Lesson 1 Keil Software Installation and Program compilation

Please activate the software first after installing Keil software, otherwise failure compilation will occur and affect the normal use.

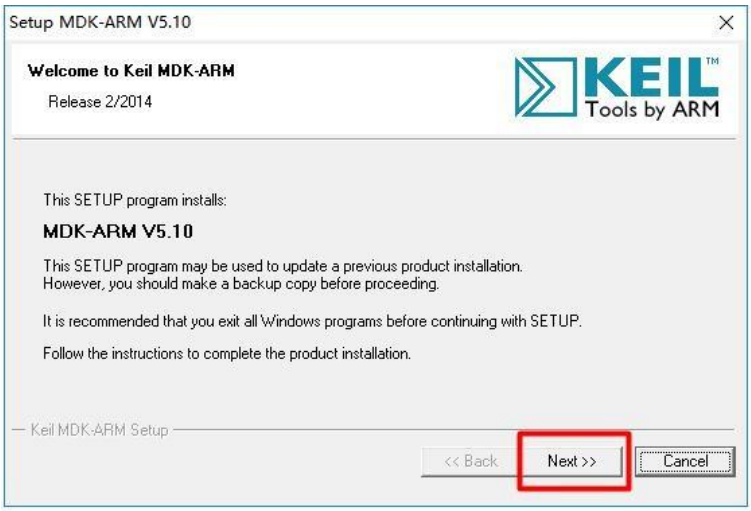
Activation method can refer to the provided tutorial in file “Keil software Activation Tutorial” under the same directory. If you use it for commercial purpose, please support and purchase the original software!

1. Keil Software Installation

Keil MDK-ARM is a powerful programming software specially designed for microcontrollers. The same installation method to different versions. Take V5.10 version as an example.

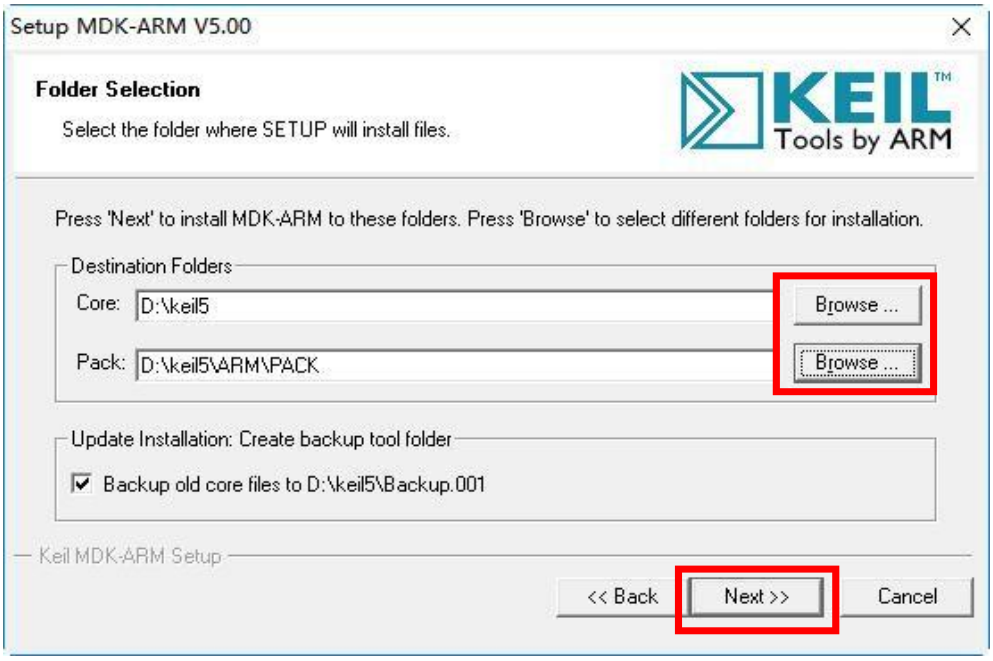
Step 1: Go to the folder “Keil Installation Pack and mcuisp Download Tool” to extract “MDK5.zip” folder, and then open “mdk510.exe” file.

Step 2: Click “Next” to install.

