

一. Main parameters: Power adaptor: 3.7V 500mAh built-in lithium battery Speaker resistor: 40hm*1 Power consumption output: 1.5W*1

二. Circuit declaration

- 1 1. DS-1095 is a mono Bluetooth speaker.
- 2 2. DS-1095 can support both AUX and Bluetooth music.
- 3 3. When play AUX music, sound frequency L&R signal enter into IC LM358 (U3) through ST-IN (earphone dock), after the process of the sound, transferring into IC HT6871(U2) to amplify and Trumpet sound output.
- 4 4. Under Bluetooth working status, the signal output from the bluetooth model BT-3089(U1) after process by the IC LM358(U3) transfers into IC HT6871(U2) to amplify and Trumpet sound output

三. Power charging Electricity of DS-1095 is supplied by 3.7V 500mAh 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 HX6001(U4) to transfer the power to device.

This device by built-in 3.7V 500MAH lithium battery power, when battery power is insufficient , external DC 5V power by MICRO USB interface entered, DC5V by charging management IC HX6001 (U4) of 4th feet entered, and 3rd feet output 4.2V/360 mA to battery charging, at this time charging lamp (LED1) light red; if full electric, HX6001 (U4) of 1st feet output high level 4.2V, at this time charging lamp power off.

The mini USB of this device contains five pins. Only two pins which are used for charging is ability to function. Other three pins are suspended. There is no address information confirmation,it is used for charging only.

For Bluetooth module

This Bluetooth module F-3089 is regulated to Bluetooth V2.1.

The working procedures are:

- a. When power on, the eut will looping scans the whole frequency until a connection command from the transmitter is received.
- b. The eut transmits a response signal.
- c. The transmitter receives the response signal and recognize it, then send a connection command to establish the connection.
- d. After the connection establish successfully, the data transmission is beginning. At the same time, the transmitter and eut will shift frequencies in

synchronization per a same pseudo randomly ordered list of hopping frequencies, the hopping rate is 1600 times per second. each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event

- e. The bandwidth of the receiver, which is set to a fixed width by the software, match the hopping channel bandwidth of their corresponding transmitter.