

ZBDongle-E

Firmware Acquisition

Coordinator:

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

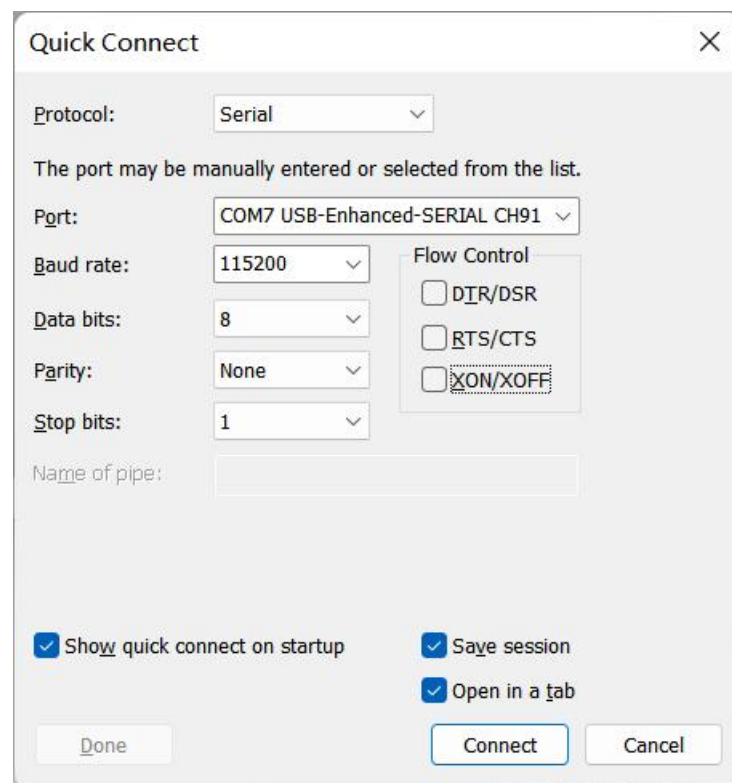
Router:

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

Firmware Flashing

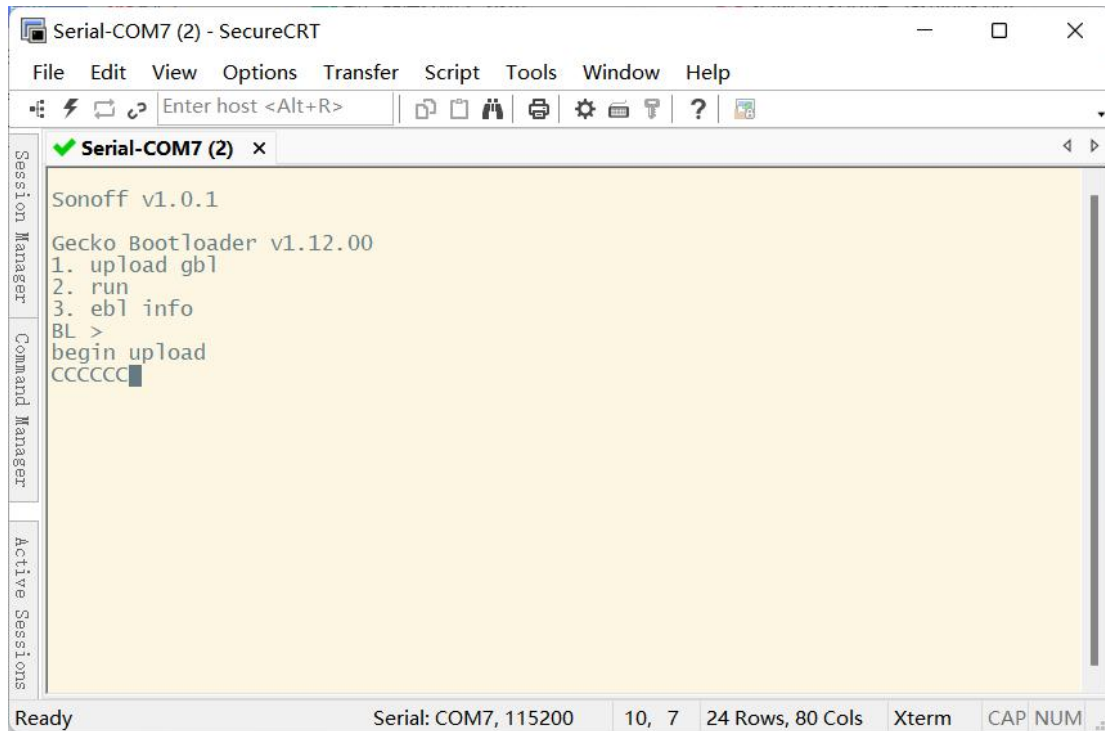
Use any tool that supports sending Xmodem(N), Here use SecureCRT as example.

