



SUNIX

PRODUCT GUIDE VOL.19

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ABOUT SUNIX

THE WORLD'S LEADING BRAND OF COMMERCIAL COMMUNICATIONS

SUNIX had being the global leader in serial communication technology more than 20 years; we invent and latch the world's first RS-232 single-chip communication card in the year of 1995. SUNIX provide more convenience for people by creating the new industry model "Commercial Communication & Control", and being the partner also earning the trust from the world's first-tier manufacturer and numerous users.

SUNIX Commercial Communication & Control

Since more then 25 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 and I/O Card or Hub.

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.

Brand Value

Communication Intelligence

SUNIX has been specializing in the communication industry. Its outstanding senior R&D team provides customers with a full range of communication products that are functionally stable, leading in technology, high quality, and reliable. By giving high technology a human touch and integrating humanities, art, and technical "communication intelligent" into our daily life, we can lead a better life; and through continuous innovation and fulfilling the needs of our customers, we can help you achieve success.

Strict Quality Control System

SUNIX Kun-Shang factory accredited with international quality certifications
ISO9001:2000 / ISO14000 / QC080000



Approval



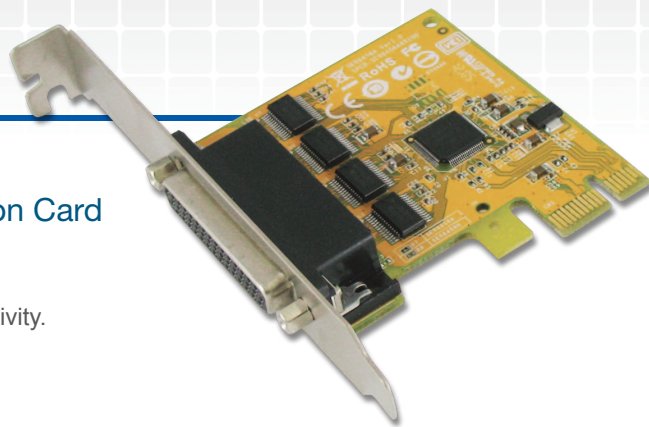
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RS-232 / RS-422/485 / RS-232/422/485 Add-on Card

Feature

- Supports PCI Express, PCI, PCI/104 and PC/104 connectivity.
- SUNIX 16C950 compatible UART controller on-board.
- Supports 16/8/4/2/1 RS-232 Serial Port.
- Supports standard and low profile board solution.
- Serial communication speeds up to 115.2Kbps (921.6Kbps Optional).
- Built-in 128 byte hardware Tx/Rx FIFO for each serial port.
- On-chip hardware auto flow control to guarantee no data loss.
- Built-in $\pm 15KV$ ESD protection for all serial signals.
- Optional 600W Surge and 2.5KV Isolation protection for RS-422/485 solution.
- RS-422/485 auto detect and switching technology .
- AHDC/CS™ technology for collision free RS-485 communication.
- Plug-n-Play, I/O address and IRQ assigned by BIOS.
- Ultra low power consumption design for Green Environment.



