apm8760 Bluetooth v2.1/4.2 Dual Mode SPP Module

DESCRIPTION

The apm8760 module is a highly integrated single-chip Bluetooth 2.1/3.0/4.0/4.1/4.2 controller with a UART interface. It combines a BT Protocol Stack(LM, LL, L2CAP, GATT, RFCOMM, SPP and LE), BT baseband, modem, and BT RF in size of 11 x 15 mm based on RTK RTL8760ATT solution.

The apm8760 Bluetooth module complies with Bluetooth core specification v4.0/v4.1/v4.2, and supports dual mode (BR/EDR+AMP+Low Energy Controllers). It is compatible with previous versions, including v2.1+EDR and v3.0+HS. For BR/EDR, allows active links in slave mode and master mode. For Low Energy, it supports multiple states and allows active links in slave mode. The links in BR/EDR and LE can be active simultaneously.

The apm8760 module can widely be applied in short range wireless communication and performs as core component in remote controller, Beacon, Home automation, wearable devices.

GENERAL FEATURES

- Small footprint: 11×15×1.6 mm max
- Bluetooth v2.1/4.2 listed dual-mode module
 - QDID : 113110
 - DID : D048702
- Compatible with Bluetooth v2.1 and v3.0 systems
- Supports Bluetooth v4.2 Low Energy(BLE)
- Integrated 8KB ROM to keep Bluetooth patch, lower MCU storage requirement
- Supports all packet types in basic rate and enhanced data rate
- Supports secure simple pairing
- Supports low power mode (Sniff mode)
- Bluetooth 4.2 Dual Mode support: Simultaneous LE and BR/EDR

- Supports multiple Low Energy states
- Integrated 32K OSC for power management
- RoHS compliant

Profile

- Support SPP profile
- Support GATT profile

HOST INTERFACES

• Complies with HS-UART with configurable baud rate for Bluetooth

PERIPHERAL INTERFACES

- Configurable LED pin
- Support SPI serial FLASH memory for parameter and data storage

APPLICATIONS

- Mobile Point of Sales(mPOS)
- M2M connectivity
- Wearables
- Health care/Medical
- Home automation
- Remote control toys

APPEARANCE

