



# RTL8752H Series



## General Description

- Supports Bluetooth 5.3 core specification+2.4GHz proprietary
- Supports 15.4 communication required for Thread/Zigbee Spec
- Supports LE 2Mbps
- LE advertising Extensions
- High Duty Cycle Non-Connection Advertising
- Supports OTA (Over-the-Air)



## Peripheral Interface

- Flexible GPIO design
- Hardware Keyscan and Quad-decoder
- Embedded IR transceiver & receiver
- Real-Time Counters (RTC)
- SPI master/slave x 2; Timers x 8; I2C x 2; PWM x 8; UART x 2
- I8080/QSPI
- 400ksps, 12bit, 6CH AUXADC
- I2S/PCM interface
- Internal 32K RCOSC to keep BLE link
- Embedded PGA and audio ADC



## MCU Platform

- ARM Cortex-M0+ maximum frequency 40MHz
- 120KB SRAM totally
- Serial Flash Controller (1-bit&4-bits mode) with 8KB 4-way cache
- Supports AES 128/192/256 encryption/decryption engine
- 512KB/1024KB Flash (depends on part number)
- Supports TRNG & Secure Boot



## RF Performance

- Tx Power: 0/4/7.5 dBm adjustable (refer to datasheet for details)
- BLE Rx Sensitivity : -97dBm@1M
- 15.4 Rx Sensitivity : -102dBm@250 kbps O-QPSK DSSS
- Fast AGC control to improve receiving dynamic range