



# Multiport Serial PCI Boards

*The Features You Require And The Quality You Demand From The Industry's Most Reliable Serial PCI Manufacturer.*

Serial connectivity is the backbone of many commercial and industrial applications such as POS networks, ATMs, banking teller stations, and CNC-based production lines. PCI is the de facto standard for board level expansion slots in PC-based systems.

Quatech PCI boards provide extensive choices for adding serial functionality to a system using minimal system resources. They also provide peace of mind. Quatech has specialized in quality data communication products for almost 20 years. We have a proven failure rate of only .002% after burn-in. And, Quatech's meticulously designed boards strictly adhere to the PCI specification, so you can be assured that our products will consistently function properly in your systems. Add to that our long five year warranty, and a customer service team that is dedicated to exceeding your expectations, and you truly have the industry's most reliable serial PCI boards.

New for 2007, the Quatech MOSCHIP-based PCI Serial Boards. Quatech MOSCHIP RS-232 PCI boards provide two, four or six independent serial ports. Serial port connections are made via DB-9 male connectors and are implemented with 16550 UARTs with serial data transfer rates up to 1152000bps. The board uses a PCI 2.0 32 bit bus at 33MHz. Four and six port MOSCHIP PCI boards require extra PC slots for serial expansion. MOSCHIP-based interface design for cost effective solutions.

- Introducing MOSCHIP-based PCI Serial Boards
- Two, four or eight independent serial ports
- RS-232 or RS-422/485
- Speeds up to 921.6 kbps
- Standard 16750 UARTs with 64-byte FIFOs
- Optional surge suppression package
- Full modem control and hardware and software flow control
- All ports share a single PCI interrupt
- DB-9, DB-25, or RJ-11 connectors
- 4-layer board design enhances signal integrity
- Plug & Play
- Win. 9x/Me/NT/2000/XP/Vista, Linux, OS/2, DOS
- RoHS compatible
- Five year warranty



## RS-232 Board Specifications

**Bus Interface:** 32-bit, 33 MHz PCI Bus specification 2.2 compliant

**MOSCHIP Bus Interface:** PCI 2.1 32bit, 33MHz

**OS Support:** Windows 95/98/Me/NT/2000/XP/Vista, Linux, OS/2, DOS

**Data Rate:** 921.6 kbps (max); 460.8 kbps (DSC-100 only)

**MOSCHIP Data Rate:** up to 115200bps

**Serial Ports:** **DSC:** 2      **QSC:** 4      **ESC:** 8

**UARTs:** 16750 UARTs with 64-byte FIFOs (1 per port)  
16550 UARTs with 16-byte FIFOs (DSC-100 only)

**Drivers:** SN75150 or compatible

**High Level Output:** +5V (min), +8V (typ)

**Low Level Output:** -5V (min), -8V (typ)

**Transition Time (THL-TLH):** 30ns (typ) with 15 pF load

**Receive Buffers:** MC1489 or compatible

**Voltage Range:** -13V to +13V

**Transition Time (THL-TLH):** 120ns (typ)

**IND Option:** Surge suppressor applied to each line that is capable of sustaining up to 40A peak, 8 x 20 $\mu$ s transient surges, a clamping voltage of 30V and a peak energy dissipation of 0.1 Joules. **(NOTE: The "IND" option limits data rate to 115.2 kbps)**

### Environment:

**Operating:** 0°C to 70°C

**Storage:** -50°C to 80°C

**Humidity:** 10% to 90%

### Power Requirements:

**DSC:** 260mA (+5V)

**QSC:** 260mA (+5V), 35mA ( $\pm$ 12V)

**ESC:** 260mA (+5V), 35mA ( $\pm$ 12V)

**Size:** **DSC/QSC:** 4.9" x 3.7"      **ESC:** 6.4" x 4.5"

### Connectors:

**DSC-100:** 2 DB-9 male

**QSC-100:** DB-37 female or cable with 4 DB-9 or 25 male

**ESC-100D:** DB-78 female or cable with 8 DB-9 or 25 male

**ESC-100M:** 8 RJ-11, optional cables convert to 8 DB-25 male

**ESB-10:** ESC-100D breakout box option, 1 DB-25 & 7 DB-9

**Certifications:** CE, FCC Class B, RoHS and WEEE

**MOSCHIP Serial Ports:** DS:2 QS:4 (requires 2 PC bracket slots)

HS:6 (requires 3 PC bracket slots)

### Ordering Information:

**DSC-100:** Two port RS-232 board with DB-9 connectors

**QSC-100:** Four port RS-232 board with DB-25 cable

**QSC-100D9:** Four port RS-232 board with DB-9 cable

**ESC-100D:** Eight port RS-232 board with DB-25 cable

**ESC-100D9:** Eight port RS-232 board with DB-9 cable

**ESC-100M:** Eight port RS-232 board with RJ-11 connectors

**DS-PCI-100:** 2 port RS-232 MOSCHIP PCI board

**QS-PCI-100:** 4 port RS-232 MOSCHIP PCI board

**HS-PCI-100:** 6 port RS-232 MOSCHIP PCI board

**ESB-10:** Breakout box option (ESC-100D /D9 only)

**CP-RJ8:** Set of 8 RJ-11 to DB-25 male connectors

**IND:** Surge suppression package option

## RS-422/485 Board Specifications

**Bus Interface:** 32-bit, 33 MHz PCI Bus specification 2.2 compliant

**OS Support:** Windows 95/98/Me/NT/2000/XP/Vista, Linux, OS/2, DOS

**Data Rate:** 921.6 kbps (max)

**Serial Ports Provided:** **DSC:** 2      **QSC:** 4  
(each configurable as RS-422 or RS-485 for full or half duplex)

**UARTs:** 16750 UARTs with 64-byte FIFOs (1 per port)

**Transceiver:** MAX491 or compatible

### Drivers:

**Differential Voltage:** +2V (min)

**Transition Time (TLH):** 15ns (typ), 40ns (max)

**Transition Time (THL):** 15ns (typ)

### Receive Buffers:

**Differential Input Threshold:**  $\pm$ 0.2V

**Voltage Range:** -7V to +12V Common Mode Input

**Transition Time (THL-TLH):** 15ns (typ)

**IND Option:** Surge suppressor applied to each line that is capable of sustaining up to 40A peak, 8 x 20 $\mu$ s transient surges, a clamping voltage of 15.5V and a peak energy dissipation of 0.1 Joules. **(NOTE: The "IND" option limits data rate to 115.2 kbps)**

### Environment:

**Operating:** 0°C to 70°C

**Storage:** -50°C to 80°C

**Humidity:** 10% to 90%

**Power Requirements:** 320 mA (+5V)

**Size:** **DSC:** 5.0" x 3.7"      **QSC:** 5.4" x 3.8"

**Connectors:** **DSC:** 2 DB-9 female

**QSC:** DB-37 female or cable with 4 DB-9 or 25 male

**Certifications:** CE, FCC Class B, RoHS and WEEE

### Ordering Information:

**DSC-200/300:** Two port RS-422/485 board w. DB-9 connectors

**QSC-200/300:** Four port RS-422/485 board

**CP-QSD9:** Optional four port DB-9 male connector cable

**CP-QS:** Optional four port DB-25 male connector cable

**IND:** Surge suppression package option

