



RTL8762D Series



General Description

- Supports Bluetooth 5.1 core specification
- Supports LE 2Mbps
- LE advertising Extensions
- LE Long Range
- High Duty Cycle Non-Connection Adv
- Supports OTA (Over-the-Air)
- Supports AoA/AoD



Peripheral Interface

- Flexible GPIO
- Hardware Keyscan and Quad-decoder
- Embedded IR transceiver
- Real-Time Counters (RTC)
- SPI master/slave x 2; Timers x 8; I2C x 2; PWM x 8; UART x 2
- 400ksps, 12bit, 8-channel AUXADC
- I2S interface for external audio codec
- I8080 interface for LCD
- Internal 32K RCOSC to keep BLE link
- Embedded PGA and audio ADC with 5-band EQ



MCU Platform

- ARM Cortex-M4F max frequency 90MHz
- 192KB SRAM totally
- Serial Flash Controller (1-bit&4-bits mode)with 16KB 4-way cache
- Supports AES128/192/256 encryption/decryption engine
- MCM Flash512/1024KB (depends on detail part number)
- Supports secure boot, encryption code execution



RF Performance

- Tx Power: 0/4/7.5 dBm adjustable (refer to datasheet for details)
- Rx Sensitivity: -97dBm BLE
- Fast AGC control to improve receiving dynamic range