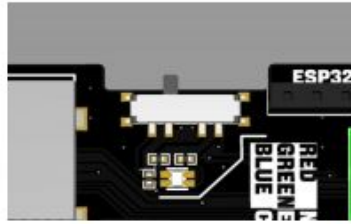
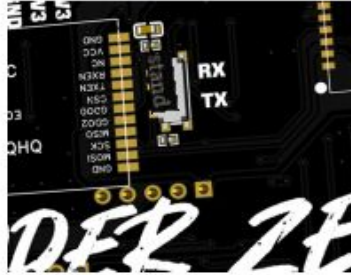


## Function switching



There is a function switch button on the top of the PCB, which can be switched among the three module functions by toggling the switch. The LED below the switch is used to indicate the current function: the red light indicates that it is a 2.4GHz transceiver module, the green light indicates that it is a WIFI module, and the blue light indicates that it is a CC1101 module.



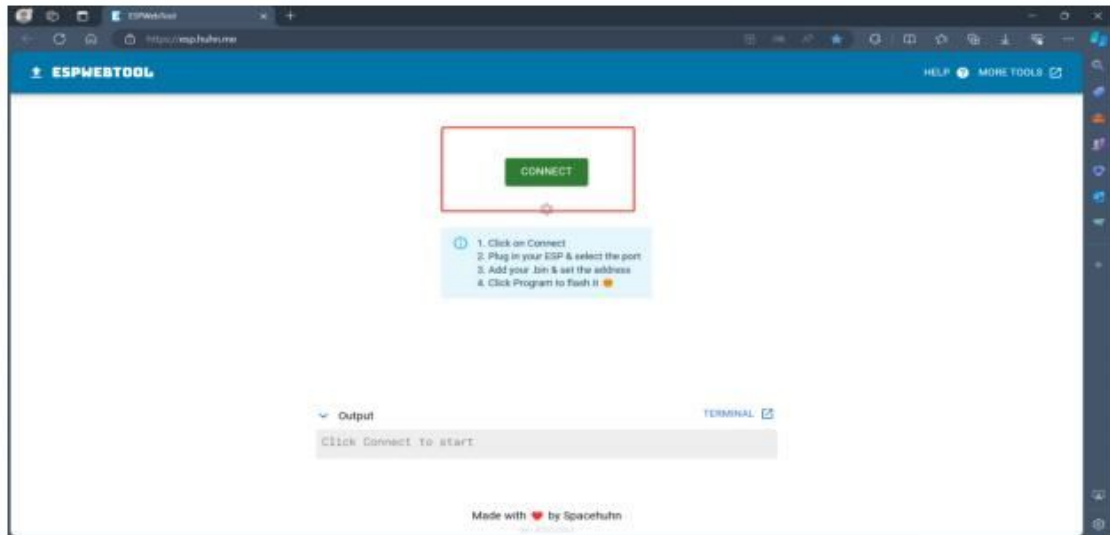
The switch on the back of the PCB is used to turn on the built-in gain circuit of the CC1101 module. When the switch is in RX mode, the receiving function of the CC1101 module gains, and when the switch is in TX mode, the transmitting function of the module gains. When the switch is in the RX position, the module can also perform receiving function, but the TX function does not have gain amplification.

**Do not directly plug or unplug the module when it is powered on, as it may damage the module's power supply function.**

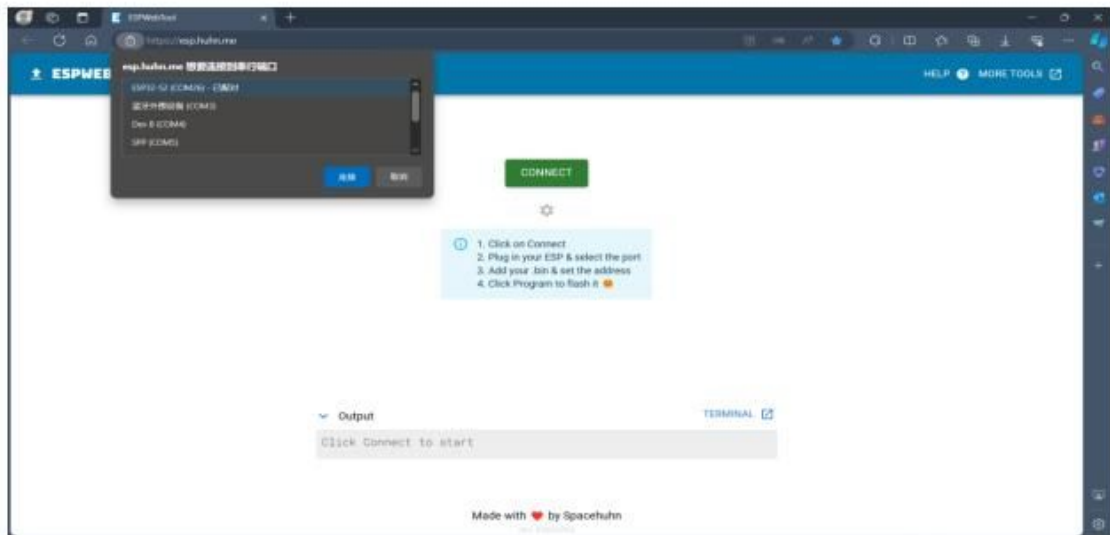
## ESP32 program burning

The WIFI module selected on the PCB is ESP32-S2. When downloading the program, you can refer to the burning process of the official Flipperzero WIFI board.