O.S. Support



Approval

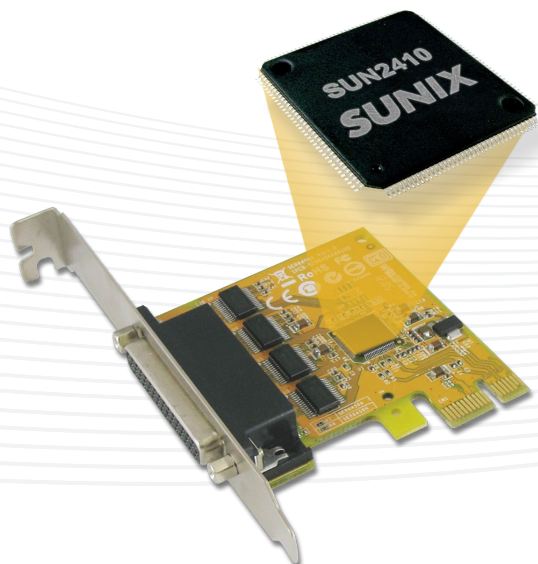


Interface

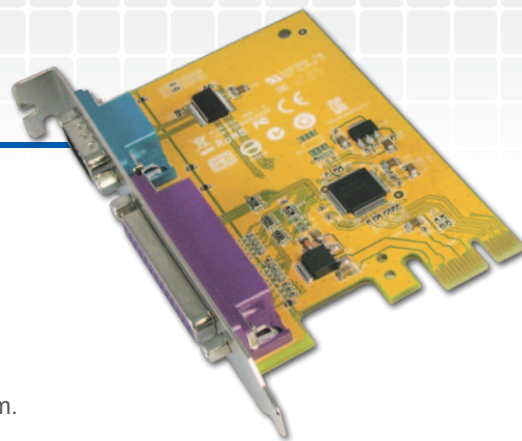


High reliability SUNIX 16C950 PCIe Gen2 UART controller

Product Family



Interface	Bus	Port	Version
RS-232	PCI Express PCI	16-Port 8-Port 4-Port 2-Port 1-Port	A-Version H-Version L-Version P/S-Version D/R-Version U-Version
	Mini PCI Express	4-Port	A-Version
	PCI/104	8-Port 4-Port 2-Port	A-Version
	PC/104	4-Port 2-Port	A-Version
RS-422/485	PCI Express PCI	8-Port 4-Port	L-Version U-Version SI-Version
RS-232/422/485	PCI Express PCI	8-Port 4-Port	L-Version U-Version SI-Version



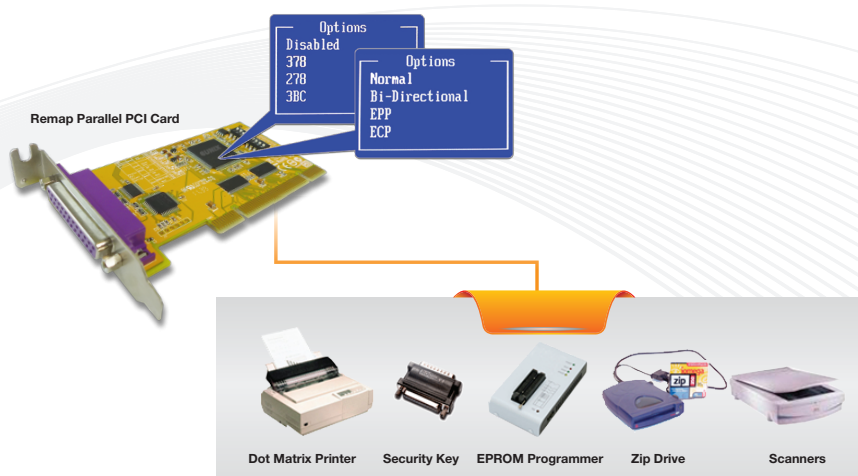
Parallel / Multi I/O Add-on Card

Feature

- Supports PCI or PCI Express connectivity.
- SUNIX 16C950 UART Multi I/O controller on-board.
- Expands both RS-232 COM and IEEE1284 LPT ports on system.
- Supports standard and low profile board solution.
- Serial communication speeds up to 115.2Kbps (921.6Kbps Optional).
- Built-in 128 byte hardware Tx/Rx FIFO for each serial port.
- Parallel LPT port supports IEEE 1284-1994 parallel port standard ECP(Enhance Capacity Port) / EPP(Enhance Parallel Port) SPP(Standard Parallel Port) / BPP(Bi-direction Parallel Port)
- Built-in $\pm 15KV$ ESD protection for all serial signals.
- Plug-n-Play, I/O address and IRQ assigned by BIOS.
- Ultra low power consumption design for Green Environment.

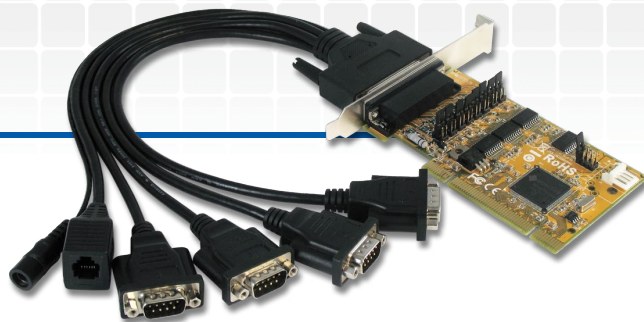


WHQL Approved Parallel-Card with Legacy Port Remap Function



Product Family

Interface	Bus	Port	Versio
Multio I/O	PCI Express	4S/1P 2S/1P 1S/1P	A-Version H-Version L-Version
	PCI	4S/2P 4S/1P 2S/2P 2S/1P 1S/1P	A-Version H-Version L-Version
Parallel	PCI Express	2P 1P	A-Version L-Version
	PCI	2P 1P	A-Version L-Version D/R-Version



