

Arduino ESP8266 Remote Serial Port WIFI Transceiver Wireless Module

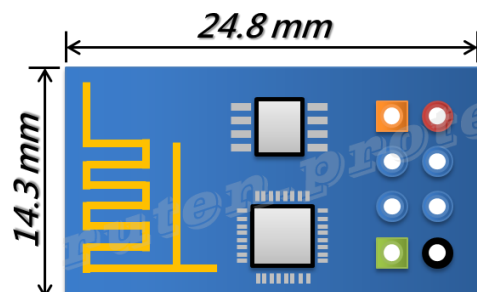


The ESP8266 WiFi Module is a self contained SOC with integrated TCP/IP protocol stack that can give any microcontroller access to your WiFi network. The ESP8266 is capable of either hosting an application or offloading all Wi-Fi networking functions from another application processor. Each ESP8266 module comes pre-programmed with an AT command set firmware, meaning, you can simply hook this up to your Arduino device and get about as much WiFi-ability as a WiFi Shield offers. This module has a powerful enough on-board processing and storage capability that allows it to be integrated with the sensors and other application specific devices through its GPIOs with minimal development up-front and minimal loading during runtime. Its high degree of on-chip integration allows for minimal external circuitry, including the front-end module which is designed to occupy minimal PCB area.

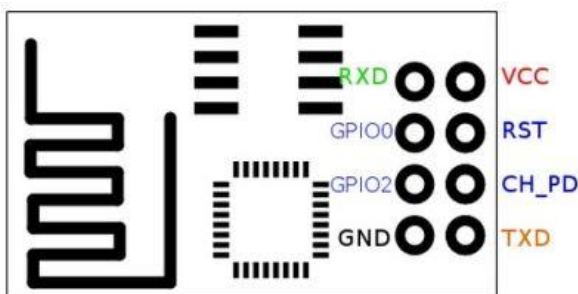
Specification:

- 32-bit RISC CPU at 80 MHz.
- External Flash 512 KiB to 4 MiB
- 802.11 b/g/n protocol
- WiFi Direct (P2P) and soft-AP
- Integrated Protocol stack.
- 16 GPIO pins (not available on all models).
- 1 10 bit ADC (= analog port with 1024 values)
- SPI, I2C
- Vcc and logical levels differ between 1.6-3.3V, some accept higher voltages through a voltage regulator or level shifters, so check the specks of your module.

Dimension:



Pins out:



| Label | Signal |
|-------|--|
| VCC | 3.3V (3.6V max) supply voltage |
| GND | Ground |
| TXD | Transmit Data (3.3V level) |
| RXD | Receive Data (3.3V level!) |
| CH_PD | Chip Power down: (LOW = power down active) |
| GPIO0 | General Purpose I / O 0 |
| GPIO2 | General Purpose I / O 2 |
| RST | Reset (reset = LOW active) |

Schematic:

