# **Commercial Communication**

The commercial communication became over the years an essential part of our life. You will find now days products related to the commercial communication everywhere in your daily life. Whether you go to your preferred bank to withdraw money from an ATM machine or just pay for your shopping at a POS station at a supermarket, gathering information about a foreign city at a KIOSK system, paying the toll fee at a toll collect station. This is where SUNIX comes in.

SUNIX makes daily life more convenient and safer for everybody, with high quality products reflecting the latest technologies and a future oriented strategy.



# Technology meets daily life

Commercial Communication



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# All about Sunix

Starting off a 20 years experience in IO communication, to a comprehensive product portfolio and a competent and specialized R&D team, a large number of customers around the world benefit already from SUNIX knowledge to satisfy their special requirements.

Here you will get to know SUNIX and all the advantages SUNIX is offering its partners and YOU.

# Contents

- 1. Company Profile
- 2. Technology meets daily Life

3. Products

# **About SUNIX**

Founded 1986, SUNIX Corporation, a professional designer and manufacturer of communication products with it's headquarter located in Taipei County, Taiwan, has about 350 employees worldwide. SUNIX Taiwan headquarter comprises two business units handling commercial and industrial communication. So SUNIX can offer its clients a total solution in the field of I/O and Ethernet communication. Starting at Serial I/O cards, move along Serial device server and media converter to Ethernet switches.

#### **SUNIX History**

In 1986, SUNIX started the business as a hardware manufacturer by developing I/O controller cards, floppy and hard disk controller interfaces and various types of controller chipsets to pave the way towards the computerized world.

In 1996, SUNIX entered into the world of serial interfaces by developing the world's first serial PCI controller chipset by integrating almost all circuit components in a single chipset.

In 2005, SUNIX introduced its new line of chipsets (SUN8899 / SUN8989), designed specifically for the Serial to Ethernet communication, to the market.

A second business unit was established in 2005, devoted to develop an serve the market with products used in industrial serial communication.

# **SUNIX Commercial Communication business unit**

Since more then 20 years SUNIX Commercial communication business unit provides high performance and high quality products to the market. We apply our years of expertise to the development of I/O Multi-port Serial Boards, Multi-port Parallel Boards, I/O CardBus.

You will find SUNIX products everywhere in your daily life. Whether you go to your preferred bank to withdraw money from an ATM machine or just pay for your shopping at a POS station at a supermarket, gathering information about a foreign city at a KIOSK system, paying the toll fee at a toll collect station. Your daily life becomes more secure and easy through SUNIX products.





#### **SUNIX mission & focus**

You set up the highest claims on your products. You know that only quality, technology and a future oriented strategy resulting in user convenience increase the value of your products on the international market.

Our mission is to provide you with this high quality and cost effective products and the latest technologies meeting your requirements through our strong R&D team and our strict quality policy. SUNIX manufacturing plants are ISO 9001:2000 certified since 2001, furthermore SUNIX obtained the ISO 14001 certificate for its manufacturing plants in 2005.

You are our focus. We are committed to your success through our continual innovation and improvement, building a prosperous and loyal relation with you.



# **SUNIX Core Values**

SUNIX is the pioneer in developing serial / parallel communication products. Our company is dedicated to the continuous development and innovation of serial / parallel technology. SUNIX ascendancy started 1996 due to the release of the first self developed Serial and Parallel ASIC chipsets (SUN1689 / SUN1699 / SUN1888 / SUN1889).These ASIC chipsets are the foundation technology in SUNIX wide range of product solutions. We successfully combined the high performance UART with Burst Data Mode, DMA, PCI Bridge, INT, and EEPROM into a single chipset solution, thereby creating complete lines of products that are highly reliable and have ultra low RMA rate.

SUNIX, furthermore developed many other advanced technologies such as 128K-byte FIFO buffer, hardware flow control, RS-422/485 handshaking communication, Auto RTS signal control (ARSC<sup>™</sup>) for RS-485 communication, hardware COM port remapping, and the True universal PCI card. These advanced technologies provide our customers around the world with high performance, highly reliable, and best value solutions for their applications.

SUNIX continues its ascendancy with the introduction of its new line of chipsets (SUN8899 / SUN8989) designed specifically for the Serial to Ethernet communication product lines in 2005. The creation of these chipsets had lead to the development of a full range of high performance and high quality serial device servers, and other Industrial Ethernet solutions.

#### **SUNIX R&D Team**

SUNIX R&D team is most resourceful and competent in system integration. The team consists of several task groups with each specializing in Software, Firmware, Electrical Layout, and Mechanical Design.

For this reason, SUNIX has always been the leader in providing the most compatible and reliable solutions in the market, as well we have the most flexibility to create customized solutions for our customers.

To further assure our customers in the reliability of SUNIX serial communication products and as well to ensure more stable systems and compatibility, SUNIX had put considerably great effort in driver development and improvement. Today SUNIX full range of serial communication products is certified by Microsoft WHQL. This logo represents that SUNIX serial driver passed the Microsoft Windows Hardware Quality Labs (WHQL) testing. This is verification for compatibility of our hardware with Microsoft operating systems.





# SUNIX's COMLab



Furthermore SUNIX offers its customers a comprehensive set of software tools, named COMLab.

#### This software contains the following tools:

#### 1. Speeder

This tool will help you to analyze the serial data communication. It will show the current status of every available communication port, including port settings, TX / RX – performance and furthermore any occurring hard- and software error.

This will help customers to adjust the serial data communication to their environment.

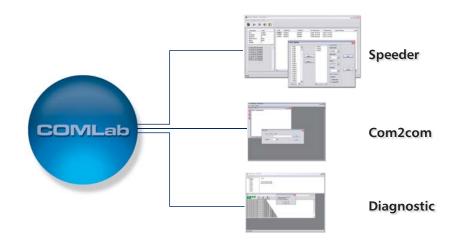
#### 2. COM2COM

This tool will show the current status of the modem signals belonging to serial data communication ports. Transfer data interactively via standard modem protocols.

#### 3. Diagnostic

Here you will find all information about your installed communication cards. This tool provides internal and external testing of UART, IRQ and modem signals ( TxD / RxD, CTS / RTS, DTR / DSR,

DTR / DCD). This tool works only with installed SUNIX boards

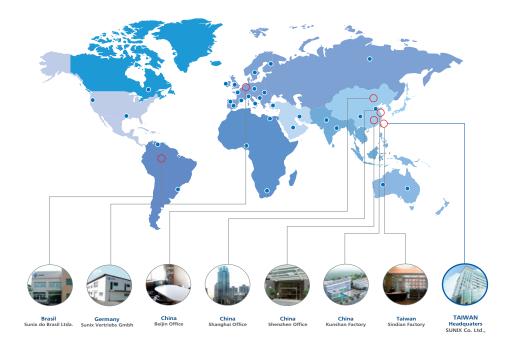


# SUNIX Worldwide OEM / ODM Business

To satisfy you with first class service, SUNIX opened affiliates and branch offices worldwide. You will find SUNIX in North- and South-America, Europe, Africa, Asia and Australia. SUNIX products are present in more than 65 countries.

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Through this global network SUNIX is able to offer a comprehensive package to its OEM / ODM clients. Starting from an individual product and software design, the investigation of applicable laws and standards to the accompaniment of your whole project, SUNIX brings your project to success.



# **SUNIX Commitment to A Strict Quality Policy**



SUNIX re-audits all its, ISO 9001:2000 certified, manufacturing facilities yearly to satisfy you with highest quality products and best services.

SUNIX took great invest to assure highest quality to its products. Therefore, we use only high quality dye, imported from Japan. The dye has a unique quality in dissipating heat from the PCB effectively, to ameliorate the reliability of the PCB and its components.

Therefore we can offer you a 5 year warranty, to give you our absolute assurance that you will get the most reliable products available on the market.

We stand for our products and with you.

Note: The 5 year warranty start with the date of delivery. SUNIX will replace or repair defective products, in case these were installed and used within their specification.



# SUNIX Environmental Policy

At SUNIX, we are very conscious taking great care for the well being of our world. We take part in ensuring a better future / world for our children.



SUNIX got certified in 2005 for the ISO 14001 certification. ISO 14001 is an internationally accepted specification for an "Environmental Management System".

Environmental protection is integral to the company's continual improvement process, to meet the expectations of the community, our customers and employees.

SUNIX Corporation is committed to:

- Meet or exceed the compliance requirements of all applicable environmental legislation
- and regulations
- Promote the prevention of pollution
- Continually improve the effectiveness of our environmental management system

SUNIX utilized the European RoHS directive at first stage to maintain a clean and safe environment for the world and the future of our children. SUNIX ensures the use of environmental friendly packing material, used to process and ship its products, furthermore to the requirements of the European RoHS directive.

# **SUNIX Technical Support**

Our Technical support group works closely with our R&D team to help you to solve problems quickly and with satisfactory results.

Every customer is welcomed to contact our technical support group with his questions by mean of email, phone call, or even post mail.

Our technical support engineers also keep up to date list of FAQs they encountered, on our website to give users the resources needed to perform basic troubleshooting tasks.

Besides, SUNIX will hold seminars to introduce new products and technical trainings in vary countries around the world.



# Technology meets daily life

Can you imagine a day without SUNIX products, how much our daily life is related to the commercial communication? Let's introduce the Miller family and one day in their life.

# **Miller's Family**



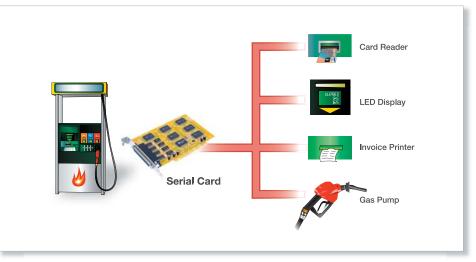
It is breakfast time; Robert, Emily and Lucy are enjoying their breakfast at home. Today it's Robert's and Emily's tenth wedding anniversary. They are now discussing how they will spend the day together.

# **Gas Station**



Robert is working for an international company and drives a car to go to work daily. Straight after leaving home he goes to the gas station to refuel the tank, to avoid running out of gas during his day. He stops his car, leaves it, picks up the spigot, refuels and watches the numbers on the gauge passing by.

And all with a little help of SUNIX products.



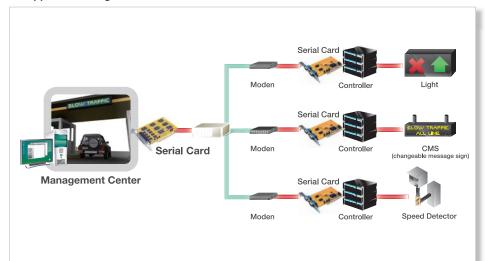
# **Toll Collection Station**



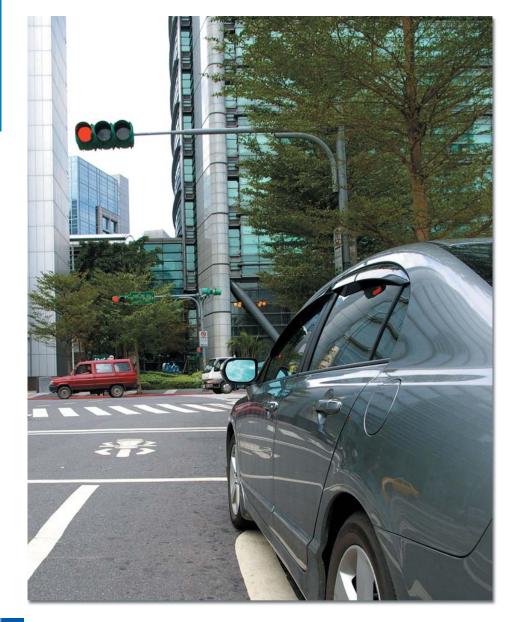


Leaving the gas station Robert turns his car towards the highway to head for his workplace. He has to pay a lot attention to the traffic as this is the rush hour, everybody is going to work. The traffic control system is giving him a helping hand not to over speed and drive carefully. Finally he passes by the toll collect station on his way to work.

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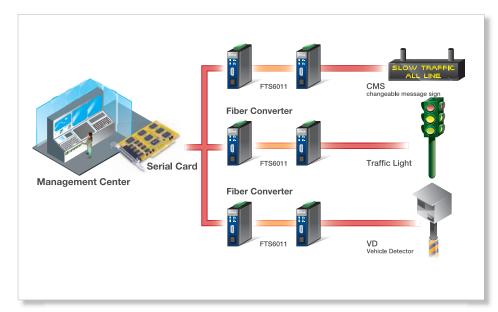


# Traffic Control

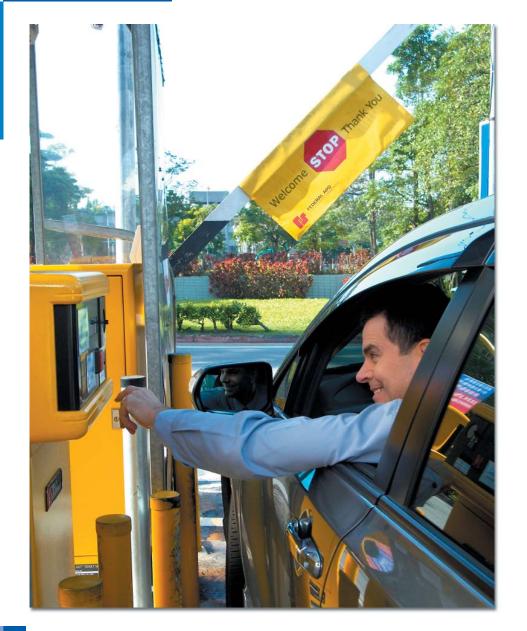


After leaving the highway, Robert comes to an intersection. The traffic lights turn red. Robert has to stop. This makes him feeling safe, so many not seen little helpers taking care for his life.

