC33 GP 100P to 100P TQFP Plug-In Module use w/ Explorer 16 (DM240001)	NA	56K6941
AC164137-2	Microchip	MRF49XA PICTail/PICtail Plus Daughter Board (433.92 MHz)	1754667	14R8659
AC164137-1	Microchip	MRF49XA PICTail/PICtail Plus Daughter Board (433.92 MHz)	1736502	14R8658
AC164124	Microchip	BOARD, PICTAIL, PLUS IRDA	1439833	26M8812

AC164130	Microchip	ECAN/LIN PICTAIL PLUS DB	1676244	98M0104
MCP2515DM-PTPLS	Microchip	MCP2515 PICtail Plus Daughter Board	1676255	07P9513

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DM240002	Microchip	802.11b/g Wi-Fi Dev Kit Standard	PIC24/dsPIC33	1712042	1146554
DV164033	Microchip	DEVELOPMENT BOARD KIT, ICD2, W/EXPLORER	PIC24F, PIC24H and dsPIC33	1439839	16M6057

Document List:

Datasheets:

Part Number	Description	Size
DM240001	dsPIC® Digital Signal Controllers	2.84 MB
PIC24FJ128GA010	PIC24FJ128GA Family	3.51 MB

Application Notes:

File Name	Size
AN1247 - Communication Device Class (CDC) Host	351 KB
AN1192 - MRF24J40 Radio Utility Driver Program	839 KB

Hardware & Software:

File Name	Size
DM240001 BOM and Schematics	866 KB
100-pin Plug-In Module (PIM) Dimensions	14 KB
PIC24F Demo Files for Explorer 16	46 KB

Others Resources:

File Name	Size
Explorer 16 Development Board User's Guide	2781 KB
Explorer 16 Development Board downloads	-

