

## 2x M.2 NGFF SSD RAID Controller Card plus 2x SATA III Ports - PCIe

**Product ID:** PEXM2SAT3422



This M.2 SSD RAID controller card lets you install two M.2 NGFF (Next Generation Form Factor) drives in your desktop computer. The card also features two SATA III (6Gbps) ports and supports hardware RAID. Now, you can merge the speed and compact size of M.2 solid state drives (SSD) with the storage capacity of traditional hard disk drives (HDD).

This M.2 controller card lets you take advantage of the size and performance benefits of NGFF SSDs. M.2 drives are smaller than typical platter drives or mSATA-based SSDs, so you can install them in small form-factor PCs and servers, or in tighter areas within your computer case.

When you couple the card with an M.2 drive, you can give your computer's performance a noticeable speed boost. By installing your operating system on the M.2 drive, you'll have faster access to the files you commonly use, and you can continue to use your higher-capacity platter HDD for bulk storage.

Due to their performance and size advantages, M.2 drives are commonly used in laptops. If your laptop has failed but its M.2 drive is functional, then this card can help with data recovery. Once the M.2 drive is installed and the data recovery is complete, you can continue to use the drive for storage and backup purposes.

If you need a scalable, internal storage solution that you can count on, then this card can help. It supports a range of RAID configurations (RAID 0, 1, and 10), giving you multiple ways to expand your storage, improve your computer's performance, or to create data redundancy backups.

Because the M.2 card supports port multiplication, you can connect up to four drives to one of the card's SATA ports. With a built-in port multiplier, you can install up to seven drives (two M.2 SSDs, five SATA drives) in your computer through this single drive controller.

You can rest assured that your M.2 SATA drives are compatible with the card. It supports the most common drive sizes, including 22110, 2280, 2260, 2242 and 2230. For more versatility, the card also supports hybrid drives.

The PEXM2SAT3422 is backed by a StarTech.com 2-year warranty and free lifetime technical support.

## Certifications, Reports and Compatibility

### Applications

- Increase the internal storage capacity of your standard or small form-factor computer
- Create a RAID array and add the security of data redundancy and increased storage to your PC
- Access and recover data from almost any M.2 SSD, such as drives pulled from laptops and other computers
- Optimize your system for I/O intensive applications such as office suites, photo and video editing, and media players

### Features

- Recover data or improve the performance and storage capacity of your desktop, by adding two M.2 solid-state drives (SSD) plus two SATA III drives
- Create a high-performance hardware RAID array to protect and back up your data or expand your storage — supports RAID 0, 1, 10 (1+0)
- Wide installation compatibility, with support for virtually all M.2 NGFF drives (22110, 2280, 2260, 2242, 2230), as well as hybrid drives
- Port multiplier lets you connect up to seven drives total, including two M.2 drives
- Two M.2 B-Key onboard sockets that support SATA III transfer speeds up to 6Gbps
- Adjustable stand-offs, and multiple mounting holes support 110 mm, 80 mm, 60 mm, 42 mm, and 30 mm SSDs
- Fast, hassle-free setup with native support on most operating systems
- Compliant with PCI Express 2.0 standards
- Supports Native Command Queuing (NCQ), as well as ATA and ATAPI commands
- PCIe bus-powered, or powered by your computer's power supply using a 4-pin floppy power connector (small drive power)
- Equipped with a full-profile bracket, includes a low-profile (half-height bracket) for installation in small form-factor computers
- Installs into x4, x8, or x16 PCIe slots

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#### Hardware

Warranty	2 Years
Ports	2



Interface	M.2 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 - SATA I/II/III (1.5/3/6Gbps)
	PCI Express 2.0
	Hardware RAID 0, RAID 1, RAID 10
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	2 (can only use 1 PM at a time)
Number of Drives Supported Through Port Multiplier	1 to 4
Bootable	Yes
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)
ATAPI Support	Yes

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### Connector(s)

Connector Type(s)	PCI Express x4
Internal Ports	M.2 (SATA, B-Key, NGFF)



SP4 (4 pin, Small Drive Power)

SATA (7 pin, Data)

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**Software**

OS Compatibility	Windows XP, Vista, 7, 8, 8.1, 10 Windows Server 2003, 2008 R2, 2012, 2012 R2, 2016, 2019 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, 2019
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**Special Notes / Requirements**

System and Cable Requirements	PCI Express x4 slot (backward compatible with 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 2.5Gbps per lane. If used with PCI Express Gen 2.0 enabled computers, the max throughput is 5Gbps per lane.  The card's two SATA ports support port multiplier, up to seven drives total (including two M.2 drives). Only one SATA port can use port multiplier at a time, with up to four drives total connected through PM (in a non-RAID configuration)

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**Indicators**

LED Indicators	M.2 drive LEDs (Green)  Pin headers for LEDs
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**Environmental**

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

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**Physical Characteristics**

Material	Steel
Product Length	7.1 in [18 cm]
Product Width	0.8 in [20 mm]



Product Height	4.7 in [12 cm]
Weight of Product	2.3 oz [64 g]

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**Packaging Information**

Package Length	6.4 in [16.2 cm]
Package Width	8.6 in [21.9 cm]
Package Height	1.9 in [47 mm]
Shipping (Package) Weight	6.0 oz [169 g]

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**What's in the Box**

Included in Package	low-profile bracket
	quick-start guide
	M.2 SSD RAID controller card
	M.2 mounting screws

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

