

## MIO5079H

2-port High Speed RS-232 &  
1-port Parallel Universal PCI  
Multi-I/O Board



### Introduction

The majority of today's motherboards are not equipped with any RS-232 or parallel port. With SUNIX MIO5079H Multi I/O board, users can expand two RS-232 and one IEEE1284 parallel ports to their system, allowing them to use serial and parallel devices further. SUNIX MIO5079H 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 MIO5079H Multi-IO card supports majority of the OS on the market. We provide driver support for Microsoft Windows 32/64-bit platform, Linux, making it the best and most economical solution for commercial and industrial applications.

### Features

- Expands 2-port RS-232 COM and 1-port IEEE1284 LPT on system.
- Universal PCI compatible with 64/32-bit PCI-X/PCI Bus and 3.3/5V connector key.
- High reliability SUNIX SUN1989 16C950 compatible Multi-IO controller on-board
- Expands two RS-232 serial ports with communication speed up to 921.6Kbps.
- On-chip hardware auto flow control to guarantee no data loss.
- Built-in  $\pm 15$ 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).
- Auto-switching between ECP/EPP/SPP/BPP modes without configuration.
- Plug-n-Play, I/O address and IRQ assigned by system.
- Certified by CE, FCC, RoHS, and Microsoft WHQL approval.
- Support Microsoft Windows, Linux, and DOS.



## Specifications

### General

<b>Interface</b>	RS-232 and IEEE1284	<b>BUS</b>	Universal PCI 64/32bit 3.3V/5V PCI Ver 3.0, 2.3, 2.2, 2.1
<b>Controller</b>	SUNIX SUN1989 (16C950 UART Compatible)	<b>IRQ &amp; IO</b>	Assigned by System

### Serial Communication

<b>Interface</b>	RS-232	<b>Signal</b>	TxD, RxD, RTS, CTS, DTR, DSR, GND, DCD, RI
<b>No. of Port</b>	2-port	<b>Baud rate</b>	50bps ~921.6Kbps
<b>FIFO</b>	128byte Hardware	<b>Stop bit</b>	1, 1.5, 2
<b>Flow Control</b>	None, Xon/Xoff, RTS/CTS	<b>Parity</b>	even, odd, none, mark, space
<b>PCB Connector</b>	DB9 Male	<b>Protection</b>	±15KV ESD protection for each signal Human Body Model (HBM) ±15KV IEC1000-4-2 Air Gap Discharge ±8KV IEC1000-4-2 Contact Discharge

### Parallel Communication

<b>Interface</b>	IEEE1284	<b>Speed</b>	Maximum 1.8Mbps
<b>No. of Port</b>	1-port	<b>FIFO</b>	16byte Hardware
<b>Mode</b>	SPP/ECP/EPP/BPP(PS2)	<b>PCB Connector</b>	13 x 2 Pin Header
<b>Cable Connector</b>	DB25 Female		

### Driver Support

<b>Microsoft Client</b>	XP/Vista/7 (X86/X64)
<b>Microsoft Server</b>	2000/2003/2008 (X86/X64)
<b>Microsoft Embedded</b>	XP Embedded/POS Ready 2009/ Embedded System 2009
<b>Linux</b>	Linux 2.4.x/2.6.x
<b>DOS</b>	DOS

### Regulatory Approvals

<b>Hardware</b>	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class B, BSMI: CNS13438, C-Tick: CISPR22 AS/NZS, RoHS
<b>Software</b>	Microsoft WHQL Windows ◆ Microsoft Client: XP/Vista/7 (X86/X64) ◆ Microsoft Server: 2000/2003/2008 (X86/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)

