

**Changzhou Jianwei Electric Appliance Co., Ltd.,
Jiangsu Province**

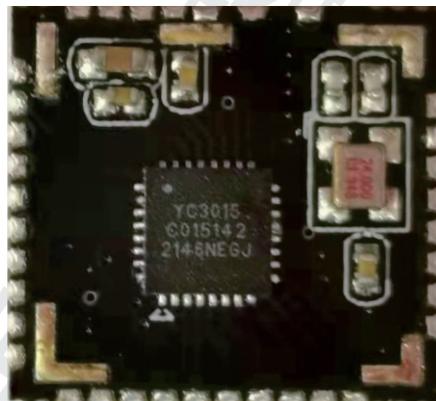
JWBT-01 Bluetooth Module

User's Manual

v 1.0

VERSION	DATE	DIRECTIONS	REVISED BY
V2.0	2022.04.22	MODIFY THE TEXT	ZHANG ANJUN

FIRST: INTRODUCTION

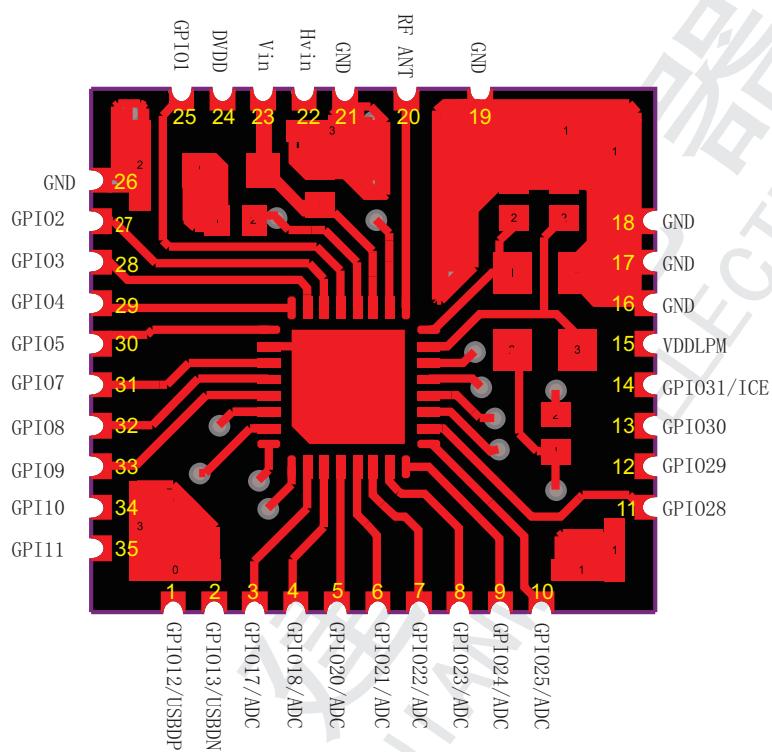


The JWBT-01 Bluetooth module is specially designed by Changzhou Jianwei Electric Co., Ltd. for intelligent wireless data transmission of electric vehicles. It adopts YC 3015 chip of China Yizhaowei Company, the chip is dual-core configuration, M0 and BT operate independently and do not interfere with each other. The chip has built-in 512 KB Flash and 22 IOs for customers to use.

SECOND: ANTENNA REQUIREMENTS

The antenna type that can be used by the module is the on-board antenna, and the antenna gain is not greater than 0.55 d Bi. The model of the auxiliary test board for the module is: JW-K 1 V 07