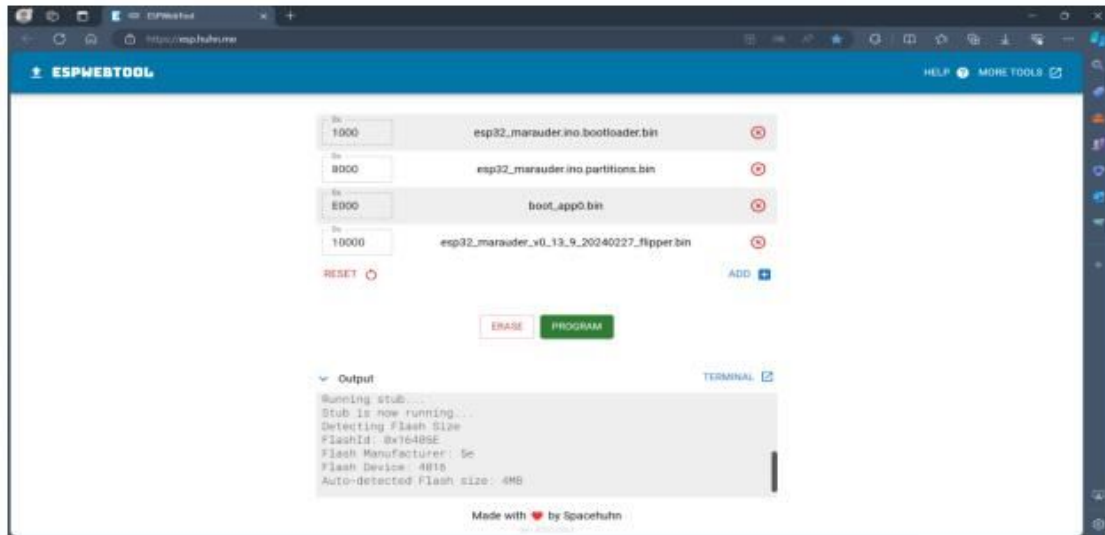
1. Open the following website through a browser: [ESPWebTool\(huhn.me\)](https://huhn.me) (using Edge browser)
2. Turn the toggle switch above the front of the PCB board to the middle position.
3. Press and hold the boot button below the front of the PCB (the silk screen next to the button is BT), and connect the TYPE-C on the PCB through the USB cable.  
When connecting the port to the computer interface, the LED color on the front of the PCB should be green.
4. Click the CONNECT button on the webpage



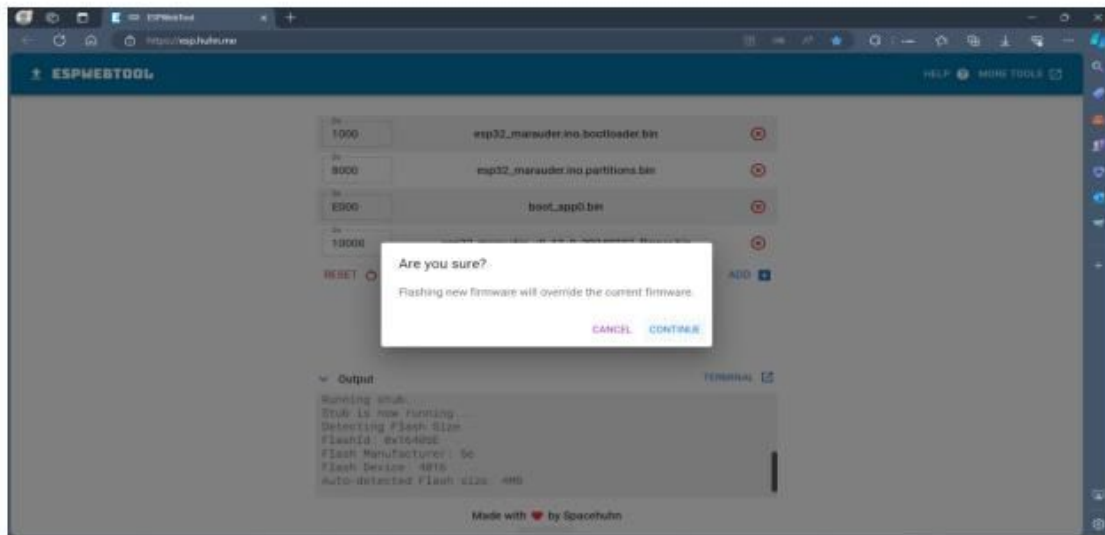
5. Select the esp32-s2 chip in the prompt window in the upper left corner



6. Click the picture below to add the downloaded file to the corresponding address



7. Click the **PROGRAM** button to start downloading. A window will pop up after clicking it. Click **CONTINUE** to continue.



8. When the download progress reaches 100%, it will prompt that the download is complete. If the download progress is interrupted in the middle and an **ERROR** message is prompted, check whether the module welding and the **USB** interface are firmly connected to the computer. After the inspection is completed, reconnect to the computer and burn

0x 1000	esp32_marauder.ino.bootloader.bin	⊗
0x 8000	esp32_marauder.ino.partitions.bin	⊗
0x E000	boot_app0.bin	⊗
0x 10000	esp32_marauder_v0_13_9_20240227_flipper.bin	⊗

RESET ⓘ

ADD ⓘ

ERASE

PROGRAM

## Error message

Output

TERMINAL ⓘ

```
Image header: Magic=0xE9, FlashMode=0x02, FlashSizeFreq=0x2F
Filling data with filesize: 966832
Erase size: 966832, blocks 50, block size 0x4000, offset 0x10000,
ERROR!
Exception: Cannot read properties of null (reading "getWriter")
Done!
To run the new firmware please reset your device.
```