

4 Port PCI Express 2.0 SATA III 6Gbps RAID Controller Card with HyperDuo SSD Tiering - TAA

Product ID: PEXSAT34RH



The PEXSAT34RH 4-Port PCI Express 2.0 SATA Controller Card with HyperDuo adds 4 AHCI SATA III ports to a computer through a PCIe slot (x2), delivering multiple internal 6Gbps connections for high-performance hard drives and Solid State Drives (SSDs).

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.)

The PCIe SATA controller card supports Port Multiplier (PM), enabling multiple SATA drives to be connected to one port over a single cable, for a total of 7 drives (Up to 4 drives through PM on one port, and a single drive to the remaining 3 ports). Plus, the SATA controller card offers an effective hardware RAID solution, with native RAID (0, 1, 1+0) support.

Throughput Benchmark

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

Certifications, Reports and Compatibility









































Applications

- Use SSD tiering to optimize your system for I/O intensive applications such as Office Suites, Photo/Video Editing and Media Players
- Upgrade an older PCIe-based system to SATA 6Gbps capability, to better utilize faster SATA drives
- · Add more internal SATA ports to a computer system, to connect additional storage drives and/or optical drives
- Provide optimized off-site back-ups/vaulting, through built-in RAID 1 capability
- Perfect for multi-drive internal RAID storage solutions

Features

- HIGH-PERFORMANCE: Add four SATA III 6Gbps ports to your desktop computer or server using a PCIe x1 slot to connect SATA drives (HDD/SSD); 4-Port SATA PCIe card features 4x SATA connections for connecting drives using SATA cables (sold separately)
- MARVELL RAID CONTROLLER: JBOD or Hardware RAID 0, 1, and 1+0 modes can be configured through BIOS -HyperDuo feature allocates frequently accessed files to faster SSD drive - Supports Port Multiplier, Native Command Queuing (NCQ) and ATA/ATAPI commands
- COMPATIBILITY: Supports PCIe 2.0, SATA III & AHCI specs and backwards compatible w/ earlier versions -Supports Windows, Mac, and Linux and is also compatible with Optical/Blu-Ray drives - NOTE: HyperDuo configuration supported in Windows only
- EASY INSTALL: Expansion card includes full and low-profile brackets for PCIe slot compatibility Marvell Storage Utility software included for card configuration and drive management
- THE IT PRO'S CHOICE: IT professionals choice for over 30 years; This SATA PCIe adapter controller card converter is backed for 2 years, including free 24/5 North America based multi-lingual assistance

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Warranty 2 Years

Ports 4

SATA Interface



Bus Type PCI Express

Card Type Standard Profile (LP bracket incl.)

Port Style Integrated on Card

Industry Standards PCI Express 2.0

Serial ATA 3.0 specification

Chipset ID Marvell - 88SE9230

Performance

Type and Rate SATA III (6 Gbps)

Port Multiplier Yes

Number of Ports That Support Port Multiplier

4 (can only use 1 PM at a time)

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 0 (Striped Disks)

RAID 10 (1+0, Striped set of Mirrored Subset)

Max Drive Capacity Currently tested up to 4TB per drive

ATAPI Support Yes

Hot Swap Capability Yes

Connector(s)

Connector Type(s) 1 - PCI Express x2

Internal Ports 4 - SATA (7 pin, Data)

Software





OS Compatibility Windows XP, Vista, 7, 8, 8.1, 10, 11

Windows Server 2003, 2008 R2, 2012, 2012 R2, 2016, 2019,

2022

Mac OS 10.6 to 10.14

Linux 3.5.x and up - LTS Versions only

Special Notes / Requirements

System and Cable Requirements

Available PCI Express x2 slot (backward compatible with x4, x8,

and x16 slots)

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.
Conly one port can use the Port Multiplier feature at a time. Supports up to 4 drives connected via Port Multiplier, 7 drives total.
Port Multiplier not supported in Mac OS.
Note: Connected drives cannot be used as System / Primary drive in Windows Server 2012, 2012 R2,

2016

The Marvell Storage Utility application requires macOS 10.9

to 10.14.

Power

Input Voltage 12V DC

Output Voltage 12V DC

Environmental

Operating Temperature 5C ~ 50C (41F ~ 122F)

Storage Temperature -25C ~ 70C (-13F ~ 158F)

Humidity 20% ~ 80% RH

Physical Characteristics

Color Green

Material Steel

Product Length 2.8 in [70 mm]

Product Width 4.7 in [12 cm]



	Product Height	0.8 in [2 cm]
	Weight of Product	1.7 oz [49 g]
Packaging Information		
	Package Quantity	1
	Package Length	6.9 in [17.4 cm]
	Package Width	5.7 in [14.4 cm]
	Package Height	1.2 in [3.0 cm]
	Shipping (Package) Weight	5.5 oz [156.0 g]
What's in the Box		
	Included in Package	1 - PCIe SATA Controller Card
		1 - Low Profile Bracket
		1 - Driver CD
		1 - Instruction Manual
Warranty Information		
	Warranty	2 Years

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