# MPLAB® Snap In-Circuit Debugger/Programmer



#### **Summary**

The MPLAB Snap In-Circuit Debugger/Programmer provides affordable, fast and easy debugging and programming of 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). The MPLAB Snap connects to your computer via high-speed 2.0 USB 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 programming and debug capabilities. 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 In-Circuit Serial Programming<sup>TM</sup>.

## **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™
- Cost Effective
  - Similar performance at a fraction of the price of fullfeatured tools
- 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/mplabx



# **Products Supported**

The MPLAB Snap In-Circuit Debugger/Programmer supports PIC, AVR and SAM 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. New product support is released via MPLAB X IDE. Visit www.microchip.com/mplabx to download free of charge.

#### **Host System Requirements**

- Available USB port
- Microsoft Windows® 7 or later, MacOS® and Linux® operating systems

## **Ordering Information**

Part Number	Description	Availability
	MPLAB® Snap In-Circuit Debugger/Programmer Kit	
PG164100	This kit includes:	Now
	One MPLAB Snap In-Circuit Debugger/Programmer	

# **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 <sup>®</sup> and AVR <sup>®</sup> MCUs
SW006022-SUB	MPLAB XC16 C Compiler PRO Subscription License	30-day C Compiler License for 16-bit PIC MCUs and $\mbox{dsPIC}^{\circledcirc}$ DSCs
SW006023-SUB	MPLAB XC32 C/C++ Compiler PRO Subscription License	30-day C Compiler License for 32-bit PIC and SAM MCUs
AC164164	PIC-IoT WG Development Board	Simple and effective way to connect to the Google Cloud IoT Core
DM164136	Curiosity High Pin Count (HPC) Development Board	Cost-effective, fully integrated 8-bit development platform for first-time users, Makers and those seeking a feature-rich rapid prototyping board
DM320104- BNDL	Amazon FreeRTOS Curiosity PIC32MZ EF Bundle	Develop small, low-powered edge devices that are easy to program, deploy, secure and maintain using Amazon FreeRTOS
DM320104	Curiosity PIC32MZ EF Development Board	Offers expansion capabilities making it an excellent choice for a rapid prototyping board in connectivity, IoT and general-purpose applications

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