

NuMicro[®] Family VS Code Quick Start Guide

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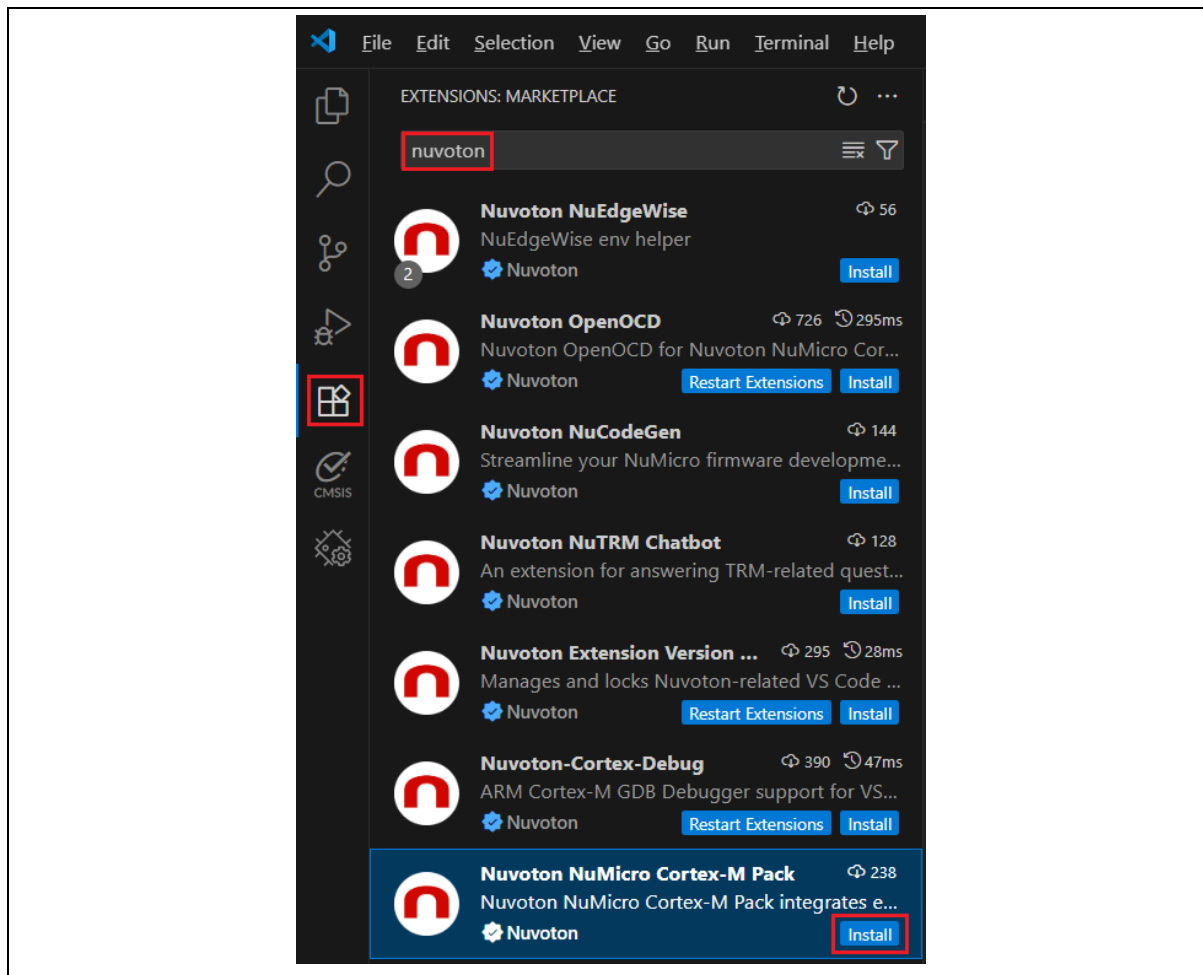
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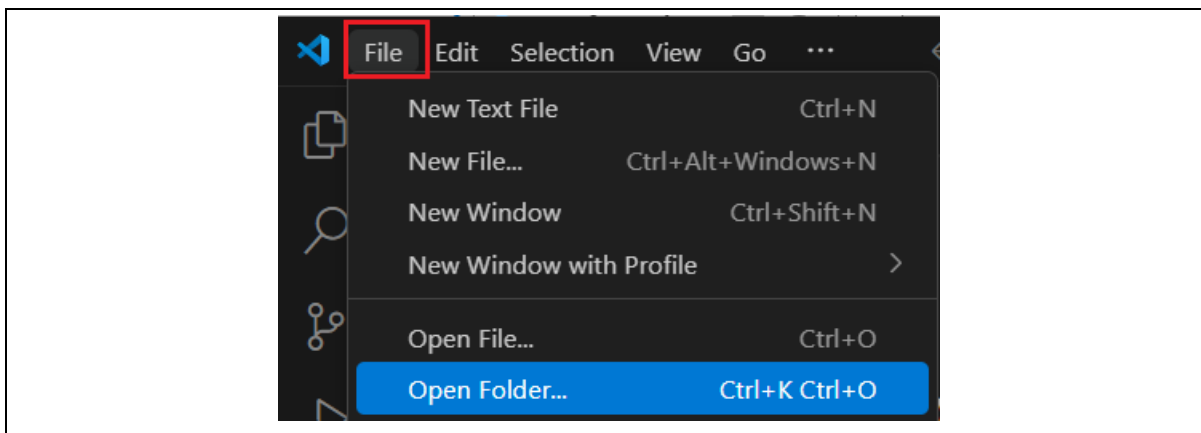
1 INSTALLATION VSCODE AND EXTENSIONS

1. Download VSCode from <https://code.visualstudio.com> and install it.
2. Launch VSCode and click Extensions in the Activity Bar.
3. Text “**Nuvoton NuMicro Cortex-M Pack Extension**” in search bar. Click the “**Install**” button to install.

