

CIRCUIT DESCRIPTION

1. Schematic diagram description

The CK6 Bluetooth speakerphone based on CSR BC6150A08 QFN chipset, It is support the headset profile and handfree profile. It is compliant to Bluetooth v2.1 + EDR specification.

References to the document <The CK6 Bluetooth Headset schematic diagram>

U1(BC6150) is a single chip Radio and baseband IC for Bluetooth 2.4GHZ systems.it provides Bluetooth RF of the 2402-2480MHz Tx frequency, 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.

U2 is serial EERPOM, it use for store the configurations of MMI.

XT1 is a crystal oscillator, provides 16M clock reference.

CK6 uses PCB copper antenna for RF transceiver.

CK6 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 CK6 Speakerphone 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 headset, 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.