

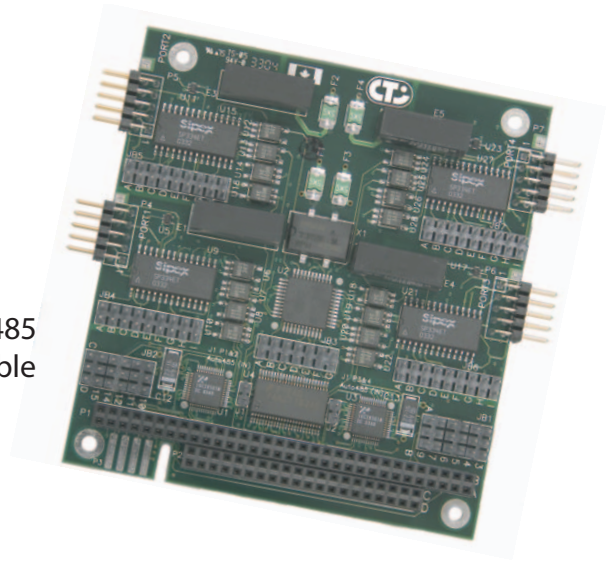
# PC/104 Optical Isolation

## Serial Communications

### Xtreme/104 Opto

#### Features

- Two or four asynchronous serial ports in various electrical interface configurations (jumper selectable)
- Each port is optically isolated from each other and the board up to 3.0 kV AC peak to peak, on all signals
- Supports full duplex (4 wire), half duplex (2 wire) with auto TxD echo cancellation and multi-drop (4 wire) communication modes in RS-422/485
- Maximum data speeds of 460.8 Kbps. Custom baud rates are also available
- Jumper selectable 120 Ohm termination resistor included on each RS-422/485 transmitter and receiver
- Each port can be independently configured for baud rate, parity, data and stop bits. IRQ lines are jumper selectable
- Industrial Temperature model available (-40°C to 85°C, -40°F to 185°F)



#### Specifications

<b>Number of ports</b>	2 or 4
<b>Electrical Interface</b>	RS-232 and/or RS-422/485 (electrical interface is jumper selectable for each port)
<b>Optical Isolation</b>	Each port individually isolated up to 3.0 kV AC peak to peak, 3.0 kV DC and 2.1 kV AC RMS on all signals
<b>Connectors</b>	10 pin header connectors (custom connectors and optional DB-9 male cables available)
<b>Control Signals</b>	RS-232: TxD, RxD, RTS, CTS RS-422/485: TxD±, RxD±, RTS±, CTS±
<b>Baud Rates</b>	RS-232: 50 bps to 230.4 Kbps RS-422/485: 50 bps to 460.8 Kbps (custom baud rates available)
<b>Interrupts</b>	Jumper selectable for IRQs 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15
<b>I/O Addresses</b>	Eight pre-defined sets of I/O addresses are jumper selectable
<b>UART Type</b>	16C2850 dual UARTs with 128 byte transmit and receive FIFO buffers
<b>Dimensions</b>	Width: 9.60 cm/3.77" Length: 10.41 cm/4.09" (includes 10 pin headers) Height: 1.12 cm/0.44"
<b>Power Requirements</b>	+5 VDC @200mA (max) ±5%
<b>Environmental</b>	Operating Temperature (standard): 0° C to 70° C (32° F to 158° F) Industrial Temperature models: -40° C to 85° C (-40° F to 185° F) Storage Temperature: -40° C to 150° C (-40° F to 302° F) Humidity: 95% non-condensing
<b>Bus</b>	ISA bus compatible, 16 bit PC/104 connector
<b>Software Compatibility</b>	DOS, Linux, SCO Unix, Solaris, QNX, VxWorks Windows 95/98/Me/CE/CE.Net/NT/2000/XP
<b>System Requirements</b>	One available PC/104 module stack connector and hardware interrupt (if required)
<b>Regulatory Approvals</b>	FCC Class A <b>FC</b> <b>CE</b> EN50082-2 ICES-003 Class A    EN 55022 Class A EN 55024

Durable and stackable, the two and four port Xtreme/104 Opto's small form factor makes it the ideal serial communications link in today's demanding embedded systems.

The Xtreme/104 Opto offers optical isolation and is available in an industrial temperature model, so it is well suited for any embedded computer situation, from unmanned submarines to building automation systems.

16C2850 UARTs offer 128 bytes of transmit and receive FIFO buffers, and each port can be independently configured for options for parity, baud rate, data and stop bits.

It is the ideal product for manufacturers of medical equipment, transportation systems, military and defence systems or automation applications.

All Connect Tech products are covered by a Lifetime Warranty and no-charge technical support.



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