

NuMicro[®] Family VS Code Quick Start Guide

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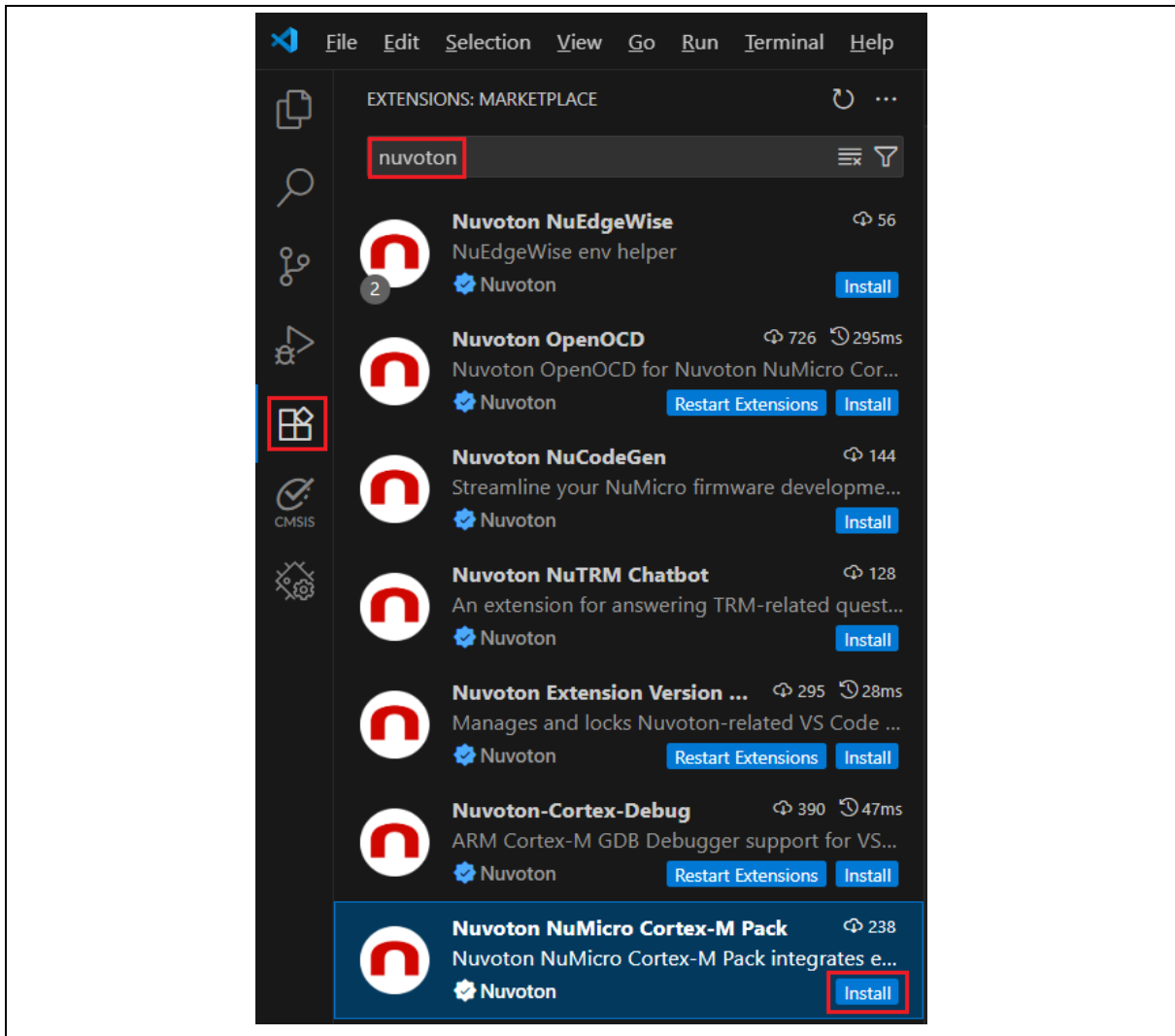
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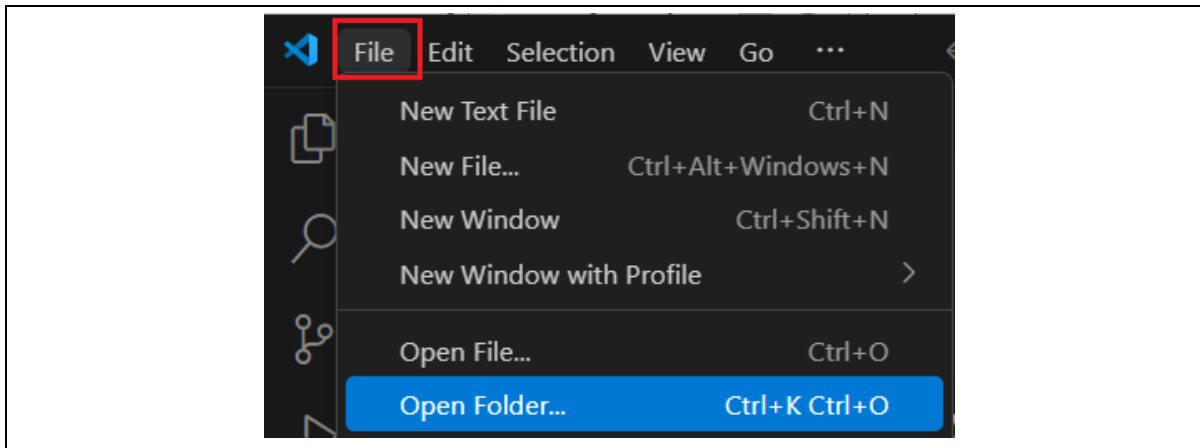
1 INSTALLATION VS CODE AND EXTENSIONS

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

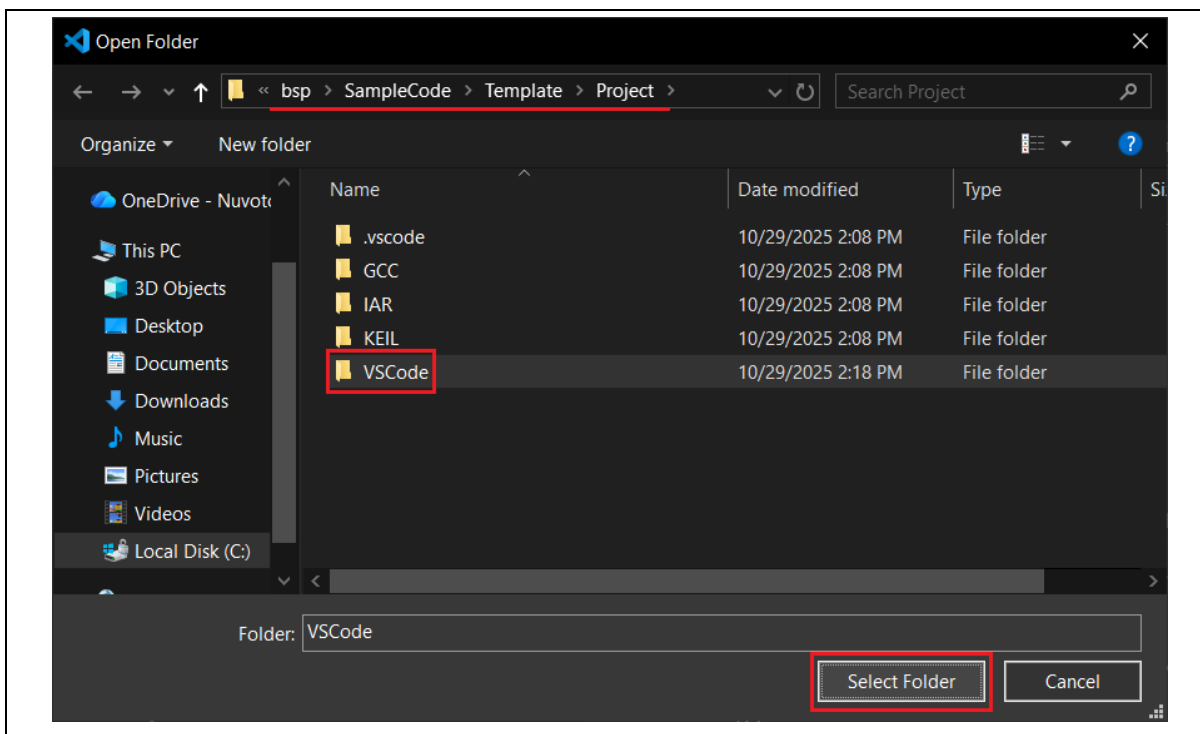


2 GET STARTED WITH A SAMPLE PROJECT

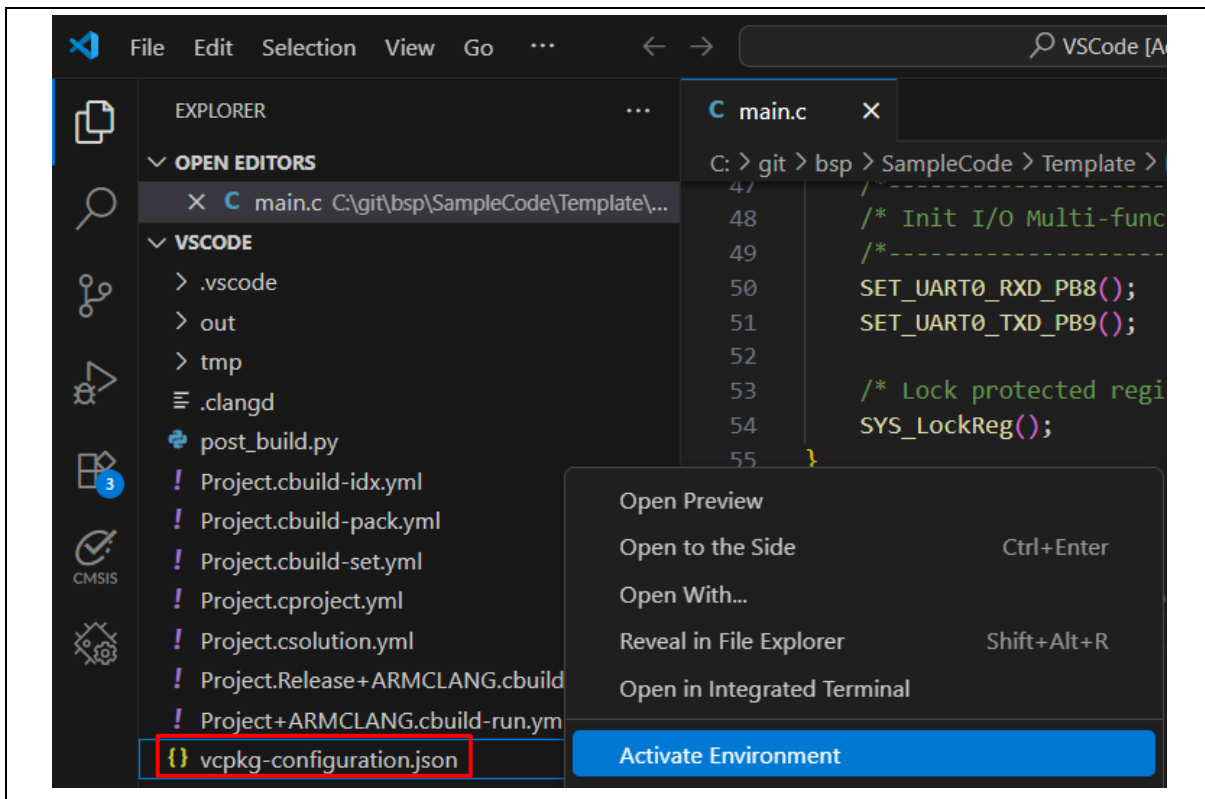
1. Click "File" menu and select "Open Folder" in the toolbar.



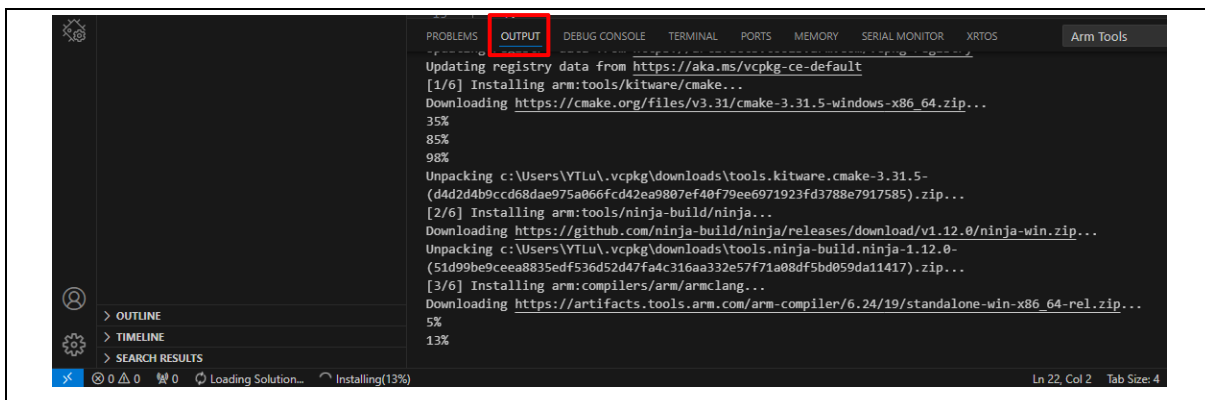
2. Select the "VSCode" folder of a sample project to open the project.



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

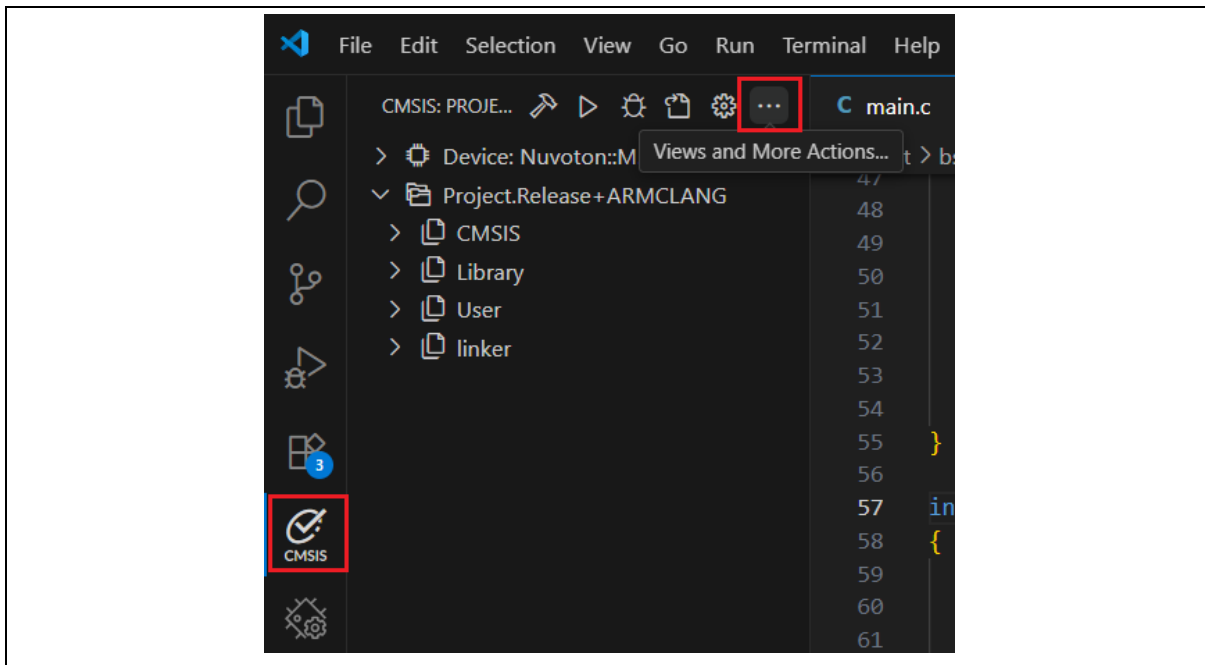


- Check **OUTPUT** terminal at the bottom. It will download and install the requires tools.

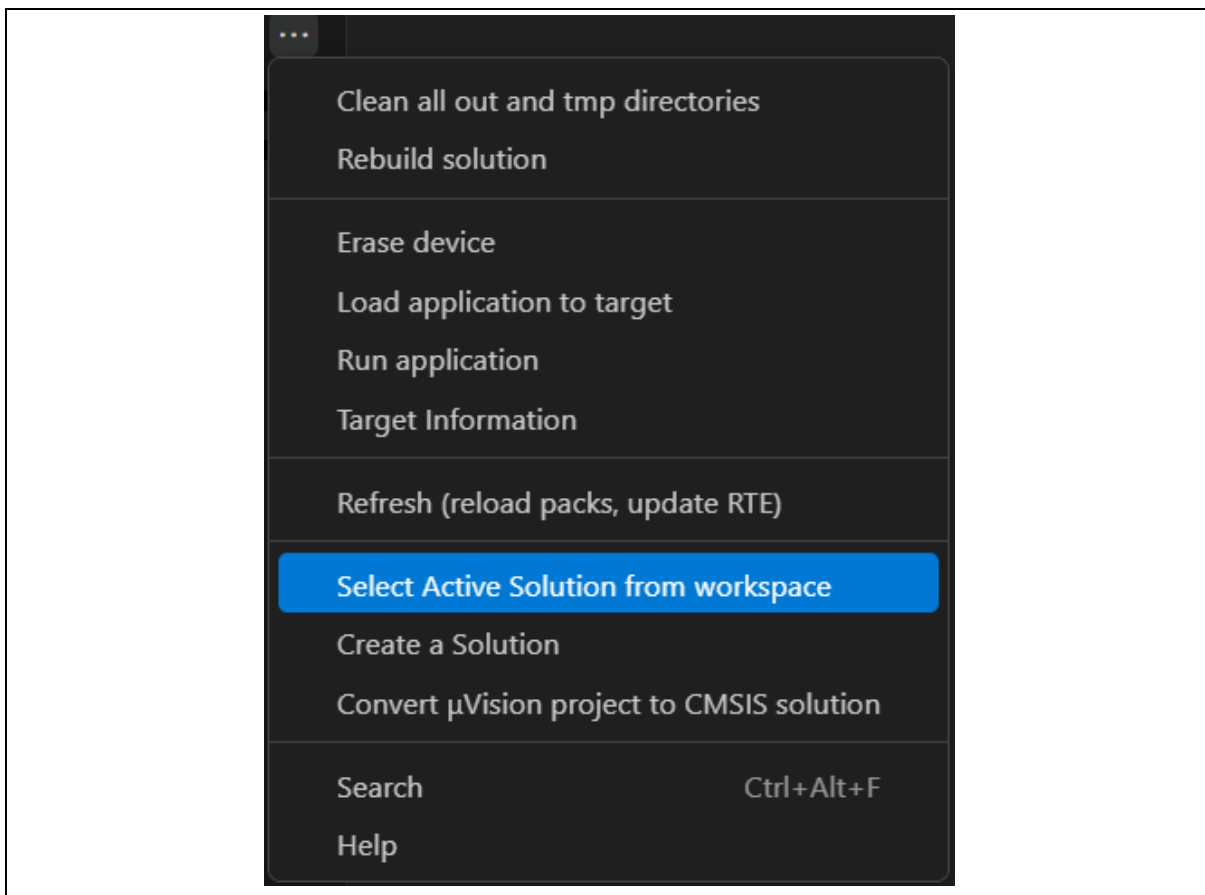


5. Click **CMSIS** icon in the Activity Bar.

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

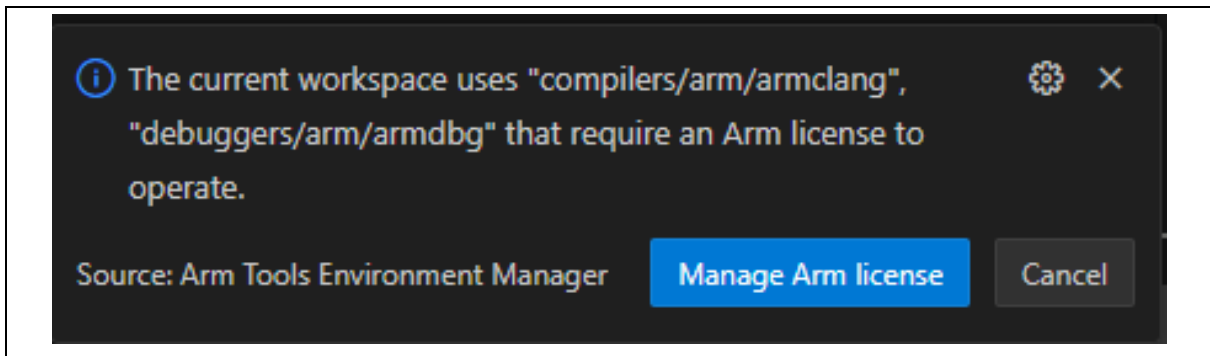


6. Select “**Select Active Solution from workspace**” command.

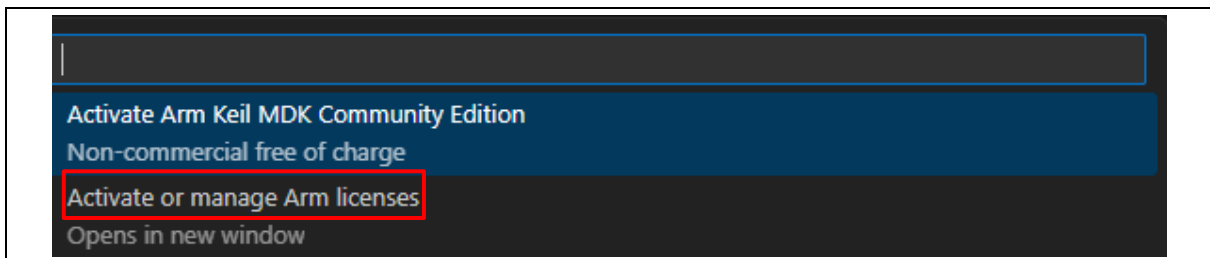


3 MANAGE ARM LICENSE

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

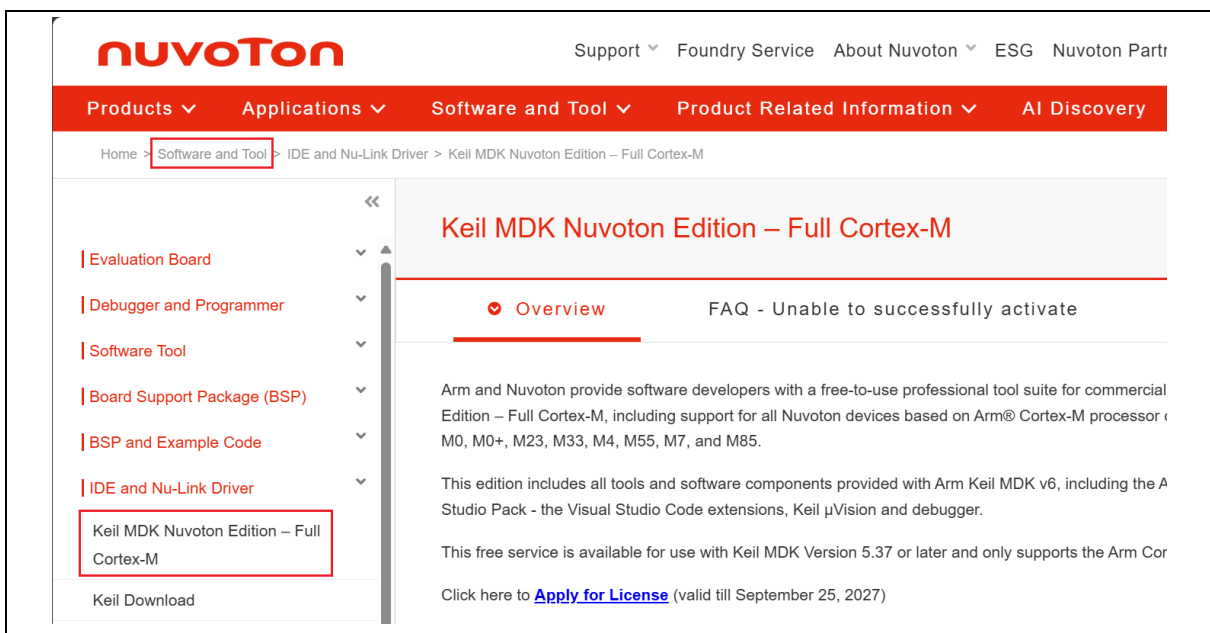


2. In the search bar at the top, select **"Activate or manage Arm licenses"** command from the available options.



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"/>

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 Last modified: June 01, 2023

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Submit

Let's chat
 00:00:00

3) Check mailbox and fill in the License Server.

Arm License Management Utility

Activate with: ☐ Activation Code ☒ License Server

Enter your license server address:

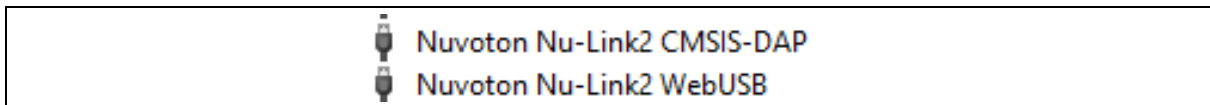
Query

4 CONFIGURE THE DEVICE

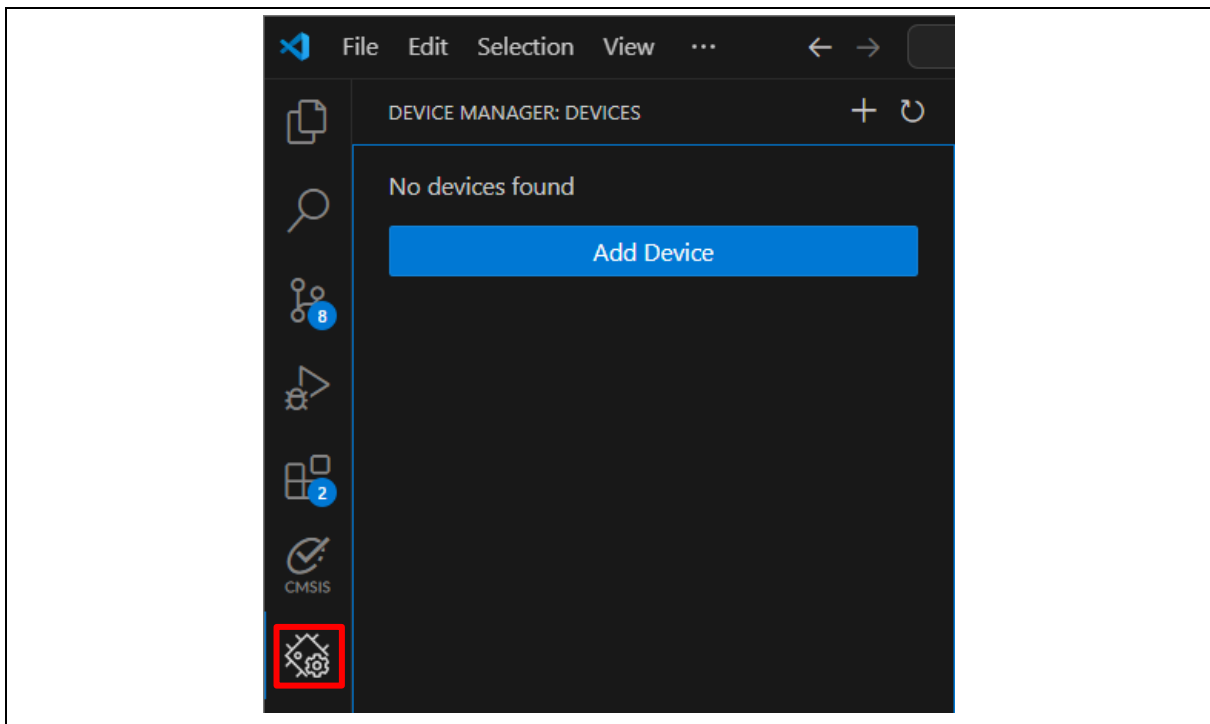
1. Install Nuvoton Nu-Link Keil Driver.
2. After installing the Keil driver, please check the box to install the Nu-Link USB Driver.



