

Circuit Description

The Bluetooth Speaker includes below main components: IC2 (HX6001), IC3 (CYT8117), IC4 (TX3012), U2 (LM358), U5(bluetooth module), CN1(mini USB socket), JK1(headphone jack), K1(power switch), S1(button), S2(button), S3(button), LED1(light diode), LED2(light diode), BAT(battery).

Bluetooth circuit: The IC3 and L8, C14, C2, C25 constitute a 3.3V voltage supply U5 circuit (utilizing a 16MHz oscillator), which will receive and decode the audio signal and then via the C3, C4 input to U2, after U2 magnification and high-pass filter output to IC4 power amplifier, and then by IC4 power amplifier output to the speaker. Through the S1, S2 control U5, make U5 I/O, PIO4 control IC4 increase volume; AIO3 control IC4 reduced volume. S3 control U5, make its control music play/pause. LED2 for bluetooth indicator.

AUX audio circuit: JK1 for external audio input port AUX, audio through input to the U2 C1 high-pass filter, and then by IC4 power amplifier output to the speaker.

Charging circuit explanation: CN1 mini USB socket of the input DC5V supply IC2 first constant current 310 mA, again constant pressure to lithium battery charging 4.2 V. LED1 for charging indicator .