1. Cc2652P Firmware Flashing

1.1 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

1.2 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:

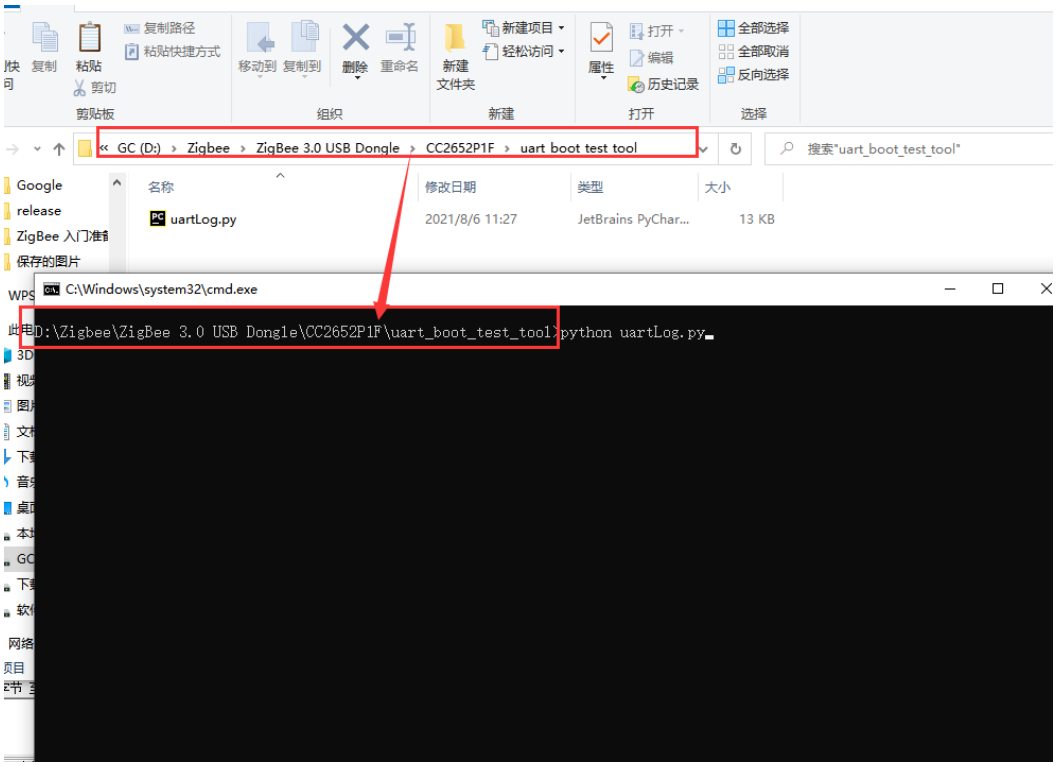
1. Manual mode

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

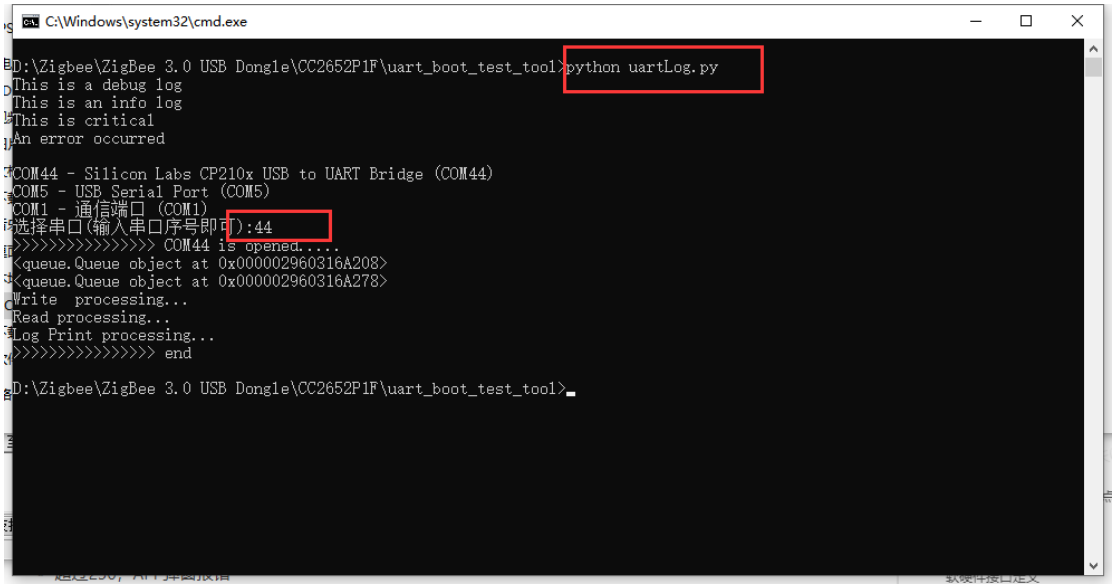
2. Automatically enter the serial port Bootloader through a python script
   https://bit.ly/32cJoz6

