

WE310F5-I/P Evaluation Board Quick Start Guide

This Quick Start Guide will walk you through the basic setup required to run the Serial-to-Wireless application.
The WE310F5 module evaluation board is available in two variants:

- WE310F5-I includes an antenna
- WE310F5-P includes only the RF PAD and requires an external antenna.

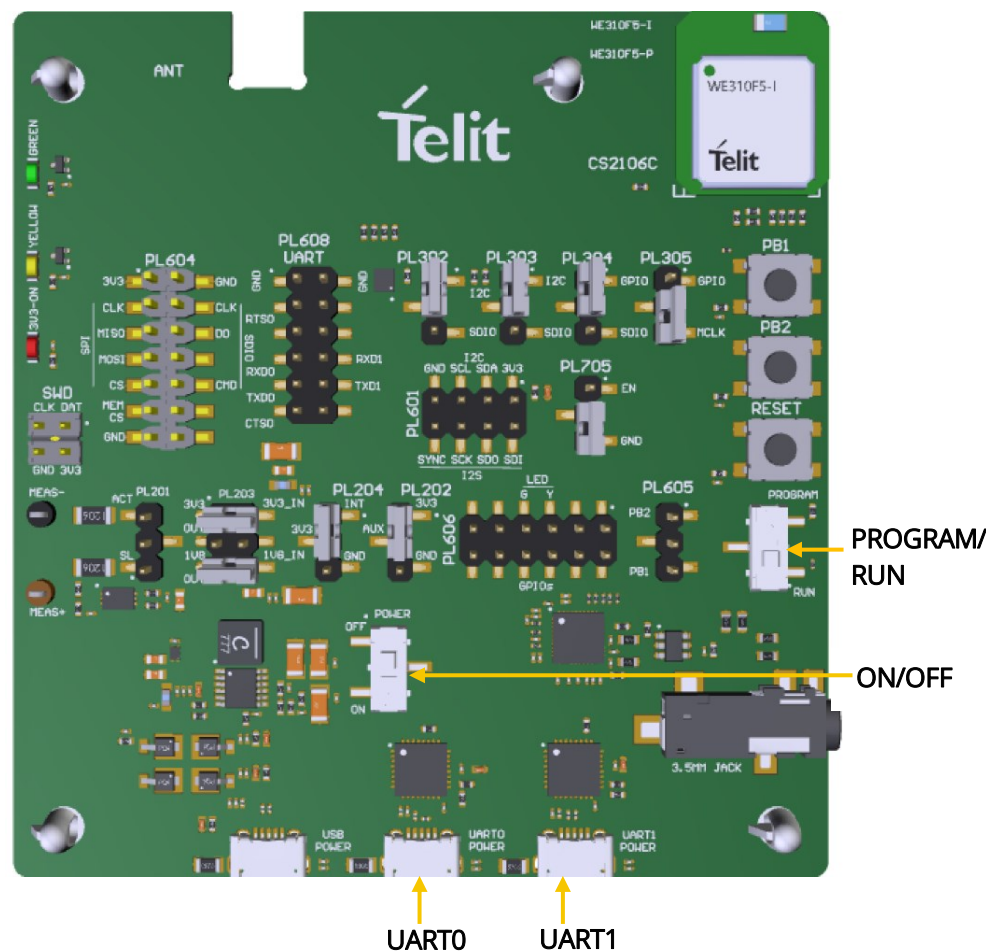


Figure 1: WE310F5-I EVB

The external antenna variant WE310F5-P EVB has the RF connector as shown in the figure below:

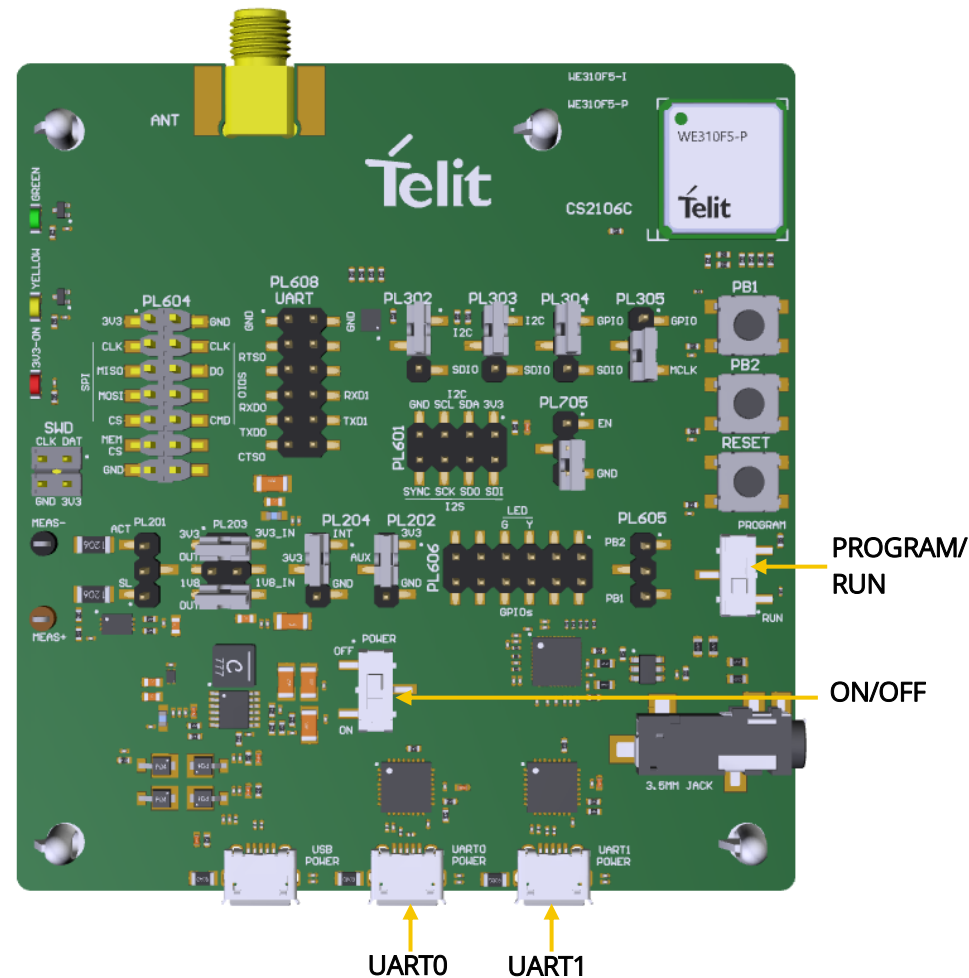


Figure 2: WE310F5-P EVB

Kit Contents

- WE310F5 EVB Quick Start Guide (this document)
- WE310F5 Evaluation Board
- 1 Micro-USB Cable
- Antenna in case the “WE310F5-P” module

Prerequisites

- Install Tera Term

Note: The ports required for Program and Run mode:

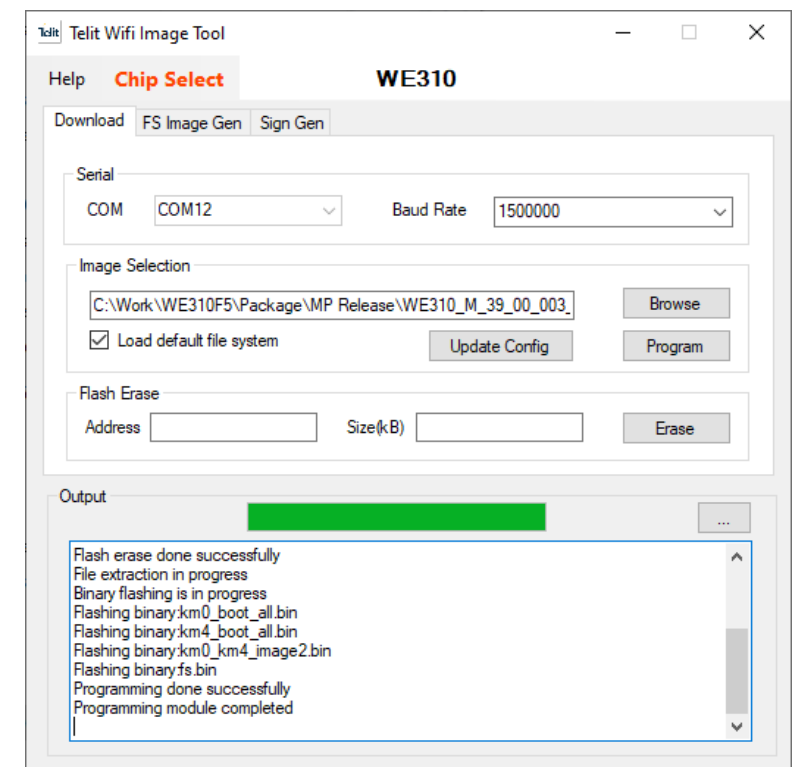
- UART0 Port: Run Mode
- UART1 Port: Programming Mode

