

# **WizFi360**

## **Firmware Update Guide**

**Version 1.2.3**

**WIZnet Co.,Ltd**

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## History

| Ver   | Date       | Description  |
|-------|------------|--|
| 1.0.0 | 2019.07.29 | Initial version  |
| 1.1.0 | 2019.08.01 | Added explanation about firmware updates using the cloud |
| 1.2.0 | 2019.08.09 | Modified explanation about Using upgrade tool            |
| 1.2.1 | 2019.08.30 | Modified explanation about UART                          |
| 1.2.2 | 2019.09.02 | Added explanation about UART1                            |
| 1.2.3 | 2019.10.01 | Modified typing error and github link                    |

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## 1. The method of firmware update

There are three methods to update firmware. You can use Tera Term(Serial Program), Cloud or Upgrade Tool.

### 1.1 Using the Tera Term (Serial)

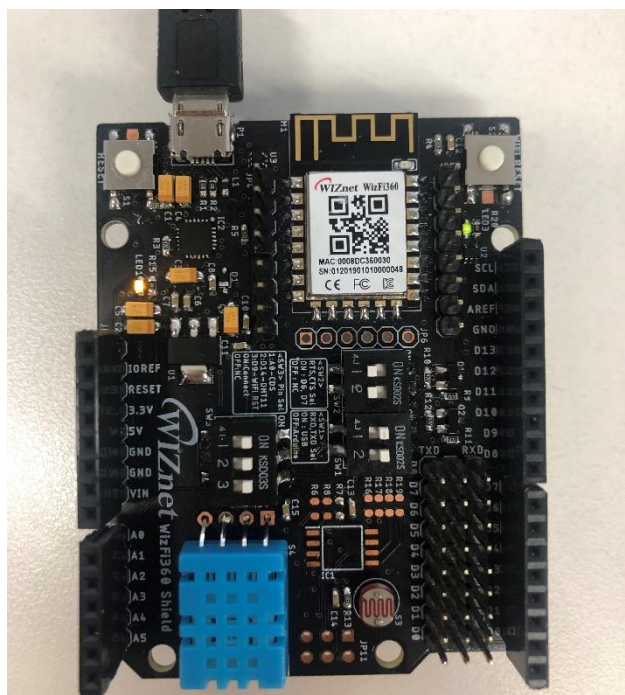
#### 1.1.1 Required hardware and software

- WizFi360-EVB
- Tera Term
- USB cable or TTL to USB module
- WizFi360 Firmware: WizFi360\_SDK.img
  - o <https://github.com/wizfi/Release/tree/master/Binary>

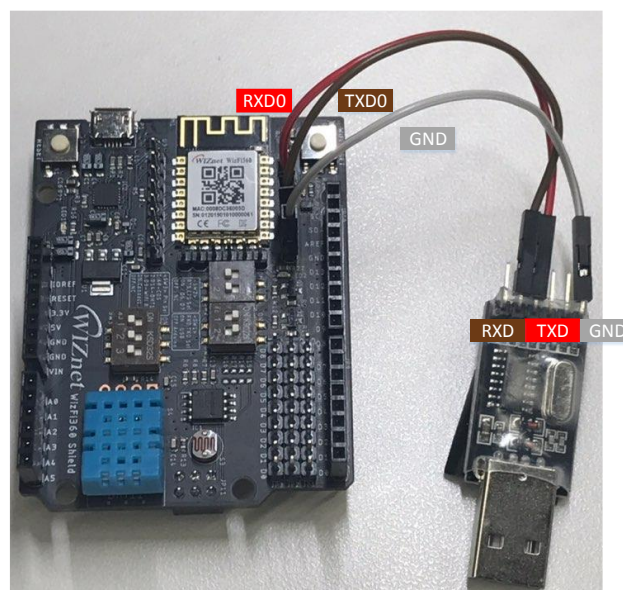
#### 1.1.2 How to download the firmware using the Serial

1. Update Firmware by communicating with Tera Term through Serial. Use UART0 or UART1 for serial communication. In case of UART1 use USB cable and in case of UART0 use TTL to USB module.

