Computer serial port configuration instructions for this module

The module must be connected to the usbttl module

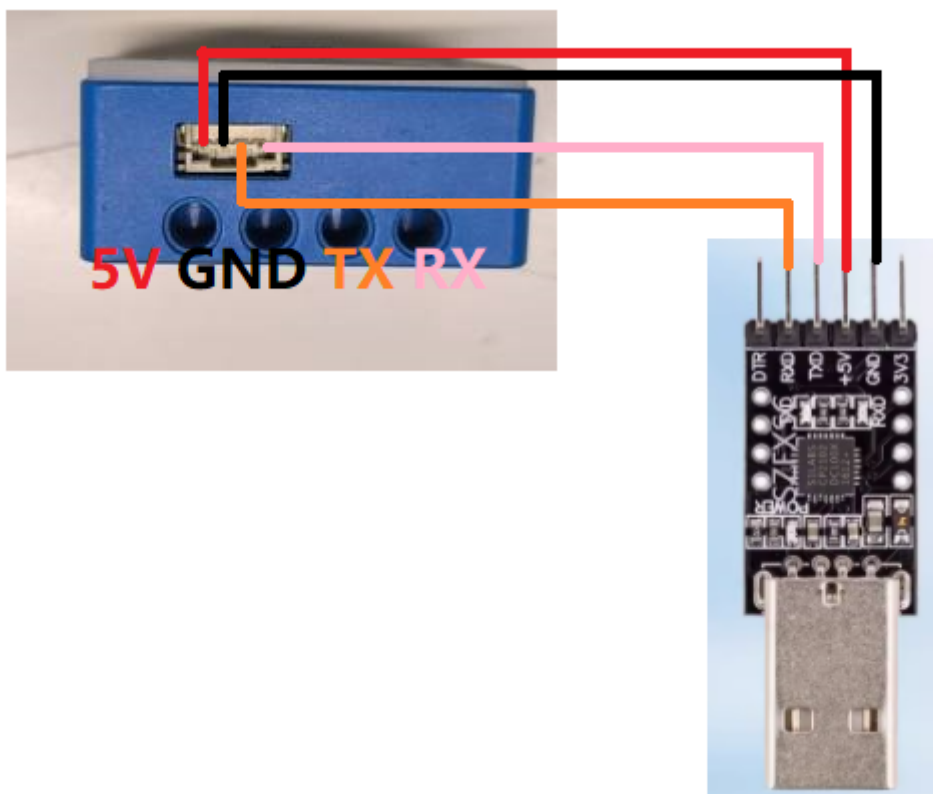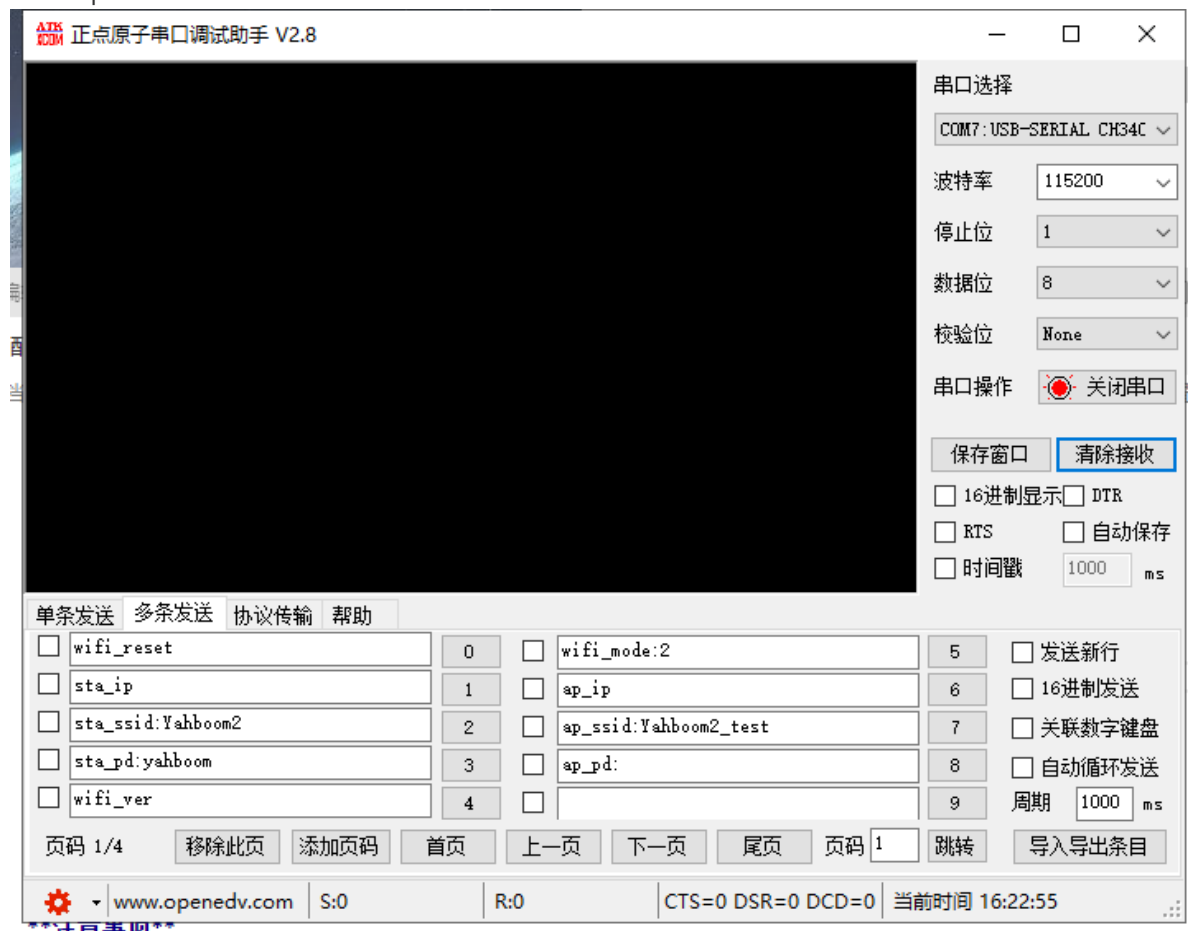| usbttl	wifi camera
RX	TX
TX	RX
GND	GND
VCC	VCC

