MDK Arm

MDK Arm (Microcontroller Development Kit for ARM): An integrated development environment (IDE) for microcontroller applications based on Cortex™-M, Cortex-R4, ARM7™ and ARM9™ processors.

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

1. MDK-ARM installation

To build the TI development environment, you need to use Keil MDK-Arm uVision v5.38a or higher!

```
Since MDK-ARM is a paid software, the tutorial only covers the MDK-ARM
installation process
```

Open `MDK_541.exe` as an administrator and install according to the prompts:

Agree to the agreement

Installation location

The recommended default location for the software:

User Information

You can fill in as you like:
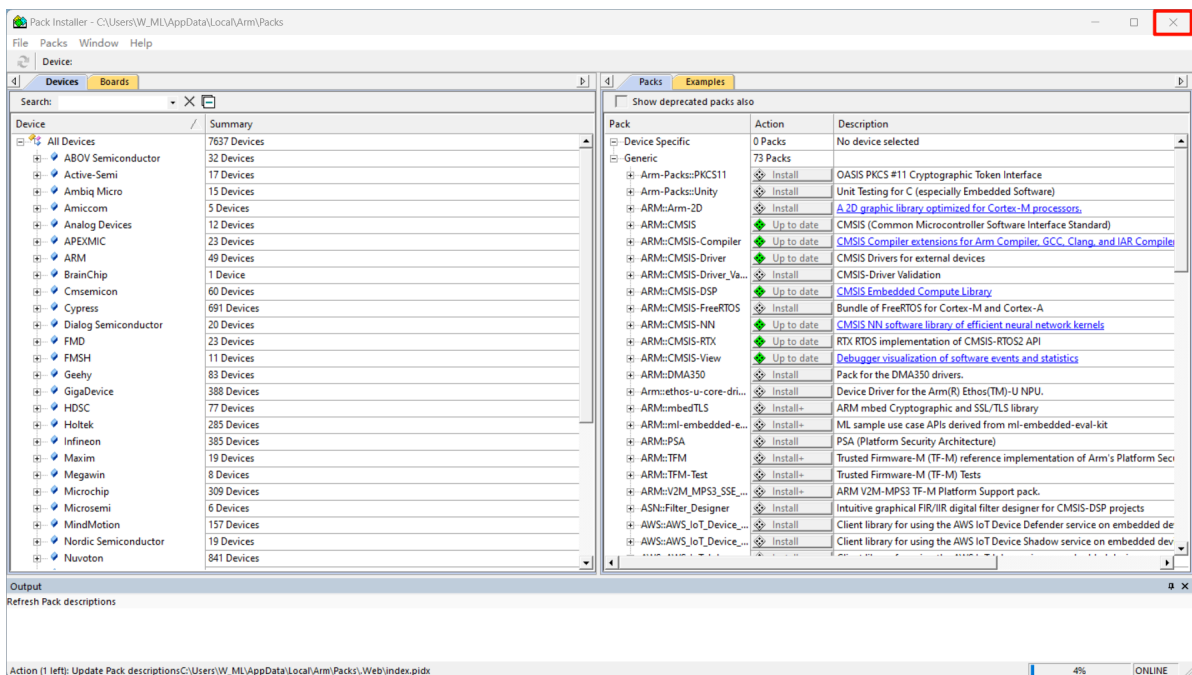

If the driver installation pops up during the installation process, select Install All:
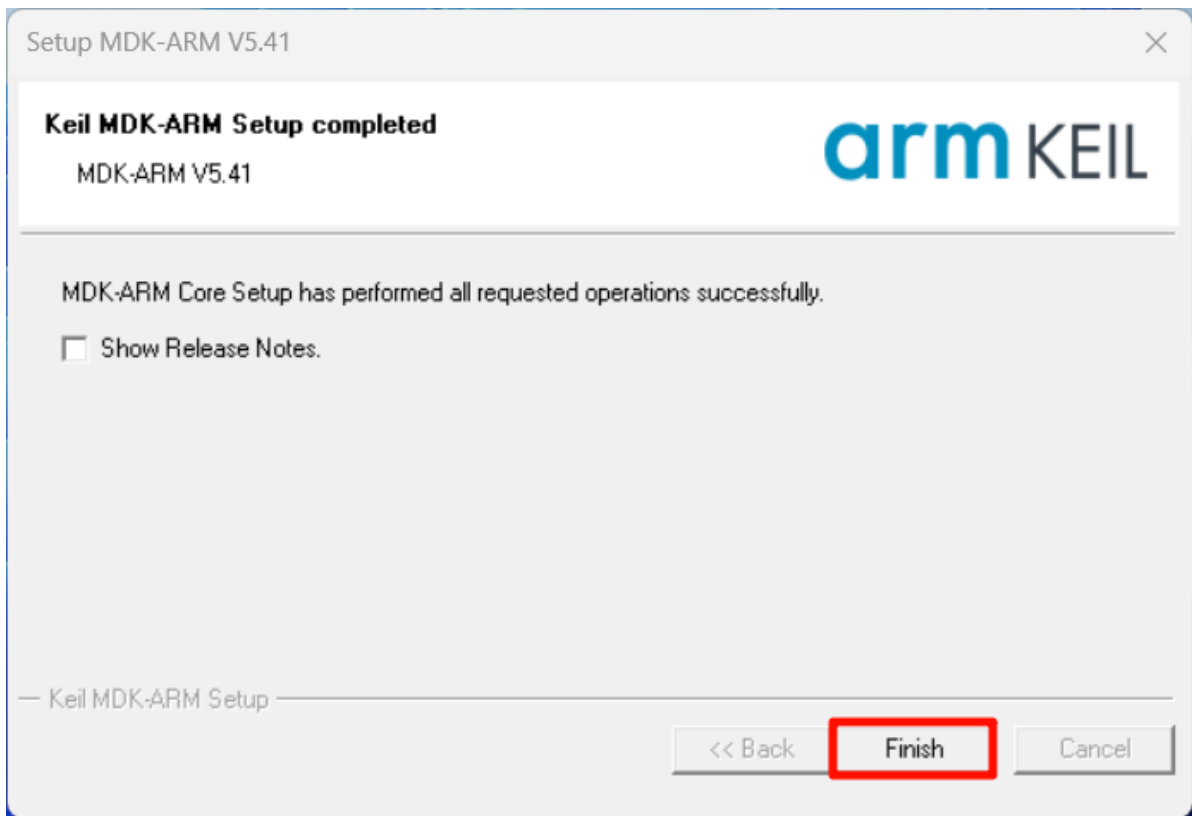
You need to close the software package/component interface for the first time: This interface can install chip packages, but it requires a network connection!


ARM Compiler 5 (AC 5)

Starting from MDK5.37, the AC5 compiler is no longer installed by default and needs to be installed independently!

