ESPrtk blog for DIY User - ESP32 RTK.

ESPrtk tutorial.

NON CLASSÉ

How to use Flash Download Tools to flash .bin file for ESP32.

Date: 23 December 2018 **0 Comments**

Download flash tool from espressif

Link: **Dowload** — (Google Cloud)

Flash Download Tools (ESP8266 & ESP32) Windows PC

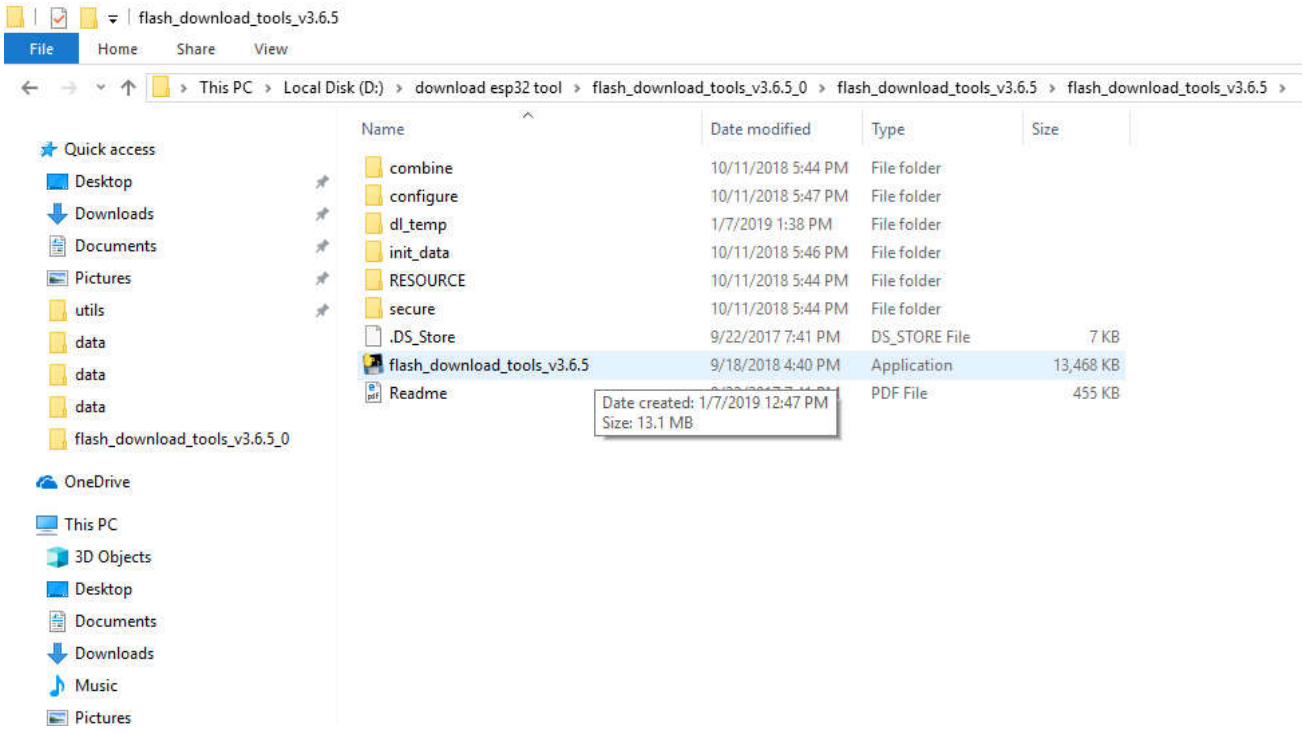
This turtorial use version: Windows PC – V3.6.5 .

Download Test Firmware for ESPrtk :

Link : Download — (Google Cloud)

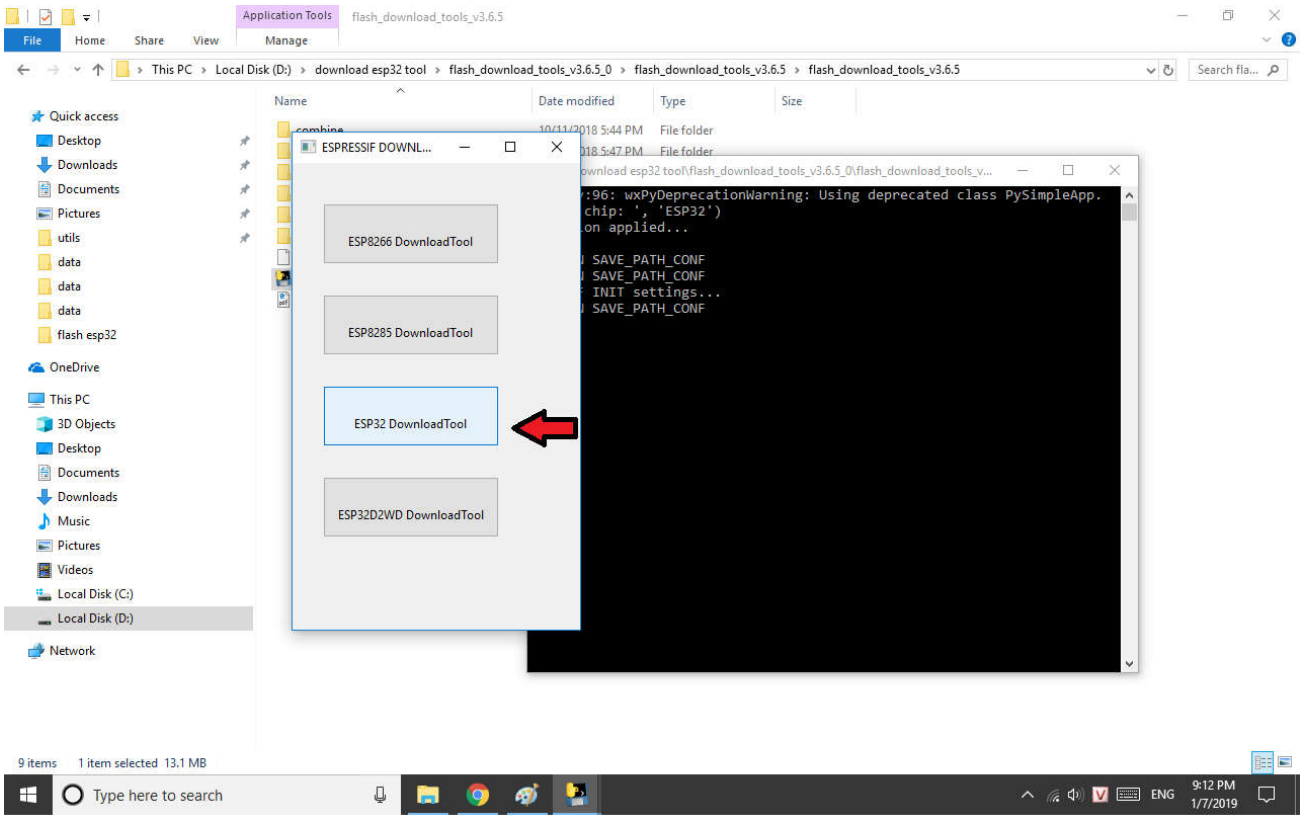
Open the software.

