ZBDongle-E

Firmware Acquisition

Coordinator:

https://github.com/itead/Sonoff_Zigbee_Dongle_Firmware/tree/master/Dongle-E/NCP

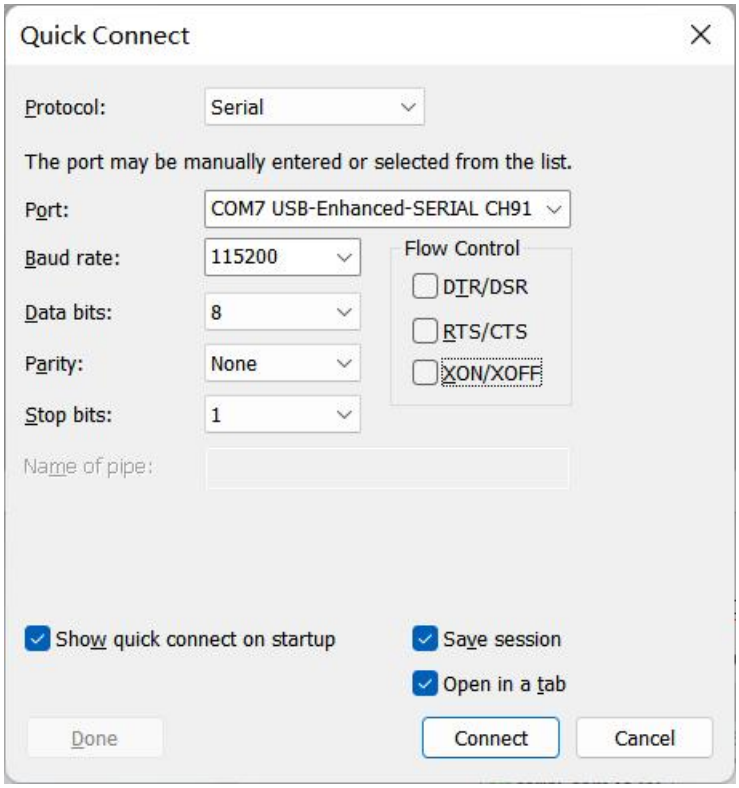
Router:

https://github.com/itead/Sonoff_Zigbee_Dongle_Firmware/tree/master/Dongle-E/Router

Firmware Flashing

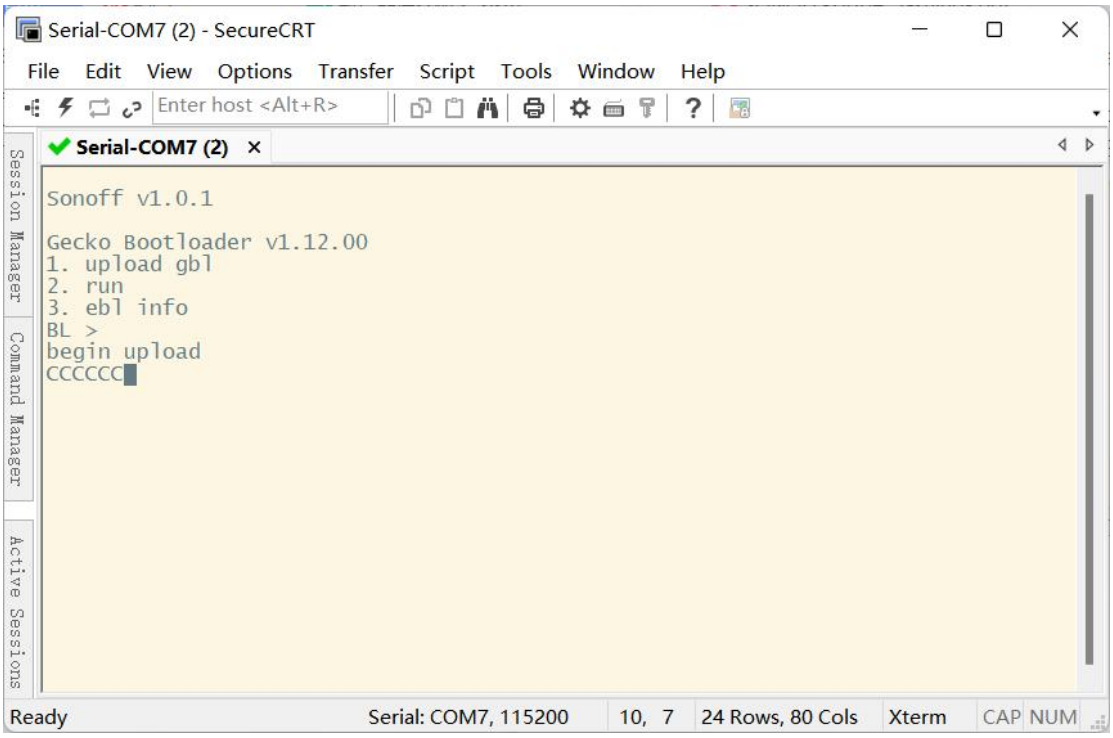
Use any tool that supports sending Xmodem(N), Here use SecureCRT as example.

