

General Standards Corporation

High Performance Bus Interface Solutions

PCI-SIO4B-SYNC

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



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
- Fast RS485/RS422 Differential Cable Transceivers to Provide Increased Noise Immunity
- 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

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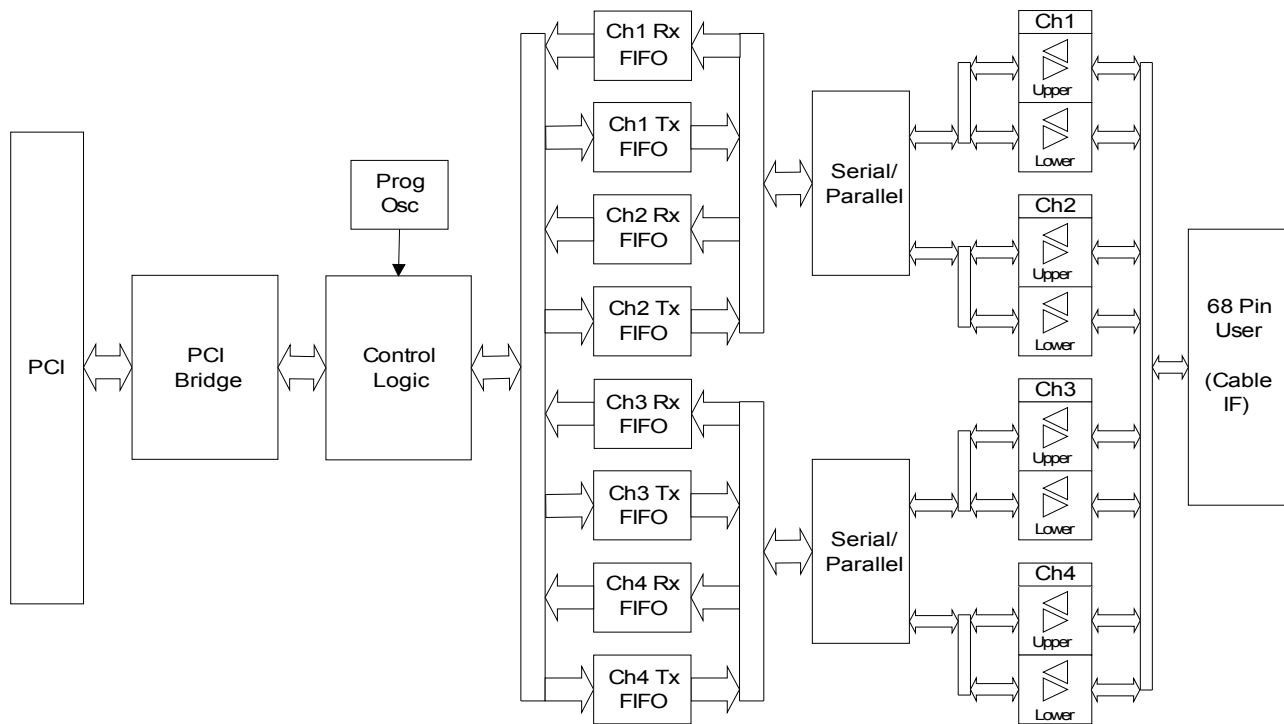
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Applications Include:

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

Functional Description:

The PCI-SIO4B-SYNC board is a four channel serial interface card which provides a simple synchronous serial interface capability for PCI applications. The PCI-SIO4B-SYNC combines a flexible parallel/serial converter and 8 external FIFOs to provide four fully independent synchronous RS422/RS485 serial channels. These features, along with a high performance PCI interface engine, give the PCI-SIO4B-SYNC unsurpassed performance in a serial interface card.



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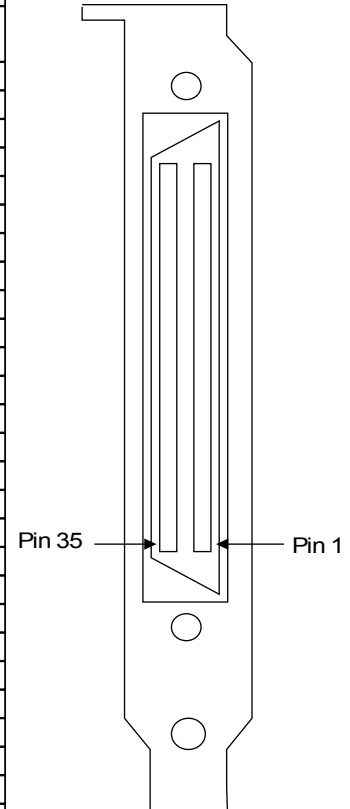
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USER I/O CONNECTIONS:

Pin	DTE Signal	DCE Signal	Pin	DTE Signal	DCE Signal
1	Reserved		35	Reserved	
2	Reserved		36	Reserved	
3	Reserved (Ch1 RxAuxC/TxAuxC +)		37	Reserved (Ch3 RxAuxC/TxAuxC +)	
4	Reserved (Ch1 RxAuxC/TxAuxC -)		38	Reserved (Ch3 RxAuxC/TxAuxC -)	
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	GND	51	GND	GND
18	GND	GND	52	GND	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	Reserved (Ch2 RxAuxC/TxAuxC +)		65	Reserved (Ch4 RxAuxC/TxAuxC +)	
32	Reserved (Ch2 RxAuxC/TxAuxC -)		66	Reserved (Ch4 RxAuxC/TxAuxC -)	
33	Reserved		67	Reserved	
34	Reserved		68	Reserved	



**PCI-SIO4B-SYNC
User Connector**

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Please see the hardware user manual for pin-out charts and detailed pin descriptions. The user interface connections on the SIO4B-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.

General Standards Corporation assumes no responsibility for the use of any circuits in this product. No circuit patent licenses are implied. Information included herein supersedes previously published specifications on this product and is subject to change without notice.

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