

## 6.6 WiFi module writing firmware tutorial

### 1. Preparation before burning firmware

There are two ways to write firmware.

1-Unplug the jumper cap of the WiFi module. Then, use CH340 serial assistant module to write firmware.

2-Plug in the jumper cap of the WiFi module, write the firmware to the WiFi module through the CH340 serial port that comes with the K210 development board.

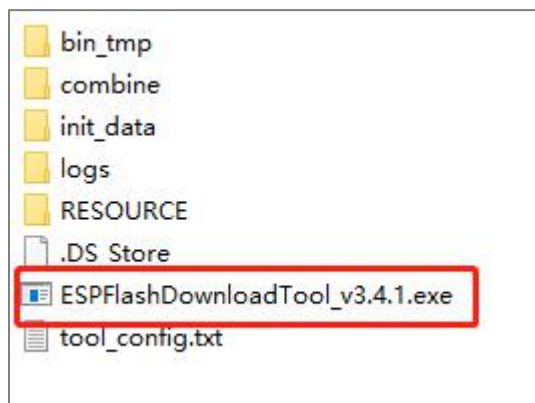
**we use the second method as a demonstration.**

**Note: Before writing firmware, K210 must wrote the firmware of `wifi_AT.bin` and insert the jumper cap into the serial port of the WiFi module (the factory default is already inserted).**

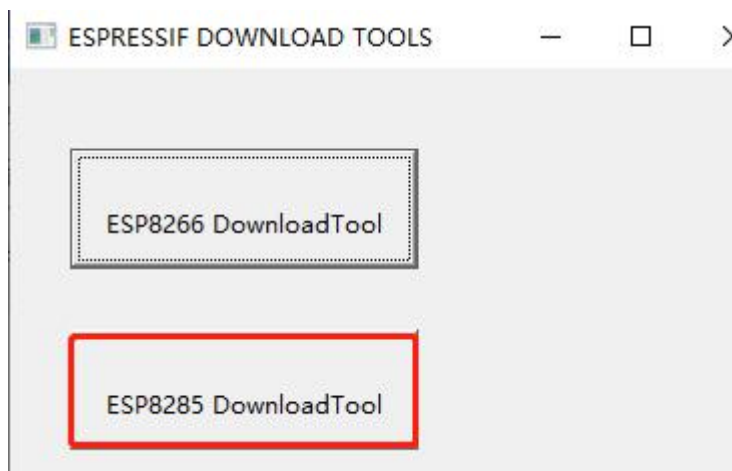
Connect the K210 development board to the computer through Type-C cable, and identify the serial port number.

### 2. Open the ESP burning tool

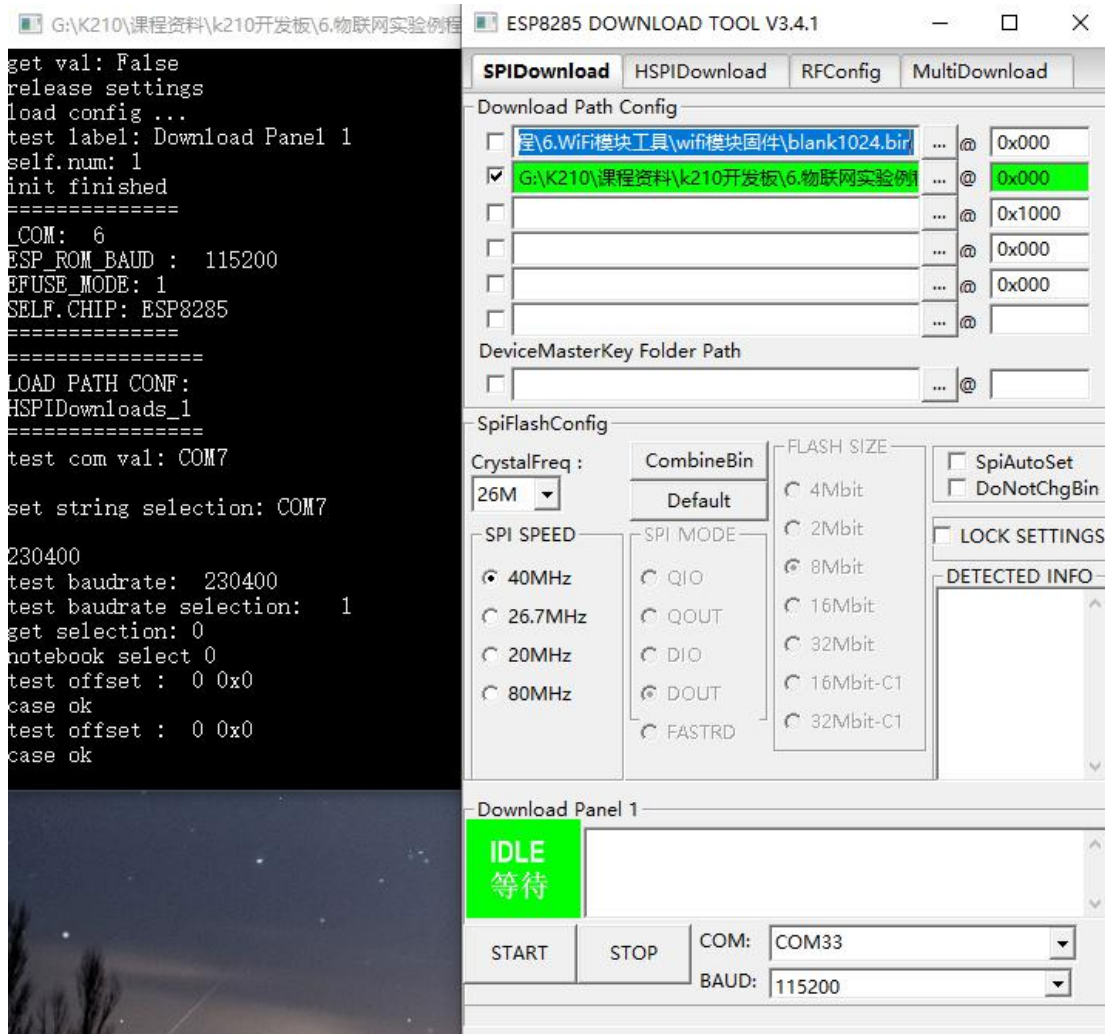
2.1 Extract and open the tool ESP\_TOOLS for writing firmware, double-click to open the ESPFlashDownloadTool\_v3.4.1 tool