1. Set the "Quick Connect", and connect. The port can be viewed in the Management Console.



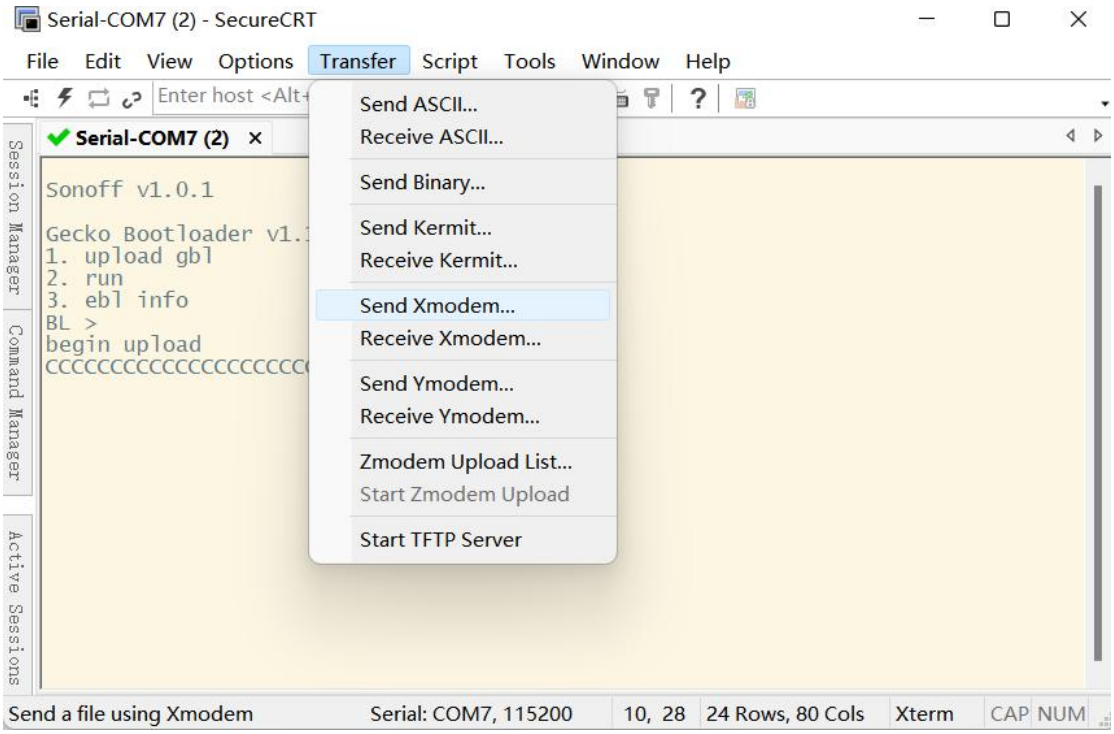
2. Dongle Enter Bootloader Mode.

Keep pressing the Boot button, restart the device, and release the Boot button after Dongle enters the serial port Bootloader, then enter 1.