1 Program the WE310F5 Module

1. Connect a Micro USB cable, one end to your PC/Laptop and the other to the WE310F5 EVB's UART1 Port (Evaluation board).
2. Toggle the **PROGRAM/RUN** switch to **PROGRAM**.
3. Download and unzip the latest firmware package from the [Telit Download Zone](#) (WE310>WE310F5>Firmware Release & Release Note).
4. Navigate to the `\Downloads\Telit_WE310_M_39.00.00x\documents\Telit_Wifi_Image_Tool.zip` file and launch the `Telit_Wifi_Image_Tool.exe` application.

Name	Date modified	Type	Size
we310_tools	9/27/2022 9:08 AM	File folder	
Telit_Wi-Fi Image Tool User Guide	7/28/2021 1:33 PM	Foxit PDF Reader Document	531 KB
Telit_Wifi_Image_Tool	8/23/2022 12:46 PM	Application	339 KB
we310_s2w_custom_profile	2/14/2022 8:24 PM	FTE Binary Export File	1 KB

5. Select the appropriate **COM** Port and click **Browse** to navigate to the `s2w.bin` file in the downloaded package.



6. To initiate flash, select **Load default file system** and then click **Program**.
7. Once the flash process is complete, click **OK**.

The WE310F5 EVB is now ready to configure.

2 Run the WE310F5 Module

1. Disconnect and reconnect the micro-USB cable from **UART1** to the **UART0** port.
2. Change the toggle switch position to **RUN**.
3. To power the board, toggle the **ON/OFF** switch to the **ON** position.
4. Now, launch the **Tera term** application that you have installed on your laptop.
5. Go to **File->New Connection**.
6. Select the **Appropriate COM Port** and click **OK**.
7. Go to **Settings->Serial Port**, set the **Baud Rate** as 115200, and click **OK**.

The WE310F5 EVB is now ready for use.

3 WiFi Operations

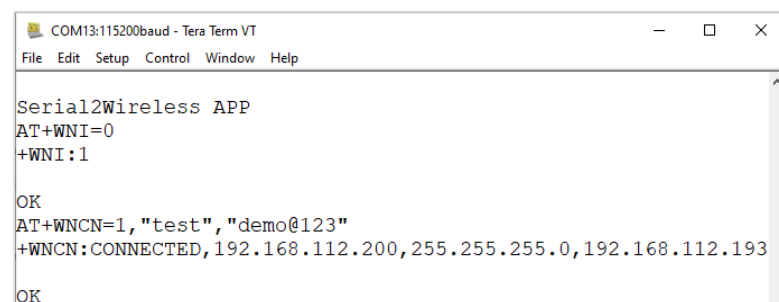
The following use cases describe the WiFi operations of the WE310F5 module. The WE310F5 module supports two modes of operations:

- Station Mode
- Limited AP Mode

Station Mode

To configure the module in Station Mode, configure an Access Point with an Open/Secured Network. In this case, the configuration is a secure network.

1. To start the WLAN Interface
`AT+WNI=0`
2. To connect to a network
`AT+WNCN=1, "test", "demo@123"`



```
COM13:115200baud - Tera Term VT
File Edit Setup Control Window Help

Serial2Wireless APP
AT+WNI=0
+WNI:1

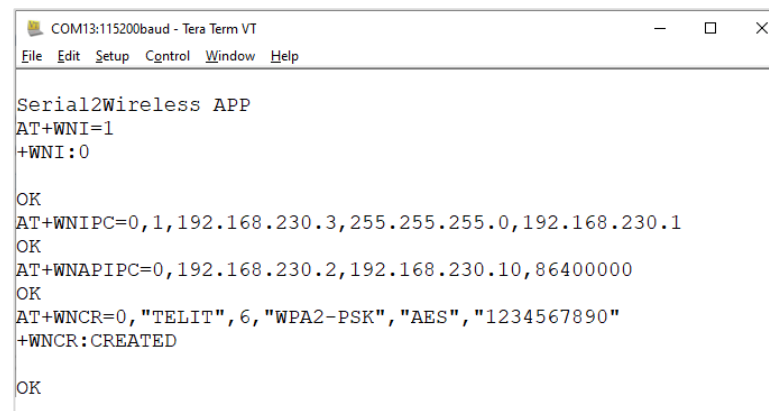
OK
AT+WNCN=1,"test","demo@123"
+WNCN:CONNECTED,192.168.112.200,255.255.255.0,192.168.112.193

OK
```

