WizFi360

Firmware Update Guide

Version 1.21

WIZnet Co.,Ltd

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History

Ver	Date	Description
1.00	2019.07.29	Initial version
1.10	2019.08.01	Added explanation about firmware updates using the cloud
1.20	2019.08.09	Modified explanation about Using upgrade tool
1.21	2019.08.30	Modified explanation about UART

Contents

1. The method of firmware update

The firmware update are method of two that it is the method of using through Serial and the method of using AT command through WiFi.
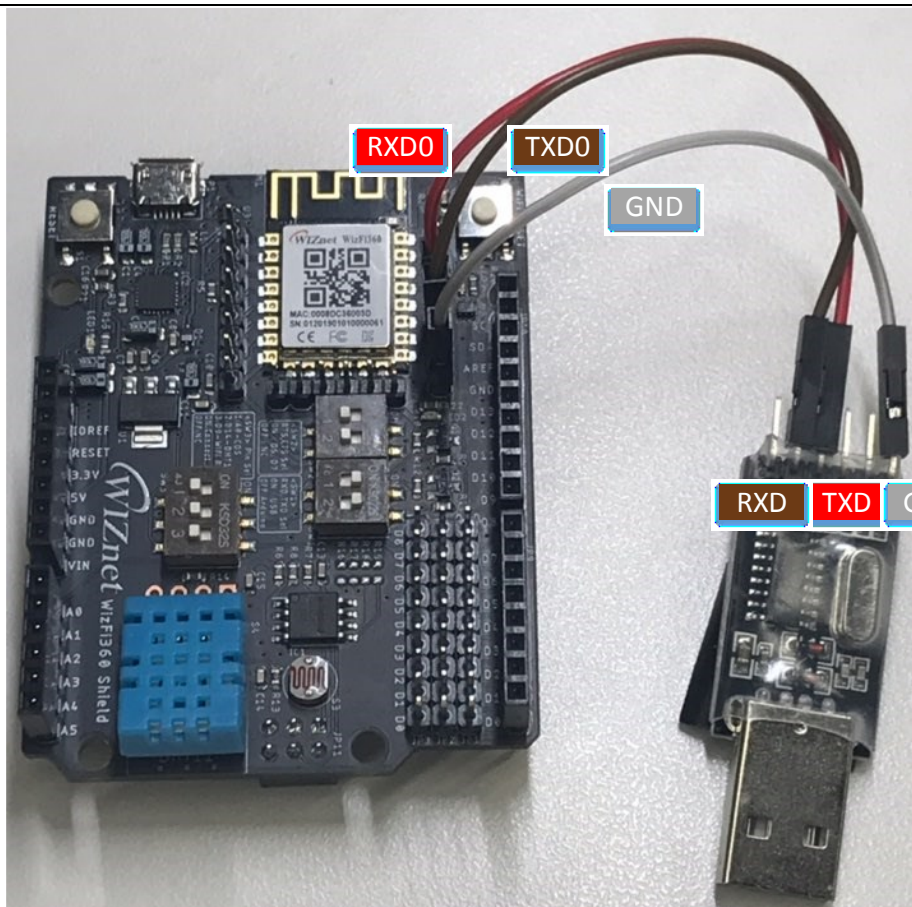
1.1 Using the Tera Term (Serial)

1.1.1 Required hardware and software

- **WizFi360-EVB**
- **Tera Term**
- **TTL to USB module**
- **WizFi360 Firmware: WizFi360_SDK.img**
  - **https://github.com/WIZnet-WizFi360/Release/tree/master/Binary**

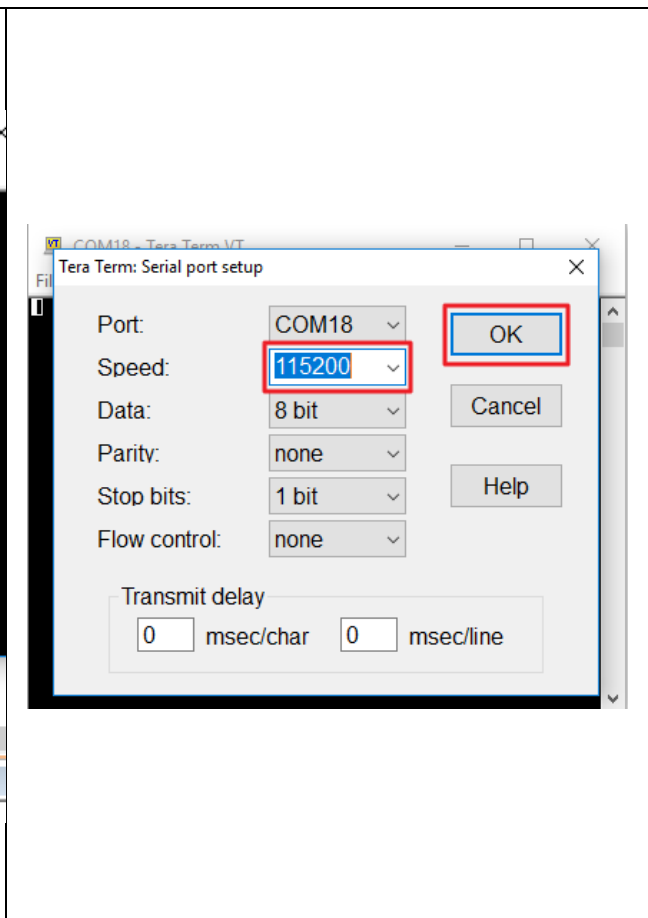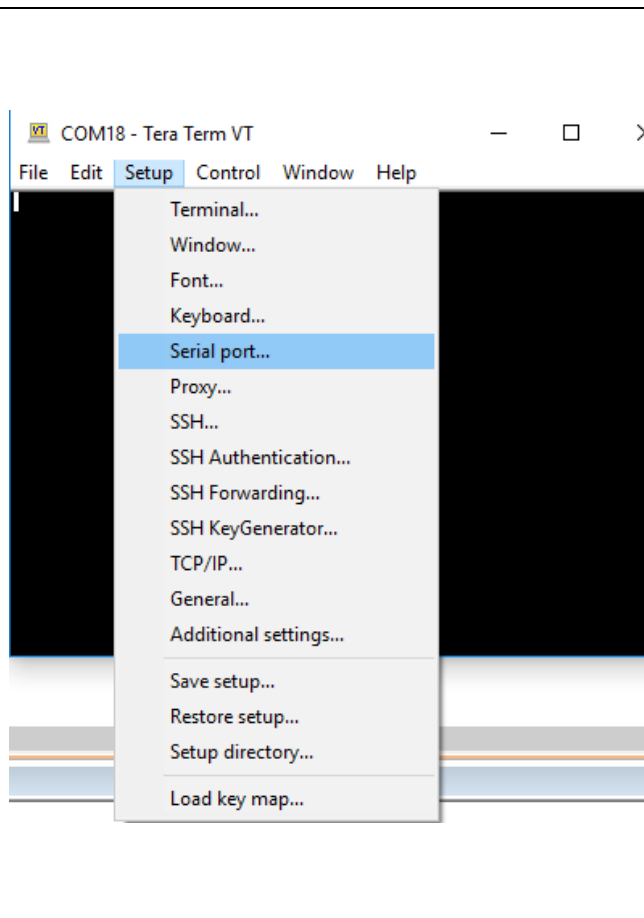### 1.1.2 How to download the firmware using the Serial