Extract the downloaded file, find the software named “fash_download_toolv365.exe”.



(Full size)

Run the software, a new window appears with 4 subprograms. Please select “ESP32 downloadtool”.



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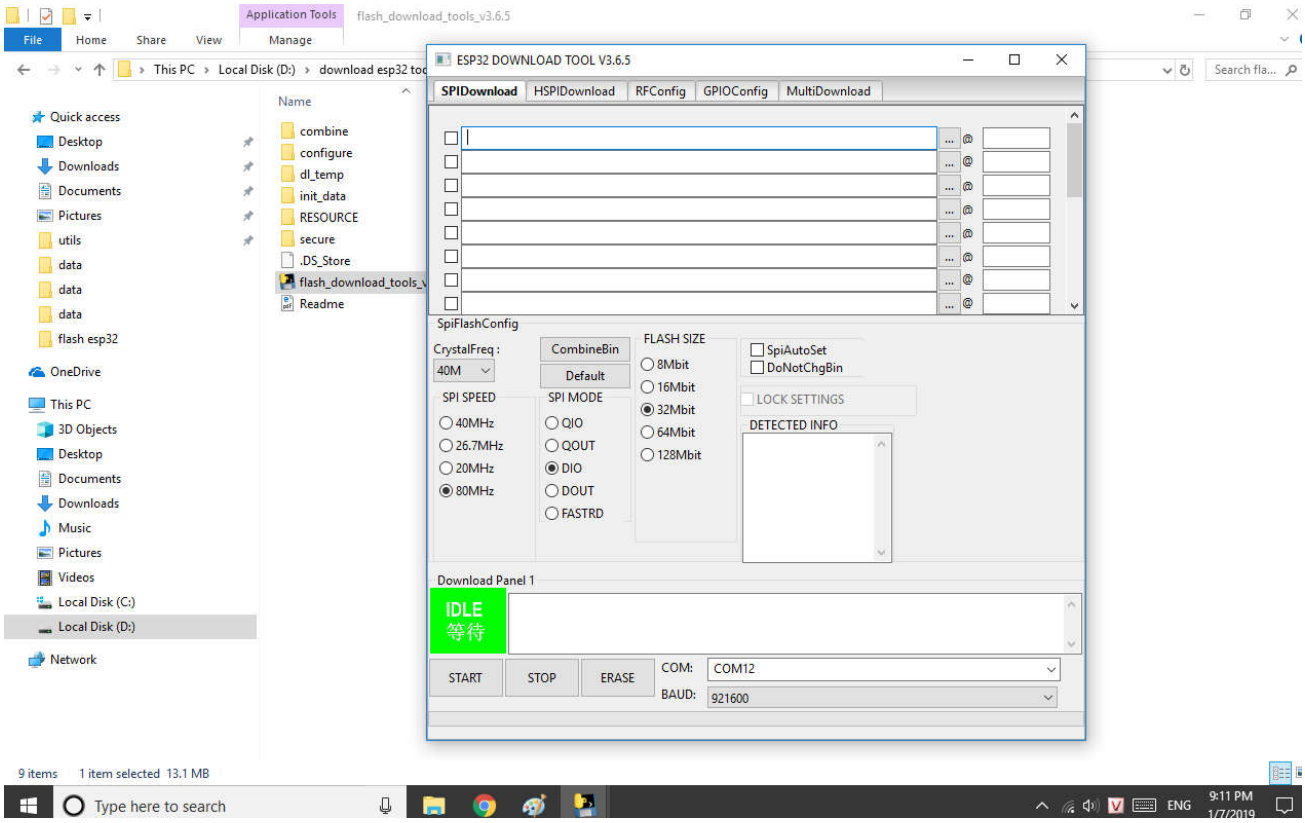
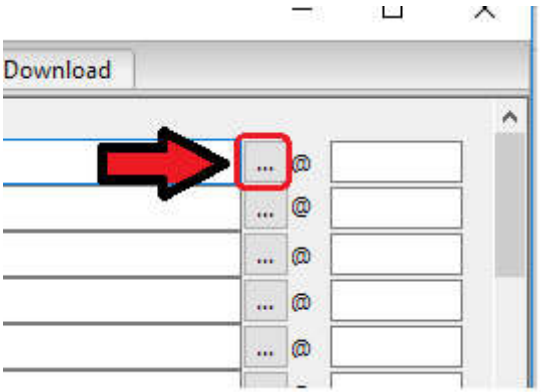
A new window with the interface as shown below



