

Xtreme/104 Isolated

Applications

This high density Xtreme/104 adapter offers **12 asynchronous serial ports** while maintaining full compliance with PC/104 form factor standards. It features eight jumper selectable RS-232/422/485 ports with support for all three RS-485 modes, and four dedicated RS-232 ports. Each port is individually electrically isolated up to 1.0 kV AC peak to peak. The Xtreme/104 Isolated is durable, operating at an industrial temperature range of -40 to 70 degrees C. Xtreme/104 Isolated adapters are ideal industrial strength solutions for control and automation applications requiring single node or multi-drop communications over short or long distances using PC/104 bus compatible computers.

Features

- Twelve asynchronous I/O ports, including eight jumper selectable RS-232/422/485 ports and four RS-232 ports
- Supports all three RS-422/485 modes:
 - Full Duplex (four wire)
 - Half Duplex (two wire)
 - Multi-drop (four wire)
- Provides electrical isolation on every port using Analog Device's *iCoupler*® technology
- Supports data communications speeds up to 115.2 Kbps (RS-232) and 460.8 Kbps (RS-422/485). Custom baud rates are also available
- 16C2850 Dual UARTs control each port providing 128 bytes of Tx/D/RxD FIFO buffers
- Jumper selectable RS-485 bias and termination available
- Eight jumper selectable I/O address ranges
- IRQ lines, interrupts and modes are jumper selectable
- Comes with comprehensive manual and driver software

Benefits

High Speed, High Performance Communications

This unique PC/104 board accommodates rapid data transfer rates up to 460.8 Kbps while offering 128 bytes of transmit and receive FIFO buffers to offload interrupt handling and buffering from the main CPU, to improve overall system performance. Each port is electrically isolated to a maximum 1 kV AC peak to peak using the latest in isolation technology, allowing for lower power operation, higher data rates and higher port density than traditional isolation methods.

Hardware Flexibility

Xtreme/104 offers hardware flexibility and adaptability for your application. You can configure each of the eight switchable ports for electrical interface, baud rate, parity, data and stop bits independently. Various connector options are offered to suit your needs. Xtreme/104 Isolated supports all three RS-422/485 modes: full duplex, two-wire half duplex and four-wire multi-drop.

Software Compatibility

Because of its compatibility with standard PC serial ports, the Xtreme/104 Isolated boards support all the most popular operating systems and communication software, including Linux, QNX, SCO Unix, Solaris and Windows 98/Me/CE/CE.NET/NT/2000/XP and XP Embedded.

Easy to Use

The Xtreme/104 Isolated comes ready for simple installation. Included are board, device driver software, where required, and a manual.



Lifetime Warranty and Service

Connect Tech, an ISO 9001 registered company, provides high performance serial communication solutions to customers around the globe. Since 1985 Connect Tech has designed and tested products to meet the highest standards of quality and reliability. The Xtreme/104 Isolated, like all Connect Tech serial communication products, is covered by free customer support and a lifetime warranty.

Specifications

Number of ports	12
Electrical Interface	Four RS-232 and eight jumper selectable RS-232/422/485
Electrical Isolation	Each port is isolated up to 1 kV AC peak to peak
Connectors	10 pin connectors for RS-232/422/485 ports 6 pin connectors for RS-232 ports
Control Signals	RS-232: Tx/D, Rx/D, RTS, CTS, ISOGND RS-422/485: Tx/D ±, Rx/D ±, CTS ±, RTS ±, ISOGND
Baud Rates	RS-232: 50 bps – 115.2 Kbps RS-422/485: 50 bps – 460.8 Kbps (Custom baud rates also available)
I/O Addresses	Eight pre-defined sets of I/O addresses are jumper selectable
Interrupts	Jumper selectable for IRQs 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15
UART Type	16C2850 dual UARTs with 128 byte Tx/D/RxD FIFO buffers
Dimensions	Main Board: 3.55 in. (9.0 cm) by 3.775 in. (9.6 cm) With connectors: 3.99 in. (10.1 cm) by 3.775 in. (9.6 cm) Daughter Board: 2.27 in. (5.8 cm) by 2.175 in. (5.5 cm) Height fully compliant with PC/104 specification.
Power Requirements	+5 V DC @ 500mA (typ), 1A (max)
Environmental Requirements	Operating Temperature: -40° to 70° C (-40° to 158° F) Humidity: 95% non-condensing
Bus	ISA bus compatible 16 bit PC/104 connector.
Software Compatibility	Linux, QNX, SCO Unix, Solaris, and Windows 98/Me/CE/CE.NET/NT/2000/XP, and XP Embedded. (Contact Connect Tech for most current list)
System Requirements	One available PC/104 module stack connector and hardware interrupt (if required)

Please call for more information about our industrial strength communication products

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Quality and Reliability since 1985