> To compile with the old version of the project source code, you need to use AC5 to compile. To install the AC5 compiler, you need to open the project first.
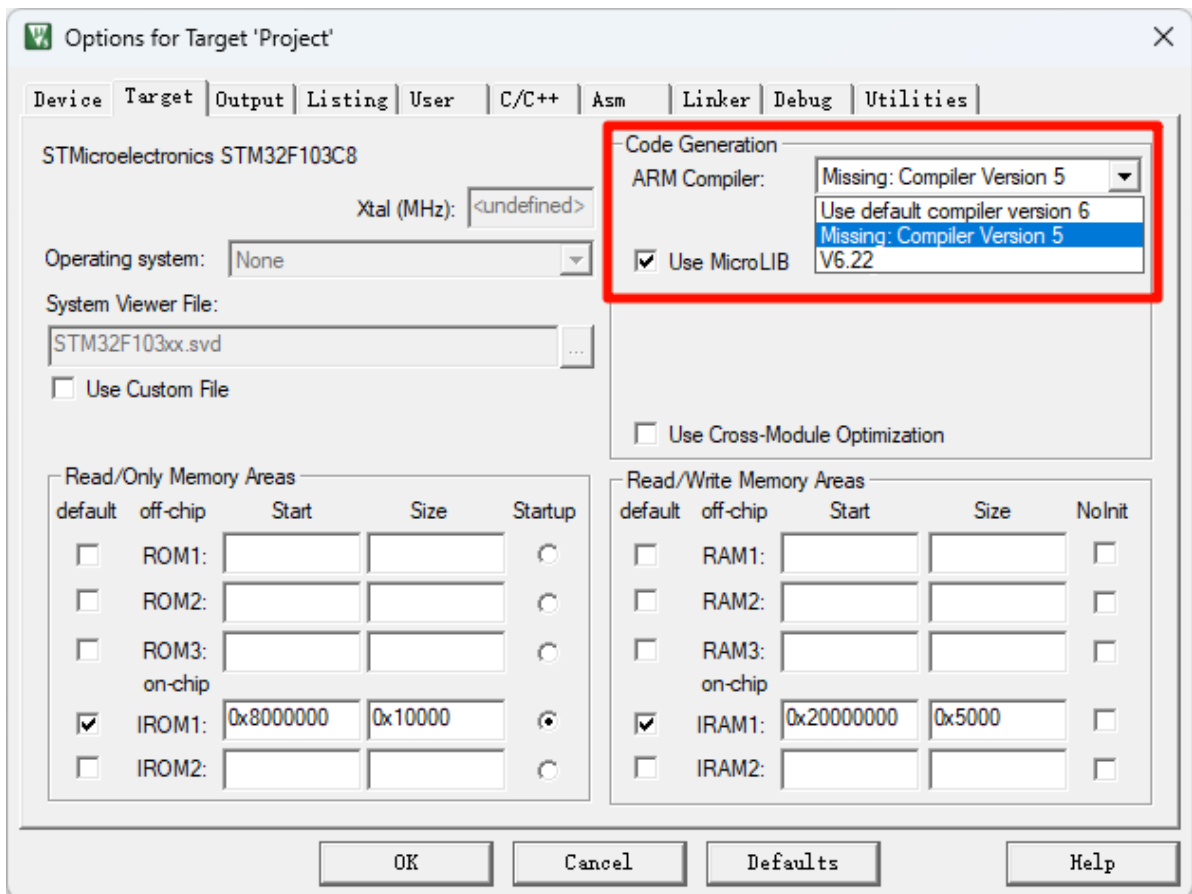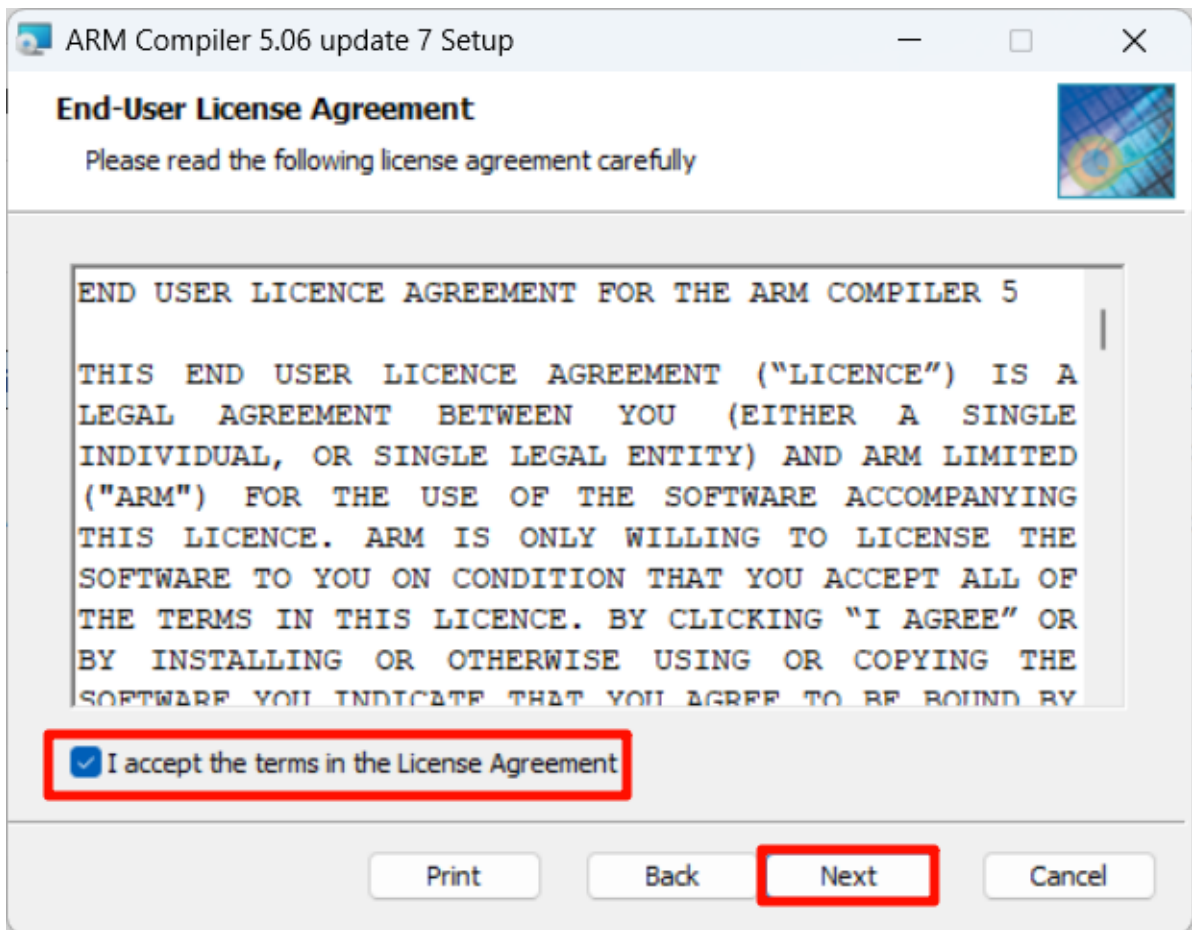
Install AC 5