Cash Drawer Add-on Card

Feature

- Supports PCI or PCI Express connectivity.
- Expands 4/2 Independent RS-232 Serial Port with +5 or +12 VDC power output.
- Expands RJ11 Type Cash Drawer interface to drive +12 / 24VDC Cash Drawer.
- Support +12VDC Power Jack output to connect POS peripheral.
- SUNIX 16C950 compatible UART controller on-board.
- Serial communication speeds up to 115.2Kbps (921.6Kbps Optional).
- Supports standard and low profile board solution
- Plug-n-Play, I/O address and IRQ assigned by BIOS.
- SUNIX Windows and Linux based APIs for user easily application.
- Support POS .NET, JavaPOS, and OPOS.
- Ultra low power consumption design for Green Environment.



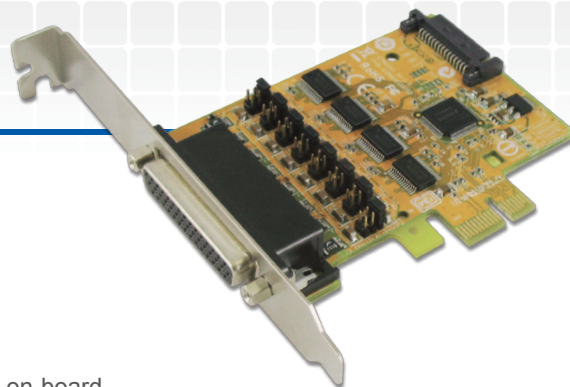
Application



Product Family

Interface	Serial	Cash Drawer	DC-Jack
PCI Express	4-port	1-port	1-port
PCI	4-port	1-port	1-port
	2-port	1-port	1-port
	2-port	1-port	—

Powered I/O



Powered Serial Add-On Card

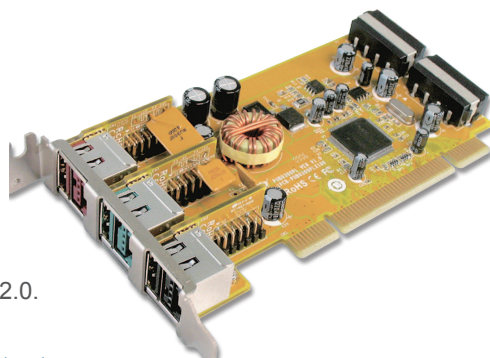
Feature

- Supports PCI or PCI Express connectivity.
- High performance SUNIX 16C950 compatible UART controller on-board.
- **Supports 4/2/1 RS-232 Serial Port with +5 or +12 VDC power output.**
- Supports standard and low profile board solution.
- Serial communication speeds up to 115.2Kbps (921.6Kbps Optional).
- Built-in 128 byte hardware Tx/Rx FIFO for each serial port.

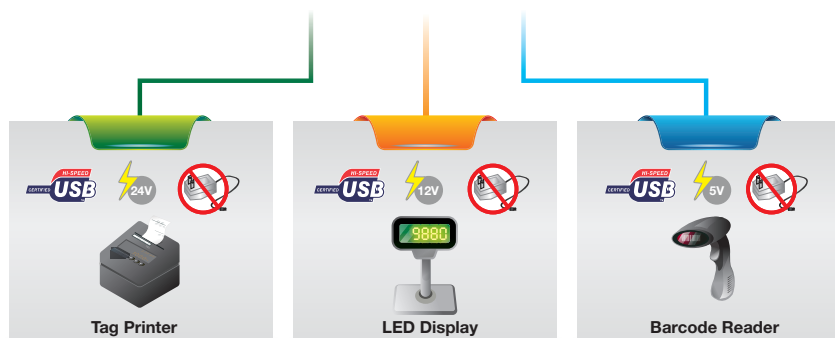
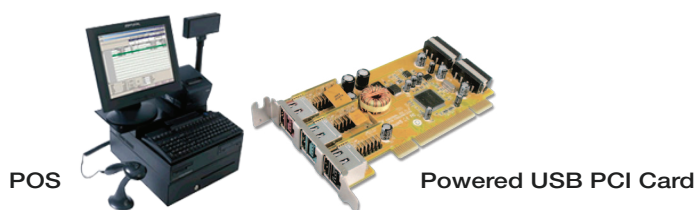
Powered USB Add-on Card

Feature

- Supports PCI connectivity.
- Compliant with the Universal Serial Bus (USB) Specification Revision 2.0.
- Support 4 external Powered USB ports.
- **Powered USB port supports +24, +12, and +5VDC @ 3A power output.**
- Each Powered USB ports built-in over current protection.
- Plug-n-Play, I/O address and IRQ assigned by operating system.
- Supports USB device Hot-Swapping and Plug-n-Play function.



