

nRF52840 Low Power BLE Module with Ceramic Antenna

SKU 113990556

Description

This product is Bluetooth Low Energy (BLE) module using Nordic NRF52840 SoC solution. The nRF52840 is designed around an ARM Cortex-M4 CPU with floating Point unit (FPU) and has 1MB flash with cache and 256kB RAM. As such it has the ability to support complex and demanding applications as a single chip solution. It offers a wealth of peripherals that include NFC, USB and multiple interface options including Quad SPI (QSPI). Security is paramount in today's IoT designs and the nRF52840 has high-end security features included to achieve best in class security with an ARM Cryptocell-310 cryptographic system on chip and a full AES 128-bit encryption suite.

Features :

- Full Bluetooth 5 support for long radio
- Processing power and flash flexibility
- Multiprotocol radio
- Power Efficiency

Specificaitons:

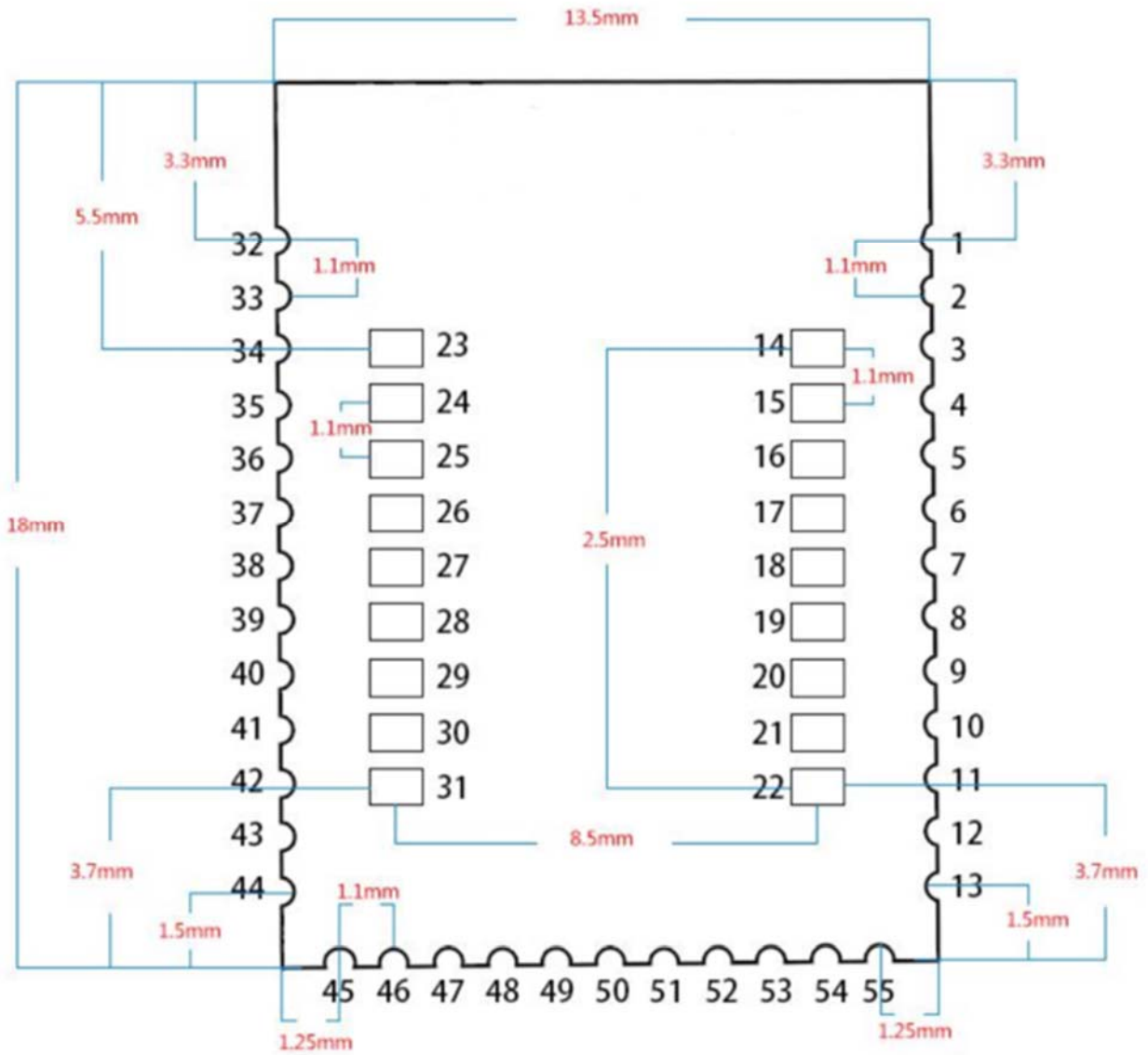
- Bluetooth 5 ready multi-protocol radio
 - 2Mbps
 - Long range
 - Advertising extensions
 - Improved coexistence(CSA#2)
- IEEE 802.15.4 radio support
 - Thread
 - Zigbee
- 32-bit ARM Cortex-M4F@64MHZ
- Up to 111dB link budget for Bluetooth long range mode
- Full-speed 12Mbs USB controller
- NFC Tag-A
- Software stacks available as downloads
- Programmable output power form +8dBm to -20dBm
- On-air compatible with nRF51,nRF24L and nRF24AP series
- High-precision RSSI
- 128 bit AES/ECB/CCM/AAR co-processor
- Single-ended antenna output (on-chip balun)
- Application development independent of protocol stack
- Wide supply voltage range +1.7V to 5.5V
- QSPI/SPI/2-wire/I²S/PDM/QDEC
- Programmable Peripheral Interface - PPI
- High speed SPI interface 32MHz
- Quad SPI interface 32MHz
- EasyDMA for all digital interfaces
- RAM mapped FIFO using EasyDMA
- 12bit/200K SPS ADC
- On-chip DC-DC buck converter
- Quadrature demodulator
- -96dBm Sensitivity for Bluetooth Low Energy
- Arm cryptoCell CC310 cryptographic security modele

Applications:

- Internet of Things(IoT)
- SmartHome sensors
- Computer peripherals
- A4WP "Rezence" wireless charging
- Sports and fitness sensors and hubs
- Smart watches
- Interactive games
- Wearables
- Connected white goods
- Voice-command smart remotes
- Beacons

- Connected health products
- RC Toys
- Building automation and sensor networks

Pin assignments



ECCN/HTS

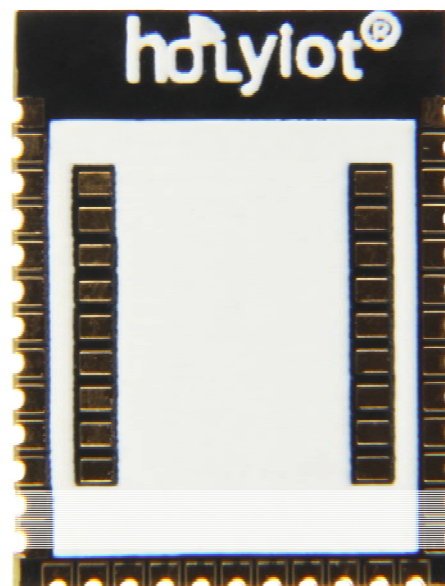
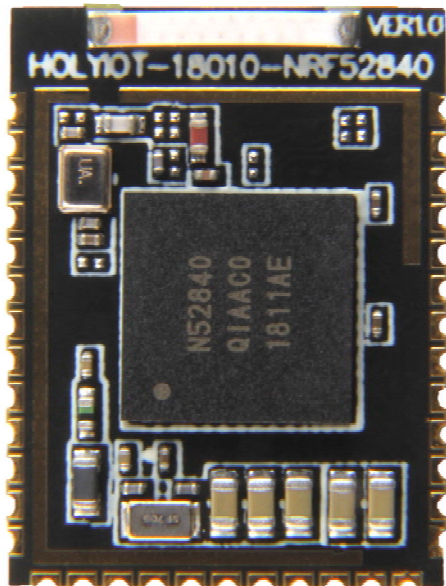
ECCN	5A991.b
HSCODE	8517709000

