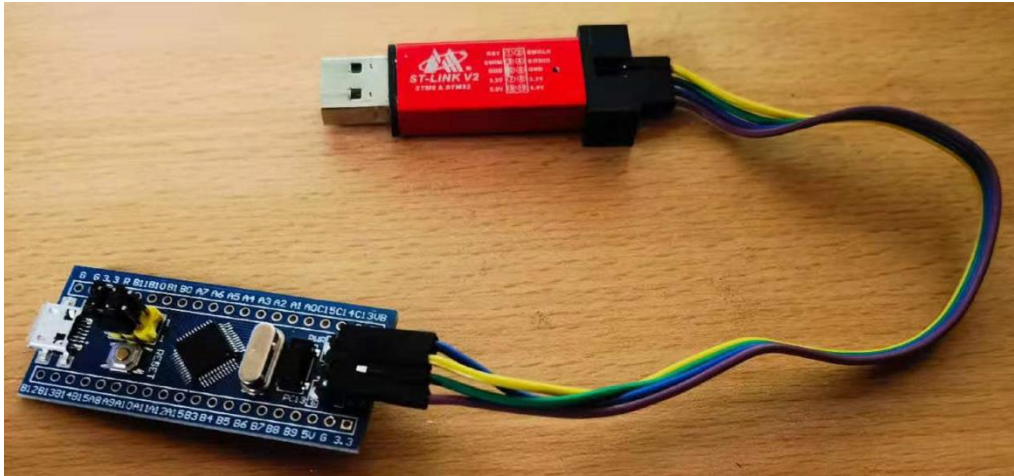


CH32F103 Chip Development Download manual V1.0

1.STlink(SW and other download tools) download

1.1 The board is connected to STlink



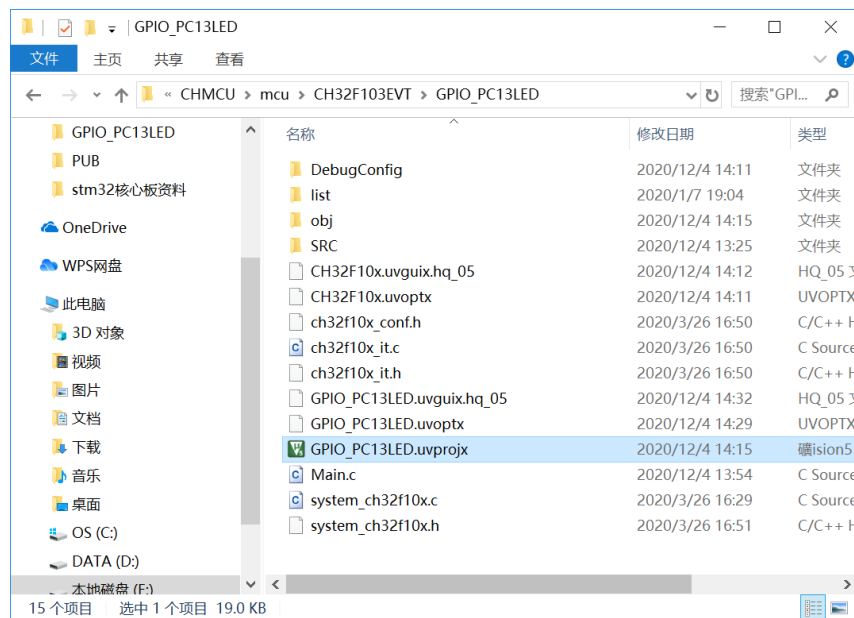
1.2 Download in Keil Project

Note: you can refer to the package of development board about Development code and drivers