Step to execute python script:

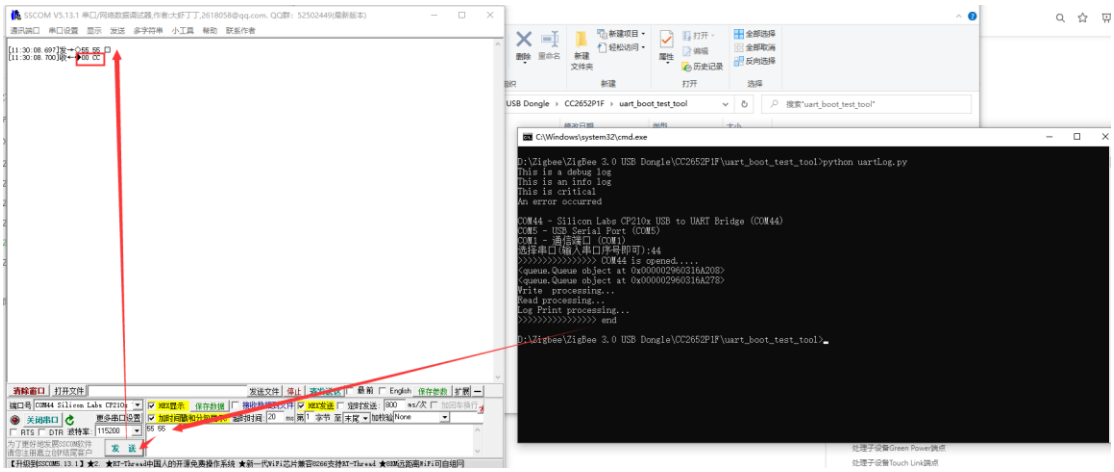
1) Download, unzip and execute the file



2) Enter the serial port number inserted into the dongle

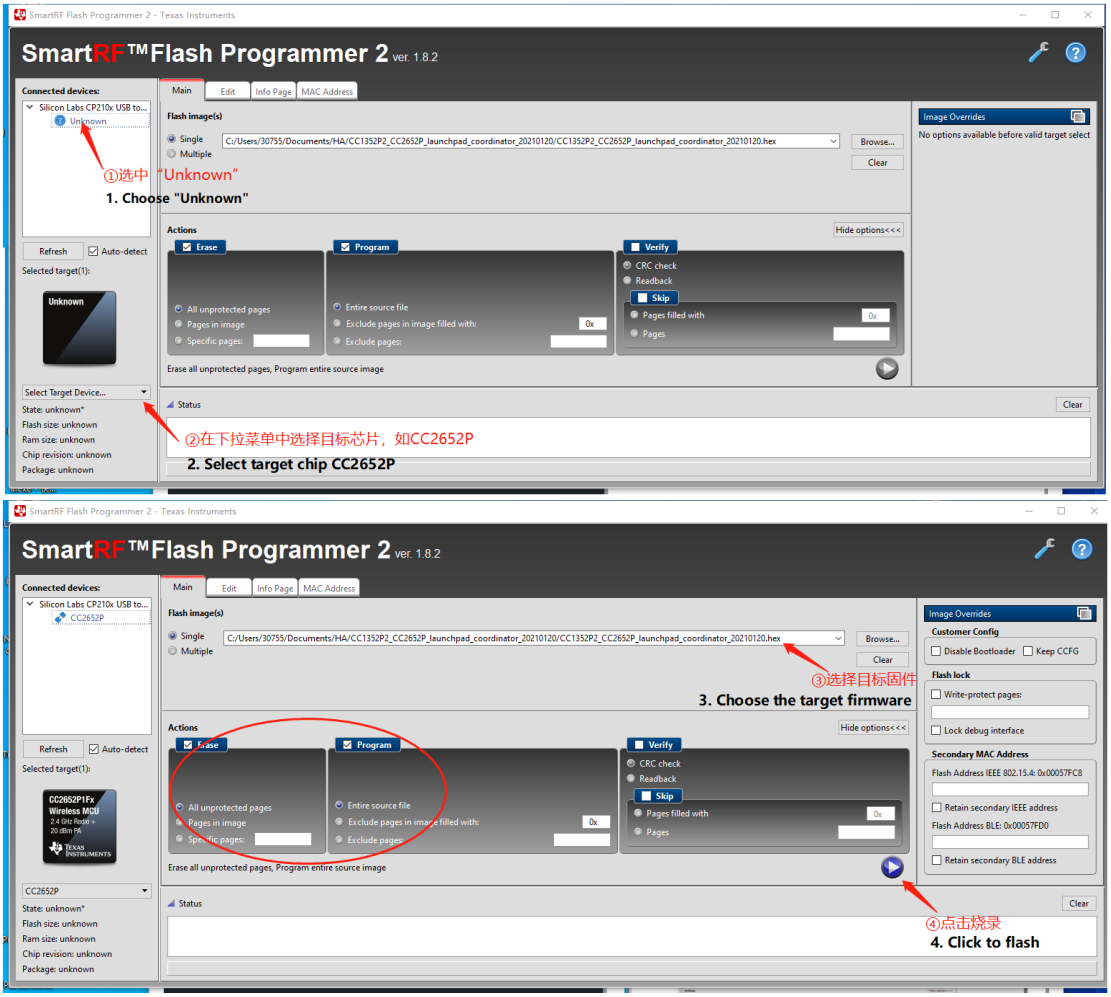


3) After executing the file, enter 55 55 in the serial port assistant tool, and receive the returned result 00 CC, which means that the dongle has successfully entered the Bootloader.



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

