

Bluetooth speaker schematic diagram description

1. Schematic diagram description

The Bluetooth speaker based on CSR BC8615 QFN chipset, It is support the headset profile and handfree profile. It is compliant to Bluetooth V4.0 specification. It is a dual mode Module supporting Bluetooth v3.0 and Bluetooth Low Energy.

U1(BC8615) is a single chip Radio and baseband IC for Bluetooth 2402-2480MHZ systems.it provides Bluetooth RF, baseband and some power regulator functions. It is integrated DC +1.8V power supply. +1.8V uses for the PIO pull up such as the buttons.

U4 is flash IC, it use for store the configurations of MMI.

Y1 is a crystal oscillator, provides 26M clock reference.

U6 is power amplifier IC;

It uses PCB copper antenna for RF transceiver.

It has Blue and Red indicator lights to show different working state, and has MFB, Volume up, Volume Down buttons to operation the headset.

2. The Signal Path description

When the Bluetooth speaker connects to a mobile phone, the built-in MCU will control the RF modem to process the baseband signal, indicate the working state by the LED. When uses the speaker, the voice can be picked by microphone. There are Multi-function Button, Volume up button and Volume Down button for you to increase the volume or decrease the volume of the speaker.