CCS Theia

CCS Theia (Code Composer Studio™ integrated development environment (IDE) Theia): Integrated development environment (IDE) for TI microcontrollers and processors.

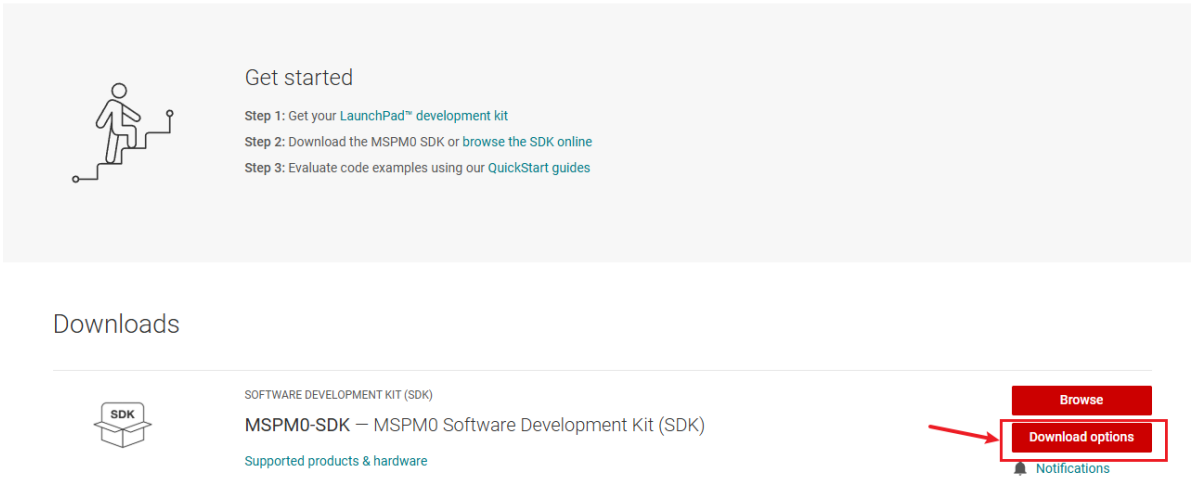
MSPM0 Software Development Kit (SDK): Provides rich and comprehensive software resources, as well as corresponding tools and documents.

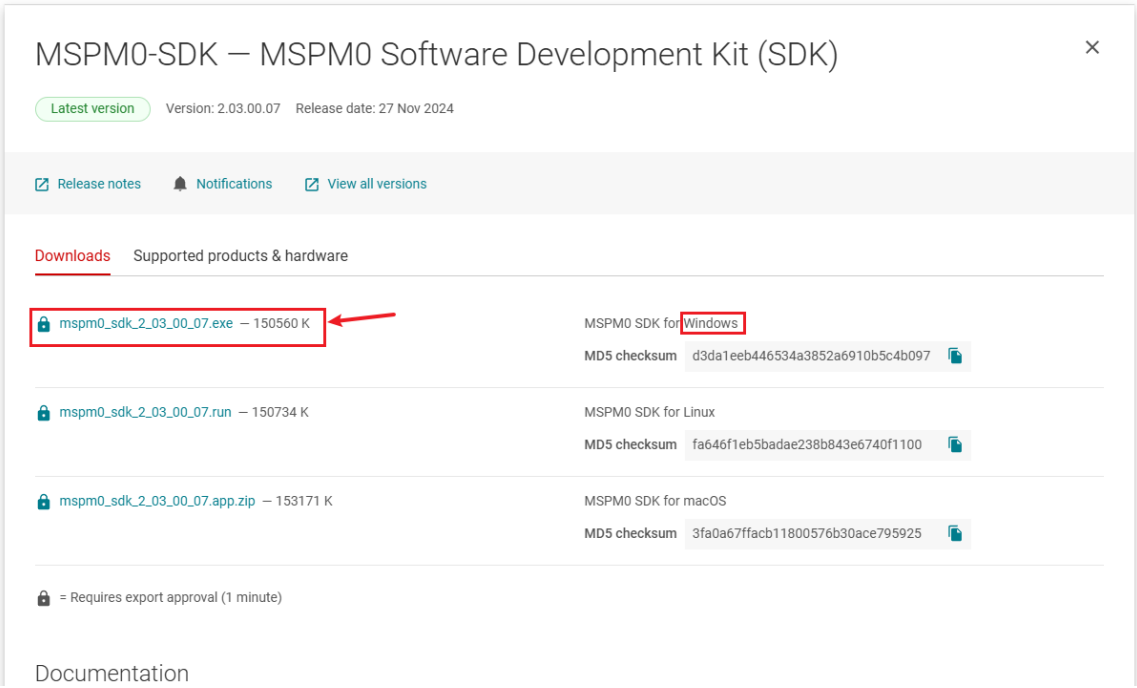
```
The path where the installation package is located and the path where the software is installed should not contain Chinese characters. Please install the installation package in a full English path
```

1. MSPM0-SDK download

Download address: [MSPM0-SDK Software development kit (SDK) | TI.com]

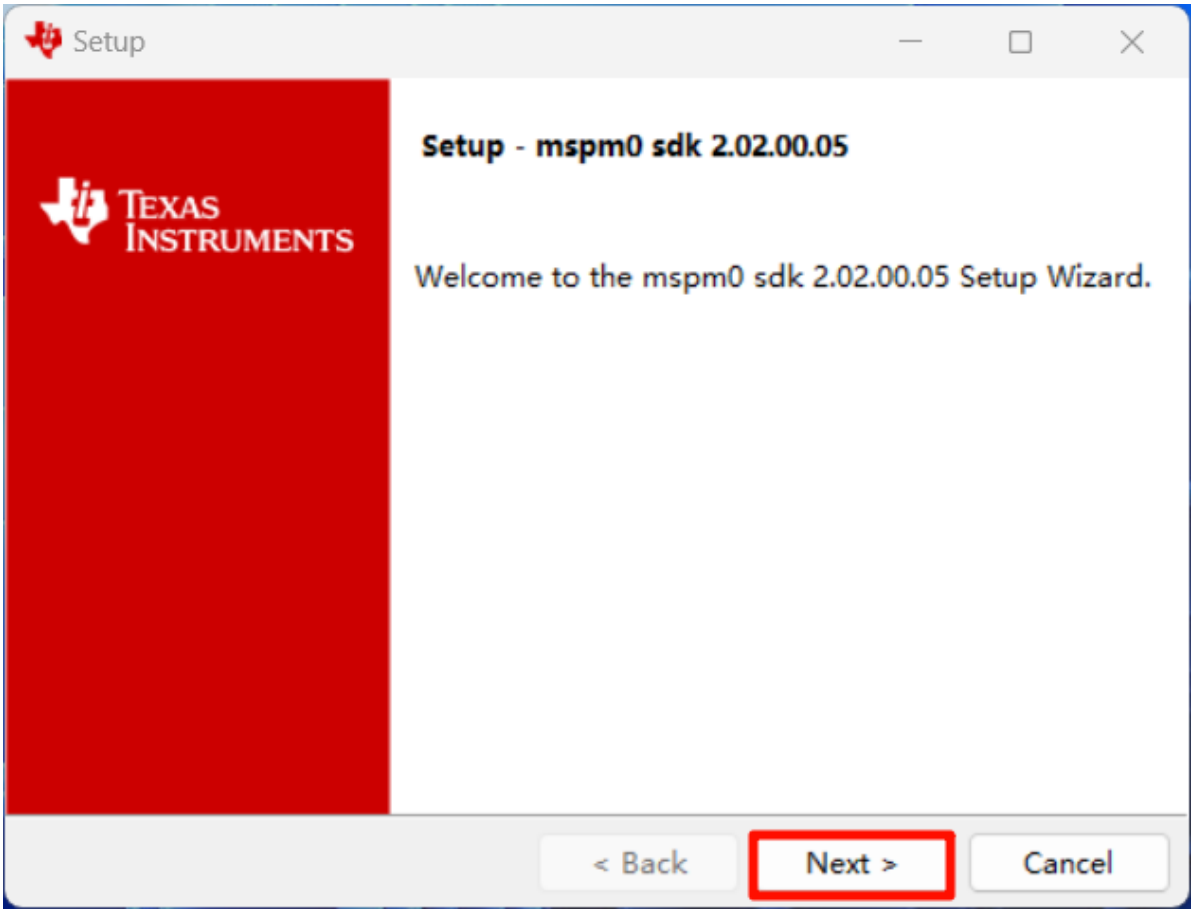
You can download the latest version from the download link above, or use the version provided in our materials.



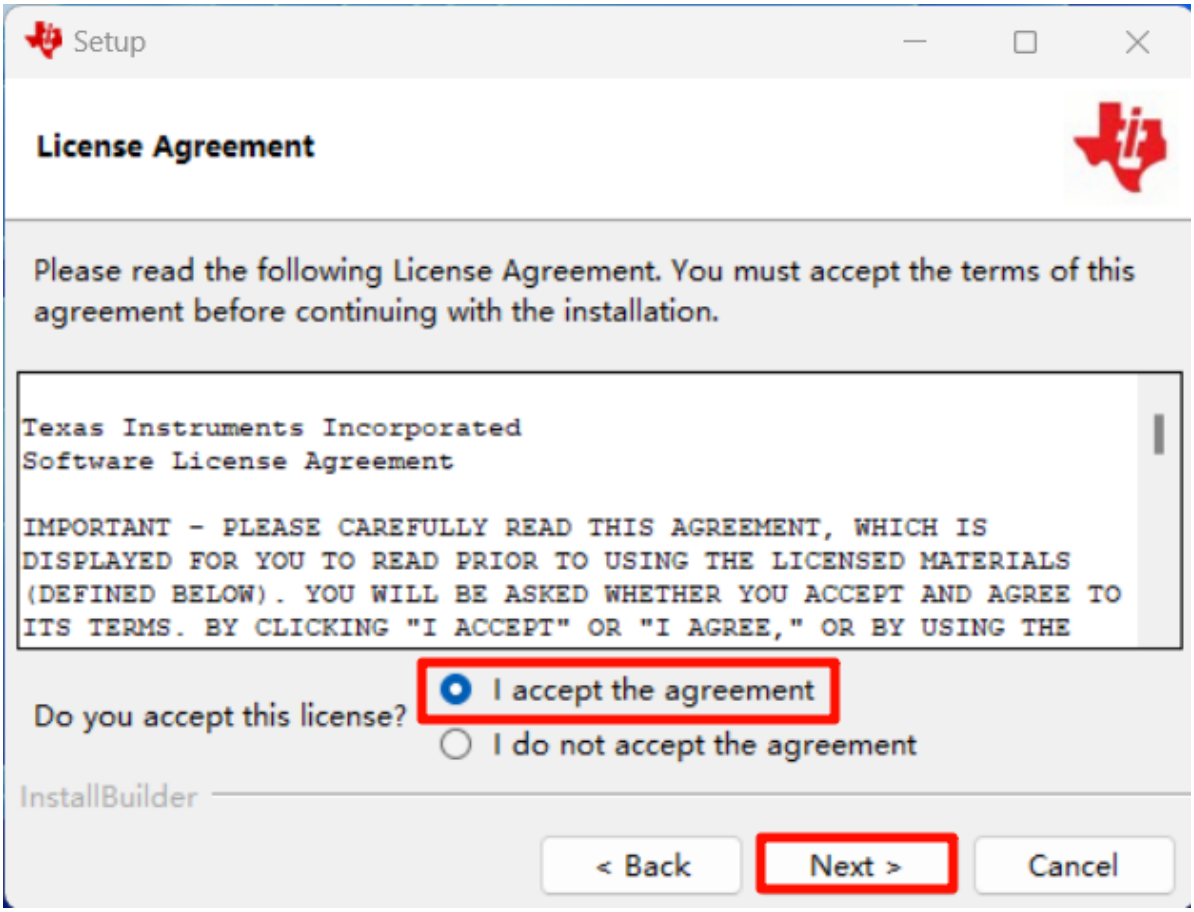


2. MSPM0-SDK installation

Open `mspm0_sdk_xx.exe` as an administrator and install according to the prompts:

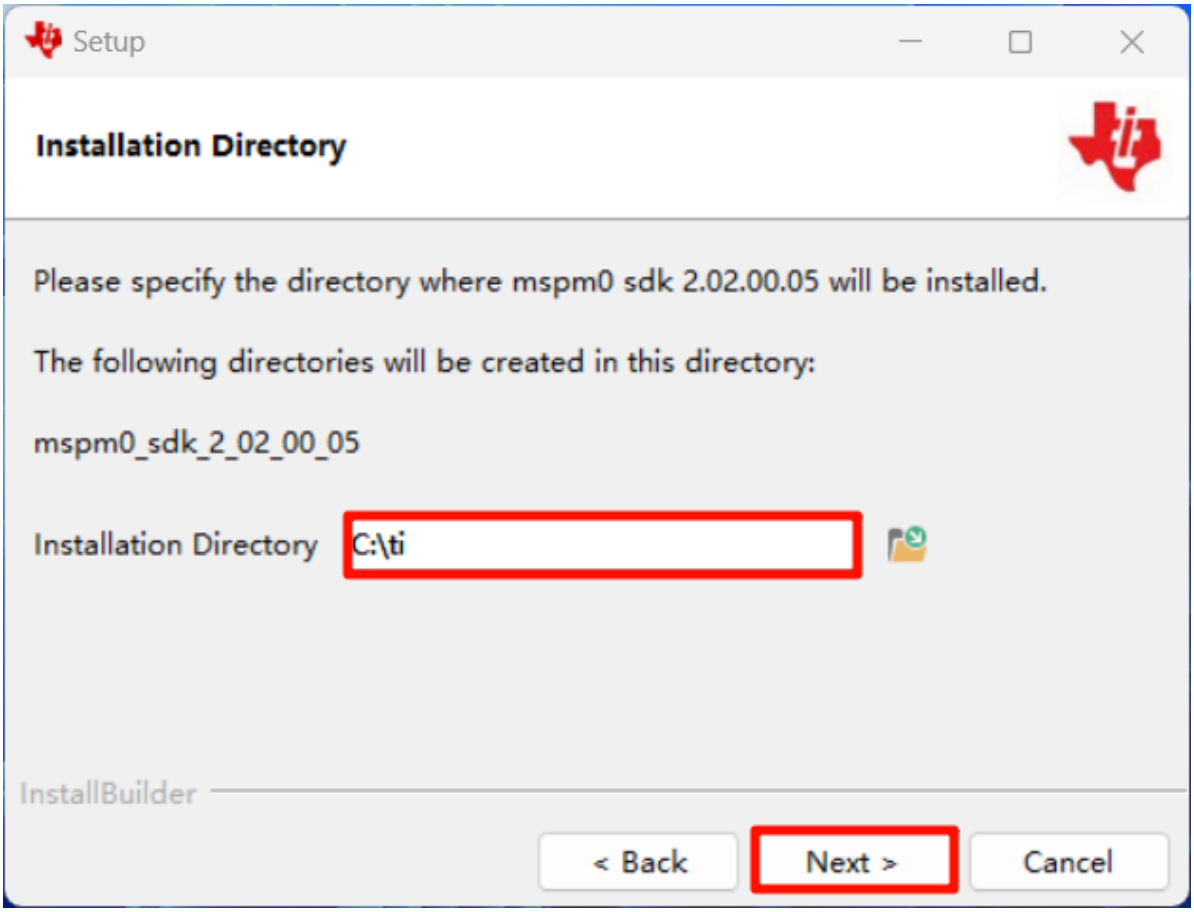


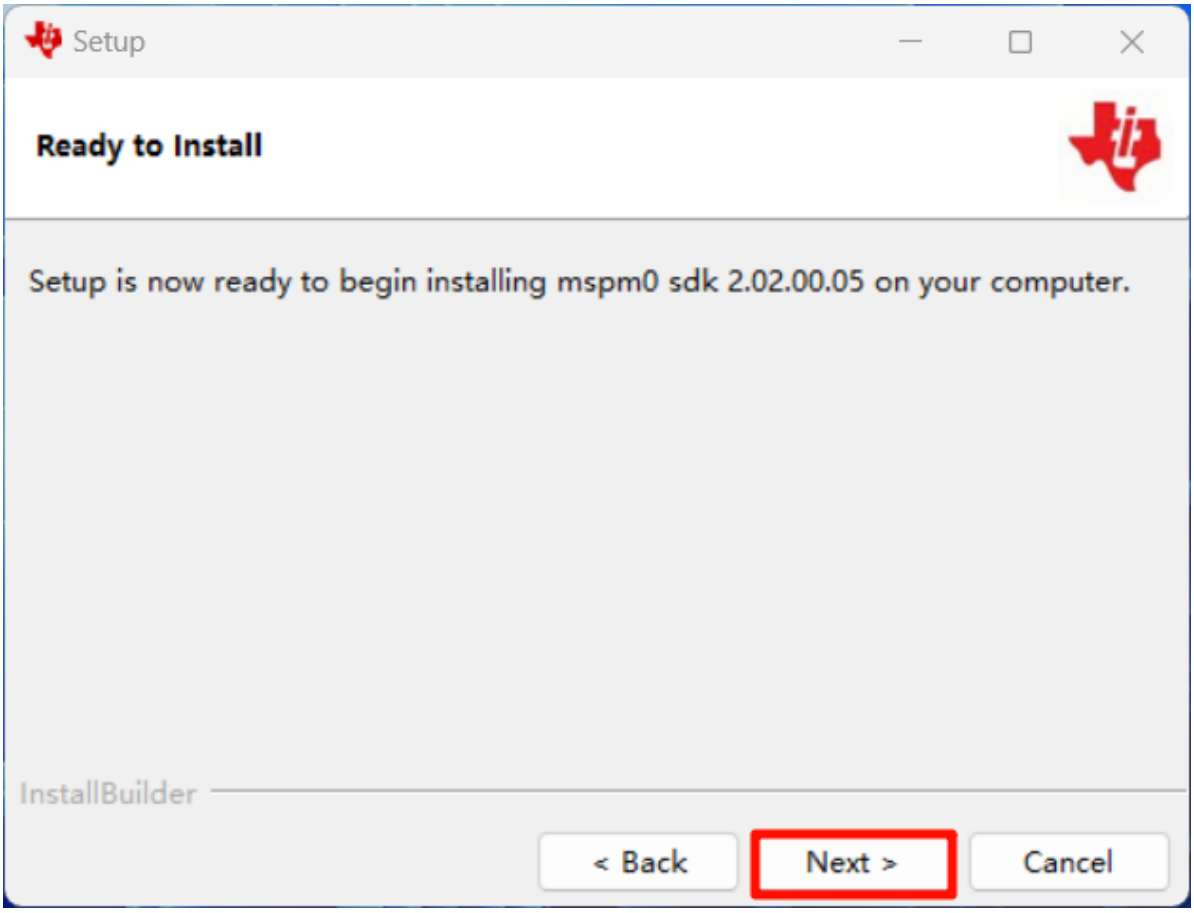
> **Agree to the agreement**

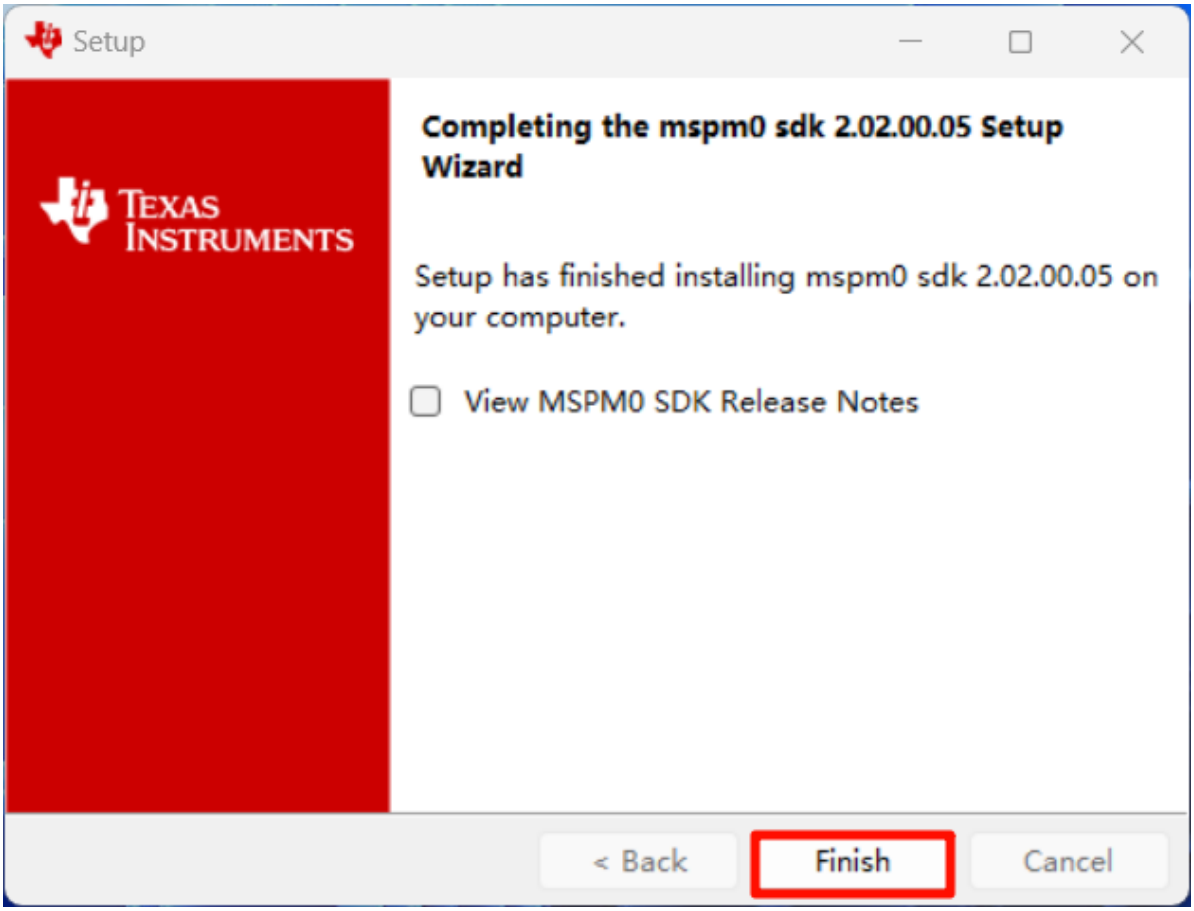


Installation location

The recommended default location for the software is:

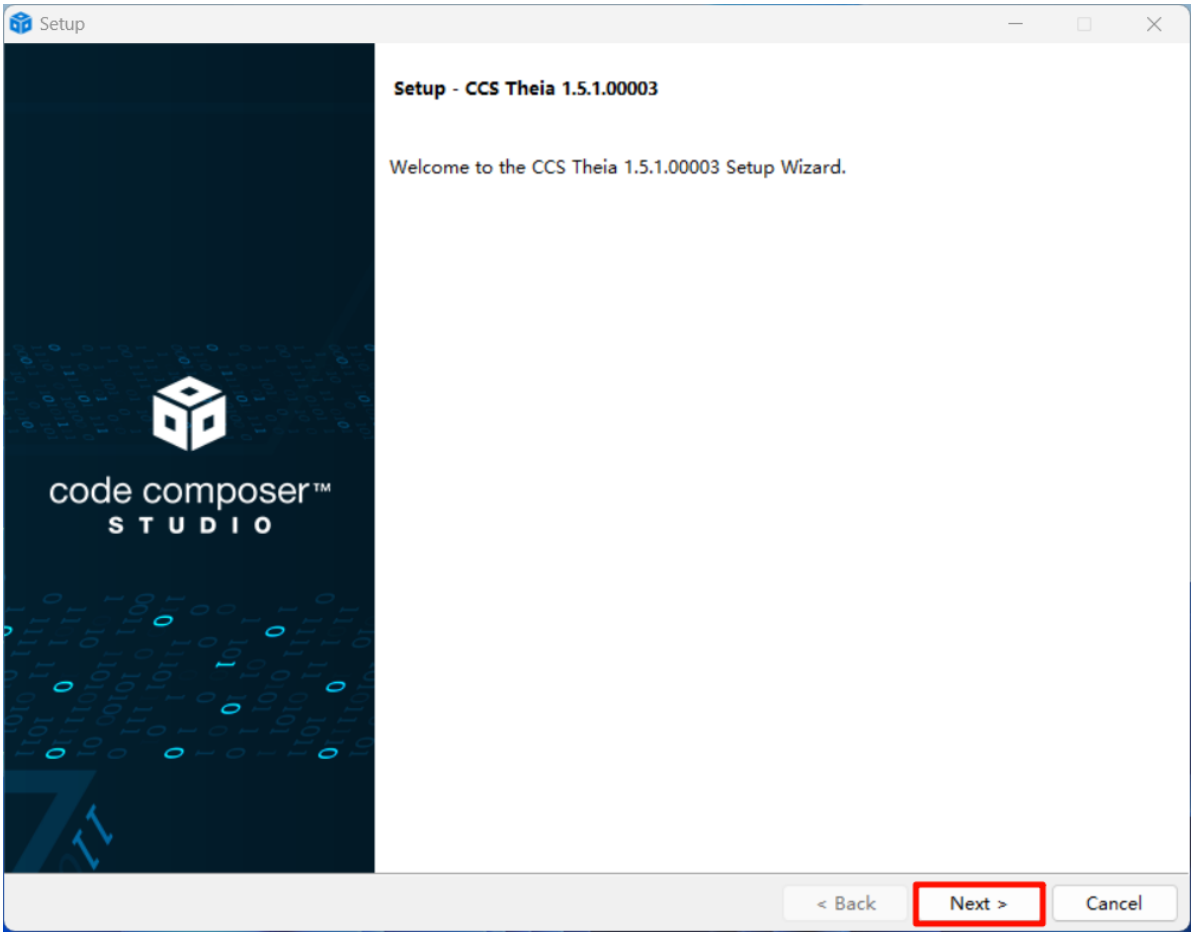




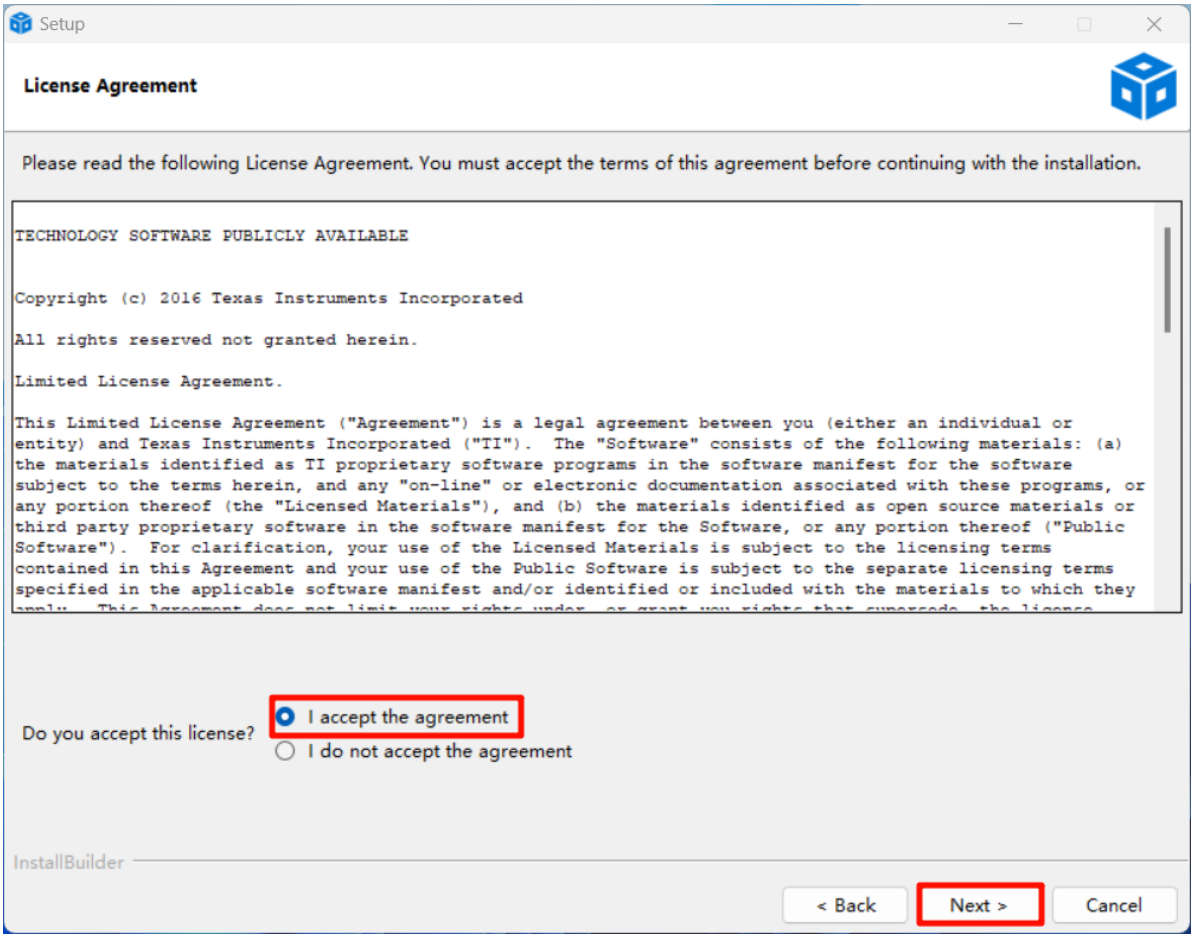


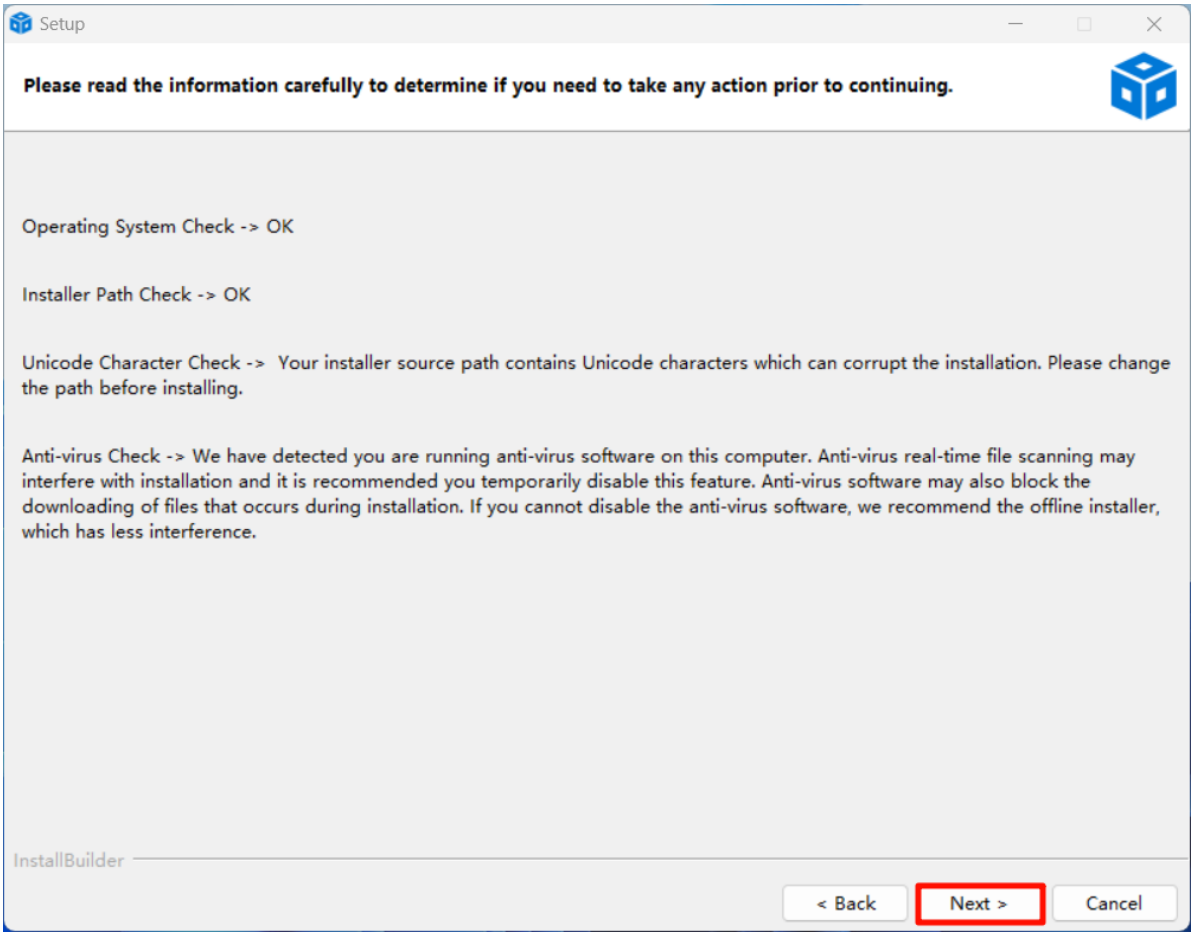
3. CCS Theia installation

Open `ccs_theia_setup_xx.exe` as an administrator and install according to the prompts:



Agree to the agreement

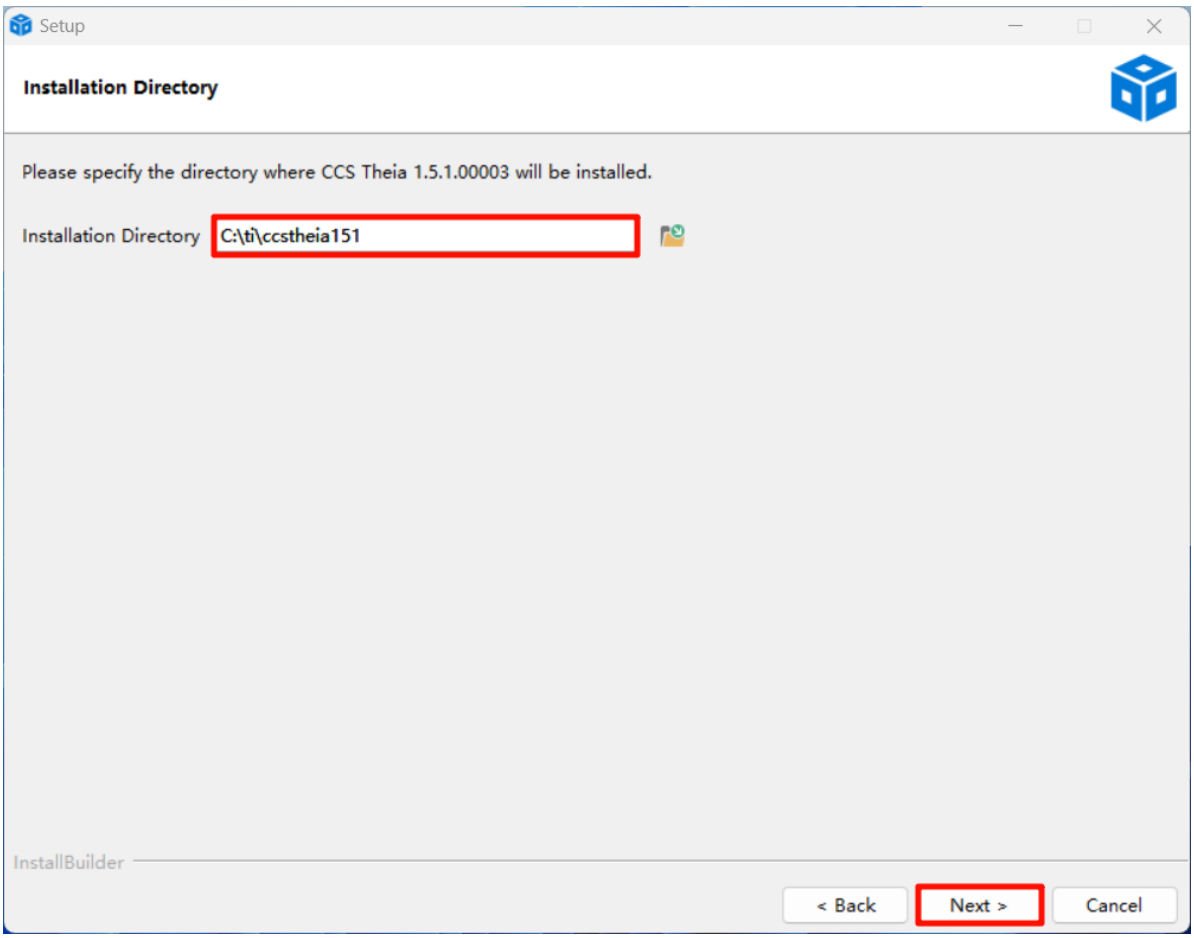




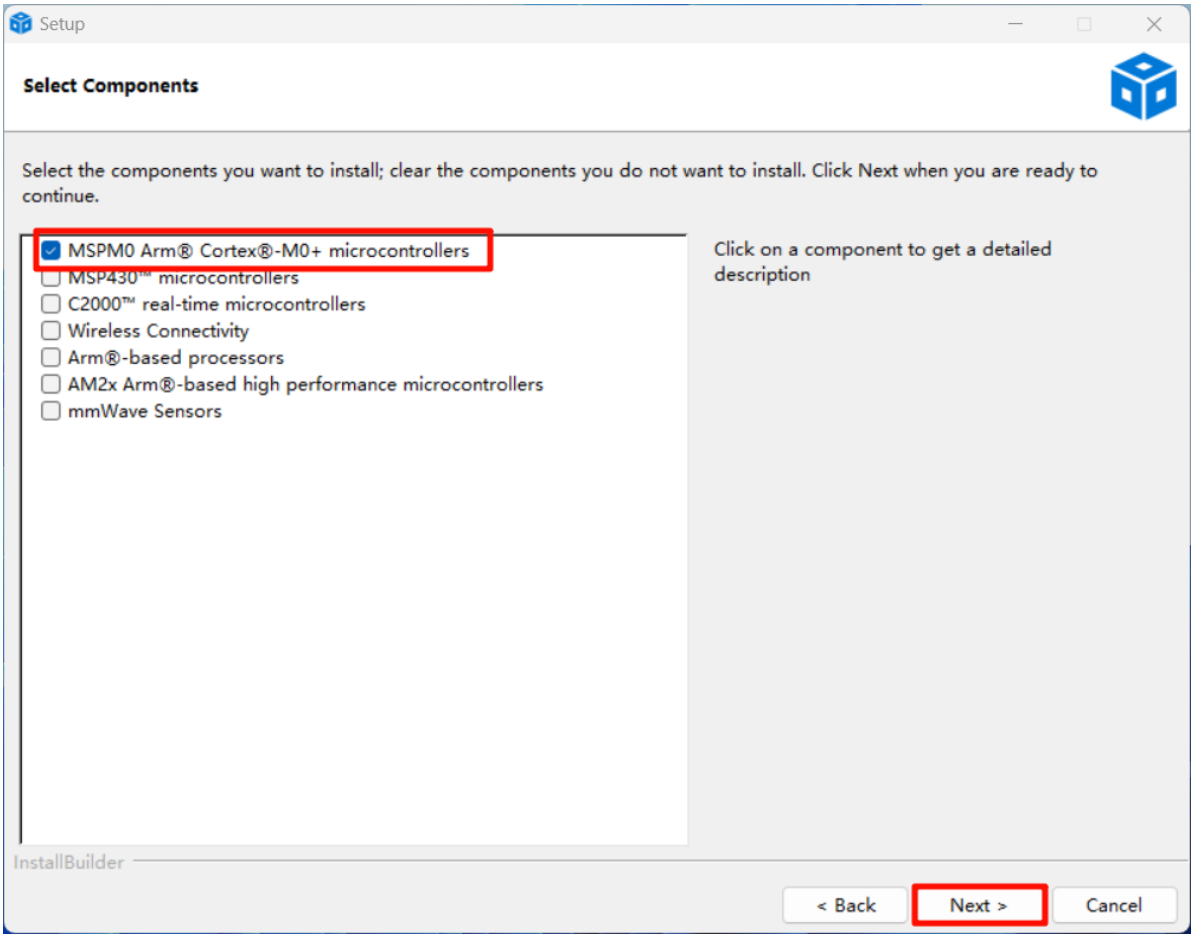
Installation location

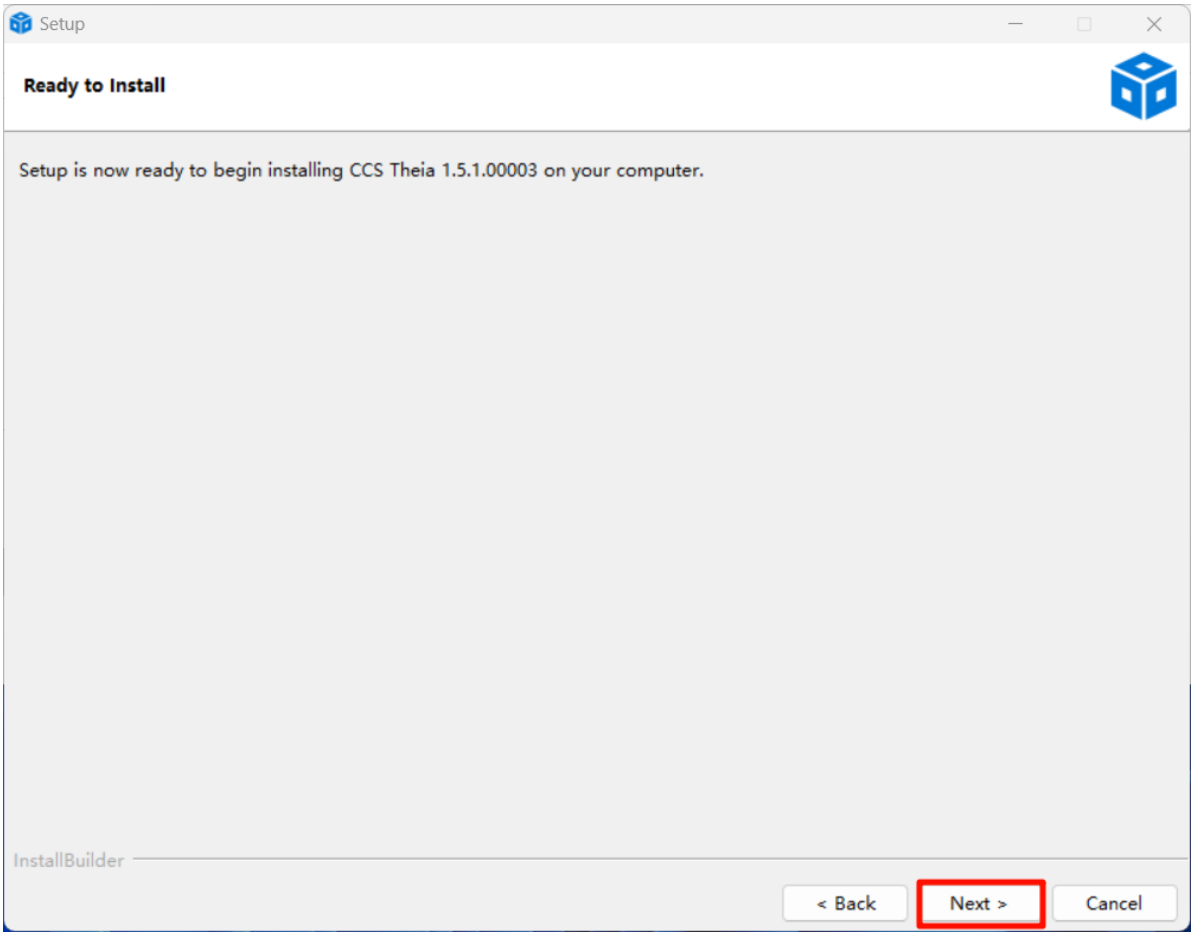
The recommended default location for the software is:

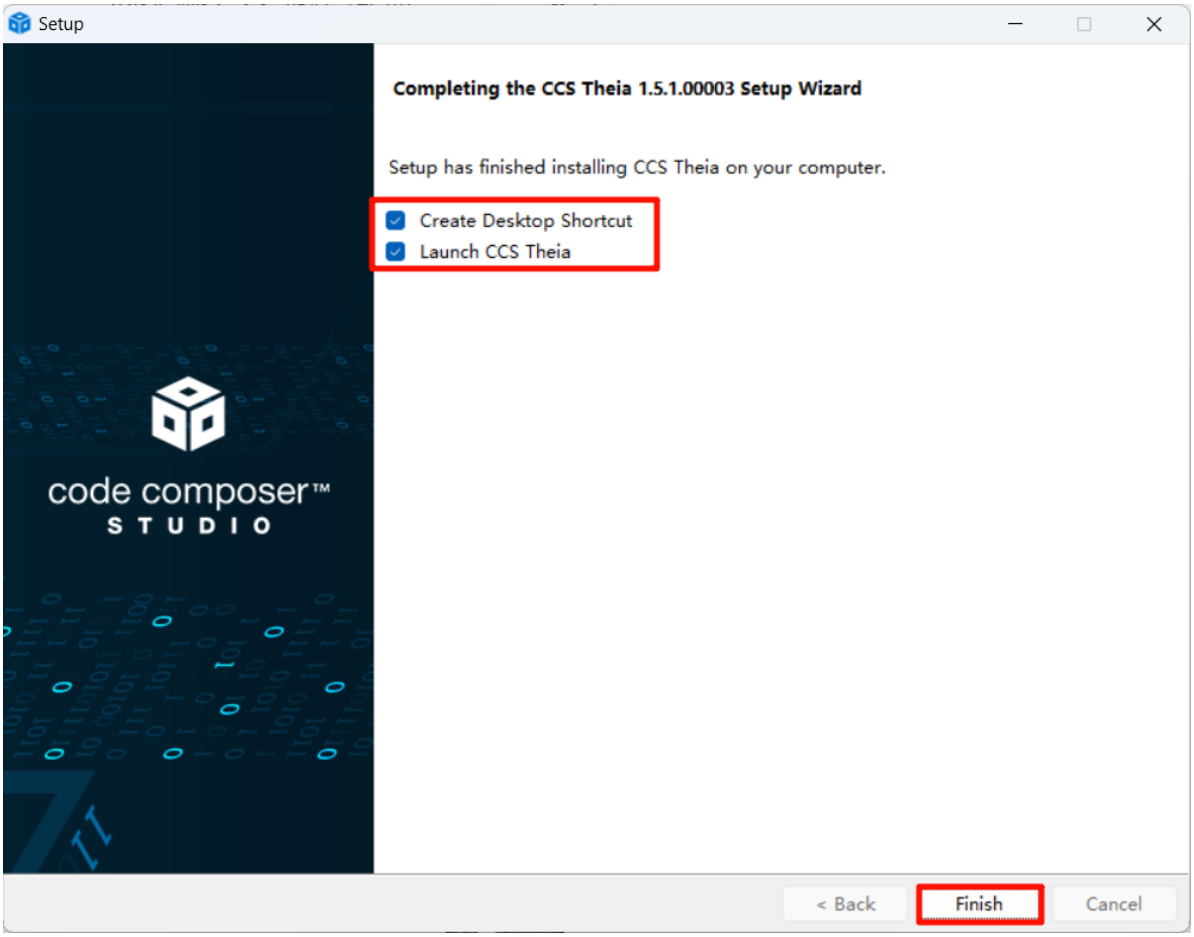
Note that there cannot be Chinese characters in the path. If your computer user name is Chinese, it cannot be installed by default and must be installed in the English path.

