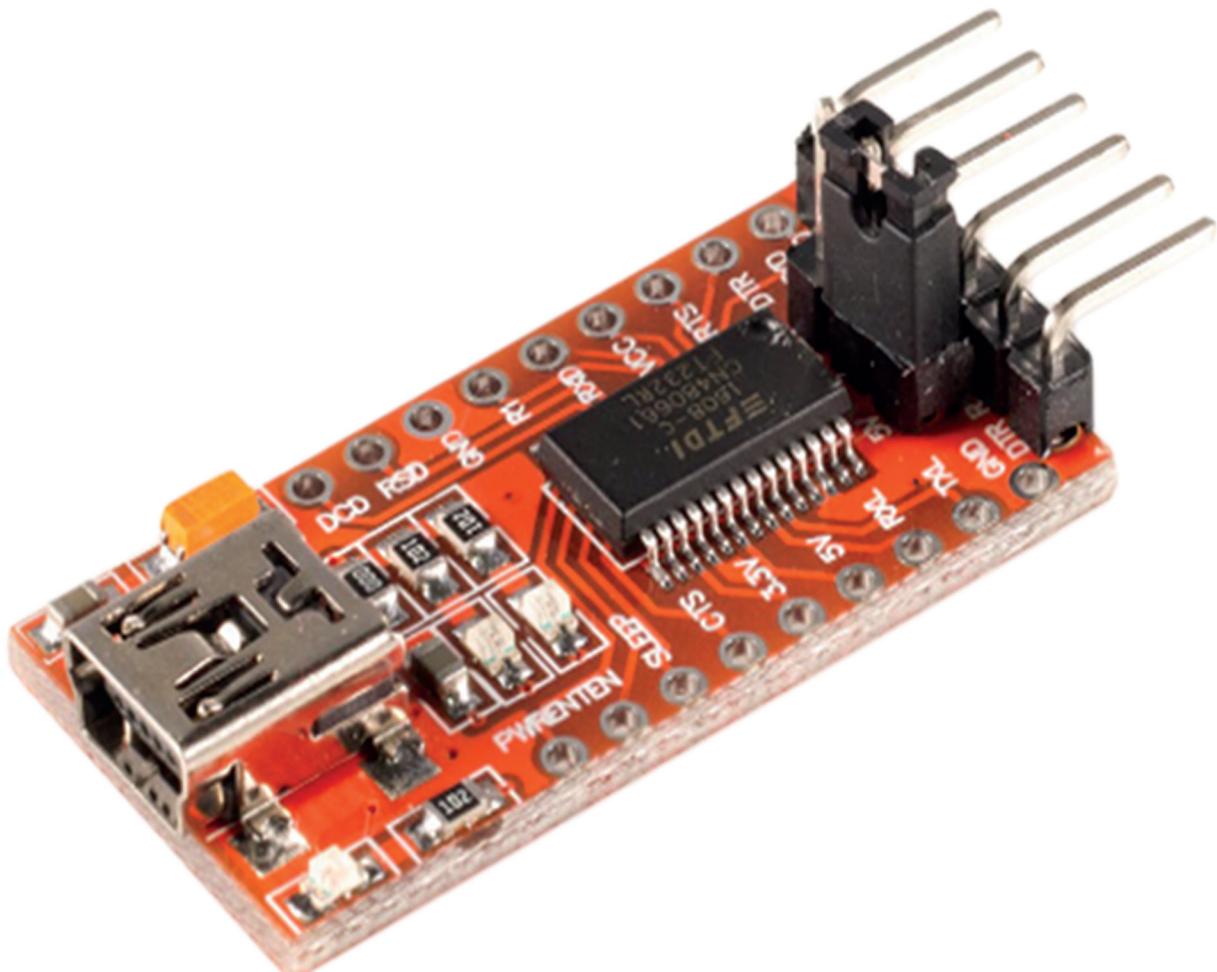


FTDI Adapter FT232RL Datenblatt



Contents:

- 1. Description**
- 2. Pin Layout**
- 3. Adapter Support**

1. Description

The USB to TTL serial adapter is based on the high quality and very popular FTDI FT232RL chipset and is an excellent way to connect TTL serial devices to a PC through a USB port.