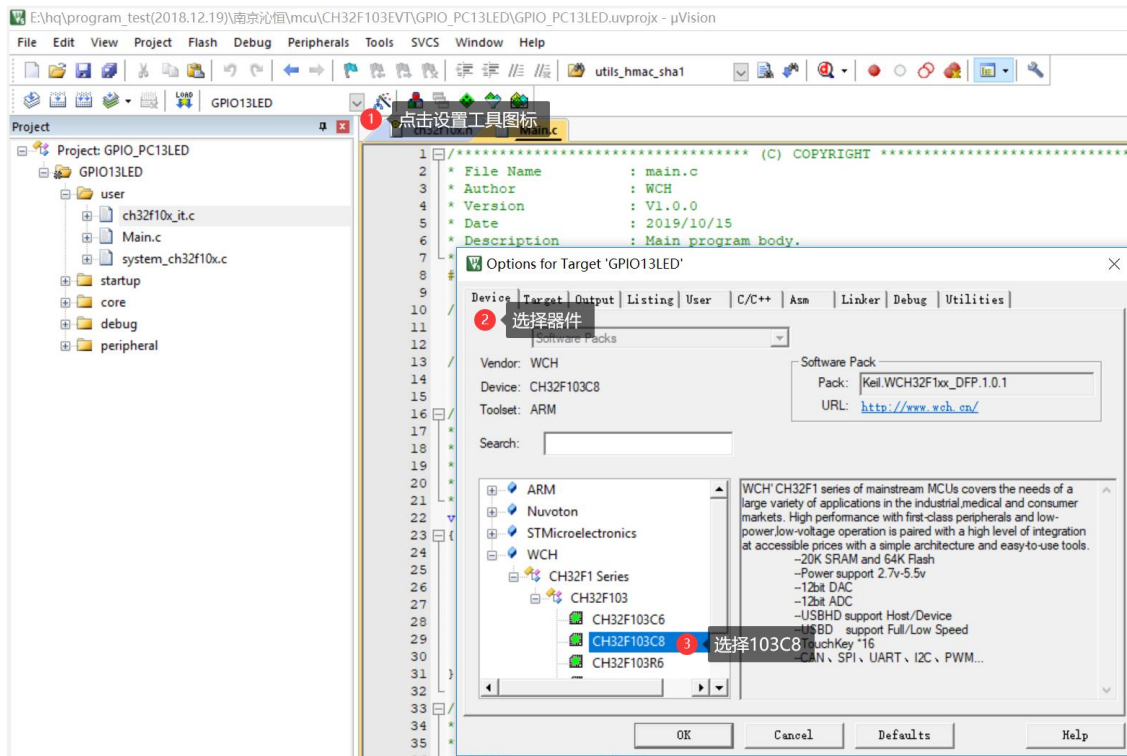
For examples : GPIO_PC13LED project ,you can find from the development package.

(1) Find the device library file (WCH32F1xx_DFP.1.0.0.pack)in the development package, and then install it

