CG2271

Getting started with ESP32

In this manual, you will learn how to use the ESP32 board with the Arduino IDE.

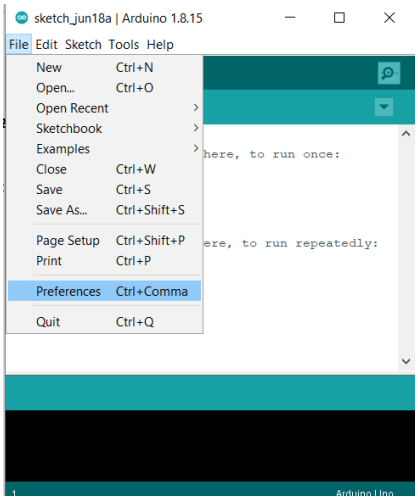
Step 1: Ensure that you have Arduino IDE installed.

https://www.arduino.cc/en/software

Step 2:

Installing ESP32 add-on in Arduino IDE

In the Arduino IDE, for to **File->Preferences**

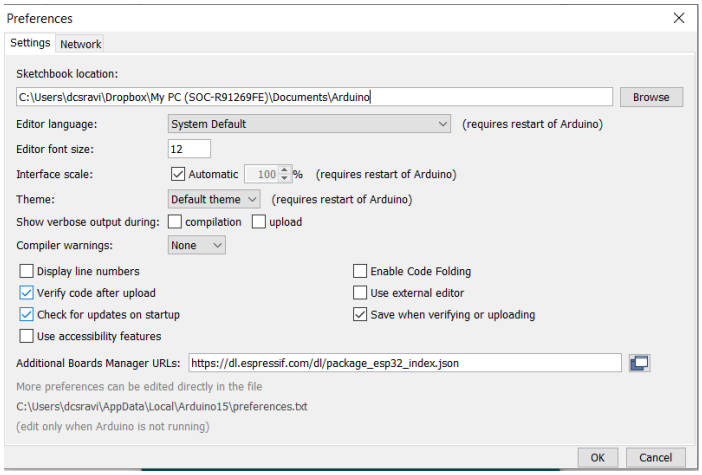


Step 3:

Enter

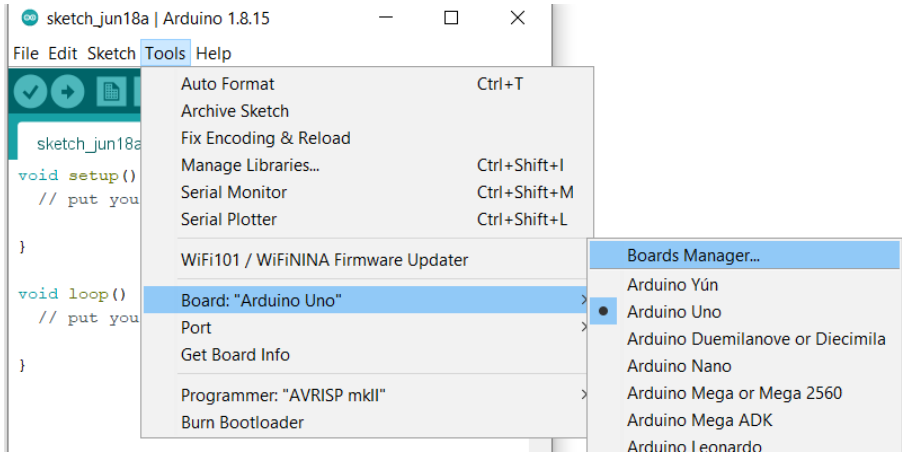
https://dl.espressif.com/dl/package_esp32_index.json

into the “Additional Board Manager URLs” field. Then, click the “OK” button.



Step 4:

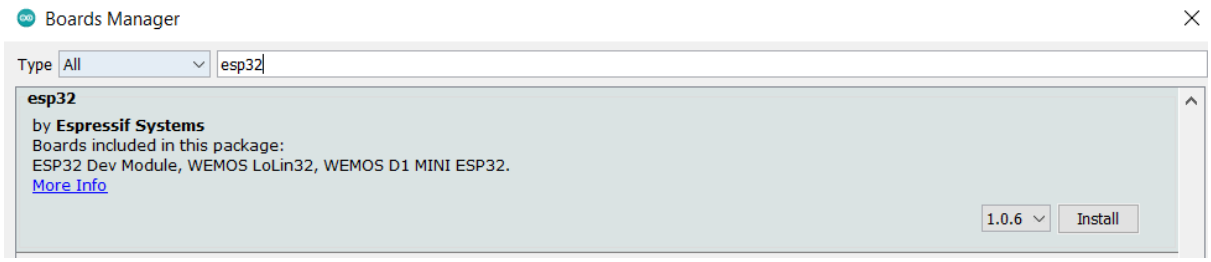
Go to **Tools - > Board - > Boards Manager**