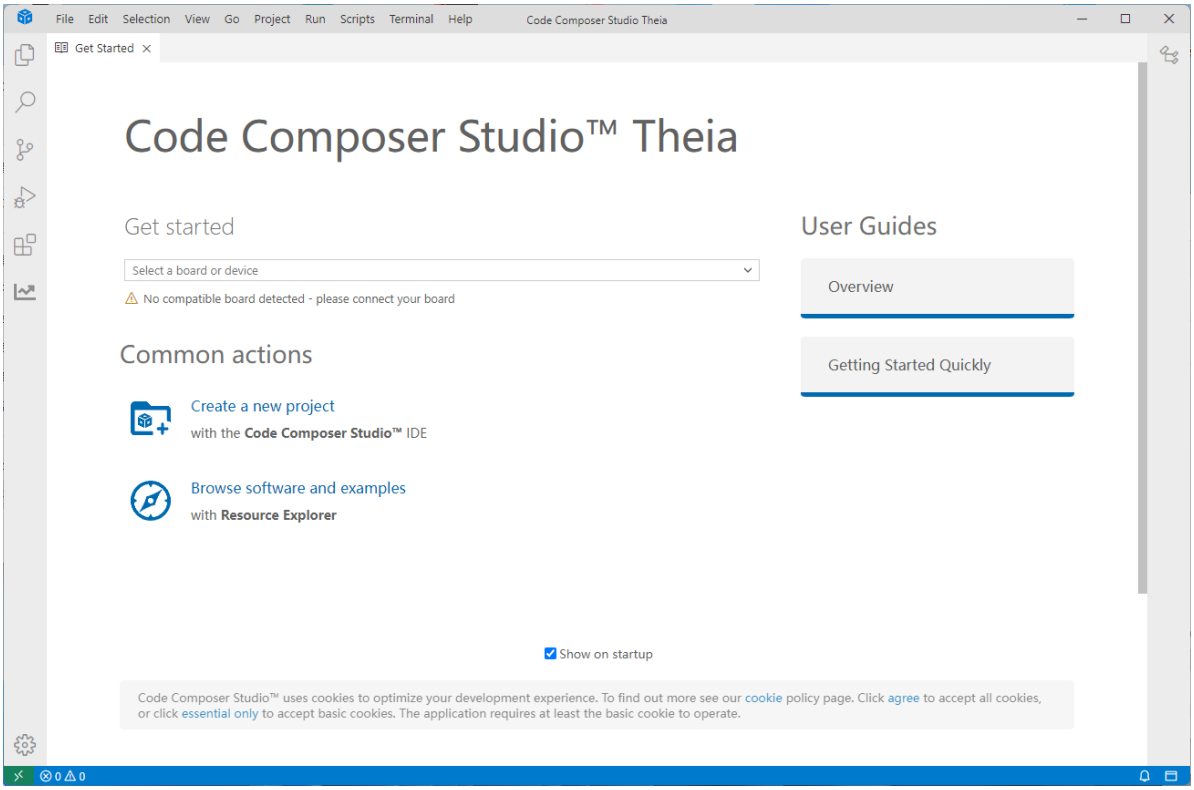


Install components




Setup
Ready to Install
Setup is now ready to begin installing CCS Theia 1.5.1.00003 on your computer.
InstallBuilder
< Back
Next >
Cancel


Setup
code composer™
STUDIO
Completing the CCS Theia 1.5.1.00003 Setup Wizard
Setup has finished installing CCS Theia on your computer.
Create Desktop Shortcut
Launch CCS Theia
< Back
Finish
Cancel

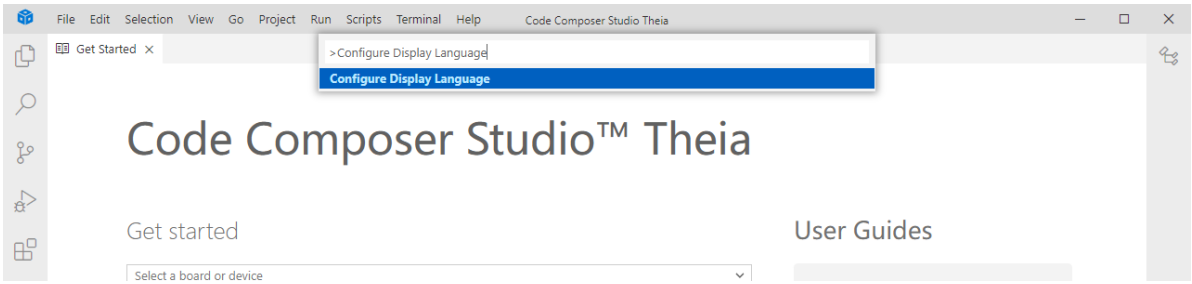


4. Manually configure SDK

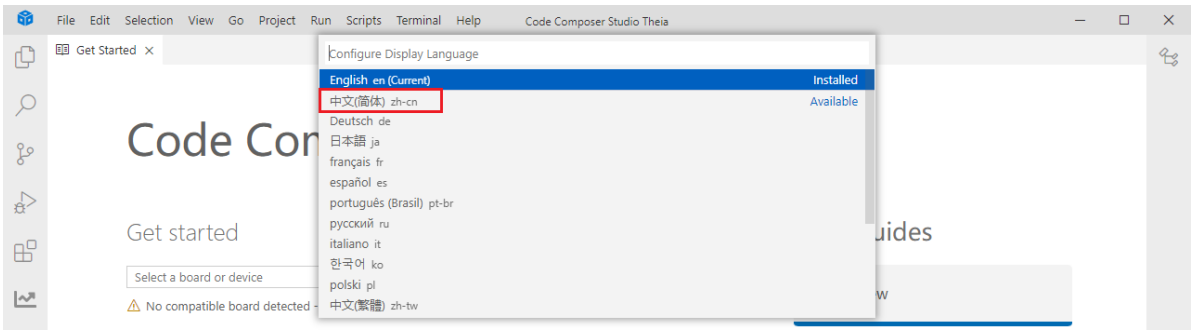
4.1 Configure other language display*

> You can skip this configuration tutorial without affecting the environment construction. Here we take setting Chinese display as an example.

Press the shortcut keys shift+ctrl+P and enter `Configure Display Language` to enter the language configuration interface.

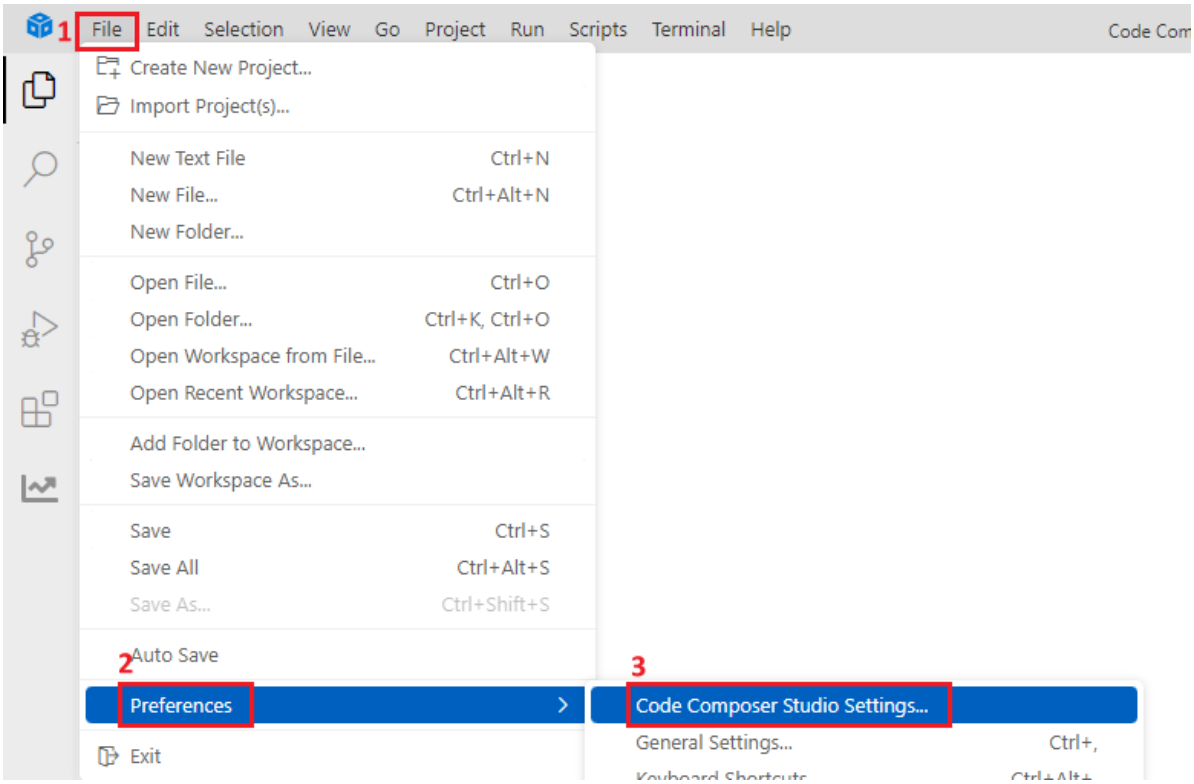


After CCS loads all languages, select Chinese to install.

