

## MIO4096AM

4 ports RS-232 & 2 ports Parallel  
Multi-I/O PCI Board



### Introduction

The majority of today's motherboards is not equipped with any RS-232 or parallel LPT port. With SUNIX MIO4096AM Multi I/O board, users can expand four RS-232 and two IEEE1284 parallel ports on their system, allowing them to use traditional serial and parallel devices further. SUNIX MIO4096AM is compatible with both 32/64-bit PCI architecture supporting 3.3 and 5V Bus, allowing the board to be installed in virtually any PC system. Furthermore, SUNIX MIO4096AM Multi-IO card supports majority of the OS on the market. We provide driver support for Microsoft Windows X86/X64 platform, and Linux 2.2.x ~ 2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

### Features

- Expands 4 ports RS-232 and 2 ports IEEE1284 interface on system.
- Universal PCI compatible with 64/32-bit PCI-X/PCI Bus and 3.3/5V connector key.
- High reliability SUNIX UL7522EQ 16C750 compatible Multi-IO controller on-board
- Expands four RS-232 serial ports with communication speeds up to 230.4Kbps.
- 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.
- Support IEEE 1284-1994 parallel port standard
  - ◆ ECP(Enhance Capacity Port) / EPP(Enhance Parallel Port)
  - ◆ SPP(Standard Parallel Port) / BPP(Bi-direction Parallel Port)
- Plug-n-Play, I/O address and IRQ assigned by BIOS.
- Certified by RoHS CE, FCC ClassB approval
- Support DOS, Linux, Microsoft 3.x, 9x, Me, NT, 2000, XP, 2003, Vista, and 2008.
- Ready for the Intel® and AMD® 32/64-bit operation system



