LSD4BT212-06D0
BT Module Product Specification and User Manual

Name:BT Module

Model:LSD4BT212-02D0

Version:V1.0

FCC Caution:

Any Changes or modifications not expressly approved by the responsible party could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

To satisfy FCC RF Exposure requirements for this transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation.

If used in portable product to do SAR evaluation and testing.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1).This device may not cause harmful interference, and

2).This device must accept any interference received, including interference that may cause undesired operation.

OEM Labeling Requirements:

NOTICE: The OEM or final integrator must ensure that FCC labeling requirement are met. This includes an additional label on the outside of the final product housing with the following contents:

Company Name MODEL: Contains Model: LSD4BT212-06D0, FCC ID:N8NLSD4BT212-06D0 This device complies with Part 15 of the FCC Rules. Operation is subjected to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1. Functional characteristics

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.

Installed location

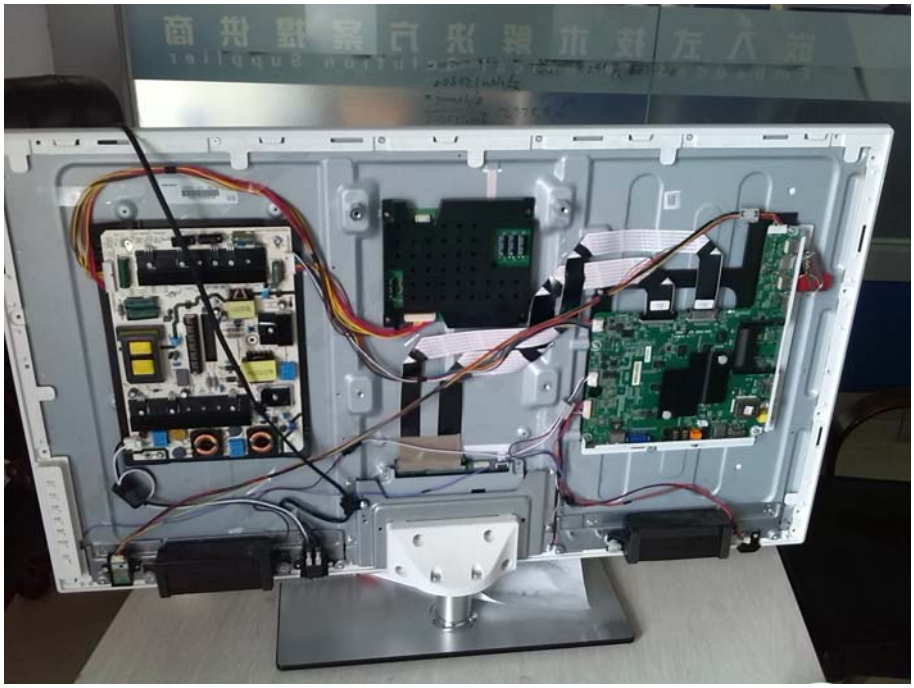


Figure 1

Figure 2

2. 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, π/4-DQPSK, 8DPSK;
- Communication speed: 1Mbps (GFSK), 2Mbps (π/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;

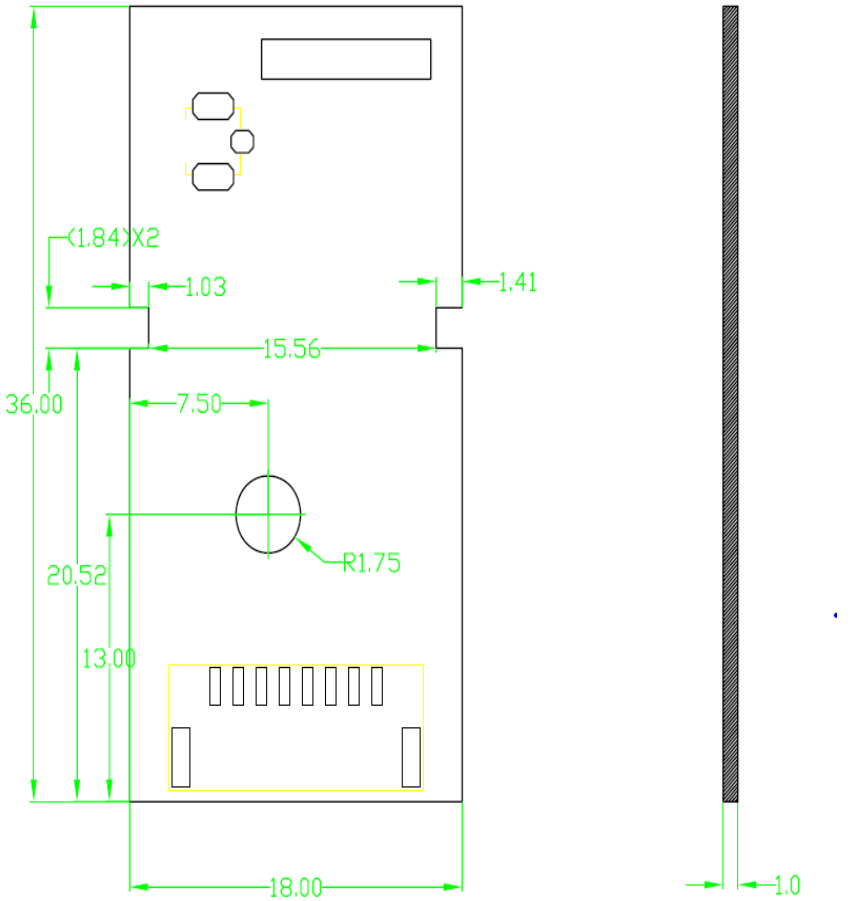
3.Module Characteristics

Parameters	Performance
DC Input	5V(MAX:5.5 V)
Operating Temperature	0℃～60℃
BT Output Power(Conducted Output Power)	＜6dBm
Initial Carrier Frequency Tolerance/Average Offset	±75kHz
Carrier Drift/Drift Rate/DH1	±20kHz/50us
Carrier Drift/Drift Rate/DH3	±20kHz/50us

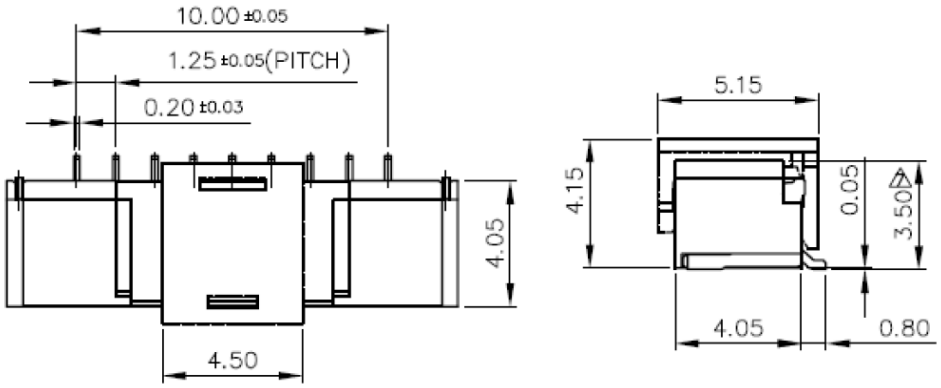
Carrier Drift/Drift Rate/DH5	±20kHz/50us
Carrier Drift/Average Drift/DH1	±25kHz
Carrier Drift/Average Drift/DH3	±40kHz
Carrier Drift/Average Drift/DH5	±40kHz
Modulation Characteristic/F1avg	155kHz
Modulation Characteristic/F2max	130kHz
Modulation Characteristic/F1/F2 Ratio	0.94

4.Hardware layout and interface description

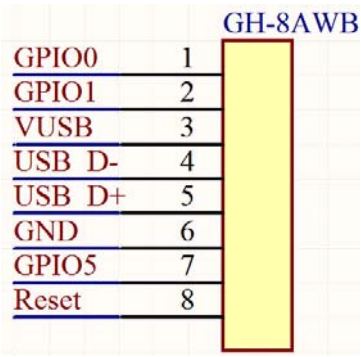
PACKAGE INFORMATION



Interface size



Pin Description



Pin No	Discription
1	BT_DEVICE_WAKE(GPIO_0)
2	BT_HOST_WAKE(GPIO_1)
3	USB_5V
4	HUSBDM
5	HUSBDP
6	GND
7	3D_SYNC(GPIO_5)
8	BT_RST