Application



Product Family

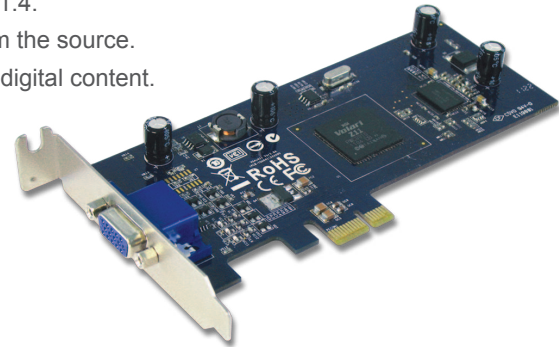
Interface	Bus	Serial	Version
Serial with Power Output	PCI Express PCI	4/2/1-port	P,S,H,L,-Version

Interface	Bus	Port No	Version
Serial with Power Output	PCI	24V	Standard/ LowProfile Bracket
		12V	
		5V	
		4or3	
		1	3or2
		1	
		1	2or1
		1	

DisplayPort Splitter Adapter

Feature

- Works with any PC or NB which has DisplayPort output connectivity.
- Fully HD compatible and provides full display performance with virtually zero latency and no display application limitations.
- Hot Plug & Plug-n-play feature without configuration.
- Compatible with DP™ v1.1a, HDMI™ V1.3, VESA DDM, and EDID v1.4.
- Supports main link rates of 2.7Gbps (HBR) and 1.62Gbps (RBR) from the source.
- Supports exceptional Secured Content Protection with HDCP 1.3 for digital content.
- **Supports HDMI and DisplayPort output connectivity.**
- Resolutions up to 3840x1200@60Hz.
- Supports video mirror and extension mode.



Graphics Add-On Card

Feature

- Supports PCI or PCI Express connectivity.
- **Support VGA and DVI-I connectivity.**
- Ultra-Low power consumption 2W makes heat sink free.
- Max 2D resolution 16-bit 1920x1200@60Hz.



