Installing CP2102 or CH340 USB Driver.   V1.2 21/01/2024

Note:- These guides must be followed in the correct order
ESP32 Installing CP2102 USB Driver
ESP32 Arduino Software Load (not required for Development Timer)
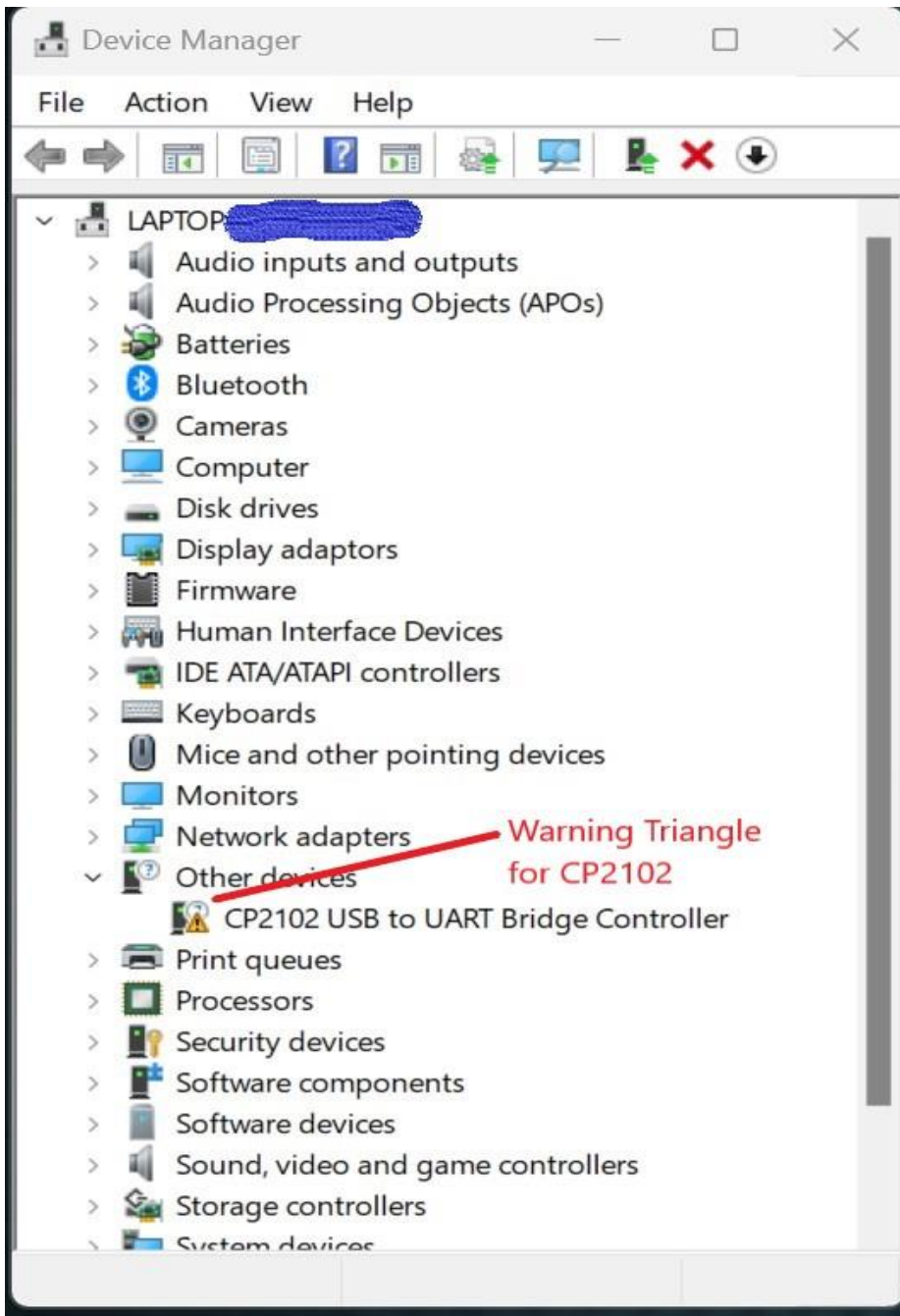ESP32 Firmware Load

The CP2102 device driver does not normally come pre-installed on Windows and has to be installed manually.
Note:- If using a ESP32 board with a different driver, Windows may or may not have a driver pre-loaded.