1. To upload the firmware of WiZFi360, use UART1 or UART0, and in case of UART0 connects with TTL to USB as below.

2. Run the Tera Term, go to 'File - New connection' menu, select 'Serial', and choose the port to which WizFi360 is connected.
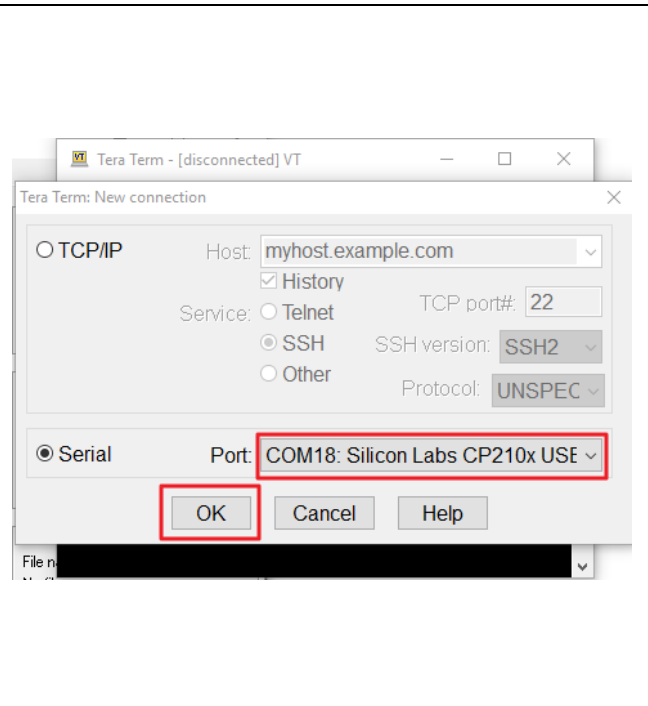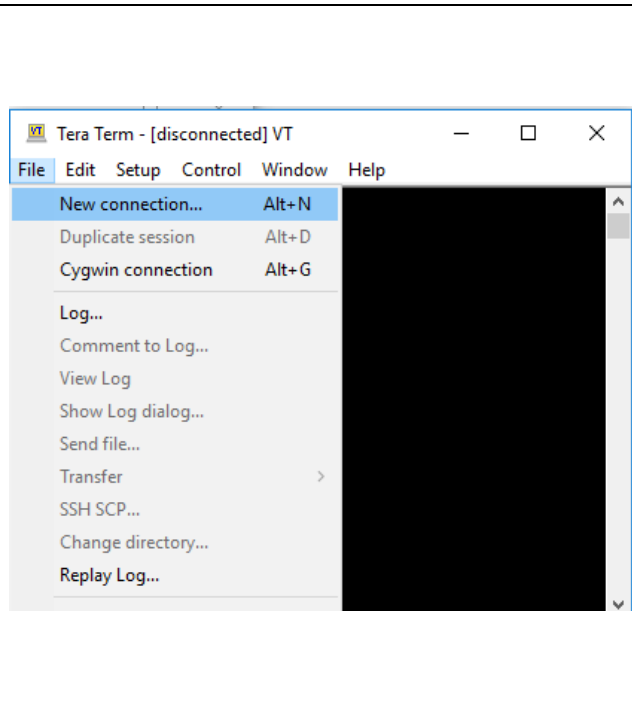
3. Set Speed to 115200kbps in 'Setup - Serial port'.

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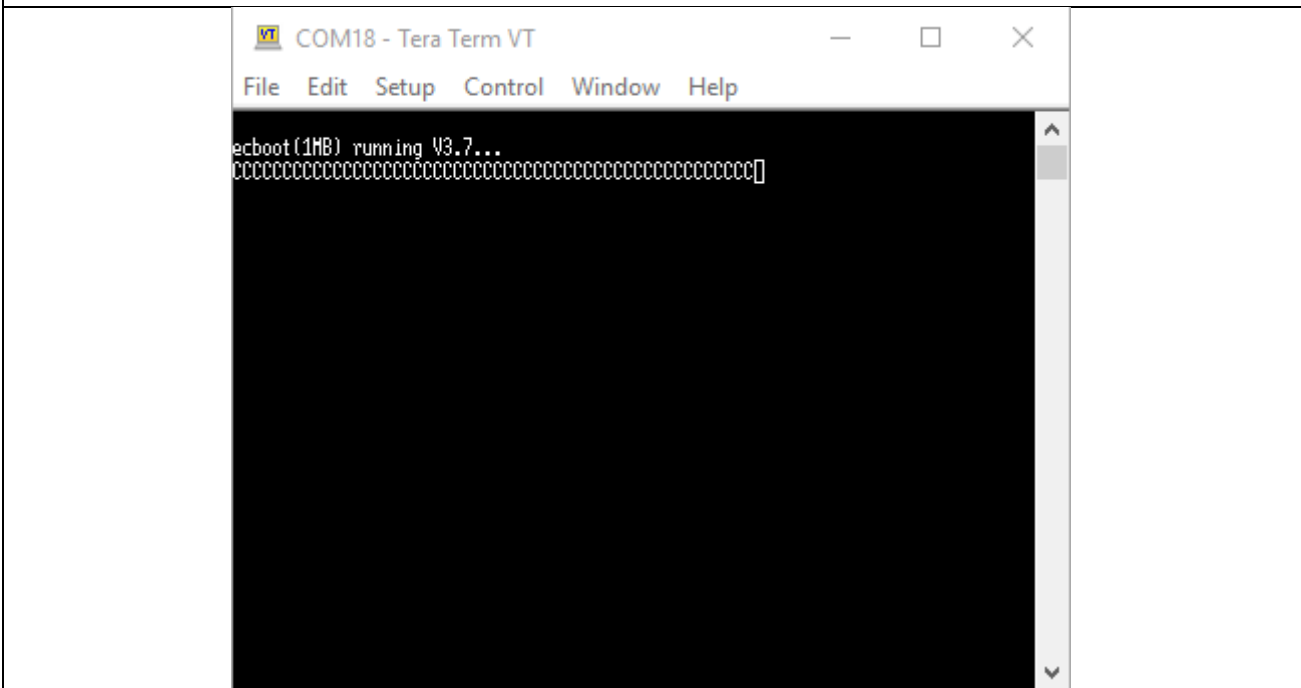
5. Go to 'File - Transfer - XMODEM - Send' menu, select the binary file and click OK button to proceed the firmware update.

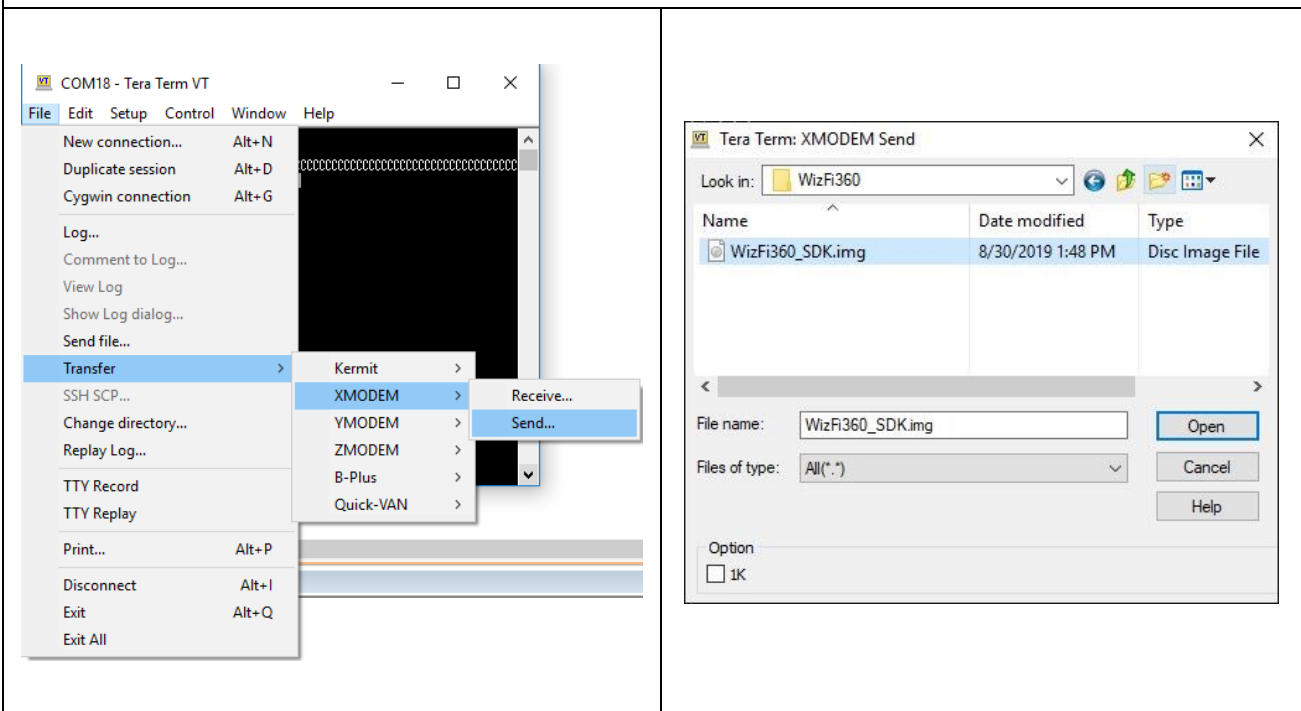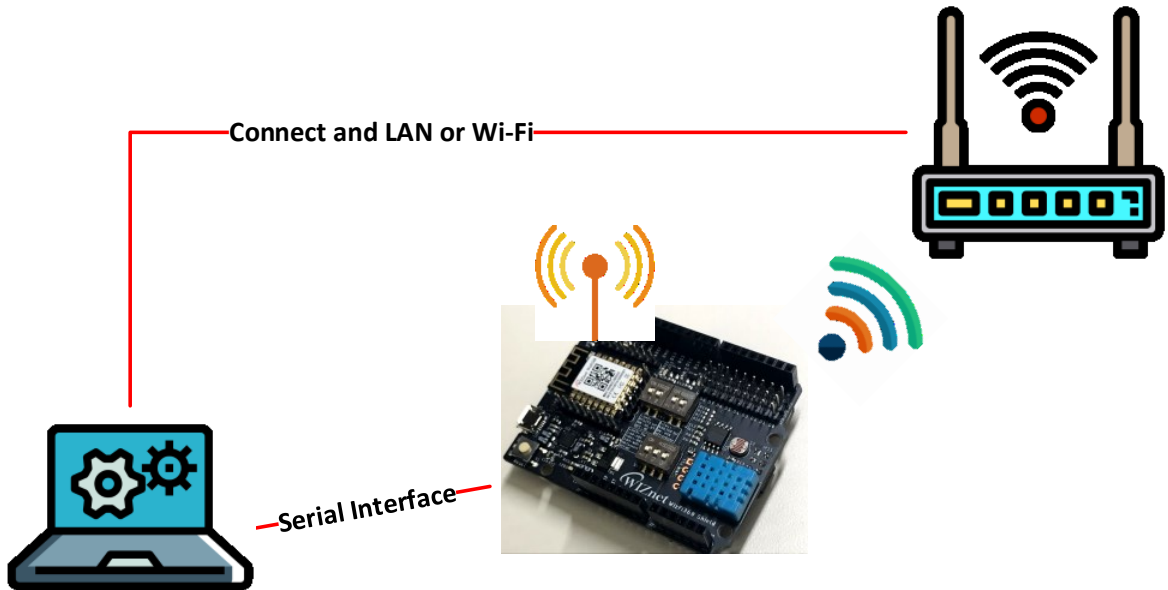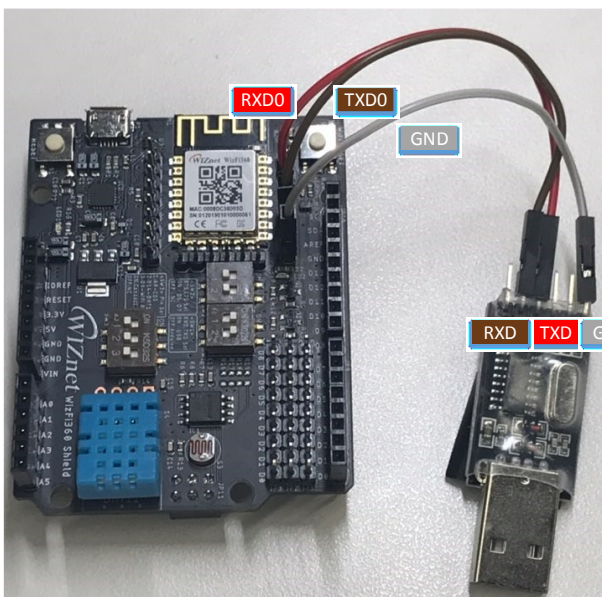6. When the firmware update is completed, 'ready' is displayed on the terminal.

