FT232 / FT245 Serialiser and Test Utility Program

In addition to serialising the external EEPROM used in FT232 and FT245 based designs, this application can be used to test serial RS232 operation on products, which implement a USB to RS232 link.

The test features of this application require a special Y-shaped cable, and a PC with two hardware serial ports. This allows the transmit, the receive, and all of the hardware handshaking lines to be tested.

The construction of this cable is detailed below:-

25 pin connector

Test cable = 25 pin female to 2 x 9 pin female (COM1 and COM2)

USB ⇔	Serial Pin 2 (TXD)	to	COM2 Pin 2 (RXD)
USB ⇔	Serial Pin 3 (RXD)	to	COM2 Pin 3 (TXD)
USB ⇔	Serial Pin 4 (RTS)	to	COM2 Pin 8 (CTS)
USB ⇔	Serial Pin 5 (CTS)	to	COM2 Pin 7 (RTS)
USB ⇔	Serial Pin 6 (DSR)	to	COM2 Pin 4 (DTR)
USB ⇔	Serial Pin 7 (GND)	to	COM2 Pin 5 (GND)
USB ⇔	Serial Pin 20 (DTR)	to	COM2 Pin 6 (DSR)
USB ⇔	Serial Pin 8 (CDET)	to	COM1 Pin 4 (DTR)
USB ⇔	Serial Pin 22 (RI)	to	COM1 Pin 7 (RTS)

9 pin connector

Test cable = 9 pin female to 2 x 9 pin female (COM1 and COM2)

USB ⇔	Serial Pin 3 (TXD)	to	COM2 Pin 2 (RXD)
USB ⇔	Serial Pin 2 (RXD)	to	COM2 Pin 3 (TXD)
USB ⇔	Serial Pin 7 (RTS)	to	COM2 Pin 8 (CTS)
USB ⇔	Serial Pin 8 (CTS)	to	COM2 Pin 7 (RTS)
USB ⇔	Serial Pin 6 (DSR)	to	COM2 Pin 4 (DTR)
USB ⇔	Serial Pin 5 (GND)	to	COM2 Pin 5 (GND)
USB ⇔	Serial Pin 4 (DTR)	to	COM2 Pin 6 (DSR)
USB ⇔	Serial Pin 1 (CDET)	to	COM1 Pin 4 (DTR)
USB ⇔	Serial Pin 9 (RI)	to	COM1 Pin 7 (RTS)