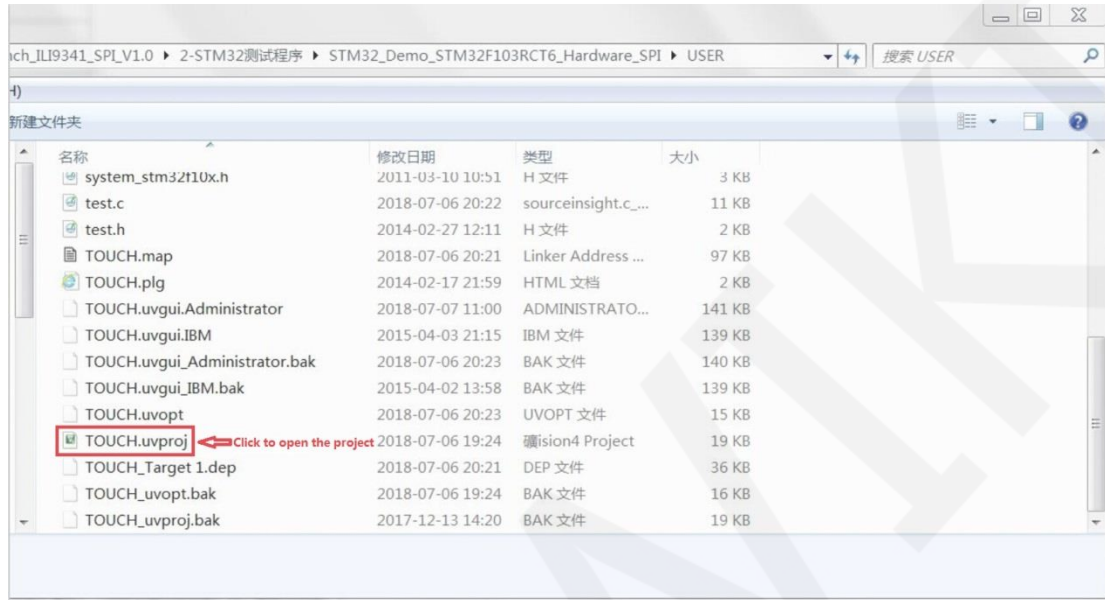
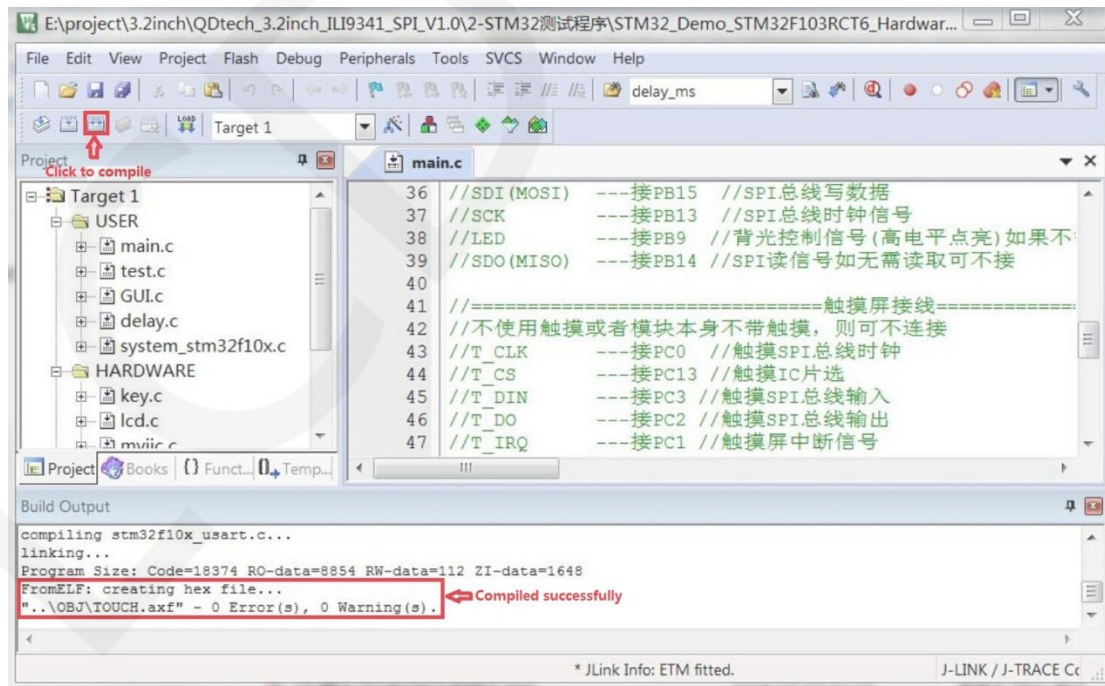