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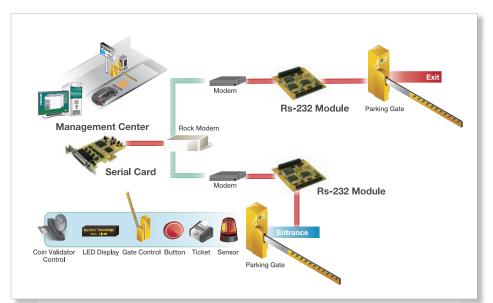


# **Gate Control**



Finally arrived at the company Robert enters the parking lots. He presses the button at the ticket counter, getting the ticket. The gate lifts up and Robert heads to his parking lot.

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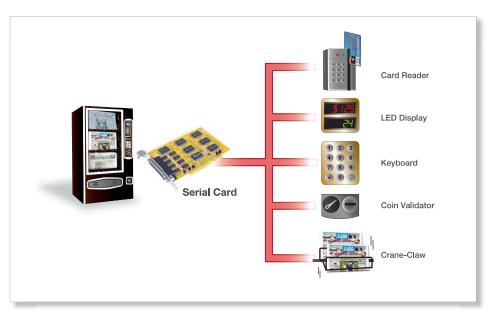


# **Newspaper Vending Machine**



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Robert is a sales manager who updates himself daily with the latest global economical news buying a newspaper at the lobby, before starting work at the office.

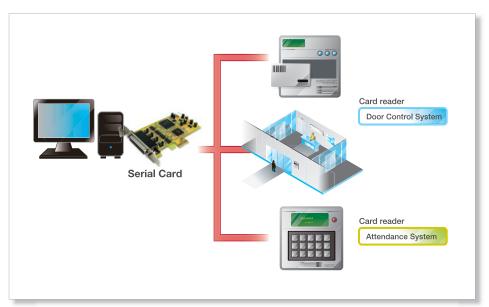


# **Door Entry System**



Robert dresses up his suit, after reading the international economic news. Filled with confidence a new business day, full of new challenges expects him. He goes to the ID card reader, taking out his ID to check in to his office.

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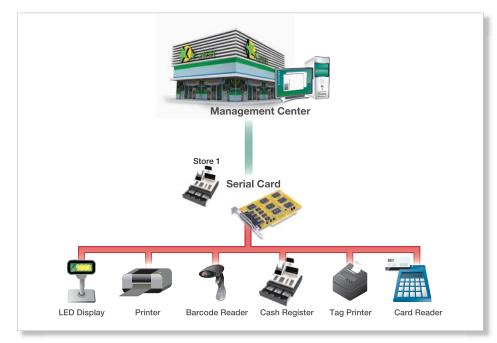


# **POS System**

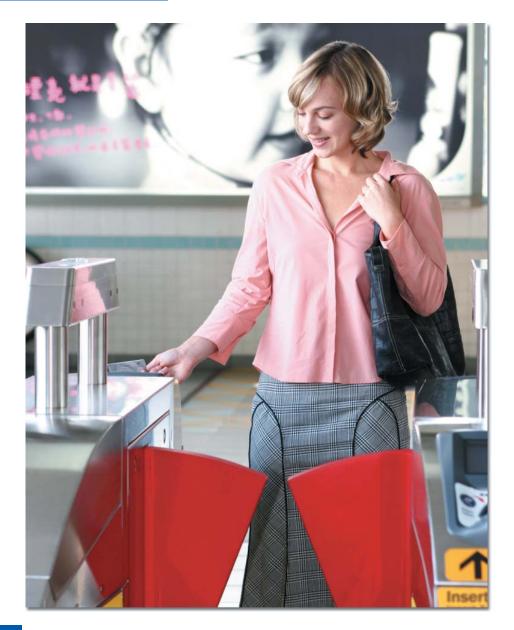


*Emily puts Lucy to the school bus after Robert went to the office. Then she goes to a convenient store to pay the last month power bill. The store keeper scans the barcode on the bill, asks for the credit card from Emily and proceeds the deal via POS system.* 

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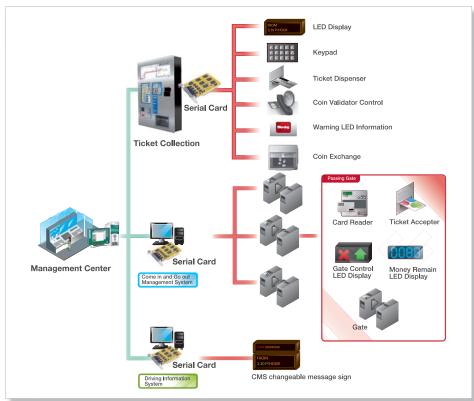


# MRT-pass-gate Ticket Collection & Billboard



Emily takes now the underground to her preferred bank. She has to transfer Lucy's school expenses for the upcoming semester. She buys the token at the ticket machine, proceeds to the gate, inserts the token and finally enters the underground to reach the bank.

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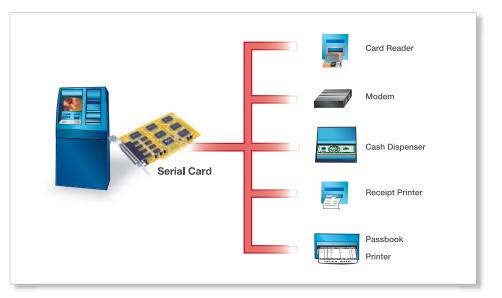


# Banking ATM System

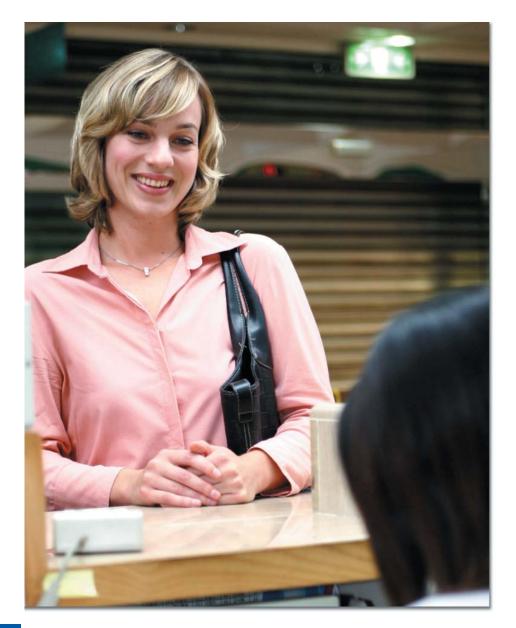


Upon arrival at the bank Emily withdraws money from the Bank's ATM. She inserts the bank card, enters code and amount, withdraws the money and takes her printed receipt.

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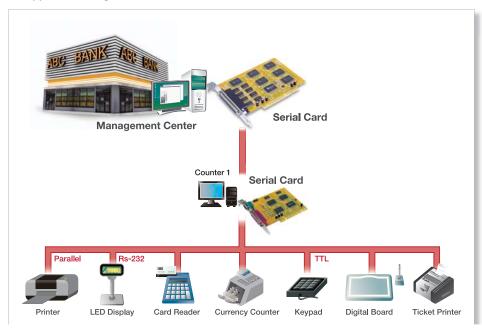


# **Bank Counter**

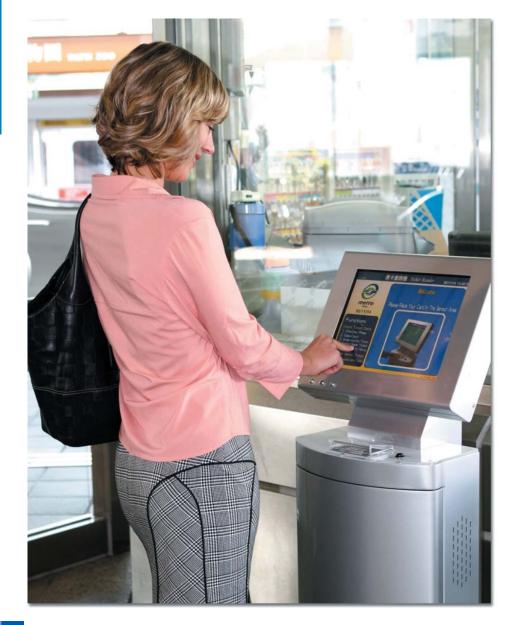


Emily proceeds to the bank counter, first drawing a number ticket and waiting for her call. She tells the bank clerk that she would like to transfer money to her daughter's school. The bank clerk checks the disposability, takes the bank book and prints the transfer to finalize it.

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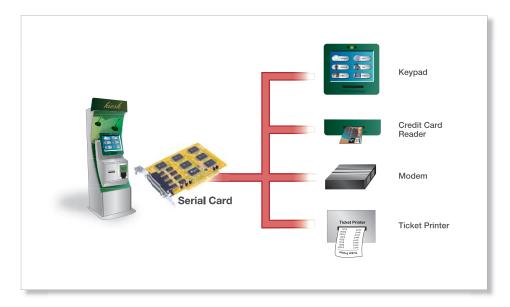


# **Kiosk Station**



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As the family wants to celebrate this day together, Emily goes to a KIOSK system near the bank to check the availability and then order online three movie tickets for the evening show.

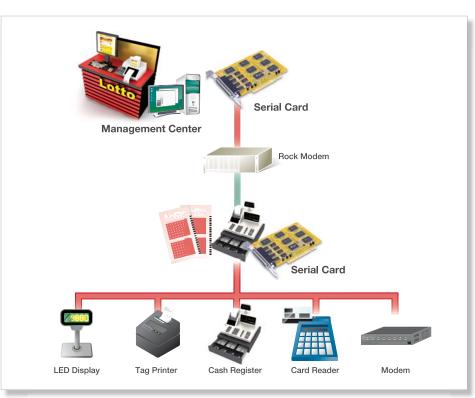


# **Lottery System**



Emily thinks that she has good fortune, as it is Robert's and hers tenth wedding anniversary. So she goes to a lottery store to do the lottery. The store keeper wishes her good luck after the receipt is printed, which makes Emily happily smiling on her way back home.

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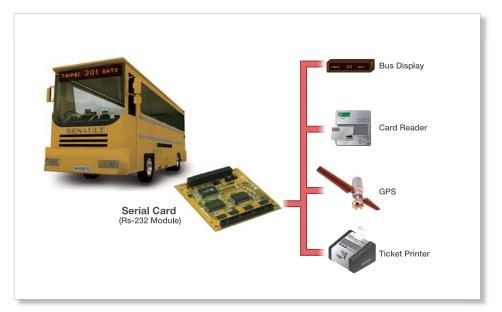


# **Mass Transportation System**



Lucy takes the bus everyday to school. She places the smartcard on a senor at the bus entrance to proceed inside. The bus driver smiles and calls her a cute and polite little girl. Whereon Lucy smiles with a pleasure.

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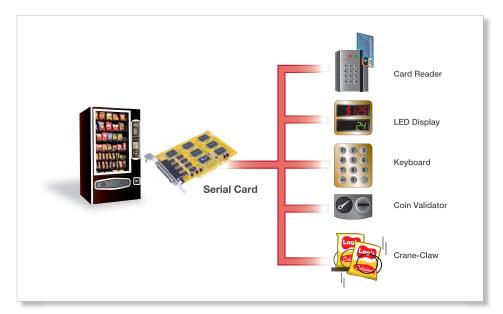


# Vending Machine



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It's now already afternoon and Lucy gets thirsty. She inserts the coins and chooses her favorite drink with a vending machine near the play ground. Enjoying the drink, she is looking forward to spend the evening together with her parents.

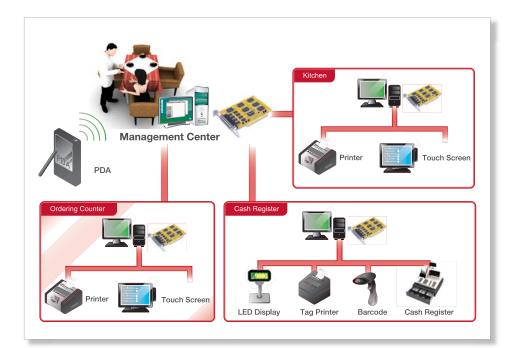


# **Order System**



Robert chose a dignified restaurant with the right atmosphere to celebrate this day. So Emily and Lucy dress up and meet with Robert in front of the restaurant. The restaurant uses a modern electronic ordering system, which automatically transfers all orders to the kitchen. The Millers enjoy their dinner and go for the movies afterwards.

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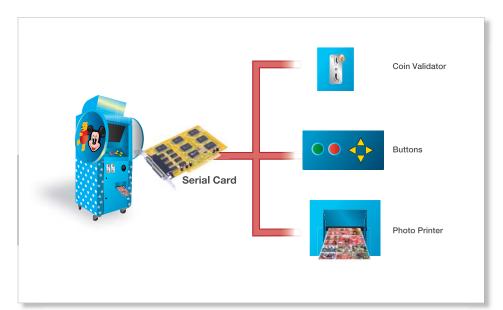


# **Photo Taking Machine**

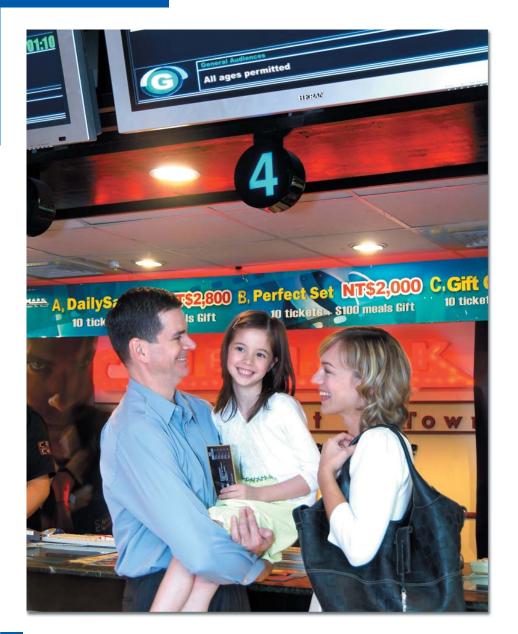


Arrived at the movies Lucy suggests taking a photo in memory of her parent's tenth wedding anniversary. She chooses the frame for the family photo. Finished, taking the photo they go to the movie's lobby.

