



# SER6456A

4-port RS-232  
PCI Express Board



## Introduction

SUNIX SER6456A, 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 SER6456A 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 115.2Kbps.
- 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  $\pm 15\text{KV}$  ESD protection.
- 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

<b>Interface</b>	RS-232
<b>Controller</b>	SUNIX SUN2410 (16C950 UART Compatible)
<b>BUS</b>	PCI Express Spec 2.0, Single-Lane (x1)
<b>IRQ &amp; IO</b>	Assigned by System

### Serial Communication

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

### Driver Support

<b>Windows Client</b>	XP / Vista / 7 / 8.x / 10 (X86/X64) / 11
<b>Windows Server</b>	2003 / 2008 / 2012 / 2016 / 2019 / 2022 (X64)
<b>Windows Embedded</b>	Windows CE 4.2/5.0/6.0 XP Embedded / POSReady 2009 / POSReady 7 / Embedded System
<b>Linux</b>	Linux 2.x / 3.x / 4.x / 5.x
<b>DOS</b>	DOS

### Regulatory Approvals

<b>Hardware</b>	CE/FCC/VCCI/BSMI
<b>Software</b>	Microsoft WHQL Windows Windows Client: XP / Vista / 7 / 8.x / 10 (X86/X64) / 11 Windows Server: 2003 / 2008 / 2012 / 2016 / 2019 / 2022 (X64)

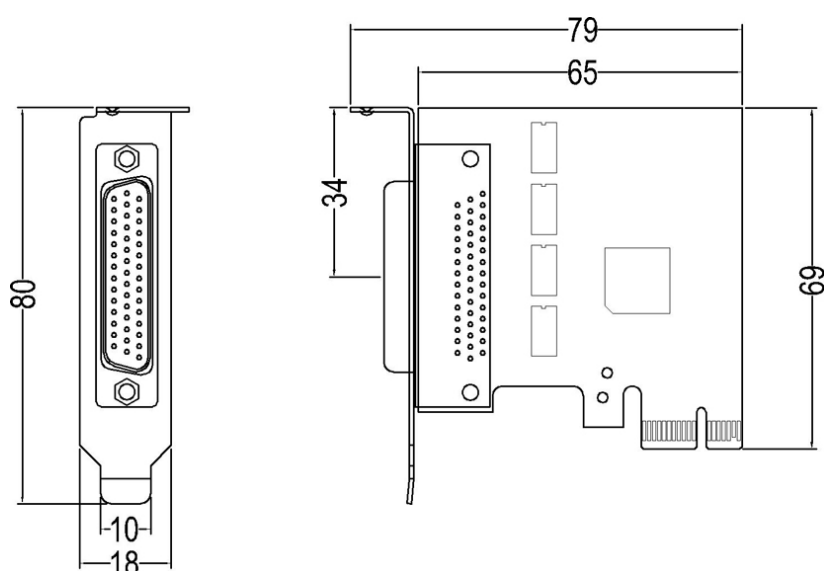
## Environment

<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

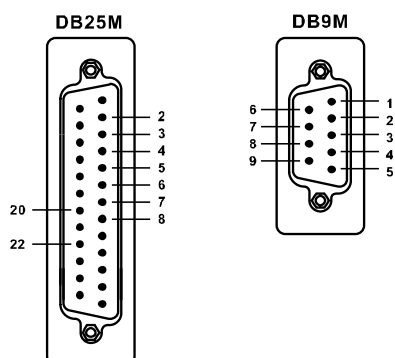
<b>PCB Dimension</b>	65 x 69 mm
<b>Bracket</b>	Standard 121 mm
<b>Bracket Space</b>	1

## Mechanical Drawings (Unit = mm)



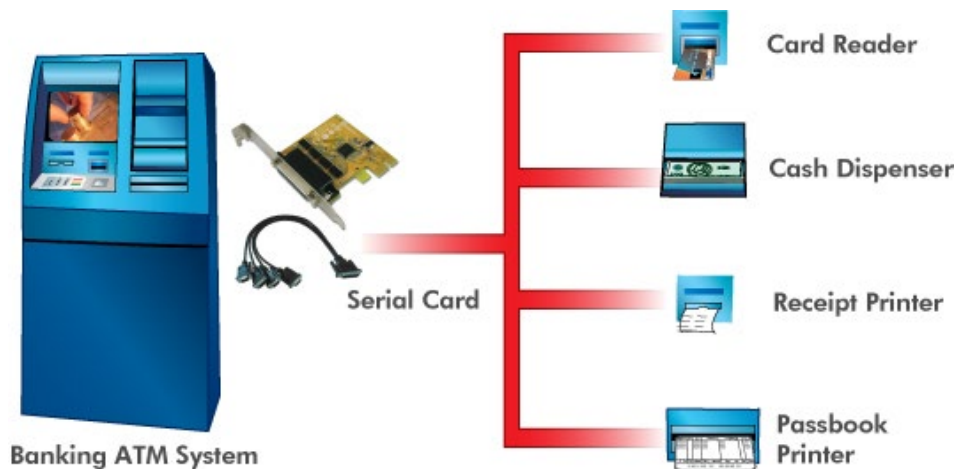
## Pin Assignment

### 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

- SER6456A- 4-port RS-232 PCI Express Board.
- Quick Installation Guide.
- Software CD Driver
- DB44 to 4-port DB9 Male Connection Cable, 40 cm

Part No.: 1WDB-44M04009D4003



## Optional Accessories

- PCIe Add-on Card Holder

Part No.: 13BF-PCIEFIX0



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