

I would really be grateful if you start to build the project, that you go to Github and say hi.

Installing CH9102, CP2102 or CH340 USB Driver. V1.0 16/09/2024

Note:- These guides must be followed in the correct order

ESP32 Installing USB Driver

ESP32 Arduino IDE Software Load (not required for Development Timer)

ESP32 Firmware Load

ESP32 boards come with a range of USB driver chip. The main there are listed below.

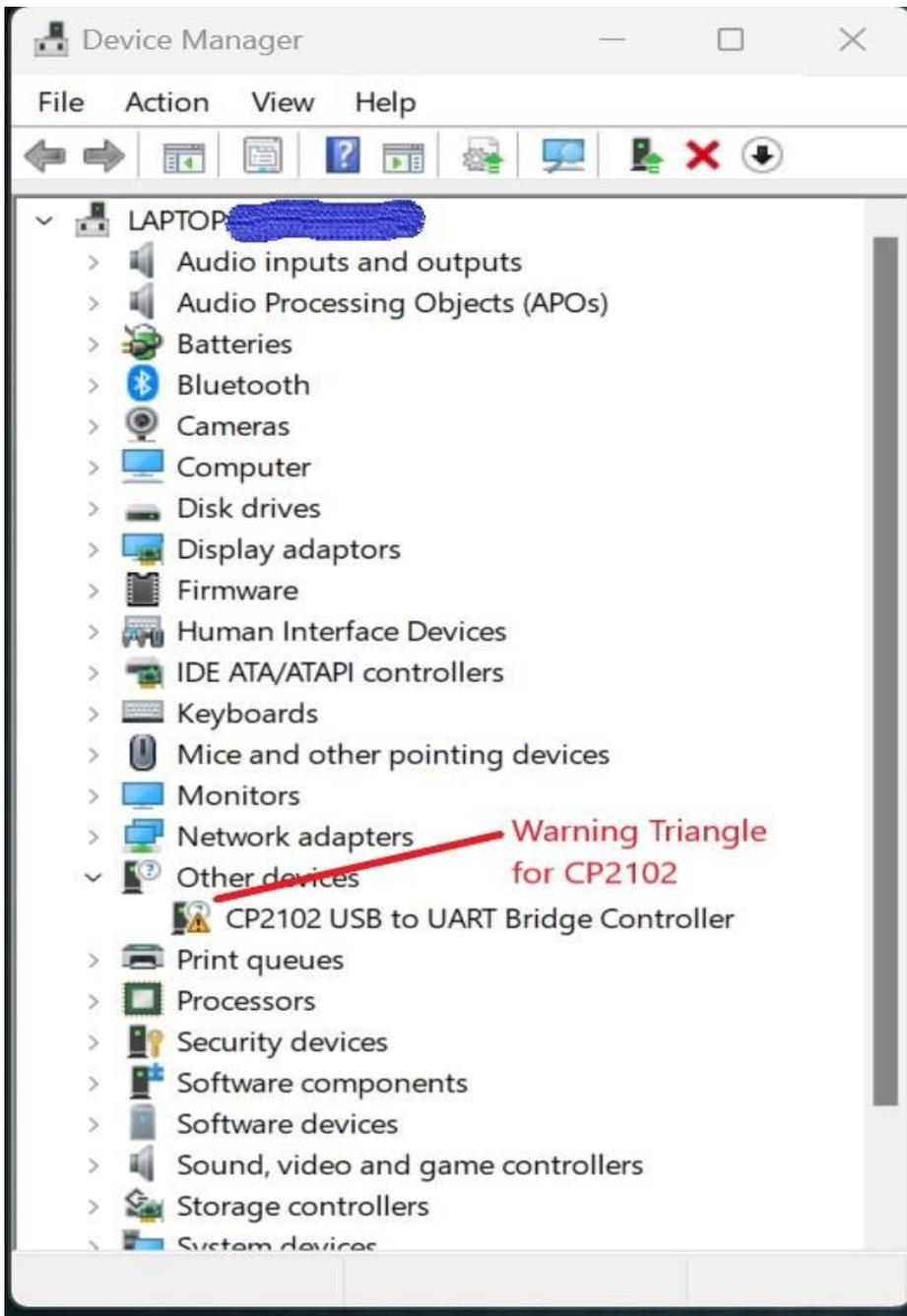
The CP2102 device driver does not normally come pre-installed on Windows and has to be installed manually.

The CH9102 device driver does not normally come pre-installed on Windows and has to be installed manually.

The CH340 driver will normally be installed on a Windows computer. This driver is required if using the Lolin D32 board for the Development timer. Follow the below to see if Windows has the CH340 driver.

First thing to do is connect the ESP32 board to your computer and see if the driver is installed.