2.2 Choose “ESP8285 DownloadTool”.



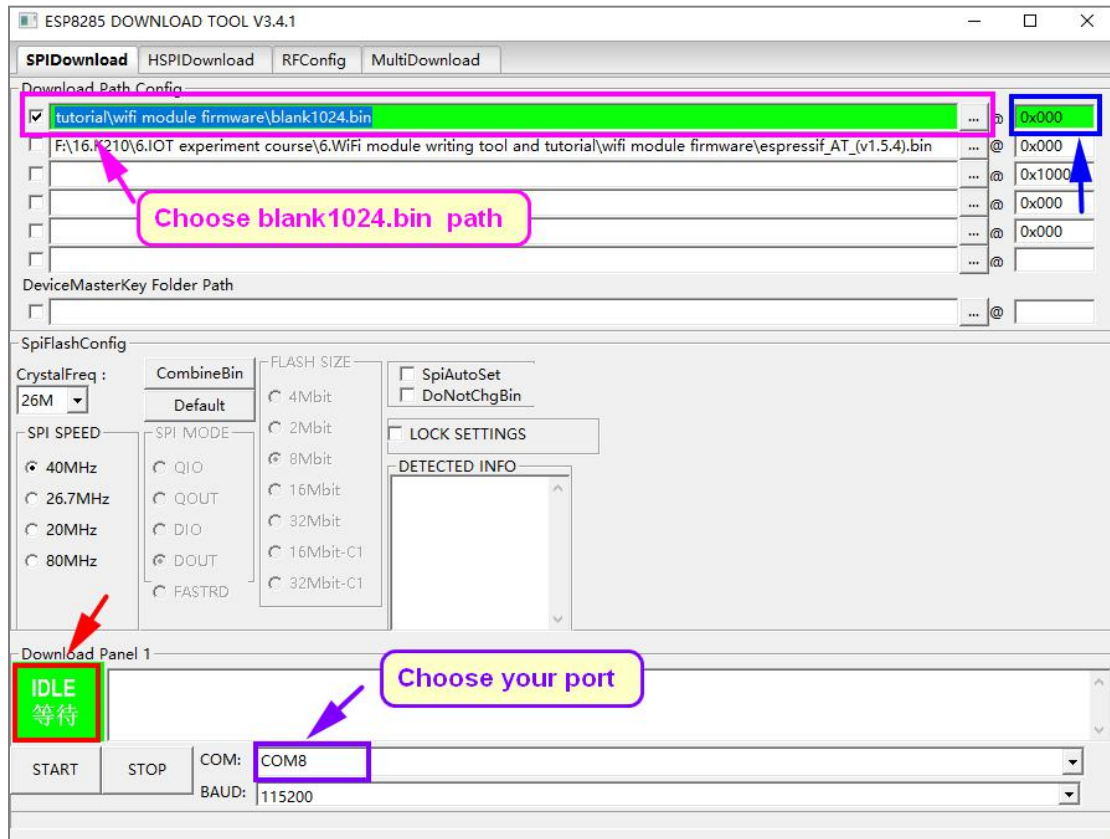
You can see following interface.



