

CP2102 USB to TTL Board V3.0



This is an USB2.0 to TTL UART Converter module which is based on CP2102 Bridge by SiLabs. This module can be used with Laptop's which don't have standard serial port. This module creates a virtual COM port using USB on your computer which can support various standard Baud Rates for serial communication. You just need to install the driver using a setup file which automatically installs correct driver files for Windows XP/Vista/ 7. After driver installation, plug the module into any USB port of your PC. Finally a new COM port is made available to the PC. The feature which makes it more convenient is the TTL level data i/o. So you don't need to make a RS232 to TTL converter using chips like MAX232. The Rx and Tx pin can be connected directly to the MCUs pins (assuming 5v i/o).

Pinouts

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 upto 50mA.
- 5V = Optional output to power external circuit upto 500mA
- DTR/RST = Optional output pin to reset external microcontrollers like Arduino.

Features:

- Stable and reliable chipset CP2102.
- USB specification 2.0 compliant with full-speed 12Mbps.
- Standard USB type A male and TTL 6pin connector.
- 6pins for 3.3V, RST, TXD, RXD, GND & 5V.
- All handshaking and modem interface signals.
- Baud rates: 300 bps to 1.5 Mbps.
- Byte receive buffer; 640 byte transmit buffer.
- Hardware or X-On/X-Off handshaking supported.
- Event character support Line break transmission.
- USB suspend states supported via SUSPEND pins.
- Temperature Range: -40 to +85.