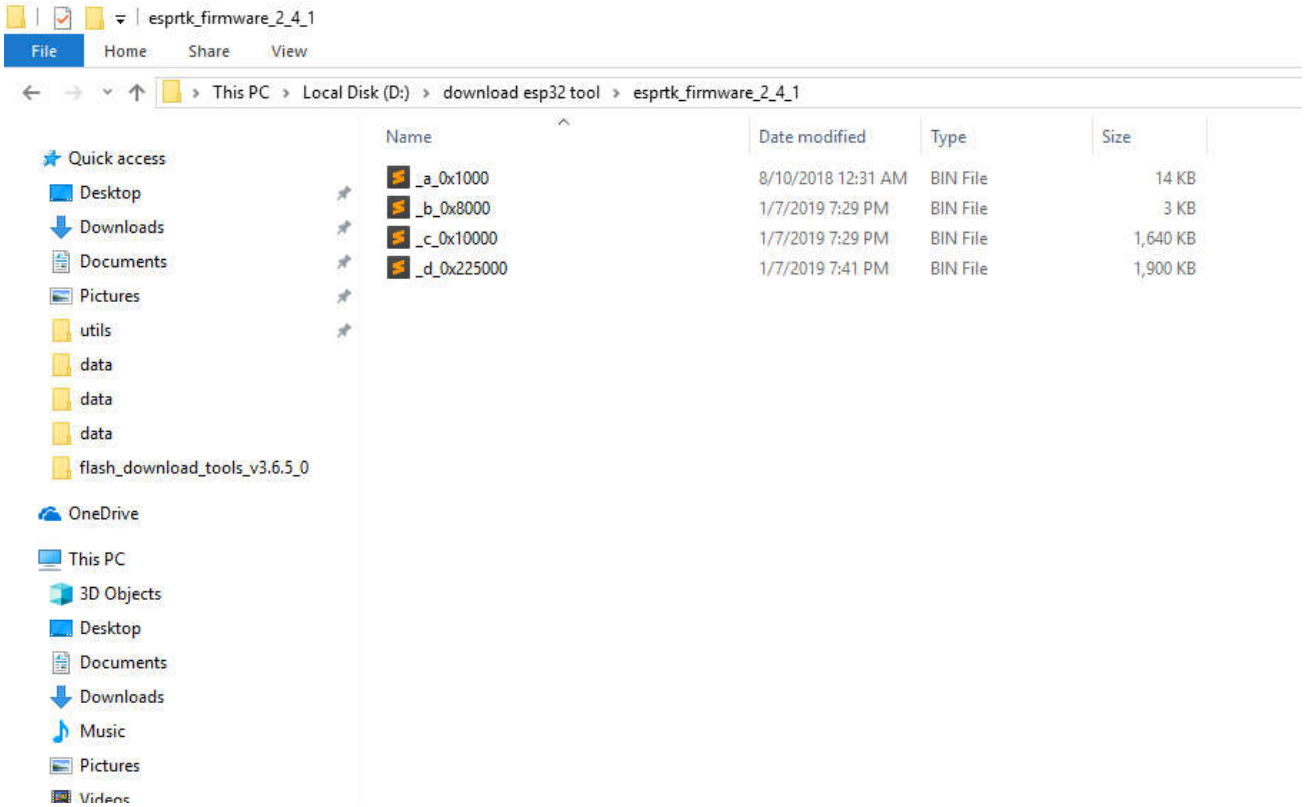
(Full size)

Add files:

Click the … button to add the .bin file component.



(Full size)