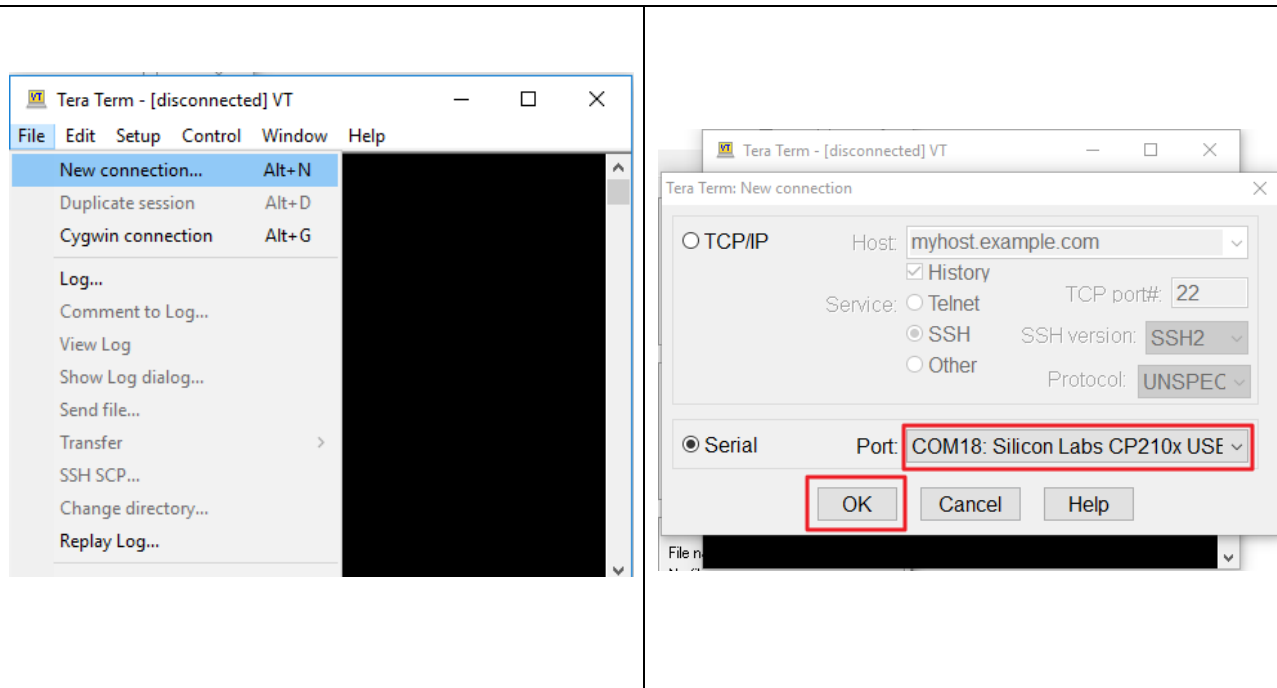
UART1



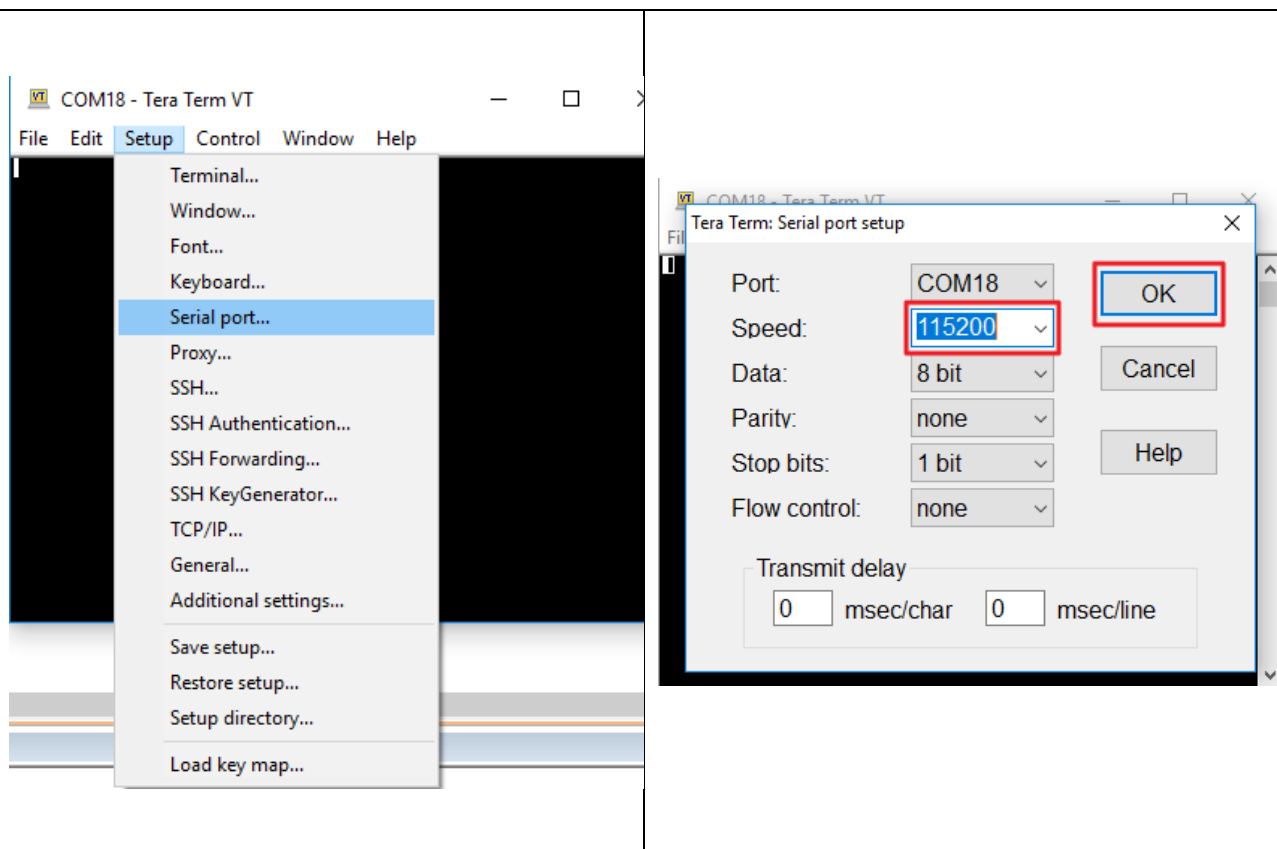
UART0



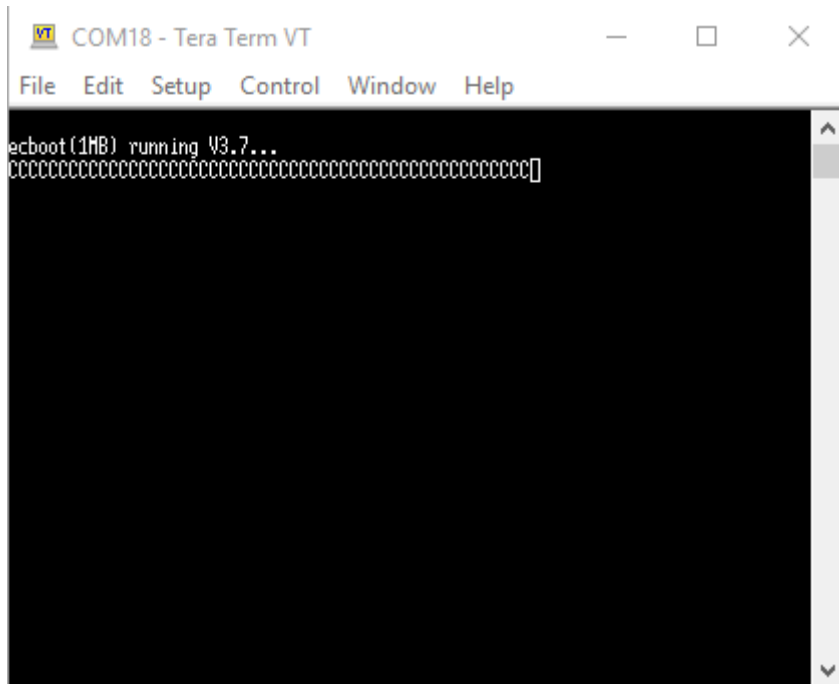
2. Run the Tera Term, go to 'File - New connection' menu, select 'Serial', and choose the port to which WizFi360 is connected.



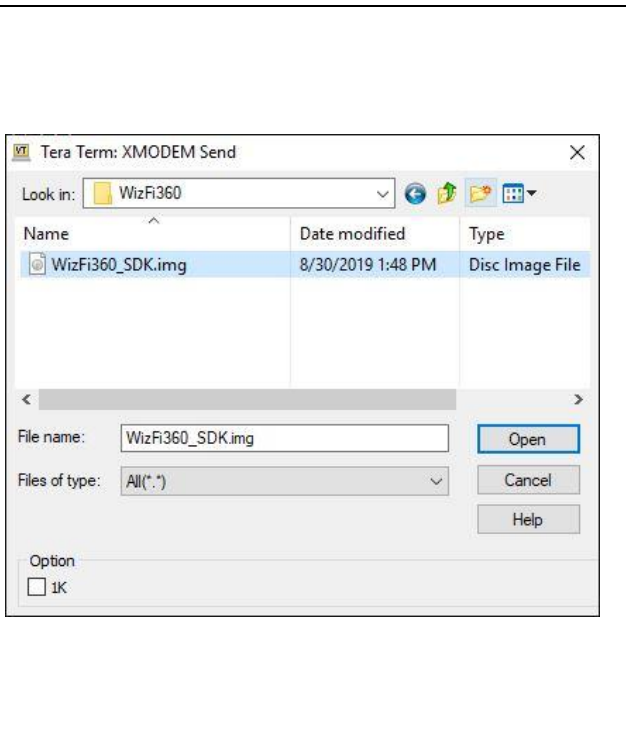
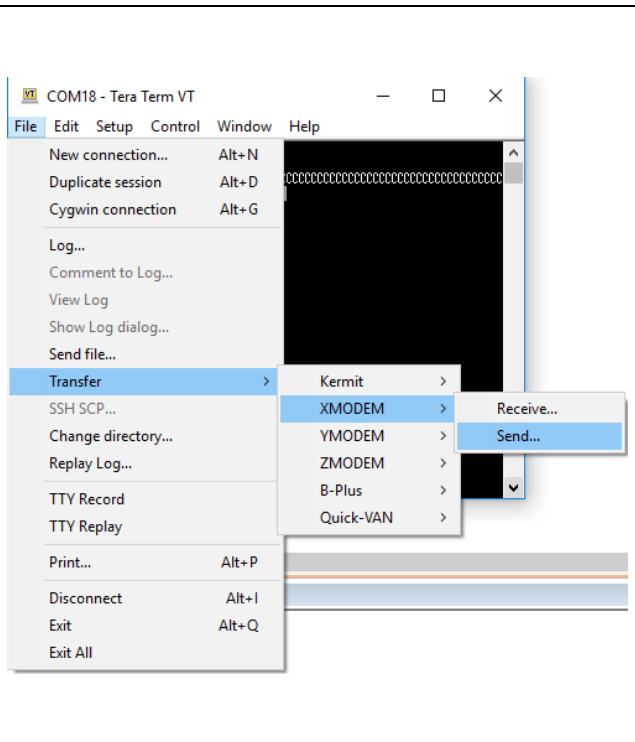
3. Set Speed to 115200bps in 'Setup - Serial port'.

