支持测试的接口种类　Interface types

TypeA（3.0)

TypeB（3.0)
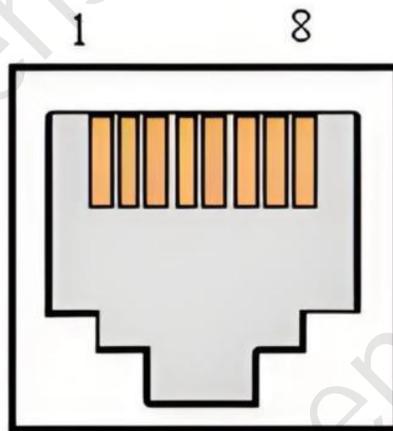
MicroB（2.0)

TypeC（3.0)
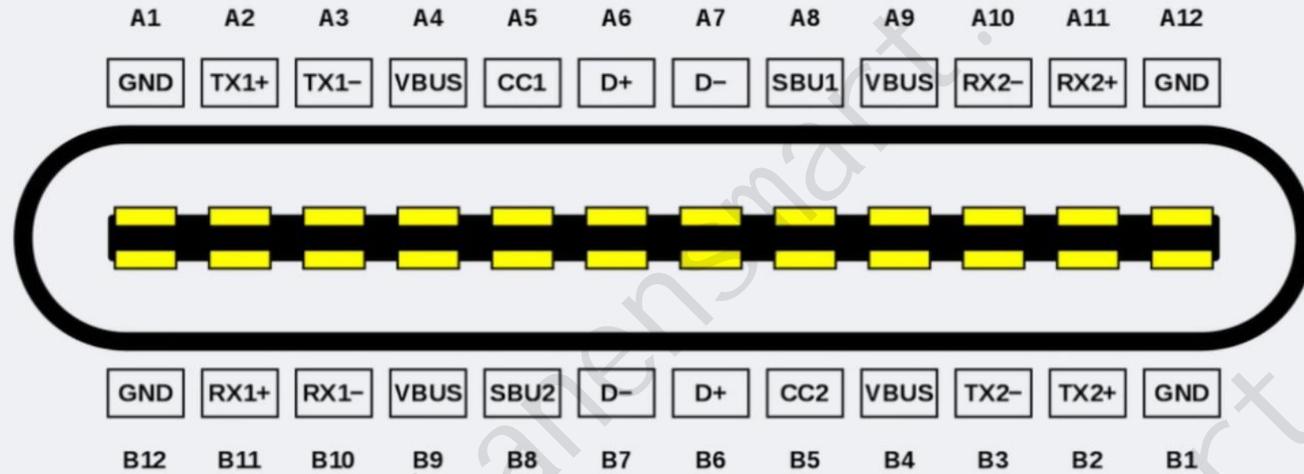
lightning接口
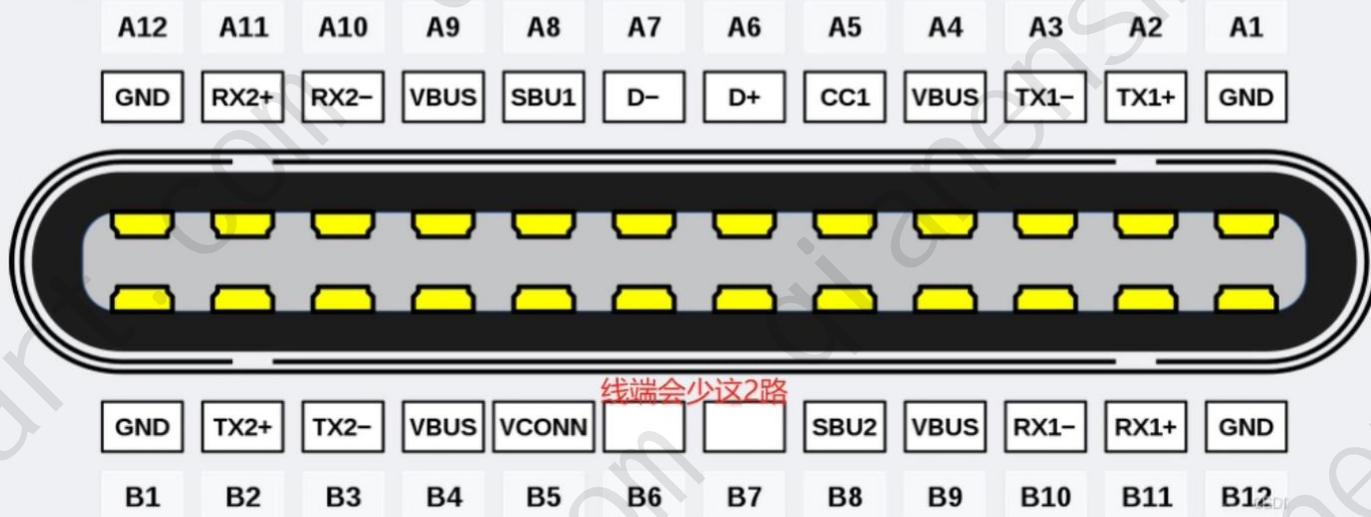
1　　　　　8

RJ45 插座

USB Type C 母口 测试板端 **Board**

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
GND	TX1+	TX1−	VBUS	CC1	D+	D−	SBU1	VBUS	RX2−	RX2+	GND

GND	RX1+	RX1−	VBUS	SBU2	D−	D+	CC2	VBUS	TX2−	TX2+	GND
B12	B11	B10	B9	B8	B7	B6	B5	B4	B3	B2	B1

USB Type C 公头 充电线端 **Cable**

A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1
GND	RX2+	RX2−	VBUS	SBU1	D−	D+	CC1	VBUS	TX1−	TX1+	GND

线端会少这2路

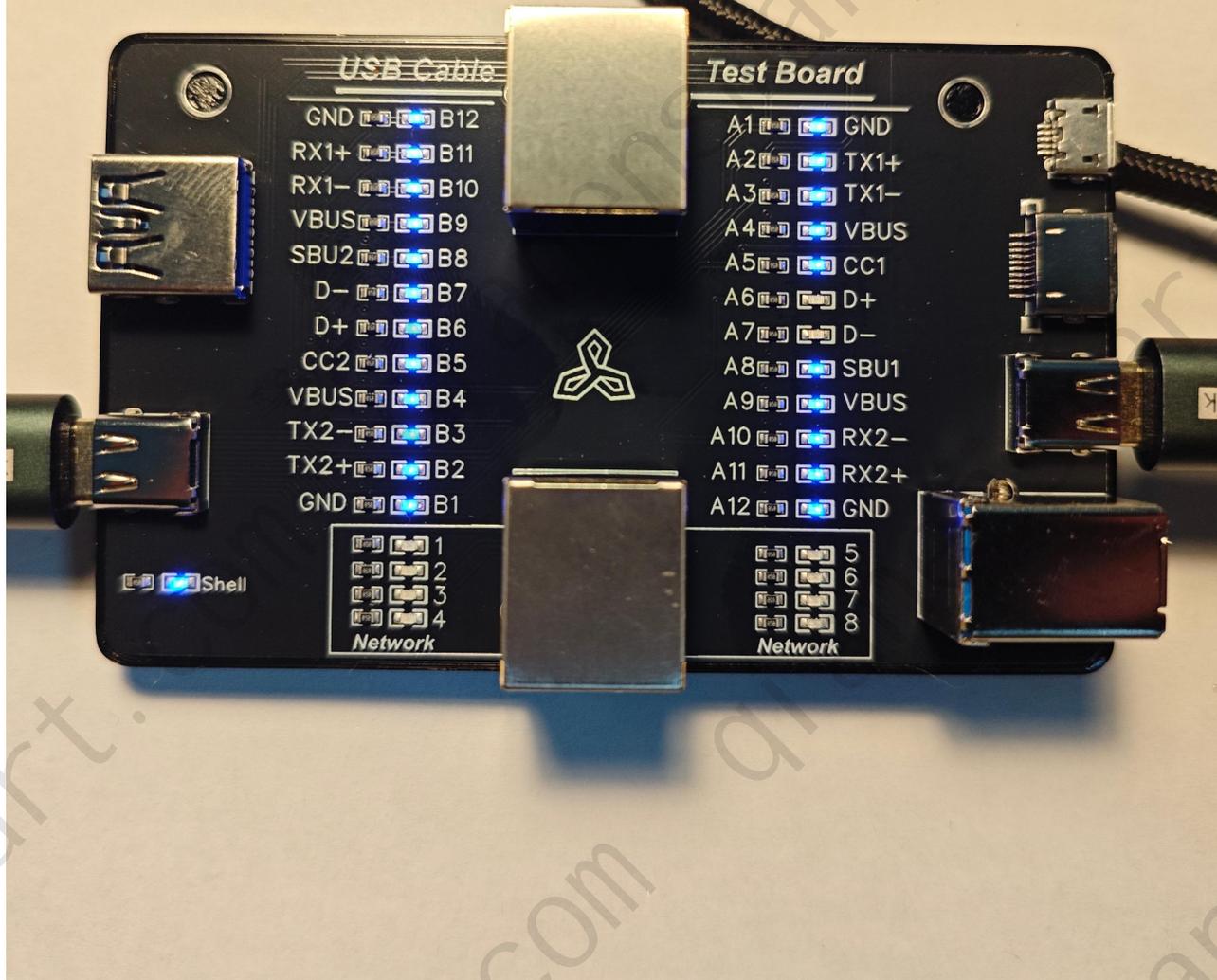| GND	TX2+	TX2−	VBUS	VCONN			SBU2	VBUS	RX1−	RX1+	GND
B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12

Product Introduction: This USB 3.0 cable continuity tester can detect the continuity of all-function USB 3.0 series Type-C (24-pin) cables, allowing users to quickly identify the quality of the cable. It also supports continuity testing for Android Micro-B, Gigabit/100Mbps RJ45 Ethernet cables, Apple Lightning cables, and printer download cables (Type-B 2.0/3.0). It is a multi-functional portable testing instrument.

Main Advantages: No power supply required; comes with a replaceable button battery (CR2032 model). Battery life depends on usage frequency; it consumes no power when not in use and does not leak, making it safe.

引脚功能定义

Pin	名称	功能描述	Pin	名称	功能描述
A1	GND	接地	B12	GND	接地
A2	SSTXp1	SuperSpeed差分信号#1，TX，正	B11	SSRXp1	SuperSpeed差分信号#1，RX，正
A3	SSTXn1	SuperSpeed差分信号#1，TX，负	B10	SSRXn1	SuperSpeed差分信号#1，RX，负
A4	VBUS	总线电源	B9	VBUS	总线电源
A5	CC1	Configuration channel	B8	SBU2	Sideband use (SBU)
A6	Dp1	USB 2.0差分信号，position 1，正	B7	Dn2	USB 2.0差分信号，position 2，负
A7	Dn1	USB 2.0差分信号，position 1，负	B6	Dp2	USB 2.0差分信号，position 2，正
A8	SBU1	Sideband use (SBU)	B5	CC2	Configuration channel
A9	VBUS	总线电源	B4	VBUS	总线电源
A10	SSRXn2	SuperSpeed差分信号#2，RX，负	B3	SSTXn2	SuperSpeed差分信号#2，TX，负
A11	SSRXp2	SuperSpeed差分信号#2，RX，正	B2	SSTXp2	SuperSpeed差分信号#2，TX，正
A12	GND	接地	B1	GND	接地