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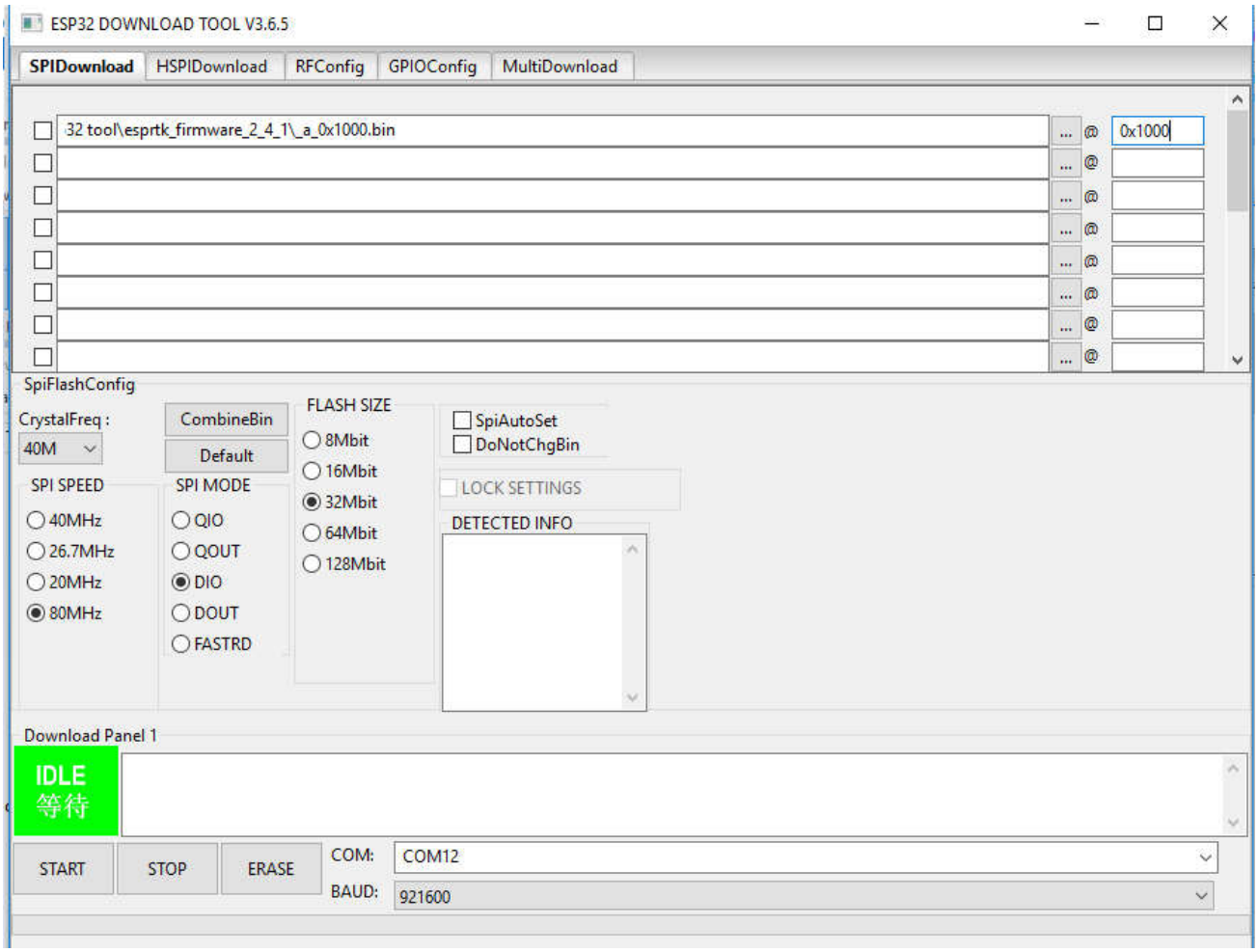
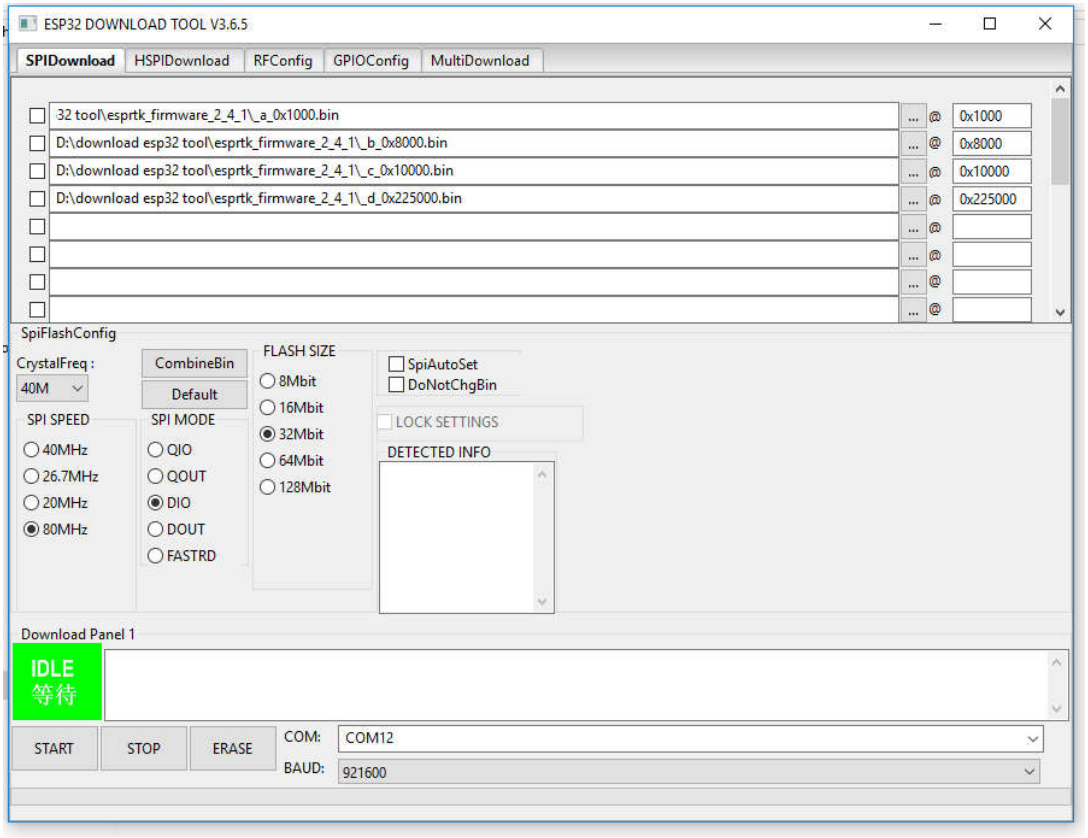


(Full size)

