

HDLC-PMC

HDLC Communications Controller



**Advanced Micro
Peripherals**

THE EMBEDDED VIDEO EXPERTS

The HDLC-PMC is a four channel HDLC communications controller on a single PMC card. The HDLC-PMC uses a high performance, industry standard serial communication controller to provide 4 independent channels that can be configured for either HDLC-Synchronous or Asynchronous communication.



The HDLC-PMC has been designed for demanding transportation and industrial applications. The HDLC-PMC supports an extended temperature operation range of -40 to +85C. All 4 ports feature galvanic isolation up to 2000Vrms.

Each of the 4 channels can be individually configured for RS-232, RS-422 or RS-485 electrical interface. Each channel has independent receive and transmit FIFOs that allow high speed serial data rates.

The HDLC-PMC is available with software drivers for Linux and Windows.

Rev A.00

Subject to change without notification

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2000Vrms

Galvanic

Isolation

for demanding

Transportation and

Industrial

Applications



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Applications

Serial protocol conversion
Mass-Transit / Transportation
Vending Machines
POS and ATM systems
Remote instrumentation
LAN Gateway or Bridge
Embedded WAN
Locomotive Communications

4 Independent
HDLC-Synchronous
or Asynchronous
channels

Extended
Temperature
operation

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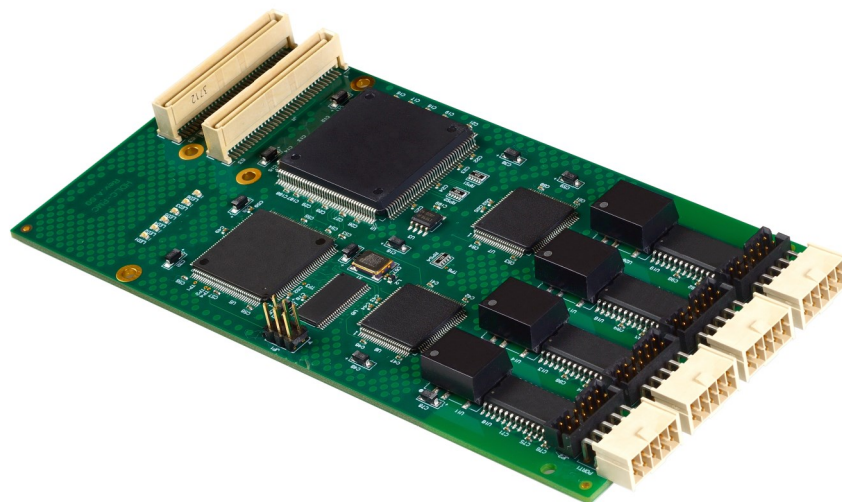
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HDLC-PMC
(faceplate removed)

Features

- 4 channel concurrent operation
- Individually configurable for HDLC / Asynchronous operation
- 2000Vrms galvanic isolation for each port
- Selectable RS-232/422/485 electrical interface
- Rugged, Locking I/O connectors
- Extended temperature operation (-40C to +85C)

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Designed for

Demanding

Transportation and

Industrial

Applications

Communications Controller

32Bytes FIFO per channel
HDLC synchronous, Asynchronous operation

HDLC

HDLC protocol support
Wide range of serial encoding methods:
NRZ, NRZB, Biphasic Mark (FM1), Biphasic Space (FM0),
Biphase Level (Manchester),
Biphase Differential (Manchester Differential)
Up to 1Mbit/sec multiple Ports (depends on host CPU)
Supporting differential TX-Data and RX-Data
Full-duplex operation
Abort Sequence generation and checking
Automatic zero bit insertion/deletion
Automatic flag insert

Asynchronous

Programmable baud rates up to 115200bps
Full-duplex operation
5,6,7, or 8 data bits per character
1, 1.5, or 2 stop bits
Odd or Even parity

Bus Interface

PCIMG-2.0 Rev 2.1
IEEE 1386.1 standard
32 bit PCI @ 33MHz

Physical Interface

Independent RS-232/RS-422/RS-485 ports
2000Vrms galvanic isolation
Supporting TX-Data, RX-Data, CTS, RTS

Miscellaneous

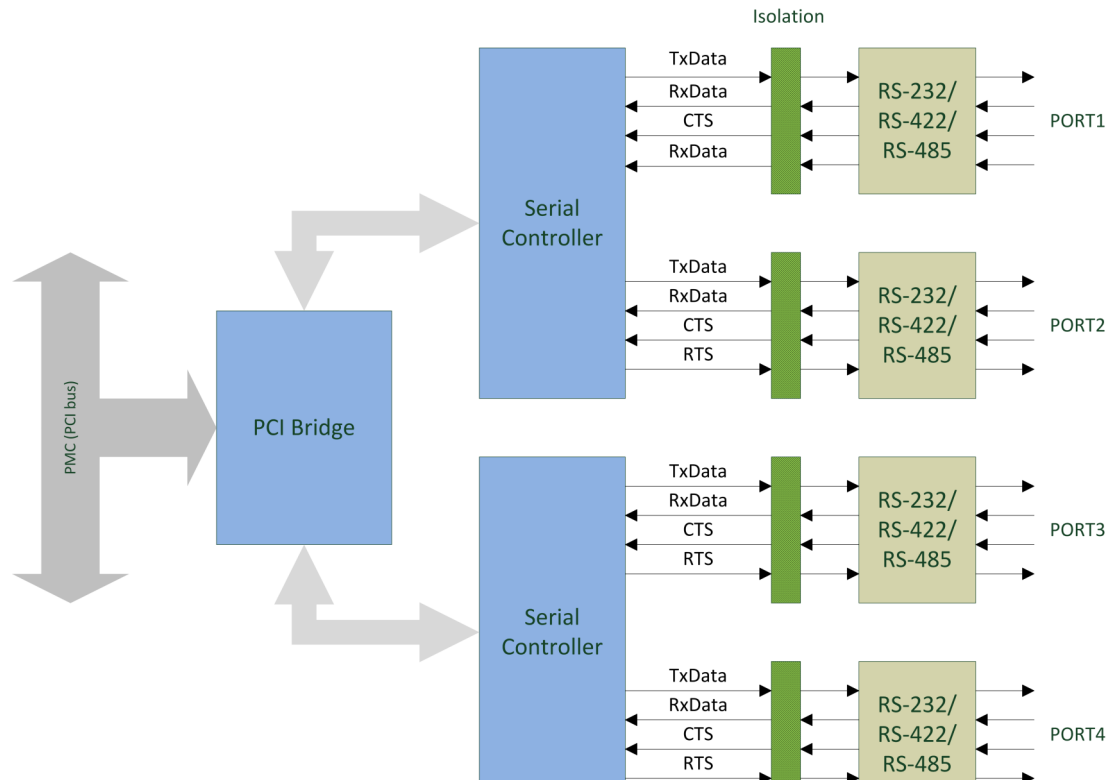
Single +5V supply
Operating temp -40°C to +85°C (extended temp)

Software Support

Linux
Windows-XP/7/8

Ordering Information

HDLC-PMC-Ext
4-port PMC HDLC Controller (-40 to 85°C)



HDLC-PMC Functional Diagram