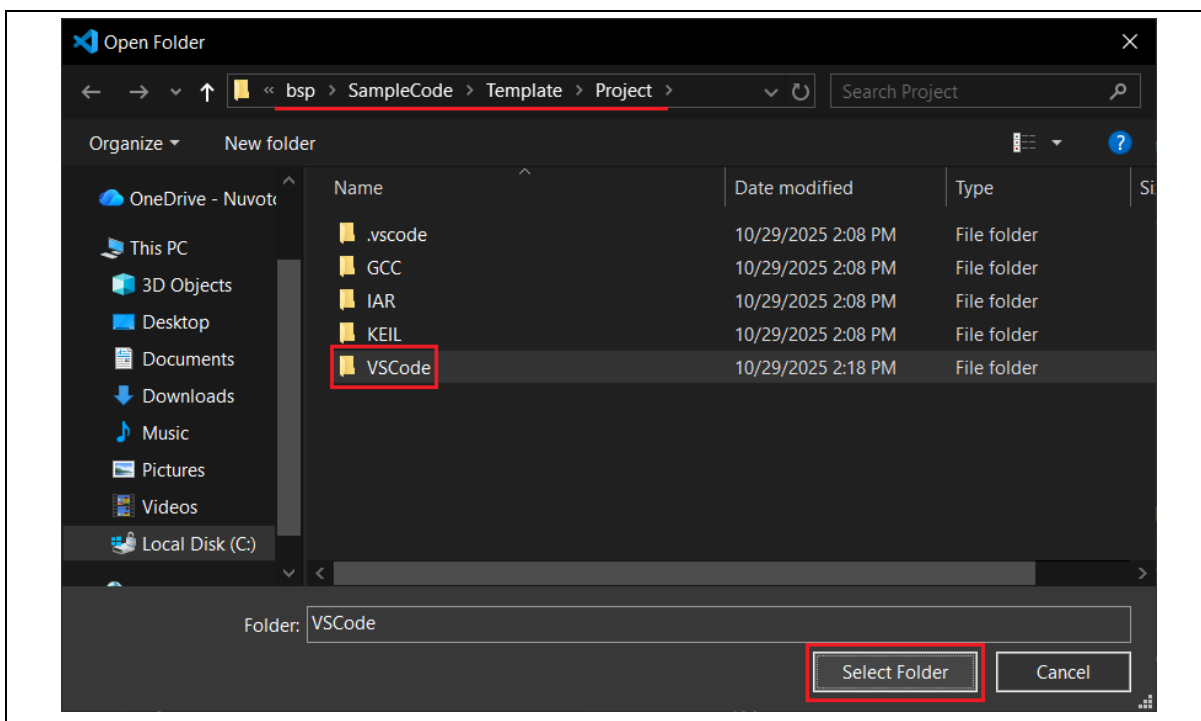


2 GET STARTED WITH A SAMPLE PROJECT

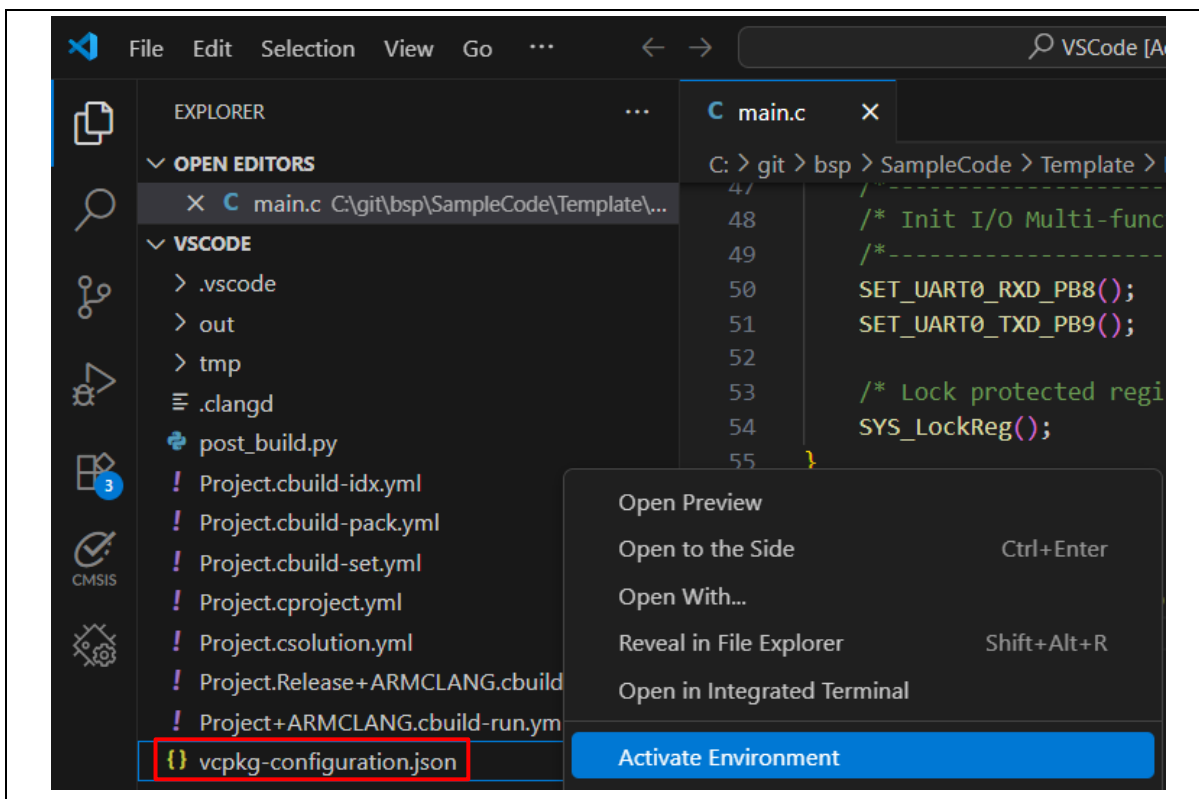
1. Click "File" menu and select "Open Folder" in the toolbar.



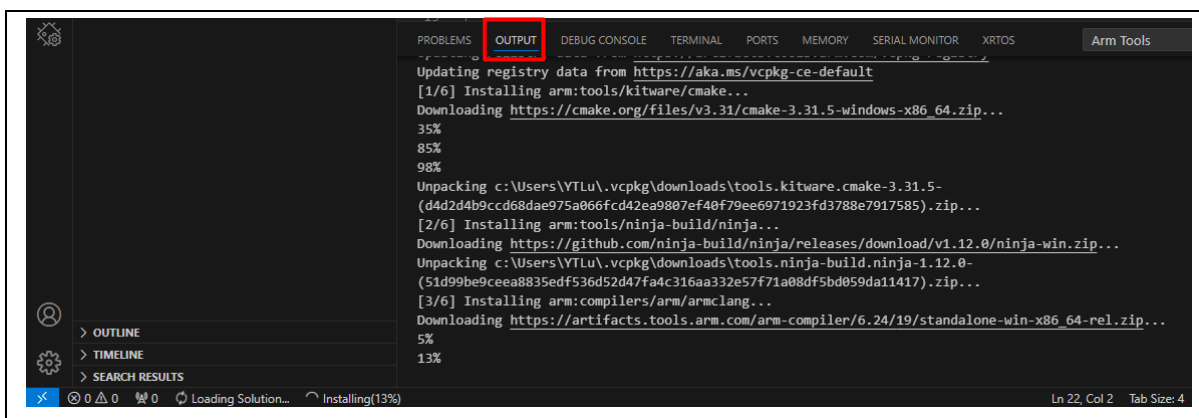
2. Select the "VSCode" folder of a sample project to open the project.