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.



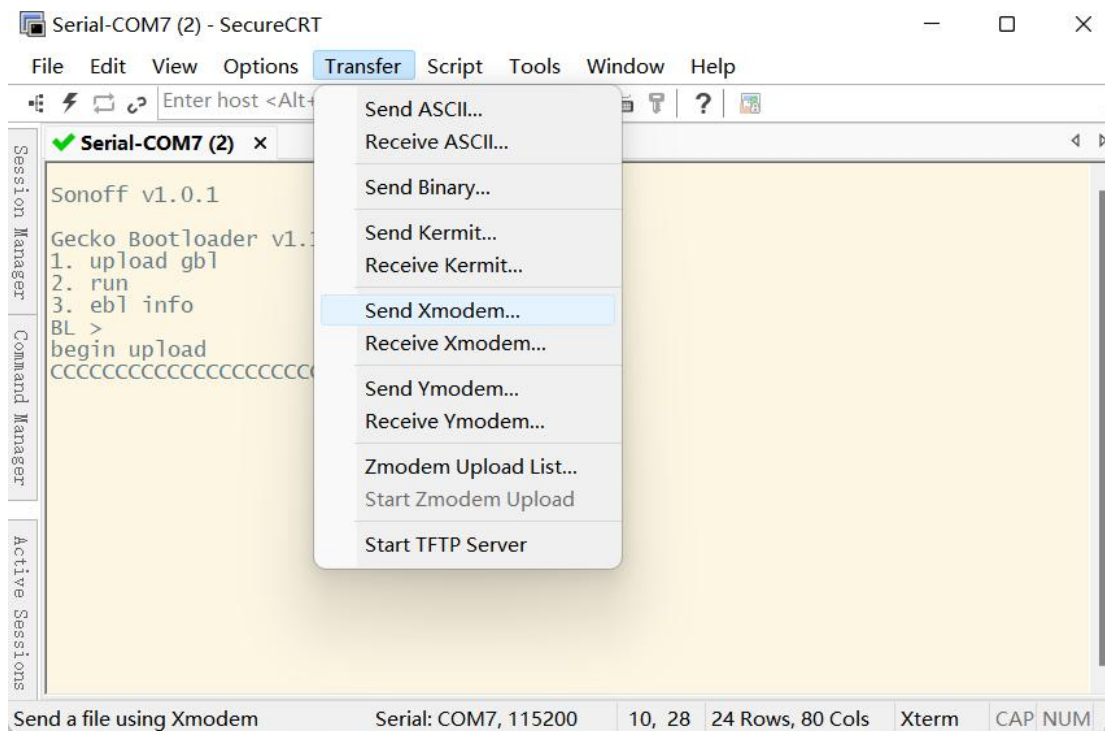
The screenshot shows a SecureCRT window titled "Serial-COM7 (2) - SecureCRT". The terminal displays the following text:

```
Sonoff v1.0.1  
Gecko Bootloader v1.12.00  
1. upload gbl  
2. run  
3. ebl info  
BL >  
begin upload  
CCCCC█
```

The status bar at the bottom indicates "Ready", "Serial: COM7, 115200", "10, 7", "24 Rows, 80 Cols", "Xterm", and "CAP NUM".

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.