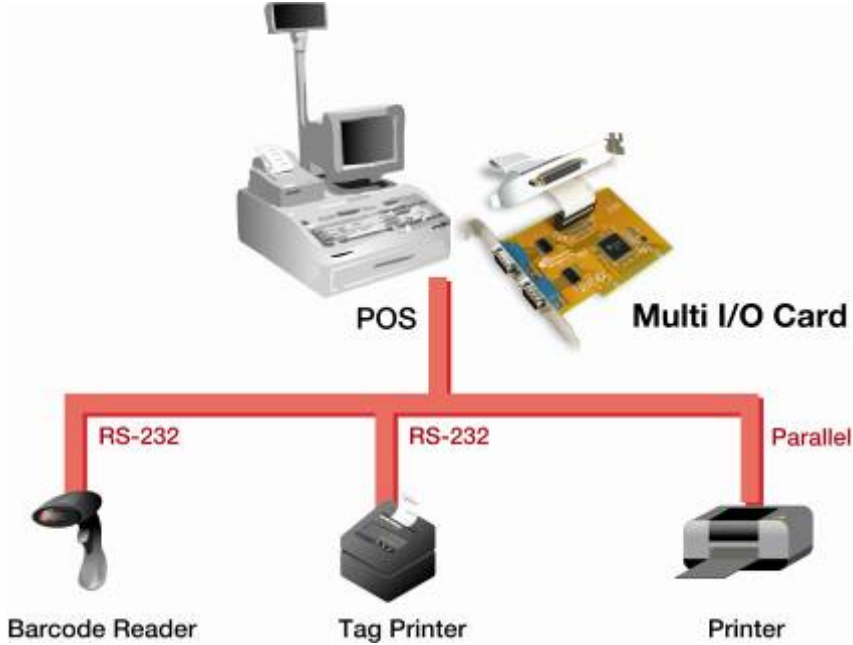
### Dimension

<b>PCB Dimension</b>	120 x 82 mm
<b>Bracket</b>	Standard 121 mm
<b>Bracket Space</b>	2

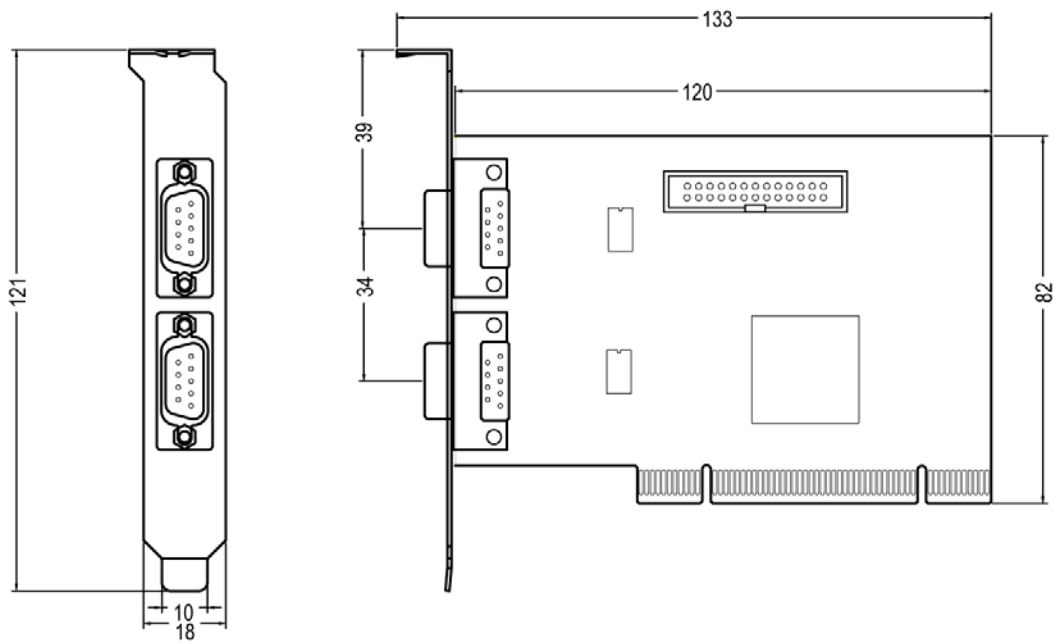
#### Note:

- \* Do not support LPT Key Locker Parallel device.
- \* LPT port does not support legacy 278/378 ISA address under Windows nor Linux operation systems, but only DOS mode.

