FT232-AZ USB auf TTL Adapter Datenblatt
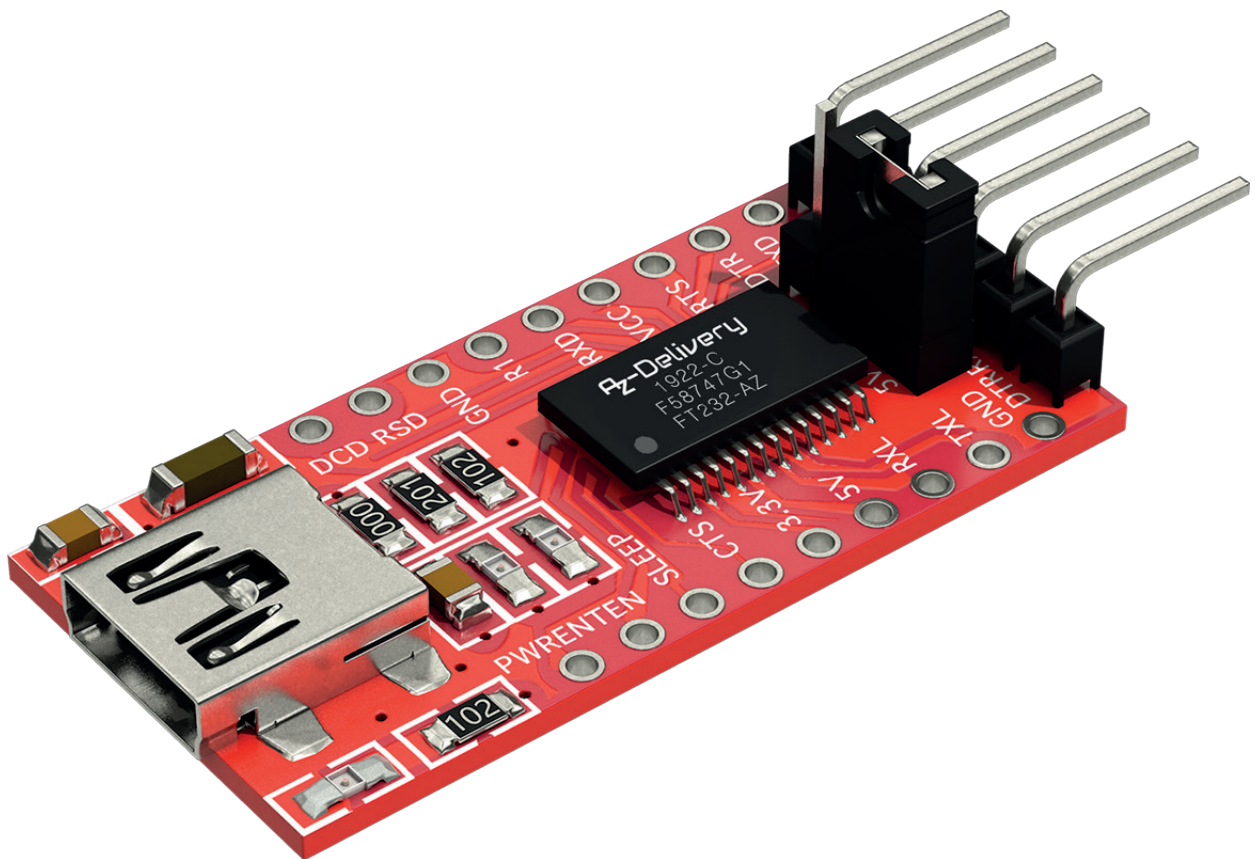
Content:

1. Basic Specifications

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 FT232-AZ, all the useful signals are provided as through-hole solder pads - ideal for use with straight headers into a breadboard, for example.
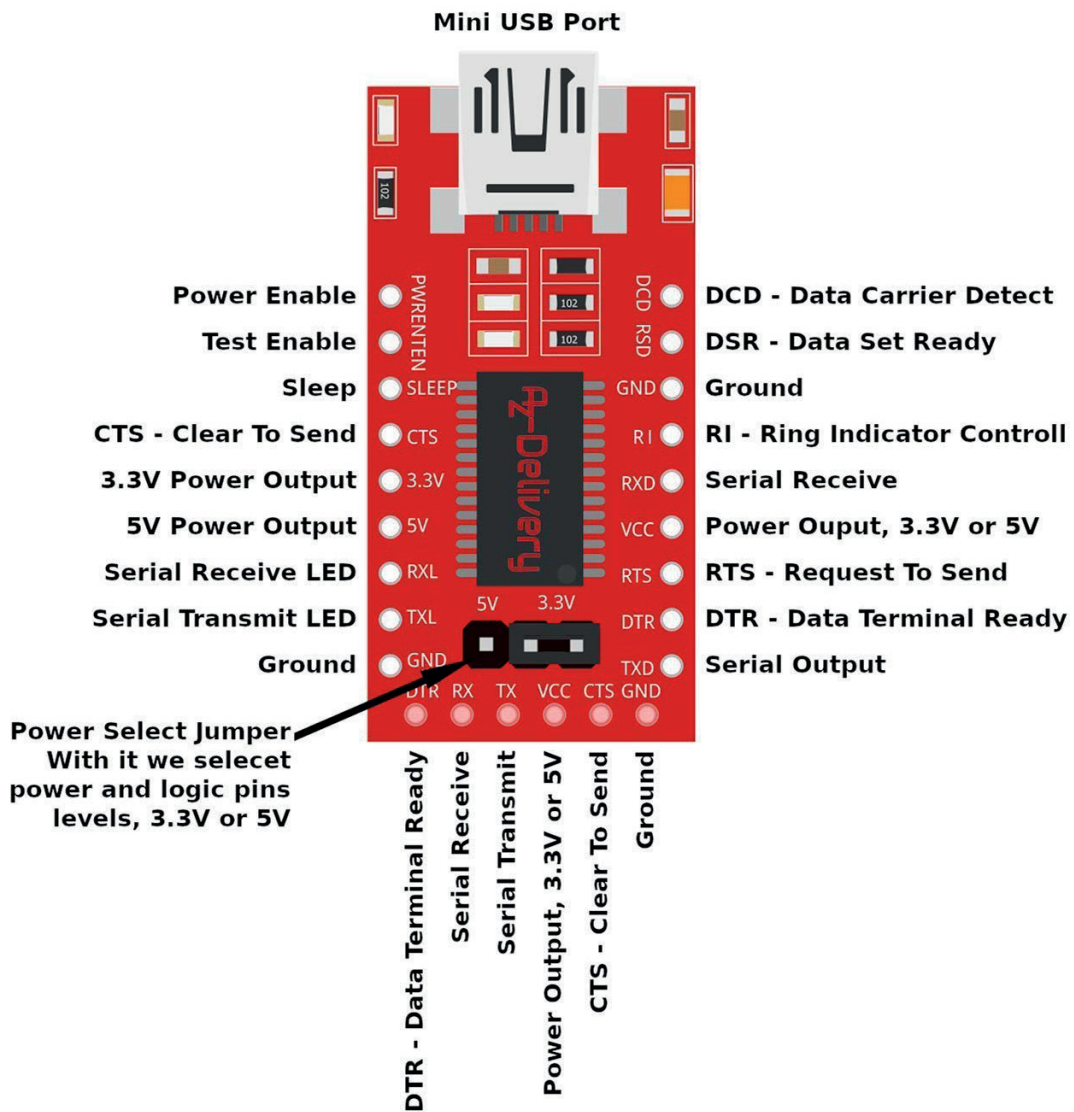
2. Absolute Maximum Ratings

