



SER6437AL

2-port RS-232 Low Profile
PCI Express Board



Introduction

SUNIX SER6437AL, PCI Express serial communication board meets the PCI Express Base Specification Revision 2.0, allows users to add or expand two RS-232 COM ports on PC-based system to use serial devices further. 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 motherboard is not equipped with serial ports or only have one serial port. With SUNIX PCI Express serial board, users can add one serial port to their system, allowing them to use serial devices further. SUNIX SER6437AL card has 128-bytes onboard FIFO buffer and compatible with 16C950 UART specifications. It is designed with SUNIX UART controller, SUN2212 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 two independent RS-232 serial ports with communication speeds up to 115.2Kbps.
- With high reliable SUNIX SUN2212 native PCI Express 16C950 UART controller.
- Designed to meet PCI Express Base Specification Revision 2.0.
- 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 $\pm 15\text{KV}$ 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

General

Interface	RS-232
Controller	SUNIX SUN2212 (16C950 UART Compatible)
BUS	PCI Express Spec 2.0, Single-Lane (x1)
IRQ & IO	Assigned by System

Serial Communication

Interface	RS-232
No. of Port	2-port
FIFO	128byte Hardware
Signal	DCD, TxD, RxD, RTS, CTS, DTR, DSR, GND, RI
Baud rate	50bps ~ 115.2Kbps
Stop bit	1, 1.5, 2
Parity	even, odd, none, mark, space
Flow Control	None, Xon/Xoff, RTS/CTS
Protection	±15KV ESD protection for each signal Human Body Model (HBM) ±15KV IEC1000-4-2 Air Gap Discharge ±8KV IEC1000-4-2 Contact Discharge
PCB Connector	DB44 Female

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 /3.x
DOS	DOS
FreeBSD	FreeBSD 5.3~5.5 / 6.0~6.4
QNX	QNX 6.3.2/6.4.0

Regulatory Approvals

Hardware	CE EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, VCCI Class B 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)

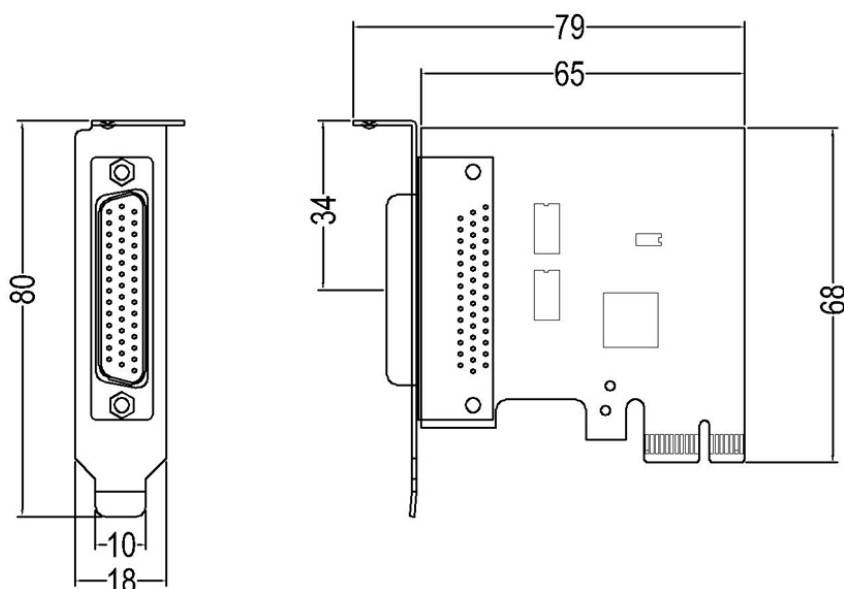
Environment

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

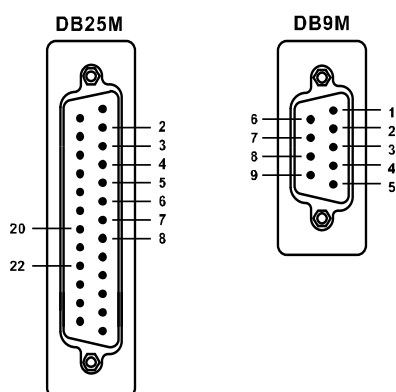
PCB Dimension	65 x 68 mm
Bracket	Low Profile 80 mm
Bracket Space	1

Mechanical Drawings (Unit = mm)