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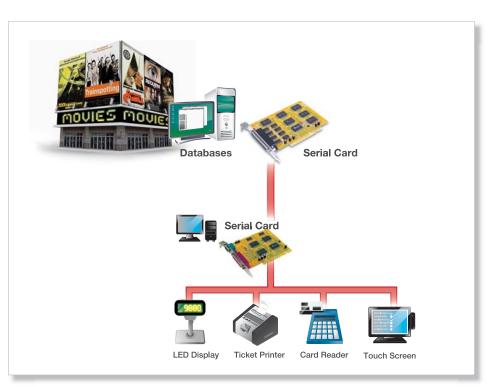


# **Movie Ticket System**

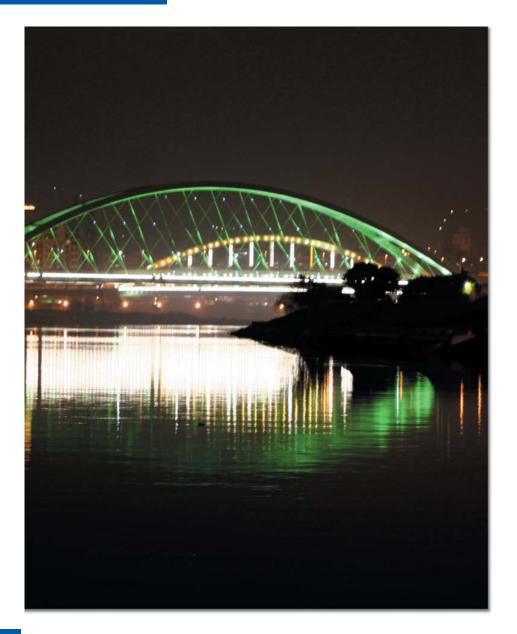


It's time for the movie now. They go to the counter to pick up their tickets to enter the movie hall. The Miller family enjoys a wonderful movie. Afterwards Lucy gets tired and the family heads back home.

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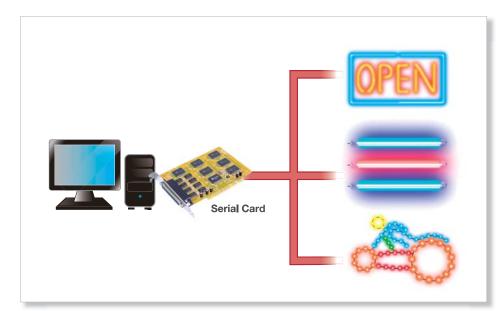
# **Advertisement Billboard**



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It's night already. Lucy sleeps in the car. Robert and Emily watch the city's neon lights; shining like stars, let them feel even more convenient and secure.

A more convenient and safer life thanks to SUNIX high quality products.



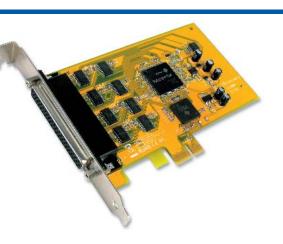
# **Sunix Products**

SUNIX is offering you and its partner a comprehensive RS-232 product portfolio, from PCI-Express and PCI, Express Card and PC Card, USB to Bluetooth. Relying on a powerful and experienced R&D team, SUNIX equips its products with its own high performance GoldenIO chipset. You will find on the following pages detailed product information reflecting SUNIX high quality standard relying on the latest technologies.

# **High Speed I/O**

# **SER1640A SER8400A SER4400A / AL**

16 / 8 / 4 port RS-232 Serial **PCI Express Board** 



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#### **Overview**

SUNIX PCI Express serial communication boards meet the PCI Express Base Specification Revision 1.1. They are compatible with PCI Express x1, x2, x4, x8 and x16 lane Bus. The majorities of today's motherboards is not equipped with serial ports or only have one serial port. With SUNIX PCI Express serial board, users can add 16/8/4 serial ports to their system, allowing them to use serial devices further. Windows 2000 and later and Linux 2.4x kernel and later support the PCI Express bus system. SUNIX PCI Express Serial Board is the advanced and high efficient solution for commercial and industrial automation applications.

#### Features

- High performance SUNIX chipset solution16C650 UART compatible.
- 10 / 8 / 4 / 2 RS-232 serial ports with a data transfer rate up to 921.6Kbps.
- Supports x1, x2, x4, x8, x16 (lane) PCI Express Bus throughput.
- Designed to meet PCI Express Bus Specification Revision 1.1.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±15KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 2000 / XP / 2003 / Vista, Linux 2.4x / 2.6x.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

| Specification  |                  |                  |                  |                  |  |
|----------------|------------------|------------------|------------------|------------------|--|
| Picture        | 1978             | A                | (IIII)           | ALS -            |  |
| Item           | SER1640A         | SER8400A         | SER4400A         | SER4400AL        |  |
| Port           | 16               | 8                | 4                | 4                |  |
| BUS            | PCI-E x1         | PCI-E x1         | PCI-E x1         | PCI-E x1         |  |
| ESD Protection | ±15KV            | ±15KV            | ±15KV            | ±15KV            |  |
| Baud Rate      | 50 ~ 921.6Kbps   | 50 ~ 921.6Kbps   | 50-~ 921.6Kbps   | 50 ~ 921.6Kbps   |  |
| PCB Connector  | VHDC 68          | DB62F            | DB44F            | DB44F            |  |
| Bracket Space  | 1                | 1                | 1                | 1                |  |
| Dimensions     | 120 x 100 mm     | 127 x 79 mm      | 110 x 62.5 mm    | 110 x 62.5 mm    |  |
| Bracket        | Std. 121 mm      | Std. 121 mm      | Std. 121 mm      | L.P. 79.2 mm     |  |
| DB9M Cable     | 2-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm |  |
| DB25M Cable    | 2-set 40/100cm   | 1-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm |  |

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# **Package Content**

- 1 x Multi-port RS-232 PCI Express Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Optional Accessories**

- 2 x VHDC68 to 8 DB9 / 25 Male connection cable, 40cm (1640A)
- 1 x DB62F to 8 ports DB9 / 25 Male connection cable, 40cm (8400A)
- 1 x DB44F to 4 ports DB9 / 25 Male connection cable, 40cm (4400A/AL)

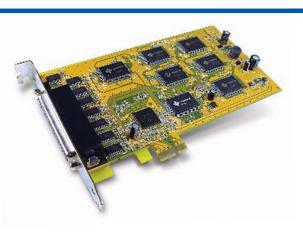
#### **Order Information**

- SER1640A 16 ports RS-232 PCI Express Board
- SER8400A 8 ports RS-232 PCI Express Board
- SER4400A 4 ports RS-232 PCI Express Board
- SER4400AL 4 ports RS-232 PCI Express Low Profile Board

# Golden I/O

4466A 4456A / AL 4437A

8 / 4 / 2 port RS-232 Serial PCI Express Board



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#### **Overview**

SUNIX PCI Express serial communication boards meet the PCI Express Base Specification Revision 1.1. They are compatible with PCI Express x1, x2, x4, x8 and x16 lane Bus. The majorities of today's motherboards is not equipped with serial ports or only have one serial port. With SUNIX PCI Express serial board, users can add 8/4/2 serial ports to their system, allowing them to use serial devices further. Windows 2000 and later and Linux 2.4x kernel and later support the PCI Express bus system. SUNIX PCI Express Serial Board is the advanced and high efficient solution for commercial and industrial automation applications.

#### **Features**

- Highly reliable SUNIX chipset solution16C650 UART compatible.
- 8 / 4 / 2 RS-232 serial ports with a data transfer rate up to 115.2Kbps.
- Supports x1, x2, x4, x8, x16 (lane) PCI Express Bus throughput.
- Designed to meet PCI Express Bus Specification Revision 1.1.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 2000 / XP / 2003 / Vista, Linux 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.

| Picture        | The second secon | W. Road                | the safe    |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------|
| Item           | 4466A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4456A/AL               | 4437A       |
| Port           | 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4                      | 2           |
| BUS            | PCI-E x1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCI-E x1               | PCI-E x1    |
| ESD Protection | ±2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±2KV                   | ±2KV        |
| Baud Rate      | 115.2Kbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 115.2Kbps              | 115.2Kbps   |
| PCB Connector  | DB62F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DB44F                  | DB9M        |
| Bracket Space  | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1                      | 1           |
| Dimensions     | 175 x 105 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 151 x 52 mm            | 151 x 71 mm |
| Bracket        | Std. 121 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Std.121mm / LP.79.2 mm | Std. 121 mm |
| DB9M Cable     | 1-set 40 / 100cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1-set 40 / 100cm       | _           |
| DB25M Cable    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | _           |
|                | 1-set 40 / 100cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1-set 40 / 100cm       |             |

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#### Package Content

- 1 x Multi-port RS-232 PCI Express Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Optional Accessories**

- DB62 to 8 ports DB9/25 male connection cable, 40/100cm (4466A)
- DB44 to 8 ports DB9/25 male connection, ArrayBox (4466A)
- DB44 to 4 ports DB9/25 male connection cable, 40/100cm (4456A/AL)

#### **Order Information**

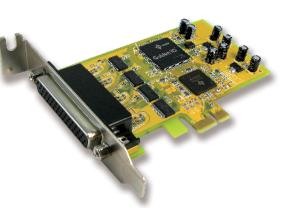
- 4466A 8 ports RS-232 PCI Express Board
- 4456A 4 ports RS-232 PCI Express Board
- 4456AL 4 ports RS-232 PCI Express Low Profile Board
- 4437A 2 ports RS-232 PCI Express Board

# **Power IO**



# SER4400P SER4400PL 4456PM 4456LL

4 port RS-232 Serial Power Selectable PCI Express Board



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#### **Overview**

SUNIX Power IO PCI Express serial communication boards support 5 or 12 Volt power output. The boards are designed for use in commercial applications without need to provide the serial devices with external power supplies. The boards meet the PCI Express Base Specification Revision 1.1. The Power IO board series has a 32 bytes onboard FIFO. SUNIX Power IO serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- High performance SUNIX UL7522EQ chipset solution16C650 UART compatible.
- Four RS-232 serial ports with 5V / 12V power output.
- Supports PCI Express Bus power and systems power supply output.
- Designed to meet PCI Express Bus Specification Revision 1.1.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±15KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 2000 / XP / 2003 / Vista, Linux 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

| Picture       | (HIRA)           | Alex-            | (Basa            | A Carton         |
|---------------|------------------|------------------|------------------|------------------|
| Item          | SER4400P         | SER4400PL        | 4456PM           | 4456LL           |
| Port          | 4                | 4                | 4                | 4                |
| BUS           | PCI-E x1         | PCI-E x1         | PCI-E x1         | PCI-E x1         |
| Protection    | 15KV ESD         | 15KV ESD         | 15KV ESD         | 15KV ESD         |
| Baud Rate     | 50 ~ 921.6Kbps   | 50 ~ 921.6Kbps   | 50 ~ 230.6Kbps   | 50 ~ 230.6Kbps   |
| PCB Connector | DB44F            | DB44F            | DB44F            | DB44F            |
| Bracket Space | 1                | 1                | 1                | 1                |
| Dimensions    | 110 x 62.5 mm    |
| Bracket       | Std. 121 mm      | L.P. 79.2 mm     | Std. 121 mm      | L.P. 79.2 mm     |
| DB9M Cable    | 1-set 40 / 100cm |
| DB25M Cable   | 1-set 40 / 100cm | 1-set 40 /100cm  | 1-set 40 / 100cm | 1-set 40 / 100cm |

#### **Package Content**

- 1 x Multi-port RS-232 PCI Express Board
- 1 x Driver CD ROM

Constitution

• 1 x Quick Installation Guide

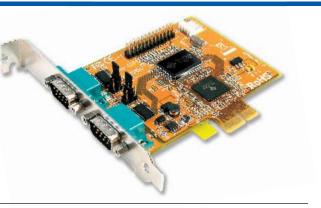
# **Order Information**

- SER4400P 4 ports Power Selectable RS-232 PCI Express Board
- SER4400PL 4 ports Power Selectable RS-232 PCI Express Low Profile Board
- 4456PM 4 ports Power Selectable RS-232 PCI Express Board
- 4456LL 4 ports Power Selectable RS-232 PCI Express Low Profile Board

# Multi I/O

# 4479AM

2 port RS-232 & 1 port IEEE1284 Parallel PCI Express Board



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#### **Overview**

SUNIX 4479AM PCI Express Multi-I/O communication board provides an independent high speed RS-232 serial and IEEE 1284 parallel interface. It is compatible with PCI Express x1, x2, x4, x8 and x16 lane Bus. Windows 2000 and later and Linux 2.4x kernel and later support the PCI Express bus system. This IO board is designed for commercial applications to connect RS-232 serial devices. It provides the option to select between 5V and 12V to provide power to the connected RS-232 serial devices through the ninth pin of the DB9 male connector.

#### **Features**

- Highly reliable SUNIX SUN1998 single chipset solution.
- Two RS-232 and one IEEE1284 Parallel port.
- Full single-lane (or x1) PCI Express throughput.
- Designed to meet PCI Express Bus Specification, Revision 1.1.
- RS-232 serial ports with 5 / 12 V power output.
- IEEE 1284-1994 compliant supports
  - SPP (Standard Parallel Port)
  - EPP (Enhanced Parallel Port)
  - ECP (Enhanced Capability Port)
  - BPP (Bi-direction Parallel Port )
- Industrial grade design for stability and reliability.
- Built-in 1.5A fuse to prevent connected devices from damage by over current.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows, MAC, Linux, and DOS.
- Support Microsoft Windows Win 3x / 9x / ME / NT / 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

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#### **Specification**

| specification    |                                 |
|------------------|---------------------------------|
| Picture          |                                 |
| Item             | 4479AM                          |
| Port             | 2 port RS-232, 1 port IEEE 1284 |
| BUS              | PCI-E x1                        |
| ESD Protection   | ±2KV                            |
| Baud Rate RS-232 | 50~115.2Kbps                    |
| Speed IEEE 1284  | 2.7 MB/s                        |
| Mode IEEE 1284   | SPP / EPP / ECP / BPP           |
| PCB Connector    | 2 x DB9M, 1 x DB25F             |
| Bracket Space    | 2                               |
| Dimensions       | 120 x 70 mm                     |
| Bracket          | Std. 121 mm                     |
| DB9M Cable       |                                 |

# **Package Content**

- 1 x Multi IO PCI Express Board
- 2 x 13 Pin Header to DB25F flat cable with bracket
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Order Information**

• 4479AM 2 ports RS-232 & 1 port IEEE1284 Parallel PCI Express Board

# Golden I/O



# 4418A 4408A

2 / 1 port IEEE-1284 Parallel PCI Express Board

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#### **Overview**

SUNIX PCI Express parallel communication boards meet the PCI Express Base Specification Revision 1.1. They are compatible with PCI Express x1, x2, x4, x8 and x16 lane Bus. The majority of today's motherboards is not equipped with a parallel port. With SUNIX PCI Express parallel board, users can add 2 / 1 parallel ports to their system, allowing them to use parallel devices further. Windows 2000 and later and Linux 2.4x kernel and later support the PCI Express bus system. SUNIX PCI Express Parallel Board is the advanced and high efficient solution for commercial and industrial automation applications.

#### Features

- Highly reliable SUN1888 IEEE1284 chipset solution.
- Two or one IEEE1284 Parallel ports.
- Supports x1, x2, x4, x8, x16 (lane) PCI Express Bus throughput.
- Designed to meet PCI Express Bus Specification Revision 1.1.
- IEEE 1284-1994 compliant supports
- SPP (Standard Parallel Port)
- EPP (Enhanced Parallel Port)
- ECP (Enhanced Capability Port)
- BPP (Bi-direction Parallel Port )
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME / NT / 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x & DOS.
- Ready for the Intel  $\ensuremath{\mathbb{R}}$  / AMD  $\ensuremath{\mathbb{R}}$  CPU and 32/64-bit operation system.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.

| Specification |                       | 1          |  |
|---------------|-----------------------|------------|--|
| Picture       | The second            | A second   |  |
| Item          | 4418A                 | 4408A      |  |
| Port          | 2                     | 1          |  |
| BUS           | PCI-E x1              | PCI-E x1   |  |
| PCB Connector | DB25F                 | DB25F      |  |
| Bracket Space | 2                     | 1          |  |
| Dimensions    | 120 x 94 mm           | 120x94 mm  |  |
| Bracket       | Std. 121 mm           | LP.79.2 mm |  |
| DB9M Cable    |                       | _          |  |
| Application   | Commercial Automation |            |  |

# Package Content

- 1 x Multi-port IEEE-1284 Parallel PCI Express Board
- 1 x Driver CD ROM

Constitution

- 1 x Quick Installation Guide
- Cable (4418A only)

# **Order Information**

- 4418A 2 ports IEEE-1284 Parallel PCI Express Board
- 4408A 1 port IEEE-1284 Parallel PCI Express Board

# High Speed I/O

# SER1600A SER8000A SER4000A / AL 4037A4



16 / 8 / 4 / 2 port RS-232 Serial PCI Board

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#### **Overview**

With SUNIX Universal PCI serial communication boards, users can add 16/8/4/2 serial ports to their system, allowing them to use serial devices further. The board is compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. SUNIX Universal PCI serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x ~ 2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- High Speed SUNIX GolenIO chipset solution16C650 UART compatible.
- 16 / 8 / 4 / 2 RS-232 serial ports with a data transfer rate up to 921.6Kbps.
- Universal PCI compatible with 64 / 32-bit PCI-X / PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±15KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME / NT / 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.

| Picture       | 11:1:00          | The state        | WI RA            | WI BAT           | Mar in        |
|---------------|------------------|------------------|------------------|------------------|---------------|
| Item          | SER1600A         | SER8000A         | SER4000A         | SER4000AL        | 4037A4        |
| Port          | 16               | 8                | 4                | 4                | 2             |
| BUS           | Universal PCI    | Universal PCI    | Universal PCI    | Universal PCI    | Universal PCI |
| Protection    | 15KV ESD         | 15KV ESD         | 15KV ESD         | 15KV ESD         | 15KV ESD      |
| Baud Rate     | 50~921.6Kbps     | 50~921.6Kbps     | 50~921.6Kbps     | 50~921.6Kbps     | 50~921.6Kbps  |
| PCB Connector | VHDC68           | DB62F            | DB44F            | DB44F            | DB9M          |
| Bracket Space | 1                | 1                | 1                | 1                | 1             |
| Dimensions    | 120 x 100 mm     | 144 x 76 mm      | 110 x 62.5 mm    | 110 x 62.5 mm    | 120 x 64 mm   |
| Bracket       | Std. 121 mm      | Std. 121 mm      | Std. 121 mm      | L.P. 79.2 mm     | Std. 121 mm   |
| DB9M Cable    | 2-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm | _             |
| DB25M Cable   |                  | < C              |                  |                  |               |
|               | 2-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm | 1-set 40 / 100cm |               |

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# **Package Content**

- 1 x Multi-port RS-232 PCI Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

# **Order Information**

- SER1600A 16 ports RS-232 PCI Board
- SER8000A 8 ports RS-232 PCI Board
- SER4000A 4 ports RS-232 PCI Board
- 4037A4 4 ports RS-232 PCI Low Profile Board

# Golden I/O

4066R

PCI Board

4066J 4066U 8 port RS-232 Serial

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#### **Overview**

With SUNIX Universal PCI serial communication boards, users can add 8 serial ports to their system, allowing them to use serial devices further. The board is compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. The 4066 board series has a 32 bytes onboard FIFO. SUNIX Universal PCI serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux  $2.2.x \sim 2.6.x$ kernels, making it the best and most economical solution for commercial and industrial applications.

#### Features

- Highly reliable SUNIX SUN1889/SUN1699 chipset solution16C650 UART compatible.
- 8 RS-232 serial ports with a data transfer rate up to 115.2Kbps.
- Universal PCI compatible with 64/32-bit PCI-X / PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME / NT / 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32 / 64-bit operation system.
- O°C ~ 60°C operating temperature.

| Picture        | THE REAL PROPERTY IN | A State                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | His an                           |
|----------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Item           | 4066R                | 4066J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4066U                            |
| Port           | 8                    | 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8                                |
| BUS            | Universal PCI        | Universal PCI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Universal PCI                    |
| ESD Protection | ±2KV                 | ±2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±2KV                             |
| PCB Connector  | 50~115.2Kbps         | 50~115.2Kbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50~115.2Kbps                     |
| Baud Rate      | DB62F                | RJ45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Pin Header                       |
| Bracket Space  | 1                    | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1                                |
| Dimensions     | 144 x 102 mm         | 155 x 102 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 164 x 63 mm                      |
| Bracket        | Std. 121 mm          | Std. 121 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | L.P. 79.2 mm                     |
| Accessory      | -                    | and the second s | _                                |
| DB9M Cable     | 1-set 40 / 100cm     | 8-set 30cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | _                                |
| DB25M Cable    | 1-set 40 / 100cm     | 8-set 30cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | _                                |
| Application    | POS                  | Building Automation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Embedded for<br>RackMount system |

# **Package Content**

- 1 x Multi-port RS-232 PCI Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Order Information**

- 4066R 8 ports RS-232 PCI Board
- 4066J 8 ports RS-232 PCI Board
- 4066U 8 ports RS-232 PCI Embedded Board

Note: Please find Pin Assignment definition.



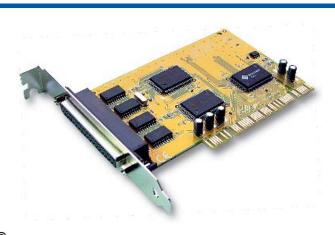
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# Golden I/O

4056D 4056U

4 port RS-232 Serial PCI Board

4056A / AL



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#### **Overview**

With SUNIX Universal PCI serial communication boards, users can add 4 serial ports to their system, allowing them to use serial devices further. The board is compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. The 4056 board series has a 32 bytes onboard FIFO. SUNIX Universal PCI serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- Highly reliable SUNIX SUN1889/SUN1699 chipset solution16C650 UART compatible.
- 4 RS-232 serial ports with a data transfer rate up to 115.2Kbps.
- Universal PCI compatible with 64/32-bit PCI-X / PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME / NT / 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

| Specification  |                  |                        |                             |                                     |
|----------------|------------------|------------------------|-----------------------------|-------------------------------------|
| Picture        | THE BOA          | West the               | Wester.                     | -                                   |
| Item           | 4056A            | 4056AL                 | 4056D                       | 4056U                               |
| Port           | 4                | 4                      | 4                           | 4                                   |
| BUS            | Universal PCI    | Universal PCI          | Universal PCI               | Universal PCI                       |
| ESD Protection | ±2KV             | ±2KV                   | ±2KV                        | ±2KV                                |
| Baud Rate      | 50~115.2Kbps     | 50~115.2Kbps           | 50~115.2Kbps                | 50~115.2Kbps                        |
| PCB Connector  | DB37F            | DB44F                  | RJ45                        | Pin Header                          |
| Bracket Space  | 1                | 1                      | 1                           | 1                                   |
| Dimensions     | 120 x 80 mm      | 120 x 64 mm            | 120 x 115 mm                | 128 x 50 mm                         |
| Bracket        | Std. 121 mm      | L.P. 79.2 mm           | Std. 121 mm                 | L.P. 79.2 mm                        |
| DB9M Cable     | 1-set 40 / 100cm | 1-set 40 / 100cm       | 8-set 30cm                  | 4-set 30cm                          |
| DB25M Cable    | 1-set 40 / 100cm | 1-set 40/100cm         | 8-set 30cm                  | _                                   |
| Application    | Transpotation    | Building<br>Automation | ReMap legacy<br>ISA Address | Embedded for<br>RackMount<br>system |

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#### **Package Content**

- 1 x Multi-port RS-232 PCI Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Optional Accessories**

- DB44 to 4 ports DB9 / 25 male connection cable, 40/100cm (4056A4/AL)
- DB37 to 4 ports DB9 / 25 male connection cable, 40/100cm (4056A)
- DB37 to 4 ports DB9 / 25 male connection Array Box (4056A)
- 8-pin RJ45 to DB9 / 25 Male connection cable, 30cm (4056D)
- 5x2 Pin Header to DB9 Male connection cable, 30cm (4056U)

#### **Order Information**

- 4056A 2 ports RS-232 PCI Board
- 4056AL 2 ports RS-232 PCI Low Profile Board
- 4056D 2 ports RS-232 PCI Board

Note: Please find Pin Assignment definition.

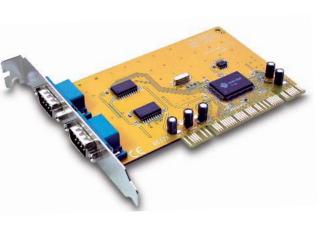
• 4056U 2 ports RS-232 PCI Embedded Board

# High Speed I/O

4036A3V 4037A / AL 4037D 4037U

2 port RS-232 Serial

PCI Board



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#### **Overview**

With SUNIX Universal PCI serial communication boards, users can add 2 serial ports to their system, allowing them to use serial devices further. The board is compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. The 4037 board series has a 32 bytes onboard FIFO. SUNIX Universal PCI serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- Highly reliable SUNIX SUN1889 chipset solution16C650 UART compatible.
- 2 RS-232 serial ports with a data transfer rate up to 115.2Kbps.
- Universal PCI compatible with 64 / 32-bit PCI-X/PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2 to ±15KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME NT / 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4 / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

| Specificatio   | The state               | A Traine               | AR.a.                       | Carlen -                            | A LEADER                            |
|----------------|-------------------------|------------------------|-----------------------------|-------------------------------------|-------------------------------------|
| Item           | 4036A3V                 | 4037A                  | 4037AL                      | 4037D                               | 4037U                               |
| Port           | 2                       | 2                      | 2                           | 2                                   | 2                                   |
| BUS            | PCI 2.3 up<br>3.3V only | Universal PCI          | Universal PCI               | Universal PCI                       | Universal PCI                       |
| ESD Protection | -                       | ±2KV                   | ±2KV                        | ±2KV                                | ±2KV                                |
| Baud Rate      | 50~115.2Kbps            | 50~115.2Kbps           | 50~115.2Kbps                | 50~115.2Kbps                        | 50~115.2Kbps                        |
| PCB Connector  | DB9M                    | DB9M                   | DB44F                       | DB9M                                | Pin Header                          |
| Bracket Space  | 1                       | 1                      | 1                           | 1                                   | 1                                   |
| Dimensions     | 120 x 78 mm             | 120 x 78 mm            | 120 x 64 mm                 | 128 x 78 mm                         | 128 x 50 mm                         |
| Bracket        | Std. 121 mm             | Std. 121 mm            | L.P. 79.2 mm                | Std. 121 mm                         | L.P. 79.2 mm                        |
| DB9M Cable     | _                       | _                      | 1-set 30cm                  | _                                   | 2-set 30cm                          |
| Application    | transpotation           | Building<br>Automation | ReMap legacy<br>ISA Address | Embedded for<br>RackMount<br>system | Embedded for<br>RackMount<br>system |

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#### **Package Content**

- 1 x Multi-port RS-232 PCI Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Optional Accessories**

- DB44 to 2 ports DB9 male connection cable, 30cm (4037AL)
- 5x2 Pin Header to DB9 Male connection cable, 30cm (4037U)

#### **Order Information**

- 4036A3V 2 ports RS-232 PCI Board
- 4037A 2 ports RS-232 PCI Low Profile Board
- 4037AL 2 ports RS-232 PCI Board
- 4037D 2 ports RS-232 PCI Board
- 4037U 2 ports RS-232 PCI Embedded Board

