

Main parameters:

Power adaptor: 3.7V 900mAh built-in lithium battery
Charging voltage: DC 5V
Speaker resistor: 4Ohm
Power consumption output: 1.5W*2

Circuit declaration

1. iSP245 is a 2.0(stereo) portable Bluetooth speaker.
2. iSP245 can support both AUX and Bluetooth music.
 - 2.1. When play AUX music, sound frequency L&R signal enter into 3(R IN)&18(L IN) of IC HT6808(U2) through JK1(earphone dock), after amplifying, transferring into L&R speaker from amplifier IC 5(RP+), 8(RO-) and 13(L-) 16(L+).
 - 2.2. The shift between AUX and Bluetooth can be controlled by JK1(earphone dock). When AUX signal is input, JK1(earphone dock) switch outputs L electrical level, counter wisely, JK1(earphone dock) switch outputs H level.
 - 2.3. While playing AUX music, the Bluetooth module power will be cut off to stop working through JK1(earphone dock) switch to control triode Q1(3904) and Q2(3906).
 - 2.4. Under Bluetooth working status, due to no AUX signal input, it can use JK1(earphone dock) switch to control triode Q1(3904) and Q2(3906) to make it pass, then the Bluetooth can be charged by power adaptor which will help Bluetooth work.
 - 2.5. The Bluetooth Module F-3089 utilizes 12MHz OSC.

Power charging

Electricity of iSP245 is supplied by 3.7V 900mAh built-in lithium battery. When the power is limited, it can be charged by outer DC 5V adaptor, which connected with mini USB cable, using charging management IC EUP8054(U3) to transfer the power to device.