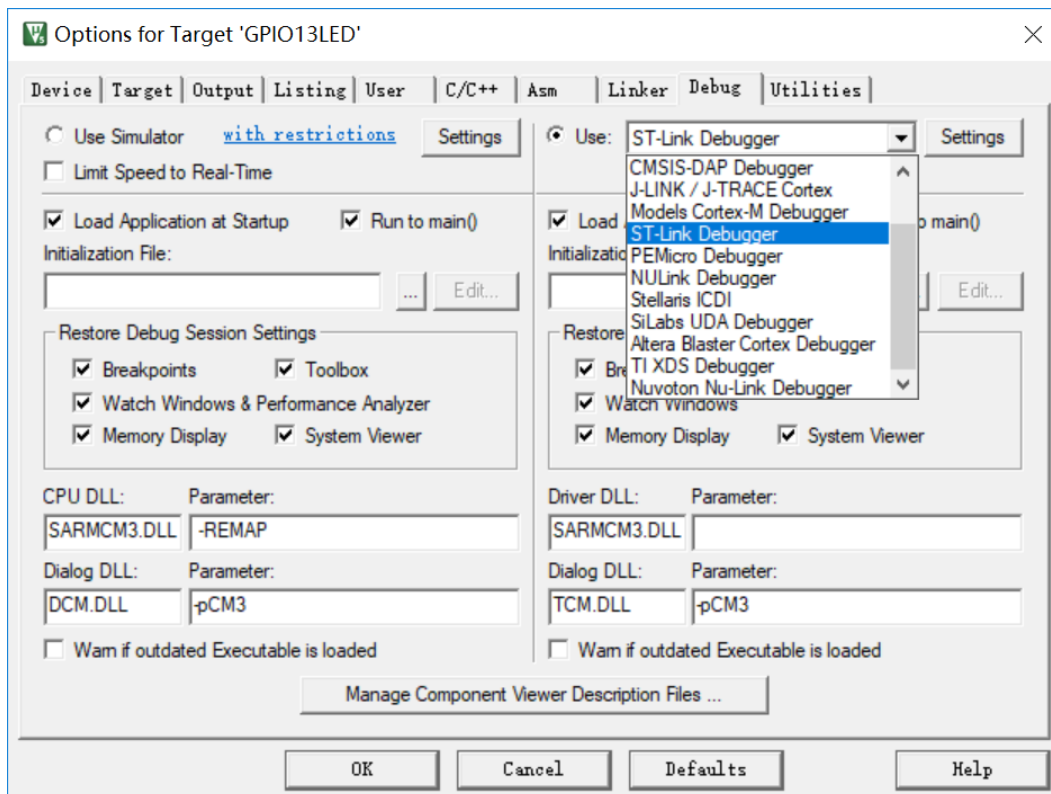
(2) Open GPIO_PC13LED project file



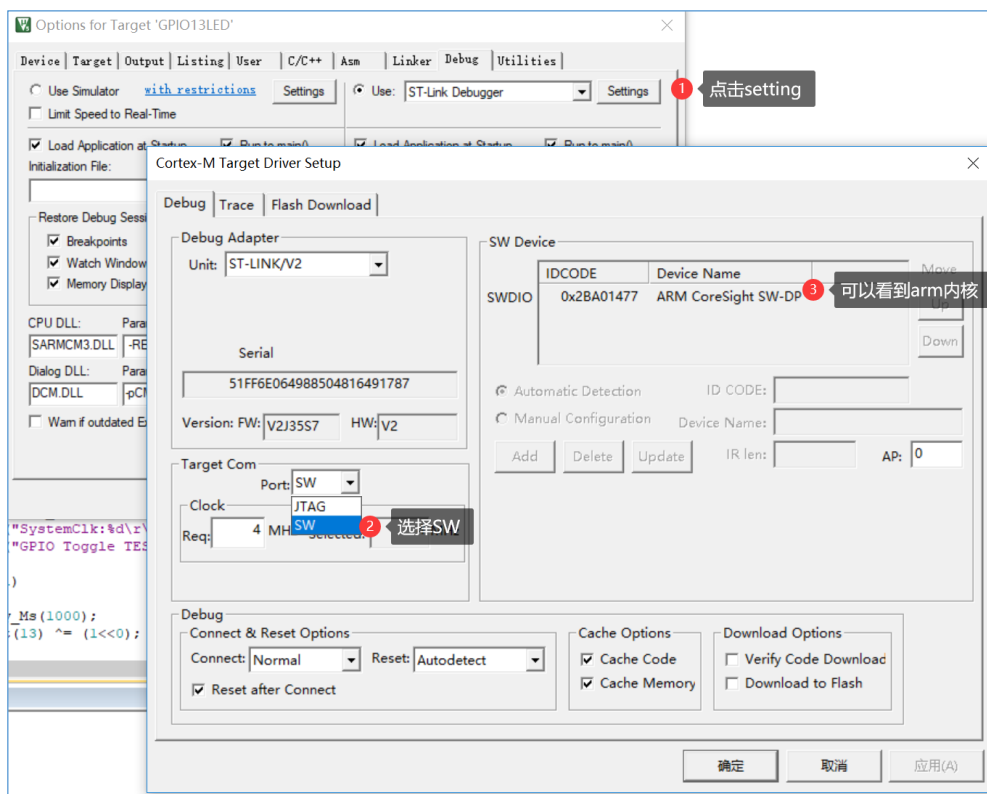
(3) select the device as shown below, and select 103C8 here.