# Golden I/O



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#### **Overview**

With SUNIX Universal PCI serial communication boards, users can add 1 serial port to their system, allowing them to use a serial device further. The board is compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. The 4027 board series has a 32 bytes onboard FIFO. SUNIX Universal PCI serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- Highly reliable SUNIX SUN1889 chipset solution16C650 UART compatible.
- 1 RS-232 serial port with a data transfer rate up to 115.2Kbps.
- Universal PCI compatible with 64/32-bit PCI-X / PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET /3x / 9x /ME / NT 2000 / XP / 2003(32-64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

| Specification  |               |               |               |                 |
|----------------|---------------|---------------|---------------|-----------------|
| Picture        | H. T. L. M.   | The substrain | A statement   | No. Contraction |
| Item           | 4027A         | 4027AL        | 4027D         | 4027DL          |
| Port           | 1             | 1             | 1             | 1               |
| BUS            | Universal PCI | Universal PCI | Universal PCI | Universal PCI   |
| ESD Protection | ±2KV          | ±2KV          | ±2KV          | ±2KV            |
| Baud Rate      | 75~921.6Kbps  | 75~921.6Kbps  | 75~921.6Kbps  | 75~921.6Kbps    |
| PCB Connector  | DB9M          | DB9M          | DB9M          | DB9M            |
| Bracket Space  | 1             | 1             | 1             | 1               |
| Dimensions     | 120 x 52 mm     |
| Bracket        | Std. 121 mm   | L.P. 79.2 mm  | Std. 121 mm   | L.P. 79.2 mm    |
|                |               |               |               |                 |

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ReMap legacy

ISA Address

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ISA Address

#### **Package Content**

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- 1 x Single-port RS-232 PCI Board
- 1 x Driver CD ROM

Note

1 x Ouick Installation Guide

#### **Order Information**

- 4027A 1 port RS-232 PCI Board
- 4027AL 1 port RS-232 PCI Low Profile Board
- 4027D 1 port RS-232 PCI Board
- 4027DL 1 port RS-232 PCI Board Low Profile Board

# **High Speed Power I/O**

# SER4000P / PL 4 port RS-232 Serial

4 port RS-232 Serial Power Selectable PCI Board

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#### **Overview**

SUNIX Power IO PCI serial communication boards support 5 or 12 Volt power output. The boards are designed for use in commercial applications without need to provide the serial devices with external power supplies. The boards are compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. The Power IO board series has a 32 bytes onboard FIFO. SUNIX Power IO serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- Highly reliable SUNIX UL7512EQ chipset solution16C650 UART compatible.
- Four RS-232 serial ports with 5V/12V power output and a data transfer rate up to 921.6Kbps.
- Supports PCI Bus power and systems power supply output.
- Universal PCI compatible with 64 / 32-bit PCI-X / PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x ME / NT / 2000 / XP / 2003(32/64-bit) / Vista, Linux 2.2x / 2.4x / 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

| Specification |  |
|---------------|--|
|               |  |

| Picture        | No an            | A CONTRACTOR     |
|----------------|------------------|------------------|
| Item           | SER4000P         | SER4000PL        |
| Port           | 4                | 4                |
| BUS            | Universal PCI    | Universal PCI    |
| ESD Protection | ±15KV            | ±15KV            |
| Baud Rate      | 50~921.6Kbps     | 50~921.6Kbps     |
| PCB Connector  | DB44F            | DB44F            |
| Bracket Space  | 1                | 1                |
| Dimensions     | 110 x 62.5 mm    | 110 x 62.5 mm    |
| Bracket        | Std. 121 mm      | L.P. 79.2 mm     |
| DB9M Cable     | 1-set 40 / 100cm | 1-set 40 / 100cm |
| DB25M Cable    | 1-set 40 / 100cm | 1-set 40 / 100cm |

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#### **Package Content**

- 1 x Multi-port RS-232 PCI Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

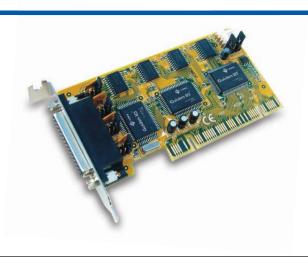
#### **Order Information**

- SER4000P 4 ports Power Selectable RS-232 PCI Board
- SER4000PL 4 ports Power Selectable RS-232 PCI Express Low Profile Board

## Power I/O

4056P / PL 4037P / PL 4027P / PL

4 / 2 / 1 port RS-232 Serial Power Selectable PCI Board



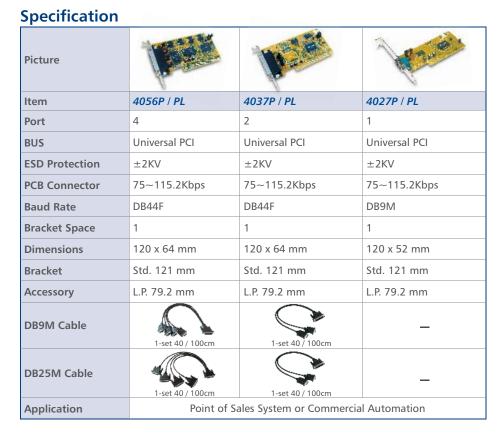
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#### **Overview**

SUNIX Power IO PCI serial communication boards support 5 or 12 Volt power output. The boards are designed for use in commercial applications without need to provide the serial devices with external power supplies. The boards are compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. The Power IO board series has a 32 bytes onboard FIFO. SUNIX Power IO serial communication boards support the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- Highly reliable SUNIX SUN1889/SUN1699 chipset solution16C650 UART compatible.
- 4 / 2 / 1 RS-232 serial ports with 5V/12V power output.
- Supports PCI Bus power and systems power supply output.
- Universal PCI compatible with 64 / 32-bit PCI-X / PCI Bus and 3.3 / 5V.
- On-chip hardware auto flow control, guarantees no data loss.
- Built-in ±2KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE. NET / 3x / 9x ME / NT 2000 / XP / 2003 / Vista Linux 2.2x / 2.4x 2.6x & DOS.
- Ready for the Intel® / AMD® CPU and 32 / 64-bit operation system.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.



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#### Package Content

- 1 x Multi-port RS-232 PCI Board
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Order Information**

- 4056P 4 ports RS-232 Power Selectable PCI Board
- 4056PL 4 ports RS-232 Power Selectable PCI Low Profile Board
- 4037P 2 ports RS-232 Power Selectable PCI Board
- 4037PL 2 ports RS-232 Power Selectable PCI Low Profile Board
- 4027P 1 port RS-232 Power Selectable PCI Board
- 4027PL 1 port RS-232 Power Selectable PCI Low Profile Board

## Multi I/O



**4079LM** 2 port RS-232 & 1 port IEEE1284 PCI Board

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#### **Overview**

SUNIX 4079 PCI Multi-I/O communication board provides an independent high speed RS-232 serial and IEEE 1284 parallel interface. It provides the option to select between 5V and 12V to provide power to the connected RS-232 serial devices through the ninth pin of the DB9 male connector. The board is designed for use in commercial applications without need to provide the serial devices with external power. The board is compatible with both 32 / 64-bit PCI architecture supporting 3.3 and 5V. It has a 32 bytes onboard FIFO. The SUNIX Power IO Multi IO communication board supports the major operating systems on the market. We provide driver support for Microsoft Windows 32/64-bit platform, WinCE, Linux 2.2.x  $\sim$  2.6.x kernels, making it the best and most economical solution for commercial and industrial applications.

#### **Features**

- Highly reliable SUNIX SUN1998 UART / Parallel chipset solution.
- Two RS-232 and one IEEE1284 Parallel ports.
- All serial ports with 5V/12V power output selectable.
- Supports PCI Bus power and systems power supply output.
- Universal PCI compatible with 64/32-bit PCI-X/PCI Bus and 3.3/5V.
- Supports Re-map function for legacy ports under Microsoft Windows 98 O.S..
- IEEE 1284-1994 compliant supports
  - SPP (Standard Parallel Port)
  - EPP (Enhanced Parallel Port)
  - ECP (Enhanced Capability Port)
  - BPP (Bi-direction Parallel Port )
- Built-in ±2 KV ESD protection for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 3x / 9x ME / NT / 2000 / XP / 2003(32/64-bit) / Vista & Linux 2.2x / 2.4x 2.6x.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.



#### **Specification**

| Specification  |                                 |                                 |  |
|----------------|---------------------------------|---------------------------------|--|
| Picture        | W.                              | The second second               |  |
| ltem           | 4079AM                          | 4079LM                          |  |
| Port           | 2 port RS-232, 1 port IEEE 1284 | 2 port RS-232, 1 port IEEE 1284 |  |
| BUS            | Universal PCI                   | Universal PCI                   |  |
| ESD Protection | ±2KV                            | ±2KV                            |  |
| Baud Rate      | 50~115.2Kbps                    | 50~115.2Kbps                    |  |
| PCB Connector  | 2 x DB9M, 1 x Pin Header        | DB44F                           |  |
| Bracket Space  | 2                               | 1                               |  |
| Dimensions     | 120 x 78 mm                     | 120 x 78 mm                     |  |
| Bracket        | Std. 121 mm                     | LP. 79.2mm                      |  |
| Accessory      |                                 |                                 |  |
| Application    | Commercial Application          |                                 |  |

#### Package Content

- 1 x Multi IO PCI Board
- 2 x 13 Pin Header to DB25F flat cable with bracket (4079AM)
- 1 x DB44F to 2 x DB9M and 1 DB25F cable (4079PM)
- 1 x Driver CD ROM
- 1 x Quick Installation Guide

#### **Order Information**

- 4079AM 2 ports RS-232 & 1 port IEEE1284 Parallel PCI Board
- 4079LM 2 ports RS-232 & 1 port IEEE1284 Parallel PCI Low Profile Board

4018A 4008A



4008A

2 / 1 port IEEE1284 Parallel PCI Board

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#### **Overview**

SUNIX PCI parallel communication boards are compatible with the 32/64-bit PCI architecture supporting a 3.3 and 5V Bus. The majority of today's motherboards is not equipped with a parallel port. With SUNIX PCI parallel board, users can add 2/1 parallel ports to their system, allowing them to use parallel devices further. The SUNIX PCI parallel Board is the advanced and high efficient solution for commercial and industrial automation applications.

#### **Features**

- Highly reliable SUN1888 IEEE -1284 chipset solution.
- Two or one IEEE1284 Parallel ports.
- Universal PCI compatible with 64/32-bit PCI-X / PCI Bus and 3.3 / 5V.
- IEEE 1284-1994 compliant supports
  - SPP (Standard Parallel Port)
  - EPP (Enhanced Parallel Port)
  - ECP (Enhanced Capability Port)
  - BPP (Bi-direction Parallel Port )
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 3x / 9x / ME / NT / 2000 / XP / 2003(32/64-bit) / Vista,
- Linux 2.4x / 2.6x.
- Ready for the Intel® / AMD® CPU and 32/64-bit operation system.
- O°C ~ 60°C operating temperature.

# Specification Picture Item 44018A Port 2

| ite in        | 1101011                | 10001         |  |
|---------------|------------------------|---------------|--|
| Port          | 2                      | 1             |  |
| BUS           | Universal PCI          | Universal PCI |  |
| PCB Connector | DB25F / Pin            | DB25F         |  |
| Bracket Space | 2                      | 1             |  |
| Dimensions    | 120 x 64 mm            | 120 x 64 mm   |  |
| Bracket       | Std. 121 mm            | Std. 121 mm   |  |
| Accessory     | -                      |               |  |
| Application   | Commercial Application |               |  |

#### Package Content

- 1. 1 x Multi IO PCI Board
- 1 x Pin Header to DB25F Connector Bracket set (4018A)
- 1 x User's Manual and Software CD ROM
- 1 x Quick Installation Guide

#### **Order Information**

- 4018A 2 ports Multi IO PCI Board
- 4008A 1 port Multi IO PCI Board

# Golden I/O

4366A 4356A

**4337A** 8 / 4 / 2 port RS-232 Serial PCI-104 Board



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#### **Overview**

SUNIX PCI-104 RS-232 serial communication board combines small size, industrial grade construction and reliability specifications, plus perform the functions most commonly need in embedded application. Each port offer data transfer rate up to 921.6 Kbps with built-in 128-Kbyte FIFO buffer to give you maximum system performance and efficiency. PCI-104 modules use as smart stacking bus design, they avoid the costs and bulk associated with backplanes or card cage. It works with PC / 104 -plus CPU boards that accept the PCI-104 expansion interface, and comes with DB9 or DB25 connection cables are available as options to meet users' varied connection requirements.

#### **Features**

- 8 / 4 / 2 independent RS-232 serial ports with communication speeds up to 921.6Kbps.
- High Speed Chipset Sunix Golden IO (4366A)
- High speed SUN1889 16C650 compatible UART controller on-board.
- On-chip hardware auto flow control to guarantee no data loss.
- Built-in ±2 KV ESD protections for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME / NT / 2000 / XP / 2003 / Vista, Linux & DOS.
- O°C ~ 60°C operating temperature.

| Specification  |              |                     |                                  |
|----------------|--------------|---------------------|----------------------------------|
| Picture        |              |                     |                                  |
| Item           | 4366A        | 4356A               | 4337A                            |
| Port           | 8            | 4                   | 2                                |
| BUS            | PCI-104      | PCI-104             | PCI-104                          |
| ESD Protection | ±5KV         | ±2KV                | ±2KV                             |
| PCB Connector  | Box Header   | Box Header          | Box Header                       |
| Baud Rate      | 50~921.6Kbps | 50~115.2Kbps        | 50~115.2Kbps                     |
| Dimensions     | 95.9 x 90 mm | 95.9 x 90 mm        | 95.9 x 90 mm                     |
| Accessory      |              |                     |                                  |
| Application    | POS System   | Building Automation | Embedded for<br>RackMount system |

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#### **Package Content**

- 1 x Golden IO PCI-104 Board
- 1 x User's Manual and Software CD ROM
- 1 x Quick Installation Guide

#### **Optional Accessories**

• 5x2 Pin Header to DB9 Male connection cable, 30cm

#### **Order Information**

- 4337A 2 ports Multi IO PCI-104 Board
- 4356A 4 ports Multi IO PCI-104 Board
- 4366A 8 ports Multi IO PCI-104 Board

## Golden I/O



**4243 4233** 4/2 port RS-232 Serial PC / 104 Board



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#### **Overview**

SUNIX PC / 104 RS-232 Multi-port serial communication board combines small size, industrial grade construction and reliability plus perform the functions most commonly need in embedded application. Each serial port has a built-in 64 byte hardware FIFO, and provides high-performance data transfer rates with SUNIX SUN1699 16C750 standard UART. The I/O address and interrupt of each serial port is configurable. SUNIX PC / 104 modules use as smart stacking bus design to avoid the costs and bulk associated with backplanes or card cage. DB9 or DB25 connection cables are available as options to meet users' varied connection requirements.