### 3. Clear the Flash chip

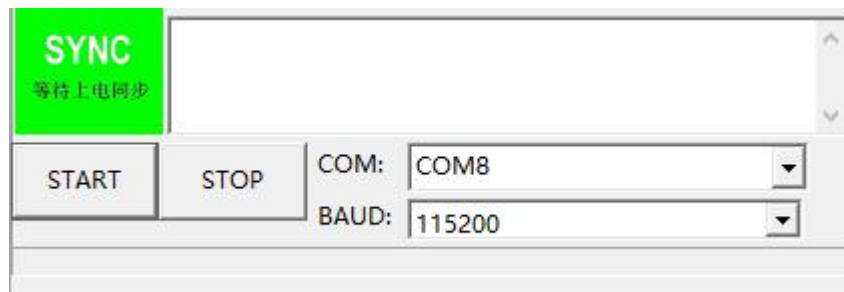
**Note: The function of this step is to clear the content saved in Flash.**

3.1 Select the path of the **blank1024.bin** firmware in the position in the figure below.

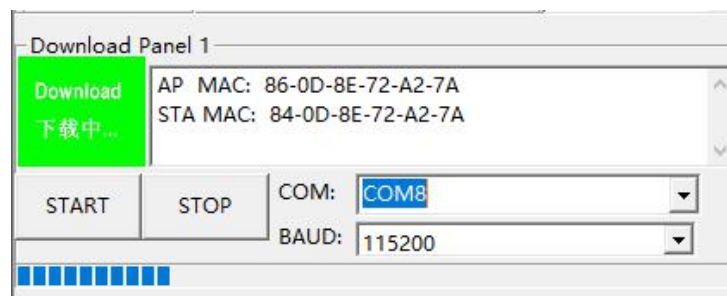


3.2 Click "START". The IDLE button will become SYNC.

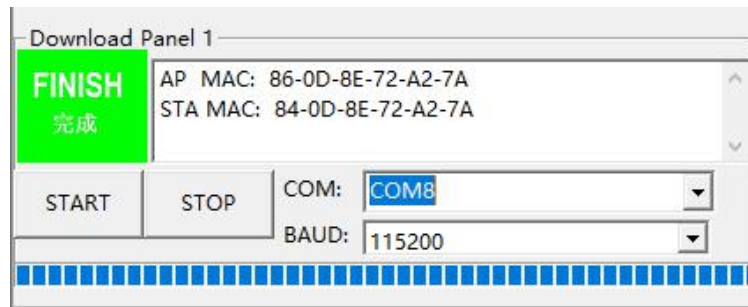
At this time, we need to press and hold the ESP-BOOT button of the WIFI module, and press the ESP-RST button, it will automatically enter the download.



