

D1 mini NodeMCU Wifi IOT devkit board ESP-12F



Features:

- ~ 11 digit input/output pins, all pins have interrupt/pwm/I2C/one-wire supported (except D0)
- ~ 1 Analog input (3.2V max input)
- ~ a Micro USB connection
- ~ Compatible with gizDuino and Arduino boards
- ~ Compatible with NodeMCU

Specifications:

- Operating Voltage:** 3.3V DC
- Digital I/O Pins:** 11
- Analog Input Pins:** 1 (Max input:3.2V)
- Clock Speed:** 80MHz/160MHz
- Flash:** 4M bytes
- Weight:** 10g
- PCB Dimensions:** 34.2 mm x 25.6mm

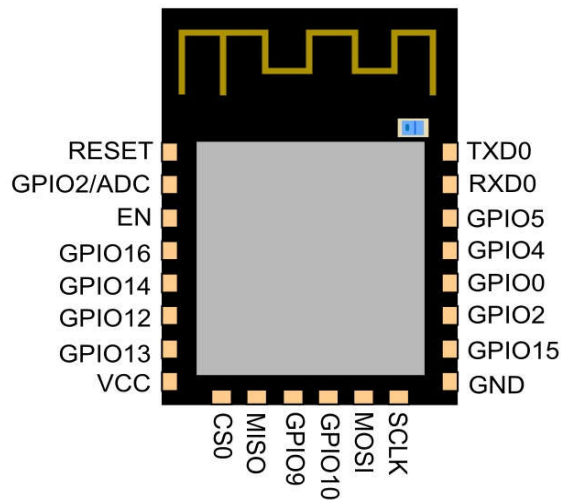


Figure 1. ESP-12F pinouts.

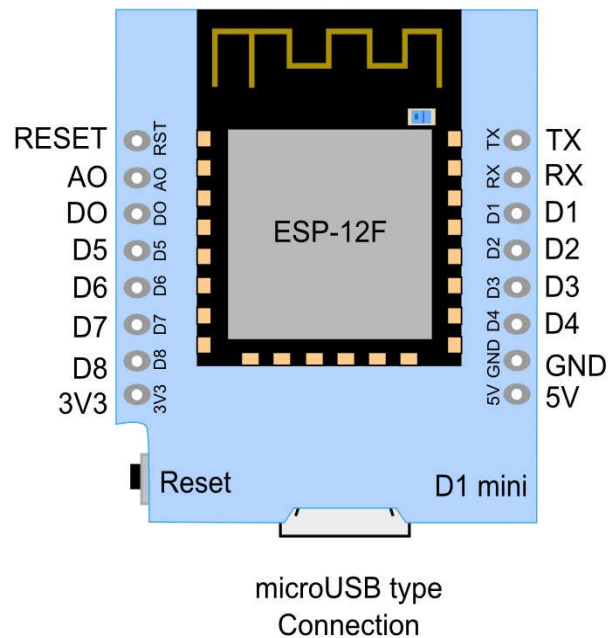


Figure 2. D1 Mini NodeMCU.

Table 1. Pin

Pin	Function	ESP-8266 Pin
TX	TXD	TXD
RX	RXD	RXD
A0	Analog input, max 3.3V input	A0
D0	IO	GPIO16
D1	IO,SCL	GPIO5
D2	IO,SDA	GPIO4
D3	IO,10k Pull-up	GPIO0
D4	IO,10k Pull-up, BUILTIN_LED	GPIO2
D5	IO,SCK	GPIO14
D6	IO,MISO	GPIO12
D7	IO,MOSI	GPIO13
D8	IO,10k Pull-down, SS	GPIO15
G	Ground	GND
5V	5V	-
3V3	3.3V	3.3V
RST	Reset	RST

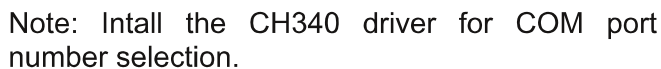
Updating Firmware NODEMCU



1. Connect the D3 and D8 to the Ground.
2. Connect the D1 mini to PC, using microUSB type connector.



Click the gear icon: select the
nodemcu_float_0.9.5_20150318.bin
Address: 0x000000



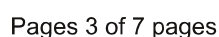
Part1: Updating Firmware NodeMCU

1. Download the NODEMCU FIRMWARE PROGRAMMER. (go to our website at e-gizmo.net search the device).
2. ADVANCED: Set Baudrate, Flash size, Flash speed, SPI Mode.