#### **Features**

- 4 / 2 independent RS-232 serial ports with communication speeds up to 115.2Kbps.
- High speed SUN1699 16C750 compatible UART controller on-board.
- On-chip hardware auto flow control to guarantee no data loss.
- Each serial port with built-in 64 byte hardware FIFO.
- IRQ sharing and I/O address selectable for each serial port by jumper.
- Built-in ±2 KV ESD protections for all serial signals.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows WinCE.NET / 3x / 9x / ME / NT / 2000 / XP / 2003 / Vista, Linux & DOS.
- O°C ~ 60°C operating temperature.

| Picture        | The second secon | The set                       |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Item           | 42431                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 42331                         |
| Port           | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2                             |
| BUS            | PC / 104                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PC / 104                      |
| ESD Protection | ±2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±2KV                          |
| Baud Rate      | 50~115.2Kbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50~115.2Kbps                  |
| PCB Connector  | Box Header                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Box Header                    |
| Bracket Space  | 95.9 x 90 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 95.2 x 90 mm                  |
| Accessory      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |
| Application    | Building Automation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Embedded for RackMount system |

#### Package Content

- 1 x Golden IO PC / 104 Board
- 1 x User's Manual and Software CD ROM
- 1 x Quick Installation Guide

#### **Optional Accessories**

• 5x2 Pin Header to DB9 Male connection cable, 30cm

#### **Order Information**

- 4233I 2 port Multi IO PC / 104 Board with Interrupt Sharing
- 42431 4 port Multi IO PC / 104 Board with Interrupt Sharing

### **Golden I/O ExpressCard**

# **ECS4400 ECS2400 ECS1400**



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#### **Overview**

Express Card

Sunix ExpressCard series meet the need of the ExpressCard market where notebooks, desktops, and docking stations could add additional RS-232 serial ports via a single slim-type 34/54mm ExpressCard slot. The ExpressCards are equipped with SUNIX high performance and reliable chipset UL7512EQ. The SUNIX ExpressCard series is the advanced and high efficient solution for commercial and industrial automation applications. Users will benefit from ExpressCard plug-n-play ease of use, which eliminates the need to open the chassis to add new features. SUNIX Serial ExpressCard series support serial peripherals, such as GPS receivers, serial printers/ plotters, barcode scanners, digital cameras, PDAs, Cell Phones and fax/modems.

#### **Features**

- 4/2/1 independent RS-232 serial ports with communication speeds up to 921.6Kbps.
- High reliability SUNIX UL7512EQ 16C750 UART compatible chipset solution.
- Designed to meet PCI Express Base Specification Revision 1.1.
- Full single-lane (or x1) PCI Express throughput.
- Built-in ±15KV ESD protection for all serial signals meets IEC1000-4-2 standard.
- Hot-swapping feature allows you to attach/detach RS-232 devices without first powering your computer off.
- Plug-n-Play.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 98SE / ME / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

| Specification  |                                                          | 1                              | 1                              |
|----------------|----------------------------------------------------------|--------------------------------|--------------------------------|
| Picture        |                                                          |                                |                                |
| Item           | ECS4400                                                  | ECS2400                        | ECS1400                        |
| Port           | 4                                                        | 2                              | 1                              |
| BUS            | Express Card, 1x                                         | Express Card, 1x               | Express Card, 1x               |
| ESD Protection | ±15KV                                                    | ±15KV                          | ±15KV                          |
| PCB Connector  | DB44F                                                    | DB44F                          | DB9M                           |
| Baud Rate      | 50 ~ 921.6Kbps                                           | 50 ~ 921.6Kbps                 | 50 ~ 921.6Kbps                 |
| Dimensions     | 132 (W) x 58 (D) x<br>21mm (H)                           | 132 (W) x 58 (D) x<br>21mm (H) | 132 (W) x 58 (D) x<br>21mm (H) |
| DB9M Cable     |                                                          |                                | _                              |
| Application    | 1-set 40 / 100cm 1-set 40 / 100cm Commercial application |                                |                                |

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### **Package Content**

- 1 x Golden I/O ExpressCard
- 1 x Driver CD ROM

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- 1 x DB44 to 4 / 2 ports DB9 / 25 Male Cable, 40cm (ECS4400 / ECS2400)
- 1 x Quick Installation Guide

#### **Order Information**

- ECS1400 1 port RS-232 ExpressCard
- ECS2400 2 ports RS-232 ExpressCard
- ECS4400 4 ports RS-232 ExpressCard

## Multi I/O ExpressCard



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ECM2925

IFFF1284 Parallel Express Card

#### **Overview**

SUNIX ExpressCard series meet the need of the ExpressCard market where notebooks, desktops, and docking stations could add additional RS-232 serial and IEEE1284 parallel ports via a single slim-type 34 / 54mm ExpressCard slot. The ExpressCards are equipped with SUNIX high performance and reliable chipset UL7512EQ. The SUNIX ExpressCard series is the advanced and high efficient solution for commercial and industrial automation applications. Users will benefit from ExpressCard plug-n-play ease of use, which eliminates the need to open the chassis to add new features. SUNIX Serial ExpressCard series support serial peripherals, such as GPS receivers, serial printers / plotters, barcode scanners, digital cameras, PDAs, Cell Phones and fax/modems and parallel devices, like printer, scanner, plotter.

#### **Features**

- Two RS-232 serial ports and one IEEE1284 parallel port
- High reliability SUNIX UL7512EQ 16C750 chipset solution.
- Designed to meet PCI Express Base Specification Revision 1.1.
- Full single-lane (or x1) PCI Express throughput.
- Built-in ±15KV ESD protection for all serial signals meets IEC1000-4-2 standard.
- Hot-swapping feature allows you to attach/detach RS-232 devices without first powering your computer off.
- Plug-n-Play.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 98SE / ME / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

| <b>Specification</b> |
|----------------------|
|----------------------|

| specification    |                                 |
|------------------|---------------------------------|
| Picture          |                                 |
| Item             | ECM2925                         |
| Port             | 2 port RS-232, 1 port IEEE 1284 |
| BUS              | Express Card, 1x                |
| ESD Protection   | ±15KV                           |
| Baud Rate RS-232 | 50 ~ 921.6Kbps                  |
| Connector        | 1 x DB44F                       |
| Speed IEEE 1284  | 2.7 MB / s                      |
| Mode IEEE 1284   | SPP / EPP / ECP / BPP           |
| Dimensions       | 132 (W) x 58 (D) x 21mm (H)     |
| DB9 Cable        | 1-set 40 / 100cm                |
| Application      | Commercial Application          |

#### **Package Content**

- 1. 1 x Multi IO ExpressCard
- 1 x Driver CD ROM
- 1 x DB44 to 2-port DB9 Male and 1-port DB25 Female cable, 40cm
- 1 x Quick Installation Guide



## Multi I/O ExpressCard

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# ECP0010 ECP0020 2/1 port IEEE1284

2 / 1 port IEEE1284 Parallel ExpressCard



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#### **Overview**

Sunix ExpressCard series meet the need of the ExpressCard market where notebooks, desktops, and docking stations could add additional IEEE1284 parallel ports via a single slim-type 34/54mm ExpressCard slot. The ExpressCards are equipped with SUNIX high performance and reliable chipset UL7512EQ. The SUNIX ExpressCard series is the advanced and high efficient solution for commercial and industrial automation applications. Users will benefit from ExpressCard plug-n-play ease of use, which eliminates the need to open the chassis to add new features. SUNIX Serial ExpressCard series support serial peripherals, such as GPS receivers, serial printers/ plotters, barcode scanners, digital cameras, PDAs, Cell Phones and fax/modems.

#### Features

- Two or one IEEE1284 parallel ports
- High reliability SUNIX UL7512EQ chipset solution.
- Designed to meet PCI Express Base Specification Revision 1.1.
- Support ECP(Enhance Capacity Port) / EPP(Enhance Parallel Port)
- Full single-lane (or x1) PCI Express throughput.
- Hot-swapping feature allows you to attach/detach parallel devices without first powering your computer off.
- Plug-n-Play.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 98SE / ME / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

| Picture     |                             |                             |  |
|-------------|-----------------------------|-----------------------------|--|
| Item        | ECP0020                     | ECP0010                     |  |
| Port        | 2                           | 1                           |  |
| BUS         | Express Card, 1x            | Express Card, 1x            |  |
| Protection  | 2KV ESD                     | 2KV ESD                     |  |
| Speed       | 2.7 MB / s                  | 2.7 MB / s                  |  |
| Mode        | SPP / EPP / ECP / BPP       | SPP / EPP / ECP / BPP       |  |
| Connector   | DB44F                       | DB25F                       |  |
| Dimensions  | 132 (W) x 58 (D) x 21mm (H) | 132 (W) x 58 (D) x 21mm (H) |  |
| Accessory   |                             | _                           |  |
| Application | Commercial application      |                             |  |

#### **Package Content**

- 1 x Multi IO ExpressCard
- 1 x Driver CD ROM

**Specification** 

- 1 x DB44 to 2 ports DB25 Female Cable, 40cm
- 1 x Quick Installation Guide

#### **Order Information**

- ECP0010 1 port Multi IO CardBus
- ECP0020 2 port Multi IO CardBus

### Golden I/O CardBus

# **CBS4009 CBS2009 CBS1009**

4 / 2 / 1 / port RS-232 Serial

# **Overview**

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CardBus

SUNIX card bus series are RS-232 PCMCIA Type II 32-bit CardBuss, widely used in varieties of portable systems. Each of the serial ports offers data transfer rates up to 230.4 Kbps with built-in 32-byte FIFO buffer to give you maximum system performance and efficiency. Equipped with Sunix high performance and reliable single chipset UART, UL7512EQ, this CardBuss also provide full modem control signals to ensure compatibility with all kind of RS-232 peripherals. These CardBuss are the advanced and high efficient solution for commercial and industrial automation applications and ideal as well for home or office use. These Card Bus Cards are your best solution to utilize the peripheral with serial port in an easy-to-use environment such as plug-n-play and hot-swapping function.

#### **Features**

- 4/2/1 independent RS-232 serial ports with communication speeds up to 230.4Kbps.
- High reliability SUNIX UL7512EQ 16C750 chipset solution16C650 UART compatible.
- Compliant with PCMCIA Type II Card Bus specification.
- Built-in ±15KV ESD protection for all serial signals meets IEC1000-4-2 standard.
- Hot-swapping feature allows you to attach/detach RS-232 devices without first powering your computer off.
- Plug-n-Play.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 98SE / ME / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

| CBS4009                        | CBS2009                                                                            | CBS1009                                                                                                                                                                                                                                     |
|--------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4                              | 2                                                                                  | 1                                                                                                                                                                                                                                           |
| PCMCIA Type II, 332            | bit Card Bus                                                                       | PCMCIA Type II, 332                                                                                                                                                                                                                         |
| ±15KV                          | ±15KV                                                                              | ±15KV                                                                                                                                                                                                                                       |
| DB44F                          | DB9M                                                                               | DB9M                                                                                                                                                                                                                                        |
| 50 ~ 921.6Kbps                 | 50 ~ 921.6Kbps                                                                     | 50 ~ 921.6Kbps                                                                                                                                                                                                                              |
| 132 (W) x 58 (D) x<br>21mm (H) | 132 (W) x 58 (D) x<br>21mm (H)                                                     | 132 (W) x 58 (D) x<br>21mm (H)                                                                                                                                                                                                              |
|                                |                                                                                    | _                                                                                                                                                                                                                                           |
| 1-set 40 / 100cm               |                                                                                    | 1                                                                                                                                                                                                                                           |
|                                | 4<br>PCMCIA Type II, 332<br>±15KV<br>DB44F<br>50 ~ 921.6Kbps<br>132 (W) x 58 (D) x | 4       2         PCMCIA Type II, 332       bit Card Bus         ±15KV       ±15KV         DB44F       DB9M         50 ~ 921.6Kbps       50 ~ 921.6Kbps         132 (W) x 58 (D) x       132 (W) x 58 (D) x         21mm (H)       21mm (H) |

#### **Package Content**

**Specification** 

- 1 x Golden IO CardBus
- 1 x User's Manual and Software CD ROM
- 1 x DB44F to 4/2 x DB9M cable (CBS4009 / CBS2009)
- 1 x Quick Installation Guide

#### **Order Information**

- CBS1009 1 port RS-232 CardBus
- CBS2009 2 ports RS-232 CardBus
- CBS4009 4 ports RS-232 CardBus





## Multi I/O CardBus

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IFFF1284 Parallel CardBus

#### **Overview**

SUNIX card bus series are RS-232 PCMCIA Type II 32-bit CardBuss, widely used in varieties of portable systems. Each of the serial ports offers data transfer rates up to 921.6 Kbps with built-in 32-byte FIFO buffer to give you maximum system performance and efficiency. Further the integrated IEEE1284 parallel port a data transfer rate up to 2.7MB/s. Equipped with Sunix high performance and reliable single chipset UART, UL7512EQ, this CardBuss also provide full modem control signals to ensure compatibility with all kind of RS-232 peripherals. It supports SPP, EPP and ECP mode to ensure highest compatibility to modern parallel devices..These CardBuss are the advanced and high efficient solution for commercial and industrial automation applications and ideal as well for home or office use. These Card Bus Cards are your best solution to utilize the peripheral with serial port in an easy-to-use environment such as plug-n-play and hot-swapping function.