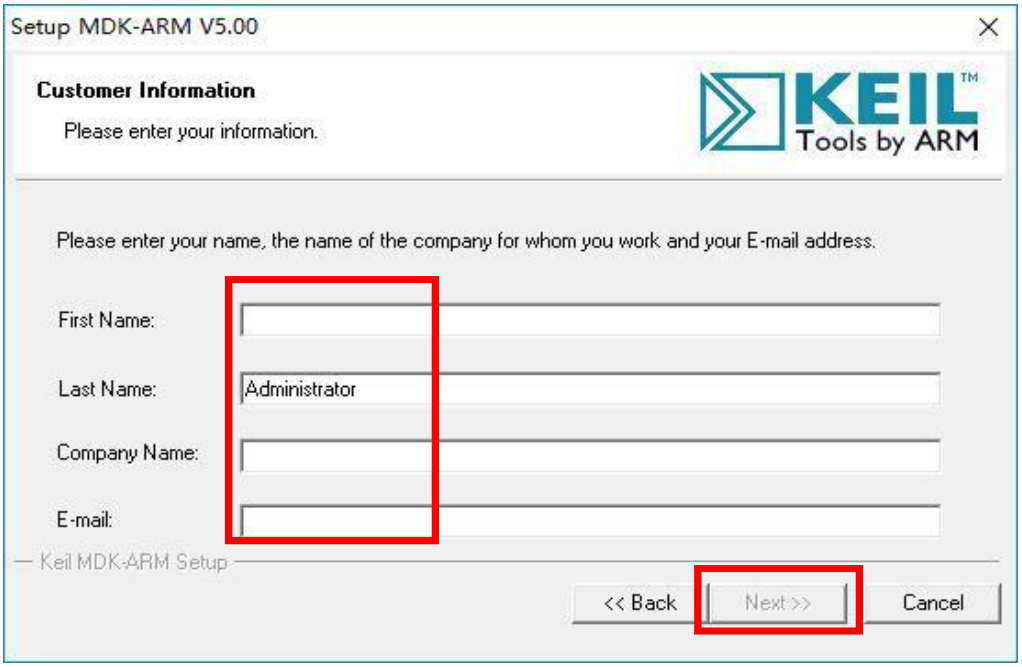


Step 3: Check to agree in the red box, and then click “Next” to proceed.

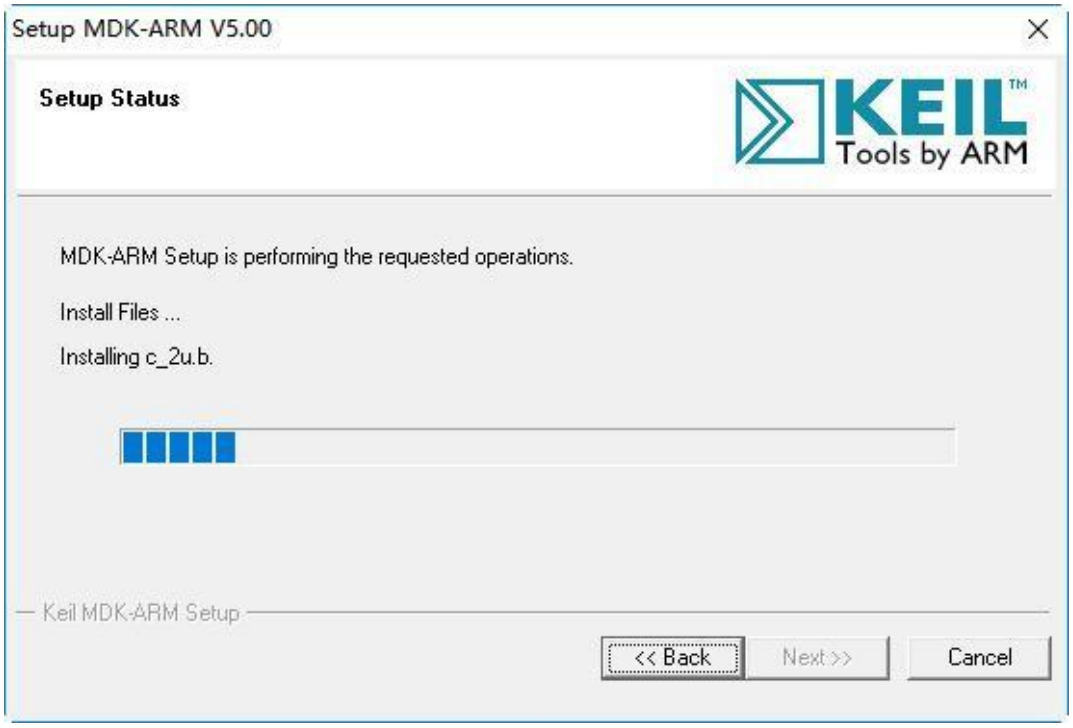
Step 4: Select the installation path.



Step 5: Enter user information. You can enter arbitrarily but not be blank, otherwise can not proceed to the next step.

