

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

StarTech 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).

Leverage the size and speed of M.2 drives

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.

Peace of mind, with simple and cost-effective data recovery

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.

Build a high-performance RAID array

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.

Connect even more drives with port multiplication

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.

Supports a wide range of drives

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.

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

Technical Specifications

Warranty	2 Years
Bus Type	PCI Express
Card Type	Standard Profile (LP bracket incl.)
Chipset ID	Marvell - 88SE9230
Industry Standards	Serial ATA 3.0 specification - SATA I/II/III (1.5/3/6Gbps)
Industry Standards	PCI Express 2.0
Industry Standards	Hardware RAID 0, RAID 1, RAID 10
Interface	M.2 SATA (NGFF)
Interface	SATA
Port Style	Integrated on Card
Ports	2
Port Multiplier	Yes
RAID	Yes
Supported RAID Modes	JBOD - (Just a Bunch of Disks)
Supported RAID Modes	RAID 1 (Mirrored Disks)
Supported RAID Modes	RAID 0 (Striped Disks)
Supported RAID Modes	RAID 10 (1+0; Striped set of Mirrored Subset)
Type and Rate	SATA III (6 Gbps)
Connector Type(s)	1 - PCI Express x4 Male
Internal Ports	2 - M.2 (NGFF; B-Key) Receptacle
Internal Ports	2 - SATA (7 pin; Data) Plug
Internal Ports	1 - SP4 (4 pin; Small Drive Power) Male
OS Compatibility	Windows® 10 (32-bit or 64-bit), 8 / 8.1 (32-bit or 64-bit), 7 (32-bit or 64-bit) Windows Server® 2012, 2008 R2 Mac OS 10.8 and later (tested up to 10.11) Linux® 3.5

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.
Note	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)
System and Cable Requirements	PCI Express x4 slot (backward compatible with x8, and x16 slots)
LED Indicators	2 - M.2 drive LEDs (Green)
LED Indicators	3 - Pin headers for LEDs
Humidity	20%~80% RH (Non-condensing)
Operating Temperature	5°C to 50°C (41°F to 122°F)
Storage Temperature	-25°C to 70°C (-13°F to 158°F)
Product Height	4.7 in [120 mm]
Product Length	7.1 in [180 mm]
Product Weight	2.4 oz [68 g]
Product Width	0.8 in [20 mm]
Shipping (Package) Weight	6.1 oz [174 g]
Included in Package	1 - M.2 SSD RAID controller card
Included in Package	1 - low-profile bracket
Included in Package	2 - M.2 mounting screws
Included in Package	1 - quick-start guide

Certifications, Reports and Compatibility