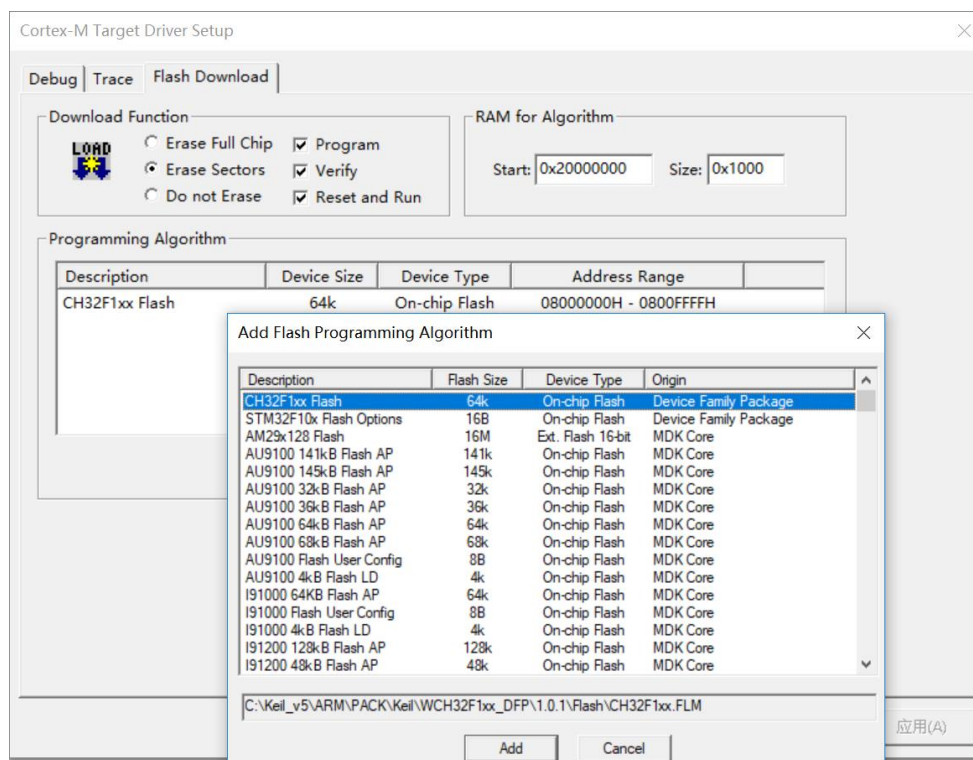
(4) After connecting to STlink, then configure the Debug item and select the simulation downloader, as shown in Figure:



When you select SW, you can see the kernel value, indicating that the hardware connection is correct, otherwise the hardware connection needs to be checked.