Open `setup.exe` under `ARMCompiler_5.zip` as an administrator and install according to the prompts:
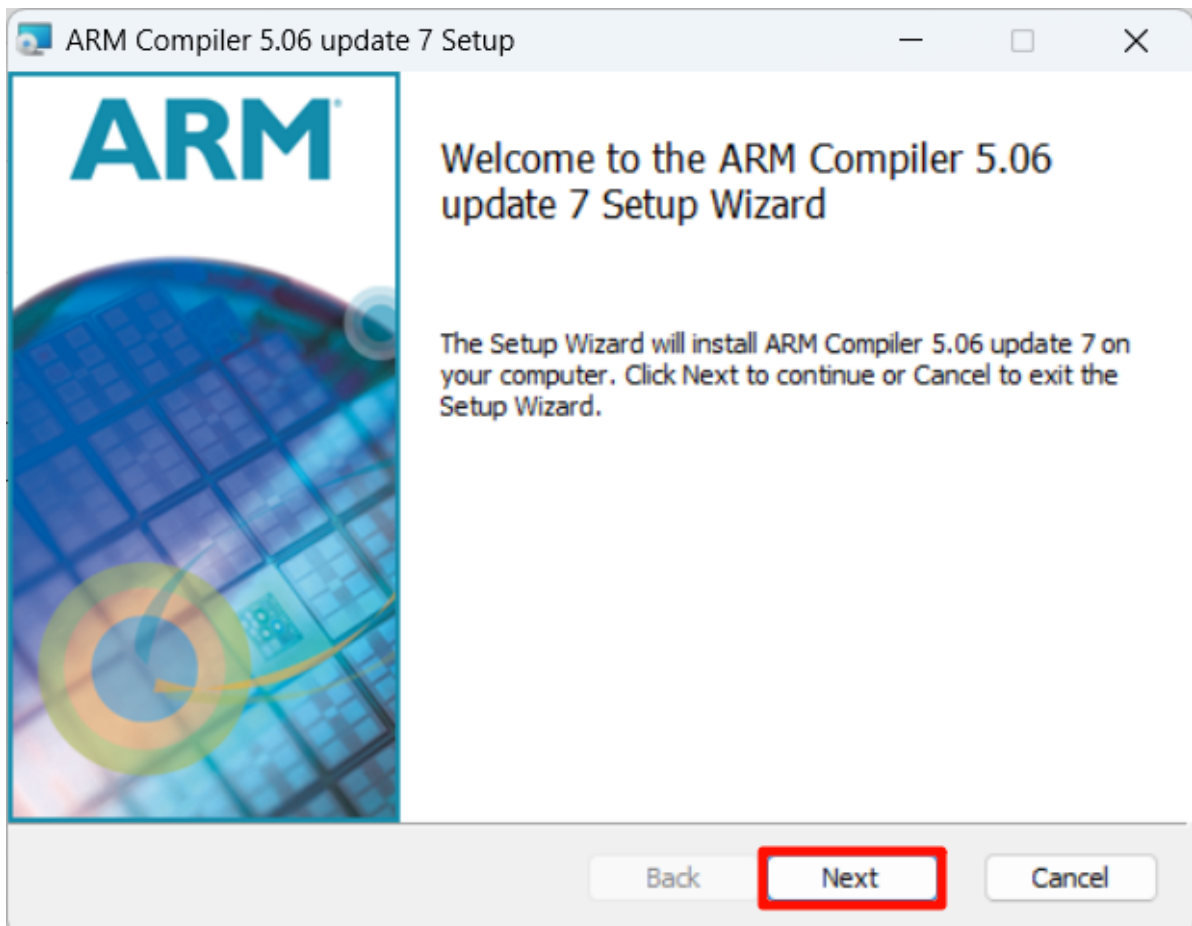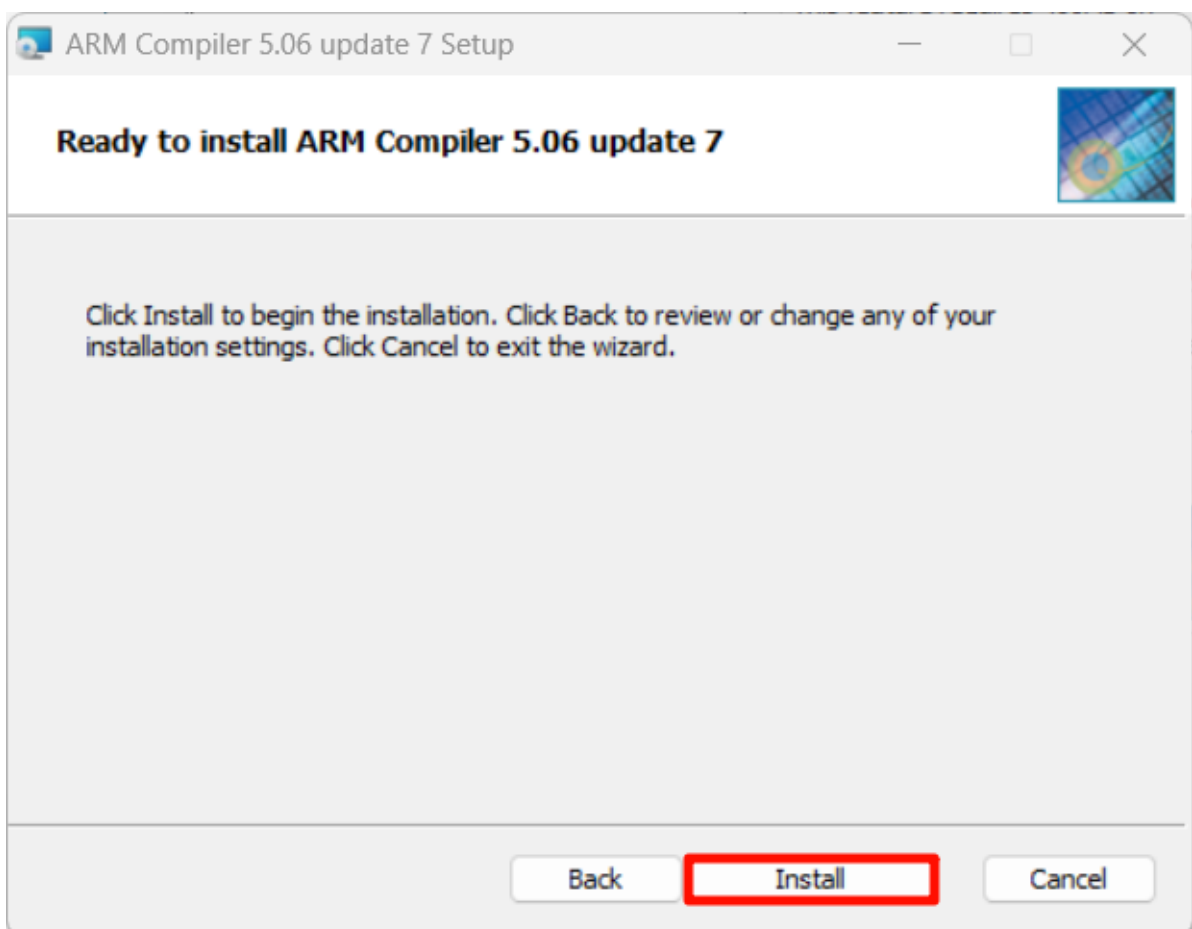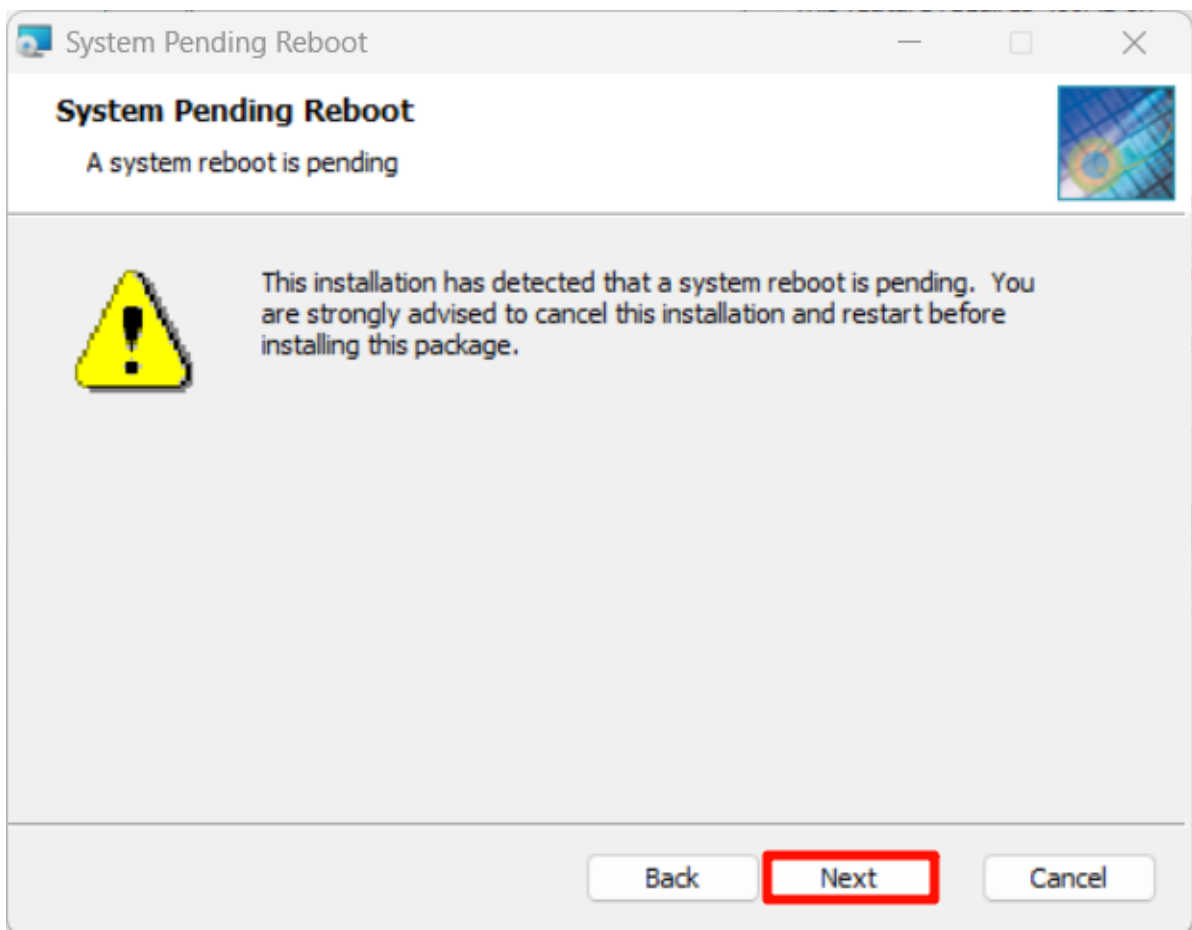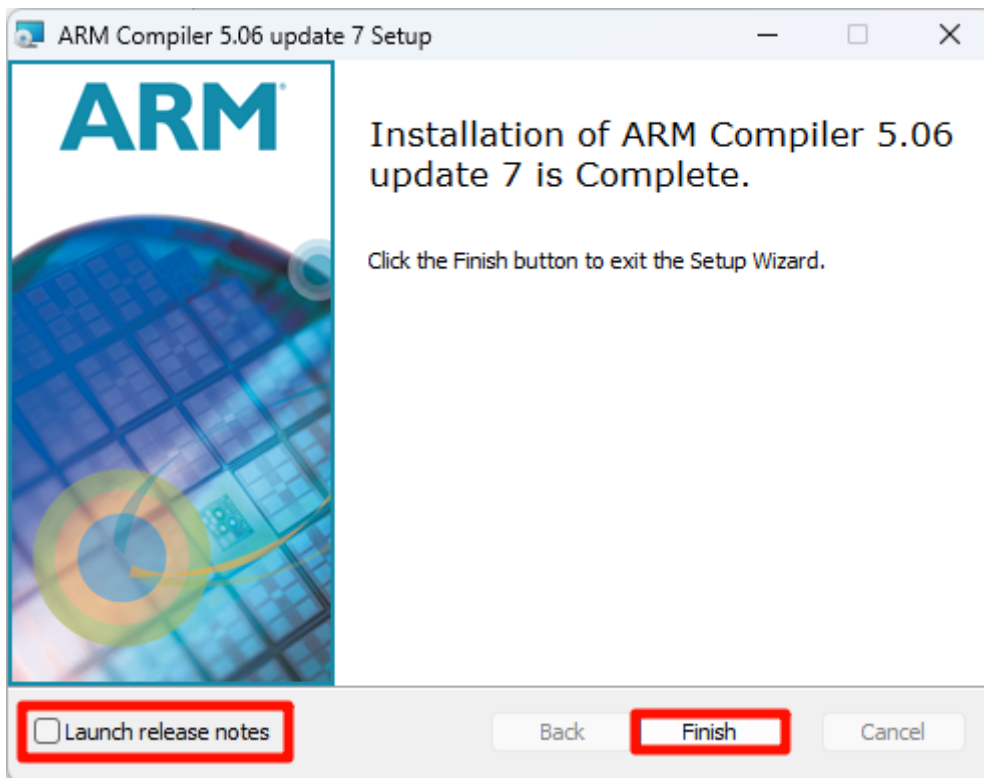