- Right-click “**vcpkg-configuration.json**” file and select “**Activate Environment**” command. (Please use private network connection.)

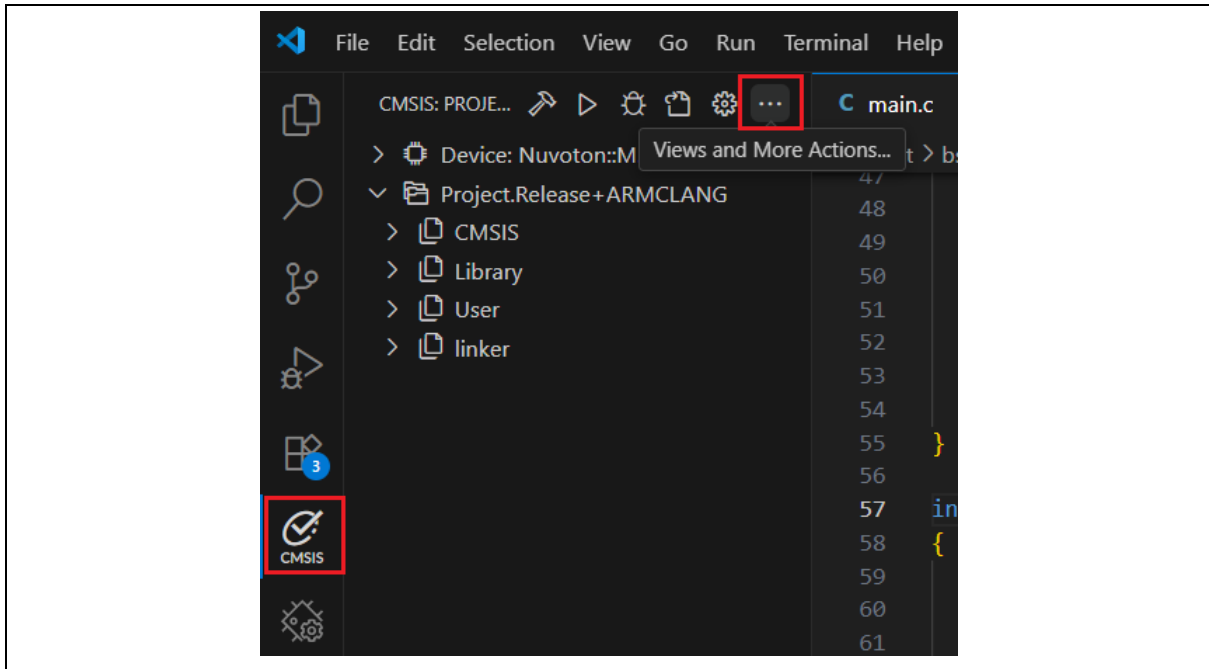


- Check **OUTPUT** terminal at the bottom. It will download and install the requires tools.

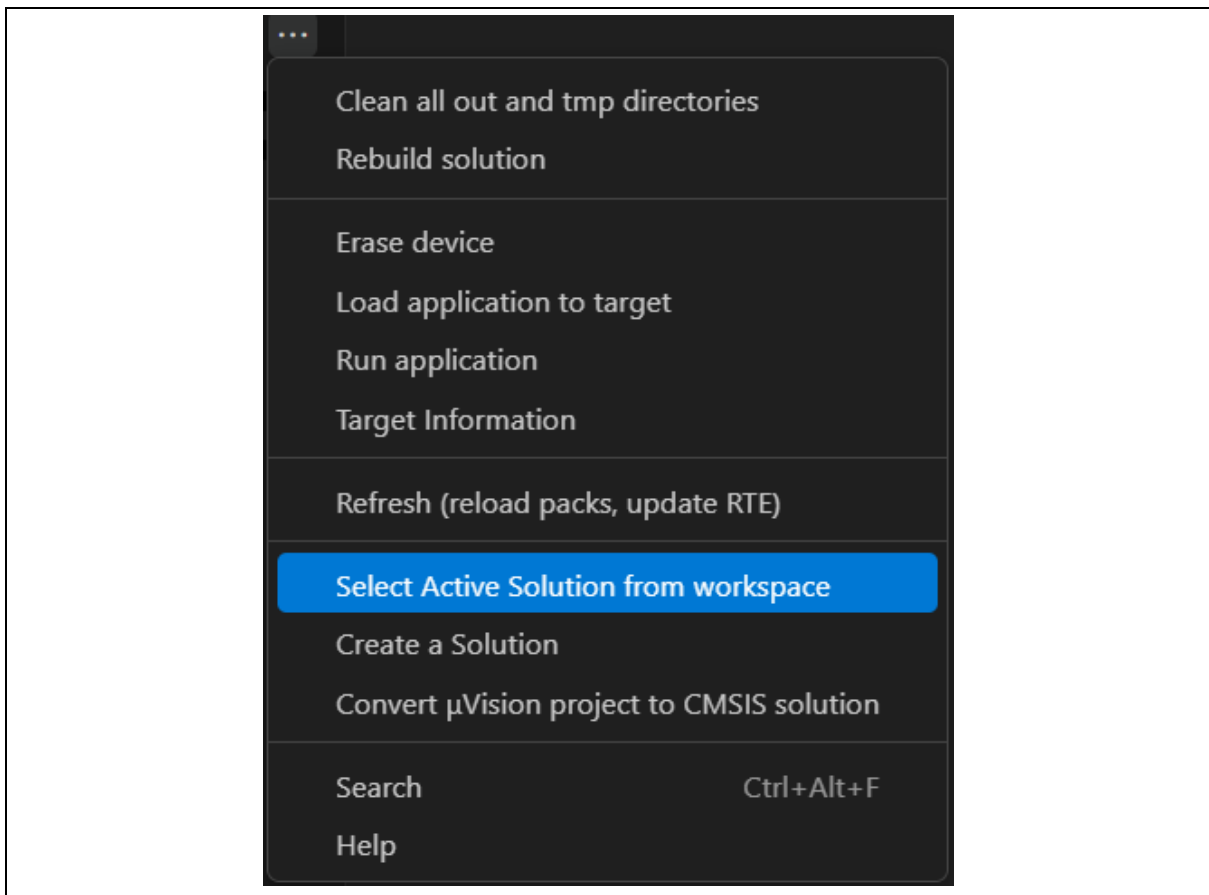


5. Click **CMSIS** icon in the Activity Bar.

Then click **“Views and More Commands”** button.

