



SER6456H

4-port RS-232 High Speed
PCI Express Board



Introduction

SUNIX SER6456H, PCI Express serial communication boards meet 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 PC-based system. 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 four serial ports to their system, allowing them to use serial devices further. SUNIX SER6456H card has 128-bytes onboard FIFO buffer and compatible with 16C950 UART specification. It is designed with SUNIX UART controller, SUN2410 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 921.6Kbps.
- With high reliable SUNIX SUN2410 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 ± 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

General

Interface	RS-232
Controller	SUNIX SUN2410 (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	4-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)



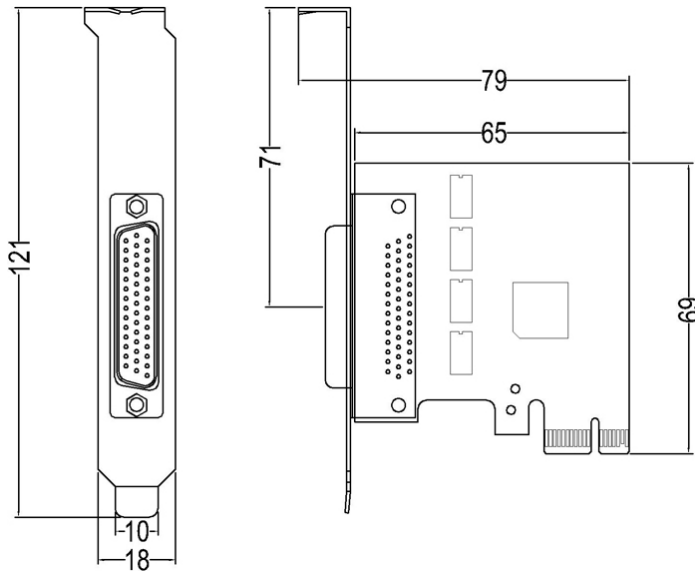
Environment

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

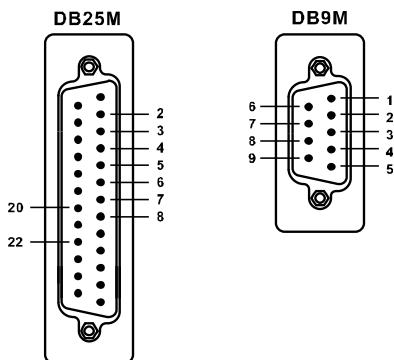
PCB Dimension	65 x 69 mm
Bracket	Standard 121 mm
Bracket Space	1

Mechanical Drawings (Unit = mm)



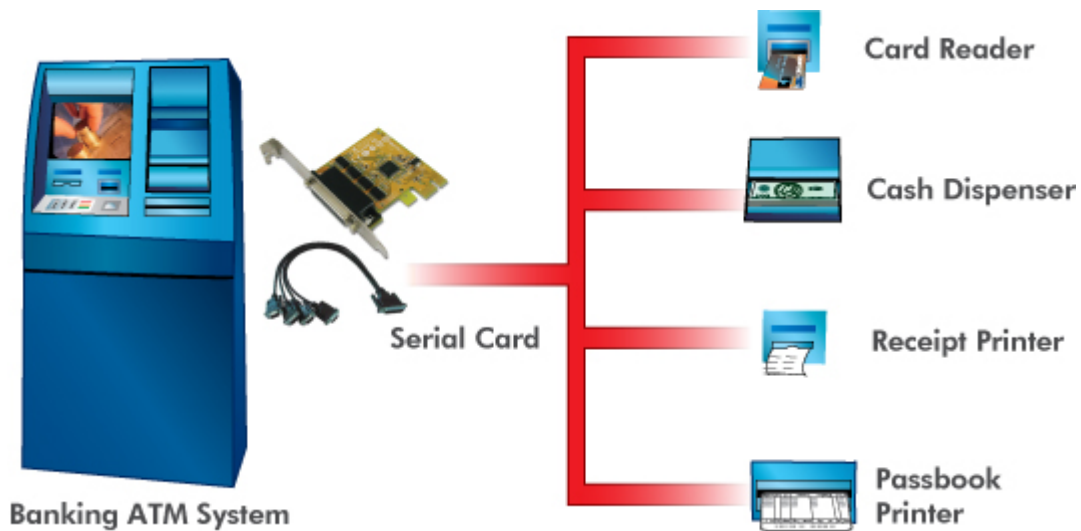
Pin Assignment

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

- SER6456H- 4-port RS-232 High Speed PCI Express Board.
- Quick Installation Guide.
- Software CD Driver
- DB44 to 4-port DB9 Male Connection Cable, 40 cm

Optional Accessories

- DB44 to 4-port DB9 Male Connection Cable, 40cm
Part No.: 1WDB-44M04009D4001
- DB44 to 4-port DB25 Male Connection Cable, 40cm
Part No.: 1WDB-44M04025D4000
- DB44 to 4-port DB9 Male Connection Cable, 100cm
Part No.: 1WDB-44M10009C4000
- DB44 to 4-port DB25 Male Connection Cable, 100cm
- 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
			115.2Kbps				SER5466A
	921.6Kbps	SER5466H					
	115.2Kbps	SER5466AL					
	8	DB62 Female	921.6Kbps			SER5466HL	
			115.2Kbps			SER6456A	
		Mini SCSI 68 Female	921.6Kbps			SER6456H	
			115.2Kbps			SER6456P	
	4	DB44 Female	921.6Kbps			SER6456S	
			115.2Kbps			SER6456PH	
			921.6Kbps			SER6456SH	
			115.2Kbps			SER6456AL	
			921.6Kbps		SER6456HL		
			115.2Kbps		SER6456PL		
			921.6Kbps		SER6456SL		
			921.6Kbps		SER6456PHL		
			921.6Kbps		SER6456SHL		
			115.2Kbps		SER6437A		
			921.6Kbps		SER6437H		
			2		DB9 Male	115.2Kbps	SER6437P
	921.6Kbps	SER6437S					
	DB44 Female	115.2Kbps			SER6437PH		
		921.6Kbps			SER6437SH		
	1	DB9 Male	115.2Kbps		SER6437AL		
			921.6Kbps		SER6437HL		
			115.2Kbps		SER6437PL		
			115.2Kbps		SER6437SL		
			921.6Kbps		SER6437PHL		
			921.6Kbps		SER6437SHL		
			115.2Kbps		SER6427A		
			921.6Kbps		SER6427H		
	-	5V/12V	115.2Kbps		SER6427P		
921.6Kbps			SER6427S				
-		-	115.2Kbps	SER6427PH			
			921.6Kbps	SER6427SH			
5V/12V	Standard	115.2Kbps	SER6427AL				
		921.6Kbps	SER6427HL				
	Low Profile	-	115.2Kbps	SER6427PL			
			921.6Kbps	SER6427SL			
5V/12V	Standard	115.2Kbps	SER6427PHL				
		921.6Kbps	SER6427SHL				
	Low Profile	-	115.2Kbps	SER6427AL			
			921.6Kbps	SER6427HL			

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