Power Supply: DC 3.7V

Speaker Impedance: 4Ohm

DS-1108 is a Bluetooth speaker, introductions for the circuits:

AUX signal was sent through the JACK2 (earphone socket) to U1 (HT6809) the amplifier U1 (HT6809), and finally to the speaker. Under Bluetooth status, Pls press ‘pair ’button at the back of the speaker to pair with the external BT equipment. After paired, it will play the music. The signal is conducted after the Bluetooth receiver module to the COMMON Mode U2 (LM358), via amplifier U1 (HT6809), and finally to the speaker. When play the music, we can press PLAY/PAUSE and volume up and down buttons.U2 (LM358) is the pre-amplifier. SW4 (PAIR button) 、SW3(Volume down)、SW2(PLAY/PAUSE)、SW1(Volume up)、LED1(charging indicator)、LED2(AUX/Bluetooth status indicator).

The device is a bluetooth stereo speaker, The working frequency of RF module F-3089（crystal is 12MHz） is setted to 2402MHz ~ 2480MHz, the frequency separation is 1MHz and there are 79 channels. with the spread spectrum code sequences to hopping constantly.

To make sure the communication stable, Bluetooth special design the fast acknowledge and frequency hopping plan to ensure that link stability. First link, between Bluetooth devices will build a pseudorandom code, Only the pseudorandom code is same, the information transfer will be accepted. Other interference is not possible in the same sequence of interference. Bluetooth through the spread spectrum technology, Make the influence of interference may become very small.

The working procedures are:
1. Power on, the indicator light flashes faster, the DS-1108 enter to pair mode.The DS-1108 will do the frequency hopping according to a certain sequence, and then send the connection command.
2. If there is a Device response, the DS-1108 will judge whether it can be permitted to connect. Prompt enter a passkey.
3. If the passkey is right, then can be permitted to connect, send the connection command to build up the connection.
4. While the connection build up successfully, the data transmission is beginning. At the same time, the DS-1108 and device will shift frequencies in synchronization per a same pseudo randomly ordered list of hopping frequencies, the hopping rate is 1600 times per second.
5. The bandwidth of the receiver, which is set to a fix width by the software, match the hopping channel bandwidth of their corresponding transmitte