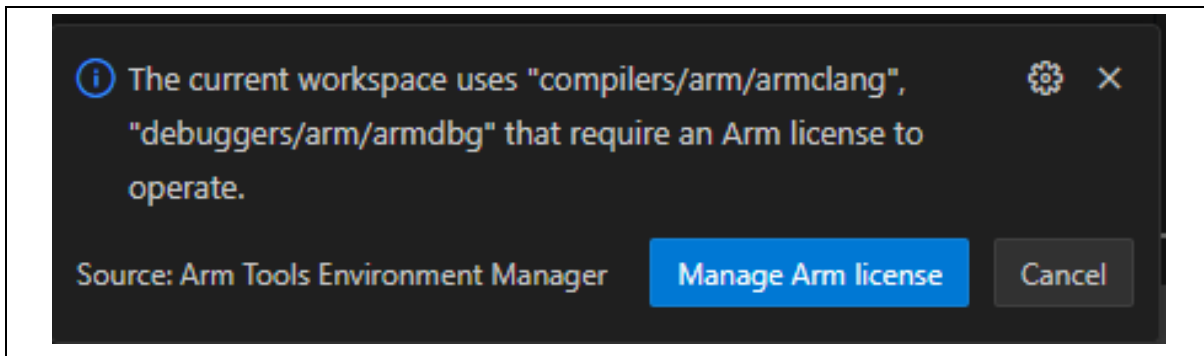


6. Select **“Select Active solution from workspace”** command.

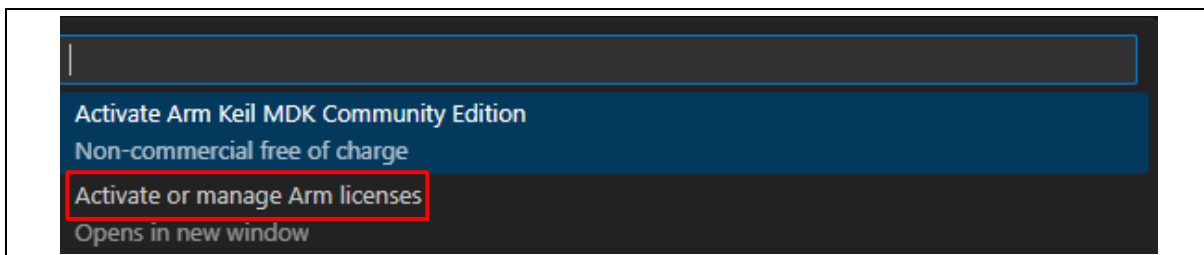


3 MANAGE ARM LICENSE

1. Click **"Manage Arm License"** button in the pop-up window at the bottom right.

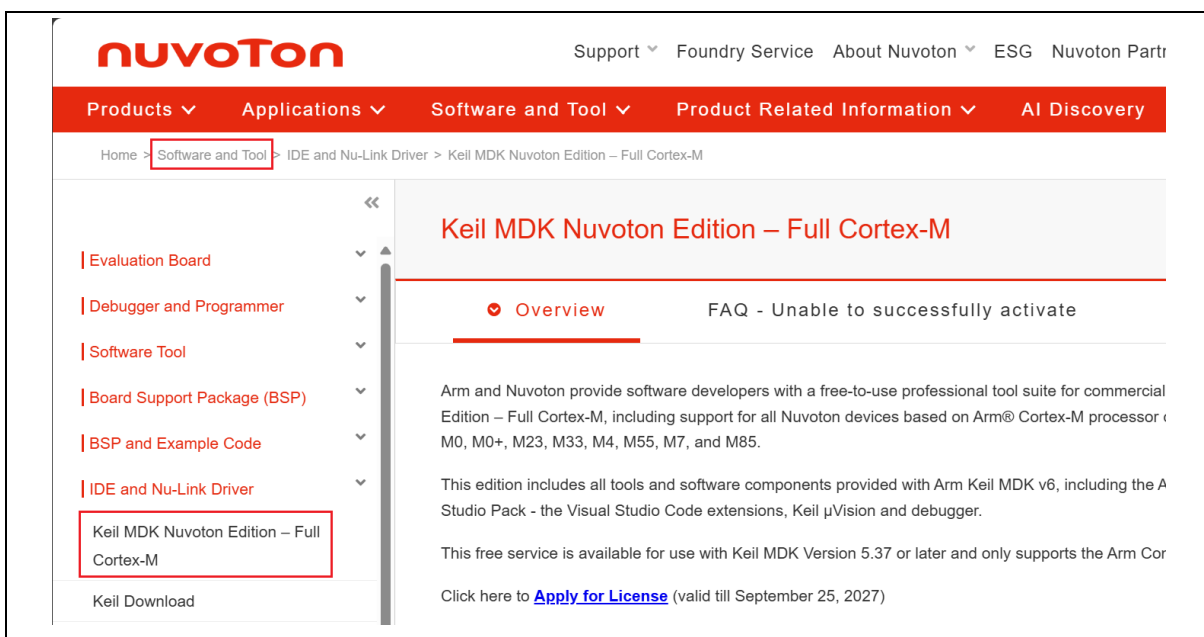


2. In the search bar at the top, select **"Activate or manage Arm licenses"** command from the available options.



3. Get Keil MDK License ID code.

- 1) Navigation to [Official Website](#).



2) Fill out the form.

Apply for Keil MDK Nuvoton Edition – Full Cortex-M

First Name*	Email*
<input type="text"/>	<input type="text"/>
Last Name*	Phone*
<input type="text"/>	<input type="text"/>
Company / Organization *	Industry
<input type="text"/>	-- Industry --
Job Title *	Application*
<input type="text"/>	-- Application --
Region / Country or region *	Series*
-- Select Region --	-- Select Line --
State / Province*	-- Select Category --
<input type="text"/>	Part No
<input type="text"/>	<input type="text"/>

NUVOTON Privacy Policy
 NUVOTON Privacy Policy
 Last modified: June 01, 2023

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Submit

Let's chat
 +86 20 2222 2222
 9:00am - 6:00pm (GMT+8)

3) Check mailbox and fill in the License Server.

