

MIO5079HL

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



Introduction

The majority of today's motherboards are not equipped with any RS-232 or parallel port. With SUNIX MIO5079HL 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 MIO5079HL is compatible with both 32/64-bit PCI architecture supporting 3.3 and 5V Bus, allowing the board to be installed in any slim size PC-based system with low profile bracket structure. Furthermore, SUNIX MIO5079HL 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 $\pm 15\text{KV}$ 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).
- Auto-switching between ECP/EPP/SPP/BPP modes without configuration.
- Plug-n-Play, I/O address and IRQ assigned by system.
- Low profile bracket design idea for slim or portable PC.
- Certified by CE, FCC, RoHS, and Microsoft WHQL approval.
- Support Microsoft Windows, Linux, and DOS.



Specifications

General

Interface	RS-232 and IEEE1284	BUS	Universal PCI 64/32bit 3.3V/5V PCI Ver 3.0, 2.3, 2.2, 2.1
Controller	SUNIX SUN1999 (16C950 UART Compatible)	IRQ & IO	Assigned by System

Serial Communication

Interface	RS-232	Signal	TxD, RxD, RTS, CTS, DTR, DSR, GND, DCD, RI
No. of Port	2-port	Baud rate	50bps ~921.6Kbps
FIFO	128byte Hardware	Stop bit	1, 1.5, 2
Flow Control	None, Xon/Xoff, RTS/CTS	Parity	even, odd, none, mark, space
PCB Connector	DB44 Female	Cable Connector	DB9 Male
Protection	±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

Interface	IEEE1284	Speed	Maximum 1.8MBps
No. of Port	1-port	FIFO	16byte Hardware
Mode	SPP/ECP/EPP/BPP	PCB Connector	DB44 Female
Cable Connector	DB25 Female		

Driver Support

Microsoft Client	XP/Vista/7 (X86/X64)
Microsoft Server	2000/2003/2008 (X86/X64)
Microsoft Embedded	XP Embedded/POS Ready 2009/ Embedded System 2009
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, BSMI: CNS13438, C-Tick: CISPR22 AS/NZS, RoHS
Software	Microsoft WHQL Windows ◆ Microsoft Client: XP/Vista/7 (X86/X64) ◆ Microsoft Server: 2000/2003/2008 (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

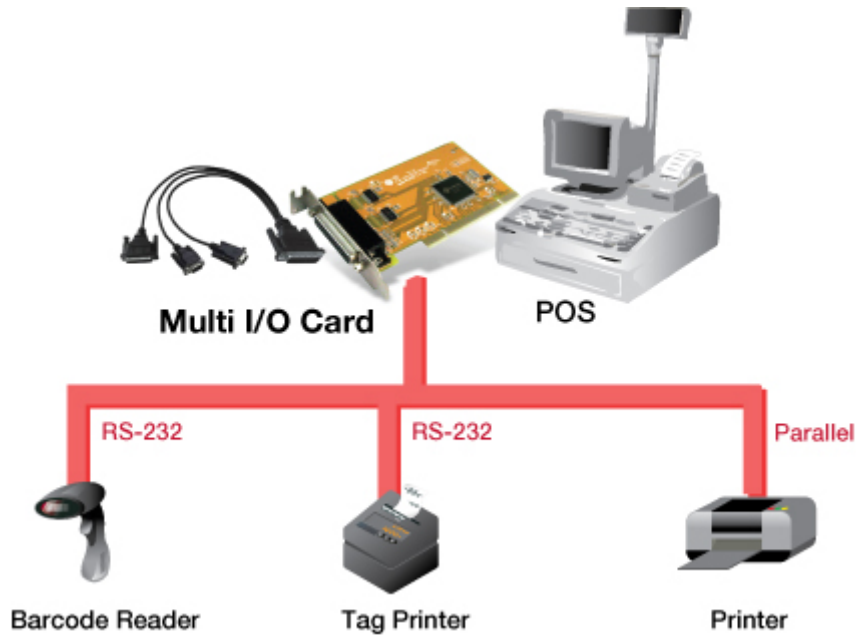
PCB Dimension	120 x 63 mm
Bracket	Low Profile 80 mm
Bracket Space	1

