成都亿佰特电子科技有限公司
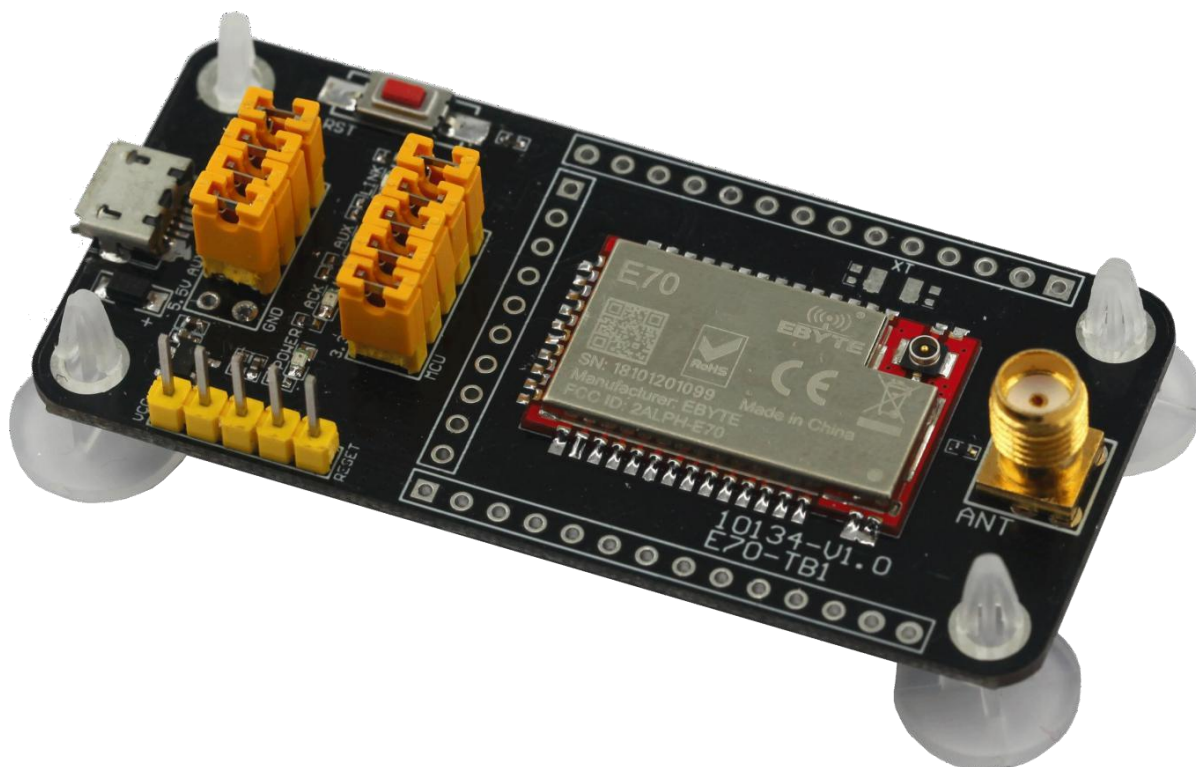**Chengdu Ebyte Electronic Technology Co.,Ltd.**

E70-433TBL-01 Datasheet v1.1

1、Product Introduction

(1) It is used to test and develop Chengdu Ebyte E70 series wireless modules (E70-433T14S, E70-868T14S, E70-915T14S). The test base plate is pre-soldered with E70-433T14S. For details, please refer to the module manual.

(2) All IOs of E70 series wireless modules have been led out.

(3) With CH340G serial port chip, serial communication development can be carried out.

(4) With a Micro-USB interface, it can be connected to a computer.

(5) Users can access the external power supply and serial port by themselves for secondary development.

(6) The work is stable and easy to develop.