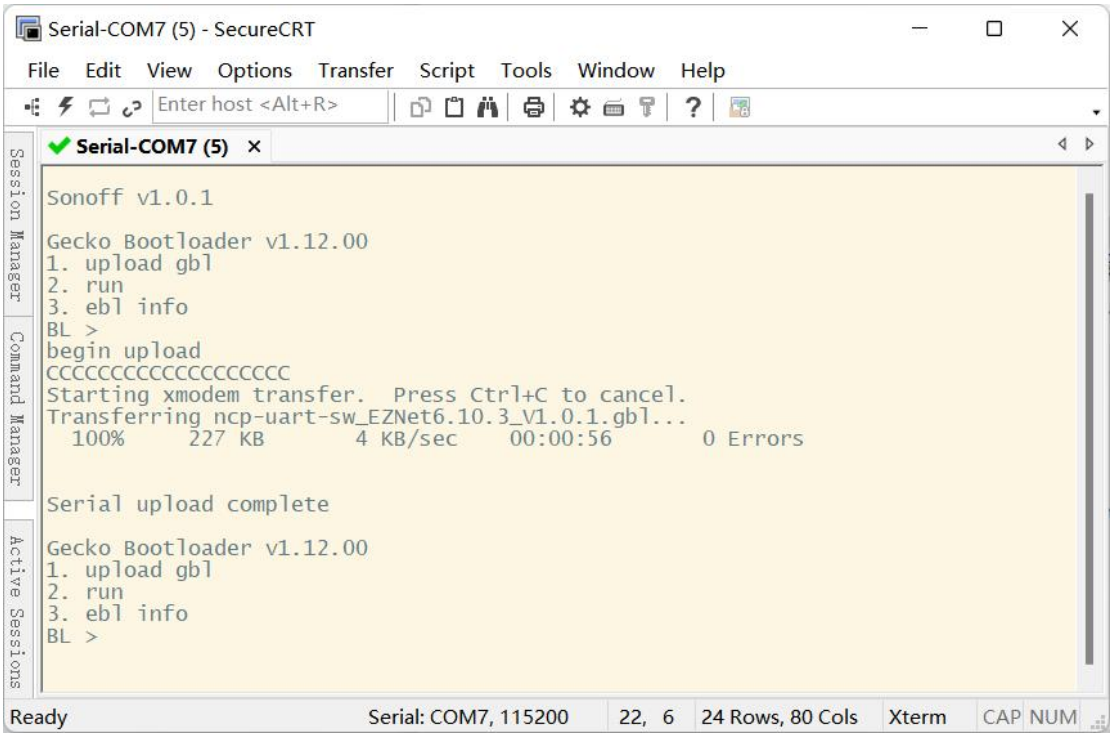


3. Click “Send Xmodem(N)”, select local downloaded firmware.

*Note: You should complete this step before the end of the progress bar displayed as the character "C". Otherwise, an error will be reported, and you need to re-enter 1.



4. **Download completed.**



5. **Finally, enter "2" or reboot manually.**

ZBDongle-P

Firmware acquisition

Download the Z-Stack_3.x.0 firmware of CC2652P USB Dongle from the following link:

Coordinator:

https://github.com/Koenkk/Z-Stack-firmware/tree/master/coordinator/Z-Stack_3.x.0

Router:

https://github.com/Koenkk/Z-Stack-firmware/tree/master/router/Z-Stack_3.x.0

Firmware flashing

Method 1:

Use the automatic upgrade tool “cc2538-bsl” to achieve "Auto BSL".
https://github.com/JelmerT/cc2538-bsl

Method 2:

CC2652P USB Dongle supports serial port Bootloader to flash firmware. Use firmware flashing tools like "Flash Programmer 2" to flash the firmware.

1. Enter the serial port Bootloader

There are two ways for Dongle to enter Bootloader:

1. Manual mode

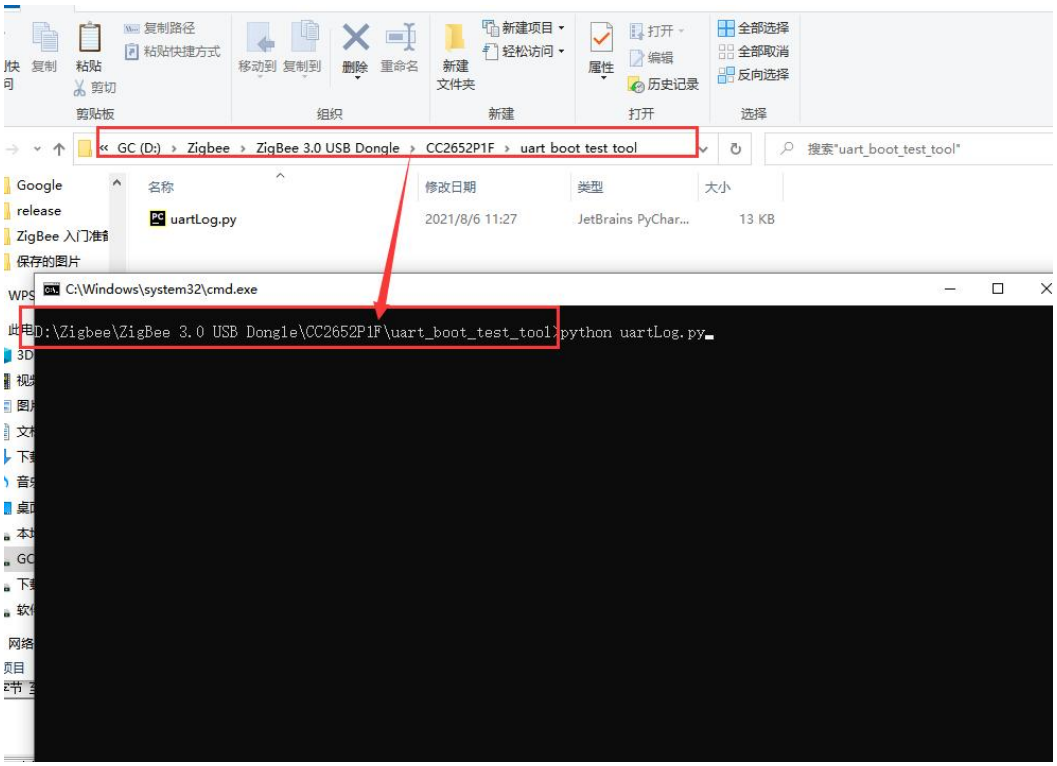
Keep pressing the Boot button, restart the device, and release the Boot button after Dongle enters the serial port Bootloader.

2. Automatically enter the serial port Bootloader through a python script

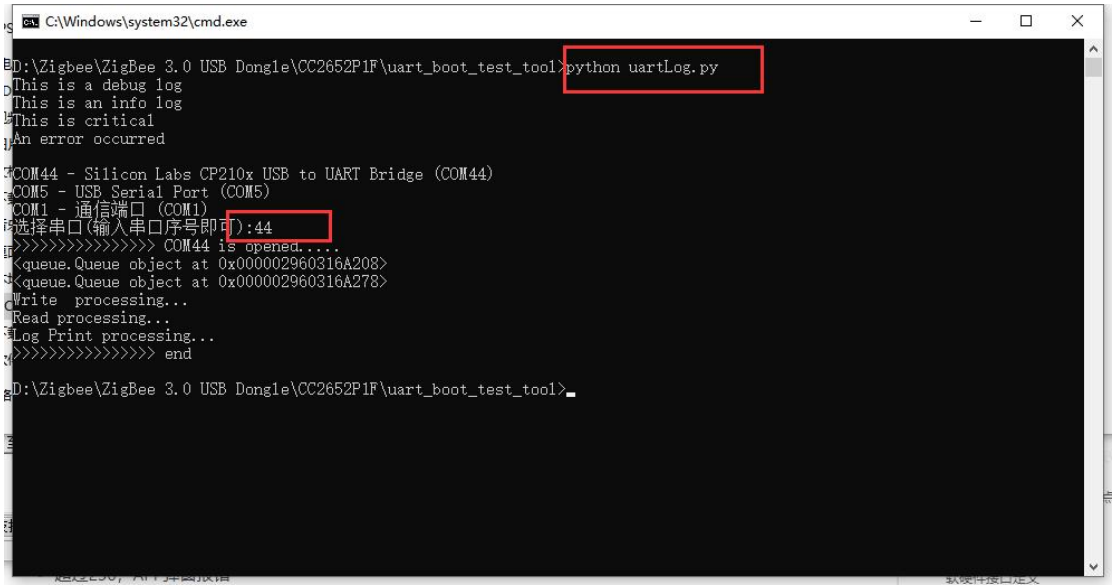
https://sonoff.tech/wp-content/uploads/2023/02/Auto-enter-bootloader.zip