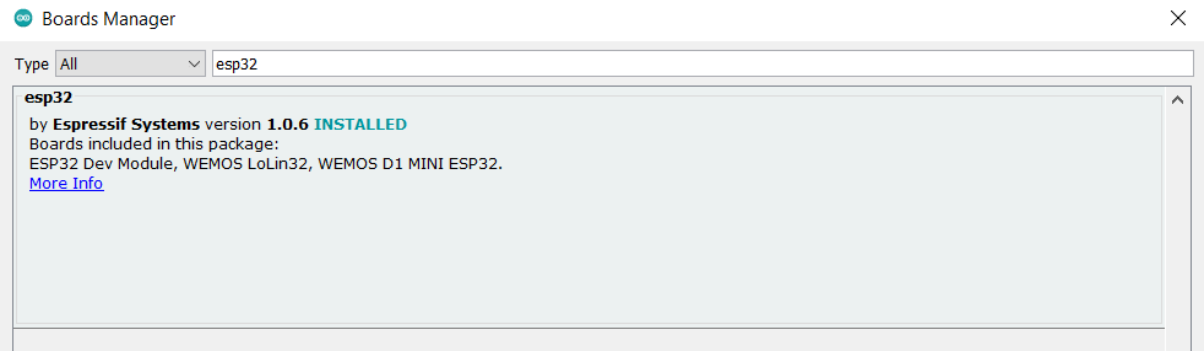
Step 5:

Enter “esp32” in the Search Bar and you should see “esp32 by Espressif Systems”

Click on “Install”



It will proceed to download and install the package.



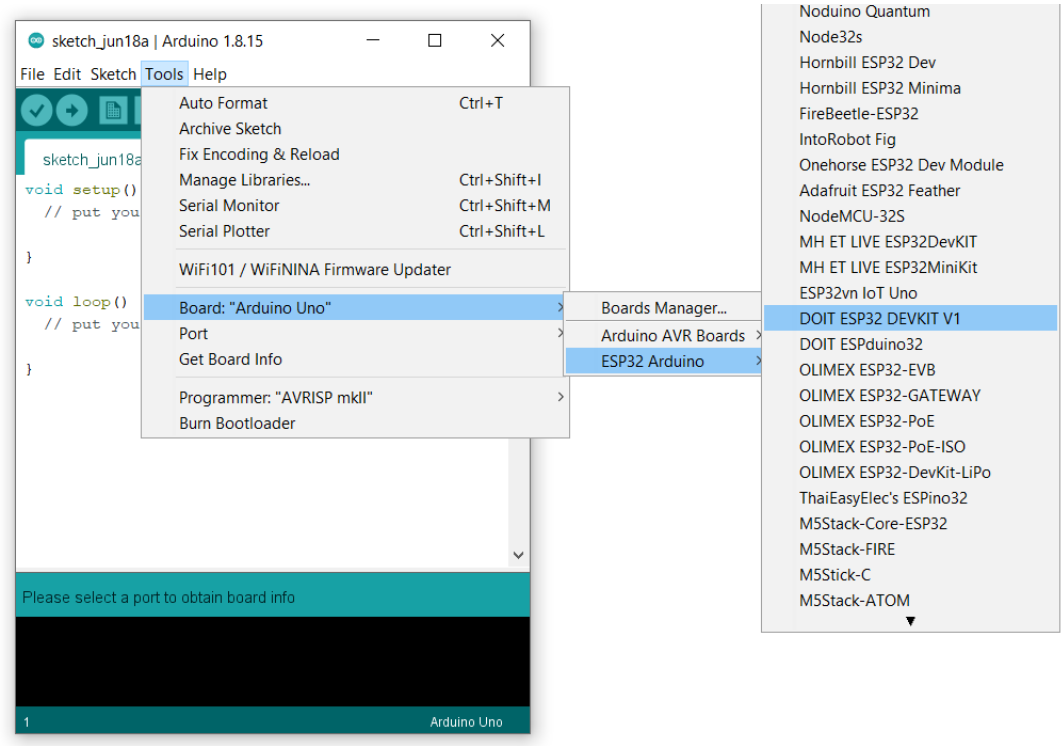
Testing the Board

Step 5:

We can now proceed to test the board with the installed package.

