

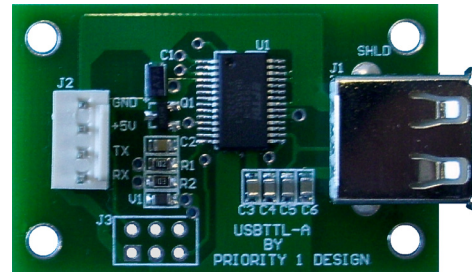
# USBTTL-A

## TTL TO USB CONVERTER BOARD

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Designed for embedding into products manufactured by third-parties, this unit is a simply low cost USB adapter board for allowing serial uart TTL level signals to be accessed via a standard USB port on a PC. It features:

- 1 transmit and 1 receive line, full duplex.
- RTS, CTS handshake lines.
- Switched 5V USB supply output.
- Small unit size: 46mm x 29mm.
- 4 mounting holes
- Data transfer rates from 300 baud to 3 Mbaud at TTL levels.
- USB 2.0 Full Speed compatible.



### Connector Pin Description:

The USBTTL-A derives its power from the USB port supply via connector J1. This is a standard type A USB socket. TTL uart signals are available on two connection points, J2 and J3. Connector J2 is a 4 way wire to board connector, while J3 is a solder pad connection point carrying identical signals and additional RTS and CTS handshake lines. The 5V supply output is the voltage source from the USB bus. After USB enumeration is complete this 5V supply is switched via a JFET transistor and is available through J2 and J3 for user applications. The maximum current allowed to be drawn on the 5V supply line is 100mA.

4 way Con. (J2)	Description
1 (output)	RX TTL Serial Output
2 (input)	TX TTL Serial Input
3 +5V	+5V Supply Output
4 GND	GND Signal Ground

6 way solder pad(J3)	Description
1 +5V (Output)	+5V Supply Output.
2 TX (Input)	Transmit Asynchronous Data.
3 GND	GND Signal Ground.
4 RX (Output)	Receiving Asynchronous Data.
5 CTS (Input)	Clear To Send Control / Handshake Signal.
6 RTS (Output)	Request to Send Control / Handshake Signal.

### USB driver installation:

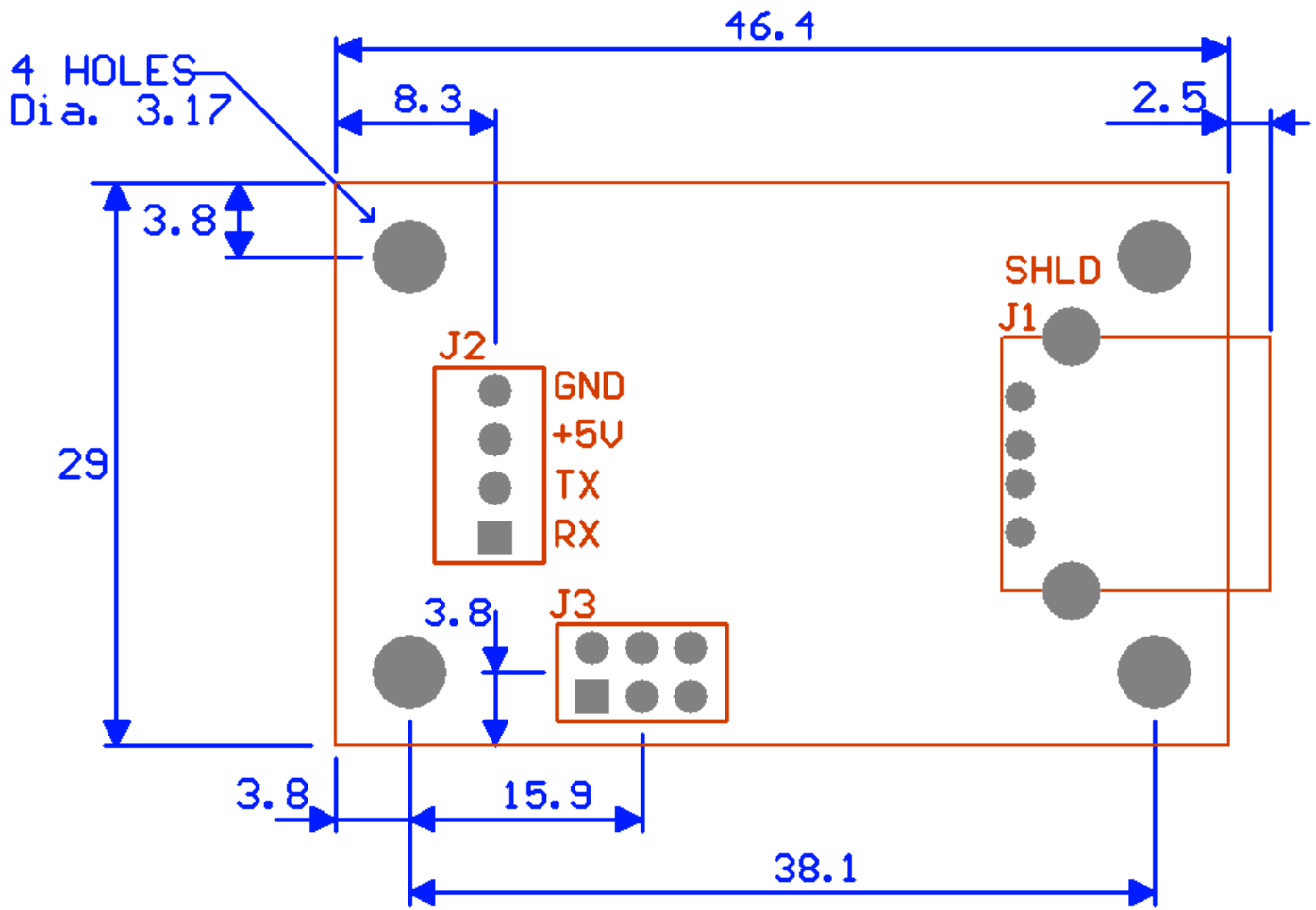
The USBTTL-A uses a USB to Serial device manufactured by FTDI which enables the USB port to become accessible as a virtual serial port. Once installed the reader will appear in the PC's device driver list as shown below.



In the case above the serial port is allocated to serial port COM3 however may vary depending on pre-existing com port hardware and virtual drivers loaded for other applications. The device manager list can be located by selecting the Start>Control Panel>System Menu and then selecting the Hardware>Device tabs.

The USB drivers can be downloaded from [http://www.priority1design.com.au/usbtlla\\_usb\\_driver.exe](http://www.priority1design.com.au/usbtlla_usb_driver.exe). Once downloaded simply save the file to any location on your PC and run the executable file. The drivers will automatically be installed on your system. When the USBTTL-A is next plugged into a USB port on your PC it will be allocated a COM port number as shown above and will be accessible as a serial port by a suitable application program that is able to send and receive characters to a serial port.

**Dimensions:**



All Dimensions shown in mm.

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