Note:

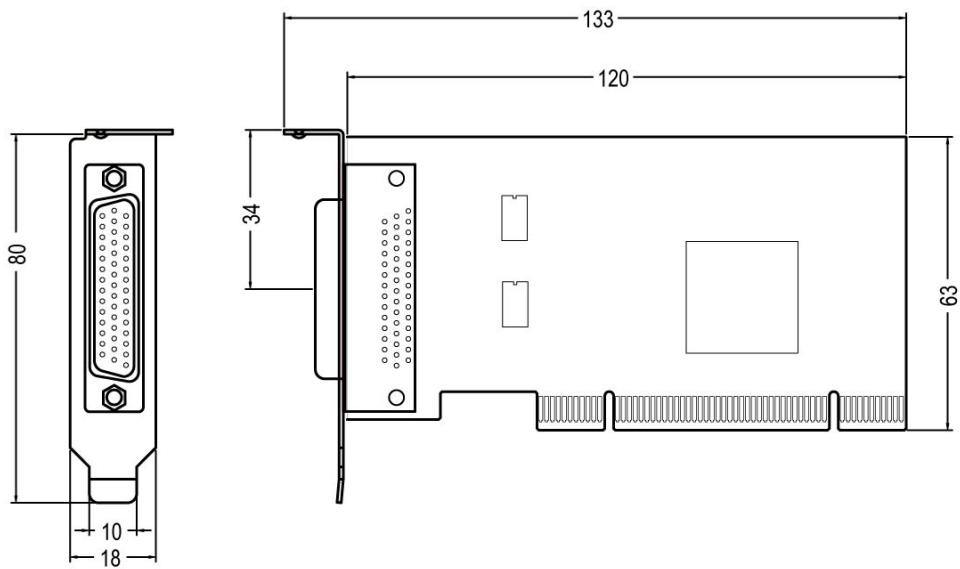
* Do not support LPT Key Locker Parallel device.

* LPT port does not support legacy 278/378 ISA address under Windows nor Linux operation systems, but only DOS mode.

Application



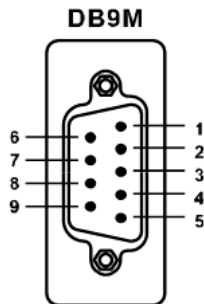
Mechanical Drawings (Unit = mm)





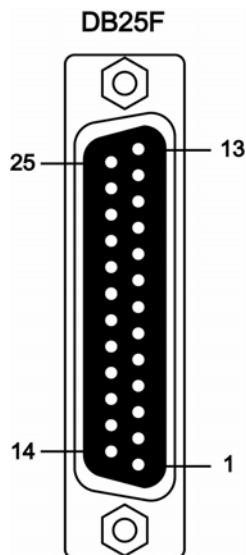
Pin Assignment

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

- MIO5079HL- 2-port High Speed RS-232 & 1-port Parallel Universal PCI Low Profile Multi-I/O Board
- Quick Installation Guide
- Driver CD ROM
- DB44 Male to 2-port DB9 Male And 1-port DB25 Female Connection Cable



Optional Accessories

- DB44 Male to 2-port DB9 Male And 1-port DB25 Female Connection Cable, 30 cm
Part Number: 1WDB-44M03025F3B22



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	MIO5069U			
					921.6Kbps		MIO5069PH			
2		1	DB9 Male	13x2 Pin Header	115.2Kbps	-	Standard	MIO5069UL		
					921.6Kbps			MIO5069UH		
			5x2 Pin Header	13x2 Pin Header	115.2Kbps		Low Profile	MIO5079A		
					921.6Kbps			MIO5079H		
			DB44 Female		115.2Kbps		Low Profile	MIO5079U		
					921.6Kbps			MIO5079UL		
4		1	DB44 Female	13x2 Pin Header	115.2Kbps	-	Standard	MIO5079UH		
					921.6Kbps			MIO5079AL		
			DB44 Female	13x2 Pin Header	115.2Kbps		Low Profile	MIO5079HL		
					921.6Kbps			MIO5099A		
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	