3.3 Wait for the scroll bar to finish scrolling.

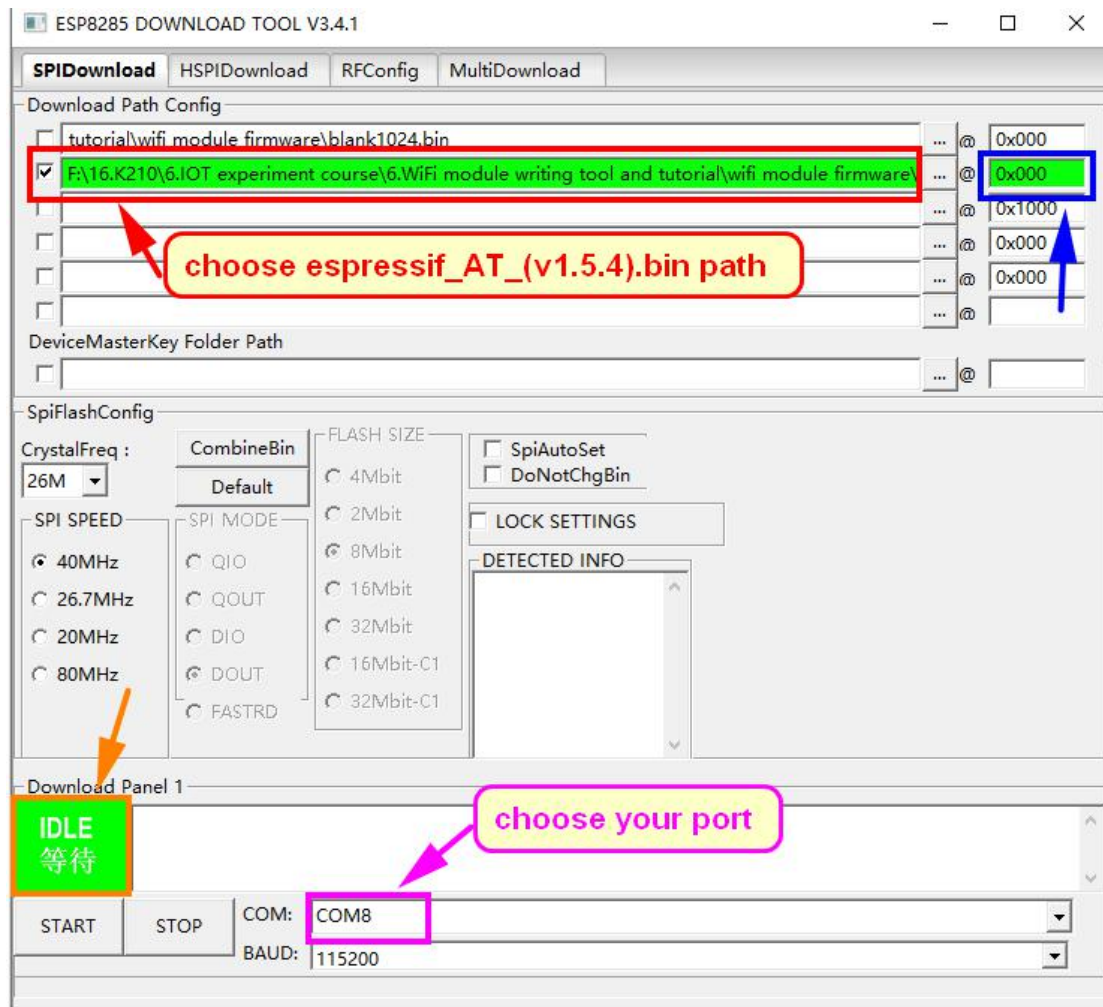


3.4 After the flash is cleared, you can start to download the firmware.



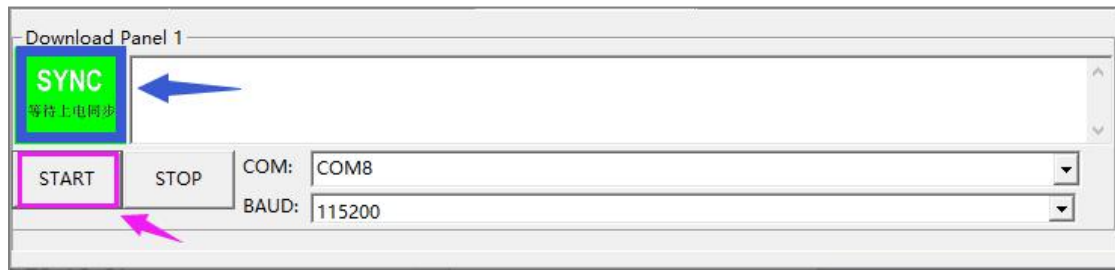
#### 4. Writing wifi module firmware

4.1 Select the path of the **espressif\_AT\_(v1.5.4).bin** firmware in the position in the figure below.

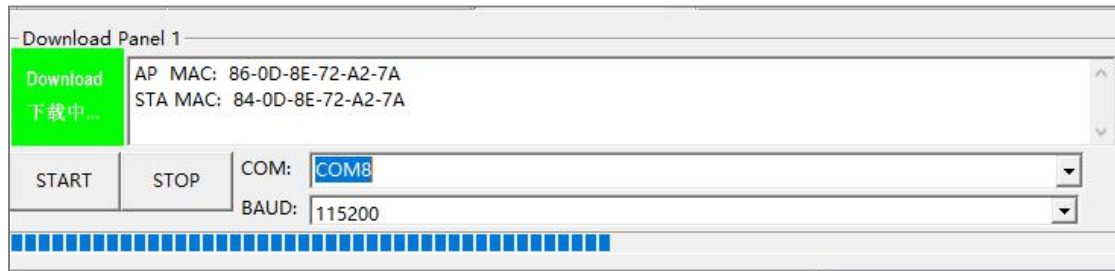


4.2 Click "START". The IDLE button will become SYNC.

At this time, we need to press and hold the ESP-BOOT button of the WIFI module, and press the ESP-RST button, it will automatically enter the download.



4.3 Wait for the scroll bar to finish scrolling.



4.4 After the flash is cleared, you can start to download the firmware.

