

# SER6437A

2-port RS-232  
PCI Express Card



## Introduction

SUNIX SER6437A, PCI Express serial communication card 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 PC-based system. The majorities of today's motherboard is not equipped with serial ports or only have one serial port. With SUNIX PCI Express serial card, users can add serial ports to their system, allowing them to use serial devices further. SUNIX SER6437A card has 128-bytes onboard FIFO buffer and it is designed with SUNIX UART controller, SUN2212 as well as building 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 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 IEC61000-4-2 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 and Linux OS.

## Specifications

### Serial Communication

|                       |  |                     |                              |
|-----------------------|--|---------------------|------------------------------|
| <b>Interface</b>      | RS-232                                     | <b>Baud rate</b>    | 50bps ~ 115.2Kbps            |
| <b>Controller</b>     | SUNIX SUN2212                              | <b>Stop bit</b>     | 1, 1.5, 2                    |
| <b>BUS</b>            | PCI Express 2.0 x 1(single lan)            | <b>Parity</b>       | even, odd, none, mark, space |
| <b>No. of Port</b>    | 2-port                                     | <b>Flow Control</b> | None,Xon/Xoff,RTS/CTS        |
| <b>IRQ &amp; IO</b>   | Assigned by System                         | <b>FIFO</b>         | 128byte Hardware             |
| <b>Signal</b>         | DCD, TxD, RxD, RTS, CTS, DTR, DSR, GND, RI |                     |                              |
| <b>ESD Protection</b> | ±15KV Air / ±8KV Contact                   |                     |                              |
| <b>PCB Connector</b>  | DB9 Male                                   |                     |                              |

### Driver Support

|                         |   |
|-------------------------|---|
| <b>Microsoft Client</b> | XP / Vista / 7 / 8.x / 10 (X86/X64) / 11                      |
| <b>Microsoft Server</b> | 2003 / 2008 / 2012 / 2016 / 2019 / 2022 (X64)                 |
| <b>Windows Embedded</b> | XP Embedded / POSReady 2009 / POSReady / Embedded System 2009 |
| <b>Linux</b>            | Linux 2.x / 3.x / 4.x / 5.x / 6.x                             |
| <b>DOS</b>              | DOS   |

### Regulatory Approvals

|                 |   |
|-----------------|---|
| <b>Hardware</b> | CE/ FCC / VCCI / BSMI   |
| <b>Software</b> | Microsoft WHQL Windows<br>Microsoft Client: 10 (X86/X64) / 11<br>Microsoft Server: 2022 |

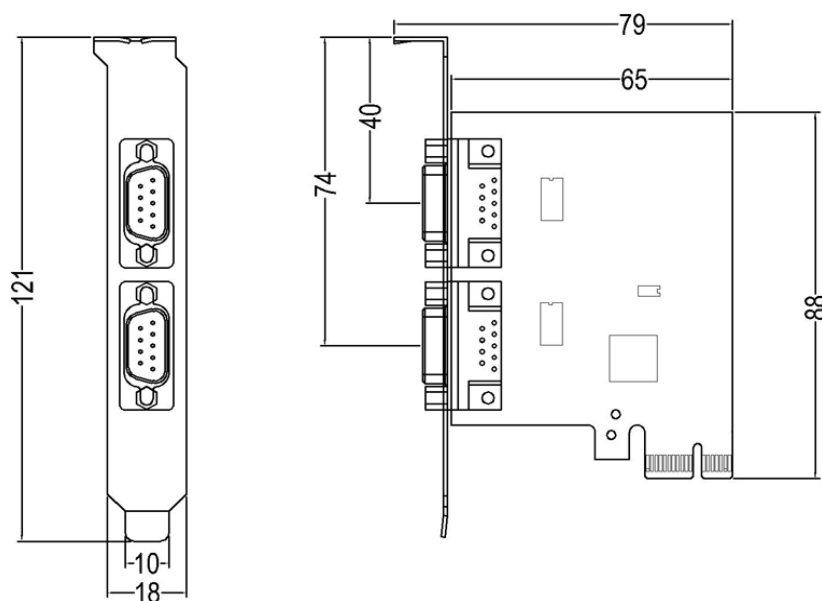
### Environment

|                              |                           |
|------------------------------|---------------------------|
| <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

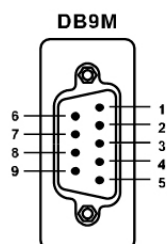
|               |                 |
|---------------|-----------------|
| PCB Dimension | 65 x 88 mm      |
| Bracket       | Standard 121 mm |
| Bracket Space | 1               |

## Mechanical Drawing (Unit = mm)



## Pin Assignment

### ■ RS-232



| Define | Pin |
|--------|-----|
| DCD    | 1   |
| RxD    | 2   |
| TxD    | 3   |
| DTR    | 4   |
| GND    | 5   |
| DSR    | 6   |
| RTS    | 7   |
| CTS    | 8   |
| RI     | 9   |

## Package

- SER6437A - 2-port RS-232 PCI Express Card x1
- Quick Installation Guide x1

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