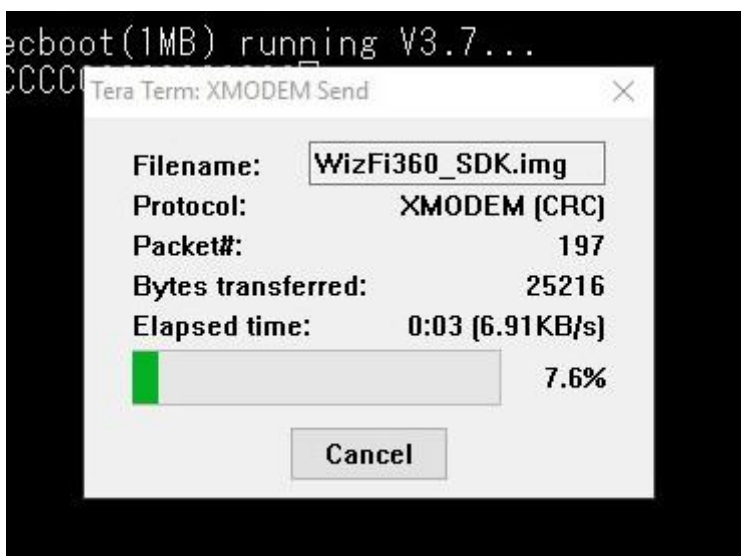


4. While holding down the ESC key on the keyboard, press the reset button on the WizFi360 to enter the Boot mode. When boot mode is entered, the below screen is displayed.

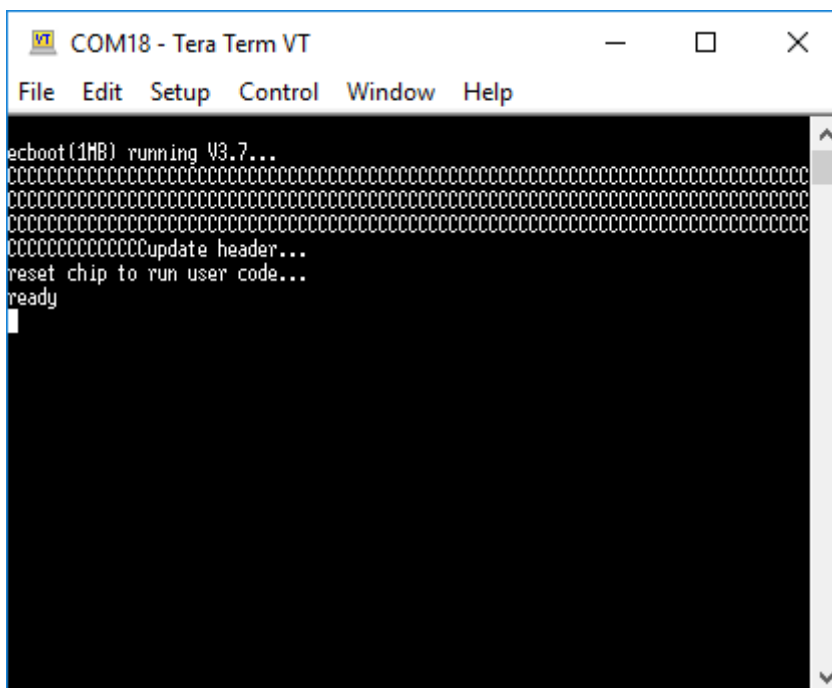


5. Go to 'File - Transfer - XMODEM - Send' menu, select the binary file and click OK button to proceed the firmware update.





6. When the firmware update is completed, 'ready' is displayed on the terminal.



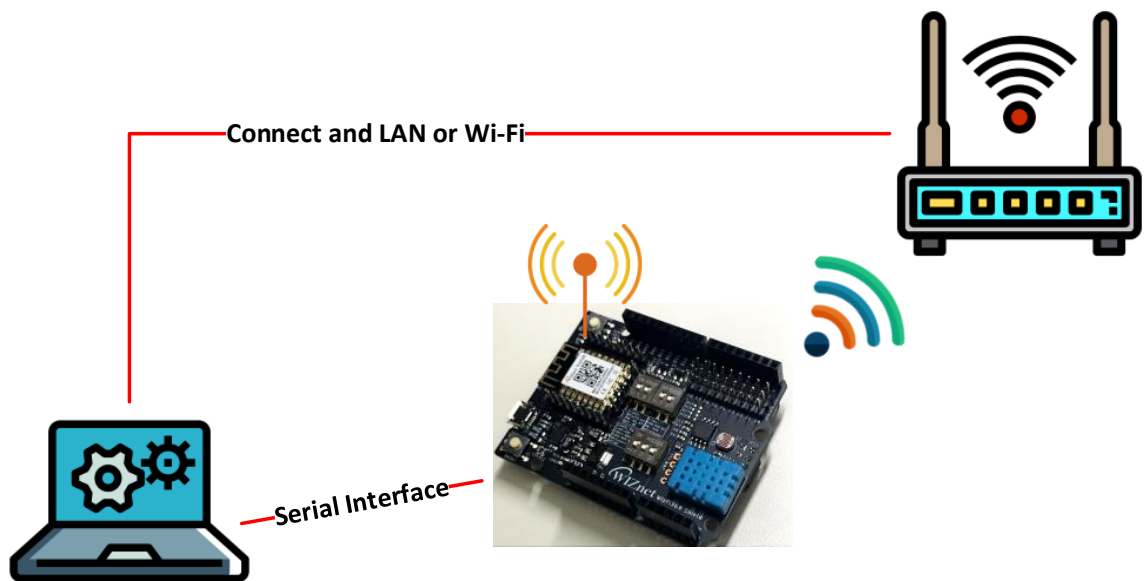
## 1.2 Using the Cloud (Wi-Fi)

