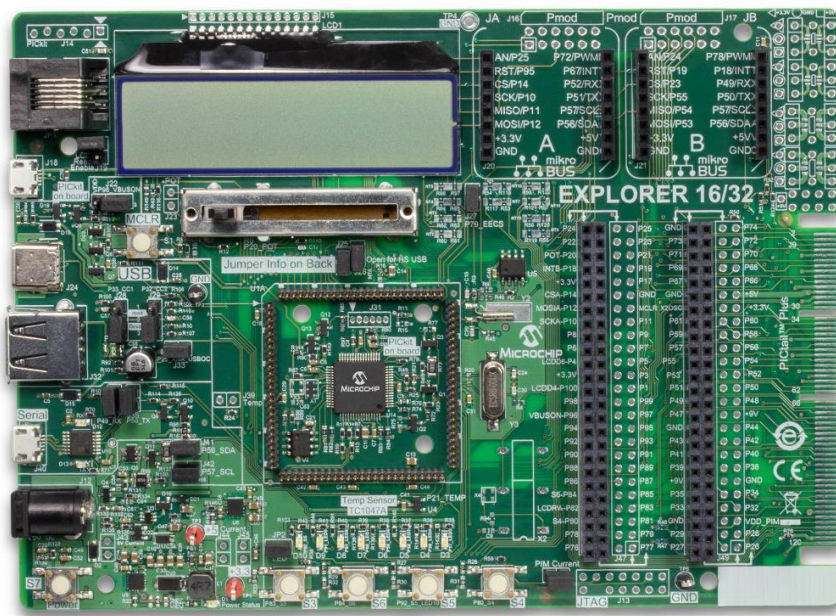# Part Number: DM240001-3 - Explorer 16/32 Development Kit

The Explorer 16/32 Development Kit is a flexible, convenient and ready to start development, demonstration and testing platform for 16-bit PIC24 MCUs, dsPIC® DSCs and 32-bit PIC32 MCUs from Microchip Technology. It features all the necessary hardware to begin developing and debugging a complete embedded application. The board accepts Processor Plug-In Modules (PIM) designed for the Explorer 16 or Explorer 16/32 development board for easy device swapping. In addition to the hardware features provided by the board, hardware expansion is possible through the use of PICtail™ Plus daughter cards and mikroBUS™ accessory boards. Coupled with the integrated PICkit™-On-Board (PKOB), MPLAB ICD 3 In-Circuit Debugger or MPLAB REAL ICE™ real-time emulation and debug facilities enable faster evaluation and prototyping of application.
The development kit comes with Explorer 16/32 main development board, PIC24FJ1024GB610 PIM (MA240023), USB A to micro-B cable, and USB A to Type-C

Cable. For out of the box experience, Explorer 16/32 Development Kit is the right choice that comes with all the necessary components to get started with the evaluation and prototyping right away!

Features

- 100 pin Plug-In Module (PIM) socket, supporting a wide variety of 16-bit and 32-bit PIC® MCUs and dsPIC® DSCs
- Power supply

    - USB Power through PICkit™-On-Board (PKOB), USB Type-C™ or USB-Serial Converter
    - 9-15V DC Power Supply
- On board USB to UART/I2C™ adapter for data exchange with PC/Mac/Linux based host
- USB Type-C™ (host/device) and Type-A (host) support for applications using USB microcontroller
- Hardware functionality extension by attaching accessory boards via

    - PICtail™ Plus interface
    - 2x MikroElektronika mikroBUS™ interface
    - 2x Digilent Pmod™ footprint
- Alpha-numeric 16 x 2 LCD display, 8x User LEDs, 4x Push Buttons, 10k Potentiometer
- Microchip's TC1047A high accuracy, analog output temperature sensor
- Programmer/Debugger

    - Integrated USB programmer/debugger - PICkit™-On-Board (PKOB)
    - Interfaces to MPLAB ICD 3, MPLAB REAL ICE™, PICkit™ 3
- Support for all the existing and new PICtail™ Plus Daughter Cards
    - Interface PICtail™ Plus Daughter Cards connected via side PICtail™ Plus connector directly
    - Interface PICtail™ Plus Daughter Cards connected via vertical PICtail™ Plus connector through additional accessory.