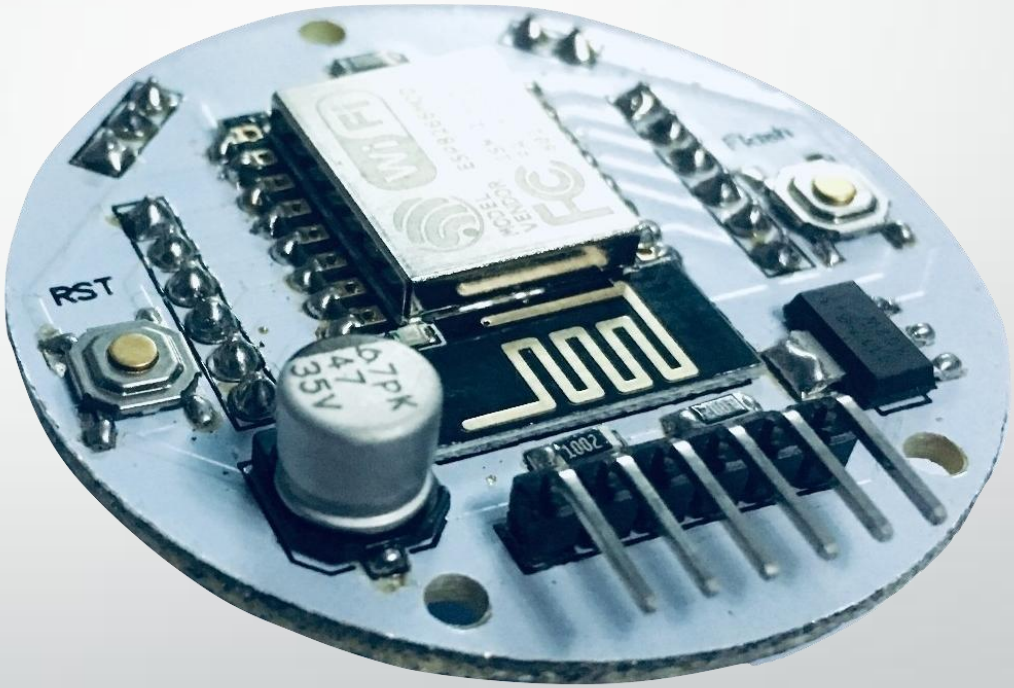
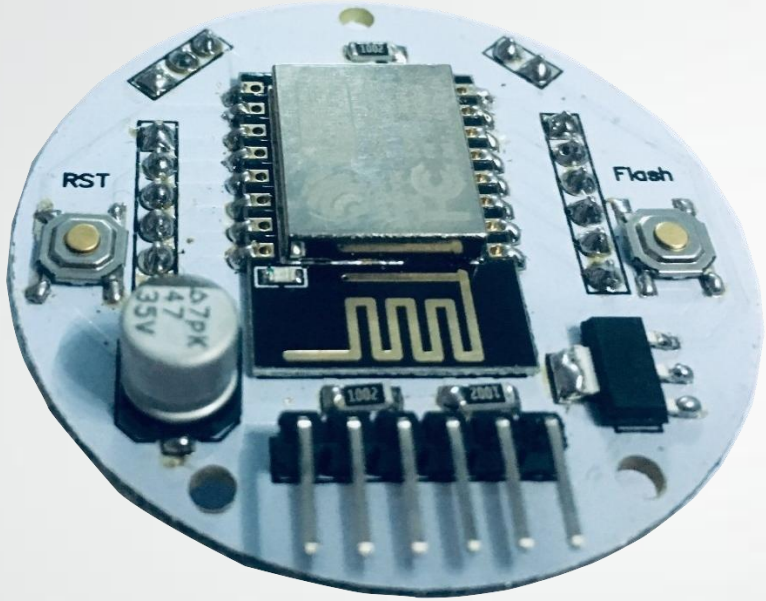
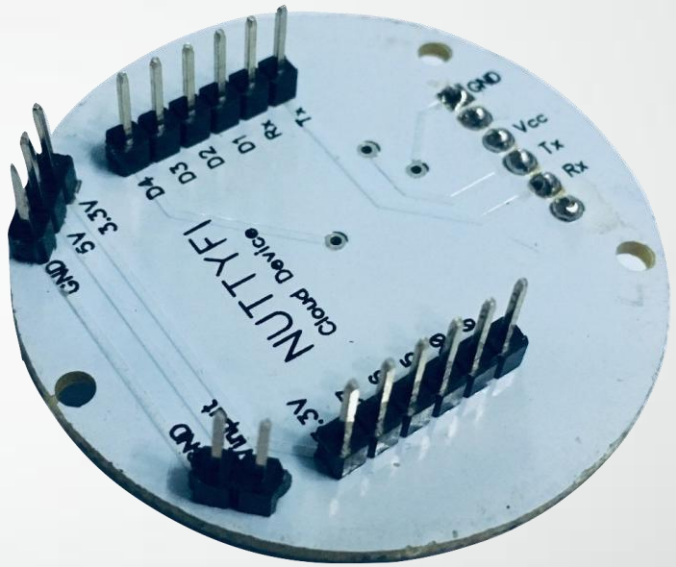
NUTTYFI