### 1.2.1 Required hardware and software

- WizFi360-EVB
- USB Cable or TTL to USB module

### 1.2.2 How to download the firmware using the Cloud (Wi-Fi)

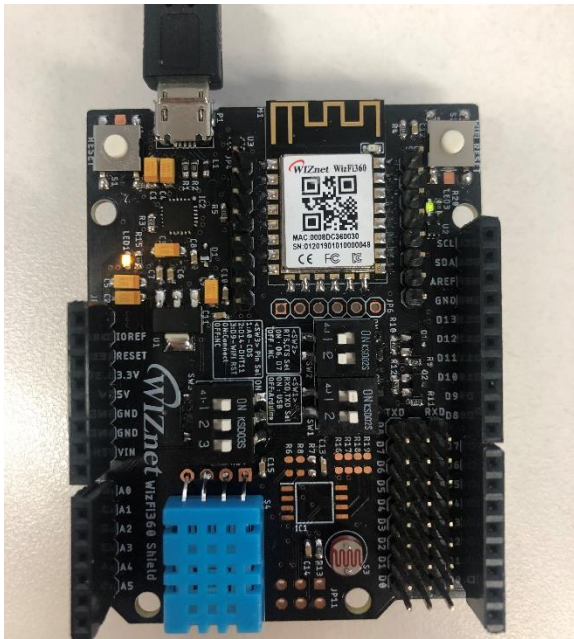
1. Update Firmware by connecting to Cloud through WiFi. Connect PC, WizFi360, and Router as shown below. The router must be connected to the Internet, and the WizFi360 and PC are assigned an IP by DHCP Server of router. To use AT Command, serial communication is used UART0 or UART1. In case of UART1 use USB cable and in case of UART0 use TTL to USB module.



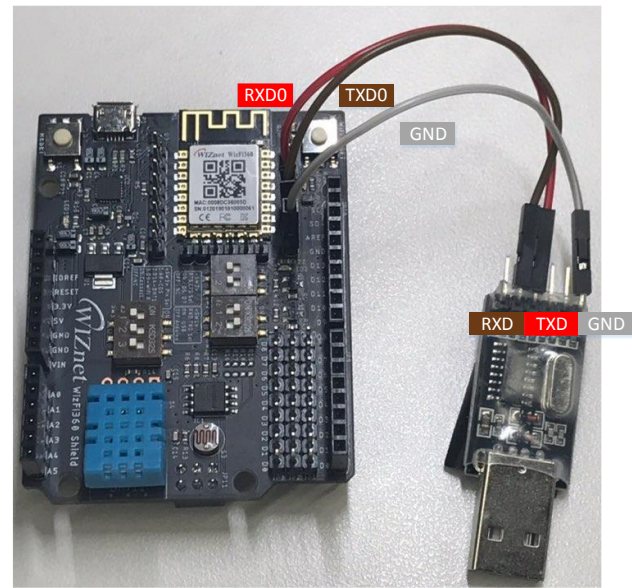
Automatically assigns temporary IP address to PC by DHCP server.



UART1



UART0



2. Use the AT command to upgrade the firmware like below.

```
(10:09:15.104) ready<CR><LF>
(10:09:21.898) AT+CWMODE_CUR=1<CR><LF>
(10:09:22.039) AT+CWMODE_CUR=1<CR><LF>
(10:09:22.039) <CR><LF>
(10:09:22.039) OK<CR><LF>
(10:09:22.932) AT+CWLAP<CR><LF>
(10:09:23.081) AT+CWLAP<CR><LF>
(10:09:24.769) +CWLAP: (3, "##WIZnet_irina", -53, "64:e5:99:b8:60:5a", 1, 1)<CR><LF>
(10:09:24.854) +CWLAP: (4, "DIR-815_Wiznet", -59, "14:d6:4d:cf:fa:a7", 1, 1)<CR><LF>
(10:09:24.854) +CWLAP: (3, "Matthew2.4", -61, "88:36:6c:be:8a:3a", 2, 1)<CR><LF>
(10:09:24.854) +CWLAP: (0, "iptime", -69, "88:36:6c:7d:79:44", 4, 1)<CR><LF>
(10:09:24.854) +CWLAP: (3, "Dap", -57, "88:36:6c:e8:32:9e", 3, 1)<CR><LF>
(10:09:24.854) +CWLAP: (4, "Teddy_AP", -38, "90:9f:33:21:e5:00", 5, 1)<CR><LF>
(10:09:24.854) +CWLAP: (0, "WizFi630S_AP_57985E", -57, "00:08:dc:57:98:5e", 6, 0)<CR><LF>
(10:09:24.854) +CWLAP: (4, "DLINK-IPV6", -51, "cc:b2:55:d2:19:a2", 7, 1)<CR><LF>
(10:09:24.854) +CWLAP: (3, "WIZnet_Scott", -44, "18:a6:f7:56:73:2e", 6, 1)<CR><LF>
(10:09:24.854) +CWLAP: (3, "rena", -53, "88:36:6c:6e:ac:28", 9, 1)<CR><LF>
(10:09:24.854) +CWLAP: (3, "wizms1", -61, "e8:fc:af:fd:a2:85", 11, 1)<CR><LF>
(10:09:24.854) +CWLAP: (0, "iptime", -71, "64:e5:99:a4:e3:6c", 11, 1)<CR><LF>
(10:09:24.854) +CWLAP: (0, "ESP_577CC7", -85, "2e:f4:32:57:7c:c7", 11, 0)<CR><LF>
(10:09:24.854) <CR><LF>
(10:09:24.854) OK<CR><LF>
(10:09:25.523) AT+CwJAP_CUR="Teddy_AP", "12345678"<CR><LF>
(10:09:25.669) AT+CwJAP_CUR="Teddy_AP", "12345678"<CR><LF>
(10:09:29.122) WIFI CONNECTED<CR><LF>
(10:09:29.122) WIFI GOT IP<CR><LF>
(10:09:29.122) <CR><LF>
(10:09:29.122) OK<CR><LF>
(10:09:38.905) AT+CIUPDATE<CR><LF>
(10:09:39.052) AT+CIUPDATE<CR><LF>
(10:09:39.161) +CIUPDATE: 1<CR><LF>
(10:09:39.781) +CIUPDATE: 2<CR><LF>
(10:09:39.781) +CIUPDATE: 3<CR><LF>
(10:09:54.538) +CIUPDATE: 4<CR><LF>
(10:09:54.645) <CR><LF>
(10:09:54.645) OK<CR><LF>
(10:10:01.939) <CR><LF>
(10:10:01.939) ready<CR><LF>
```

