

SER5056AL

4-port RS-232 Universal PCI
Low Profile Serial Board



Introduction

SUNIX SER5056AL, Universal PCI serial communication board, allows users to add or expand four RS-232 ports on PC-based system. The card is compatible with both 64 / 32-bit PCI architecture supporting 3.3 and 5V Bus, allowing it to be installed in any slim size PC-based system with low profile bracket structure. SUNIX SER5056AL 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 4 independent RS-232 serial ports with communication speeds up to 115.2Kbps.
- High speed SUN1999 16C950 compatible UART controller on-board.
- Compliance with PCI 33MHz Ver. 3.0/2.3/2.2./2.1 specification.
- Supports both 64-bit & 32-bit PCI bus slot and 3.3V & 5V power.
- On-chip hardware auto flow control to guarantee no data loss.
- Built-in ± 2 KV ESD protection for all serial signals.
- 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, RI
Controller	SUNIX SUN1999 (16C950 UART Compatible)	Baud rate	50bps ~115.2Kbps
BUS	Universal PCI 64/32bit 3.3V/5V PCI Ver 3.0, 2.3, 2.2, 2.1	Stop bit	1, 1.5, 2
No. of Port	4-port	Parity	even, odd, none, mark, space
IRQ & IO	Assigned by System	Flow Control	None, Xon/Xoff, RTS/CTS
FIFO	128byte Hardware	PCB Connector	DB44 Female
Protection	±2KV ESD protection for each signal Human Body Model (HBM)		

Driver Support

Windows Client	Windows XP/Vista/7/8/8.1 (X86/X64)
Windows Server	Windows 2000 / 2003 / 2008 / 2008 R2 / 2012 / 2012 R2 (X86/X64)
Windows Embedded	Windows CE 4.2/5.0/6.0/XP Embedded/POSReady 2009/POSReady 7/ Embedded System 2009/Embedded Standard 7
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 ◆ Windows Client: XP/Vista/7/8/8.1 (X86/X64) ◆ Windows Server: 2000 / 2003 / 2008 / 2008 R2 / 2012 / 2012 R2 (X86/X64)

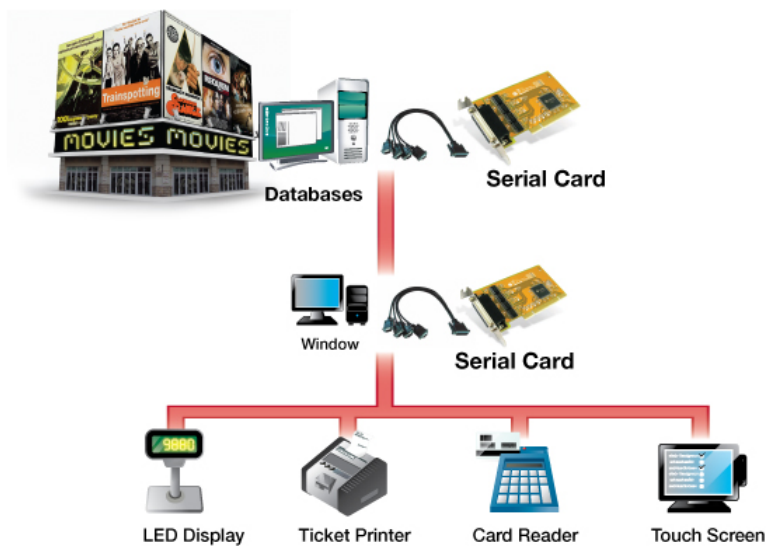
Environment

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)

