

# ACN52840

BT5 Smart Module  
Made for Bluetooth 5 long range

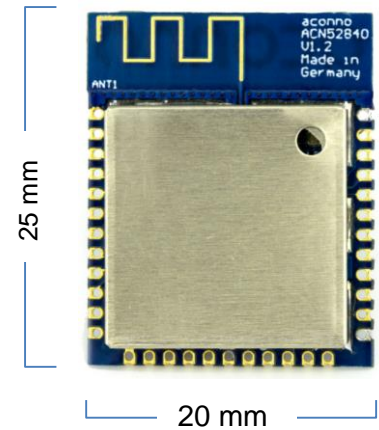


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aconno™

## ACN52840

The ACN52840 is a fully integrated, ultra-low power, Bluetooth Smart (former BLE) module in a small form factor which features the advanced Nordic Semiconductor nRF52840 SoC. The module combines the latest Bluetooth 5 connectivity, high performance, feature-rich applications with best-in-class security. Its capabilities are tailored for the upcoming demands of sophisticated IoT devices where small size, low power, application performance and radio-range are essential. Unlike many competitors, it features a maker-friendly PCB scale package that allows fast and easy integration without sacrificing access to its advanced peripherals and capabilities.



### Use cases:

- IoT (Smart Home, sensor networks, building automation)
- Beacons
- Advanced Personal Area Network (fitness monitoring, connected health, gaming, remote control, VR / AR)
- Advanced remote and gaming controllers

### Advantages:

- Excellent RF performance – BT5 LR up to 1500m
- Based on Nordic Semiconductor's nRF52840 Bluetooth 5 Low Energy SoC
- 64 MHz ARM® Cortex™-M4 with FPU and DSP
- 1 MB Flash + 256 KB RAM (double in comparison to nRF52832)
- 28 GPIOs with flexible module pin mapping (I2C, UART, I2S, PWM), USB, NFC-A tag
- Fully certified: CE, CE RED, FCC, IC, BT SIG, WEEE and ROHS compliant
- Easy to flash firmware through Tag-Connect connector
- Very energy efficient - runs for years on a coin cell battery
- Made in Germany

### Device Specifications:

- Ultra low power consumption
- Bluetooth 5 (2Mbps + Long Range)
- 32-bit ARM® Cortex™ M4 running on 64 MHz / 1024KB Flash memory / 256 KB RAM
- ARM TrustZone® CryptoCell 310 security subsystem
- Supporting: Bluetooth 5/Bluetooth mesh/Thread/Zigbee/802.15.4/ANT/ANT+/2.4 GHz
- Full set of digital interfaces including: USB/SPI/TWI/UART/PWM/QPSI/I<sup>2</sup>S/PDM/QDEC
- Quadrature decoder
- On-chip DC-DC buck converter and selectable LDO
- 12 bit /200 KSPS ADC
- Regulated supply for external components up to 25 mA
- -20 dBm to +4 dBm output power
- Weight: 2.2g
- Temperature range: -40°C to +85°C

**Let's do I(o)T together!**

