Serial Port PCI Cards CE

DSC-100 shown above

RS-232 Enhanced Serial Boards *(Specifications on page 2)*

Two, four or eight RS-232 serial ports on a single PCI board

2-Port Models: **DSC-100, DSC-100IND**
4-Port Models: **QSC-100, QSC-100-D9, QSC-100IND, QSC-100IND-D9**
8-Port Models: **ESC-100D, ESC-100DB, ESC-100-D9, ESC-100DIND, ESC-DBIND, ESC-100IND-D9, ESC-100M, ESC-100MIND**

RS-422/485 Enhanced Serial Boards *(Specifications on page 3)*

Two or four independent serial ports that are jumper selectable for RS-422 or RS-485

2-Port Models: **DSC-200/300, DSC-200/300IND**
4-Port Models: **QSC-200/300, QSC-200/300IND**

Overview

As a PCI device, all these cards require no hardware configuration. These cards are automatically configured by the computer's BIOS or operating system and are Plug & Play compatible.

A special interrupt status register is provided to manage the shared interrupt line. These cards completely adhere to the PCI 2.1 specification. All PCI registers are properly implemented so users can be assured that no conflicts with other properly implemented PCI devices will occur.

High clock speeds and large FIFOs will greatly reduce CPU overhead, making these cards an ideal choice for heavy multi-tasking environments. To maintain maximum signal integrity, these cards use a four-layer board design.

Surge Protection

Non-surge protected models **DSC-100, DSC-200/300, QSC-100, QSC-100-D9, QSC-200/300; ESC-100D, ESC100DB, ESC-100-D9, ESC-100M** and have a clock multiplying feature allowing data rates as high as 921.6 kbps.

Surge protected models (**IND** indicator in the model/part #) **DSC-100IND, DSC-200/300IND; QSC-100IND, QSC-IND-D9, QSC-200/300IND; ESC-100DIND, ESC-100DBIND, ESC-100IND-D9, ESC-100MIND** can achieve data rates up to 115.2 kbps. Each signal line of these surge protected models comes with surge suppression capable of sustaining up to 40A 20ms peak transient surges, a clamping voltage of 30V and a peak energy dissipation of 0.1 Joules.

2-Port DSC series

The two serial ports share a single interrupt line and are addressed in a continuous block of 16 bytes.
Each card has two 16750 UARTs containing 64-byte FIFOs.
External connections are provided via two DB9 male connectors.

4-Port QSC series

The four serial ports share a single interrupt line and are addressed in a continuous block of 32 bytes.
Each card has four 16750 UARTs containing 64-byte FIFOs.
External connections are provided via one DB37 female connector.
A cable is provided to convert the DB37 female into four standard DB25 male connectors.

8-Port ESC series

The eight serial ports share a single interrupt line and are addressed in a continuous block of 64 bytes.
Each card has eight 16750 UARTs containing 64-byte FIFOs.

Eight-port cards come in three different connector styles:

Models ESC-100D, ESC-100DB, ESC-100DIND and ESC-DBIND have a DB78 female connector and include a DB78 male to 8-DB25 male connector cable.

Models ESC-100-D9 and ESC-100IND-D9 have a DB78 female connector and include a DB78 male to 8-DB9 male connector cable.

Models ESC-100M and ESC-100MIND do not include an external cable but have 8-RJ11 connectors on the card bracket.

RS-232 Board Specifications

Bus Interface:	32-bit, 33MHz PCI Bus spec. 2.1 compliant	
OS Support:	Win 95/98/Me/NT/2000/XP, Linux, OS/2, DOS	
Data Rate:	921.6 kbps (max)	
Ports:	DSC series: 2	
	QSC series: 4	
	ESC series: 8	
UARTs:	16750 UARTs with 64-byte FIFOs (1 per port)	
Drivers:	SN75150 or compatible	
	High Level Output:	+5V (min), +8V (typ)
	Low Level Output:	-5V (min), -8V (typ)
	Transition Time (THL-TLH):	30ns (typ) w/15pf load
Receiver Buffers:	MC1489A or compatible	
	Voltage Range:	-13V to +13V
	Transition Time (THL-TLH):	120ns (typ)
Environment:	Operating: 0° to 70° C	
	Storage: -50° to 80° C	
	Humidity: 10% to 90%	

