nRF52832 Bluetooth Low Energy Module – MDBT42Q–512KV2 PRODUCT ID: 4077

DESCRIPTION

If you have a custom PCB design and you'd like to add a little Bluetooth Low Energy, this module is ultra compact and easy to use. It contains a Nordic nRF52832 chip that comes integrated with BLE radio as well as most of the supporting circuitry and even a chip antenna. The whole thing comes with FCC, CE and TELEC certifications.

Please note! The module comes with a *blank* chip – this is for people who are comfortable programming the chips themselves with a J-Link programmer and the Nordic SDK. We don't provide any firmware to go along with it!

This is the same module we use for the Adafruit nRF52832 Feather so if you'd like to see a possible reference design for this module, check out the PCB files here!

Of course the best way to program these chips is with the Nordic SDK. This chip also has some basic Arduino support, some micropython support, and is well supported by MyNewt. Either way you go (SDK/micropython/Arduino) you'll still need to solder this onto a PCB and load code via a SWD programmer.

TECHNICAL DETAILS

- 32-bit ARM® Cortex™ M4F CPU
- Supply: 1.7V – 3.6V
- Memory: 512KB Flash Memory
- RAM: 64KB
- Tx Power: +4 dBm @ 7.5mA, 0 dBm @ 5.3mA
- Rx Sensitivity: -96 dBm @ 5.4mA
- Flexible and configurable 32 GPIO (8 analog inputs)
- Interfaces: UART / I2C / SPI / PWM / PDM / I2S / NFC
- 3 x Hardware SPI master ; 3 x Hardware SPI slave·2 x two-wire master ; 2 x two-wire slave
    - 1 x UART (CTS / RTS)
    - PDM for digital microphone
    - I2S for audio
- 12-bit / 200KSPS ADC
- 128-bit AES ECB / CCM / AAR co-processor
- Low cost external crystal 32MHz ± 40ppm for Bluetooth ; ± 50ppm for ANT Plus
- Low power 32MHz crystal and RC oscillators
- Operating Temp: -40°C to +85°C
- Raytac's product page

Product Dimensions: 16.0mm x 10.0mm x 2.2mm / 0.6" x 0.4" x 0.1"

Product Weight: 0.6g / 0.0oz

https://www.adafruit.com/product/4077/1-28-19