Arm License Management Utility

Activate your product

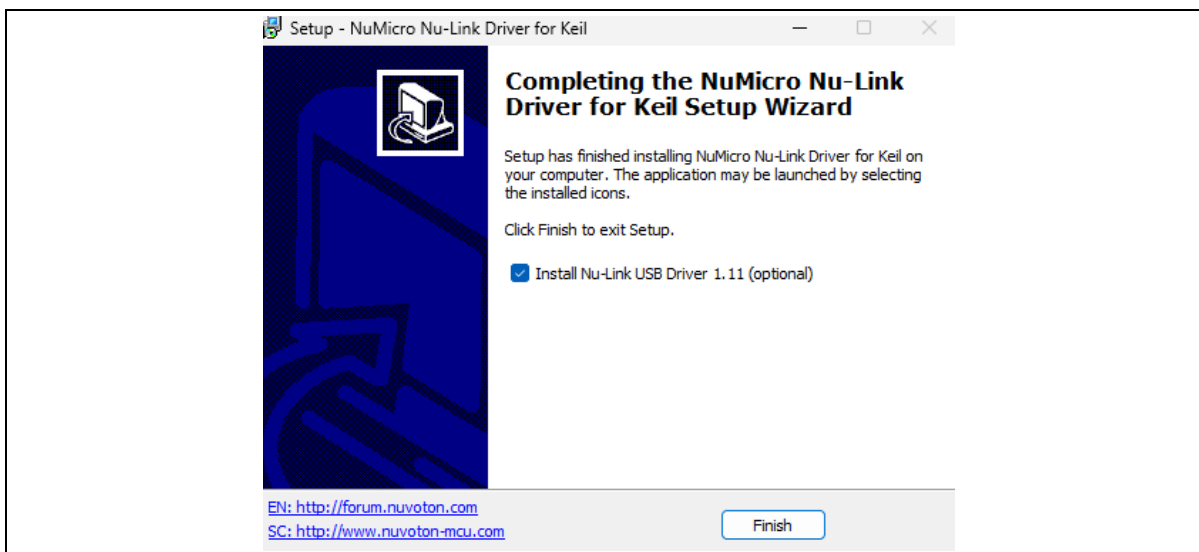
Activate with: ☐ Activation Code ☒ License Server

Enter your license server address:

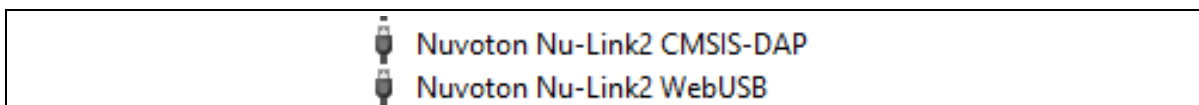
Query

4 CONFIGURE THE DEVICE

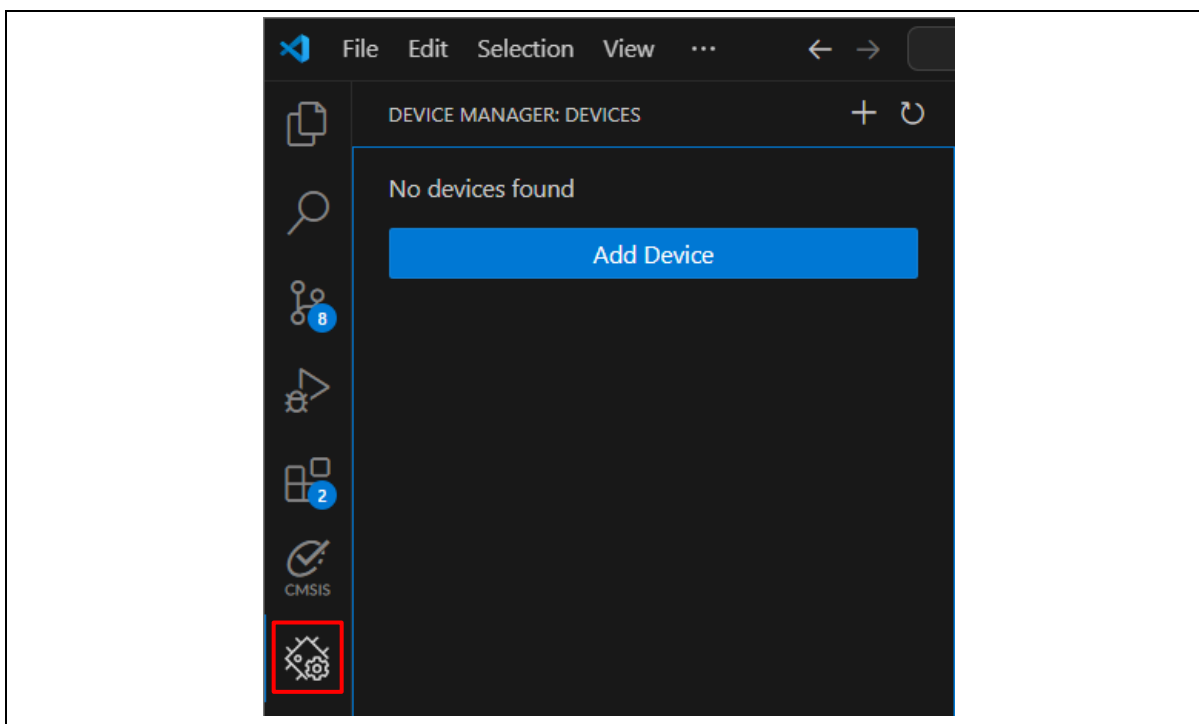
1. Install Nuvoton Nu-Link Keil Driver.
2. After installing the Keil driver, please check the box to install the Nu-Link USB Driver.



