



Bluetooth 4.0 NRF51822 Core Board

SKU: 9515

Part Number: Core51822

Brand: -

UPC: 799632836667

Description

BLE4.0 Bluetooth 2.4G Wireless Module, nRF51822 Onboard

Overview

Core51822 is a wireless module based on **nRF51822** - the Multiprotocol Bluetooth® 4.0 low energy/2.4 GHz RF SoC designed for ULP (ultra low power) wireless applications.

Core51822 Specifications

- Onboard chip: nRF51822
- Communication distance (open outdoor@1M data rate): 30m
- Frequency range: 2.4GHz
- Operating voltage: 2.0V ~ 3.6V
- Operating temperature: -40°C ~ 85°C
- Dimension (PCB): 24.5mm x 32.26mm
- Expansion pinheader: all the I/Os except P0.26 and P0.27
- Pinheader pitch: 2.00mm
- Spacing between pinheaders on the left side and the right side: 18.00mm
- Antenna: onboard antenna

nRF51822 Features

- 2.4 GHz multiprotocol RF transceiver
- ARM® Cortex™-M0 32 bit processor
- 128 bit AES HW encryption
- 256kB flash & 32kB RAM
- Programmable Peripheral Interconnect (PPI)
- Digital interfaces: SPI, I2C, UART
- 10 bit ADC
- Programmable output power: -20 to +4 dBm
- Independent application development and protocol stack
- Fully compatible with NRF24L series
- Pinout compatible with NRF51xxx series
- Global separate power management
- Operating voltage: 1.8 V ~ 3.6 V

Applications

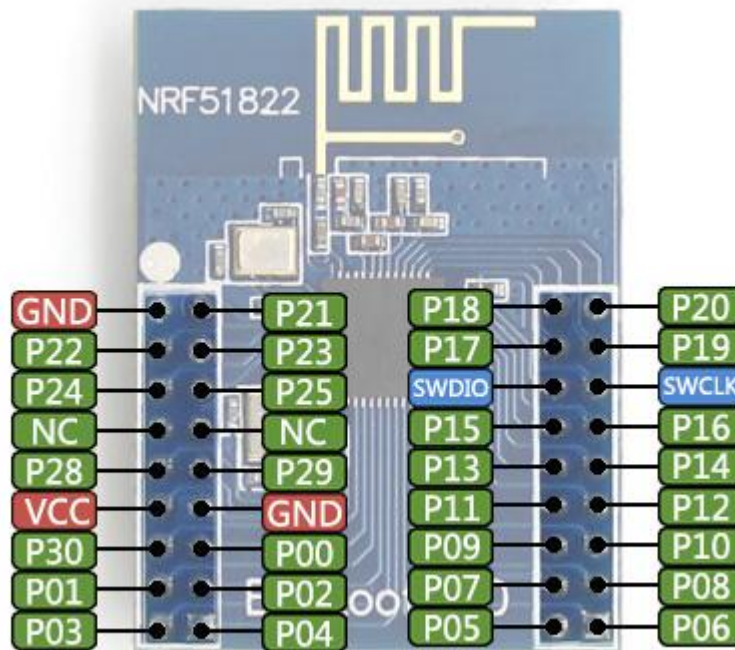
- Wearable devices
- Bluetooth intelligent application
- Mobile phone accessories
- RFID labels
- Smart home appliances

- Industry control
- Data acquisition system

Revision History

- 2015.06, Core51822 upgrades the onboard chip to Rev3, features 32kB RAM, supports higher version SDK, and all the demo codes are still compatible with the Rev2 ones.

Core51822 Expansion Headers



Photos



Core51822 Bluetooth 2.4G RF module



Core51822 Bluetooth 2.4G RF module



Core51822 Bluetooth 2.4G RF module back view



Connecting to the mother board

Note: mother board in the photo is NOT included in the price.

Dimension