## 1.3 Using the Upgrade Tool (Serial/Wi-Fi)

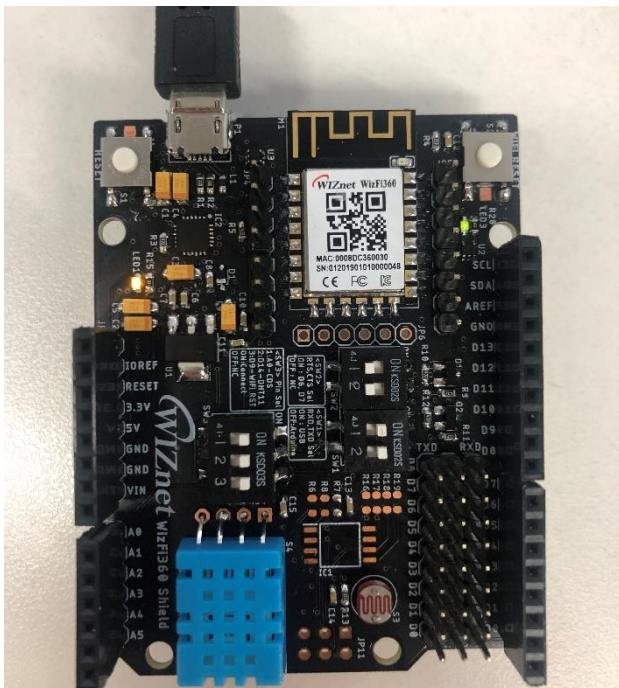
### 1.3.1 Required hardware and software

- WizFi360-EVB
- WizFi360 Upgrade Tool
- USB Cable or TTL to USB module
- WizFi360 Firmware: WizFi360\_SDK.img

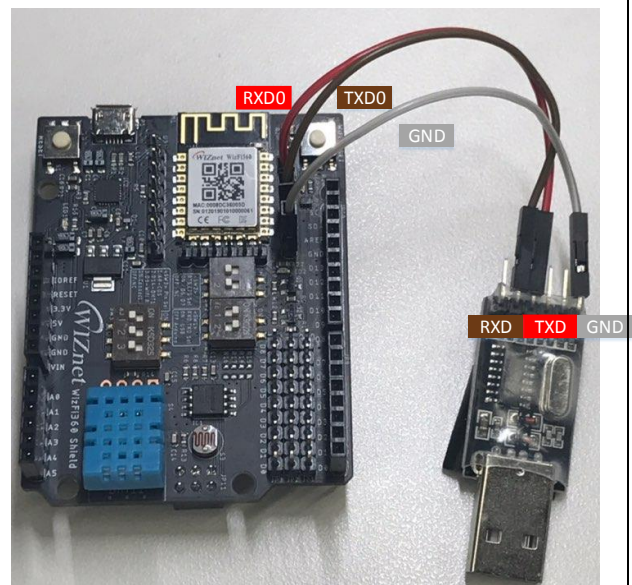
### 1.3.2 How to download the firmware using the Upgrade Tool (Serial)

1. Update Firmware by communicating with Upgrade tool through Serial.  
Use UART0 or UART1 for serial communication. In case of UART1 use USB cable and in case of UART0 use TTL to USB module.

