

SSD7000 Series NVMe RAID Solutions

Mac Installation Guide

V1.04 – June, 2021

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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 Thunderbolt™ 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.
- 2) The SSD7101A-1/7120/6540/6540M/7103/7104/7140/7505/7540/7540L NVMe device must be 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 Thunderbolt™ 3 port.

- 3) Operating System Support: macOS 10.13 or later
- 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 3 before attempting to install any software for the HighPoint NVMe device.

1. Apple T2 security Chip-Disable Secure boot

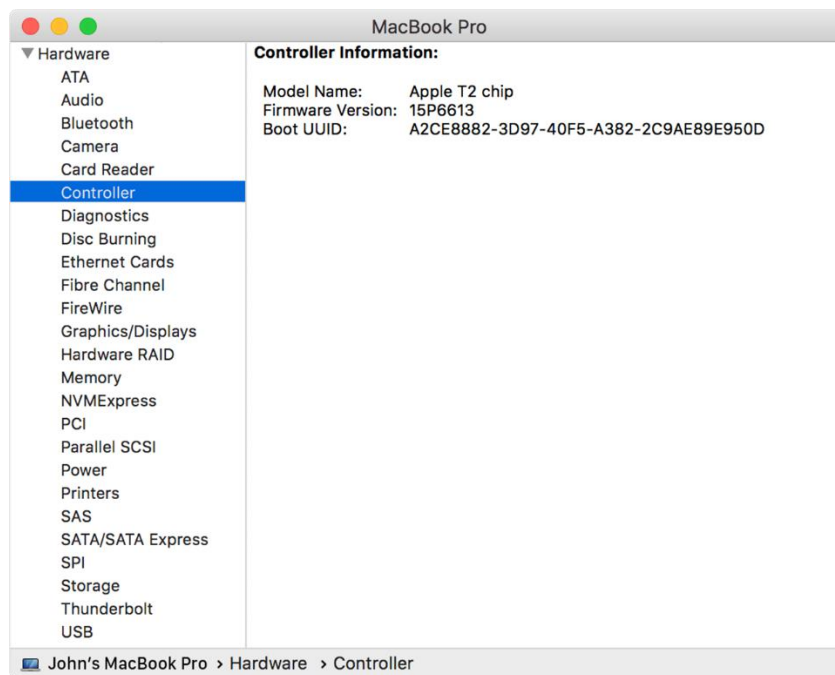
Secure Boot must be disabled on the following products:

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

- iMac Pro
- Mac Pro introduced in 2019
- Mac mini introduced in 2018
- MacBook Air introduced in 2018 or later
- MacBook Pro introduced in 2018 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.

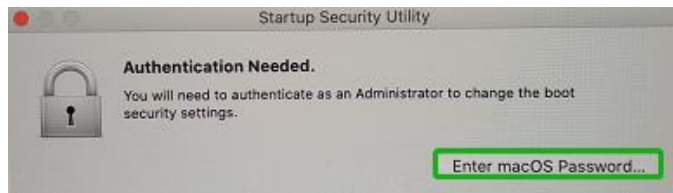


Disabling Secure Boot

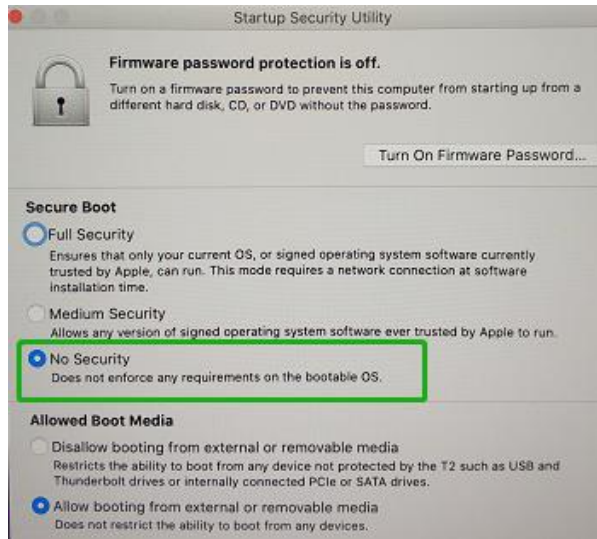
- 1) Restart the computer and then press the **Command + R** keys simultaneously. Keep holding the keys down until the Apple Logo appears.
- 2) **When the menu bar says: "macOS Utilities"**, you have booted into Recovery mode. Launch the **Startup Security Utility** application by selecting it from the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

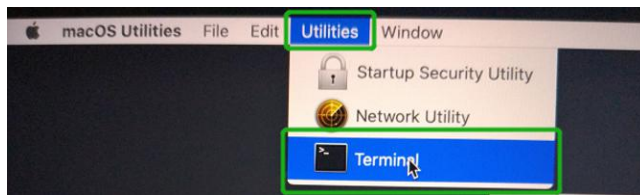
2. Installing the Device Driver

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

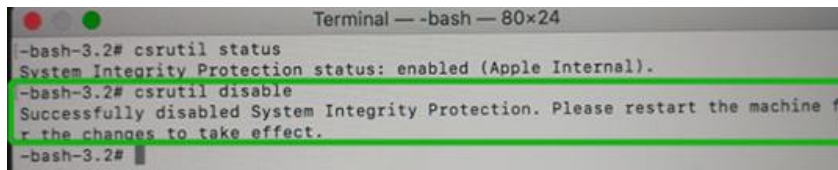
macOS High Sierra 10.13 Driver Installation Procedure

- 1) Restart the computer and then press the **Command + R** keys simultaneously. Keep holding the keys down until the Apple logo appears. Click on **Utilities** in the upper left corner and select **Terminal**.