1. First, make sure that the keil software is installed on the computer (please consult Baidu for the specific installation method)
2. Select the example you want to test, find the file ending with “.uvproj”, and double-click to open the project, as shown below:

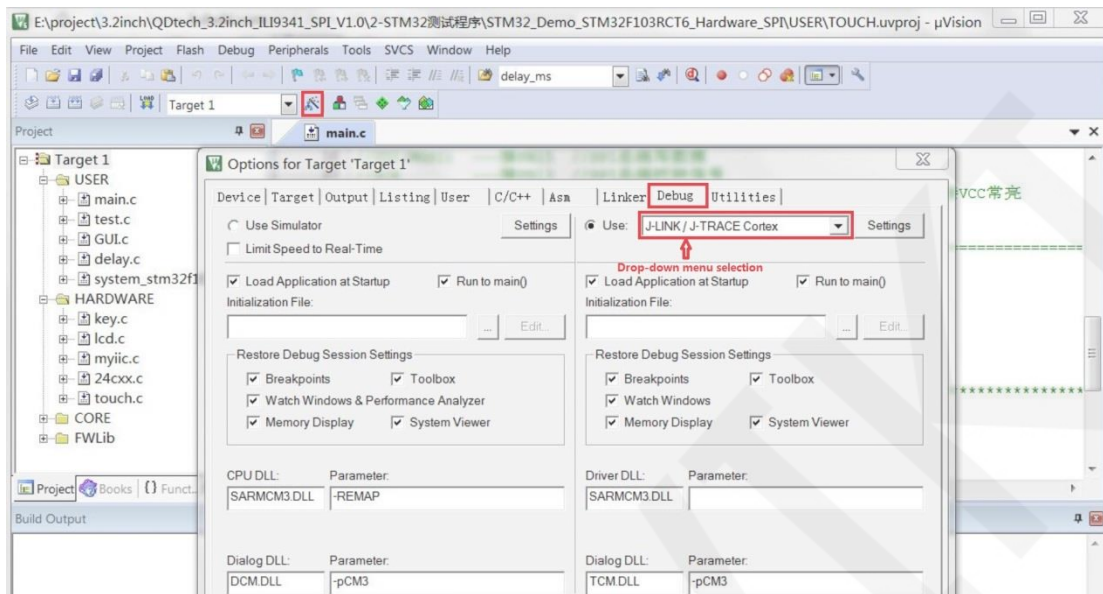


3. After opening the project, compile the project, click the compile button to compile the project. If the “FromELF: creating hex file...” prompt appears, the compilation is successful, as shown in the figure below:

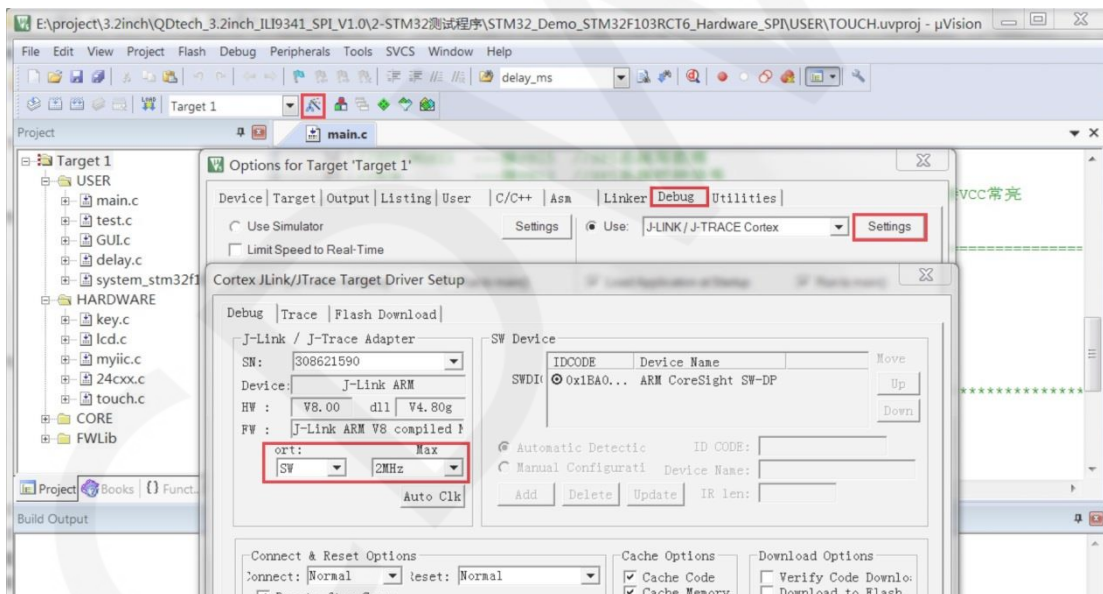


4. Set JTAG as follows: (If it is already set, do not set it)

- A. Connect JTAG to the computer and development board, click the magic wand icon -> Debug-> drop-down menu to select J-LINK/J-TRACE Cortex, as shown below:

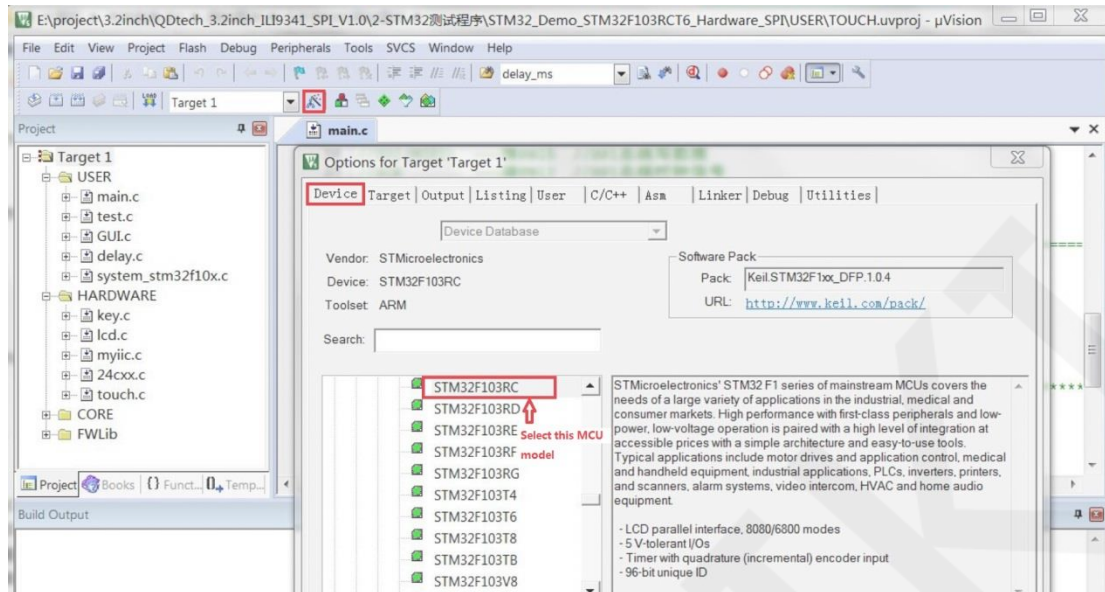


- B. Click Settings, set port to SW, and Max to 2MHz, as shown below:

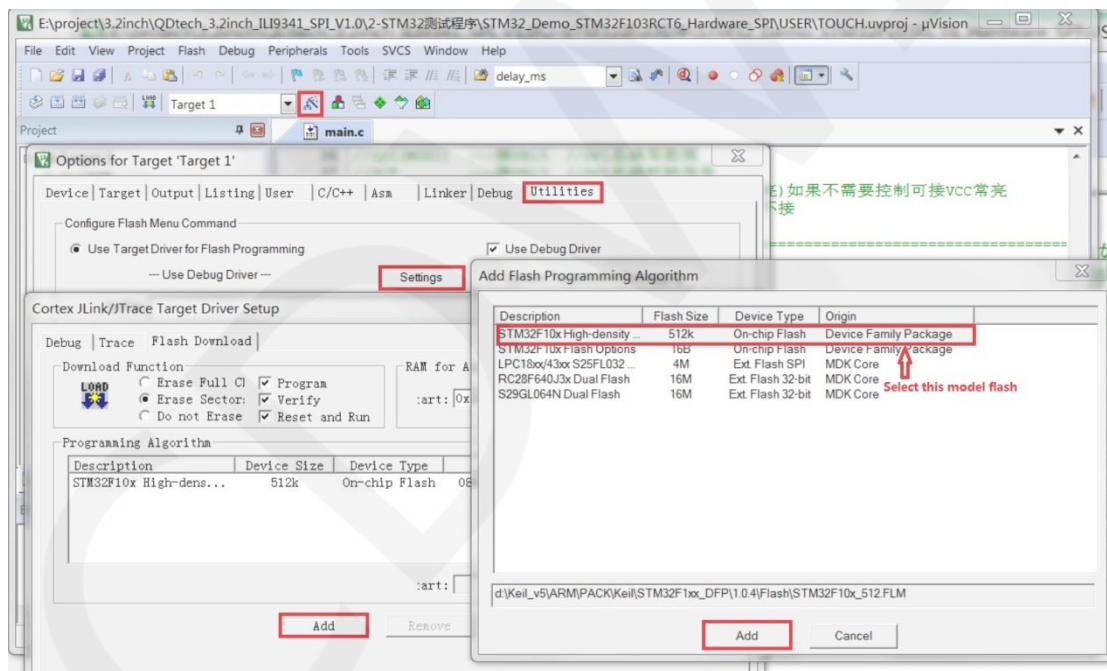


5. Set the flash as follows: (If it is already set, do not set it)

- A. First select the MCU model, click the magic wand icon -> Device-> select STM32F103RC MCU model, as shown below:

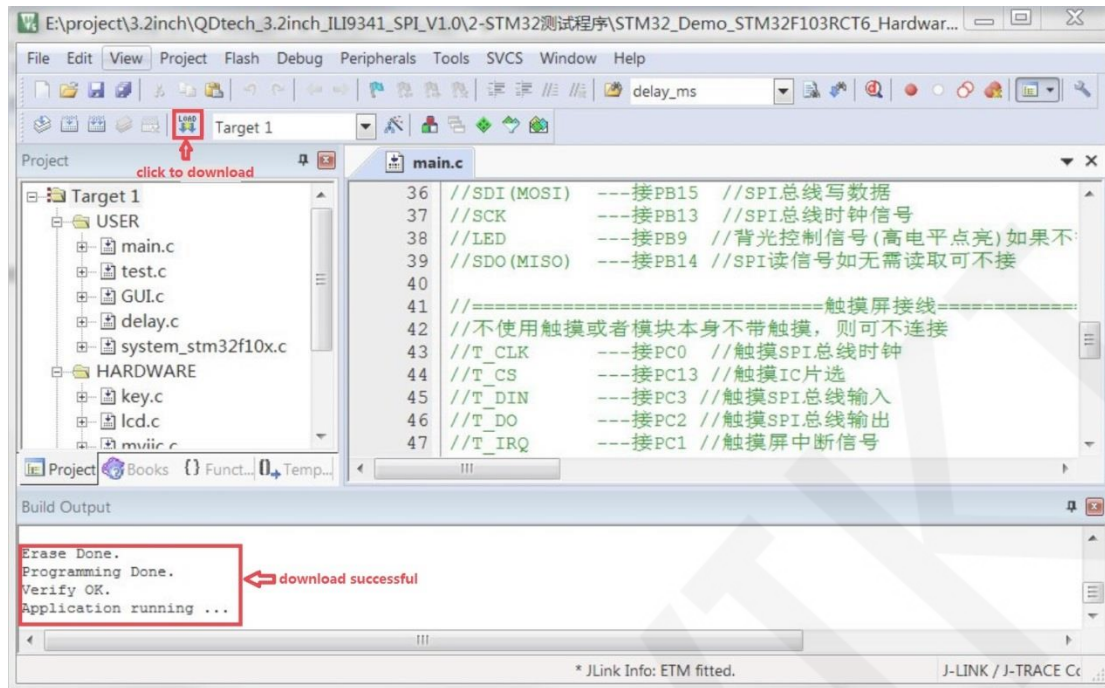


B. Select the flash model and click Utilities->Settings->Add->Select STM32F10x High-density Flash->Add, as shown below:

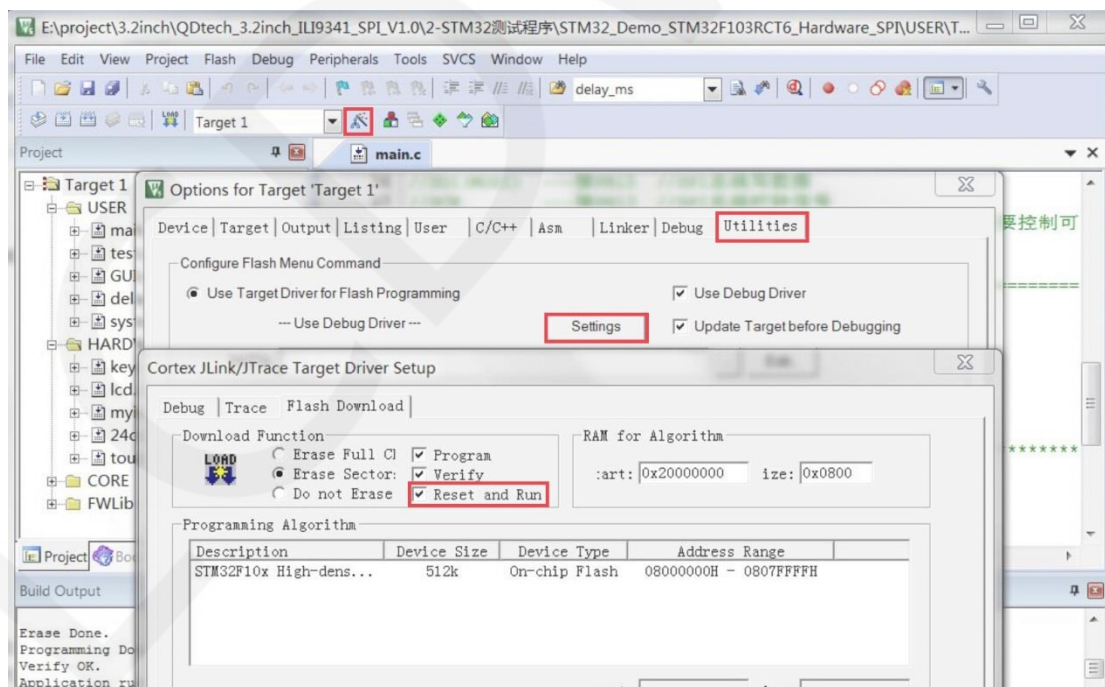


6. After setting both JTAG and flash, you can download the program. Download the program, click the download button, download the hex file to the development board, if the “**Programming Done. Verify OK.**” prompt appears, the download is successful, as shown below:





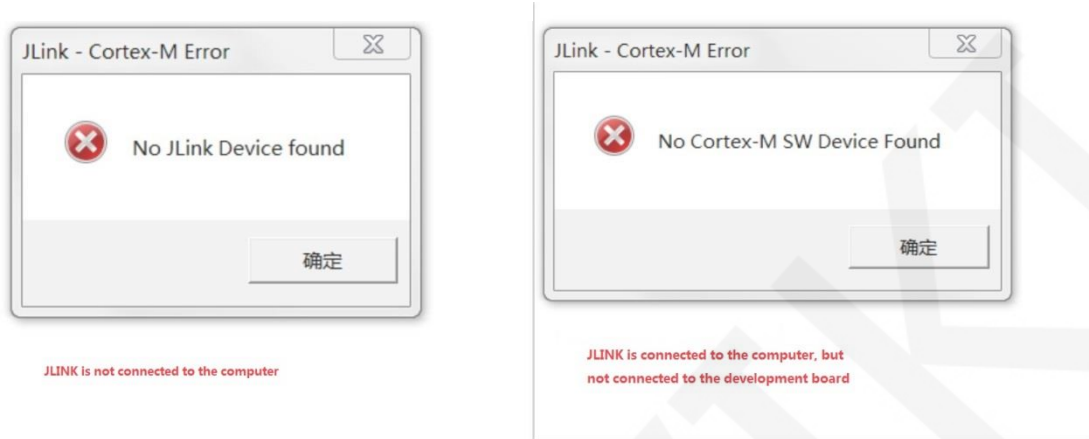
7. After the program is successfully downloaded, if the module does not have any reaction, you need to press the reset button to run normally. If you want the program to run automatically after the download is successful, you need to set it as follows: Click the magic wand icon -> Utilities->Settings-> check Reset and run, as shown below:



8. If the module displays characters and graphics normally, the program runs successfully.

**NOTE:**

1. When downloading the program, if the following error occurs, the JTAG setting is incorrect. Please follow step 4 of the operation instructions:



2. If the following error occurs, the flash setting is incorrect. Please follow step 5 of the operating instructions:

