



WiFi Board with Full IO Chip Antenna

Model. ESP07-8266



Description.

With the popularity of Wifi IoT devices, there is an increasing demand for low-cost and easy-to-use WiFi modules. ESP8266 is a new player in this field: it's tiny (25mm x 15mm), with simple pin connections, using serial TX/RX to send and receive Ethernet buffers, and similarly, using serial commands to query and change configurations of the WiFi module. This is quite convenient as it only requires two wires (TX/RX) to communicate between a microcontroller and WiFi, but more importantly, it offloads WiFi-related tasks to the module, allowing the microcontroller code to be very light-weighted.

ESP8266 (ESP-07) Serial WIFI Transceiver Module is a cheap and easy way to connect any small microcontroller platform, like Arduino, wirelessly to Internet. ESP8266 has powerful on-board processing and storage capabilities that allow 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, and the entire solution, including front-end module, is designed to occupy minimal PCB area.

ESP-07 WIFI Transceiver Module is addressable over SPI and UART, making this an exceptionally easy choice for anyone wanting to build an Internet of Things thing. You can use AT commands to connect to WiFi networks and open TCP connections without need to have TCP/IP stack running in your own microcontroller. You can simply connect any microcontroller to this module and start pushing data up to the Internet.

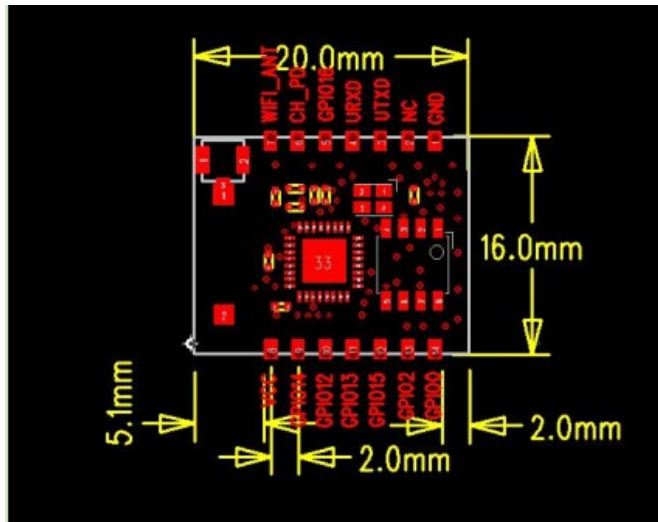
Features:

- Serial UART Interface.
- It run LWIP.
- WIFI Direct (P2P), SOFT-AP.
- Integrated TCP/IP protocol stack.
- Integrated TR switch, balun, LNA, power amplifier and matching network.
- Integrated PLLs, regulators, DCXO and power management units.
- Built-in TCP/IP.
- The AT command is perfect, efficient, and concise.
- Support three modes: AP, STA and AP+STA coexistence mode the TCP/IP protocol suit.
- Onboard Chip Antenna.

Specifications:

- 802.11 b/g/n
- +19.5dBm output power in 802.11b mode
- Power down leakage current of <10uA
- Integrated low power 32-bit CPU could be used as application processor
- SDIO 1.1/2.0, SPI, UART
- STBC, 1×1 MIMO, 2×1 MIMO
- A-MPDU & A-MSDU aggregation & 0.4ms guard interval
- Wake up and transmit packets in < 2ms
- Standby power consumption of < 1.0mW (DTIM3)
- ESP-07: Semi hole SMT technology, all are leaded by IO, with metal shielding case, support external IPX antenna as well as internal ceramic antenna.

Drawing:



Made in China