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3-Port M.2 NGFF SSD Adapter Card - 1 x PCIe M.2, 2 x SATA III M.2 - PCIe 3.0

PEXM2SAT32N1



*actual product may vary from photos

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For the latest information, technical specifications, and support for this product, please visit www.startech.com/PEXM2SAT32N1.

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

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Table of Contents

Introduction	1		
Packaging contents1			
System requirements	1		
Product diagram	2		
Top view	2		
Bottom view	2		
Mounting hardware	2		
LED indicators	3		
LED diagram	3		
Hardware installation	4		
Install a drive on the PCIe card	4		
SATA M.2 drive-installation diagram (top side)	4		
PCIe M.2 drive-installation diagram (bottom side)	5		
Install the low-profile bracket	5		
Install the PCIe card	5		
Initialize a drive	б		
Prepare a drive for use on a computer running Windows	6		
Prepare a drive for use on a computer running Mac OS	7		
Technical support	8		
Warranty information	8		



Introduction

This M.2 adapter card lets you mount both PCIe and SATA-based M.2 (NVMe) SSDs inside your computer, through a PCI Express slot. It's a versatile solution for upgrading the performance and storage capacity of your desktop computer or server. The M.2 adapter card supports a single PCIe M.2 SSD, plus two SATA-based M.2 SSDs.

The adapter card offers wide installation compatibility, with support for virtually all M.2 drives (2230, 2242, 2260, 2280).

Packaging contents

- 1x 3-port M.2 NGFF SSD adapter card
- 1x low-profile bracket
- 3x M.2 mounting screws
- 3x M.2 mounting standoffs
- 3x M.2 mounting nuts
- 1x screwdriver
- 1x quick-start guide

System requirements

- A computer enabled with PCI Express (PCIe), and an available PCI Express x4, x8, or x16 slot
- One or two SATA host ports on the host computer (for example, the SATA controller card, or the motherboard SATA ports inside of your computer)
- An operating system that natively supports PCIe SSDs (NVMe), such as:
 - o Windows® 7 and later
 - o Mac OS 10.10.3 and later

Note: When installed in a compatible operating system, the card is natively supported and doesn't require any additional drivers or software. However, your operating system must natively support PCle SSDs (NVMe – Non-Volatile Memory Express).

System requirements are subject to change. For the latest requirements, please visit www.startech.com/PEXM2SAT32N1.



Product diagram







LED indicators

The PEXM2SAT32N1 features four LEDs, which indicate the status and activity of the card and its connected drives:

LED	Behavior	Status
SATA M.2 SSD 1 LED	Solid green	A drive is installed into the SATA 1 M.2 slot — drive is idle
	Solid red	There is activity on the installed drive (read and write)
SATA M.2 SSD 2 LED	Solid green	A drive is installed into the SATA 2 M.2 slot — drive is idle
	Solid red	There is activity on the installed drive (read and write)
PCIe M.2 SSD LED	Solid green	A drive is installed into the PCIe M.2 slot — drive is idle
	Blinking red	There is activity on the installed drive (read and write)
Power LED	Solid blue	The card is powered and operational

LED diagram





Hardware installation

Install a drive on the PCIe card

Warning! Drives and PCIe cards should be handled carefully, especially when they're transported. If you're not careful with your drives, you may lose data as a result. Make sure that you're properly grounded by wearing an anti-static strap when you install any computer component. If an anti-static strap isn't available, touch a large, grounded metal surface for several seconds to discharge any built-up static electricity.

- 1. The card features drive-installation mounting holes at different intervals (30 mm, 42 mm, 60 mm, and 80 mm) to support all M.2 drive sizes. To determine which mounting hole to use, place your M.2 drive next to the card and note the drive-installation holes that match the height of your drive.
- 2. Fasten a standoff and a nut to the adapter card at the mounting-hole location(s) that match(es) the length of your drive.
- 3. Gently slide the M.2 connector on your drive into the corresponding connector on the adapter card.

Note: The connector on your drive is keyed so that it only fits one way.

4. Repeat steps 2 and 3 for each of your M.2 drives.

Note: Two SATA drives can be installed to the top side of the adapter card, while one PCIe drive can be installed on the bottom side of the adapter card.