3. Installation complete in Windows Device Manager.



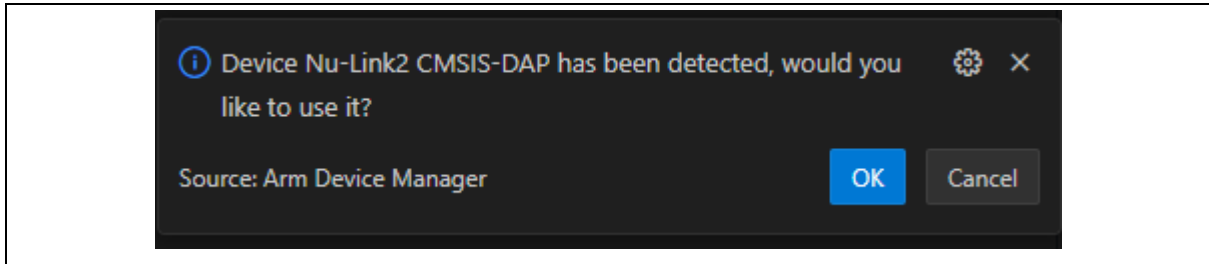
4. Click “**Device Manager**” icon in the Activity Bar to open the Device Manager.



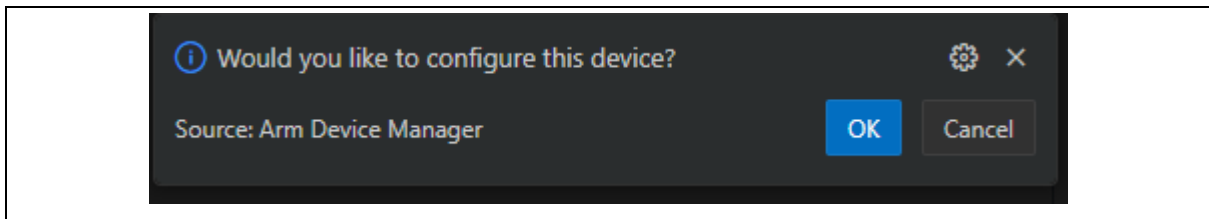
5. Connect device to your computer over USB.

The Device Manager detects the board and displays a pop-up message.

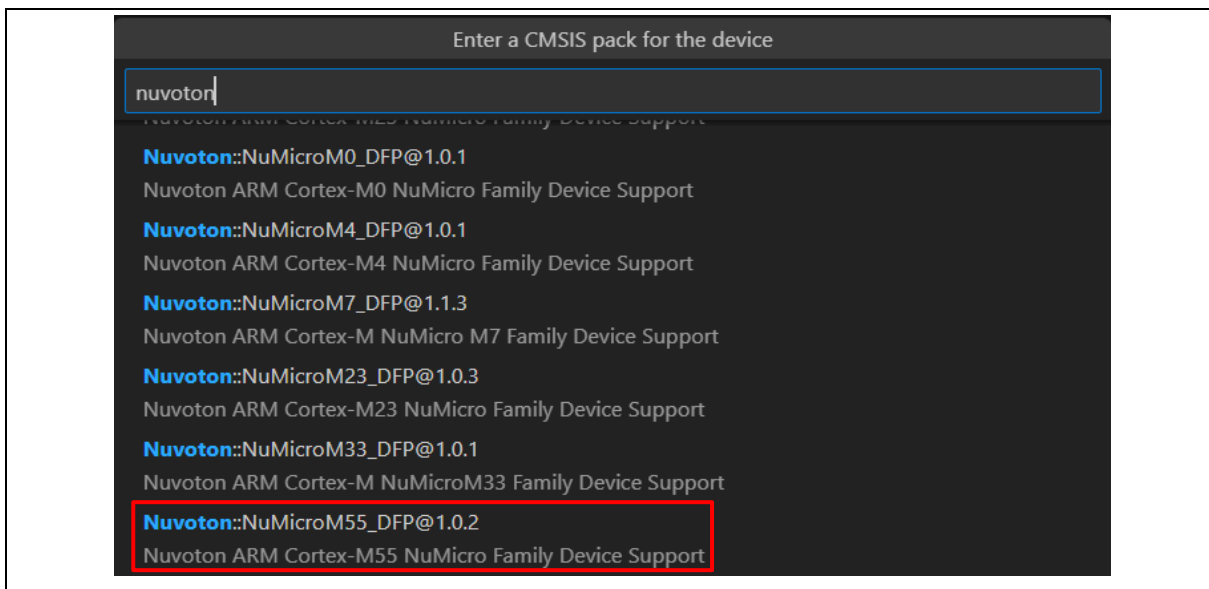
Press OK in the pop-up message and use it.



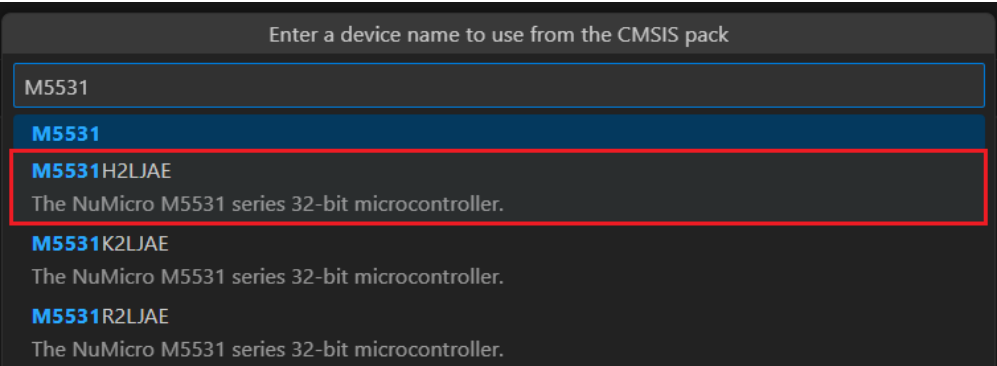
6. Press OK in the pop-up message and configure this device.



