

# Catalogue

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## 1 Application software description

固件与应用软件对应的支持关系:

应用软件	canable	canable2.0
cangaroo	canLight/slcan/cantact	slcan(支持canfd)
BUSMASTER v3.2.2	canLight/pcan/cantact	canLight
TSMaster	canLight/pcan/cantact	canLight
PCAN-Explorer 5与pcan view	pcan	不支持
cantact	slcan	slcan(不支持canfd)

## 2 Application software user manual

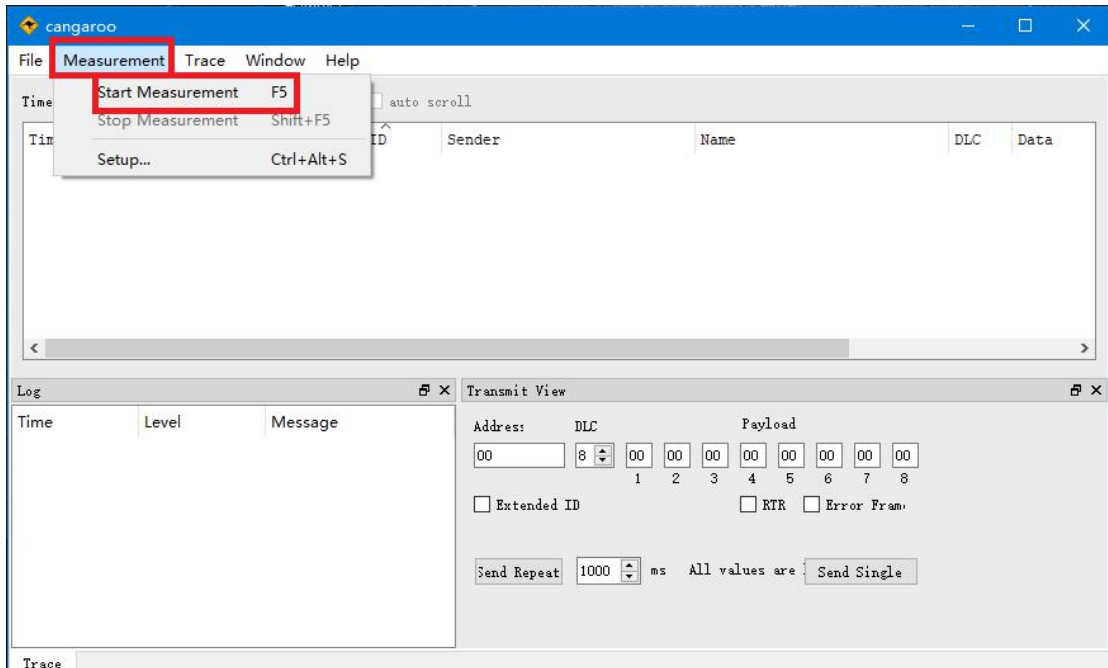
### 2.1 How to use software cangaroo

With the default Candlelight firmware, after connecting to the computer, the following devices will be visible in the Device Manager:

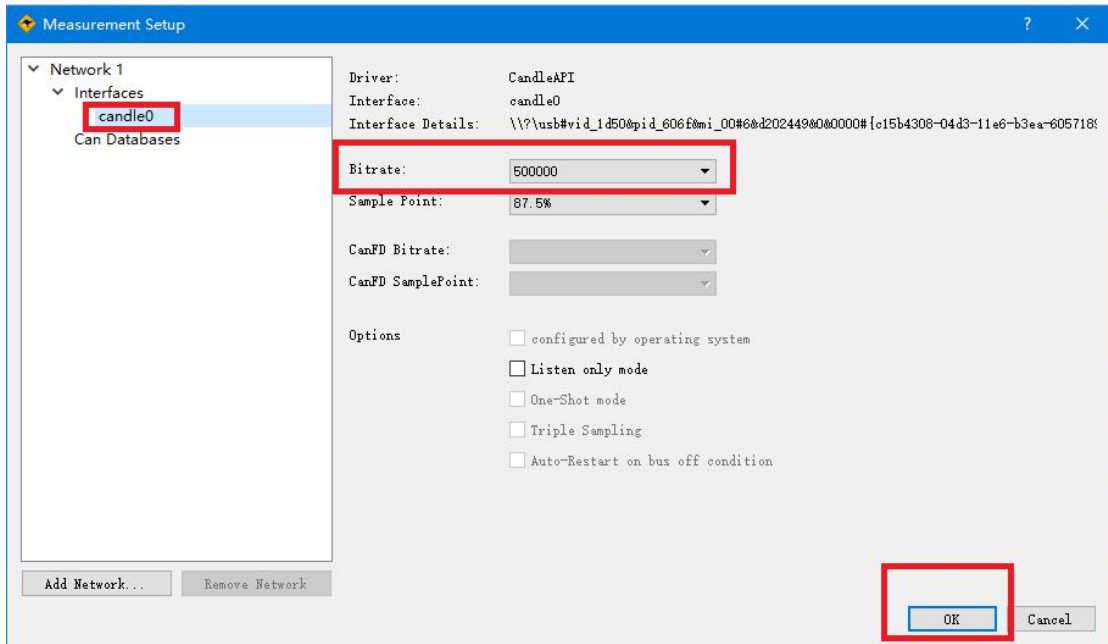


Decompress : \candleLight\cangaroo-windows.rar , Open cangaroo-windows  
\cangaroo.exe:

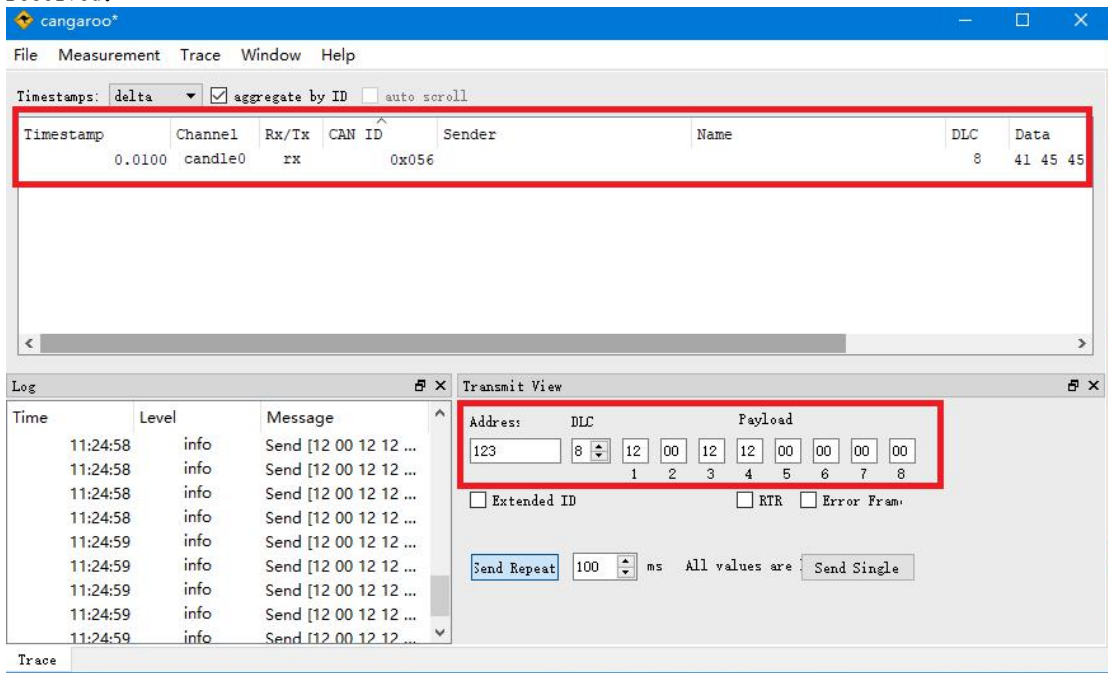
platforms	2018/8/30 13:46	文件夹	
styles	2018/8/30 13:46	文件夹	
<b>cangaroo.exe</b>	2018/10/1 16:35	应用程序	449 KB
libgcc_s_dw2-1.dll	2015/12/28 18:25	应用程序扩展	118 KB
libstdc++-6.dll	2015/12/28 18:25	应用程序扩展	1,505 KB
libwinpthread-1.dll	2015/12/28 18:25	应用程序扩展	78 KB
Qt5Charts.dll	2017/11/30 21:33	应用程序扩展	1,375 KB
Qt5Chartsd.dll	2017/11/30 21:34	应用程序扩展	81,597 KB
Qt5Core.dll	2018/1/3 16:24	应用程序扩展	6,028 KB
Qt5Cored.dll	2018/1/3 16:24	应用程序扩展	118,657 KB
Qt5Gui.dll	2017/11/30 20:04	应用程序扩展	6,249 KB
Qt5Guid.dll	2017/11/30 20:05	应用程序扩展	221,006 KB
Qt5Widgets.dll	2017/11/30 20:10	应用程序扩展	6,081 KB
Qt5Widgets.d.dll	2017/11/30 20:10	应用程序扩展	163,920 KB
Qt5Xml.dll	2017/11/30 19:57	应用程序扩展	211 KB
Qt5Xmld.dll	2017/11/30 19:57	应用程序扩展	1,896 KB



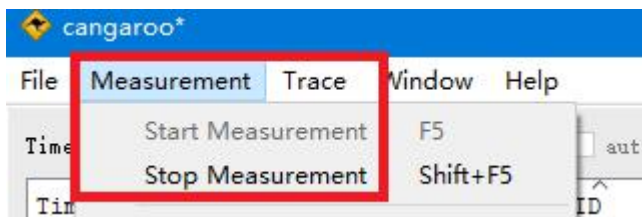
Click Measurement -> Start Measurement, the following devices will appear:



Click OK , The indicator light for board sending and receiving will light up, The connection to the board has been successfully established, and data can now be sent and received:

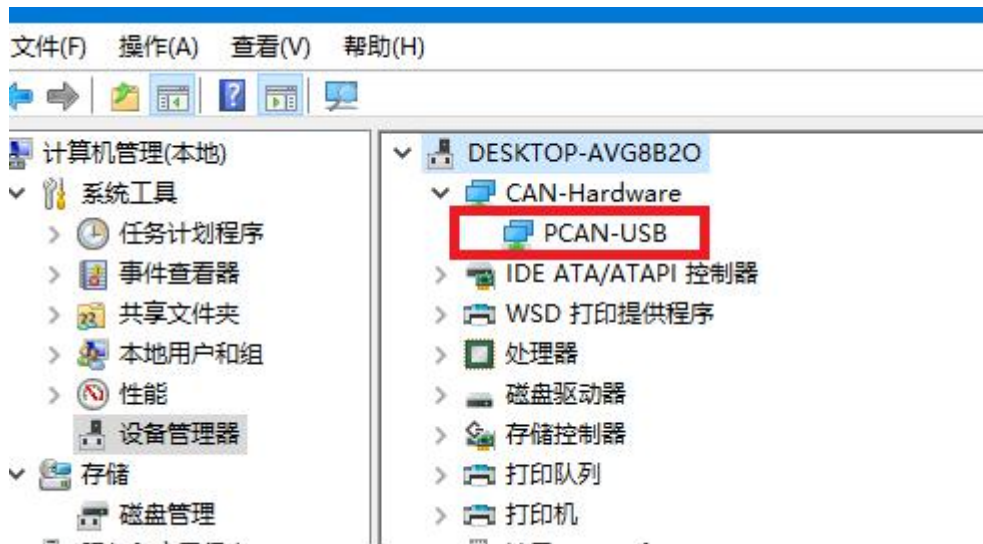


If stop using, click here: Measurement -> Stop Measurement



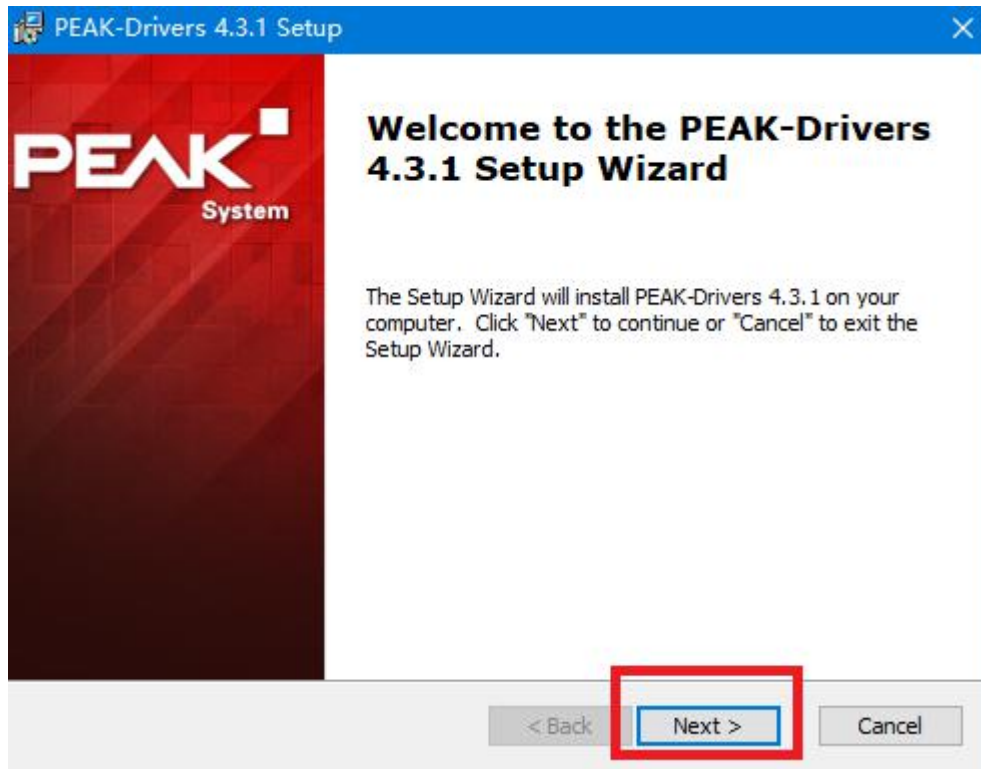
## 2.2 How to use software pcanview

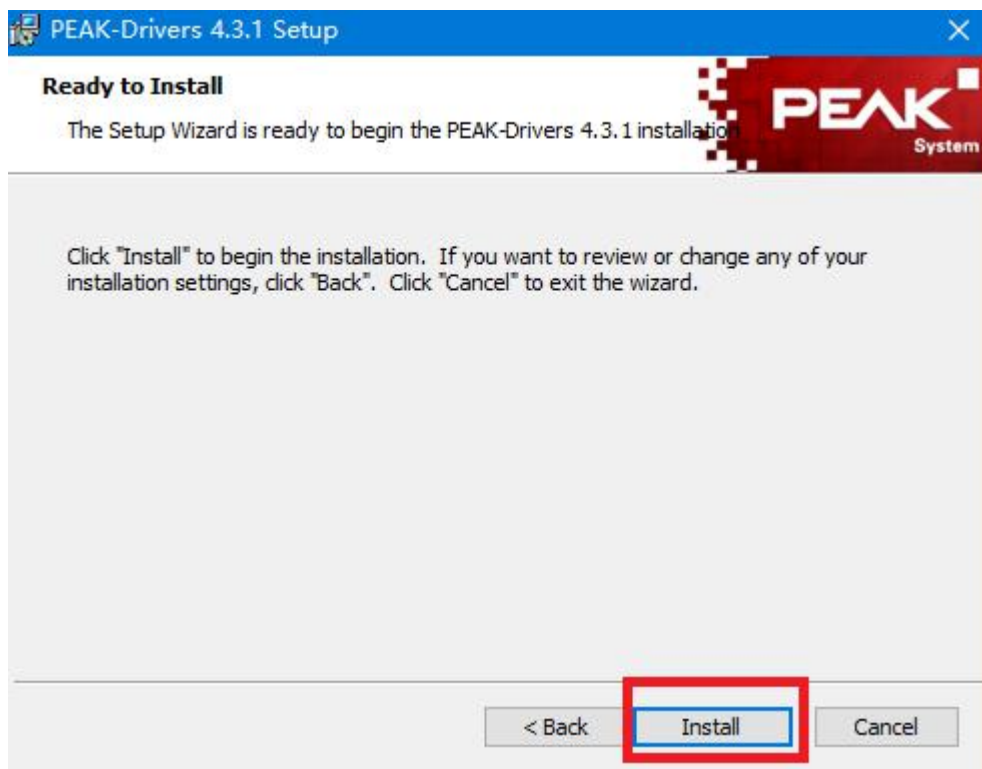
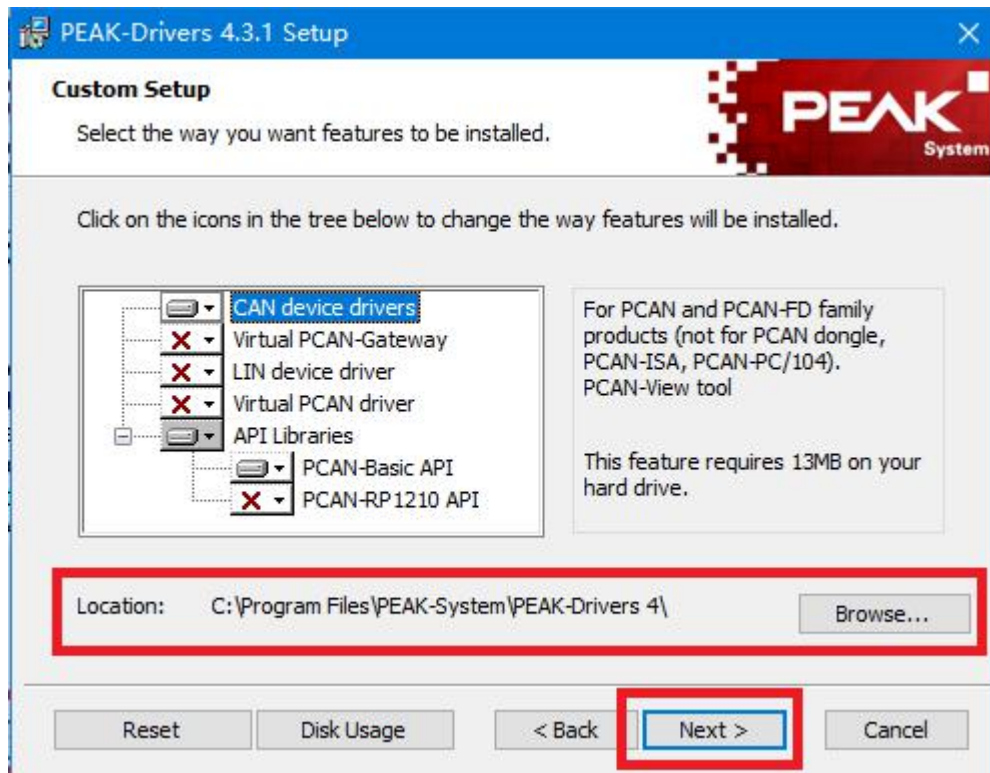
When using the pcanview software, the board must be flashed with the PCAN firmware: 03-Firmware \pcan. After connecting the board to the computer, the device can be seen in the Device Manager (the driver needs to be installed first, otherwise XCAN-USB will be displayed):

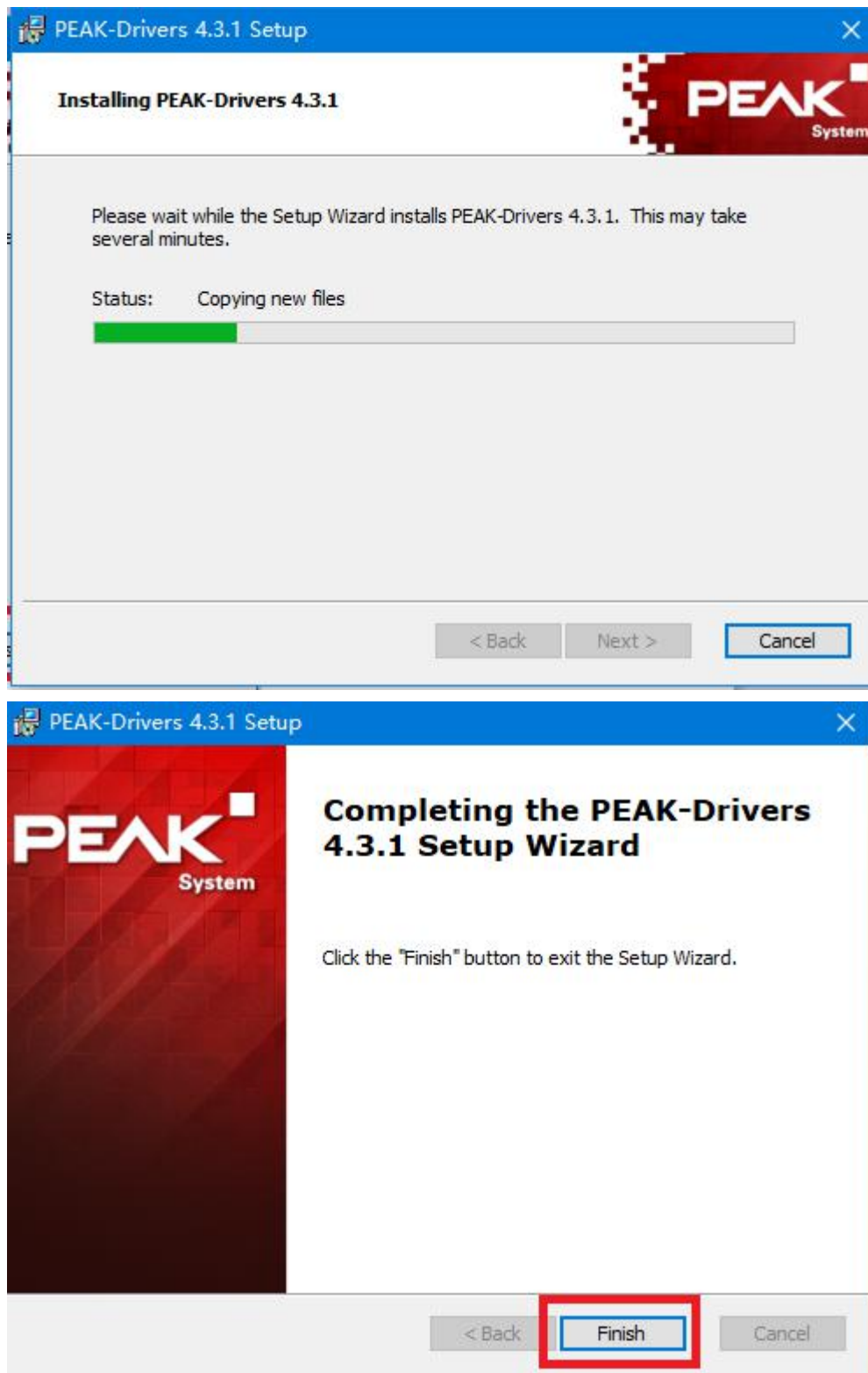


After unzipping 05-Application Software\pcan\PEAK-System\_Driver-Setup.zip, open PeakOemDrv.exe to install the driver, which includes the application. If the driver has already been installed, you can directly unzip 05-Application Software\pcan\pcanview.zip to open the application PcanView.exe. We click on PeakOemDrv.exe to install both the application and the driver:

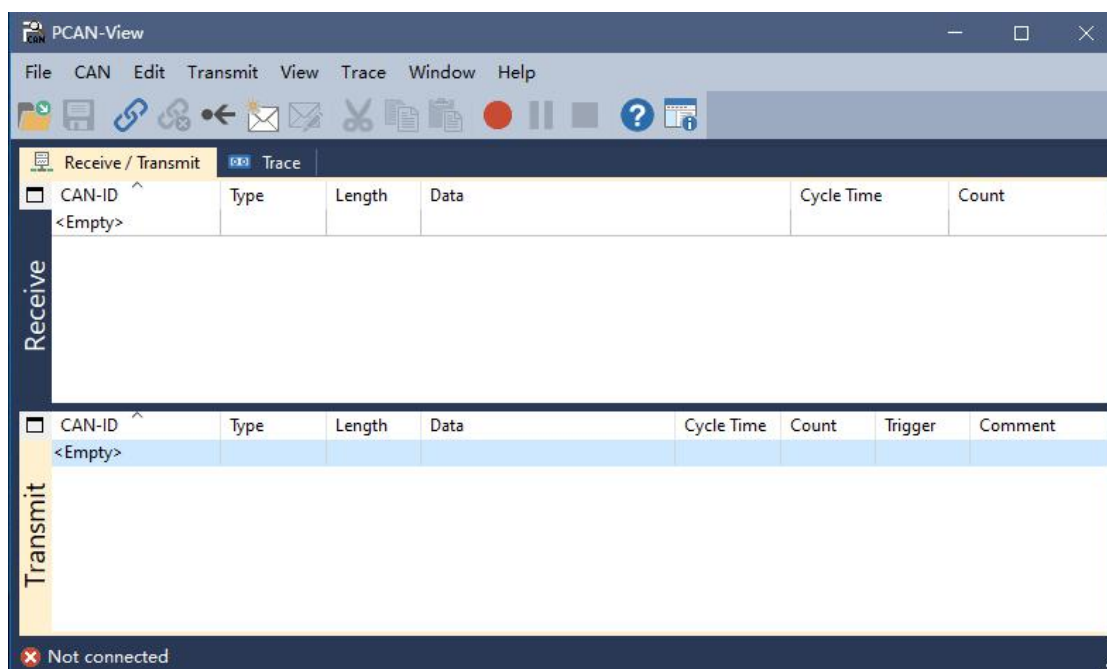
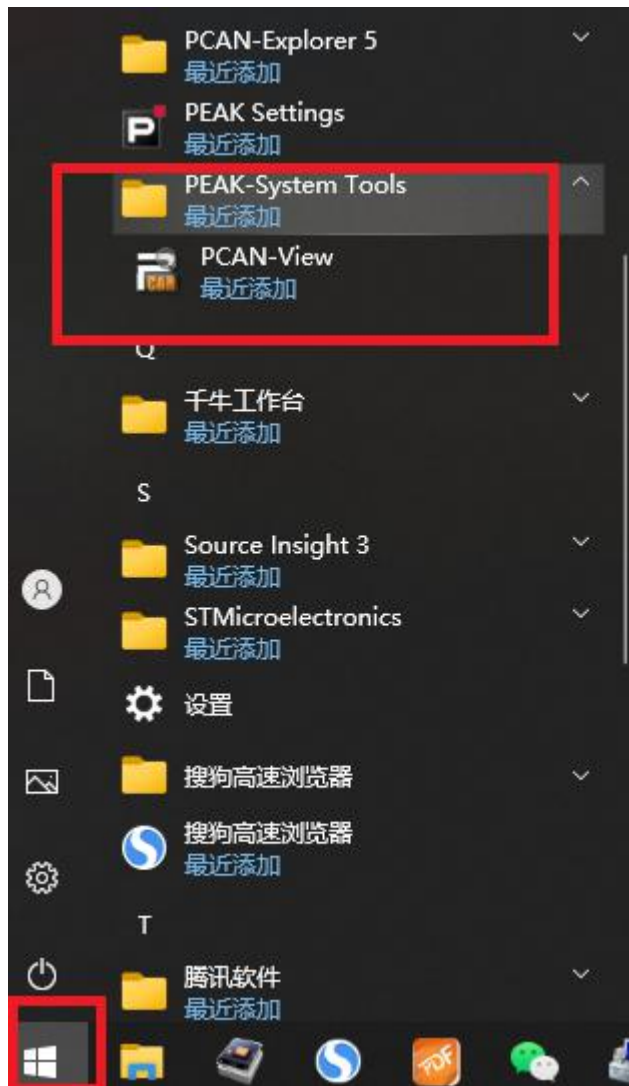
名称	修改日期
PeakOemDrv.exe	2022/9/1 17:35
PEAK-System_Driver-Setup.zip	2022/9/29 13:27



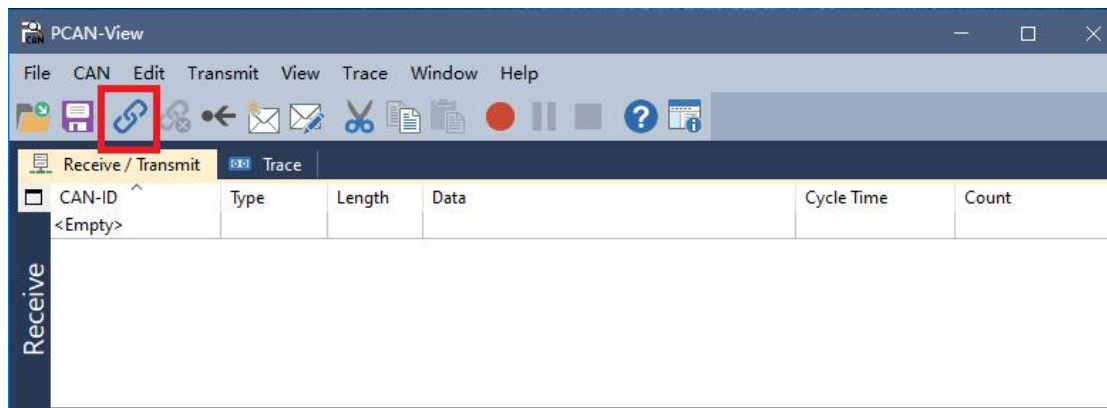




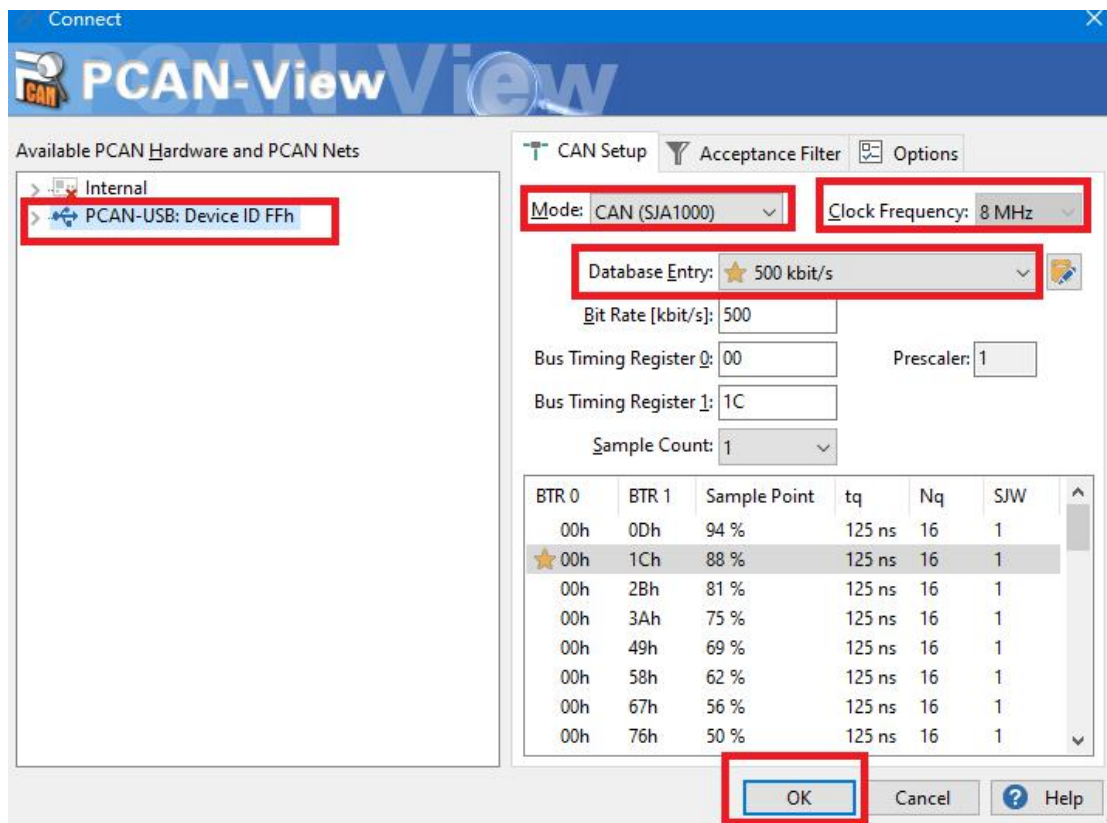
After installation, you can open the PCAN-View application under "Start-PEAK-System Tools" on your computer:



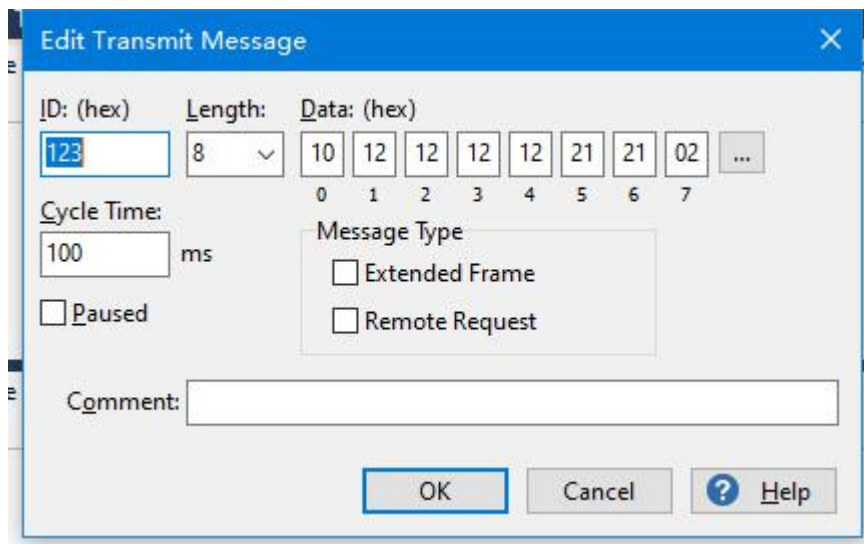
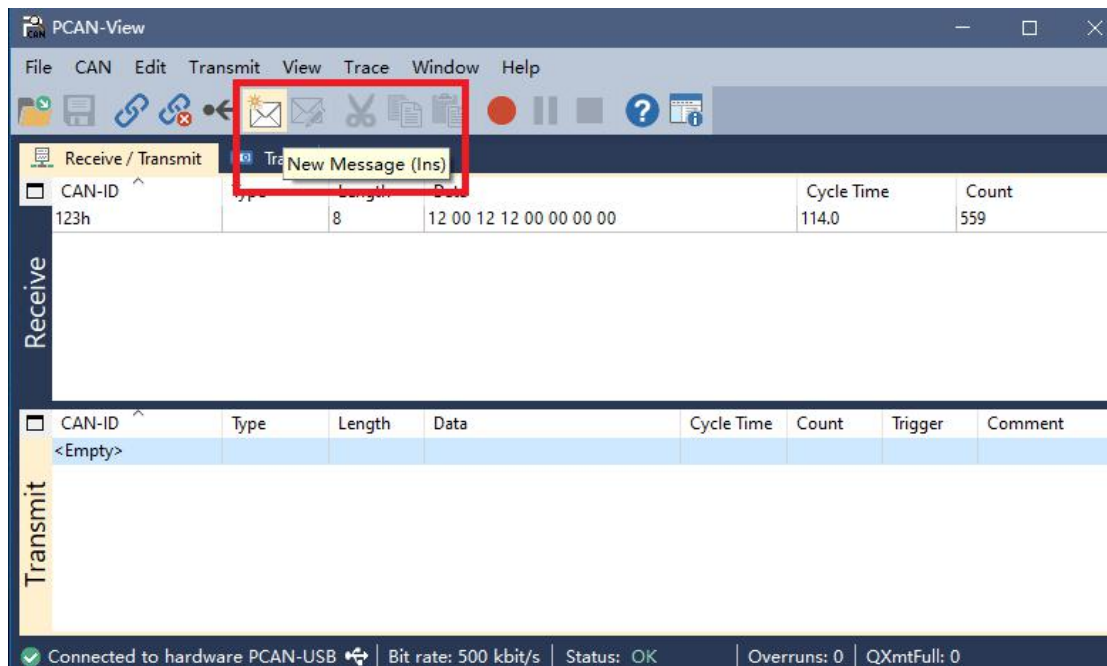
Click CAN -> Connect.... Or click on the connected icon:



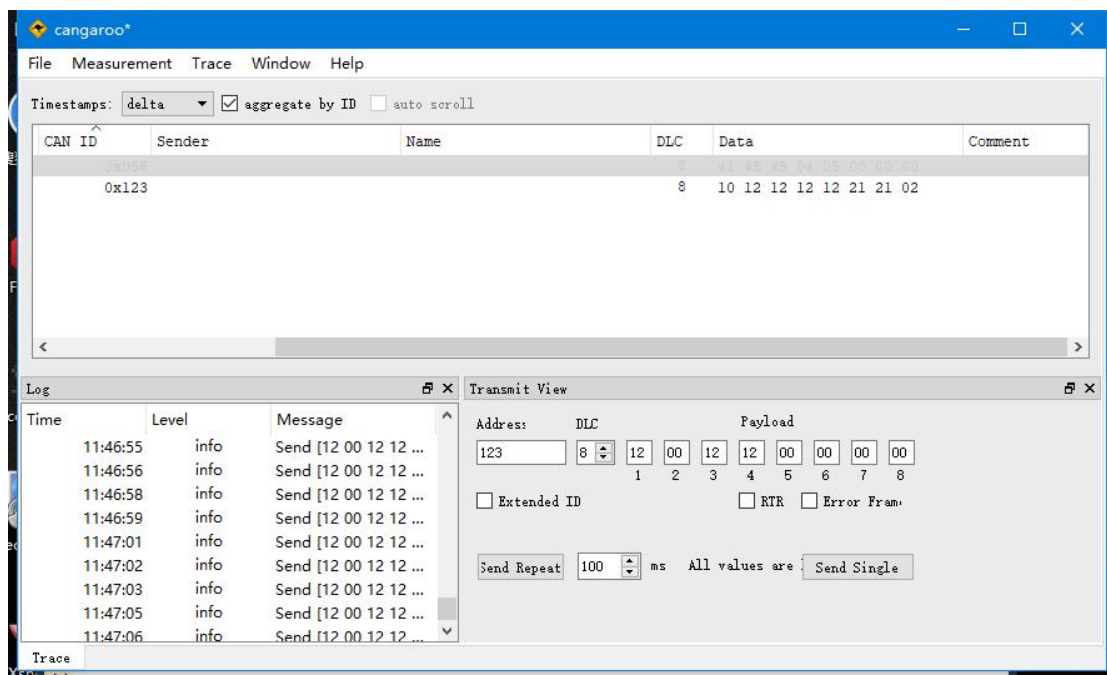
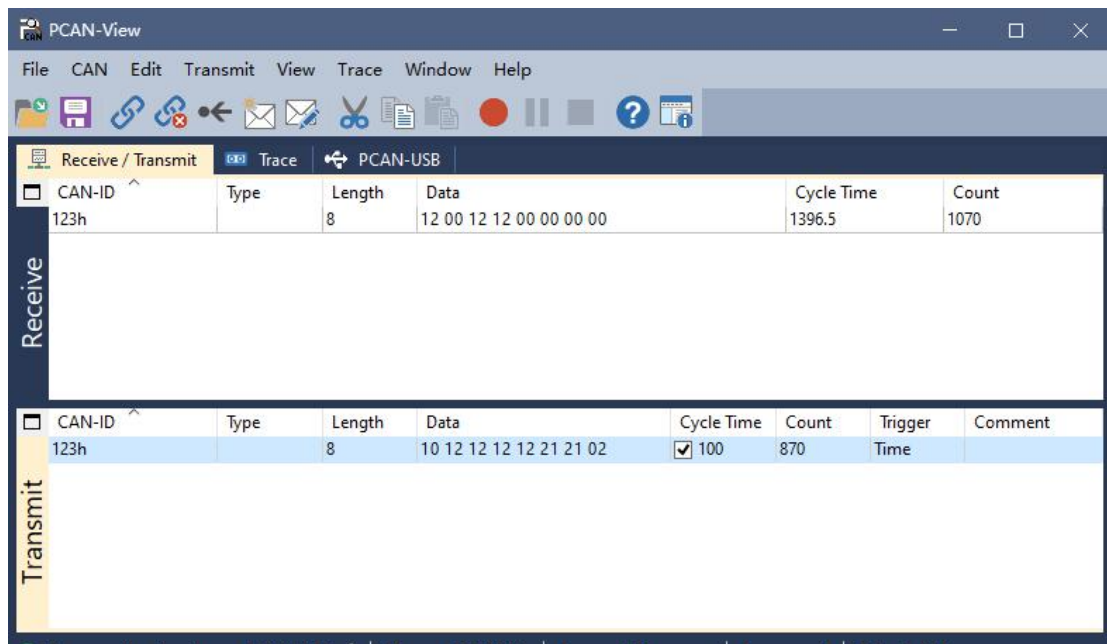
The following default settings pop up, using a rate of 500K:



Just click "OK" to connect.  
Click the following icon to send new data:



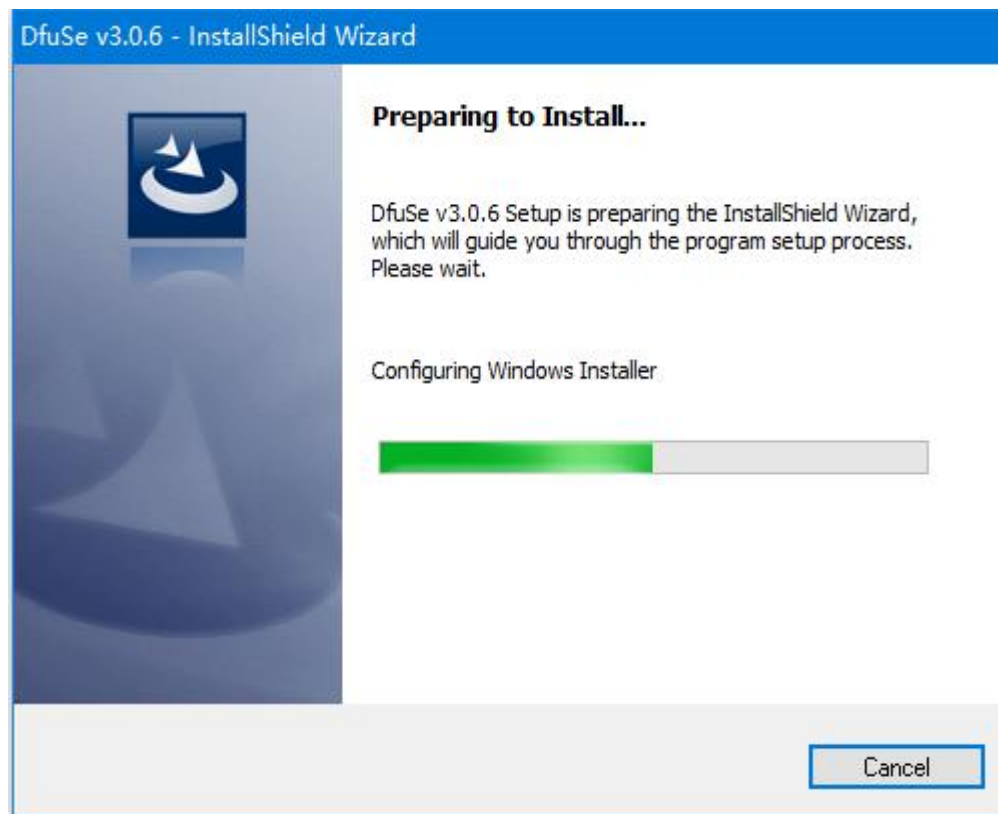
The data sent and received by two boards for mutual communication:

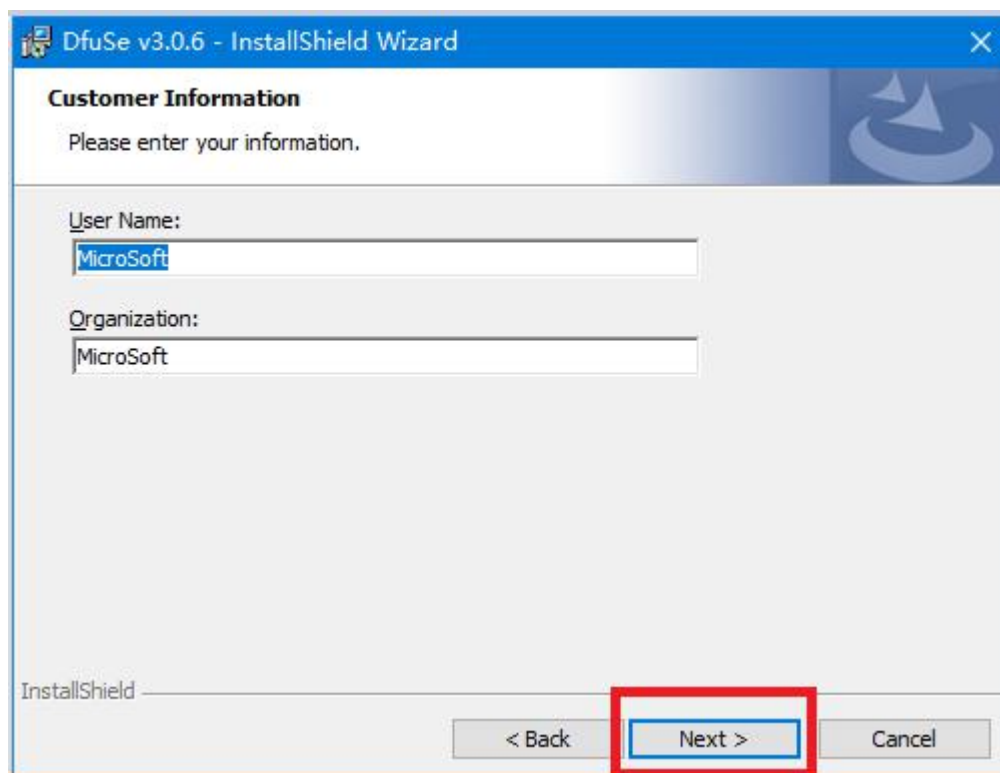
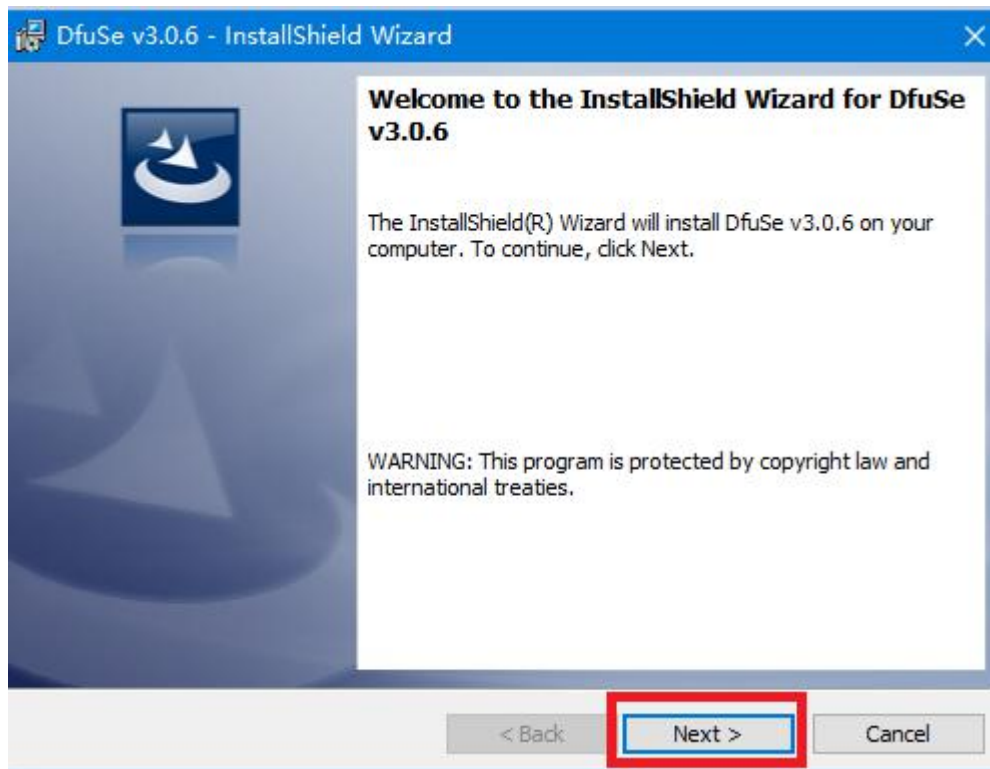


