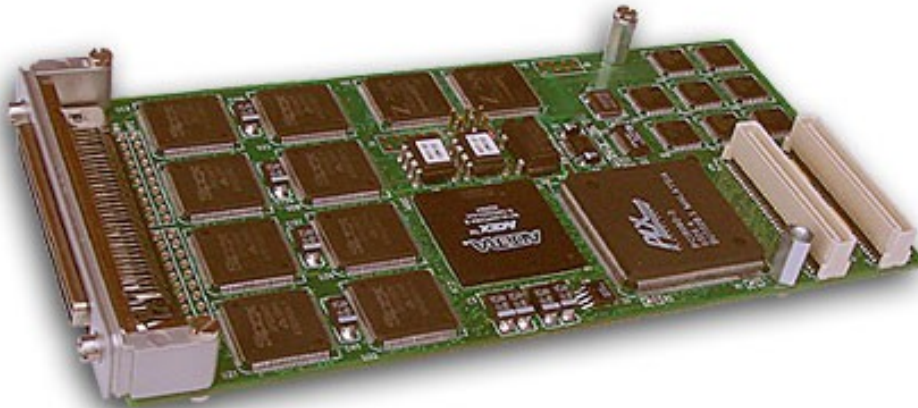


# **General Standards Corporation**

**High Performance Bus Interface Solutions**

## **PMC-SIO4BX-SYNC**

**QUAD CHANNEL SYNCHRONOUS SERIAL TO PARALLEL CONTROLLER  
WITH OPTIONAL DEEP TRANSMIT AND RECEIVE FIFOS**



### **Features Include:**

- **Features Include:**
  - Four Independent Synchronous Serial Channels
  - Serial Data Rates up to 10 Mbits/sec
  - SCSI II type 68 pin front edge I/O Connector with optional cable adapter to four DB25 connectors.
  - Independent Transmit and Receive FIFO Buffers for each Serial Channel – Up to 32k Deep Each
  - Programmable Transmit Bit Counts allow for various transmit word lengths
  - Selectable Transmit Gap Bit Counts allow for a programmed number of clocks between words
  - Unused Serial Channels can be programmed to provide General Purpose IO capability.
  - Dual PCI DMA Engine to speed transfers and minimize host I/O overhead
  - On-Board Programmable Oscillators provide increased flexibility for Baud Rate Clock generation
  - A variety of device drivers are available, including VxWorks, WinNT, Win2000, Windows XP, Linux, and Labview
  - Fast RS422/RS485 Differential Cable Transceivers Provide Data Rate up to 10Mbps
  - RS423 and RS232 Cable Transceivers Provide Data Rate up to 230kbps
  - Multiprotocol Transceivers support RS422 (V.11)/RS485, RS423 (V.10), RS232 (V.28), V.35, RS530, as well as other Mixed Protocol modes.

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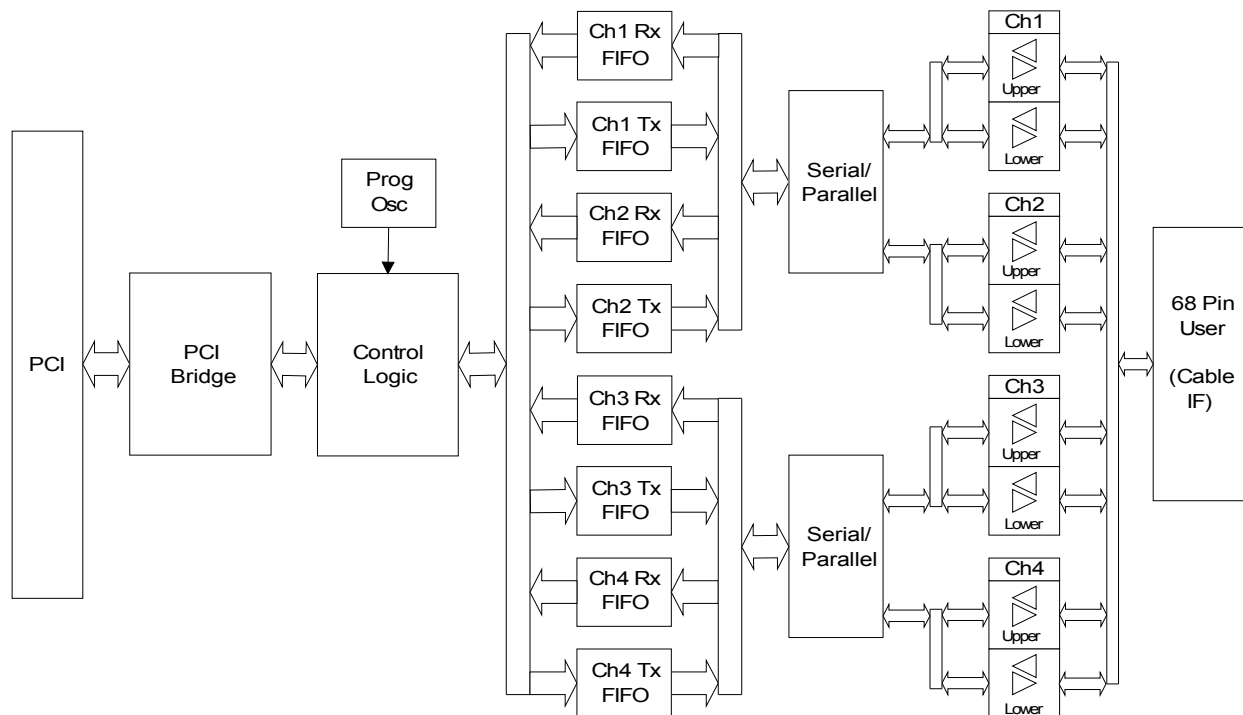
## High Performance Bus Interface Solutions

