

Certification Test

Instructions for T2 Series

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Revision history

document revision	author	release date	explanation
V1.0	朱志林	2022/05/22	first edition

Catalog

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使用工具清单 List of tools used

- 1) 、 Connecting USBDM/USBDP to Serial Port Tool TX/RX
 recommend the use of Serial Port Tool FT232 ;
- 2) 、 4 DuPont Lines;
- 3) 、 Instruments for Certification Testing;
- 4) 、 One brand computer (power ripple from USB port meets the certification requirements) ;

Cautions

- 1) 、 The program does not have an automatic shutdown function. It will keeps running after power on. Therefore, we recommend that to turn power on only during testing to prevent the battery from running out of power.
- 2) 、 FCC testing requires two prototypes, One is for testing the Bluetooth protocol, which requires communication with the PC' s upper software(the program will be provided by this document). The other is a normal prototype for testing radiation;
- 3) 、 baud rate of the serial port is 115200;
- 4) 、 Instruments for Certification Testing;
- 5) 、 One brand computer (power ripple from USB port meets the certification requirements) ;

1 Wiring instructions

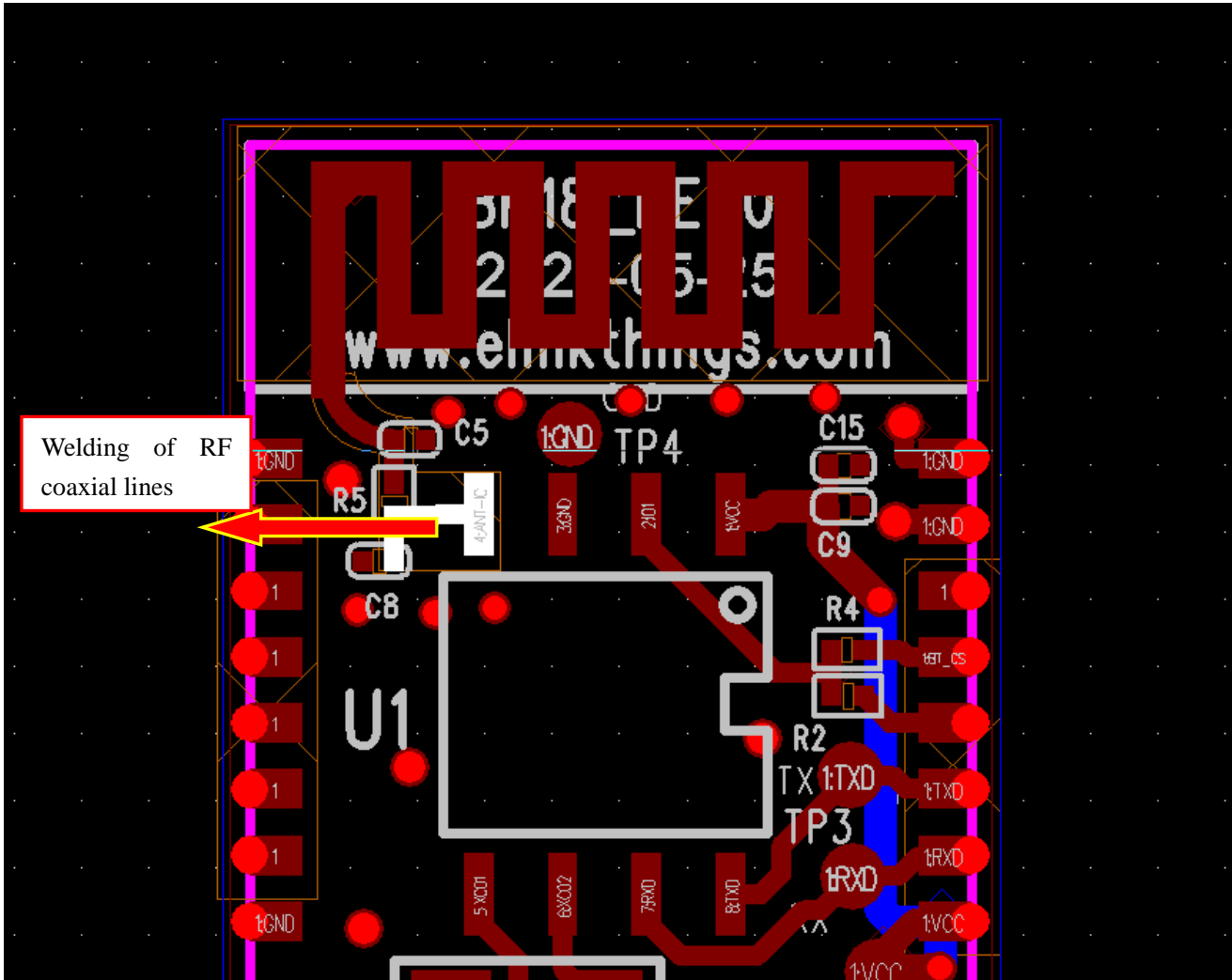
1.1 Connection diagram



(BM18 connection diagram)