The CH340 driver will normally install 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. If not, skip t the end of this document for CH340 specific instructions

Connect the ESP32 board to the computer using a suitable USB cable.

Open Device Manager by pressing Windows Key + X and selecting 'Device Manager'

If you see a yellow ! triangle labelled CP2102, then drivers require installing.

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

Note:- if using a board with the CH340 USB device (Lolin D32) & the above is not showing it as working, skip to the end of this document for CH340 specific guidance.
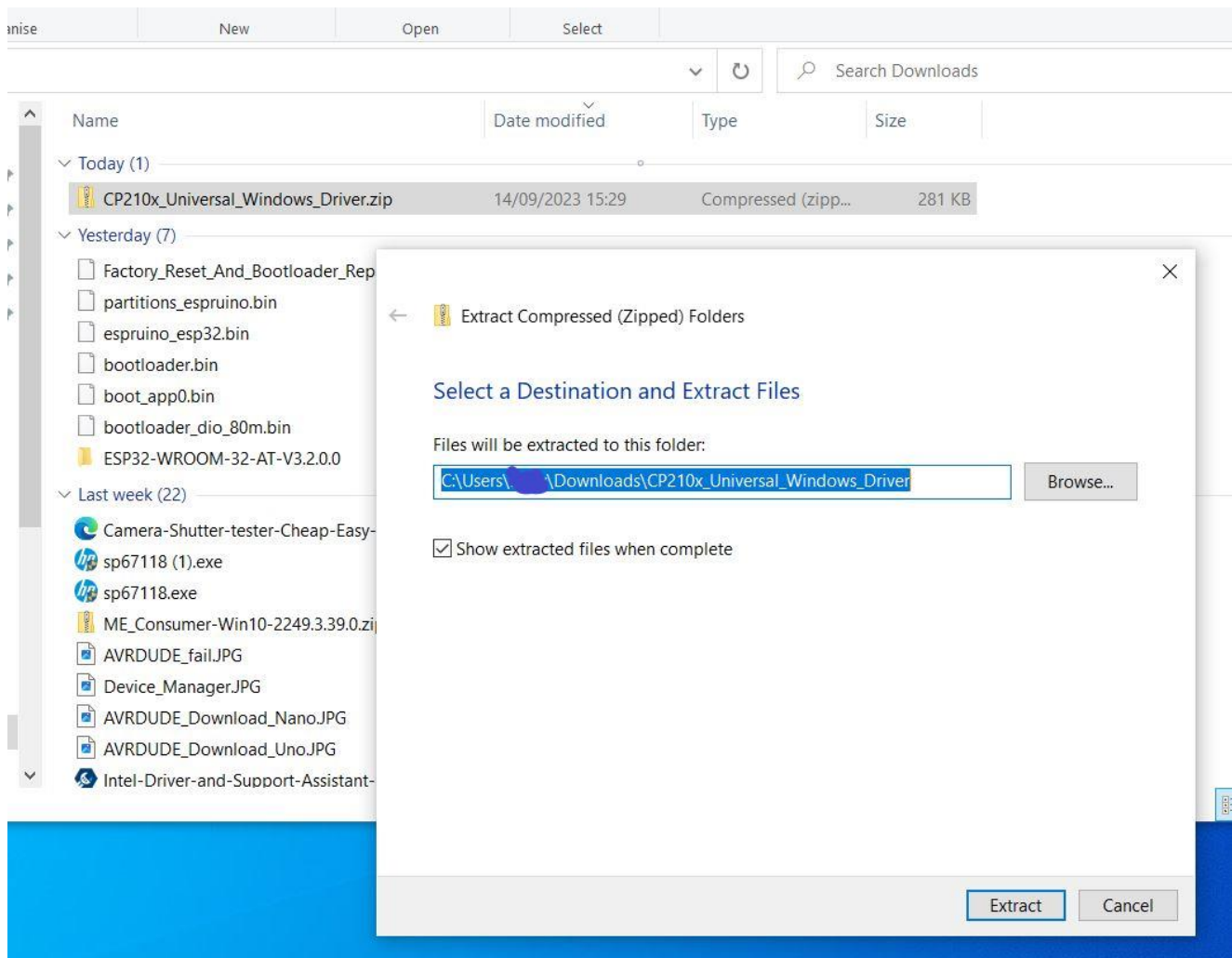
Step 1,

Download the drivers from the link below.

