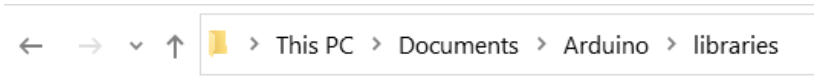
# Firmware upload to Lite3DP Gen 2 mainboard

1. Check that the computer to be used does not already have a library with one of the following names:




"SdFat"

"Adafruit_GFX"

"Adafruit_BusIO"

“Adafruit_SH110X”

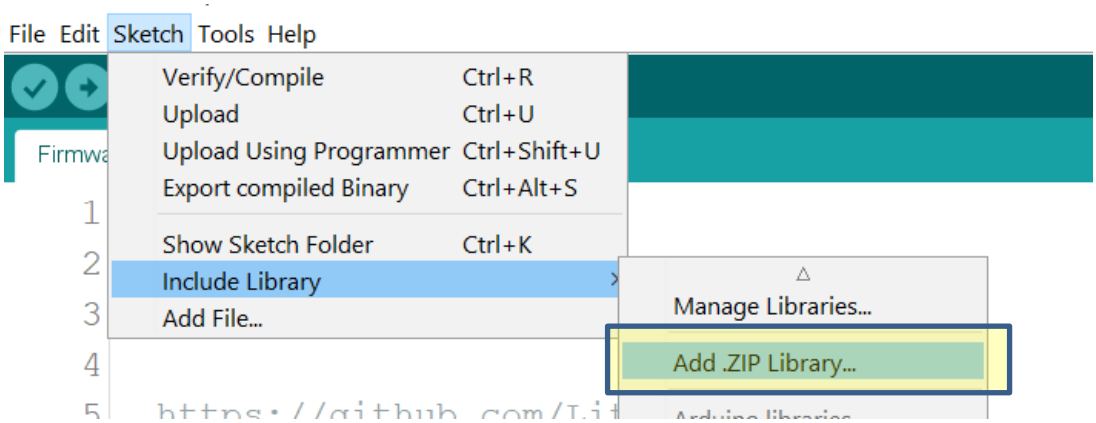
“PNGdec”

“TFT-eSPI”

“XPT2046_Touchscreen”

In case you have a library of the same name, **please delete it (or temporarily move it to another location)**, since another version of the libraries will cause a malfunction.

2. Add the 7 attached libraries, one by one, in the Arduino IDE:



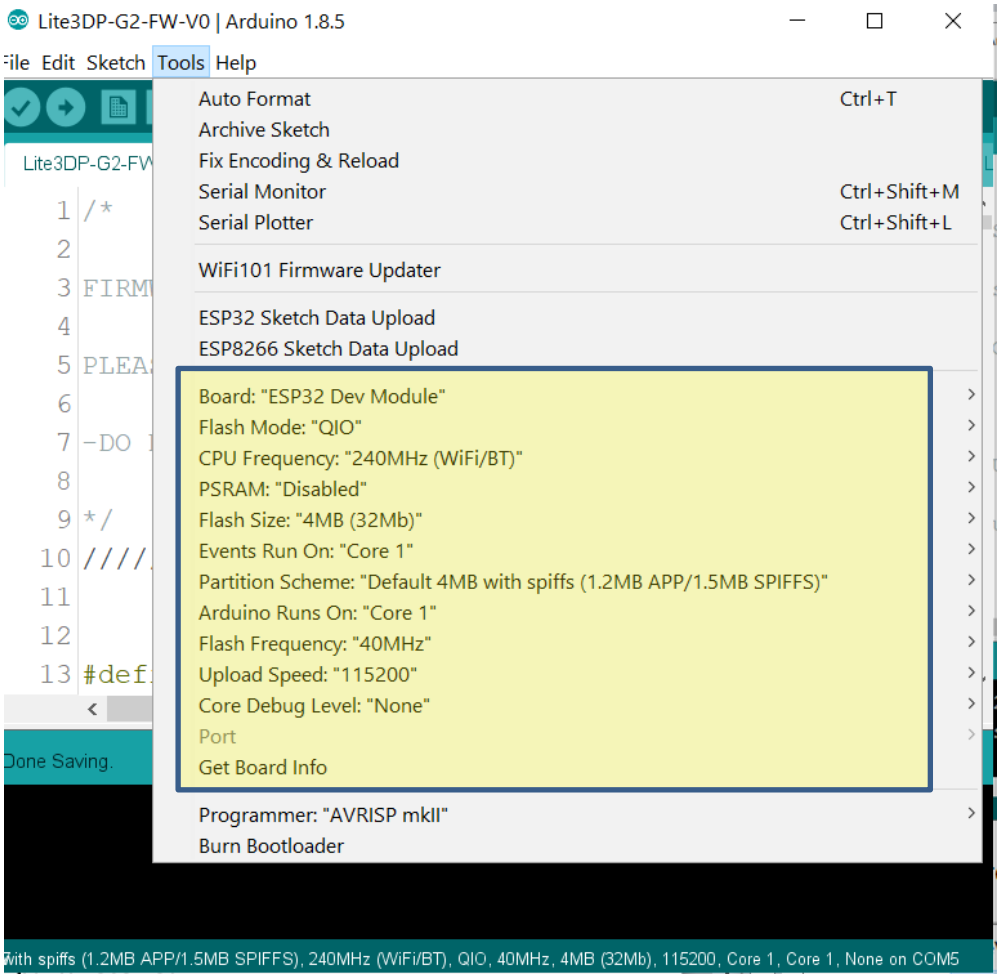
Libraries to be added:

- Adafruit_BusIO.zip
- Adafruit_GFX_Library.zip
- Adafruit_SH110X.zip
- PNGdec-master.zip
- SDFat.zip
- TFT_eSPI-master.zip
- XPT2046_Touchscreen-master.zip

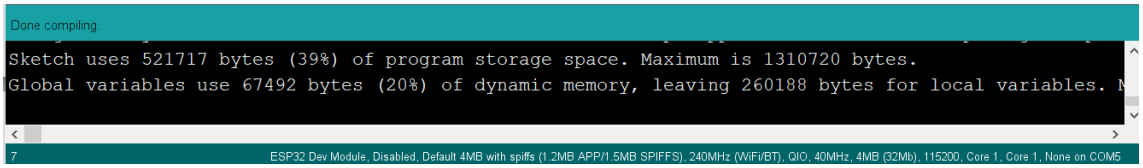
3. Open the corresponding Lite3DP firmware in the Arduino IDE:

| |
|---|
| **LITE3DP-G2-TOUCH.ino** |
| **LITE3DP-G2-OLED.ino** |

4. Select the following options:

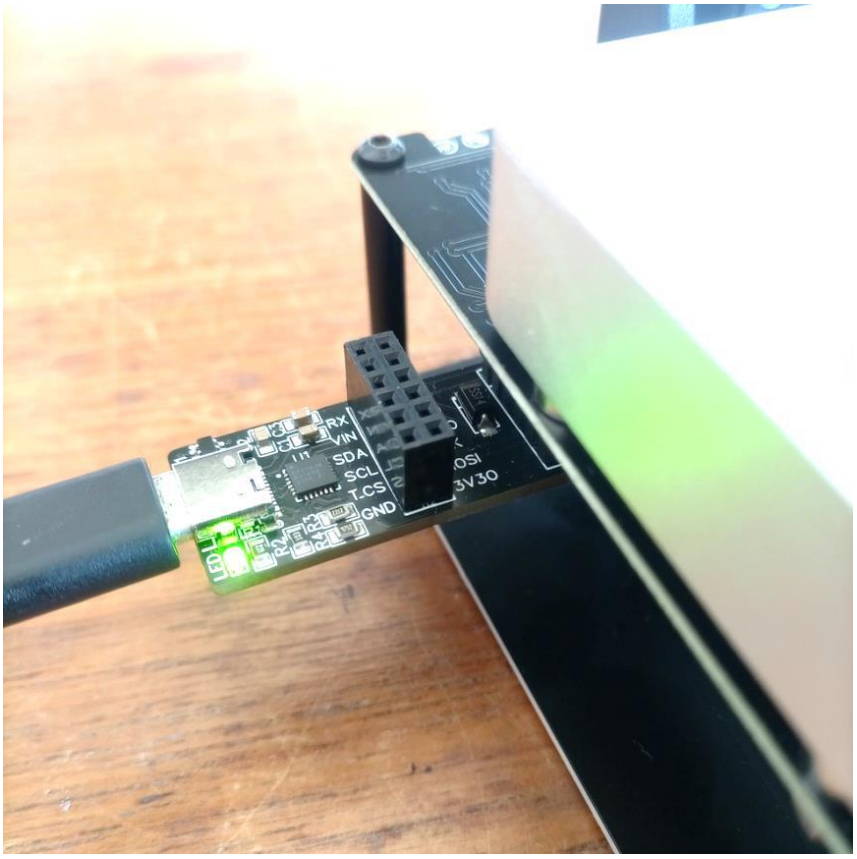


5. Hit verify/compile  and you should get:

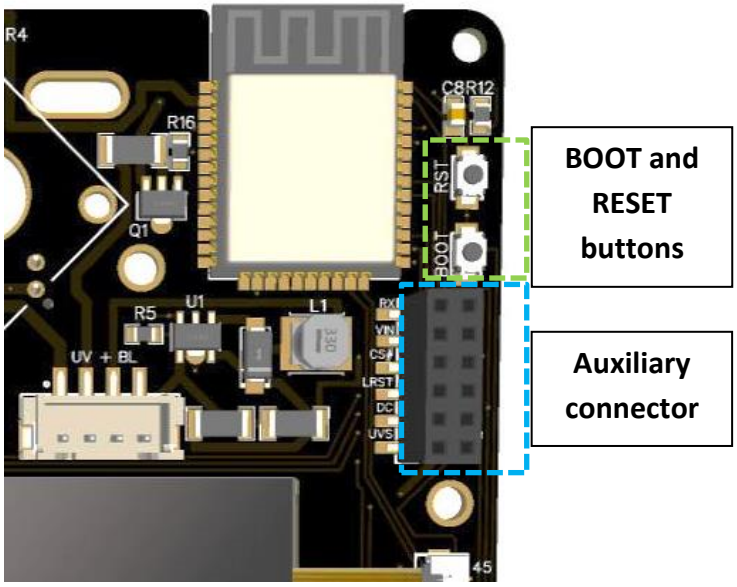



6. Connect the CP2102 board to the auxiliary connector and then the USB-C cable to computer.

CAUTION: Improper connection of the CP2102 board to the mainboard may cause permanent damage.



7. Before upload the firmware, press BOOT, and without releasing it, press RST. Let go of both buttons and the ESP32 will enter upload mode.




8. Select the correct COM port.

9. Hit Upload  until the upload is complete.