2. Using Flash Programmer 2 serial port flashing firmware



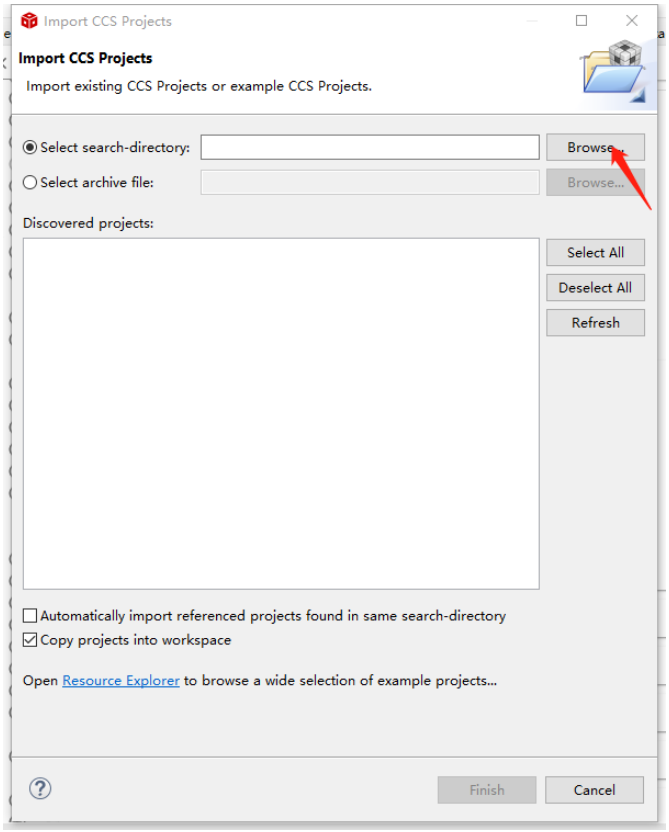
Note: There is no difference between the coordinator and routing firmware flashing steps.

2. Enable Hardware Flow Control and Generate Corresponding Firmware (optional)

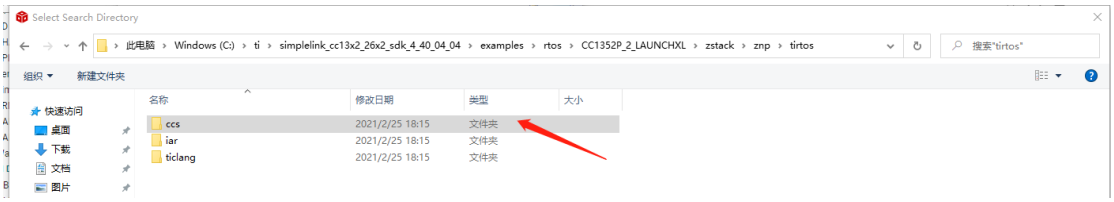
If you need to enable the hardware flow control of the CC2652P USB Dongle, you need to use CCS to import the ZNP project to configure and compile the firmware that supports the hardware flow control.