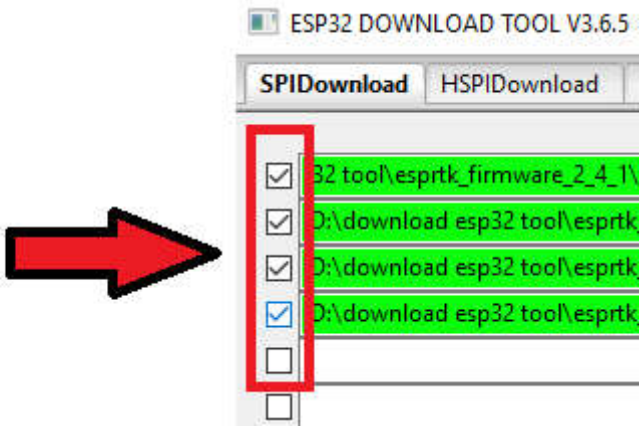
Find the folder containing the firmware files for esp32. Click and enter the address in the following order:

Type	File name	Address
Bootloader	_a_0x1000.bin	0x1000
Partition Table	_b_0x8000.bin	0x8000
Main File	_c_0x10000.bin	0x10000
SPIFFS	_d_0x225000.bin	0x225000



(Full size)

Tick on the selected buttons on all files:

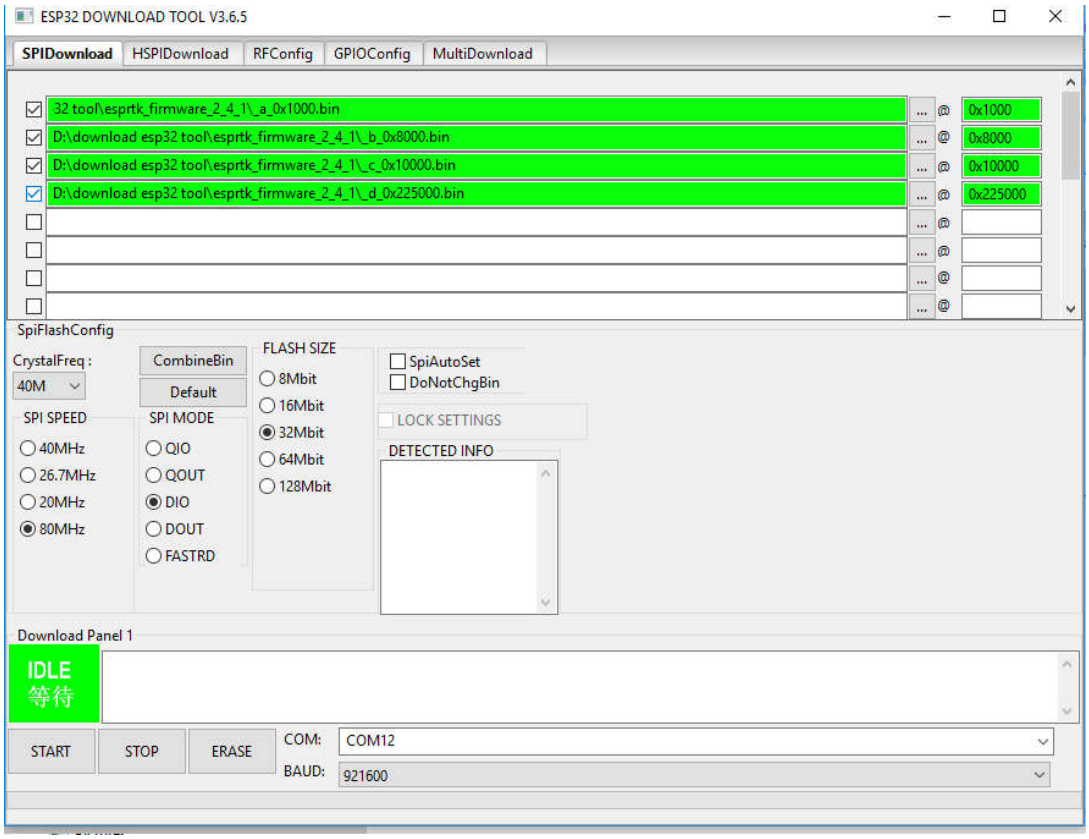


(Full size)

Upload configuration for ESPrtk is:

- CrystalFreq: 40MHz.
- SPI Speed: 80MHz.
- SPI Mode: DIO.

- Flash Size: 32Mbit.
- SPIAutoset: No Select.
- DoNotChgbin: No Select.



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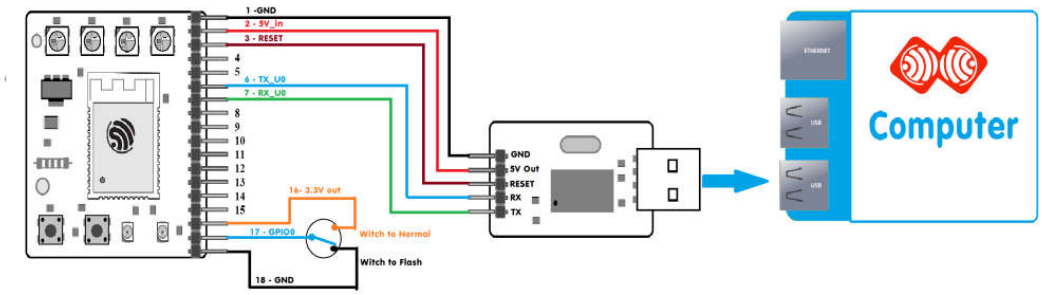
Flash