- 1) Connect the ESP32 board** to the computer using a suitable USB cable.
- 2) Open Device Manager** by pressing Windows Key + X and selecting 'Device Manager'
- 3) Expand either 'other devices' or 'Ports (COM & LPT)** and look for the connected USB device.



If you see a **yellow ! triangle** labelled CP2102 or CH9102 or CH340, then drivers require installing.

Note:- the Ports (COM & LPT) may need expanding, to see the device.

CH340 Specific Instructions.

If the CH340 driver is not loaded & Windows is not showing an option to automatically install it, follow the link below for a video guide.

[How to Install CH340 Drivers - SparkFun Learn](#)

CH9102 Specific Instructions.

[Overview | How To Install Drivers for WCH CH9102F USB to Serial Chips | Adafruit Learning System](#)

CP2102 Specific Instructions.

Step 1,

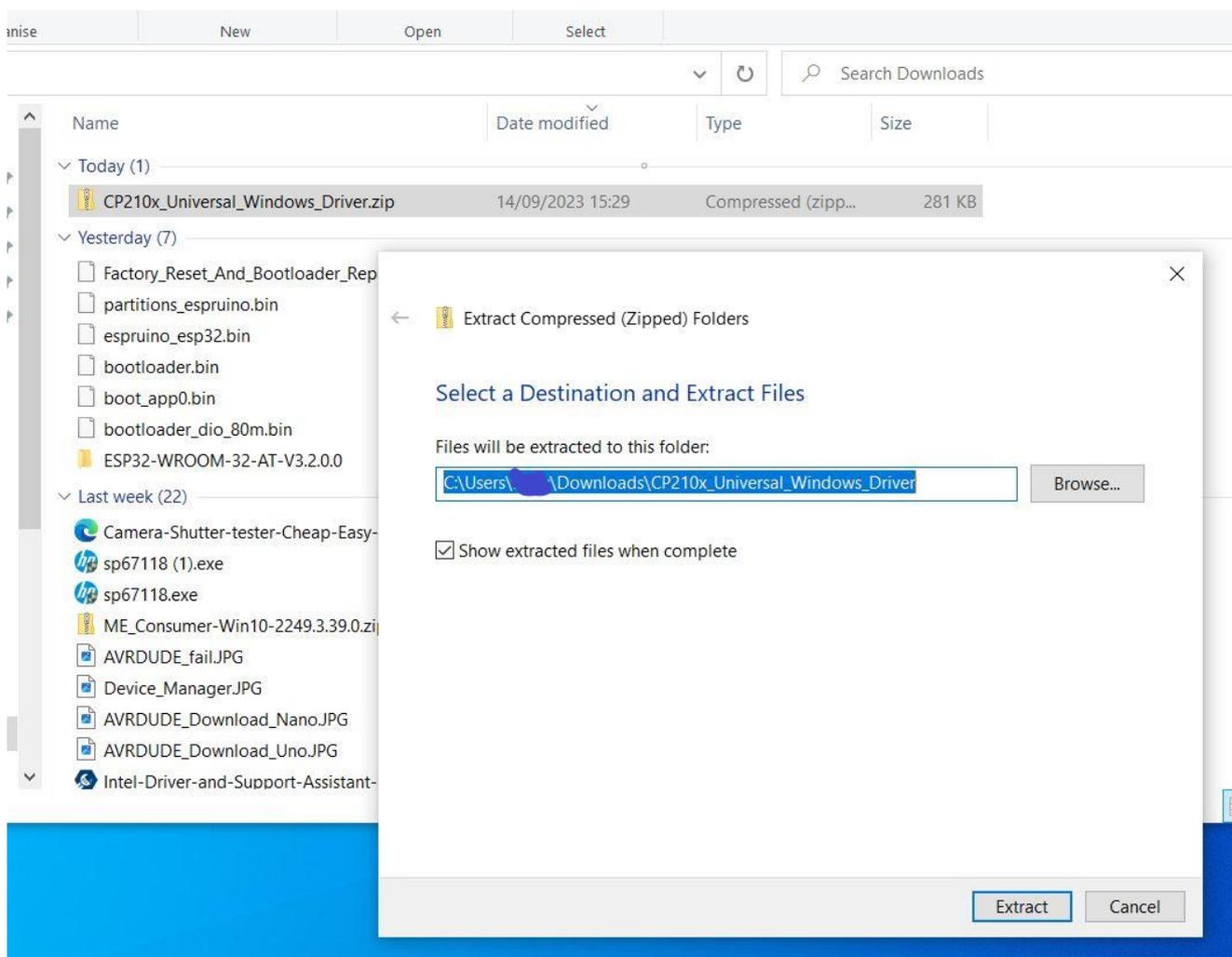
Download the drivers from the link below.