Agree to the agreement

Installation location

Modify the installation location: Create a new ARMCC folder in the C:\Users\W_ML\AppData\Local\Keil_v5\ARM folder, and select this folder as the installation location of AC5

```
You need to create a new ARMCC folder according to your own MDK-ARM installation
location
```

System Pending Reboot

System Pending Reboot

A system reboot is pending

⚠️ This installation has detected that a system reboot is pending. You are strongly advised to cancel this installation and restart before installing this package.

Back | **Next** | Cancel

ARM Compiler 5.06 update 7 Setup

Ready to install ARM Compiler 5.06 update 7

Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.
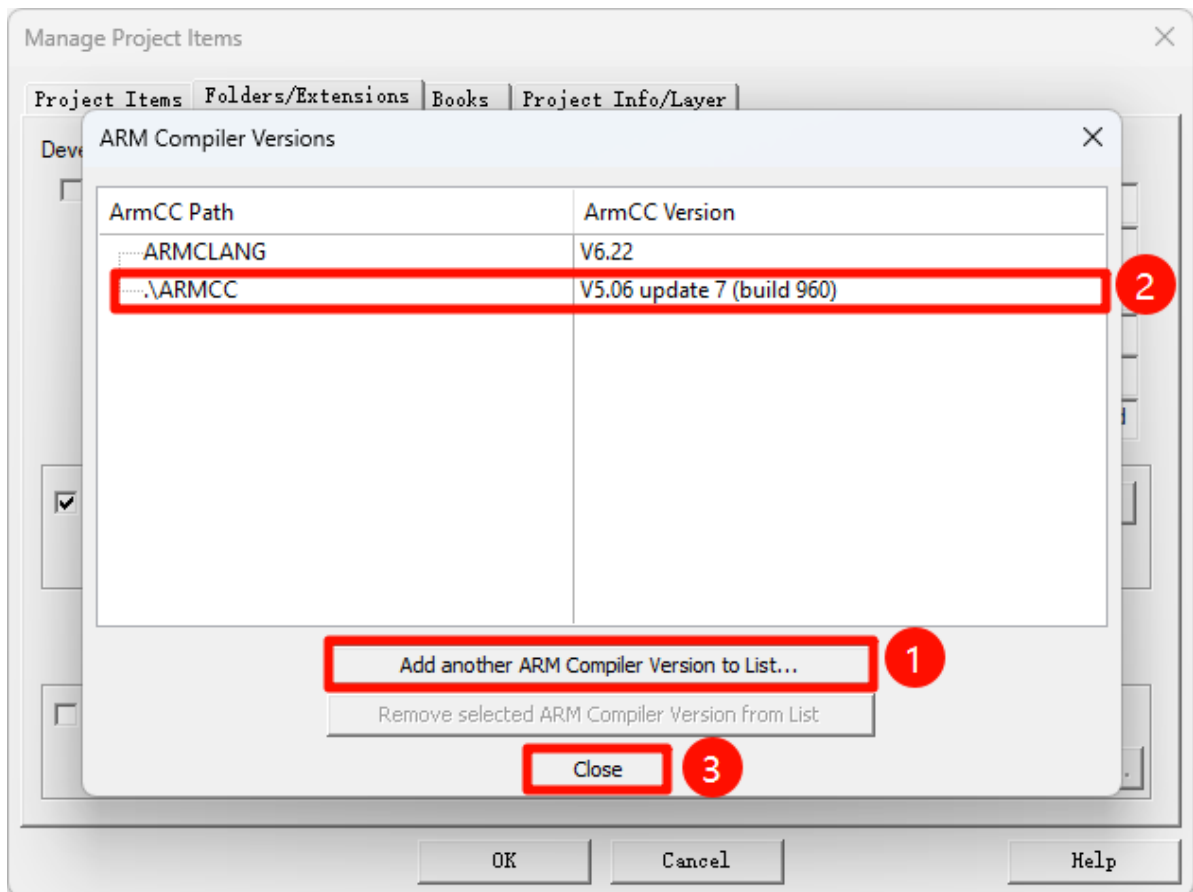
Back | **Install** | Cancel