Parameter	Value	Units
Storage Temperature	-65 to 150	°C
Floor Life (Out of Bag) At Factory Ambient (30°C / 60% Relative Humidity)	168 (IPC/JEDEC J-STD-033A MSL Level 3 Compliant)*	Hours
Ambient Temperature (Power Applied)	-40 to 85	°C
MTTF	11162037	hours
VCC Supply Voltage	-0.5 to +6.00	V
DC Input Voltage – USBDP and USBDM	-0.5 to +3.8	V
DC Input Voltage – High Impedance Bidirectional	-0.5 to + (VCC +0.5)	V
DC Input Voltage – All Other Inputs	-0.5 to + (VCC +0.5)	V
DC Output Current – Outputs	24	mA
DC Output Current – Low Impedance Bidirectional	24	mA
Power Dissipation (VCC = 5.25V)	500	mW

3. DC Characteristics

DC Characteristics at Ambient Temperature from -40°C to +85°C)

Parameter	Description	Minimum	Typical	Maximum	Units	Conditions
VCC1	VCC Operating Supply Voltage	4.0	-	5.25	V	Using Internal Oscillator
VCC1	VCC Operating Supply Voltage	3.3	-	5.25	V	Using External Crystal
VCC2	VCCIO Operating Supply Voltage	1.8	-	5.25	V	
Icc1	Operating Supply Current	-	15	-	mA	Normal Operation
Icc2	Operating Supply Current	50	70	100	µA	USB Suspend
3V3	3.3v regulator output	3.0	3.3	3.6	V	

Mini USB Port

Left labels		Right labels
Power Enable	PWRENTEN	DCD - Data Carrier Detect
Test Enable		DSR - Data Set Ready
Sleep	SLEEP	Ground
CTS - Clear To Send	CTS	RI - Ring Indicator Controll
3.3V Power Output	3.3V	Serial Receive
5V Power Output	5V	Power Ouput, 3.3V or 5V
Serial Receive LED	RXL	RTS - Request To Send
Serial Transmit LED	TXL	DTR - Data Terminal Ready
Ground	GND	Serial Output

Power Select Jumper
With it we selecect power and logic pins levels, 3.3V or 5V

DTR - Data Terminal Ready
Serial Receive
Serial Transmit
Power Output, 3.3V or 5V
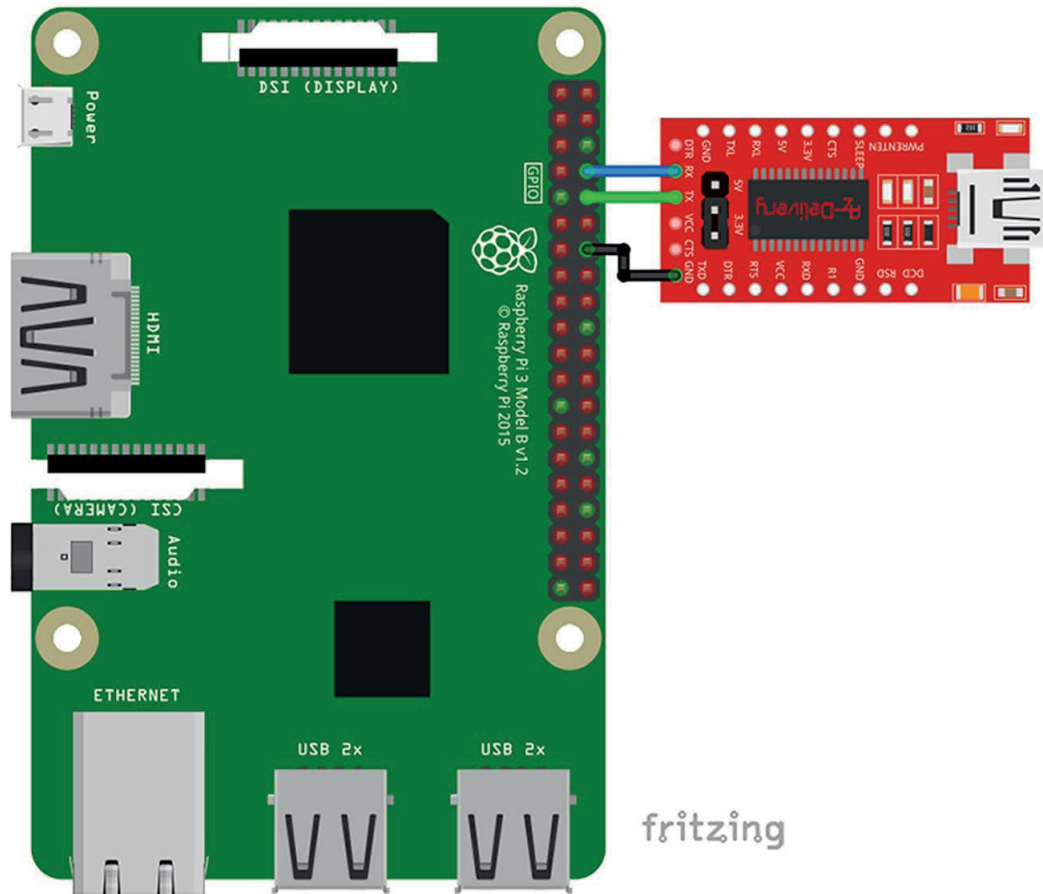CTS - Clear To Send
Ground