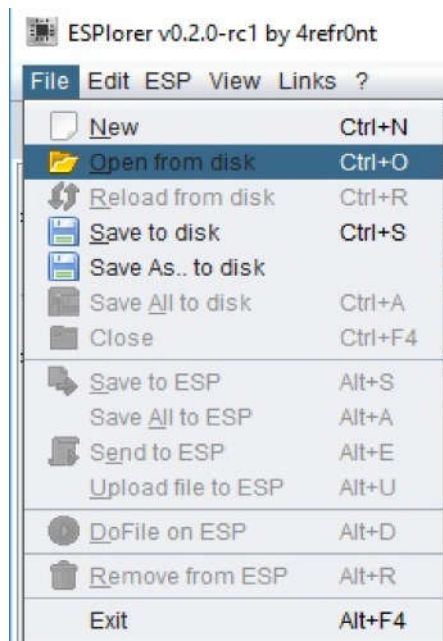
Select the correct COM #
the Click the Flash (F), the MAC addresses and a
QR-CODE image will show if the flash is success.
Then wait to Finish bootloading..

After bootload is done, disconnect the D3 and D8 from the ground.

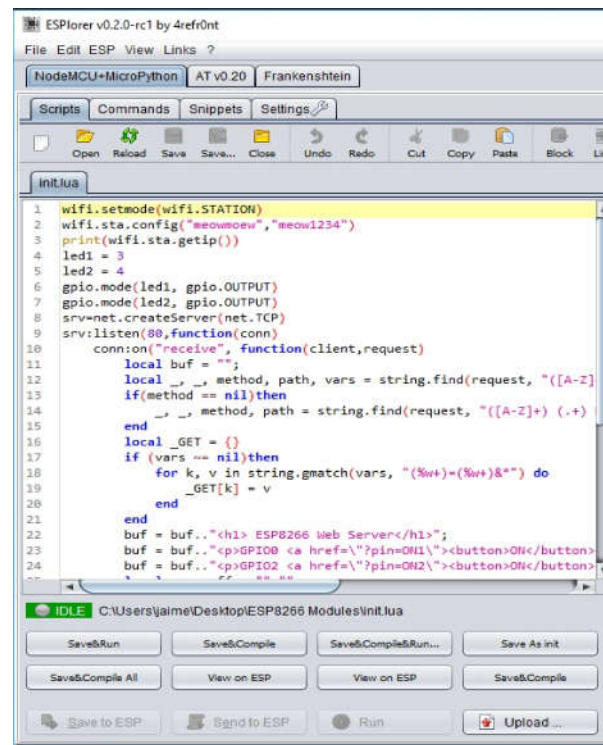


B: Download the ESPlorer

1. Open the ESPlorer.(Download this to our website)
2. Connect the D1 mini NodeMCU module to your PC.
3. In ESPlorer, go to File>Open.

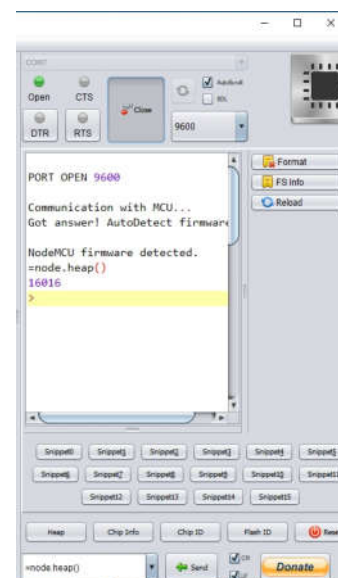
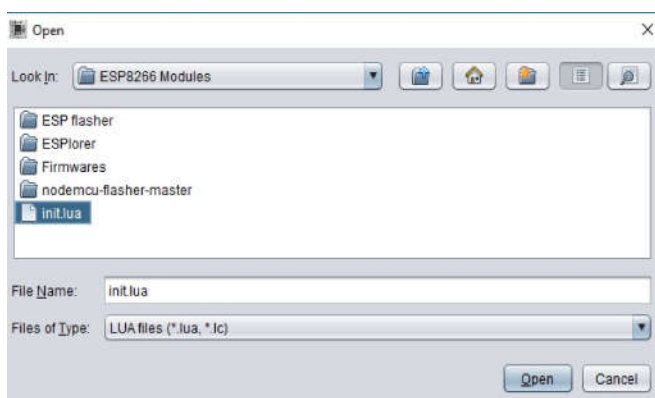