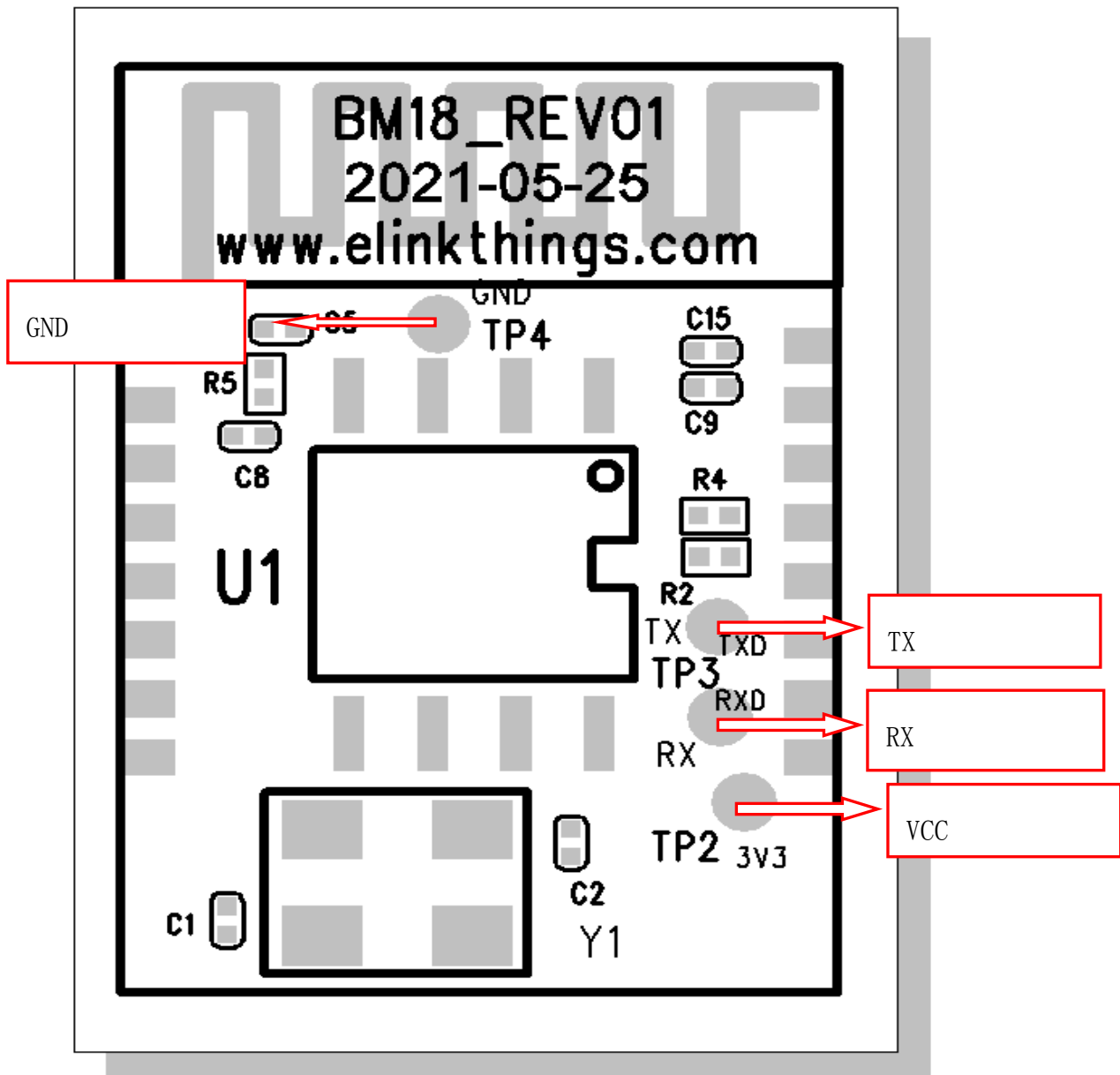
Red: VDD Yellow: TX Green: RX Orange: GND

1.2、Welding of RF coaxial lines: Remove R5 (0 ohms)The feed point is welded at the location as shown, Please refer to the PCB diagram below



1.3、 Definition of the electrical property of the BM18 test points

As the figure shows: The four lines of modules VDD, GND, RX and TX need to be connected to UART(FT232)and strictly follow the wiring order on the picture;



(electrical property diagram of the BM18 pin)

2 Test

2.1、 Path file

Test Instruction Documentation: Certification Test Instructions for T2 Series_20220522.doc

