

PCI Express 2.0 SATA III RAID Controller Card with Internal Mini-SAS SFF-8087 Connector

StarTech ID: PEXSAT34SFF



The PEXSAT34SFF PCI Express SATA Controller Card enables 4 AHCI SATA III connections to be added to a computer, through a single internal Mini-SAS (SFF-8087) port, connected using a PCI Express slot.

The controller card features a Mini SAS connector, which when used with our [Mini-SAS to 4x SATA breakout cables](#) and [Mini-SAS SFF-8087 backplanes](#) (accessories not included, SAS drives not supported), provide an internal 6Gbps connectivity solution, all from a single card.

Compliant with SATA revision 3.0, this 4-Port PCI Express SATA controller card delivers up to 6Gbps of data bandwidth, which makes it ideal for utilizing the speed of high performance hard drives and solid state drives (SSD).

The card also offers Port Multiplier (PM) support, which allows for multiple SATA drives (up to 7) to be connected using a single cable. Plus, the controller card offers an effective hardware RAID solution, with native RAID (0, 1, 1+0) support.

The PEXSAT34SFF PCIe SATA 6g card is backed by a 2-year StarTech.com warranty and free lifetime technical support.

Applications

- Upgrade a PCIe-based system with SATA 6Gbps connectivity (through a Mini SAS connector), to better utilize faster SATA drives
- Add more internal SATA ports to a computer system to connect additional storage drives and/or optical drives through an appropriate Mini-SAS adapter (listed under Accessories)
- Optimized for off-site backups, this RAID controller can be configured in RAID 1 (Mirrored) so that all information on the primary drive is copied to the secondary drive
- Perfect for multi-drive internal RAID storage solutions

Features

- 1x Mini-SAS (SFF-8087) port, expandable to 4 SATA III (6Gbps) ports through a breakout cable (purchased separately)
- Fully compliant with SATA 3.0 specifications and backward compatible with SATA I/II (1.5/3.0Gbps) drives
- Supports hardware RAID 0, 1, and 1+0 modes configured through BIOS
- Supports HDDs/SSDs/Optical/Blu-Ray drives
- Compliant with PCI Express 2.0 standards
- Natively supported single chipset design
- Port Multiplier FIS-based and Command-based switching supported
- Supports Native Command Queuing (NCQ) and ATA/ATAPI commands
- Includes Low Profile/Half-Height installation bracket
- LED headers for HDD activity LED indicators

Technical Specifications

Warranty	2 Years
Bus Type	PCI Express
Card Type	Standard Profile (LP bracket incl.)
Chipset ID	Marvell 88SE9230
Industry Standards	PCI Express 2.0
Industry Standards	Serial ATA 3.0 specification
Interface	Mini-SAS
Port Style	Integrated on Card
Ports	1
Connector Type(s)	1 - PCI Express x2 Male
Internal Ports	1 - SFF-8087 (36 Pin; Internal Mini-SAS) Plug
Supported RAID Modes	JBOD - (Just a Bunch of Disks)
Supported RAID Modes	RAID 0 (Striped Disks)
Supported RAID Modes	RAID 1 (Mirrored Disks)
Supported RAID Modes	RAID 10 (1+0; Striped set of Mirrored Subset)
LBA support	48-bit
Max Drive Capacity	Currently tested up to 4TB per drive
Port Multiplier	Yes
RAID	Yes
Type and Rate	SATA III (6 Gbps)
OS Compatibility	Windows 8 (32/64-bit), 7 (32/64), Vista (32/64), XP (32/64) Mac OS 10.6-10.8 Linux
Product Height	20 mm [0.8 in]
Product Length	70 mm [2.8 in]
Product	40 g [1.4 oz]

Weight	
Product Width	120 mm [4.7 in]
Humidity	20% ~ 80% RH
Operating Temperature	5°C ~ 50°C (41°F ~ 122°F)
Storage Temperature	-25°C ~ 70°C (-13°F ~ 158°F)
System and Cable Requirements	Available PCI Express x2 slot (backward compatible with x4, x8, and x16 slots)
System and Cable Requirements	Mini-SAS SFF-8087 to SATA cable (not included)

Note The maximum throughput of this card is limited by the bus interface. If used with PCI Express Gen 1.0 enabled computers, the max throughput is 2.5 Gbps per lane. If used with PCI Express Gen 2.0 enabled computers, the max throughput is 5 Gbps per lane.

Only one port can use the Port Multiplier feature at a time. Supports up to 4 drives connected via Port Multiplier.

Port Multiplier not supported in Mac OS.

Not compatible with SAS drives, only SATA drives are supported.

Package Quantity	1
Shipping (Package) Weight	131 g [4.6 oz]
Included in Package	1 - PCIe SATA Controller Card
Included in Package	1 - Low Profile Bracket
Included in Package	1 - Driver CD
Included in Package	1 - Instruction Manual

Certifications, Reports and Compatibility

