

Serial PCMCIA Cards RS-232 and RS-422/485



Quatech serial PCMCIA cards (PC Cards) provide a simple yet robust solution for adding multiple serial ports to laptops, notebooks, tablets, handhelds and embedded systems.



Quatech serial PCMCIA cards add one, two or four RS-232 or RS-422/485 ports to portable computers.

The most complete serial PCMCIA product line available

Quatech offers more choices in serial I/O PC cards than any other manufacturer, including several exclusive models. In addition, our PCMCIA cards use a single driver set for all models, making them an extremely practical choice for applications with multiple configurations that span several operating systems including Windows, Linux and OS/2.

Quatech PC Cards are small, light and have low power requirements to reduce battery drain. They are available with one to four independent RS-232 or RS-422/485 serial ports that share a single interrupt. The standard version comes with a convenient detachable cable. For extreme computing environments, permanently attached ruggedized cables are available.

Multiple serial ports for portable devices, mobile applications, and embedded systems

Quatech serial PCMCIA cards are a flexible, low-cost way to interface serial peripherals in a wide variety of portable, PC-based mobile applications. They are also ideally suited for embedded systems, where achieving maximum functionality in a minimum of space is essential. For example:

- POS Systems
- Field data collection
- Medical testing
- Kiosks
- GPS tracking
- Mobile office
- Industrial monitoring & control

Industry leading speeds mean exceptional performance

Quatech serial PCMCIA cards provide industry leading speeds of up to 921.6 kbps by employing a clock multiplying feature in conjunction with 16750 UARTs.

To further increase performance, we have created an auto toggle feature for the RS-422/485 transmitter that permits the hardware itself to regulate data flow by only driving lines while actively transmitting--providing increased speed and convenience over the older software controlled method.

Features and Benefits

- One, two or four independent serial ports
- RS-232 or RS-422/485 cards
- Speeds up to 921.6 kbps
- Auto enable/disable feature for RS-422/485 transmitter
- Ruggedized case with removable cable standard
- Permanently attached ruggedized cable option for one and two port RS-232 cards
- 3.3V and 5V compatible
- RoHS compatible
- Plug & Play and Hot Swap capability
- Low power requirements
- Linux support
- Windows CE and Pocket PC support
- Windows 9x/Me/NT/2000/XP/Vista and OS/2 support
- 5 year warranty

RS-232 SPECIFICATIONS

Bus Interface: 16-bit PCMCIA, Release 8 & backward compatible

OS Support: Windows CE, Pocket PC, Windows 95/98/Me/NT/2000/XP/Vista, Linux, OS/2

Data Rate:

SSP/DSP/QSP: 921.6 kbps (max)*

* Actual baud rates can be affected by cabling and other factors

Ports: **SSP:** 1 **DSP:** 2 **QSP:** 4

UARTs: **SSP/DSP/QSP:** 16750 UARTs with 64-byte FIFOs (1 per port)

Transceivers:

SSP/DSP/QSP: ICL 3245 or compatible

Drivers:

High Level Output: +5V (min), +5.4V (typ)
Low Level Output: -5V (min), -5.4V (typ)
Transition Time: (THL-TLH): 25 ns (typ)

Receive Buffers:

Voltage Range: +25V (max), -25V (min)
Transition Time: (THL-TLH): 25 ns (typ)

Environment:

Operating: 0°C to 70°C
Storage: -50°C to 70°C
Humidity: 10% to 90%

Power Requirements:

SSP/DSP/QSP: compatible with 3.3V & 5V systems

SSP: 20mA @ 5V (typ), 35mA (max)
DSP: 30mA @ 5V (typ), 45mA (max)
QSP: 45mA @ 5V (typ), 50mA (max)

Size: Type II PCMCIA Card package

Connectors:

SSP: Detachable cable with one DB9 male connector
SSPR: Permanently attached cable with one DB9 male connector
DSP: Detachable cable with two DB9 male connectors
DSPR: Permanently attached cable with two DB9 male connectors
QSP: Detachable cable with four DB9 male connectors

Certifications: CE, FCC Class B, RoHS

Ordering Information:

SSP-100: 1-port RS-232 card with cable
SSPR-100: 1-port RS-232 card with attached cable
DSP-100: 2-port RS-232 card with cable
DSPR-100: 2-port RS-232 card with attached cable
QSP-100: 4-port RS-232 card with cable

RS-422/485 SPECIFICATIONS

Bus Interface: 16-bit PCMCIA, Release 8 & backward compatible

OS Support: Windows CE, Pocket PC, Windows 95/98/Me/NT/2000/XP Linux, OS/2

Data Rate:

SSP/DSP/QSP: 921.6 kbps (max)*

* Actual baud rates can be affected by cabling and other factors

Ports: (each configurable for RS-422 or RS-485 for full or half duplex communication)
SSP: 1 **DSP:** 2 **QSP:** 4

UARTs: **SSP/DSP/QSP:** 16750 UARTs with 64-byte FIFOs (1 per port)

Transceivers:

SSP/DSP/QSP: MAX 3076E or compatible (Auto enable/disable of RS-422/485 transmitter on SSP/DSP)

Drivers:

Differential Voltage: +/- 3.3V
Transition Time: (TLH): 52 ns (typ)
Transition Time: (THL): 60 ns (typ)

Receive Buffers:

Differential Input Threshold +/-0.2V
Voltage Range: -7V to +12C CMI
Transition Time: (THL-TLH): 65 ns (typ)

Environment:

Operating: 0°C to 70°C
Storage: -50°C to 70°C
Humidity: 10% to 90%

Power Requirements:

SSP/DSP/QSP: compatible with 3.3V & 5V systems

SSP: 20mA @ 5V (typ), 35mA (max)
DSP: 30mA @ 5V (typ), 45mA (max)
QSP: 45mA @ 5V (typ), 50mA (max)

Size: Type II PCMCIA Card package

Connectors:

SSP: Detachable cable with one DB9 female connector
DSP: Detachable cable with two DB9 female connectors
QSP: Detachable cable with four DB9 female connectors

Ordering Information:

SSP-200/300: 1-port RS-422/485 card with cable
DSP-200/300: 2-port RS-422/485 card with cable
QSP-200/300: 4-port RS-422/485 card with cable

TYPICAL APPLICATIONS

POS Application:



Vehicle Diagnostics:



Building Automation:

