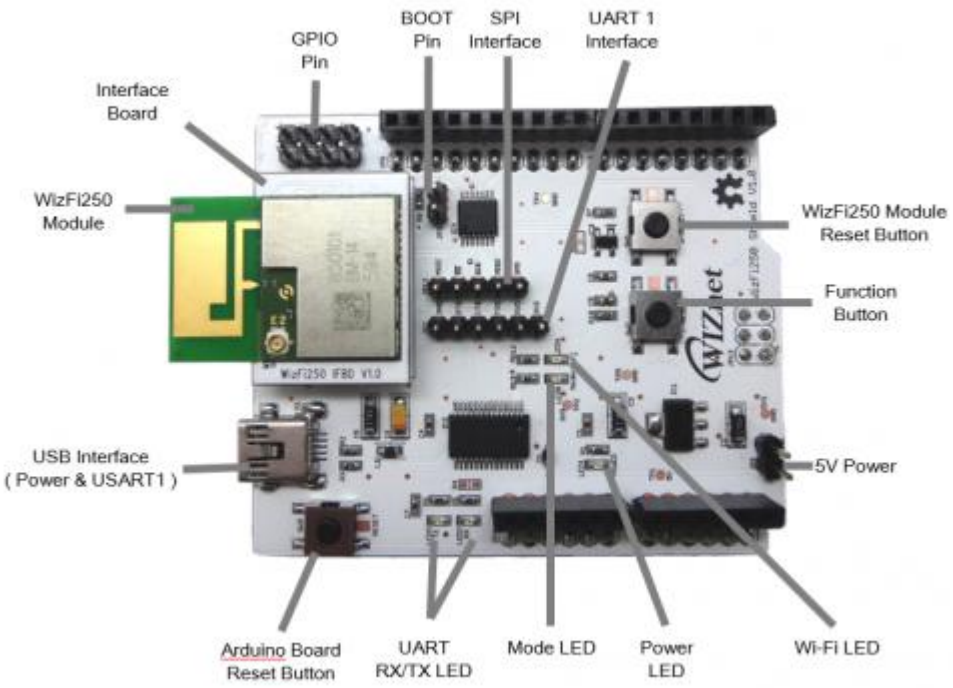
WizFi250 Quick Start Guide

WizFi250 Evaluation Board

The WizFi250 EVB is the evaluation board for testing WizFi250 and prototyping development. WizFi250 EVB is composed of a WizFi250 evaluation board and a WizFi250 module.

Feature Identification



Button Description

WizFi250 Reset	Through this button, user can restart WizFi250 module.
Function	Through the function button, user can enter specific mode without AT Command. ♦ **Factory Recovery** : When doing Boot or Reset, press the button over 3.5 seconds ♦ **AP Mode** : When module is working, press it once. ♦ **OTA Mode** : When module is working, press it twice. ♦ **Factory Default** : When module is working, press it three times.
Arduino Board Reset	With this button, user can restart Arduino board.

LED Description

UART RX/TX	Indicate UART RX/TX Status
Power LED	Indicate Power On/Off of WizFi250
Mode LED	Indicate Data/Command Mode ♦ LOW(ON) : Data Mode ♦ HIGH(OFF) : Command Mode
Wi-Fi LED	Indicate Wi-Fi Association ♦ LOW(ON) : Wi-Fi is associated ♦ HIGH(OFF) : Wi-Fi is not associated