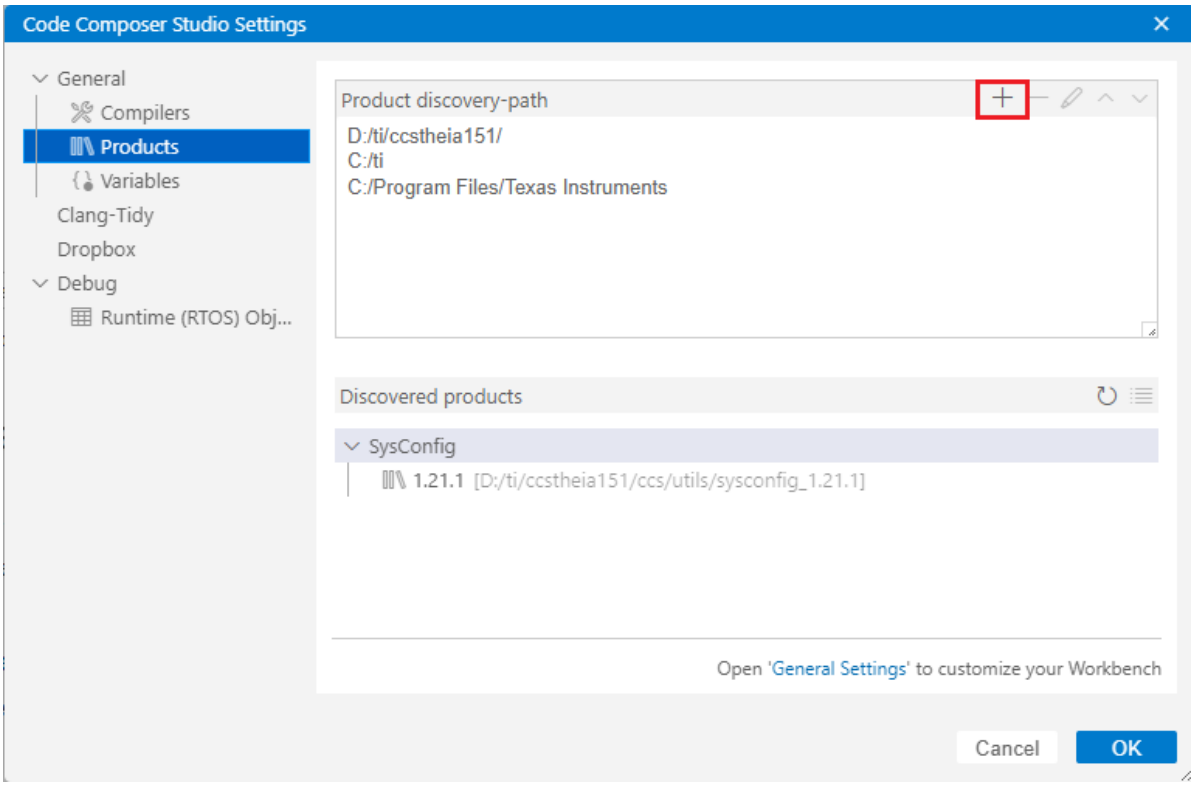


4.2 Configure SDK

Open **CCS File --> Preferences Code --> Composer Studio Settings...**

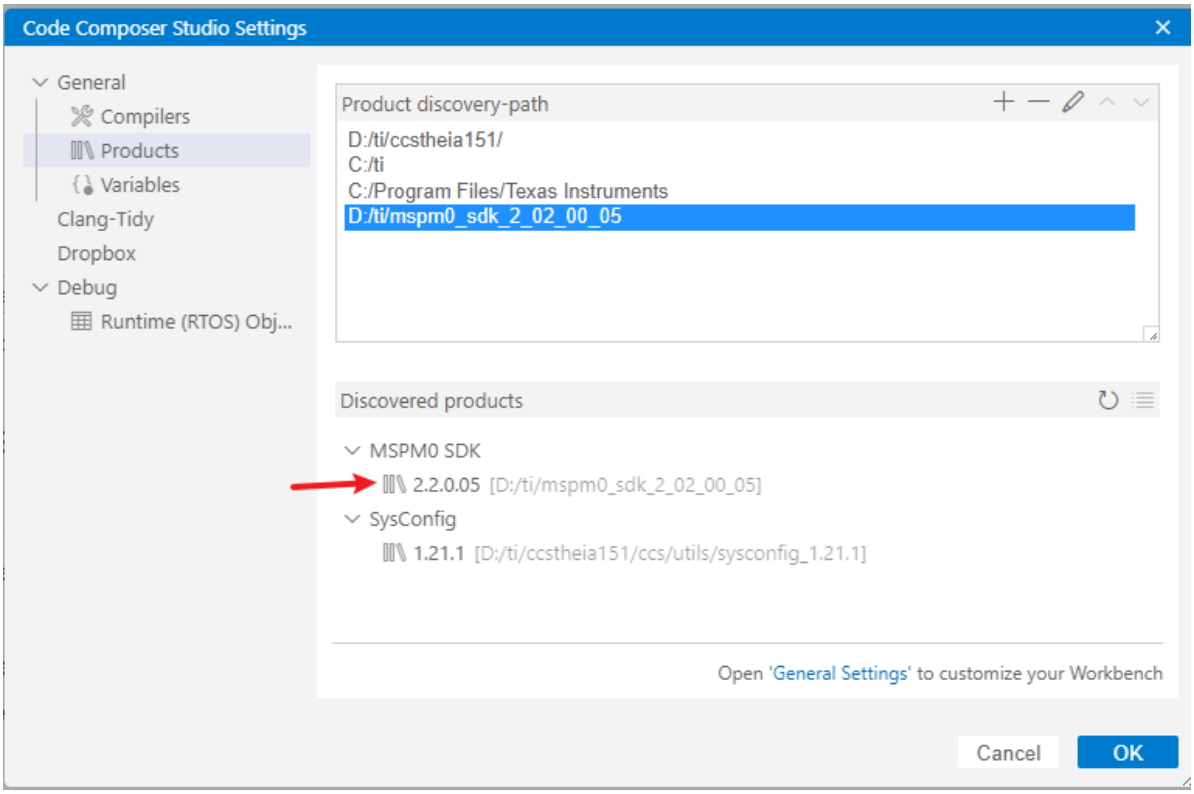


Click `Products` and add the path of the SDK.



Select your own SDK path and import it into the CCS configuration, and the SDK will be automatically recognized.

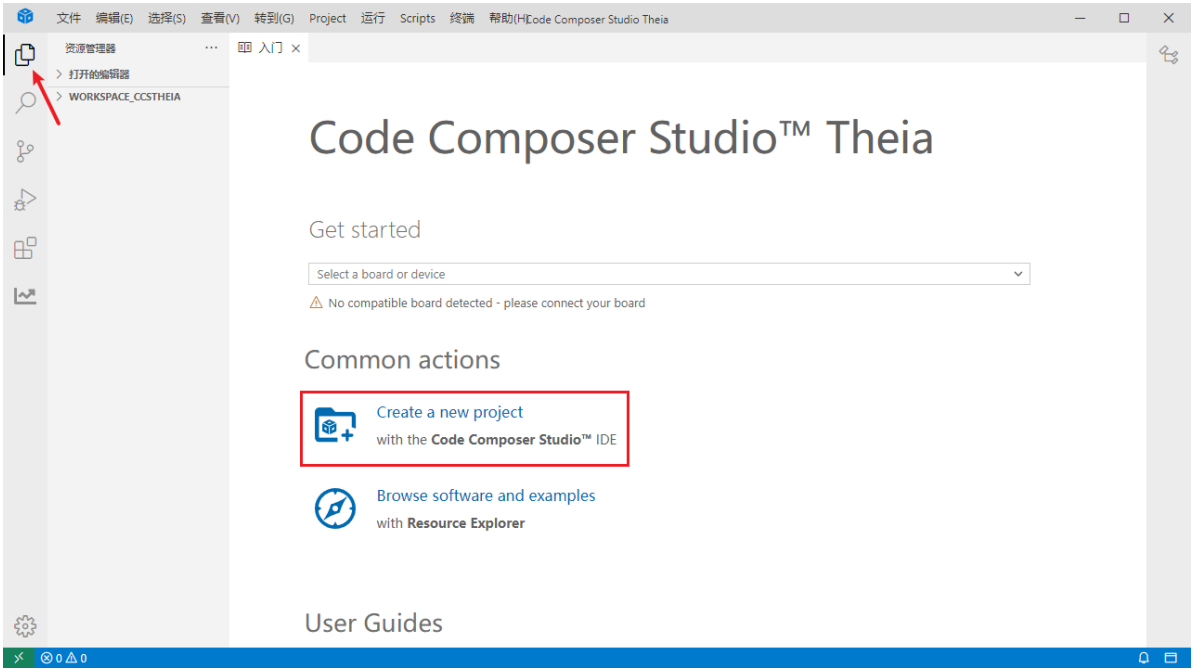
> The following figure is my SDK path address.



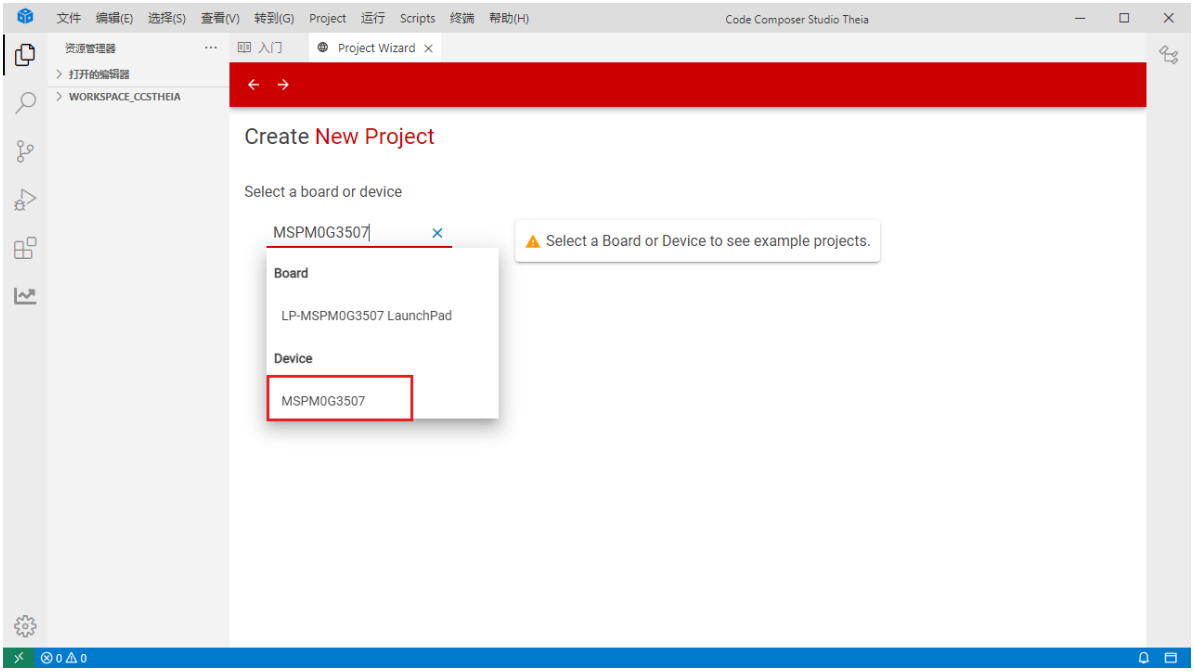
Click OK after completion.

5. Create a new project

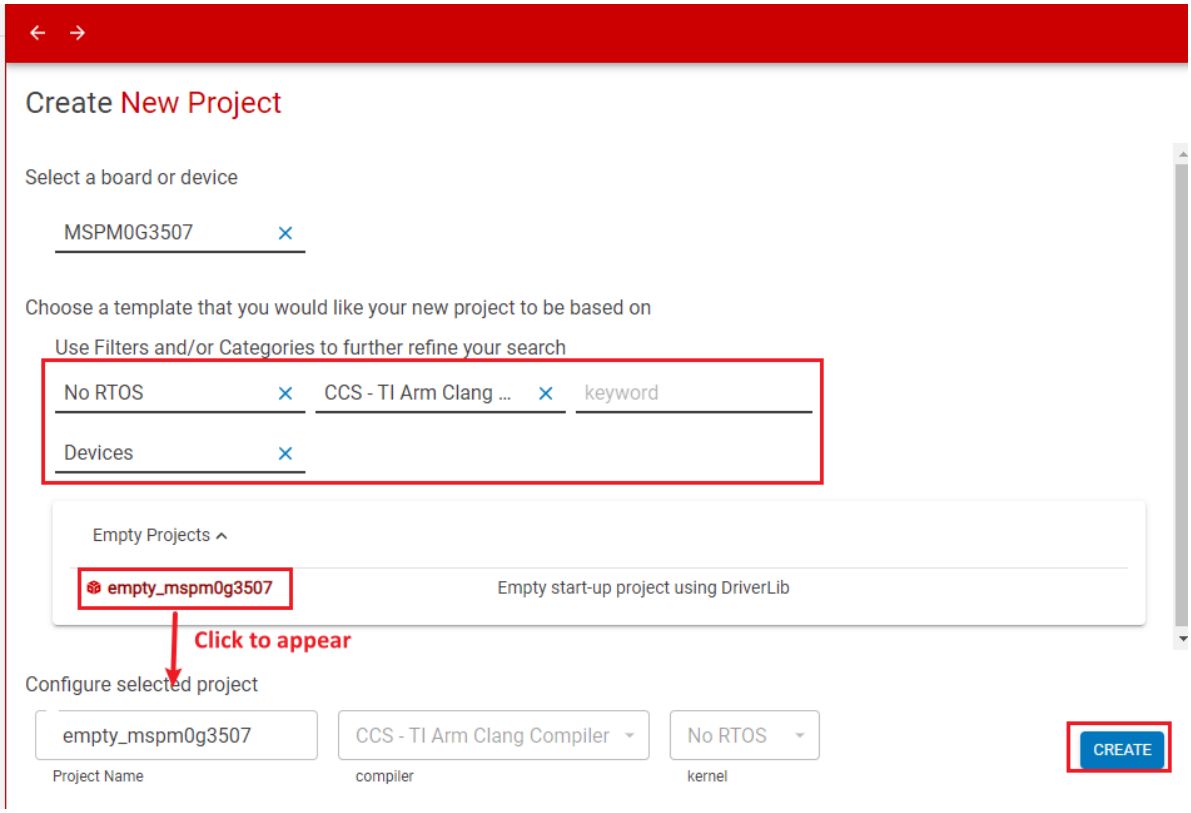
Click `Create a new project` to create a new project



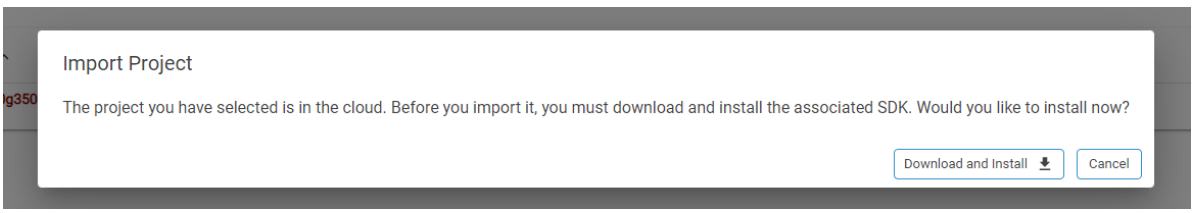
First manually enter MSPM0G3507, and select the device as MSPM0G3507 in the drop-down option.



