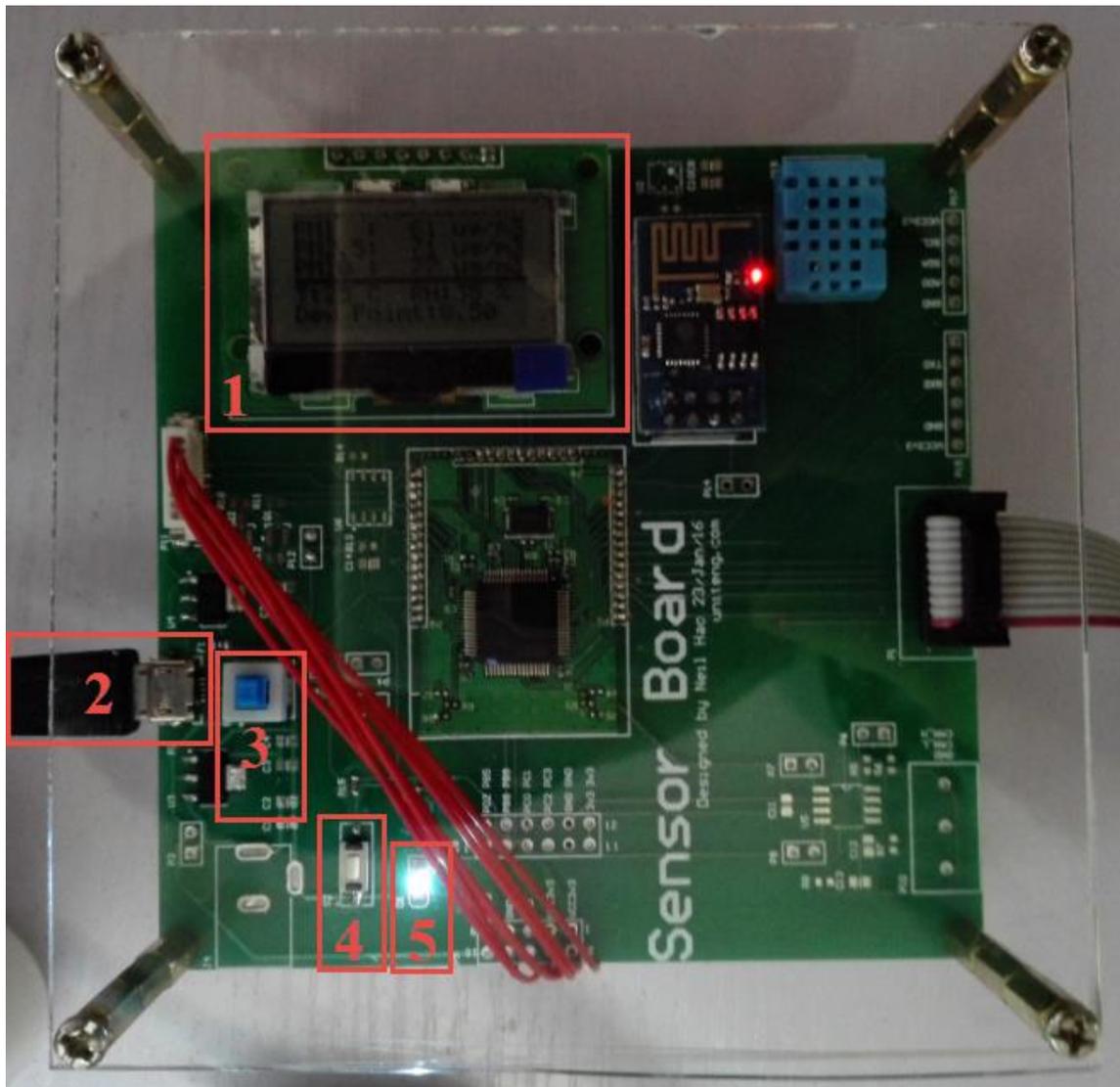


Thingspeak Demo

Hardware

This demo is implemented based on following hardware components:

Hardware Component	Resource
Sensor Board Rev0	Schematic
STM32 Core Board Rev0	Schematic

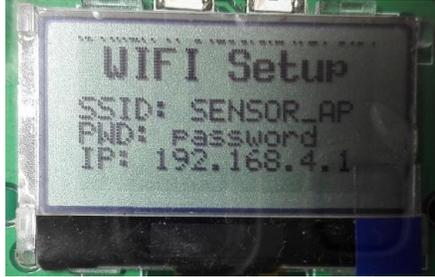


1. LCD Screen
2. Mini USB Socket
3. Power Switch
4. WIFI Setting Button

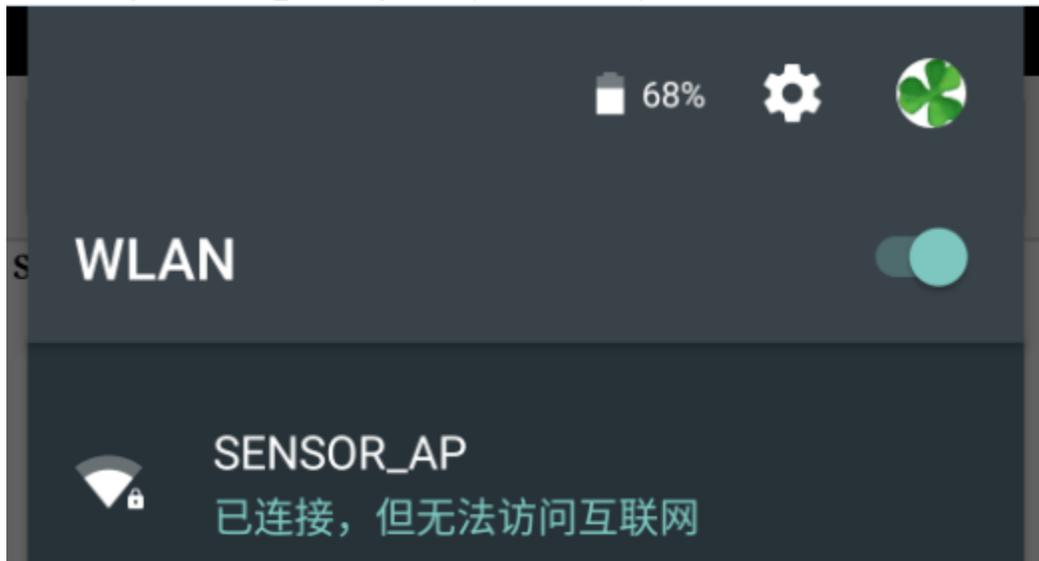
5. LED Indicator

WIFI Configuration

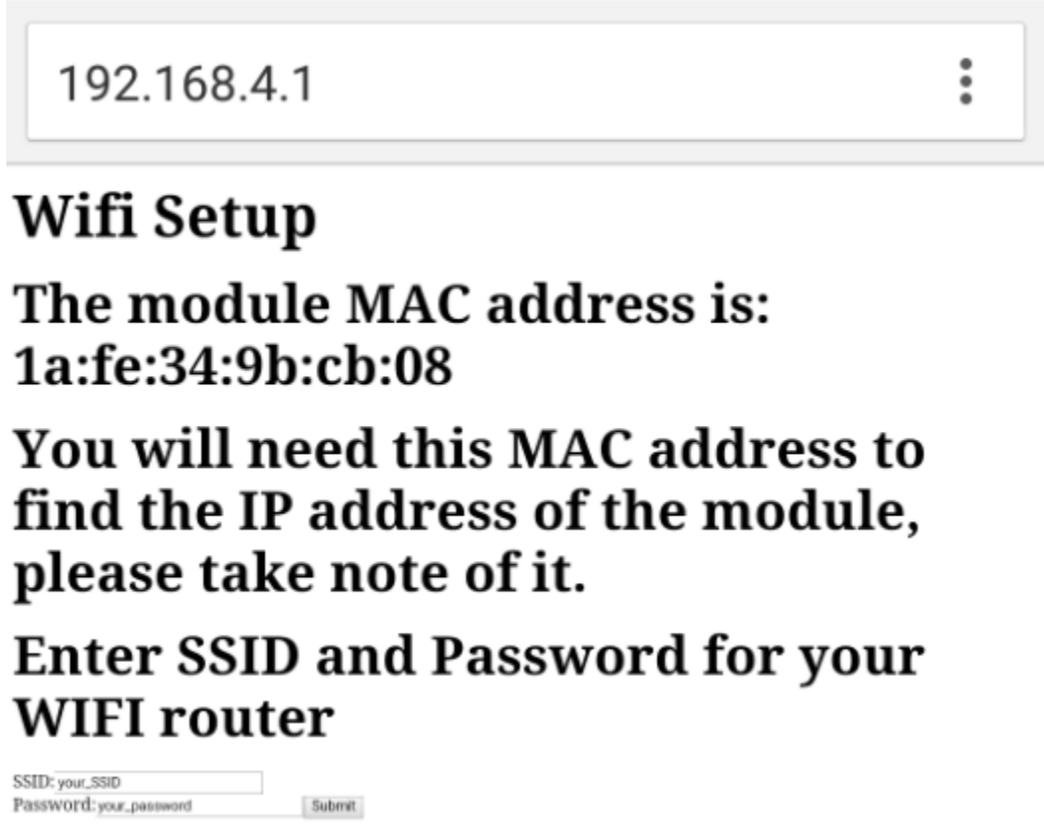
1. Power off the board using Power Switch(3)
2. Press the WIFI Setting Button(4) and hold it down, then power on the board using Power Switch(3)
3. Release the WIFI Setting Button (4) when the LED Indicator (5) is blinking at 300ms time interval. At this time, the LCD Screen(1) should display following contents:



4. The LCD screen (1) indicates the board entered AP mode and a web server had been set up at port 80. The web server provides SSID and Password configuration service. The board's SSID is SENSOR_AP, the WIFI password is password. The configuration page is hosted at <http://192.168.4.1>
5. Connecting to SENSOR_AP using smart phone or computer:



6. Accessing <http://192.168.4.1> using web browser. The following web page should be displayed, entering the SSID and password of the AP you want to access.