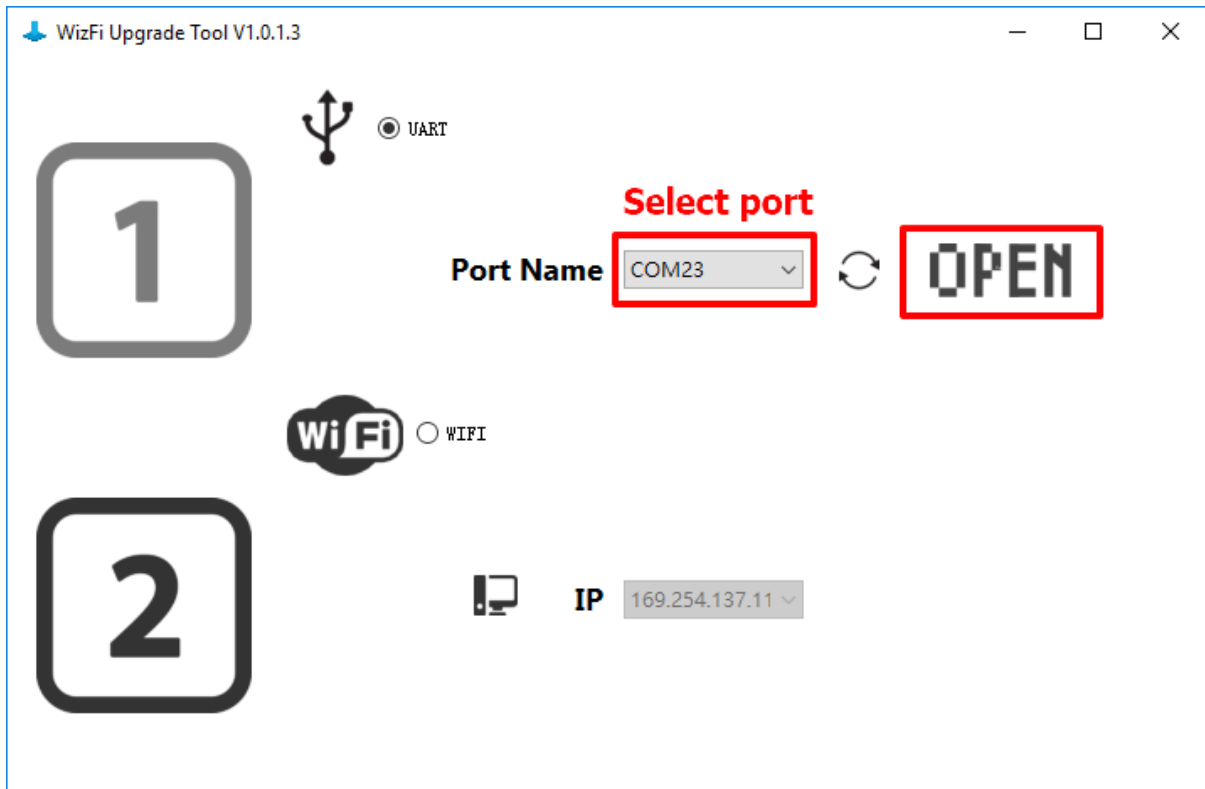
UART1



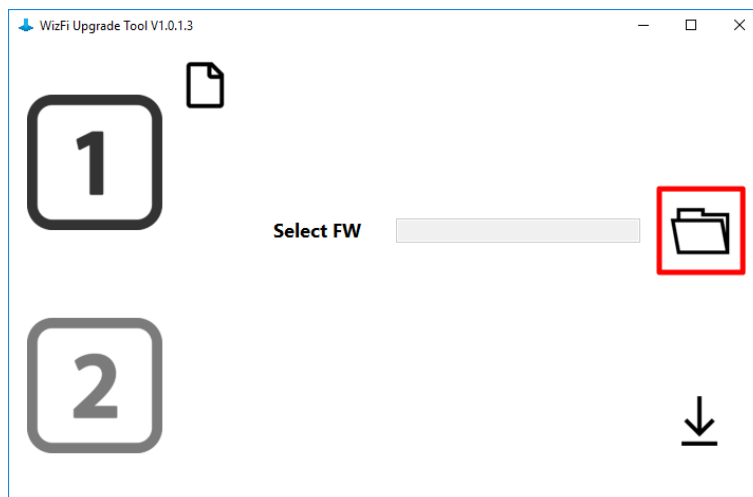
UART0

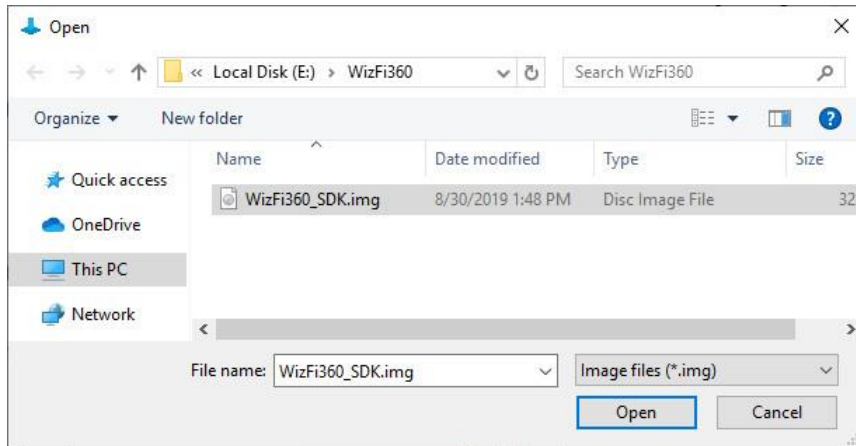


2. Open the WizFi Upgrade Tool and Open the Serial port of WizFi360.

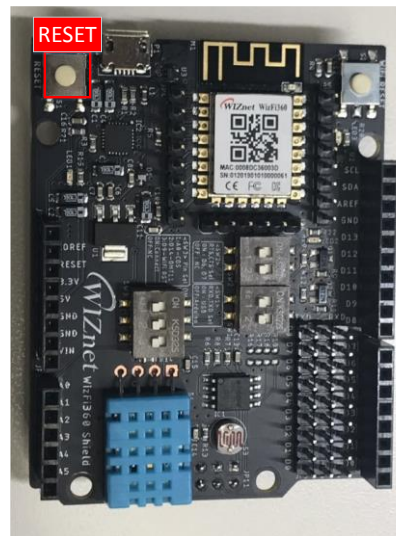
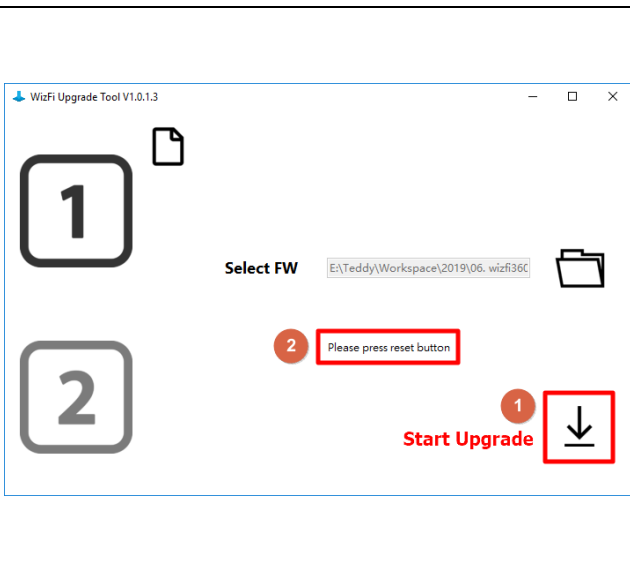


3. Click the folder icon to select the WizFi360 Firmware binary file. (WizFi360\_SDK.img)

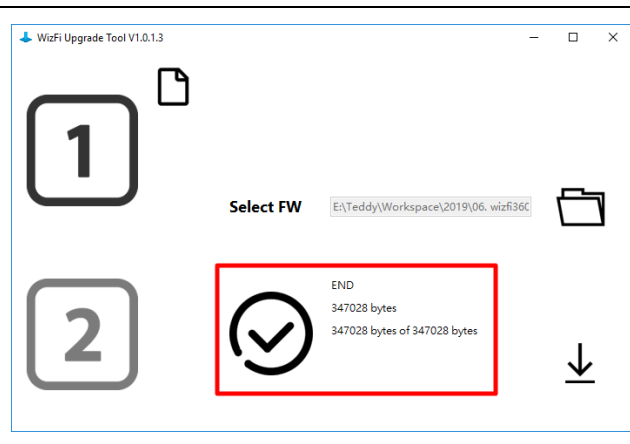
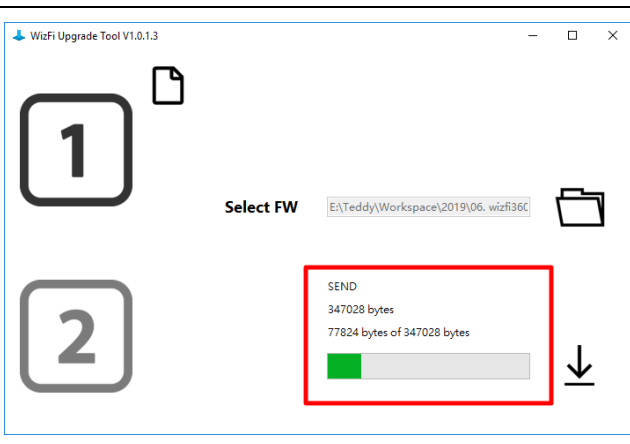




