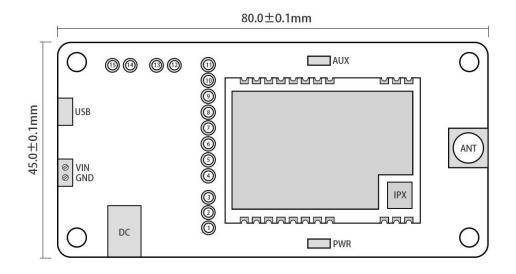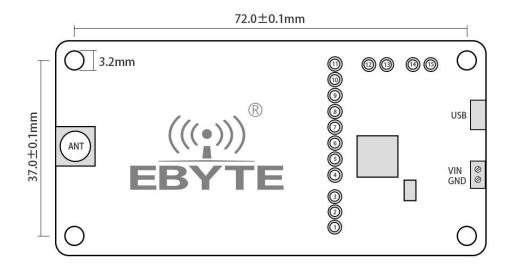# 1. Brief Introduction

E22-900TBH-01 is a set of test kit formed by SMD UART module combined with USB to TTL serial board for customer testing and development, which greatly reduces the difficulty of testing and development of customers. This manual describes how to use the test board for more details. Please refer to the E22-900T22S user manual.

1.1. Description for size and interface

No.	Def.	Description
1	5V	5V network on the backplane, can be shorted with VCC by jumper for module power input
2	VCC	Module power supply
3	VBUS	VBUS network(USB powered) on the backplane, can be shorted with VCC by jumper for module power input
4	GND	Grounding
5	VCC	Module power supply
6	AUX	Pls refer to the E22-900T22S user manual
7	RXD	Connect to the TXD pin of the module, for test
8	TXD	Connect to the RXD pin of the module, for test

9	NC3	----
10	NC2	----
11	NC1	----
12	GND	Grounding, usually work with M0
13	M0	For mode selection, 1 for floating and 0 for jumper and GND shorted connected.
14	M1	For mode selection, 1 for floating and 0 for jumper and GND shorted connected.
15	GND	Grounding, usually work with M1

Notes：

1. Optional power supply mode, terminal block or DC carrier. Select DC carrier, then the terminal jumps to invalid;

2. External power supply range 8 – 28V DC

2. Quick start

2.1. Preparation before test

2.1.1. Driver installation

Please visit our website for downloading CH341SER.EXE（Click here for download），double click for install。This driver supports 32/64 bit Windows 10/8.1/8/7/VISTA/XP, SERVER2016/2012/2008/2003，2000/ME/98，pass Microsoft digital signature authentication, supports USB to 3-wire and 9-wire serial ports and so on.

2.1.2. Connection for hardware

Please prepare the Micro USB cable and antenna, connect to the E22-900TBH-01, and open the corresponding serial port.

2.2. The communication for Mode 0

As shown in the figure, plug in the jumper (select 5V power supply, mode 0), both E22-900TBH-01 are configured as the same, open the corresponding serial port, you can send and receive data, and you can observe that the AUX light of the backplane flashes.

2.3.　Other modes

As shown in the figure, plug in the jumper (select 5V power supply, mode 1). For details, please refer to the corresponding serial port module manual.

As shown in the figure, plug in the jumper (select 5V power supply, mode 2). For details, please refer to the corresponding serial port module manual.

As shown in the figure, plug in the jumper (select 5V power supply, mode 3). For details, please refer to the corresponding serial port module manual.