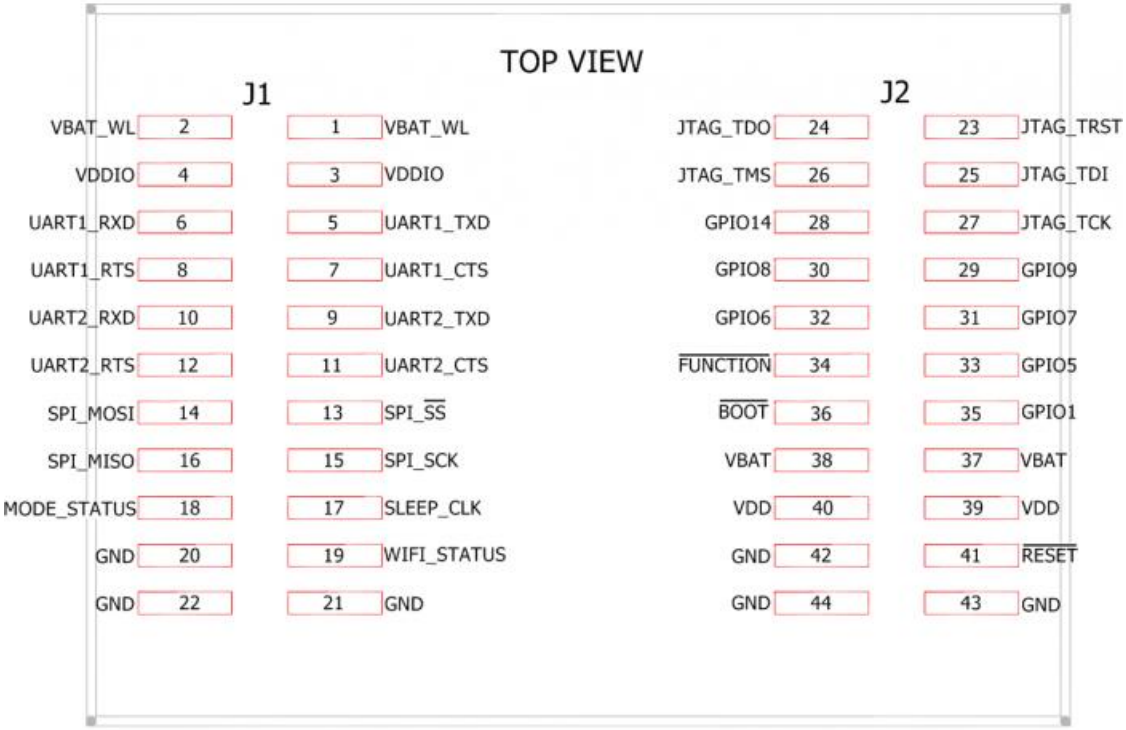
Pin Description

BOOT	Enter boot mode ♦ SHORT : Start in boot mode ♦ OPEN : Start in application mode
5V Power	Alternative choice for 5V power supply
GPIO Pin	Through this pin, user can use GPIO signal