4. Click the Start Upgrade button (arrow icon) and check the "Please Press reset button message."



5. Firmware upload is progressed and uploaded firmware size is displayed.

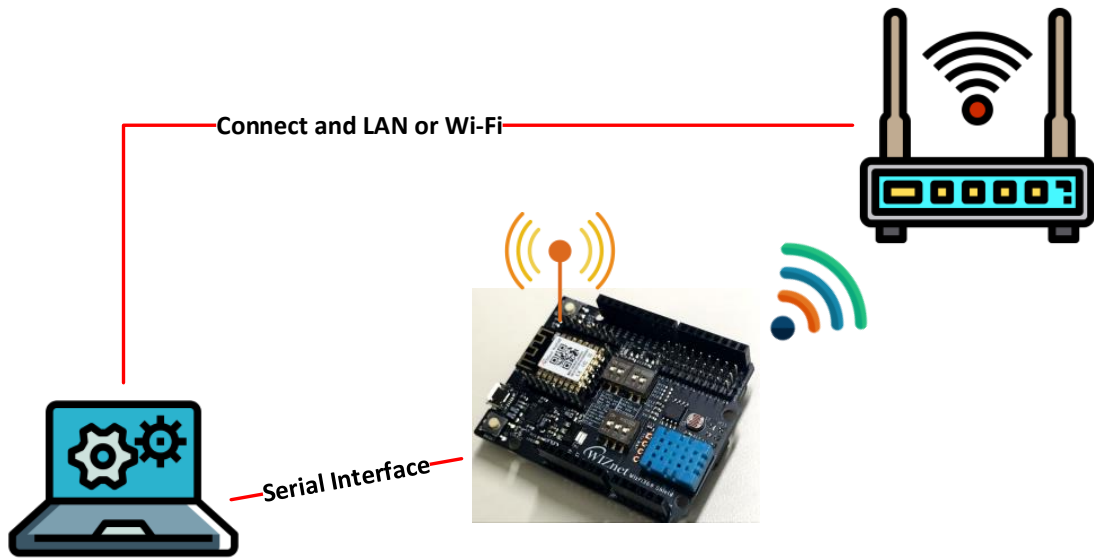




### 1.3.3 How to download the firmware using the Upgrade Tool (Wi-Fi)

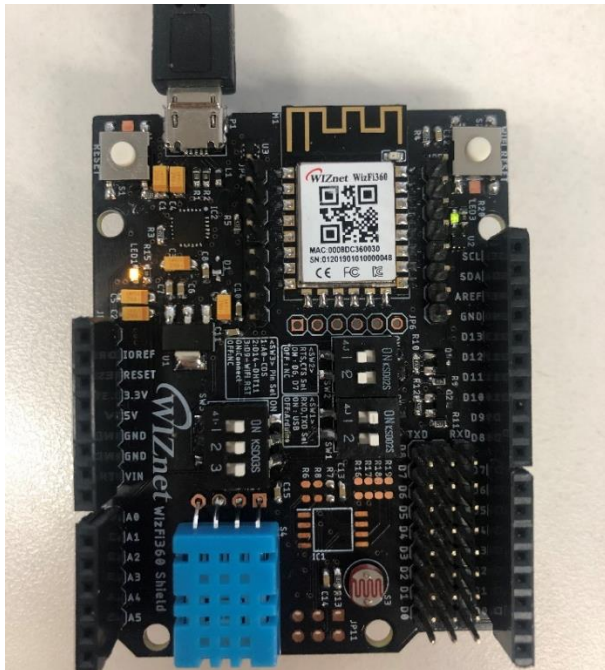
1. Update Firmware by communicating with Upgrade Tool through Wi-Fi. Select Firmware binary file to update in Upgrade Tool, and update firmware using AT Command (AT + CIUPDATE) in WizFi360.

To use AT Command, serial communication is used UART0 or UART1. In case of UART1 use USB cable and in case of UART0 use TTL to USB module.

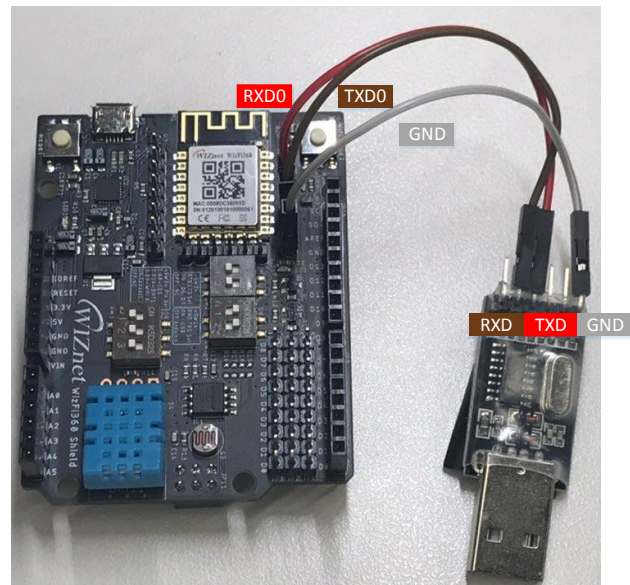


Automatically assigns temporary IP address to PC by DHCP server.

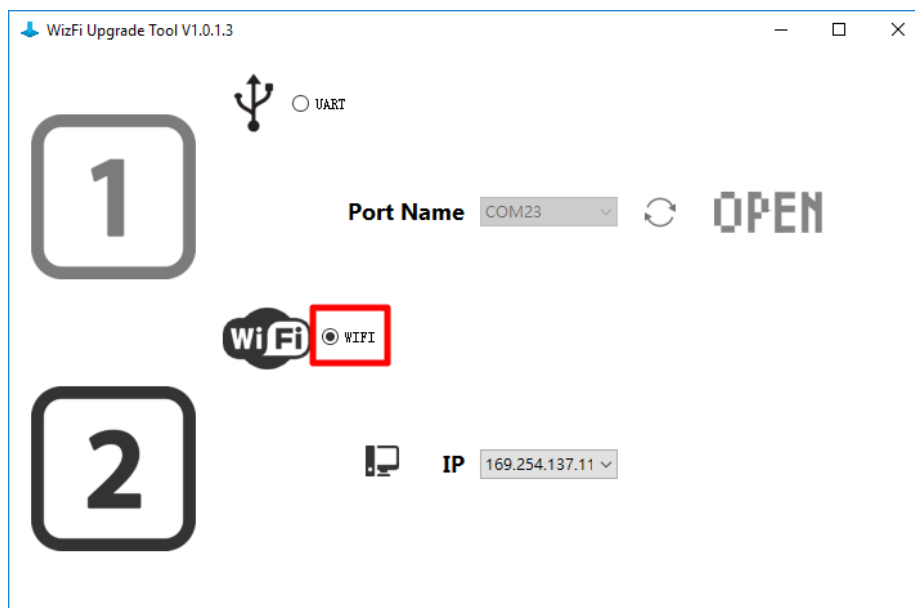
#### UART1



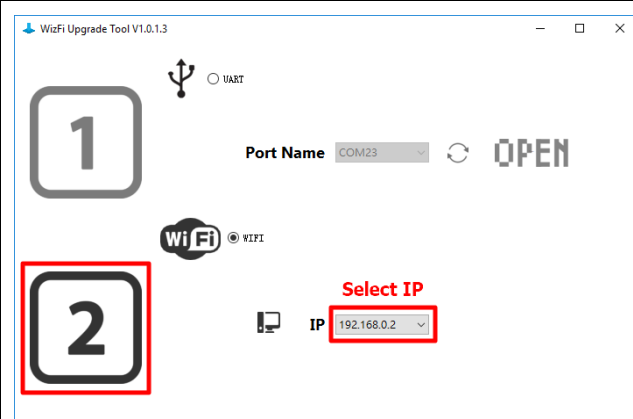
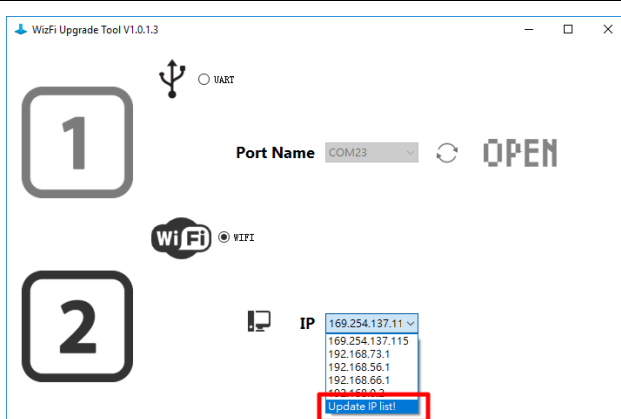
#### UART0