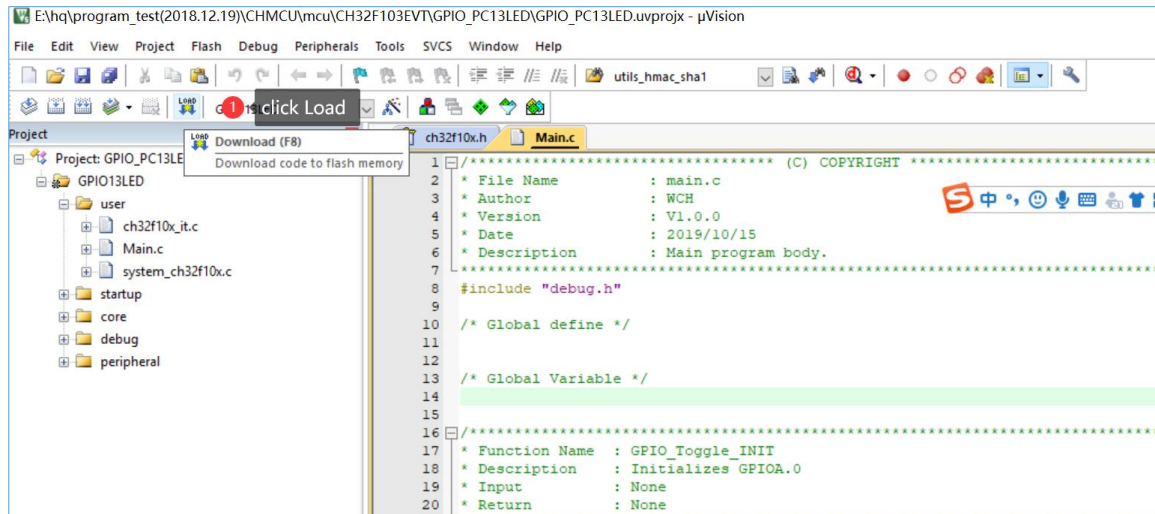


(5) Add the algorithm file, select the flash download option page in the image above, select add on that page, add the algorithm, select CH32F1xx Flash. Then choose OK.

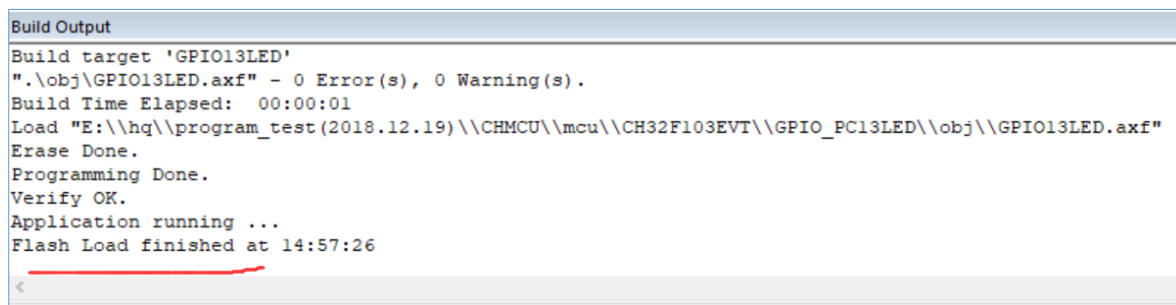


(6) Download

Once the program is compiled successfully, click on the download toolbar.



If the download is successful, there will output information of "Flash load finished" in the output bar.



2. Serial download

2.1 Hardware connection:

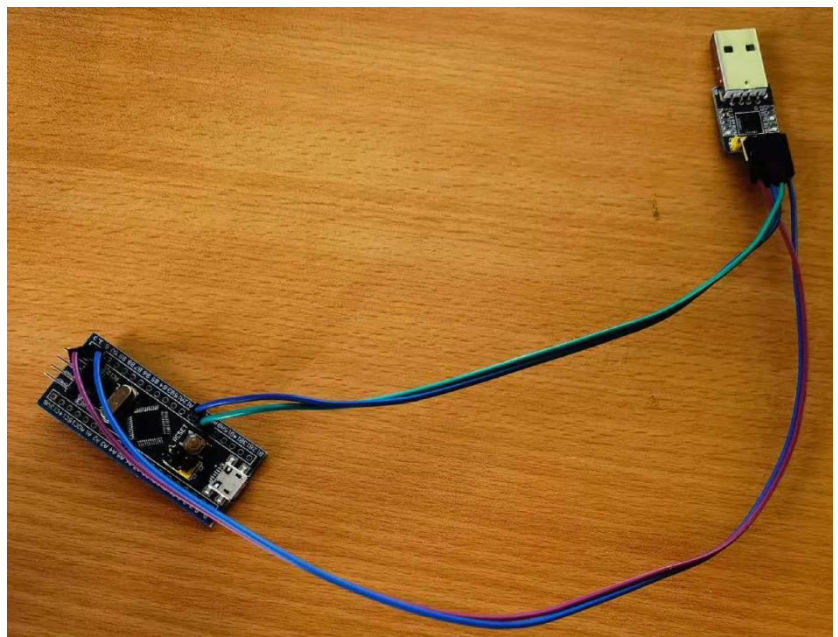
Rx--->A9

Tx---->A10

GND-->G

VCC-->3.3

Jumper boot1 is set to high



2.1 Software configuration:

(1) Install the software:

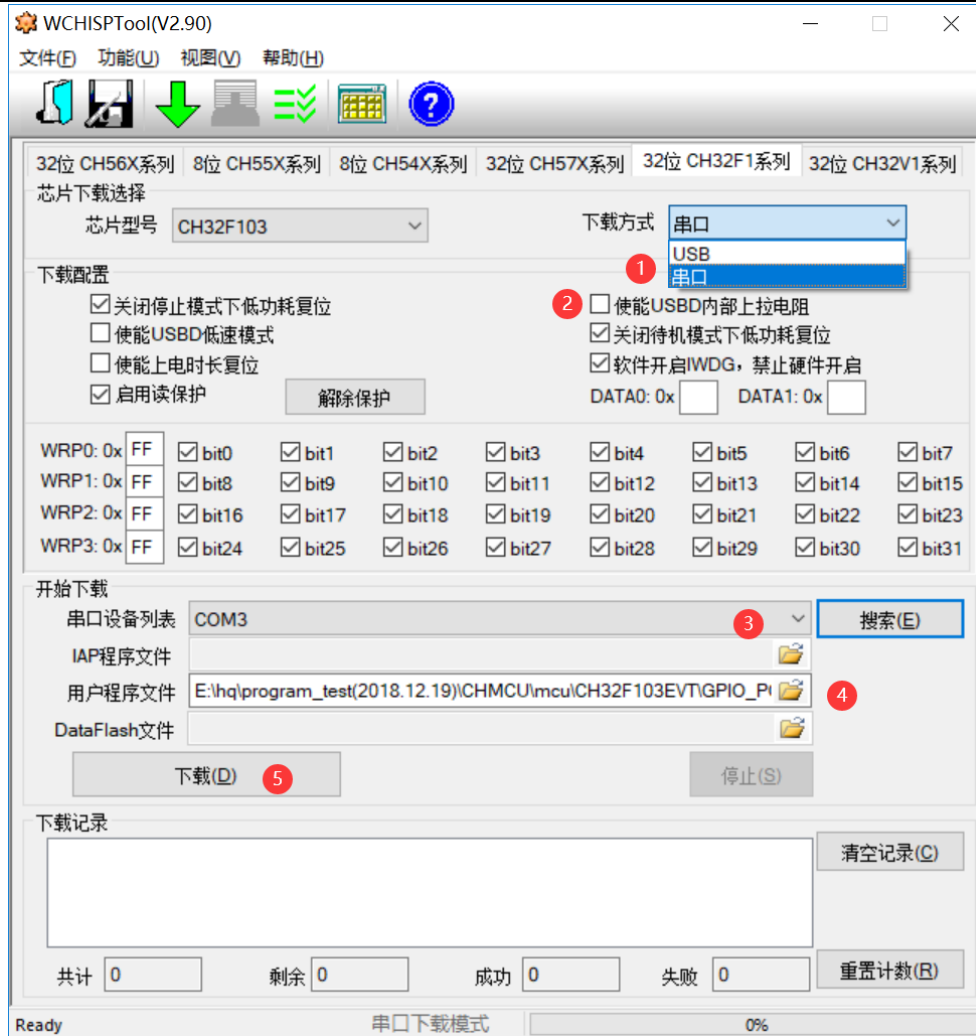
Install the software of WCHISPTool(the software can be found in the package WCHISPTool_Setup.exe)

if using serial downloads, and open it as follows:

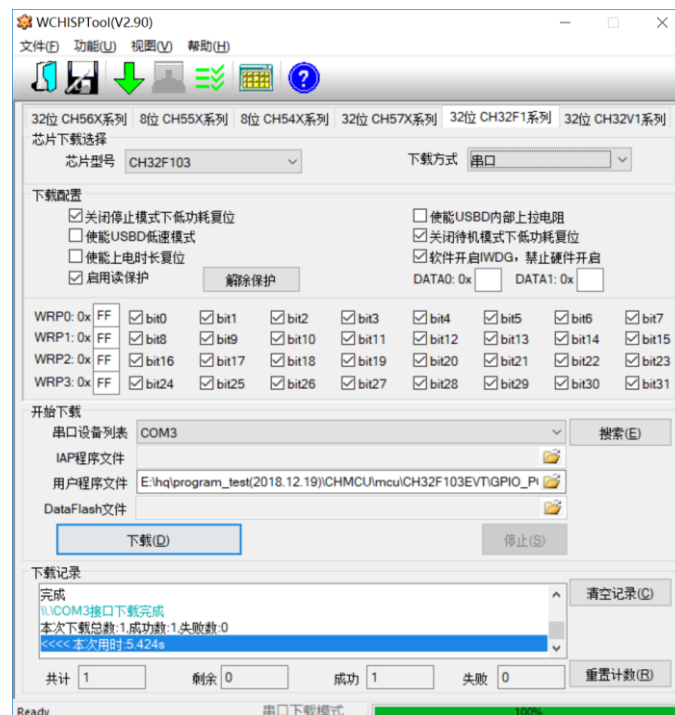


(2) The configuration process

①Select serial port-->② if usb has pull-up resistors, should be removed here----->③choose to Serial port----->④ select the HEX or bin file----->⑤download

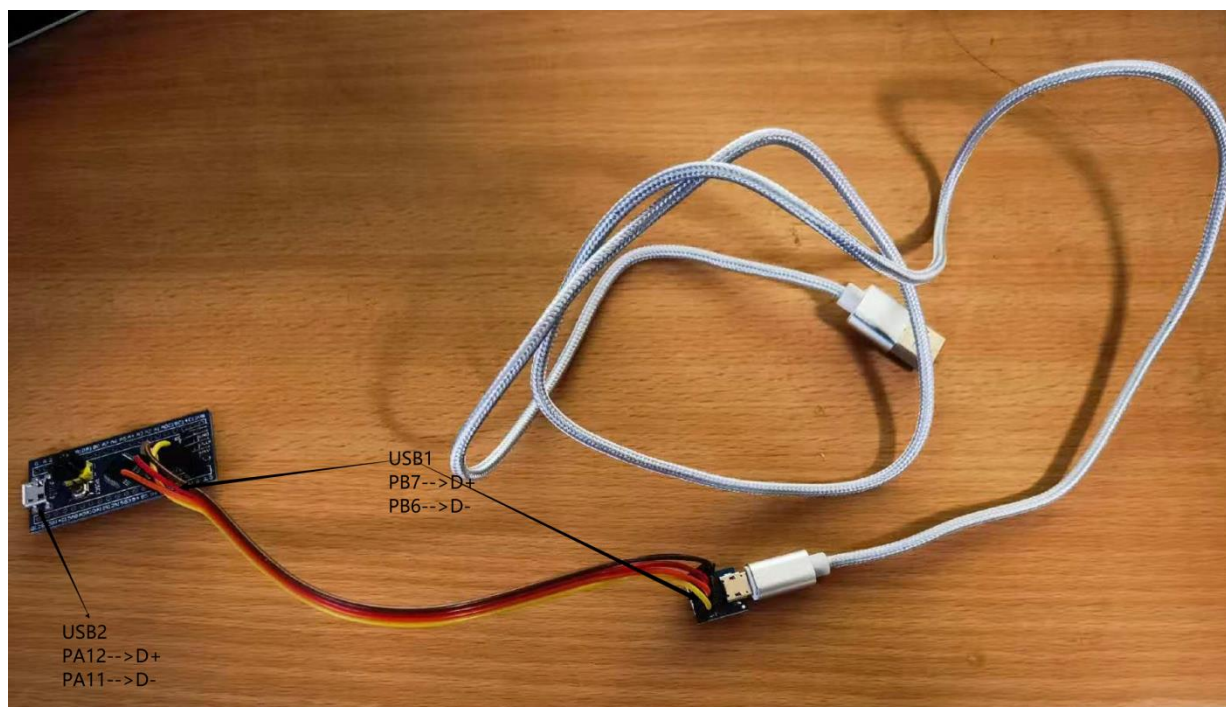


(3) if successful download:



4.USB download

4.1 USB connection as shown



The CH32F103 has 2 USB ports, one for the host usb and one for the device usb. The corresponding pins are:

HUSB: PB7----->D+

PB6----->D-

USB device: PA12----->D+

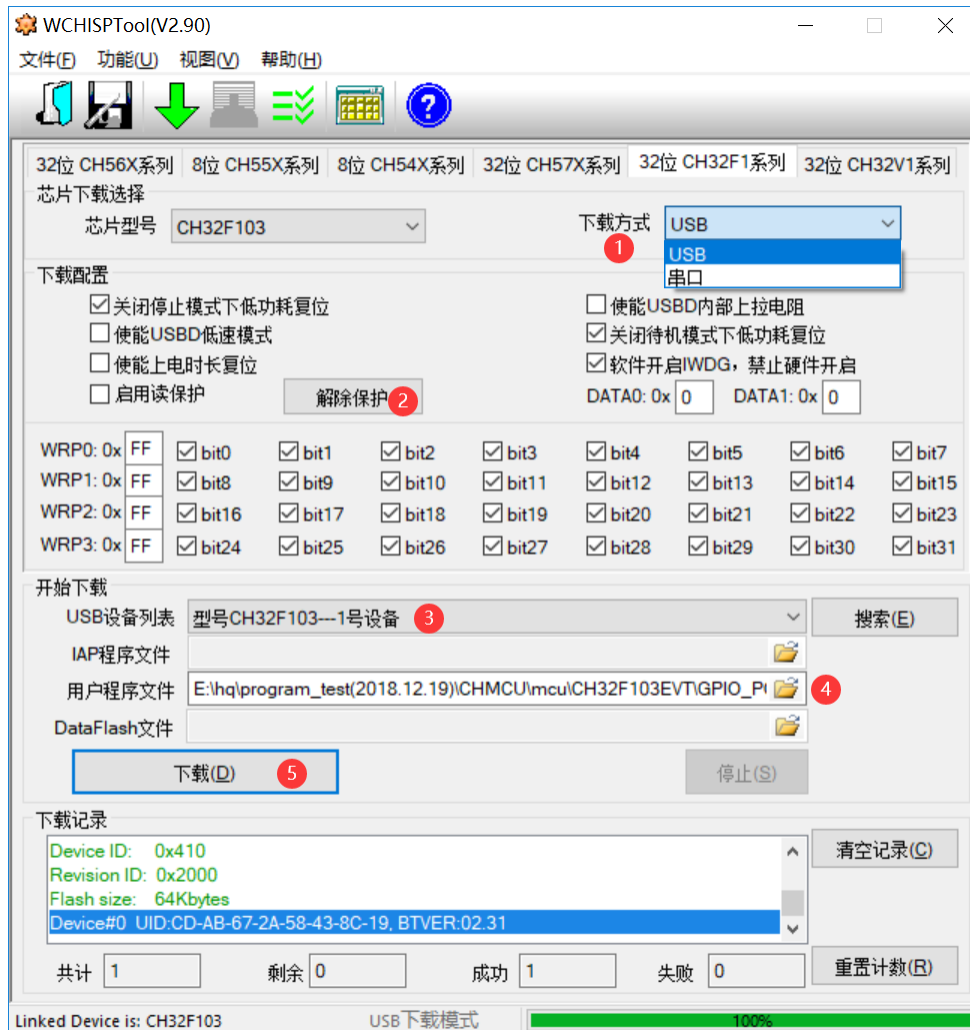
PA11----->D-

The firmware is downloaded by **default using HUSB**, so you need connect to the development board with a usb-to-dip module.

4.2 Software settings

(1)The softwaresetup process

① Select the USB port--> ② Remove read protection-----> ③ See the usb device -----> ④ select the HEX or bin file----->⑤download



(2) if successful download:

