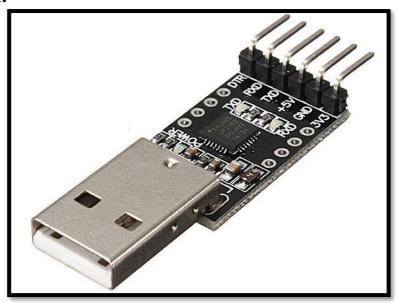


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# CP2102 USB 2.0 to TTL UART Module Serial

# **Converter**

### **Introduction:**



The CP2102 USB UART Board (mini) is an accessory board that features the single-chip USB to UART Bridge CP2102 onboard. CP2102 features: Single-Chip USB to UART Data Transfer. No external resistors required, no external crystal required. On-chip power-on reset circuit and voltage regulator.

Included USB transceiver, without external circuit device. Includes a clock circuit and power-on reset circuit. Meet the USB2.0 specification requirements SUSPEND pin supports USB suspend state. Asynchronous serial data bus compatible with all handshake and modulation controller interface signals. Supported data format is 8 data bits, 1 stop bit and parity bits; Connotation 512 byte receive buffer and 512 byte transmit buffer.



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### **Feature support:**

- Windows 98/Me/2000/7
- MAC OS-9
- MAC OS
- X-Windows CE
- Linux 2.40 or later
- Package Included:
- 1pcs 6Pin CP2102 Module
- Note: Light shooting and different displays may cause the color of the item in the picture a little different from the real thing. The measurement allowed error is +/- 1-3 cm.

# **Specifications:**

Color: As shown

• Material: plastic + metal

• PCB Dimensions: 26.5\* 15.6mm

- With 3.3V and 5V dual power output
- With three LEDs: power indicator, data reception indicator, the data transmission indicator, working status with self-recovery fuse.
- In the event of accidental short circuit, it can effectively protect your computer USB port and Downloader; with reset signal output, etc. directly to the Arduino board Promini download!



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#### **Pinouts CP2102:**

This module has 6 pin breakout which includes

- TXD = Transmit Output Connect to Receive Pin (RXD) of Micro controller. This pin is TX pin of CP2102 on board.
- RXD = Receive Input Connect to Transmit Pin (TXD) of Micro controller. This pin is RX pin of CP2102 on board.
- GND = should be common to microcontroller ground.
- 3V3 = Optional output to power external circuit up to 50mA.
- 5V = Optional output to power external circuit up to 500mA
- DTR/RST = Optional output pin to reset external microcontrollers like Arduino.

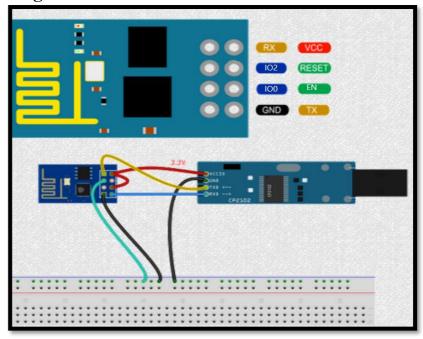
#### **Procedures:**

- Firstly, simply connect jumper wire from CP2102 to ESP8266 (tx to rx and rx to tx)
- Then, combine IOO with GND ESP8266 connect to GND CP2102 USB
- After that, combine 3V3 with EN ESP8266 connect to VCC CP2102
- Connect the CP2102 USB to the pc/laptop that he has connected with ESP8266, then open
  the Arduino to put the coding for ESP8266, after the coding is compiled the connection on
  IO0 this is because to see the function of the CP2102 as a connection like USB,
- Lastly control the led on the ESP8266 using blinky apps



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# Schermatic diagram:



## **Result:**