C to C 接口线束测试

USB Cable

GND ▯▯-▯▯ B12
RX1+ ▯▯-▯▯ B11
RX1- ▯▯-▯▯ B10
VBUS ▯▯-▯▯ B9
SBU2 ▯▯-▯▯ B8
D- ▯▯-▯▯ B7
D+ ▯▯-▯▯ B6
CC2 ▯▯-▯▯ B5
VBUS ▯▯-▯▯ B4
TX2- ▯▯-▯▯ B3
TX2+ ▯▯-▯▯ B2
GND ▯▯-▯▯ B1

▯▯-▯▯ 1
▯▯-▯▯ 2
▯▯-▯▯ 3
▯▯-▯▯ 4
Network

▯▯ Shell

Test Board

A1 ▯▯-▯▯ GND
A2 ▯▯-▯▯ TX1+
A3 ▯▯-▯▯ TX1-
A4 ▯▯-▯▯ VBUS
A5 ▯▯-▯▯ CC1
A6 ▯▯-▯▯ D+
A7 ▯▯-▯▯ D-
A8 ▯▯-▯▯ SBU1
A9 ▯▯-▯▯ VBUS
A10 ▯▯-▯▯ RX2-
A11 ▯▯-▯▯ RX2+
A12 ▯▯-▯▯ GND

▯▯-▯▯ 5
▯▯-▯▯ 6
▯▯-▯▯ 7
▯▯-▯▯ 8
Network

USB 3.0 Type-C 24-Pin Ctoc Detection Instructions: Type-C connectors come in female and male versions, with a total of 24 pins. The female connector is typically onboard, while the male connector is generally used on data cables. The female connector has 24 pins, symmetrically arranged, allowing for reversible insertion. The male connector has 22 pins; because the USB 2.0 standard only has one pair of D+/D- pins, only one pair is retained on the cable. The symmetrical design on the female connector accommodates only one pair of D+/D- pins on the cable. VBUS and GND are the main power paths, with 4 pins each, totaling 8. SSTX/SSRX (4 pairs, 8 channels) are USB 3.0 high-speed signals. The female connector has 2 pairs of 4-channel D+/D- pins, while the cable only has one pair, supporting the USB 2.0 protocol. CC/SBU: CC is for detecting device connection and reversible insertion, while SBU is a symmetrical pin to CC, used for auxiliary detection and power supply. Shell is the protective casing.

