

## 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)<br>Mac OS 10.6-10.8<br>Linux |
| Product Height       | 0.8 in [20 mm]   |
| Product Length       | 2.8 in [70 mm]   |
| Product              | 1.4 oz [40 g]  |

|                               |   |
|-------------------------------|---|
| Weight                        |   |
| Product Width                 | 4.7 in [120 mm]   |
| 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)  |
| <b>Note</b>                   | <p>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.</p> <p>Only one port can use the Port Multiplier feature at a time. Supports up to 4 drives connected via Port Multiplier.</p> <p>Port Multiplier not supported in Mac OS.</p> <p>Not compatible with SAS drives, only SATA drives are supported.</p> |
| Package Quantity              | 1   |
| Shipping (Package) Weight     | 4.6 oz [131 g]  |
| 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