An IoT Hardware Platform



Nutty Engineer Pvt Ltd





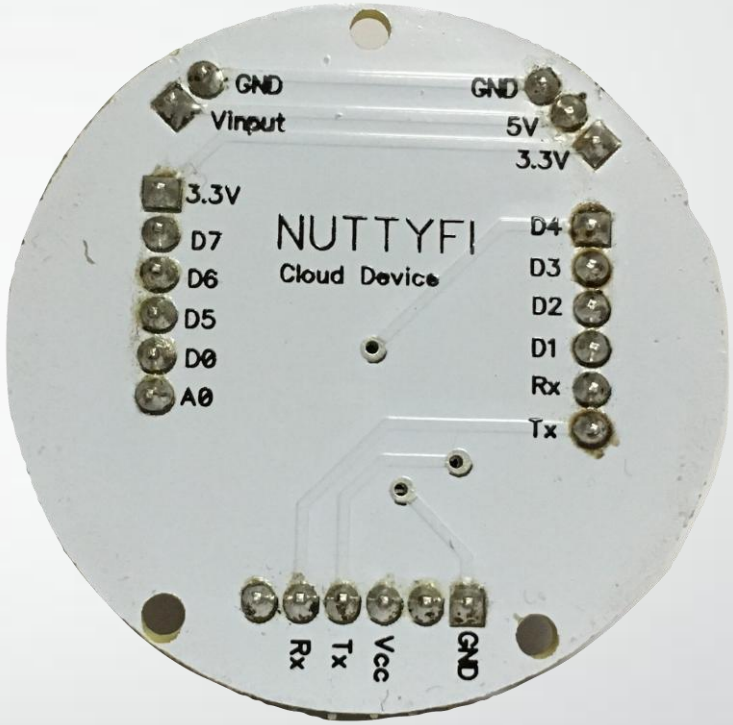
NUTTYFI is a self-contained WiFi networking solution hardware platform offering as a bridge from existing micro controller to WiFi and is also capable of running self-contained applications. This module comes with a built in capability to program via any USB to UART Bridge Converter like FTDI, CH340 or CP2102. With these, you can connect **NUTTYFI** Board to your laptop and flash it without any trouble, just like Arduino.

Specification:

- Voltage:Input 5v to 21V DC
- Wi- Fi Direct (P2P), soft- AP.
- Current consumption: 10uA~170mA.
- Flash memory attachable: 16MB max (512K normal).
- Integrated TCP/IP protocol stack.
- Processor: Tensilica L106 32 - bit.
- Processor speed: 80~160MHz.
- RAM: 32K + 80K.
- GPIOs: 17 (multiplexed with other functions).
- Analog to Digita l: 1 input with 1024 step resolution.
- +19.5dBm output power in 802.11b mode
- 802.11 support: b/g/n.
- Maximum concurrent TCP connections: 5

Pin Definition:

1. 8 digital pins: From Do to D7,
2. 1 Analog pin- Ao
3. Vinput- From 5V to 21v
4. 3.3V output pin
5. UART Pins to Flash program to NUTTYFI Cloud Device using FTDI UART Bridge.



How to install NUTTYFI in to Arduino IDE:

The most basic way to use the ESP8266 module is to use serial commands, as the chip is basically a WiFi/Serial transceiver.

You need to follow these steps.

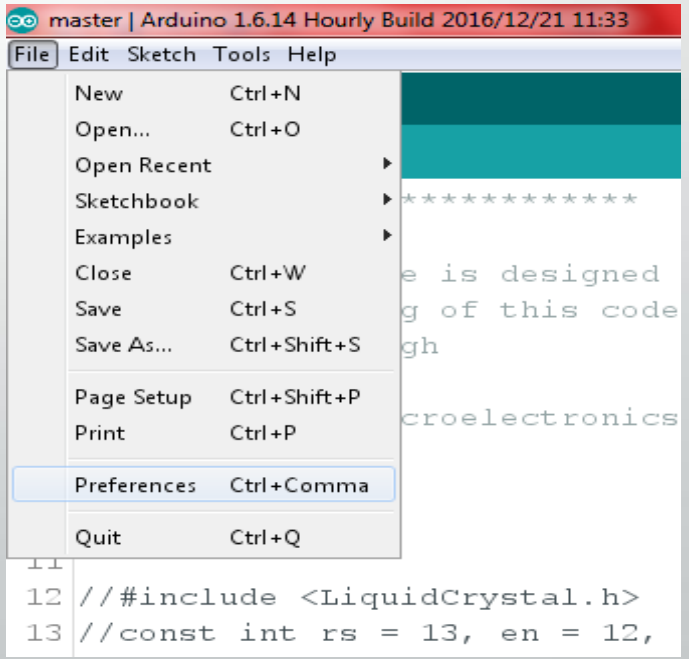
1. Open the Arduino IDE. Arduino IDE version must be 1.6.4 or greater.

2. Note That your Laptop/ Computer must

Connected with Internet to install NUTTYFI

in Arduino IDE.

3. Click on File & Click on Preferences like this

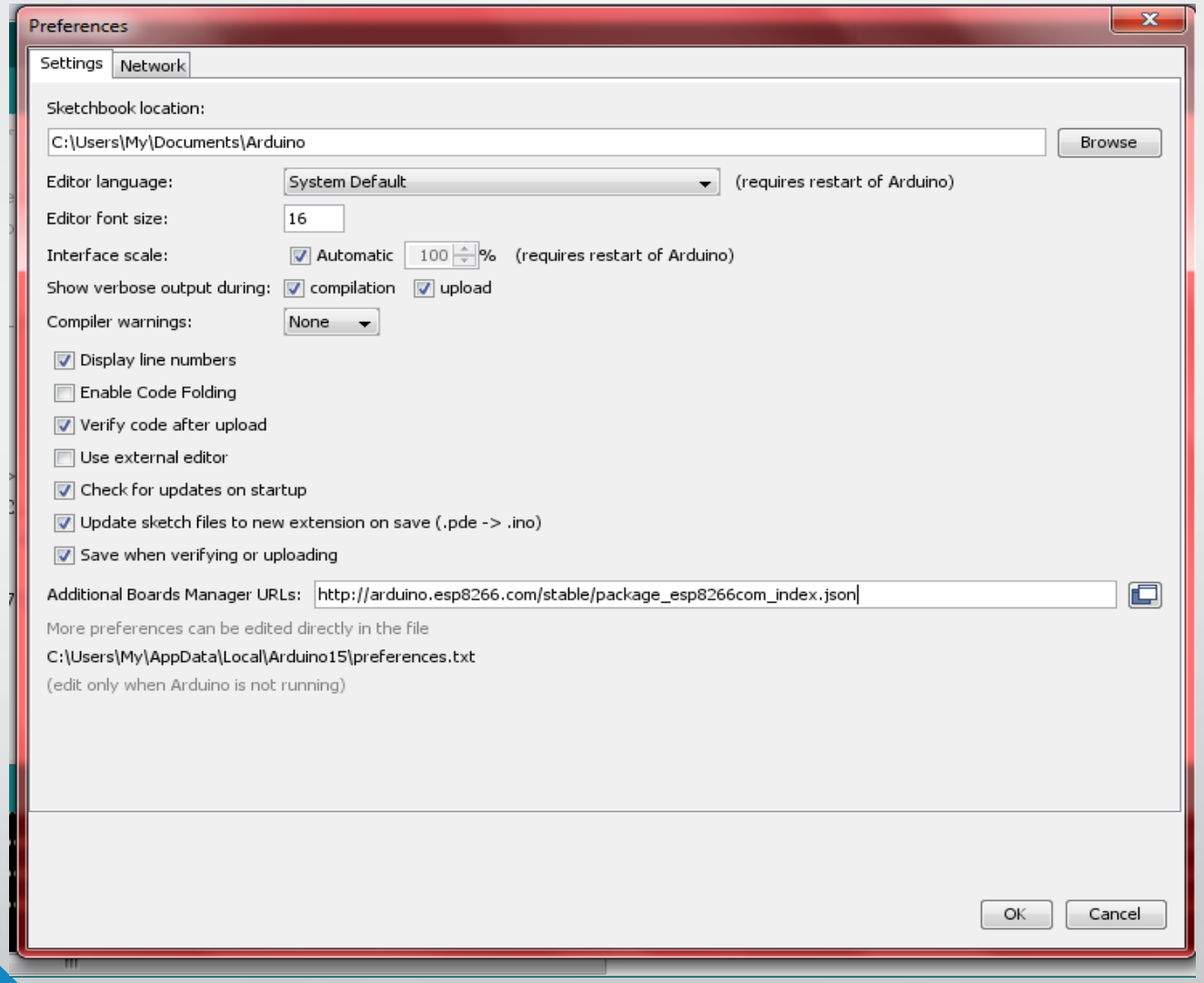


4. Preference window will appear.

