

SER5437A

2-port RS-232 PCI Express
Serial Board



Introduction

SUNIX SER5437A, 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. 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 2 serial ports to their system, allowing them to use serial devices further. SUNIX SER5437A 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.
- 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.
- 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 SUN1989 (16C950 UART Compatible)	Baud rate	50bps ~115.2Kbps
BUS	PCI Express one lane (x1)	Stop bit	1, 1.5, 2
No. of Port	2-port	Parity	even, odd, none, mark, space
IRQ & IO	Assigned by System	Flow Control	None, Xon/Xoff, RTS/CTS
FIFO	128byte Hardware	PCB Connector	DB9 Male
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 CE5.0/6.0/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)

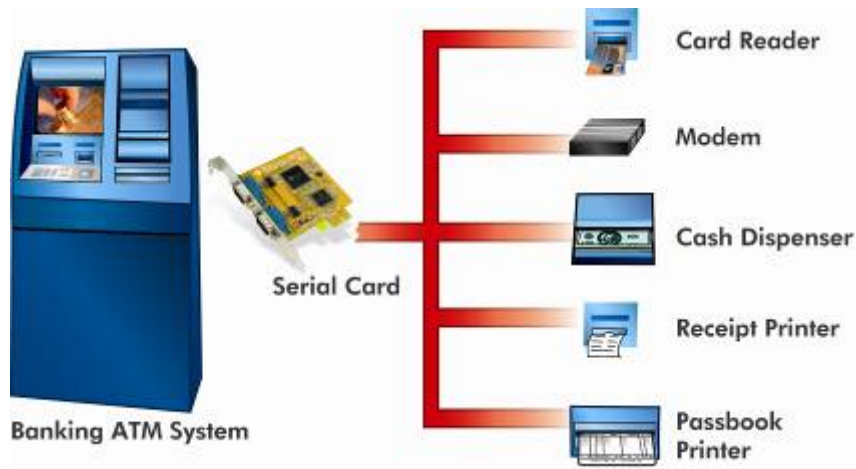
Environment

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)

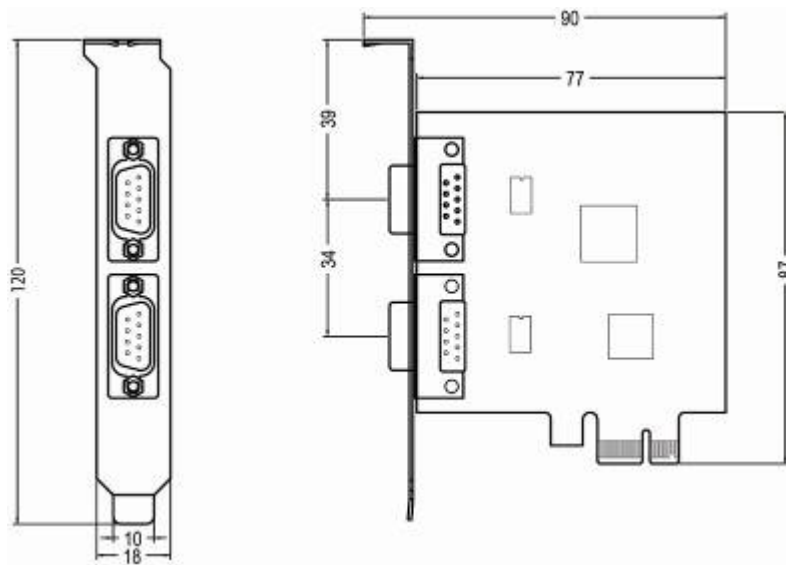
Dimension

PCB Dimension	77 x 87 mm
Bracket	Standard 121 mm
Bracket Space	1

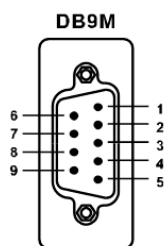
Application



Mechanical Drawings (Unit = mm)



Pin Assignment



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



Packing List

Packing Content

- SER5437A – 2-port RS-232 PCI Express Serial Board
- Quick Installation Guide
- Software CD ROM



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		-	SER5066HL
	5x2 Pin Header	-	Low profile	SER5066UH					
		-		SER5066UHL					
	4	DB44 Female	115.2 Kbps	±15KV		-	Standard	SER5056A	
						5V/12V		-	SER5056P
		5x2 Pin Header	921.6Kbps		-	Low profile	SER5056AL		
					5V/12V		-	SER5056PL	
		DB44 Female	921.6Kbps		-	Standard	SER5056U		
					-		SER5056UL		
	5x2 Pin Header	-		Low profile	SER5056H				
		-			SER5056HL				
	DB44 Female	-		Standard	SER5056PH				
		5V/12V			-	SER5056PUH			
	DB9 Male	115.2Kbps	±2KV	-	Standard	SER5037A			
				5V/12V		-	SER5037P		
	5x2 Pin Header			921.6Kbps	-	Low profile	SER5037U		
					-		SER5037AL		
	DB44 Female			921.6Kbps	-	Standard	SER5037PL		
					5V/12V		-	SER5037UL	
	5x2 Pin Header	115.2Kbps	-		Low profile	SER5037H			
			-			SER5037PH			
	DB9 Male	921.6Kbps	±15KV		-	Standard	SER5037UH		
					5V/12V		-	SER5037HL	
	5x2 Pin Header			115.2Kbps	-	Low profile	SER5037HHL		
					-		SER5037PHL		
	DB44 Female			115.2Kbps	±2KV	-	Standard	SER5027A	
						5V/12V		-	SER5027P
	DB9 Male	921.6Kbps	±15KV			-	Low profile	SER5027U	
						-		SER5027AL	
	5x2 Pin Header	115.2Kbps				-	Standard	SER5027PL	
						-		SER5027UL	
DB9 Male	921.6Kbps	±15KV		-	Low profile	SER5027H			
				5V/12V		-	SER5027PH		
5x2 Pin Header			115.2Kbps	-	Standard	SER5027UH			
				-		SER5027HL			
DB9 Male			921.6Kbps	±15KV	-	Low profile	SER5027PHL		
					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		