Limited AP Mode

To configure the WE310F5 In LAP Mode:

1. To set the module in AP Mode
`AT+WNI=1`
2. To set the Static IP
`AT+WNIPC=0,1,192.168.230.3,255.255.255.0,192.168.230.1`
3. To set the DHCP server IP
`AT+WNAIPPC=0,192.168.230.2,192.168.230.10,86400000`
4. To create a Network
`AT+WNCR=0, "TELIT", 6, "WPA2-PSK", "AES", "1234567890"`



```
COM13:115200baud - Tera Term VT
File Edit Setup Control Window Help

Serial2Wireless APP
AT+WNI=1
+WNI:0

OK
AT+WNIPC=0,1,192.168.230.3,255.255.255.0,192.168.230.1
OK
AT+WNAIPPC=0,192.168.230.2,192.168.230.10,86400000
OK
AT+WNCR=0,"TELIT",6,"WPA2-PSK","AES","1234567890"
+WNCR:CREATED

OK
```

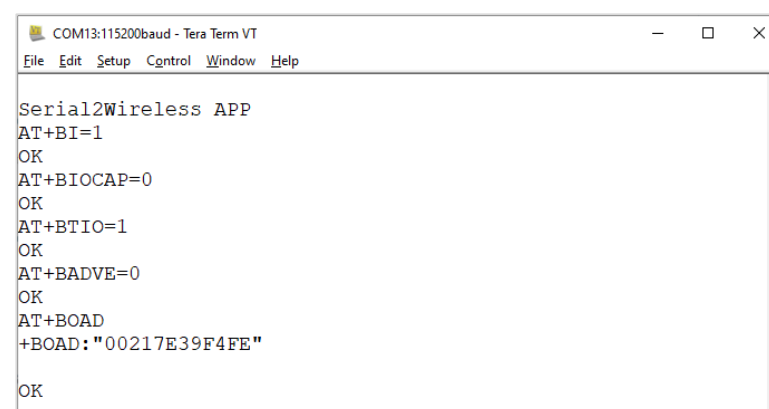
4 Bluetooth® Operations

WE310F5 module supports the Bluetooth® Low Energy 5.0 version.

TIO Communication

To initiate the Bluetooth® Low Energy interface via TIO communication, use the following AT commands:

```
AT+BI=1
AT+BIOCAP=0
AT+BTIO=1
AT+BADVE=0
AT+BOAD
```



```
COM13:115200baud - Tera Term VT
File Edit Setup Control Window Help

Serial2Wireless APP
AT+BI=1
OK
AT+BIOCAP=0
OK
AT+BTIO=1
OK
AT+BADVE=0
OK
AT+BOAD
+BOAD:"00217E39F4FE"

OK
```

GATT Communication

To initiate the Bluetooth® Low Energy interface via GATT Communication, use the following AT commands:

```
AT+BI=1
AT+BATTRIB="pserv","uuid=12AA"
AT+BATTRIB="char","prop=0x1A","uuid=12A1"
AT+BATTRIB="charval","perm=0011","len=1","val=0x59"
AT+BATTRIB="COMPLETE"
AT+BADVE=1
AT+BOAD
```



```
COM13:115200baud - Tera Term VT
File Edit Setup Control Window Help

Serial2Wireless APP
AT+BI=1
OK
AT+BATTRIB="pserv","uuid=12AA"
OK
AT+BATTRIB="char","prop=0x1A","uuid=12A1"
OK
AT+BATTRIB="charval","perm=0011","len=1","val=0x59"
+BATTRIB:"CHARID:2"

OK
AT+BATTRIB="COMPLETE"
+BATTRIB:"SRVID:2"

OK
AT+BADVE=1
OK
AT+BOAD
+BOAD:"00217E39F4FE"

OK
```

Resource Links

For the latest Firmware Packages and product documentation downloads:

<https://www.telit.com/we310f5-download-zone>

Contact Information, Support

For technical support and general questions please e-mail:

- TS-SRD@telit.com

Alternatively, use:

<https://www.telit.com/contact-us>