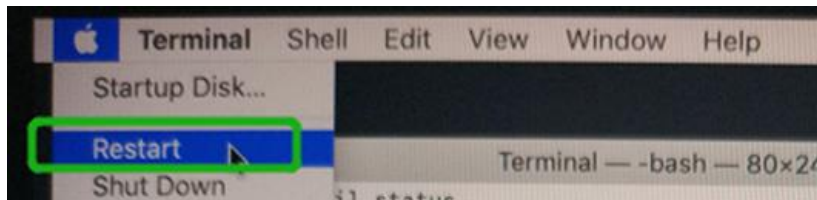


- 2) Open a Terminal window and enter the following command:

csrutil disable



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

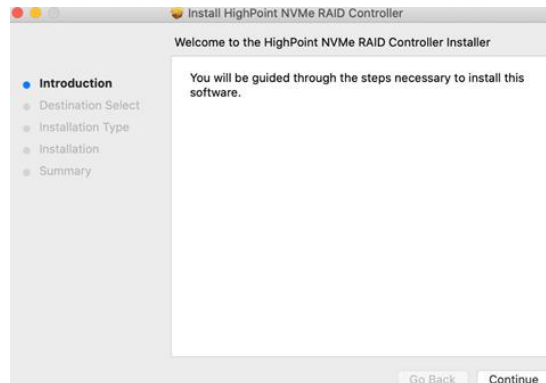


- 4) After rebooting, confirm that SIP is in the disabled state. Open terminal and type the following command:

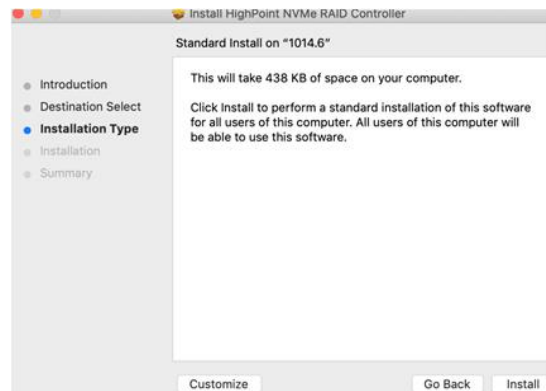
csrutil status


```
test — -zsh — 80x24
Last login: Sat Oct 12 17:18:44 on console
[test@testsMB20161015 ~ % csrutil status
System Integrity Protection status: disabled.
test@testsMB20161015 ~ %
```

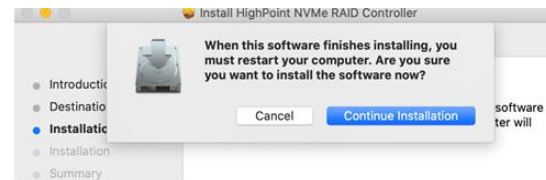
- 1) Next, start the driver installation procedure. Locate the download and double click the package to start the installer. Click the **Continue** button:



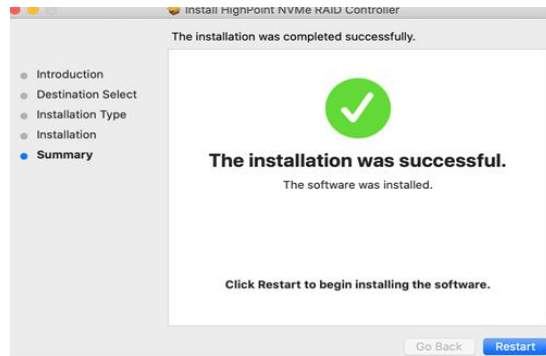
- 2) macOS will prompt you to install the driver. Click **Install** to proceed.



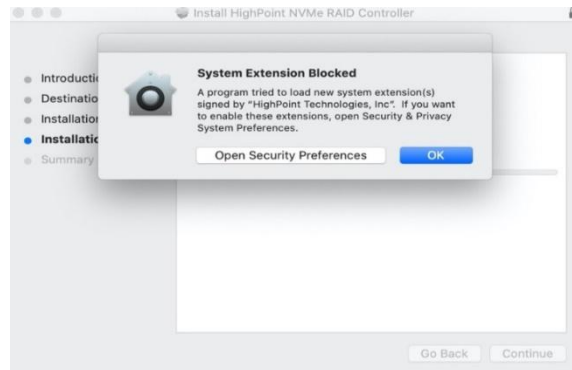
- 3) You will be prompted that a reboot is needed to install the software. Click **Continue Installation**.



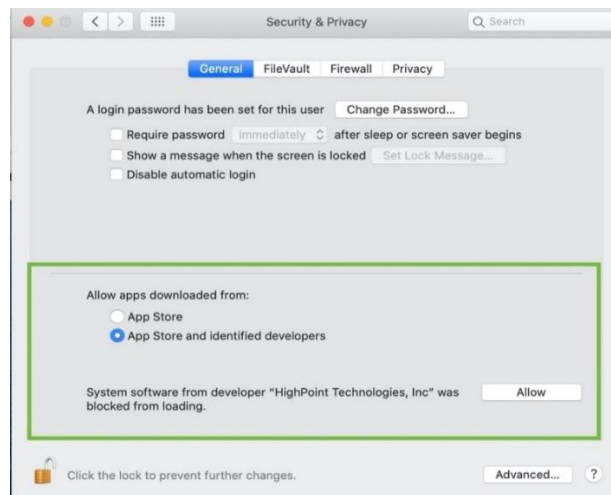
- 4) If no pop-ups appear, please proceed to the next step of installation. Click **Restart**.



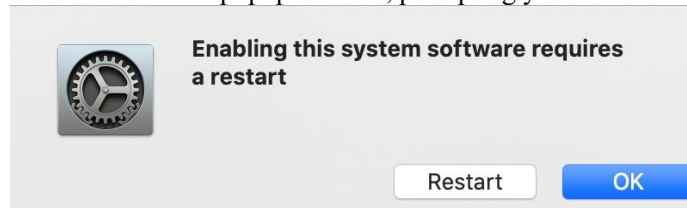
- 5) If you receive a popup window prompting you for permission, click **Open Security Preferences**.