1.2 Using the Cloud

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

1. Connect the PC, WizFi360, and Router as shown below. The router must be connected to the Internet, and WizFi360 and PC are assigned an IP by DHCP Server of router. WizFi360 and TTL to USB connect as shown in below image.

Connect and LAN or Wi-Fi

Serial Interface

Automatically assigns temporary IP address to PC by DHCP server.

RXD0 TXD0 GND

RXD TXD GND

```
AT
AT

OK
AT+CWLAP
AT+CWLAP
+CWLAP:(3,"##WIZnet_irina",-55,"64:e5:99:b8:60:5a",1)
+CWLAP:(4,"DIR-815_Wiznet",-65,"14:d6:4d:cf:fa:a7",1)
+CWLAP:(3,"Matthew2.4",-57,"88:36:6c:be:8a:3a",2)
+CWLAP:(3,"rena",-57,"88:36:6c:6e:ac:28",3)
+CWLAP:(0,"iptime",-59,"88:36:6c:7d:79:44",4)
+CWLAP:(3,"Taylor",-55,"00:08:9f:50:1a:36",6)
+CWLAP:(3,"Dap",-63,"88:36:6c:e8:32:9e",8)
+CWLAP:(4,"DLINK-IPv6",-51,"cc:b2:55:d2:19:a2",10)
+CWLAP:(3,"WIZnet_Scott",-57,"18:a6:f7:56:73:2e",11)
+CWLAP:(3,"wizms1",-59,"e8:fc:af:fd:a2:85",11)
+CWLAP:(0,"iptime",-65,"64:e5:99:a4:e3:6c",11)
+CWLAP:(3,"Teddy_AP",-51,"90:9f:33:21:e5:00",13)

OK
AT+CWJAP_CUR="Teddy_AP","12345678"
AT+CWJAP_CUR="Teddy_AP","12345678"
WIFI CONNECTED
WIFI GOT IP

OK
```

