



ESP8266 flash firmware

ISEN 2022-2023

Toulon

DOCS

- All documentation is available on this website : <https://docs.espressif.com/>
- Especially :
<https://www.espressif.com/en/products/socs/esp8266ex/resources>
https://docs.espressif.com/projects/espat/en/latest/esp32/Get_Started/Downloading_guide.html

DOWNLOAD

- Download last ESP8266 firmware here : https://docs.espressif.com/projects/esp-at/en/release-v2.2.0.0_esp8266/AT_Binary_Lists/ESP8266_AT_binaries.html
- Download to your platform the NodeMCU flasher : <https://github.com/marcelstoer/nodemcu-pyflasher/releases>

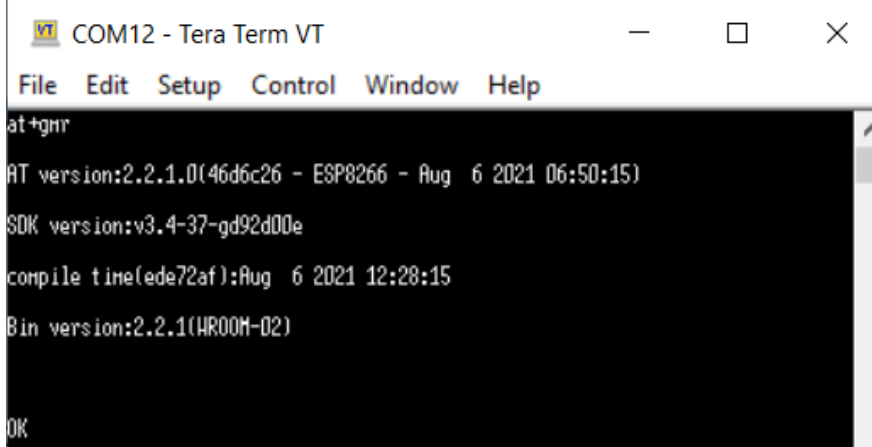
Warning: You may need to install python in your platform to run the logiciel.

TEST NODEMCU AND FIRMWARE

- Connect usb serial on NodeMCU.
- Open a port COM terminal and configure serial port with:
 - Baudrate: 74880
 - Data: 8 bits
 - Parity: none
 - Stop bits: 1
- Reset NodeMCU.
- If some bootloader info are printed after reset, mcu is working.

Warning: Make sure that your terminal send CR+LF both !!

- Then, connect an usb to uart on D8(Tx) and D7(Rx) pins.
- Change serial port, connect and modify the baudrate to 115200.
- Try to send AT command.
- For example, AT+GMR indicate the firmware version.
- If other information are printed, HAYES protocol is not supported.



The screenshot shows a terminal window titled "COM12 - Tera Term VT". The menu bar includes "File", "Edit", "Setup", "Control", "Window", and "Help". The terminal content shows the command "at+gmr" being entered, followed by the output: "AT version:2.2.1.0(46d6c26 - ESP8266 - Aug 6 2021 06:50:15)", "SDK version:v3.4-37-gd92d00e", "compile time(ede72af):Aug 6 2021 12:28:15", and "Bin version:2.2.1(WROOM-02)". The cursor is at the end of the output, and the prompt "OK" is visible at the bottom left.

```
at+gmr
AT version:2.2.1.0(46d6c26 - ESP8266 - Aug 6 2021 06:50:15)
SDK version:v3.4-37-gd92d00e
compile time(ede72af):Aug 6 2021 12:28:15
Bin version:2.2.1(WROOM-02)
OK
```

FLASH FIRMWARE

- Run **NodeMCU-PyFlasher**.
- Select the serial port.
- Select the binary file previously downloaded :
 - `.\ESP8266-IDF-AT_V2.2.1.0\ESP8266-AT-V2.2.1.0\factory\factory_WROOM-02.bin`
- Check DIO mode.
- Erase all flash data.
- Flash NodeMCU.
- Reset after download.