THIRD: CHIP PINOUT

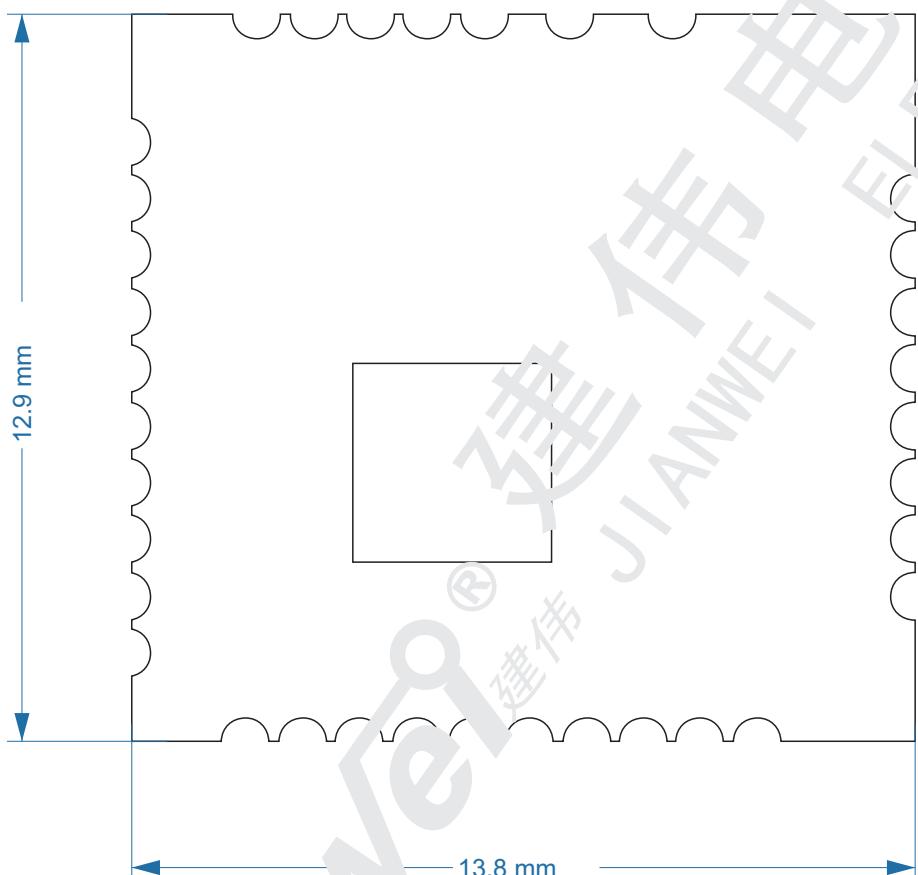


FORTH: PIN FUNCTION DESCRIPTION

4x4 32L	Pin Name	Function Description
1	GPIO13/USBDN	pls check "sheet: GPIO_Muxing", or USB port
2	ADC/GPIO17	pls check "sheet: GPIO_Muxing", or ADC
3	ADC/GPIO18	pls check "sheet: GPIO_Muxing", or ADC
4	ADC/GPIO20	pls check "sheet: GPIO_Muxing", or ADC
5	ADC/GPIO21	pls check "sheet: GPIO_Muxing", or ADC
6	ADC/GPIO22	pls check "sheet: GPIO_Muxing", or ADC
7	ADC/GPIO23	pls check "sheet: GPIO_Muxing", or ADC

8	ADC/GPIO24	pls check "sheet: GPIO_Muxing", or ADC
9	ADC/GPIO25	pls check "sheet: GPIO_Muxing", or ADC
10	GPIO28	pls check "sheet: GPIO_Muxing"
11	GPIO29	pls check "sheet: GPIO_Muxing"
12	GPIO30	pls check "sheet: GPIO_Muxing"
13	GPIO31/ICE	pls check "sheet: GPIO_Muxing" or debug port
14	VDDLPM	internal LDO output, 1.2V. Need an external bypass cap here 0.1uF.
15	XTALOUT	XTAL port.
16	XTALIN	XTAL port, or external CLK in.
17	RF	
18	HVIN	HVLDO input, 2.2~5.5V, 2.2uF bypass cap.
19	HVOUT/VIN/VIO	HVLDO output, 3.1V. Bypass cap need here 2.2uF, max output current 150mA@3.1V.
20	DVDD	internal LDO output, 1.2V. Need an external bypass cap here 0.1uF.
21	GPIO1	pls check "sheet: GPIO_Muxing"
22	GPIO2	pls check "sheet: GPIO_Muxing"
23	GPIO3	pls check "sheet: GPIO_Muxing"
24	GPIO4	pls check "sheet: GPIO_Muxing"
25	GPIO5	pls check "sheet: GPIO_Muxing"
26	GPIO6	pls check "sheet: GPIO_Muxing"
27	GPIO7	pls check "sheet: GPIO_Muxing"
28	GPIO8	pls check "sheet: GPIO_Muxing"
29	GPIO9	pls check "sheet: GPIO_Muxing"
30	GPIO10	pls check "sheet: GPIO_Muxing"
31	GPIO11	pls check "sheet: GPIO_Muxing"
32	GPIO12/USBDP	pls check "sheet: GPIO_Muxing", or USB port
	VSS	