2、Instructions for use
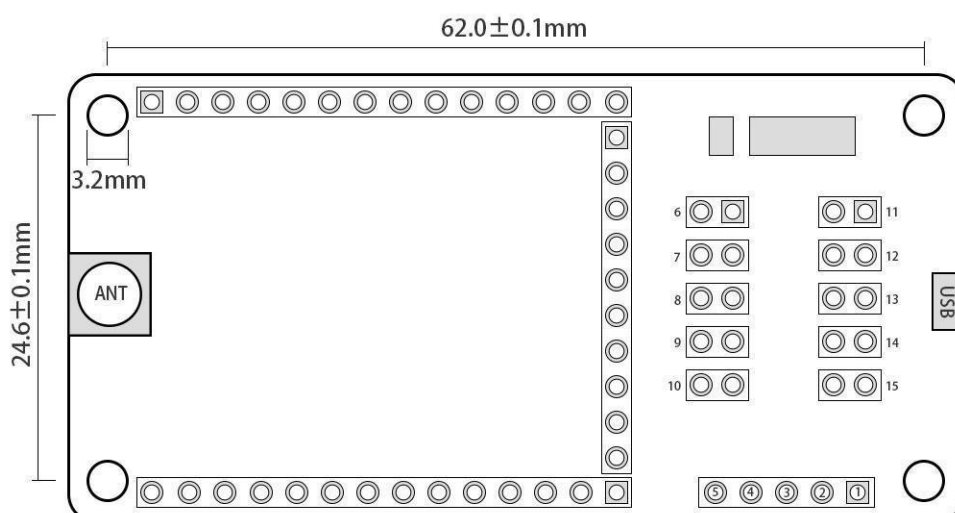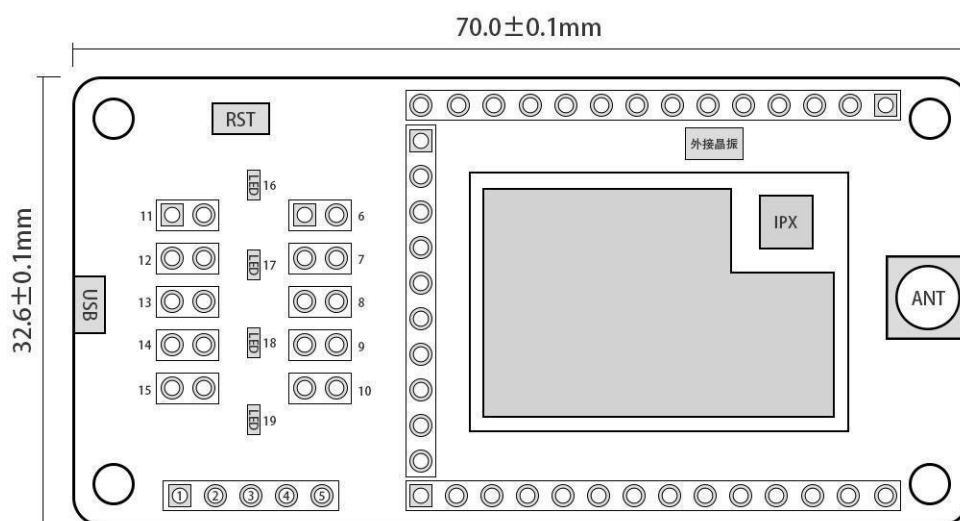
Pin	Value	Usage	Remark
1	VCC	Connect the downloader VCC for downloading.	Download port
2	GND	Connect the downloader GND for downloading.	
3	TMSC	Connect the downloader TMSC for downloading.	
4	TCKC	Connect the downloader TCKC for downloading.	
5	RESET	Connect the downloader RESET for downloading.	
6	M2	M2 mode selection port, plug in the jumper cap M2=0, unplug it vice versa.	Mode selection port
7	M1	M1 mode selection port, plug the jumper cap M1=0, unplug it vice versa.	Mode selection port
8	M0	M0 mode selection port, plug in the jumper cap M0=0, unplug it vice versa.	Mode selection port
9	ACK	ACK light select port, plug in jumper cap to connect ACK light.	E70-433T14S, E70-868T14S, The E70-915T14S module has no ACK indicator function, please remove the jumper cap at this time.

