Log in to myMicrochip to access tools and benefits. **Sign up in just one minute**.

☰ **MICROCHIP** | All ⌄ | Enter keyw | 🔍 | 👤 **myMicrochip** ⌄   🛒 ✉

Overview   **Related Tools**   **Documentation**

Part Number: DV164055

MPLAB® ICD 5 In-Circuit Debugger/Programmer ☆

📄 **Download Primary User Guide**

MPLAB ICD 5 Contains versatile and easy-to-use connectivity features for debugging and programming

- USB Type-C® cable interface makes it easy to connect to a PC

Skip to footer

- High-Speed USB 2.0 host PC interface supports speeds up to 480 Mbps for fast data transfer rates

View Purchasing Options

- PoE+ (IEEE® 802.3at) offers a convenient and flexible option to power up the debugger/programmer and deliver power to the target

- Fast Ethernet connectivity supports speeds up to 100 Mbps
  - Wired/DHCP/APIAP IP addressing
  - Static IP addressing

- Connects to more targets using an RJ11 or RJ45 modular cable

- Includes adapter board that supports:
  - JTAG, SWD, ICSP and AVR MCU protocols

Professional-grade safety features and support for devices ranging from 1.2V to 5.5V

- Safely powers the target at up to 1A using the PoE power supply or a

- Receives feedback from debugger when an external power supply is needed for the target
- CE and RoHS compliant, conforms to industry standards

Advanced trace capabilities

- Support for instrumented trace via the Arm® Serial Wire Debug (SWD) interface

Power monitoring

- Allows you to optimize your design's power consumption
- Captures power data, such as current and voltage values
- Works with MPLAB Data Visualizer, which graphically analyzes power data

Data gateway interfaces

- UART over Windows® Virtual COM Port (VCP)

[Skip to footer](#)

Continuous Integration/Continuous
Delivery (CI/CD) Support

- Can be implemented over
Ethernet using hardware in the loop
- Works with CI/CD wizard available
with MPLAB X IDE v6.10 and later to
set up system using Jenkins and
Docker

Powerful debugging

- High-powered debugging with
MPLAB X IDE
- Multiple breakpoints, stopwatch
and source code file debugging
- Selectable pull-up/pull-down
option to the target interface in
MPLAB X IDE's editor for quick
program modification and debugging

High-speed programming

- Quick firmware reloading for fast
debugging and in-circuit
reprogramming

^ **Collapse**

Overview

Did you know that the MPLAB® ICD 5 In-Circuit Debugger/Programmer is now supported in Microsoft® Visual Studio® Code (VS Code®) via our **MPLAB Extensions for VS Code**? These extensions are currently released under an early access program to allow users to provide us with feedback for additional development. Join the conversation and help us to refine and expand our offerings.

The MPLAB® ICD 5 In-Circuit Debugger/Programmer offers advanced connectivity and power options for developers of designs based on PIC®, AVR® and SAM devices and dsPIC® Digital Signal Controllers (DSCs). It debugs and programs with the powerful and easy-to-use graphical user interface of MPLAB X Integrated Development Environment (IDE). This next-generation tool offers a variety of capabilities and features that you would normally find in more expensive products to speed up your development and reduce your debug time.

With its support for Fast Ethernet connectivity and Power over Ethernet Plus (PoE+), the MPLAB ICD 5 Debugger/Programmer offers flexibility and the convenience of remote development while isolating your application from environmental conditions

Skip to footer

Package Contents

- One MPLAB ICD 5 In-Circuit Debugger and Programmer
- One USB Type-C to Type-C cable
- One adapter kit

System Requirements

- Available USB 2.0 port
- Microsoft Windows 10 or later, macOS® or Linux® operating systems
- MPLAB X IDE version 6.10 or later

Whether you're an experienced developer or just starting out, the

MPLAB® ICD 5 In-Circuit Debugger/Programmer will accelerate your

development process and help you take your designs to the next level.

Getting Started With the MPLAB® ICD 5

[Skip to footer](#)