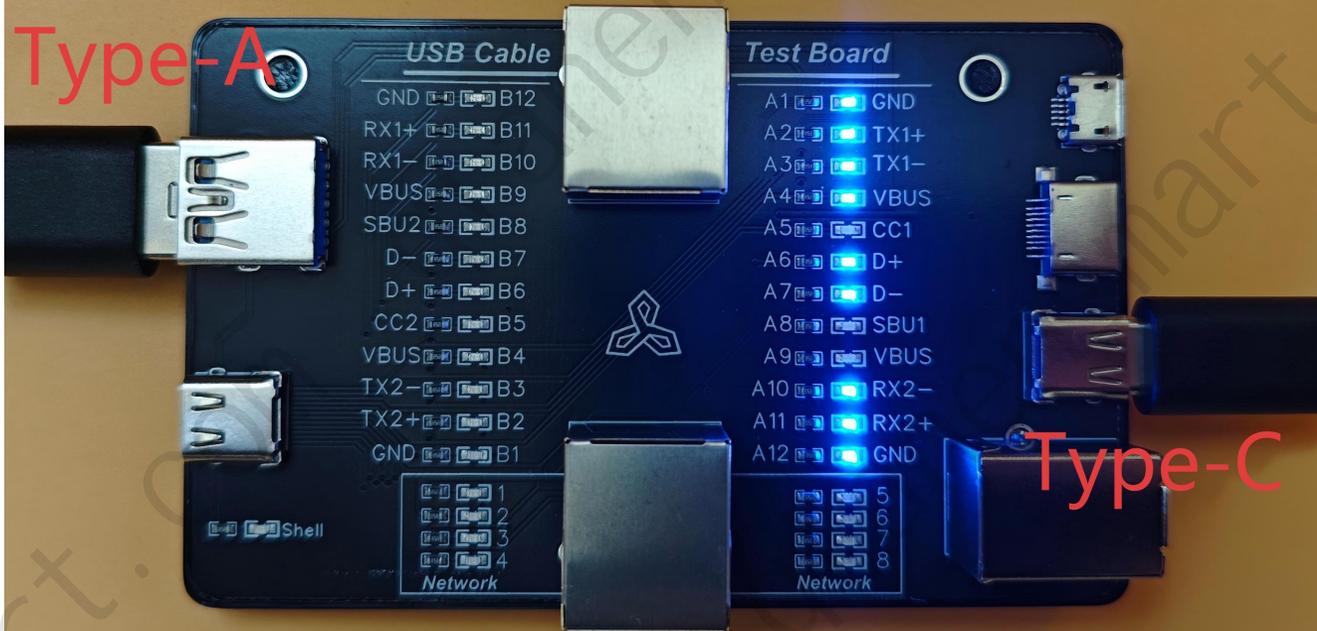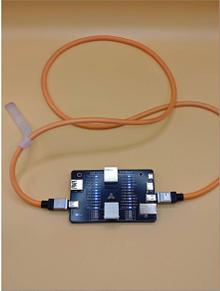**C to Lightning** 有MFI芯片的苹果线会导致VBUS灯珠变暗
这是正常的
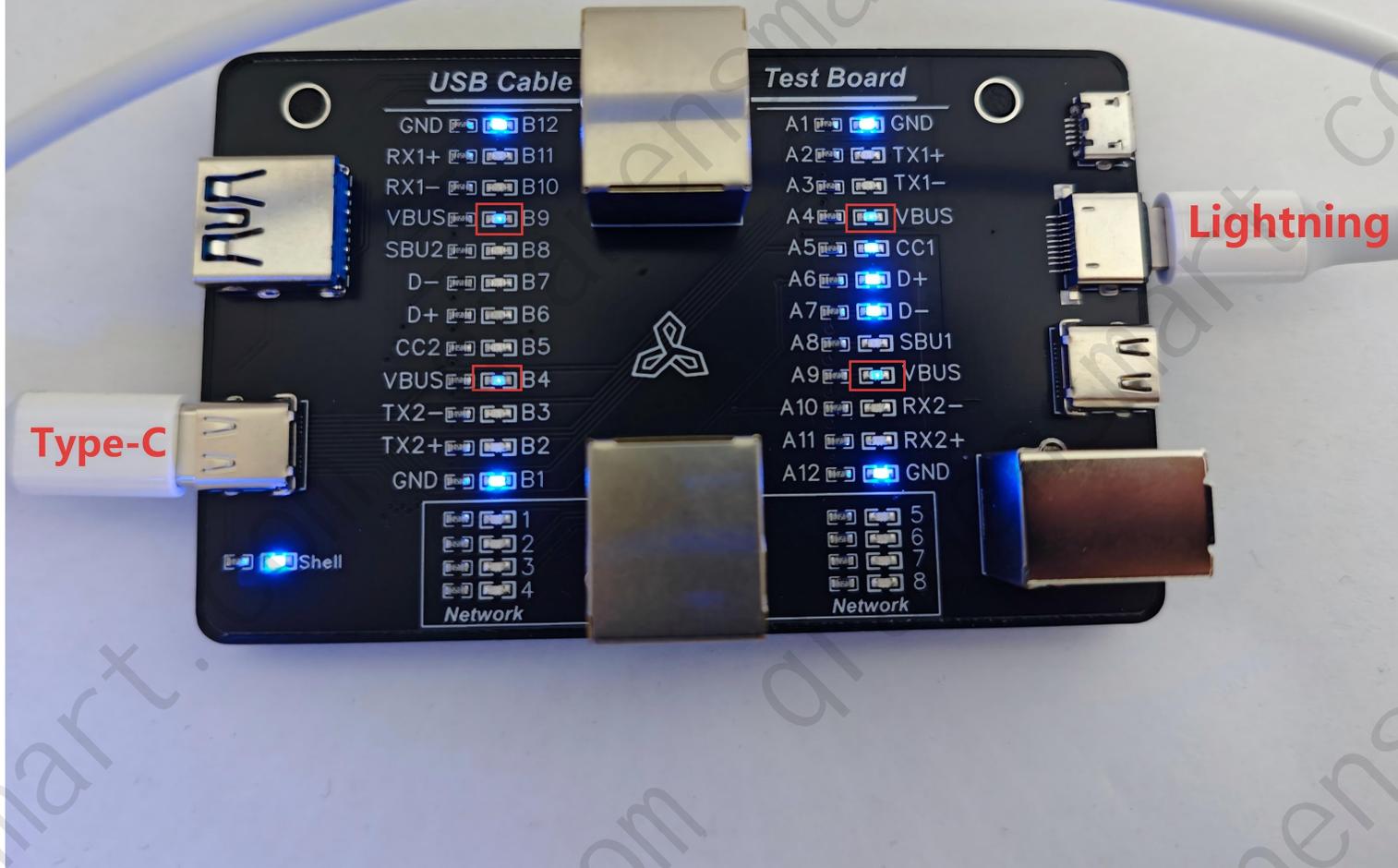
Apple's Type-C to Lightning harness has a VBUS LED that dims due to the presence of an MFi chip; this is unique to Apple harnesses and is normal.

Both GND and VBUS pairs are lit, indicating support for fast charging.

USB3.0 A to C 线束

Type-A

Type-C

USB Cable

GND	B12
RX1+	B11
RX1−	B10
VBUS	B9
SBU2	B8
D−	B7
D+	B6
CC2	B5
VBUS	B4
TX2−	B3
TX2+	B2
GND	B1

Shell

	1
	2
	3
	4

Network

Test Board

A1	GND
A2	TX1+
A3	TX1−
A4	VBUS
A5	CC1
A6	D+
A7	D−
A8	SBU1
A9	VBUS
A10	RX2−
A11	RX2+
A12	GND

	5
	6
	7
	8

Network

For A to C cables that support the USB 3.0 protocol, the lit TX/RX lights indicate support for high-speed data transfer.

该线支持100W超级快充
但不支持USB3.0协议

USB Cable | Test Board

GND B12 | A1 GND
RX1+ B11 | A2 TX1+
RX1− B10 | A3 TX1−
VBUS B9 | A4 VBUS
SBU2 B8 | A5 CC1
D− B7 | A6 D+
D+ B6 | A7 D−
CC2 B5 | A8 SBU1
VBUS B4 | A9 VBUS
TX2− B3 | A10 RX2−
TX2+ B2 | A11 RX2+
GND B1 | A12 GND

