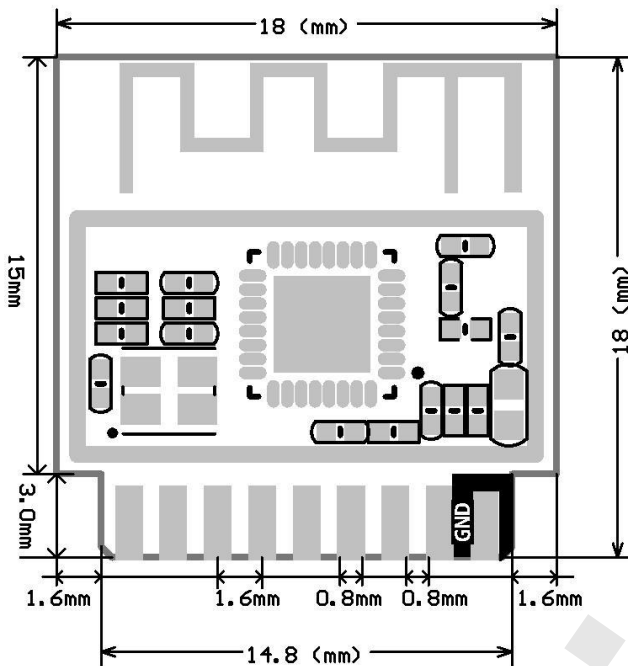


ESP-01M 802.11 b/g/n Wi-Fi Module



| | | | | | | | | |
|-----|-----|------|------|------|------|-----|------|-----|
| EN | IO0 | IO2 | IO15 | IO13 | RXD | TXD | VDD | GND |
| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| IO4 | IO9 | IO10 | IO5 | IO12 | IO14 | ADC | IO16 | RST |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

Features

- The smallest 802.11b/g/n Wi-Fi SOC module
- Low power 32-bit CPU, can also serve as the application processor
- Up to 160MHz clock speed
- Built-in 10 bit high precision ADC
- Supports UART/GPIO/PWM/ADC
- Integrated Wi-Fi MAC/BB/RF/PA/LNA
- Deep sleep current as low as 20uA
- Embedded lwIP protocol stack
- Supports STA/AP/STA + AP operation mode
- Support Smart Config/AirKiss technology
- UART baudrate up to 4Mbps
- General AT commands can be used quickly
- Supports remote firmware upgrade (FOTA)

Overview

ESP-01M has a highly competitive package size and ultra-low power technology.

ESP-01M can be widely used in a variety of networking, for home automation, industrial wireless control, baby monitors, wearable electronic products, wireless location sensing devices, wireless positioning system signals and other networking applications.

ESP-01M in DIP package, unique plug-in package design, it can be flexible access to existing products, especially for automation, large-scale, low-cost modern production methods, easy to apply to a variety of things networking hardware terminal occasions.

Product Specifications

| | |
|------------------------|--|
| Module Model | ESP-01M |
| Package | DIP-18 |
| Size | 18*18*2.8 (±0.2) mm |
| SPI Flash | Built-in 1MByte |
| Interface | UART/GPIO/PWM/ADC |
| IO Port | 11 |
| UART Baudrate | Support 300 ~ 4608000 bps , Default 115200 bps |
| Frequency Range | 2412 ~ 2484MHz |
| Antenna | PCB antenna, 2 dBi |
| Secondary Development | Support |
| Transmit Power | 802.11b: 16±2 dBm (@11Mbps) 802.11g: 14±2 dBm (@54Mbps) 802.11n: 13±2 dBm (@HT20, MCS7) |
| Receiving Sensitivity | CCK, 1 Mbps : -90dBm CCK, 11 Mbps: -85dBm 6 Mbps (1/2 BPSK): -88dBm 54 Mbps (3/4 64-QAM): -70dBm HT20, MCS7 (65 Mbps, 72.2 Mbps): -67dBm |
| Power (Typical Values) | Continuous Transmission => Average: ~ 71mA, Peak: 300mA Modem Sleep: ~20mA Light Sleep: ~2mA Deep Sleep: ~0.02mA |
| Security | WEP/WPA-PSK/WPA2-PSK |
| Power Supply | Voltage 3.0V ~ 3.6V, Current >300mA |
| Operating temperature | -20 °C ~ 85 °C |
| Storage Environment | -40 °C ~ 90 °C , < 90%RH |
| weight | 0.4g |

Contact US

ShenZhen Ai-Thinker Technology Co., Ltd

Address: 6/F, Block C2, Huafeng Industrial Park, Hangcheng Road, Bao'an Road, Baoan District, Shenzhen ,China

 Website: www.ai-thinker.com

Tel: 400-855-5368

 E-mail: support@aithinker.com