192.168.4.1

Wifi Setup

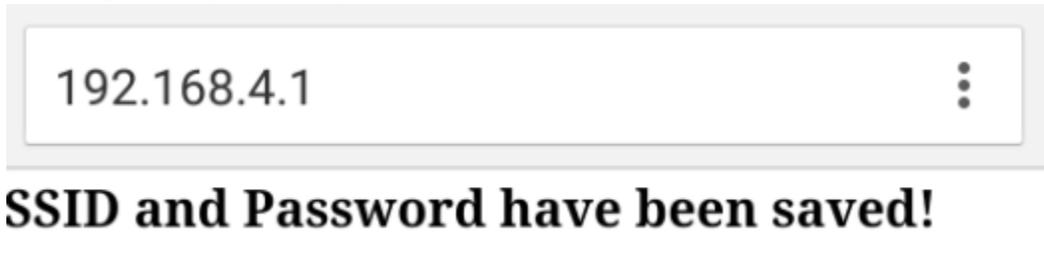
**The module MAC address is:
1a:fe:34:9b:cb:08**

**You will need this MAC address to
find the IP address of the module,
please take note of it.**

**Enter SSID and Password for your
WIFI router**

SSID:
Password:

7. Click the submit button. The SSID and Password have been saved successfully if following web page is displayed.



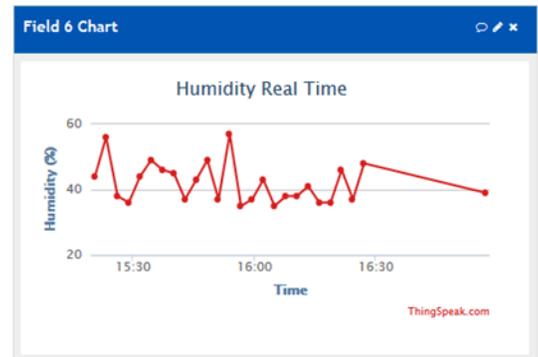
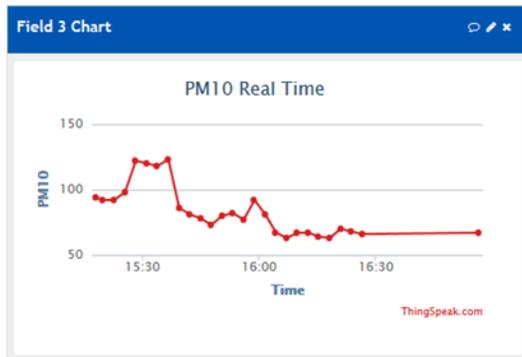
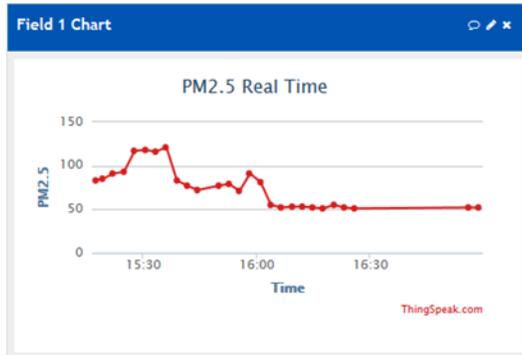
192.168.4.1

SSID and Password have been saved!

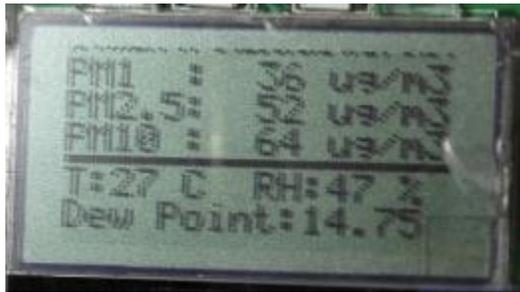
8. Rebooting the board using Power Switch (3). The board should try to connect to the AP we set in step 7 after rebooting. In the meantime, the LCD screen (1) should display current WIFI information.



9. If both SSID and password are correct, the real time sensor data can be accessed at <https://thingspeak.com/channels/104809>



10. The current sensor data should also be displayed on the LCD Screen (1), after the sensor data submitting to the server.



Note:

About LED Indicator (5)

- 300ms interval blinking, the board is in the WIFI configuration mode
- 1s interval blinking, the board is idle
- Always on, the board is submitting data to the server