

## SER5037AL

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



### Introduction

SUNIX SER5037AL, Universal PCI serial communication board, allows users to add or expand two 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 SER5037AL card has 128-bytes onboard FIFO buffer and compatible with 16C950 UART specification. It is designed with SUNIX UART controller, SUN1989 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 2 independent RS-232 serial ports with communication speeds up to 115.2Kbps.
- High speed SUN1989 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  $\pm 2$ 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

<b>Interface</b>	RS-232	<b>Signal</b>	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND, RI
<b>Controller</b>	SUNIX SUN1989 (16C950 UART Compatible)	<b>Baud rate</b>	50bps ~115.2Kbps
<b>BUS</b>	Universal PCI 64/32bit 3.3V/5V PCI Ver 3.0, 2.3, 2.2, 2.1	<b>Stop bit</b>	1, 1.5, 2
<b>No. of Port</b>	2-port	<b>Parity</b>	even, odd, none, mark, space
<b>IRQ &amp; IO</b>	Assigned by System	<b>Flow Control</b>	None, Xon/Xoff, RTS/CTS
<b>FIFO</b>	128byte Hardware	<b>Protection</b>	±2KV ESD protection for each signal Human Body Model (HBM)
<b>PCB Connector</b>	DB44 Female		

### Driver Support

<b>Microsoft Client</b>	Windows XP/Vista/7 (X86/X64)
<b>Microsoft Server</b>	Windows 2000/2003/2008 (X86/X64)
<b>Microsoft Embedded</b>	Windows CE5.0/6.0/XP Embedded/POS Ready 2009/Embedded System 2009
<b>Linux</b>	Linux 2.4.x/2.6.x
<b>DOS</b>	DOS
<b>FreeBSD</b>	FreeBSD 5.3~5.5 / 6.0~6.4
<b>QNX</b>	QNX 6.3.2/6.4.0
<b>* IBM OS/2</b>	WARP 3/WARP 4
<b>* SCO UnixWare</b>	UnixWare 7.1.3/7.1.4/ Open Server 5.0.7/6.0
<b>* Sun Microsystems</b>	Solaris 10

Note : " \* " Supported by special inquiry.

