

Description of BK063RD Operating Principle

Power Supply

- A. Battery: system is supplied power by Li-polymer battery, the nominal voltage is 3.7 V; capacitance C37 plays a part in decoupling; the voltage of the battery will be 4.2 V after fully charged, it will down to 3.2 V or so after the power is drained.
- B. Unit of Voltage-stabilizing: the inner DC/DC change-over circuit of U1 adjusts the battery's voltage to 1.8 V and is output by the feet 31 of U1, and then supply power for the inner CODEC of bluetooth main chip of U1 and the part of logic control.
- C. Circuit of Charge: the outer DC5V connects U4 to charge IC by MICRO-USP and to charge the Li-polymer battery through the inner circuit of charge of U4.
- D. Charge to Reset Circuit: Q2、C26、R19、C23 compose the charging of resetting circuit.

E PROM Storage

E PROM U2 is used to store the parameter setup in advance by earphone.

Crystal Oscillator

Crystal oscillator provide the frequency of sending and receiving radio frequency.

Antenna

Making use of Meander Line Antenna as the antenna, aerial impedance matching circuit is made up of C1、C2、L1、L2、L3.

Audio Circuit

- A. Unit of Microphone: input from the 1、2 feet of U1 of bluetooth main chip, formed by C20、C21、C38、R4、R18、L5, microphone apply biasing voltage through connecting the 47 feet of U1 of bluetooth main chip, C38 is the decoupling capacitance of the biasing voltage, C18、C19 are between microphone and microphone magnifier to separate direct current.
- B. Unit of Earphone: output from the feet 3、4 of bluetooth main chip U1 to audio power amplifier IC U5, and amplified through U5 and output by speaker.

Circuit of Keystoke

- A. SW MFB: realize the function of turning on、turning off and facility pairing.
- B. SW V+、SW V- : achieve the function of increasing、reducing volume
- C. SW、MUTE: realize the function of microphone mute during a call.