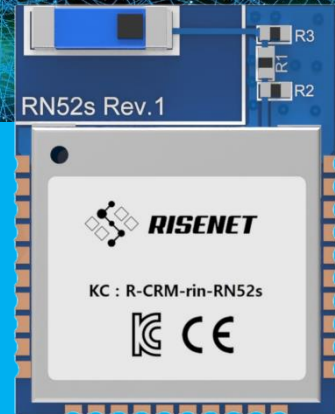


RN52s

BLE & 2.4GHz RF Module



RN52s is an ultra-low power 2.4 GHz wireless System on Chip (SoC) module, a 32 bit ARM® Cortex™-M4F CPU, flash memory, and analog and digital peripherals.

RN52s can support **Bluetooth® Low Energy** and a range of proprietary 2.4 GHz protocols, such as Gazell from Nordic Semiconductor.

Fully qualified Bluetooth Low Energy stacks for RN52s are implemented in the S132 series of SoftDevices.

The S132 series of SoftDevices are available for free and can be downloaded and installed on RN52s independent of your own application code.

Application

- Internet of Things (IoT)
 - Home automation
 - Building automation
 - Industrial
- Interactive entertainment devices
 - Remote control, 3D Glasses.
 - Gaming controller, Remote control toys
- Personal Area Networks
 - Health/fitness sensor and monitor devices
 - Medical devices, Key-fobs + wrist watch
- Mesh Network
 - BLE Mesh, Risenet Mesh

Features

- 2.4 GHz transceiver
 - -96 dBm sensitivity in Bluetooth® low energy mode
 - 215 EEMBC CoreMark® score
 - 1 Mbps, 2 Mbps Bluetooth® low energy mode
- TX Power -20 to +4 dBm in 4 dB steps
 - On-chip balun (single-ended RF)
 - 11.7 mA peak RX, 11.6 mA peak TX (0 dBm)
 - RSSI (1 dB resolution)
- ARM® Cortex®-M4 32-bit with FPU, 64 MHz
 - 58 µA/MHz running from flash memory
 - 51.6 µA/MHz running from RAM
 - Serial Wire Debug (SWD), Trace port
- S132 series SoftDevice ready
- Memory
 - 512 kB flash Program memory
 - 64 kB RAM
- Support for non-concurrent multiprotocol operation
 - On-air compatibility with nRF24L series
- Flexible Power Management
 - Supply voltage range 1.7 V to 3.6 V