### Applications Include:

- ✓ LAN/WAN Networking
- ✓ Telecommunications
- ✓ Serial Interface

### Functional Description:

The PMC-SIO4B-SYNC board is a four channel serial interface card which provides a simple synchronous serial interface capability for PCI applications. The PMC-SIO4B-SYNC combines a flexible parallel/serial converter and 8 external FIFOs to provide four fully independent synchronous serial channels. These features, along with a high performance PMC/PCI interface engine, give the PMC-SIO4B-SYNC unsurpassed performance in a serial interface card.



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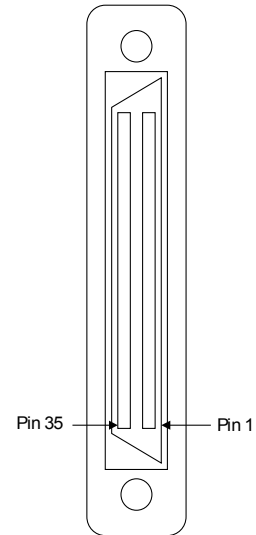


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## High Performance Bus Interface Solutions

### USER I/O CONNECTIONS:

Pin #	DTE Signal	DCE Signal	Pin #	DTE Signal	DCE Signal
1		Ch1 AuxC +	35		Ch3 AuxC +
2		Ch1 AuxC -	36		Ch3 AuxC -
3		Ch1 Spare +	37		Ch3 Spare +
4		Ch1 Spare -	38		Ch3 Spare -
5	Ch1 RxE +	Ch1 TxE +	39	Ch3 RxE +	Ch3 TxE +
6	Ch1 RxE -	Ch1 TxE -	40	Ch3 RxE -	Ch3 TxE -
7	Ch1 RxD +	Ch1 TxD +	41	Ch3 RxD +	Ch3 TxD +
8	Ch1 RxD -	Ch1 TxD -	42	Ch3 RxD -	Ch3 TxD -
9	Ch1 RxC +	Ch1 TxC +	43	Ch3 RxC +	Ch3 TxC +
10	Ch1 RxC -	Ch1 TxC -	44	Ch3 RxC -	Ch3 TxC -
11	Ch1 TxE +	Ch1 RxE +	45	Ch3 TxE +	Ch3 RxE +
12	Ch1 TxE -	Ch1 RxE -	46	Ch3 TxE -	Ch3 RxE -
13	Ch1 TxD +	Ch1 RxD +	47	Ch3 TxD +	Ch3 RxD +
14	Ch1 TxD -	Ch1 RxD -	48	Ch3 TxD -	Ch3 RxD -
15	Ch1 TxC +	Ch1 RxC +	49	Ch3 TxC +	Ch3 RxC +
16	Ch1 TxC -	Ch1 RxC -	50	Ch3 TxC -	Ch3 RxC -
17	GND		51	GND	
18	GND		52	GND	
19	Ch2 RxE +	Ch2 TxE +	53	Ch4 RxE +	Ch4 TxE +
20	Ch2 RxE -	Ch2 TxE -	54	Ch4 RxE -	Ch4 TxE -
21	Ch2 RxD +	Ch2 TxD +	55	Ch4 RxD +	Ch4 TxD +
22	Ch2 RxD -	Ch2 TxD -	56	Ch4 RxD -	Ch4 TxD -
23	Ch2 RxC +	Ch2 TxC +	57	Ch4 RxC +	Ch4 TxC +
24	Ch2 RxC -	Ch2 TxC -	58	Ch4 RxC -	Ch4 TxC -
25	Ch2 TxE +	Ch2 RxE +	59	Ch4 TxE +	Ch4 RxE +
26	Ch2 TxE -	Ch2 RxE -	60	Ch4 TxE -	Ch4 RxE -
27	Ch2 TxD +	Ch2 RxD +	61	Ch4 TxD +	Ch4 RxD +
28	Ch2 TxD -	Ch2 RxD -	62	Ch4 TxD -	Ch4 RxD -
29	Ch2 TxC +	Ch2 RxC +	63	Ch4 TxC +	Ch4 RxC +
30	Ch2 TxC -	Ch2 RxC -	64	Ch4 TxC -	Ch4 RxC -
31	Ch2 Spare +		65	Ch4 Spare +	
32	Ch2 Spare -		66	Ch4 Spare -	
33	Ch2 AuxC +		67	Ch4 AuxC +	
34	Ch2 AuxC -		68	Ch4 AuxC -	



PMC-SIO4BX-SYNC  
User Connector

The user interface connections on the SIO4BX-SYNC is a SCSI III type 68-pin connector (female) mounted to the front edge of the board (P2). The part number for the 68 pin front edge connector is AMP 787170-7. The mating connector is AMP 749111-6 or equivalent. The tables below show the pinout for the RS485/RS422. Single Ended signals (RS-423 and RS-232) use the negative side ( - ) of the differential pair.

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