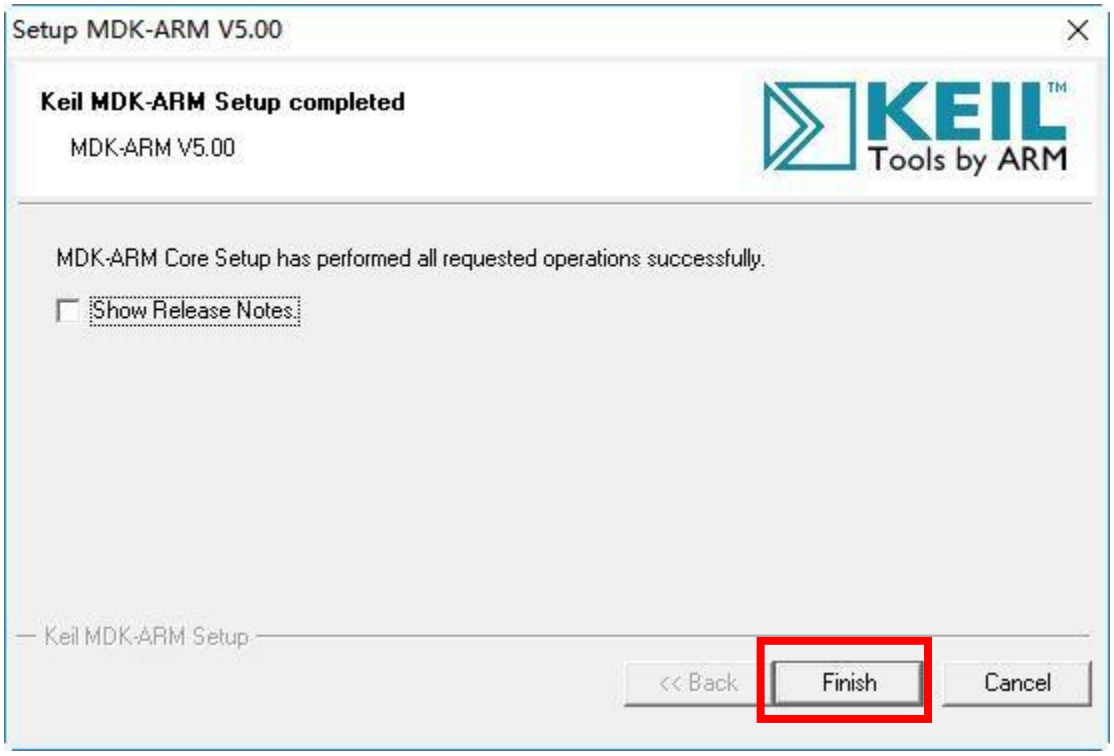


Step 6: After entering, click “Next” to install.



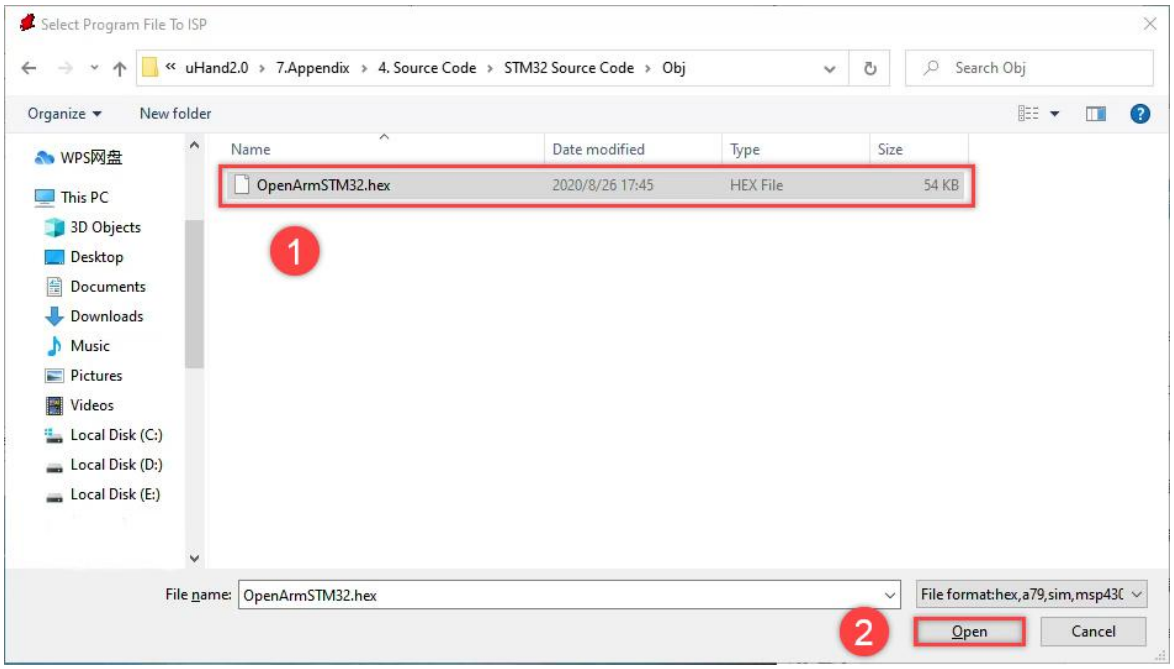
Step 7: Wait a while. When the interface prompting the installation of Ulink driver pops up, click “Install”.