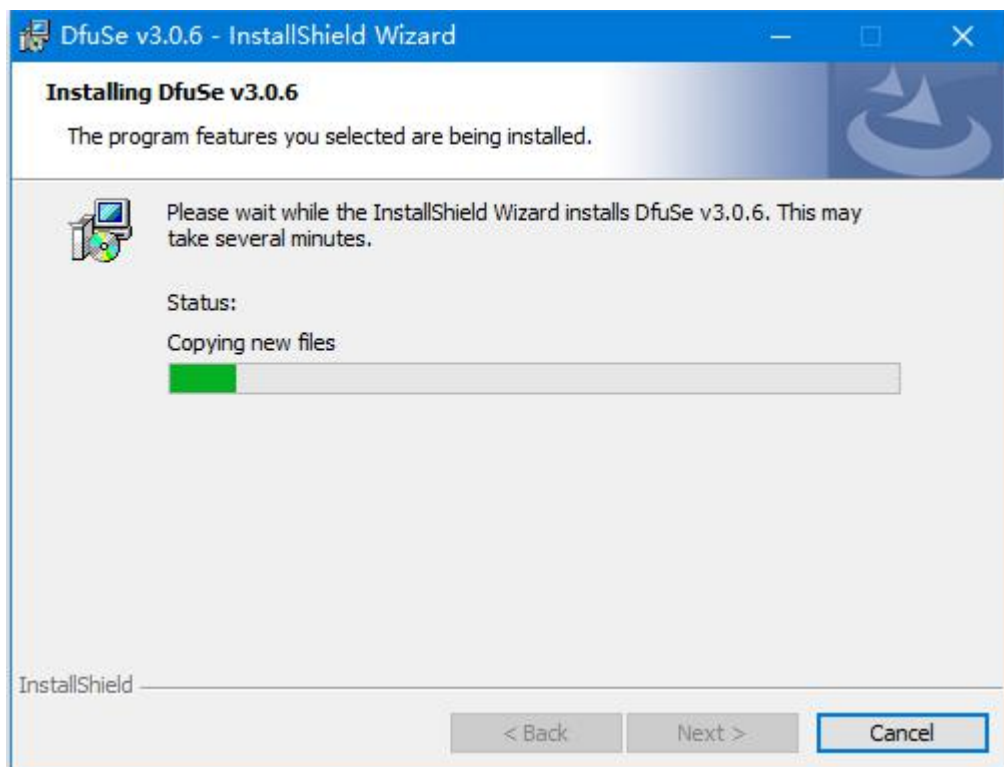
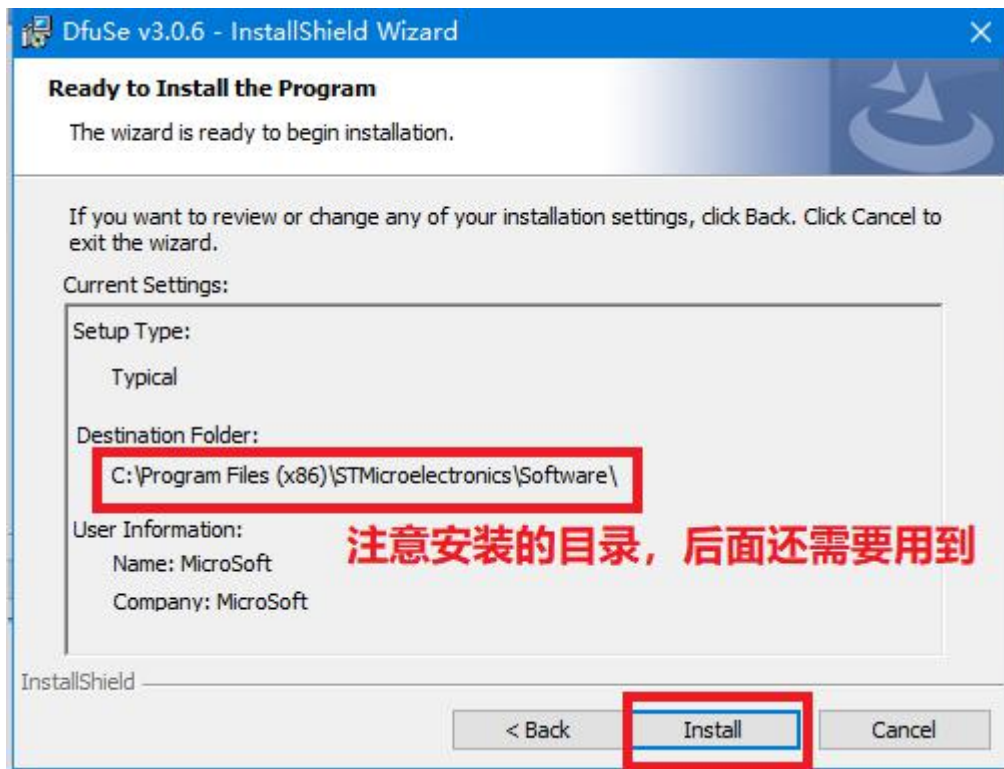
### 3 Firmware flashing

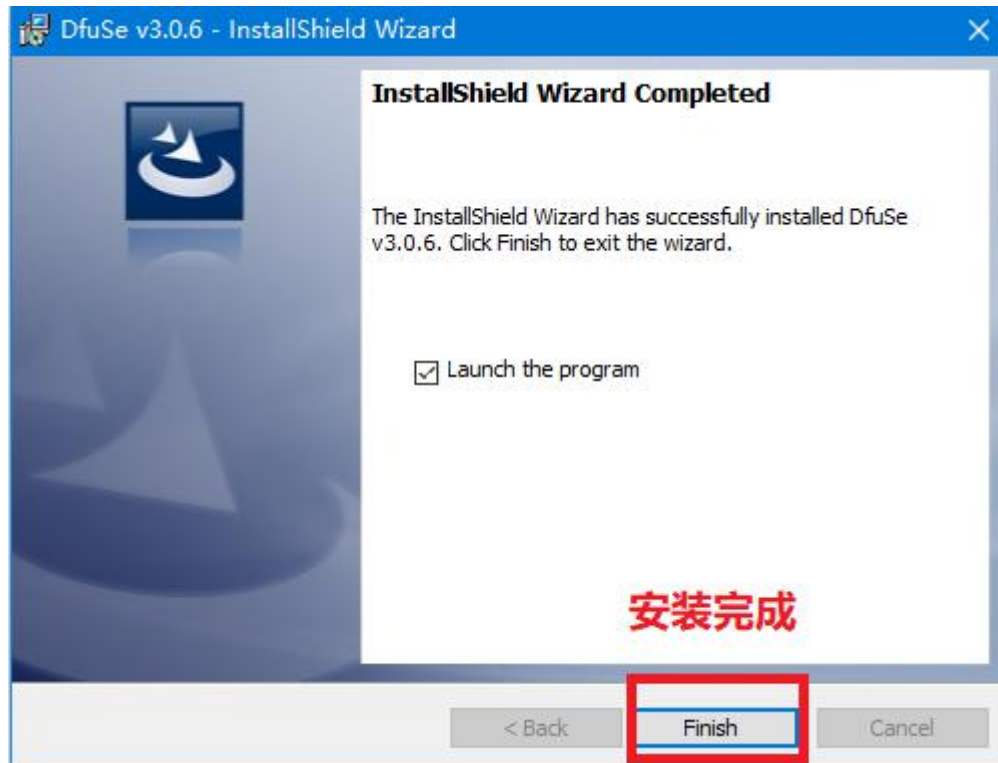
#### 3.1 Installation of DFU programming driver for STM32

After Unzipping, programming drivers and tools \DfuSe\_Demo.rar , Install DfuSe\_Demo\_V3.0.6\_Setup.exe, The installation steps are as the below:

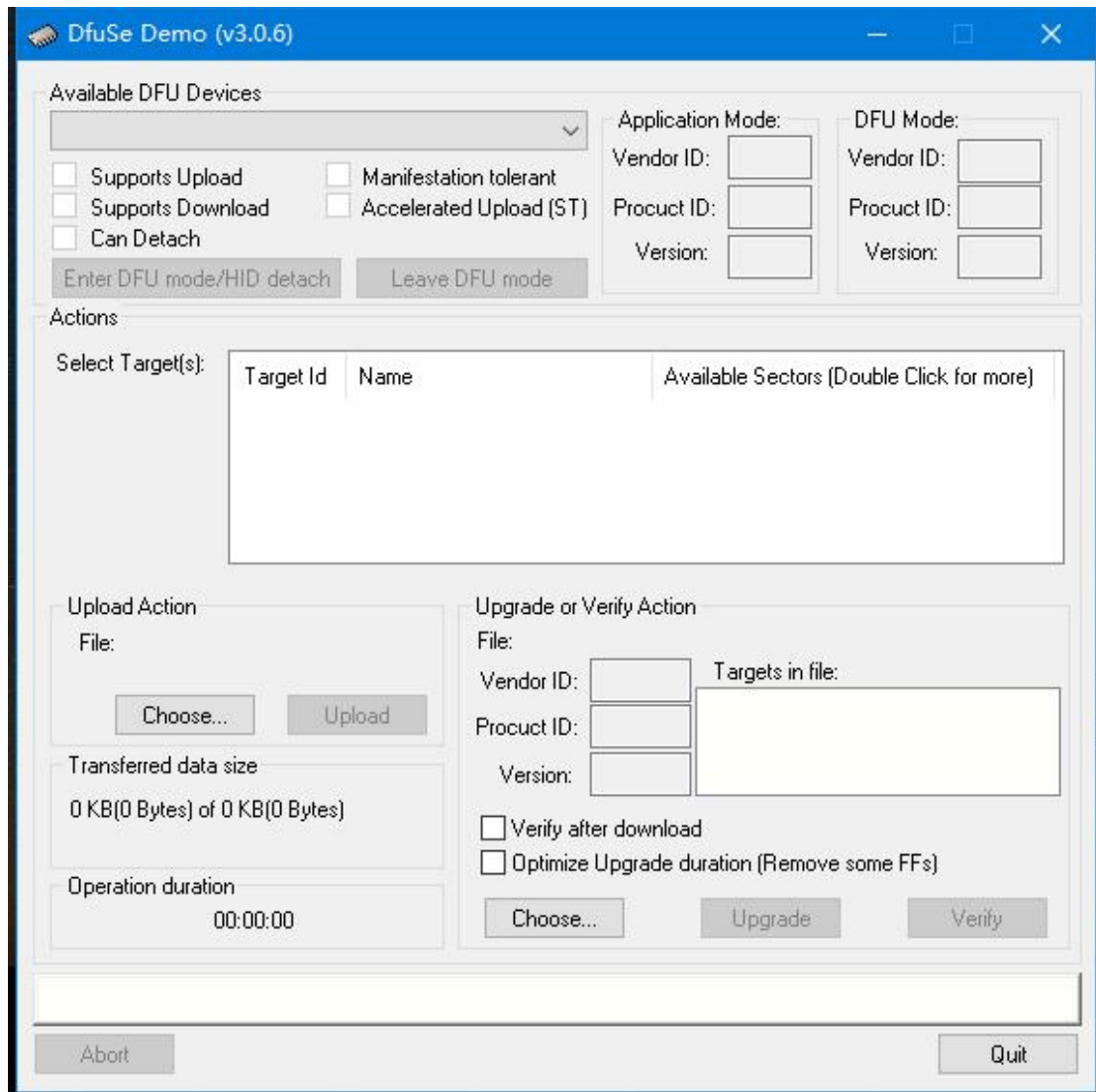


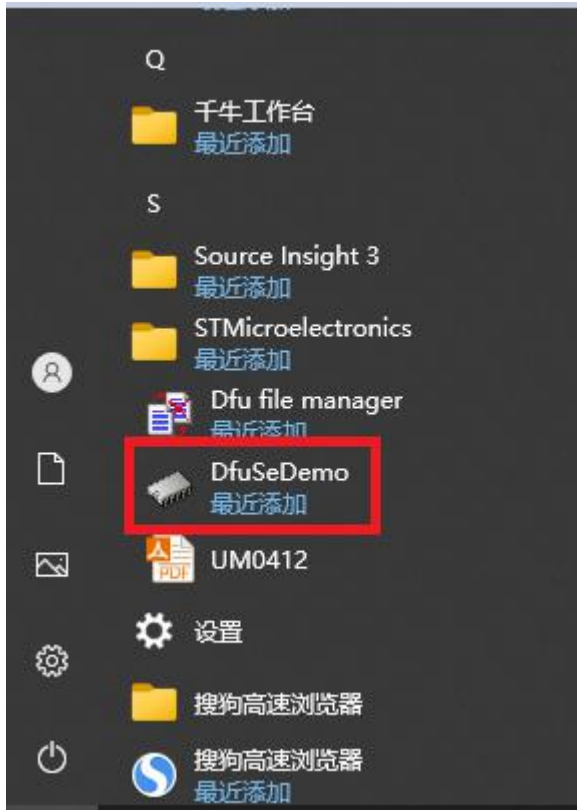






Click **Finish** , DFU automatically opensOr open it from the "Start" menu on the computer, then select "Applications":

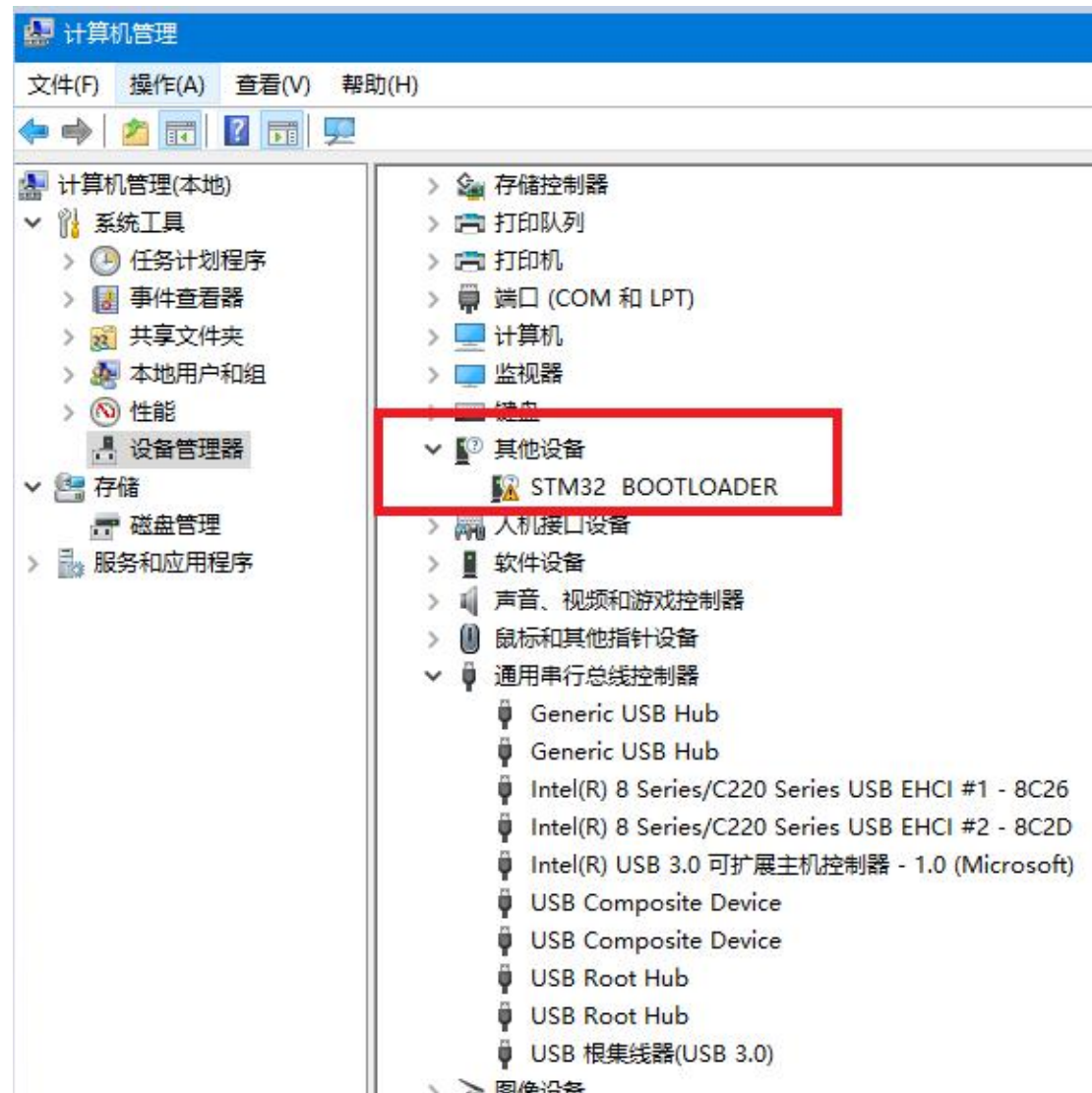




Turn the board's dip switch to BOOT:

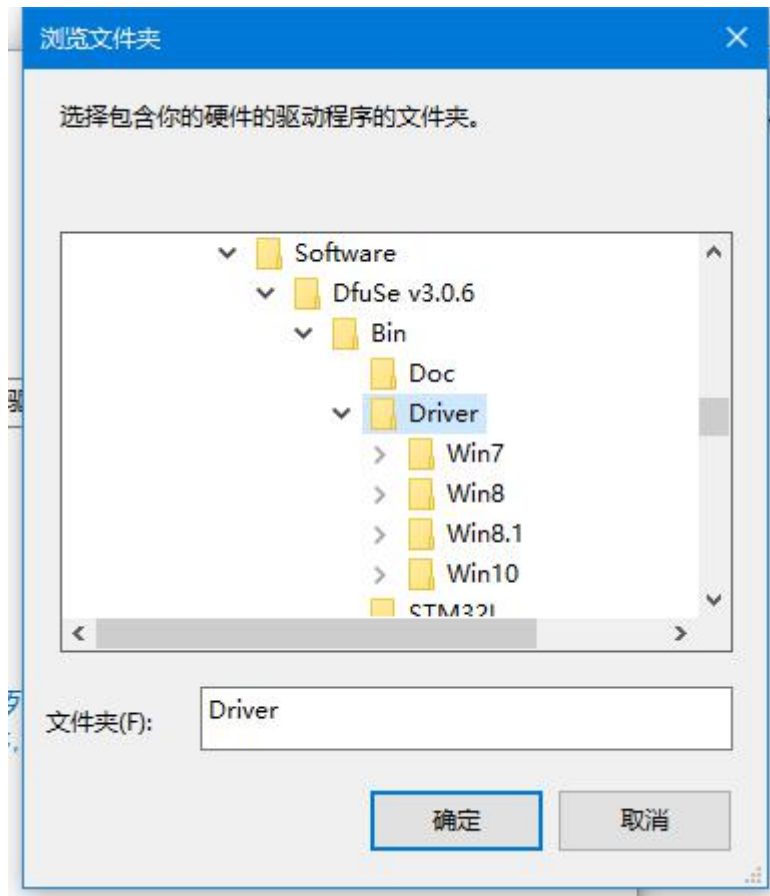


Connect to the computer via USB, and you will see it in the device manager of the computer:



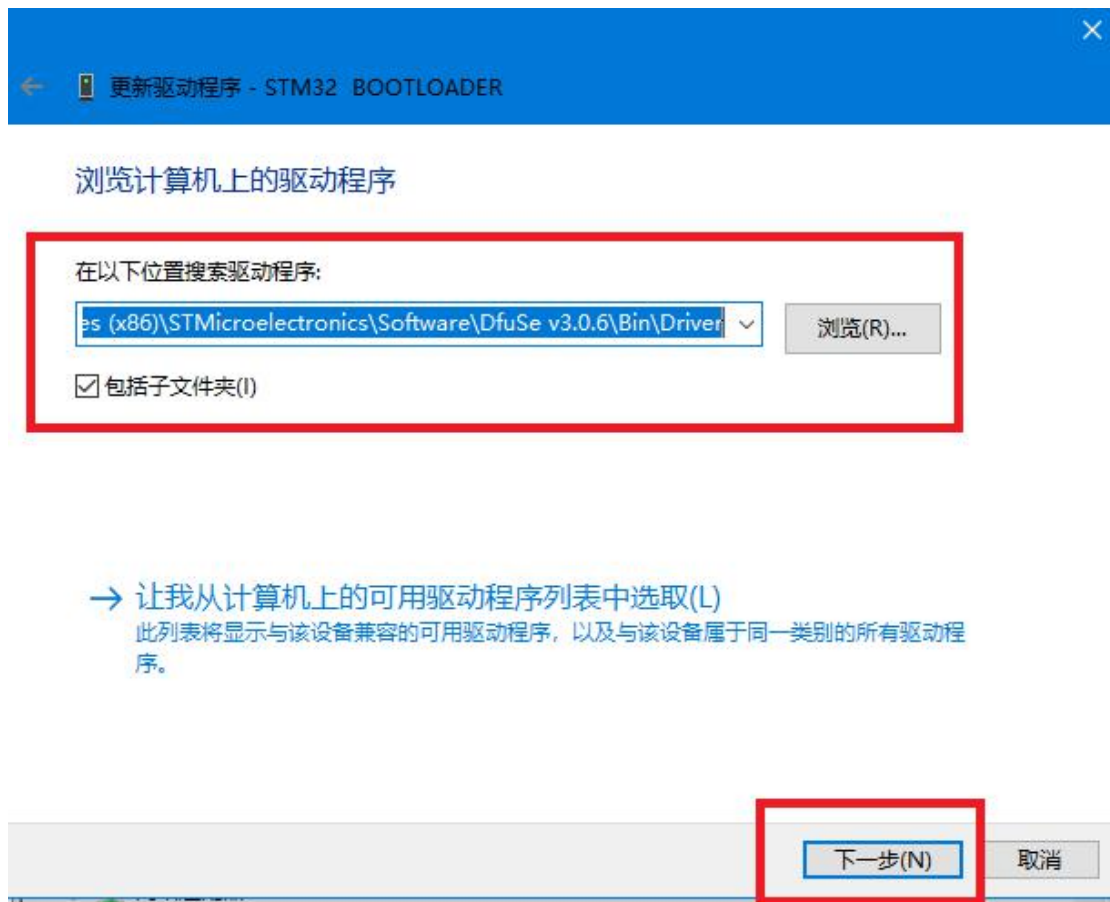
We right-click on STM32 BOOTLOADER to update the driver:

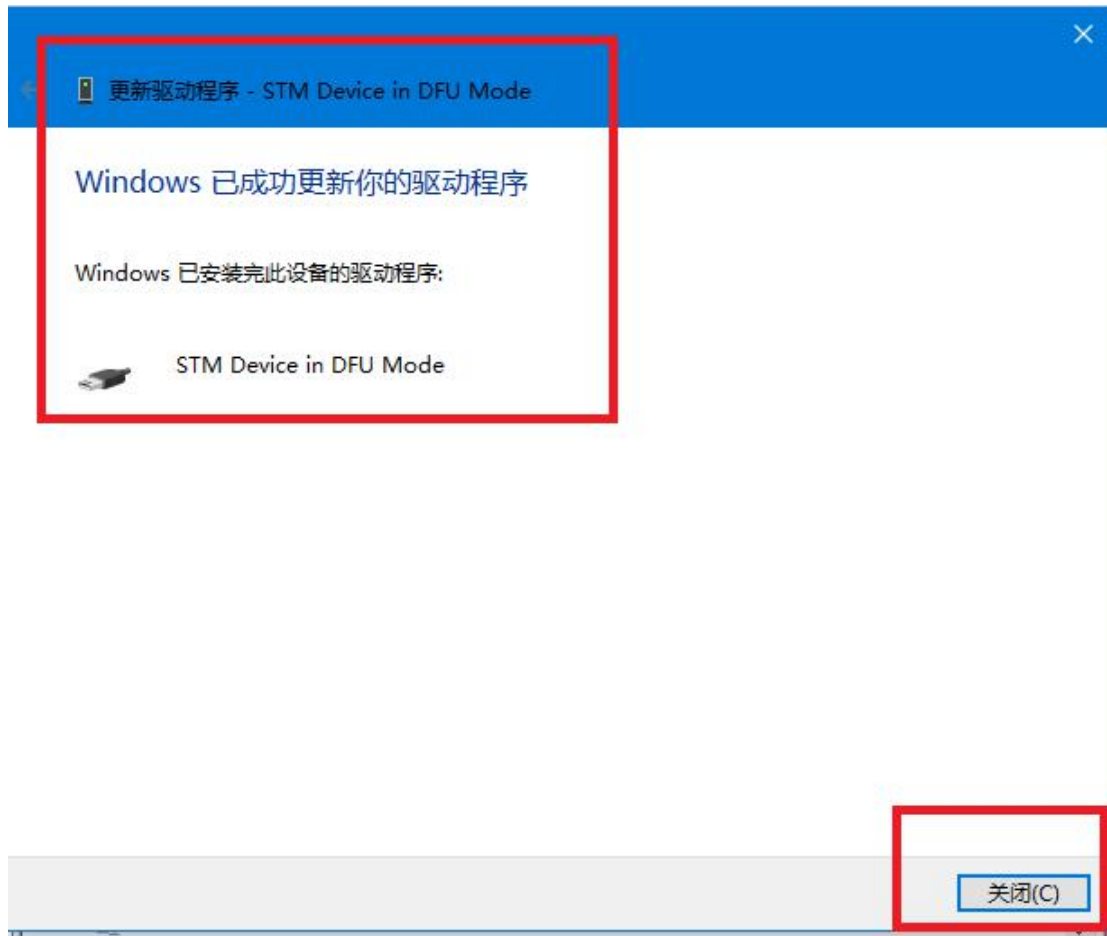




Find the directory where we installed DFU earlier, for example:

C:\Program Files (x86)\STMicroelectronics\Software\DfuSe v3.0.6\Bin\Driver



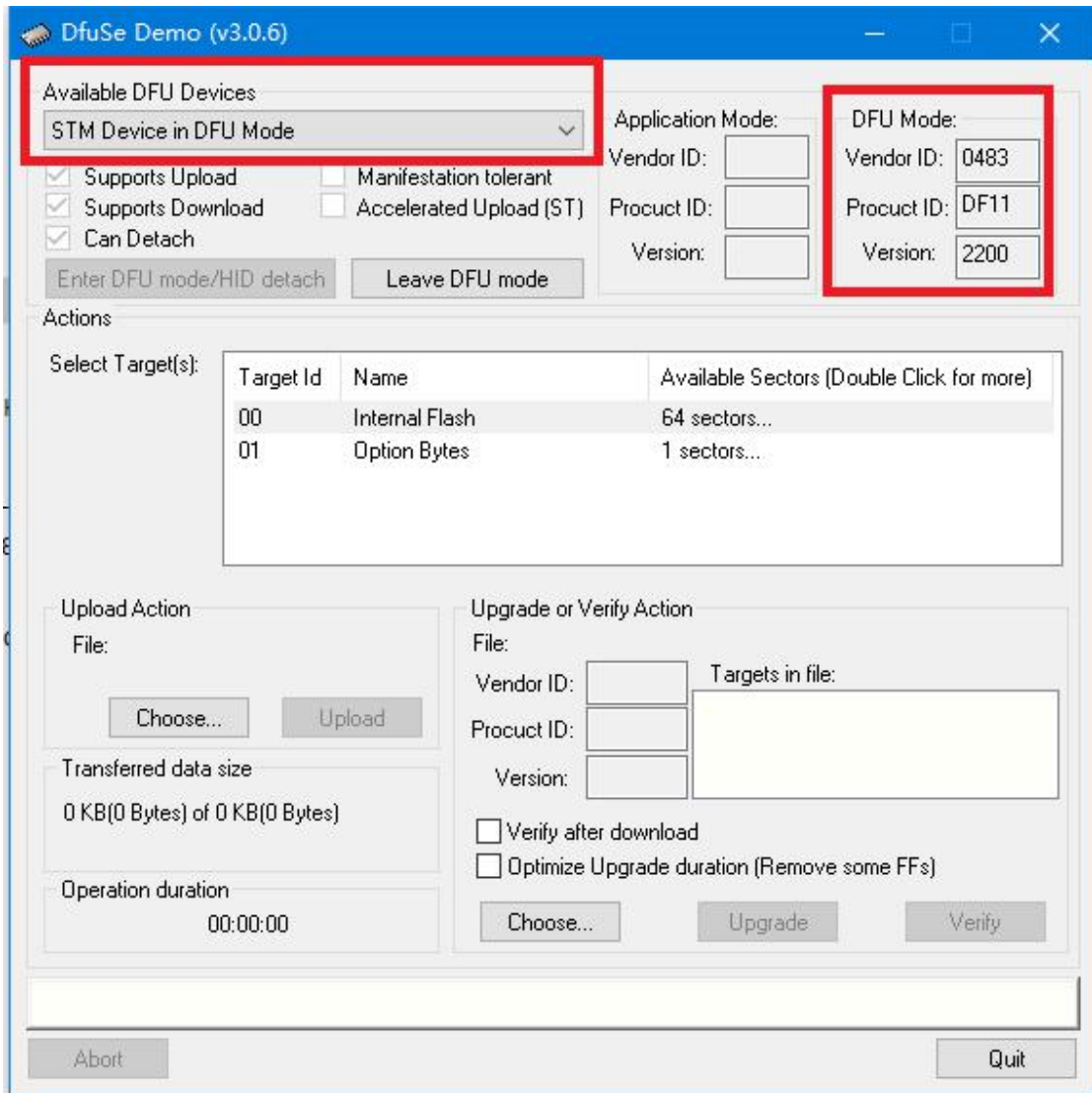




Seeing this indicates that the installation has been completed.

### 3.2 Firmware flashing

Ensure that the board's switch is set to BOOT. After connecting to the computer, the device manager will display the "STM Device in DFU Mode" mode. Then, open the DfuSeDemo software, and you will see the following screen:

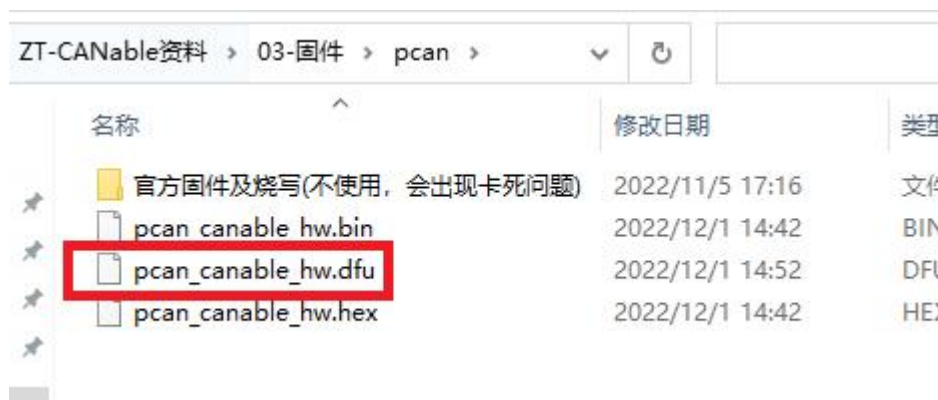


Then we click "Choose" to load the firmware:

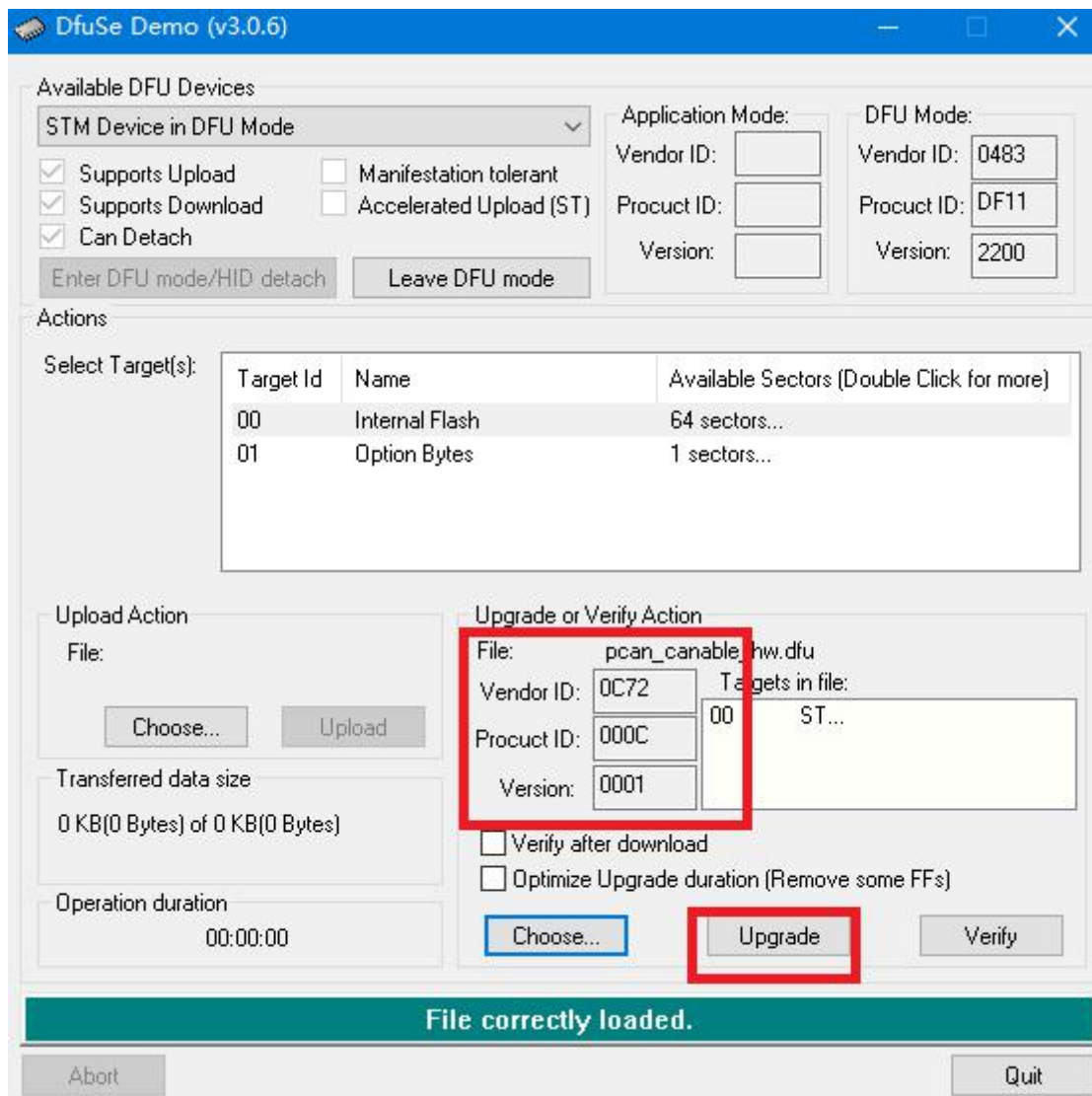
candleLight Corresponding firmware: `\candleLight\candleLight_fw.dfu` ,

PCAN Corresponding firmware: `\pcan\pcan_canable_hw.dfu`

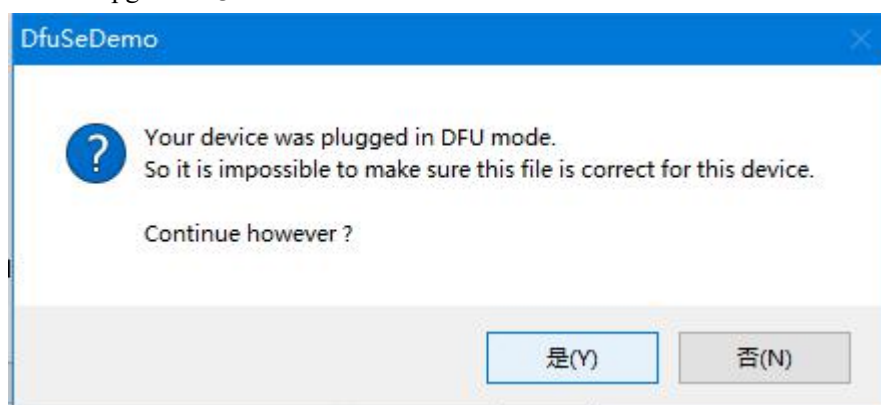
If you want to program the pcan firmware:



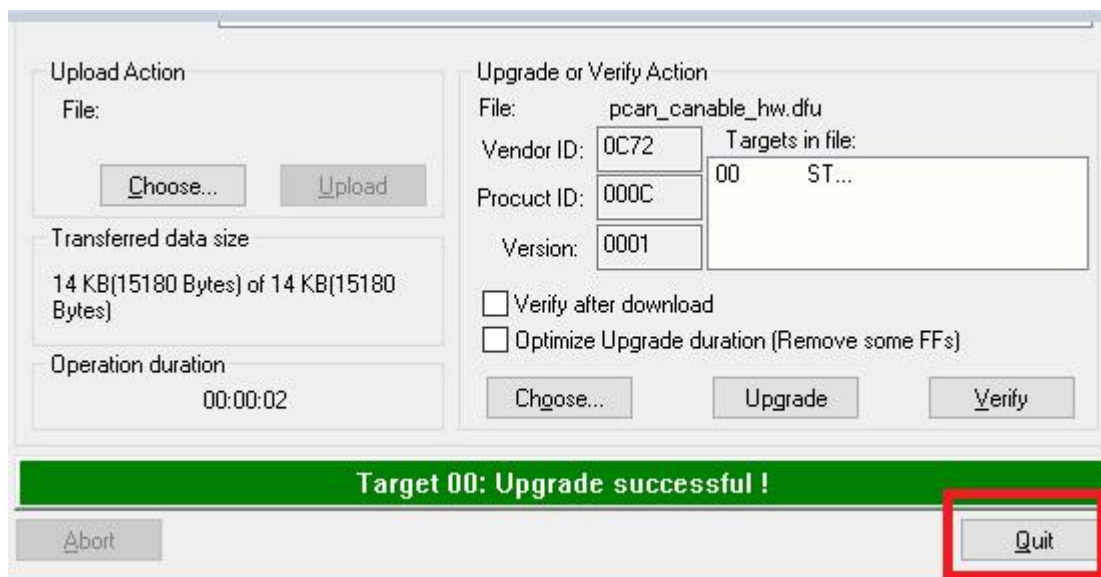
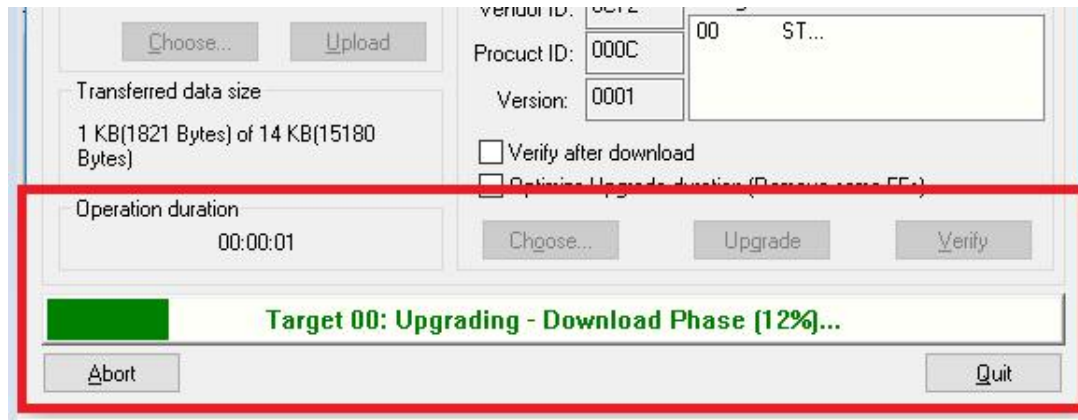
After loading the firmware, you will see PID,VID:



Click Upgrade again, it will show:



Click "Yes" to burn the firmware:



After the programming is complete, click "Quit". At this point, unplug the device, and then move the toggle switch to the "RUN" position. The board can now be started normally to use the corresponding functions.

### 3.3 Update firmware on official website

If you want to update the firmware of the official website through the webpage, set the board's dip switch to BOOT, connect it to the computer, and then open: 04-Programming Driver and Tools \ImpulseRC\_Driver\_Fixer.exe to install the driver. Then, on the browser (Google Chrome)

Open firmware address: <https://canable.io/updater/canable1.html>

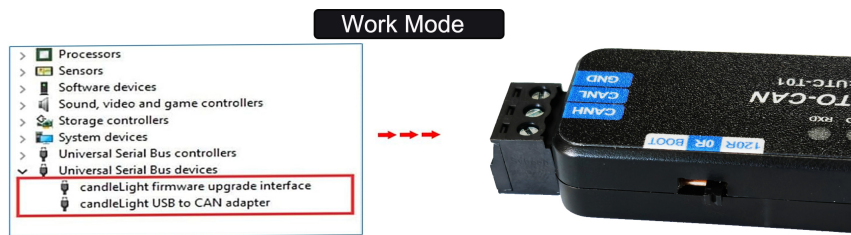
Click on the webpage: " Conect and Update "

Note: After installing the driver via ImpulseRC\_Driver\_Fixer.exe, the STM Device in DFU Mode visible in the computer's Device Manager will change to STM32 BOOTLOADER, which means the DFU mode driver for STM32 will become invalid. To use the DFU function again, right-click on STM32 BOOTLOADER in the Device Manager - > Uninstall Device - > check the box to delete the driver software for this device:

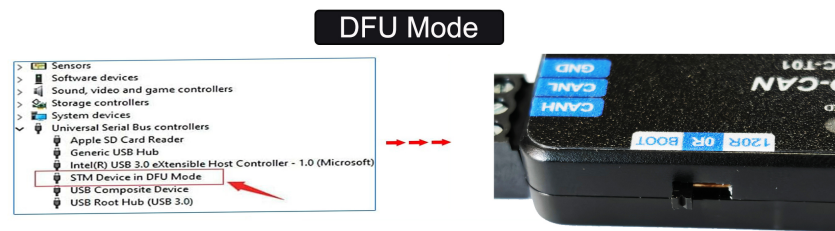


Then click "Uninstall". After uninstallation, re-plug the device to allow it to be recognized in DFU mode of STM32 again.

**It can collect data from CAN bus to Computer via USB port to Control the transmission and reception, data analysis, acquisition, and monitoring of CAN bus network**



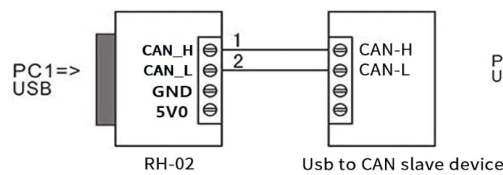
Built in Candlelight Firmware by default then you can use it directly with Cangaroo software .



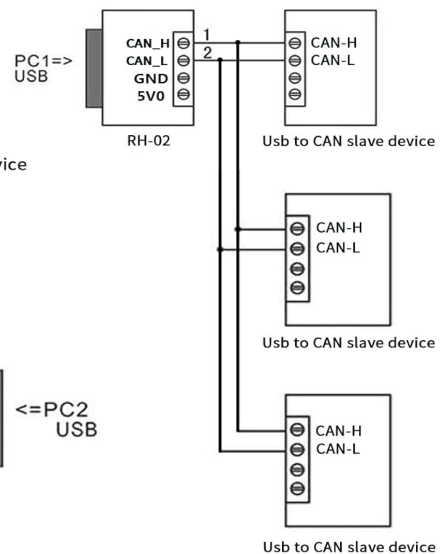
In this mode, you can flash different firmware to meet different needs.

## Usb to Can Wiring Instructions

① USB to CAN converter to a single Usb to CAN Slave



② USB to CAN converter to multiple Usb to CAN slaves



③ USB to CAN converter to Usb to CAN converter