3. Installation complete in Windows Device Manager.



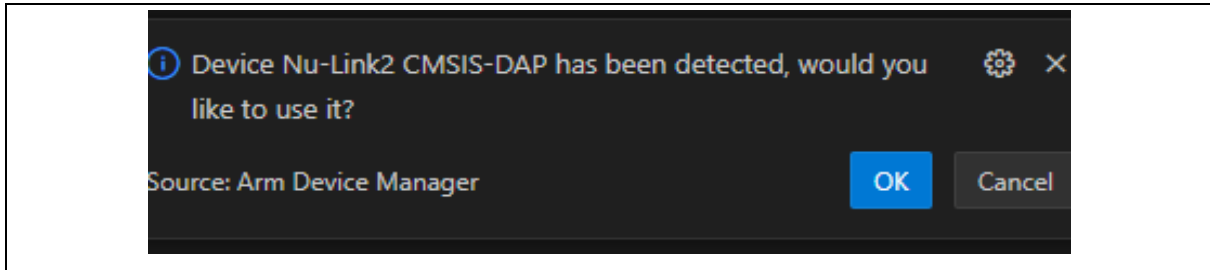
4. Click “**Device** Manager” icon in the Activity Bar to open the Device Manager.



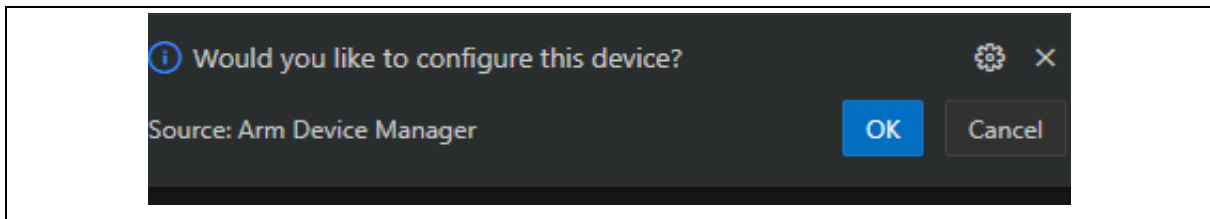
5. Connect device to your computer over USB.

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

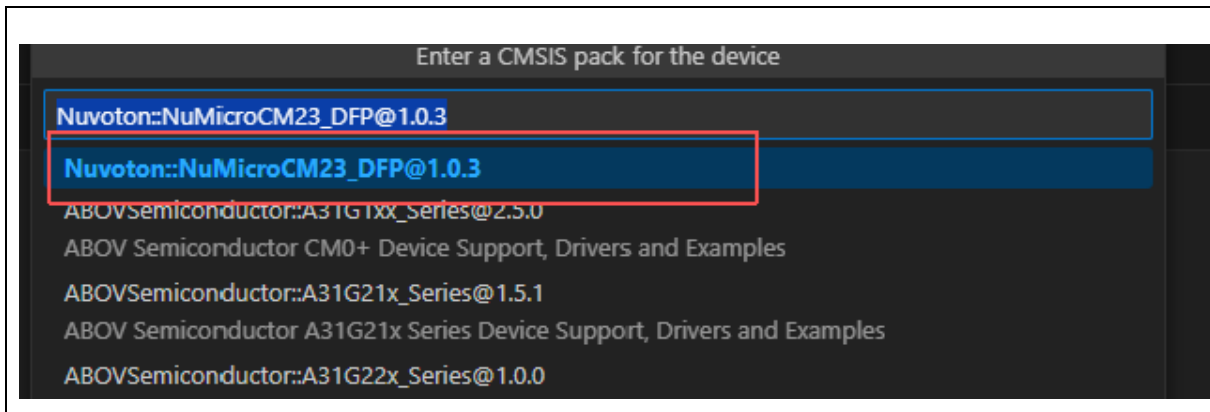
Press OK in the pop-up message and use it.



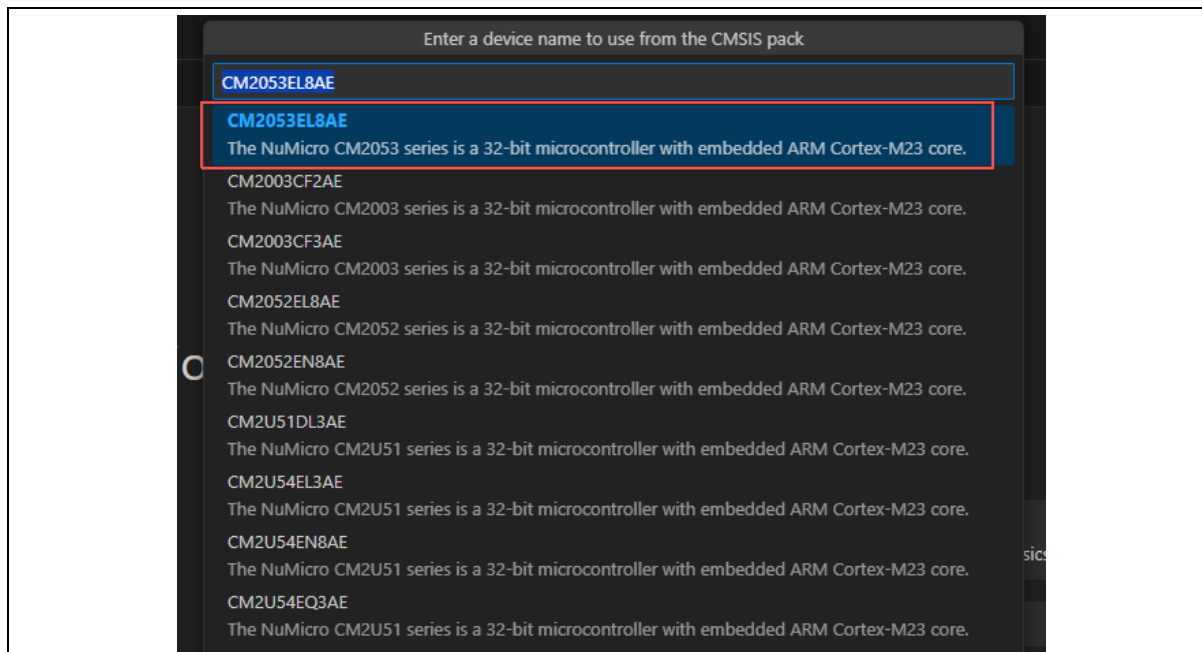
6. Press OK in the pop-up message and configure this device.



