

Description

Our Wi-Fi+BLE module is a module consisting of a combo tri-radio chipset integrating 1x1 Wi-Fi 6, Bluetooth® 5.4, and IEEE 802.15.4.

It is ideal for applications in smart homes, industrial automation, and medical devices, offering a cost-effective, high-performance, and developer-friendly platform for next-generation IoT solutions.

Features

■ Integrated Tri-Radio Connectivity

- 1x1 Wi-Fi 6.
- Bluetooth® 5.4 Dual Mode (BR/EDR + LE).
- IEEE 802.15.4 support for Thread and Zigbee.
- Supports Matter over Wi-Fi and Thread.
- Ethernet support with Bluetooth LE commissioning.

■ High Processing Performance

- 32-bit RISC-V MCU up to 325 MHz.
- Integrated DSP and FPU for efficient computing.
- Optional stacked memory support including pSRAM and NOR Flash.

■ Advanced Security

- Hardware security acceleration engine.
- Secure Boot and Secure Debug.
- Support for encryption, public key acceleration, and TRNG.
- QSPI XiP on-the-fly AES decryption.
- PSA Certified Level 1.

■ Rich Peripheral & Multimedia Interfaces

- 16 programmable GPIOs.
- Interfaces include SPI, UART, I2C, I2S, SDIO, PWM, ADC, DAC, CAN.
- Audio input/output with multiple sampling rates.



Electrical Characteristics

- Power Supply: 2.97V~3.63.
- IO Level: 1.8 V/3.3V.

General Features

- Operating Temperature Range: -40 °C to +85 °C.