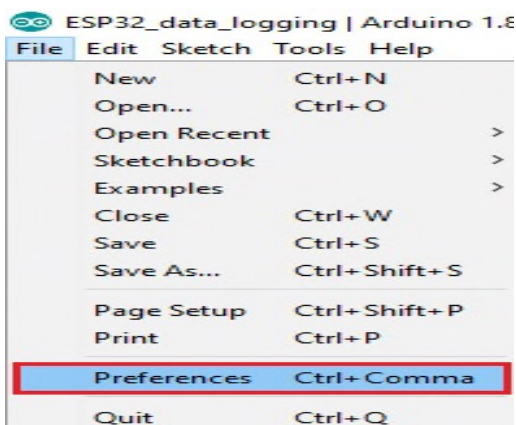# Installing the ESP32 Board in Arduino IDE

Prerequisites: Arduino IDE Installed :

Before starting this installation procedure, make sure you have the latest version of the Arduino IDE installed in your computer.
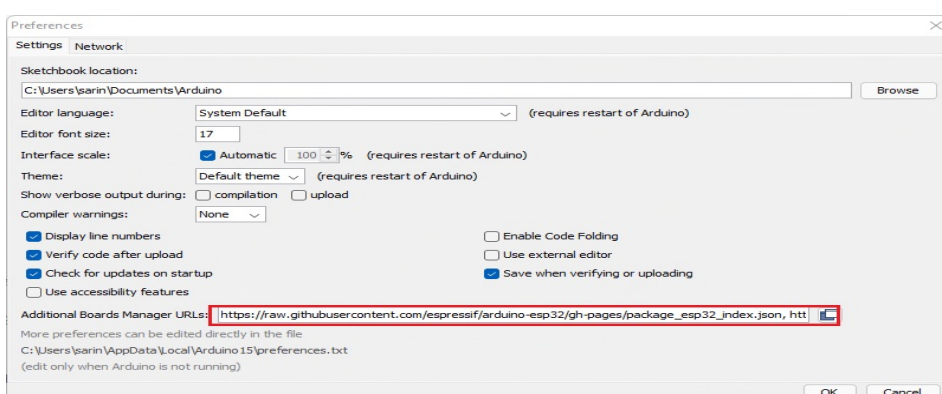
Installing ESP32 Add-on in Arduino IDE :

1. In your Arduino IDE, go to File> Preferences

2. Enter the following into the "Additional Board Manager URLs" field:

https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json

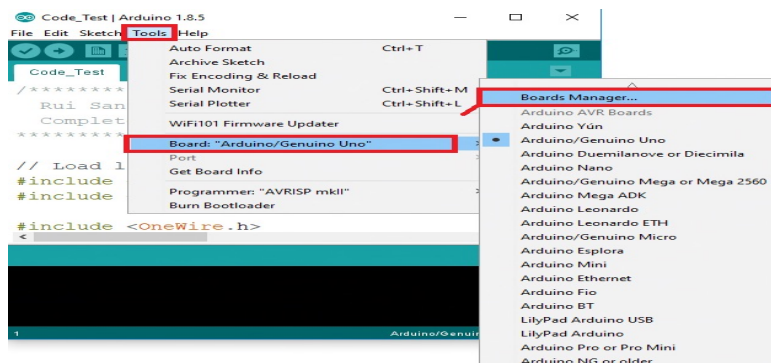Then, click the "OK" button:

Note: if you already have the ESP8266 boards URL, you can separate the URLs with a comma as follows:

https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json, http://arduino.esp8266.com/stable/package_esp8266com_index.json

3. Open the Boards Manager. Go to Tools > Board > Boards Manager…

4. Search for ESP32 and press install button for the "ESP32 by Espressif Systems":
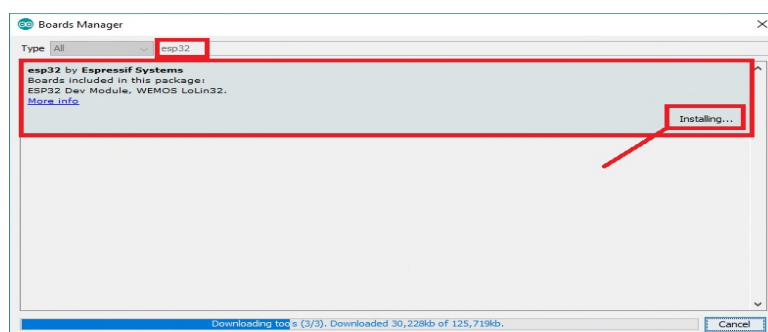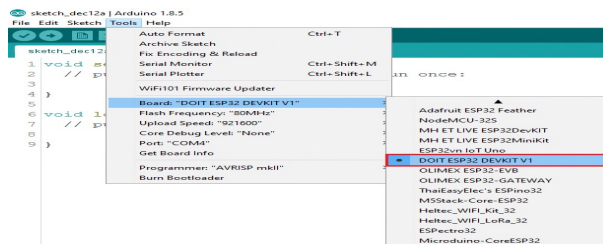

5. That's it. It should be installed after a few seconds.

To test the Installation follow the steps:

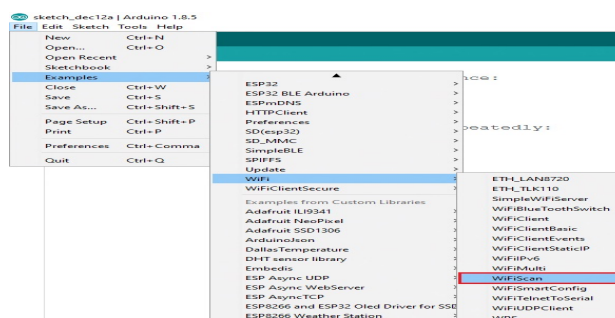Plug the ESP32 board to your computer. With your Arduino IDE open, follow these steps:

1. Select your Board in Tools > Board menu (in my case it's the DOIT ESP32 DEVKIT V1)

2. Select the Port (if you don't see the COM Port in your Arduino IDE, you need to install the CP210x USB to UART Bridge VCP Drivers):
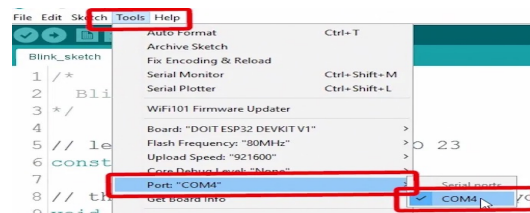
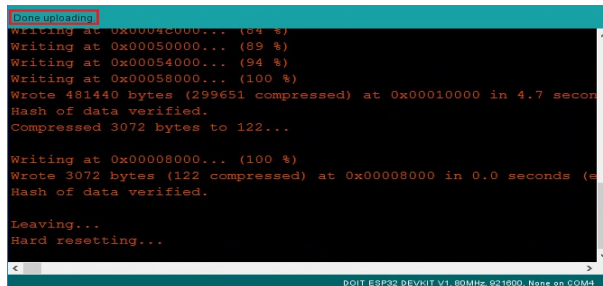3. Open the following example under File > Examples > WiFi (ESP32) > WiFiScan

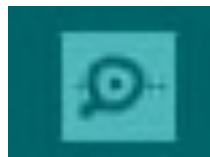4. A new sketch opens in your Arduino IDE:

5. Press the Upload button in the Arduino IDE. Wait a few seconds while the code compiles and uploads to your board.
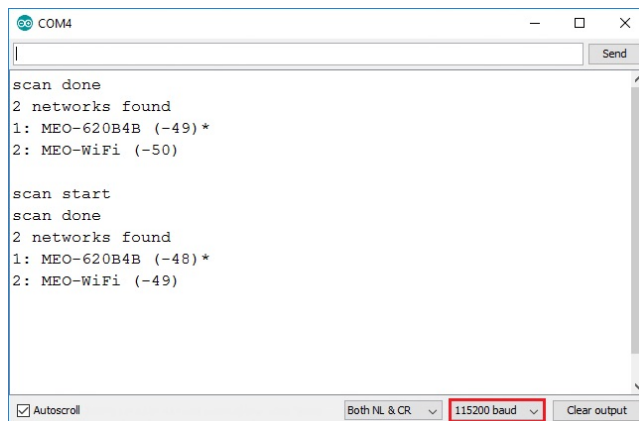
6. If everything went as expected, you should see a "Done uploading." message.

7. Open the Arduino IDE Serial Monitor at a baud rate of 115200:

8. Press the ESP32 on-board Enable button and you should see the networks available near your ESP32:
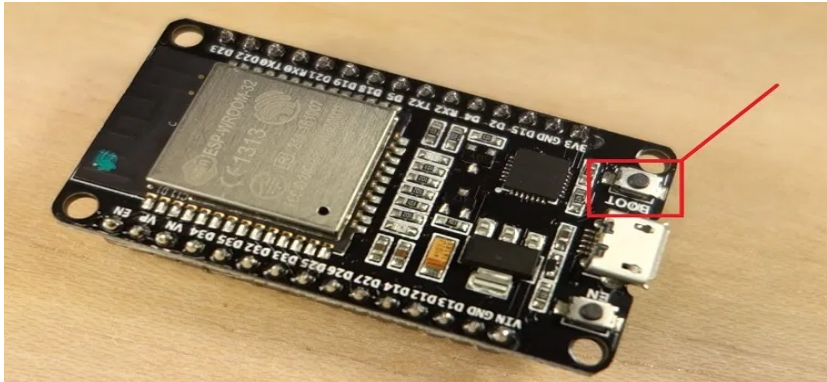
Troubleshooting :

If you try to upload a new sketch to your ESP32 and you get this error message "A fatal error occurred: Failed to connect to ESP32: Timed out… Connecting…". It means that your ESP32 is not in flashing/uploading mode.
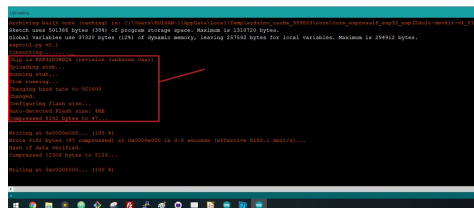Having the right board name and COM por selected, follow these steps:
* Hold-down the "BOOT" button in your ESP32 board

* Press the "Upload" button in the Arduino IDE to upload your sketch:

* After you see the "Connecting…." message in your Arduino IDE, release the finger from the "BOOT" button:

* After that, you should see the "Done uploading" message
That's it. Your ESP32 should have the new sketch running. Press the "ENABLE" button to restart the ESP32 and run the new uploaded sketch.