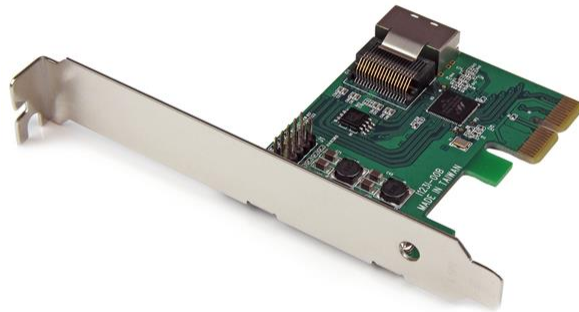


PCI Express SATA III RAID Controller Card with Mini-SAS Connector (SFF-8087) - HyperDuo SSD Tiering

Product ID: PEXSAT34SFF



The PEXSAT34SFF PCI Express 2.0 SATA Controller Card enables 4 AHCI SATA III connections to be added to a computer through a single internal Mini-SAS (SFF-8087) connector.

The Mini-SAS connector with Port Multiplier support allows for multiple SATA drives (up to 7) to be connected using a single cable. When used with our Mini-SAS to 4x SATA breakout cable or Mini-SAS SFF-8087 backplane (accessories not included, SAS drives not supported), you have a complete internal 6Gbps connectivity solution, all from a single card.

Featuring HyperDuo technology, the SATA card offers SSD auto-tiering which lets you balance the performance advantages of SSD storage with the cost-effectiveness and large capacity of standard hard drives. By combining SSD and HDD drives into a single volume (up to 3 SSD + 1 HDD), HyperDuo discreetly works in the background to identify and move frequently accessed files to the faster SSD drive(s) for improved data throughput - up to 80% of SSD performance! (Note: The HyperDuo automatic storage tiering feature is compatible with computers that use a BIOS.)

Compliant with SATA revision 3.0, this PCI Express SATA RAID card delivers up to 6Gbps of data bandwidth; ideal for high performance hard drives and solid state drives (SSD). Plus, the controller card offers an effective hardware RAID solution, with native RAID (0, 1, 1+0) support.

Throughput Benchmark

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

<small>Note: The PEXSAT34SFF does not support SAS hard drives. You can connect multiple SATA hard drives to the card's SAS connector using a breakout cable such as the Mini-SAS to 4x SATA breakout cable.</small>

Certifications, Reports and Compatibility

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
- Use SSD tiering to optimize your system for I/O intensive applications such as Office Suites, Photo/Video Editing and Media Players

Features

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

Hardware

Warranty	2 Years
Ports	1
Interface	Mini-SAS

Bus Type	PCI Express
Card Type	Standard Profile (LP bracket incl.)
Port Style	Integrated on Card
Industry Standards	Serial ATA 3.0 specification PCI Express 2.0
Chipset ID	Marvell - 88SE9230

Performance

Type and Rate	SATA III (6 Gbps)
Port Multiplier	Yes
Number of Ports That Support Port Multiplier	1
Number of Drives Supported Through Port Multiplier	1 to 4
Bootable	Yes
LBA support	48-bit
Hardware Raid Supported	Yes
Supported RAID Modes	JBOD - (Just a Bunch of Disks) RAID 1 (Mirrored Disks) RAID 10 (1+0, Striped set of Mirrored Subset) RAID 0 (Striped Disks)
Max Drive Capacity	Currently tested up to 4TB per drive
ATAPI Support	Yes

Connector(s)

Connector Type(s)	PCI Express x2
Internal Ports	SFF-8087 (36 Pin, Internal Mini-SAS)

Software



OS Compatibility	Windows XP, Vista, 7, 8, 8.1, 10 Windows Server 2003, 2008 R2, 2012, 2012 R2, 2016 Mac OS 10.6 to 10.12 Linux 3.5.x to 4.11.x <i>LTS versions only</i> Note: Connected drives cannot be used as System / Primary drive in Windows Server 2012, 2012 R2, 2016
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Special Notes / Requirements

System and Cable Requirements	Available PCI Express x2 slot (backward compatible with x4, x8, and x16 slots) 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.<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>

Environmental

Operating Temperature	5C ~ 50C (41F ~ 122F)
Storage Temperature	-25C ~ 70C (-13F ~ 158F)
Humidity	20% ~ 80% RH

Physical Characteristics

Product Length	2.8 in [70 mm]
Product Width	4.7 in [12 cm]
Product Height	0.8 in [20 mm]
Weight of Product	1.4 oz [40 g]

Packaging Information

Package Quantity	1
Package Length	6.9 in [17.5 cm]
Package Width	5.7 in [14.5 cm]



Package Height	1.2 in [30 mm]
Shipping (Package) Weight	4.6 oz [131 g]

What's in the Box

Included in Package	Low Profile Bracket
	Driver CD
	Instruction Manual
	PCIe SATA Controller Card

****Product appearance and specifications are subject to change without notice.***

