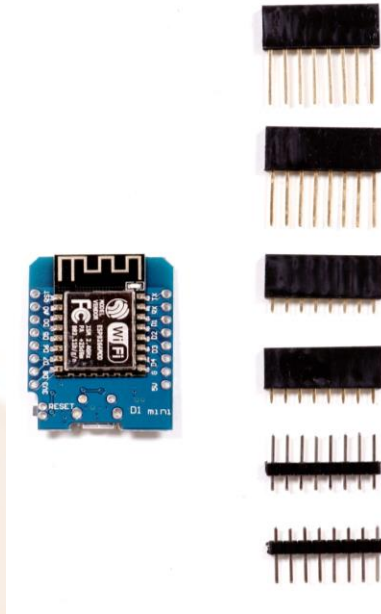


Wemos D1 Mini ESP8366 Wifi Module



The D1 Mini is a WiFi capable ESP8266 based development board in the form of the common Arduino UNO compatible board format. This board is compatible with the Arduino IDE and with NodeMCU. The D1 Mini also features an on-board switching power supply which allows to power the board from a power supply up to 12V

FEATURES:

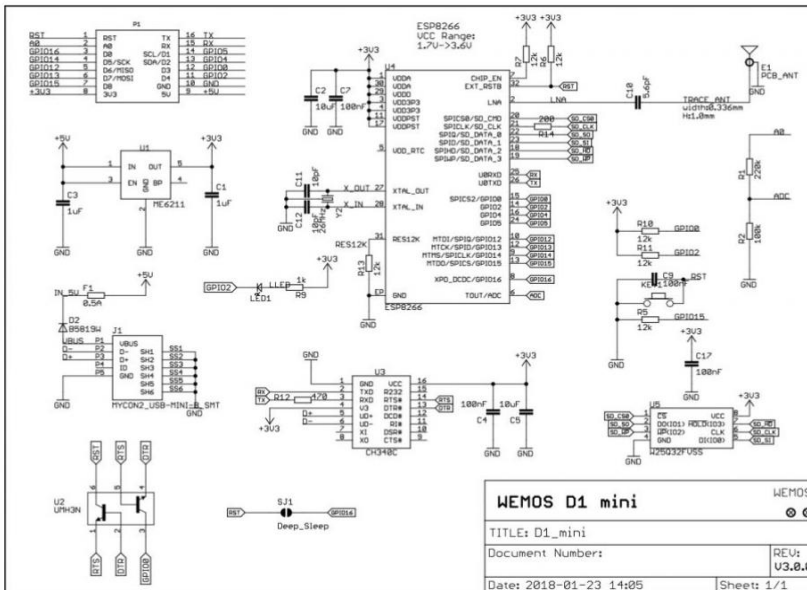
- Use BRT (Bias Resistor Transistor)
- Easier into flash mode.
- 30% increase in radiating area
- Good stability.
- 11 digital input/output pins, all pins have interrupt/pwm/I2C/one-wire supported(except for D0)
- 1 analog input(3.2V max input)
- Micro USB connection
- Compatible with Arduino

- Compatible with nodemcu
- Support OTA wireless uploading
- 11 x I/O pins, 1 x ADC pin

SPECIFICATIONS:

- Microcontroller ESP-8266EX
- Operating Voltage 3.3 V
- Digital I/O Pins 11
- Analog Input Pins 1(Max input: 3.2V)
- Clock Speed 80MHz/160MHz
- Flash 4M bytes
- Length 34.2mm
- Width 25.6mm

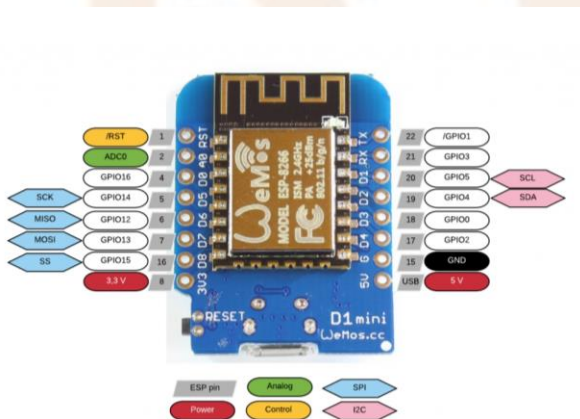
SCHEMATIC DIAGRAM:



FUNCTIONAL DESCRIPTION:

- Esp8266 D1 Mini NodeMCU Wifi Development Board is an Arduino Compatible mini wifi board with 4MB flash based on ESP8266EX. The board is with 11 digital input/output pins, all pins have interrupt/PWM/I2C/one-wire supported(except D0) 1 analog input(3.3V max input) and a Micro USB connection.
- The development board features WiFi-SoC ESP8266 and is made for fast Internet-of-Things (IoT) prototyping. It is flashed with the latest firmware version and can be set up and programmed right away with the onboard micro USB connection. With only a few lines of code, the NodeMCU Dev Kit connects to your local network and ready for control by other network members like computers and smartphones.
- The D1 mini is an ESP8266 development board that is compact, versatile and very easy to use with the Arduino IDE. It supports natively by the Expressive SDK

PIN FUNCTION:



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	3.3	3.3
RST	Reset	RST

APPLICATIONS:

- IOT Projects
- Access Point Portals
- Wireless Data logging
- Smart Home Automation
- Learn basics of networking
- Portable Electronics
- Smart bulbs and Sockets