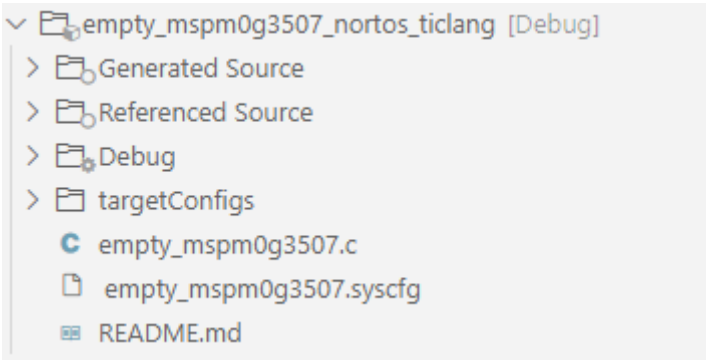
Then set the parameters as follows. After setting, click `CREAT` to create the project



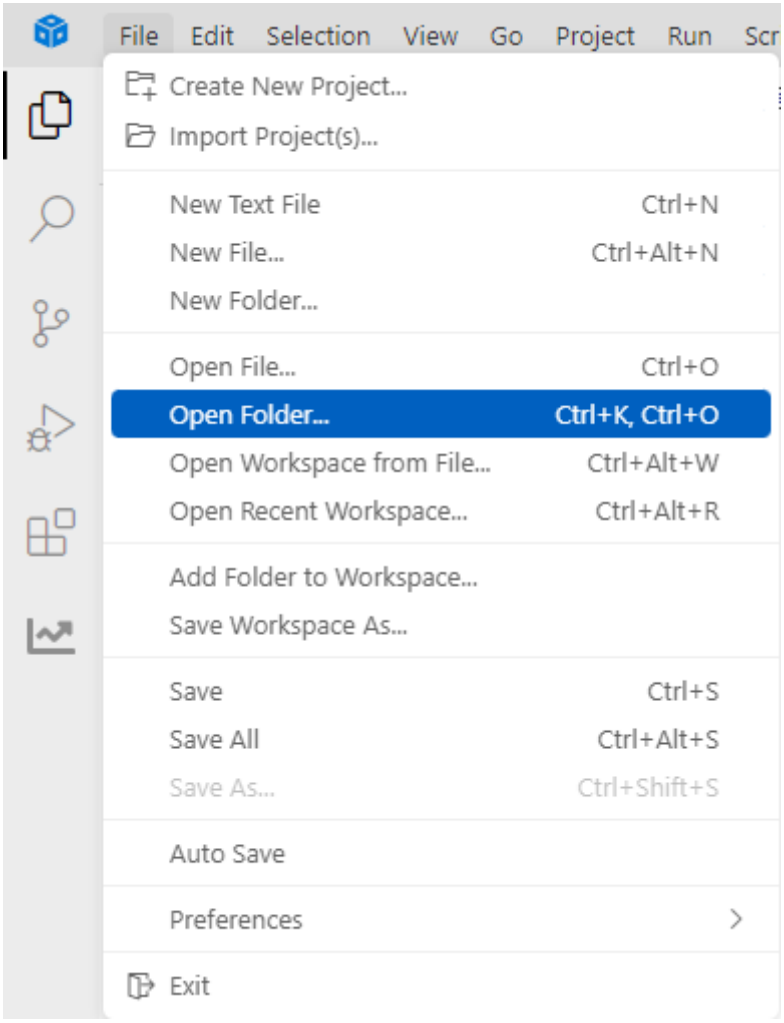
During creation, you may be prompted that the SDK is not detected and whether to install it online. The SDK has been manually configured before. If a prompt appears, it means the latest version of the SDK. You can go to the SDK download link to download the latest version and reconfigure it.

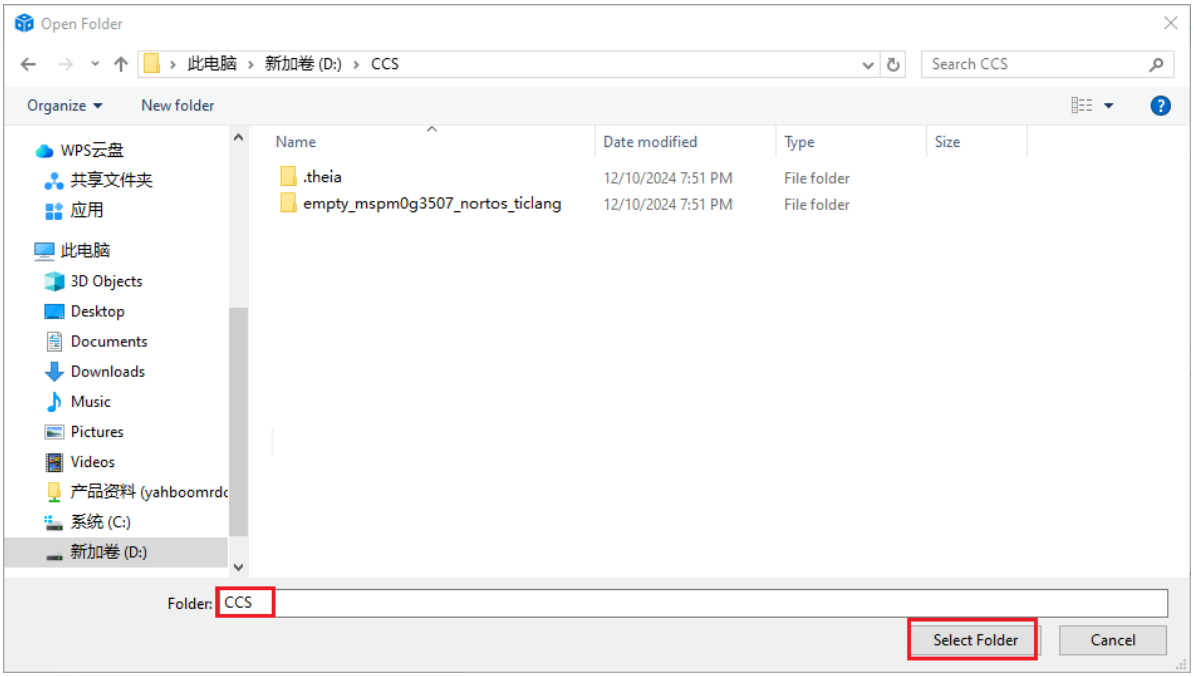


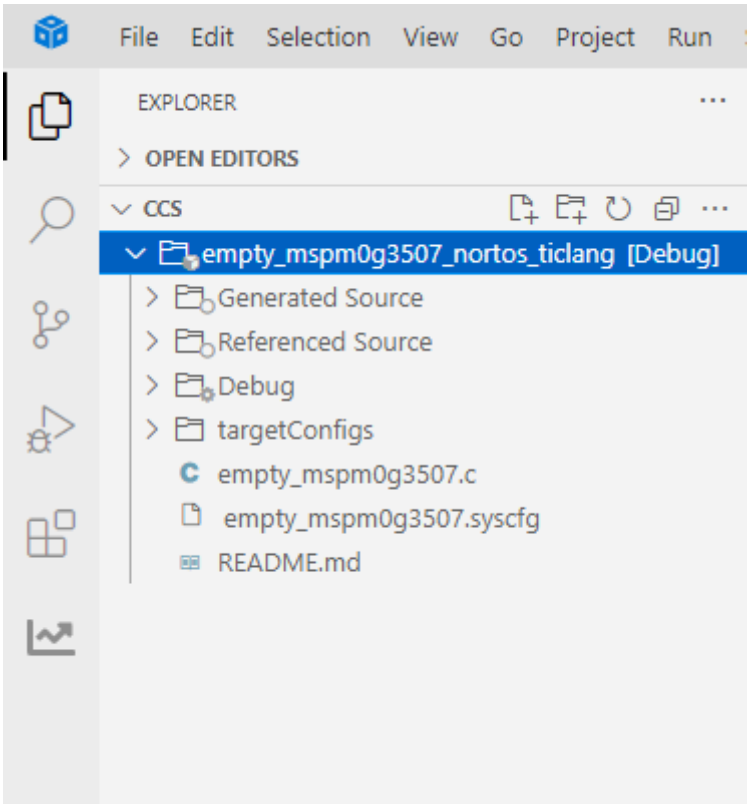
Here is the project we created.



The first time you open the software, the newly created project will be placed in the C:\Users\Administrator\workspace_ccstheia (workspace) path by default. You can copy the project file to another folder, and then open this folder in CCS Theia to generate a new workspace. The next time you open the software, the new workspace will be opened by default, and the newly created project will also be placed in the workspace by default.

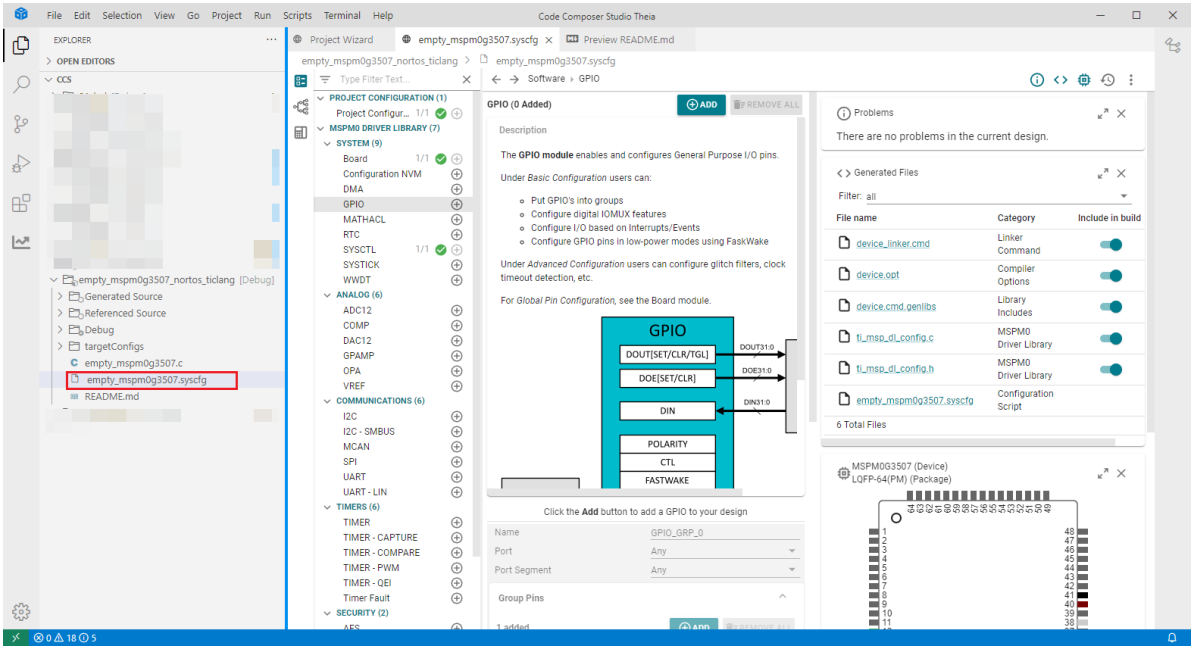






6. SYSCFG settings

Click on the .syscfg file of the project and configure it on this page. After the configuration is completed, use the shortcut key `Ctrl + S` to save our configuration.

