



SER6437HL

**2-port RS-232 High Speed
PCI Express Low Profile Board**



Introduction

SUNIX SER6437HL, PCI Express serial communication board meets the PCI Express Base Specification Revision 2.0. 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 SER6437HL 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 921.6Kbps.
- 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 ~ 921.6Kbps
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)

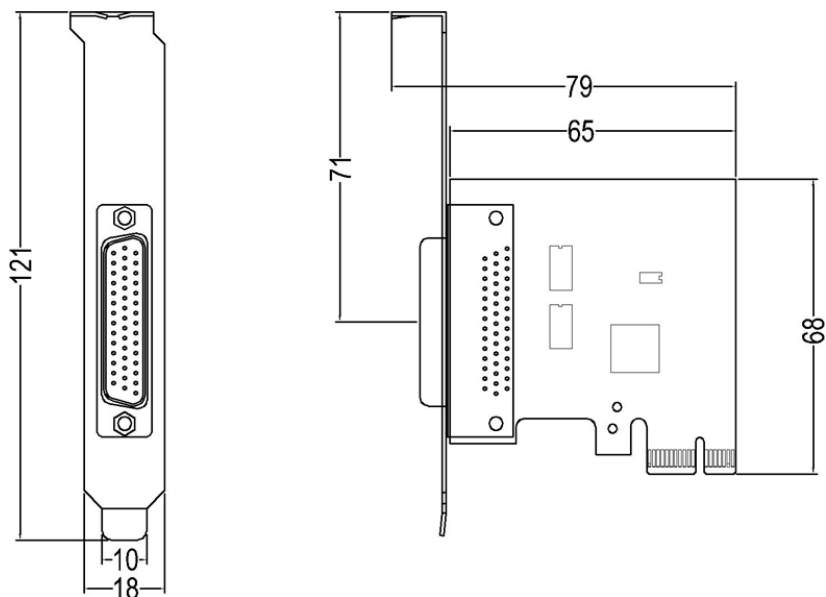
Environment

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

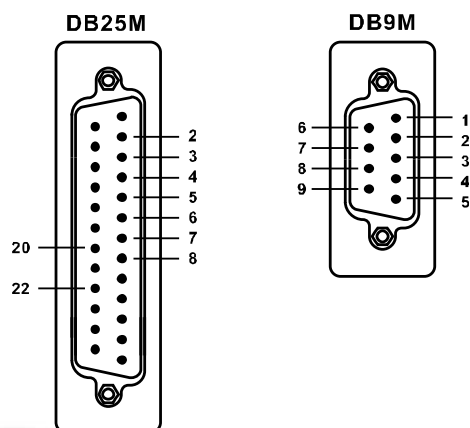
PCB Dimension	65 x 68 mm
Bracket	Low Profile 80 mm
Bracket Space	1

Mechanical Drawings (Unit = mm)



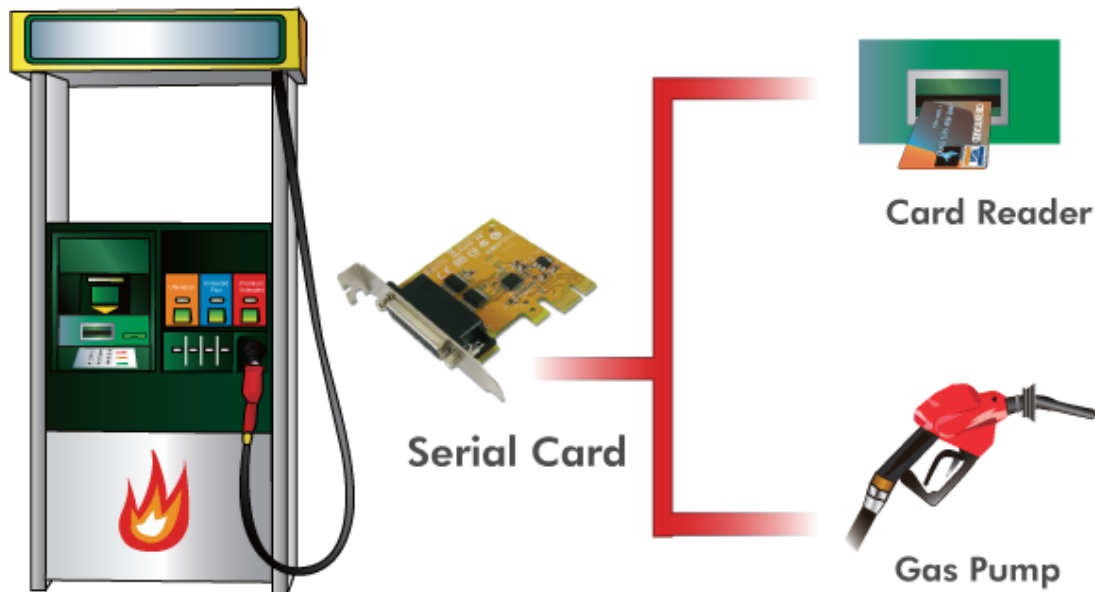
Pin Assignment

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

- SER6437HL- 2-port RS-232 High Speed PCI Express Low Profile 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
	921.6Kbps				SER6456H		
	115.2Kbps				SER6456P		
	5V/12V				SER6456S		
					SER6456PH		
					SER6456SH		
					-	Low Profile	SER6456AL
	SER6456HL						
	SER6456PL						
	SER6456SL						
	SER6456PHL						
	SER6456SHL						
	2	DB9 Male	115.2Kbps		-	Standard	SER6437A
			921.6Kbps				SER6437H
			115.2Kbps				SER6437P
			5V/12V				SER6437S
							SER6437PH
							SER6437SH
		-			Low Profile	SER6437AL	
			SER6437HL				
			SER6437PL				
			SER6437SL				
			SER6437PHL				
			SER6437SHL				
	1	DB9 Male	115.2Kbps		-	Standard	SER6427A
			921.6Kbps				SER6427H
			115.2Kbps				SER6427P
			5V/12V				SER6427S
							SER6427PH
							SER6427SH
					-	Low Profile	SER6427AL
			SER6427HL				
			SER6427PL				
			SER6427SL				
			SER6427PHL				
			SER6427SHL				

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