Set your available Wi-Fi connection: "SSID","Password"



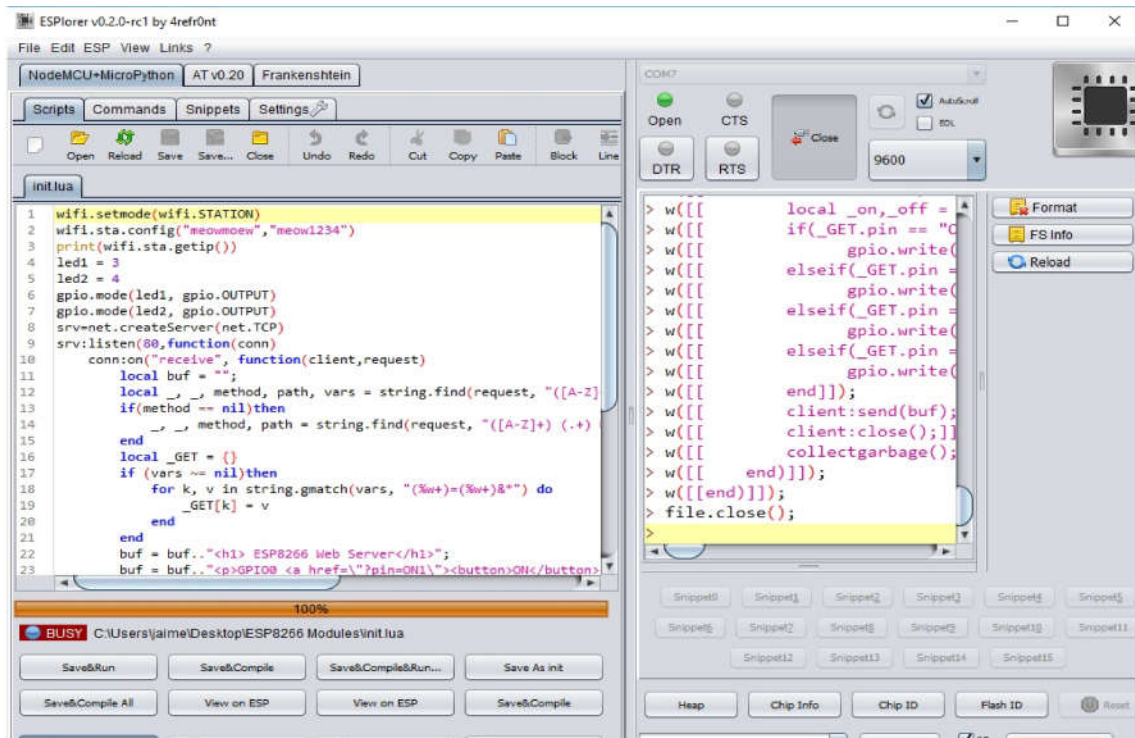
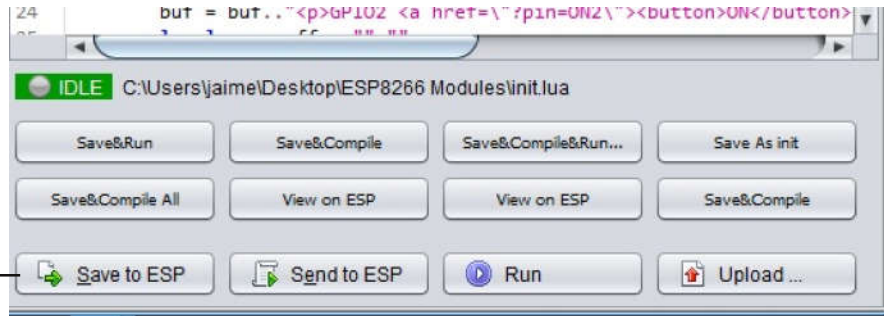
Select COM#, Baudrate: 9600 Click OPEN and Reset.