2.1 Import the ZNP project of CC1352P into CCS

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



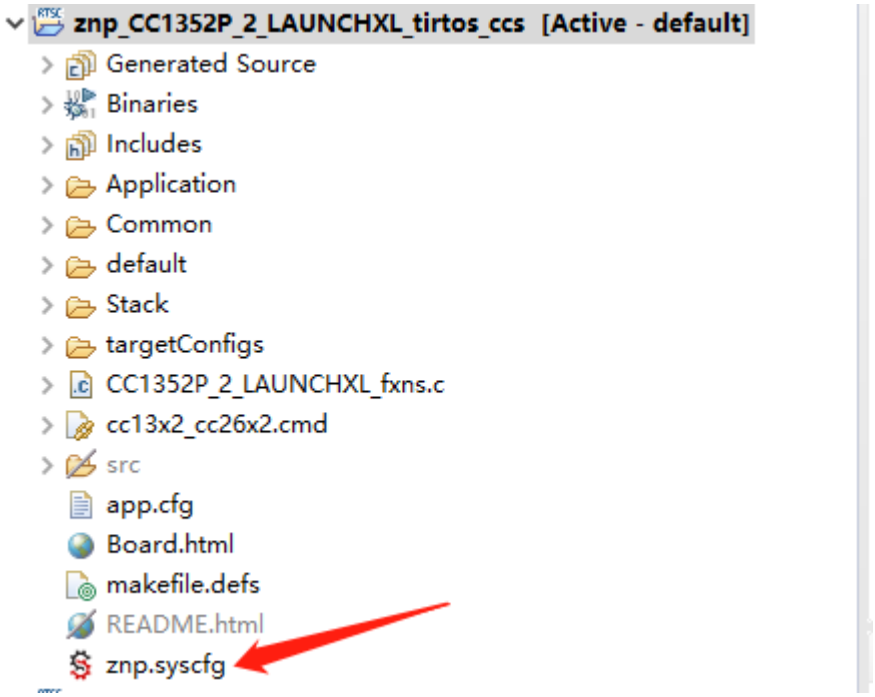
2. Click [Browse] and select the ZNP project file under SDK:



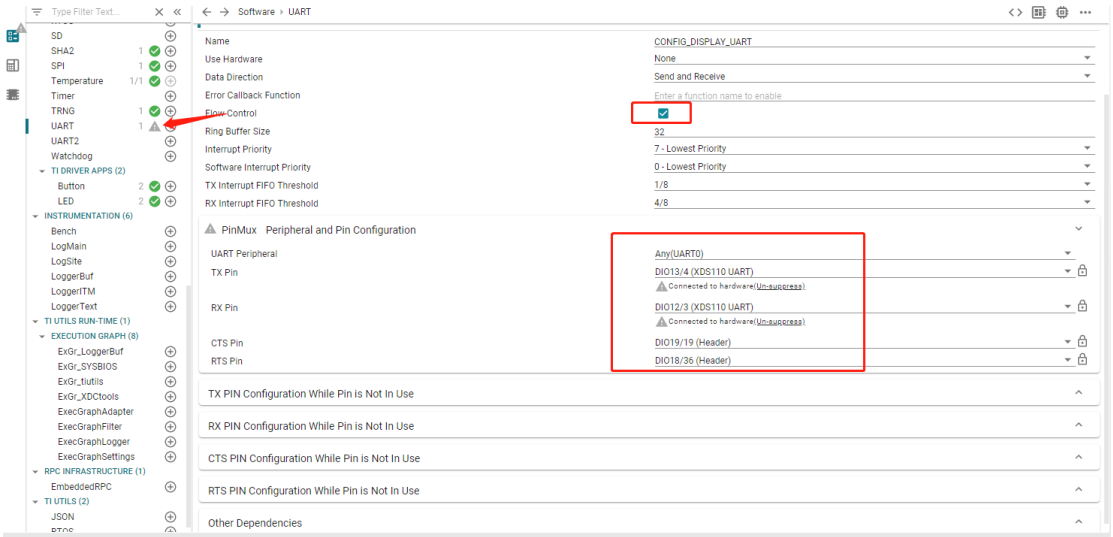
3. Click [Finish]

2.2 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.