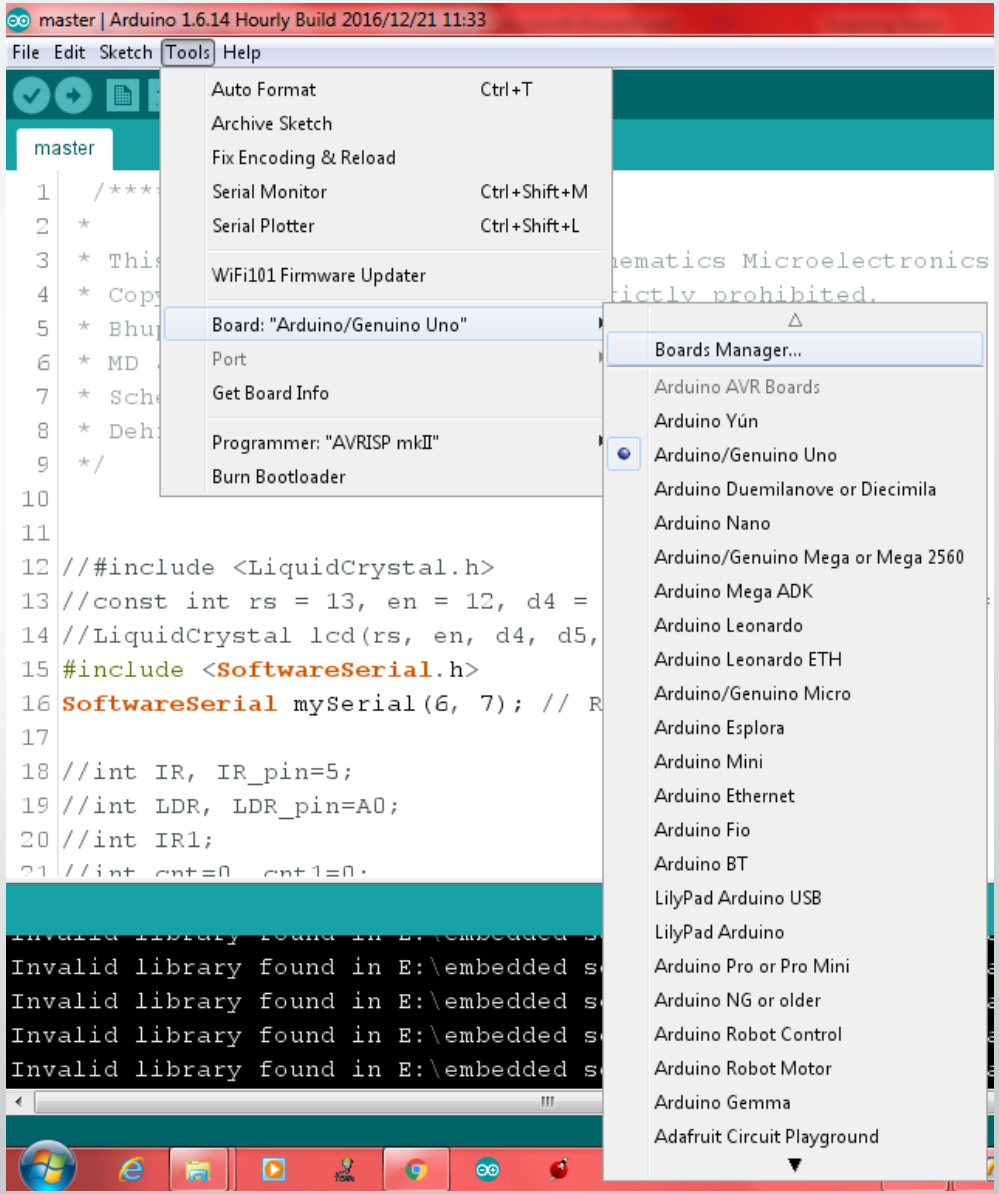
You have to copy & paste given below link to Additional Board Manager URLs as shown in image in next page-

