



MICROCHIP

Regional Training Centers

Section 2

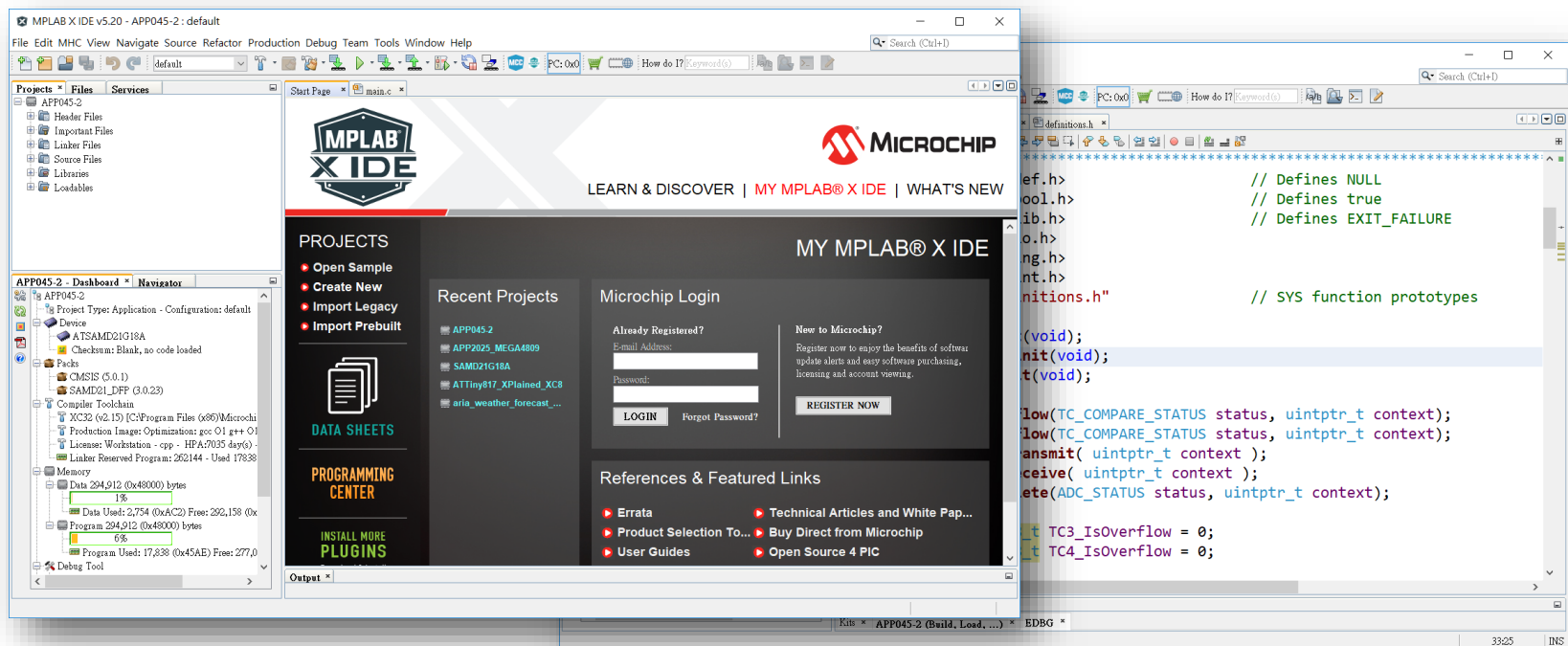
MPLAB X IDE and MHC

Development Tools Introduction

All in One Development

MPLAB® X IDE

- New generation integrated Development Tools, Support PIC, dsPIC, AVR, CEC and SAM Series MCU/MPU, Provide Plug-in function to extend more advance function. Java Based, Cross platform, Current version is v5.20 ◦



AVR/SAM Series Development

Atmel Studio 7

- Last generation integrated Development Tools, Only support AVR and SAM Series, Current version is v7.0.1931 ◦
- Not recommend for new design.



Official Site Download Page

www.microchip.com/mplabX

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More Information

Home / MPLAB / MPLAB® X IDE

MPLAB Xpress Cloud-based IDE

MPLAB Xpress Cloud-based IDE is an online development environment that contains the most popular features of our award-winning MPLAB X IDE. This simplified & hosted experience is a helpful acceleration of our desktop-based program, which allows users to easily transition between the two environments. Click here to download the quick start guide.

MPLAB Xpress is a perfect starting point for new users of PIC Microcontrollers - no downloads, no machine configurations, and no waiting to get connected on your system development.

*Design in the Cloud
*No software installation required
*Complete IDE to easily get started
*Includes most recent Compilers and PRO configurations
*Includes Board - No hardware necessary
*Single-Click from Library of existing projects
*Join your existing relationship through user accounts

MPLAB Xpress incorporates the latest version of MPLAB X Code Configurator, which enables users to automatically generate initialization and application code for 8-bit Microcontrollers using a graphical interface and pin map.

With massive amounts of storage available to users, you can store your current projects in the Cloud. The contents of these files can be shared with others, or given inspiration from the shared code repository.