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) +CIPUPDATE:1<CR><LF>
(10:09:39.781) +CIPUPDATE:2<CR><LF>
(10:09:39.781) +CIPUPDATE:3<CR><LF>
(10:09:54.538) +CIPUPDATE: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>
```
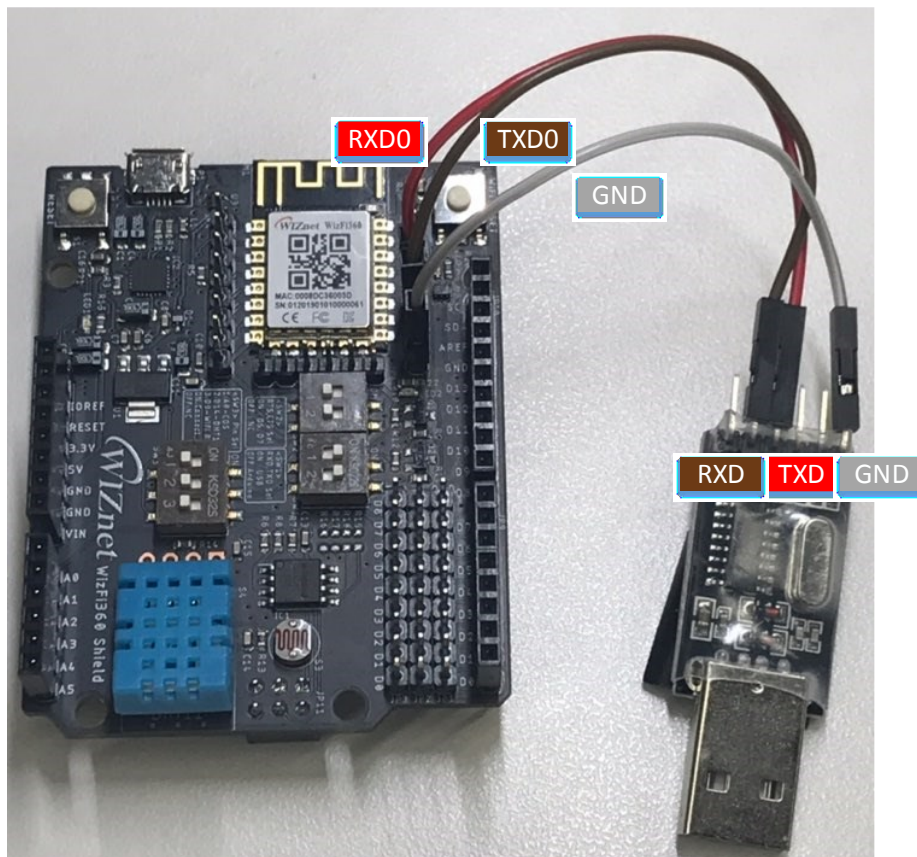
1.3 Using the Upgrade tool (Serial/WiFi)

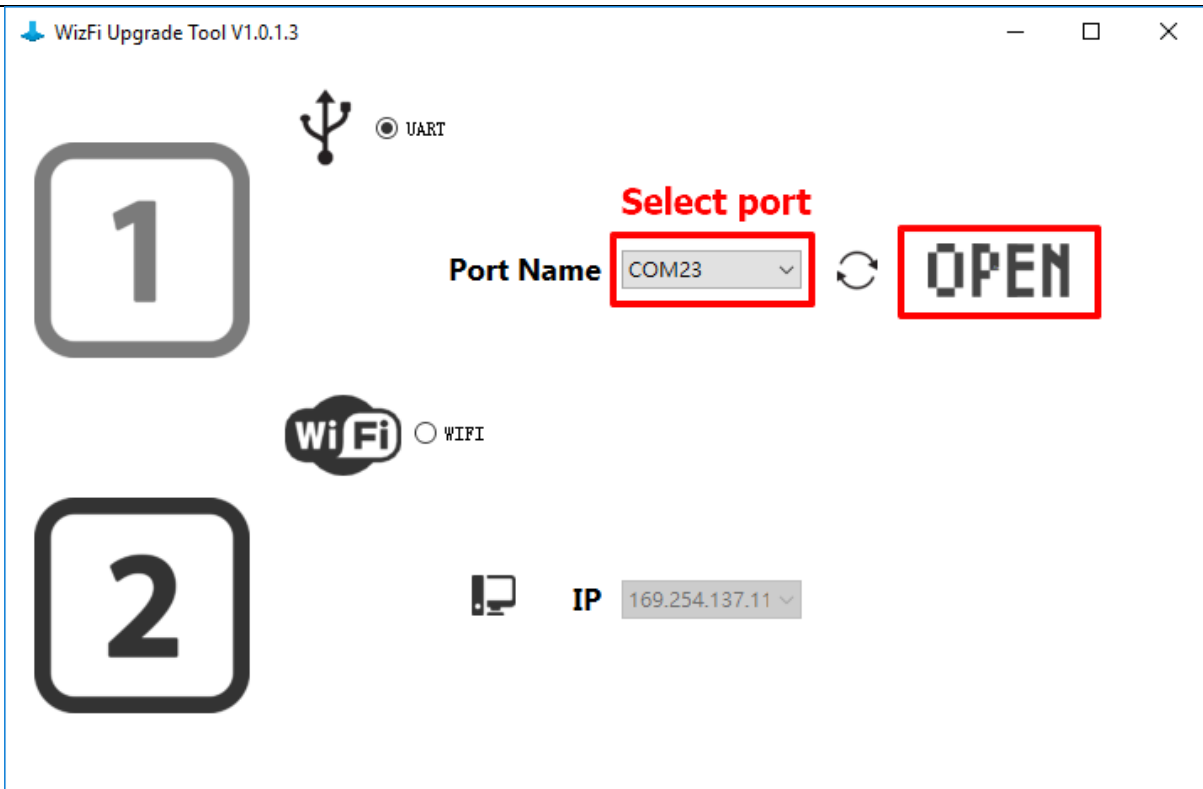### 1.3.1 Required hardware and software

- **WizFi360-EVB**
- **WizFi360 Upgrade Tool**
- **TTL to USB module**
- **WizFi360 Firmware: WizFi360_SDK.img**

