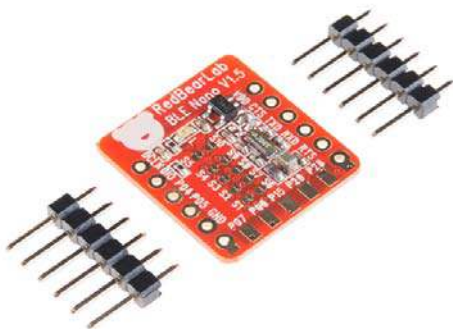**sparkfun**

Export Restrictions

This product has some level of export control/restriction, so may be delayed by 2-3 business days when shipping outside the United States. Contact us with questions, or we will contact you after you place your order.

RedBearLab BLE Nano - nRF51822

WRL-13729

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Description: The BLE Nano from RedBearLab is one of the smallest Bluetooth 4.1 Low Energy (BLE) development boards in the market. At each BLE Nano's core is a Nordic nRF51822, an ARM Cortex-M0 SoC plus BLE capable of running at 16MHz with ultra low power consumption. The RedBearLab BLE Nano also supports numerous different wireless devices running iOS 7/8, Android 4.3 or higher, and Windows Phone 8.1.

Developing a Bluetooth Smart enabled 'appcessory' (accessory device + companion application) is easier than ever. You can quickly produce prototypes and demos targeted for Internet of Things (IoT) and other interesting projects. The RedBearLab BLE Nano can operate under 1.8V to 3.3V, making it able to work in conjunction with a wide variety of electronic components. It should be noted that the RedBearLab BLE Nano can accept 3.3V to 13V from the VIN pin, however voltage will be regulated to 3.3V via the on-board LDO regulator due in part to the nRF51822 IC. It is important to keep in mind that you must have at least one MK20 USB board, found in the BLE Nano Kit, which is used to load firmware onto RedBearLab BLE Nano from a PC.

Note: The RedBearLab BLE Nano includes two 1x6 male headers that can be soldered on after purchase for easy interface. Additionally, you can find a complete pin-out for this board on the Product Page link found in the *Documents* section below.

Includes:

- 1x RedBearLab BLE Nano
- 2x Header - 1x6 (Male, 0.1")

Features:

- Smallest BLE development board, only 18.5mm x 21.0mm
- Nordic nRF51822 ARM Cortex-M0 SoC supports both BLE Central and BLE Peripheral roles
- 2.4 GHz transceiver
- Ultra low power consumption
- Support voltage from 1.8V to 3.3V
- Software development using mbed.org, GCC, Keil or Arduino
- Lots of libraries and examples available
- Work with our free Android App and iOS App