

LINGDONG INTELLIGENT TECHNOLOGIES CO.,LTD.

SPECIFICATION

Customer Name:

Sample Name: Bluetooth BLE Board

Sample part number: TS02

Factory seal:

Date: June 17, 2024

检 查 TESTED BY	核 对 CHECKED BY	承 认 APPROVED BY
石潘超	欧阳良才	陈建

Customer signature and seal:

Date:

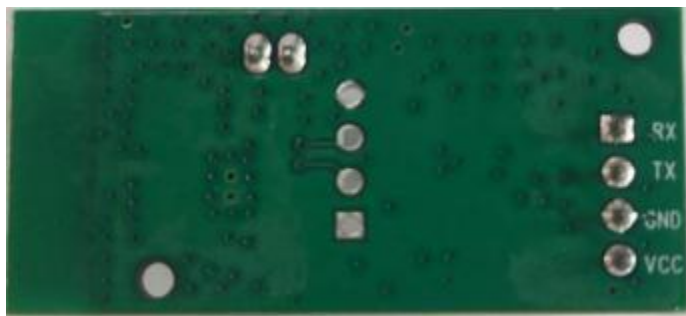
检 查 TESTED BY	核 对 CHECKED BY	承 认 APPROVED BY

# 1. Product Display

Positive:



Reverse side :



## 2. Product Description

- \*Bluetooth APP functions
- \*Transparent transmission and remote control functions
- \*Firmware upgrade function
- \*Electricity monitoring function
- \*ADC acquisition function
- \*PIO collection function
- \*Customize UUID functionality
- \*Power adjustable function
- \*Gain adjustable function
- \*Support customized services

### 3. Product Features

- \*BQB certification meets RoHS standards
- \*Over 100 AT instruction sets
- \*Ultra low standby power consumption 90uA~400uA
- \*Ultra fast reaction speed of 0.4 microseconds
- \*Universal for Android, Apple, and PC
- \*No byte limit for sending and receiving, up to 3K bytes/second
- \*Supports RSSI instructions, Advanced Encryption Standard (AES) security coprocessor
- \*Small and cost-effective appearance, able to meet various customer needs

### 4. Application Area

- \*Fitness equipment: treadmills, fitness equipment
- \*Medical devices: heart rate meter, pulse measuring meter, blood pressure meter, digital thermometer
- \*Leisure and entertainment: remote control toys, audio speakers, game controllers/Bluetooth earphones
- \*Office equipment: printers, scanners, smart cards
- \*Commercial scanning: cash register, scanner, access control system
- \*Mobile phone peripherals: anti loss device, alarm
- \*Transportation tools: torsion bikes, electric scooters, four-wheel scooters, and power assisted bicycles