Shell

Network | Network

TypeC

TypeC

TX\RX灯不亮表示没有高速信号

This cable harness has relatively thick wires and multiple GND/VBUS connections, indicating a redundant design and significant overcurrent capability. The manual states it has a 100W charging power, but whether fast charging is enabled depends on the charging protocol between the charger and the device. The TX/RX lights are not lit, indicating that USB 3.0 is not supported.
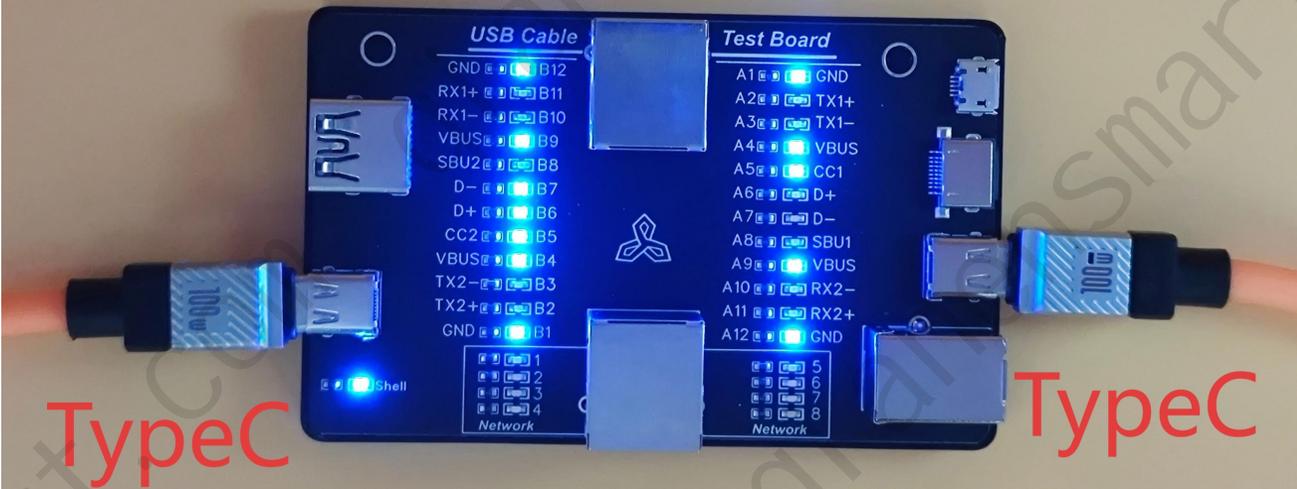
普通 A to C 线检测，亮4个灯
USB2.0 快充\慢充（根据协议）

TypeA

TypeC
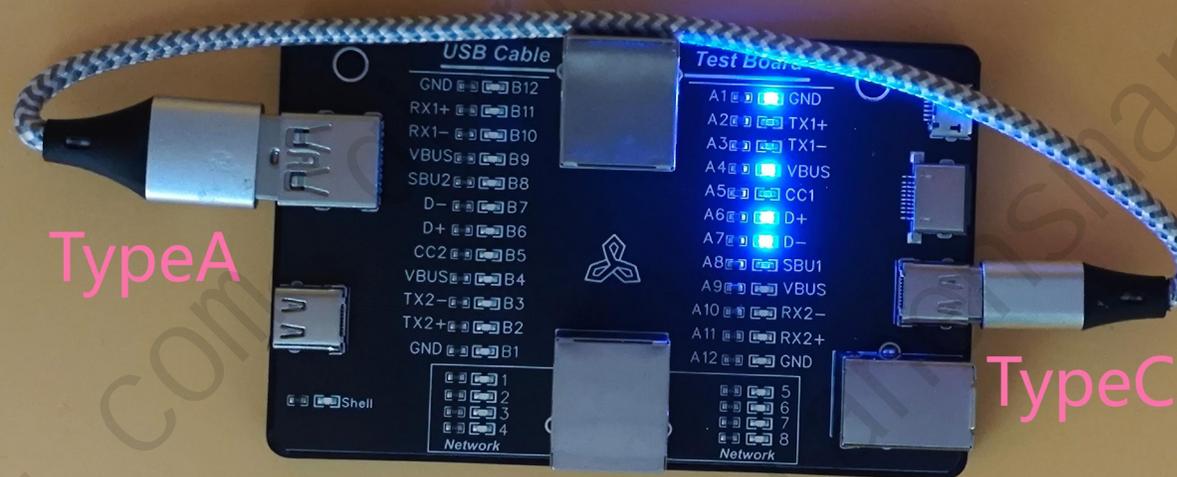
This type of A to C charging cable is generally used for slow charging. Some original charging cables have thicker wires and support certain protocols, allowing for fast charging as well. This particular cable only has the D+D- indicator lit, while the TX/RX indicators are off, indicating that it only supports the USB 2.0 protocol and has a lower data transfer speed.

