FEATyRES

- Eight or four-port PCI Express RS-232 serial communication cards
- Low profile PCIe MD1 form factor, MD1 defines the shortest standard card length available
- High performance 16C950 class UARTs with 128-byte FIFO for each TX and RX
- Supports data communication speeds up to 921.6kbps
- +/- 15kV ESD protection on transmitter and receiver pins
- Full modem control signals
- Software compatible with all operating systems
- Plug and Play, no jumpers to configure
- Connector strengthening bracket for secure and fail-proof cable connections
- 6' breakout cable included, terminating with industry-standard DB9M connectors (no external breakout box required)

FACTORY OPTIONS

- Extended Temperature Operation -40°C to +85°C
- RoHS compliant version
- Wake-up enable

FUNCTIONAL DESCRIPTION

ACCES I/O’s PCI Express multiport serial communication cards deliver eight (PCIe-COM232-8L) or four (PCIe-COM232-4L), high-speed, RS-232 ports for use in a wide variety of applications. The cards were designed to offer serial compatibility with the PCI Express bus and to be used by system integrators and manufacturers in the design of industrial and commercial systems. Each RS-232 port is capable of supporting data rates up to 921.6kbps and implements full modem control signals to ensure compatibility with a broad variety of serial devices. Existing serial peripherals can connect directly to the industry standard DB9M connectors which are provided on the breakout cable that ships with each card. The card features a x1 lane PCI Express connector which can be used in any available x1, x2, x4, x8, x12, or x16 PCI Express expansion slot.

The card is 4.7 inches in length and 2.2 inches seated height and complies with the MD1 Low Profile Form Factor specifications (the smallest PCI Express card available). Low profile PCI Express allows the design of small footprint, low profile systems while still offering expandability and upgradeability to the end user. A regular profile mounting bracket is installed for use in standard size computers, while a low profile bracket is provided for smaller systems which require the use of low profile PCI Express cards.

SOFTWARE

A complete driver support package is provided including an easy-to-use Windows terminal program for testing out your COM ports. This simplifies the verification of proper COM port operation. The card installs as standard COM ports in all operating systems including DOS, Linux (including Mac OS X) and Windows 2000/XP/2003.

ACCESSORIES

- ADAP9 Screw Terminal Adaptor board with a Female DB9 connector and 9 screw terminals (one per serial port DB9 may be used).

Additional available accessories include a wide variety of cables, screw terminal boards and breakout boxes for a variety of quick and easy connectivity options.
BLOCK DIAGRAM

SPECIFICATIONS

Communications Interface

I/O connection: VHDCI 68 pin SCSI connector
Serial ports: 8 RS-232 ports
Serial data rates: Up to 921.6k baud asynchronous
UART: Octal type 16C950 with 128-byte transmit & receive FIFO, 16C550 compliant
ESD Protection: 15KV on board
Character length: 5, 6, 7, or 8 bits
Parity: Even, Odd, None, Space, Mark
Stop interval: 1, 1.5, or 2 bits
Flow Control: RTS/CTS and/or DSR/DTR, Xon/Xoff
Cable: 6' shielded breakout cable terminated with 8 male D-sub 9-pin connectors

Environmental

Operating temperature: Commercial: 0°C to +70°C Industrial: -40°C to +85°C
Storage temperature: -65°C to +150°C
Humidity: 5% to 95%, non-condensing
Power required: +3.3VDC @ 0.9W (typical)
Size: 4.72 inches long x 2.20 inches high (120 mm long x 55.8 mm high)

ORDERING GUIDE

PCle-COM232-8L PCI Express eight-port RS-232 serial card with 6' DB9M breakout cable
PCle-COM232-4L PCI Express four-port RS-232 serial card with 6' DB9M breakout cable

Model Options

-T Extended Temp. Operation (-40° to +85°C)
-RoHS RoHS compliant version
-W Wake-up enable