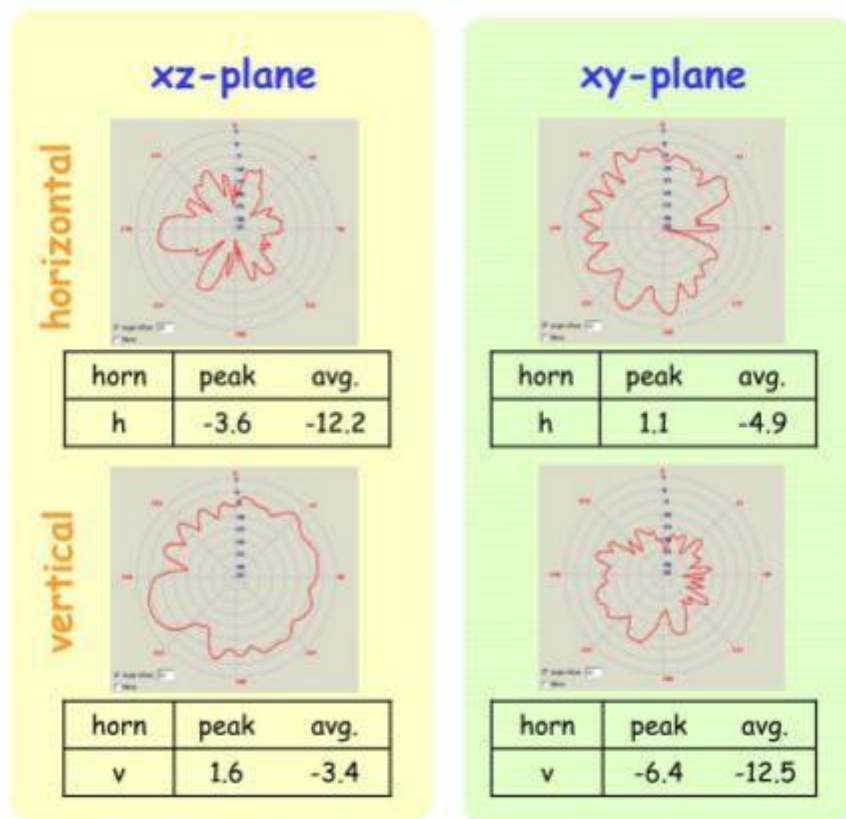
### 5. Product Specifications

Working frequency band	2.402GHz - 2.480GHz ISM
Bluetooth hardware version	V1.0
Power level	Class II
Main chip	AC6928B
Transmission power	8dBm ( Max)
Receiving sensitivity	-94dBm AT 0.1%BER 1Mbps
Power supply voltage	12V
Maximum receiving distance	5m
Size	40.0*18.0*8.7mm

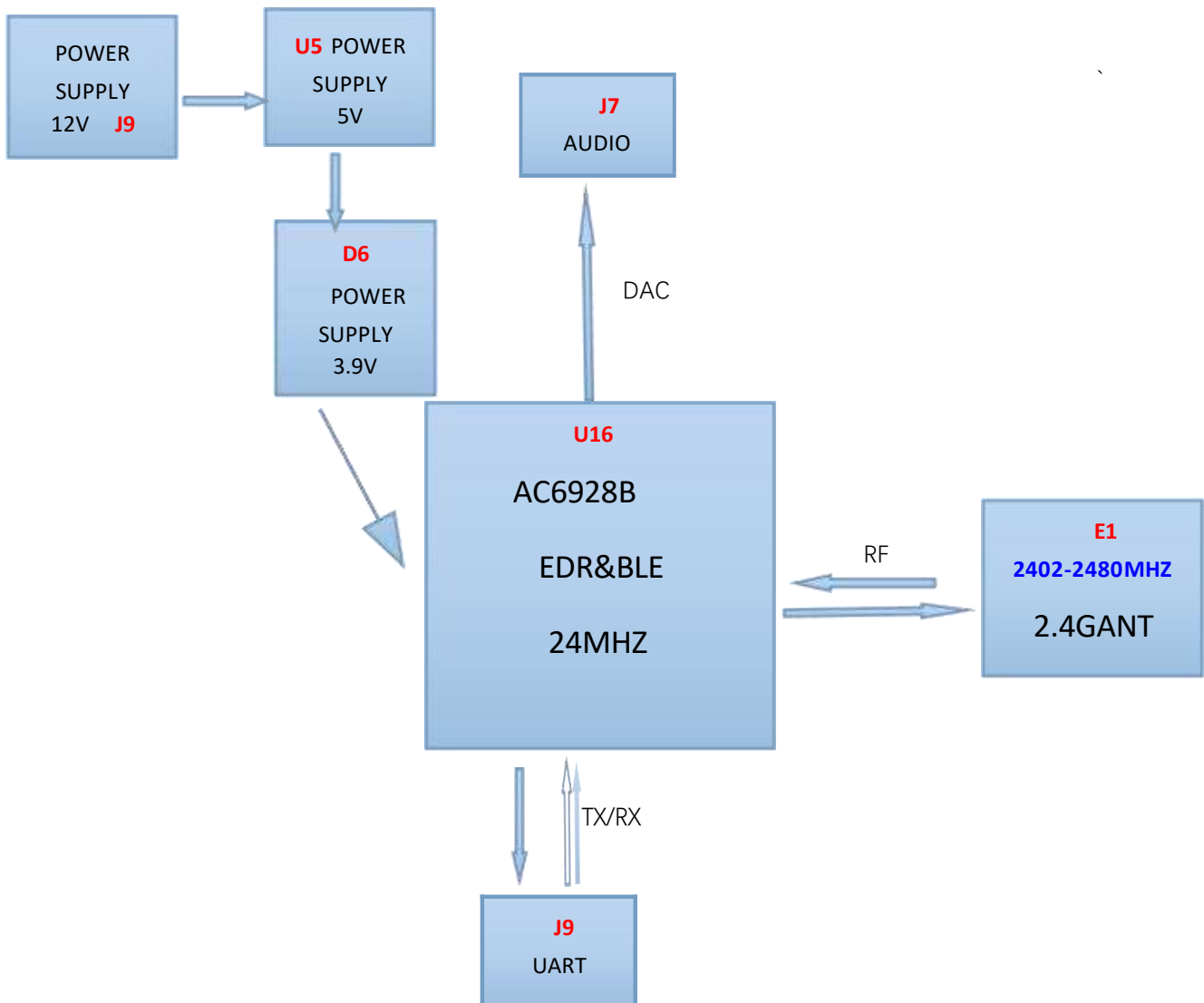
## 6. Recommended Parameters

Parameter	MIN	TYP	MAX	UNIT
Storage temperature	-30	+25	+75	°C
working temperature	-20	+25	+70	°C
Working voltage VDD	6	12	40	V
GPIO	0		3.3	V

## 7. Radiation Patterns



## 8. Product Diagram



- (1) Power supply part: LDO U5 12V to 5V, power supply to U16 Bluetooth module after passing through D2;
- (2) Bluetooth module part: Bluetooth U16, audio DAC outputs audio signals to J7 interface, RF signals are wirelessly connected to other Bluetooth devices through E1 2.4G antenna, and J9 UART serial port communicates with other devices.

### PAIRING TOUR DLUETUOIH DEVICE

- Ensure both the Bluetooth function in your device and the Mini Bike are turned on
- Open the Mini Riko ADD on voue douioo to oonnont wirolonnls to tho Mini Rikol
- On your device, locate the Bluetooth device list. Select "Hypergogo" from the list

## FCC regulatory compliance statement

### §15.19 Statement

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.

### §15.21 Information to user

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

- List of applicable FCC rules:

47 CFR Part 15, Subpart C 15.247

47 CFR Part 2.1093

- Summarize the specific operational use conditions

This module can be used in Electric Bike, the input voltage to the module is nominally 5V.

- Limited module procedures

This module is a single module.

- Trace antenna designs

The antenna is not a trace antenna.

- RF exposure considerations

This Module 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.

- Antennas

If you desire to increase antenna gain and either change antenna type or use same antenna type certified, a Class II permissive change application is required to be filed by us, or you (host manufacturer) can take responsibility through the change in FCC ID (new application) procedure followed by a Class II permissive change application.

- Label and compliance information

Please notice that if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC ID: 2BC7L-TS02" any similar wording that expresses the same meaning may be used.

§ 15.19 Labelling requirements shall be complied on end user device.

Labelling rules for special device, please refer to §2.925, § 15.19 (a)(5) and relevant KDB publications. For E-label, please refer to §2.935.

- Information on test modes and additional testing requirements

The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module.

Test software access to different test modes: FCC\_assist.exe

Testing item, Frequencies, Transmit Power, Modulation Type can be selected on the test script instructions.

● FCC other Parts, Part 15B Compliance Requirements for Host product manufacturer

This modular transmitter is only FCC authorized for the specific rule parts listed on our grant, host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

Host manufacturer in any case shall ensure host product which is installed and operating with the module is in compliant with Part 15B requirements.

Please note that For a Class B or Class A digital device or peripheral, the instructions furnished the user manual of the end-user product shall include statement set out in §15.105 *Information to the user* or such similar statement and place it in a prominent location in the text of host product manual. Original texts as following:

For Class B

*Note: 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.*

For Class A

*Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*