For Windows users, select the top one, CP210x Universal Windows Driver

[CP210x USB to UART Bridge VCP Drivers - Silicon Labs \(silabs.com\)](https://www.silabs.com/usb-to-uart-bridge-vcp-drivers)

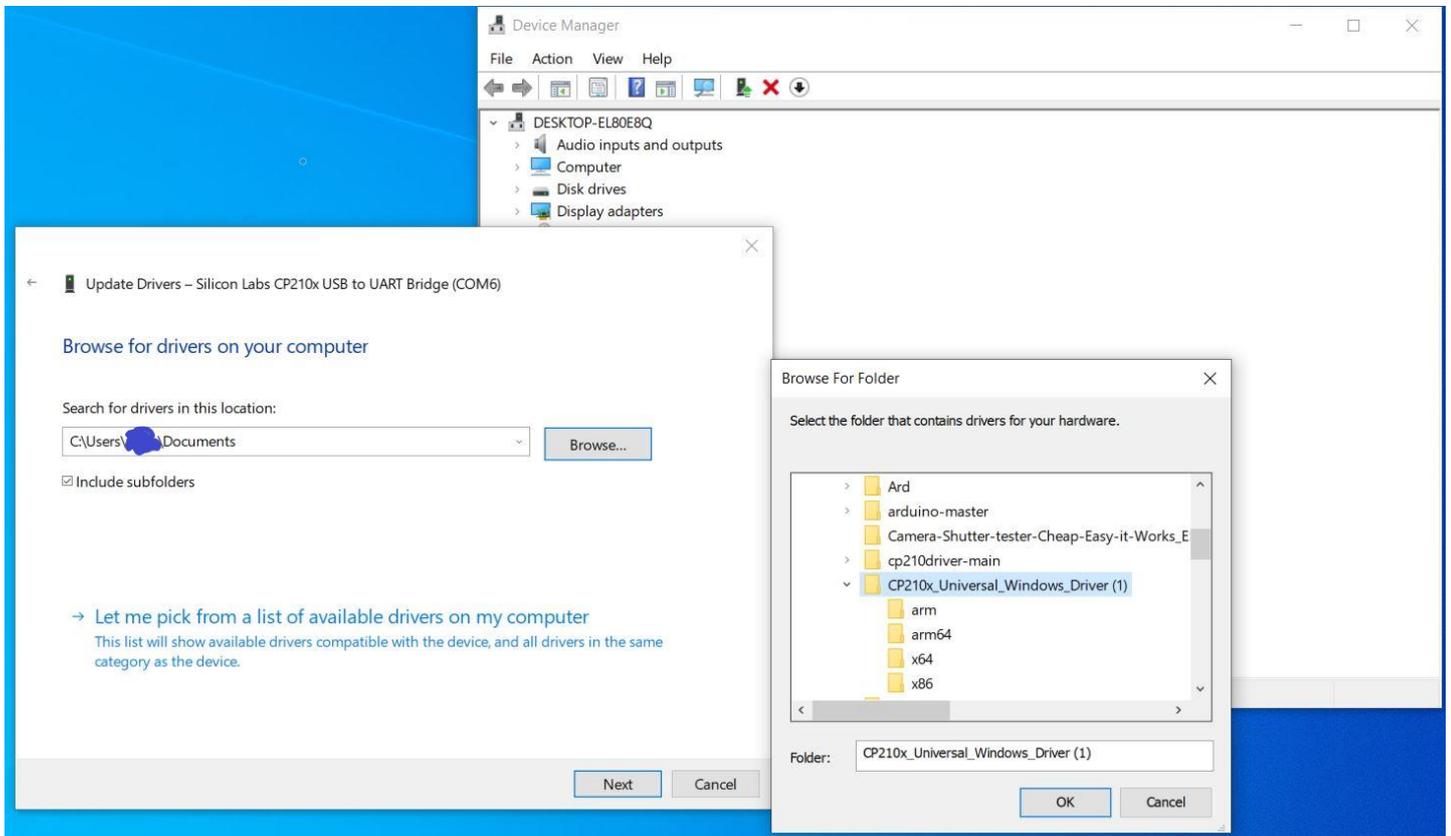
Step 2,

Navigate to the downloaded file (most likely in Downloads directory) Highlight it by clicking once, then right-click and select 'Extract All' and accept the default directory.



Step 3,

Go back to Device Manager and right-click on the **Yellow ! Triangle** select 'Update Driver' and then 'Browse my computer for drivers'



Click 'Browse' and navigate to the Downloads folder, find and click on the folder that was previously downloaded & extracted.

Click 'Ok' and then 'Next; in the previous box and the drivers should be installed.

A computer re-start will be required to complete installation.