MPLAB ICD 3 In-Circuit Debugger ★
Part Number: DV164035

BUY IT NOW

✉
Share

The MPLAB ICD 3 is a mature product. For new designs, consider using the MPLAB ICD 4 (DV164045)

MPLAB® ICD 3 In-Circuit Debugger System is Microchip's most cost effective high-speed hardware debugger/programmer for Microchip Flash Digital Signal Controller (DSC) and microcontroller (MCU) devices. It debugs and programs PIC® Flash microcontrollers and dsPIC® DSCs with the powerful, yet easy-to-use graphical user interface of MPLAB Integrated Development Environment (IDE).

The MPLAB ICD 3 In-Circuit Debugger probe is connected to the design engineer's PC using a high-speed USB 2.0 interface and is connected to the target with a connector compatible with the MPLAB ICD 2 or MPLAB REAL ICE systems (RJ-11). MPLAB ICD 3 supports all Emulation headers.

MPLAB ICD 3 has improved speed as compared with MPLAB ICD 2.

Get started with the ICD 3 here.

Products Supported
MPLAB ICD 3 In-Circuit Debugger/Programmer supports most Flash PIC MCUs and dsPIC DSCs. For the current list of supported parts, review the latest release notes located in the MPLAB IDE and attached below. The firmware is continually being updated to add support for new devices. As new device firmware is released, it can be downloaded with the latest version of **MPLAB X IDE**, free of charge.

Notes about Headers
Some 8-, 14- and 18-pin devices use small header boards with a special MCU for debugging. This special MCU has extra pins for MPLAB ICD 3 communication and therefore allows the use of all pins on the part for the application. The header board is not used or needed for programming. However, when debugging these devices the header must be used. See the "Header Specification" document below or see a list of current devices that use headers **here**.

Features	Package Contents	Related Tools

- **Real-time Debugging** - MPLAB ICD 3 In-Circuit Debugger is designed to support high-speed processors running at maximum speeds, allowing embedded engineers to debug applications on their own hardware in real time.

- **Ruggedized Probe Interface** - Protection circuitries are added to the probe drivers to guard the probe kit from power surges from the target. Vdd and Vpp voltage monitors protect against over-voltage conditions, and all lines have over-current protection. The unit can provide power to a target (up to 100 ma).

- **Microchip Standard Connectivity** - MPLAB ICD 3 In-Circuit Debugger employs a standard Microchip debugging connector (RJ-11).

- **Portable, USB-powered and RoHS-Compliant** - Housed in a small (3.7" x.8") and attractive enclosure, the MPLAB ICD 3 In-Circuit Debugger is powered by the USB port, so an external power adapter is not required. MPLAB ICD 3 In-Circuit Debugger is CE and RoHS-compliant.

- **High Speed Programming** - Fast programming allows both quick firmware reload for fast debugging and for in-circuit re-programming. Programming times are improved up to 15x over MPLAB ICD 2.

- **Low Voltage Emulation** - MPLAB ICD 3 supports target supply voltages from 2.0 to 5.5 volts.

- **Test Interface Module** - Included with every MPLAB ICD 3 is a test module to test I/O lines to confirm the unit is working properly.

- **Ease of Maintenance** and Feature Upgrade - Adding new device support and advanced features to MPLAB ICD 3 In-Circuit Debugger is as simple as installing later versions of the MPLAB IDE, downloadable free. MPLAB ICD 3 In-Circuit Debugger is field upgradeable through a firmware download from MPLAB IDE.

- **Low Cost** - MPLAB ICD 3 In-Circuit Debugger breaks the price barrier for a complete and advanced in-circuit debugger, offering new ways to interact with and debug applications at a fraction of the cost of traditional emulator systems.

- **Powerful Debugging** - High powered debugging with MPLAB IDE, supporting multiple breakpoints, stopwatch, source code file debugging in MPLAB's editor for quick program modification/debug.

Documentation & Software

Back To Top

Documents	Last Updated	Size	
★ SQTP File Format Specification	1/3/2017 10:52:01 AM	660KB	
★ ETN-35 ICD3 Vpp First modification for PIC16F1xxx	6/30/2015 11:00:32 AM	66KB	
★ MPLAB ICD 3 In-Circuit Debugger User's Guide for MPLAB X IDE	11/9/2014 7:11:08 AM	583KB	
★ MPLAB X IDE - Using MPLAB ICD 3 In-Circuit Debugger Poster	9/24/2014 3:32:41 PM	1MB	
★ Uninstalling Incorrect USB Device Drivers	6/13/2011 10:48:22 AM	272KB	
★ ETN-29 MPLAB ICD 3 VPP Increased Current Sink Modification	7/26/2010 2:33:28 PM	109KB	

Products | Applications | Design Support | Training | Sample and Buy | About Us | Contact Us | Legal | Investors | Careers | Support