

Four-Channel RS232/RS422/RS485 Comms Adaptor



APPLICATIONS

The CC PMC/RS1 is a four-channel asynchronous serial communications adaptor supporting either the industry standard RS232 interface, RS422 differential interface or the RS485 multi-drop interface. Suitable for use with any PMC Host Board (VMEbus, VME64, CompactPCI®, Multibus II etc). The product is ideally suited to expand



upon the number of serial ports of the host processor board and can be used in a wide range of industrial, telecommunication, commercial, financial and defense applications. To simplify the board's integration many popular industry standard operating systems are supported.

HIGHLIGHTS

- 4 x RS232, RS422 or RS485 PC compatible serial channels:
 - Using 16550 compatible serial comms channels
 - RS232 data rates up to 230 Kbps
 - RS422 and RS485 data rates up to 4 Mbps
 - CTS, RTS, DCD, DSR, DTR and RI modem signals supported
 - Accessed via front panel and PMC P4 I/O connector
- PMC (PCI Mezzanine Card) format
- Single size CMC (Common Mezzanine Card)
- 32-bit interface
- 3.3/5 Volt PCI signaling interface
- PCI clock rates up to 33 MHz
- For use with VMEbus, VME64, CompactPCI and Multibus II and other PMC Host Boards
- Extended temperature versions available:
 - -25°C to +70°C (E-Series)
 - -40°C to +85°C (K-Series, includes humidity sealant)
- Software support for Windows® 2000, Windows® XP, Windows® XP Embedded, Linux®, QNX®, VxWorks® and Solaris™

Serial Communications

- 4 x asynchronous serial channels provided by 4 x enhanced 16550 UARTs
- implemented by Oxford Semiconductor OXmPCI954
- serial I/O via 68-way front panel connector and via rear I/O connector
- RS232 data rates up to 230Kbps full duplex
- RS422/RS485 data rates up to 4Mbps
- operates in RS422 mode supporting:-
 - TXD, RXD, CTS, RTS, DCD, DSR, DTR and RI
- operates in RS485 mode supporting:-
 - simplex or duplex bus
 - selectable RXD resistor termination
 - master/slave selection accessible via software
 - per channel flow control selectable by DTR or RTS

Parallel Communications

- IEEE 1284 compatible parallel interface supporting:-
 - SPP (Standard Parallel Port)
 - PS2 (Simple Bidirectional)
 - EPP (Enhanced Parallel Port)
 - ECP (Enhanced Capability Port)

PMC Interface

- complies with PCI Protocol Specification 3.0
- complies with PCI Electrical Specification 2.3
- supports PCI clock rates up to 33 MHz
- 3.3V and 5V compatible 32-bit PCI signaling interface
- base address software configurable

Software Support

- Windows® 2000, Windows® XP, Windows® XP Embedded, Linux®, QNX®, VxWorks® and Solaris™ supported

Electrical Specification

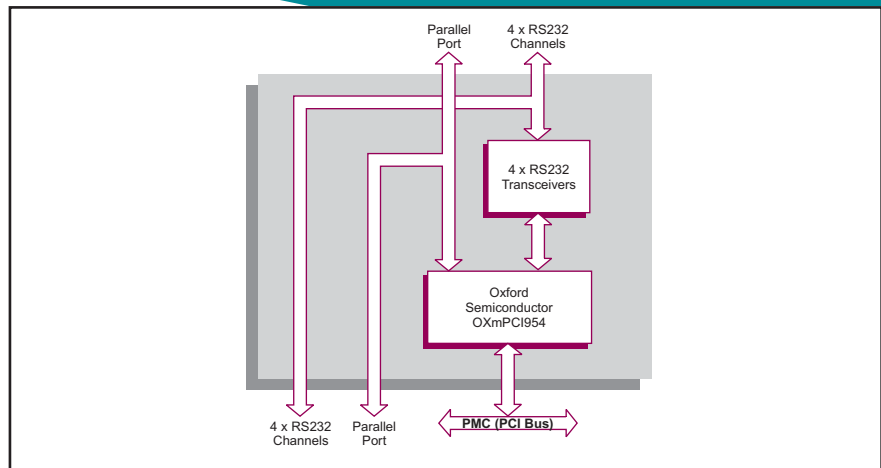
- all voltages to be within $\pm 5\%$
- 0.3A (typical) current consumption at 5V for RS232
- 0.7A (typical) current consumption at 5V for RS422
- 3.3V, +12V and -12V not utilized