只亮2个灯，只能充电的线束
很多玩具车配的就是这种

TypeA

TypeC

This is a cheap USB cable harness that only has two lights. It is generally of low quality, with very thin wires that can only charge slowly. It is best not to use it to charge mobile phones. It is often found in cheap toys, small flashlights, and other daily necessities.
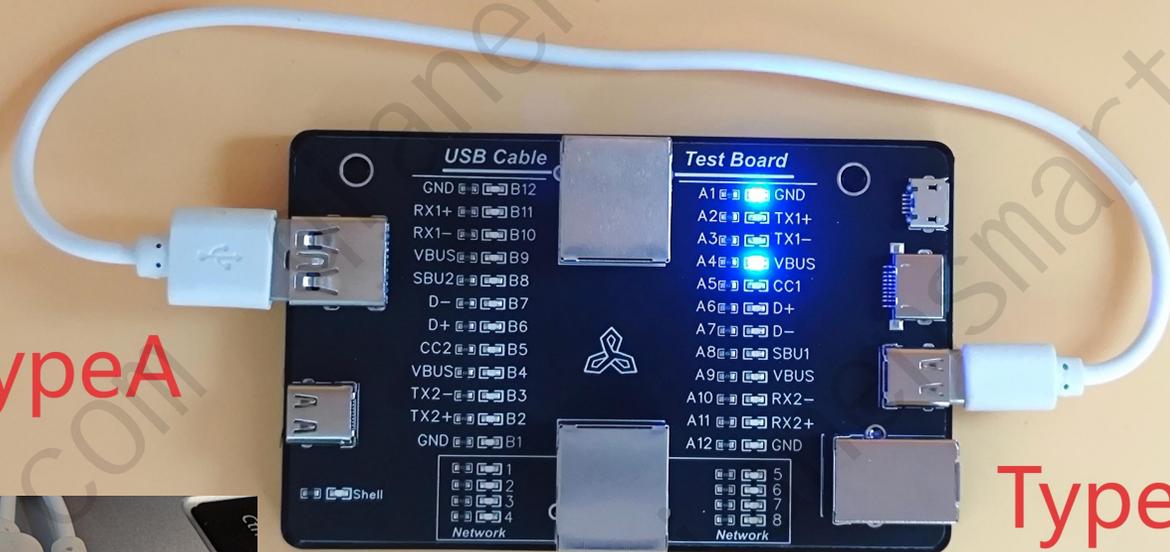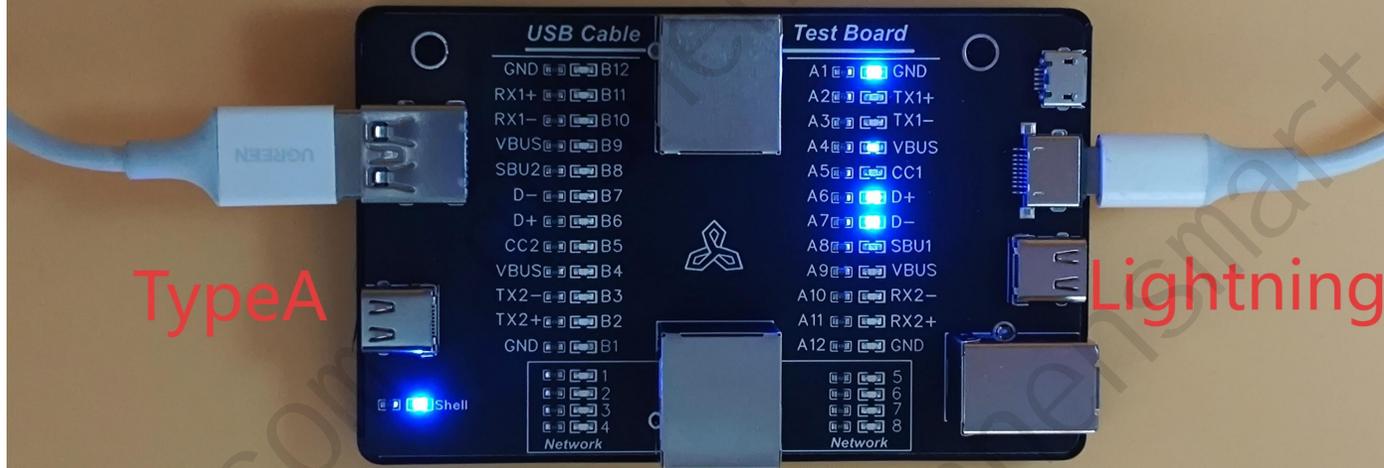
A to B 常见于下载线和打印机线
USB2.0协议

Type-A

TypeB

This type of data cable is commonly found in printers, programmers, audio equipment, and some industrial equipment. It has a thicker connector and is more durable.

If only the D+D- lights are on, it means that only the USB 2.0 protocol is supported.