- 5. Place one of the included M.2 mounting screws in the drive-mount standoff and use a screwdriver to tighten the screw and hold your M.2 drive in place.
- 6. If necessary, repeat step 5 for a second and third drive.
- To remove a drive, use a screwdriver to remove the M.2 mounting screw that is holding the drive in place and gently pull the drive out of the adapter card.

SATA M.2 drive-installation diagram (top side)





PCIe M.2 drive-installation diagram (bottom side)



Install the low-profile bracket

The adapter card can be installed in a low-profile or a full-profile computer. The fullprofile bracket comes preinstalled on the card, but if you have a small form-factor computer, you can install the low-profile bracket instead.

- 1. Use a Phillips head screwdriver to remove the two bracket screws from the card.
- 2. Remove the full-profile bracket from the adapter.
- 3. Line up the low-profile bracket with the bracket holes on the back of the card.
- 4. Insert the two bracket screws you removed in step 1 and tighten them in place.

Install the PCIe card

Warning! PCle cards can be severely damaged by static electricity. If an anti-static strap isn't available, discharge any built-up static electricity by touching a large grounded metal surface for several seconds.

The card is natively supported when installed in a compatible operating system (see **Requirements**). Once the card is installed in your host computer the required drivers will automatically install.

- 1. Turn off your computer and any devices or peripherals that are connected to it (for example, printers, external storage, and so on).
- 2. Unplug the power cable from the back of your computer.
- 3. Disconnect any peripheral devices that are connected to your computer.
- 4. Remove the cover from your computer case. Consult the documentation that came with your computer for details about how to do this safely.



5. Locate an open PCIe slot and remove the corresponding metal cover plate from the back of your computer case. Consult the documentation that came with your computer for details about how to do this safely. This card works in PCIe slots of 4, 8, or 16 lanes (x4, x8, or x16 slot).

Note: If you install the card into a low-profile (small form-factor) desktop system, it may be necessary to replace the preinstalled full-profile bracket with the included low-profile (half-height) installation bracket. See **Install the low-profile bracket** for instructions on how to do this.

- 6. Gently insert the card into the open PCIe slot and fasten the bracket to the back of the case.
- As necessary, connect SATA cables from the SATA ports on the card, to the SATA ports inside your computer (for example, connect the card's SATA ports to your computer's SATA controller or to the SATA ports on your computer's motherboard.)
- 8. Place the cover back onto your computer case.
- 9. Reconnect the power cable to the back of your computer.
- 10. Reconnect all of the peripheral devices that you disconnected in step 3.
- 11. Turn on your computer.

Initialize a drive

Prepare a drive for use on a computer running Windows

If you install a drive that already has data on it, the drive appears under **My Computer** or **Computer** with a drive letter assigned to it. If you install a brand-new drive that doesn't contain any data, you must prepare the drive for use.

Warning! When you complete the following steps, all of the data on your drive will be deleted. If your drive has data on it that you require, you should create a backup file or use a different drive.

- 1. Navigate to Disk Management.
- 2. A dialog window appears and asks you to initialize the drive. Depending on the version of Windows that you're running, you have the option to create either an **MBR** or a **GPT** disk.

Note: GPT (GUID partition) is required for drives larger than 2 TB, but GPT isn't compatible with some earlier versions of operating systems. MBR is supported by both earlier and later versions of operating systems.

3. Locate the disk that is labeled **Unallocated**. To confirm that the drive is the correct one, check the drive capacity.

- 4. Right-click the section of the window that says **Unallocated** and click **New Partition** or **New Simple Volume**.
- 5. To initialize the drive in the format of your choice, complete the on-screen



instructions.

When the drive is successfully installed, it appears under **My Computer** or **Computer** with a drive letter assigned to it.

Prepare a drive for use on a computer running Mac OS

Warning! When you complete the following steps, all of the data on your drive will be deleted. If your drive has data on it that you require, you should create a backup file or use a different drive.

- 1. Do one of the following:
- In Spotlight, enter Disk Utility.
- Open Finder. Navigate to Applications and click Utilities. Open Disk Utility.
- 2. Select the new drive and click the **Partition** tab.
- 3. Enter a name for the partition.
- 4. Click Apply.

The drive should now appear on your desktop and be accessible in **Finder**.



Technical support

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For the latest drivers/software, please visit www.startech.com/downloads

Warranty information

This product is backed by a two-year warranty.

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