http://arduino.esp8266.com/stable/package_esp8266com_index.json

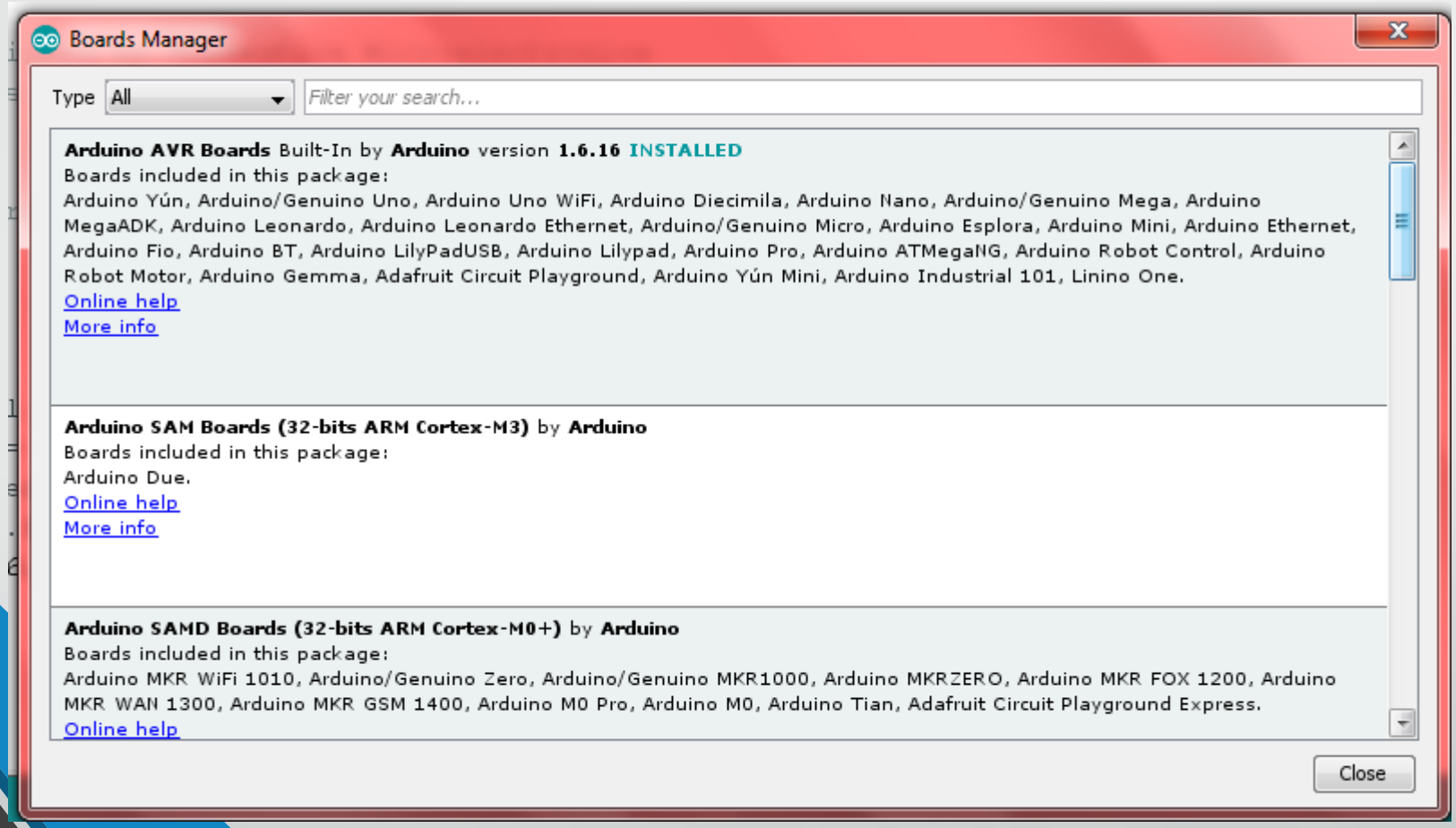
5. After Paste the Link, click on **OK** button