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

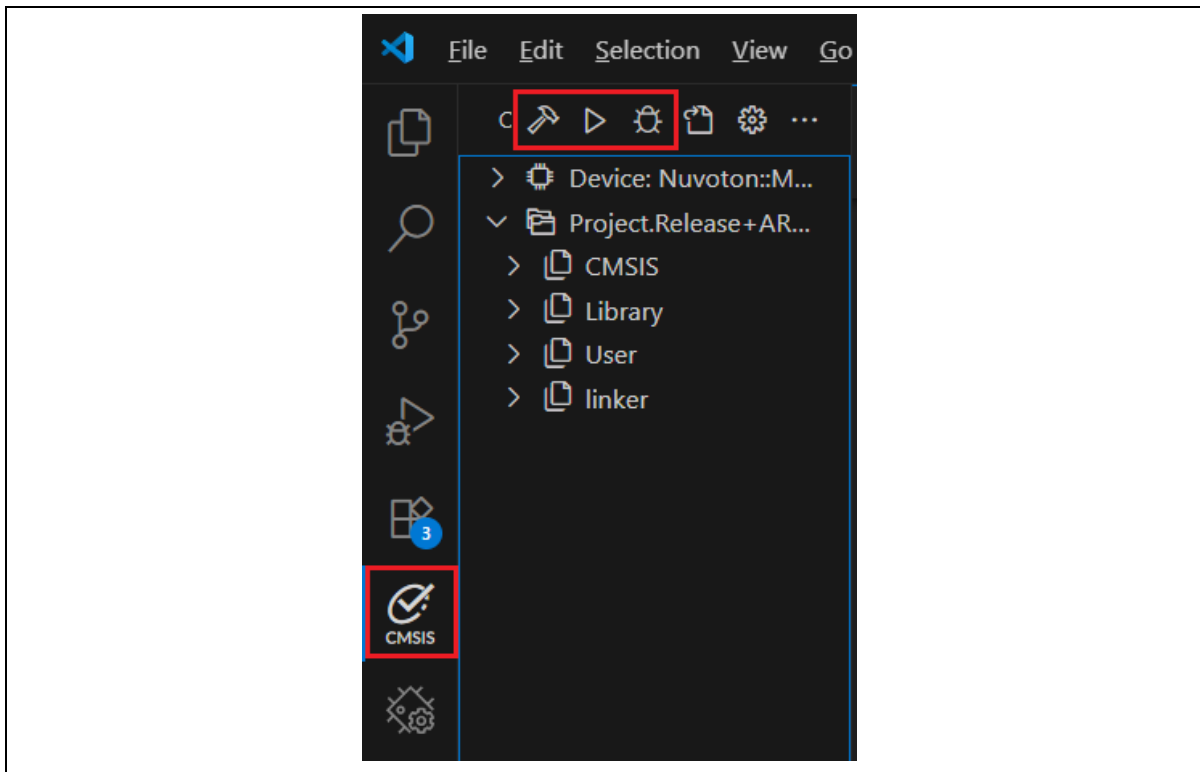


8. Text your “**device model number**” in search bar and select your target device.

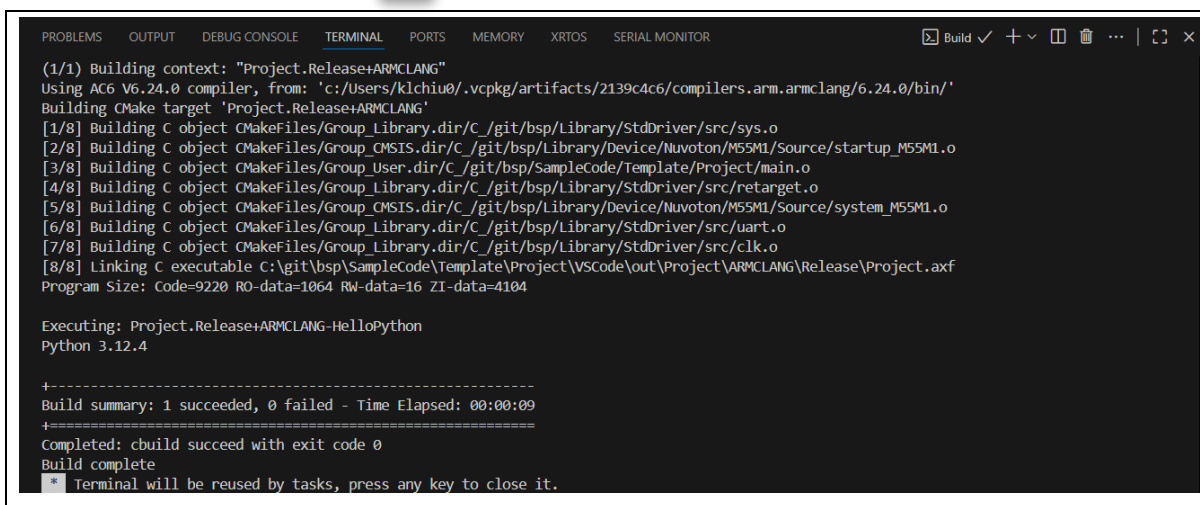


5 RUN THE SAMPLE PROJECT

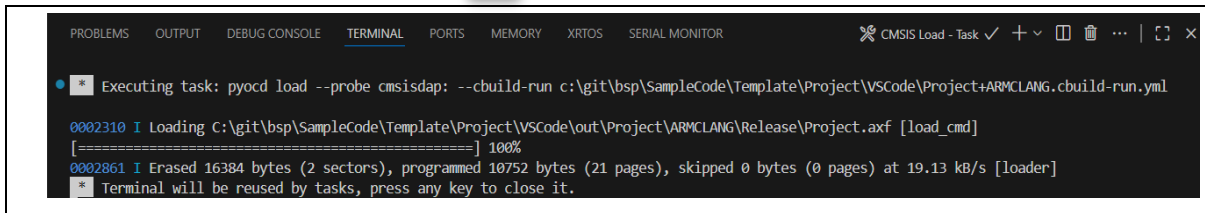
1. Click “CMSIS” icon in the Activity Bar.



2. Click “Build” button.



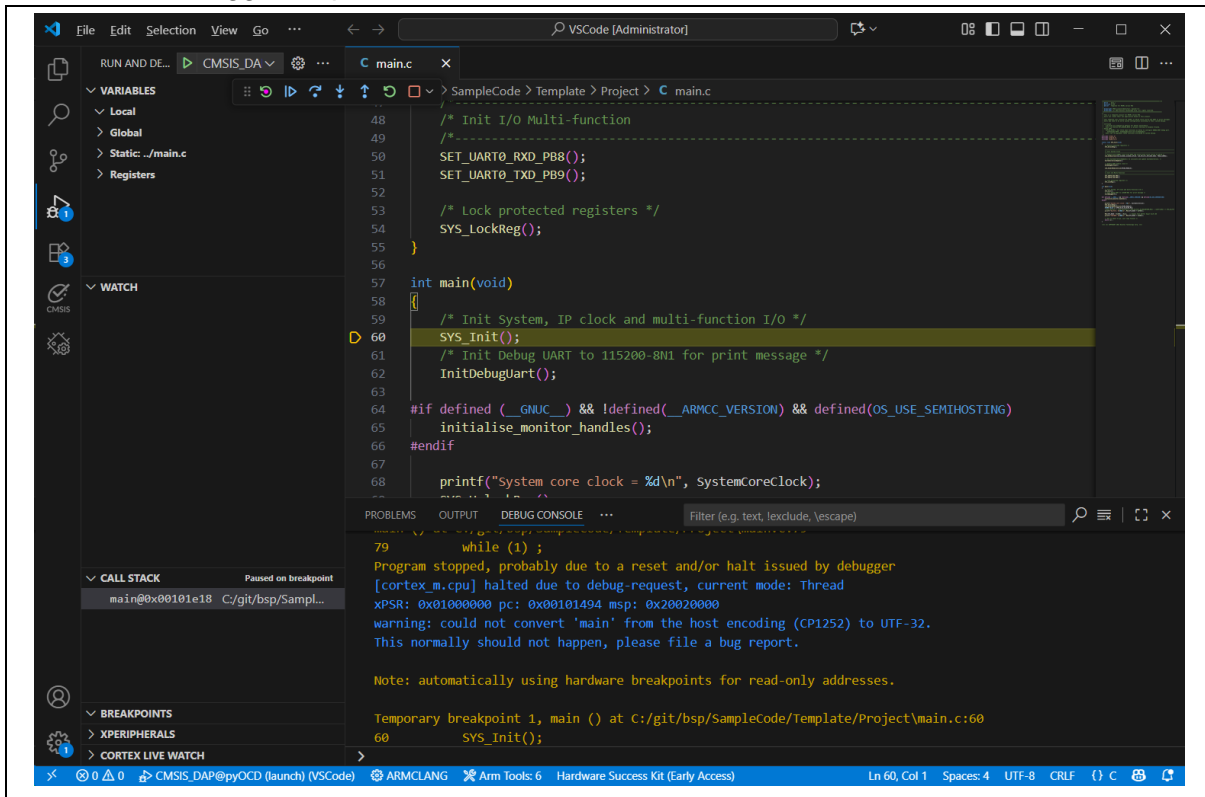
3. Click **“Load & Run”** button.



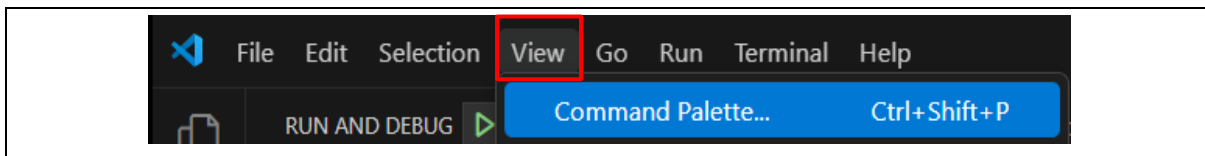
4. Click **“Load & Debug”** button.



The debugger stops at the main function.



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



The screenshot shows the C source code for the STM32L432C8T6 microcontroller. The code is a template project for the M253 series MCU, configured for the IAR/Keil project settings. It includes a main function that initializes the system and prints 'hello world'.

```

1  // STM32L432C8T6
2  // STM32L432C8T6
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251 // STM32L432C8T6
252 // STM32L
```

REVISION HISTORY

Date	Revision	Description
2025.12.25	1.00	1. Initial version.

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