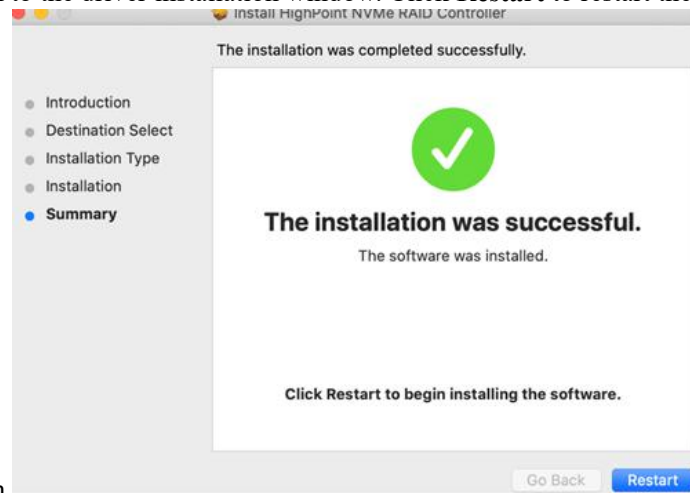
- 6) Make sure **App Store and identified developers** is checked, and then click **Allow**.



- 7) You will receive a popup window, prompting you to restart. Click **OK**.



- 8) Return to the driver installation window. Click **Restart** to restart the

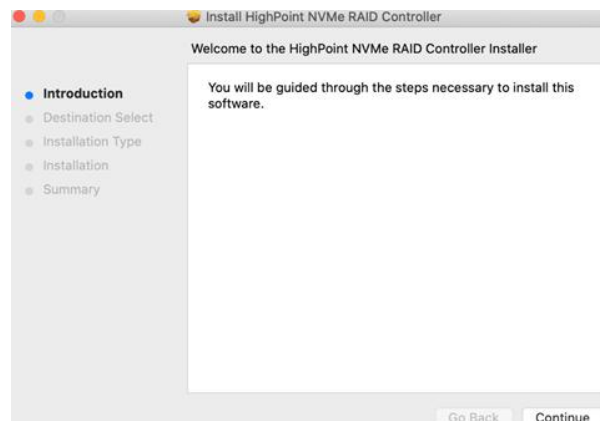


system.

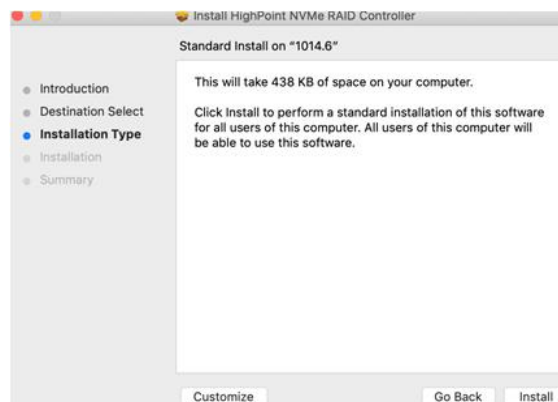
- 9) After restarting the system, install HighPoint RAID management.

macOS Mojave 10.14 and macOS Catalina 10.15 Driver Installation Procedure

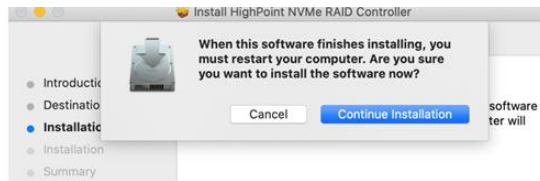
- 1) Locate the download and double click the package to start the installer. Click the **Continue** button:



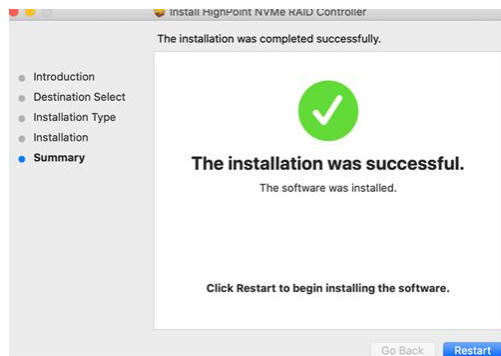
- 2) macOS will prompt you to install the driver. Click **Install** to proceed.



- 3) You will be prompted that a reboot is needed to install the software. Click **Continue Installation**.



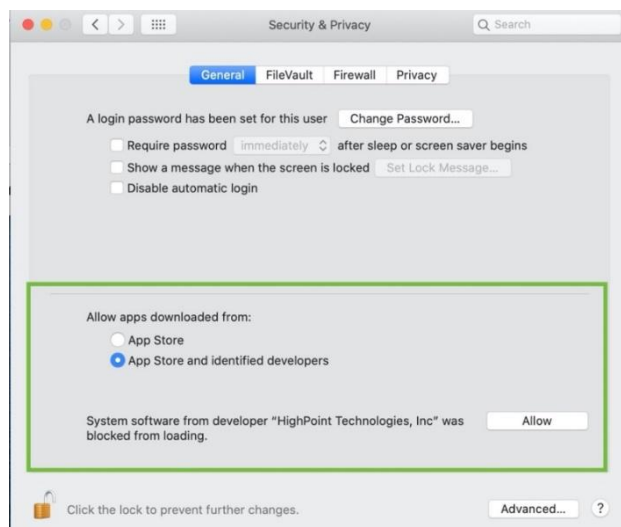
- 4) If no pop-ups appear, please proceed to the next step of installation. Click **Restart**.



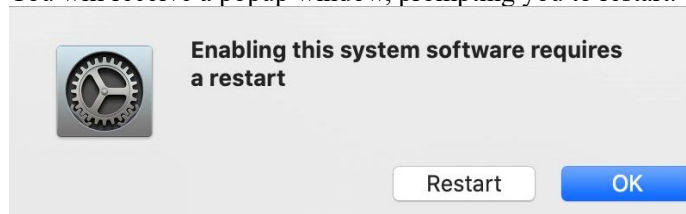
- 5) If you receive a popup window prompting you for permission, click **Open Security Preferences**.



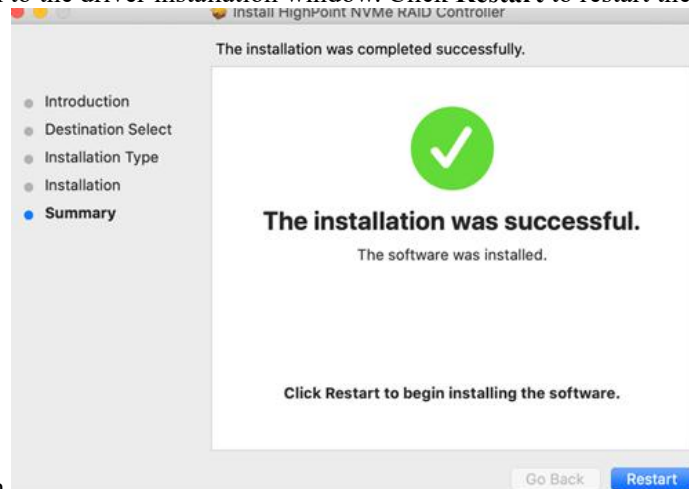
- 6) Make sure **App Store and identified developers** is checked, and then click **Allow**.



- 7) You will receive a popup window, prompting you to restart. Click **OK**.

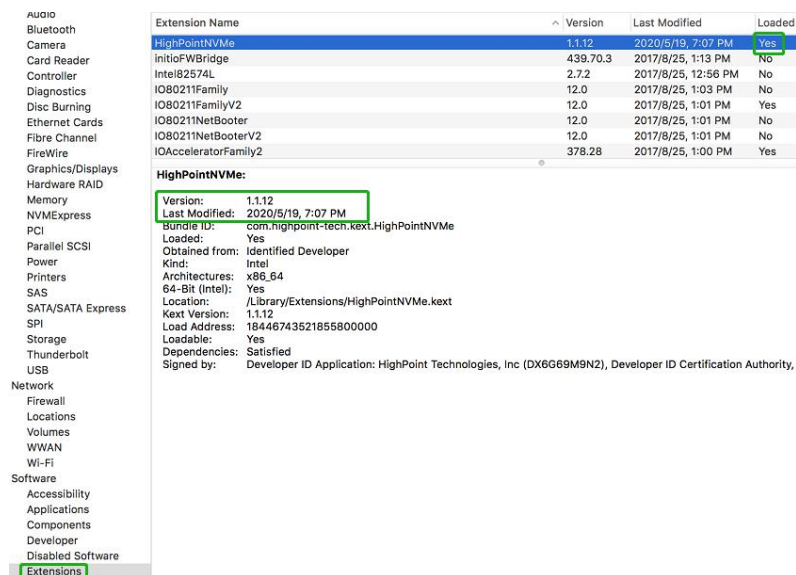


- 8) Return to the driver installation window. Click **Restart** to restart the



system.

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



3. Updating the Device Driver

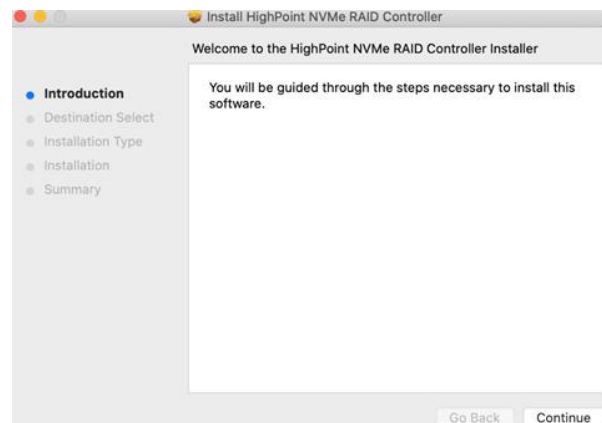
Note: Update the driver, please make sure the RAID controller is connected to the host.

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

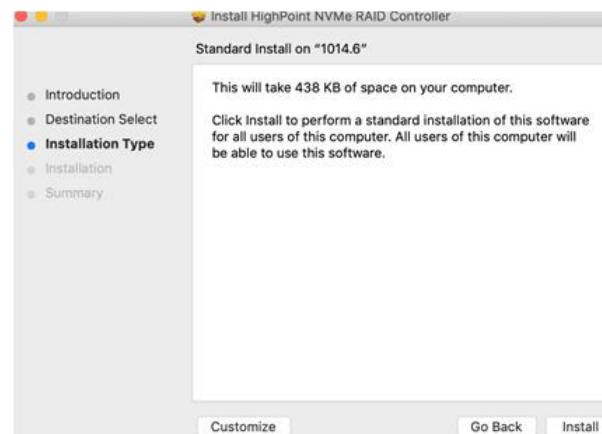
Product	Download Page
SSD7101A-1	https://www.highpoint-tech.com/USA_new/series-ssd7101a-1-download.htm
SSD7120	https://highpoint-tech.com/USA_new/series-ssd7120-download.htm
SSD7204	https://highpoint-tech.com/USA_new/series-ssd7204-download.htm
SSD7104	https://highpoint-tech.com/USA_new/series-ssd7104-download.htm
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 macOS 10.13/10.14/10.15)

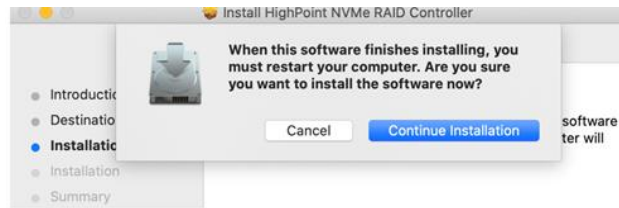
- 1) Locate the download and double click the package to start the installer. Click the **Continue** button:



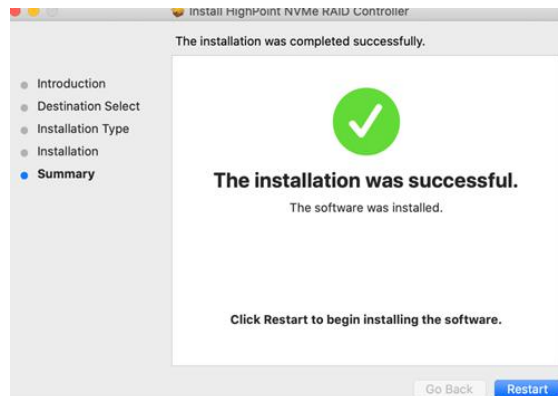
- 2) macOS will prompt you to install the driver. Click **Install** to proceed.



