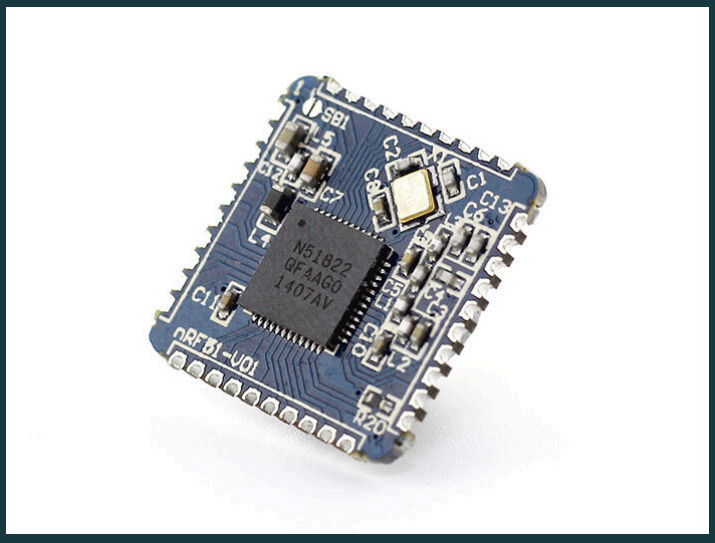
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INDUSTRIAL PRODUCT DATASHEET

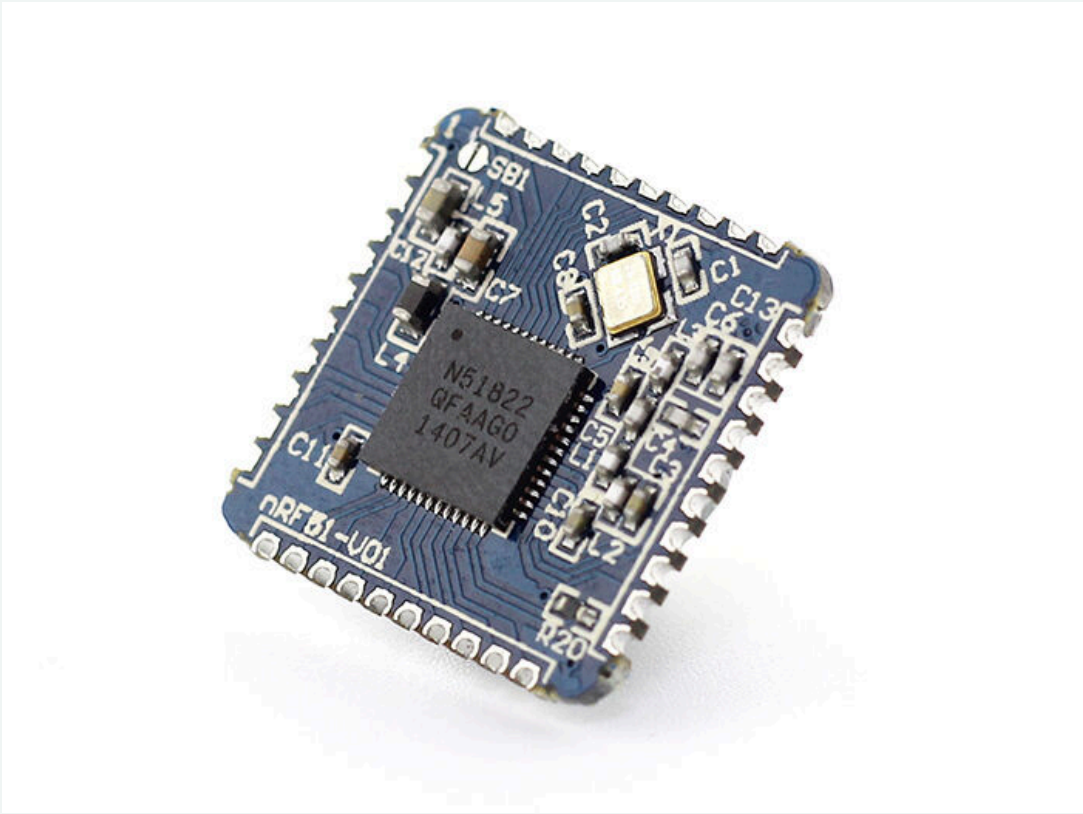
SMD Nordic nRF51822 Module with 2.4GHz, 16*16mm(not include antenna)

The SMD Nordic nRF51822 Module is a compact, ultra-low-power 2.4 GHz Bluetooth low energy module for computer peripherals and I/O devices.

SKU	UPDATED	PRICE
317030013	2026-04-09 12:32:37	$10.75(Excl. VAT)



Overview



The SMD Nordic nRF51822 Module integrates the nRF51822 SoC for ultra-low-power 2.4 GHz wireless connectivity. It supports Bluetooth low energy and proprietary protocols, making it suitable for computer peripherals and I/O devices.

Key Features

Description

Description

The modules use nRF51822 from NORDIC as the controller chips. With its small form factor, low power, high economic Bluetooth radio, nRF51-01 can easily be added in your system and help to promote the design process.

nRF51822 is an ultra-low-power 2.4 GHz wireless System on Chip (SoC) integrating the nRF51 series 2.4 GHz transceiver, a 32 bit ARM® Cortex™-M0 CPU, flash memory, and analog and digital peripherals. nRF51822 can support Bluetooth® low energy and a range of proprietary 2.4 GHz protocols, such as Gazell from Nordic Semiconductor.

Fully qualified Bluetooth low energy stacks for nRF51822 are implemented in the S100 series of SoftDevices. The S100 series of SoftDevices are available for free and can be downloaded and installed on nRF51822 independent of your own application code.

- 2.4 GHz transceiver
- -93 dBm sensitivity in Bluetooth® low energy mode
- 250 kbps, 1 Mbps, 2 Mbps supported data rates
- TX Power -20 to +4 dBm in 4 dB steps
- TX Power -30 dBm Whisper mode
- 13 mA peak RX, 10.5 mA peak TX (0 dBm)
- RSSI (1 dB resolution)
- ARM® Cortex™-M0 32 bit processor
- 275 ^A/MHz running from flash memory
- 150 ^A/MHz running from RAM
- Serial Wire Debug (SWD)
- Memory 256 kB or128 kB embedded flash program memory 16 kB RAM
- Flexible Power Management
- Supply voltage range 1.8 V to 3.6 V
- 2.5 ^s wake-up using 16 MHz RCOSC
- 0.4 ^A @3V OFF mode
- 0.5 ^A @3V in OFF mode + 1 region RAM retention
- 2.3 ^A @3V ON mode, all blocks IDLE
- 8/9/10 bit ADC - 8 configurable channels
- 31 General Purpose I/O Pins
- One 32 bit and two 16 bit timers with counter mode

· SPI Master

· UART (CTS/RTS)

· Two-wire Master (I2C compatible)

· Quadrature Decoder (QDEC)

· AES HW encryption

· Real Timer Counter (RTC)

· 16 MHz crystal

· Balun

· AES HW encryption

· Package variants

· nRF51-01, 16 x16 mm

Applications

· Computer peripherals and I/O devices

Specification

Datasheet:

Technical Details
Technical details

Specification

Dimensions	60mm x60mm x2mm
Weight	G.W 3g
Battery	Exclude

Applications

- **Computer peripherals and I/O devices**

Compliance & Logistics

HSCODE	
UPC	841454115786
COO	CHINA

Resource Links

- https://www.seeedstudio.com/2-4GHz-low-power-consumption-BLE4-0-module-not-include-antenna-16-16mm-p-2203.html
- Datasheet

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