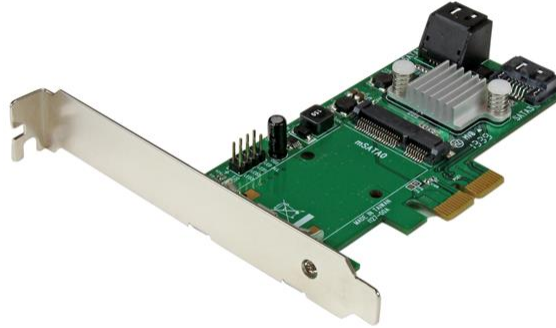


3 Port PCI Express 2.0 SATA III 6 Gbps RAID Controller Card w/ mSATA Slot and HyperDuo SSD Tiering

Product ID: PEXMSATA343



The PEXMSATA343 3-Port PCI Express 2.0 SATA Card with HyperDuo adds an internal mSATA SSD (Solid State Drive) slot plus three internal SATA III ports to your computer through a PCIe x2 slot, adding multiple 6 Gbps internal connections that enable you to improve the overall speed and storage capacity of your computer by connecting high-performance SSDs and hard drives.

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 offers Port Multiplier (PM) support, so multiple SATA drives can be connected 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 2 ports and mSATA slot). Plus, the SATA controller card offers an effective hardware RAID solution, with native RAID (0, 1) support.

Throughput Benchmark

You can install a SSD directly to the card via a convenient metal latching clip to help relieve the internal space constraints often associated with multiple hard drive configurations. Plus the controller card also includes a low profile/half-height installation bracket for small form factor (SFF) systems.

Backed by a StarTech.com 2-year 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 your computer, for connecting 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
- Install an internal SSD directly to the card for a simple and discreet solution for improving overall computer system performance

Features

- Supports HyperDuo SSD auto-tiering
- 1 mSATA SSD slot and 3 AHCI SATA III (6Gbps) ports through PCI Express x2
- Fully compliant with SATA 3.0 specifications and backward compatible with SATA I/II (1.5/3.0Gbps) drives
- Supports hardware RAID 0 and 1 modes configured through BIOS
- Compliant with PCI Express 2.0 standards
- Port Multiplier FIS-based and Command-based switching supported
- Simple HyperDuo configuration via card-BIOS level or intuitive GUI console (Windows only)
- Supports Native Command Queuing (NCQ) and ATA/ATAPI commands
- Includes Low Profile/Half-Height installation bracket
- Supports HDDs/SSDs/Optical/Blu-Ray drives
- Supports TRIM command with compatible SSD and Operating System
- On-board durable, metal latching mSATA clip for SSDs - no screws required

Hardware

Warranty	2 Years
Ports	3
Interface	Mini SATA
	SATA

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	3 (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)
Max Drive Capacity	Currently tested up to 4TB per drive
ATAPI Support	Yes

Connector(s)

Connector Type(s)	PCI Express x2
Internal Ports	SATA (7 pin, Data) mSATA (52 pin, Mini SATA) Slot

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 10.14 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)
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, 7 drives total. Port Multiplier not supported in Mac OS. The Marvell Storage Utility application requires macOS 10.9 to 10.14.

Environmental

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

Physical Characteristics

Product Length	4.5 in [11.5 cm]
Product Width	0.7 in [18 mm]
Product Height	4.7 in [12 cm]
Weight of Product	2.0 oz [57 g]

Packaging Information

Package Length	6.9 in [17.5 cm]
Package Width	5.5 in [14 cm]
Package Height	1.2 in [30 mm]
Shipping (Package)	5.3 oz [151 g]



Weight

**What's in the
Box**

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

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