Step 8: When the installation is complete, click “Finish”.

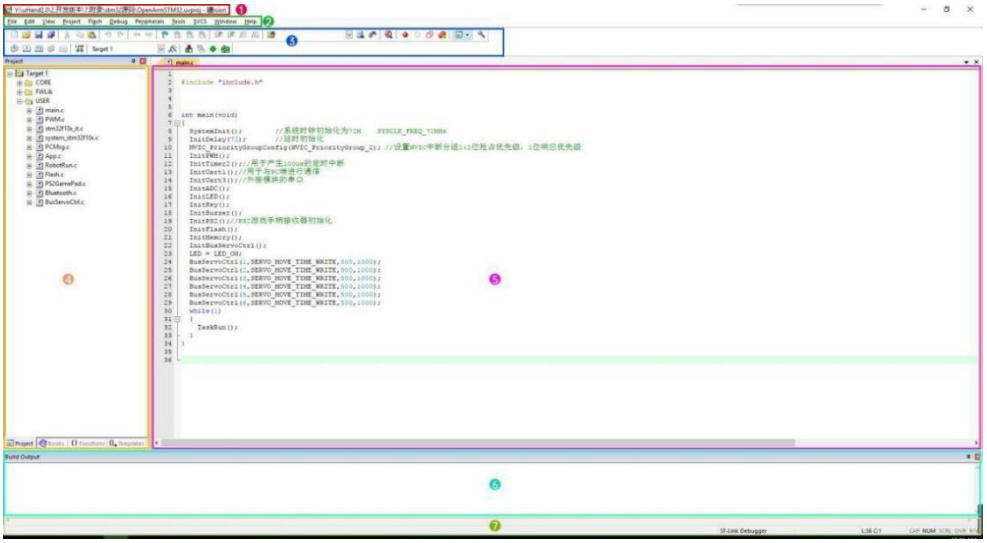


2. Open the Project

Step 1: Go to the folder “5. Sample Code/ STM32/ STM32 source code” to extract “STM32 2.2.zip” file. Then get the STM32 project folder and double-click to open “OpenArmSTM32.uvproj” as the figure shown below.



