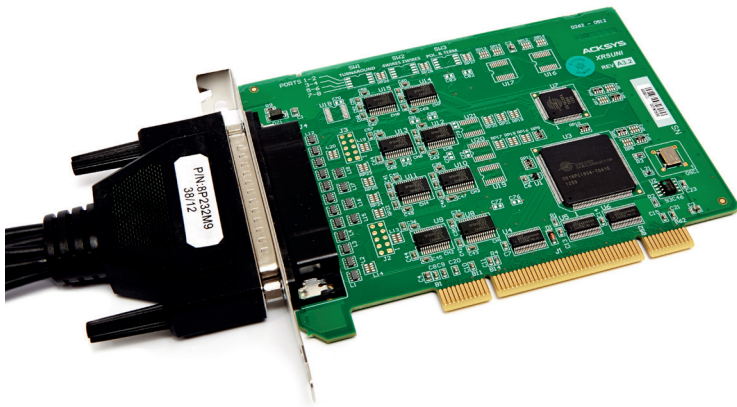# xRSUNI range

4 & 8 ports serial boards

- 2, 4 or 8 high performance serial ports, universal bus (3.3V, 5V, PCI-X), low profile or standard profile mounting

- High speed : 1 Mbps for RS232, 1.8 Mbps for RS422/485, 1 Mbps for isolated RS422/485

- Latest technologies : 128 byte FIFO, RS485 mode self line turn-around

- «Plug and Play», PCI 2.3 standard compliant

- Windows & Linux operating systems support

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LIFETIME WARRANTY

Introduction

The new range of universal PCI serial multi-port boards from ACKSYS combines high performance, ease of use, robustness at very competitive prices. This multipurpose range includes 2, 4 and 8 channel boards for RS232, RS422 or RS485.

PERFORMANCE...
Featuring state-of-the-art communication controllers (UARTS), the xRSUNI range reduces host CPU loading time by up to 75% compared to existing PCI boards.
This level of performance is made possible by the full-scale PCI interface integrated in the UARTS, unlike traditional architectures.
The 128 byte per channel FIFO buffer memory implies that the boards can manage multiple communication lines at much higher rates than traditional boards, and ensures the reliability of received data.
A high resolution baud rate generator can handle custom transmission rates in addition to the standard rates (up to 1.8 Mbps).

UNIVERSALITY...
The xRSUNI range offers ease of use in all PCI based computers (PCI & PCI-X) regardless of the bus power supply (+3.3VDC / +5VDC).

SECURITY...
In RS485 mode, line turn-around is usually software-controlled, a fact which often leads to conflicts.
The xRSUNI board performs automatic line turn-around to guarantee optimal performance in RS485 mode, independently of the baud rate or operating system.

RELIABILITY...
Highly integrated, MTBF > 10^6 POH, ESD protection 15 KV : 3 key advantages that guarantee reliability and robustness.

Technical characteristics overview

Number of channels	2, 4 or 8 (build around the 16C950 communication controller)
Baud rate	Up to 1.8 Mbps (only for non-isolated RS422/RS485, 1 Mbps in other cases), standard & custom transmission rates (non-multiple of standard rates)
Format	Asynchronous. 5, 6, 7 or 8 bits per character. 1, 1½, 2 stop bits. Parity : Even, Odd, Mark, Space or none.
Buffer size	128 byte FIFO buffer on each transmit/receive channel, programmable FIFO threshold.
Flow control	Hardware (RTS/CTS) and/or (XON/XOFF), RS485 self line turn-around.
Line interface	RS232 or RS422/RS485 (with or without isolation). On-board management of automatic line turn-around in RS485 mode.
Connectors	Depending on reference
Protection	Electrostatic discharges (ESD 15 KV), HF filtering, 2500V optical isolation for isolated model.
Dimensions	LP model : (H) 64.41 mm x (L) 119.91 mm, SP : (H) 106.68 mm x (L) 140.44 mm LP boards are also delivered with a SP PCI bracket
Power consumption	2 Watts maximum (8-port model).
Operating conditions	-5°C to +65°C (our manufacturing process includes cyclical tests between -20°C and +80°C).
Environment & safety	89/336/CEE, NF-EN55022 (class B), NF-EN55024, NF-EN50082-2, EN61000-4-2 to -4-8, ENV50204, NF-EN60950, EN50102, IEC61131-2, IEC695-2-1, IEC68-2-1, IEC68-2-2,IEC68-2-6, IEC68-2-14, IEC68-2-27, IEC68-2-32.
Peripheral drivers	Windows and Linux peripheral drivers, controlled like standard COM ports.
Applications	Industrial computing, industrial automation, access control, ticketing, banking systems (ATM), point of sales.

Ordering references

Standard profile PCI computers

2RSUNI-232-9	2-port RS232, SUB D9 male connectors, universal bus
4RSUNI-232-9	4-port RS232, octopus cable with SUB D9 male connectors, universal bus
8RSUNI-232-9	8-port RS232, octopus cable with SUB D9 males connectors, universal bus
2RSUNI-400-9	2-port RS422/485, SUB D9 female connectors, universal bus
4RSUNI-400-25	4-port RS422/485, octopus cable with SUB D25 male connectors, universal bus
4RSUNI-400-I	4-port isolated RS422/485, external box with 5-point screw-in terminal, universal bus
8RSUNI-400-25	8-port RS422/485, octopus cable with SUB D25 male connectors, universal bus

Low profile PCI computers

4RSUNI-232-9	4-port RS232, octopus cable with SUB D9 male connectors, universal bus, low profile MD1 format
4RSUNI-400-I-LP	4-port isolated RS422/485, external box with 5-point screw-in terminal, universal bus, low profile MD1 format
8RSUNI-232-9-LP	8-port RS232, octopus cable with SUB D9 male connectors, universal bus, low profile MD1 format

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