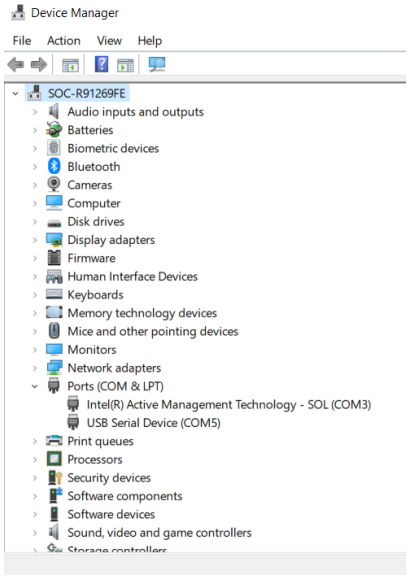
Plug in the board to your computer.

Select Board **Arduino Uno -> ESP32 Arduino -> DOIT ES32 DEVKIT V1**

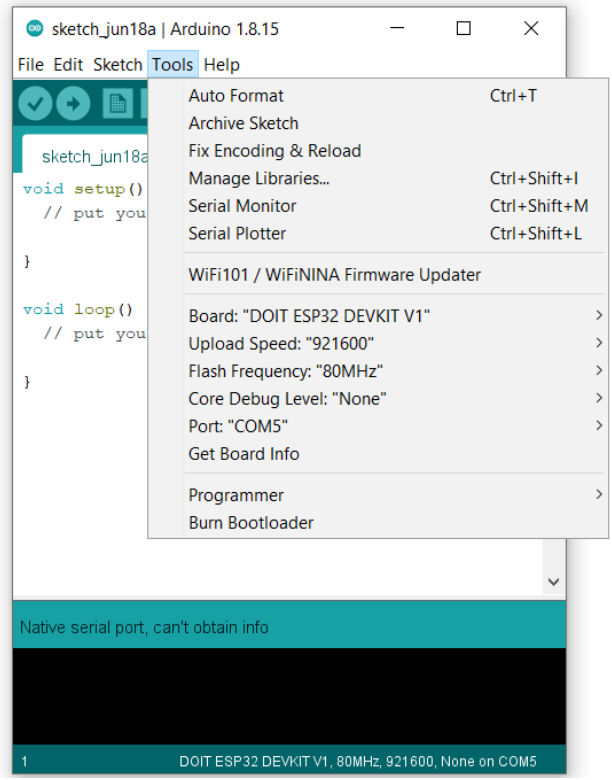


Step 6:

You can check the COM Port Number with your Device Manager.



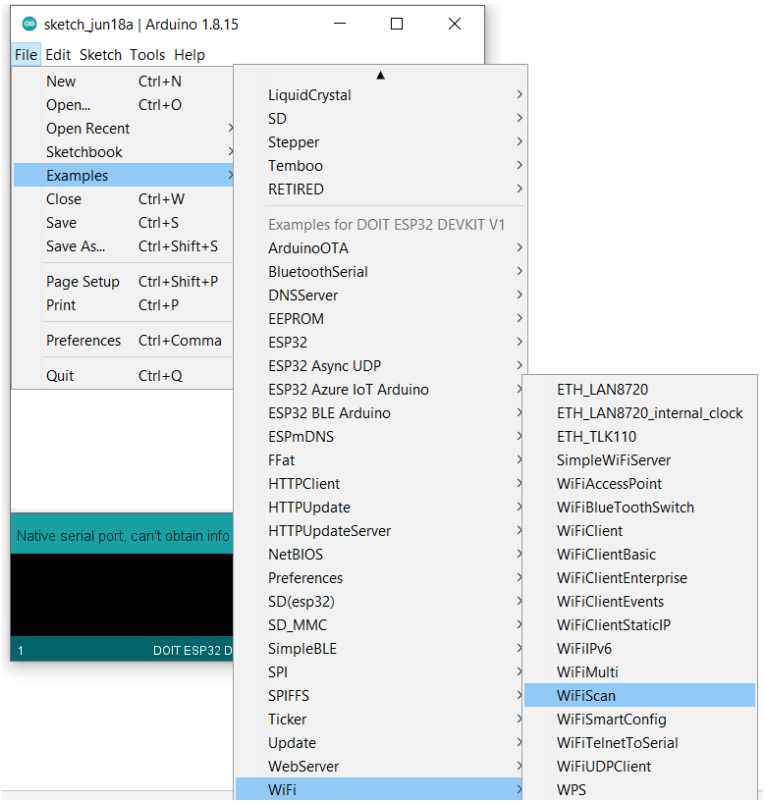
The details of the board will now be displayed under **Tools**



Step 7:

Open the following example code.

