## Install and Configure Arduino Software for MAC OS

## Step 1– Install the driver

- Click this instant URL to download directly from here:
   https://www.silabs.com/documents/public/software/Mac\_OSX\_VCP\_Driver.zip

  For your information, <u>click here</u> for the website that contains the above download link.
- The file is normally located in your Downloads directory. Double click on the
   <u>Mac\_OSC\_VCP\_Driver.zip</u> [Figure 1 (Step 1)]. You should be able to see the
   newly created <u>Mac\_OSX\_VCP\_Driver</u>. Expand the folder and double click on
   the .dmg file [Figure 1 (Step 2)] and install it like your normally install a Mac
   software.

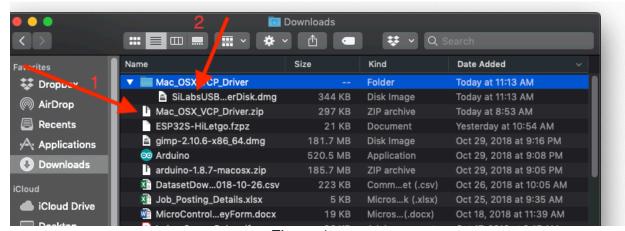


Figure 1

Once you finish installing it, you need to give it permission to run on your system.
 Hit the Apple icon on the top left of your screen, and go to <u>System Preferences</u> -> <u>Security & Privacy</u>. You should see that SiLab software is asking for the permission, click Allows and hit the Lock image at the bottom left of the Security & Privacy windows.

## Step 2— Download and install the Arduino software

- Visit <a href="https://www.arduino.cc/en/Main/Software">https://www.arduino.cc/en/Main/Software</a> and download the MacOS X version of the Arduino software installer.
- Install the software per the instructions
  at <a href="https://www.arduino.cc/en/Guide/MacOSX">https://www.arduino.cc/en/Guide/MacOSX</a>. Skip the last section of the installation instructions, i.e. the "Proceed with board specific instructions" portion.

## Step 3— Configure the Arduino Software

 Add the necessary libraries (libraries are like "drivers") to let the Arduino software know how to communicate with the ESP32 microcontroller and components we will be using.

To add support for the ESP32 microcontroller, click on <u>Arduino -> Preferences</u>
 [Figure 2]

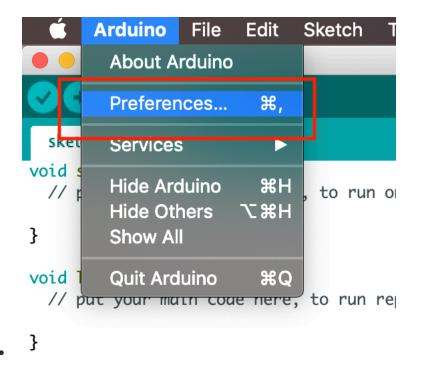


Figure 2

Paste <a href="https://dl.espressif.com/dl/package\_esp32\_index.json">https://dl.espressif.com/dl/package\_esp32\_index.json</a> into the blank space next to "Additional Boards Manager URLs:" then click "OK" to return to the main Arduino software windows [Figure 3].

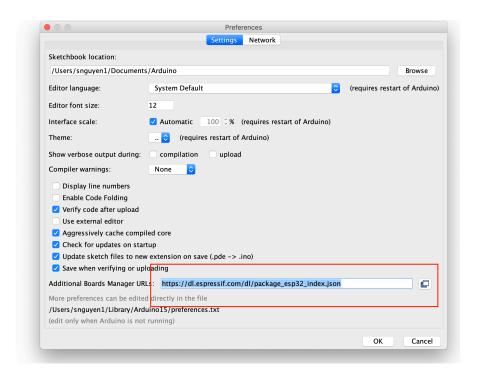


Figure 3

• Click on Tools -> Board: "Arduino/Genuine Uno" -> Boards Manager.... [Figure 4]