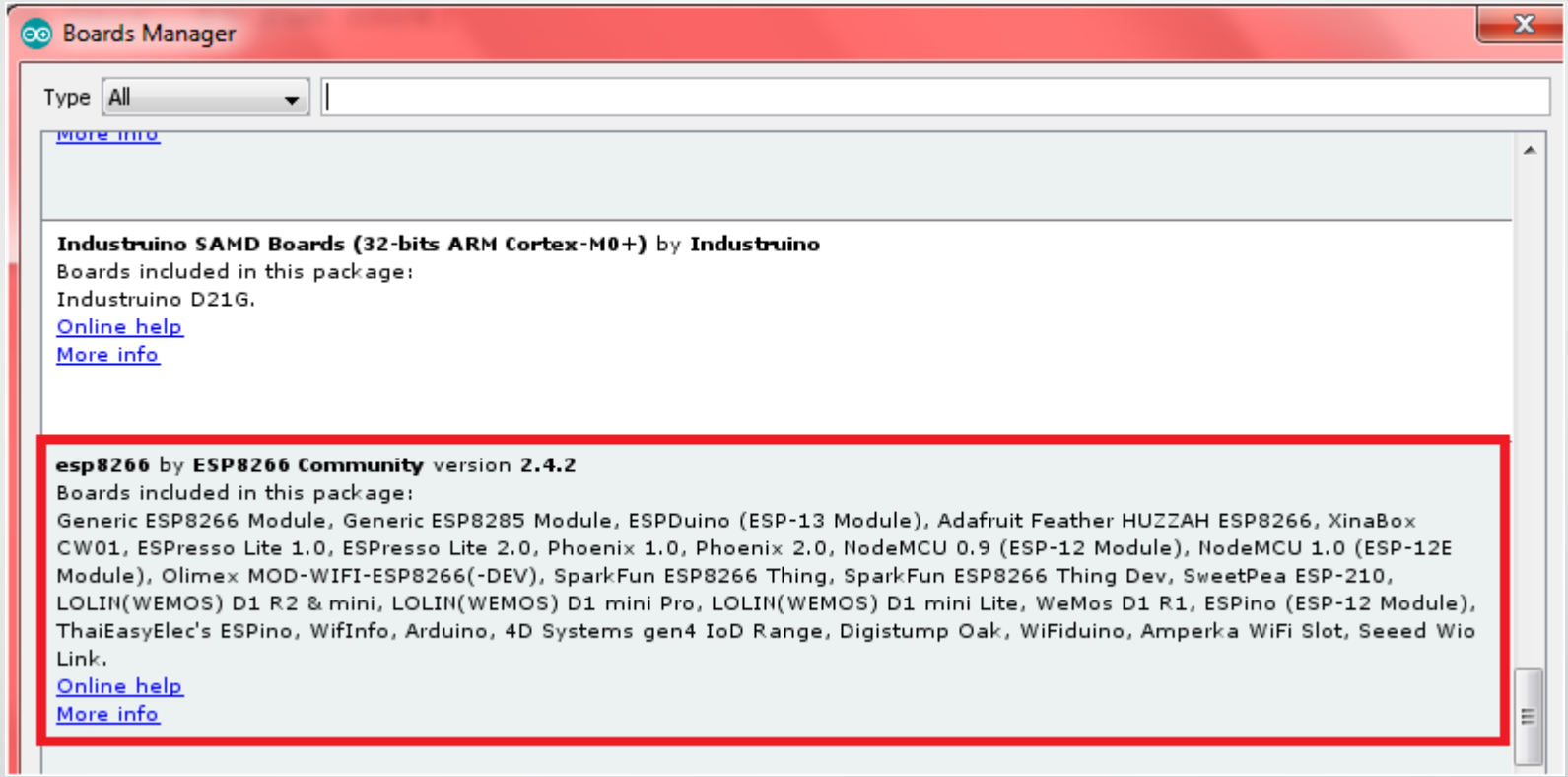
6. Now, Click on Tools on Arduino IDE, Then Boards-> Board Manager like Shown in image.



