

# Circuit Description

LSD4BT212-06D0 is based on Broadcom Bluetooth chip BCM20705, designed specifically for Hisense TV Bluetooth module, can be widely applied in the field of short-range wireless communications for all occasions, it has small size, low power consumption, transmission distance, anti-interference ability, and low cost.

The module antenna is ceramic antenna, the overall design is compact, small size, the interface is completely open, customers in the use of RF hardware design eliminates the difficulty, while the software and product structure more flexible secondary development of space.

## 1. Feature

- support Bluetooth 4.0 and EDR mode;
- Built-PA, to support Class1 mode;
- Supply voltage support 5.5V, can be used directly USB powered;
- Working frequency: 2402MHz ~ 2480 MHz;
- Channel spacing: 1MHz;
- Modulation: FHSS / GFSK,  $\pi/4$ -DQPSK, 8DPSK;
- Communication speed: 1Mbps (GFSK), 2Mbps ( $\pi/4$ -DQPSK), 3Mbps (8DPSK);
- The module with a standard USB interface and IO ports , can be used in applications such as television sets;
- Software programmable output power;

### 3.Module Characteristics

Parameters	Performance
DC Input	5V(MAX:5.5 V)
Operating Temperature	0°C ~ 60°C
BT Output Power(Conducted Output Power)	<6dBm
Initial Carrier Frequency Tolerance/Average Offset	±75 kHz
Carrier Drift/Drift Rate/DH1	±20 kHz /50us
Carrier Drift/Drift Rate/DH3	±20 kHz /50us
Carrier Drift/Drift Rate/DH5	±20 kHz /50us
Carrier Drift/Average Drift/DH1	±25kHz
Carrier Drift/Average Drift/DH3	±40 kHz
Carrier Drift/Average Drift/DH5	±40 kHz
Modulation Characteristic/F1avg	155 kHz
Modulation Characteristic/F2max	130 kHz
Modulation Characteristic/F1/F2 Ratio	0.94