

The diagram illustrates a USB-to-serial converter circuit. At the top left, a 40-pin socket is connected to the FT232RL chip. The socket pins are numbered 1 to 40, and the connections are labeled as follows:

- Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20: Connected to the FT232RL chip pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
- Pins 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40: Connected to the FT232RL chip pins 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40.

The FT232RL chip is configured for RS-485 communication. The connections are as follows:

- VDD (pin 1) is connected to +5V.
- VSS (pin 2) is connected to GND.
- TXD (pin 3) is connected to TXD+ (pin 1) and TXD- (pin 2) of the MAX662A.
- RXD (pin 4) is connected to RXD+ (pin 1) and RXD- (pin 2) of the MAX662A.
- TXEN (pin 5) is connected to TXEN+ (pin 1) and TXEN- (pin 2) of the MAX662A.
- RXLED (pin 6) is connected to RXLED+ (pin 1) and RXLED- (pin 2) of the MAX662A.
- SLEEP (pin 7) is connected to SLEEP+ (pin 1) and SLEEP- (pin 2) of the MAX662A.
- GND (pin 8) is connected to GND.
- TXD (pin 9) is connected to TXD+ (pin 1) and TXD- (pin 2) of the MAX662A.
- RXD (pin 10) is connected to RXD+ (pin 1) and RXD- (pin 2) of the MAX662A.
- TXEN (pin 11) is connected to TXEN+ (pin 1) and TXEN- (pin 2) of the MAX662A.
- RXLED (pin 12) is connected to RXLED+ (pin 1) and RXLED- (pin 2) of the MAX662A.
- SLEEP (pin 13) is connected to SLEEP+ (pin 1) and SLEEP- (pin 2) of the MAX662A.
- GND (pin 14) is connected to GND.
- TXD (pin 15) is connected to TXD+ (pin 1) and TXD- (pin 2) of the MAX662A.
- RXD (pin 16) is connected to RXD+ (pin 1) and RXD- (pin 2) of the MAX662A.
- TXEN (pin 17) is connected to TXEN+ (pin 1) and TXEN- (pin 2) of the MAX662A.
- RXLED (pin 18) is connected to RXLED+ (pin 1) and RXLED- (pin 2) of the MAX662A.
- SLEEP (pin 19) is connected to SLEEP+ (pin 1) and SLEEP- (pin 2) of the MAX662A.
- GND (pin 20) is connected to GND.

The MAX662A DC-DC converter is used to generate +12V from the +5V USB supply. The connections are as follows:

- VCC (pin 1) is connected to +5V.
- Vout (pin 2) is connected to +12V.
- GND (pin 3) is connected to GND.
- SHDN (pin 4) is connected to GND.
- C2+ (pin 5) is connected to +12V.
- C2- (pin 6) is connected to GND.
- C1+ (pin 7) is connected to +5V.
- C1- (pin 8) is connected to GND.

The USB connector is shown in two types: B-type and A-type. The B-type connector is connected to the +5V and GND pins of the USB connector. The A-type connector is connected to the +5V and GND pins of the USB connector.