

USB TO TTL (B)

Industrial USB TO TTL Converter, Original CH343G Onboard, Multi-Protection & Systems Support.

Features

- Onboard resettable fuse and TVS diode, providing protections including over-current, over-voltage, backward-proof, and ESD protection, improving shock resistance, and safe and stable communications.
- Onboard IO protection circuit for surge suppression.
- Onboard TTL serial port 3.3V and 5V voltage level switch, allows selecting TTL level.
- 3 x LED indicators for easily checking power connection and signal TX/RX statuses.
- Quality plastic case with a dull-polish surface, well-crafted.
- IDC connector with fool-proof design.

Parameter

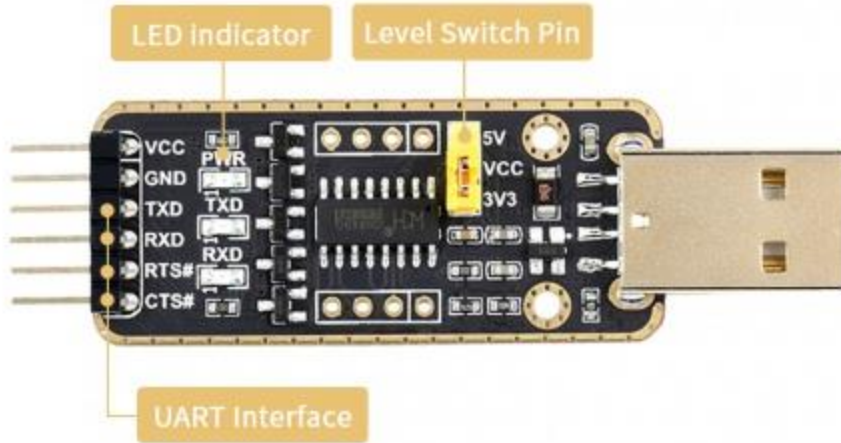
Name	Parameters
Product Type	USB to TTL
Supply Voltage	5V
Communication rate	50bps ~ 6Mbps
Serial port TTL level	5V/3.3V/2.5V/1.8V ^①
Operating system	Mac OS, Linux, Windows 11 / 10 / 8.1 / 8 / 7, Android

①: The onboard 5V/3.3V can be selected by the jumper cap, or the jumper cap can be unplugged, and the external voltage input can also be used (2.5V/1.8V, except industrial grade).

Specifications

- Product category: Industrial USB TO TTL converter
- Host interface: USB
- Device interface: UART
- Communication range: 50bps ~ 6Mbps
- USB Device Interface:
 - connector: USB Type-A;
 - Protection: resettable Fuse, ESD protection
- UART interface:
 - connector: 6pin right-angle pinheader;
 - protection: IO protection diode
- Indicator:
 - PWR: power indicator, turns red when USB voltage is detected
 - TXD: TX indicator, turns red while the USB port is sending data
 - RXD: RX indicator, turns red while the device port is receiving data

Pinouts



PIN	Description
VCC	5V or 3.3V output for external device (configured by jumper)
GND	Power ground
TXD	Connects to MCU.RXD
RXD	Connects to MCU.TXD
RTS#	Connects to MCU.CTS
CTS#	Connects to MCU.RTS
RI#	MODEM contact input signal, ringing indication, active low
DCD#	MODEM contact input signal, carrier detection, active low
DTR#	MODEM contact output signal, data terminal ready, active low
DSR#	MODEM contact input signal, data device ready, active low

About CH343

CH343 is a USB bus adapter chip, that realizes USB to a high-speed asynchronous serial port, and supports up to 115200bps communication Automatic identification and dynamic self-adaptation of baud rate, providing common MODEM contact signals for expanding asynchronous serial ports of computers, or feature USB bus for the common serial device or MCU.

How to use

- ## Windows

CDC

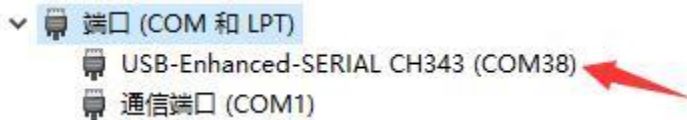
The default driver of the computer is the CDC driver, which can be viewed through the device manager.



We default to software flow control. If you need to use CDC hardware flow, you need to connect the CFG of the board to EN (power-on self-test).

VCP Driver

The VCP driver is a manufacturer driver and needs to be installed by the user. After installation, it can be viewed through Device Manager.



The default is software flow control. If you need to use VCP hardware flow, you can open it directly through the serial debugging assistant.

- ## Linux/Raspberry Pi

To work with Raspberry Pi, it is driver-free, just connect and check with the following command:

```
ls /dev/tty*
```

```
pi@raspberrypi:~ $ ls /dev/tty*
/dev/tty /dev/tty17 /dev/tty26 /dev/tty35 /dev/tty44 /dev/tty53 /dev/tty62
/dev/tty0 /dev/tty18 /dev/tty27 /dev/tty36 /dev/tty45 /dev/tty54 /dev/tty63
/dev/tty1 /dev/tty19 /dev/tty28 /dev/tty37 /dev/tty46 /dev/tty55 /dev/tty7
/dev/tty10 /dev/tty2 /dev/tty29 /dev/tty38 /dev/tty47 /dev/tty56 /dev/tty8
/dev/tty11 /dev/tty20 /dev/tty3 /dev/tty39 /dev/tty48 /dev/tty57 /dev/tty9
/dev/tty12 /dev/tty21 /dev/tty30 /dev/tty4 /dev/tty49 /dev/tty58 /dev/ttyACM0
/dev/tty13 /dev/tty22 /dev/tty31 /dev/tty40 /dev/tty5 /dev/tty59 /dev/ttyAMA0
/dev/tty14 /dev/tty23 /dev/tty32 /dev/tty41 /dev/tty50 /dev/tty6 /dev/ttyprintk
/dev/tty15 /dev/tty24 /dev/tty33 /dev/tty42 /dev/tty51 /dev/tty60 /dev/ttyS0
/dev/tty16 /dev/tty25 /dev/tty34 /dev/tty43 /dev/tty52 /dev/tty61
pi@raspberrypi:~ $
```

The port should be named as ttyACM0, user can use the minicom tool to test.

```
minicom -D /dev/ttyACM0
```

- **MacOS**

To use with MacOS, please download the driver and follow the guide

- [CH343 driver for MacOS](#)
- [MacOS guide](#)

- **Android**

To use with Android device, please download the APP and test.

- [UART APP in Android](#)

Resources

- [CH343 Datasheet](#)
- [SSCOM software](#)
- [CH343 VCP driver for Windows](#)
- [CH343 driver for MacOS](#)
- [MacOS guide](#)

- [UART APP in Android](#)