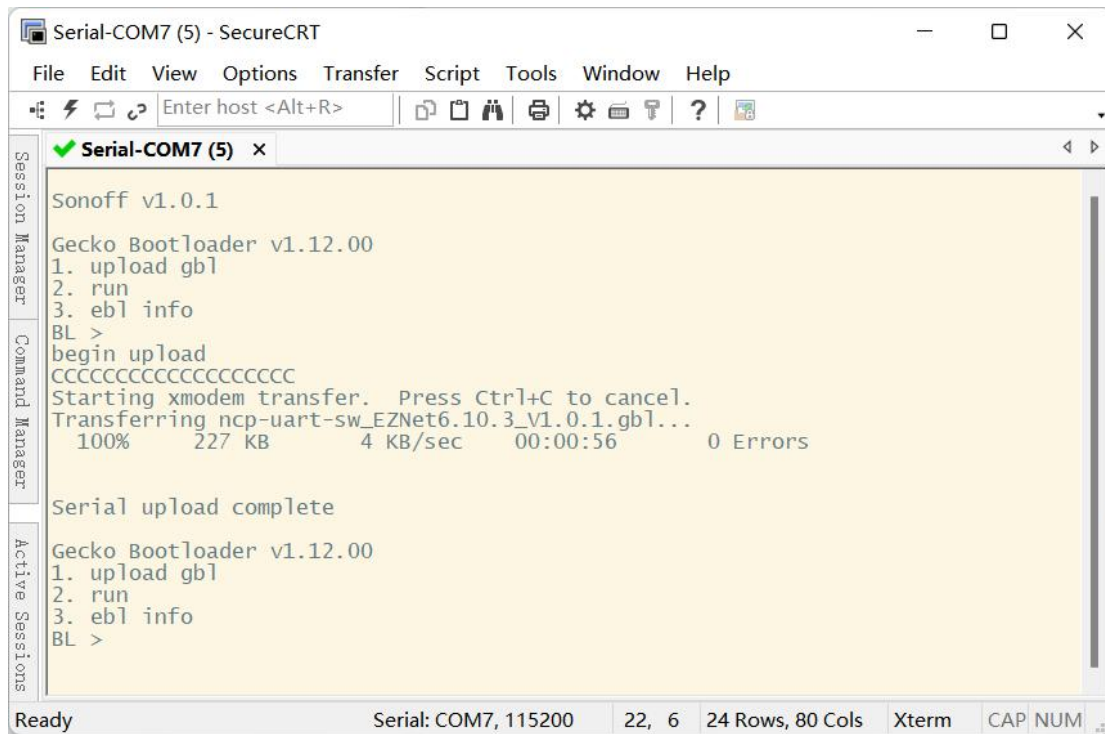


The screenshot shows the same SecureCRT window as in step 2, but with the "Transfer" menu open. The menu options are:

- Send ASCII...
- Receive ASCII...
- Send Binary...
- Send Kermit...
- Receive Kermit...
- Send Xmodem... (highlighted)
- Receive Xmodem...
- Send Ymodem...
- Receive Ymodem...
- Zmodem Upload List...
- Start Zmodem Upload
- Start TFTP Server

The terminal text is partially obscured by the menu. The status bar at the bottom indicates "Send a file using Xmodem", "Serial: COM7, 115200", "10, 28", "24 Rows, 80 Cols", "Xterm", and "CAP NUM".

4. Download completed.



The screenshot shows a SecureCRT terminal window titled "Serial-COM7 (5) - SecureCRT". The terminal displays the following text:

```
Sonoff v1.0.1
Gecko Bootloader v1.12.00
1. upload gbl
2. run
3. ebl info
BL >
begin upload
CCCCCCCCCCCCCCCCCCCC
Starting xmodem transfer. Press Ctrl+C to cancel.
Transferring ncp-uart-sw_EZNet6.10.3_v1.0.1.gbl...
 100%    227 KB    4 KB/sec    00:00:56    0 Errors

Serial upload complete

Gecko Bootloader v1.12.00
1. upload gbl
2. run
3. ebl info
BL >
```

The terminal window includes a menu bar (File, Edit, View, Options, Transfer, Script, Tools, Window, Help), a toolbar with icons for host entry, copy, paste, print, settings, and help, and a status bar at the bottom showing "Ready", "Serial: COM7, 115200", "22, 6", "24 Rows, 80 Cols", "Xterm", and "CAP NUM".

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>

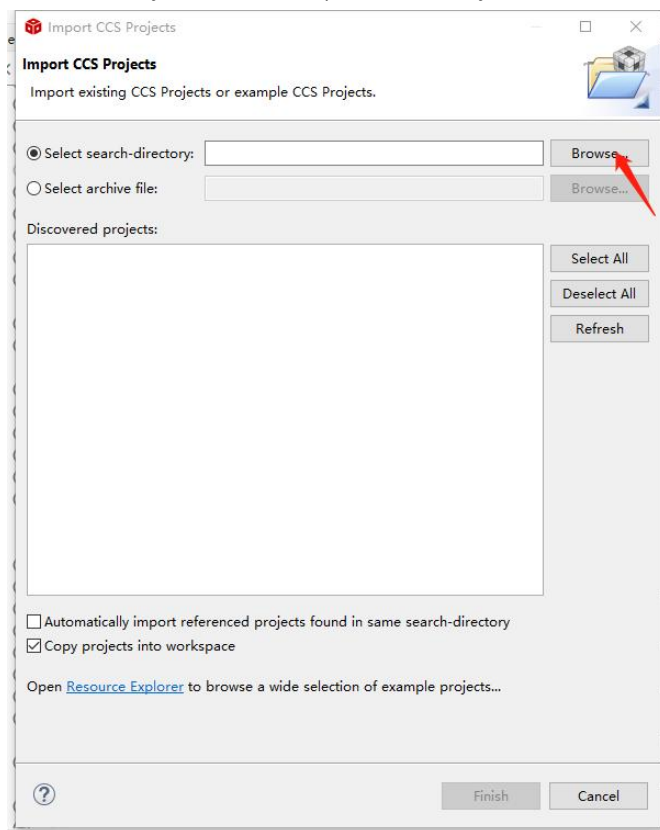
Enable Hardware Flow Control and Generate Corresponding Firmware (optional)