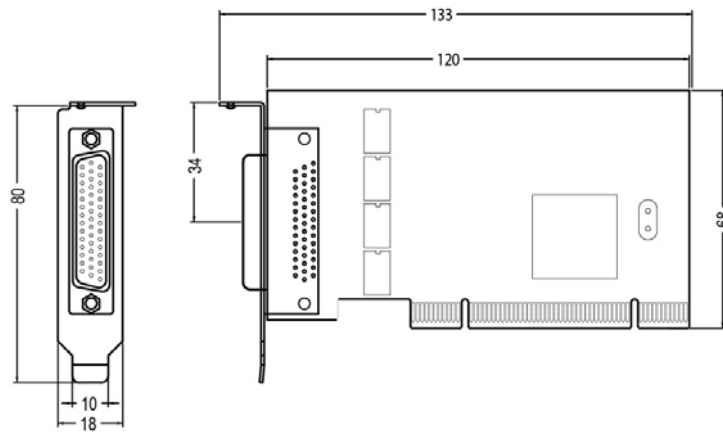
Dimension

PCB Dimension	120 x 68 mm
Bracket	Low Profile 80 mm
Bracket Space	1

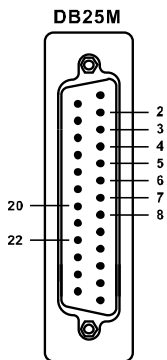
Application



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
RI	9	22



Packing List

Packing Content

- SER5056AL – 4-port RS-232 Universal PCI Low Profile Serial Board
- Quick Installation Guide
- Software CD ROM
- DB44 to 4-port DB9/DB25 Male Connection Cable, 40 cm



Optional Accessories

- DB44 to 4-port DB9 Male Connection Cable, 40/100 cm



- DB44 to 4-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	
			921.6Kbps		-	Low profile	SER5456AL		
					5V/12V		-	SER5456PL	
		DB9 Male	115.2 kbps		-	Standard	SER5456H		
					5V/12V		-	SER5456PH	
			921.6Kbps		-	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	±15KV	-	Standard	SER5066H
							Mini SCSI 68 female		-
	5x2 Pin Header	-	Low profile	SER5066UH					
		-		SER5066UHL					
	4	DB44 Female	115.2 Kbps	±2KV			-	Standard	SER5056A
							5V/12V		-
		5x2 Pin Header			-	Low profile	SER5056AL		
					5V/12V		-	SER5056PL	
		DB44 Female			921.6Kbps	±15KV	-	Standard	SER5056U
							-		SER5056UL
	5x2 Pin Header	-	Low profile	SER5056H					
		-		SER5056HL					
	DB44 Female	-	Low profile	SER5056PH					
		5V/12V		-			SER5056PHL		
	2	DB9 Male	115.2Kbps	±2KV	-	Standard	SER5037A		
					5V/12V		-	SER5037P	
		5x2 Pin Header			-	Low profile	SER5037U		
					-		SER5037AL		
		DB44 Female			-	Low profile	SER5037PH		
					5V/12V		-	SER5037PL	
		5x2 Pin Header	921.6Kbps	±15KV	-	Standard	SER5037UL		
					-		SER5037UHL		
		DB9 Male			-	Low profile	SER5037H		
					5V/12V		-	SER5037PH	
		5x2 Pin Header			-	Low profile	SER5037UH		
					-		SER5037UHL		
	DB44 Female	-	Low profile	SER5037PHL					
		5V/12V		-	SER5037PHL				
	1	DB9 Male	115.2Kbps	±2KV	-	Standard	SER5027A		
					5V/12V		-	SER5027P	
		5x2 Pin Header			-	Low profile	SER5027U		
					-		SER5027AL		
DB9 Male		921.6Kbps	±15KV	-	Standard	SER5027PH			
				5V/12V		-	SER5027UH		
5x2 Pin Header				-	Low profile	SER5027HL			
				-		SER5027PHL			
DB9 Male				-	Low profile	SER5027H			
				5V/12V		-	SER5027PH		
5x2 Pin Header	-	Low profile	SER5027UH						
	-		SER5027UHL						
DB9 Male	-	Low profile	SER5027HL						
	5V/12V		-	SER5027PHL					
Express Card	4	DB44 Female	921.6Kbps	±15KV	-	34mm	ECS4000		
	2				-	34mm	ECS2000		
	1				-	34mm	ECS1000		
CardBus	4	DB44 Female	115.2Kbps	±15KV	-	54mm	CBS4000		
	2				-	54mm	CBS2000		
	1				-	54mm	CBS1000		