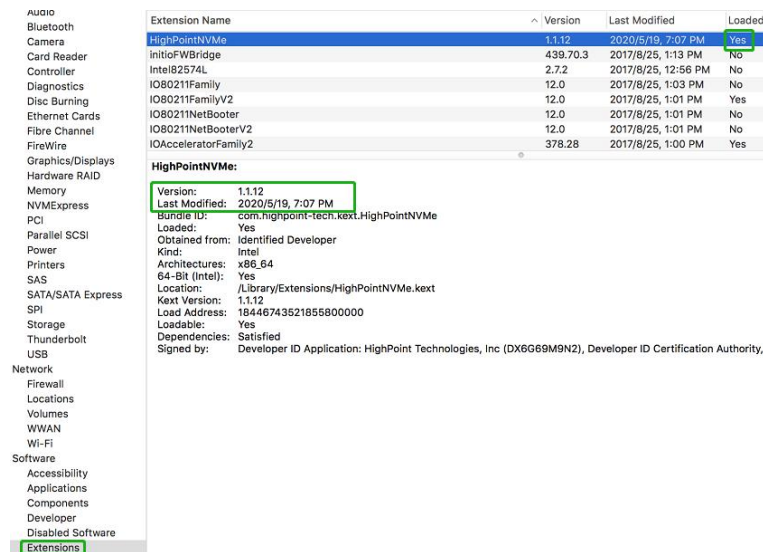
- 3) You will be prompted that a reboot is needed to install the software. Click **Continue Installation**.



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



- 5) After the system restarts, the driver's status can be viewed under **System Information**; the screenshot below shows that the driver has loaded properly.

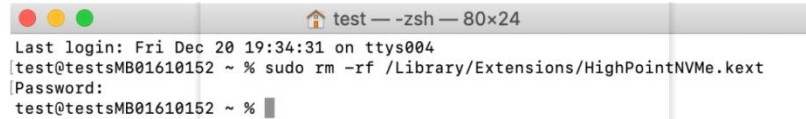


4. Uninstalling the Device Driver

Uninstalling the Device driver for macOS 10.13 and 10.14

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



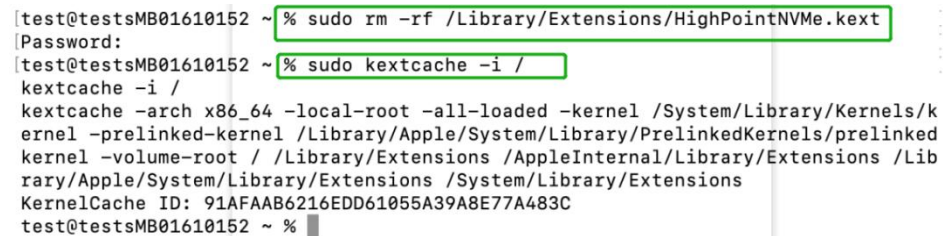
```
test — zsh — 80x24
Last login: Fri Dec 20 19:34:31 on ttys004
test@testsMB01610152 ~ % sudo rm -rf /Library/Extensions/HighPointNVMe.kext
Password:
test@testsMB01610152 ~ %
```

Uninstalling the Device Driver for macOS 10.15

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 /

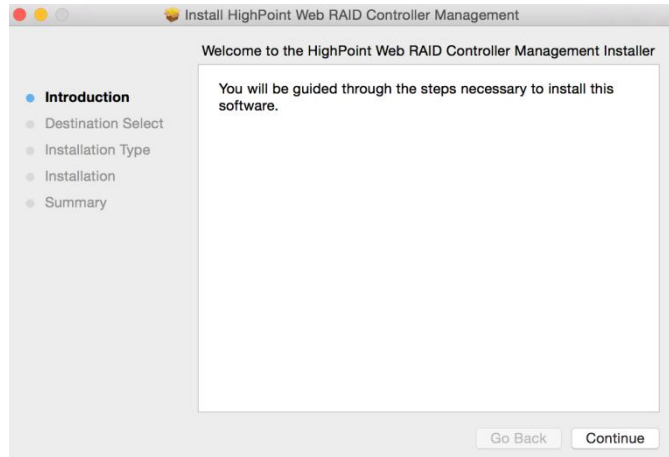


```
test@testsMB01610152 ~ % sudo rm -rf /Library/Extensions/HighPointNVMe.kext
Password:
test@testsMB01610152 ~ % sudo kextcache -i /
kextcache -i /
kextcache -arch x86_64 -local-root -all-loaded -kernel /System/Library/Kernels/k
ernel -prelinked-kernel /Library/Apple/System/Library/PrelinkedKernels/prelinked
kernel -volume-root / /Library/Extensions /AppleInternal/Library/Extensions /Lib
rary/Apple/System/Library/Extensions /System/Library/Extensions
KernelCache ID: 91AFAAB6216EDD61055A39A8E77A483C
test@testsMB01610152 ~ %
```

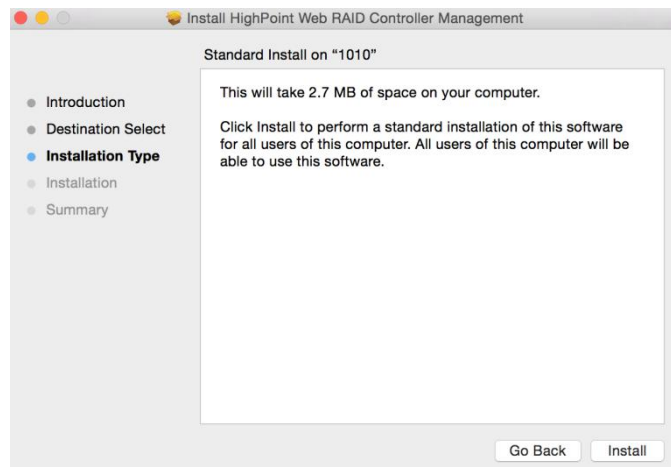

5. Installing the RAID Management Software (WebGUI)

Installing the WebGUI for macOS 10.13/10.14/10.15

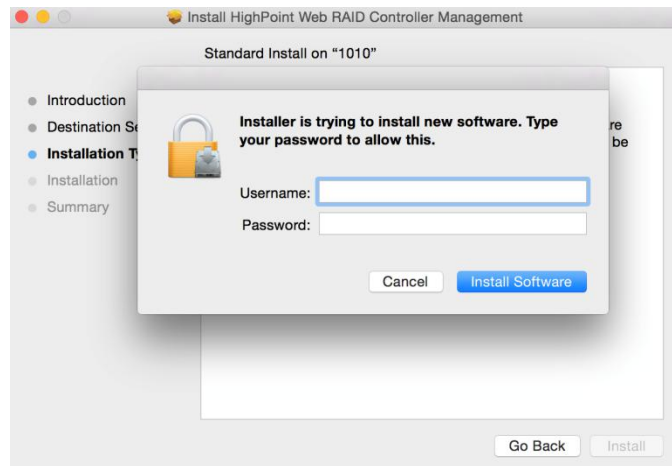
- 1) Double click the package named **HighPointWebGUI.pkg** to start the installer. When the window appears, click the **Continue** button.