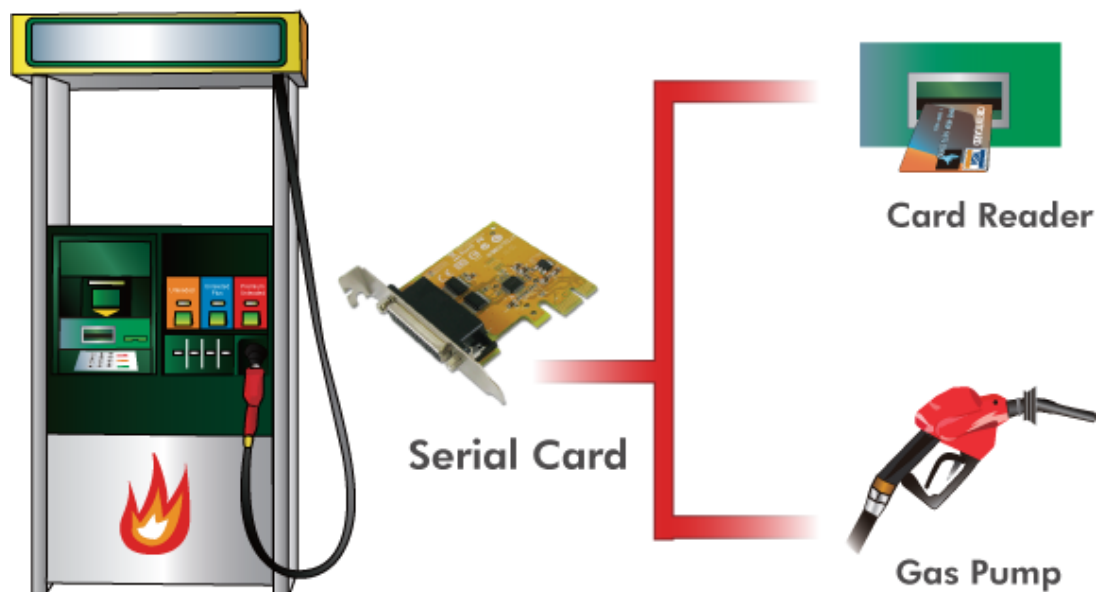
Pin Assignment

Serial



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

Application



Package

- SER6437AL– 2-port RS-232 Low Profile PCI Express Board.
- Quick Installation Guide.
- Software CD Driver
- DB44 to 2-port DB9 Male Connection Cable, 40 cm



Optional Accessories

- DB44 to 2-port DB9 Male Connection Cable, 40cm
Part Number: 1WDB-44M04009C2000
- DB44 to 2-port DB25 Male Connection Cable, 40cm
Part Number: 1WDB-44M04025A2001
- DB44 to 2-port DB9 Male Connection Cable, 100cm
Part Number: 1WDB-44M10009C2000
- DB44 to 2-port DB25 Male Connection Cable, 100cm
Part Number: 1WDB-44M10009C2A10
- PCIe Add-on Card Holder
Part No.: 13BF-PCIEFIX010000



Order Information

Bus	Port	Connector	Baud Rate	ESD Protection	Power output	Bracket	Model NO.	
PCI Express	16	Mini SCSI 68 Female	921.6Kbps	±15KV	-	Standard	SER5416H	
	8	DB62 Female	115.2Kbps				SER5466A	
			921.6Kbps				SER5466H	
		Mini SCSI 68 Female	115.2Kbps			Low Profile	SER5466AL	
			921.6Kbps				SER5466HL	
	4	DB44 Female	115.2Kbps		-	Standard	SER6456A	
			921.6Kbps				SER6456H	
			115.2Kbps		5V/12V		SER6456P	
			921.6Kbps				SER6456S	
			921.6Kbps				SER6456PH	
			115.2Kbps		-	Low Profile	SER6456SH	
			921.6Kbps				SER6456AL	
			115.2Kbps		5V/12V		SER6456HL	
			921.6Kbps				SER6456PL	
			115.2Kbps				SER6456SL	
			921.6Kbps				SER6456PHL	
			921.6Kbps				SER6456SHL	
	2	DB9 Male	115.2Kbps		-	Standard	SER6437A	
			921.6Kbps				SER6437H	
			115.2Kbps		5V/12V		SER6437P	
			921.6Kbps				SER6437S	
		DB44 Female	115.2Kbps		Low Profile		SER6437PH	
			921.6Kbps				-	
			115.2Kbps			SER6437AL		
			115.2Kbps			5V/12V		SER6437HL
			921.6Kbps					SER6437PL
			115.2Kbps					SER6437SL
			921.6Kbps					SER6437PHL
			921.6Kbps					SER6437SHL
	1	DB9 Male	115.2Kbps		-	Standard	SER6427A	
			921.6Kbps				SER6427H	
			115.2Kbps		5V/12V		SER6427P	
			921.6Kbps				SER6427S	
			921.6Kbps		Low Profile		SER6427PH	
			115.2Kbps				-	
			921.6Kbps			SER6427AL		
			921.6Kbps			5V/12V		SER6427HL
			115.2Kbps					SER6427PL
			921.6Kbps					SER6427SL
			921.6Kbps					SER6427PHL
			921.6Kbps					SER6427SHL

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