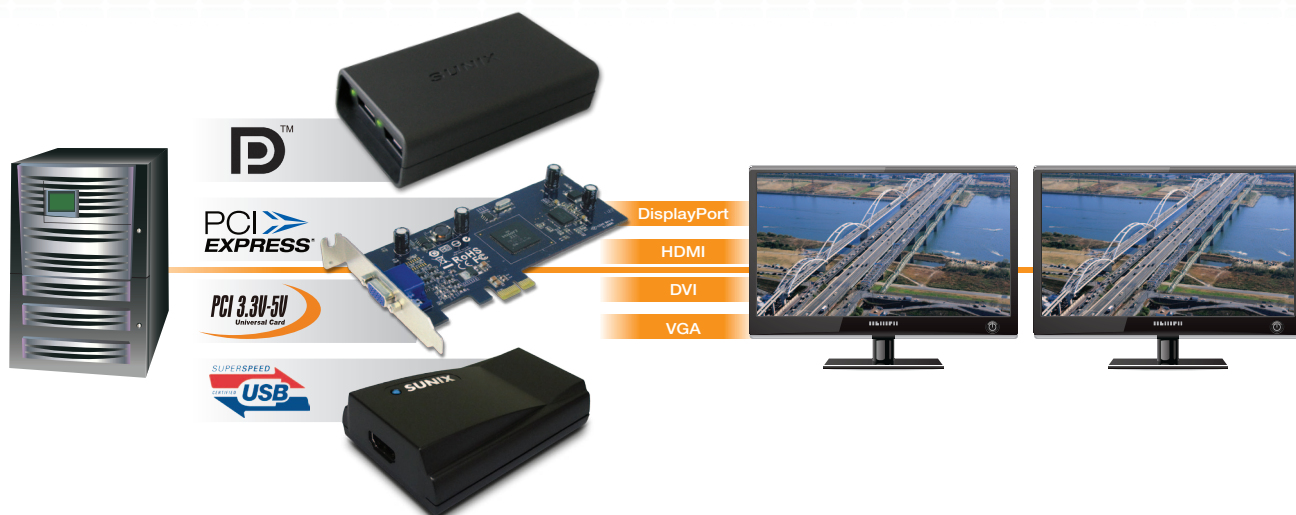
USB Extension Series

Feature

- Add-on monitor, LCD or projector through USB3.0/2.0 connectivity.
- Supports widescreen aspect ratio of 16:9 Full HD 1080P video streaming.
- High performance USB Graphics Engine supports resolutions up to 2048 x 1152 @ 32bit.
- **Supports VGA, DVI-I and HDMI connectivity.**
- Low power consumption via USB Bus power supply (without Heat Sink).
- Supports desktop display mirror, extend mode, multi screen mode and screen rotation mode.
- Up to six USB3.0 graphic adapters to work simultaneously.
- Automatic recognition of monitor type, resolution, and features.
- Hot-swapping / Plug-n-Play of monitors without reconfiguration.
- Movement of windows on the desktop is smooth, with no trail or shuddering.
- Compatible with Windows power management hibernate and suspend modes.
- Specialized for office using, home entertainment, and video playing.



Application



Extend Mode



Mirror Mode



Multi Screen Mode



Screen Rotation Mode



Normal

90°

180°

270°

Product Family

Series	Interface	Connectivity	Port
Adapter	DisplayPort	DisplayPort	2 -Port
		HDMI	2 -Port
		VGA	1 -Port
	USB3.0	DVI-I	1 -Port
		HDMI	1 -Port
		Display	1 -Port
Card	PCI Express	DVI	1 -Port
		VGA	1 -Port
	PCI	VGA	1 -Port

Wireless Serial

Bluetooth to RS-232 / RS-422/485 Adapter

Feature

- Link RS-232 or RS-422/485 device to a Bluetooth communication.
- Supports Bluetooth Class 1 version 2.1 standard.
- Operating distance of up to 100 meters in free space.
- Safe wireless communication for Bluetooth pair connection
- Supports baud rate up to 921.6 Kbps.
- Compact sized and easy operation design.
- User-friendly Windows configuration software utility supports Windows OS.
- Intelligent draw/provide +5VDC power to/from the device through the 9th-pin.



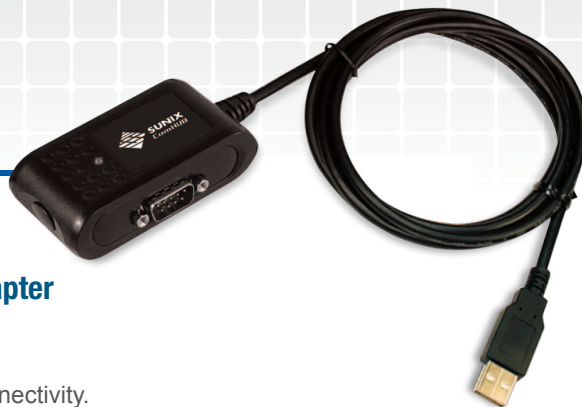
Host Control Mode



Pair Connection Mode



USB Extension Series



USB to RS-232 / Parallel / Multi I/O / Ethernet Hub/Adapter

Feature

- Supports RS-232, Parallel, Multi I/O, Ethernet and USB connectivity.
- Supports Universal Serial Bus Plug-n-Play and Hot-Swapping feature.
- No IRQ, DMA, I/O address resource required.
- Compact size and low power consumption.
- Plug-n-Play, I/O address and IRQ assigned by BIOS.

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Interface



Product Family



USB3.0 to GigaEthernet Adapter



Carry and keep easily



ExpressCard Extension



ExpressCard Series

Feature

- Full single-lane (or x1) PCI Express throughput.
- High performance SUNIX 16C950 compatible UART controller on-board.
- Designed to meet PCI Express Base Specification Revision 1.1
- Built-in 128 byte hardware Tx/Rx FIFO for each serial port.
- Parallel LPT port supports IEEE 1284-1994 parallel port standard
ECP(Enhance Capacity Port) / EPP(Enhance Parallel Port)
SPP(Standard Parallel Port) / BPP(Bi-direction Parallel Port)
- Built-in $\pm 15\text{KV}$ ESD protection for all serial signals.
- Plug-n-Play, I/O address and IRQ assigned by BIOS.