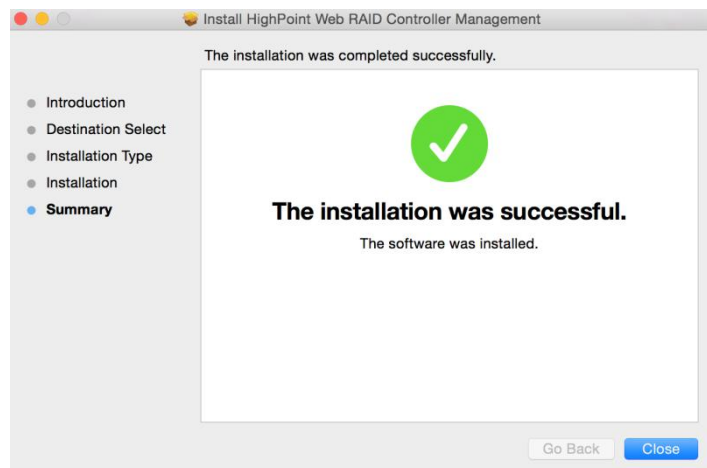
- 2) You will be promoted to click the **Install** button. Click **Install** to continue.



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



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

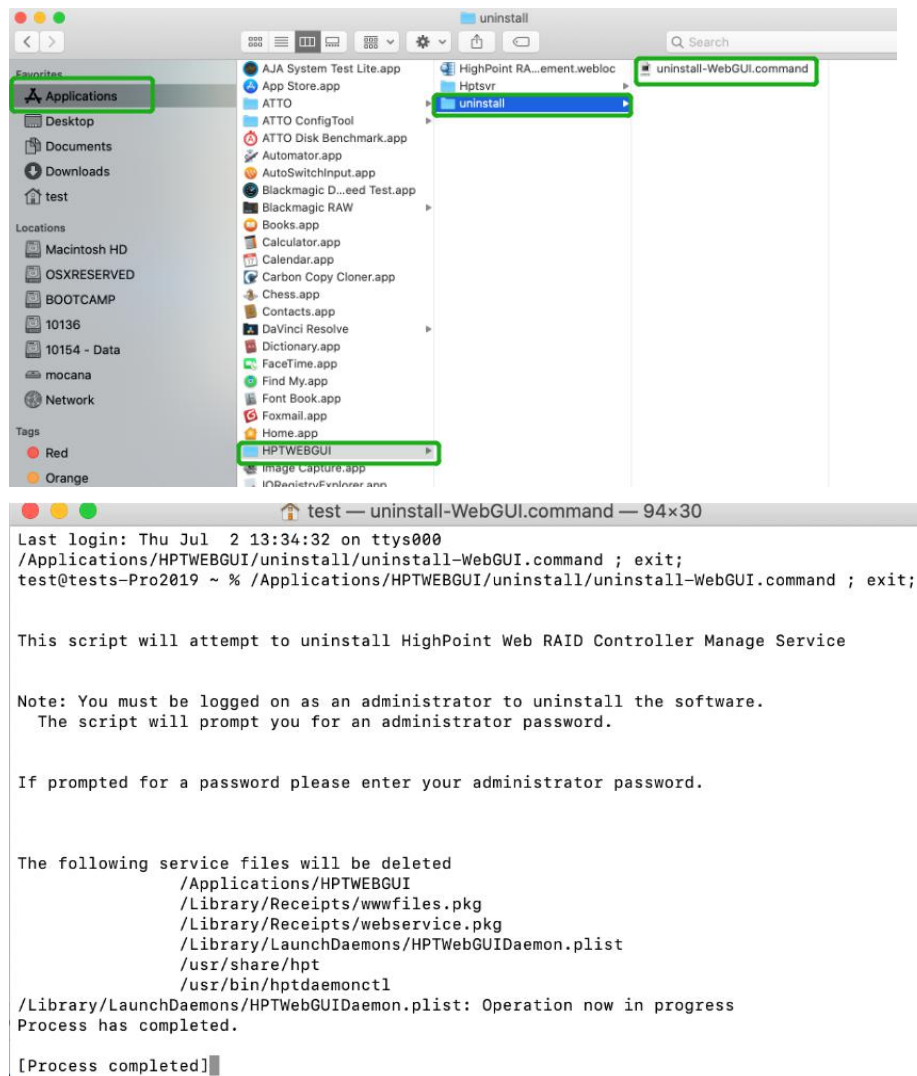


6. Updating the WEBGUI for macOS 10.13/10.14/10.15

- 1) First, uninstall the current WebGUI. Please refer to item 7 below ([Uninstalling the WebGUI](#)).
- 2) After uninstalling the WebGUI, reboot macOS.
- 3) Once the system has rebooted, download the latest version of the WebGUI from the appropriate Software Downloads webpage.
- 4) Locate the download and double click the package named **HighPointWebGUI.pkg** to start the installer. Please refer to Installing the [WebGUI for macOS 10.13/10.14/10.15](#) for more information.

