



ExpressCard Performance Line

PXP series - Serial and Parallel product lines



Performance Line Technology

ExpressCard technology is emerging with faster speeds and better efficiency than the typical PCMCIA and PC Cards, connecting high-bandwidth peripherals to notebooks and other portables. The ExpressCard's credit-card like format gives way to a smaller, faster and more desktop-friendly format.

Gone are the days of laptops manufactured with PC Card slots and are swapped out with smaller, slimmer and thinner ExpressCard portals. Quatech's new Performance ExpressCard line supersedes older technology and are engineered for new laptop models.

Quatech's ExpressCards are designed in the smallest form factor -34. ExpressCard 34 is compatible with all ExpressCard slots - 34/54.

Quatech's PXP ExpressCard solutions accommodate I/O expansion and connectivity to serial and parallel devices in mobile laptop applications.

Available in one, two and four port serial configurations and one parallel port, the Performance series of ExpressCards offer easy-to-upgrade PC Card technologies, while integrating popular external peripheral functionality via ExpressCard module form-factor.

Differing from Quatech's ExpressCard Connectivity line, the PXP series was designed with a PCI Express (PCIe) interface rather than using USB controller interfaces.

Advantages of a PCIe-based ExpressCard design are in the interface to the laptop's motherboard. The PCIe bus interface is the successor to the PCI bus, which in turn was the successor to the ISA bus to which built-in ports were originally attached. As such, the ExpressCard adapter design utilizes a PCIe-based design and can still directly use I/O space addresses and interrupts, thus more closely emulating built-in ports than can be done via USB-based design. Moreover, because there's no USB stack for the drivers to contend with, throughput can be higher and latency will be lower (considerably so in many cases).

Due to improved data transfer rate, the ExpressCard is considerably more efficient for multi-tasking operations. The PXP series support data rates of up to 921.6Kbps, which provides steady flow of data throughput.

Quatech's PXP series is a great solution to connect with existing peripherals and maintain compatibility and functionality with their current application software.

Quatech also sells and supports other ExpressCard connectivity products, including 1 and 2 port serial ExpressCards, hard drive eSATA 2.0 and Ethernet configurations.

KEY FEATURES

- New generation of I/O expansion for notebooks
- Adds 1, 2 or 4* high-speed serial ports; 1 true parallel port
- Support PCI Express Base Specification Revision 1.1a
- Installs in any ExpressCard slot
- Built-in 1024-byte FIFOs buffers increase data transmit/receive speed
- Baud rates up to 921.6kbps
- Hot plugging and hot swapping features
- High speed ExpressCard with plug-n-play
- Supports Windows XP/Vista operating systems

Model Selection Guide

Model No.	Description
SSPXP-100	1 port performance PCIe-based RS-232 serial ExpressCard
DSPXP-100	2 port performance PCIe-based RS-232 serial ExpressCard
QSPXP-100*	4 port performance PCIe-based RS-232 serial ExpressCard
SSPXP-200/300	1 port performance PCIe-based RS-422/485 serial ExpressCard
DSPXP-200/300	2 port performance PCIe-based RS-422/485 serial ExpressCard
QSPXP-200/300*	4 port performance PCIe-based RS-422/485 serial ExpressCard
SPPXP-100	1 high performance PCIe-based EPP parallel port ExpressCard
XCD-B/PCIE-ST	1 rear slot ExpressCard Drive, PCI Express interface
For more information, please visit www.Quatech.com/catalog/expresscard_performance.php	

*QSPXP-100/200/300 series not available until Fall 2007

Specifications

Serial ExpressCards (SSPXP, DSPXP, QSPXP)

**Bus Interface:**

ExpressCard Standard, Release 1.1 compliant PCI Express Base Specification, Revision 1.1 compliant interface

OS Support:

Windows XP/Vista

Baud Rate: (SSPXP, DSPXP, QSPXP)

921.6kbps per port

Serial Ports:

SSPXP: 1 **DSPXP:** 2 **QSPXP:** 4

UARTS:

16450/550/750-compatible register set

Data FIFO:

1024-byte

Data Bits:

Supports 5, 6, 7, 8

Supports even, odd, mark, space and no parity

Supports 1, 1.5 and 2 stop bits

SSPXP/DSPXP/QSPXP-100:

TIA-232-F (RS-232) Compliant

SSPXP/DSPXP/QSPXP-200/300:

TIA-422-B (RS-422) and TIA-485-A (RS-485) compliant

200/300 Series:

- Supports full-duplex and RTS, DTR or automatic transmitter control half-duplex
- Selectable receiver control (echo/no echo)
- Selectable RTS/CTS, TxCLK/RxCLK or loopback auxiliary data pair
- Full fail-safe (open and short) 1/8 load receivers

Applications:

- Cellular Network Performance Testing
- Vehicle Diagnostics
- Radiation Mapping
- Service Technician HVAC Systems
- Flight Data Recorder Download

Parallel ExpressCards (SPPXP-100)

**Bus Interface:**

ExpressCard Standard, Release 1.1 compliant PCI Express Base Specification, Revision 1.1 compliant interface

OS Support:

Windows XP/Vista

Parallel Ports:

SPPXP: 1

Modes:

EPP Mode, Standard Unidirectional Parallel Port Mode, Standard Bidirectional Parallel Port Mode

SPPXP-100 Series:

- IEEE Standard, 1284-2000 compliant
- Supports compatibility (Centronics), Bi-directional (PS/2), ECP and EPP modes
- 2048-byte FIFO (ECP mode only)
- Supports RLE decompression (ECP mode only)
- Uses the Windows system-supplied parallel drivers

Connector:

PIN 1: STROBE	PIN 18: GND
PIN 2: D0	PIN 19: GND
PIN 3: D1	PIN 20: GND
PIN 4: D2	PIN 21: GND
PIN 5: D3	PIN 22: GND
PIN 6: D4	PIN 23: GND
PIN 7: D5	PIN 24: GND
PIN 8: D6	PIN 25: GND
PIN 9: D7	
PIN 10: ACK	
PIN 11: BUSY	
PIN 12: PERROR	
PIN 13: SELECTIN	
PIN 14: AUTOFEED	
PIN 15: NFAULT	
PIN 16: INT	
PIN 17: SELECT	

Applications:

- Parallel Connection for Dongle Operation
- Security Dongle for Application Software
- Medical Diagnostic Systems Connectivity



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