Seeed Studio XIAO nRF52840 - Supports Arduino / CircuitPython- Bluetooth5.0 with Onboard Antenna

SKU 102010448

Seeed Studio XIAO Series are diminutive development boards, sharing a similar hardware structure, where the size is thumb sized. The code name "XIAO" here represents its half feature "Tiny", and the other half will be "Puissant".

Seeed Studio XIAO nRF52840 is carrying wireless capability for the first time and it supports B**luetooth 5.0**, also able to operate with **low power consumption**. It will be your best microcontroller for Bluetooth applications.

Features

- **Versatile Microcontroller:** Incorporate the Nordic nRF52840 chip with FPU, operating up to 64 MHz, mounted multiple development ports, supported by Arduino / CircuitPython
- **Wireless Capabilities:** Implement Bluetooth 5.0, BLE functions with onboard antenna, also provide NFC connectivity.
- Elaborate Power Design: Provide **ultra-low power consumption** as 5μA in deep sleep mode while supporting lithium **battery charge management.**
- **Thumb-sized Design:** 21 x 17.5mm, Seeed Studio XIAO series classic form-factor, suitable for wearable devices
- **Perfect for Production:** Breadboard-friendly & SMD design, no components on the back

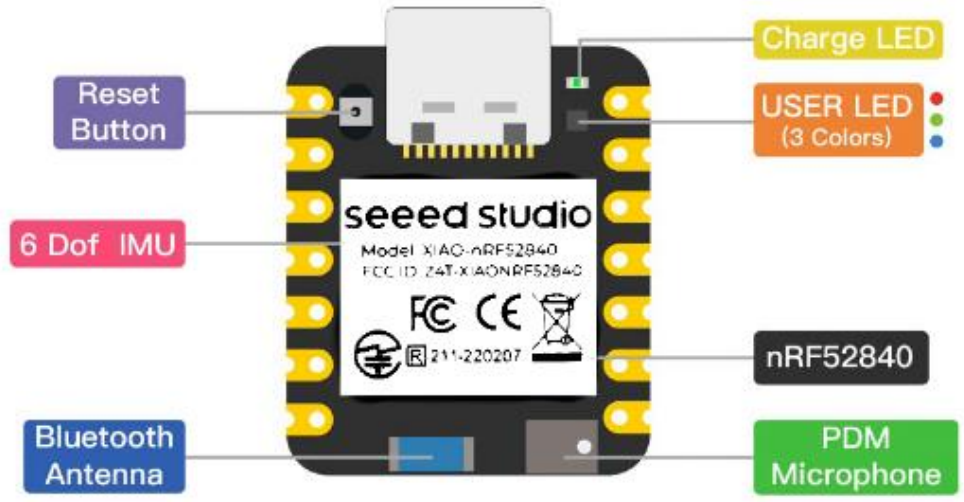
Seeed Studio XIAO nRF52840 has an **ultra-low power consumption** of only 5μA in the deep sleep mode, the embedded BQ25101 chip supports battery charge management which **prolongs its use time**. Moreover, Seeed Studio XIAO nRF52840 supports the USB Type-C interface which can supply power and download code. It also has **rich On-chip Memory** of 1 MB flash and 256 kB RAM, and an Onboard Memory of 2 MB QSPI flash. There are 11 digital i/o that can be used as PWM pins and 6 analog i/o that can be used as ADC pins. It supports UART, IIC, and SPI all three common serial ports. 1 Reset button, 1 3-in-one LED, 1 Charge LED, and 1 Bluetooth antenna are on board, allowing developers to debug their code very easily.

The powerful performance makes it **perfect for machine learning applications**, and the tiny size allows it to be used in wearable devices and Internet of Things projects, not just for prototypes but the mass production. Furthermore, Seeed Studio XIAO nRF52840 is friendly to the communities for its **strong software compatibilities**, which support Arduino, Micropython, and CircuitPython. Except for the software, flexible I/O allows it to speak to almost any external device.

Application

- Wearable devices
- Wireless connect
- Embedded machine learning projects
- Perfect for mini Arduino projects
- Tiny Machine Learning application

Hardware Pinout



Attention:

All the I/O pins are 3.3V, please do not input more than 3.3V, otherwise, the CPU may be damaged.