

INDUSTRIAL PRODUCT DATASHEET

Grove - UART WiFi V2 (ESP8285)

The Grove - UART WiFi V2 (ESP8285) provides plug-and-play Wi-Fi connectivity with ultra-low power consumption for IoT applications such as home automation and sensor networks.

SKU

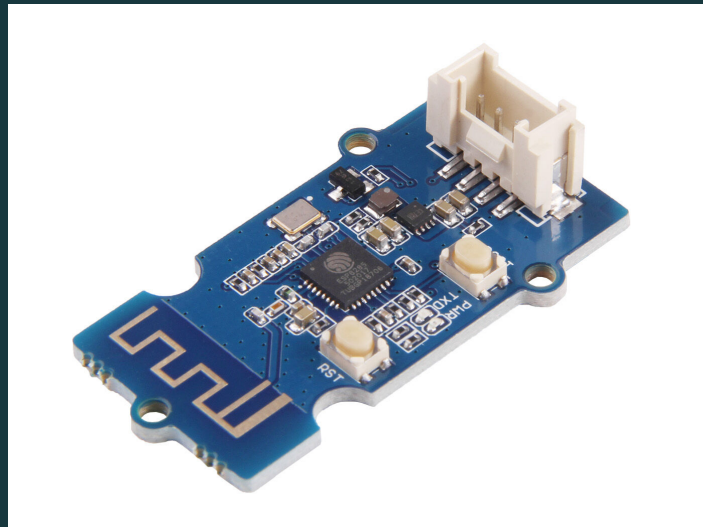
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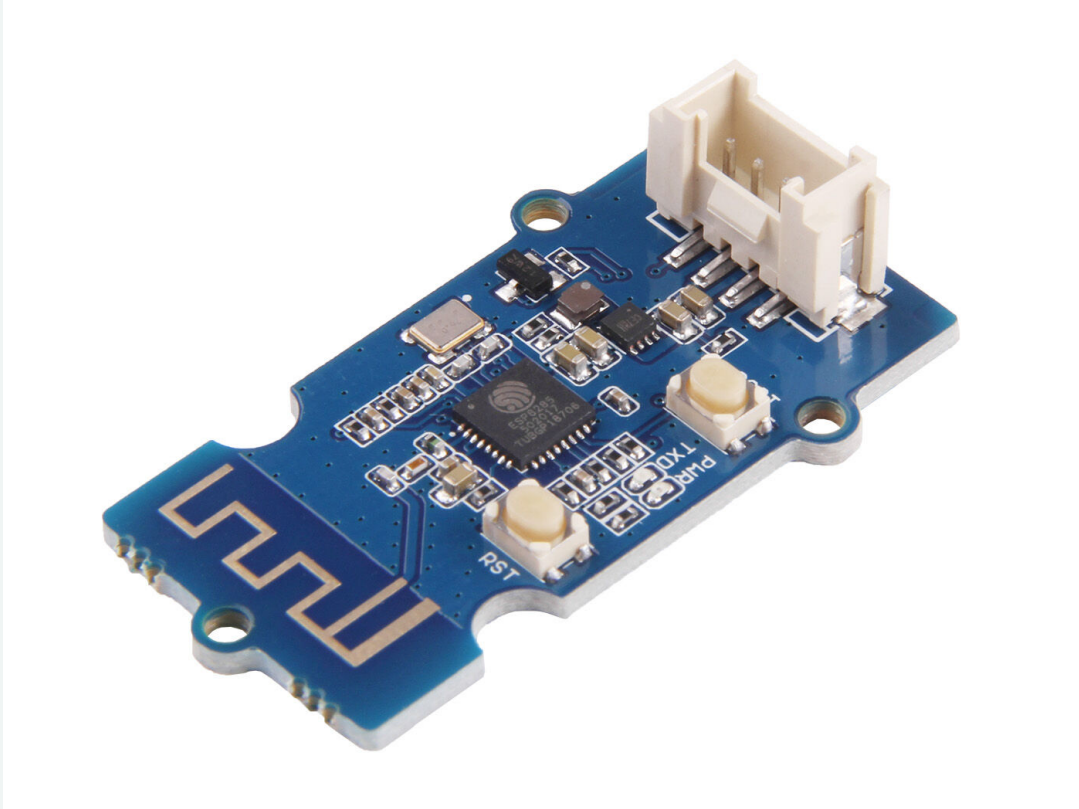
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PRICE

\$9.90(Excl. VAT)



Overview



The Grove - UART WiFi V2 (ESP8285) is a serial transceiver module based on the ESP8285 SoC, supporting 802.11 b/g/n Wi-Fi with AP and Station modes. It features ultra-low power technology with five power states, quick 2ms wake-up, and an integrated high-speed cache, controllable via AT commands for easy IoT integration.

Key Features

Features

- **Highly integrated Wi-Fi SoC:** powerful ESP8285 wifi chip, support 802.11 b/g/n, 2.4~2.4835GHz up to 72.2 Mbps, and Ap&Station mode
- **Ultra-low power technology:** Five power states reduce non-essential functions and low energy consumption with DEEP_SLEEP mode supported
- **Good WiFi performance and fast response:** can quickly wake up and transmit data packets within 2ms
- **Integrated high-speed cache:** Helps improve system performance and optimize system memory
- **Starter-friendly:** Plug-and-play Grove connector with detailed wiki provided.

Description

Grove - UART WiFi V2.0(ESP8285) is a serial transceiver module featuring the ubiquitous ESP8285 IoT SoC. With an integrated TCP/IP protocol stack, this module lets your microcontroller interact with WiFi networks with only a few lines of code. Each ESP8266 module comes pre-programmed with an AT command set firmware, meaning you can send simple text commands to control the device. The SoC features integrated WEP, WPA/WPA2, TKIP, AES, and WAPI engines, can act as an access point with DHCP, can join existing WiFi networks, and has configurable MAC and IP addresses.

It's the upgrade version of Grove - UART WiFi, we changed the ESP8266 into ESP8285 and made some other adjustments to make it more stable and lighter. For more detail about the version change, please refer to our wiki.

ESP8285 can perform either as a standalone application or as a slave to a host MCU. When ESP8285 hosts the application, it promptly boots up from the flash. The integrated high-speed cache helps to increase system performance and optimize system memory. Also, ESP8285 can be applied to any micro-controller design as a Wi-Fi adaptor through SPI/SDIO or I2C/UART interfaces.

Technical details

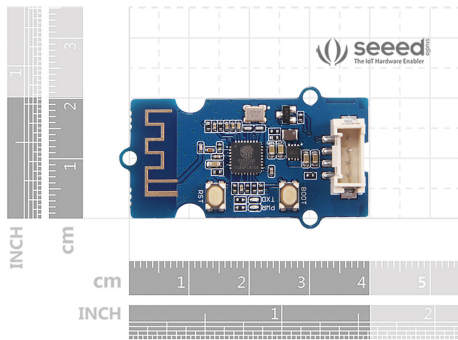
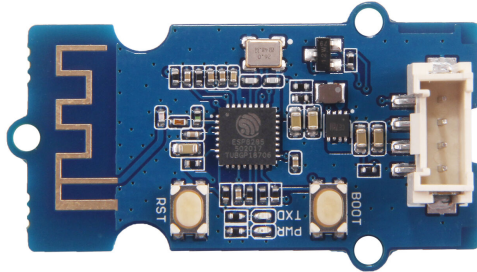
Application Ideas

- Home automation
- Sensor networks
- Mesh networking
- Wearable electronics
- Baby monitor
- Network camera
- Industrial wireless control
- WiFi beacons
- Smart power plug
- Location-aware applications

Note

We've Released the [Grove Selection Guide](#) and hope to help you find the Grove suit you best.

Product Gallery



Applications

- Home automation
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- Network camera
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Part List

Grove - UART WiFi V2 (ESP8285)	1
Grove cable	1

Compliance & Logistics



HSCODE	8517709000
USHSCODE	8536700000
UPC	841454120346
EUHSCODE	8517180000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/Grove-UART-WiFi-V2-ESP8285.html>
- [Schematic in PDF](#)
- [Schematic in Eagle](#)
- [Espressif Systems ESP8285](#)
- [Espressif Systems ESP8266 AT Instruction Set - v0.24](#)
- [ESP8266 Community Forum](#)
- [ESP-06](#)
- [ESP8266 on Hackaday](#)
- [ESP8266 on nurdspace](#)

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