Step to execute python script:

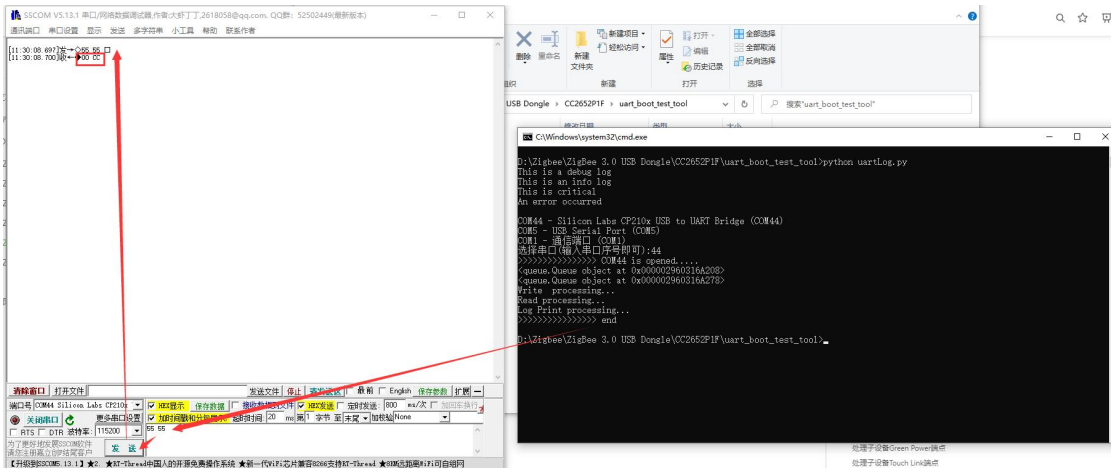
1) Download, unzip and execute the file



2) Enter the serial port number inserted into the dongle

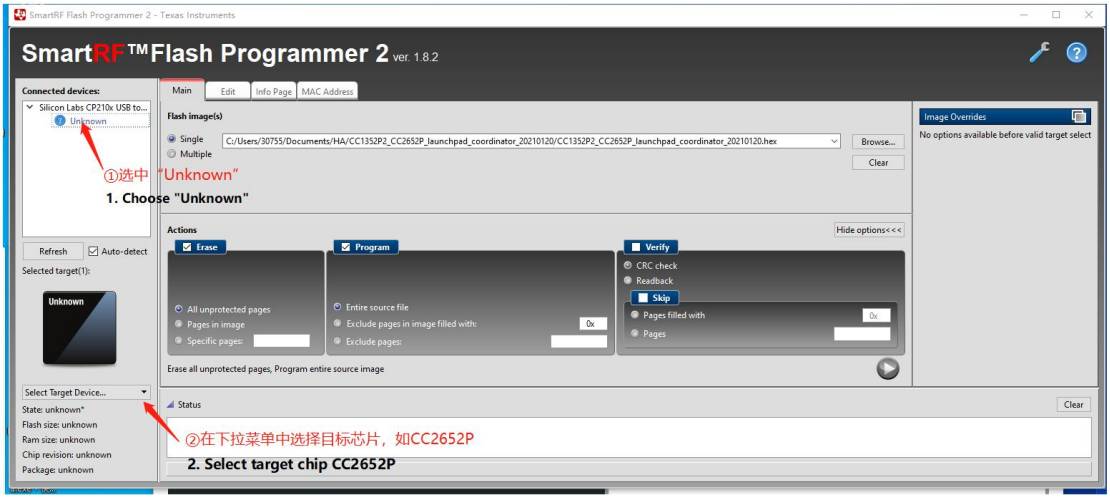


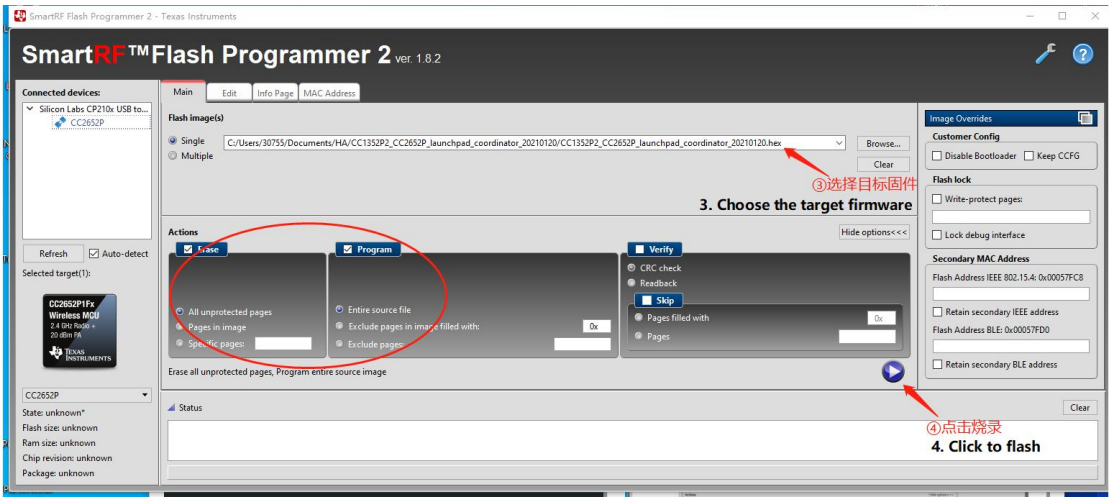
3) After executing the file, enter 55 55 in the serial port assistant tool, and receive the returned result 00 CC, which means that the dongle has successfully entered the Bootloader.



Note: The serial port Bootloader does not enable hardware flow control.

2. Using Flash Programmer 2 serial port flashing firmware