7. Text “**nuvoton**” in search bar and select corresponding CMSIS pack for the device.



8. Text your “**device model number**” in search bar.

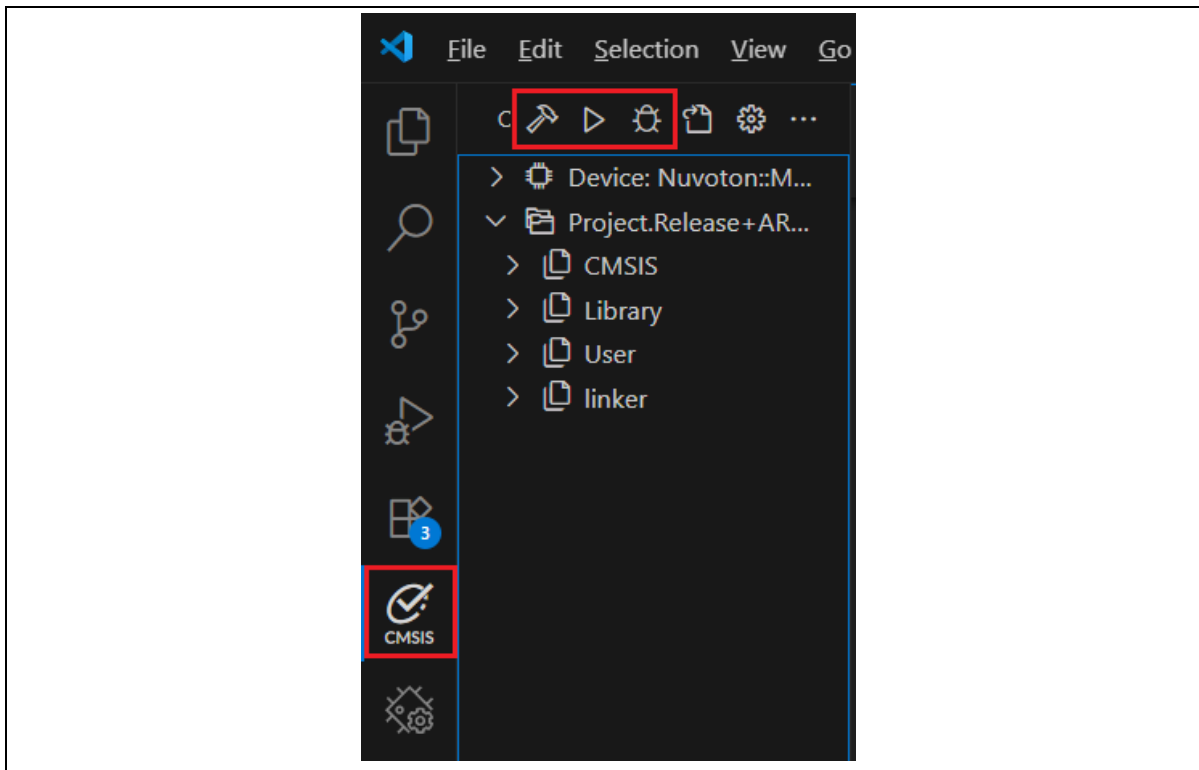


The screenshot shows a search interface with a dark background. At the top, a header reads "Enter a device name to use from the CMSIS pack". Below this is a search bar containing the text "M5531". A list of search results is displayed below the search bar. The first result, "M5531", is highlighted with a blue background. The second result, "M5531H2LJAE", is highlighted with a red border and includes the description "The NuMicro M5531 series 32-bit microcontroller." Below it are two more results: "M5531K2LJAE" and "M5531R2LJAE", both with the description "The NuMicro M5531 series 32-bit microcontroller."

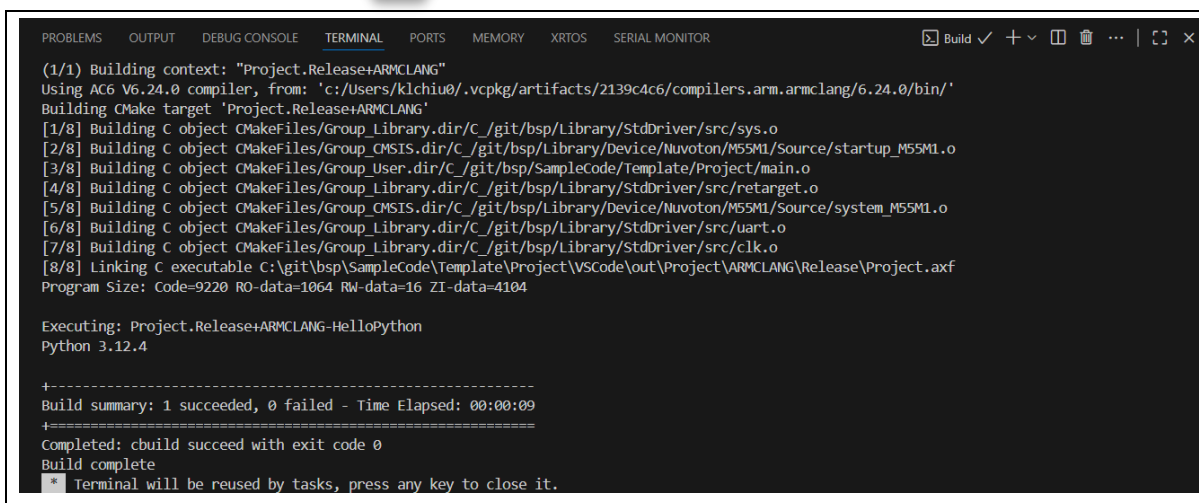
Device Model Number	Description
M5531	
M5531	
M5531H2LJAE	The NuMicro M5531 series 32-bit microcontroller.
M5531K2LJAE	The NuMicro M5531 series 32-bit microcontroller.
M5531R2LJAE	The NuMicro M5531 series 32-bit microcontroller.

5 RUN THE SAMPLE PROJECT

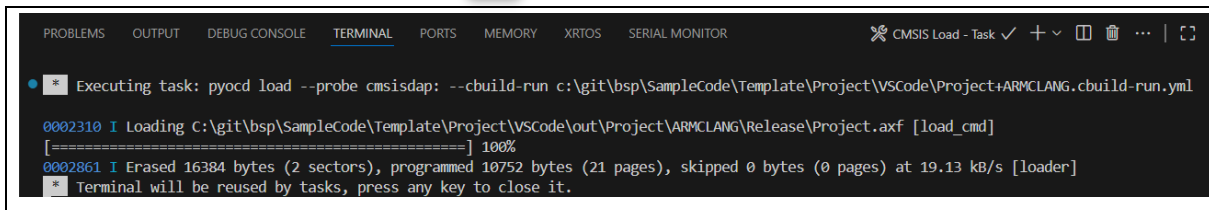
1. Click “CMSIS” icon in the Activity Bar.