5. Connection Diagrams

Connect the FT232-AZ USB to TTL Adapter with Uno as shown on the following connection diagram:
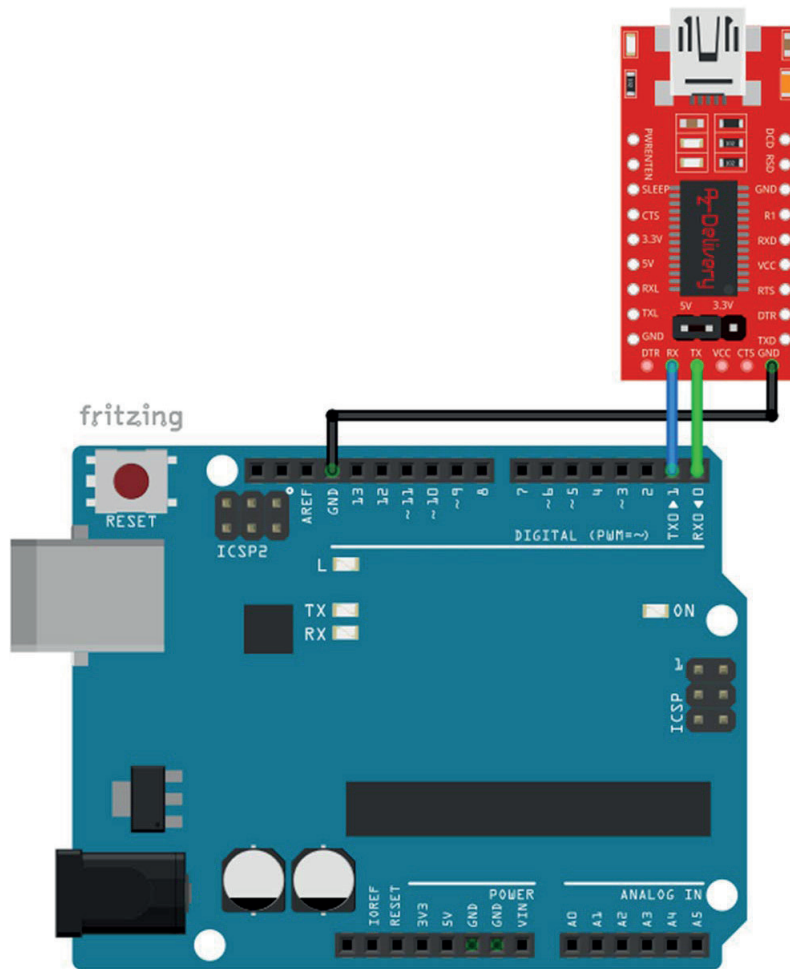
Connect the FT232-AZ USB to TTL Adapter with Raspberry Pi as shown on the following connection diagram:

6. 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)
Windows 10 (32 and 64 bit)
Linux 2.6+
Mac OS X 10.4, 10.5, 10.6, 10.7, 10.8 and 10.9

Ihr Experte für Mikroelektronik!

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