7. Uninstalling the WebGUI for macOS 10.13/10.14/10.15

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:



Audio	Extension Name	Version	Last Modified	Loaded
Bluetooth	HighPointNVMe	1.1.12	2020/5/19, 7:07 PM	Yes
Camera	IntelFWBridge	439.70.3	2017/8/25, 1:13 PM	No
Card Reader	IntelI82574L	2.7.2	2017/8/25, 12:56 PM	No
Controller	IO80211Family	12.0	2017/8/25, 1:03 PM	No
Diagnostics	IO80211FamilyV2	12.0	2017/8/25, 1:01 PM	Yes
Disc Burning	IO80211NetBooter	12.0	2017/8/25, 1:01 PM	No
Ethernet Cards	IO80211NetBooterV2	12.0	2017/8/25, 1:01 PM	No
Fibre Channel	IOAcceleratorFamily2	378.28	2017/8/25, 1:00 PM	Yes
FireWire				
Graphics/Displays				
Hardware RAID				
Memory				
NVMeExpress				
PCI				
Parallel SCSI				
Power				
Printers				
SAS				
SATA/SATA Express				
SPI				
Storage				
Thunderbolt				
USB				
Network				
Firewall				
Locations				
Volumes				
WWAN				
Wi-Fi				
Software				
Accessibility				
Applications				
Components				
Developer				
Disabled Software				
Extensions				

Version: 1.1.12

Last Modified: 2020/5/19, 7:07 PM

Bundle ID: com.highpoint-tech.kext.HighPointNVMe

Loaded: Yes

Obtained from: Identified Developer

Kind: Intel

Architectures: x86_64

64-Bit (Intel): Yes

Location: /Library/Extensions/HighPointNVMe.kext

Kext Version: 1.1.12

Load Address: 18446743521855800000

Loadable: Yes

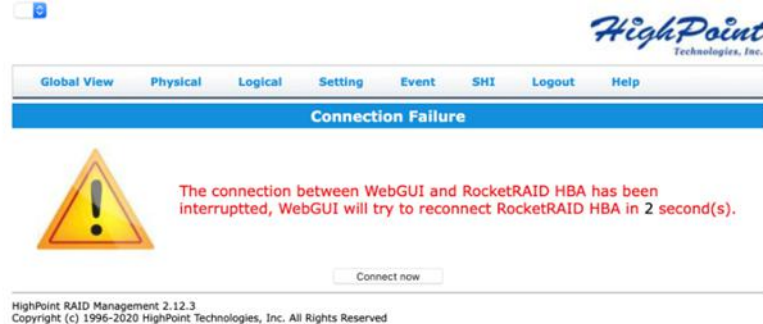
Dependencies: Satisfied

Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Inc

8. 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:

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

1. Verifying the HighPoint NVMe hardware

Please refer to the [Appendix – Verifying Product Installation](#) to make sure the HighPoint NVMe device is properly recognized by macOS.

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

1. 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 [third screenshot](#) displayed under - **Appendix – Verifying Product Installation**. If the RS6661A entry is present, proceed to screenshot #2.
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 [Appendix - Checking the Driver status and Version](#) to make sure the HighPoint NVMe driver is installed properly.

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

If WEBGUI is still not connected, please contact our [Support Department](#) 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 [Appendix - Checking the SIP Status](#) (page 27).
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

1. Please refer to the [Appendix - Systems with T2 chipsets – Secure Boot status](#) . If the setting is incorrect, you will need to reboot the system to change the setting.

If you encounter any problems while checking items 1-5, please refer to the [Appendix](#) to collect information about your system and configuration, and submit a support ticket to our Customer Support department using our Online Support Portal: <https://www.highpoint-tech.com/websupport/main.php>

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 a 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.

