Using MicroPython on a WeMOS Mini D1 (clone)

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General instructions: <https://randomnerdtutorials.com/getting-started-thonny-micropython-python-ide-esp32-esp8266/>

Prepare the D1 (not needed if it already has the Python image)

from <https://randomnerdtutorials.com/flashing-micropython-firmware-esptool-py-esp32-esp8266/>

* Download the python image from <https://micropython.org/download/all/> , I used <https://micropython.org/resources/firmware/esp8266-1m-20200902-v1.13.bin>
* (assuming you have a python installed)
* C:\Program Files (x86)\Python36\python
* Python –m pip install esptool (administrator rights required)
* Python –m esptool –chip esp8266 erase\_flash (note the port)
* Python –m esptool --chip esp8266 --port COM4 write\_flash --flash\_mode dio --flash\_size detect 0x0 esp8266-1m-20200902-v1.13.bin

For ESP32:

(nodemcu did NOT work, wemos lite is OK, on-board LED at 22, ttgo met oled/lipo is OK, geen on-board LED: <https://forums.4fips.com/viewtopic.php?f=3&t=6905> )

* [esp32-idf4-20200902-v1.13.bin](https://micropython.org/resources/firmware/esp32-idf4-20200902-v1.13.bin)
* Python –m esptool --chip esp32 --port COM4 erase\_flash
* Python –m esptool --chip esp32 --port COM4 write\_flash --flash\_mode dio --flash\_size detect esp32-idf4-20200902-v1.13.bin
* Python –m esptool --chip esp32 --port COM4 write\_flash --flash\_mode dio --flash\_size detect 0x1000 esp32-idf4-20200902-v1.13.bin

On your laptop

* Install ThonnyIDE from <https://thonny.org/>
* Run it, Tools>Options>Interpreter>MicroPython (ESP8266/ESP32), select serial port
* (check) in the lower command prompt, type help()
* Blinky:

|  |
| --- |
| from machine import Pin  from time import sleep  led = Pin(2, Pin.OUT)  while True:  led.value(not led.value())  sleep(0.5) |

Notes

* <https://awesome-micropython.com/>
* <https://docs.micropython.org/en/latest/esp8266/tutorial/network_basics.html>