FIFTH: DIMENSIONS



SIXTH: PRECAUTIONS

The Bluetooth module works in the 2.4G wireless frequency band.

The influence of various factors on wireless transmission and reception should be avoided as much as possible. Pay attention to the following points:

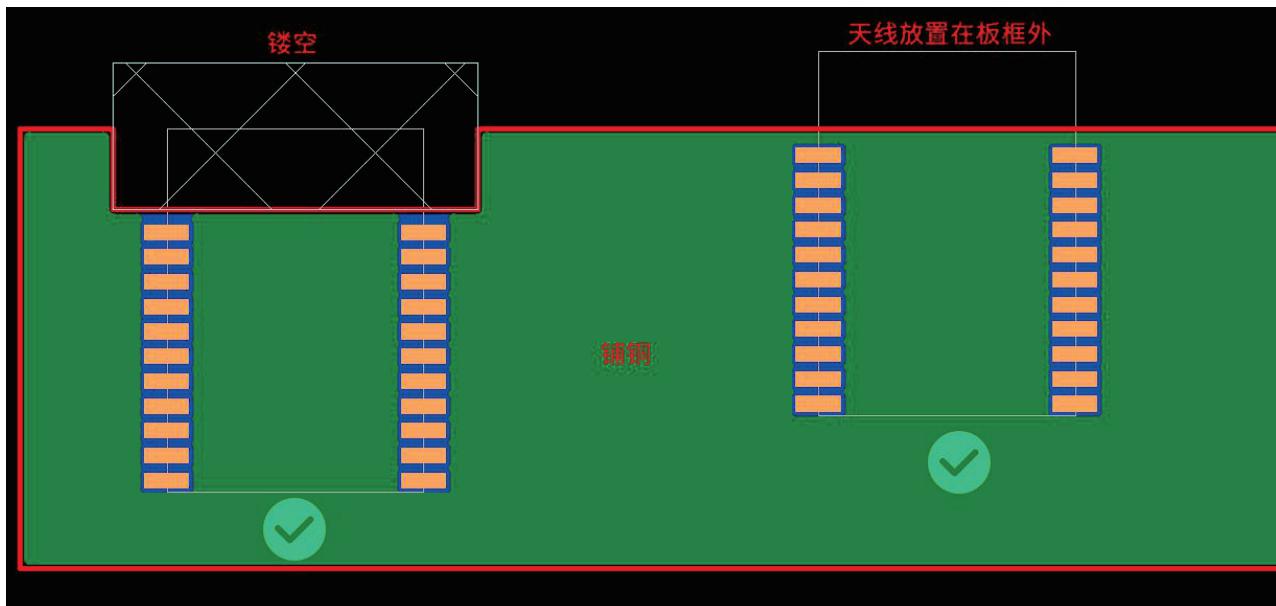
1. Avoid using metal for the product shell surrounding the Bluetooth.

When using a partial metal shell, try to keep the antenna part of the module away from the metal part. The metal connecting wires or metal screws inside the product should be kept away from the antenna part of the module as much as possible.

