



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





(images/product/317030013\_1\_02.jpg)

## 2.4GHz low power consumption BLE4.0 module (not include antenna)

16\*16mm

SKU: 317030013



[https://www.kickstarter.com/projects/seeed/wio-link-3-steps-5-minutes-build-your-iot-applicat/description?ref=banner\\_depot](https://www.kickstarter.com/projects/seeed/wio-link-3-steps-5-minutes-build-your-iot-applicat/description?ref=banner_depot)

### 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.

#### Features:

##### Key Features

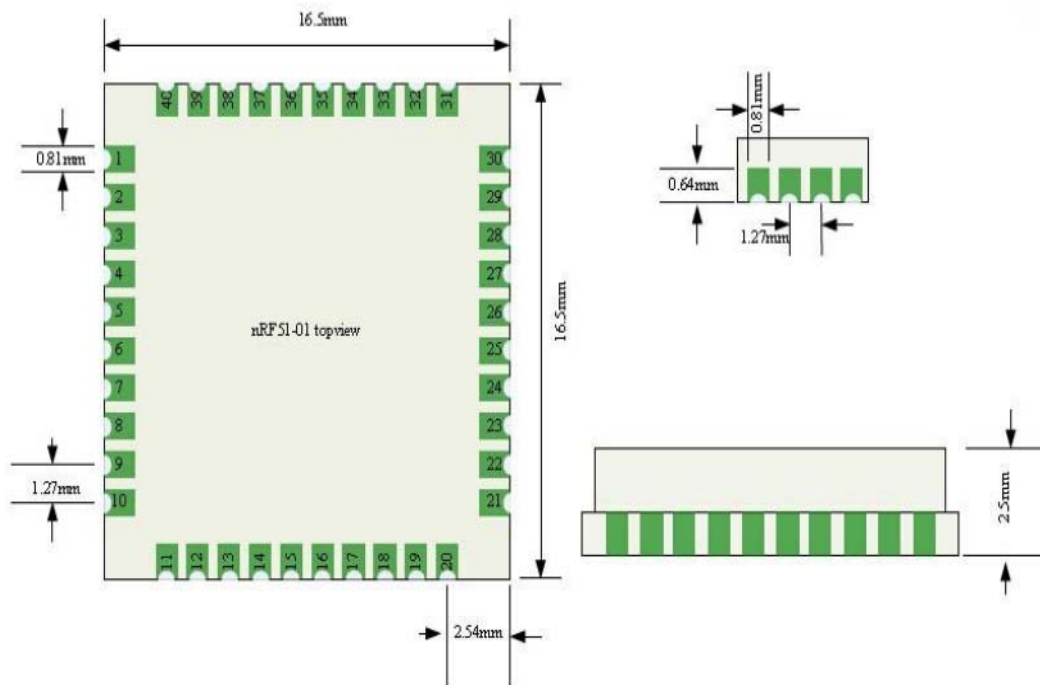
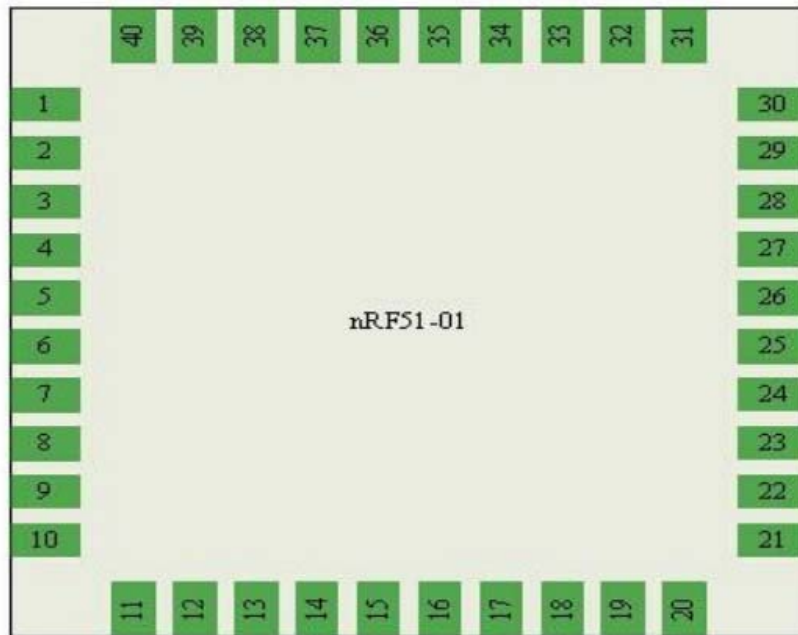
- 2.4 GHz transceiver

- -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  $\mu$ A/MHz running from flash memory
  - 150  $\mu$ A/MHz running from RAM
  - Serial Wire Debug (SWD)
- 
- Memory
  - 256 kB or 128 kB embedded flash program memory
  - 16 kB RAM
- 
- Flexible Power Management
  - Supply voltage range 1.8 V to 3.6 V
  - 2.5  $\mu$ s wake-up using 16 MHz RCOSC
  - 0.4  $\mu$ A @3V OFF mode
  - 0.5  $\mu$ A @3V in OFF mode + 1 region RAM retention
  - 2.3  $\mu$ 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: (<http://www.seeedstudio.com/document/BLE40nRF510102DK%20datasheet.pdf>)

## Overview

---



(<http://www.seeedstudio.com/depot/Shenzhen-2U-t-11.html?ref=pinfo>)

(<http://www.seeedstudio.com/depot/Others-m-24.html?ref=pinfo>)

Weight: 2 g

Designer: Others  
Other Products From  
This Designer