Power Requirements:	+5V	+/- 12V
DSC series:	240 mA	10 mA
QSC series:	260 mA	35 mA
ESC series:	260 mA	35 mA

Surge Suppression Option (**IND** indicator in the model/part #)

Surge suppressor on each line is capable of sustaining up to 40A 20ms peak transient surges, a clamping voltage of 30V, and a peak energy dissipation of 0.1 Joules.

Size:

DSC/QSC series:	4.9 x 3.7 in
ESC series:	6.4 x 4.5 in

Connectors:

DSC-100 series:	2 DB-9 male
QSC-100 series:	DB-37 female or cable with DB-25 or DB-9 cable options
ESC-100 series:	DB-78 female with cable DB-25 or DB-9 cable options
ESC-100M series:	RJ-11 modular connectors

Certification: CE, FCC Class B

Order Number:	**Description:**
DSC-100:	two port RS-232 board
DSC-100IND:	two port RS-232 board with surge suppression option
QSC-100:	four port RS-232 board
QSC-100-D9:	four port RS-232 board with DB9 connectors
QSC-100IND:	four port RS-232 board with surge suppression option
QSC-100IND-D9:	four port RS-232 board with surge suppression and DB9 connectors
ESC-100D:	eight port RS-232 board with cable eight DB25 connectors
ESC-100DB:	eight port RS-232 board with breakout box
ESC-100-D9:	eight port RS-232 board with cable to eight DB9 connectors
ESC-100DIND:	eight port RS-232 board with surge suppression
ESC-100DBIND:	eight port RS-232 board with breakout box and surge suppression
ESC-100IND-D9:	eight port RS-232 board with surge suppression option and cable to eight DB-9 connectors
ESC-100M:	eight port RS-232 with RJ-11 modular connectors
ESC-100MIND:	eight port RS-232 with RJ-11 modular connectors with surge suppression

RS-422/485 Board Specifications

Bus Interface:	32-bit, 33MHz PCI Bus spec. 2.1 compliant	
OS Support:	Win 95/98/Me/NT/2000/XP, Linux, OS/2, DOS	
Data Rate:	921.6 kbps (max) all boards	
Ports:	DSC series:	2
	QSC series:	4 (each configurable as RS-422 or RS-485 for full or half duplex communication)
UARTs:	16750 UARTs with 64-byte FIFOs (1 per port)	
Transceiver:	Max 491 or compatible	
Drivers:	Differential Voltage:	+/- 2V (min)
	Transition Time (TLH):	15ns (typ), 40 (max)
	Transition Time (THL):	15ns (typ)
Receive Buffers:	Differential Input Threshold:	+/- 0.2V
	Voltage Range:	-7V to +12V Common Mode Input
	Transition Time (THL-TLH):	15ns (typ)
Environment:	Operating:	0° to 70° C
	Storage:	-50° to 80° C
	Humidity:	10% to 90%
Power Requirements:	DSC series:	320mA @+5V
	QSC series:	320mA @+5V

Surge Suppression Option (**IND** indicator in the model/part #)

Surge suppressor on each line that is capable of sustaining up to 40A 20ms peak transient surges, a clamping voltage of 30V, and a peak energy dissipation of 0.1 Joules.

Size:	DSC series:	5.0 x 3.7 in
	QSC series:	5.4 x 3.8 in
Connectors:	DSC-200/300 series:	2 DB-9 female
	QSC-200/300 series:	DB 37 female or cable with 4 DB-25 male
Certification:	CE, FCC Class B	

Order Number:	**Description:**
DSC-200/300:	two port RS-422/485 board
DSC-200/300IND:	two port RS-422/485 with surge suppression
QSC-200/300:	four port RS-422/485 board
QSC-200/300IND:	four port RS-422/485 with surge suppression

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

B+B SmartWorx:

ESC-100D-D9 DSC-100 ESC-100D