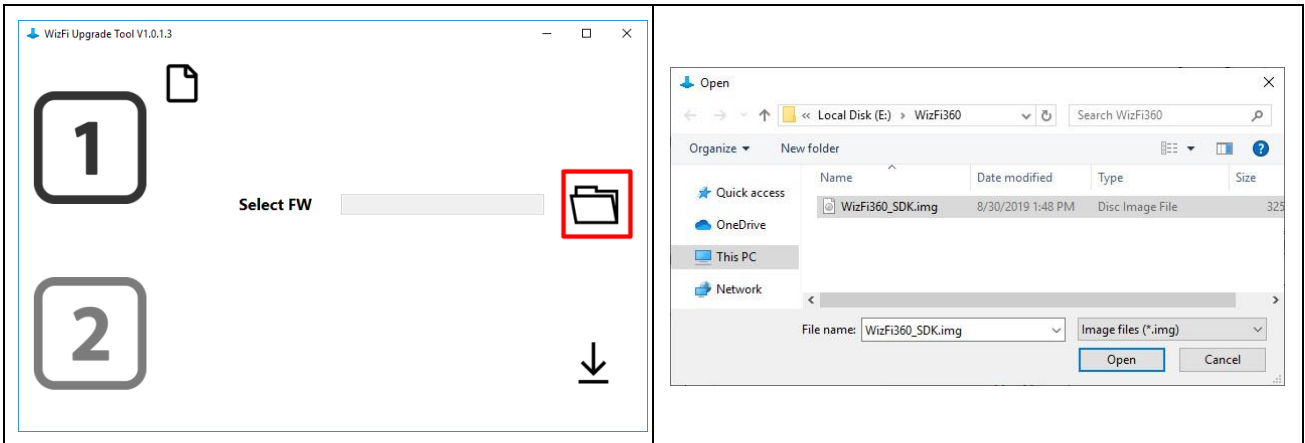
2. Click the WiFi option of the Upgrade Tool.



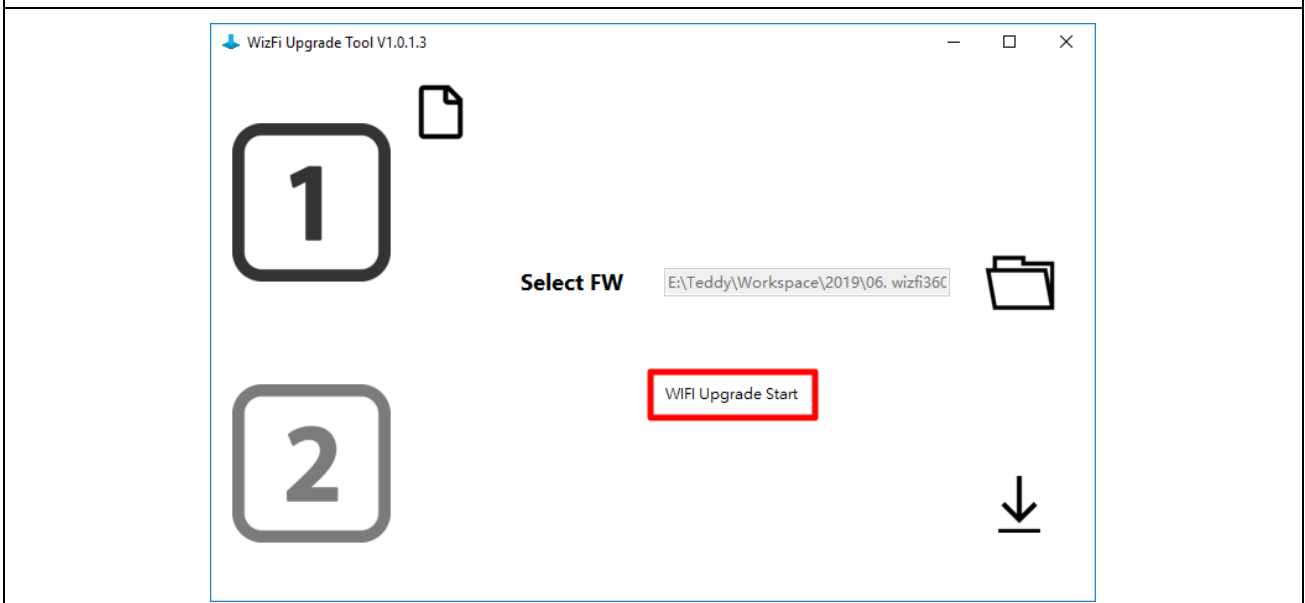
3. Click IP list and select IP of PC.



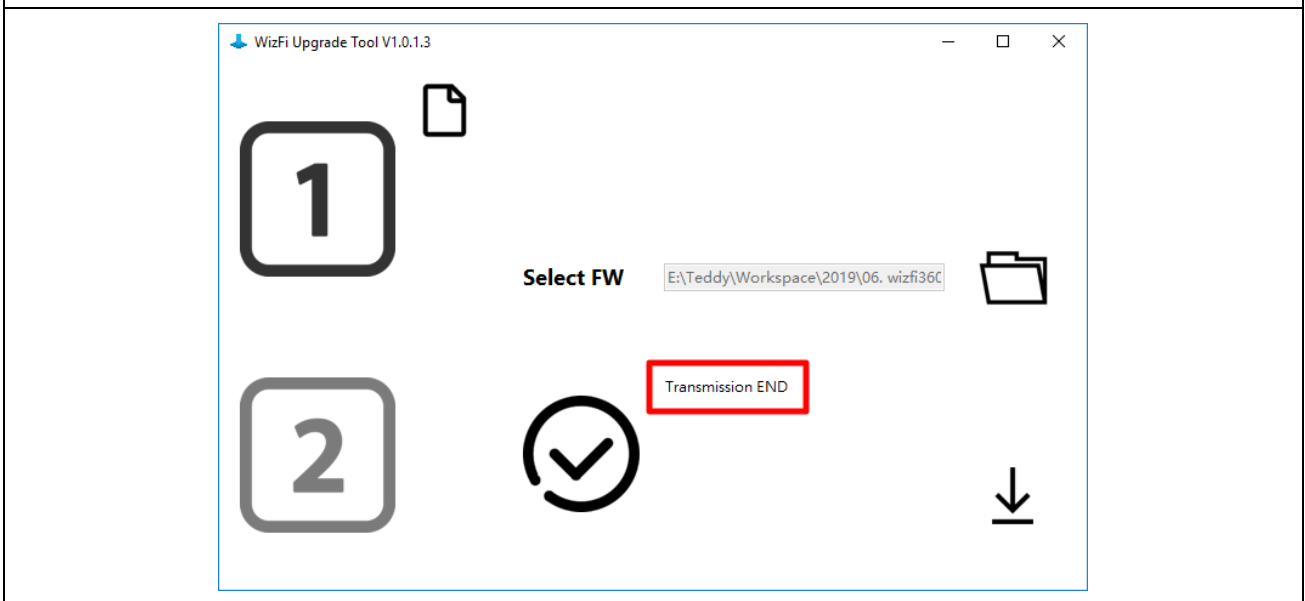
4. In Select FW, click the folder icon to select the WizFi360 Firmware binary file. (WizFi360\_SDK.img)



5. When WizFi360's Firmware Upgrade is ready, the following message will be displayed.



6. Use the AT command to upgrade the firmware.



```
AT+CIUPDATE="http://192.168.0.2:8080/WizFi360_SDK.img"  
AT+CIUPDATE="http://192.168.0.2:8080/WizFi360_SDK.img"  
+CIUPDATE:1  
+CIUPDATE:2  
+CIUPDATE:3  
+CIUPDATE:4  
  
OK  
  
ready
```