RTL8763E Series

General Description

- Bluetooth 5.3 core specification
- BR/EDR/LE-1M/LE-2M
- LE audio (depends on part number)
- OTA (Over-the-Air) FW upgrade
- Support speaker out
- Analog mic input
- Digital mic input
- Built-in LDO for the I/O and FLASH memory
- Built-in Li-Ion battery charger with up to 300mA charger current

RF Performance

- Max Tx Power 7.5 dBm @EDR 2M (refer to datasheet for details)
- Max Tx Power 10 dBm @BLE (refer to datasheet for details)
- RX sensitivity -97.5 dB (1M BLE)
- RX sensitivity -94.5 dBm (1M BR)
- RX sensitivity -94 dBm (2M EDR)
- Fast AGC control to improve receiving dynamic range

Audio Codec Support

- SBC codec
- mSBC codec
- LC3 codec (depends on part number)
- MP3 decoder(depends on part number)

MCU Platform

- RealM300, 32-bit ARMv8M mainline processor, maximum frequency, max rate 100MHz
- 532KB embedded shared SRAM
- AES 128/256, SHA256, RSA-2048 security engine
- embedded Flash 4MB (depends on part number)
- Embedded PSRAM 4MB (depends on part number)

Peripheral (depends on part number)

- Flexible GPIO Design
- Real Time Counter (RTC)
- 4 CH 12 bits ADC
- USB 2.0 (depends on part numbers)
- I2C
- I2S interface for external audio processor
- UART
- Line in, L/R channel
- SPI
- PDM interface for digital mic input
- PWM
- SDIO (depends on part numbers)
- SPIC (depends on part numbers)
- I8080 (depends on part numbers)
- Available GPIOs: 9~59 pins depend on part numbers