Description

The new PCI-422/485-2 and PCI-422/485-2I provides the most rugged and economical two port industrial RS422 or RS485 serial adapters for the modern PC with PCI slots. These half sized PCI boards with two rear mounted DB9 connectors were designed for either rugged embedded PC's or in high reliability standard PCs where larger boards will not fit.

The PCI-422/485-2 and PCI-422/485-2I support both RS-422 and RS-485 communications, the cards utilize differential balanced drivers for long range and noise immunity. On the PCI-422/485-2I the data lines are opto-isolated from the computer and from each other to ensure communication when large common mode noise is present.

In RS422 mode the PCI-422/485-2 & PCI-422/485-2I have the capability to jumper in load resistors which terminate the communication lines. RS-422 communications requires that a transmitter supply bias voltage to ensure a known "zero" state. Receiver inputs at each end of the network can be terminated to eliminate "ringing". All cards support biasing by default and support termination by jumpers on the card.

In RS-485 communications, the driver must be enabled and disabled as needed, allowing all cards to share a two wire cable. The PCI-422/485-2 and PCI-422/485-2I automatically control this function, which is what is commonly known as Automated RTS. With automatic control, the driver is enabled when data is ready to be transmitted. The driver remains enabled for one additional character's transmission time after data transfer is complete and then is disabled. The receiver is also normally enabled, then disabled during RS-485 transmissions, and then re-enabled after transmission is completed. This makes the PCI-422/485-2 and PCI-422/485-2I ideal for Windows 95/98/NT/2000/ME operation under RS-485.

Features

· Two optically Isolated or Non-Isolated RS-422/485 serial ports

· Auto RTS Control for RS-485

· Half length PCI board

· High reliability components

· DOS, Windows 95/98/NT/2000/ME support

· 16550 UARTs

· Standard Baud Rates up to 460.8kbps

· PCI specification 2.1 compliant (seen over bridge)

· Two DB9 Male connectors on rear of board bracket

· Auto IRQ & PCI I/O address selection

· Interrupt sharing provided

· Cable lengths up to 4000 feet

Support

· Superior pre-sales and post-sales technical support

· All products carry a two year warranty

Specifications

Number of Ports Serial
2 RS422 or RS485

UART
Type 16550 serial

Throughput
Serial- Maximum 460Kbps

I/O Addressing
Plug-n-Play-Auto Selection

Interrupts
Interrupt sharing provided, auto selection

Bus Interface
PCI: PCI specification 2.1, works past PCI bridge in Plug and Play mode.

Connectors
Two 9-pin DB male on rear of card

Length
6.15 inches (156mm) Half Card
PCI-422/485-2I is full height and pictured
PCI-422/485-2 is half height

Operation temperatures
0 ° to 60 °C

Storage temperature
-50 ° to 120 °C

Humidity
5 to 95% (non-condensing)

MTBF
Isolated 97.95 years (calculated)
Non-isolated 159.81 years (calculated)

Isolation
500VDC (PCI-422/485-2I)

Power
+5VDC 125 mA (Typical)
+12VDC 5mA
-12VDC 5mA

Certifications
CE Conformity with:
EU EMC Directive 89/336/EEC
EU Low Voltage Directive 72/23/EEC

OS Support
Dos, Windows 95/98/NT/2000/ME

Ordering Guide

PCI-422/485-2
Non-Isolated 2-port RS422/485 card, software CD & manual

PCI-422/485-2I
Isolated 2-port RS422/485 card, software CD & manual

www.icsadvent.com
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