SSD7000 Series NVMe RAID Solutions macOS11.0 Installation Guide

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Overview

This guide includes important hardware/software requirements, installation & upgrade procedures, and troubleshooting tips for using SSD7000 NVMe RAID controllers, the RocketStor 6661A-NVMe ThunderboltTM 3 NVMe RAID solution, and SSD6540/6540M RAID enclosures with a macOS operating system.

Prerequisites

This section describes the base hardware and software requirements for SSD7000 series NVMe RAID controllers & enclosures.

Driver Installation

This section covers driver installation, driver upgrade and driver uninstallation procedures for SSD7000 series NVMe RAID controllers & enclosures in a macOS environment.

Troubleshooting

Please consult this section if you encounter any difficulties installing or using SSD7000 series NVMe RAID controllers or enclosures. It includes descriptions and solutions for commonly reported technical issues.

Appendix

This section describes how to collect trouble shooting information for support cases you have submitted via our Online Support Portal.

Prerequisites

- 1) Make sure at least one NVMe SSD's has been installed into the HighPoint NVMe controller or enclosure. The driver will not install properly unless NVMe SSD's are detected by the hardware environment.
- The SSD7101A-1/7120/6540/6540M/7103/7104/7140/7505/7540/7540L NVMe device must installed into a PCIe 3.0 slot with x16 dedicated lanes. The SSD7204 can be installed into a PCIe 3.0 x8 or x16 slot.

If you are using the RocketStor 6661A-NVMe or a SSD7000 NVMe RAID controller via the RocketStor 6661A adapter, the RocketStor unit must be plugged into a ThunderboltTM 3 port.

- 3) Operating System Support: macOS 11.0
- 4) Before installing the driver and RAID Management software, you should log into the system as a System Administrator.
- 5) Identify the system as either T2 or Non-T2 based if the system has a T2 chip, make sure to follow section 1 before attempting to install any software for the HighPoint NVMe device.
- 6) If you're using the **Apple M1** Platform, make sure to follow <u>section 2</u> before attempting to install any software for the HighPoint NVMe device.

1. Apple T2 security Chip-Disable Secure boot

Secure Boot must be disabled on the following products:

Learn more About the Apple T2 Security Chip: https://support.apple.com/en-us/HT208862

- iMac (Retina 5K, 27-inch, 2020)
- iMac Pro
- Mac Pro (2019)
- Mac Pro (rack model, 2019)
- Mac mini 2018
- MacBook Air (Retina, 2020 or later)
- MacBook Pro (Retina, 2020 or later)

You can also use System Information to learn whether your Mac has this chip:

- 1. Press and hold the Option key while choosing Apple menu € > System Information.
- 2. In the sidebar, select either Controller or iBridge, depending on the version of macOS in use.
- 3. If you see "Apple T2 chip" on the right, your Mac has the Apple T2 Security Chip.

Hardware Controller Information: ATA Model Name: Apple T2 chip
ATA Audio Model Name: Apple T2 chip
Bluetooth Firmware Version: 15P6613 Bluetooth Boot UUID: A2CE8882-3D97-40F5-A382-2C9AE89E950D Camera Card Reader
Controller
Diagnostics Disc Burning Ethernet Cards Fibre Channel FireWire Graphics/Displays Hardware RAID Memory NVMExpress PCI Parallel SCSI Power Printers SAS SATA/SATA Express SPI Storage Thunderbolt
John's MacBook Pro > Hardware > Controller

Disabling Secure Boot – For Apple Intel Platform

- 1) Restart the computer and then press the **Command** + **R** keys simultaneously. Keep holding the keys down until the Apple Logo appears.
- When the menu bar says: "macOS Utilities", you have booted into Recovery mode. Launch the Startup Security Utility application by selecting it from the Utilities menu.



3) A dialog box will appear, telling you that you will need to authenticate as an Administrator to make changes, click **the Enter macOS Password...** button.



4) When the Startup Security Utility window appears, select **No Security** under the Secure Boot options.



5) Select **Restart** from the Apple menu to restart your Mac, and wait for your normal Desktop to appear.

2. Apple M1 Platform – Reduced Security Policy

Security Policy must be reduced on the following products:

- Mac mini (M1, 2020)
- MacBook Air (M1, 2020)
- MacBook Pro (13-inch, M1, 2020)

You can also choose **Apple menu** About This Mac to find out if your Mac supports the M1 chip:



Reduced Security Policy – For Apple M1 Platform

- 1) Choose Apple menu [€] > Shut down.
- 2) Hold down the power button on your Mac until you see "Loading Startup Option".



3) Click **Options**, then click **Continue**.



4) When the menu bar says: "macOS Recovery", you have booted into Recovery mode. Launch the Startup Security Utility application by selecting it from the Utilities menu.

Ś	Recovery	File	Edit	Utilities	Window
				Startup S	ecurity Utility
				Terminal	
				Share Dis	sk

5) Select the system you want to use to set the security policy.



6) Select Reduced Security and 'Allow user management of kernel extensions from Identified developers', click OK.

If required, please enter the password of the administrator account.

Sec	urity Policy for "OS2":
0 1	Full Security
E	ensures that only your current OS, or signed operating system software currently trusted by Apple, can run. This mode requires a network connection at software installation time.
• F	Reduced Security
,	Allows any version of signed operating system software ever trusted by Apple to run.
1	Allow user management of kernel extensions from identified developers
1	Allow remote management of kernel extensions and automatic software updates
	k₂
	Cancel

7) Select Restart from the Apple menu to restart your Mac, and wait for your normal Desktop to appear.

3. Installing the Device Driver

Current drivers can be downloaded from each product's Software Downloads webpage.

Product	Download Page
SSD7101A-1	https://www.highpoint-tech.com/USA_new/series-ssd7101a-1-download.htm
SSD7120	https://highpoint-tech.com/USA_new/series-ssd7120-download.htm
SSD7204	https://highpoint-tech.com/USA_new/series-ssd7204-download.htm
SSD7104	https://highpoint-tech.com/USA_new/series-ssd7104-download.htm
SSD6540M	https://highpoint-tech.com/USA_new/series-ssd6540m-download.htm
SSD6540	https://highpoint-tech.com/USA_new/series-ssd6540-download.htm
SSD7103	https://highpoint-tech.com/USA_new/series-ssd7103-download.htm
SSD7140	https://highpoint-tech.com/USA_new/series-ssd7140-download.htm
RS6661A-NVMe	https://highpoint-tech.com/USA_new/series-rs6661a-nvme-download.htm
SSD7505	https://highpoint-tech.com/USA_new/series-ssd7500-download.htm
SSD7540	https://highpoint-tech.com/USA_new/series-ssd7500-download.htm
SSD7540L	https://highpoint-tech.com/USA_new/series-ssd7500-download.htm

macOS Big Sur 11.0 Driver Installation Procedure

1) Locate the download and double click the HighPointNVMe.pkg package to start the installer.

Click the **Continue** button:

0.	Install HighPoint NVMe RAID Controller
Introduction Destination Select Installation Type Installation Summary	Welcome to the HighPoint NVMe RAID Controller Installer Vou will be guided through the steps necessary to install this software.

2) macOS will prompt you to install the driver. Click Install to proceed.



3) You will be prompted that installer is trying to install new software, enter the *Administrator* Username and Password. Once these have been entered, Click **Install Software**.

Introduce	Enter your pas	trying to install new software.	
Destinat	User Name:	test	oftware
Installat	Password:		
Installati	russworu.		_
	-	Cancel Install Softwa	re

4) If no pop-ups appear, please proceed to the next step of installation. Click Restart.

• • •	😺 Install HighPoint NVMe RAID Controller
 Introduction Destination Select Installation Type Installation Summary 	The installation was completed successfully.
	Click Restart to begin installing the software.
	Go Back Restart

5) If you receive a popup window prompting you for permission, click **Open Security Preferences**.

•••		ılly.
 Introduction Destination Select Installation Type Installation Summary 	System Extension Updated A program has updated system extension(s) signed by "HighPoint Technologis, Inc". To finish the update, you must approve it in the Security & Privacy System Preferences.	successful.
	OK Open Security Preferences	italled.
	Click Restart to begin insta	lling the software.
		Go Back Restart

6) Make sure App Store and identified developers is checked, and then click Allow.

	General FileVault	Firewall	Privacy	
A login password I	has been set for this user	Chan	ge Password	
Require pa	ssword immediately C	after sle	ep or screen save	r begins
Show a me	ssage when the screen is	locked	Set Lock Messag	e
Disable aut	omatic login			
		_		
Allow apps downlo	aded from:			
App Store				
O App Store	and identified developers			
System software f	rom developer "HighPoint	Technolo	ogies, Inc" was	Allow

7) You will receive a popup window, prompting you to restart. Click Not Now.

• · · · · · · · · · · · · · · · · · · ·	ecurity & Privacy		
Show a message	ge when the screen is	locked Set Lock Me	
Disable auto	6		
	A restart is require system extension	red before new as can be used.	
Allow apps downloa	Restart	Not Now	
App Store			
 App Store and 	identified developers	6	

8) If you receive the permission prompt for the second time, click "**Open Security Preferences**" again.

		ılly.
 Introduction Destination Select Installation Type Installation Summary 	System Extension Updated A program has updated system extension(s) signed by "HighPoint Technologis, Inc". To finish the update, you must approve it in the Security & Privacy System Preferences.	successful.
	OK Open Security Preferences	talled.
	Click Restart to begin insta	lling the software.
		Go Back Restart

9) Make sure App Store and identified developers is checked, and then click Allow.

General FileVault Firewall Privacy
A login password has been set for this user Change Password
Require password immediately O after sleep or screen saver begins
Show a message when the screen is locked Set Lock Message
Allow apps downloaded from:
Allow apps downloaded from:
Allow apps downloaded from: App Store App Store and identified developers
Allow apps downloaded from: App Store App Store and identified developers
Allow apps downloaded from: App Store App Store App Store and identified developers System software from developer "HighPoint Technologies, Inc" was Allow

10) You will receive a popup window, prompting you to restart. Click Not Now.

🗢 💿 < 💈 💷 Security & Privac	Cy Q Search
Show a message when the screer	n is locked Set Lock Message
Disable auto A restart is required	uired before new
Allow apps downloa	Not Now
App Store	
 App Store and identified develope 	

11) Return to the driver installation window. Click **Restart** to restart the system.

• • •	😺 Install HighPoint NVMe RAID Controller	E
 Introduction Destination Select Installation Type Installation Summary 	The installation was completed successfully.	
	Click Restart to begin installing the software.	
	Go Back Restart	

12) After the system restarts, the driver's status can be viewed under **System Information→ Extensions**; The following screenshot shows the **HighPointNVMe** driver has been **loaded**:

	MacBook Pro					
AUGIO	Extension Name	Version	Last Modified	Materized	Londord	Obtained from
Bluetooth	Extension Name	~ version	Last modified	Notarized	Loaded	Obtained irom
Camera	HFS_MacJapanese	8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Card Reader	HFS_MacKorean	8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Controller	HFSEncodings	1.0	2020/1/1, 4:00 PM	Yes	Yes	Apple
Diagnostics	HighPointIOP	4.4.5	2020/1/1, 4:00 PM	Yes	Ma	Identified Dev
Disc Burning	HighPointNVMe	1.1.26	2021/3/21, 9:56 PM	Yes	Yes	Identified Dev
Ethernet Cards	HighPointRR	4.23.1	2021/3/12, 3:54 PM	Yes	No	Identified Dev
Fibre Channel	initioFWBridge	511.60.2	2020/1/1, 4:00 PM	Yes	No	Apple
FireWire	Intel82574L	2.7.2	2020/1/1, 4:00 PM	Yes	No	Apple
Graphics/Displays	Incode and the second	**		34= =	Ma.a	*!-
Memory	HighPointNVMe					
NVMExpress	right once the.					
PCI	Version: 1.1.26					
Parallel SCSI	Last Modified: 2021/3/21, 9:56	5 PM				
Power	Bundle ID: com.highpoint-	tech.kext.HighPointNVMe				
Printers	Notarized: Yes					
SAS	Loaded: Yes					
SATA	Obtained from: Identified Deve	Obtained from: Identified Developer Kind: Universal Architectures: arm64e, x86_64 64-Bit (Intel): Yes Location: /Library/Extensions/HighPointNVMe.kext Kext Version: 1.26				
SPI	Kind: Universal					
Storage	Architectures: armo4e, x80_0					
Thunderbolt/USB4	Location: // ibrary/Extens					
USB	Kext Version: 1.1.26					
Vetwork	Load Address: 184467418748	01902000				
Firewall	Loadable: Yes					
Locations	Dependencies: Satisfied					
Volumes	Signed by: Developer ID A	pplication: HighPoint Tech	nologies, Inc (DX6G69N	19N2), Develop	er ID Certifica	ation Authority,
WWAN	Apple Root CA					
Wi-Fi						
✓ Software						
Accessibility						
Applications						
Developer						
Disabled Software						
Extensions						
Fonts						
Frameworks						
Installations	In test's MacBook Bro. MI. OS	2) Coffware) Evtensio	ine + HighDolotNVMo			
	test a macbook Pro_M1_03	2 · Summare · Extensio	ing a confine putitita a late			

4. Updating the Device Driver

Note: Update the driver, please make sure the RAID controller is connected to the host.

Current drivers can be downloaded from each product's Software Downloads webpage.

Product	Download Page
SSD7101A-1	https://www.highpoint-tech.com/USA_new/series-ssd7101a-1-download.htm
SSD7120	https://highpoint-tech.com/USA_new/series-ssd7120-download.htm
SSD7204	https://highpoint-tech.com/USA_new/series-ssd7204-download.htm
SSD7104	https://highpoint-tech.com/USA_new/series-ssd7104-download.htm
SSD6540M	https://highpoint-tech.com/USA_new/series-ssd6540m-download.htm
SSD6540	https://highpoint-tech.com/USA_new/series-ssd6540-download.htm
SSD7103	https://highpoint-tech.com/USA_new/series-ssd7103-download.htm
SSD7140	https://highpoint-tech.com/USA_new/series-ssd7140-download.htm
RS6661A-NVMe	https://highpoint-tech.com/USA_new/series-rs6661a-nvme-download.htm
SSD7505	https://highpoint-tech.com/USA_new/series-ssd7500-download.htm
SSD7540	https://highpoint-tech.com/USA_new/series-ssd7500-download.htm
SSD7540L	https://highpoint-tech.com/USA_new/series-ssd7500-download.htm

Updating the Device Driver (for macOS11.0)

1) Locate the download and double click the **HighPointNVMe.pkg** package to start the installer. Click the **Continue** button:



2) macOS will prompt you to install the driver. Click Install to proceed.

	Standard Install on "110-2013"	
 Introduction Destination Select Installation Type Installation Summary 	This will take 467 KB of space on your computer. Click Install to perform a standard installation of this softw on the disk "110-2013".	are
	Customize Go Back Ir	neta

3) You will be prompted that installer is trying to install new software, enter the *Administrator* Username and Password. Once these have been entered, Click **Install Software**.

000		Point NVMe RAID Controller	
Introduc	Installer is to Enter your pass	rying to install new software.	
Destinat	User Name:	test	oftware
Installat	Password:	•••••	
Installati			
	-	Cancel Install Software	
	Customize	Go Back	Install

4) If no pop-ups appear, please proceed to the next step of installation. Click Restart.

• • •	😺 Install HighPoint NVMe RAID Controller	
 Introduction Destination Select Installation Type Installation Summary 	The installation was completed successfully.	
	Click Restart to begin installing the software.	
	Go Back Restart	

5) If you receive a popup window prompting you for permission, click **Open Security Preferences**.

		ılly.
 Introduction Destination Select Installation Type Installation Summary 	System Extension Updated A program has updated system extension(s) signed by "HighPoint Technologies, Inc." To finish the update, you must approve it in the Security & Privacy System Preferences.	successful.
	OK Open Security Preferences	talled.
	Click Restart to begin insta	lling the software.

6) Make sure App Store and identified developers is checked, and then click Allow.



7) You will receive a popup window, prompting you to restart. Click Not Now.

• · · · · · · · · · · · · · · · · · · ·	ecurity & Privacy		
Show a message	ge when the screen is	locked Set Lock Me	
Disable auto	6		
	A restart is require system extension	red before new as can be used.	
Allow apps downloa	Restart	Not Now	
App Store			
 App Store and 	identified developers	6	

8) If you receive the permission prompt for the second time, click "**Open Security Preferences**" again.

•••		ally.
 Introduction Destination Select Installation Type Installation Summary 	System Extension Updated A program has updated system extension(s) signed by "HighPoint Technologis, Inc." To finish the update, you must approve it in the Security & Privacy System Preferences.	successful.
	OK Open Security Preferences	talled.
	Click Restart to begin insta	Illing the software.
		Go Back Restart

9) Make sure App Store and identified developers is checked, and then click Allow.

General FileVault Firewall Privacy
A login password has been set for this user Change Password
Require password immediately C after sleep or screen saver begins
Show a message when the screen is locked Set Lock Message
Allow apps downloaded from:
O App Store
App Store and identified developers

10) You will receive a popup window, prompting you to restart. Click Not Now.

Securit	ty & Privacy	
Show a message whe	n the screen is locked Set	Lock Message
Disable auto A re	start is required before new	v
Allow apps download	Restart Not Now	
App Store		-

11) Return to the driver installation window. Click **Restart** to restart the system.

• • •	🥪 Install HighPoint NVMe RAID Controller
 Introduction Destination Select Installation Type Installation Summary 	The installation was completed successfully.
	Click Restart to begin installing the software.
	Go Back Restart

12) After the system restarts, the driver's status can be viewed under **System Information→ Extensions**; The following screenshot shows the **HighPointNVMe** driver has been **loaded**:

		Ma	cBook Pro			
Audio Bluetooth	Extension Name	~ Version	Last Modified	Notarized	Loaded	Obtained from
Camera	HFS MacJapanese	8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Card Reader	HES MacKorean	8.0	2020/1/1 4:00 PM	Yes	No	Apple
Controller	HESEncodings	1.0	2020/1/1 4:00 PM	Yes	Yes	Apple
Diagonstics	HighPointIOP	4.4.5	2020/1/1, 4:00 PM	Yes	No	Identified Dev
Disc Burning	HighPointNVMe	1.1.26	2021/3/21, 9:56 PM	Yes	Yes	Identified Dev
Ethernet Cards	HighPointRR	4.23.1	2021/3/12, 3:54 PM	Yes	No	Identified Dev
Fibre Channel	initioFWBridge	511.60.2	2020/1/1, 4:00 PM	Yes	No	Apple
FireWire	Intel82574L	2.7.2	2020/1/1, 4:00 PM	Yes	No	Apple
Graphics/Displays	1	* 0		34	24	A 1 -
NVMExpress PCI Parallel SCSI Power Printers SAS SATA SPI Storage Thunderbolt/USB4 USB V Network Firewall Locations Volumes WWAN Wi-FI Volumes WWAN Wi-FI Accessibility Applications Developer Disabled Software Extensions Frameworks Installations	Version: 1.1.26 Last Modified: 2027(3/21, 9:56 Bundle ID: com.highpoint-tr. Notarized: Yes Odaed: Yes Architectures: arm64e, x88_54 64-Bit (Intel): Yes Location: LibraryExtensio Kext Version: 1.1.26 Load Address: 1844674187480 Loadble: Yes Dependencies: Satisfied Signed by: Developer ID Ap Apple Root CA	PM ech.kext.HighPointNVMe oper ins/HighPointNVMe.kext 1902000 plication: HighPoint Tech	nologies, Inc (DX6G69M ns → HighPointNVMe	I9N2), Develop	er ID Certifica	ation Authority,

5. Uninstalling the Device Driver Uninstalling the Device Driver for macOS11.0

To uninstall the NVMe driver, you will need to open a Terminal window and enter the following command:

sudo rm -rf /Library/Extensions/HighPointNVMe.kext

sudo kextcache --i /



6. Installing the RAID Management Software (WebGUI)

Installing the WebGUI for macOS11.0

1) Double click the package named **HighPointWebGUI.pkg** to start the installer. When the window appears, click the **Continue** button.



2) You will be promoted to click the Install button. Click Install to continue.



3) You will then be promoted to enter the *Administrator* Username and Password. Once these have been entered, click **Install Software** to continue.

	 Install HighPoint Web RAID Controller Management Standard Install on "1010" 	
 Introduction Destination St Installation T Installation Summary 	Installer is trying to install new software. Type your password to allow this. Username: Password: Cancel Install Software	re be
	Go Back	

4) The WebGUI Management software has been installed. Click **Close** to complete the procedure.

•••	Install HighPoint Web RAID Controller Management
 Introduction Destination Select Installation Type Installation Summary 	The installation was completed successfully.
	Go Back Close

7. Updating the WebGUI for macOS11.0

- First, uninstall the current WebGUI. Please refer to item 7 below (Uninstalling the WebGUI).
- 2) Once the system has rebooted, download the latest version of the WebGUI from the appropriate Software Downloads webpage.
- 3) Locate the download and double click the package named **HighPointWebGUI.pkg** to start the installer. Please refer to Installing the <u>WebGUI for macOS11.0</u> for more information.

8. Uninstalling the WebGUI for macOS11.0

To uninstall the WebGUI, access Applications, click on **HPTWEBGUI**, select uninstall, and double-click the **uninstall-WebGUI.command**. The uninstall command will automatically open a terminal and uninstall the software:



9. Trouble shooting

Unable to connect to the WebGUI

After the driver and management software are installed, the management software displays a "Connection Failure" warning when attempting to start the



interface: HighPoint RAID Management 2.12.3 Copyright (c) 1996-2020 HighPoint Technologies, Inc. All Rights Reserved

This error can be triggered by one of the following issues:

- 1. The HighPoint NVMe hardware is not recognized by macOS
- 2. The HighPoint NVMe device driver is not installed or is not loading properly.
- 3. WEBGUI service is not running.
- 4. The system's SIP status is incorrect.
- 5. If you are using a T2 system, Secure Boot may not be 'Disabled'.
- 6. If you are using Apple M1 system, Security Policy may not be 'Reduced'.

1. Verifying the HighPoint NVMe hardware

Please refer to the <u>Appendix – Verifying Product Installation</u> to make sure the HighPoint NVMe device is properly recognized by macOS.

Note: If you are using the RocketStor 6661A-NVMe:

- If you are using the RocketStor 6661A-NVMe (RS6661A-NVMe), or another SSD7000 series controller via our RocketStor 6661A adapter and a Thunderbolt[™] 3 connection, refer to the <u>third screenshot</u> displayed under - **Appendix** - **Verifying Product Installation**. If the RS6661A entry is present, proceed to screenshot #2.
- If the RocketStor 6661A entry is not displayed, this may be related to a connection problem – move the RS6661A to another Thunderbolt[™] 3 port or replace the cable and recheck the entry.

2. Make sure the HighPoint NVMe Driver is loaded

Please refer to the <u>Appendix - Checking the Driver status and Version</u> to make sure the HighPoint NVMe driver is installed properly.

- If the HighPoint NVMe driver is not loading, proceed to step 2 <u>Check the</u> security & privacy status. If HighPoint software is blocked in the permission, you need to click Allow.
- If the driver is loading properly, but the WebGUI is still unable to start, please try to restart the WEBGUI service. Please refer to <u>Appendix - WEBGUI service restart</u> make settings.

3) If WEBGUI is still not connected, please contact our <u>Support Department</u> to open a support ticket. Please make sure to include any screenshots and system information you are able to collect (see the Appendix for more information).

3. Check the SIP status

- 1) Please refer to the <u>Appendix Checking the SIP Status</u>.
- 2) If the settings are not correct for your system, please refer to the driver installation manual for each system to reset the SIP status.

4. For T2 Systems: Make sure Secure Boot is disabled

 Please refer to the <u>Appendix – Systems with T2 chipsets – Secure Boot status</u>. If the setting is incorrect, you will need to reboot the system to change the setting.

5. For Apple M1 Platform: Make sure Security Policy is reduced

1) Please refer to the <u>Apple M1 Platform-Reduced Security Policy</u>. If the setting is incorrect, you will need to shutdown the system to change the setting.

If you encounter any problems while checking items 1-6, please refer to the <u>Appendix</u> to collect information about your system and configuration, and submit a support ticket to our Customer Support department using our Online Support Portal: <u>https://www.highpoint-tech.com/websupport/main.php</u>

The WebGUI can't connect to a remote system

If you can't connect to a remote system, make sure **raidman-httpsd** is running on the target system, and confirm that you can access the remote system via a TCP/IP connection. If you have a firewall configured, make sure TCP port 7402 is not blocked.

Appendix

When submitting s support ticket via our Online Support Portal, the following information will help our Support Department diagnose and resolve your issue as quickly and efficiently as possible.

Collecting the macOS version

1) Click on the Apple logo located near the upper left-hand portion of the Desktop, and click "Version". Then the version number of the system will all be displayed.



Check the security & privacy

1) Check if there is HighPoint software blocked in the permission, if it is blocked, you need to click "Allow".



Verifying Product Installation

1) Click on the **Apple** logo located near the upper left-hand portion of the Desktop, and select "**About this Mac**".

		масвоок Рго	
▼ Hardware	Thunderbolt Device Tree		
ATA	Thursday the Days O		
Apple Pay	Thunderbolt Bus 0		
Audio	Inunderbolt Bus 1		
Bluetooth	ROCKETSTOF 6661A		
Camera			
Card Reader			
Controller			
Diagnostics			
Disc Burning			
Ethernet Cards			
Fibre Channel			
FireWire			
Graphics/Displays			
Memory			
NVMExpress			
PCI			
Parallel SCSI			
Power			
Printers			
SAS			
SATA/SATA Express		0	
SPI	DesketSter SSS14		
Storage	ROCKELSIOF BOBTA:		
Thunderbolt	Vendor Name: HighPoint Techno	gies, Inc.	
USB	Device Name: RocketStor 6661		
▼ Network	Vendor ID: 0x43		
Firewall	Device ID: 0x6661		
Locations	UID: 0x0043053BE54	D00	
Volumes	Route String: 1		
WWAN	Firmware Version: 26.1		
Wi-Fi	Port (Upstream):	Device compared	
▼ Software	Link Status:	Device connected	
Accessibility	Speed:	Up to 40 Gb/s x1	
Applications	Current Link Width:	0x2	
Developer	Cable Firmware Version:	0.9.0	
Disabled Software	Link Controller Firmware Version	0.36.0	
Extensions	Status:	No device connected	
Enots	Link Status:	0x7	
Frameworks	Speed:	Up to 40 Gb/s x1	
	Current Link Width:	0x1	

RocketStor 6661A-NVMe (Thunderbolt entry):

2) If you are using a SSD7000 series NVMe RAID controller, check under **Hardware**, **PCI**. Reference screenshots for each product are show below.

SSD7101A / 7104 / 7204 / 7120 / 6540 / 6540M, or RS6661A-NVMe:

Hardware	Card		~ Туре	Driver Installed	Slot
ATA Apple Day	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@71,0,0
Apple Pay	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@72,0,0
Rusteeth	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@69,0,0
Camera	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@70,0,0
Diagnostics Disc Burning Ethernet Cards Fibre Channel FireWire Graphics/Displays	pci144d,a804: Type: Driver Installed:	NVM Express Controller Yes	•		
Memory	Tunnel Compatible: Pause Compatible:	Yes No			loca
PCI Power Printers	MSI: Bus: Slot: Vendor ID: Device ID:	Yes PCI Thunderbolt@71,0,0 0x144d 0xa804	Controller(1): NVMe		
SAS SATA/SATA Express	Subsystem Vendor ID: Subsystem ID: Revision ID:	0x144d 0xa801 0x0000	Global View Pt	nysical Log	gical Setting
Storage	Link width: Link Speed:	x4 8.0 GT/s			Logic

SSD7140/7540L:

▼ Hardware	Card		~ Туре	Driver Installed	Slot
AIA	AMD Radeon Pro 580X		Display Controller	Yes	Slot-1@7,0,0
Apple Pay	pci10b5,87d0		Unknown	No	Slot-3@17,0,1
Audio	pci10b5,87d0		Unknown	No	Slot-3@17,0,2
Bluetooth	pci10b5,87d0		Unknown	No	Slot-3@17,0,3
Camera Cand Dandar	pci10b5,87d0		Unknown	No	Slot-3@17,0,0
Card Reader	pci15b7,5002		NVM Express Controller	Yes	Slot-3@26,0,0
Controller	pci15b7,5003		NVM Express Controller	Yes	Slot-3@21,0,0
Diagnostics	pci15b7,5003		NVM Express Controller	Yes	Slot-3@20,0,0
Disc Burning	pci15b7,5003		NVM Express Controller	Yes	Slot-3@24,0,0
Ethernet Cards	pci126f,2262		NVM Express Controller	Yes	Slot-3@22,0,0
Fibre Channel	pci144d,a808		NVM Express Controller	Yes	Slot-3@19,0,0
Firewire	pci144d,a808		NVM Express Controller	Yes	Slot-3@23,0,0
Graphics/Displays	pci1002,aaf0		Audio Device	Yes	Slot-1@7.0.1
Memory	pci1179,11a		NVM Express Controller	Yes	Slot-3@25,0,0
NVMExpress	pci8086.15eb		Thunderbolt Controller	Yes	Thunderbolt@146.0.0
PCI	XHC4		USB eXtensible Host Controller	Yes	Thunderbolt@145,0,0
Parallel SCSI					
Power					
Printers					
SAS	AMD Radeon Pro 580X	l:			
SATA/SATA Express	Namo	ATV Forrabuo			
SPI	Type:	Display Controller			
Storage	Driver Installed:	Yes			
Inunderbolt	MSI:	Yes			
USB	Bus:	PCI Class 1070.0			
* Network	Vendor ID:	SIDE-1@7,0,0			
Firewall	Device ID:	0x67df			
Locations	Subsystem Vendor ID:	0x106b			
volumes	Subsystem ID:	0x0206			
WWAN	Revision ID:	UXUUCU x16			
WI-FI	Link Speed:	8.0 GT/s			
▼ Software					

SSD7103:

		MacBook Pro		
▼ Hardware	Card	^ Туре	Driver Installed	Slot
ATA Apple Day	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@130,0,0
Apple Pay	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@131,0,0
Rustooth	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@138,0,0
Gemere	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@136,0,0
Card Reader	pci1103,7103	RAID Controller	No	Thunderbolt@137,0,0
Controller				
Diagnostics				
Disc Burning				
Ethernet Cards		0		
Fibre Channel	pci144d,a808:			
FireWire	Tuno	NV/M Express Controller		
Graphics/Displays	Driver Installed:	Yes		
Hardware RAID	Tunnel Compatible:	Yes		
Memory	Pause Compatible:	Yes		
NVMExpress	MSI: Bus:	Yes		
PCI	Slot:	Thunderbolt@130,0,0		
Parallel SCSI	Vendor ID:	0x144d		

SSD7110:

		Mac	Book Pro	-	
✓ Hardware	Card		∧ Туре	Driver Installed	Slot
ATA Apple Pay Audio Bluetooth Camera Card Reader	pci144d,a804 pci144d,a804 pci144d,a808 pci1103,7110		NVM Express Controller NVM Express Controller NVM Express Controller RAID Controller	Yes Yes Yes No	Thunderbolt@135,0,0 Thunderbolt@132,0,0 Thunderbolt@134,0,0 Thunderbolt@133,0,0
Controller Diagnostics Disc Burning Ethernet Cards Fibre Channel	pci144d,a804:		٥		
FireWire Graphics/Displays Hardware RAID Memory NVMExpress PCI Parallel SCSI	Type: Driver Installed: Tunnel Compatible: Pause Compatible: MSI: Bus: Slot: Vendor ID: Devide ID:	NVM Expre Yes Yes Yes PCI Thunderbo 0x144d	ess Controller bit@135,0,0		

SSD7505:

			Mac Pro			
/ Hardware	Card		^	Туре	Driver Installed	Slot
AIA Accile Devic	AMD Radeon Pro 580X			Display Controller	Yes	Slot-1@7,0,0
Apple Pay	pci144d,a808		- г	NVM Express Controller	Yes	Slot-3@21,0,0
Audio	pci144d,a808			NVM Express Controller	Yes	Slot-3@22,0,0
Camora	pci144d,a808			NVM Express Controller	Yes	Slot-3@23,0,0
Carriera Card Boador	pci144d,a808			NVM Express Controller	Yes	Slot-3@24,0,0
Cart Reader	pci1000,c010			Other Mass Storage Controller	No	Slot-3@32,0,0
Diagnostics	pci1002,aaf0		1.0	Audio Device	Yes	Slot-1@7,0,1
Disc Rurning	pci1103,7505			RAID Controller	No	Slot-3@27,0,0
Ethernet Carde	pci8086,15eb			Thunderbolt Controller	Yes	Thunderbolt@149,0
Ethernet Cards	XHC4			USB eXtensible Host Controller	Yes	Thunderbolt@148,0
FireWire				0		
NVMExpress PCI Parallel SCSI Power Printers SATA/SATA Express SPI Storage Thunderbolt USB Vatwork Firewall Locations Volumes WWAN	Type: Driver Installed: MSI: Bus: Slot: Vendor ID: Device ID: Subsystem Vendor ID: Subsystem Vendor ID: Revision ID: Link Width: Link Speed:	RAID Controller No PCI Slot-3@270,0 0x7505 0x7103 0x0001 0x0001 x2 5.0 GT/s				
The second s						
SD7540:						

		IV	lac Pro			
/ Hardware	Card		^	Туре	Driver Installed	Slot
ATA	AMD Radeon Pro 580X			Display Controller	Yes	Slot-1@7.0.0
Apple Pay	pci144d,a808			NVM Express Controller	Yes	Slot-3@27.0.0
Audio	pci144d,a808			NVM Express Controller	Yes	Slot-3@30,0,0
Bluetooth	pci144d,a808			NVM Express Controller	Yes	Slot-3@29,0,0
Camera	pci144d,a808			NVM Express Controller	Yes	Slot-3@28,0,0
Card Reader	pci144d,a808			NVM Express Controller	Yes	Slot-3@21,0,0
Controller	pci144d,a808			NVM Express Controller	Yes	Slot-3@22,0,0
Diagnostics	pci144d,a808			NVM Express Controller	Yes	Slot-3@23,0,0
Disc Burning	pci144d,a808			NVM Express Controller	Yes	Slot-3@24,0,0
Ethernet Cards	pci1000,c010			Other Mass Storage Controller	No	Slot-3@35,0,0
Fibre Channel	pci1002,aaf0			Audio Device	Yes	Slot-1@7,0,1
Firewire	pci1103,7540			RAID Controller	No	Slot-3@33,0,0
Graphics/Displays	pci8086,15eb			Thunderbolt Controller	Yes	Thunderbolt@151,0
Memory	XHC4			USB eXtensible Host Controller	Yes	Thunderbolt@150,0
NVMExpress				0		
Parallel SCSI Power Printers SAS SATA/SATA Express SPI Storage Thunderbolt USB Network Firewall Locations Volumes	per1103,7540: Type: Driver installed: MSI: Bus: Slot: Vendor ID: Device ID: Subsystem Vendor ID: Subsystem Nor ID: Revision ID: Link Width: Link Speed:	RAID Controller No PCI @33,0,0 0x103 0x7540 0x1103 0x0001 0x0001 x1 5.0 GT/s				

WEBGUI Screenshots

Please take screenshots of WEBGUI each Tab (such as Physical, Logical, Event, etc.) and upload these to your support case. In addition, check the Event log tab and save a copy of the current log – please upload this to the support case.

WEBGUI service restart

If you can't connect to the WebGUI, please check if a process named raidman-httpsd is running on the system. If it is not running, you can start it manually by opening a terminal window and running the command: "sudo hptdaemonctl restart".

Checking the SIP Status

Open a Terminal window and enter the following command:

csrutil status

Please take a screenshot of the output, and attach it to a support case (see example below):

Last login: Sat Oct 12 16:02:36 on ttys000 test@testsMB20161015 ~ % csrutil status			
test@testsMB20161015 ~ % csrutil status	Last login:	Sat Oct 12 16	5:02:36 on ttys000
Puster Intervity Dustastion status, enchlad	test@testsM	B20161015 ~ %	csrutil status

The status will vary depending on which version of macOS you are using:

MacOS Version	SIP Status	Driver Status	
11.x	Enable	Loaded	

Systems with T2 chipsets – Secure Boot status

You will need reboot the system and enter Recovery Mode to check the Secure Boot status. This setting should remain disabled.

Checking the Driver status and Version

- 1) Click on the **Apple** logo located near the upper left-hand portion of the Desktop, and select "**About this Mac**".
- 2) Click on **Extensions**, and then click on **HighPoint NVMe** entry please take a screenshot and attach it this support case (see the example below):

System Information→Software→Extensions→HighPointNVMe

		N	acBook Pro			
Augio	Extension Name	~ Version	Last Modified	Notarized	Loaded	Obtained from
Company	UES Mas language	8.0	2020/18 4:00 044	Vac	Nie	Apple
Card Dander	HFS_MacJapanese	8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Card Reader	HF5_MacKorean	8.0	2020/1/1, 4:00 PM	105	NO	Apple
Controller	HESEncoolings	1.0	2020/1/1, 4-00 PM	res	Tes	Apple Identified Dev
Diagnostics	HighPointiOP	4.4.5	2020/1/1, 4:00 PM	Tes		Identified Dev
Disc Burning	HighPointNVMe	1.1.26	2021/3/21, 9:56 PM	TOS	105	Identified Dev
Ethernet Cards	HighPointRR	4.23.1	2021/3/12, 3:54 PM	Yes	NO	Identified Dev
Fibre Channel	initioFWBridge	511.60.2	2020/1/1, 4:00 PM	Yes	No	Apple
FireWire	Intel82574L	2.7.2	2020/1/1, 4:00 PM	Yes	No	Apple
Graphics/Displays	Tarren II al a ka I Tarren a	**		3d = =		*****
Memory	title bin standard and					
NVMExpress	HighPointNVMe:					
PCI	Manian					
Parallel SCSI	Version: 1.1.20	O'EE DM				
Power	Bundle ID: com highr	point-tech kext HighPointNVM	0			
Printers	Notarized: Yes					
SAS	Loaded: Yes					
SATA	Obtained from: Identified	Developer				
SPI	Kind: Universal					
Storage	Architectures: arm64e, x	86_64				
Thunderholt/LISBA	64-Bit (Intel): Yes					
LISB	Location: /Library/Ex	ktensions/HighPointNVMe.kex				
La Network	Kext Version: 1.1.26	274201002000				
- Network	Load Address: 18446741	874801902000				
Firewali	Dependencies: Satisfied					
Locations	Signed by: Developer	ID Application: HighPoint Tec	hoologies Inc (DX6G69)	(9N2) Develor	er ID Certifica	ation Authority
Volumes	Apple Roo	t CA	intelegices, intellectores	one, ocreat		actor machancy,
WWAN		10.2 March 10.0 March				
Wi-Fi						
✓ Software						
Accessibility						
Applications						
Developer						
Disabled Software						
Extensions						
Fonts						
Frameworks						
Installations	testis MacRook Dro. M	1 DC2 > Coffuero > Evtensi	one + HighDolotNVMe			
	COSt & Macbook Pro_M	Those animale > Extensi	ous summentes and			

How to Collect System Logs

Please attach a copy of the /var/log folder to your support ticket.
 To locate the /var/log Folder: 1. Go to Applications → Utilities → Console:



2) On the left side of the Console application, right-click on the /var/log folder and select Reveal in Finder:

				Con	sole	
Now Activities	P23 Clear	C Reload	1nfo		① Share	0
Devices Devices 10.13.4's iMac Reports Mac Analytics System Reports User Reports User Reports system.log Comparison Although and	CDI CON dail disp fsci hfs, inst mor sys 1 sys 1 sys 1 sys 1 sys 1 sys	Its S.custom ecaptured.log y.out olaypolicyd.std c_hfs.log .convert.log all.log nthly.out tem.log tem.log.0.gz tem.log.1.gz tem.log.2.gz	out.log	LANGUAGE=en		
► 🖿 /var/log	Revea	tem.log.3.gz I in Finder				
	1 sys	tem.log.6.gz				

3) You should then be automatically directed to the log folder in the var directory. Please remember when sending the folder to zip file, you should first direct it to a separate location (such as the desktop).

			var	
< 5	** = = =	Ⅲ × ♦ × □	ô O	
Favorites	agentx	ət	audit	backups
(R) AirDrop				
Recents				
iCloud Drive				
Applications	empty	folders	install	jabberd
Desktop	_			
Documents	-	-	-	-
O Downloads		_		
Devices	1773	ma	mail	msas
Remote Disc	6025		11101	mago

- 4) In addition to /var/log Folder detailed above, please attach a copy of the errlog.txt file:
 - Open terminal and type the following, then press Enter: log show |grep kernel > hptsyslog.txt



5) Please attach the hptsyslog.txt to your support ticket.