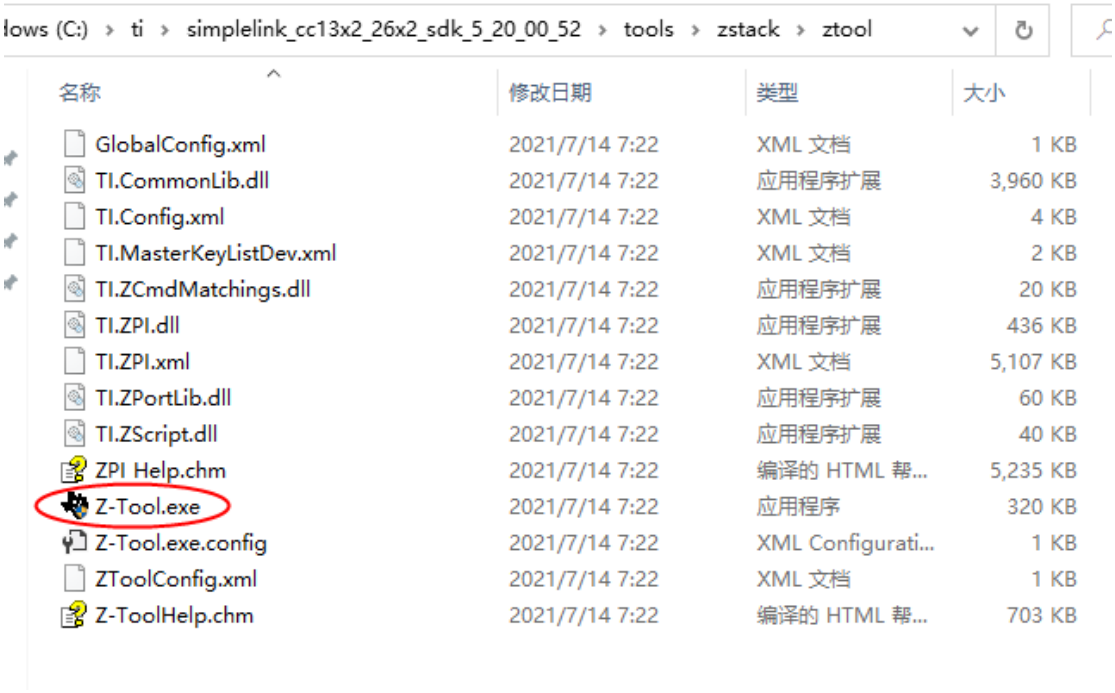
3. Adding Routers to the Gateway

The guide is for the routers that flashed with the official router firmware.

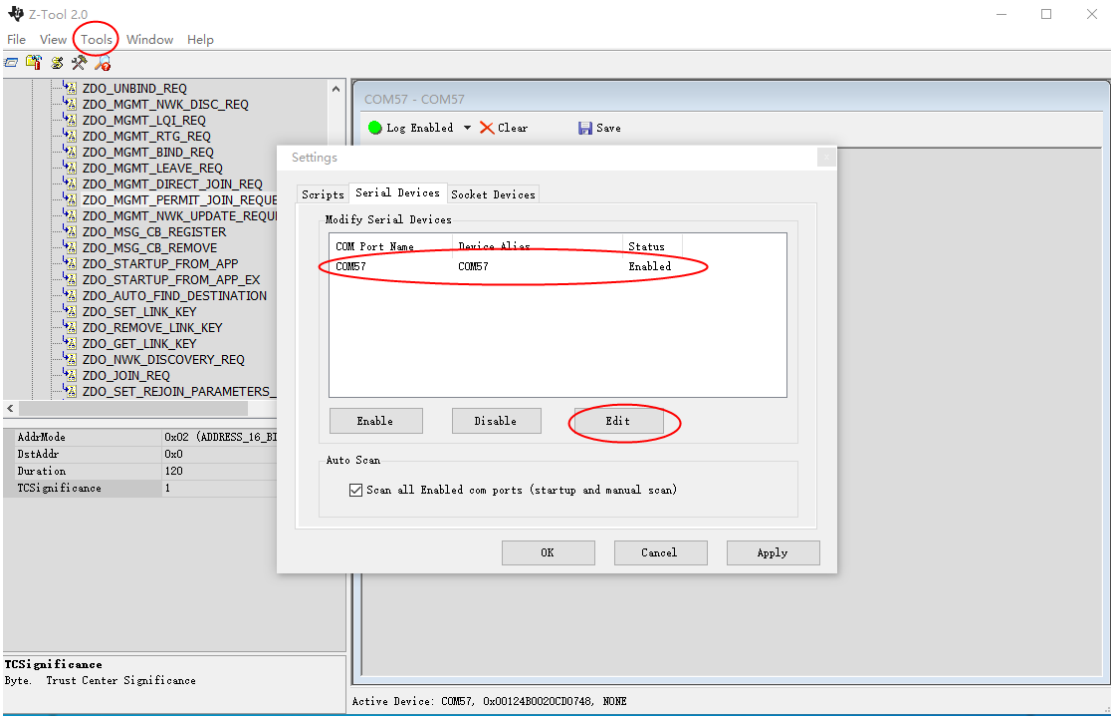
1. Download the official host computer SDK

