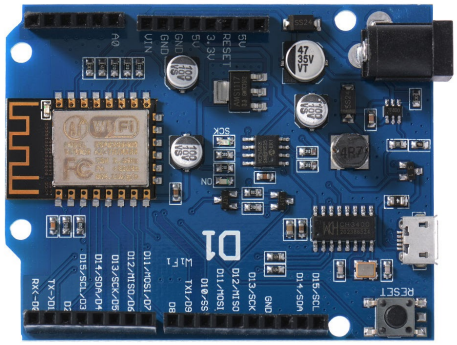
WeMos D1 R2 Board ESP8266 Arduino NodeMCU Compatible Development Board



This WeMos D1 R2 development board for Arduino / NodeMCU is a WiFi capable ESP8266 based development board in the format of the Arduino UNO R3. This board is compatible with the Arduino IDE and with NodeMCU.

The D1 features an on-board switching power supply which allows you to power the board from a power supply up to 24V, 11 GPIO pins (can be used as input/output/PWM/I²C, except D0), and 1 analog input. The PWM resolution is 10bit (1MHz frequency). The integrated 5V switching power supply (1A) is followed by a 3.3V LDO to supply power for the Wifi module and the 3.3V output (power supply for sensors and shields). Please pay attention when you connect other active peripherals to the I/O pins, because this is a 3.3V logic level device and higher levels on any pin could damage it. The maximum input voltage for the analog pin is 3.2V.

Specifications:

- 80 MHz Processor / 4M Flash
- FCC Certified ESP8266-12F Module
- 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
- Power jack, 9-24V power input
- All IO pins are 3.3V and have interrupt/pwm/I2C/one-wire support except D0

Arduino/WEMOS Resources and Guides:

- Programming the ESP8266 WEMOS-D1 Using the Arduino IDE on Instructables:
- http://envistia.info/programming-wemos-d1-instructables
- ESP8266 Chipset Datasheet: http://envistia.info/esp8266-chipset-datasheet
- ESP8266 Arduino Core Reference: http://envistia.info/esp8266-arduino-core-reference
- How-To installation Video for Arduino IDE from educ8s.tv: http://envistia.info/wemos-d1-tutorial-youtube
- ESP8266 and Arduino on Github: http://envistia.info/esp8266-arduino-github
- Getting Started with Arduino: http://envistia.info/ardgetstarted
- Arduino Software (IDE) download link: http://envistia.info/arduinoide

The CH340G USB drivers may need to be installed on your computer before using this UNO board with the Arduino IDE. CH340G USB Bus Converter driver download links:

- http://envistia.info/ch340win7drvr
- http://envistia.info/ch340win8drvr
- http://envistia.info/ch340serialdrvr (Serial Driver for Win10, Linux, Mac)