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

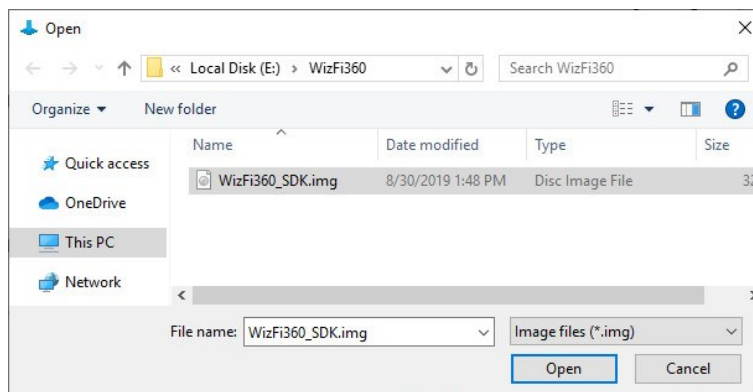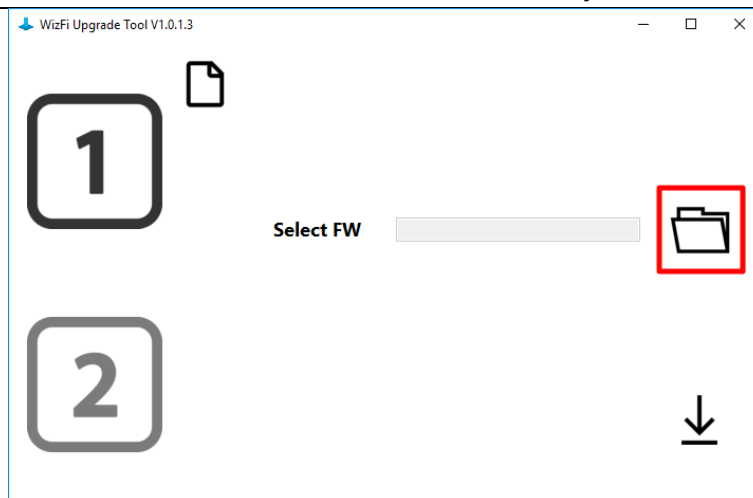| |
|---|
| 1. Use UART1 or UART0 of WizFi360 to upload the Firmware and in case of UART0 it connects the WizFi360 to the TTL to USB is as below. |
| |

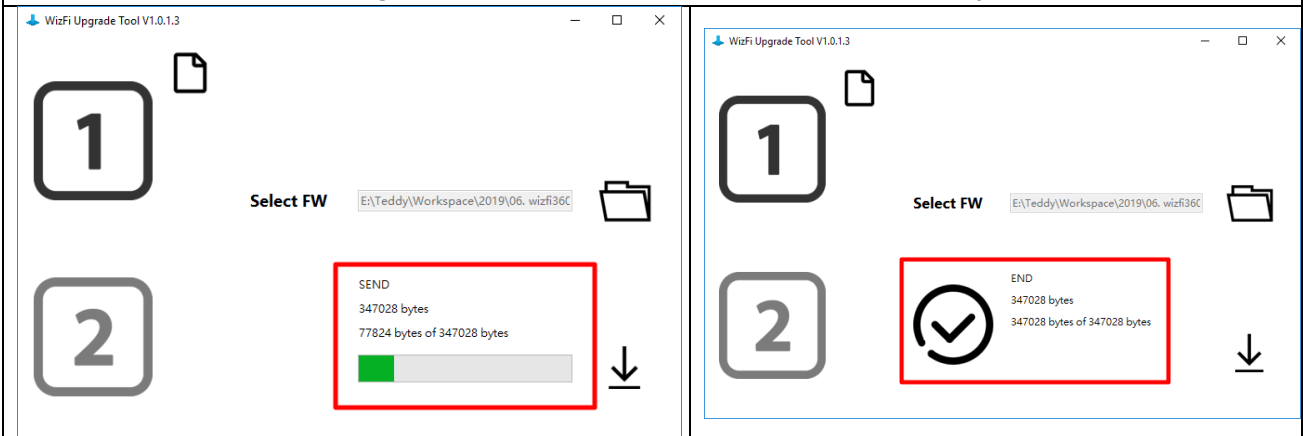| |
|---|
| 2. Open the WizFi Upgrade Tool and Open the Serial port of WizFi360.
 |
| 3. Click the folder icon to select the WizFi360 Firmware binary file. (WizFi360_SDK.img)
 |