This USB to TTL serial adapter is ideal for many uses, including:

- Programming microprocessors such as ARM, AVR, etc
- Working with computing hardware such as routers and switches
- Serial communication with many devices such as GPS devices
- Serial terminals on devices like the Raspberry Pi

Unlike most USB to TTL serial adapters, this adapter supports both 5V AND 3.3V operation!

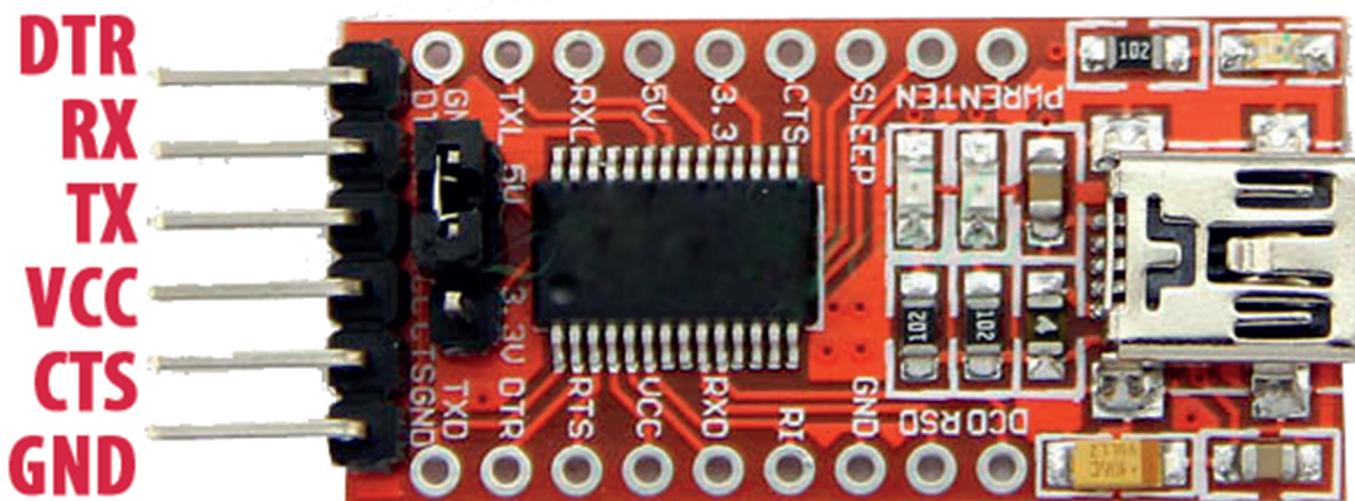
Simply set the jumper as required to choose between 5V and 3.3V as labelled on the board.

The adapter comes with a right-angle connector fitted allowing you to use it straight away.

If you need to access any of the other inputs or outputs of the FT232RL, all the useful signals are provided as through-hole solder pads - ideal for use with straight headers into a breadboard, for example.

2. Pin Layout

The main connector has 6 pins:



- DTR: Data Terminal Ready - an output used for flow control
- RX: Serial data Receive pin
- TX: Serial data Transmit pin
- VCC: Positive voltage output - this is controlled by the jumper. If the jumper is set to 5V, this will provide a 5V output. If the jumper is set to 3.3V, this will provide a 3.3V output.
- CTS: Clear To Send - an input used for flow control
- GND: Ground or OV

For most uses, you can simply connect the following pins:

- RX on this board to the TX pin on your device
- TX on this board to the RX pin on your device
- GND on this board to GND on your device

The VCC pin is ideal for powering small devices such as homemade circuits. This pin should not be connected when a device has a separate power supply as this may damage both devices.

Please note that in 5V mode the maximum current draw on this pin is approximately 500mA. In 3.3V mode the maximum current draw on VCC is approximately 50mA.

There are also several pins available as solder pads. These pins are labelled on the board. Connecting to these pins is not usually required and you should check the FTDI datasheet (linked below) before doing so.

3. Adapter Support

This adapter supports the following operating systems:

- Windows 2000 (32 bit)
- Windows XP (32 and 64 bit)
- Windows Vista (32 and 64 bit)
- Windows 7 (32 and 64 bit)
- Windows 8 (32 and 64 bit)
- Windows 8.1 (32 and 64 bit)
- Linux 2.6+
- Mac OS X 10.4, 10.5, 10.6, 10.7, 10.8 and 10.9