

OPERATIONAL DESCRIPTION

The equipment under test (EUT) is a transmitter of 2.402-2.480GHz Bluetooth speaker.

A major technical description of bluetooth speaker is described as following

Product Designation	LED shower speaker
Operation Frequency	2.402 GHz to 2.480GHz
RF Output Power	4.38dBm(Max)
Modulation	Support GFSK and $\pi/4$ -DQPSK all paket types
Hardware Version	AD-BT-C10_1 V1.0
Software Version	9C02-43A449E6
Antenna Designation	PCB Antenna
Antenna Gain	0.58dBi
Power Supply	Normal Voltage: DC 3.7V

- 1、 Power adapter input DC5V to charge, then insert MICRO 5P,it goes through D1 and R1 smoothing, to 4.4V/200mA to charging the battery.
- 2、 3.7V go through C6 to serve the BT Trip(U1) IC , Implement bluetooth RF protocol、audio agreement and the button function that controled by the logic link. The bluetooth chip works in the 2.4ghz band. The operating oscillation frequency of the IC is 24MHZ(Y1), the Antenna frequency range is 2.402~2.480GHz, and the Antenna gain is 0.58dBi.

Output audio signal of the bluetooth are amplified by power amplifier U2 and processed, then entered into speaker.

- 3、 U1 IC consists of key circuit through R3, R4 and R5 to perform functions such as "switch on / off", "play pause", "up and down music", "connect and hang up the phone"
- 4、 U1 IC controls the red light, blue light and green light on and off through R12, R13 and R14.
- 5、 R11, C13 and microphone constitute a microphone circuit to realize the call function.