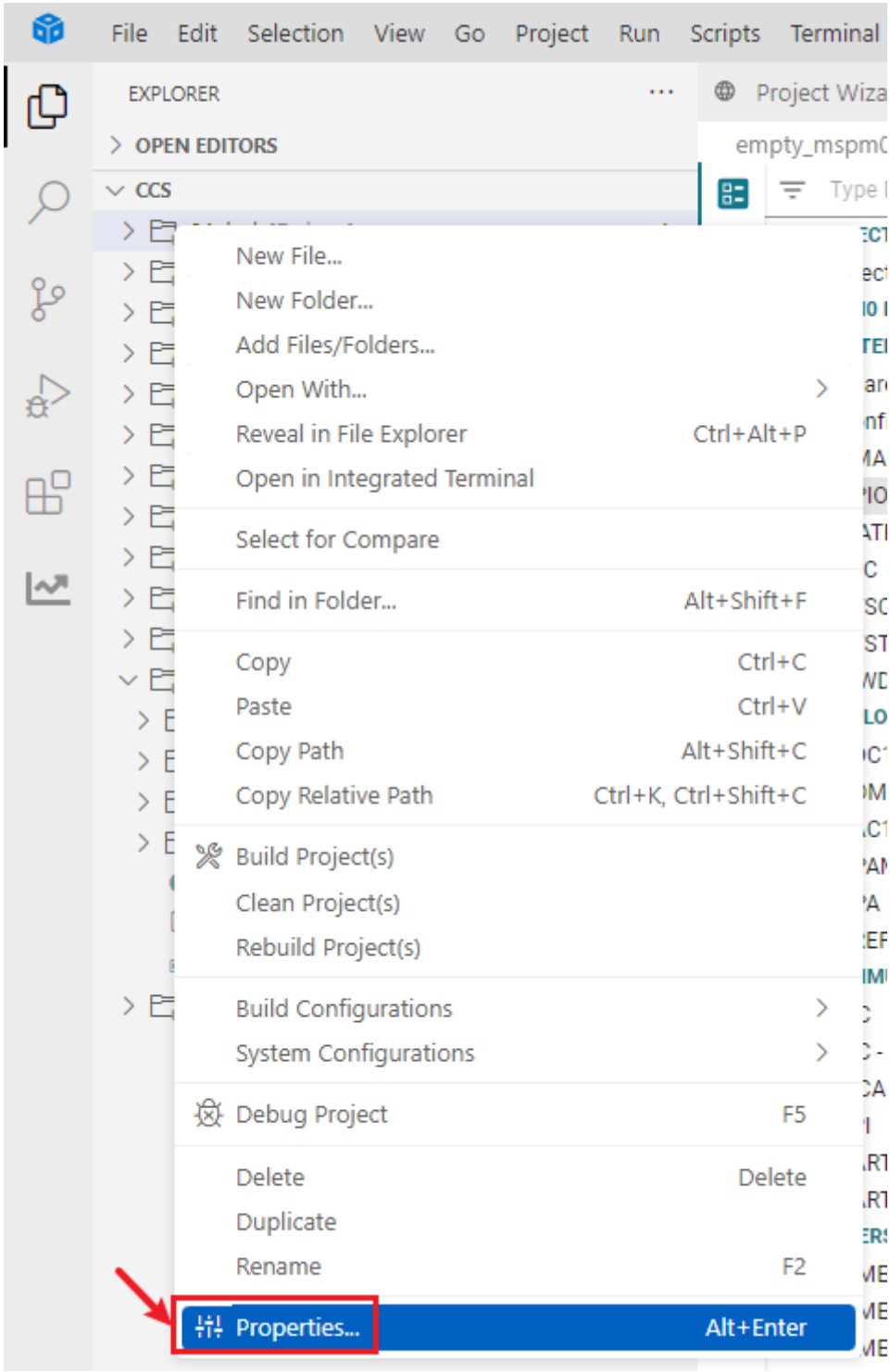


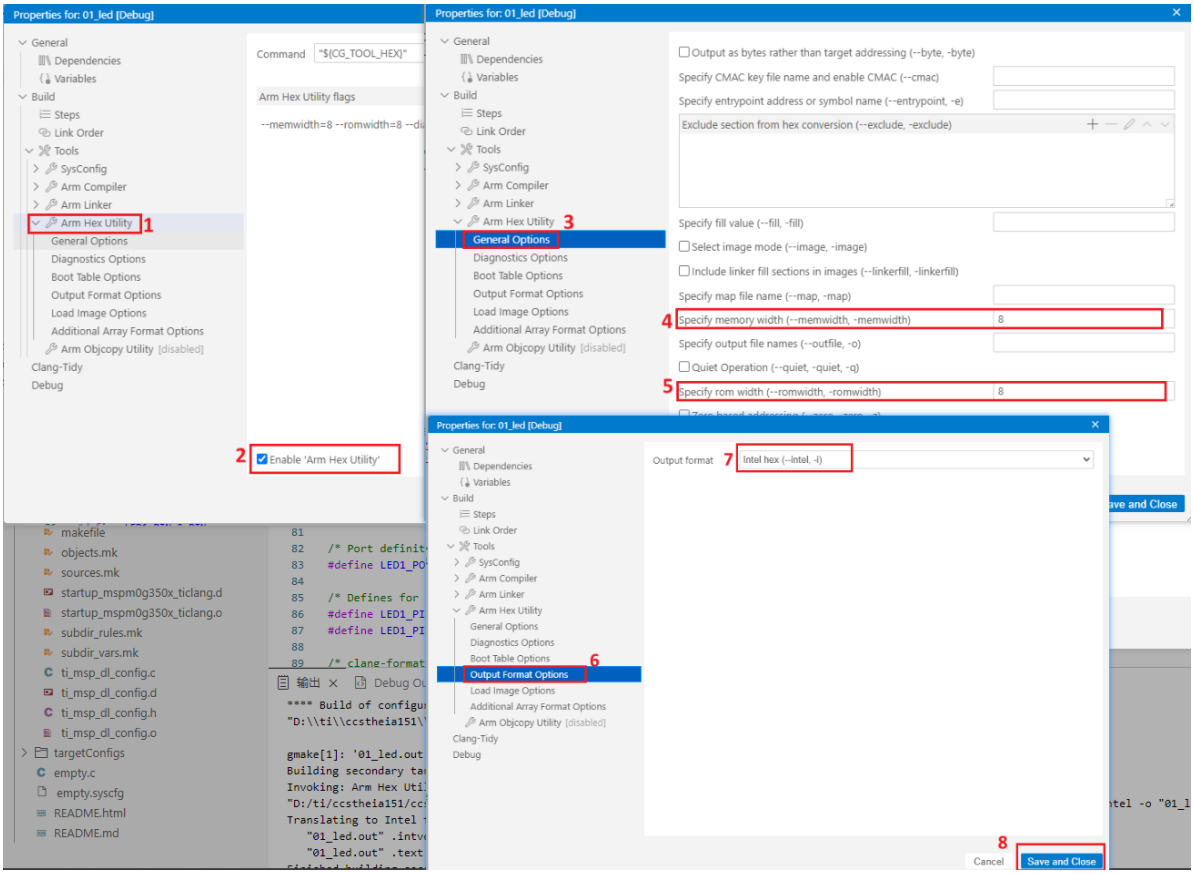
7. Compile the project

7.1 Compile configuration

Right-click the project file and select **Properties**. Select **Build →Tools → Arm Hex Utility** and check **Enable** .

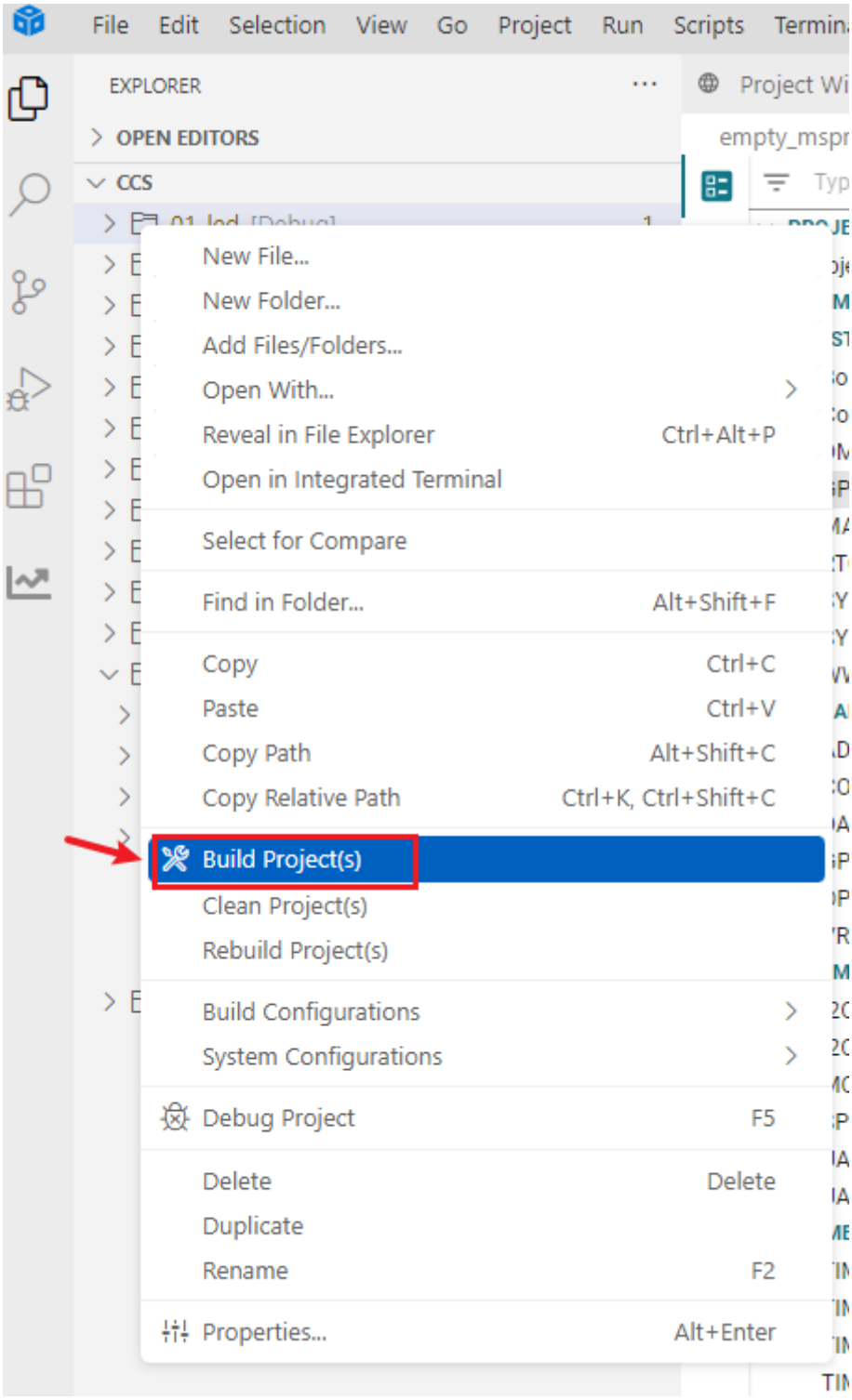
Select 8 memory and ROM width in **General Options**, select **Intel hex (–intel, -i)** in **Output Format Options**, and finally save and exit.


File Edit Selection View Go Project Run Scripts Terminal
EXPLORER
OPEN EDITORS
CCS
Project Wiza
empty_mspm0
New File...
New Folder...
Add Files/Folders...
Open With...
Reveal in File Explorer Ctrl+Alt+P
Open in Integrated Terminal
Select for Compare
Find in Folder... Alt+Shift+F
Copy Ctrl+C
Paste Ctrl+V
Copy Path Alt+Shift+C
Copy Relative Path Ctrl+K, Ctrl+Shift+C
Build Project(s)
Clean Project(s)
Rebuild Project(s)
Build Configurations
System Configurations
Debug Project F5
Delete Delete
Duplicate
Rename F2
Properties... Alt+Enter



7.2 Compile

Right-click the project folder and select `Build Project(s)` to compile.



The normal compilation is as follows: