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SSD7101A_SSD7204_SSD7104_SSD7120_SSD6540_SSD654 0M_SSD7180_SSD7184_SSD7140_SSD7540L Driver & Management Software Installation Guide

This guide includes important hardware/software requirements, installation & upgrade procedures, and troubleshooting tips for using SSD7101A-

1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L NVMe RAID controllers with a Windows operating system.

Prerequisites

This section describes the base hardware and software requirements for the SSD7101 A-1 /SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L PCIe 3.0 NVMe RAID controllers.

Driver Installation

This section covers driver installation, driver upgrade and driver uninstallation procedures for SSD7101-A/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L NVMe RAID controllers.

Management Software Installation

This section explains how to download and install the SSD7101A-1/SSD7204/SSD7104/SSD7120/ SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L RAID Management Software Suite for Windows operating systems. The download includes both the Web RAID Management Interface (WebGUI), and the CLI (Command Line Interface).

Troubleshooting

Please consult this section if you encounter any difficulties installing or using the SSD7101A-1 /SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L NVMe RAID controller. It includes descriptions and solutions for commonly reported technical issues.

Appendix

A selection of useful information and web links for the SSD7101A-1/SSD7204/SSD7104/SSD7120 /SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L NVMe RAID controllers.

Prerequisites for a Data-RAID Configuration

The SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184 /SSD7140/SSD7540L controllers can support Data-RAID arrays. In order to configure a Data-RAID array, you will need the following:

- An NVMe SSD must be installed. You must have at least one NVMe SSD installed into the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/ SSD7140/SSD7540L controller.
- 2. A PCIe 3.0/4.0 slot with x8 or x16 lanes. The SSD7101A-1/SSD7104/SSD7120/SSD6540/ SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L must be installed into a PCIe 3.0/4.0 slot with x16 dedicated lanes, The SSD7204 can be installed into a PCIe 3.0/4.0 x8 or x16 slot.
- 3. Make sure any non-HighPoint drivers are uninstalled for any SSD's hosted by the SSD7000 series RAID controllers. 3rd party software and manufacturer provided drivers may prevent the SSD7000 from functioning properly.

Warnings:

- 1) Failing to remove the controller and SSD's when uninstalling the driver may result in data loss.
- 2) Always make sure the SSD7000 driver is installed before moving a SSD7000 series NVMe RAID controller & RAID array to another Windows system.

Windows operating systems will always load the default NVMe support after the SSD7000 driver has been uninstalled, or if it detects the present of a card when no driver has been loaded – this driver will only recognize the NVMe SSD's as separate disks.

If the SSD's are recognized separately, any data they contain may be lost – this includes RAID configuration data.

Driver Installation

Installing the Device Driver

The following section discusses driver installation for a non-bootable NVMe configuration.

1. Verify that Windows recognizes the controller

After installing the SSD7000 controller into the motherboard, power on the computer, boot the Windows operating system, and open **Device Manager**.

- A. Expand the **Disk drives** tab. Each NVMe SSD's installed into the SSD7101A-1 /SSD7120/SSD7204/SSD7104/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L controller should be displayed here.
- B. Expand the **Storage Controllers** tab. You should see a "**Standard NVM Express Controller**" entry for each NVMe SSD that is installed into the SSD7101A1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L controller.

🖥 Device Manager	-	×
File Action View Help		
V Disk drives		-
Samsung SSD 860 PRO 256GB		
Samsung SSD 970 PRO 512GB		
Samsung SSD 970 PRO 512GB		
Samsung SSD 970 PRO 512GB		
Samsung SSD 970 PRO 512GB		
> 🔙 Display adapters		
> Firmware		
> 🛺 Human Interface Devices		
> 📷 IDE ATA/ATAPI controllers		
> 🧱 Keyboards		
> II Mice and other pointing devices		
> 🛄 Monitors		
> 🛃 Network adapters		
> 🚔 Print queues		
> Processors		
> I Security devices		
> Software devices		
> 4 Sound, video and game controllers		
✓ Storage controllers		
Same Microsoft Storage Spaces Controller		
Standard NVM Express Controller		
Standard NVM Express Controller		
Standard NVM Express Controller		
Standard NVM Express Controller		

Example screenshot (SSD7101A-1/7104/7204/7120/6540/6540M):

Example screenshot(SSD7180/7184):

Example serverisitot(SSD/1) > Disk drives
INTEL SSDPE21K375GA INTEL SSDPE21K375GA INTEL SSDPE21K375GA INTEL SSDPE21K375GA OCZ-AGILITV3
Samsung SSD 983 DCT 960GB Firmware Firmware Firmware
 DE ATA/ATAPI controllers Keyboards Mice and other pointing devices Network adapters Vontors Portable Devices Ports (COM & LPT) Print queues Processors Software devices Storage controllers
Standard NVM Express Controller Sad Standard NVM Express Controller Sat Standard NVM Express Controller

Example screenshot(SSD7140/SSD7540L): Device Manager File Action View Help

8	DESKTOP-LDV65Q3
>	Audio inputs and outputs
>	Bluetooth
>	Computer
Y 1	Disk drives
	KXG5AZNV256G NVMe SED TOSHIBA 256GB
	KXG5AZNV512G NVMe SED TOSHIBA 512GB
	KXG60ZNV1T02 TOSHIBA
	KXG60ZNV1T02 TOSHIBA
	Samsung SSD 860 PRO 256GB
	Samsung SSD 970 PRO 1TB
1	Samsung SSD 970 PRO 1TB
	WDS100T3X0C-00SJG0
_	WDS100T3X0C-00SJG0
>	Display adapters
>	Firmware
	Human Interface Devices
	IDE ATA/ATAPI controllers
	Keyboards
2.	Mice and other pointing devices
>	Monitors
>	Network adapters
	⁽²⁾ Other devices
	Print queues Processors
	Security devices
	Software devices
2	Sound, video and game controllers
C	Storage controllers
1	Storage controllers
	Standard NVM Express Controller
	Standard NVM Express Controller
	Standard NVM Express Controller
1	Standard NVM Express Controller
	Standard NVM Express Controller

2. Download the Device Driver

Download the appropriate SSSD7000 driver from the controller's Software Downloads webpage.

SSD7101A-1:

https://highpoint-tech.com/USA_new/series-ssd7101a-1-download.htm

SSD7104:

https://highpoint-tech.com/USA_new/series-ssd7104-download.htm SSD7204:

https://highpoint-tech.com/USA_new/series-ssd7204-download.htm SSD7120:

https://highpoint-tech.com/USA_new/series-ssd7120-download.htm SSD6540:

https://highpoint-tech.com/USA_new/series-ssd6540-download.htm

SSD6540M:

https://highpoint-tech.com/USA_new/series-ssd6540m-download.htm

SSD7180:

https://highpoint-tech.com/USA_new/series-hpc-download.htm

SSD7184:

https://highpoint-tech.com/USA_new/series-hpc-download.htm

SSD7140:

https://highpoint-tech.com/USA_new/series-ssd7140-download.htm

SSD7540L:

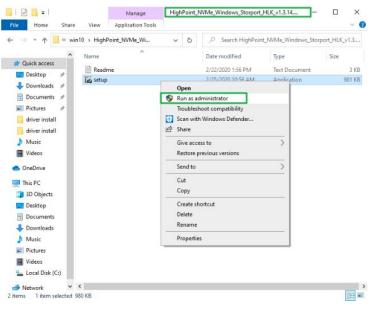
https://highpoint-tech.com/USA_new/series-ssd7500-download.htm

3. Install the Device Driver

- A. Locate the driver download and open the file.
- B. Double-click setup.

File Home	HighPoint Share	NVMe_Windows_Storport_HLK_v1.3.14.0_20	20_02	22	_	
← → - ↑	< Des	k → HighPoint_NVMe_Wi 🗸 🗸	õ		t_NVMe_Windows_Stor	port_HLK_v1.3
* Quick access		Name		Date modified	Туре	Size
Desktop		Readme		2/22/2020 12:56 PM	Text Document	3 KB
Downloads	*	👪 setup		2/25/2020 9:56 AM	Application	981 KB

Note: If installation does not start, you may have to manually start setup using Administrator Privileges. Right-click **setup**, select **Run as Administrator** from the menu, and confirm the popup window to proceed.



After driver installation is complete, click **OK** to reboot.

Please wait while	HighPoint NVMe Driver is being installed.		I.s
Output folder: C	:\Program Files (x86)\HighPoint\rsnvme\x64		
Extract Hi	ghPoint NVMe Driver Setup	×	^
LAUGEL			
Extract	Contraction and states of the states		
Output	A reboot is required for installation to complete. Please save your workspace and press "OK" to rebo		
Output	Please save your workspace and press OK to rebo	01.	
Extract			100
Output	OK		
Created			
Output folder:	C:\Program Files (x86)\HighPoint\rsnvme\x64		
			•

C. Once Windows has rebooted, open **Device Manager** to check the status of the driver. Expand **Storage controllers** and click on the **HighPoint NVMe RAID Controller** entry. View the properties and click the **Driver** tab:

	HighPoint NVMe RAID Controller Properties	×	
	righronic www.exab.contiolier Properties	^	_
> 💻 Computer	General Driver Details Events		
> Disk drives			
> 🙀 Display adapters	HighPoint NVMe RAID Controller		
> PVD/CD-ROM drives	-39A		
> Au Human Interface Devices	Driver Provider: HighPoint		
> TDE ATA/ATAPI controllers			
> Keyboards	Driver Date: 2/22/2020		
> II Mice and other pointing devices	Driver Version: 1.3.14.0		
> Monitors	Digital Signer: Microsoft Windows Hardware Compatibility		
> P Network adapters	Publisher		
> Portable Devices	Driver Details View details about the installed driver files		
> 🔁 Print queues	View details about the installed driver files.		
> Processors	Update Driver Update the driver for this device.		
> Security devices	Update Driver Update the driver for this device.		
Software devices	Pall Pask Driver, If the device fails after updating the driver, roll		
> Sound, video and game controllers	Roll Back Driver If the device fails after updating the driver, roll back to the previously installed driver.		
V Storage controllers			
HighPoint NVMe RAID Controller	Disable Device Disable the device.		
Microsoft Storage Spaces Controller			
Standard NVM Express Controller	Uninstall Device Uninstall the device from the system (Advanced).		
Standard NVM Express Controller			
Standard NVM Express Controller			
Standard NVM Express Controller	OK Cancel		
 > Image: System devices > Image: Universal Serial Bus controllers 			

Example screenshot (SSD7101A-1/7120/7104/7204/6540/6540M)

D. First, make sure the WebGUI has been installed (see page 17). Open the WebGUI and make sure the SSD.'s / arrays are properly recognized.

	Help	SHI	Event	Setting	Logical	Physical	lobal View
	erties	je Prop	Stora				Properties
2048 GB	Total Capacity:	1		ontroller	NVMe RAID C	el: HighPoint	lost Adapter mode
city: 2048 GB	Configured Capac	₽ Ū —	Q			1	Controller count:
0 GB	Free Capacity:	T				1	Enclosure count:
						4	Physical Drive:
						4	legacy Disk:
	nfigured 100.0%	Cor				0	AID Count:

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Note: Please refer to <u>Appendix A</u> to verify that your Device Manager entries correspond with the driver version you have installed.

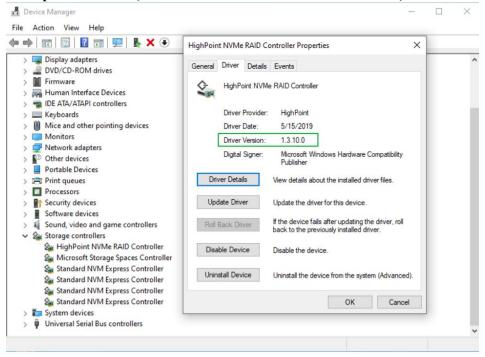
Updating the Device Driver

Note: Before attempting to update the driver entry, ensure that the SSD7101A-1/SSD7204/ SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L is removed from the motherboard.

1. Check the Driver version

Open **Device Manager** to check the current driver version. Expand **Storage controllers** and click on the **HighPoint NVMe RAID Controller** entry. View the properties and click the **Driver** tab:

Example screenshot (SSD7101A-1/7120/7104/7204/6540/6540M)



2. Download the Device Driver

Download the latest driver from the controller's Software Downloads webpage.

SSD7101A-1:

https://highpoint-tech.com/USA_new/series-ssd7101a-1-download.htm

SSD7104:

https://highpoint-tech.com/USA_new/series-ssd7104-download.htm SSD7204:

https://highpoint-tech.com/USA_new/series-ssd7204-download.htm SSD7120:

https://highpoint-tech.com/USA new/series-ssd7120-download.htm

SSD6540:

https://highpoint-tech.com/USA_new/series-ssd6540-download.htm SSD6540M:

https://highpoint-tech.com/USA new/series-ssd6540m-download.htm

SSD7180:

https://highpoint-tech.com/USA_new/series-hpc-download.htm

SSD7184:

https://highpoint-tech.com/USA_new/series-hpc-download.htm

SSD7140:

https://highpoint-tech.com/USA_new/series-ssd7140-download.htm

SSD7540L:

https://highpoint-tech.com/USA_new/series-ssd7500-download.htm

3. Shutdown and Remove the Device

A. Power down the system and remove the SSD7101A-1/SSD7204/SSD7104/ SSD7120/ SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L RAID controller from the motherboard.

Note: Failing to remove the SSD7000 controller from the motherboard during the uninstall process may result in data loss. Whenever the driver is uninstalled, Windows will attempt to install the default NVMe support, which may corrupt the RAID configurations and any data stored on SSD's hosted by the SSD7000 controller.

B. Power on the system and boot Windows.

4. Uninstall the old Device Driver

A. Access Control Panel and select Programs → Programs and Features, and click on the HighPoint NVMe Driver entry.

B. Click Uninstall/Change

← → < ↑ 🖬 > Contr	ol Panel > Programs > Programs and Feat	tures			`	✓ ð 🖉 Search			
Control Panel Home	Uninstall or change a prog	gram							
View installed updates	ew installed updates To uninstall a program, select it from the list and then click Uninstall, Change, or Repair,								
Turn Windows features on o off	r Organize 🔻 Uninstall/Change								
	Name		Publisher	Installed On	Size	Version			
			Publisher	Installed On 6/1/2020	Size	Version			
	Name	Uninstall/Change	Publisher		Size	Version			
	Name HighPoint NVMe Driver	Uninstall/Change	_	6/1/2020	Size 138 MB	Version 20.064.0329.0008			
	Name HighPoint NVMe Driver HighPoint RAID Management	Uninstall/Change	chnologies, Inc	6/1/2020 5/28/2020		20.064.0329.0008			
	Name TighPoint NVMe Driver TighPoint RAID Management Microsoft OneDrive	Uninstall/Change outable (x64) - 11	thnologies, Inc Microsoft Corporation	6/1/2020 5/28/2020 5/29/2020	138 MB	20.064.0329.0008 11.0.50727.1			

C. After uninstalling the driver, click **OK** to reboot.

lease wait whil	e HighPoint NVMe Driver is being uninstalled.		l
elete file: C:\V	/indows\System32\drivers\rsnvme.sys		
Delete f	ighPoint NVMe Driver Uninstall		×
Delete f Delete f Delete f	A reboot is required for uninstallati Please save your workspace and pre		
Remove		ОК	٦H
Remove Delete file: C:	Windows\System32\drivers\rsnvme.sys		
soft Install Syst	em v2 46		

D. After Windows has rebooted, access Control Panel to make sure the driver has been uninstalled. If there are no HighPoint NVMe RAID/Driver entries present, the driver has been successfully uninstalled:

2/22/2020 12:56 PM

2/25/2020 9:56 AM

×

Size

Text Document

Application

- 0

3 KB

981 KB

(-	→ * ↑ 🖸 « Prog >	Programs and Feat 🗸 🗸	Ö	Search Programs and Features	م
	Control Panel Home	Uninstall or change a	orogi	ram	
	View installed updates	To uninstall a program, select	it from	n the list and then click Uninstall, Change, or Repair.	
>	Turn Windows features on or				
	off	Organize 💌			== • (?
		Name		Publisher	Installed
		HighPoint RAID Management		HighPoint Technologies, Inc	9/21/2020
		 Microsoft OneDrive 		Microsoft Corporation	9/9/2020
		NVIDIA Graphics Driver 432.00		NVIDIA Corporation	9/1/2020

5. Install the new Device Driver

🖈 Quick access

Desktop

Downloads

E. Locate the driver download and open the file.

Readme

isetup

*

F. Double-click setup. 📙 | 🔄 📙 ∓ | HighPoint_NVMe_Windows_Storport_HLK_v1.3.14.0_2020_02_22 File Home Share View ← → - ↑ 🦲 « Desk... > HighPoint_NVMe_Wi... ✓ O Search HighPoint_NVMe_Windows_Storport_HLK_v1.3.... ~ Name Date modified Type

Note: If the update does not start, you may have to manually start setup using Administrator Privileges. Right-click **setup**, select **Run as Administrator** from the menu, and confirm the popup window to proceed.

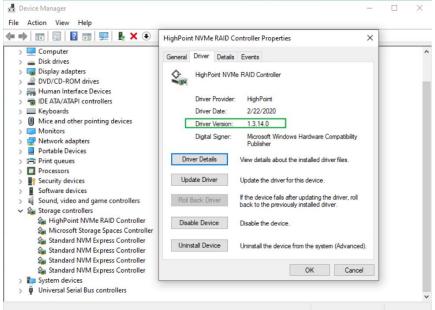
- 🚽 ~ 🛧 🦲 « win10 » HighPoin	+ NR/M+					
	Classifiers &	v	ð	,P Search HighPoin	t_NVMe_G5_RAID_Wind	Jows_StorPort
Vuick access Desktop # Downloads # Documents # Pictures # driver install Music New folder1 Videos OneDrive This PC 3D Objects Desktop Documents Downloads Downloads Downloads Downloads Downloads	~	Or Ru Tre Sc L Sh Gii Re Cu Co Cr De	en m as ad oublesh an with are ve acce store p nd to	Date modified 4/7/220 2-10 PM 7/12/2019 5:39 PM 7/12/2019 5:39 PM 001 Compatibility Windows Defender ss to revious versions	type File folder Text Document Annification	dows_StorPort Size 4 KS 503 K3
Pictures Videos Local Disk (C:)		Pr	opertie			

G. Windows will notify you that the driver is already installed. Click **OK** to reboot.

utout folder: C	: \Program Files (x86)\HighPoint\rsnvme\x64	
apar loadine		
Extract	ighPoint NVMe Driver Setup	<hr/>
Extract: Output Output	A reboot is required for installation to complete. Please save your workspace and press "OK" to reboot.	
Extract		
Output	ОК	
Created		-
Output folder:	C:\Program Files (x86)\HighPoint\rsnvme\x64	~

- H. After entering the system, **shut down** the system. In the shutdown state, connect the SSD7000 controller to the motherboard.
- I. Boot into the system.
- J. Once Windows has rebooted, open **Device Manager** to check the status of the driver. Expand **Storage controllers** and click on the **HighPoint NVMe RAID Controller** entry. View the properties and click the **Driver** tab:

Example screenshot (SSD7101A-1)



K. First, make sure the WebGUI has been installed (see page 17). Open the WebGUI and make sure the SSD.'s / arrays are properly recognized.

	Help	SHI	Event	Setting	Logical	Physical	lobal View
	erties	je Prop	Stor				A Properties
2048 GB	Total Capacity:	-		ontroller	NVMe RAID Co	el: HighPoint	Host Adapter mode
city: 2048 GB	Configured Capaci	₽Ĵ—	C			1	Controller count:
0 GB	Free Capacity:	T				1	Enclosure count:
						4	Physical Drive:
						4	Legacy Disk:
	figured 100.0%					0	RAID Count:

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Uninstalling the Device Driver

1. Power down the system and remove the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/

SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L RAID controller from the motherboard.

Note: Failing to remove the SSD7000 controller from the motherboard during the uninstall process may result in data loss. Whenever the driver is uninstalled, Windows will attempt to install the default NVMe support, which may corrupt the RAID configurations and any data stored on SSD's hosted by the SSD7000 controller.

- 2. Power on the system and boot Windows.
- 3. Access Control Panel and select Programs → Programs and Features, and click on the HighPoint NVMe Driver entry.
- 4. Click Uninstall/Change

O Pr	ograms and Features						
÷	-> -> 🕆 🖬 -> Control I	Panel > Programs > Programs and Fe	eatures				P Search Prog
C	Control Panel Home	Uninstall or change a pro	ogram				
١	fiew installed updates	To uninstall a program, select it i	from the list and then	click Uninstall, Change, or Repair.			
	urn Windows features on or						
0	off	Organize 💌 Uninstall/Change					
		Name		Publisher	Installed On	Size	Version
		HighPoint NVMe Driver		_	6/1/2020		
		HighPoint RAID Management	Uninstall/Change	chnologies, Inc	5/28/2020		
		 Microsoft OneDrive 		Microsoft Corporation	5/29/2020	138 MB	20.064.0329.0008
		BMicrosoft Visual C++ 2012 Redistr	ributable (x64) - 11	Microsoft Corporation	5/28/2020	20.4 MB	11.0.50727.1
		⊯Microsoft Visual C++ 2012 Redistr	ributable (x86) - 11	Microsoft Corporation	5/28/2020	17.3 MB	11.0.50727.1
		NVIDIA Graphics Driver 432.00		NVIDIA Corporation	5/29/2020		432.00

5. After uninstalling the driver, click **OK** to

Delete file: C:\	Windows\System32\drivers\rsnvme.sys	
	HighPoint NVMe Driver Uninstall	× ^
Delete f		
Delete f	A reboot is required for uninstallation to of Please save your workspace and press "OK	
Delete f	Please save your workspace and pless Ok	10120001
Remove	Г	
Remove	l	OK
	:\Windows\System32\drivers\rsnvme.sys	

6. After Windows has rebooted, access **Control Panel** to make sure the driver has been uninstalled. If there are no HighPoint NVMe RAID/Driver entries present, the driver has been successfully uninstalled

← → * ↑	🖸 « Prog >	Programs and Feat v	Ö	Search Programs and Features		P
Control Panel H	lome	Uninstall or change a	a progr	ram		
View installed u	ipdates	To uninstall a program, sele	ct it from	n the list and then click Uninstall, Change, or Repair.		
Turn Windows	features on or	The state of the s				
off		Organize 🔻			- 15	0
		Name		Publisher	Instal	led O
		HighPoint RAID Managemer	nt	HighPoint Technologies, Inc	9/21/	2020
		 Microsoft OneDrive 		Microsoft Corporation	9/9/2	020
		NVIDIA Graphics Driver 432.0		NVIDIA Corporation		020

Installing the HighPoint RAID Management Software (WebGUI & CLI)

The HighPoint RAID Management Software (WebGUI and CLI utilities) are used to configure and monitor NVMe SSD's hosted by the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M SSD7180/SSD7184/SSD7140/SSD7540L RAID controller. Download the latest software package from the HighPoint website:

SSD7101A-1:

https://highpoint-tech.com/USA_new/series-ssd7101a-1-download.htm

SSD7104:

https://highpoint-tech.com/USA_new/series-ssd7104-download.htm SSD7204:

https://highpoint-tech.com/USA_new/series-ssd7204-download.htm

SSD7120:

https://highpoint-tech.com/USA_new/series-ssd7120-download.htm SSD6540:

https://highpoint-tech.com/USA_new/series-ssd6540-download.htm

SSD6540M:

https://highpoint-tech.com/USA_new/series-ssd6540m-download.htm

SSD7180:

https://highpoint-tech.com/USA_new/series-hpc-download.htm

SSD7184:

https://highpoint-tech.com/USA_new/series-hpc-download.htm

SSD7140:

https://highpoint-tech.com/USA_new/series-ssd7140-download.htm

SSD7540L:

https://highpoint-tech.com/USA_new/series-ssd7500-download.htm

- 1. Extract the package and double-click the HighPoint RAID Management program to install the software.
- 2. Once installed, locate the Management icon on the desktop and double-click to start the WebGUI interface.

Example screenshot (SSD7101A-1)



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Troubleshooting

Note: When troubleshooting your SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/ SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L NVMe RAID controller, make sure all of the Prerequisites have been met before proceeding.

The WebGUI will not start after double-clicking the desktop icon.

\bigcirc	Hmmmcan't reach this page
°	Try this
	 Make sure you've got the right web address: http://localhost:7402
	Search for "http://localhost:7402" on Bing
	Refresh the page
	Details
	Report this issue
	Privacy statement

1. This is often the result of a missing driver or improperly installed driver. Open **Device Manager** and check under **Storage Controllers**.

If the Driver is properly installed, you should see a **HighPoint NVMe Controller** entry for SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L controller, followed by **HighPoint NVMe RAID Controller** entry:

🛃 Device Manager		\times
File Action View Help		
🖛 🏟 📰 🛐 🔢 🖬 🖳 💺 🗙 🛞 HighPoint NVMe RAID Controller Properties	×	
Computer General Driver Details Events General Driver Details Events HighPoint NVMe RAID Controller		^
A A A A A A A A A A A A A A A A A		1
> □ Keyboards Driver Date: 2/22/2020 > ① Mice and other pointing devices Driver Version: 1.3.14.0 > □ Monitors Digital Signer: Microsoft Windows Hardware Compatibility		
> ↓ Protevork adapters Publisher > ↓ Portable Devices Driver Details View details about the installed driver files. > ↓ Processors Driver Details View details about the installed driver files.		
Experimental Sources Experimental Sou		
A storage controllers Sorage controllers A storage controllers A storage controllers A storage controllers A storage controller A storage controller Disable Device Disable the device.		
Standard NVM Express Controller Uninstall Device Uninstall the device from the system (Advanced) with a system (Advanced)		
Standard NVM Express Controller OK Cancel > ➡ System devices > ➡ Universal Serial Bus controllers		~

Example screenshot (SSD7101A-1)

2. You should also check to make sure hptsvr is running under Task Management \rightarrow Services. If the status of hptsvr process is Stopped, right-click on this entry and select Start from the menu:

Processes Performance Ap	pp history	Startup Users Details Services			
Name	PID	Description	Status	Group	
hptsvr		HighPoint RAID Management Service	Stores		- 1
🔍 xbgm		Xbox Game Monitoring	Sto	Start	
🔍 WSearch	6668	Windows Search	Run	Stop	
WMPNetworkSvc		Windows Media Player Network Sha	Sto	Restart	
🔍 wmiApSrv		WMI Performance Adapter	Sto	0	
🔍 WinDefend	4656	Windows Defender Antivirus Service	Rur	Open Services	
G WdNisSvc	7540	Windows Defender Antivirus Networ	Rur	Search online	
🗟 wbengine		Block Level Backup Engine Service	Sto	Go to details	
🖏 VSS		Volume Shadow Copy	Stopped		-
🕞 vds		Virtual Disk	Stopped		
🕞 VaultSvc	768	Credential Manager	Running		
UIDetect		Interactive Services Detection	Stopped		
UevAgentService		User Experience Virtualization Service	Stopped		
🗟 TrustedInstaller		Windows Modules Installer	Stopped		
🔍 TieringEngineService		Storage Tiers Management	Stopped		
🔍 sppsvc		Software Protection	Stopped		
🕞 Spooler	3436	Print Spooler	Running		
a spectrum		Windows Perception Service	Stopped		
SNMPTRAP		SNMP Trap	Stopped		
SensorDataService		Sensor Data Service	Stopped		
Sense		Windows Defender Advanced Threat	Stopped		
🔍 SecurityHealthService	4564	Windows Defender Security Center S	Running		
SamSe	768	Security Accounts Manager	Running		- 3

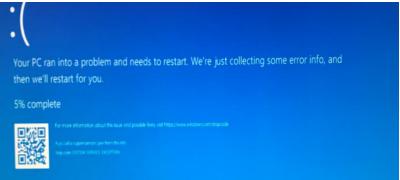
BSOD (Blue Screen of Death)

There are three scenarios in which a BSOD may occur with

SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/

SSD7540L:

1. Windows displays a BSOD when the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540 /SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L is installed.



If you are running Windows 10, please make sure that any **Quick Shutdown** options are disabled – these features can cause a BSOD when the SSD7101A-1 /SSD7204 /SSD7104 / SSD7120 /SSD6540 /SSD6540M /SSD7180 /SSD7184 /SSD7140/SSD7540L is installed into or removed from your motherboard. BSODs can be avoided by **completely powering off** your system.

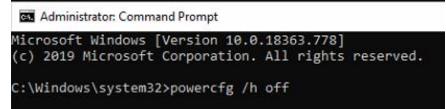
How to Turn off Quick Shutdown for Windows

a. Use administrator privileges to access the Command Prompt utility:

	Windows System		^	Microsoft Edge	Photos	1	Microsoft To	etup Information etup Information etup Information
	Command Prompt	-13	Pin to	Start				recompiled Setu
	Control Panel		STOCK CONTRACTOR					etup Information
-	File Explorer		More		>	-12	Pin to taskbar	
-	rie explorer				24	5	Run as administra	ator
Ø	Run			Microsoft Store	Washington		Open file location	n
-	Test Manager							

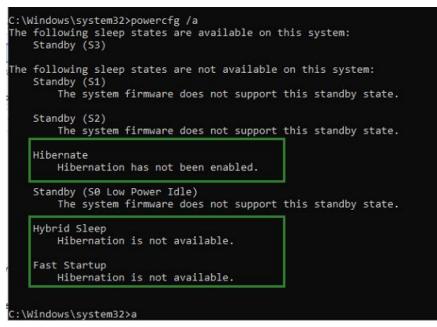
b. Enter the following command and press Enter:

powercfg / h off



c. To make sure the setting has been disabled, enter the following command and press Enter:

powercfg / a



- d. Shut down the computer and remove the SSD7101A-1 /SSD7204 /SSD7104 /SSD7120 /SSD6540 /SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L from the motherboard;
- e. Restart the system and open the SSD7101A-1/SSD7204 /SSD7104 /SSD7120 /SSD6540 /SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L driver download.
- f. Double-click **Setup** to reinstall the driver; if you are prompted to uninstall the driver, you will need to follow the prompts and restart. After rebooting, double-click **Setup** once more to install the driver.

- g. After the driver installation is complete, shut down the computer. Connect the NVMe SSD's to the SSD7101A-1/SSD7204/SSD7120/SSD6540/SSD6540M/SSD7180/ SSD7184 /SSD7140/SSD7540L and insert it into the motherboard PCIe slot.
- h. Power on the system, boot Windows and access the WebGUI; if the WebGUI can't connect, you need to restart again.
- i. If it fails to start the second time, please access our Online Support portal and submit a support ticket.

Note: If you are running a Server version of windows, and encounter a BSOD at bootup, please collect the following information: Windows version & build numbers, <u>Memory</u> <u>Dump and System event Log</u>

2. A BSOD is encountered when installing the driver:

If you experience a BSOD during driver installation, please collect the following information: <u>Memory Dump, INF log, Debug Log, System Event log, and submit a new support ticket via our</u> Online Support Portal.

3. If Windows reports that driver installation has failed:

a. Please collect these debugging information: <u>INF log</u>, <u>Debug Log</u>, <u>Device</u> <u>Manager/Storage Controller screen shot</u>, <u>System Event log</u>

Note: If you experience a BSOD or error when installing the driver, please ensure that any **Quick Shutdown** options are **not enabled** – Quick shutdown can cause a BSOD when removing the SSD7101A-1/SSD7204/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/ SSD7540L from your motherboard, and plugging it back in. BSODs can be avoided by **completely powering off** your system:

Controller and Drive Detection Issues

- If your motherboard or Windows is unable to detect the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184 /SSD7140/SSD7540L RAID controller or NVMe SSD's, please shutdown the system and try moving the SSD7101A1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/ SSD7184/SSD7140/SSD7540L to another PCIe slot.
- Make sure any unrelated NVMe devices are removed from the motherboard while troubleshooting the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M /SSD7180/SSD7184/SSD7140/SSD7540L controller.

Appendix

How to Collect Debug View Logs

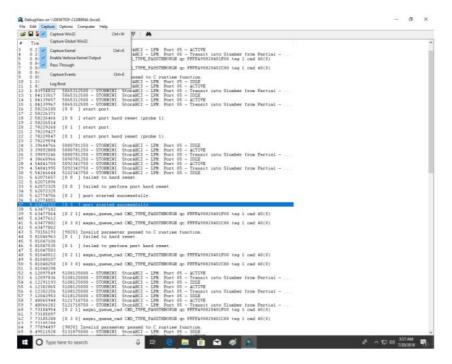
If other troubleshooting steps fail to solve the problem, we suspect that the driver and management software cannot establish a connection with the

SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/

SSD7540L controller. We will provide you with a Debug version of the driver to collect information about the problem you are experiencing.

To install the Debug driver, follow the standard driver installation procedure (please refer to the SSD7101A-1/SSD7204/SSD7104/SSD7120/SSD6540/SSD6540M/SSD7180/SSD7184/SSD7140/SSD7540L RAID controller User Guide). After installing the driver, follow the steps below:

- 1. Download the DebugView utility from https://download.sysinternals.com/files/DebugView.zip.
- 2. Unzip, right-click on the icon, and run DebugView with administrator privileges. Select Capture Win32, Capture Kernel, Enable Verbose Kernel Output, and Pass in the Capture toolbar.



 If the utility displays an "access denied" message, rename the following file: C:\Windows\System32\drivers\Dbgv.sys For example, rename it to "Dbgv.sys1", i.e change the file type.

DebugVie	w	×
\otimes	Could not extract DebugView driver to C:\Windows\system32\Drivers\Dbgv.sys: Access is denied. Kernel debug output capture will be unavailable.	
	ОК	

- 4. Save the information printed by DebugView and send this to our support department.
- 5. If required, we will provide management software information collection tools for the NVMe RAID Manager interface.

How to Collect INF Logs:

1. Go to drive $C \rightarrow$ Windows \rightarrow INF, and locate the **setuppapi.dev** and **setuppapi.setup** logs:

IIIF IIIF IIIF							-		× 0
Pin to Quick Copy Paste shortcu	t Move to •	X Del		New folder	Propertie	Dpen •	Lad had	ct all ct none rt selection	
Clipboard	Organ	nize		New	(Open	s	elect	
← → × ↑ 🧧 C:\Windows\INF		~	Ö	, Search	INF				
Name	^			Date modifie	d	Туре		Size	^
🖈 Quick access 🛛 📓 sensorsse	rvicedriver			3/19/2019 12:	43 PM	Setup Infor	mation	6	KB
🔜 Desktop 🛷 📄 setupapi.e	dev.20200429_17012	23		4/29/2020 5:0	1 PM	Text Docum	nent	4,138	КВ
🕹 Downloads 🛷 📄 setupapi.e	dev			4/29/2020 5:1	2 PM	Text Docum	nent	243	КВ
🗄 Documents 💉 📄 setupapi.e	offline.20190318_21	5229		3/19/2019 12:	52 PM	Text Docum	nent	5,667	KB
📰 Pictures 🕜 📄 setupapi.:	etup			4/27/2020 9:2	9 PM	Text Docum	nent	91	KB
Bandicam sisraid2				3/19/2019 12:	43 PM	Setup Infor	mation	5	KB
sistaid4				3/19/2019 12:	43 PM	Setup Infor	mation	4	KB
FormatFactory	٨D			3/19/2019 12:	43 PM	Setup Infor	mation	9	KB
Music Smrdisk				3/19/2019 12:	43 PM	Setup Infor	mation	2	KB

INF logs can be used to check what kind of software has been installed into the Windows systems.

2. Please access Device Manager, Storage Controllers, and check the properties for the HighPoint entry. Click on Driver Details and take a screenshot – include this with the log files you submit for your support case.

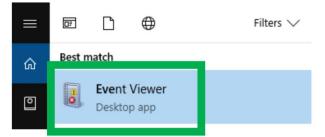
 System Tools Task Scheduler Computer Disk drives Disk drives Display adapters Display adapters Display adapters Display adapters More and other pointing devices Monitors Monitors Cherkows Server Backur, Monitors Cherkows Server Backur, Portable Devices Monitors Cherkows Server Backur, Cherkows Server Backur, Services and Applications Services and Applications<	 System Tools System Tools Bluetooth Computer Shared Folders Local Users and Groups Performance Performance Mice and other pointing devices Mice and other pointing devices Monitors Chetwork dapters Services and Applications Other devices Storage controllers Storage Standard NVM Express Controller Standard NVM Express Control	■ 🔶 😰 📷 📓 📓 📰 🖳 💺 🗙 🕑 Computer Management (Local	Actions
 	 Stark Scheduler Event Viewer Display adapters Display adapters Display adapters Event Keyboards Keyboards Keyboards Mice and other pointing devices Monitors Services and Applications Software devices Software devi		
		 Task Scheduler Task Scheduler<th>HighPoint NVMe RAID Controller Properties General Driver Details Events Driver Provider: HighPoint Driver Provider: HighPoint Driver Date: 4/24/2020 Driver Version: 1.3.16.0 Digital Signer: Mcrosoft Windows Hardware Compatibility Driver Details Vew details about the installed driver files. Driver File Details Vew details about the installed driver files. Driver File Details Were roll HighPoint NVMe RAID Controller Invier files: Invier files Image: HighPoint NVMe RAID Controller Invier files: Invier files Image: C: Windows/system32\DRIVERS/vsnvme.sys Provider: HighPoint Technologies, Inc.</th>	HighPoint NVMe RAID Controller Properties General Driver Details Events Driver Provider: HighPoint Driver Provider: HighPoint Driver Date: 4/24/2020 Driver Version: 1.3.16.0 Digital Signer: Mcrosoft Windows Hardware Compatibility Driver Details Vew details about the installed driver files. Driver File Details Vew details about the installed driver files. Driver File Details Were roll HighPoint NVMe RAID Controller Invier files: Invier files Image: HighPoint NVMe RAID Controller Invier files: Invier files Image: C: Windows/system32\DRIVERS/vsnvme.sys Provider: HighPoint Technologies, Inc.
> Convictet (a) 2020 Mich Parist Technologies Inc.	Copyright. (c) 2020. high roline (contrologies, inc.	>	Convisite: (a) 2020 HighPoint Technologian Inc.

How to Collect System Logs:

In addition to DebugView logs, System Logs can aid our Support department diagnose and resolve the support issues you have submitted. The System Log typically records errors, device failures, and software or driver related incidents. This information can help our engineers narrow down or even identify the source of the problem you are experiencing.

System Log

- 1. Click the **Windows** button towards the bottom left-hand corner of your desktop, and click on the Search field.
- 2. Type Event Viewer and click the icon as shown below:



3. Expand the Windows Log folder and select System:

🔿 🙍 🖬 👔							
Event Viewer (Local)	System Number	er of events: 17,138					Actions
🙀 Windows Logs	Level	Date and Time	Source	Event ID	Task C	^	System
	(i) Information	7/9/2018 11:06:41 AM	Service	7040	None		👩 Open Saved Log
Security	(i) Information	7/9/2018 10:06:37 AM	Kernel	16	None		Treate Custom View
Contraction of the second s	(i) Information	7/9/2018 10:06:25 AM	Kernel	11	None		Import Custom View
System	(i) Information	7/9/2018 10:06:25 AM	Kernel	11	None		
vents	(i) Information	7/9/2018 10:05:51 AM	Ntfs (98	None		Clear Log
Applications and Services Lo	(i) Information	7/9/2018 10:04:43 AM	Service	7040	None	~	Filter Current Log
Subscriptions							Properties
	Event 7040, Servie	ce Control Manager				×	
	General Detai	ls					
	General Detai	ls					Save All Events As

4. Select Save All Events as... and save the .evtx file in an easy to find location.

Image: Control Views Level Date and Time Source Event ID Task C System Image: Mark Source Image: Imag		Actions	Act				er of events: 17,138	System Numbe	
Image: Security		System	∧ Sys	Task C	Event ID	Source	Date and Time	Level	Custom Views
Security Information 7/9/2018 10:06:37 AM Kernel 16 None Create Custom Setup Information 7/9/2018 10:06:25 AM Kernel 11 None Import Custom Import Custom System Information 7/9/2018 10:05:25 AM Kernel 11 None Import Custom Forwarded Events Information 7/9/2018 10:05:51 AM Ntfs (98 None Clear Log	Log	open Saved	🗾 💆	None	7040	Service	7/9/2018 11:06:41 AM	(i) Information	
System Import Custom Forwarded Events Information 7/9/2018 10:05:25 AM Kernel 11 None Import Custom Forwarded Events Information 7/9/2018 10:05:51 AM Ntfs (98 None Clear Log	om View	💎 Create Custo		None	16	Kernel	7/9/2018 10:06:37 AM	(i) Information	
System Image: Information 7/9/2018 10:06:25 AM Kernel 11 None Forwarded Events Image: Information 7/9/2018 10:05:51 AM Ntfs (98 None Clear Log	tom View	Import Curte		None	11	Kernel	7/9/2018 10:06:25 AM	(1) Information	Setup
				None	11	Kernel	7/9/2018 10:06:25 AM	(i) Information	System
💾 Applications and Services Lo 👔 Information 7/9/2018 10:04:43 AM Service 7040 None 🗸 🍸 Filter Current Lo		Clear Log		None	98	Ntfs (7/9/2018 10:05:51 AM	(i) Information	Forwarded Events
Subscriptions	nt Log	Filter Curren	~ T	None	7040	Service	7/9/2018 10:04:43 AM	(i) Information	
Event 7040, Service Control Manager X Data Control Manager	Properties	× 📖				e Control Manager	Event 7040, Servic	Jan Subscriptions	

Collecting Windows Dump Files

Windows Dump files are snap shots that show which processes were running at the time of the event or failure. If possible, locate and upload the following files to your support case:

- Memory.dmp
- Minidump.dmp

To locate the dump files, check the C:\Windows directory and search for Memory.dmp and Minidump.dmp:

