WLT3266 User Manual

Product Name：Dual mode bluetooth module

Model ：WLT3266

1. Introduction

Thank you for using the Bluetooth 5.0 module product provided by Wenzhou Zhirong Health & Science Technology Co., Ltd. Before use, please read this user manual carefully. Please follow the technical specifications when using the module in your design and develop activities. Wenzhou Zhirong Health & Science Technology Co., Ltd has the right to change the contents of this manual in accordance with the needs of the technical development.

FCC application:

This device 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.

L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

MPE Requirements

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

To ensure compliance, operations at closer than this distance is not recommended.

Les antennes installées doivent être situées de facon à ce que la population ne puisse y être exposée à une distance de moin de 20 cm. Installer les antennes de facon à ce que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l' antenne.

La FCC des éltats-unis stipule que cet appareil doit être en tout temps éloigné d'au moins 20 cm des personnes pendant son functionnement.

Region Selection

Limited by local law regulations, version for North America does not have region selection option.

Label

Host labeling requirement: Contains transmitter module FCC ID：2AXSR-COZYMATE001.

2. Product Information

2.1 Product Information

WLT3266 is an audio Bluetooth module , and a single chip audio Bluetooth solution based on BK3266.Audioprotocol stack with built-in Bluetooth and various applications profile, It can easily realize the interconnection, data transmission, voice, music and other applications of the user's Bluetooth device.WLT3266 is an audio Bluetooth module, which supports audio codec. Audio Bluetooth protocol stack is integrated in the module to support a variety of traditional Bluetooth applications and low-power Bluetooth applications. For example: HFP, A2DP, AVRCP, etc.Support Bluetooth, HFP, A2DP, hid, AVRCP Support transparent / protocol data transmission mode, provide at + instruction set configuration, support UART communication interface, UART interface up to 3mbps. Built in 16 bit audio DAC and 16 bit audio ADC, built-in caps headset power amplifier, built-in mic bias voltage and amplifier circuit, support analog audio input PCB antenna, customers can also connect external antenna single power supply 2.8 ~ 4.2V stamp hole pin, easy and reliable welding. Ultra small size: 13x27.2mm flexible software platform, providing customized services

2.2 Feature

- ●Bluetooth 5.0
- ●operating Frequency 2.4GHz

2.3 Application area

Bluetooth Speaker Bluetooth music transponder Car Bluetooth hands-free Health care Wireless POS machine Portable printer

3. Product Specification

3.1 Parameter

BT Standard	Bluetooth BR+EDR &BLE(1M only)
BT Modulation Mode	Bluetooth: GFSK, π/4-DQPSK and 8-DPSK
BT Antenna Gain	3.0 dBi (MAX)
Max output power:	2.21dBm

4. Hardware information

4.1 basic information： (Unit:mm)

Parameter	Description	Min	TYP	Max	Unit
VCC4BAT	Battery regulator supply voltage	-0.3	-	4.2	V
VCC5USB	USB power supply voltage	4.75	-	5.75	V
RX	RX Input power	-	10	-	dBm
TSTR	Storage temperature range	-40	-	150	°C

4.2 PIN definition

Pin #	Name	Type	Description
1	UART_TX	I/O	UART_TXD/I2C_SCL, Download port
2	UART_RX	I/O	UART_RXD/I2C_SDA, Download port
3	GND	POWER	Ground
4	LINEIN_L	I	Line in L
5	LINEIN_R	I	Line in R
6	P15	I/O	SPI_SCK/ADC2/CLKOUT Soft shut down and wake up (active high)
7	NC		
8	SD_CMD	I/O	JTAG_TMS/PWM3/PCM_CLK/SD_CMD/SPI2_MOSI
9	SD_CLK	I/O	JTAG_TCK/PWM2/ADC4/PCM_SYNC/SD_CLK/SPI2_SCK
10	SD_DAT	I/O	JTAG_TDI/PWM4/ADC6/PCM_DIN/SD_DATA0/SPI2_MISO
11	RESET	-	External reset input, active low
12	VDD	POWER	Battery power supply
13	GND	POWER	Ground
14	VCC5USB	POWER	USB charge power input
15	USBDN	I/O	PWM1 / USBN
16	USBDP	I/O	PWM0 / USBP
17	AUDRP	O	Audio right channel positive
18	AUDRN	O	Audio right channel negative
19	AUDLN	O	Audio left channel negative
20	AUDLP	O	Audio left channel positive
21	MICREF	POWER	Microphone reference voltage
22	MICRN	I	Microphone input negative
23	MICRP	I	Microphone input positive
24	GPIO14	I/O	Digital input and output
25	ANT	-	External ANT PIN
26	GND	POWER	Ground