Note: There is no difference between the coordinator and routing firmware flashing steps.

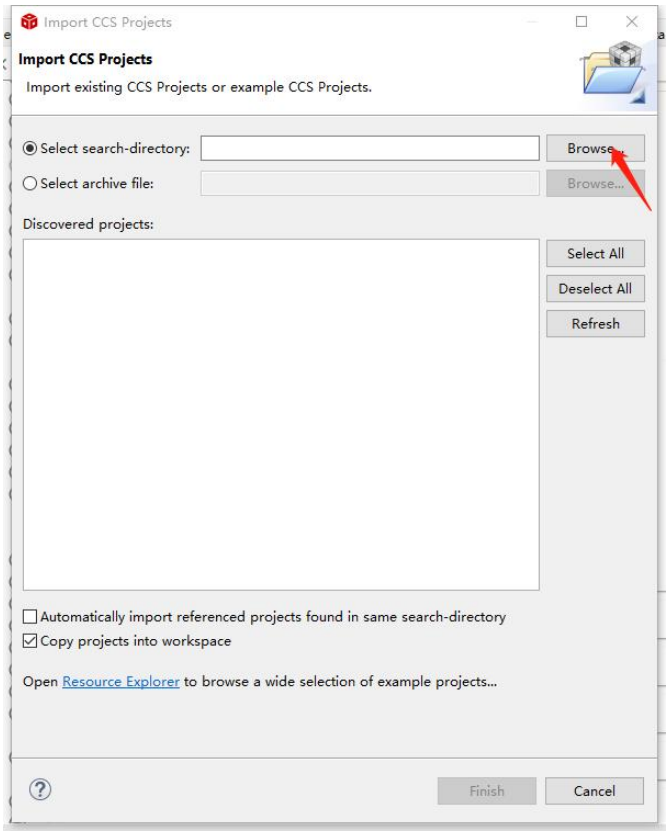
Enable Hardware Flow Control and Generate Corresponding Firmware (optional)

If you need to enable the hardware flow control of the CC2652P USB Dongle, you need to use CCS to import the ZNP project to configure and compile the firmware that supports the hardware flow control.

Note: At present, the device cannot be used after hardware flow control is enabled, and the open source platforms have not yet supported it.

