LPCI-COM SERIES

Universal PCI, Eight or Four-port RS-232/422/485 Serial Communication Card (In a Low Profile form factor)

FEATURES

- Eight or four-port Universal PCI serial communication card
- Supports field selectable RS-232, RS-422 or RS-485 (2-wire and 4-wire) protocols
- Includes type 16L788 octal UART with 64-Byte FIFO buffers in all modes
- Speeds up to 921Kbps
- Meets MD2 Low Profile PCI Bus Specification
- Universal PCI, PCI-X, 3.3V and 5V compatible
- Includes cable (no external breakout box required)
- RS-232 only versions also available

MANUALS
LPCI-COM-8SM.PDF

ACCESSORIES
LPCI-COM-8SM

ACCESSORIES
LPCI-COM-4SM

FUNCTIONAL DESCRIPTION

The LPCI-COM Series are eight or four-port asynchronous serial communication cards designed for use in PCI bus computers. The cards support RS-232, RS-422, and/or RS-485 communications which can be selected on a port by port basis. The cards are 6.6 inches in length and 2.21 inches seated height and may be installed in any 3.3 or 5-volt PCI or PCI-X expansion slot. A regular profile mounting bracket is installed for use in standard size computers, while a low profile bracket is provided for low profile computers (such as thin-client and high-density rack-mount servers). The cards are supplied with an eight-connector DB-9 breakout cable (no external breakout box required). The LPCI line has been designed for use in retail, hospitality, postal automation, and POS system applications and industries such as gaming and defense where space is a valuable resource.

A type 16L788 octal UART is used as the asynchronous communication element. This includes 64-byte transmit/receive FIFO buffers to protect against lost data in multitasking systems while maintaining compatibility with the original IBM serial port (100% compatible with standard Windows COM port drivers).

Crystal oscillators located on the card permit precise baud rate capability up to 115,200. Higher speeds, up to 921K baud, are achieved by changing a jumper on the card. The driver/receivers used for RS-485 & RS-422 are type SP491, and for RS-232 type EX211, and are capable of driving long communication lines at high baud rates. They can drive up to ±60 mA on balanced lines and receive inputs as low as 200 mV differential signal superimposed on common mode noise of +12V to -7V. In case of communication conflict, the driver/receivers feature thermal shutdown.

AUTO TRANSCEIVER CONTROL

In RS485 communications, the driver must be enabled and disabled as needed, allowing all devices to share a two wire cable. The card can control the driver automatically. With automatic control, the driver is enabled when data is ready to be transmitted. At default the driver remains enabled during transmission and is adjustable up to one additional character's transmission time after data transfer is complete and then is disabled. The receiver is also normally enabled, then disabled during RS485 transmissions, and then re-enabled after transmission is completed (plus up to one character transmission time). The card automatically adjusts it's timing to the baud rate of the data. (NOTE: Thanks to the automatic control feature, the card is ideal for use in Windows and Linux applications)

UTILITY SOFTWARE

A complete driver support package is provided including an easy to use Windows terminal program for testing out your COM ports. This helps simplify verification of proper operation. The card installs as standard Windows COM ports in all Windows operating systems. The card is supported by most operating systems and includes a free DOS, Linux and Windows 95/98/Me/NT/2000/XP/2003 compatible software package. This includes sample programs and source code in "C" for DOS, and Visual Basic, Delphi, C++ Builder, and Visual C++ for

Windows. Also included is a graphical setup program in Windows.

Specifications
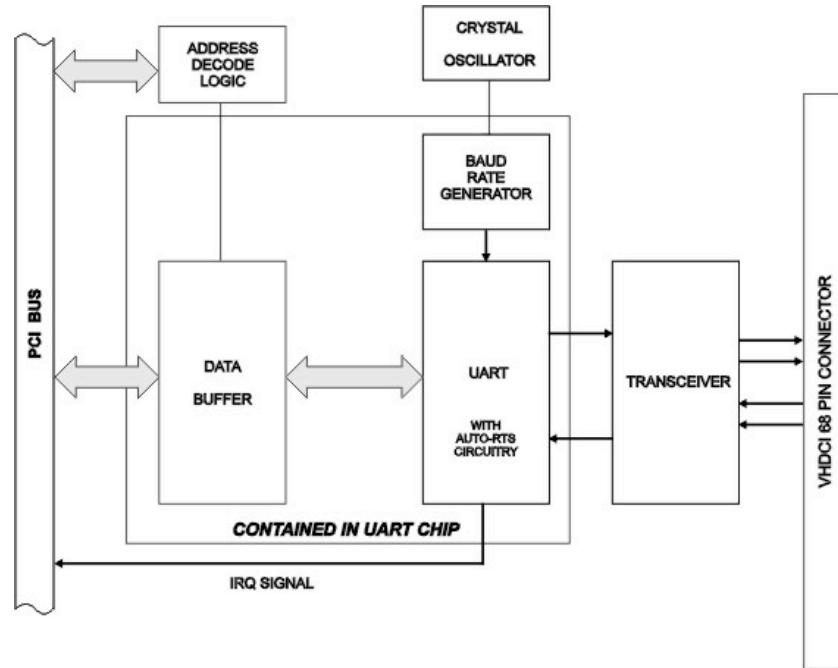
Communications Interface

- I/O Connections: Via a 68-pin, shielded, VHDCI connector. There are 9 pins per port including common grounds. All RS-232 signals are supported and present at the DB-9 connectors
- Cable: Breakout Cable from VHDCI Connector is secured to card using jack screws, with a DB9 connectors provided for each port.
- Character Length: 5,6,7, or 8 bits.
- Parity: Even, odd, or none.
- Stop Interval: 1, 1.5, or 2 bits.
- Serial Data Rates: Up to 115,200 baud, asynchronous. A faster range of rates, up to 921K baud, is achieved by jumper selection on the card prior to installation.
- Multidrop: Compatible with RS-485 specifications. Up to 32 drivers and receivers allowed on line. Driver/Receivers used are type SP491.
- Rec.Input Sensitivity: ±200 mV differential input.
- Common Mode Voltage Range: +12V to -7V.
- Transmitter Output Drive Capability: 60 mA with thermal shutdown.

Environmental

- Operating Temperature Range: 0 to +60OC.
- Storage Temperature Range: -50 to +120OC.
- Humidity: 5% to 95% RH, non-condensing.
- Power Required: +5 VDC at 200 mA typical, 1300 mW total power consumption.
- Size: 6.6" long (167.64mm) by 2.21" tall (56.17mm) seated height.

Regulatory Compliance $C \epsilon$

Declaration of Conformity, and Test Reports are on file. Users must use appropriate shielded cables.

Part Number	Price(USD)
LPCI-COM-8SM	519.00
LPCI-COM232-8	329.00
LPCI-COM-4SM	319.00
LPCI-COM232-4	224.00

Pricing for all models includes a break-out cable.