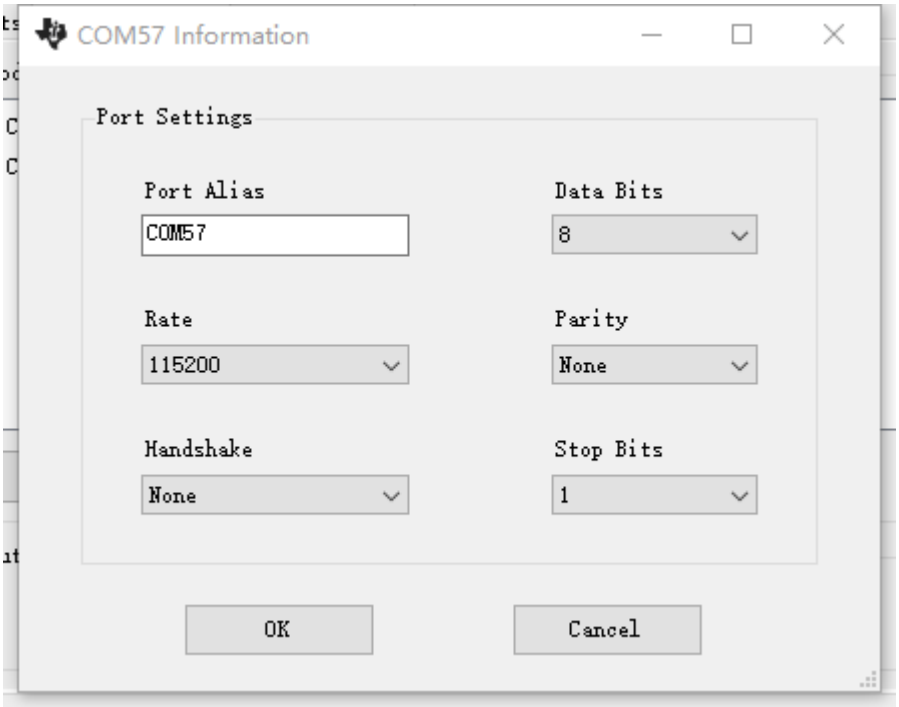
https://www.ti.com.cn/tool/cn/SIMPLELINK-CC13X2-26X2-SDK