### Application



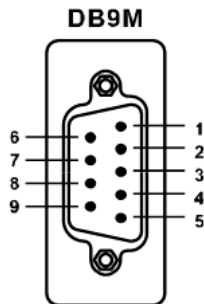
### Mechanical Drawings (Unit = mm)





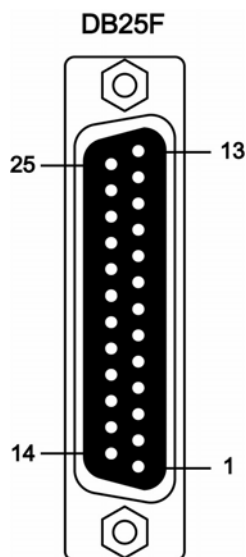
## Pin Assignment

### Serial



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		

## Packing List

### Packing Content

- MIO5079H- 2-port High Speed RS-232 & 1-port Parallel Universal PCI Multi-I/O Board
- Quick Installation Guide
- Driver CD ROM
- 13x2 Pin Header to DB25F Flat Cable With Bracket



## Optional Accessories

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- 13x2 Pin Header to DB25F Flat Cable With Bracket  
**Part Number:** 1WDB-25F04026G1001



## Order Information

### Multi I/O Interface

Bus	Port		Board Connector		Serial Baud Rate	Power output	Bracket	Model NO.		
	COM	LPT	COM	LPT						
PCI Express	1	1	DB9 Male	DB25 Female	115.2Kbps	-	Standard	MIO5469A		
					921.6Kbps			MIO5469H		
	2	1	DB9 Male	DB25 Female	115.2Kbps			Low Profile	MIO5479A	
					921.6Kbps				MIO5479H	
	4	1	DB44 Female		115.2Kbps		-	Low Profile	MIO5479AL	
					921.6Kbps				MIO5479HL	
			DB44 Female	13x2 Pin Header	115.2Kbps			Standard	MIO5499A	
					921.6Kbps				MIO5499H	
			DB44 Female	13x2 Pin Header	115.2Kbps			Low Profile	MIO5499AL	
					921.6Kbps				MIO5499HL	
	PCI	1	1	DB9 Male	DB25 Female		115.2Kbps	-	Standard	MIO5069A
							921.6Kbps			MIO5069P
5x2 Pin Header				13x2 Pin Header	115.2Kbps	-	Standard			MIO5069H
					921.6Kbps					MIO5069PH
2		1	DB9 Male	13x2 Pin Header	115.2Kbps	-	Standard	MIO5069U		
					921.6Kbps			MIO5069UL		
			5x2 Pin Header	13x2 Pin Header	115.2Kbps		-	Low Profile	MIO5069UH	
					921.6Kbps				MIO5069U	
			DB44 Female		115.2Kbps		-	Standard	MIO5079A	
					921.6Kbps				MIO5079H	
4		1	DB44 Female	13x2 Pin Header	115.2Kbps	-	Low Profile	MIO5079U		
					921.6Kbps			MIO5079UL		
			DB44 Female		115.2Kbps		-	Standard	MIO5079UH	
					921.6Kbps				MIO5079U	
			DB44 Female		115.2Kbps		-	Low Profile	MIO5079AL	
					921.6Kbps				MIO5079HL	
Express Card		1	1	DB44 Female		921.6Kbps	-	34mm	ECM1010	
		2	1	DB44 Female				34mm	ECM2010	
CardBus	1	1	DB44 Female		115.2Kbps	-	54mm	CBM1010		
	2	1	DB44 Female				54mm	CBM2010		