

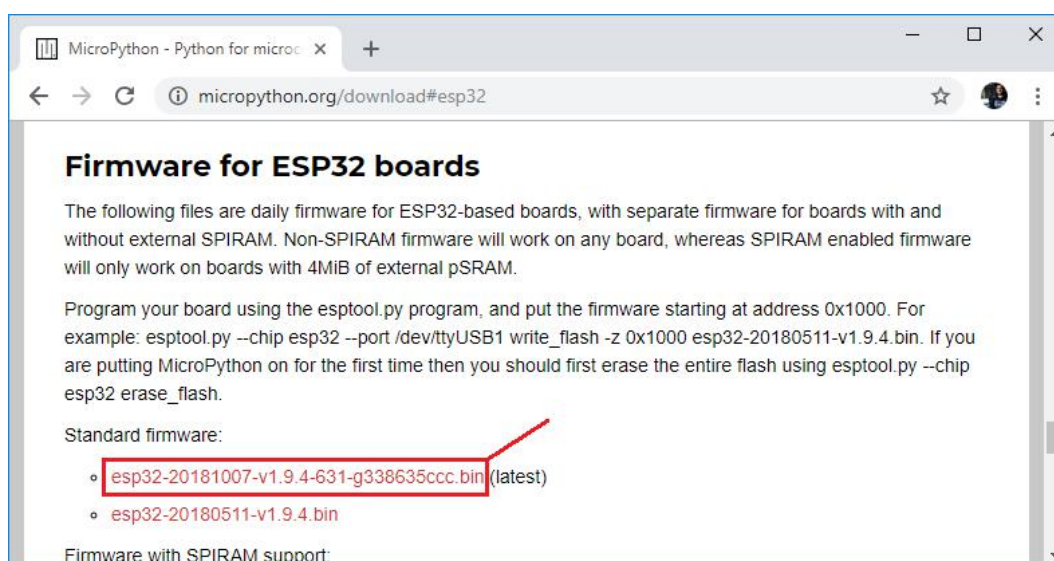
Flash/Upload MicroPython Firmware to ESP32

Installing uPyCraft IDE:

You can learn more about uPyCraft IDE on its [GitHub](#) repository, browse uPyCraft IDE source code, or click this link to download uPyCraft IDE: <https://github.com/DFRobot/uPyCraft>

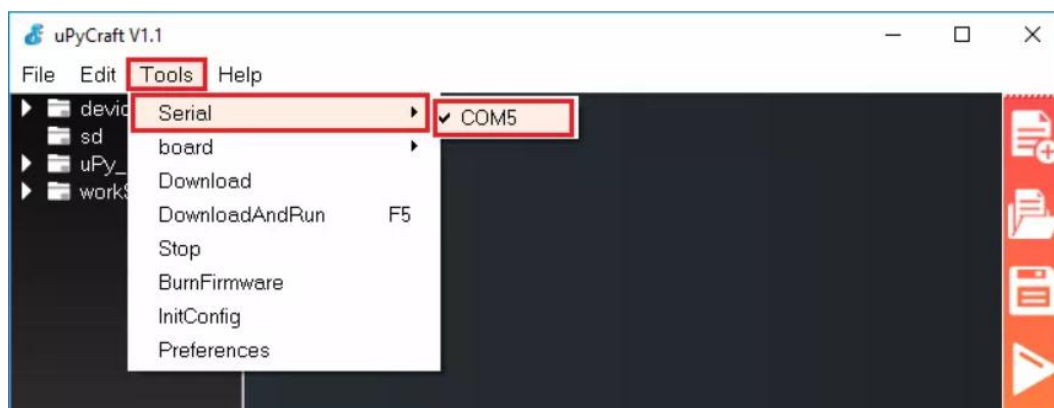
To download the latest version of MicroPython firmware for the ESP32, go to the <http://micropython.org/download#ESP32> and scroll all the way down to the ESP32 section.

You should see a similar web page (see figure below) with the latest link to download the ESP32 .bin file – for example: esp32-20181007-v1.9.4-631-g338635ccc.bin.



Selecting Serial Port

Go to Tools > Serial and select your ESP32 COM port (in our case it's COM5).



Important: if you plug your ESP32 board to your computer, but you can't find the ESP32 Port available in your uPyCraft IDE, it might be one of these two problems: 1. USB drivers missing or 2. USB cable without data wires.