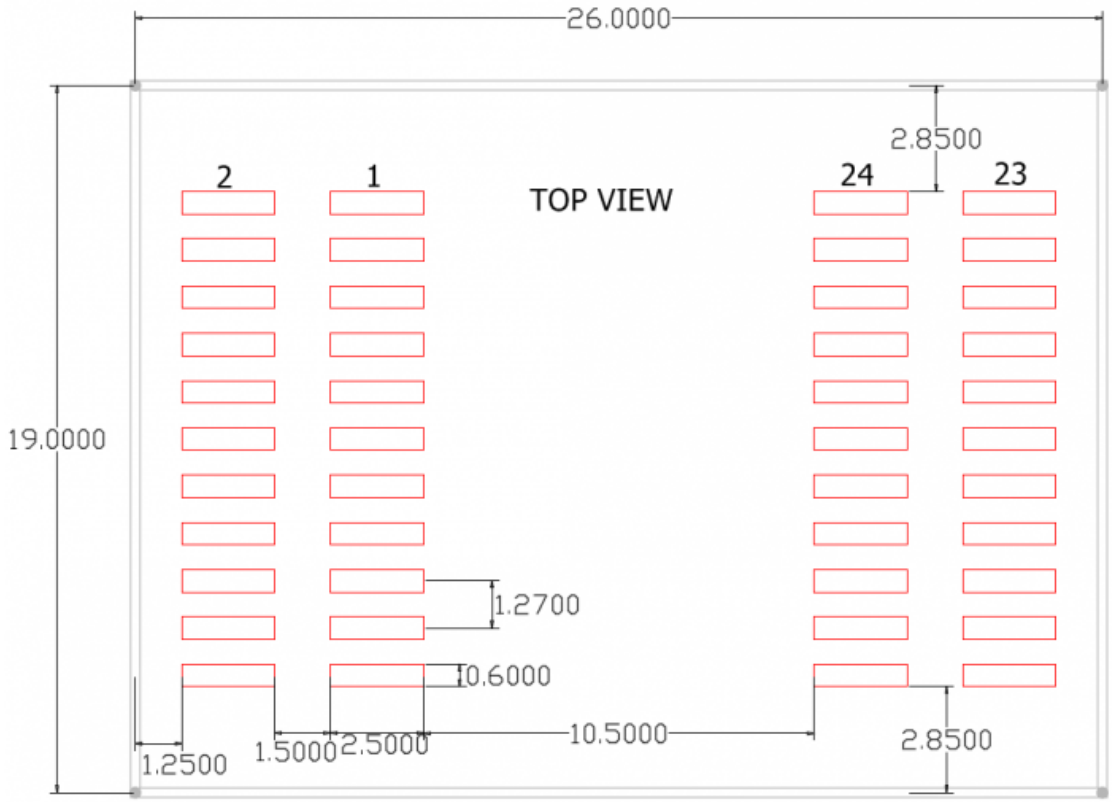
Interface Description

UART1 Interface	Alternative choice for Serial interface.
SPI Interface	Through these pins, user can control SPI interface.
USB Interface	This provides power supply & Serial interface Default serial information: ♦ Baud rate : 115200 ♦ Data rate : 8 ♦ Stop bits : 1 ♦ Parity : None ♦ Flow control : None

Interface Board PIN Map

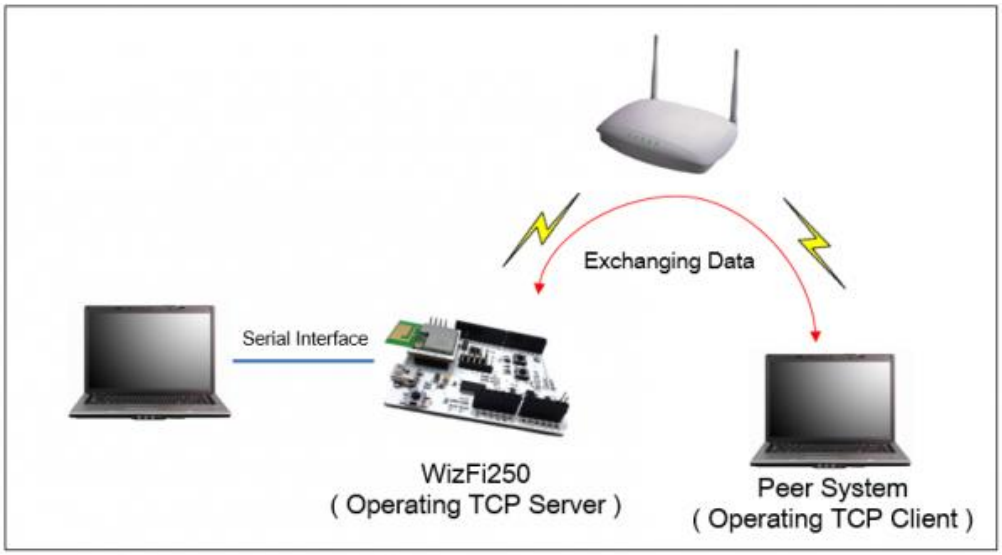


Interface Board Dimension



Start Serial to Wi-Fi

This chapter explains how to set WizFi250 in order to exchange data with peer system. This picture shows the environment for using Serial to Wi-Fi as example. In this example, WizFi250 is set to the TCP server and peer system is set to the TCP client. And then data is exchanged between WizFi250 and the peer system.