## Specifications

### General

**Interface:** RS-232 and IEEE1284

**Controller:** SUNIX UL7512EQ  
(16C650 UART Compatible)

**BUS:** Universal PCI 64/32bit 3.3V/5V,  
PCI Ver 2.3/2.2/2.1

**IRQ & IO:** Assigned by system

### Serial Communication

**Interface:** RS-232

**No. of Port:** 4-port

**FIFO:** 32byte Hardware

**Signal:** TxD, RxD, RTS, CTS, DTR, DSR, DCD,  
GND, RI

**Baud rate:** 50~230.4Kbps

**Data bit:** 5, 6, 7, 8

**Stop bit:** 1, 1.5, 2

**Parity:** even, odd, none, mark, space

**Flow Control:** None, Xon/Xoff, RTS/CTS

**Protection:** ±15KV Human Body Model (HBM)  
±15KV IEC1000-4-2 Air Gap Discharge  
±8KV IEC1000-4-2 Contact Discharge

**PCB Connector:** DB44 Female

### Parallel Communication

**Interface:** IEEE1284

**No. of Port:** 2-port

**Mode:** SPP/ECP/EPP/BPP(PS2)

**Speed:** Maximum 2.7MBps

**FIFO:** 16byte Hardware

**PCB Connector:** 5x2 Pin Header (2 Sets)

### Driver Support:

**Microsoft Windows:** 3.1/95/98/ME/2000/XP/Vista (X86/X64)

**Microsoft Embedded:** XP Embedded

**Microsoft Server:** NT/2003/2008 (X86/X64)

**Linux:** Linux 2.4.x / 2.6.x

**DOS:** DOS

### Regulatory Approvals:

**Hardware:** EN55022 Class B, EN55024, EN61000-3-2,  
EN61000-3-3, FCC Part 15 Class B, RoHS

**Software:** Microsoft WHQL Window XP/Vista

### Operation Environment:

**Operation Temperature:** 0 to 60°C (32 to 140°F)

**Operation Humidity:** 5 to 95% RH

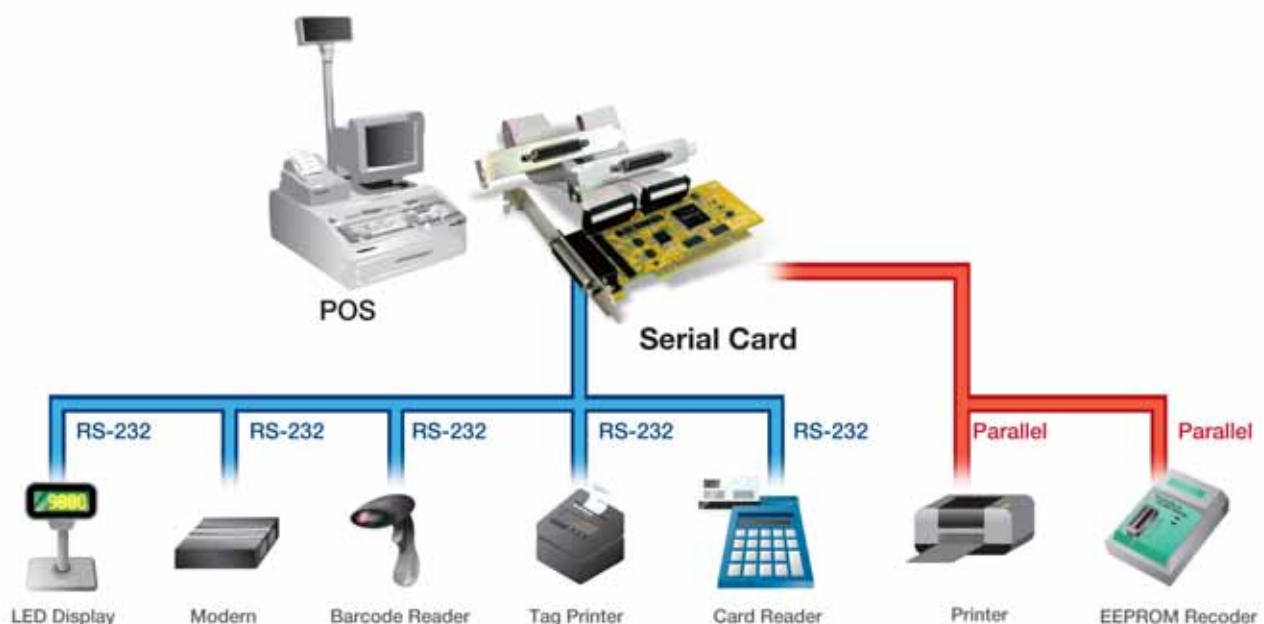
**Storage Temperature:** -20 to 85°C (-4 to 185°F)

### Dimension(Unit = mm):

**PCB Dimension:** 140 x 61

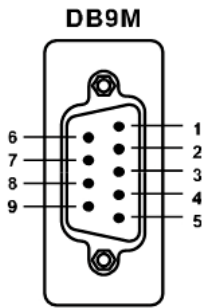
**Bracket:** Standard 121,

## Application



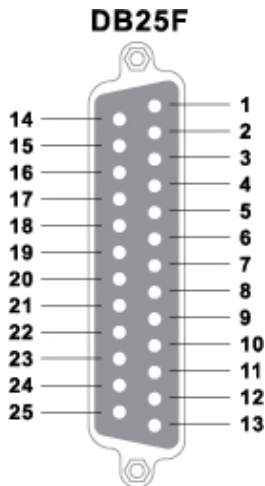


## Pin Assignment



DB9M	PIN
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

### Parallel



DB25F	PIN	DB25F	PIN
1	STROBE	14	AUTO FEED
2	DATA0	15	ERROR
3	DATA1	16	INT
4	DATA2	17	SELECT INPUT
5	DATA3	18	GND
6	DATA4	19	GND
7	DATA5	20	GND
8	DATA6	21	GND
9	DATA7	22	GND
10	ACKNOWLEDGE	23	GND
11	BUSY	24	GND
12	PAPER EMPTY	25	GND
13	SELECT		GND



## Packing List

### Packing Content

- MIO4096AM- 4 ports RS-232 & 2 ports Multi-I/O Parallel PCI Board
- Quick Installation Guide
- Software CD ROM
- Pin Header to DB9 Male & DB25 Female Connector Bracket Set x 2



## Optional Accessories

- DB44 male to 4 ports DB9 male connection cable, 40/100 cm



- DB44 male to 4 ports DB25 male connection cable, 40/100 cm



## Order Information

- MIO4096AM 4 ports RS-232 & 2 ports Parallel Multi-I/O PCI Board
- MIO4089AM 2 ports RS-232 & 2 ports Parallel Multi-I/O PCI Board
- MIO4079AM 2 ports RS-232 & 1 ports Parallel Multi-I/O PCI Board