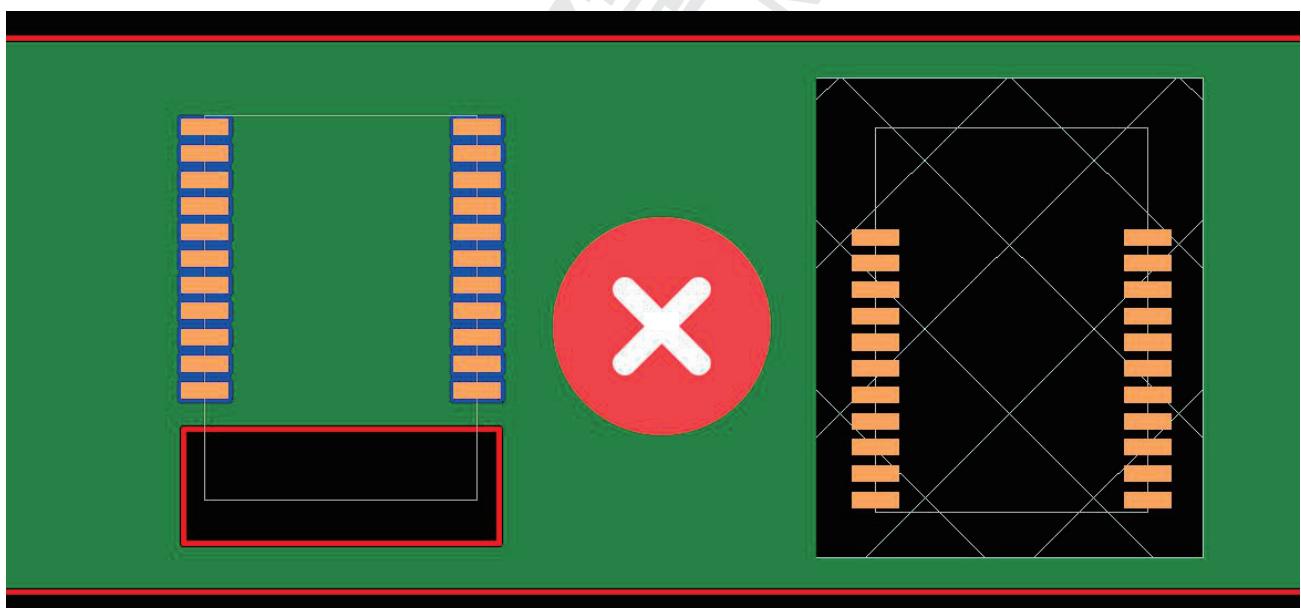
2. The antenna part of the module is placed around the on-board PCB, and it is not allowed to be placed in the PCB. The carrier board under the antenna is milled empty, and the direction parallel to the antenna is not allowed to lay copper or trace.

Or directly expose the antenna part directly to the carrier board.

3. It is recommended to use insulating material to isolate the module mounting position of the substrate, for example, place a whole piece of silk screen in this position.



(推荐) Recommend



Not recommend

CONTACT US:

ADDRESS: NO. 806, FURONG XILIU INDUSTRIAL PARK, HENGSHANQIAO TOWN, WUJIN DISTRICT, CHANGZHOU CITY, JIANGSU PROVINCE

TELEPHONE: +86 18501457351

FAX: +0519 88661677

URL: [HTTP://WWW.CZJIANWEI.CN/INTRO/3.HTML](http://WWW.CZJIANWEI.CN/INTRO/3.HTML)

FCC Statement

FCC standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

PCB Antenna with antenna gain 0.55dBi (The on-board antenna that can be used with the module, the gain is not more than 0.55dBi)

1. 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.

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

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part15 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.

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

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Any company of the host device which install this modular with modular approval should perform the test of radiated& conducted emission and spurious emission, etc. according to FCC part 15C : 15.247 and 15.209 &15.207 ,15B Class B requirement, Only if the test result comply with FCC part 15C : 15.247 and 15.209 &15.207 ,15B Class B requirement, then the host can be sold legally.

We will retain control over the final installation of the modular such that compliance of the end product is assured. In such cases, an operating condition on the limit modular approval for the module must be only approved for use when installed in devices produced by a specific manufacturer. If any hardware modify or RF control software modify will be made by host manufacturer, C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance, then it is illegal.

FCC Radiation Exposure Statement

This modular complies with FCC RF 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.

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 Transmitter Module FCC ID: 2A4MI-JW-496 Or Contains FCC ID: 2A4MI-JW-496". When the module is installed inside another device, the user manual of the host must contain below warning statements;

OEM INTEGRATION INSTRUCTIONS:

The module shall be only used with the internal on - board antenna that has been originally tested and certified with this module. However, the OEM integrator is still responsible for testing their end - product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.). The end - product may need Verification testing, Declaration of Conformity testing, a Permissive Class II Change or new Certification. Please involve a FCC certification specialist in order to determine what will be exactly applicable for the end - product.

Validity of using the module certification:

In the event that these conditions cannot be met (for example certain laptop configurations or co - location with another transmitter), then the FCC authorization for this module in combination with the host equipment is no longer considered valid and the FCC ID of the module cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re - evaluating the end product (including the transmitter) and obtaining a separate FCC authorization. In such cases, please involve a FCC certification specialist in order to determine if a Permissive Class II Change or new Certification is required.

Upgrade Firmware:

The software provided for firmware upgrade will not be capable to affect any RF parameters as certified for the FCC for this module, in order to prevent compliance issues.

End product labeling:

This transmitter module is authorized only for use in device. The final end product must be labeled in a visible area with the following: "Contains 2A4MI-JW-496".

Information that must be placed in the end user manual:

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.

When the module is installed inside another device, the user manual of the host must contain below warning statements;

CE Statement

Herby, Changzhou Jianwei Electric Appliance Co., Ltd. declares that this JWBT-01 Bluetooth Module, JW-496 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), this product allowed to be used in all EU member states.

Use the JWBT-01 Bluetooth Module in the environment with the temperature between -10°C and 40°C,

Operation Frequency:

For BT/BLE: 2402MHz ~ 2480MHz

Max Output Power:

For BT/BLE: 0.0007W

Manufacturer: Changzhou Jianwei Electric Appliance Co., Ltd.

Address: No. 806, Furong West Liutang Industrial Park, Hengshanqiao Town, Wujin District, Changzhou City, 213118, China

E-mail: dingqinze@czjianwei.cn

DECLARATION OF CONFORMITY

I hereby declare that the product

Product:

Product Name: JWBT-01 Bluetooth Module
Model: JW-496, JW-496-A, JW-496-B

Brand Name: *Jianwei*

Hardware Version: HW:V01

Software Version: SW:V01

(Name of product, type or model, batch or serial number)

satisfies all the technical regulations applicable to the product within the scope of Council Directives 2014/53/EU, 2014/35/EU and 2014/30/EU:and declare that the same application has not been lodged with any other notified body.

EN IEC 62368-1:2020+A11:2020

EN 50663:2017

EN 62479:2010

ETSI EN 301 489-17 V3.2.4 (2020-09)

ETSI EN 301 489-1 V2.2.3 (2019-11)

ETSI EN 300 328 V2.2.2 (2019-07)

(Title(s) of regulations, standards, etc.)

All essential radio test suites have been carried out.

NOTIFIED BODY: MiCOM Labs Inc**– Address:**

575 Boulder Court,
Pleasanton, California94566
USA
Identification Number: 2280

MANUFACTURER or AUTHORISED REPRESENTATIVE:**– Address:**

Changzhou Jianwei Electric Appliance Co., Ltd.
No. 806, Furong West Liutang Industrial Park, Hengshanqiao
Town, Wujin District, Changzhou City, 213118, China

This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorised representative.

Point of contact:

Kevin Ding, +8618501457351/0519-88661677

(Name, telephone and fax number)

2022-03-28

(Place, date of issue)



Kevin Ding
(Signature)

Kevin Ding, General manager

(Name and title in block letters)