2. Click “Build” button.

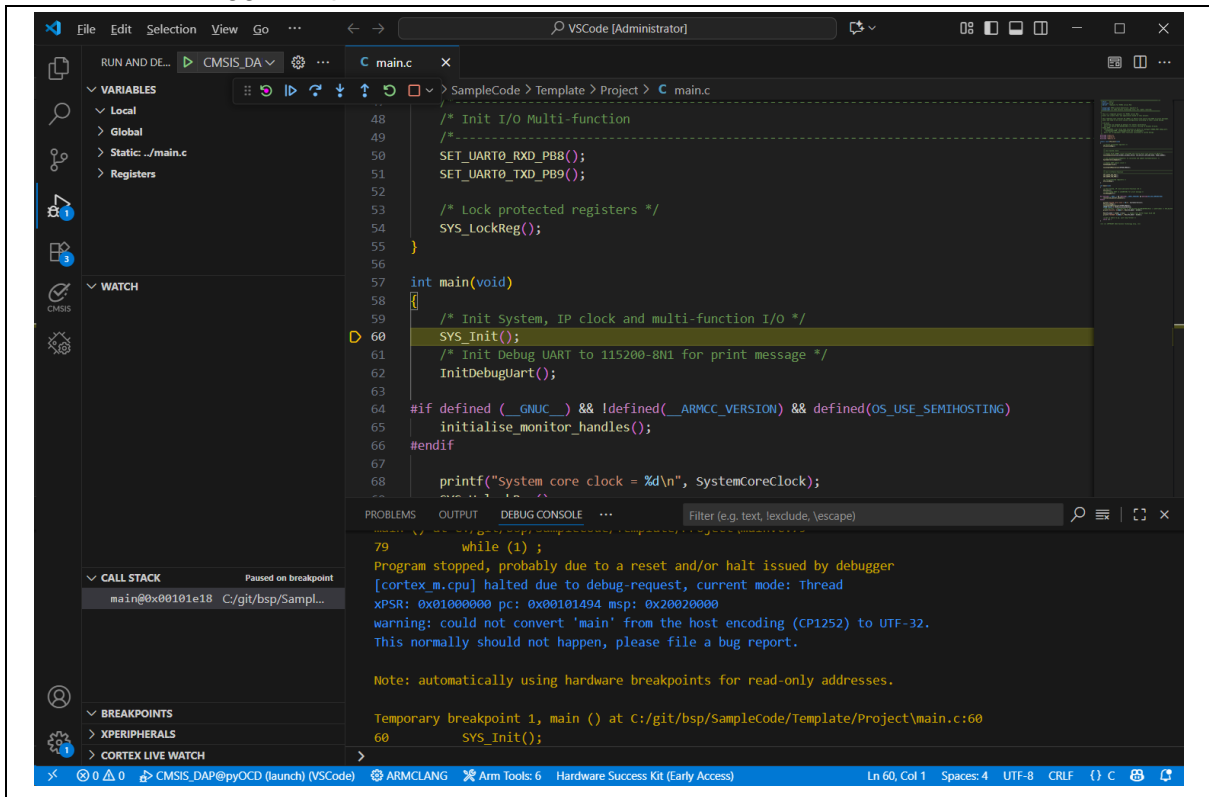


3. Click “Load & Run” button. 

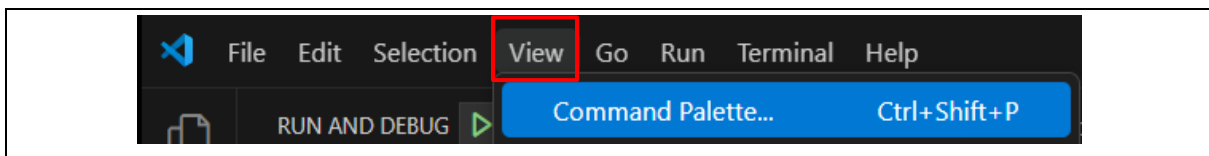


4. Click “Load & Debug” button. 

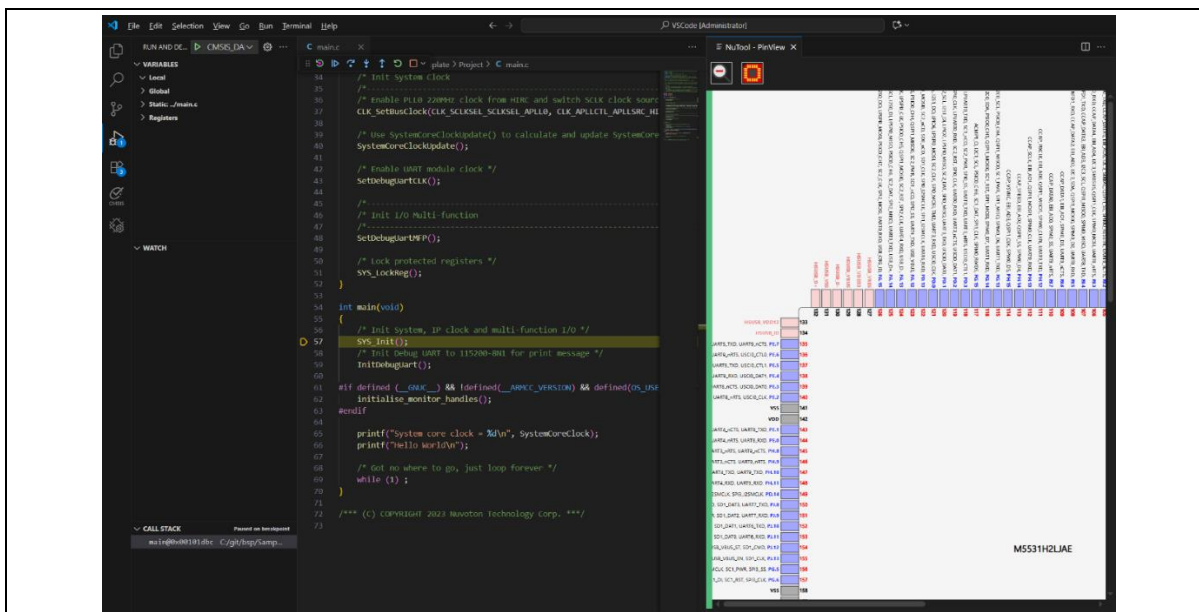
The debugger stops at the main function.



5. Click “View” menu and select “Command palette” item in the toolbar.



6. Text “Nuvoton:Open PinView” in search bar to open PinView tool.



REVISION HISTORY

Date	Revision	Description
2025.10.29	1.00	1. Initial version.

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Insecure usage includes, but is not limited to: equipment for surgical implementation, atomic energy control instruments, airplane or spaceship instruments, the control or operation of dynamic, brake or safety systems designed for vehicular use, traffic signal instruments, all types of safety devices, and other applications intended to support or sustain life.

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