Add AC 5

The following operations involve MDK-ARM software, and you need to open a project; otherwise, the relevant menu options cannot be selected.
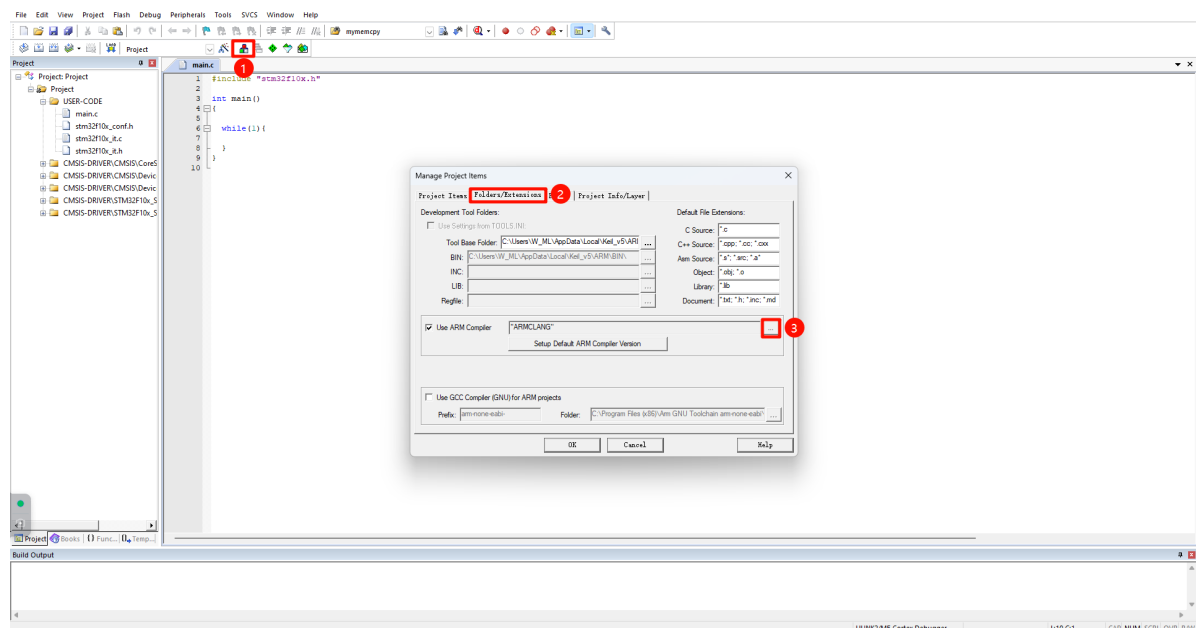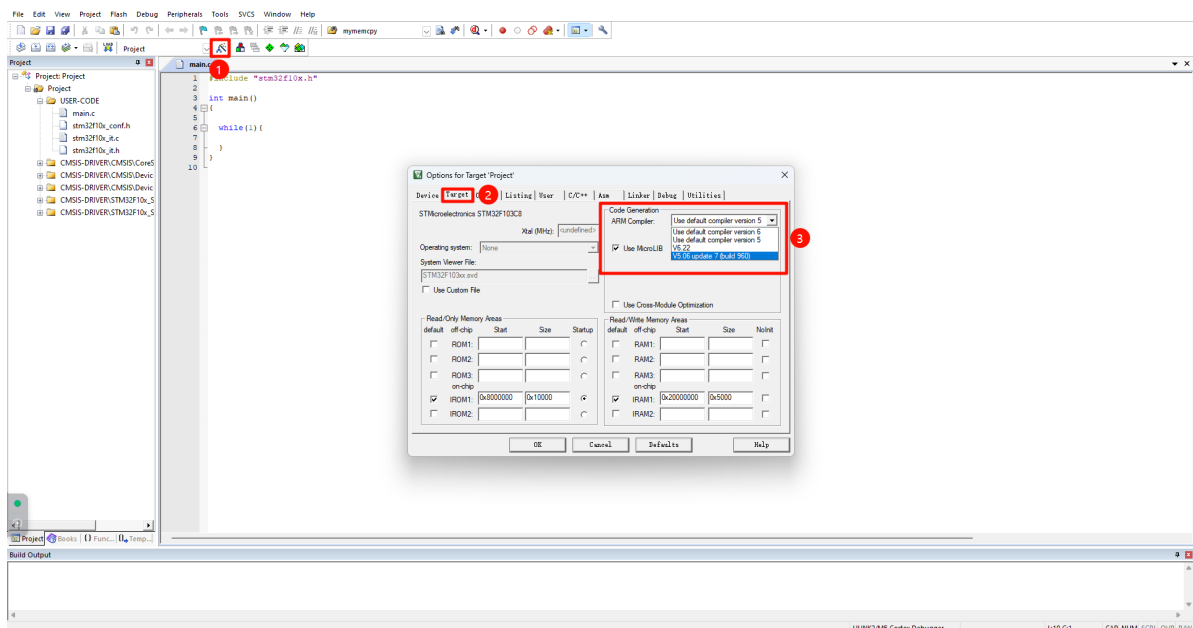

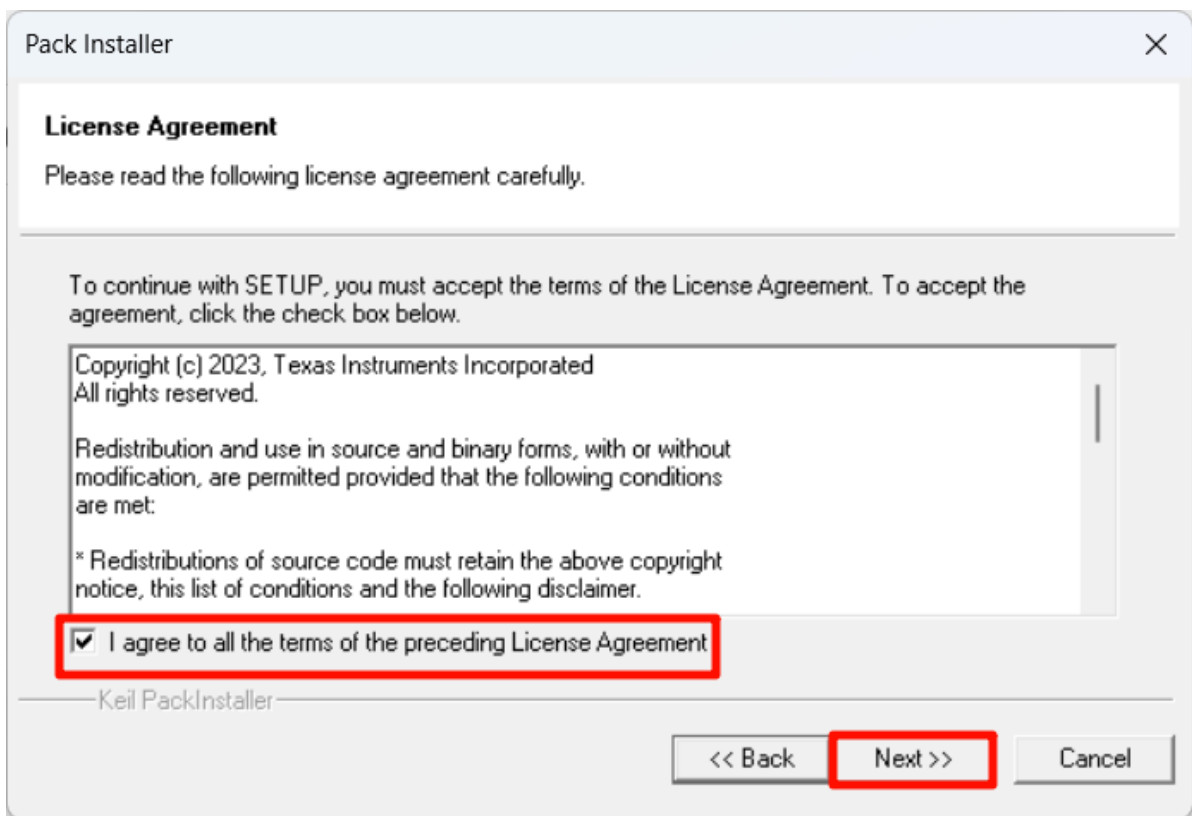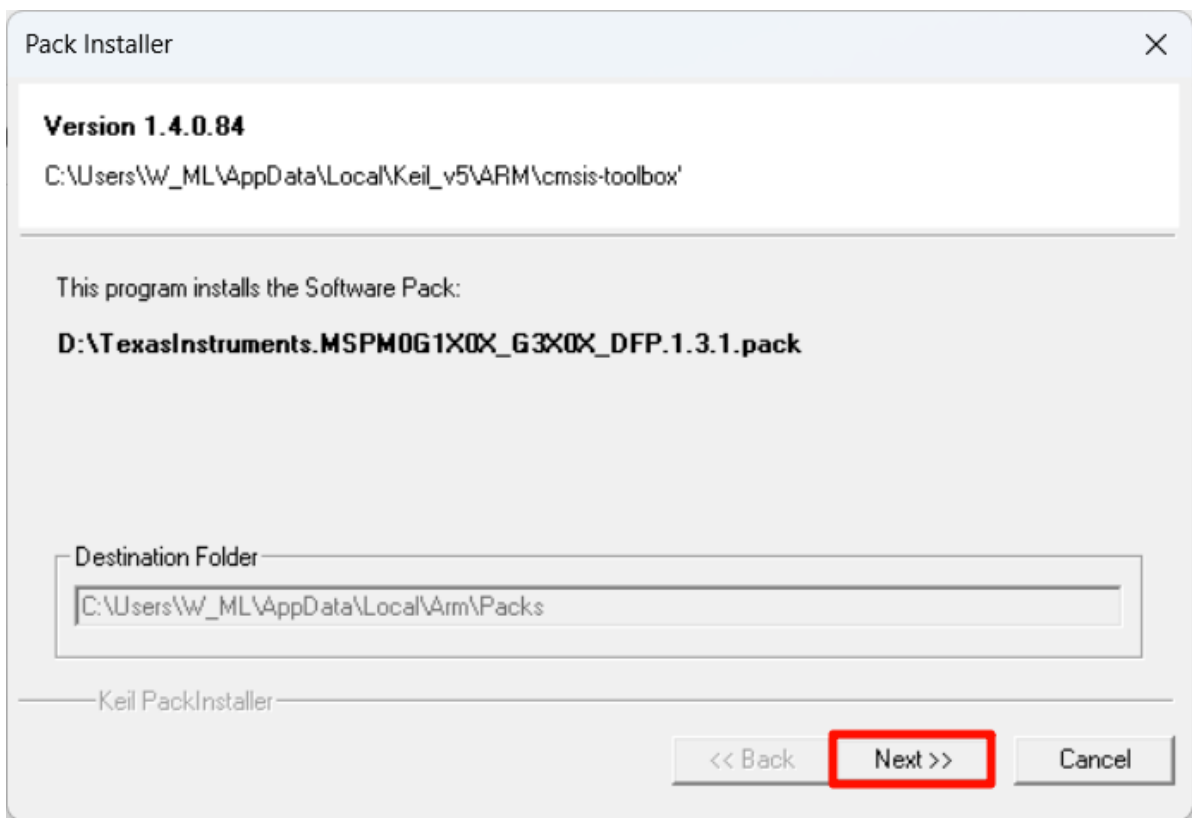Add compiler: Select C:\Users\W_ML\AppData\Local\Keil_v5\ARM\ARMCC folder
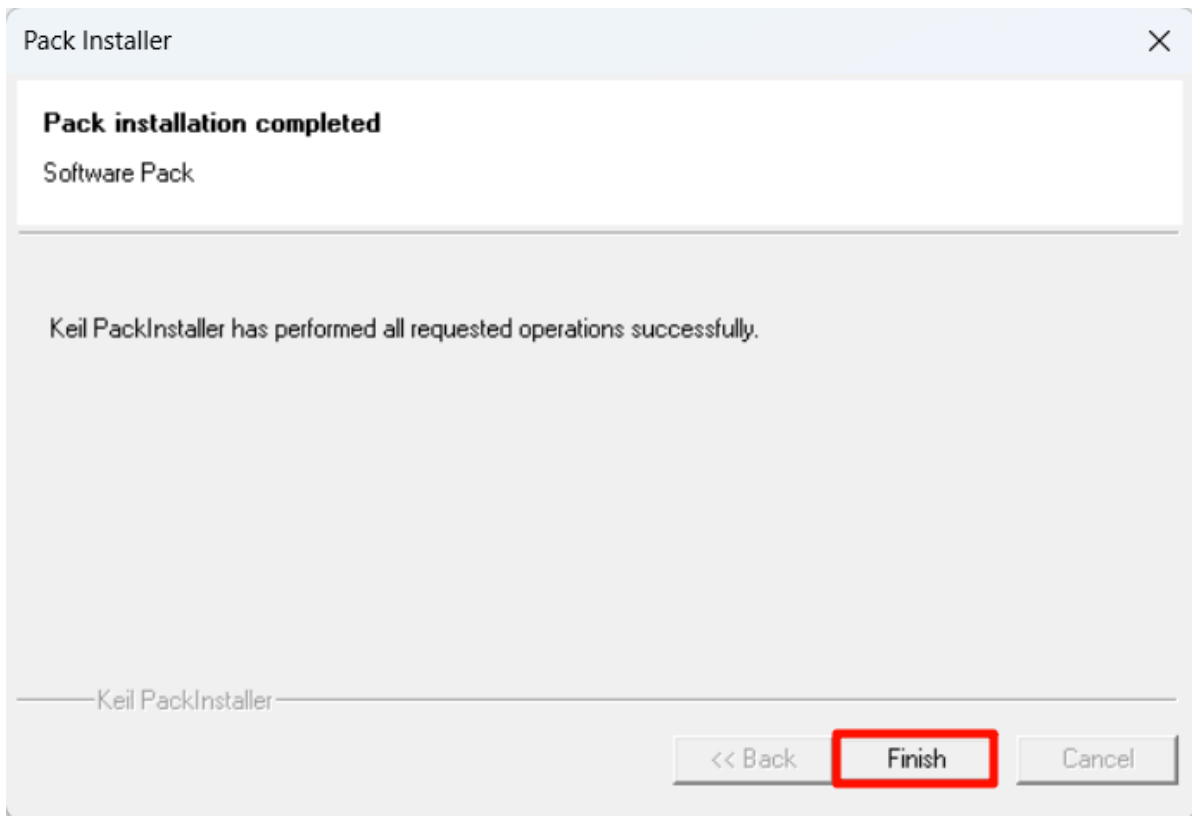
Verify AC 5