10	3.3V-MCU	The E70 module tests the current port, plugs the jumper cap, and the E70 module is powered on (3.3V).	To test the module current, please unplug the ACK light, AUX light, LINK light selection port.
11	TXD	The serial port TXD selection end, insert the jumper cap, the USB serial port TXD is connected with the module RXD. The user can use the serial port for other purposes.	———
12	RXD	The serial port RXD selection end, insert the jumper cap, the USB serial port RXD is connected with the module TXD. The user can use the serial port for other purposes.	———
13	LINK	LINK light select port, plug the jumper cap ACK light connection.	E70-433T14S, E70-868T14S, The E70-915T14S module has no LINK indicator function, please remove the jumper cap at this time.
14	AUX	AUX light selection port, plug in the jumper cap AUX light connection, this function is used to test the current.	———
15	+5VIN	5V external power supply access port, if you do not want to use USB power supply, you can connect to the external power supply (+5V and GND).	Do not reverse
16	LINK light	Network access indicator, this indicator is on when the module successfully accesses the network.	Indicator light
17	AUX light	Module idle indicator, this indicator is on when the module is idle.	
18	ACK light	Module sending status indicator, this light is on when the module is sending.	
19	POWER light	The power indicator light is on when the backplane power supply is connected.	

Remarks: The crystal oscillator has been connected inside the E70 module, and the user can also connect an external crystal oscillator (the external crystal oscillator pad has been left)

3、Pinout

70.0±0.1mm

32.6±0.1mm

62.0±0.1mm

3.2mm

24.6±0.1mm
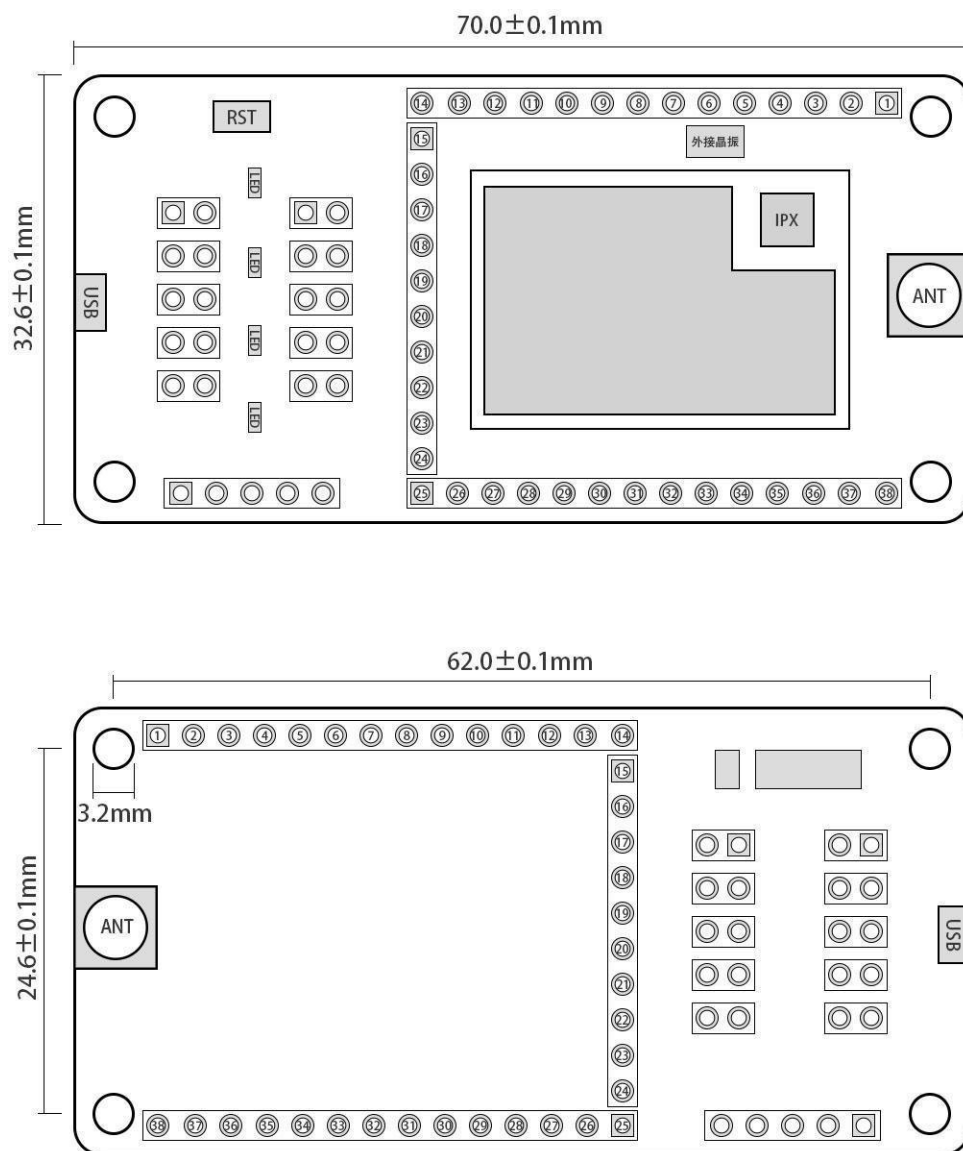
E70-433TBL-01(Front) Pin
Description

Pin	Value	Remark
1	GND	——
2	GND	——
3	DO_1	——
4	DO_2	——
5	DO_3	——
6	DO_4	——
7	DO_5	——

8	DO_6	——
9	DO_7	——
10	DO_8	——
11	DO_9	——
12	DO_10	——
13	DO_11	M2 mode pin
14	GND	——
15	DO_12	M0 mode pin
16	DO_13	M1 mode pin
17	DO_14	E70 module UART_RX pin
18	DO_15	E70 module UART_TX pin
19	DO_16	——
20	DO_17	——
21	DO_18	AUX pin
22	VCC	Module power access (+3.3V)
23	GND	——
24	DO_19	——
25	DO_20	——
26	DO_21	——
27	DO_22	——
28	RESET	Reset pin
29	DO_23	——
30	DO_24	——
31	DO_25	——
32	DO_26	——
33	DO_27	——
34	DO_28	——
35	DO_29	——
36	DO_30	——
37	GND	——
38	GND	——

4、Driver Installation

The CH340G chip is used as the serial port, please download and use the driver software provided by our company; after the installation, the serial port number can be identified in the device manager.

5、Program download

The module is a SOC module with its own GPIO port. The program download uses the CC series dedicated downloader: JTAG downloader (or TI's official CC1310 supporting development board), and cannot use the serial port or any other ISP and ICP tools. The figure below is a schematic diagram of the JTAG connection (XDS100). For the specific development method, please refer to TI official related documents (the TDI and TDO pins may not be connected).
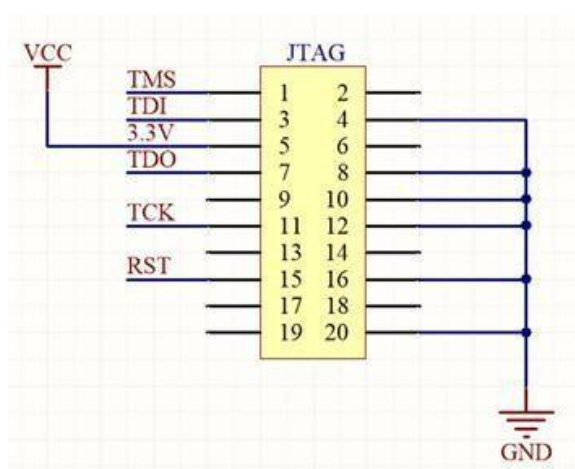
6、Notice

1	During the development process, please actively contact our technical support, we only support our modules, excluding the basic usage of single-chip microcomputer.
2	Contact：support@cdebyte.com

Aobut us

Technical support: support@cdebyte.com
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