苹果Lightning线束

USB Cable

GND B12
RX1+ B11
RX1− B10
VBUS B9
SBU2 B8
D− B7
D+ B6
CC2 B5
VBUS B4
TX2− B3
TX2+ B2
GND B1

Shell

1
2
3
4

Network

Test Board

A1 GND
A2 TX1+
A3 TX1−
A4 VBUS
A5 CC1
A6 D+
A7 D−
A8 SBU1
A9 VBUS
A10 RX2−
A11 RX2+
A12 GND

5
6
7
8

Network
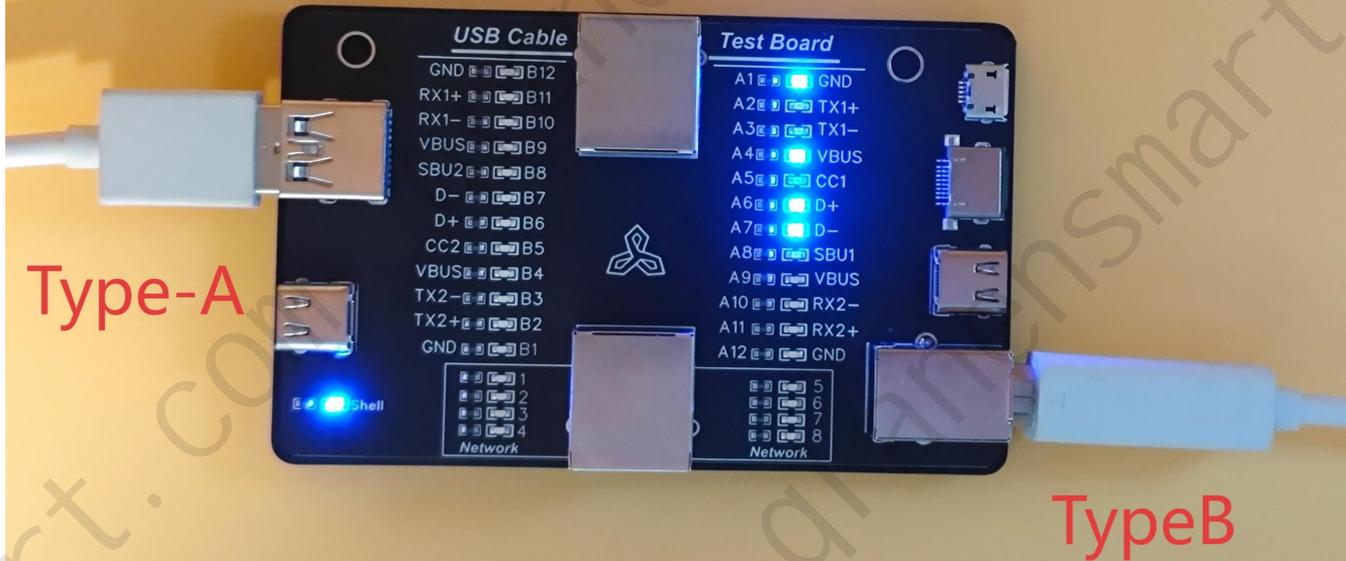
TypeA

Lightning

This Apple Lightning cable is compatible with the USB 2.0 protocol and is specifically designed for Apple devices. Because of the presence of an MFi chip, the VBUS indicator light is dimmed.

Micro_B接口线束测试
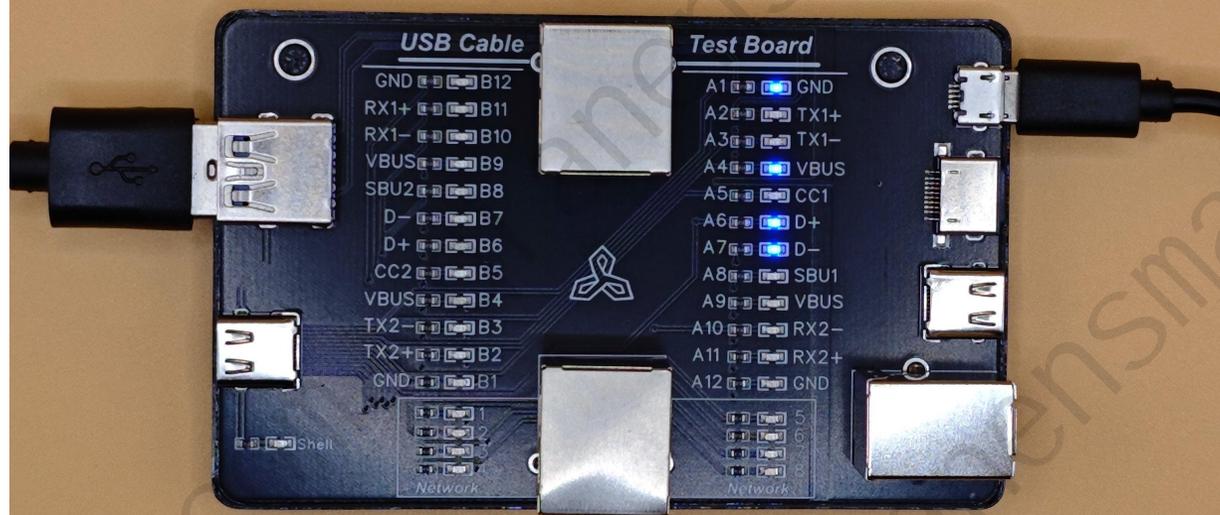
This was commonly used in older Android phones. The TX/RX indicator light was off, it only supported the USB 2.0 protocol, and it generally used slow charging. It has been gradually phased out of the mobile phone market, but it still has a large user base in other industries.
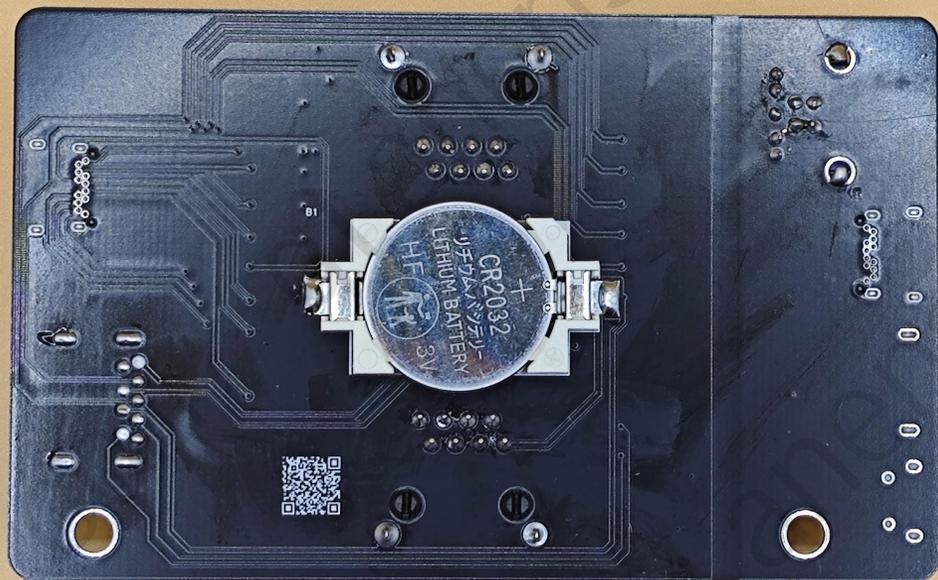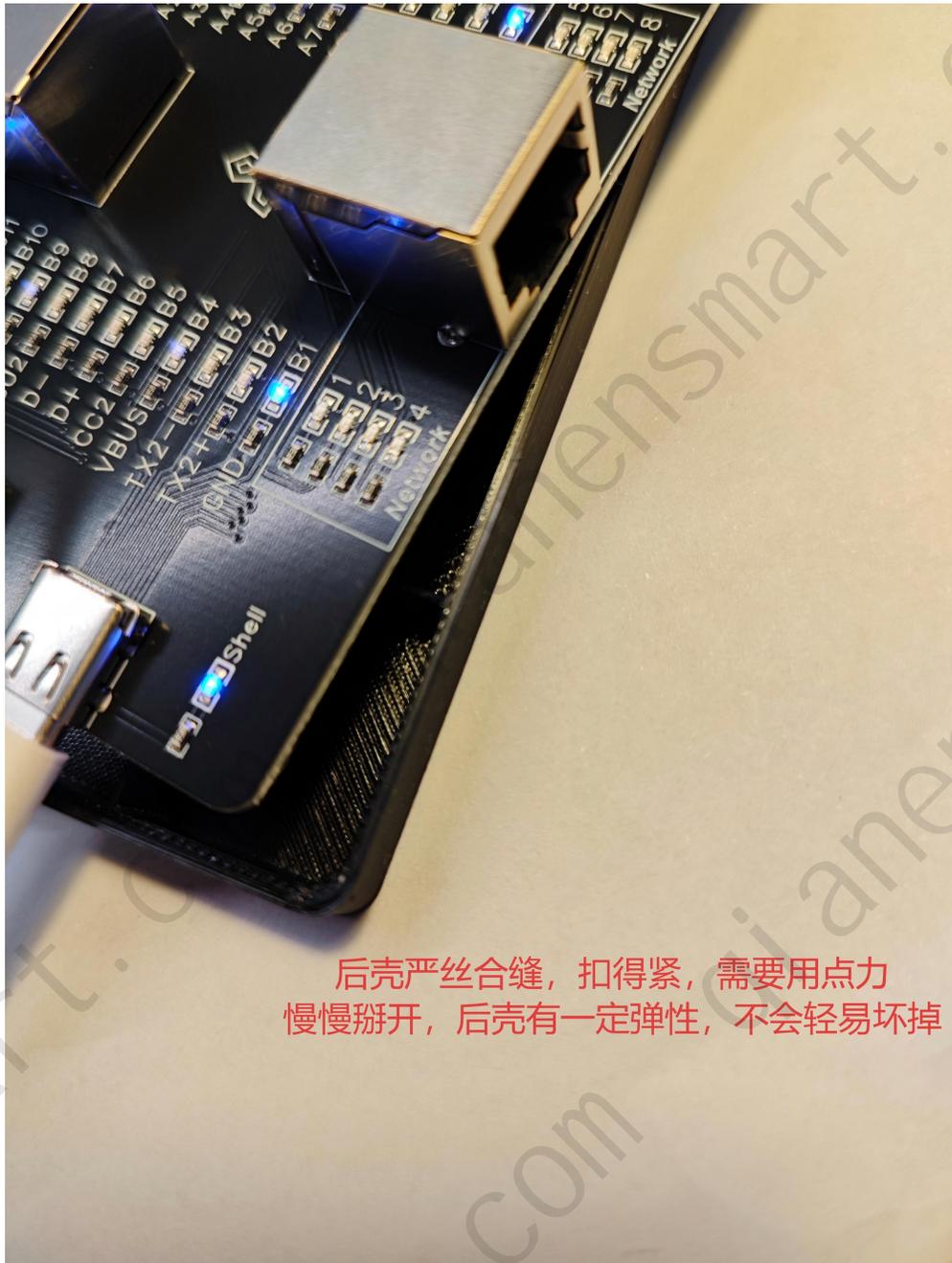
