Xtreme/104

Applications

Xtreme/104 adapters offer four and eight asynchronous RS-232 and/or RS-422/485 serial ports for data collection devices, barcode readers, time clocks, scales and other industrial automation equipment. Xtreme/104 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

- Four and eight asynchronous RS-232, and/or RS-422/485 serial ports - each port's electrical interface is jumper selectable (Xtreme/104 models).
- Four and eight asynchronous RS-232 (Xtreme/104 RS-232 models).
- Supports data communications speeds up to 230.4 Kbps (RS-232) or 460.8 Kbps (RS-422/485) – (custom baud rates also available).
- 16C654 UARTs control each port providing 64 bytes of TxD/RxD FIFO buffers.
- Supports two RS-422/485 modes:
  - Full Duplex
  - Half Duplex with auto TxD echo cancellation
- Each RS-422/485 transmitter and receiver has a jumper selectable 120 Ohm termination resistor.
- Eight pre-defined sets of I/O addresses are jumper selectable.
- IRQ lines are jumper selectable. A choice of IRQ lines 3, 4, 5, 6, 7, 9/2, 10, 11, 12, 14, 15 is available and each Xtreme/104 board can be set to run on one or two interrupts.
- Independent port configuration with baud rates from 50 bps to 230.4 Kbps (Xtreme/104 RS-232 models); 50 bps to 460.8 Kbps (Xtreme/104 models RS-422/485); data bits of 5, 6, 7 or 8; stop bits of 1, 1.5, or 2, and odd, even, or stick parity.
- Optional DB-9 male cables available (custom connectors also available).
- Easy installation comes with comprehensive manual and driver software.

Benefits

High Speed, High Performance Communications

Achieve rapid data transfer rates up to 460.8 Kbps. State of the art 16C654 quad UARTs with 64 bytes of transmit and receive FIFO buffers offload interrupt handling and buffering from the main CPU, thus improving overall system performance.
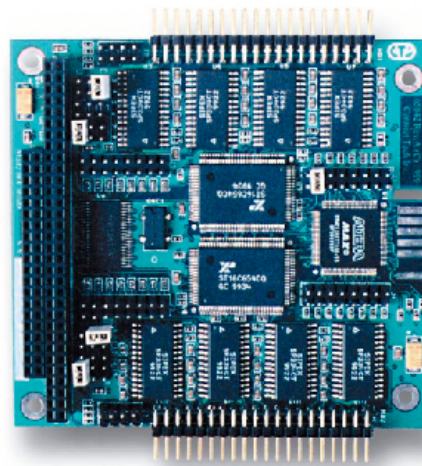
Hardware Flexibility

Xtreme/104 offers hardware flexibility and adaptability for your application. You can configure each port's electrical interface, baud rate, parity, data and stop bits independently and various connector options are offered to suit your needs. Xtreme/104 supports two RS-422/485 modes: Full Duplex and Half Duplex with auto TxD echo cancellation.

Software Compatibility

Because of its compatibility with standard PC serial ports, the Xtreme/104 boards support all the most popular operating systems and communication software.

Easy to Use

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

Warranty and Service

Connect Tech, an ISO 9001 registered company, has provided high performance communication solutions since 1985, building and testing products to meet high standards of quality and reliability. Xtreme/104 adapters are covered by our excellent no cost customer support and a lifetime warranty.

Specifications

	Xtreme/104	Xtreme/104 RS-232
Number of ports	Four and eight	
Electrical Interface	*Xtreme/104 models:* RS-232 and/or RS-422/485 each port is jumper selectable *Xtreme/104 RS-232 models:* RS-232 only	
Connectors	40 pin header connectors *(Custom connectors and optional DB-9 male cables also available)*	
Control Signals	*RS-232*: DTR, DSR, RTS, CTS, RI, TxD, RxD, DCD *RS-422/485:* TxD ±, RxD ±, CTS ±, RTS ±	
Baud Rates	*RS-232:* 50 bps – 230.4 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 - requires one set of eight addresses	
Interrupts	Jumper selectable for IRQs 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15	
UART Type	16C654 quad UARTs with 64 byte TxD/RxD FIFO buffers	
Dimensions	*Height:* 9.60 cm/3.77 in. *Length:* 10.41 cm/4.09 in. *Width:* 1.12 cm/0.44 in.	
Power Requirements	+5 VDC @ 100mA (max) ±5%	
Environmental Requirements	*Temperature:* Operating: 0º to 70º C (standard temperature model) -40º to 85º C (extended temperature model) Storage: -40º to 150º C *Humidity:* 95% non-condensing	
Bus	ISA bus compatible 16 bit PC/104 connector.	
Software Compatibility	DOS, Linux, QNX, SCO Unix, Solaris, and Windows 95/98/Me/CE/CE .NET/NT/2000/XP *(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