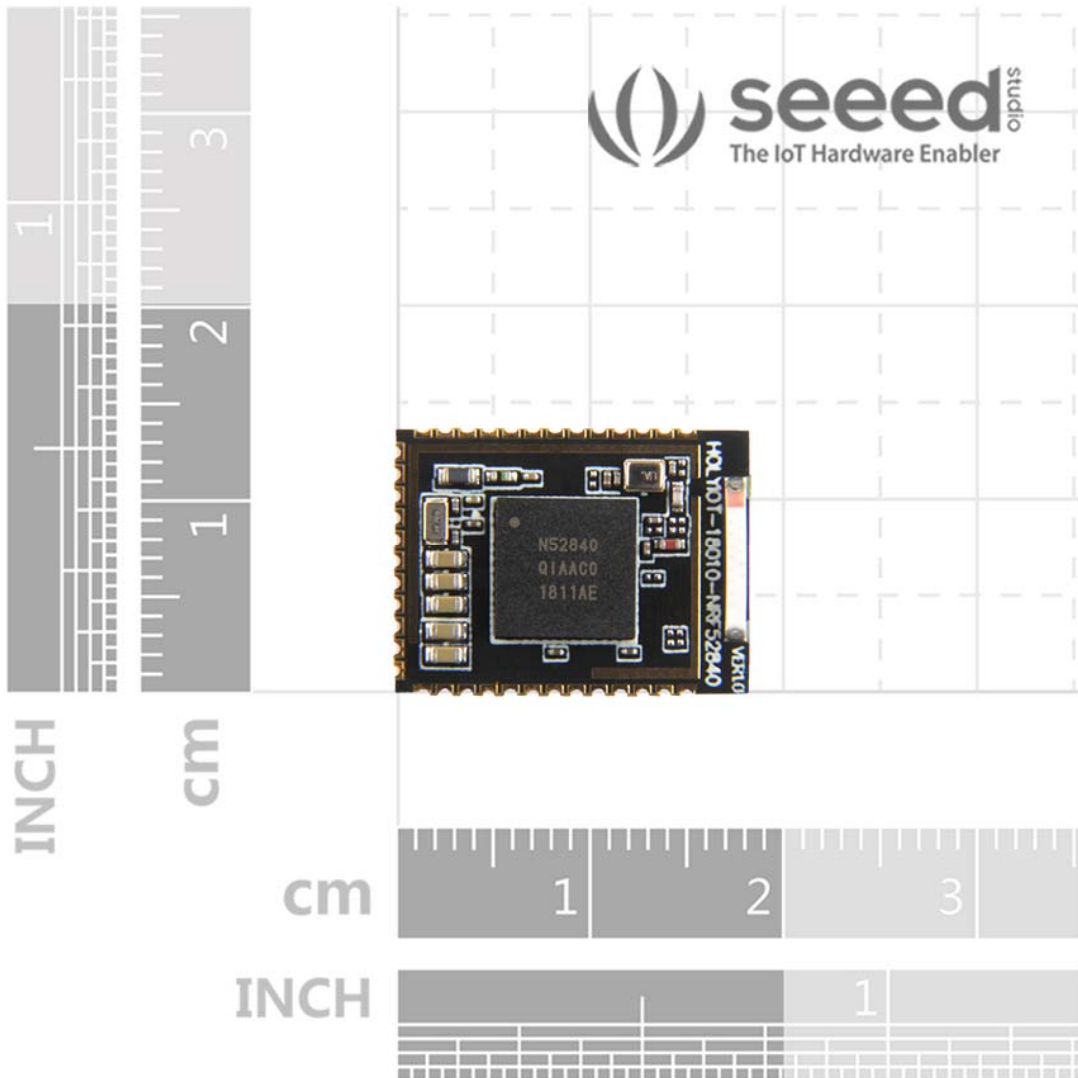
Technical Details

Dimensions	18mm x 14mm x 1.60mm
Weight	G.W 10g N.W 10g
Battery	Exclude
Chip	nRF52840 QIAAC0 Revision 1
BLE Antenna	Ceramic Antenna
BT Range	@500 meter for Bluetooth 5

Part List

nRF52840 Module	1
-----------------	---





X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bluetooth Modules \(802.15.1\)](#) category:

Click to view products by [Seeed Studio](#) manufacturer:

Other Similar products are found below :

[A2541R24A10GM](#) [BCM20737S](#) [CYW20732S](#) [968EMB0019](#) [WT32I-A-AI61C](#) [NRF51822-QFAA-R7-G0](#) [BT680F](#) [BM83SM1-00AA](#) [DAT12](#) [BGM11S12F256GA-BG2](#)
[BGM111A256V21R](#) [BGM210LA22JNF2](#) [MGM210LA22JNF2](#) [CYBT-333047-02](#) [CYBT-333032-02](#) [NINA-B410-00B](#) [NINA-B416-00B](#) [102991299](#) [BM832](#) [ENW-89852A1KF](#)
[BC840E](#) [UDG-NRF52840](#) [BMD-360-A-R](#) [BMD-341-A-R](#) [BMD-345-A-R](#)