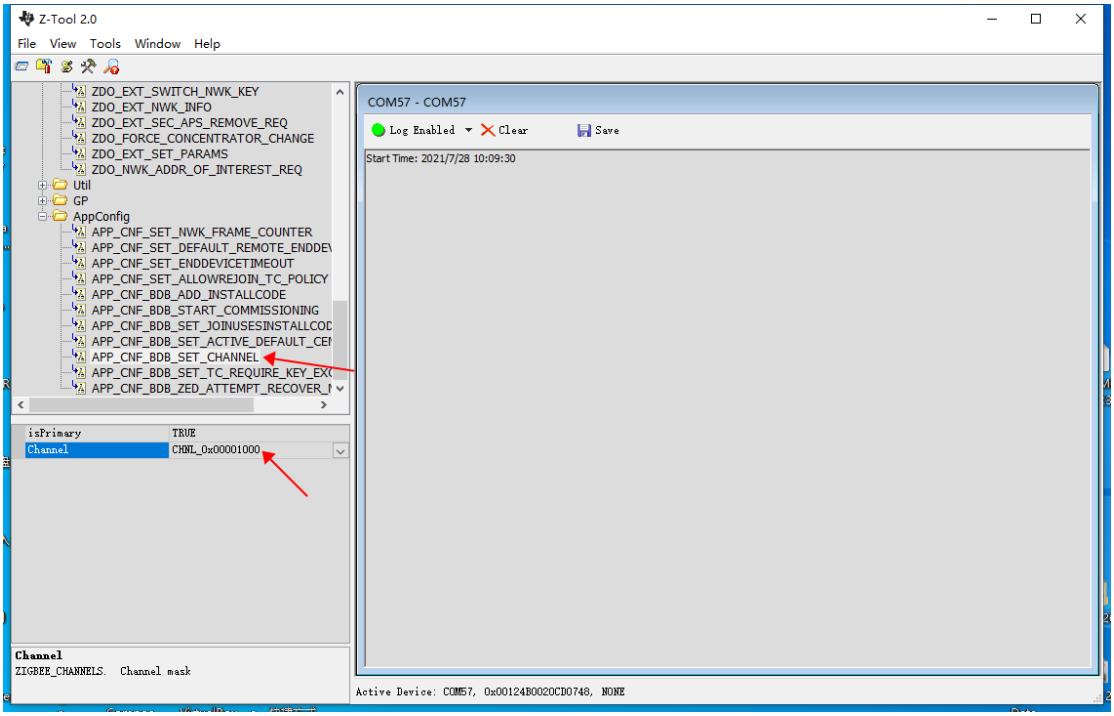
2. execute the Z-Tool.exe

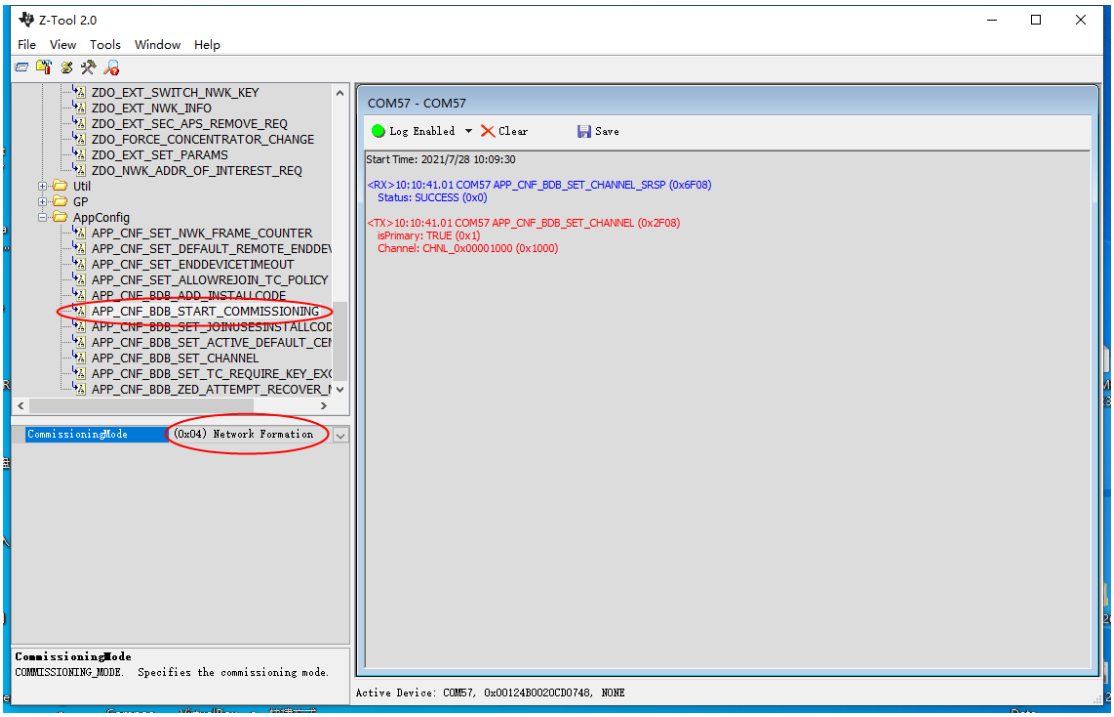


3. Set the serial port baud rate to 115200

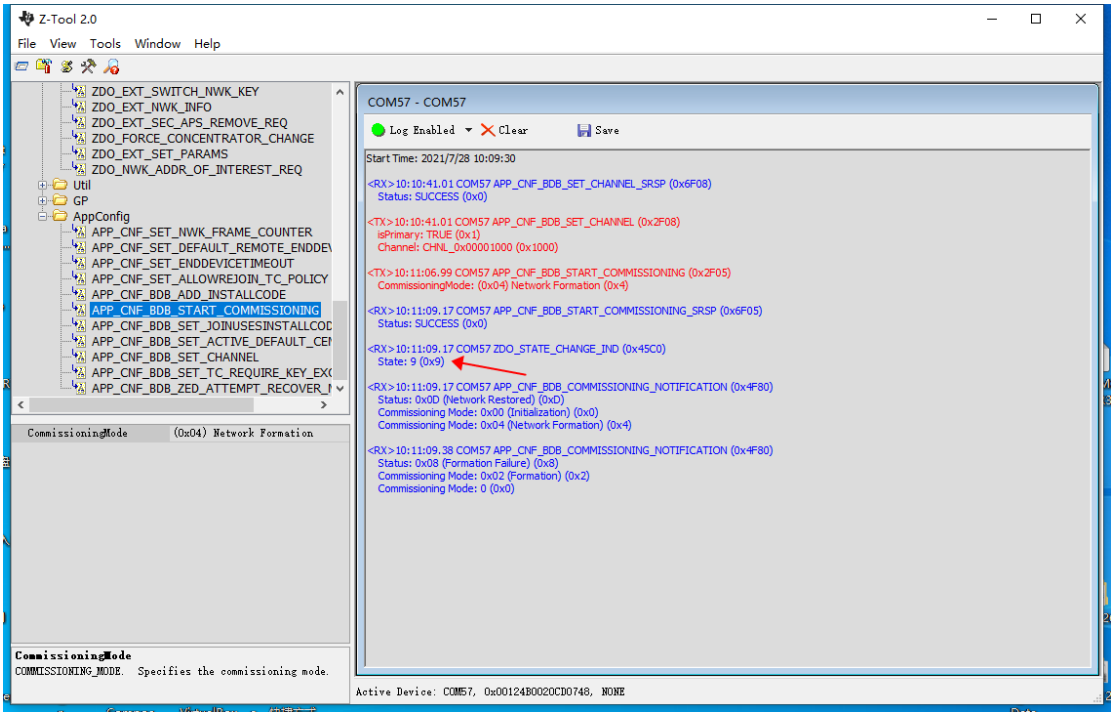

Z-Tool 2.0
File View Tools Window Help
ZDO_UNBIND_REQ
ZDO_MGMT_NWK_DISC_REQ
ZDO_MGMT_LQI_REQ
ZDO_MGMT_RTG_REQ
ZDO_MGMT_BIND_REQ
ZDO_MGMT_LEAVE_REQ
ZDO_MGMT_DIRECT_JOIN_REQ
ZDO_MGMT_PERMIT_JOIN_REQUE
ZDO_MGMT_NWK_UPDATE_REQUI
ZDO_MSG_CB_REGISTER
ZDO_MSG_CB_REMOVE
ZDO_STARTUP_FROM_APP
ZDO_STARTUP_FROM_APP_EX
ZDO_AUTO_FIND_DESTINATION
ZDO_SET_LINK_KEY
ZDO_REMOVE_LINK_KEY
ZDO_GET_LINK_KEY
ZDO_NWK_DISCOVERY_REQ
ZDO_JOIN_REQ
ZDO_SET_REJOIN_PARAMETERS_
AddrMode 0x02 (ADDRESS_16_BI
DstAddr 0x0
Duration 120
TCSignificance 1
TCSignificance
Byte. Trust Center Significance
COM57 - COM57
Log Enabled
Clear
Save
Settings
Scripts
Serial Devices
Socket Devices
Modify Serial Devices
COM Port Name
Device Alias
Status
COM57
COM57
Enabled
Enable
Disable
Edit
Auto Scan
Scan all Enabled com ports (startup and manual scan)
OK
Cancel
Apply
Active Device: COM57, 0x00124B0020CD0748, NONE


COM57 Information
Port Settings
Port Alias
COM57
Data Bits
8
Rate
115200
Parity
None
Handshake
None
Stop Bits
1
OK
Cancel





4. 0x09 means establish network successfully



5. Open network, and add device