Serial port configuration

Baud rate 115200, no parity, no hardware flow control, 1 stop bit

If you are using the serial port assistant configuration, you need to **remove** the automatic sending of new lines (additional bits) when sending commands.

as the picture shows:

1. Configure wifi commands in STA mode (mode to connect to LAN)

Command	Description	Example	Remarks
sta_ssid:	The name of the wifi to be connected	sta_ssid:yahboom	yahboom: is the wifi to be connected
sta_pd:	The wifi password to connect	sta_pd:12345678	12345678: is the wifi password to connect

Precautions

1. Whether it is sta_ssid or sta_pd, it must be followed by an English character punctuation mark, such as **comma (,), colon (:), period (.), etc.**
2. When the wifi you want to connect to does not have a password, just send **sta_pd:** once like this.
3. If the above command is successful, **OK** information will be returned. If no information is returned, please check the serial port wiring.
4. When the **sta_ssid:** command is sent like this, the characters **fail,ssid is null!** will be returned, indicating that the connected wifi name cannot be empty.
5. Instructions can be sent in all uppercase letters or all lowercase letters.
6. Both the wifi name and password cannot exceed 30 characters in length, otherwise the configuration will fail.

7. The name and password of the wifi cannot contain Chinese characters.
8. **Every time the wifi password is changed, it will be automatically reset. If you only change the wifi name, you need to manually power off and reset**

2. Configure wifi commands in AP mode (module spontaneous hotspot mode)

Command	Description	Example	Remarks
ap_ssid:	The name of the wifi to be set	ap_ssid:my_wifi	my_wifi: is the wifi to be set
ap_pd:	The wifi password to be set	ap_pd:12345678	12345678: is the wifi password to be set

Precautions

1. Whether it is ap_ssid or ap_pd, it must be followed by an English character punctuation mark, such as **comma (,), colon (:), period (.), etc.**
2. When the wifi to be set up does not have a password, just send **ap_pd:** once like this.
3. If the above command is successful, **OK** information will be returned. If no information is returned, please check the serial port wiring.
4. When the **ap_ssid:** command is sent like this, the characters **fail,AP_Name is null!** will be returned, indicating that the wifi name cannot be empty.
5. Instructions can be sent in all uppercase letters or all lowercase letters.
6. Both the wifi name and password cannot exceed 30 characters in length, otherwise the configuration will fail.
7. The name and password of the wifi cannot contain Chinese characters.
8. **Every time the wifi password is changed, it will be automatically reset. If you only change the wifi name, you need to manually power off and reset**

3. Configure wifi mode

Command	Description	Example	Remarks
wifi_mode:	Configure wifi mode	wifi_mode:2	0: AP mode 1: STA mode 2: AP+STA mode

Precautions

1. wifi_mode must be followed by an English character punctuation mark, such as **comma (,), colon (:), period (.), etc.**
2. wifi_mode can only set 3 modes in total. If a negative number is passed in, the default is AP mode. If the number is greater than 2, the default is AP+STA mode.

4. Other instructions

Command	Description	Example	Return value
sta_ip	Query the ip address in sta mode	sta_ip	Return the ip address connected to the LAN (such as sta_ip:192.168.2.199)
ap_ip	Query the ip address in ap mode	ap_ip	Return the ip address in wifi mode (such as ap_ip:192.168.4.1)
wifi_reset	Restore wifi configuration to factory settings	wifi_reset	Reset_OK
wifi_ver	Query wifi firmware version	wifi_ver	YAHBOOM VerSion:1.8.3

Precautions

1. Instructions can be sent in all uppercase letters or all lowercase letters.
2. If the above command is successful, there will be information corresponding to the return value. If there is no information returned, please check the serial port wiring.
3. wifi_reset is to configure the wifi mode to AP+STA mode. The wifi name of ap is **Yahboom_ESP32_WIFI**. There is no password and it will be reset automatically. No manual reset is required.