Environmental Specification

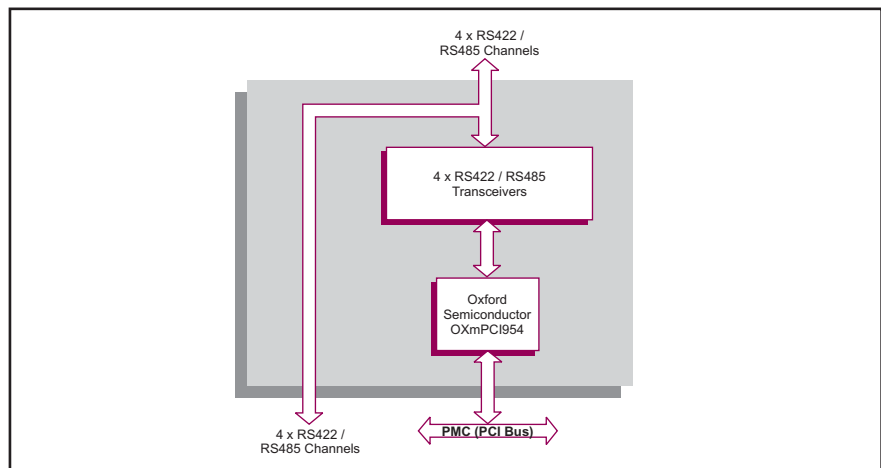
- operating temperatures:-
 - 0°C to +55°C (N-Series)
 - -25°C to +70°C (E-Series)
 - -40°C to +85°C (K-Series)
- storage temperature: -40°C to +85°C
- 10% to 90% Relative Humidity, non condensing (operating or storage):-
 - K-Series includes humidity sealant

Mechanical Specification

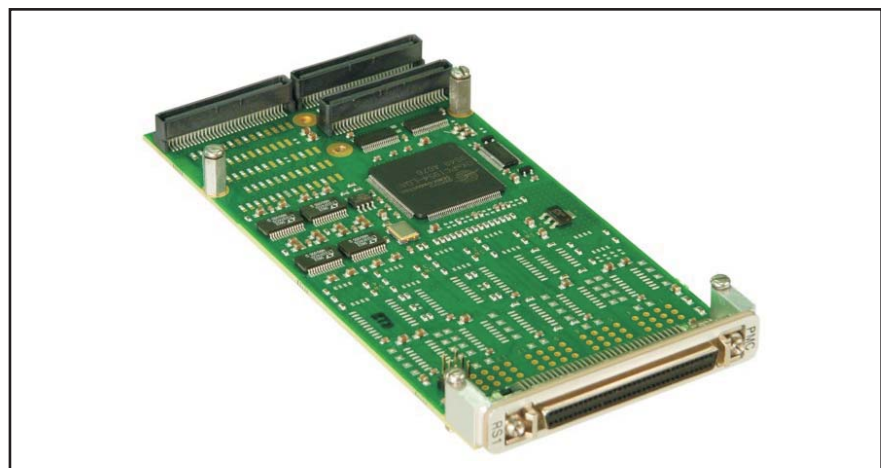
- single size CMC (Common Mezzanine Card) 74mm x 149mm
- 10mm height stack module
- IEEE 1386-2001 compliant



CC PMC/RS1-25 variant (4-port RS232 and Parallel Port)



CC PMC/RS1-50 variant (4-port RS422/RS485)



CC PMC/RS1-50 variant shown (4-port RS422/RS485)

ORDERING INFORMATION

Order Number Product Description (Hardware)

CC PMC/RS1-25	Four Channel Serial RS232 Adaptor
CC PMC/RS1-50	Four Channel Serial RS422/RS485 Adaptor
CB PMC/232-00	Cable Assembly (68-way to 4 x 9-way D-types RS232 + 1 x 25-way D-type parallel)
CB PMC/422-00	Cable Assembly (68-way to 4 x 25-way D-types RS422/RS485)

For extended temperature, E and K-Series, please contact your local sales office