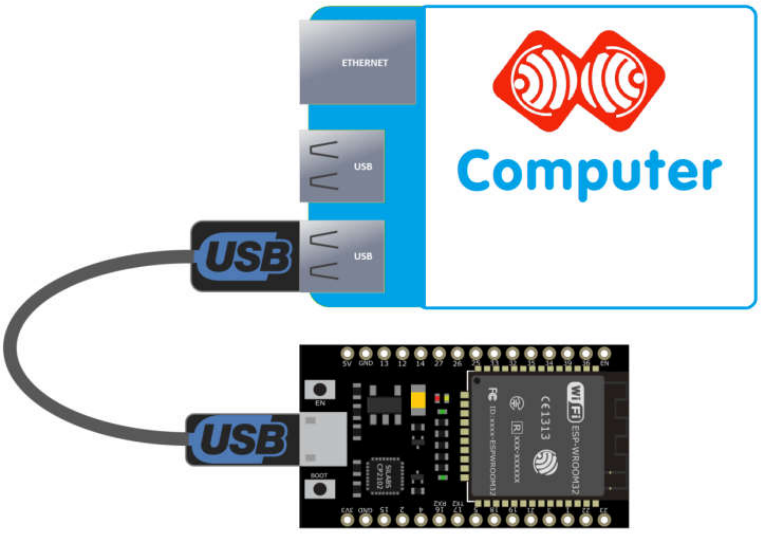
Pull GPIO0 **LOW** by pressing the “program” button on your development board. Reset the ESP32 by pressing the EN button momentarily while holding down the IO0 button.



Hardware connection to Flash ESP32 - ESPrtk

(Full size)

(You do not need to do this if ESP32 is mounted on the development board that supports automatically pulling IO0 pins such as DEVCKIT, NodeMCU boards, …)



Hardware connection to Flash ESP32 - ESPrtk - DEV Board

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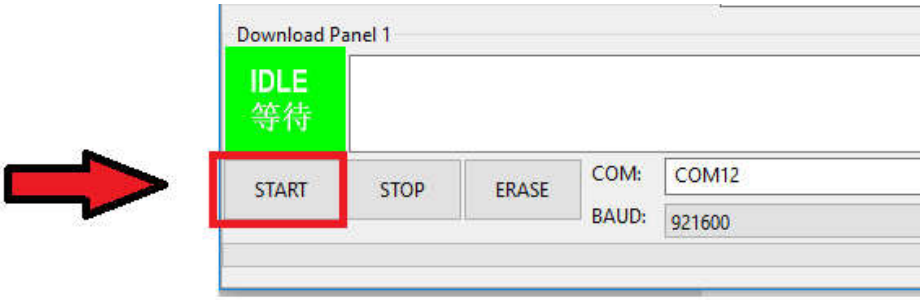
Now the ESP32 will successfully enter the flash programming mode. You can now set the files and check the required BIN file slots in the software such that they are all set to be downloaded into the flash.

Make sure that the COM port has been correctly selected. The download tool would typically automatically detect an USB-UART converter.

Next press the Start button to continue and flash the BIN files into your ESP32 module, ESP32 will return information about the MAC address and the progress bar will start running.



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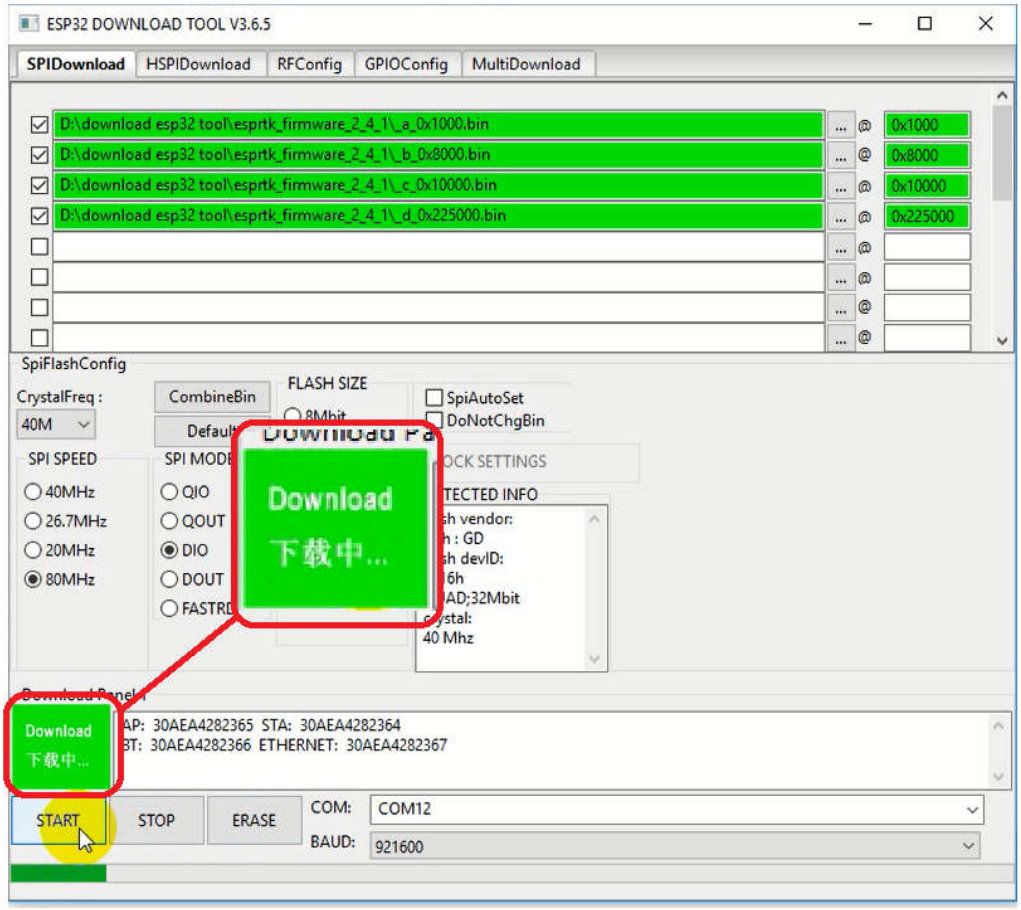
Status box switch to mode: “Download”



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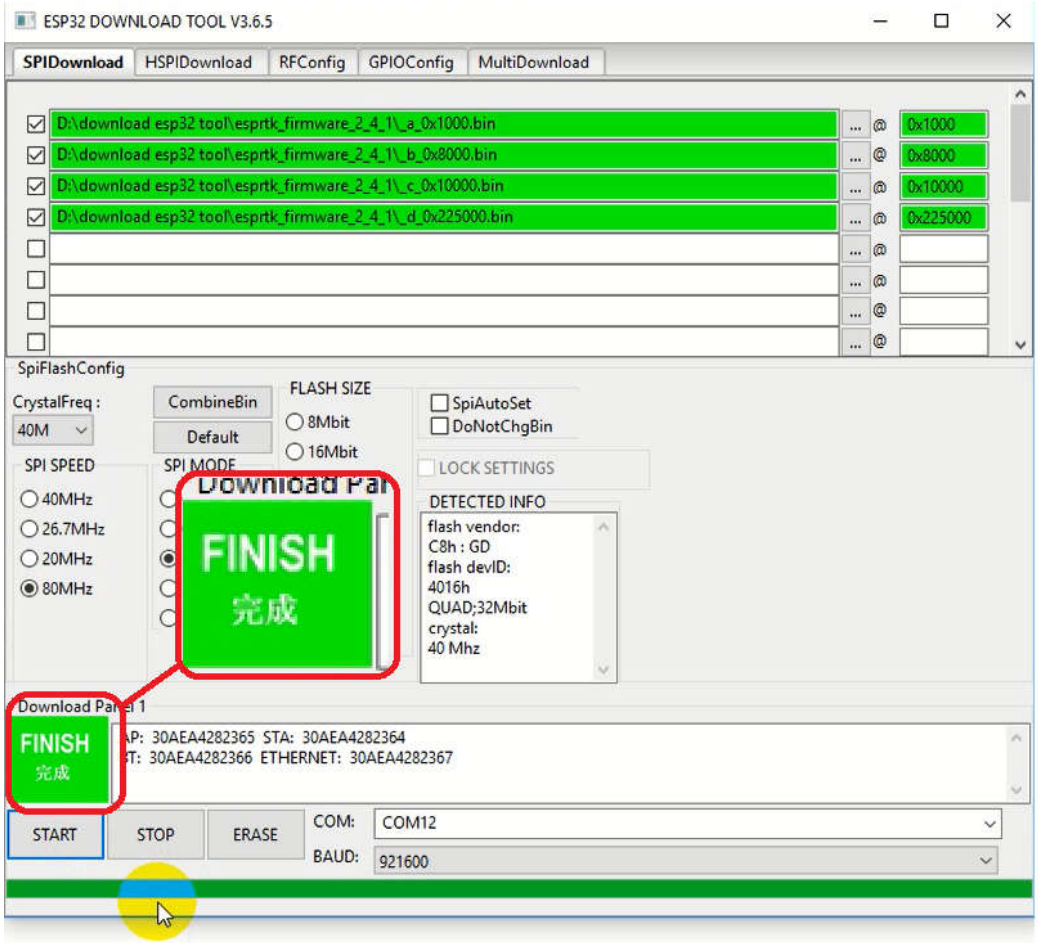
Flash complete, Status box switch to mode: “Finish”



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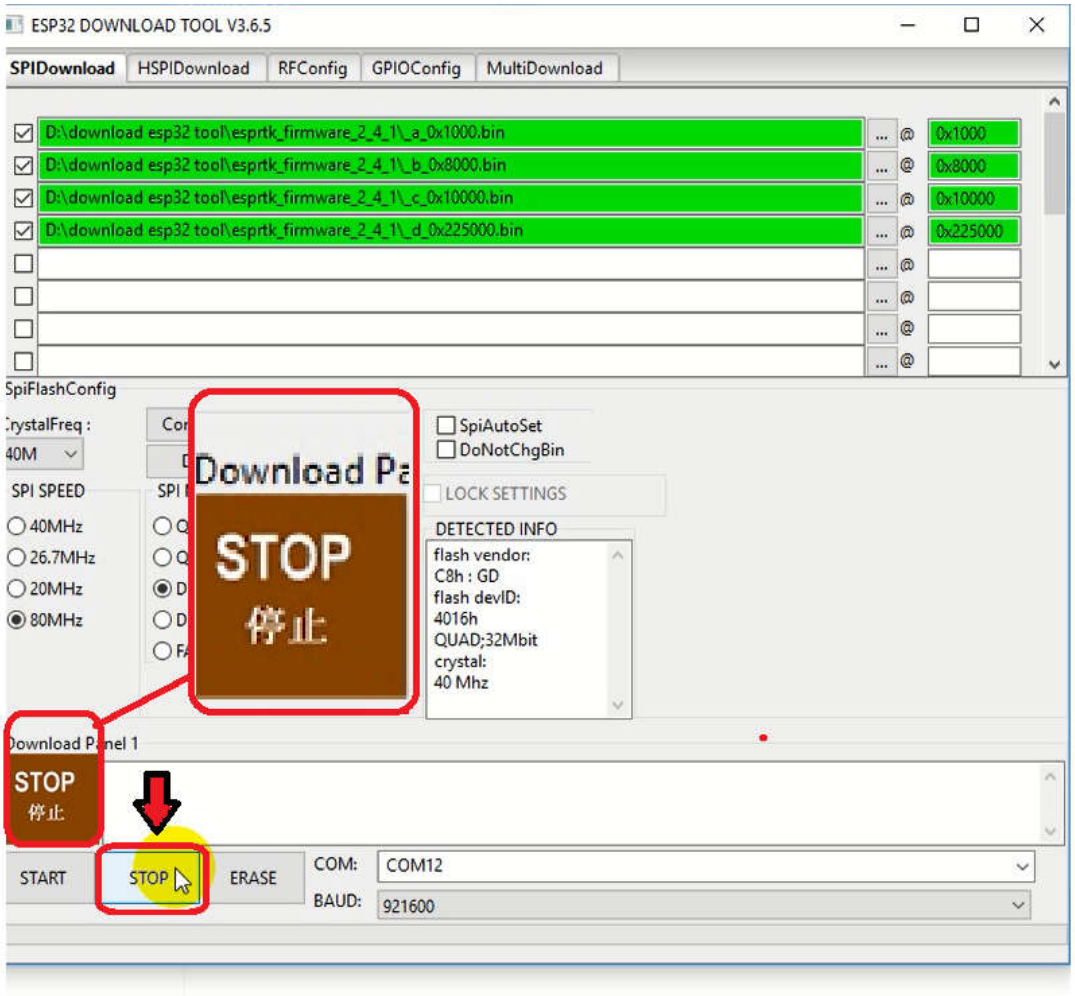
Now, press the STOP button, Status box changes to: “STOP”.



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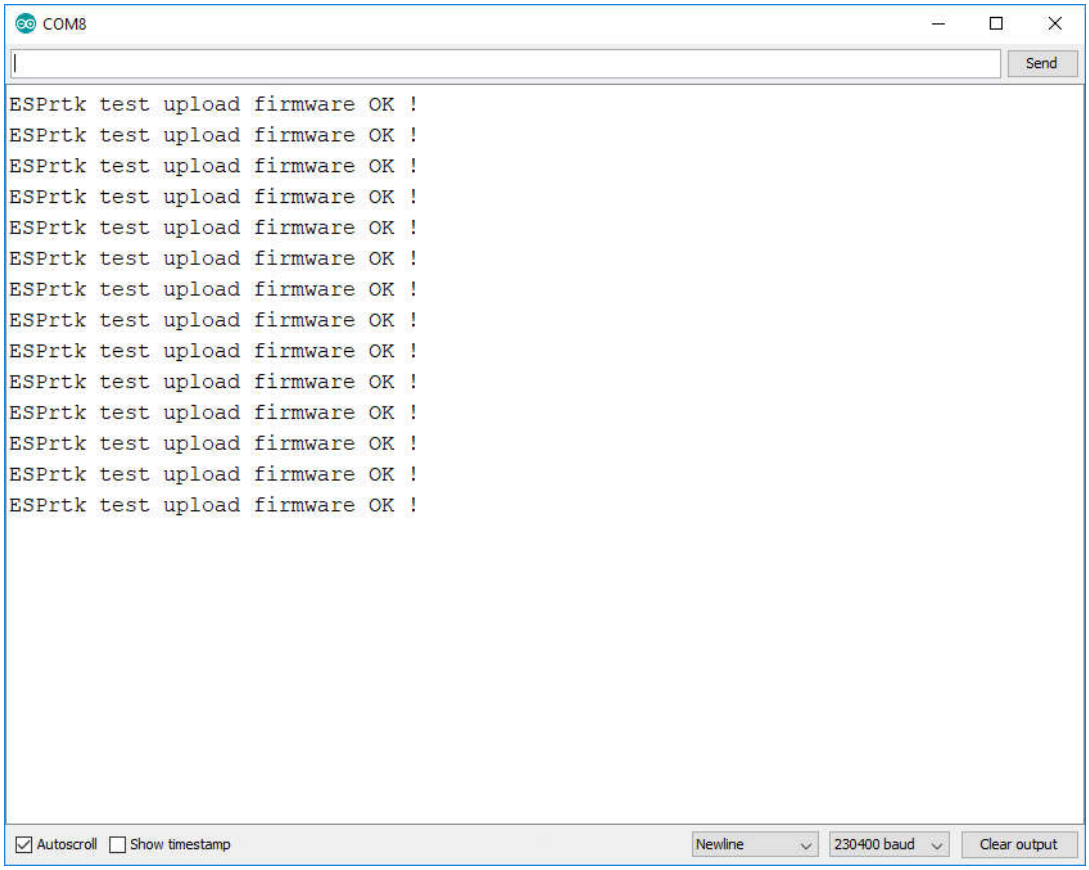
You can see a short video bellow :

Check.

After upload success, Press reset button on ESP32 and open Serial Terminal at baudrate 230400 to see output messeage.



Now upload firmware to ESP32 to use as ESPrtk , Click here .