#### Features

- Two RS-232 serial ports and one IEEE1284 parallel port
- High reliability SUNIX UL7512EQ 16C750 chipset solution16C650 UART compatible.
- Compliant with PCMCIA Type II Card Bus specification.
- Built-in ±15KV ESD protection for all serial signals meets IEC1000-4-2 standard.
- Hot-swapping feature allows you to attach/detach RS-232 devices without first powering your computer off.
- Plug-n-Play.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 98SE / ME / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

#### **Specification**

| Picture    |                                             |                                             |
|------------|---------------------------------------------|---------------------------------------------|
| Item       | СВМ2925                                     | CBM1925                                     |
| Controller | SUNIX UL7512EQ                              | SUNIX UL7512EQ                              |
| Port       | 2 port RS-232 &<br>1 port IEEE1284 Parallel | 1 port RS-232 &<br>1 port IEEE1284 Parallel |
| BUS        | PCMCIA Type II, 32-bit Card Bus             | PCMCIA Type II, 32-bit Card Bus             |
| Connector  | DB44F                                       | DB44F                                       |
| Protection | ±15KV ESD                                   | ±15KV ESD                                   |
| Baud Rate  | 50bps ~ 921.6 Kbps                          | 50bps ~ 921.6 Kbps                          |
| Dimensions | 132 (W) x 58 (D) x 21mm (H)                 | 132 (W) x 58 (D) x 21mm (H)                 |
| Cable      |                                             |                                             |
|            | 1-set 40 / 100cm                            | DB25 Female 40 cm                           |

#### **Package Content**

- 1 x Multi IO CardBus
- 1 x Driver CD ROM
- 1 x DB44 to 2-port DB9 Male (CBM2925)
- 1 x DB25 to 2 ports DB9 port DB25 Female cable, 40cm (CBM1925)
- 1 x Ouick Installation Guide

#### **Order Information**

- CBM2925 2 port RS-232 & 1 port IEEE1284 Parallel CardBus
- CBM1925 1 port RS-232 & 1 port IEEE1284 Parallel CardBus

## Multi I/O CardBus

# CBP0020M CBP0010M

2 / 1 port IEEE1284 Parallel CardBus



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#### **Overview**

SUNIX card bus series are RS-232 PCMCIA Type II 32-bit CardBuss, widely used in varieties of portable systems. Each parallel port offers data transfer rate up to 2.7 Mbps with built-in SPP / EPP / ECP / BPP operation mode to give you maximum system performance and efficiency. These CardBus are the advanced and high efficient solution for commercial and industrial automation applications and ideal as well for home or office use.These Card Bus Cards are your best solution to utilize the peripheral with serial port in an easy-to-use environment such as plug-n-play and hot-swapping function.

#### Features

- 2 / 1 IEEE 1284 Parallel ports.
- High performance SUN1888 Parallel chipset solution.
- Compliant with PCMCIA Type II Card Bus specification.
- IEEE 1284-1994 compliant supports
  - SPP (Standard Parallel Port)
  - EPP (Enhanced Parallel Port)
  - ECP (Enhanced Capability Port)
  - BPP(Bi-direction Parallel Port)
- Supports Hot-Swap and Plug-n-Play.
- Plug-n-Play.
- Certified by Microsoft WHQL, CE, FCC, RoHS approval.
- Support Microsoft Windows 98SE / ME / 2000 / XP / 2003 / Vista & Linux.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.



#### **Specification**

| Picture    |                                 |                                 |
|------------|---------------------------------|---------------------------------|
| Item       | CBP0020M                        | CBP0010M                        |
| Controller | SUNIX UL7512EQ                  | SUNIX UL7512EQ                  |
| Port       | 2 ports Parallel                | 1 port Parallel                 |
| BUS        | PCMCIA Type II, 32-bit Card Bus | PCMCIA Type II, 32-bit Card Bus |
| Connector  | DB44F                           | DB25F                           |
| Protection | ±15KV ESD                       | ±15KV ESD                       |
| Baud Rate  | 50bps ~ 921.6 Kbps              | 50bps ~ 921.6 Kbps              |
| Dimensions | 132 (W) x 58 (D) x 21mm (H)     | 132 (W) x 58 (D) x 21mm (H)     |
| Cable      | DB25 Female 40 cm               | _                               |

#### **Package Content**

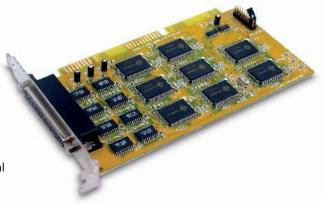
- 1 x Golden IO CardBus
- 1 x User's Manual and Software CD ROM
- 1 x DB44F to 2 x DB25F cable (CBP0020M)
- 1 x Quick Installation Guide

#### **Order information**

- CBP0010M 1 port Parallel CardBus
- CBP0020M 2 ports Parallel CardBus

## Golden I/O

4064I 4046I 4043A 4033A 4023A



8 / 4 / 2/ 1 port RS-232 Serial ISA Board

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#### **Overview**

SUNIX Golden I/O ISA serial communication board series is equipped with Sunix high performance and reliable SUN1699 chipset. The card series provides RS-232 serial port connection with DB9 or DB25 interface. SUNIX provides driver support for Windows and Linux OS, enabling it to be installed in any PC system equipped with ISA slot. SUNIX provides an economic and reliable solution for extensive use in the commercial communication and industrial automation applications, such as POS registers, lottery machines, kiosk machines, and other serial device control applications.

#### **Features**

- 8 / 4 / 2 RS-232 serial ports.
- High speed SUN1699 16C750 compatible UART chipset solution.
- On-chip hardware auto flow control to guarantee no data loss
- Each serial port has built-in 64 byte hardware FIFO
- IRQ sharing and I/O address selection for each serial port by jumper.
- Built-in ±2 KV ESD protections for all serial signals.
- Support Microsoft Windows WinCE.NET / 3.x / 9x Me / NT / 2000 / XP / 2003 / Vista, Linux 2.2x / 2.4x & DOS.
- O°C ~ 60°C operating temperature.

| Contraction Tor       | A A A A A A A A A A A A A A A A A A A                                                      | Contaction of the                                                                                                                                                                                                                                                                                                                       | No sta                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | and and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| and the second second | A second                                                                                   |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40641                 | 40461                                                                                      | 4043A                                                                                                                                                                                                                                                                                                                                   | 4033A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4023A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8                     | 4                                                                                          | 4                                                                                                                                                                                                                                                                                                                                       | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 16-bit ISA            | 16-bit ISA                                                                                 | 16-bit ISA                                                                                                                                                                                                                                                                                                                              | 16-bit ISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 16-bit ISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 12 Loc.               | 12 Loc.                                                                                    | 12 Loc.                                                                                                                                                                                                                                                                                                                                 | 12 Loc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 12 Loc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sharing               | Sharing                                                                                    | 9 Loc.                                                                                                                                                                                                                                                                                                                                  | 9 Loc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 9 Loc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2KV ESD               | 2KV ESD                                                                                    | 2KV ESD                                                                                                                                                                                                                                                                                                                                 | 2KV ESD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2KV ESD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 115.2Kbps             | 115.2Kbps                                                                                  | 115.2Kbps                                                                                                                                                                                                                                                                                                                               | 115.2Kbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 115.2Kbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DB62F                 | DB37F                                                                                      | DB37F                                                                                                                                                                                                                                                                                                                                   | DB9M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DB9M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 1                     | 1                                                                                          | 1                                                                                                                                                                                                                                                                                                                                       | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 170 x 95 mm           | 160 x 94 mm                                                                                | 175 x 83 mm                                                                                                                                                                                                                                                                                                                             | 132 x 71 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 133 x 57 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Std. 121 mm           | Std. 121 mm                                                                                | Std. 121 mm                                                                                                                                                                                                                                                                                                                             | Std. 121 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Std. 121 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 1-set 40/100cm        | 1-set 40/100cm                                                                             | 1-set 40/100cm                                                                                                                                                                                                                                                                                                                          | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                       |                                                                                            |                                                                                                                                                                                                                                                                                                                                         | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                       | 8<br>16-bit ISA<br>12 Loc.<br>Sharing<br>2KV ESD<br>115.2Kbps<br>DB62F<br>1<br>170 x 95 mm | 8         4           16-bit ISA         16-bit ISA           12 Loc.         12 Loc.           Sharing         Sharing           2KV ESD         2KV ESD           115.2Kbps         115.2Kbps           DB62F         DB37F           1         1           170 x 95 mm         160 x 94 mm           Std. 121 mm         Std. 121 mm | 8         4         4           16-bit ISA         16-bit ISA         16-bit ISA           12 Loc.         12 Loc.         12 Loc.           Sharing         12 Loc.         12 Loc.           Sharing         Sharing         9 Loc.           2KV ESD         2KV ESD         2KV ESD           115.2Kbps         115.2Kbps         115.2Kbps           DB62F         DB37F         DB37F           1         1         1           170 x 95 mm         160 x 94 mm         175 x 83 mm           Std. 121 mm         Std. 121 mm         Std. 121 mm | 8         4         4         2           16-bit ISA         16-bit ISA         16-bit ISA         16-bit ISA           12 Loc.         12 Loc.         12 Loc.         12 Loc.           Sharing         Sharing         9 Loc.         9 Loc.           2KV ESD         2KV ESD         2KV ESD         2KV ESD           115.2Kbps         115.2Kbps         115.2Kbps         115.2Kbps           DB62F         DB37F         DB37F         DB9M           1         1         1         1           170 x 95 mm         160 x 94 mm         175 x 83 mm         132 x 71 mm           Std. 121 mm         Std. 121 mm         Std. 121 mm         5td. 121 mm |

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#### **Package Content**

Constant and

- 1 x Golden IO CardBus
- 1 x User's Manual and Software CD ROM
- 1 x DB44F to 2 x DB25F cable (CBP0020M)
- 1 x Quick Installation Guide

#### **Order information**

- CBP0010M 1 port Parallel CardBus
- CBP0020M 2 port Parallel CardBus

Note: Please find Pin Assignment definition.

98 Technology meets daily life

# BTS1009C

Bluetooth to RS-232 Adapter

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#### **Overview**

SUNIX Bluetooth to IO (BTIO) series is designed to offer the perfect wireless solution for industrial and commercial applications. The BTS1009 complies with Bluetooth Class 1 standard version 2.0+EDR, which allows a data communication distance up to 100M and a transfer rate up to 460.8 Kbps.

SUNIX BTS1009 is made for a variety of applications, due to its outstanding features, like its high sensitivity and the low power consumption. The ideal solution for commercial applications, like POS, KIOSK and wireless surveillance systems.

#### Features

- Bluetooth Class 1 (20 dbm) version 2.0+EDR standard compliant.
- Operating distance of up to 100 meters in free space.
- Supports data transfer rate up to 460.8 Kbps.
- Intelligent power distribution technology. Supports the following modes:
  - The power for BTS1009 will be provided by a power supply connected to BTS1009 (5V DC only).
  - The power for BTS1009 and a connected serial device will be provided by a power supply connected to BTS1009 (5V DC only).
  - The power for BTS1009 will be provided by the connected serial device through PIN 9 of the serial port (5V DC only).
- User-friendly Windows configuration software.
- Support for Microsoft Windows 98SE / Me / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

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#### Specification

| specification        |                                                            |  |
|----------------------|------------------------------------------------------------|--|
| Picture              |                                                            |  |
| Item                 | BTS1009C                                                   |  |
| Туре                 | Bluetooth to RS-232 Adapter                                |  |
| Serial Communication | วท                                                         |  |
| Port                 | 1                                                          |  |
| Port Type            | DB9 Male                                                   |  |
| Throughput           | Maximum up to 460.8kbps                                    |  |
| Baud Rate            | 1200bps ~ 460.8 Kbps                                       |  |
| Protection           | 2KV ESD for all signal                                     |  |
| Blurtooth Communi    | cation                                                     |  |
| Standard             | Bluetooth V2.0 +EDR                                        |  |
| RF Power             | Class 1                                                    |  |
| Frequency            | 2.4~2.4835GHz inlicensed ISM band                          |  |
| Modulation           | GFSK, 1Mbps, 0.5BT Gaussian                                |  |
| Distance             | Up to 100m in free space                                   |  |
| Power input          | 5V DC                                                      |  |
| Power<br>Consumption | Tx Typical: 115mA<br>Rx Tyoical: 75mA<br>Standby Mode:15mA |  |
| Dimensions           | 109 x 34 x 18 mm                                           |  |
| Application          | Commercial Application                                     |  |

#### **Package Content**

- Bluetooth to RS-232 Adapter
- User's Manual and Software CD ROM
- Quick Installation Guide
- Power Adapter 5V / 1A

#### **Order Information**

- BTS1009C Bluetooth to RS-232 Adapter
- Power Adapter (Optinal)

# ComHub



# UTS4009P 4 ports USB to RS-232 Serial Hub

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#### **Overview**

SUNIX ComHub series is designed to easily connect your current serial devices through PC's USB (Universal Serial Bus) port without powering down your system or further configuration. SUNIX ComHub seamlessly integrates the serial ports into the operation system, so users can easily benefit from it. The ComHub is the solution to carry out simple and cost effective data accessibility.

#### Features

- 4 RS-232 serial ports.
- Each serial port provides transmission rate up to 115.2Kbps.
- 15KV ESD Surge protection for all serial signals.
- 1 USB 1.1 Full Speed (12Mbps), USB 2.0 compatible port.
- Supports Universal Serial Bus Plug-n-Play and Hot-Swapping feature.
- No further configuration required.
- Supports both USB bus power and external power.
- Support Windows CE / 98 / ME / 2000 / XP / 2003 & Linux.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.