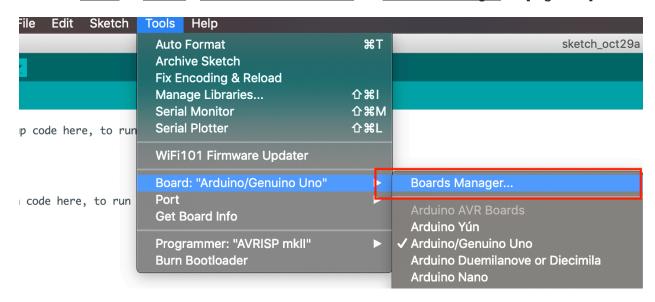


Figure 4

 Type esp32 into the filter at the top of the Boards Manager dialog, and you should see an "esp32 by Espressif Systems" option appear. Click on its "Install" button, and let the process run to completion. This will take several minutes to finish. Click the "Close" button once the install is completed. [Figure 5]

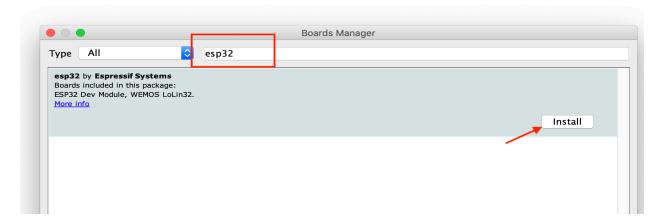


Figure 5

To add support for the various components we will be using, click on <u>Tools</u> -> <u>Manage Libraries</u>... [Figure 6 (step 1]

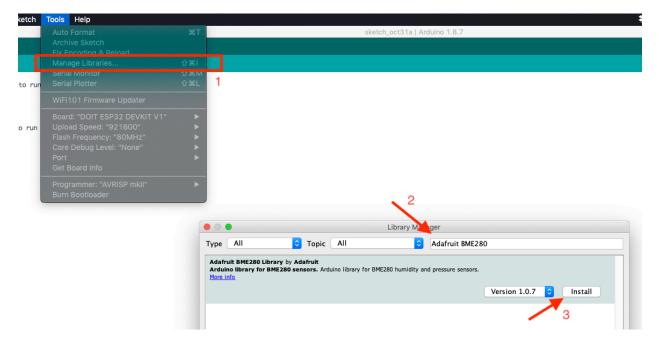


Figure 6

- Type **Adafruit BME280** into the filter at the top of the Library Manager dialog, click on the only (or first) item in the list [Figure 6 (Step 2,3)].
- On the same Library Manager window, Install Adafruit SSD1306 by Adafruit [Figure 7].

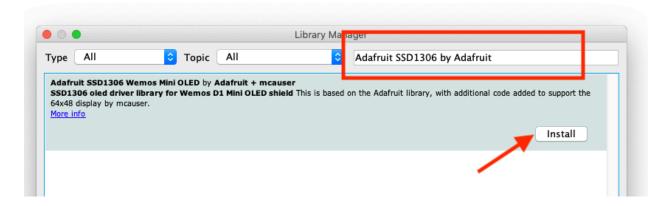


Figure 7

• Same thing, install Adafruit Unified Sensor by Adafruit library [Figure 8].

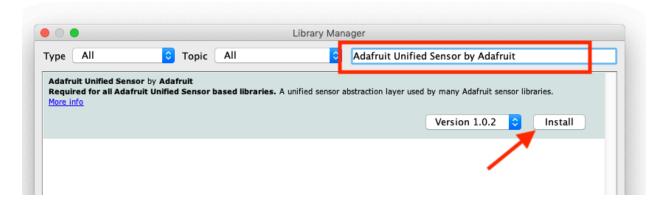


Figure 8

 Again, typing rtclib in the filter box, find & install RTClib by Adafruit library [Figure 8].

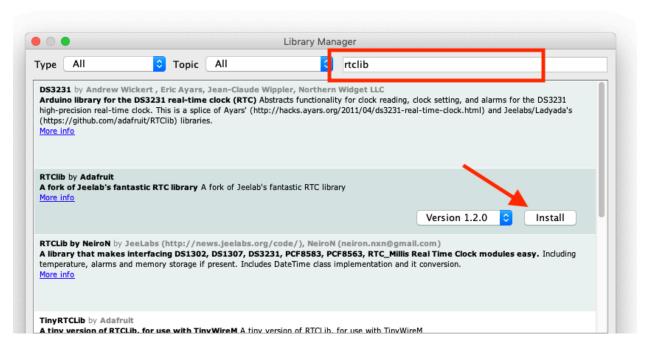


Figure 9

Click the "Close" button to return to the main Arduino software window.

Congratulations!!!!

You just finished the most difficult part. Give yourself a cookie!!!