

# Serial Interface Board

## 12 Channel USB to Serial Adapter

### Overview

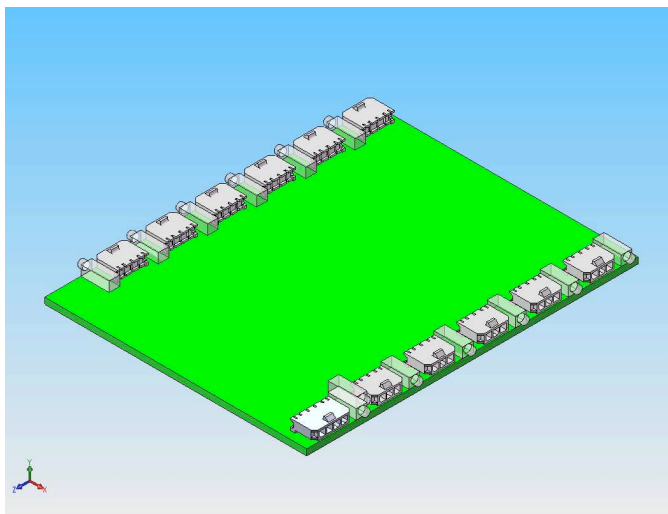
The serial interface board is a 12-port USB to RS232 adapter which allows the vehicle's computer to communicate with the rest of the submarine. The serial board sits in the mid-hull electronics stack between the sensor power and control boards. The RS232 ports all operate at standard RS-232 levels and consist of a transmit line, receive line, and ground line.

Eleven of the ports are considered device ports and go to 3-circuit Molex Microfit-3.0 connectors.

One of the ports is shares the same 4-circuit Microfit-3.0 connector which is used for powering the board.

### Specifications

Number of Ports:	12
Maximum Baud Rate:	250K baud
USB 2.0 Hub:	SMSC USB2507
UARTs:	FTDI FT2232D
Width:	4.25"
Length:	5.375"



### Features

- Uses FTDI FT2232D dual-channel USB to RS232 UARTs ensure operating system compatibility
- 480 Mbps USB 2.0 Hi-Speed uplink.
- Dedicated USB1.1 to USB2.0 transaction translator per port provides 12 Mbps of dedicated bandwidth to each UART.

### Connectors

#### Device Connectors

1x3 Molex MicroFit-3.0:

Pin 1:	TX
Pin 2:	Ground
Pin 3:	RX

#### Power Board Connector

1x4 Molex MicroFit-3.0:

Pin 1:	+5 VDC
Pin 2:	GND
Pin 3:	TX
Pin 4:	RX