

# Bluetooth 5 - SBF508M



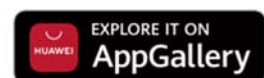
**SBF508M-21U** is a compact Bluetooth Low Energy 5(BLE5) module designed to support Smart Home Appliance solutions. It contains high-performance ARM ® Cortex TM -M0 32-bit RISC core, 256KB embedded Flash, 51KB embedded SRAM, the hardware of Link Layer for BLE5, 2.4GHz radio transceiver and peripheral for application.

The module has built-in MESH solution firmware, which reduces the project development time and accelerates time-to-market of the product. The BLE (Bluetooth low energy) core is a qualified Bluetooth baseband controller that compatible with the Bluetooth low energy 5.0 specifications and it is in charge of packet encoding/decoding and frame scheduling.

## ■ Key Features

Bluetooth Standard	BLE5
Main Chipset	SBF508BF-48
PCBA Dimension	15.0 x 22.0 x 2.6 ( mm )
Frequency Range	2.4 - 2.485 GHz ISM Band
Date Rates	1 Mbps, 2Mbps and long range (125kbps and 500kbps mode)
Modulation	GFSK
Voltage	3.0V ~ 3.6V
Operating Temperature	-40 ~ 85°C ambient temperature
Maximum Input / Output Power Level	Input 10 dBm Output MAX=15 dBm
RX sensitivity(IC)	1M PER < 30.8% -95 dBm 2M PER < 30.8% -93 dBm 500K PER < 30.8% -97 dBm 125K PER < 30.8% -102 dBm
Features	14 * GPIOs, 5 * PWM (*I), 1 * UART, 1 * I2C, 1 * SPI <i>Note(*I) : Pin shared with other I/O</i>

## ■ Picture & Smart Home APP



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