

Circuit Description

This product is a Bluetooth speaker that can input audio signals through Bluetooth connection. It contains charging management, Bluetooth module, power amplifier module, radio module, button module and other parts.

1. Charging management: DC 5V voltage is input from the TYPE-C socket, input through the 16th pin of the main control AC6965E4, and after internal voltage reduction and voltage regulation, it outputs 4.2V voltage through the 17th pin of the AC6965E4 to charge the lithium battery. The lithium battery supplies power to the main control AC6965E4 through the 17th pin of the AC6965E4.
2. The Bluetooth module receives and transmits RF signals through the 22nd pin antenna of the main control AC6965E4 to pair with other Bluetooth devices. The audio received by Bluetooth is output to the power amplifier LTK8002D through the 12th pin of the main control AC6965E4, and then output to the load speaker to make sound. AC6965E4 also supports FM function.
3. The power amplifier module is the main control AC6965E4. The received audio signal is transmitted to the power amplifier through pin 12. At the same time, it is controlled and powered by VBAT through pin 14, and the audio is output from pins 5 and 8 of the power amplifier.

Frequency Range:

Bluetooth: 2402~2480MHz

FM: 87.5-108MHz (RX)

Modulation Technique:

Bluetooth: GFSK, $\pi/4$ -DQPSK, 8DPSK

FM: FM