Open the init.lua example



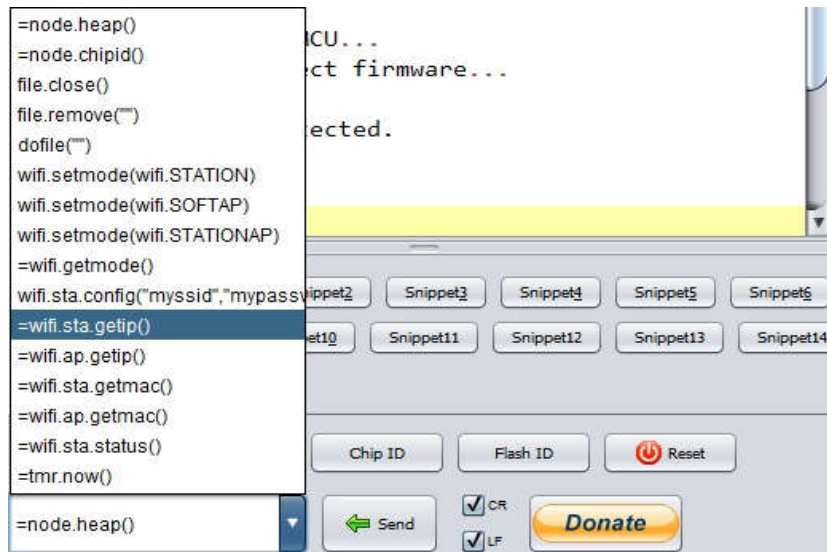
Reset.

Click **SAVE to ESP.**

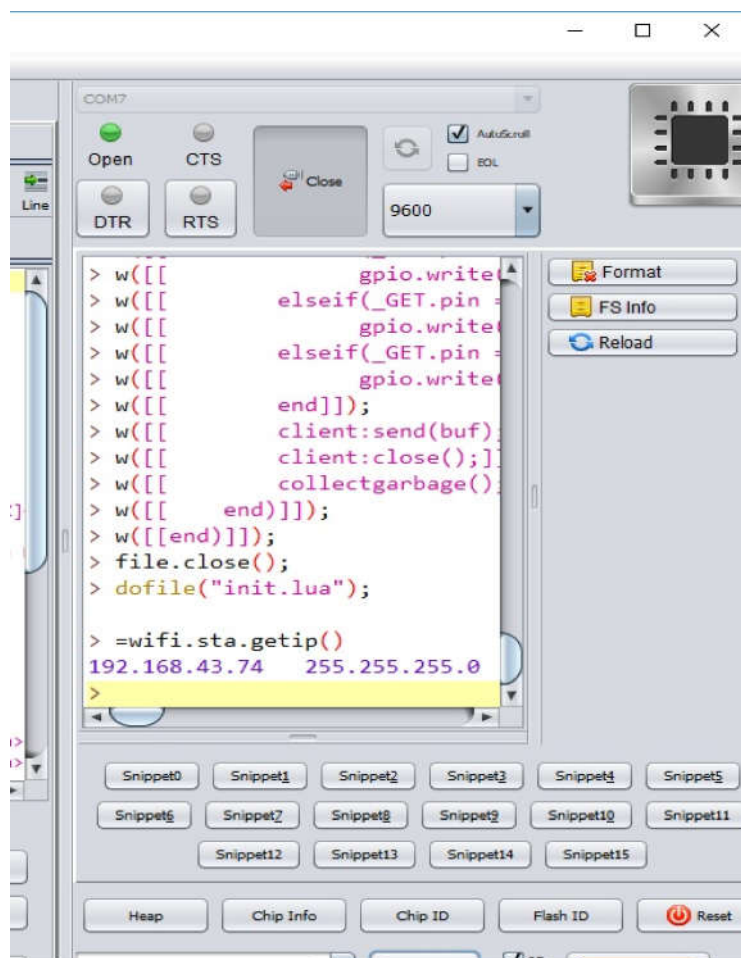


Wait until completed **100% done.**

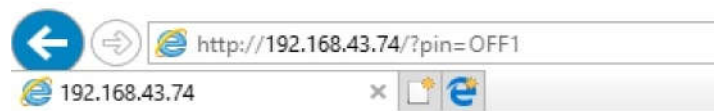
**Then select the
"=wifi.sta.getip()"
to get the IP address
Click SEND.**



**You will see the given IP address
from the router.
e.g 192.168.43.74**



C. Open your Internet Browser. Then type the IP address. The page will show on the tab.



ESP8266 Web Server

GPI00	ON	OFF
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GPIO2 ☒ ON ☐ OFF

Wiring Diagram.

Press the Button ON and OFF either on the two pins, LED will turn in High or Low state.

Done you may now control the ESP using Wifi connections.

