Circuit Description

The Bluetooth speaker circuit is composed of USB 5V charging, Bluetooth main control (AC6969D), audio power amplification.

1. Charging: The USB base is inserted into DC 5V, and the constant current of a single 3.7V lithium battery is about 300mA through IC 4054.

2. Bluetooth wireless music playback: Lithium battery (3.7V) provides power for Bluetooth, crystal oscillator (24MHz) provides clock signal for Bluetooth. When the speaker is on, the indicator lights up and the Bluetooth will broadcast the Bluetooth signal to the surrounding area through the antenna (2402MHz-2480MHz). When there is a Bluetooth device (such as a mobile phone, laptop, or PAD), the device name of the Bluetooth speaker is searched through Bluetooth and connected to the speaker through matching.

3, audio power amplifier: XA8870C from Bluetooth output music signal power amplification drive speaker sound. The power amplifier IC has built-in adaptive, to ensure a large enough output power and prevent cutting distortion.

4. Turn on and off the RGB color lights through the main control (AC6969D).

Modulation:

BDR(GFSK) , EDR(π/4-DQPSK), EDR(8DPSK)