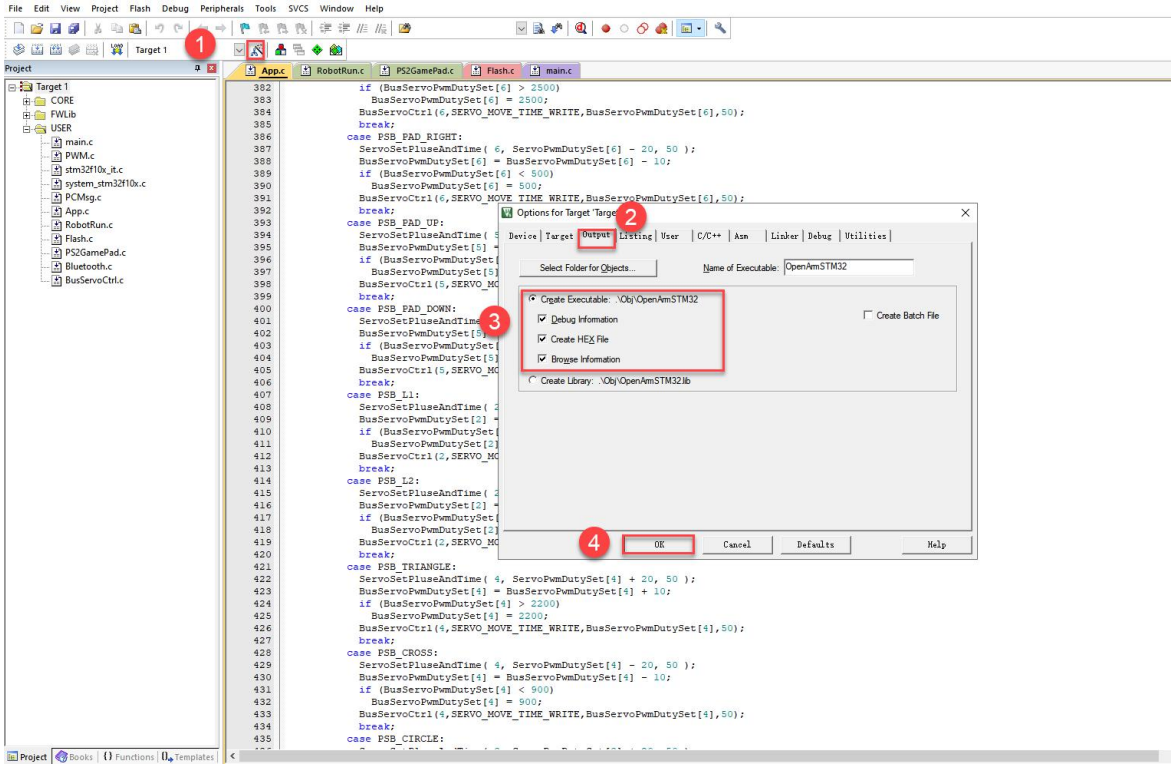
Step 2: After opening the project file, we will briefly introduce you the main interface of Keil. For a complete presentation of the main interface, we will show you the pre-compiled program as an example.



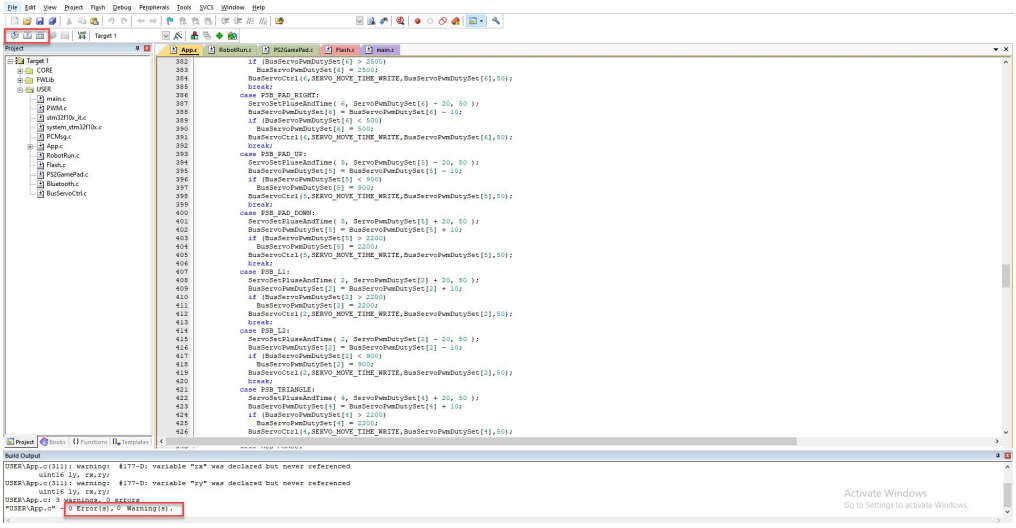
Keil interface is divided into several areas:

No.	Area Name	Function
①	Project name bar	Use to display the current name and the path of the project file.
②	Menu bar	The menu bar contains File, Edit, View, Project, help windows and etc.
③	Tool bar	This window contains some common shortcuts.
④	Project window	A workspace can include multiple projects. This window is used to display the project content (project, group, source code files).
⑤	Editing window	The area for writing code
⑥	Information window	This window contains some information such as compilation information, debugging information, finding information.
⑦	Status bar	This window contains status information loading state, warning number, mouse cursor location, This window contains status information such as readiness, error and warning number, cursor's row position, character encoding, keyboard Num lock, etc.

Step 3: After opening the project file, configure the file options. Click  configure project target options button and refer to the figure below to set the options.



Step 4: Next, compile the target file in the project. There are three buttons for compilation as shown in the upper-left red box. Click the first button “Translate” to translate the currently active file. Wait a moment, the compilation result can be viewed in information window. “0 Error(s), 0 Warning(s)” will be prompted when the compilation is successful.



Step 5: After compiling, ".hex" file will be generated automatically. You can view in folder "5.Sample Code/STM32/STM32 source code/ST32 2.2/Obj" shown in the figure below.