Test Tools Software:FCC_assist_1.0.2.2.exe (No installation required, just execute it)

2.2、 Test step

2.2.1 Connecting the device under test to 'USB to serial' tool

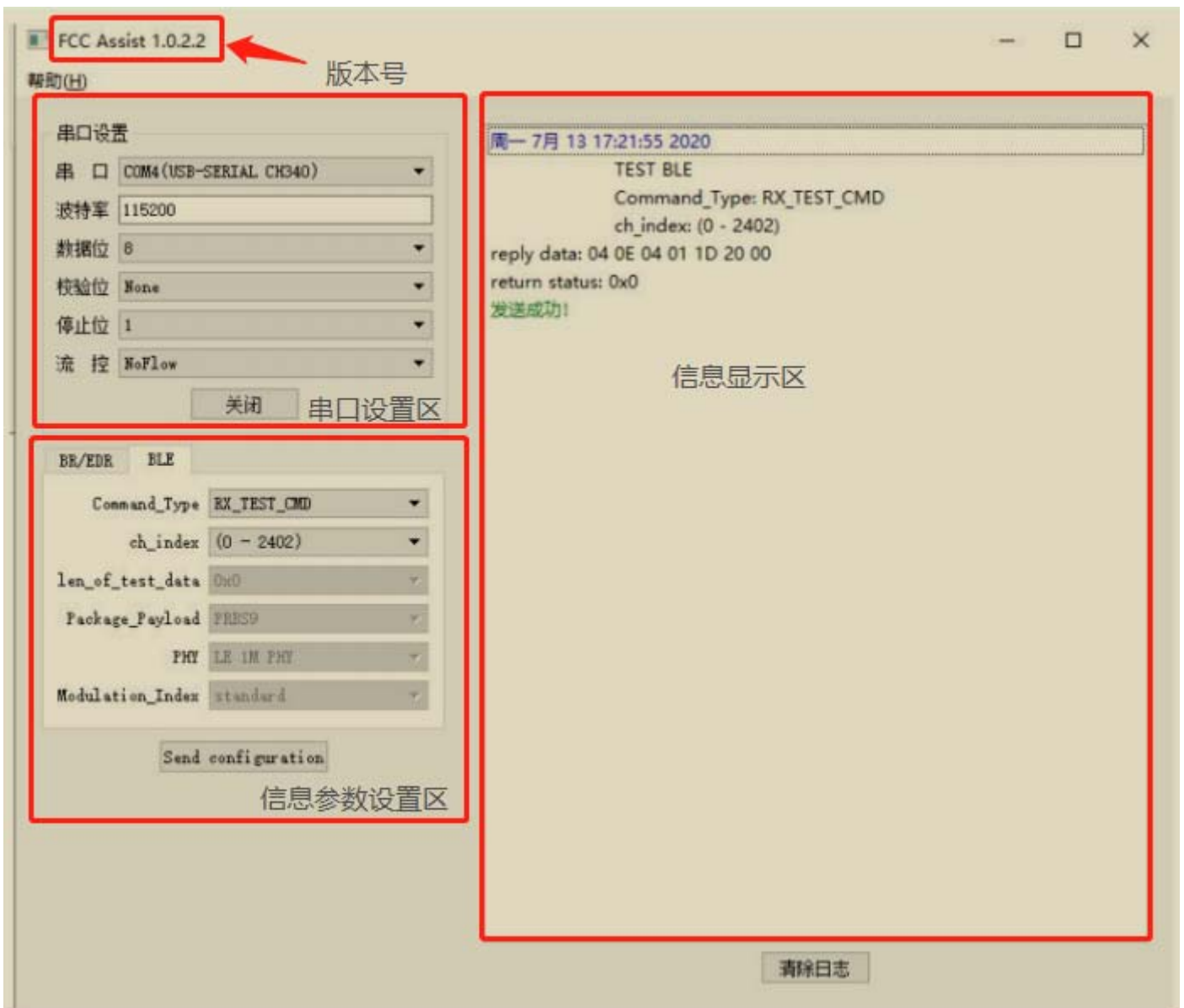
VDD of device under test connected to 3V~3.3V, GND connected to GND, TX connected to RX of Serial Port Tool, RX connected to TX of Serial Port Tool.

2.2.2 Open your PC's Device Manager, and check the serial port number (Different computers have different serial port numbers)



2.2.3 Open: file FCC_assist_1.0.2.2.exe, select the corresponding serial port and set it up according to the following chart; you can choose different frequency points for testing according to the certification requirements

Examples of successful BLE communications:



The reasons for the certification failure are as follows:

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1. Check if the setting parameters of tool software are correct
2. Check if the modules are wired correctly (Try swapping serial port TX/RX)
3. Check if the module is wrong
4. Check the module for damage

3 Contact Us

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