The appearance of `compiler version 5` indicates that the installation is successful!

Install the MSPM0G chip package

Double-click to open the `TexasInstruments.MSPM0G1X0X_G3X0X_DFP.1.3.1.pack` file to install the chip package:

Pack Installer

Version 1.4.0.84

C:\Users\W_ML\AppData\Local\Keil_v5\ARM\cmsis-toolbox'

This program installs the Software Pack:

D:\TexasInstruments.MSPM0G1X0X_G3X0X_DFP.1.3.1.pack

Destination Folder

C:\Users\W_ML\AppData\Local\Arm\Packs

Keil PackInstaller

<< Back   **Next >>**   Cancel

Pack Installer

License Agreement

Please read the following license agreement carefully.

To continue with SETUP, you must accept the terms of the License Agreement. To accept the agreement, click the check box below.

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* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

☑ **I agree to all the terms of the preceding License Agreement**

Keil PackInstaller

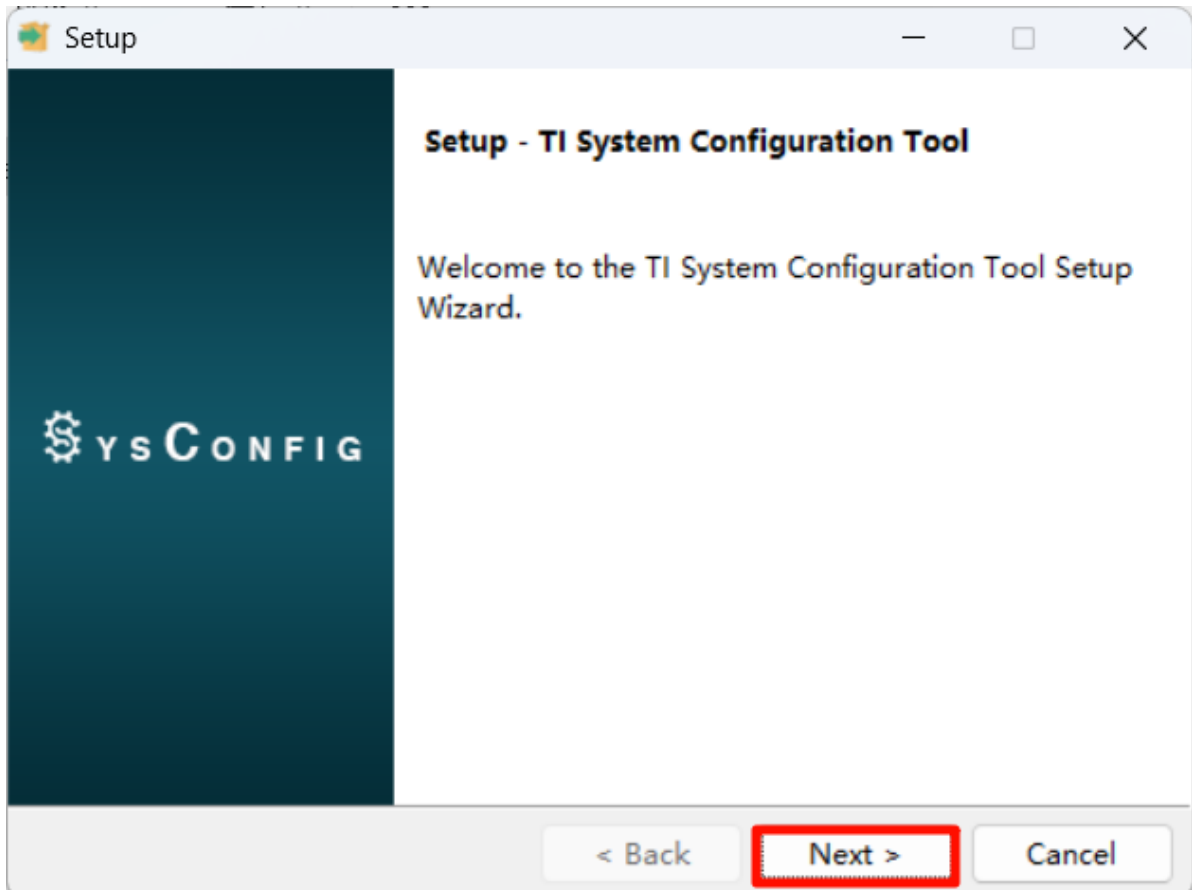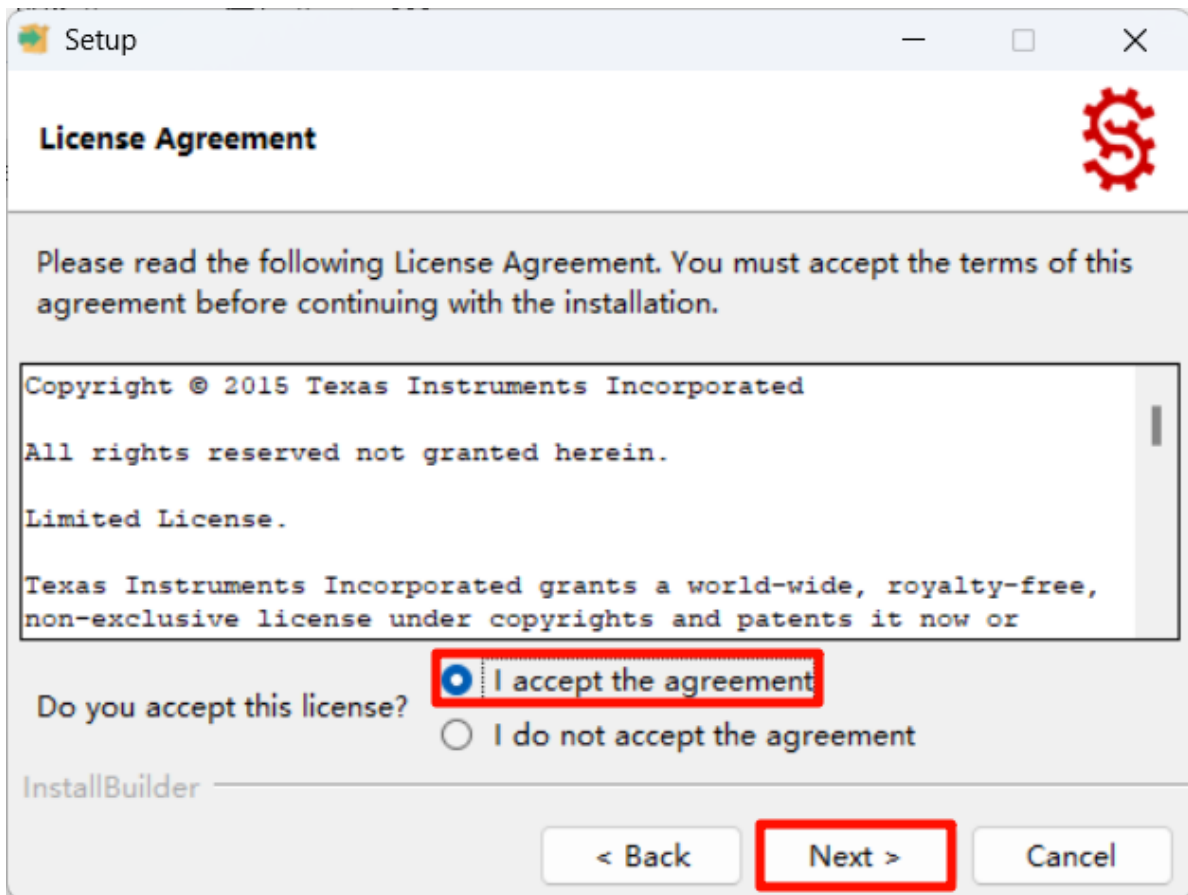<< Back   **Next >>**   Cancel

