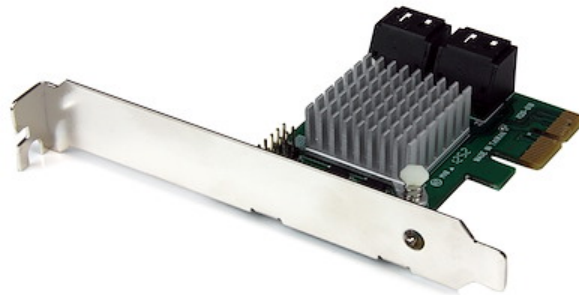


## 4 Port PCI Express 2.0 SATA III 6Gbps RAID Controller Card with HyperDuo SSD Tiering

**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.)

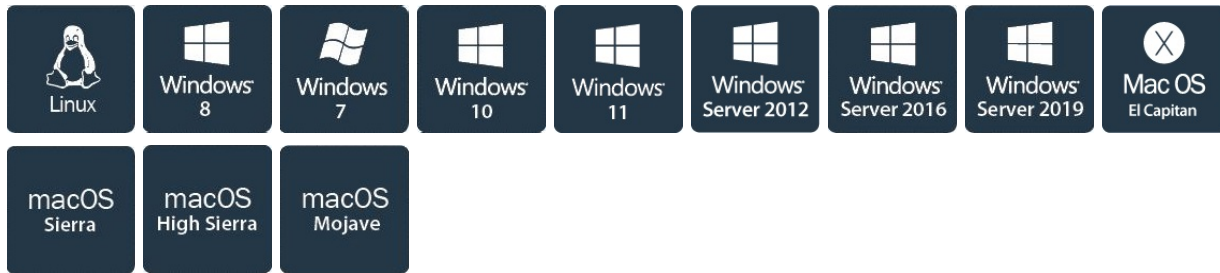
The PCIe SATA controller card supports Port Multiplier (PM), enabling multiple SATA drives to be connected to one port over a single cable, for a total of 7 drives (Up to 4 drives through PM on one port, and a single drive to the remaining 3 ports). Plus, the SATA controller card offers an effective 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
- Provide optimized off-site back-ups/vaulting, through built-in RAID 1 capability
- Perfect for multi-drive internal RAID storage solutions
- 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

## 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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### Hardware

Warranty	2 Years
Ports	4
Interface	SATA

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

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### 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

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### Connector(s)

Connector Type(s)	1 - PCI Express x2
Internal Ports	4 - SATA (7 pin, Data)

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### 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 - <i>LTS Versions only</i>
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**Special Notes / Requirements**

System and Cable Requirements	Available PCI Express x2 slot (backward compatible with x4, x8, and x16 slots)
Note	<p>&lt;p&gt;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.&lt;/p&gt;&lt;p&gt;Only one port can use the Port Multiplier feature at a time. Supports up to 4 drives connected via Port Multiplier, 7 drives total.&lt;/p&gt;&lt;p&gt;Port Multiplier not supported in Mac OS.&lt;/p&gt;&lt;p&gt;Note: Connected drives cannot be used as System / Primary drive in Windows Server 2012, 2012 R2, 2016&lt;/p&gt;</p>
	<p>The Marvell Storage Utility application requires macOS 10.9 to 10.14.</p>

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**Power**

Input Voltage	12V DC
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**Environmental**

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

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**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]

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**Packaging Information**

Package Quantity 1

Package Length 6.9 in [17.5 cm]

Package Width 5.7 in [14.5 cm]

Package Height 1.3 in [32 mm]

Shipping (Package) Weight 5.0 oz [141 g]

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**What's in the Box**

Included in Package

- 1 - PCIe SATA Controller Card
- 1 - Low Profile Bracket
- 1 - Driver CD
- 1 - Instruction Manual

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