SUNIX

IPC-E2002 / 4 / 8

2 / 4 / 8 ports RS-422/485 PCI Express
(with Surge & Isolation options)

Features

- Expands 4/8 independent RS-422/485 serial ports with communication speeds up to 921.6Kbps
- High speed SUNX single chip solution with built-in 16C750 compatible UART controller
- Compliance with PCI Express 1.0a BUS specifications
- Low profile boards for smaller PC
- RS-422/485 auto detect and switching technology – jumper and software free
- AHDC/CS™ technology for collision free communication
- Built-in 15KV ESD protection for all serial signals
- Plug-n-Play, I/O address and IRQ assigned by BIOS
- Certified by CE, FCC, RoHS, and Microsoft WQHL approval
- Support Microsoft Windows, Linux, and DOS

Introduction

SUNIX IPC-E200X series, PCI Express serial communication boards, allows users to add or expand 2/4/8 RS-422/485 ports on Industrial PC-based system. The card is compatible with PCI Express 1.0a BUS specifications, allowing it to be installed in virtually any PC-based systems. SUNIX card has 64-bytes onboard FIFO buffer and compatible with 16C750 UART specification. SUNIX industrial serial cards used the most advanced chipset developed by SUNIX called MATRIX for high performance and reliable communication. These cards are single chip solution with built-in UART controllers. This industrial card series is designed with many of SUNIX advanced features and technologies, making it the best solution for industrial and mission critical applications.

Specifications

Serial Communication

Interface	RS-422 / 485	Baud rate	75bps ~921.6Kbps
Controller	SUNIX MATRIX (16C750 UART Compatible)	Stop bit	1, 1.5, 2
BUS	PCI Express 1.0a	Parity	even, odd, none, mark, space
No. of Port	2 / 4 / 8 ports	Flow Control	Xon / Xoff (software)
IRQ & IO	Assigned by System	Protection	15KV ESD protection 2.5KV Isolation protection
FIFO	64byte Hardware	PCB Connector	DB44 Male
Signal	4-wire RS-485: TxD+, TxD-, RxD+, RxD-, GND 2-wire RS-485: Data+, Data-, GND	Cable Connector	DB9 / DB25 Male

Driver Support

Microsoft	3.1 / 95 / 98 / NT/ ME / 2000 / XP / 2003 / Vista (32bit) / CE5.0 / XP Embedded	Unix	SCO Unixware 7.1.3, SCO OpenServer 5.0.6/5.0.7/6.0
Linux	Linux 2.4.x / 2.6.x	DOS	DOS

Regulatory Approvals

Hardware	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class B, RoHS
Software	Microsoft WHQL

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Operation Environment

Operation Temperature	0°C to 70°C
Operation Humidity	5 to 95% RH
Storage Temperature	-40°C to 85°C

Dimension(Unit = mm)

PCB Dimension	90 x 64 mm (IPC-E2002)
	105 x 64 mm (IPC-E2004)
	110 x 68.5 mm (IPC-E2002SI)
	123 x 68.5 mm (IPC-E2004SI)
	119.62 x 95.5 mm (IPC-E2008SI)

Bracket: Low Profile
Warranty: 5 years

Pin Assignment
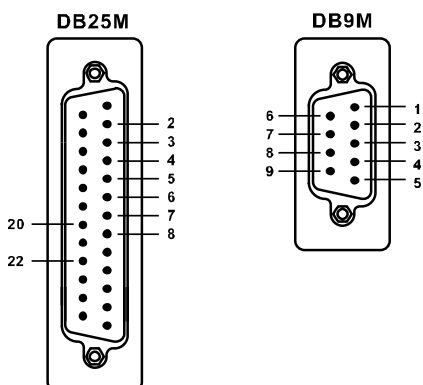
PIN	DB9M	DB25M
DCD	1	8
RxD	2	3
TxD	3	2
DTR	4	20
GND	5	7
DSR	6	6
RTS	7	4
CTS	8	5
RI	9	22

Optional Accessories

DB44 to 2/4/8 ports DB9 male connection cable, 40/100 cm

DB44 to 2/4/8 ports DB25 male connection cable, 40/100 cm

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Ordering Information

- ◆   IPC-E2002   2 ports RS-422/485 PCI Express Serial Board
- ◆   IPC-E2002SI   2 ports RS-422/485 PCI Express Serial Board with Surge & Isolation
- ◆   IPC-E2004   4 ports RS-422/485 PCI Express Serial Board
- ◆   IPC-E2004SI   4 ports RS-422/485 PCI Express Serial Board with Surge & Isolation
- ◆   IPC-E2008SI   8 ports RS-422/485 PCI Express Serial Board with Surge & Isolation

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