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】



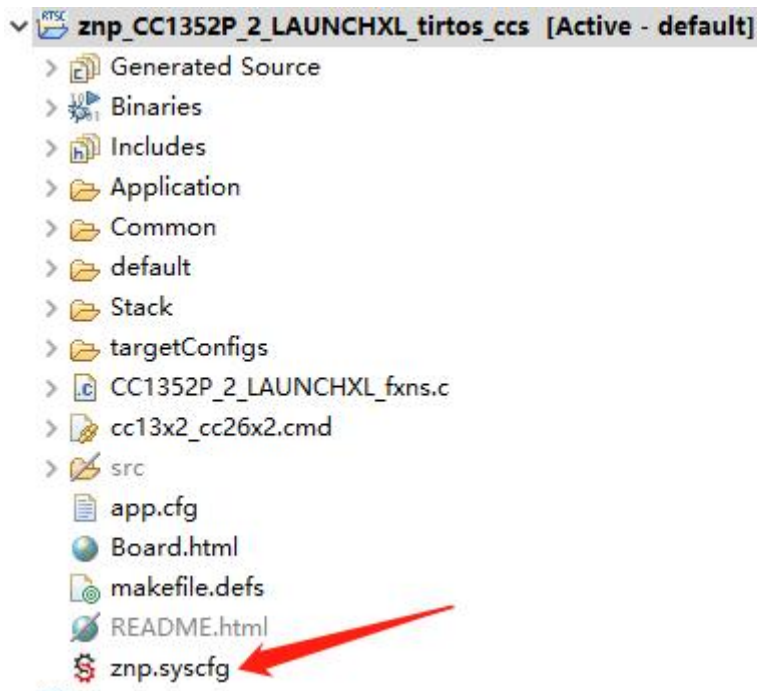
2. Click [Browse] and select the ZNP project file under SDK:



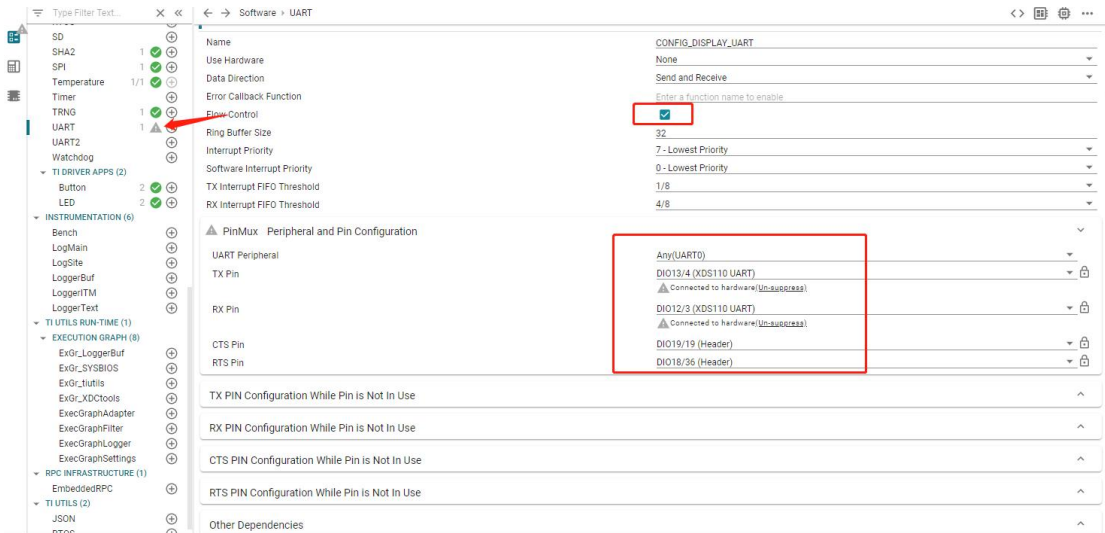
3. Click [Finish]

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.