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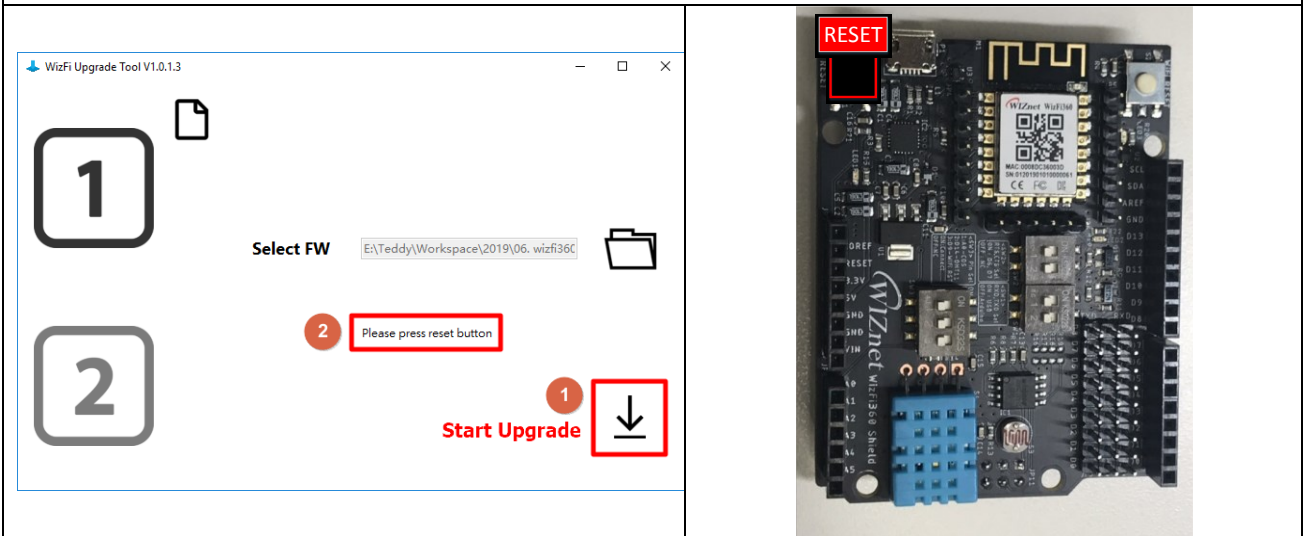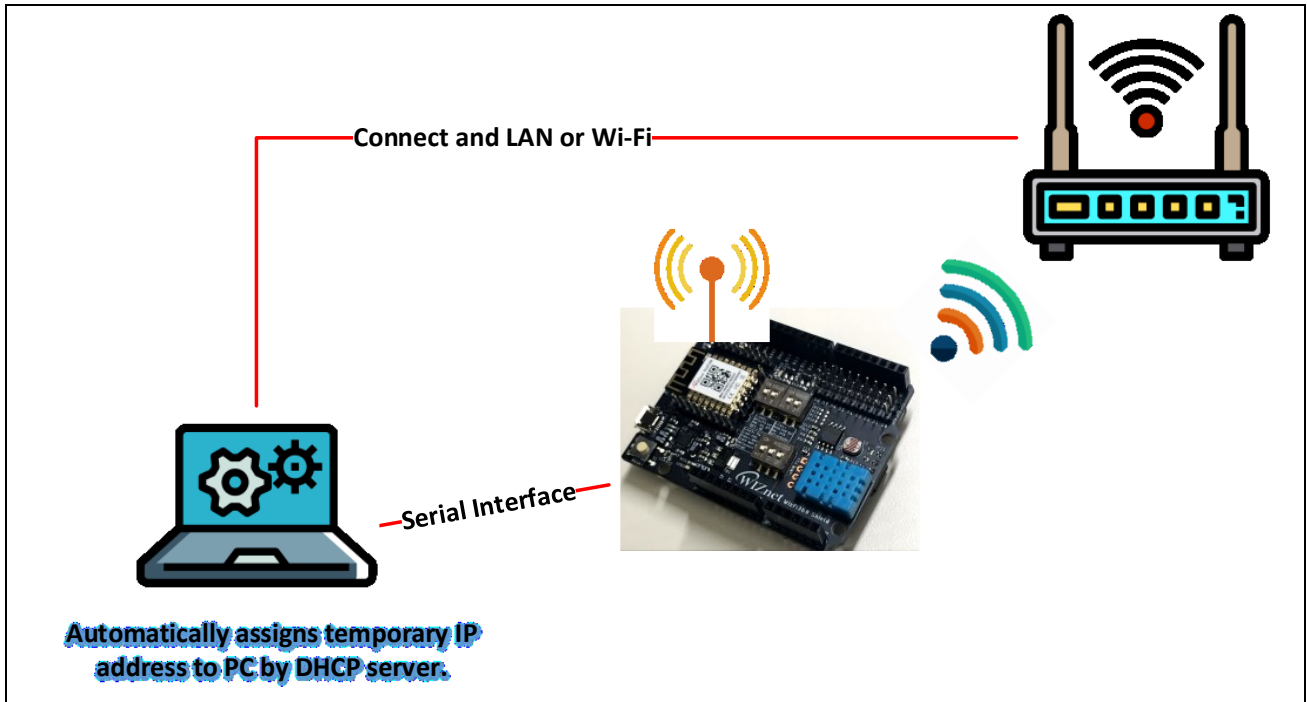

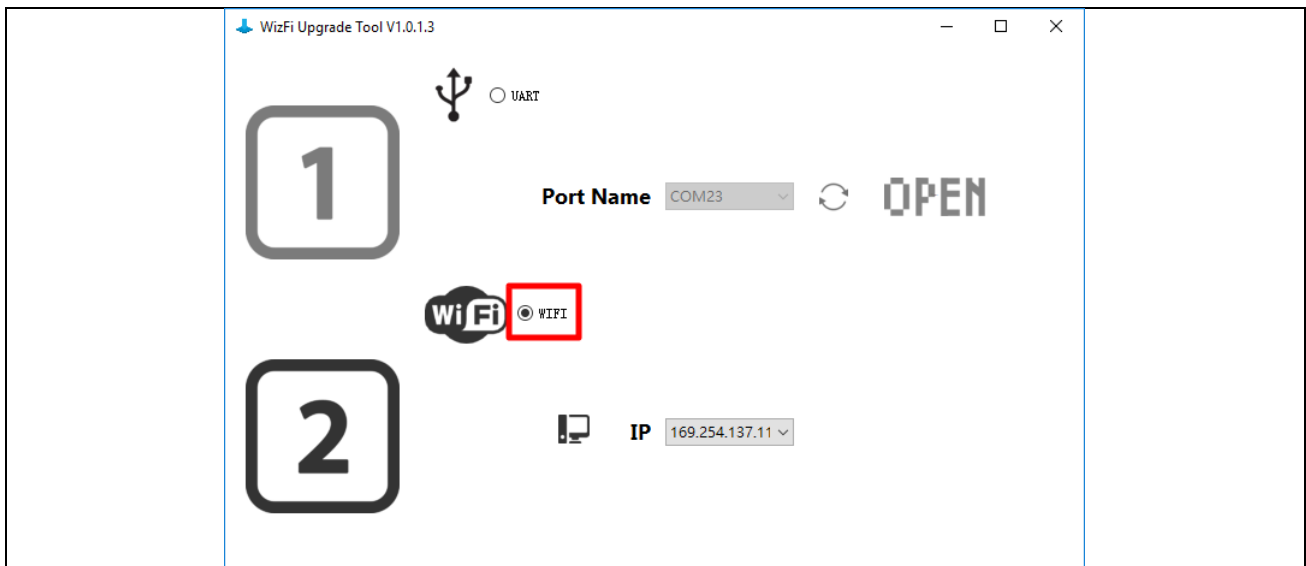5. Firmware upload is progressed and uploaded firmware size is displayed.

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

1. Use UART1 of WizFi360 through AT CMD(AT+CIUPDATE) and WizFi Upgrade Tool to upload via Wi-Fi.
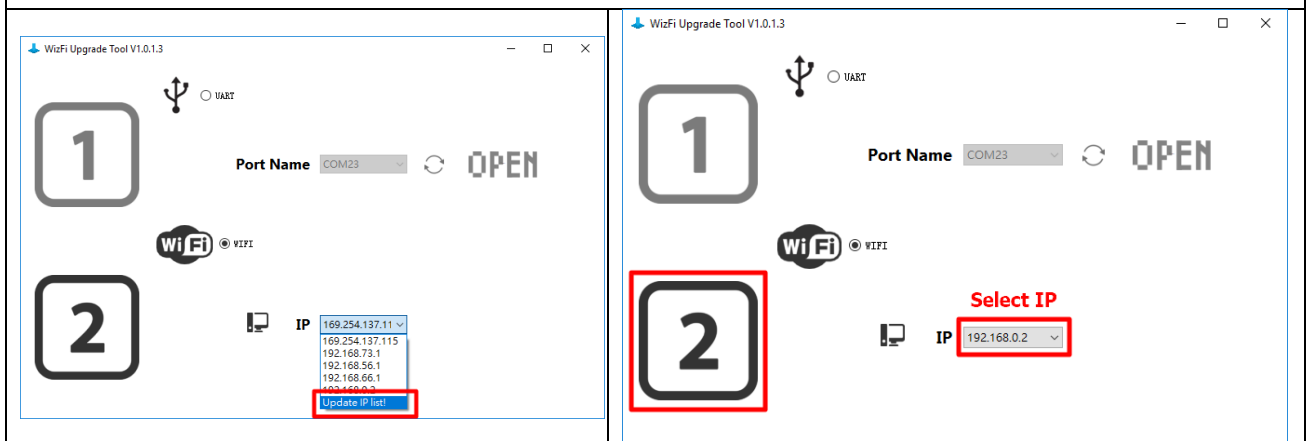
Connect and LAN or Wi-Fi

Serial Interface

Automatically assigns temporary IP address to PC by DHCP server.