WLT3266
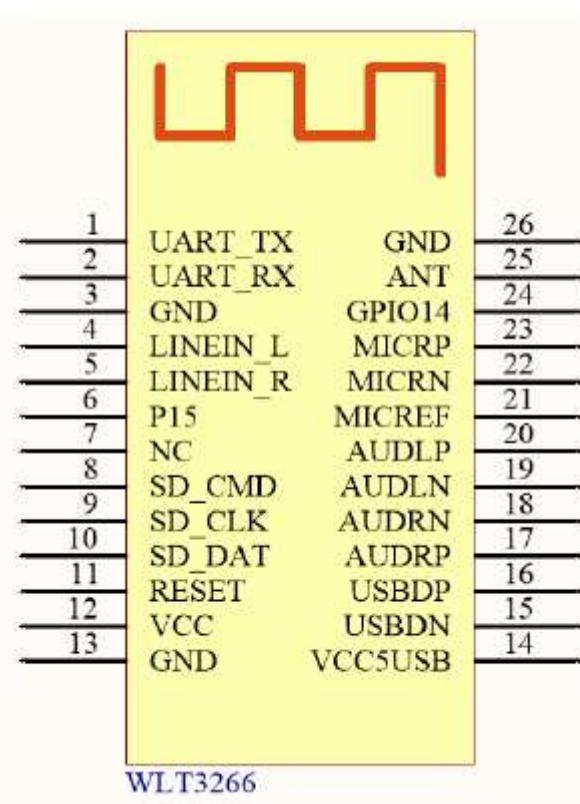
4.2 audio spec

| Parameter	Condition	Min	TYP	Max	Unit
DAC Diff. Output	With 600ohm loading	-	-	1.1	Vrms
	With 32ohm loading	-	-	-	Vrms
	With 16ohm loading	-	-	0.9	Vrms
DAC Diff. Output THD	With 1.1Vrms@600ohm loading	-	75	-	dB
	With 0.8Vrms@16ohm loading	-	75	-	dB
DAC output SNR	1kHz sine wave	-	98	-	dB
DAC Sample Rate		8	-	48	kHz
ADC SNR	1kHz sine wave	-	96	-	dB
ADC Sample Rate		8	-	48	kHz

4.3 module size spec
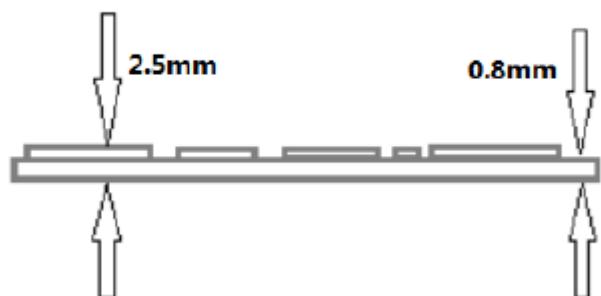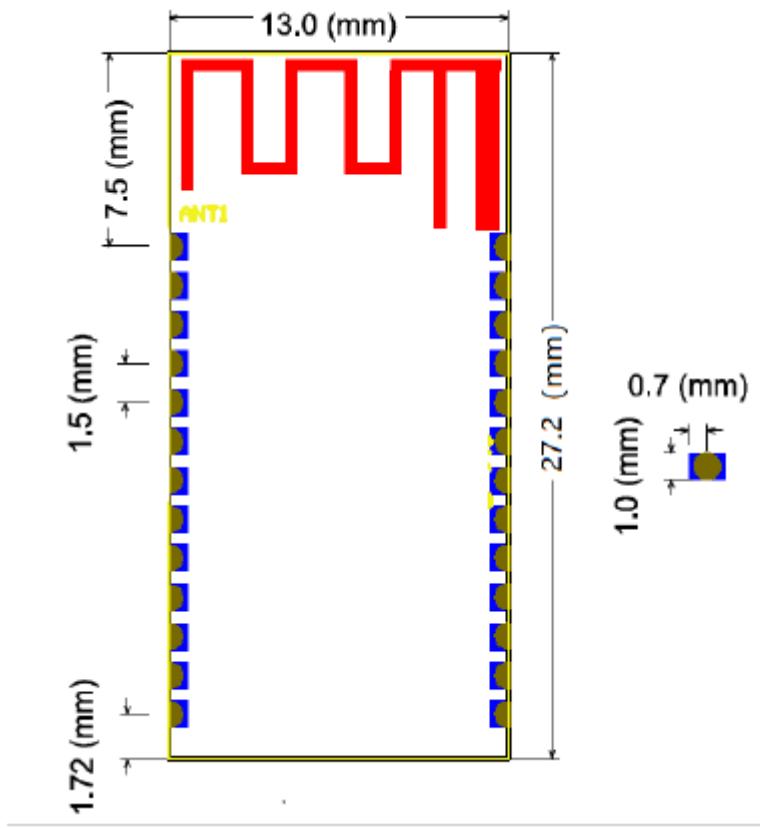
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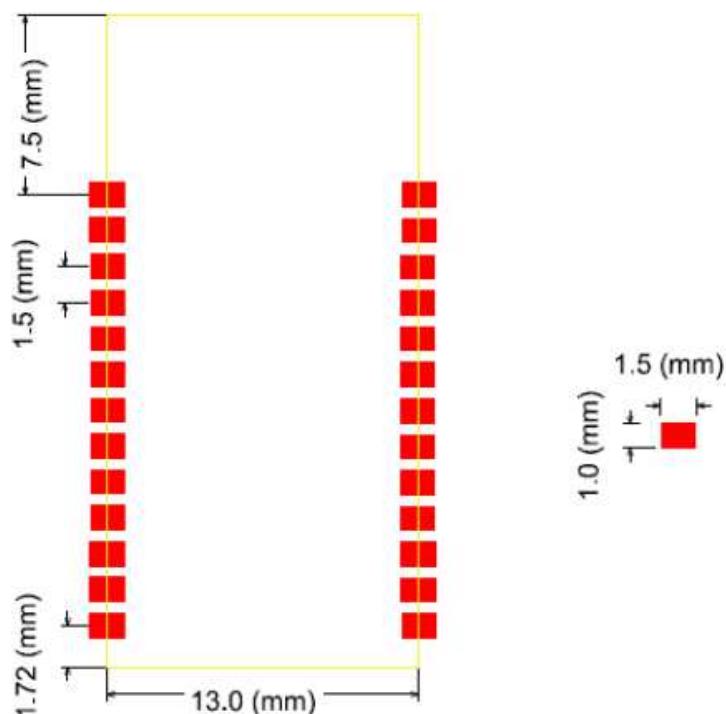
4.5Reference design
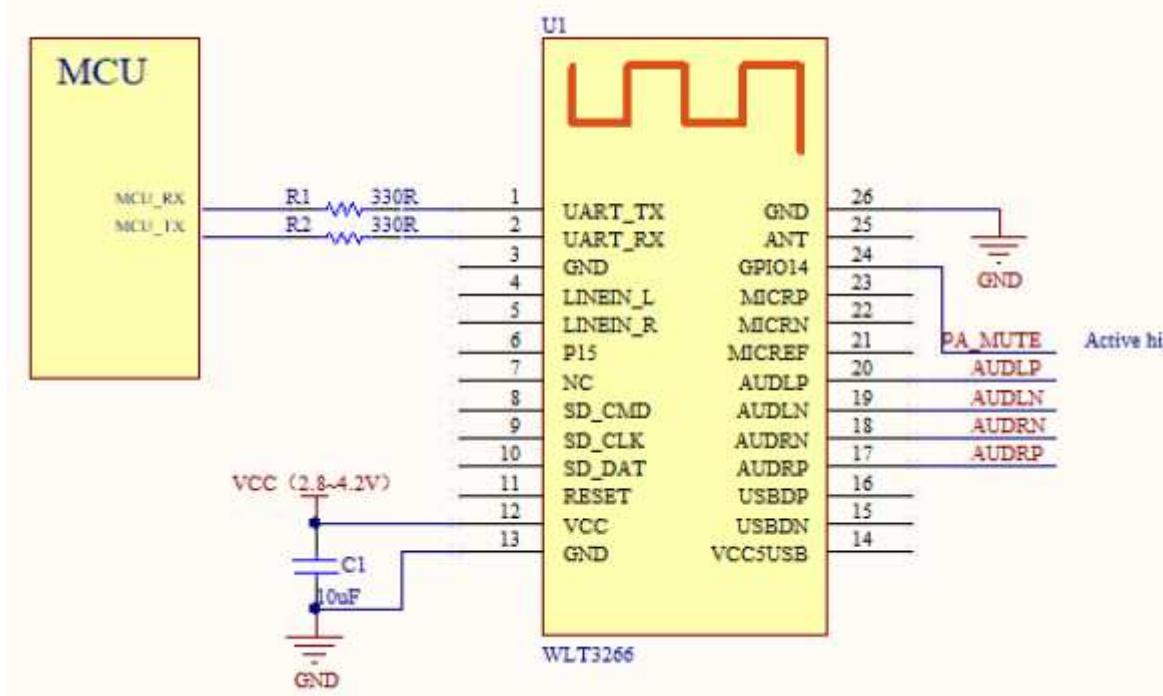
5 EU single contact point