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

CP210x USB to UART Bridge VCP Drivers - Silicon Labs (silabs.com)

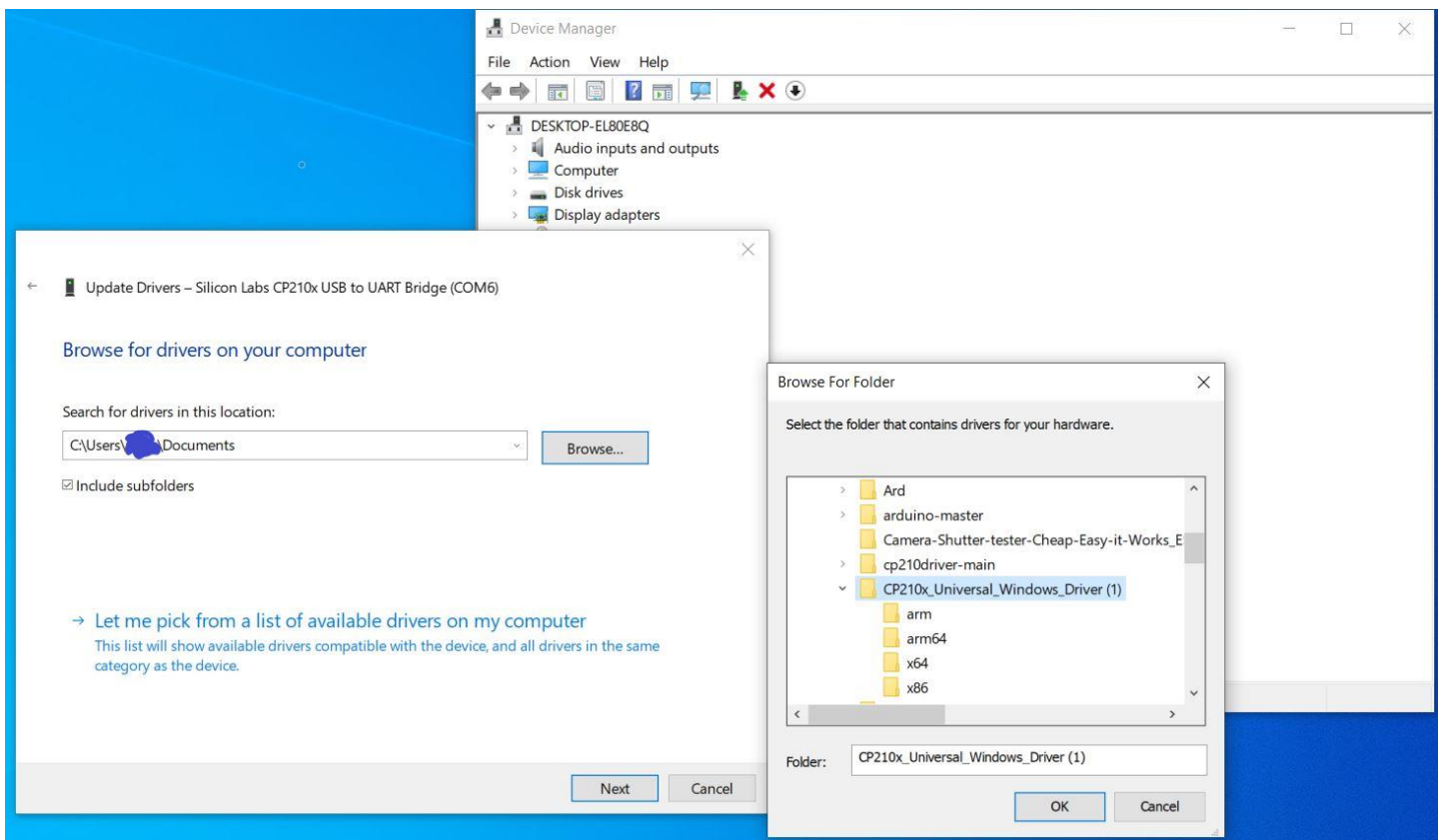**Step 2,**

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 <mark>Yellow ! Triangle</mark>
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.

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](#)