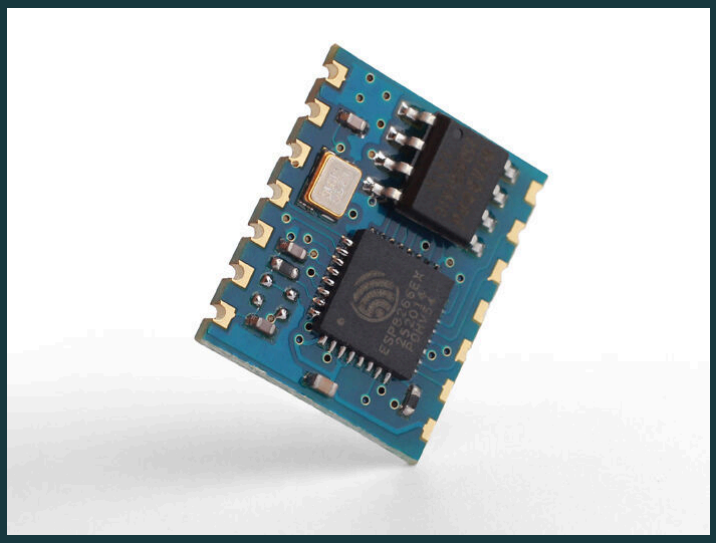
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INDUSTRIAL PRODUCT DATASHEET

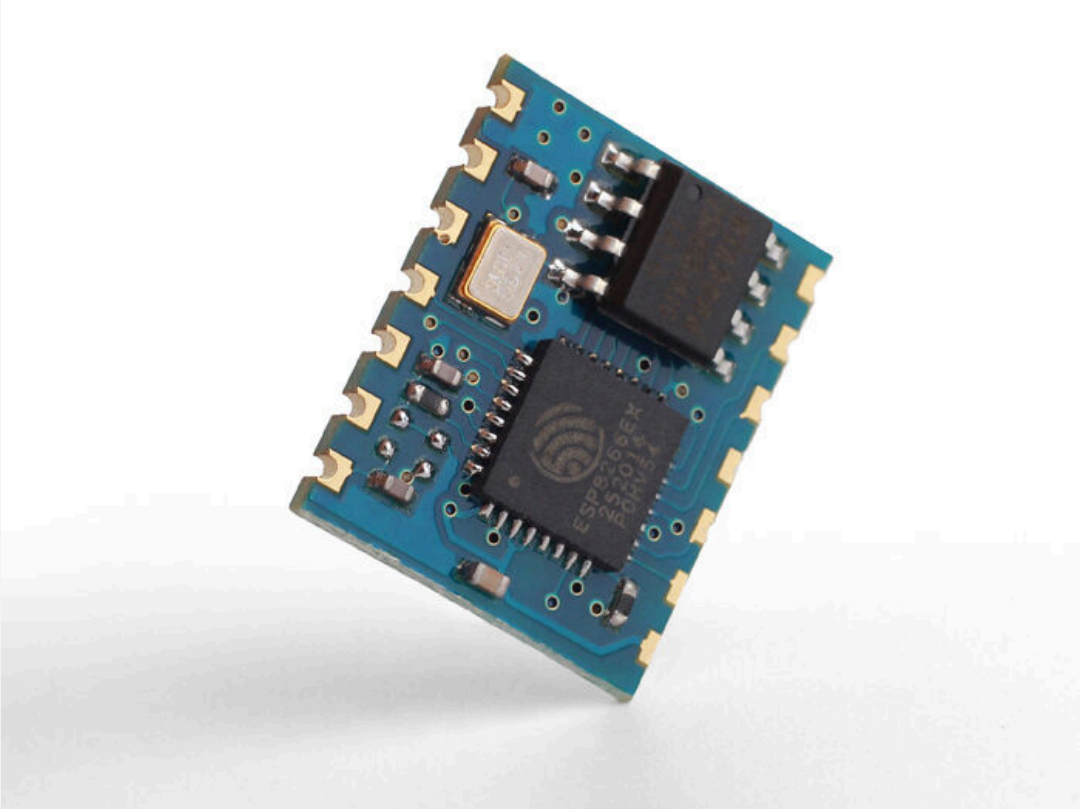
WiFi Serial Transceiver Module w& ESP8266-Medium

The WiFi Serial Transceiver Module with ESP8266 provides integrated Wi-Fi and TCP/IP networking with low power consumption and multiple serial interfaces.

SKU	UPDATED	PRICE
113990085	2025-07-30 07:07:31	$2.99(Excl. VAT)



Overview



The WiFi Serial Transceiver Module w/ ESP8266-Medium integrates the ESP8266 SoC, offering a self-contained Wi-Fi solution with TCP/IP stack, 802.11b/g/n, Wi-Fi Direct, and soft-AP. It includes SDIO 2.0, SPI, and UART interfaces, a 32-pin QFN package, and low power consumption with standby <1.0mW and wake-up time <2ms.

Key Features

We release a tutorial for ESP8266.

This is SMD WiFi serial transceiver module, based on ESP8266 SoC.

The SOC has Integrated TCP/IP protocol stack

We have a set of documents in Chinese. We are preparing tutorials and demo software to showcase utility of this module.

Please buy this module only when you understand the existing documents.

ESP8266 is a highly integrated chip designed for the needs of a new connected world. It offers a complete and self-contained Wi-Fi networking solution, allowing it to either host the application or to offload all Wi-Fi networking functions from another application processor.

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.

Features

Corresponding Interface:

- SDIO 2.0, SPI, UART
- 32-pin QFN package
- Integrated RF switch, balun, 24dBm PA, DCXO, and PMU
- Integrated RISC processor, on-chip memory and external memory interfaces
- Integrated MAC/baseband processors
- Quality of Service management
- I2S interface for high fidelity audio applications
- On-chip low-dropout linear regulators for all internal supplies
- Proprietary spurious-free clock generation architecture
- Integrated WEP, TKIP, AES, and WAPI engines

Specification

- 802.11 b/g/n
- Wi-Fi 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
- +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)

Compliance & Logistics

HSCODE	8542390000
UPC	841454100584
COO	CHINA

Resource Links

- https://www.seeedstudio.com/WiFi-Serial-Transceiver-Module-w-ESP8266-Medium-p-2397.html

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