1. Import the ZNP project of CC1352P into CCS

1. CCS【Project】 - 【Import CCS Project】

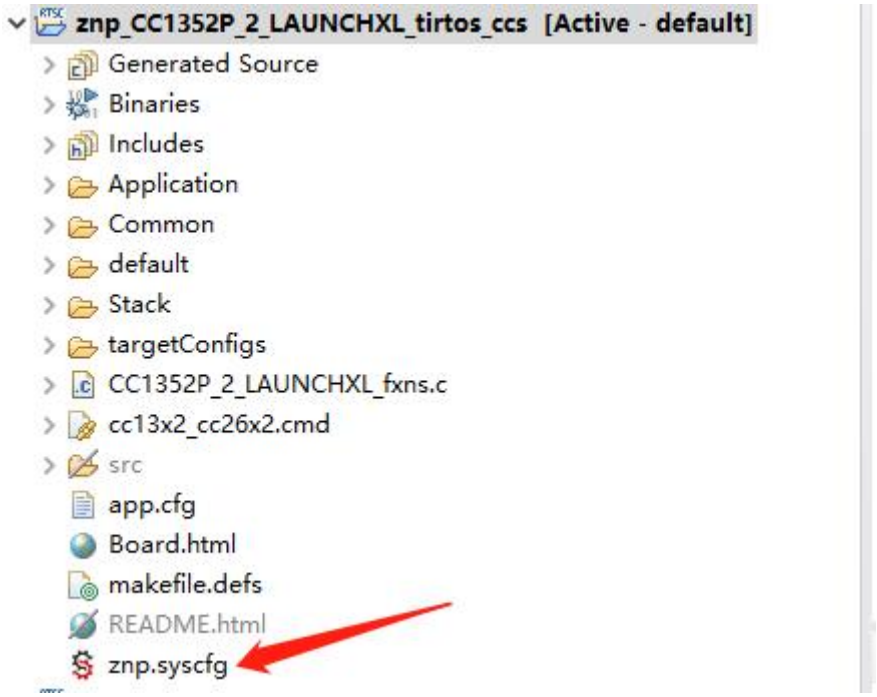


2. Click [Browse] and select the ZNP project file under SDK:

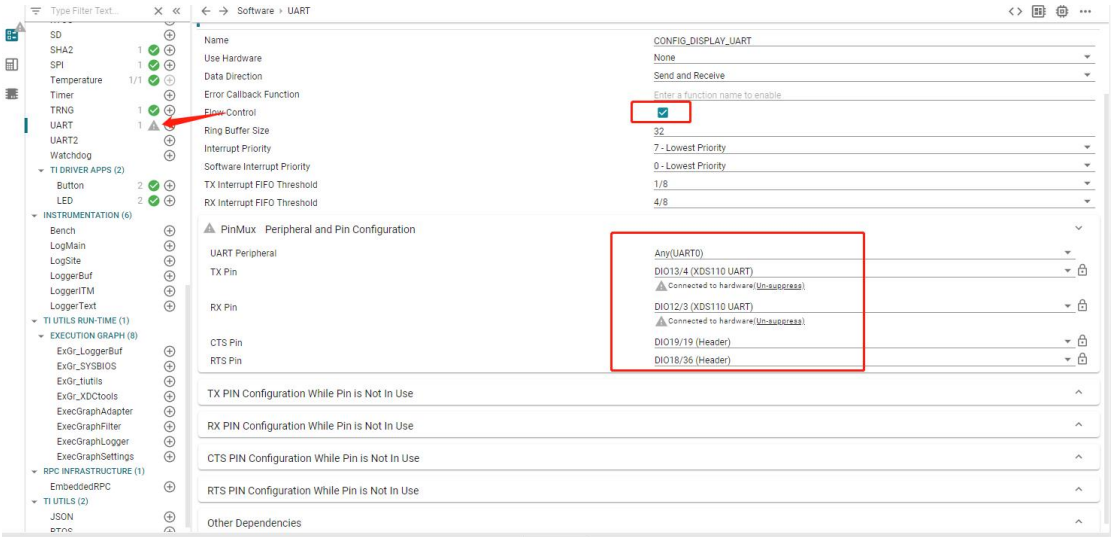
3. Click [Finish]

2. Configure engineering hardware flow control

1. Open the .syscfg configuration file in the ZNP project:



2. Enable serial flow control in the UART option in the .syscfg configuration file:



3. Then save and compile.