O.S. Support



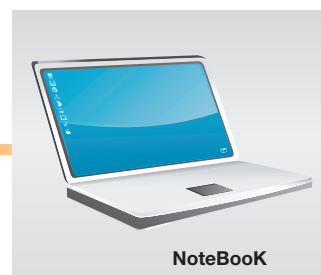
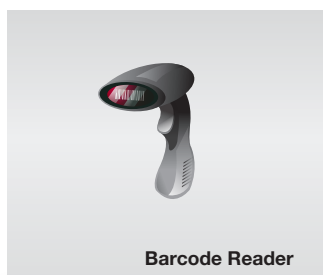
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Interface



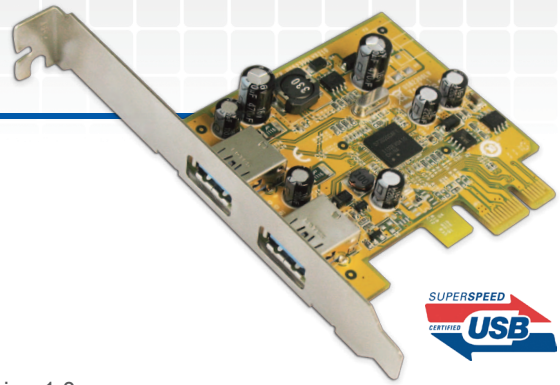
Application



Product Family



USB3.0 Series



USB3.0 PCI Express Card / ExpressCard / Hub

Feature

General

- Compliant with Universal Serial Bus 3.0 specification Revision 1.0.
- Compliant with xHCI (eXtensible Host Controller Interface) spec revision 1.0.
- Supports simultaneous operation of USB 3.0, USB 2.0 and USB 1.1 devices.
- Supports USB data transfer rate of 1.5/12/480/5000 Mbps.
- Each USB port supplies maximum +5V / 900mA power output to USB device.

PCI Express Card

- USBIF certificated USB3.0 host card TID 350790048
- Supports PCI Express Base Specification Revision 2.0.
- Single-lane (x1) PCI Express throughput rates up to 5 Gbps.
- Supports widows power management and remote wakeup from USB device.
- Expands 4/2 external USB3.0 Super-Speed ports on the system.

ExpressCard

- USBIF certificated USB3.0 host card TID 350740032
- Fully compliant with ExpressCard Specification 1.0.
- ExpressCard/34 form factor module
- Embedded into ExpressCard slot without protruding.
- Hot-swapping feature allows you to connect/disconnect devices without powering down the system



Hub

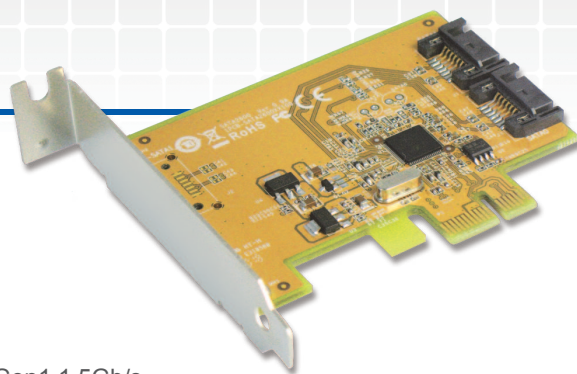
- Expands four external USB3.0 Super-Speed ports on the system.
- Built-in DC jack power connector for receiving extra power from power adapter.
- Hot-swapping feature allows you to connect/disconnect devices without powering down the system.



Product Family

Interface	Bus	Port
USB3.0	PCI Express	4-port 2-port
	Express Card	2-port 1-port
	Hub	4-Port