#### **Specification**

| Picture              |                                                    |  |
|----------------------|----------------------------------------------------|--|
| Item                 | UTS4009P                                           |  |
| Controller           | Prolific 2303HX 16C550 Compatible UART             |  |
| Port                 | 4                                                  |  |
| Port type            | DB9 Male                                           |  |
| BUS                  | Universal Serial Bus (USB)                         |  |
| ESD Protection       | ±2KV ESD for all signal                            |  |
| Power input          | USB Bus-power<br>5VDC External Power, DC Jack type |  |
| Power<br>Consumption | < 0.7W = 5V x 130mA                                |  |
| Baud Rate            | 75 ~ 115.2 Kbps                                    |  |
| LED                  | Red for TxD, Green for RxD, Orange for Full-Duplex |  |
| Dimensions           | 180 x 70 x 26 mm                                   |  |

#### **Package Content**

- USB to RS-232 Serial Hub
- USB Cable
- User's Manual and CD ROM Driver
- Quick Installation Guide

#### **Order Information**

• UTS4009P 4 port USB to RS-232 Serial Hub

UTS2009 UTS1009 UTS1009D 2/1 ports USB to

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#### **Overview**

RS-232 Serial Hub

SUNIX ComHub UTS series transform your Universal Serial Bus (USB) port into asynchronous RS-232 serial ports to communicate with serial devices. The adapter is compatible with both USB 2.0 and 1.1 specifications. The serial ports provide a data transfer rate up to 115.2Kbps. SUNIX ComHub UTS seamlessly integrates the serial ports into the operation system, so users can easily benefit from it. The ComHub UTS is the solution to carry out simple and cost effective data accessibility.

#### **Features**

- 2 / 1 RS-232 serial ports.
- Each serial port provides transmission rate up to 115.2Kbps.
- 15KV ESD Surge protection for all serial signals.
- 1 USB 1.1 Full Speed (12Mbps), USB 2.0 compatible port.
- Supports Universal Serial Bus Plug-n-Play and Hot-Swapping feature.
- No further configuration required.
- Supports both USB bus power and external power.
- Compact Size and low power consumption.
- Support Windows CE / 98 / ME / 2000 / XP / 2003 & Linux.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.

| Specification        |                                              |                                              |                                              |
|----------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|
| Picture              | •9                                           | •9                                           | •9                                           |
| Item                 | UTS2009                                      | UTS1009                                      | UTS1009D                                     |
| Controller           | Prolific 2303HX<br>16C550 Compatible<br>UART | Prolific 2303HX<br>16C550 Compatible<br>UART | Prolific 2303HX<br>16C550 Compatible<br>UART |
| Port                 | 2                                            | 1                                            | 1                                            |
| BUS                  | Universal Serial Bus<br>(USB)                | Universal Serial Bus<br>(USB)                | Universal Serial Bus<br>(USB)                |
| ESD Protection       | ±2KV                                         | ±2KV                                         | ±2KV                                         |
| Power input          | USB Bus-power                                | USB Bus-power                                | USB Bus-power                                |
| Power<br>Consumption | < 1.0W = 5V x<br>200mA                       | < 0.8W = 5V x<br>150mA                       | < 0.8W = 5V x<br>150mA                       |
| Baud Rate            | 75 ~ 115.2 Kbps                              | 75 ~ 115.2 Kbps                              | 75 ~ 115.2 Kbps                              |
| Dimensions           | 75 x 40 x 22 mm                              | 75 x 40 x 22 mm                              | 51 x 33 x 15 mm                              |

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#### **Package Content**

- USB to RS-232 Serial Hub
- Quick Installation Guide
- User's Manual and CD ROM Driver

#### **Order Information**

- UTS2009 2 port USB to RS-232 Serial Hub with DB9M connector
- UTS1009 1 port USB to RS-232 Serial Hub with DB9M connector
- UTS1009D 1port USB to RS-232 Serial Adapter Molding Type with DB9M connector

# ComHub

**UTM1925** 

USB to RS-232 and



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#### **Overview**

SUNIX UTM1925 transforms your Universal Serial Bus (USB) port into asynchronous RS-232 serial interface and IEEE1284 parallel SPP mode LPT ports to communicate with serial devices and parallel printers. This adapter is compatible with both USB 2.0 and 1.1 specifications. The USB Full Speed connection offers a data transfer rate up to 12Mbps. SUNIX UTM1925 is the solution to carry out simple and cost effective data accessibility.

#### **Features**

- 1 RS-232 serial port, 1 IEEE 1284 port.
- The serial port provides transmission rate up to 115.2Kbps.
- The IEEE 1284 parallel port supports SPP mode at a data transfer rate of 2.7MB/sec.
- 1 USB 1.1 Full Speed (12Mbps), USB 2.0 compatible port.
- Supports Universal Serial Bus Plug-n-Play and Hot-Swapping feature.
- No further configuration required.
- Supports both USB bus power and external power.
- Compact Size and low power consumption.
- Support Windows 98 / ME / 2000 / XP / 2003 / Vista & Linux.
- O°C ~ 60°C operating temperature.

| Specification        |                                        |
|----------------------|----------------------------------------|
| Picture              | •9                                     |
| Item                 | UTM1925                                |
| Controller           | MosChip MCS7715 16C550 Compatible UART |
| Port                 | 1                                      |
| Port type            | 1 x DB9 Male, 1 x DB25 Female          |
| BUS                  | Universal Serial Bus (USB)             |
| ESD Protection       | ±2KV ESD for all signal                |
| Power input          | USB Bus-power                          |
| Power<br>Consumption | < 1W = 5V x 200mA                      |
| Baud Rate            | 75 ~ 115.2 Kbps                        |
| Dimensions           | 180 x 70 x 26 mm                       |

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#### **Package Content**

- USB to RS-232 and Parallel Multi-I/O Hub
- Ouick Installation Guide
- User's Manual and CD ROM Driver

#### **Order Information**

- UTM1925 USB to RS-232 and Parallel Multi-I/O Hub
- Note: Please find Pin Assignment definition.

# ComHub

**UTP1025** 

USB to Parallel Adapter

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#### **Overview**

SUNIX UTP1025 enables your laptop or workstation to use IEEE1284 SPP mode parallel peripherals, such as printer or scanner. This adapter is compatible with both USB 2.0 and 1.1 specifications. The USB Full Speed connection offers a data transfer rate up to 12Mbps.

#### Features

- 1 IEEE 1284 port.
- The IEEE 1284 parallel port supports SPP mode at a data transfer rate of 2.7MB/sec.
- 1 USB 1.1 Full Speed (12Mbps), USB 2.0 compatible port.
- Supports Universal Serial Bus Plug-n-Play and Hot-Swapping feature.
- No further configuration required.
- Supports both USB bus power and external power.
- Compact Size and low power consumption.
- Support Windows 98 / ME / 2000 / XP / 2003 / Vista & Linux.
- $0^{\circ}C \sim 60^{\circ}C$  operating temperature.

| Specification        |                            |
|----------------------|----------------------------|
| Picture              | •9                         |
| Item                 | UTP1025                    |
| Controller           | Prolific PL2305            |
| Port                 | 1                          |
| Port type            | DB25 Female                |
| BUS                  | Universal Serial Bus (USB) |
| Power input          | USB Bus-power              |
| Power<br>Consumption | < 1W = 5V x 200mA          |
| Throughput           | Maximum up to 2.7MBps      |
| Dimensions           | 180 x 70 x 26 mm           |

#### **Package Content**

- USB to Parallel Adapter
- Quick Installation Guide
- User's Manual and CD ROM Driver

#### **Order Information**

• UTP1025 USB to Parallel Adapter

## **Order Information**



#### High Speed I/O

- SER1640A 16 ports RS-232 PCI Express Board
- SER8400A 8 ports RS-232 PCI Express Board
- SER4400A 4 ports RS-232 PCI Express Board
- SER4400AL 4 ports RS-232 PCI Express Low Profile Board
- SER1600A 16 ports RS-232 PCI Board
- SER8000A 8 ports RS-232 PCI Board
- SER4000A 4 ports RS-232 PCI Board
- SER400AL 4 ports RS-232 PCI Low Profile Board
- 4036A3V 2 ports RS-232 PCI Board
- 4037A 2 ports RS-232 PCI Low Profile Board
- 4037AL 2 ports RS-232 PCI Board
- 4037D 2 ports RS-232 PCI Board
- 4037U 2 ports RS-232 PCI Embedded Board
- S4000P 4 ports Power Selectable RS-232 PCI Board
- 4000PL 4 ports Power Selectable RS-232 PCI Express Low Profile Board

#### Golden I/O

- 4466A 8 ports RS-232 PCI Express Board
- 4456A 4 ports RS-232 PCI Express Board
- 4456AL 4 ports RS-232 PCI Express Low Profile Board
- 4437A 2 ports RS-232 PCI Express Board
- 4418A 2 ports IEEE-1284 Parallel PCI Express Board
- 4408A 1 port IEEE-1284 Parallel PCI Express Board
- 4066R 8 ports RS-232 PCI Board
- 4066J 8 ports RS-232 PCI Board
- 4066U 8 ports RS-232 PCI Embedded Board
- 4056A 2 ports RS-232 PCI Board
- 4056AL 2 ports RS-232 PCI Low Profile Board
- 4056D 2 ports RS-232 PCI Board
- 4056U 2 ports RS-232 PCI Embedded Board
- 4027A 1 port RS-232 PCI Board
- 4027AL 1 port RS-232 PCI Low Profile Board
- 4027D 1 port RS-232 PCI Board
- 4027DL 1 port RS-232 PCI Board Low Profile Board

- 4337A 2 ports Multi IO PCI-104 Board
- 4356A 4 ports Multi IO PCI-104 Board
- 4366A 8 ports Multi IO PCI-104 Board
- 42331 2 port Multi IO PC / 104 Board with Interrupt Sharing
- 42431 4 port Multi IO PC / 104 Board with Interrupt Sharing

#### **Power I/O**

| • 4400P  | 4 ports Power Selectable RS-232 PCI Express Board             |
|----------|---------------------------------------------------------------|
| • 4400PL | 4 ports Power Selectable RS-232 PCI Express Low Profile Board |
| • 4456PM | 4 ports Power Selectable RS-232 PCI Express Board             |
| • 4456LL | 4 ports Power Selectable RS-232 PCI Express Low Profile Board |
| • 4056P  | 4 ports RS-232 Power Selectable PCI Board                     |
| • 4056PL | 4 ports RS-232 Power Selectable PCI Low Profile Board         |
| • 4037P  | 2 ports RS-232 Power Selectable PCI Board                     |
| • 4037PL | 2 ports RS-232 Power Selectable PCI Low Profile Board         |
| • 4027P  | 1 port RS-232 Power Selectable PCI Board                      |
|          |                                                               |

• 4027PL 1 port RS-232 Power Selectable PCI Low Profile Board

#### Multi I/O

- 4479AM 2 port RS-232 & 1 port IEEE1284 Parallel PCI Express Board
- 4079AM 2 ports RS-232 & 1 port IEEE1284 Parallel PCI Board
- 4079LM 2 ports RS-232 & 1 port IEEE1284 Parallel PCI Low Profile Board
- 4018A 2 ports Multi IO PCI Board
- 4008A 1 port Multi IO PCI Board

#### Golen I/O ExpressCard

- ECS1400 1 port RS-232 ExpressCard
- ECS2400 2 port RS-232 ExpressCard
- ECS4400 4 port RS-232 ExpressCard

#### Multi I/O ExpressCard

• ECM2925 2 port RS-232 & 1 port IEEE1284 Parallel Express Card

Technology meets daily life

## **Order Information**

## **Pin Assignment**



• CBP0010 1 port Multi IO CardBus

• CBP0020 2 port Multi IO CardBus

#### Golden I/O CardBus

- CBS1009 1 port RS-232 CardBus
- CBS2009 2 port RS-232 CardBus
- CBS4009 4 port RS-232 CardBus

#### Multi I/O CardBus

- CBM2925 2 port RS-232 & 1 port IEEE1284 Parallel CardBus
- CBM1925 1 port RS-232 & 1 port IEEE1284 Parallel CardBus
- CBP0010M 1 port Parallel CardBus
- CBP0020M 2 port Parallel CardBus

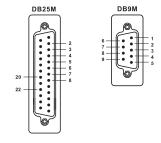
#### **BTIO**

• BTS1009C Bluetooth to RS-232 Adapter

#### ComHub

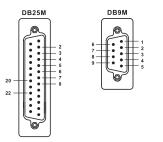
- UTS4009P 4 port USB to RS-232 Serial Hub
- UTS2009 2 port USB to RS-232 Serial Hub with DB9M connector
- UTS1009 1 port USB to RS-232 Serial Hub with DB9M connector
- UTS1009D 1port USB to RS-232 Serial Adapter Molding Type with DB9M connector
- UTS2009 2 port USB to RS-232 Serial Hub with DB9M connector
- UTS1009 1 port USB to RS-232 Serial Hub with DB9M connector
- UTS1009D 1port USB to RS-232 Serial Adapter Molding Type with DB9M connector
- UTM1925 USB to RS-232 and Parallel Multi-I/O Hub
- UTP1025 USB to Parallel Adapter





| PIN | DB9M | DB25M |
|-----|------|-------|
| DCD | 1    | 8     |
| RxD | 2    | 3     |
| TxD | 3    | 2     |
| DTR | 4    | 20    |
| GND | 5    | 7     |
| DSR | 6    | 6     |
| RTS | 7    | 4     |
| CTS | 8    | 5     |
| RI  | 9    | 22    |

#### 2. RS-232 with power output



| PIN                        | DB9M | DB25M |
|----------------------------|------|-------|
| DCD                        | 1    | 8     |
| RxD                        | 2    | 3     |
| TxD                        | 3    | 2     |
| DTR                        | 4    | 20    |
| GND                        | 5    | 7     |
| DSR                        | 6    | 6     |
| RTS                        | 7    | 4     |
| CTS                        | 8    | 5     |
| RI / <mark>5V</mark> / 12V | 9    | 22    |

# 3. Parallel