Wenzhou Zhirong Health & Science Technology Co., Ltd

6 Manufacture's postal address

No. 129, North Liandong Road Clothing Garden, Kunyang, Pingyang, Wenzhou, Zhejiang

7 Importer's name & address

Wenzhou Zhirong Health & Science Technology Co., Ltd

8. The requirement for KDB 996369 D03:

8.1 List of applicable FCC rules

FCC Part 15. 247.

8.2 Summarize the specific operational use conditions

None

8.3 Limited module procedures

The module is a single module, so this requirement is not applicable to the product.

8.4 Trace antenna designs

The module uses the permanent PIFA antenna, so this requirement is not applicable to the product.

8.5 RF exposure considerations

The host device manufacturer should confirm that a separation distance of 20 cm or more should be maintained between the antenna of this host device and persons during the host device operation.

8.6 Antennas

For Bluetooth: PCB antenna, 3.0dBi

8.7 Label and compliance information

If this certified module is installed inside the host device, then the outside of the host must be labeled with "Contains FCC ID: 2AXSR-COZYMATE001   ".

8.8 Information on test modes and additional testing requirements

The host manufacturer can use the software of Combo Tool to make the Bluetooth transmit continuously, and the software of QA Tool to make the wifi transmit continuously.

8.9 Additional testing, Part 15 Subpart B disclaimer

The module only complies with the FCC Part 15.247. If the module is installed in the host device, the host manufacturer is responsible for the compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. For example, if the host manufacturer markets their product as being Part 15 Subpart B compliant (when it also contains unintentional-radiator digital circuity), then the host manufacturer shall provide a notice stating that the final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.