Curiosity Development Boards

Summary

Your next embedded design idea has a new home. Our Curiosity Development Boards are cost-effective, fully integrated microcontroller (MCU) development platforms targeted at first-time users, makers and those seeking a feature-rich rapid prototyping board. Designed from the ground up to take full advantage of Microchip's MPLAB® X and MPLAB Xpress Integrated Development Environments, the Curiosity platform includes an integrated programmer/debugger, and requires no additional hardware to get started. There are several Curiosity Development Boards to choose from, supporting 8- 16- and 32-bit PIC® MCUs.

Your Tool for Function Enablement

The Curiosity Development Boards are the perfect platform to harness the power of modern 8-, 16- and 32-bit PIC microcontrollers. Their layout and external connections offer unparalleled access to the advanced peripherals on many newer PIC MCUs. These peripherals enable you to integrate various system functions onto a single MCU, simplifying the design and keeping system power consumption and BOM cost low.

Internet of Things (IoT) Ready

Do you have an IoT design idea? These Development Boards can help you make your IoT design idea a reality. Out of the box, these boards offers several options for user interface—including physical switches, mTouch® capacitive sensing and onboard potentiometers. A full complement of accessory boards is available via the MikroElectronika MikroBus™ interface footprint. In addition, some members of the Curiosity Development Board family include Wi-Fi® and Bluetooth® connectivity.

Share Your Curiosity

Do you need a few ideas on architecting your next design? The Curiosity Development Boards are the perfect tool for sharing and acquiring new design ideas. To spur creativity, Microchip offers a series of examples, complete with bill of materials, user code and application notes. These helpful design tips can be found at www.microchip.com/curiosity. We also encourage you to join the Microchip forums, share your ideas and become part of the community.

Key Features

The Curiosity Development Boards give you more value for your money. They can be operated as an all-in-one development platform, or can be customized by you to suit your individual needs.

- Various options support 8-, 16- and 32-bit PIC MCUs
- Integrated programmer/debugger with USB interface
- Integrates seamlessly with MPLAB X IDE, MPLAB Code Configurator and MPLAB Harmony
- Various user interface options: mTouch buttons, analog potentiometer, physical switches and RGB LEDs
- MikroBus support with over 180 MikroElectronika add-on Click Boards™ available

Compatible with MPLAB Xpress IDE

Getting started with your Curiosity Board* is easy. Navigate to the MPLAB Xpress Cloud-based IDE at http://mplabxpress.microchip.com to begin developing your project.

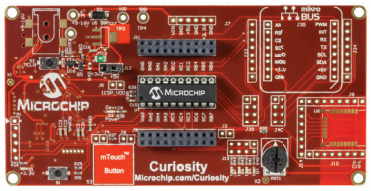
MPLAB Xpress contains the most popular features of our award-winning MPLAB X IDE. This simplified and distilled application is a faithful reproduction of our desktop-based program, which allows easy transition between the two environments. MPLAB Xpress is a perfect starting point for new users of PIC Microcontrollers—no downloads, no machine configuration and no waiting to get started on your system development.

*MPLAB Xpress IDE currently supports all 8-bit and 16-bit Curiosity Development Boards.

Choose Your Curiosity

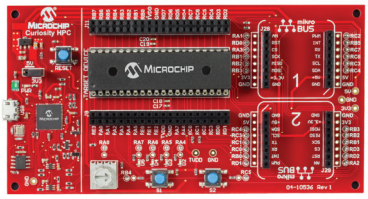
8-bit

Curiosity Development Board (DM164137)



The original Curiosity Development Board continues to be one of our most popular development boards. The Curiosity Development Board is designed to support 8-, 14- and 20-pin 8-bit PIC MCUs with low voltage programming capability.

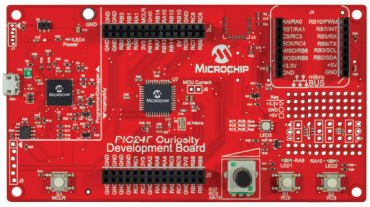
Curiosity High Pin Count Development Board (DM164136)



The Curiosity High Pin Count (HPC) Development Board supports 8-bit PIC MCUs in an expanded range of pin counts. With two DIP sockets on board, the Curiosity HPC Development Board is designed for development with 28- and 40-pin PIC MCUs with low voltage programming capability.

16-bit

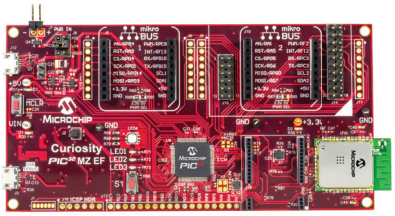
PIC24F Curiosity Development Board (DM240004)



The PIC24F Curiosity Board is a low-cost development platform with an integrated programmer and debugger and easily expandable with a mikroBUS interface to utilize Click Boards for customizing your application. This board features the PIC24FJ128GA204 eXtreme Low Power (XLP) device with 128 KB Flash and a rich set of peripherals to evaluate the PIC24F family. No additional hardware is required and it comes with integrated demo code.

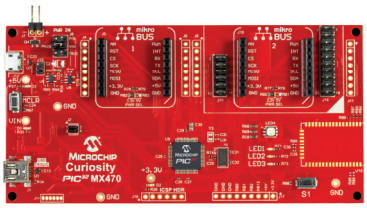
32-bit

Curiosity PIC32MZEF Development Board (DM320104)



The Curiosity PIC32MZEF Development Board is a fully integrated 32-bit development platform featuring the high-performance PIC32MZ EF Series (PIC32MZ2048FM) MCU with 2 MB Flash, 512 KB RAM, integrated FPU, crypto accelerator and excellent connectivity options including an integrated MRF24WN0MA Wi-Fi module.

Curiosity PIC32MX470 Development Board (DM320103)



The Curiosity PIC32MX470 Development Board highlights the capabilities of the PIC32MX MCUs (PIC32MX470512H) with 120 MHz clock speed, an on-chip full-speed USB interface and multiple expansion options. The board has a footprint for the BM64 Bluetooth® Module for Bluetooth audio and Bluetooth Low Energy application development, in addition to the standard mikroBUS expansion sockets.

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