2. SysConfig installation

SysConfig is a configuration tool for TI microcontrollers and processors, designed to simplify hardware and software configuration for TI developers and accelerate software development!

Open `sysconfig-xxx-setup.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. Configure SysConfig for KEIL 5

Use the SysConfig tool on KEIL MDK-ARM.

syscfg.bat

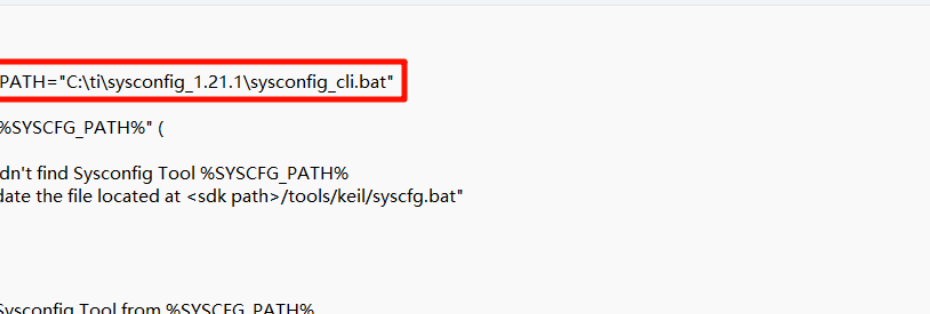Use Notepad to edit the `syscfg.bat` file, and then check whether `SYSCFG_PATH` is correct: ** Fill in the `sysconfig_cli.bat` file path in the SysConfig installation directory, pay attention to whether the version number and path are consistent! **

```
syscfg.bat file path: C:\ti\mspm0_sdk_2_02_00_05\tools\keil
sysconfig_cli.bat file path: C:\ti\sysconfig_1.21.1
If the user changes the default installation location of the software, he needs
to find the syscfg.bat file under the MSPM0-SDK installation location and modify
it
```


