SUPERFASTCOM | PCI High Speed Synchronous 4-Ch RS-422/485 Serial Port Board



Description

The new SUPERFASTCOM state of the art adapter is not only a very high speed, four channel, synchronous/asynchronous serial communications adapter but probably the fastest copper based RS-422 board on the market. While others claim "burst" rates of 10 to 20Mbps, SUPERFASTCOM can maintain a "sustained" rate of up to 40Mbps on a single channel or an aggregate data rate for all four channels at up to 108Mbps. The board features high speed RS-422/RS-485 driver/receivers with onboard line termination. The board also features an onboard clock generator which provides a high speed clock source for your system and eliminating the need for an external clock.

The SUPERFASTCOM can access system memory through DMA (Direct Memory Access) using its onboard DMA controller and supplied software. DMA is by far the fastest, most efficient method of handling the large amounts of data that high speed communications generates. Buffering a high speed data stream is critical in order to maintain data integrity, data reliability, avoid data loss and prevent data overrun. The SUPERFASTCOM does all this with minimum system processor involvement to assure no reduction in primary PC processor performance due to data communication overhead.

The SUPERFASTCOM buffering works by the user designating in his program how much system memory will be allocated to communications. The more memory in your system, the more you can allocate to the communication process. In Windows® 2000, you can buffer up to 4GB for the SUPERFASTCOM board. In LINUX®, you can buffer up to 52MB per channel. As data is received, the onboard communication processor fills a small local buffer. When this is full, the DMA controller transfers this data directly to system memory. The local buffer is reset and the process begins again. Transmitting data works in reverse when data from system memory is DMA transferred to the local buffer and when empty, new data is transferred in. All of this occurs without slowing or interfering with the system processor.

The SUPERFASTCOM supports all standard synchronous protocols (HDLC, SDLC) and their variations as well as all standard asynchronous data formats. Programming is simplified with the inclusion of drivers, example programs and comprehensive documentation supplied on the FASTCOM CD. Currently, the SUPERFASTCOM comes with SDLC and HDLC drivers for Windows 2000 and LINUX to get your communication application up and running quickly.

24x7 SUPPORT

Quick SHIPMENT

Features

- Four channel synchronous serial interface
- PCI bus mastering DMA
- RS-422 and RS-485 serial
- Aggregate data rate for all four channels is 108Mbps
- Multi-protocol capable including: HDLC, SDLC, etc.
- Up to 40Mbps sustained per port (two channels)
- Up to 4GB data buffer (Windows)
- Cable provided for DB-78 to four DB25 connectors
- SDLC, HDLC drivers for Windows 2000 & Linux

Support

- Superior pre- and post sales technical support
- All products carry a two year warranty

ICS ADVENT
www.icsadvent.com
800-523-2320

Specifications

Channels
- Four Ports

Communications Chip
- Infineon 20534

Clock
- Programmable onboard clock generator (clock source)

Max. Data Rate
- 40Mbps sustained per single channel
  108Mbps aggregate data rate for all four channels
- Data rates are limited by factors such as cable length & quality

Data Buffering
- Up to 4GB (Windows 2000)
- Up to 52MB per channel (LINUX)

Max. Distance
- Up to 5000-feet @ 9600bps (can be higher data rate depending on cabling)

Drivers/Receivers
- High speed RS-422, RS-485

Signals (Differential For Each)
- SD, RD, RTS, CTS, DCD, TT, RT, ST

Power Requirements
- +5VAC @ 450mA

Bus
- PCI 32-bit bus mastering

Connector/Cable
- One DB78F on rear card bracket
- Shielded cable is DB-78 to four DB25P connectors (follows RS-530 STD)

Operating Temperature
- 0 ° to 70 °C

Storage Temperature
- -20 ° to 70 °C

Maximum Humidity
- 10 to 90%, non-condensing

MTBF
- 24.61yrs (calculated)

Length
- 6.125-inches

Certifications
- CE Marked, FCC compliant

OS Support
- LINUX, Windows 2000 sync driver support for SDLC and HDLC

Ordering Guide

SUPERFASTCOM-C
- 4-Port RS422/485 sync PCI board, shielded cable, documentation & software CD

DB78 to 4xDB25 Cable Pinout

DB78		DB25 #1
77	gnd	1
68	gnd	7
70	sd-	2
50	sd+	14
73	rd-	3
53	rd+	16
71	rts-	4
51	rts+	19
74	cts-	5
54	cts+	13
76	dcd-	10
57	dcd+	8
69	tt-	11
52	tt+	24
72	rt-	9
56	rt+	17
75	st-	12
55	st+	15
DB78		DB25#2
38	gnd	1
29	gnd	7
13	sd-	2
32	sd+	14
36	rd-	3
17	rd+	16
33	rts-	4
14	rts+	19
18	cts-	5
37	cts+	13
31	dcd-	10
12	dcd+	8
30	tt-	11
11	tt+	24
16	rt-	9
35	rt+	17
34	st-	12
15	st+	15
DB78		DB25#3
9	gnd	1
10	gnd	7
22	sd-	2
2	sd+	14
6	rd-	3
26	rd+	16
3	rts-	4
23	rts+	19
27	cts-	5
7	cts+	13
8	dcd-	10
28	dcd+	8
1	tt-	11
21	tt+	24
25	rt-	9
5	rt+	17
4	st-	12
24	st+	15
DB78		DB25#4
48	gnd	1
49	gnd	7
62	sd-	2
46	sd+	14
65	rd-	3
42	rd+	16
63	rts-	4
45	rts+	19
66	cts-	5
41	cts+	13
40	dcd-	10
60	dcd+	8
61	tt-	11
47	tt+	24
64	rt-	9
43	rt+	17
67	st-	12
44	st+	15

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