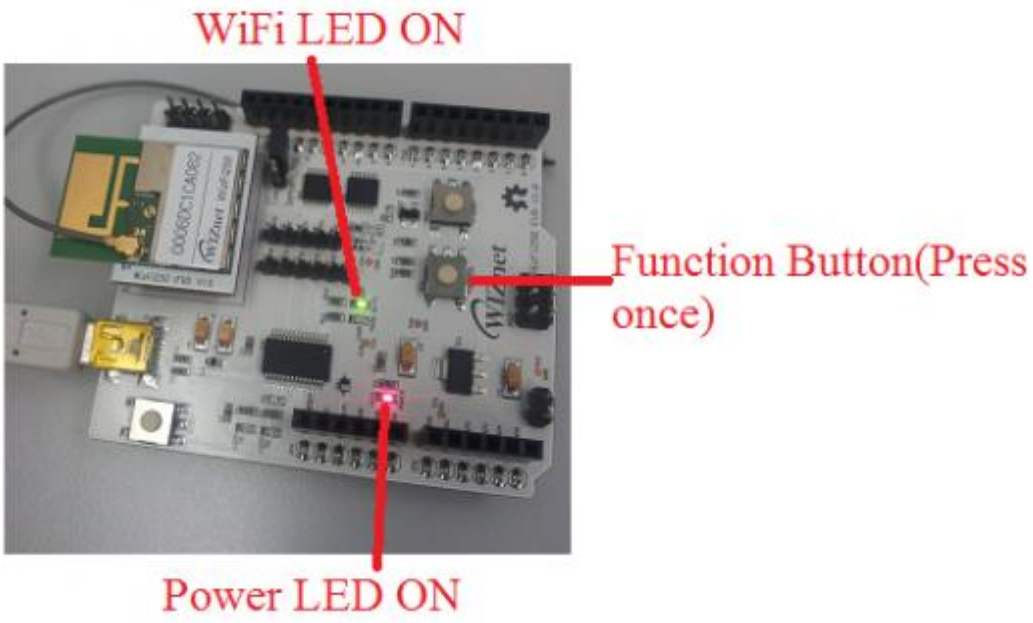
Using Function Button & Web Server Interface

This section explains how to set WizFi250 using web server in order to use serial to Wi-Fi application. (If you Use the function button, you can launch web server easily.)
Procedure for setting serial to Wi-Fi is explained below.

- 1. Press the "Function Button" one time in order to run AP mode and launch the web server. If WizFi250 is changed to AP mode successfully, Wi-Fi LED will be on and you can see WizFi250's SSID by your PC

Default information of WizFi250 AP Mode	
SSID	WizFi250_AP_0008DCXXXXXX
Security	WPA2 Mixed
Security Key	123456789
IP Address	192.168.12.1
Gateway Address	192.168.12.1

LED results of WIZFI250:



- 2. Connect to WizFi250's SSID …by inputting default password (123456789) and WizFi250's IP address or URL (wizfi250.wiznet.com) in your web browser. After that input the user id and user password. (Default ID : admin, Default Password : admin)

- 3. If you select "S2W Setting & Scan Network" menu, …the web page will be shown as below. If WizFi250 is set successfully, it shows the success message … as in the following picture on the right.
  If you select <Next_Step> button, you can move to next page.

WizFi250 TCP/IP Settings guide	
Modes	AP or Station (connect to AP)
Protocol	TCP/UDP (Server / Client)
Remote IP	Connecting device's IP address
Remote Port	Connecting device's Port
Local Port	Module's Port

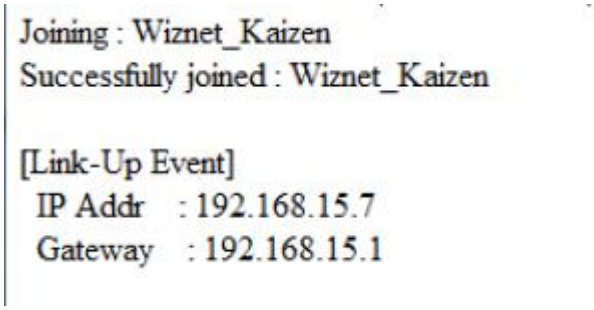
- 4. Select WizFi250's DHCP Mode.
  It includes *DHCP* or *stactic IP* setting.

- 5. Firstly, input the password of …the AP you want to join and click "Join" button to connect to that AP.

  After setting up, you will see **"Device Started Web server and access point stopped. See UART for further information."** message in web browser. It means that WizFi250 will try to connect to the selected AP.

  Important note: If you input the wrong password of AP, you need to redo all procedures.

- 6. WizFi250 will be associated … to the AP you select… and you can use TCP server in WizFi250.
  This picture is the serial message when WizFi250 has set successfully.



Using Serial Command

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AT                      (Sent AT command with 0x0d (Hex of Enter button))
[OK]                          (response meaning successful execution)

AT+WSET=0,WizFiDemoAP ,,6     (AT command for setting WiFi association)
[OK]

AT+WSEC=0,WPA2,12345678       (AT command for setting WiFi security)
[OK]

AT+WNET=1 (AT command for setting DHCP)
[OK]

AT+WJOIN                      (AT command executing AP association)
Joining : WizFiDemoAP
Successfully joined : WizFiDemoAP

[Link-Up Event]
 IP Addr     : 192.168.3.104
 Gateway     : 192.168.3.1
[OK]

AT+SCON=SO,TSN, , ,5000,1      (AT command for setting TCP Server)
[OK]

[CONNECT 0]       (When TCP connection is done, it shows this message)
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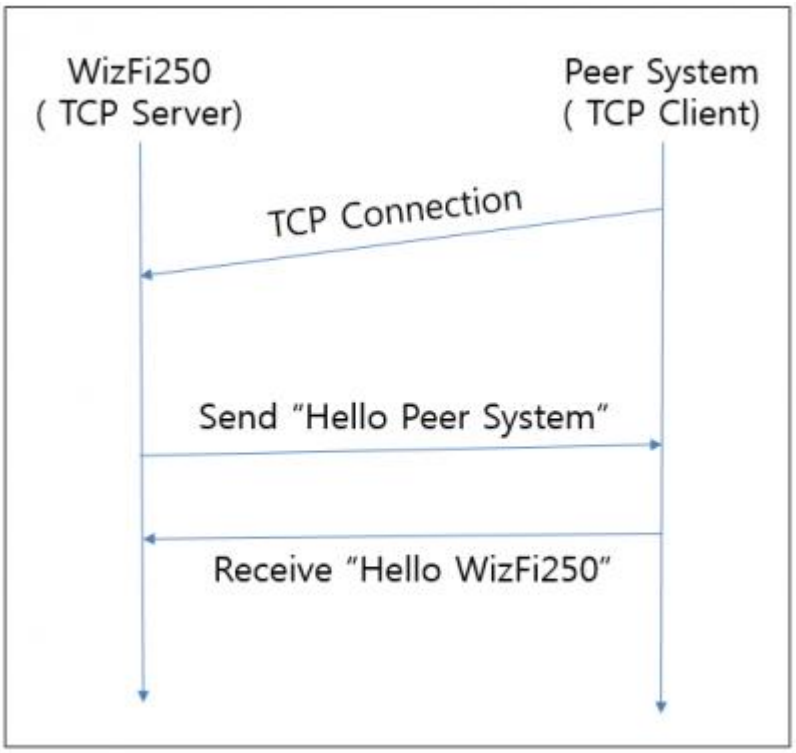
Exchanging data with a peer system

This section explains how to exchange data between WizFi250 and Peer System.
This example describes the structure of data flow.



After TCP connection is done and if WizFi250 receives serial data, the serial data will be sent to peer system immediately and Wizfi250 can receive data from peer system.