Most of all, MPLAB Xpress IDE is FREE, and can be accessed from any internet-connected PC or Mac, anywhere in the world.

Start Below
New Project
Open Project
My Account

MPLAB Xpress Code Examples

File	Active	Rating	Version	Tag	Author	Updated	Download
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5
Windows XE25	1	5	5	5	5	5	5

Features Downloads Documentation Webinars

Title	Date Published	Size	D/L
Windows (x86/x64)			
MPLAB® X IDE v5.20	5/14/2019	744.0 MB	
MPLAB® X IDE Release Notes / User Guide v5.20	5/14/2019	6.7 MB	

Tools Installation

- ❖ You can download development tools from below link at Taiwan Website, also.

http://www.microchip.com.tw/Data_CD/



Microchip 產品、教育訓練及實驗板資料Dec. 28, 2018

[Microchip Focus Product Selector Guide \(Dec. 2016\) Link](#)
[Analog and Interface Product Selector Guide \(Dec. 2016\) Link](#)
[Treelink Analog and Interface Products Presentation \(Jun. 20. 2017\) Link](#)

技術支援與相關連結

[Microchip台灣 \(www.microchip.com.tw\)](#)
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Microchip 線上Sample申請 ([www.microchip.com/samples](#))
Microchip線上元件及開發工具購買(MicrochipDIRECT) ([www.microchipdirect.com](#))
Microchip線上Code Examples ([www.microchip.com/CodeExamplesByFunc.aspx](#))
[Microchip On Line Application Design Center](#)
[Microchip On Line Application Notes](#)

開發軟體, 編譯器

MPLAB® X IDE	v5.10 Windows(Local) Windows Version Linux Version Mac Version Detail Info.
MPLAB® IDE	v8.92(Local)
MPLAB® XC8	v1.45(Local) *Peripheral libraries not include
• Part Support Patch Files	v1.45b(Local)
• Peripheral Libraries	v2.00RC3(Local) v1.34(Local)

Programmer/Debugger

PICkit 4

- The MPLAB® PICkit™ 4 In-Circuit Debugger/Programmer allows fast and easy debugging and programming of all PIC®, dsPIC®, AVR, SAM and CEC flash microcontrollers.

- **Features**

- ◆ Matches silicon clocking speed.
- ◆ Target voltage of 1.20V to 5.5V.
- ◆ Can supply up to 50mA of power to the target.
- ◆ Minimal current consumption at <100µA from target.
- ◆ Portable USB-powered and RoHS-compliant.
- ◆ 8-pin single in-line header.
- ◆ Backward compatible for demo boards, headers and target systems using 2-wire JTAG and ICSP.
- ◆ Option to be self-powered from the target (2.7V to 5.5V).



\$47.95

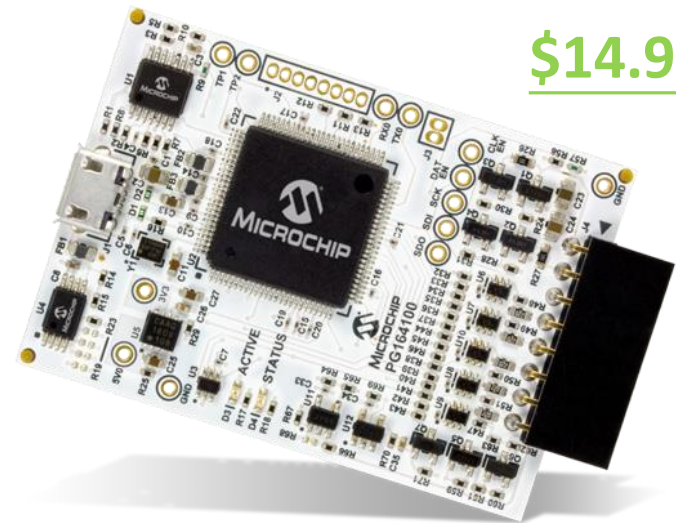
Programmer/Debugger

MPLAB SNAP

- The MPLAB® SNAP In-Circuit Debugger/Programmer allows fast and easy debugging and programming of most PIC®, dsPIC®, AVR, SAM and CEC flash microcontrollers.

- **Features**

- ◆ Affordable performance
- ◆ Matches silicon clocking speed
- ◆ Target voltage of 1.20V to 5.5V
- ◆ Portable USB-powered
- ◆ CE and RoHS-compliant
- ◆ 8-pin single in-line header
- ◆ Backward compatible for demo boards, headers and target systems using 2-wire JTAG and ICSP



\$14.95

Programmer/Debugger

EDBG

- The Embedded Debugger (EDBG) is an onboard program and debugger for integration into development kits with AVR/SAM MCUs.
- In addition to programming/debugging support through MPLAB X IDE, the EDBG offers data streaming capabilities between the host computer and the target MCU.

■ Features

- On-board programming and debugging through SWD, JTAG, and PDI
- Virtual COM Port
- Data Gateway Interface (DGI) for data streaming between target MCU and PC
- SPI, USART, and I2C interfaces available
- GPIOs for accurate status indication

