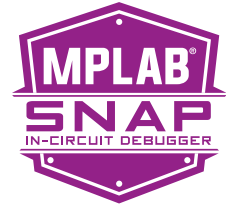
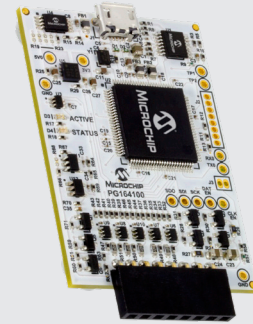


# MPLAB® Snap In-Circuit Debugger/Programmer



## Summary

The MPLAB Snap In-Circuit Debugger/Programmer provides affordable, fast and easy debugging and programming of most PIC®, AVR® and SAM Flash microcontrollers (MCUs) and dsPIC® Digital Signal Controllers (DSCs), using the powerful graphical user interface of MPLAB X Integrated Development Environment (IDE), version 5.05 and later. The MPLAB Snap connects to your computer via high-speed USB 2.0 interface and can be connected to the target via an 8-pin Single In-Line (SIL) connector. The connector uses two device I/O pins and the reset line to implement in-circuit debugging and In-Circuit Serial Programming™ (ICSP™) programming capability. MPLAB Snap has all the speed and features entry-level users need to quickly debug their prototype.



The MPLAB Snap programs quickly. It features, a powerful 32-bit 300 MHz SAM E70 Arm® Cortex®-M7 based MCU for quicker debug iterations. Along with its support for a wide target voltage, the MPLAB Snap supports advanced interfaces such as 4-wire JTAG and Serial Wire Debug with streaming data gateway. It is also backward compatible for demo boards, headers and target systems using 2-wire JTAG and ICSP.

## Advantages

- Matches silicon clocking speed
  - Programs as fast as the device will allow
- Target voltage of 1.20V to 5.5V
  - Wide target voltage supports a variety of devices
- Portable and USB-powered
  - Powered by a high-speed USB 2.0, no external power required
  - CE and RoHS-compliant
- 8-pin single in-line header
  - Supports advanced interfaces such as 4-wire JTAG and Serial Wire Debug with streaming data gateway
- Compatibility
  - Backward compatible for demo boards, headers and target systems using 2-wire JTAG and ICSP
- Ease of maintenance and feature upgrades
  - Add new device support and features by installing the latest version of MPLAB X IDE, which is available as a free download at [www.microchip.com/mplab/mplab-x-ide](http://www.microchip.com/mplab/mplab-x-ide)

## Products Supported

The MPLAB Snap In-Circuit Debugger/Programmer supports most PIC MCUs and dsPIC DSCs, and firmware is continually being upgraded to add support for new devices. For the most current list of supported parts, review the latest release notes located in MPLAB X IDE. As new device firmware is released, it can be downloaded free of charge at [www.microchip.com/snap](http://www.microchip.com/snap).

## Host System Requirements

- PC-compatible system with an Intel® Pentium® class or higher processor, or equivalent
- Available USB port
- Microsoft Windows® 7 or later, MAC OSX® and Linux® operating systems

## Ordering Information

Part Number	Description	Availability
PG164100	MPLAB® Snap In-Circuit Debugger/Programmer Kit This kit includes: <ul style="list-style-type: none"><li>• One MPLAB Snap In-Circuit Debugger/Programmer</li></ul>	Now

## Other Development Tools from Microchip

Part Number	Development Tools	Description
SW006021-SUB	MPLAB® XC8 C Compiler PRO Subscription License	30-day C Compiler License for 8-bit PIC® MCUs
SW006022-SUB	MPLAB XC16 C Compiler PRO Subscription License	30-day C Compiler License for 16-bit PIC MCUs and dsPIC® DSCs
SW006023-SUB	MPLAB XC32 C/C++ Compiler PRO Subscription License	30-day C Compiler License for 32-bit PIC MCUs
DM160228	Explorer 8 Development Kit	8-bit development platform targeted at new user
DM240001-2	Explorer 16/32 Development Board	Full-featured, modular development platform for 16-bit and 32-bit MCUs