

SER5466AL

8-port RS-232 PCI Express
Low Profile Serial Board



Introduction

SUNIX SER5466AL, PCI Express serial communication boards meet the PCI Express Base Specification Revision 1.1. It is compatible with PCI Express x1, x2, x4, x8 and x16 lane Bus, allowing it to be installed in any slim size PC-based system with low profile bracket structure. The majorities of today's motherboards is not equipped with serial ports or only have one serial port. With SUNIX PCI Express serial board, users can add eight serial ports to their system, allowing them to use serial devices further. SUNIX SER5466AL card has 128-bytes onboard FIFO buffer and compatible with 16C950 UART specification. It is designed with SUNIX UART controller, SUN1999 and as well built with many of SUNIX advanced features and technologies, making it the best solution for commercial and industrial automation applications.

Features

- Expands 8 independent RS-232 serial ports with communication speeds up to 115.2Kbps.
- High speed SUN1999 16C950 compatible UART controller on-board.
- Designed to meet PCI Express Base Specification Revision 1.1.
- Supports x1, x2, x4, x8, x16 (lane) PCI Express Bus connector keys.
- On-chip hardware auto flow control to guarantee no data loss.
- Built-in ± 15 KV ESD protection for all serial signals meets IEC1000-4-2 standard.
- Plug-n-Play, I/O address and IRQ assigned by BIOS.
- Low profile bracket design idea for slim or portable PC.
- Certified by CE, FCC, RoHS, and Microsoft WHQL approval.
- Support Microsoft Windows, Linux, and DOS.



Specifications

Serial Communication

Interface	RS-232	Signal	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
Controller	SUNIX SUN1999 (16C950 UART Compatible)	Baud rate	50bps ~115.2Kbps
BUS	PCI Express one lane (x1)	Stop bit	1, 1.5, 2
No. of Port	8-port	Parity	even, odd, none, mark, space
IRQ & IO	Assigned by System	Flow Control	None, Xon/Xoff, RTS/CTS
FIFO	128byte Hardware	PCB Connector	SCSI 68 Female
Protection	±15KV ESD protection for each signal Human Body Model (HBM) ±15KV IEC1000-4-2 Air Gap Discharge ±8KV IEC1000-4-2 Contact Discharge		

Driver Support

Microsoft Client	Windows XP/Vista/7 (X86/X64)
Microsoft Server	Windows 2000/2003/2008 (X86/X64)
Microsoft Embedded	Windows CE4.2/5.0/6.0/XP Embedded/POS Ready 2009/Embedded System 2009
Linux	Linux 2.4.x/2.6.x
DOS	DOS
FreeBSD	FreeBSD 5.3~5.5 / 6.0~6.4
QNX	QNX 6.3.2/6.4.0
* IBM OS/2	WARP 3/WARP 4
* SCO UnixWare	UnixWare 7.1.3/7.1.4/ Open Server 5.0.7/6.0
* Sun Microsystems	Solaris 10
Note : " * " Supported by special inquiry.	

Regulatory Approvals

Hardware	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class B, BSMI: CNS13438, C-Tick: CISPR22 AS/NZS, RoHS
Software	Microsoft WHQL Windows ◆ Microsoft Client: XP/Vista/7 (X86/X64) ◆ Microsoft Server: 2000/2003/2008 (X86/X64)

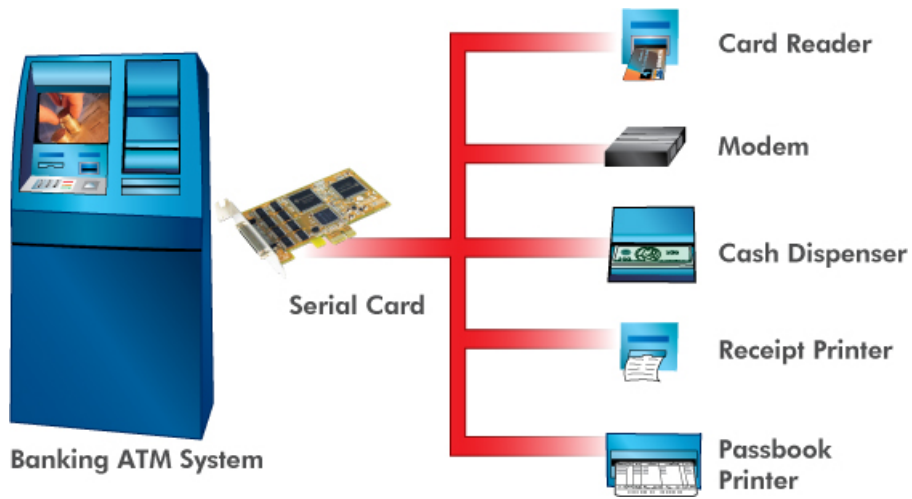
Environment

Operation Temperature	0 to 60°C (32 to 140°F)
Operation Humidity	5 to 95% RH
Storage Temperature	-20 to 85°C (-4 to 185°F)

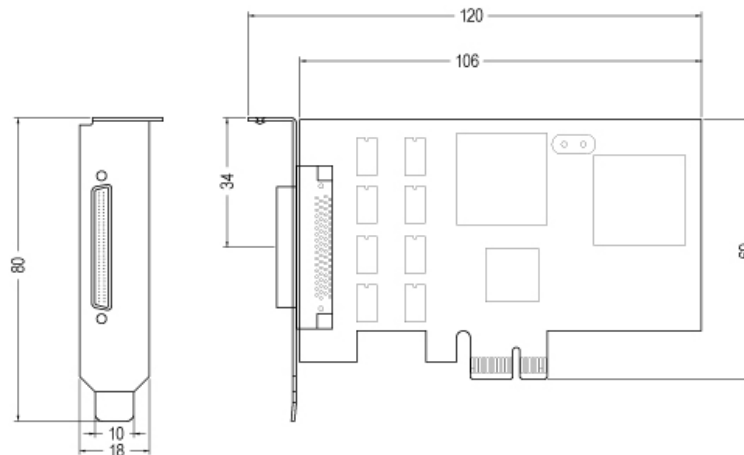
Dimension

PCB Dimension	106 x 69 mm
Bracket	Low Profile 80 mm
Bracket Space	1

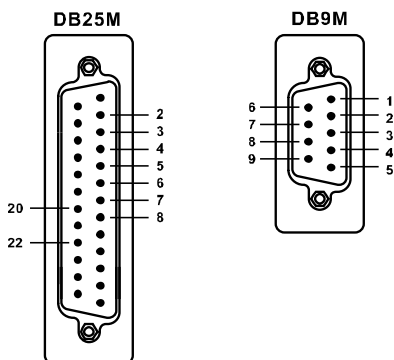
Application



Mechanical Drawings (Unit = mm)



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



Packing List

Packing Content

- SER5466AL – 8-port RS-232 PCI Express Low Profile Serial Board
- Quick Installation Guide
- Software CD ROM
- SCSI 68 to 8-port DB9/DB25 Male Connection Cable, 40 cm



Optional Accessories

- Mini SCSI 68 to 8-port DB9 Male Connection Cable, 40/100 cm



- Mini SCSI 68 to 8-port DB25 Male Connection Cable, 40/100 cm



Order Information

Serial RS-232 Interface

Bus	Port	Connector	Baud Rate	ESD Protection	Power output	Bracket	Model NO.	
PCI Express	8	DB62 Female	115.2 kbps	±15KV	-	Standard	SER5466A	
			921.6Kbps		-		SER5466H	
		Mini SCSI 68 Female	115.2 kbps		-	Low profile	SER5466AL	
			921.6Kbps		-		SER5466HL	
	4	DB44 Female	115.2 kbps		-	Standard	SER5456A	
					5V/12V		-	SER5456P
					-		Low profile	SER5456AL
			5V/12V		-	SER5456PL		
			921.6Kbps		-	Standard	SER5456H	
					5V/12V		-	SER5456PH
	-	Low profile			SER5456HL			
	5V/12V		-		SER5456PHL			
	2	DB9 Male	115.2 kbps		-	Standard	SER5437A	
					5V/12V		-	SER5437P
		DB44 Female	921.6Kbps		-	Low profile	SER5437AL	
					5V/12V		-	SER5437PL
		DB9 Male	921.6Kbps		-	Standard	SER5437H	
					5V/12V		-	SER5437PH
DB44 Female	921.6Kbps	-	Low profile	SER5437HL				
		5V/12V		-	SER5437PHL			
PCI	8	DB62 Female	115.2 Kbps	±2KV	-	Standard	SER5066A	
					Mini SCSI 68 Female		-	SER5066AL
		5x2 Pin Header			-	Low profile	SER5066U	
					-		SER5066UL	
		DB62 Female			921.6Kbps	-	Standard	SER5066H
						Mini SCSI 68 female		-
	5x2 Pin Header	-	Low profile	SER5066UH				
	-	SER5066UHL						
	4	DB44 Female	115.2 Kbps	±2KV	-	Standard	SER5056A	
					5V/12V		-	SER5056P
					-		Low profile	SER5056AL
			5V/12V		-	SER5056PL		
			5x2 Pin Header		921.6Kbps	-	Standard	SER5056U
						-		Low profile
		-		SER5056H				
		DB44 Female	921.6Kbps	-	Low profile	SER5056HL		
				5V/12V		-	SER5056PH	
		2	DB9 Male	115.2Kbps	±15KV	5V/12V	Standard	SER5056P
						-		SER5056U
			5x2 Pin Header	921.6Kbps		-	Low profile	SER5056UL
	-					SER5056H		
	DB9 Male		921.6Kbps	-		Standard	SER5056PH	
				5V/12V			-	SER5056UH
	5x2 Pin Header	921.6Kbps	-	Low profile	SER5056UHL			
			-		SER5056PHL			
	1	DB9 Male	115.2Kbps	±2KV	-	Standard	SER5027A	
					5V/12V		-	SER5027P
					-	Low profile	SER5027AL	
			5V/12V		-		SER5027PL	
			921.6Kbps		-	Standard	SER5027H	
5V/12V					-		SER5027PH	
-		Low profile		SER5027HL				
5V/12V			-	SER5027PHL				
Express Card		4	DB44 Female	921.6Kbps	±15KV	-	34mm	ECS4000
		2				-		ECS2000
		1				DB9 Male		-
CardBus		4	DB44 Female	115.2Kbps	±15KV	-	54mm	CBS4000
	2	-				CBS2000		
	1	DB9 Male				-		CBS1000