### Regulatory Approvals

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

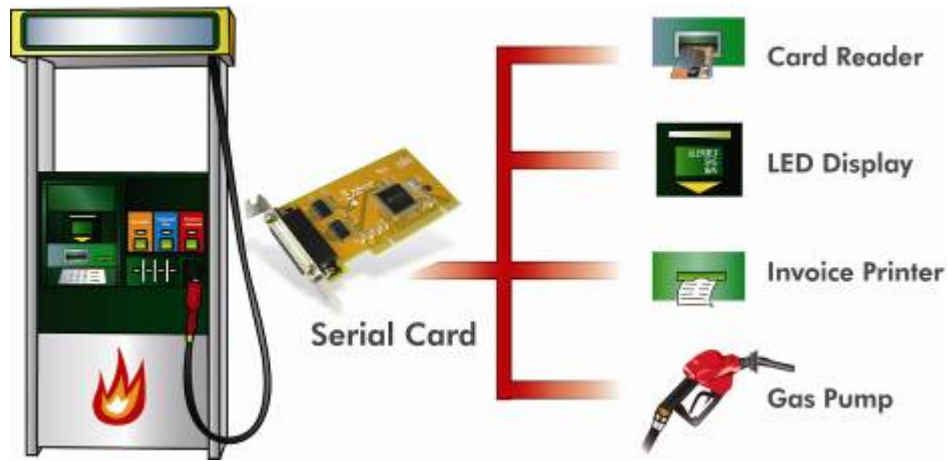
### Environment

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

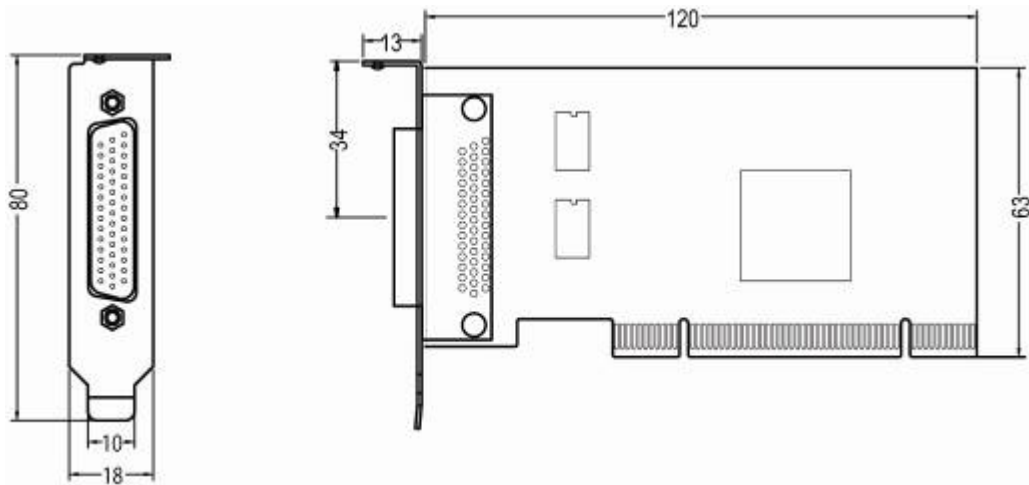
### Dimension

<b>PCB Dimension</b>	120 x 63 mm
<b>Bracket</b>	Low Profile 80 mm
<b>Bracket Space</b>	1

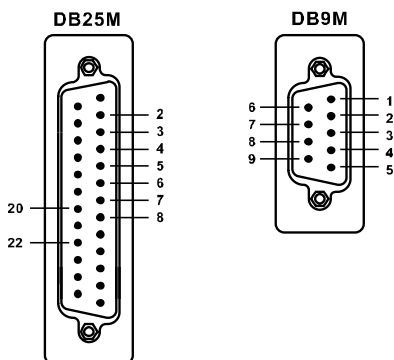
## Application



## 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

- SER5037AL – 2-port RS-232 Universal PCI Low Profile Serial Board
- Quick Installation Guide
- Software CD ROM
- DB44 to 2-port DB9/DB25 Male Connection Cable, 40 cm



## Optional Accessories

- DB44 to 2-port DB9 Male Connection Cable, 40/100 cm

**Part Number:** 1WDB-44M04009D2000



- DB44 to 2-port DB25 Male Connection cable, 40/100 cm

**Part Number:** 1WDB-44M04025D2000



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	-	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	-	Standard	SER5056U
						-		SER5056UL
	5x2 Pin Header	-	Low profile	SER5056H				
		-		SER5056HL				
	2	DB9 Male	115.2Kbps	±15KV		5V/12V	Standard	SER5056PH
						-		SER5056UH
		5x2 Pin Header			-	Low profile	SER5056UHL	
					-		SER5056PHL	
		DB44 Female			921.6Kbps	-	Standard	SER5037A
						5V/12V		-
	5x2 Pin Header	-	Low profile	SER5037U				
		-		SER5037AL				
	DB9 Male	115.2Kbps	-	Standard		SER5037PL		
			5V/12V			-	SER5037UL	
	5x2 Pin Header		-	Low profile	SER5037H			
			-		SER5037PH			
	DB9 Male		921.6Kbps	-	Standard	SER5037UH		
				5V/12V		-	SER5037HL	
	5x2 Pin Header	-		Low profile	SER5037UHL			
		5V/12V			-	SER5037PHL		
	1	DB9 Male		115.2Kbps	±2KV	-	Standard	SER5027A
						5V/12V		-
		5x2 Pin Header	-			Low profile	SER5027U	
			-				SER5027AL	
DB9 Male		921.6Kbps	-			Standard	SER5027PL	
			5V/12V				-	SER5027UL
5x2 Pin Header	-		Low profile	SER5027H				
	-			SER5027PH				
DB9 Male	921.6Kbps		-	Standard	SER5027UH			
			5V/12V		-	SER5027HL		
5x2 Pin Header		-	Low profile	SER5027UHL				
		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	