Serial ATA & IDE



Serial ATA & IDE Add-on Card

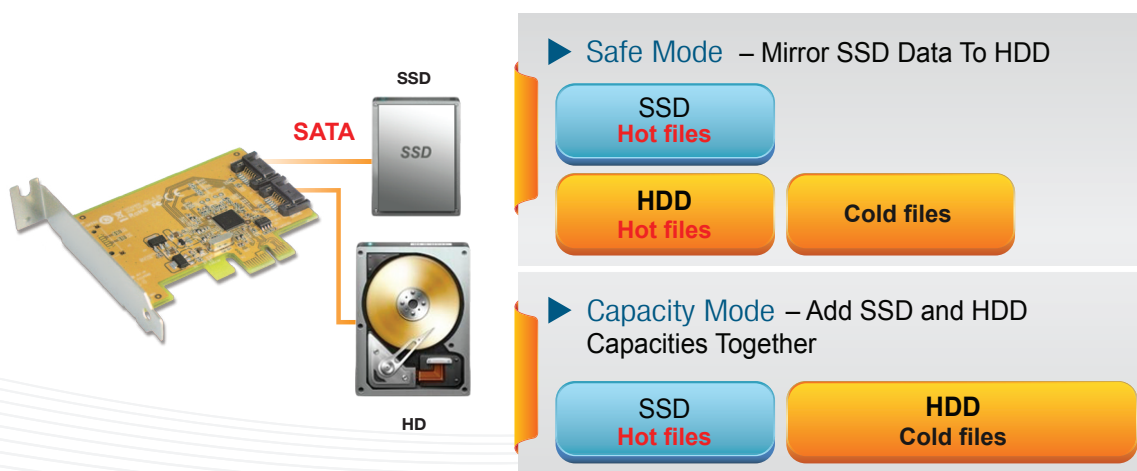
Feature

- Supports PCI or PCI Express connectivity.
- Serial ATA Gen3 6Gb/s, Serial ATA Gen2 3Gb/s and Serial ATA Gen1 1.5Gb/s
- Native Command Queue (NCQ) on SATA port.
- Supports HDD storage devices connection with RAID 0, 1, or 0+1.
- Hardware RAID design reduces the system resource loading.
- Built-in one external eSATA port and one standard SATA port connectivity.
- Works with various brands of large capacity SATA hard disk drives.
- Low-profile design fitting for kinds of computer chassis (Optional).



Serial - ATA III 6G RAID Card

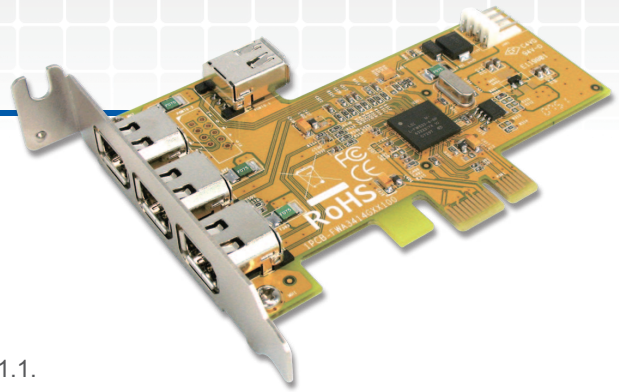
Unite SSD and HDD to achieve high-capacity and high-speed storage



Product Family

Interface	Bus	Port
Serial III	PCIExpress	2 int. port 1 int.+1ext.port
Serial III	PCIExpress	4-Port 2-port 1 int.+1ext. port
	PCI	1-port
IDE toSerial ATA Bridge		

1394a/b



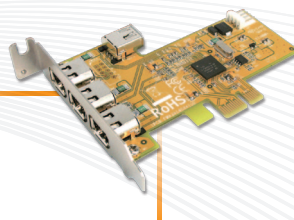
1394a/b Add-on Card

Feature

- Supports PCI or PCI Express connectivity.
- Compliant with 1394 Open Host Controller Interface Ver1.1.
- Supports data transfer rates of 100, 200, 400, and 800Mbps.
- Provides 3 external and 1 sharing internal FireWire ports.
- Built-in 4-pin power connector for receiving extra power supply from system.
- Fully compliant with IEEE P1394b and backwards supports 1394a-2000 as well as 1394-1995 standards.
- Works with various types of 1394 devices including DV camcorders, hard disk drives, removable drives, CD-RWs, DVD-ROMs and other 1394 audio/video devices
- Support Microsoft Windows 2000, XP, Sever2003, Vista, 7, Linux and MAC OS.



Application



DV



HDD



DVD / CD ROM

Product Family

Interface	Bus	Port
1394a/b	PCI	2 ext. 1394 b & 1 int. + 1 ext. 139a
		3 ext. . + 1 int. 1394 a
		Combo USB2.0+1394b
	PCI-Express	2 ext. 1394 b & 1 int. + 1 ext. 139 a
		3 ext. . + 1 int. 1394 a



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