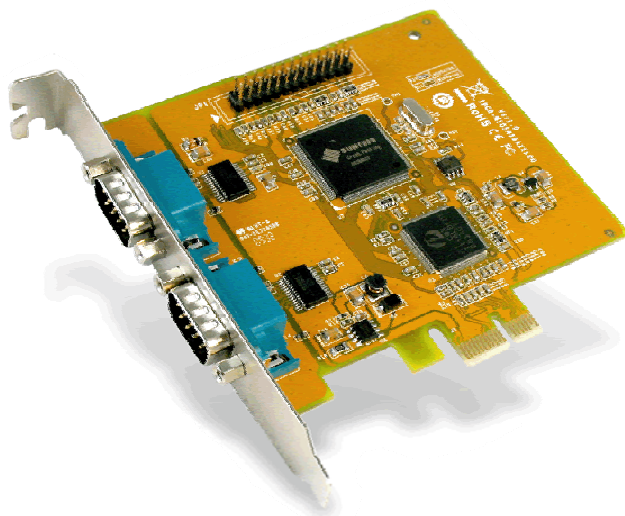




MIO5479A

2-port RS-232 & 1-port Parallel
PCI Express Multi-I/O Board



Introduction

The majority of today's motherboards are not equipped with any RS-232 or parallel port. With SUNIX MIO5479A 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 MIO5479A is compatible with PCI Express x1, x2, x4, x8 and x16 lane and PCI/PCI-x Bus, allowing the board to be installed in virtually any PC system. Furthermore, SUNIX MIO5479A 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.
- Designed to meet PCI Express Base Specification Revision 1.1.
- High reliability SUNIX SUN1989 16C950 compatible Multi-IO controller on-board
- Expands one RS-232 serial port with communication speed up to 115.2Kbps.
- On-chip hardware auto flow control to guarantee no data loss.
- Built-in ± 2 KV ESD protection for all serial signals.
- 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

Interface	RS-232 and IEEE1284	BUS	PCI Express one lane (x1)
Controller	SUNIX SUN1989 (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 ~115.2Kbps
FIFO	128byte Hardware	Stop bit	1, 1.5, 2
Flow Control	None, Xon/Xoff, RTS/CTS	Parity	even, odd, none, mark, space
PCB Connector	DB9 Male	Protection	±2KV ESD protection for each signal Human Body Model (HBM)

Parallel Communication

Interface	IEEE1284	Speed	Maximum 1.8MBps
No. of Port	1-port	FIFO	16byte Hardware
Mode	SPP/ECP/EPP/BPP	PCB Connector	13x2 Pin Header
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(Unit = mm)

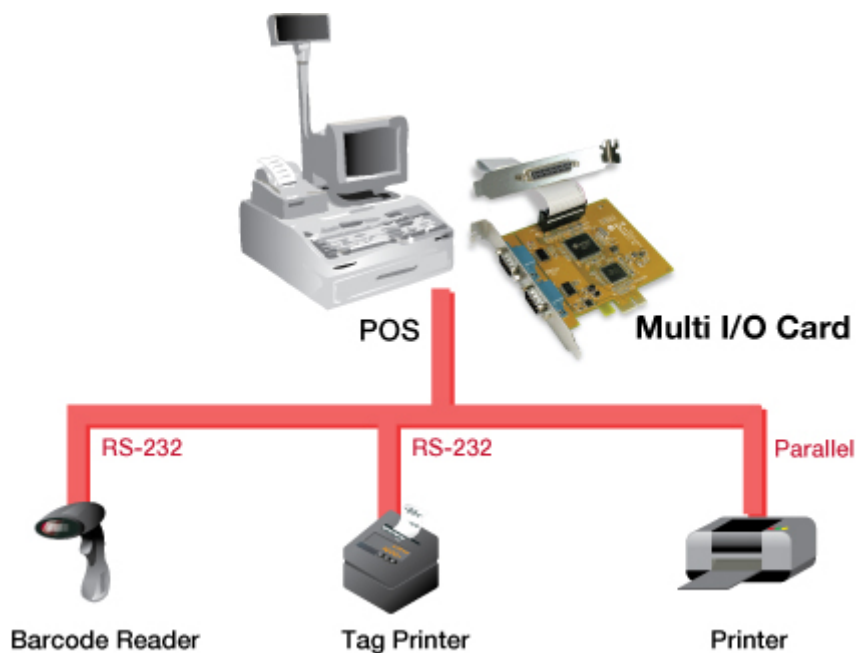
PCB Dimension	101x 90 mm
Bracket	Standard 121 mm
Bracket Space	2

Note:

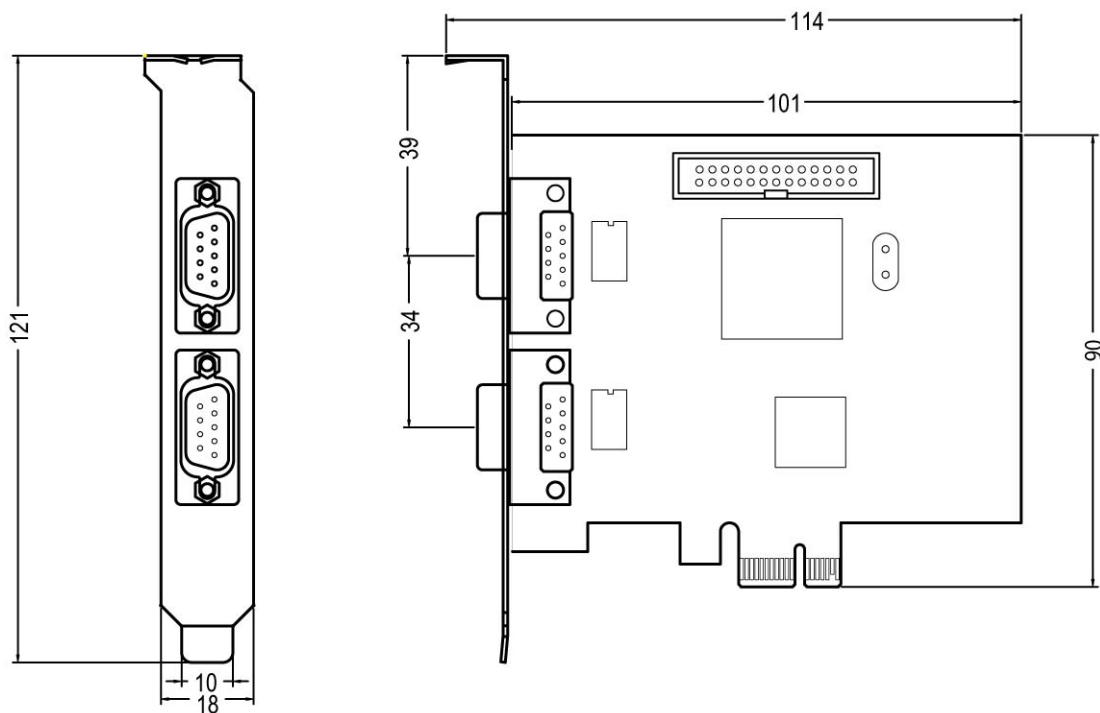
- * Do not support LPT Key Locker Parallel device.
- * LPT port does not support legacy 278/378 ISA address under Windows nor Linux operation systems, but only DOS mode.



Application



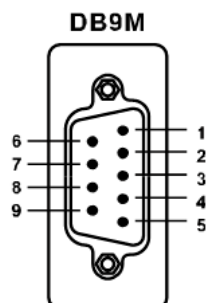
Mechanical Drawings (Unit = mm)





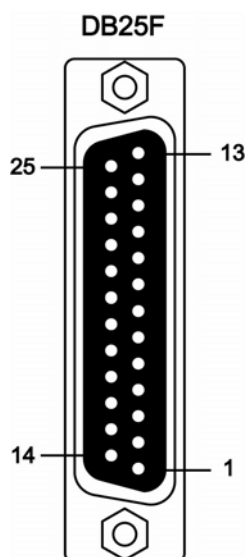
Pin Assignment

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

- MIO5479A- 2-port RS-232 & 1-port Parallel PCI Express Multi-I/O Board
- Quick Installation Guide
- Driver CD ROM
- 13x2 Pin Header to DB25F Flat Cable With Bracket



Optional Accessories

- 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			MIO5479A		
					921.6Kbps			MIO5479H		
			DB44 Female		115.2Kbps		Low Profile	MIO5479AL		
					921.6Kbps			MIO5479HL		
	4	1	DB44 Female	13x2 Pin Header	115.2Kbps		Standard	MIO5499A		
					921.6Kbps			MIO5499H		
							115.2Kbps	Low Profile	MIO5499AL	
							921.6Kbps		MIO5499HL	
PCI	1	1	DB9 Male	DB25 Female	115.2Kbps	-	Standard	MIO5069A		
								5V/12V	MIO5069P	
								-	MIO5069H	
								5V/12V	MIO5069PH	
			5x2 Pin Header	13x2 Pin Header	115.2Kbps	-	Standard	MIO5069U		
					921.6Kbps		Low Profile	MIO5069UL		
	2	1	DB9 Male	13x2 Pin Header	115.2Kbps		-	Standard	MIO5079A	
					921.6Kbps				MIO5079H	
			5x2 Pin Header	13x2 Pin Header	115.2Kbps			Low Profile	MIO5079U	
					921.6Kbps				MIO5079UL	
			DB44 Female		115.2Kbps	-	Standard	MIO5079UH		
					921.6Kbps			Low Profile	MIO5079AL	
	4	1	DB44 Female	13x2 Pin Header	115.2Kbps	-	Standard	MIO5079HL		
					921.6Kbps			MIO5099A		
							115.2Kbps	Low Profile	MIO5099H	
							921.6Kbps		MIO5099AL	
	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		