7. Now, list of all boards appear in board manager now like shown in image.

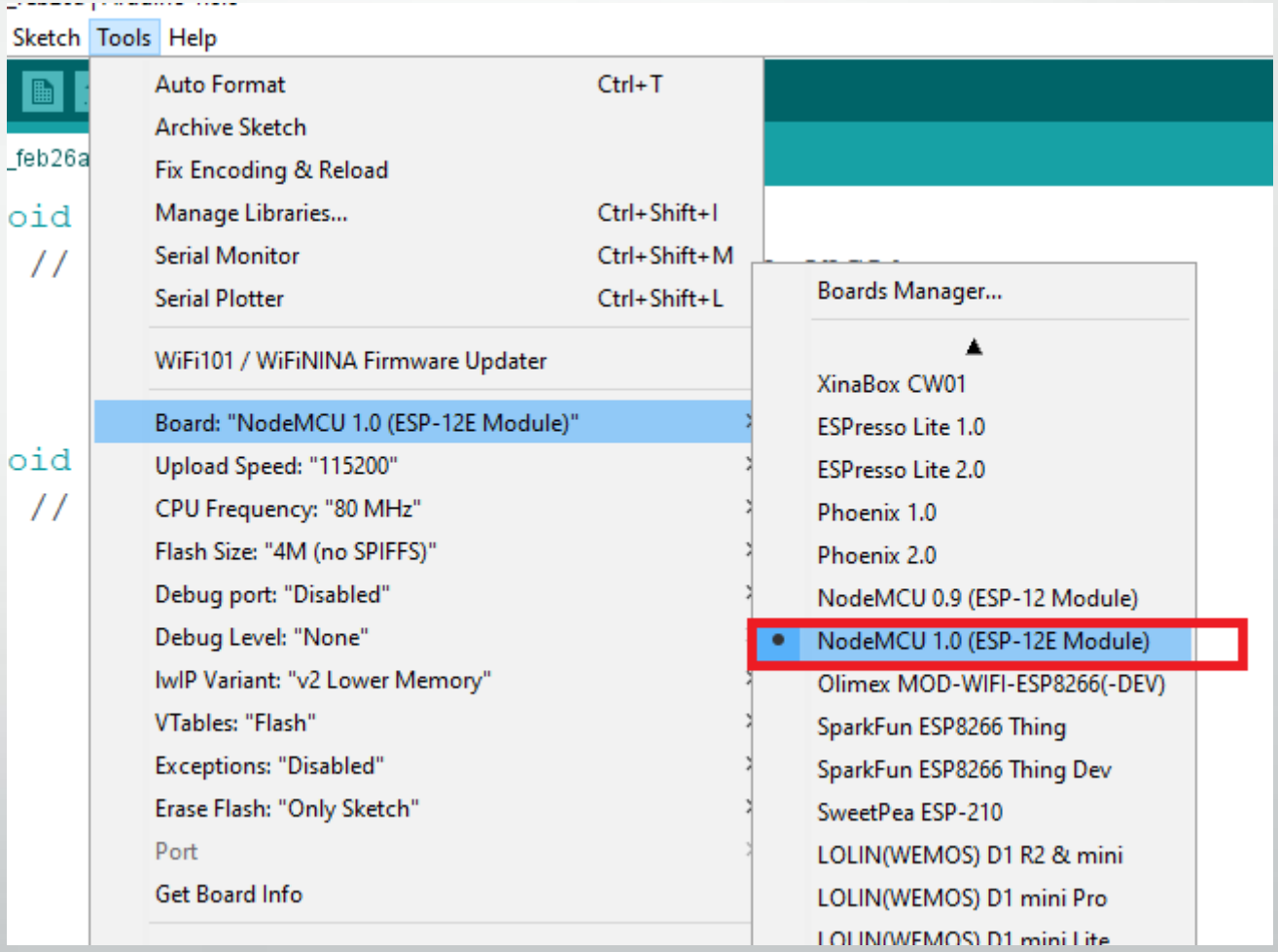


8. Scroll to bottom of the list of board manager, you will see the the “esp8266 by esp8266 community version ”. install it.



Once installation completed, close and re -open Arduino IDE for ESP8266 library to take effect

9. Now, go to Tools > Board > ESP8266 Modules and you can see many option for ESP8266. For NuttyFi, it is recommended to select "NodeMCU 1.0 (ESP-12E Module).



10. Now Your NUTTYFI Wifi Board is ready to use.

11. Next, select your port. If you cant recognize your port, go to the Control Panel > System > Device Manager > Port and update your USB driver.

If you feel any trouble in installing FTDI USB to UART Bridge Driver in your computer, then click here to step by step guide to install FTDI to your computer.