MSPM0_SDK_syscfg_menu_import.cfg

Use Notepad to edit the `MSPM0_SDK_syscfg_menu_import.cfg` file, and then check if the path and version number are correct:

```
[Sysconfig v1.21.1 - MSPM0 SDK v2_02_00_05]
Command=C:\ti\sysconfig_1.21.1\nw\nw.exe C:\ti\sysconfig_1.21.1
Initial Folder=c:\ti\mspm0_sdk_2_02_00_05
Arguments=--compiler keil -s ".metadata\product.json" "#E"
Prompt for Arguments=0
Run Minimized=0
Run Independent=-1
```
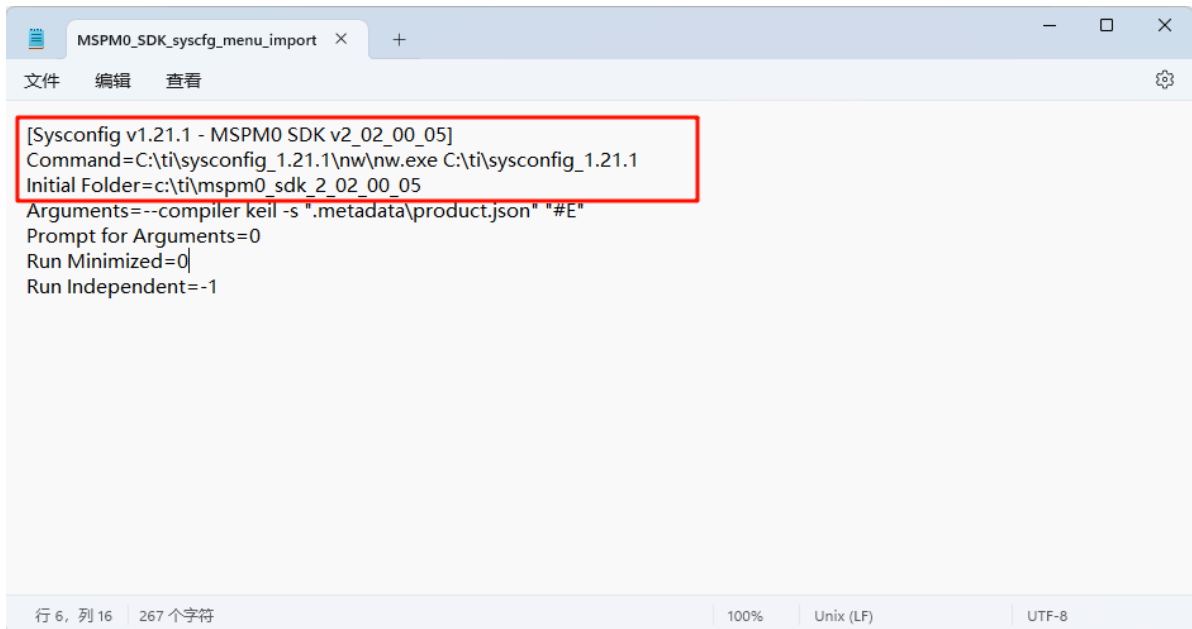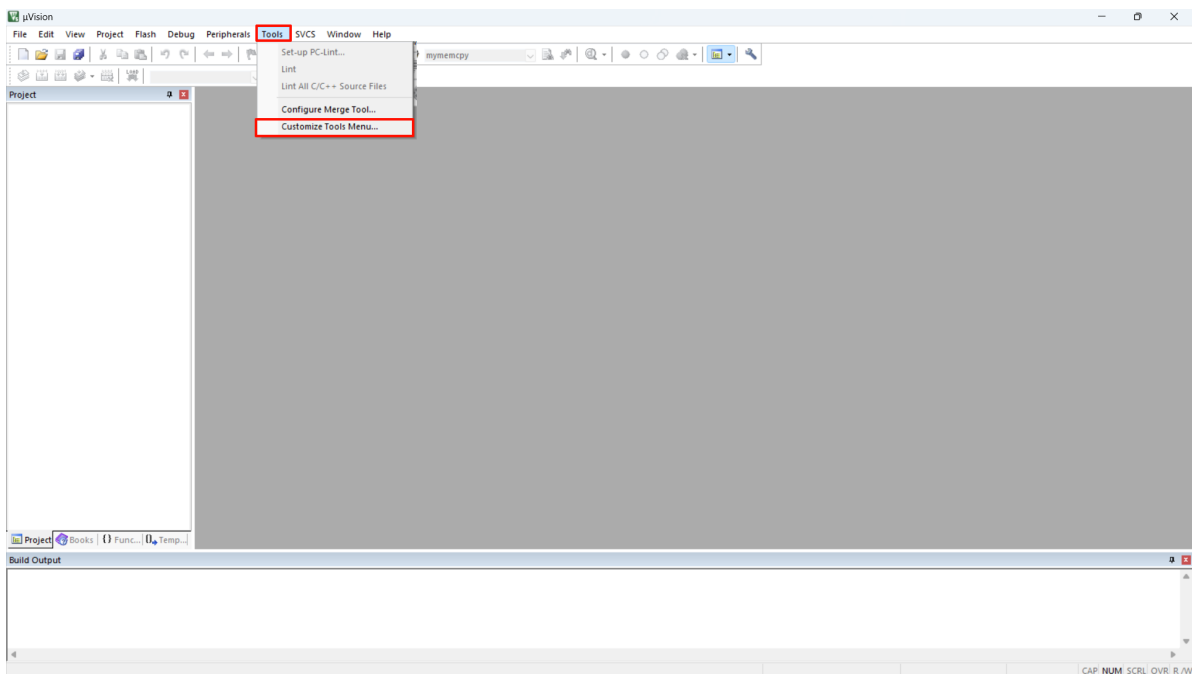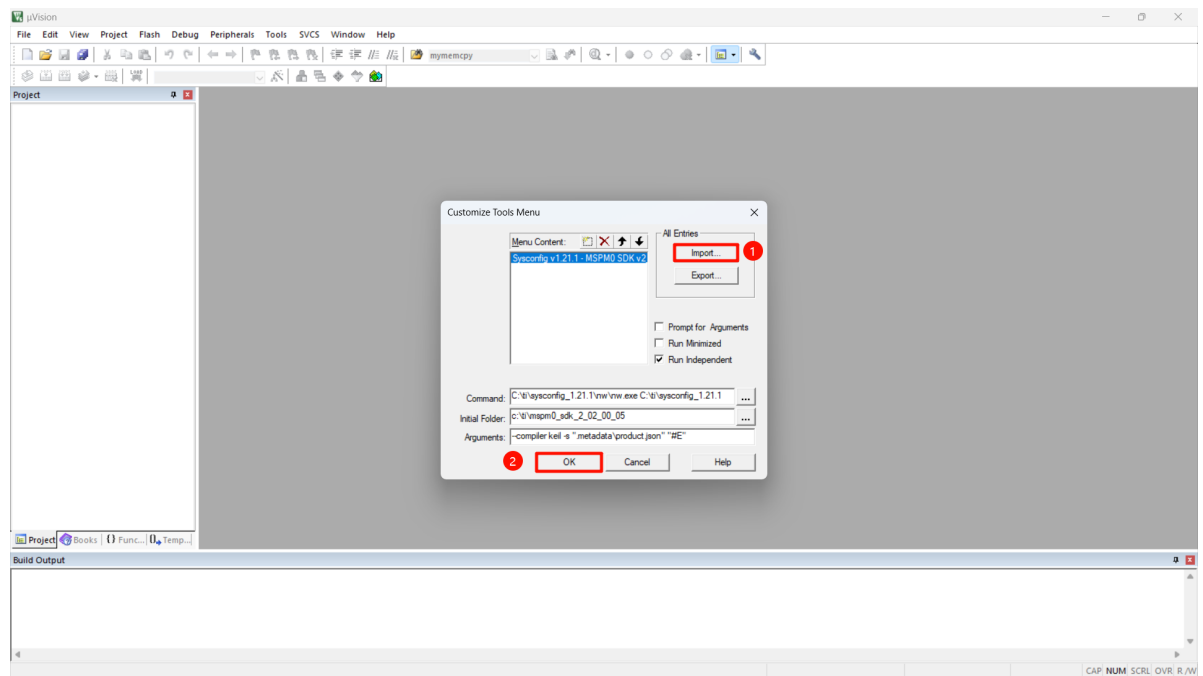
KEIL 5 Add SysConfig tool

Find and open the `MSPM0_SDK_syscfg_menu_import.cfg` file:

```
MSPM0_SDK_syscfg_menu_import.cfg file location:
C:\ti\mspm0_sdk_2_02_00_05\tools\keil
If the user changes the default installation location of the software, he needs
to find the MSPM0_SDK_syscfg_menu_import.bat file under the MSPM0-SDK
installation location
```

Use SysConfig tool
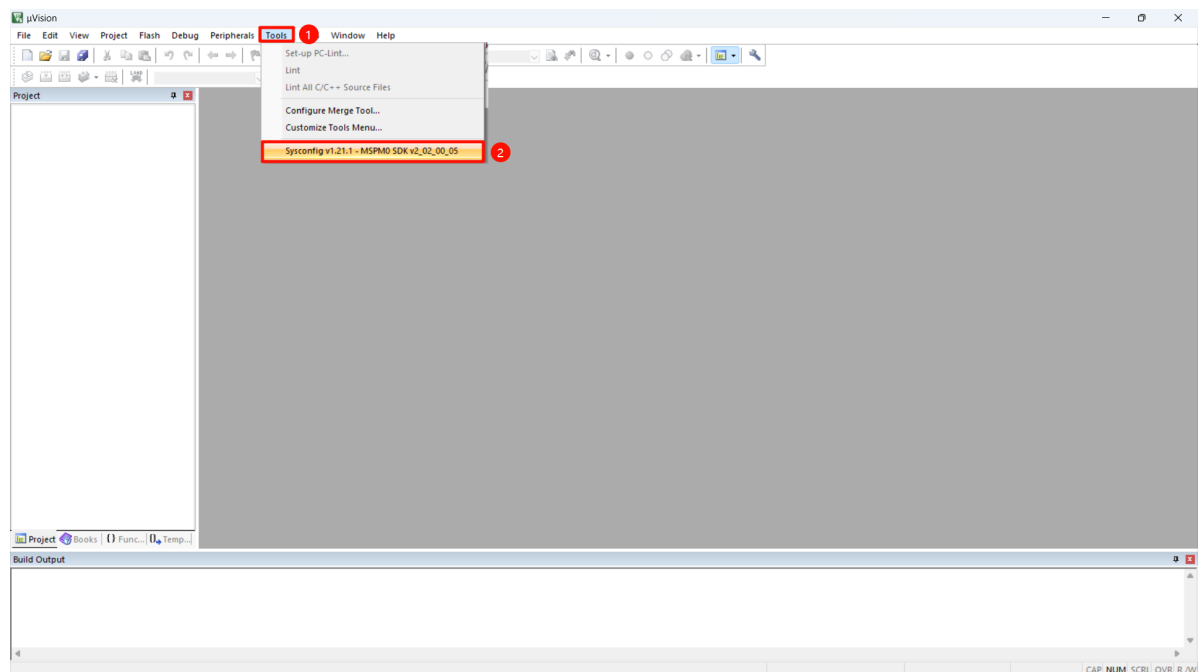
The following interface appears, indicating that the configuration is successful!

> Opening the SysConfig tool in the .cfg file of the TI project will not cause this prompt!

μVision

File Edit View Project Flash Debug Peripherals Tools SVCS Window Help

Project

Project | Books | {} Func... | 0ₑ Temp...

SysConfig

⊗ Missing argument: --board or --device must be specified

GO BACK

Build Output

C:\ti\sysconfig_1.21.1\nw\nw.exe C:\ti\sysconfig_1.21.1 --compiler keil -s ".metadata\product.json" ""

CAP NUM SCRL OVR R /W