RJ45网线接口
线束测试
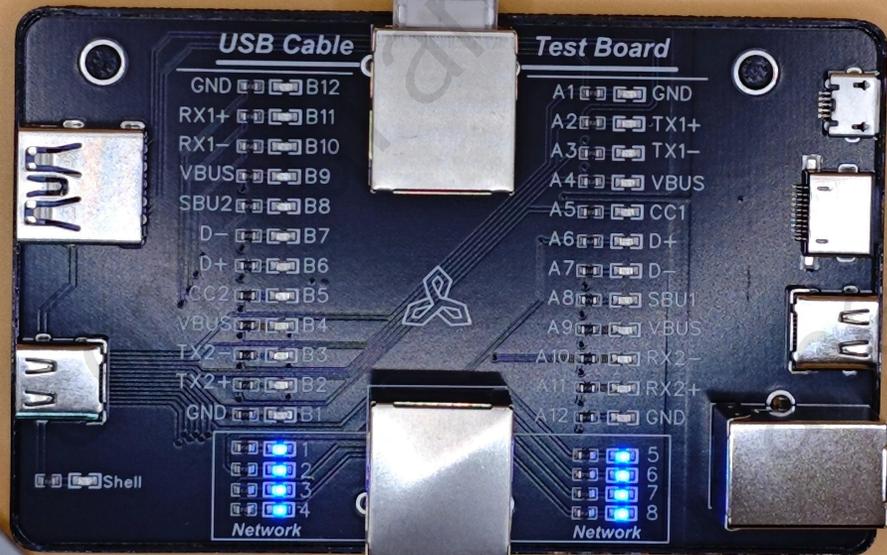
Network cable test:

100Mbps network cable: 4 lights (1, 2, 3, 6) on.
Gigabit network cable: All 8 lights on.

背部电池仓，电池型号CR2032，可更换

After opening the back cover, you can see the button battery, model CR2032, which is commonly sold in hardware stores and supermarkets.

后壳严丝合缝，扣得紧，需要用点力
慢慢掰开，后壳有一定弹性，不会轻易坏掉

How to open the back cover: Gently pry it open. The back cover is elastic and won't break easily.

This is another C-to-C dedicated testing module in the store, originally designed to solve the problem of shorter CC cables not being able to be tested using a multi-functional module. This module can test CC cables as short as 8cm. The interface definition is the same as the multi-functional CC cable wiring sequence, so it will not be repeated here.

后壳扣的比较紧，严丝合缝，但是
后壳有弹性慢慢用点力就能掰开

The back cover is elastic; you can gently pry it open with a little force.