```
AT
AT

OK
AT+CWLAP
AT+CWLAP
+CWLAP:(3,"##WIZnet_irina",-55,"64:e5:99:b8:60:5a",1)
+CWLAP:(4,"DIR-815_Wiznet",-65,"14:d6:4d:cf:fa:a7",1)
+CWLAP:(3,"Matthew2.4",-57,"88:36:6c:be:8a:3a",2)
+CWLAP:(3,"rena",-57,"88:36:6c:6e:ac:28",3)
+CWLAP:(0,"iptime",-59,"88:36:6c:7d:79:44",4)
+CWLAP:(3,"Taylor",-55,"00:08:9f:50:1a:36",6)
+CWLAP:(3,"Dap",-63,"88:36:6c:e8:32:9e",8)
+CWLAP:(4,"DLINK-IPv6",-51,"cc:b2:55:d2:19:a2",10)
+CWLAP:(3,"WIZnet_Scott",-57,"18:a6:f7:56:73:2e",11)
+CWLAP:(3,"wizms1",-59,"e8:fc:af:fd:a2:85",11)
+CWLAP:(0,"iptime",-65,"64:e5:99:a4:e3:6c",11)
+CWLAP:(3,"Teddy_AP",-51,"90:9f:33:21:e5:00",13)

OK
AT+CWJAP_CUR="Teddy_AP","12345678"
AT+CWJAP_CUR="Teddy_AP","12345678"
WIFI CONNECTED
WIFI GOT IP

OK
```
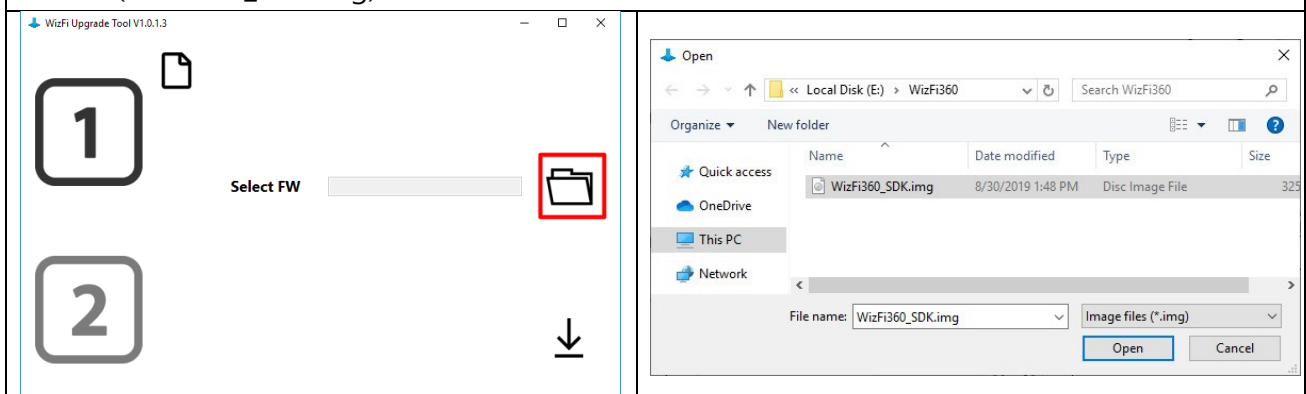
2. Click the WiFi option of the Upgrade Tool.
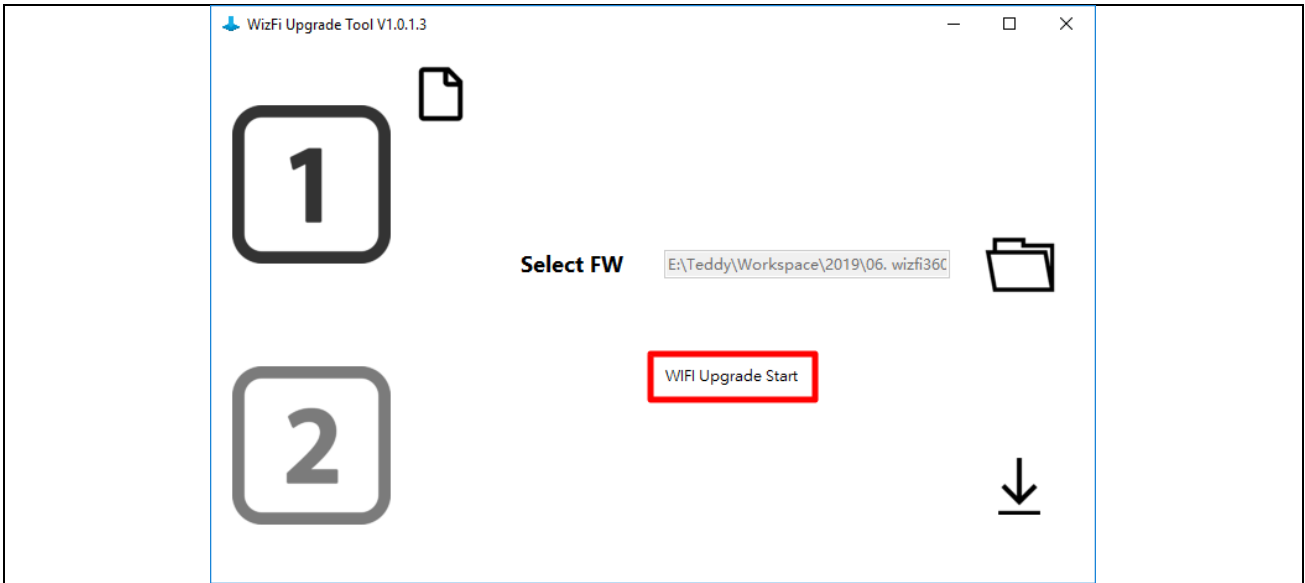
![WIZnet logo]

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.

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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"
+CIPUPDATE:1
+CIPUPDATE:2
+CIPUPDATE:3
+CIPUPDATE:4

OK

ready
```