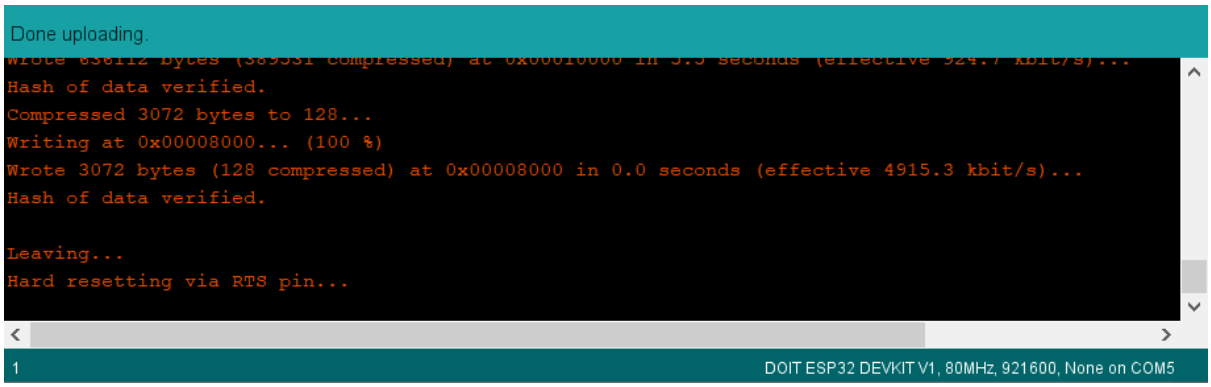
Examples -> WiFi -> WiFiScan



A new sketch will open.

Step 8:

Upload the code onto your board. It can take 1 to 2 mins to complete the compilation process and uploading. You should see the “Done uploading” message at the log.



Step 9:

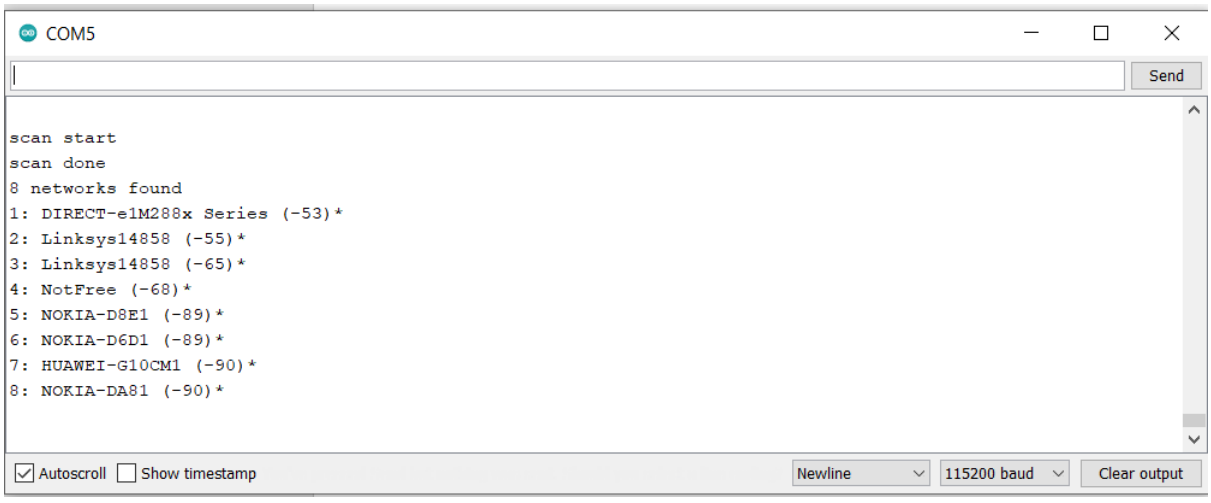
Open the Arduino IDE Serial Monitor at 115200bps.

You should start to see the WiFi scan results appear on the console.

This shows the Wifi networks picked up by the ESP32 board.

If you do not see anything on the console

- Check that the correct COM port and Baud Rate are selected for the Serial Monitor.
- Press and Release the Enable (EN) button on the board.



Congratulations! Your ESP32 is now ready for use!

Now you can look at the ESP32 WebServer Documentation to see how we can set it up to be used together with the Android App.