MPLAB[®] Xpress Cloud-Based IDE

for Curiosity and Explorer 16/32 Development Boards*

QUICK START GUIDE

MPLAB XPRESS

My Account

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Welcome to Microchip's MPLAB Xpress Cloud-Based IDE. MPLAB Xpress is an online development environment that contains the most popular features of our award-winning MPLAB X IDE. This simplified and distilled application is a faithful reproduction of our desktop-based program, which allows you to easily transition between the two environments.

MPLAB Xpress is a perfect starting point for new users of PIC[®] microcontrollers. Now you can use MPLAB Xpress IDE on even more development boards, including the Curiosity and Explorer 16/32 Development Boards, PICkit[™] 3 In-Circuit Debugger or any other Microchip board that includes an integrated programmer/debugger.

Test Drive

No Hardware Needed

Follow These Steps to Get Started

Log Into Your MyMicrochip Account

Go to the MPLAB Xpress starting page at mplabxpress.microchip.com and register or sign into your MyMicrochip account by clicking on the "My Account" button.

2 Load Code Examples

Once you are logged in, access the code examples by clicking the "EXAMPLES" button at the top of the IDE.

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INTRODUCTION	EXAMPLES	FORUM	Ľ	WIKI	Ľ	DESIGN SUPPORT	C.

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(press Board

3 Select Your Board Type

Select the board type you have, e.g. Curiosity or Explorer 16/32 Development Board, from the "Board" options column. Connect the development board to your computer via an appropriate USB cable.

Title	Author	Rating	Imports	Tags	Board	Device	Updated	Open	Ŧ.
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Term	20			ADC	Curiosity Board	m	From 🗐		
				LCD	Curiosity HPC Board	1	To 🗐		
Explorer 16/32 Demo - PIC24FJ1024GB610	2		32	ADC, LCD	Explorer 16/32	PIC24FJ1024GB610	09/29/2016	Open	
Explorer 16/32 Demo - PIC24FJ256GB410	2		13	ADC, LCD	Explorer 16/32	PIC24FJ256GB410	09/29/2016	Open	
Explorer 16/32 Demo - PIC24FJ256GB210	S		10	ADC, LCD	Explorer 16/32	PIC24FJ256GB210	09/29/2016	Open	
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*Or any other Microchip development board with an integrated programmer/debugger.



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4 Load Apps and Plug-In Module (PIM) into the IDE

Choose one of the available example apps listed that matches your board and, if applicable, your Plug-In Module (PIM), and load it into MPLAB Xpress IDE by clicking the red "Open" button on the right.

Title	Author	Rating	Imports	Tags	Board	Device	Updated	Open	T
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Term	20			ADC	Curiosity Board	∧ ^m	From		
				LCD	Curiosity HPC Board		То		
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Explorer 16/32 Demo - PIC24FJ256GB210	2		10	ADC, LCD	Explorer 16/32	PIC24FJ256GB210	09/29/201	6 Oper	۰,

5 Manage USB Bridge (First Time Only)

For the first time use only, you'll need to complete steps 5A-5C.

5A Click on the "USB Bridge Disconnected" words in the bottom left corner of the IDE to launch the "Manage USB Bridge" window.

5B The window shown on the right will appear. A prerequisite is to download and install the Java Run-Time Environment (JRE) if Java is not already installed on your computer. Click on the link and follow the instructions on the Java website.

5C Next, continue to follow the numbered instructions in the "Manage USB Bridge" window. For Step 1, download the USB Bridge Tool. For Step 2, copy and paste the automatically generated unique token into the USB Tool application.

After these steps are completed, the pop-up window will appear and a green indicator light in the bottom left corner of the IDE will confirm that the USB Bridge is connected and the Programming Tool was successfully connected to your board.





Note: Do not close this window until you have finished with your session.



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Follow These Steps to Get Started

6 Project Properties

In the MPLAB Xpress IDE "Dashboard" panel, click on the "Project Properties" icon from the far left column.

Dashbo	ard
	Explorer_1632_DemoPIC24FJ1024GB610_
12	Oevice
	🧼 PIC24FJ1024GB610
	🛄 🚟 Checksum: Blank, no code loaded.
4	👕 Compiler Toolchain
	🔐 XC16 (1.26)

7 Select Board Properties

Select your "family" and board type from the "Hardware Tool" options and select "Ok".

CATEGORIES:	Configuration
Operguration O	Firstly: All Families Device: PI24FJ10240810 HARDWARE TOOL: COMPILER TOOLCHARK Hardware Tools Compiler Toolcharks Hardware Tools Compiler Toolcharks Hardware Tools Compiler Toolcharks Bastare Kis (PROB) Compiler Toolcharks Explore triation Compiler Toolcharks State Kis (PROB) Compiler Toolcharks Simulator State Kis (PI20)
	Ok Cancel Apply

8 Compile and Program the Code

Compile and program the code onto your board using the "Make and Program" icon in the toolbar at the top of the IDE application and watch the programmed code build...

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Output × Debu	ugger Console		and run your board.
			Output Debugger Console x
Dynamic Memory U	Jsage		Target voltage detected
			Target device PIC24FJ1024GB610 found. Device ID Revision = 2
region	address	maximum length (dec)	UDID1 = 6fe0
		UDID2 - fb23	
heap	0	0 (0)	UDID3 = f00e
stack	0x93c	0x76c4 (30404)	UDID4 - f0f2
			UDID5 - fofs
	Maximum dynamic memory (bytes): 0x76c4 (30404)	
			Device Erased
\bin"\\vc16-bin	They dist (free (production / Fyn)	orer_1632_DemoPIC24FJ1024GB610_PIM.production	Programming
(DIN ((ACIO DIN	inter dist, riee, production, sape	ALE TOP DEND PICE TOP	The following memory area(s) will be programmed:
			program memory: start address = 0x0, end address = 0x1fff
Build Successful			Programming/Verify complete
~			

MPLAB Code Configurator

Write Your Own Code

If you want to write your own code, a great way to get started is to connect to the MPLAB Code Configurator by clicking on the MCC badge near the top right of the application. For a quick tutorial on MPLAB Code Configurator, visit www.microchip.com/MCC.



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