You can download the CP2102 drivers through the following link:

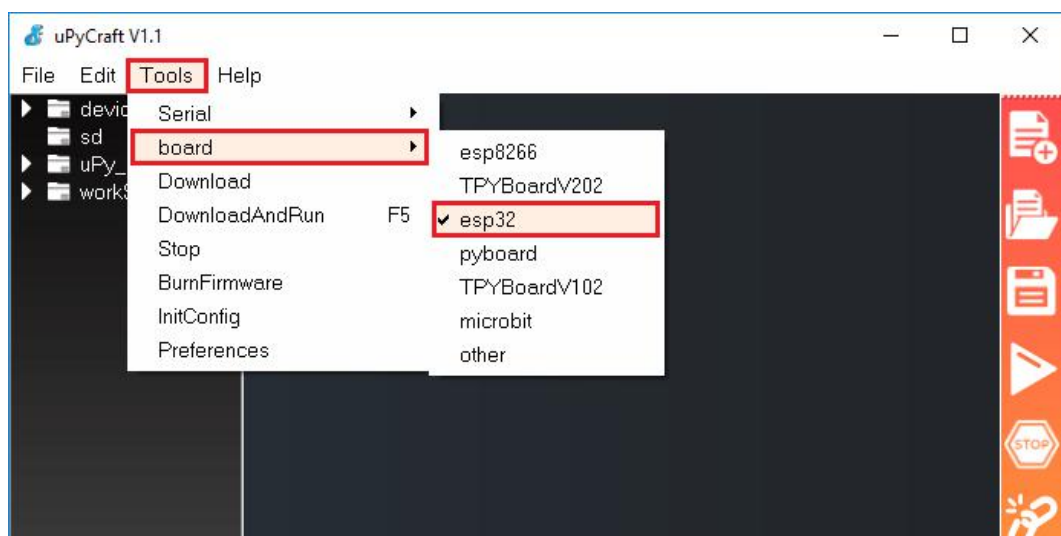
<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>

After they are installed, restart the uPyCraft IDE and you should see the COM port in the Tools menu. If you have the drivers installed, but you can't see your device, double-check that you're using a USB cable with data wires.

USB cables from powerbanks often don't have data wires (they are charge only). So, your computer will never establish a serial communication with your ESP32. Using a proper USB cable should solve your problem.

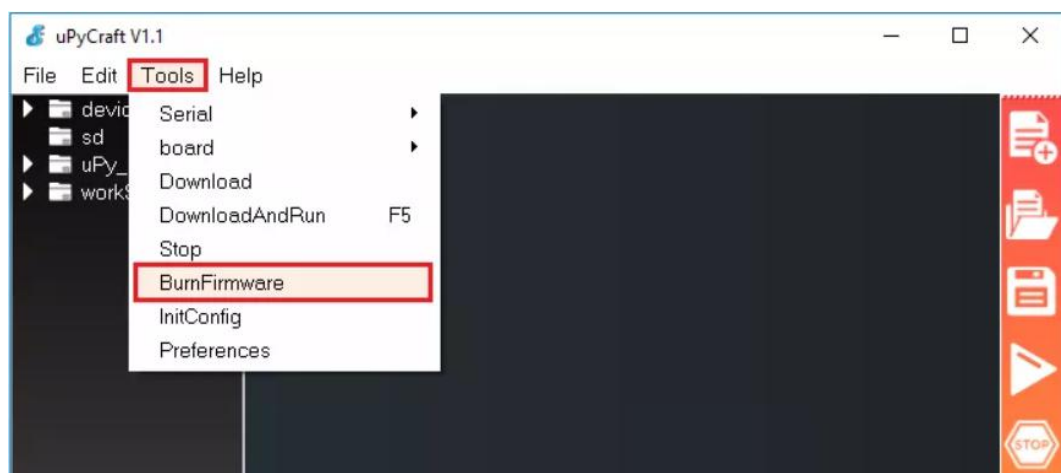
Selecting the Board

Go to Tools > Board. For this tutorial, we assume that you're using the ESP32, so make sure you select the "ESP32" option:



Flashing/Uploading MicroPython Firmware

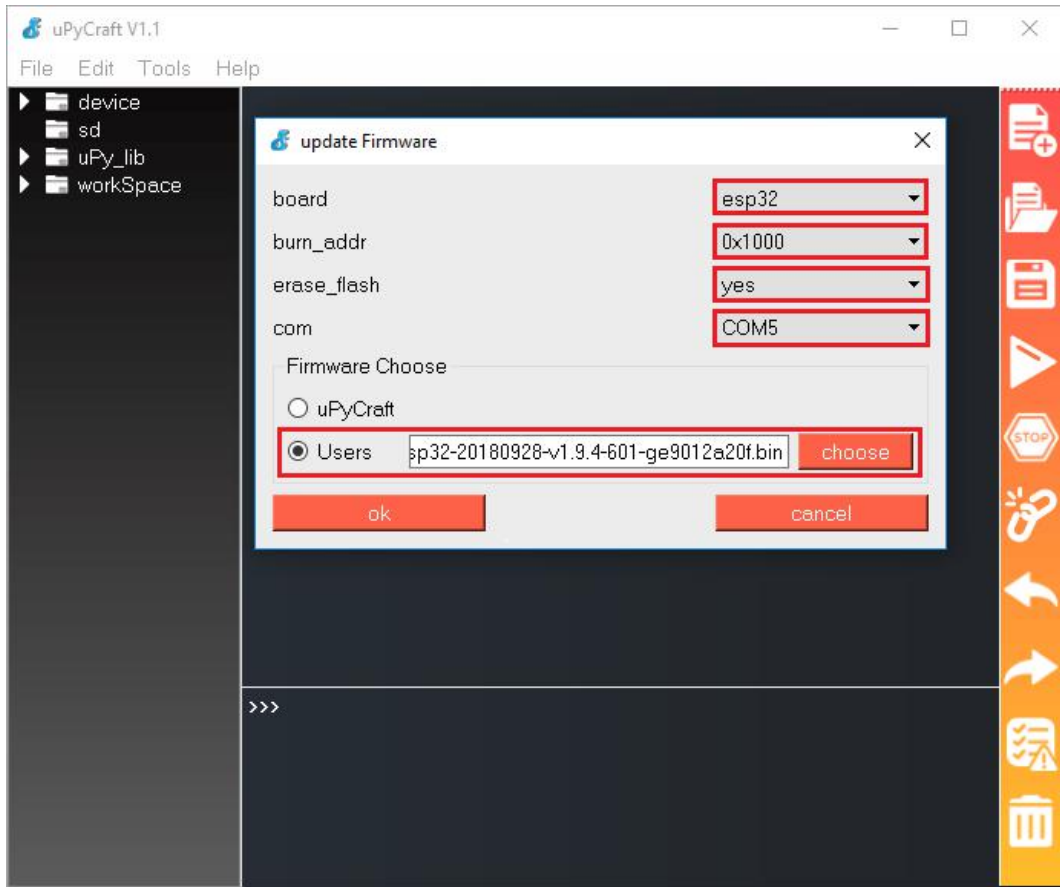
Finally, go to Tools > BurnFirmware menu to flash your ESP32 with MicroPython.



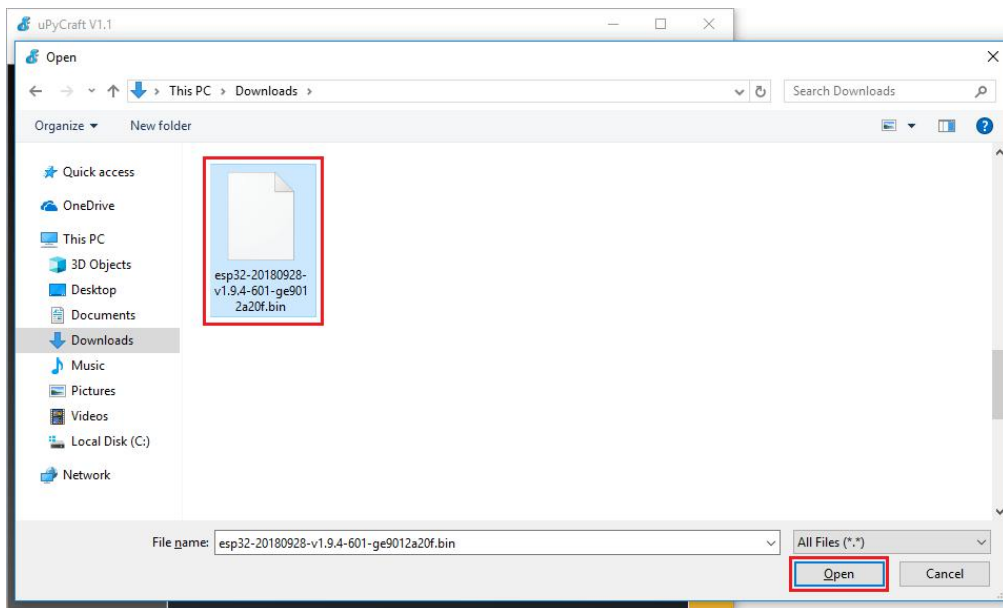
Select all these options to flash the ESP32 board:

- board: ESP32

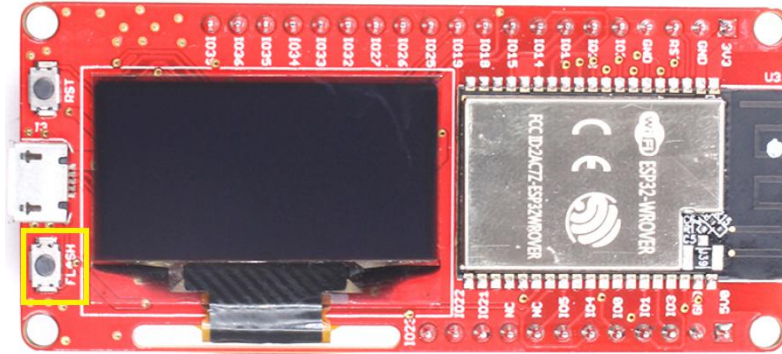
- burn_addr: 0x1000
- erase_flash: yes
- com: COMX (in our case it's COM5)
- Firmware: Select "Users" and choose the ESP32 .bin file downloaded earlier



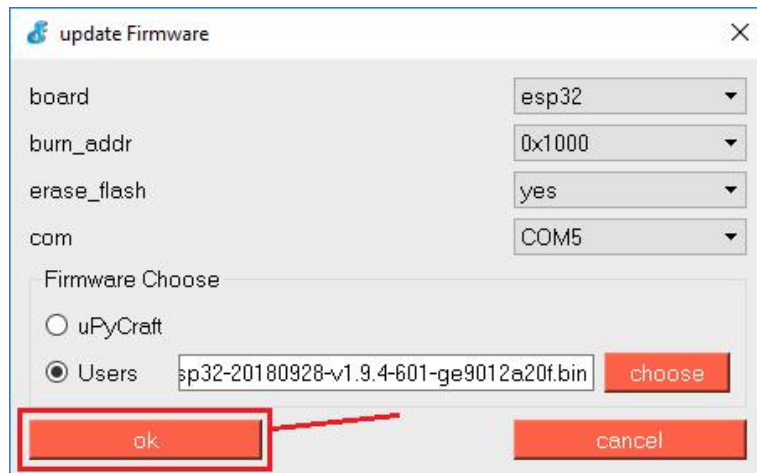
After pressing the "Choose" button, navigate to your Downloads folder and select the ESP32 .bin file:



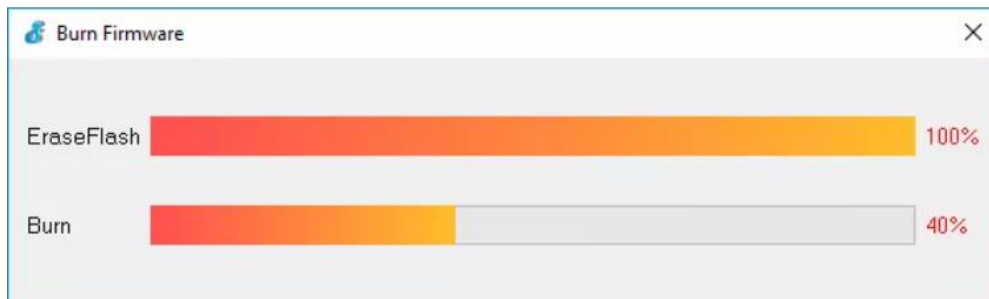
Having all the settings selected, hold-down the “FLASH” button in your ESP32 board:



While holding down the “FLASH”, click the “ok” button in the burn firmware window:



When the “EraseFlash” process begins, you can release the “FLASH” button. After a few seconds, the firmware will be flashed into your ESP32 board.



***Note:** if the “EraseFlash” bar doesn’t move and you see an error message saying “erase false.”, it means that your ESP32 wasn’t in flashing mode. You need to repeat all the steps described earlier and hold the “FLASH” button again to ensure that your ESP32 goes into flashing mode.

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