# BlueStorm/LP

Features

- Two, four or eight asynchronous serial ports in various electrical interface configurations
- Supports full duplex (4 wire) with RTS/CTS flow control, half duplex (2 wire) with auto TxD echo cancellation and multi-drop (4 wire) full duplex communication modes in RS-422/485
- Maximum data speeds of 921.6 Kbps (RS-232) and 1.843 Mbps (RS-422/485)
- Optional multi-strike surge suppression; IEC 1000-4 compatible on all signals, all ports
- Each port can be configured independently for baud rate, parity, data and stop bits
- Lifetime Warranty
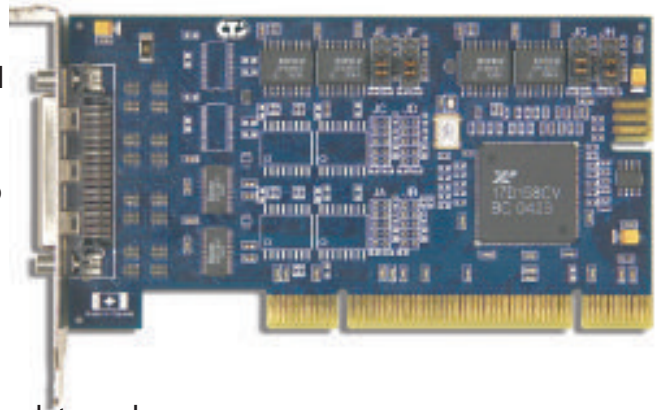
Specifications

Number of ports	2, 4 or 8
Electrical Interface	2 port models: 2 ports RS-232; 2 ports RS-422/485 4 port models: 4 ports RS-232; 4 ports RS-422/485; 2+2 ports RS-232+RS-422/485 8 port models: 8 ports RS-232; 8 ports RS-422/485; 4+4 ports RS/232+RS/422/485
Connectors	DB-9 male fan out cable (custom cable solutions also available)
Control Signals	RS-232: TxD, RxD, RTS, CTS, RI, DTR, DSR, DCD and Signal Ground (SG) RS-422/485: TxD+/-, RxD+/-, RTS+/-, CTS+/- and Signal Return (SR)
Baud Rates	RS-232: 50 bps to 921.6 Kbps RS-422/485: 50 bps to 1.8432 Mbps (custom baud rates also available)
Interrupts	Assigned by Plug and Play resources
Memory Addresses	Assigned by Plug and Play resources
UART Type	Dual, quad or octal Exar PCI UARTs with 64 byte transmit and receive FIFO buffers for each port
Dimensions	Low profile form factor. Height: 6.44 cm/2.54" (PCB only) Length: 12.72 cm/5.01" (includes connector) Width: 1.50 cm/0.59" Weight: 0.06 kg/2.12 oz
Power Requirements	+3.3 VDC (all 2 port models) +5 VDC (2, 4 and 8 port with RS-422/485 only) +5 VDC, ±12 VDC (2 and 4 port RS-232), +12VDC (8 and 4 + 4 port RS-232)
Environmental	Operating Temperature: 0° to 70° C Storage Temperature: -55° to 125° C Humidity: 95% non-condensing
Bus	Universal PCI: 3.3V or 5V PCI bus
Software Compatibility	Windows 2000/XP and NT, QNX, Linux
Surge Supression	IEC 1000-4 compatible on all signals, all ports (optional)
System Requirements	One 3.3V or 5V PCI slot. (The BlueStorm/LP can be purchased with low profile and/or standard height chassis brackets)
Regulatory Approvals	FCC Class A FC CE EN50082-2 ICES-003 Class A EN 55022 Class A EN 55024

The low profile BlueStorm/LP is designed on the small MD1 form factor, using high performance PCI UARTs. The UARTs offer 64 bytes of transmit and receive FIFO buffers, reducing the frequency of interrupts to the main CPU, thus improving overall system performance. The UART offers full functionality in a single chip, meaning fewer components on the board and therefore higher reliability.

The BlueStorm/LP supports three RS-422/485 modes: full duplex, half duplex and multi-drop slave for four wire, full duplex communications of multi-drop devices.

All ports have full modem control, along with independent configuration options for parity, baud rate, data and stop bits.

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Applications

The low profile Universal PCI BlueStorm/LP serial port adapter is ideal for a variety of applications where economy of space and reliable data transfer are critical to the system design.

It is ideally suited for PC-based systems relying on high speed data transfer, such as point-of-sale card readers. Ease of use, cost effective design, a lifetime warranty and customization options ensure that the BlueStorm/LP is the best choice for your system design and for connecting serial devices of all kinds.

Available in two, four and eight port Universal PCI solutions, the BlueStorm/LP is well suited in applications such as:

- Point-of-sale/Retail
- Transportation stations
- Lottery terminals
- Automated Teller Machines
- Self-service kiosks

BlueStorm/LP and ATMs. What's the connection?

Cash dispenser
Printer
Display screen
Card reader

BlueStorm/LP 4 port