

### FEATURES

- 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 (standard model 460.8kbps)
- +/-15kV ESD protection on all signal pins
- Supports 9-bit data mode
- Full modem control signals
- Software compatible with all operating systems
- Plug and Play, no jumpers to configure
- 3' breakout cable included, terminating with industry-standard DB9M connectors (no external breakout box required)

### FACTORY OPTIONS

- Connector strengthening bracket for secure and fail-proof cable connections
- Extended temperature operation (-40°C to +85°C)
- High-speed version up to 921.6kbps
- RoHS compliant version
- Remote wake-up enable
- Low profile bracket installed for small, embedded PCs



### FUNCTIONAL DESCRIPTION

ACCES I/O's PCI Express multi-port serial communication cards deliver eight (PCIe-COM232-8) or four (PCIe-COM232-4), 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 an optional low profile bracket is provided for smaller systems which require the use of low profile PCI Express cards.

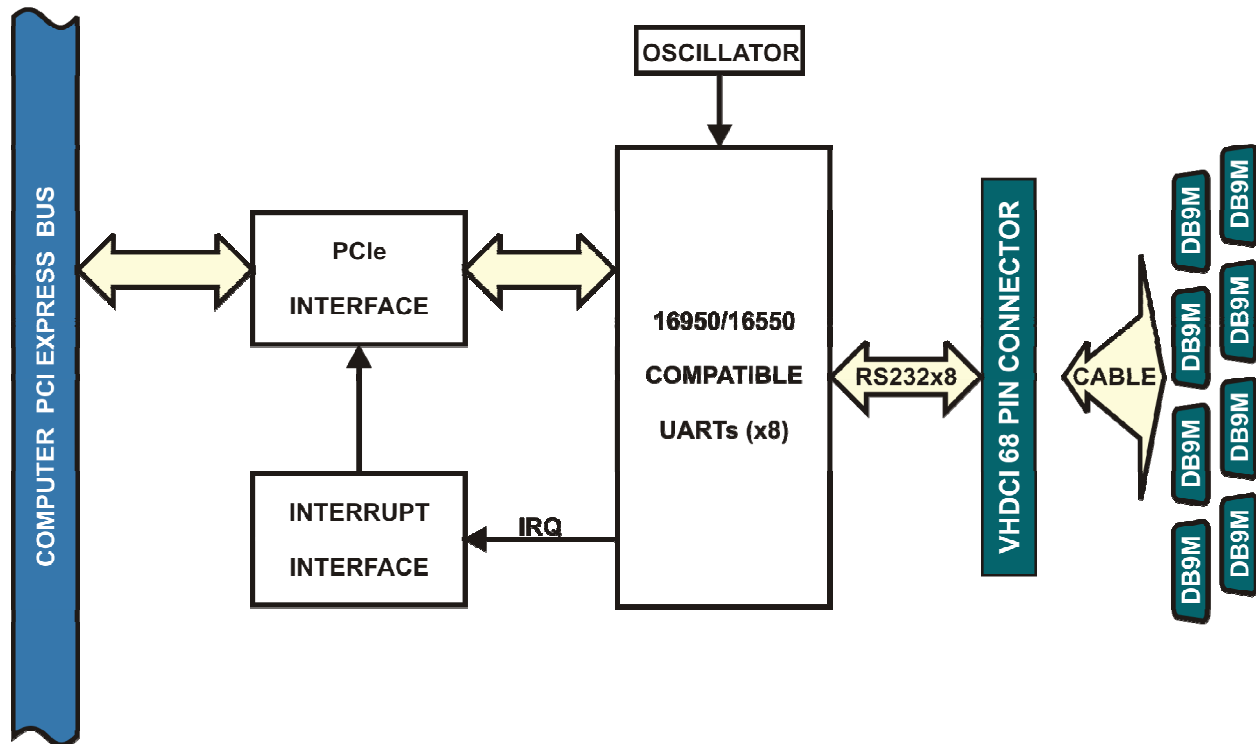
Available accessories include a broad range of cables, screw terminal boards and breakout connection boxes for a variety of quick and easy connectivity options.

### SPECIAL ORDER

Please contact ACCES with your precise requirement. Other examples of special orders would be conformal coating, custom software, RJ45 connectivity, special breakout boxes, etc... we will work with you to provide exactly what is required.

### SOFTWARE

A complete driver support package is provided including an easy-to-use Windows terminal program for testing 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 32-bit & 64-bit Windows.



**BLOCK DIAGRAM**

**SPECIFICATIONS**

**Communications Interface**

I/O connection: VHDCI 68 pin SCSI connector  
 Serial ports: 8 RS-232 ports  
 Serial data rates: 460.8k baud (up to 921.6k) asynchronous  
 UART: Octal type 16C950 with 128-byte transmit & receive FIFO, 16C550 compliant  
 ESD Protection: ±15kV on all signal pins  
 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: 3' shielded breakout cable terminated with 8 male D-sub 9-pin connectors

**Environmental**

Operating temp.: Commercial: 0°C to +70°C  
 Industrial: -40°C to +85°C  
 Storage temp.: -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)



1	2	3	4	5
DCD	RX	TX	DTR	GND
6	7	8	9	
DSR	RTS	CTS	RI	

**ORDERING GUIDE**

PCIe-COM232-8 PCIe Express eight-port RS-232 serial card with 3' DB9M breakout cable  
 PCIe-COM232-8NC PCIe Express eight-port RS-232 serial card without cable  
 PCIe-COM232-4 PCIe Express four-port RS-232 serial card with 3' DB9M breakout cable  
 PCIe-COM232-4NC PCIe Express four-port RS-232 serial card without cable

**Model Options**

- -F Fast version (up to 921.6kbps)
- -T Ext. temp. operation (-40° to +85°C)
- -RoHS RoHS compliant version
- -W Remote wake-up enable
- -L Low profile bracket installed

**Accessories**

BRKT-551-SCB Connector stabilizer bracket (use with standard height PCIe bracket only)  
 ADAP9 Screw terminal adaptor (single DB9 female to 9 screw terminals)  
 ADAP9-2 Screw terminal adaptor (dual DB9 female to 18 screw terminals)