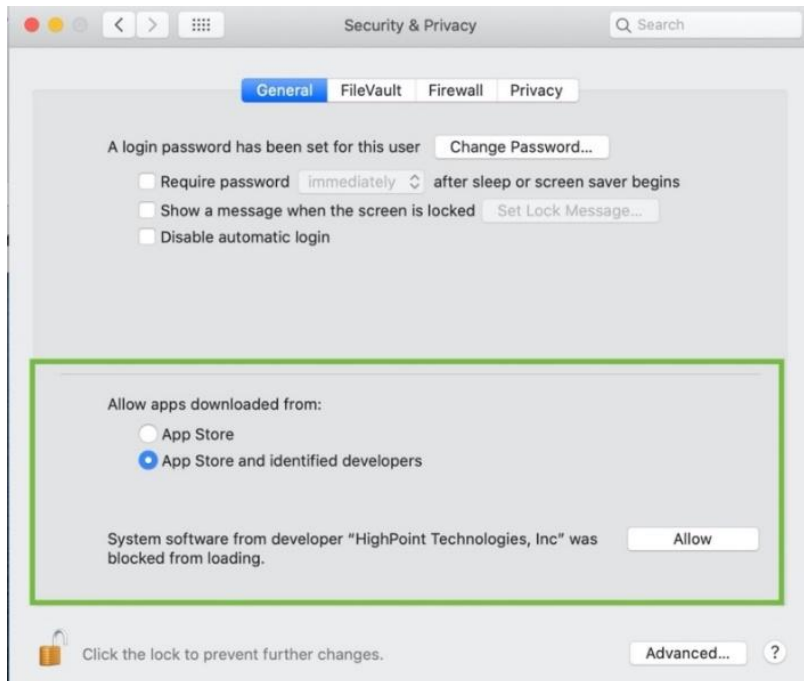
Collecting the macOS version

- 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

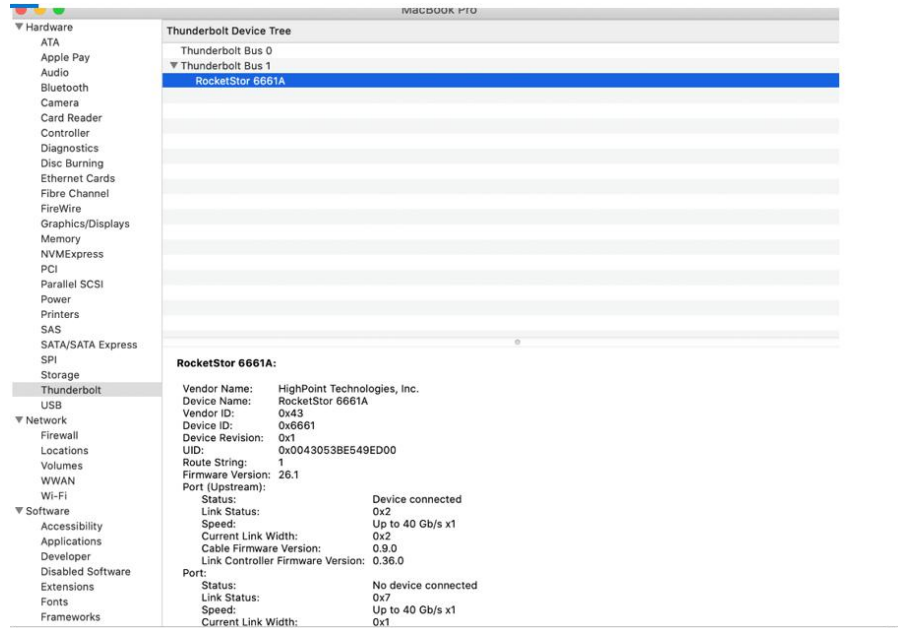
- 1) Check if there is HighPoint software blocked in the permission, if it is blocked, you need to click “Allow”.



Verifying Product Installation

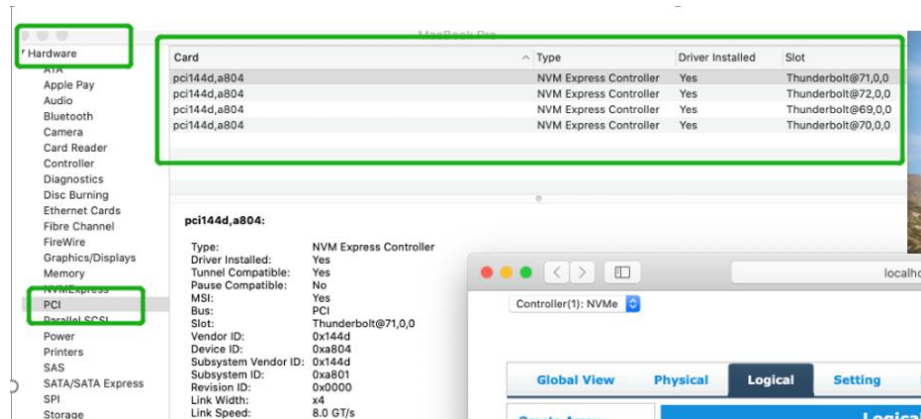
- 1) Click on the **Apple** logo located near the upper left-hand portion of the Desktop, and select “**About this Mac**”.

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:



SSD7140/7540L

Hardware	Card	Type	Driver Installed	Slot
ATA	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	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,aa10	Audio Device	Yes	Slot-1@7,0,1
Memory	pci1179,11a	NVM Express Controller	Yes	Slot-3@25,0,0
NVMeExpress	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				
SATA/SATA Express				
SPI				
Storage				
Thunderbolt				
USB				
Network				
Firewall				
Locations				
Volumes				
WWAN				
Wi-Fi				
Software				

AMD Radeon Pro 580X:	
Name:	ATY,Forrahue
Type:	Display Controller
Driver Installed:	Yes
MSI:	Yes
Bus:	PCI
Slot:	Slot-1@7,0,0
Vendor ID:	0x1002
Device ID:	0x87df
Subsystem Vendor ID:	0x106b
Subsystem ID:	0x0206
Revision ID:	0x00c0
Link Width:	x16
Link Speed:	8.0 GT/s

SSD7103:

Hardware	Card	Type	Driver Installed	Slot
ATA	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@130,0,0
Apple Pay	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@131,0,0
Audio	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@138,0,0
Bluetooth	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@136,0,0
Camera	pci1103,7103	RAID Controller	No	Thunderbolt@137,0,0
Card Reader				
Controller				
Diagnostics				
Disc Burning				
Ethernet Cards				
Fibre Channel				
FireWire				
Graphics/Displays				
Hardware RAID				
Memory				
NVMeExpress				
PCI				
Parallel SCSI				

pci144d,a808:	
Type:	NVM Express Controller
Driver Installed:	Yes
Tunnel Compatible:	Yes
Pause Compatible:	Yes
MSI:	Yes
Bus:	PCI
Slot:	Thunderbolt@130,0,0
Vendor ID:	0x144d

SSD7110:

Hardware	Card	Type	Driver Installed	Slot
ATA	pci144d,a804	NVM Express Controller	Yes	Thunderbolt@135,0,0
Apple Pay	pci144d,a804	NVM Express Controller	Yes	Thunderbolt@132,0,0
Audio	pci144d,a808	NVM Express Controller	Yes	Thunderbolt@134,0,0
Bluetooth	pci1103,7110	RAID Controller	No	Thunderbolt@133,0,0
Camera				
Card Reader				
Controller				
Diagnostics				
Disc Burning				
Ethernet Cards				
Fibre Channel				
FireWire				
Graphics/Displays				
Hardware RAID				
Memory				
NVMeExpress				
PCI				
Parallel SCSI				

pci144d,a804:	
Type:	NVM Express Controller
Driver Installed:	Yes
Tunnel Compatible:	Yes
Pause Compatible:	Yes
MSI:	Yes
Bus:	PCI
Slot:	Thunderbolt@135,0,0
Vendor ID:	0x144d

SSD7202:

MacBook Pro				
Hardware	Card	Type	Driver Installed	Slot
ATA	pci144d,a804	NVM Express Controller	Yes	Thunderbolt@135,0,0
Apple Pay	pci144d,a804	NVM Express Controller	Yes	Thunderbolt@132,0,0
Audio	pci1103,7202	RAID Controller	No	Thunderbolt@133,0,0
Bluetooth				
Camera				
Card Reader				
Controller				
Diagnostics				
Disc Burning				
Ethernet Cards				
Fibre Channel				
FireWire				
Graphics/Displays				
Hardware RAID				
Memory				
NVMeExpress				
PCI				
Parallel SCSI				
Power				

pci1103,7202:

Type:	RAID Controller
Driver Installed:	No
Tunnel Compatible:	No
Pause Compatible:	No
MSI:	No
Bus:	PCI
Slot:	Thunderbolt@133,0,0
Vendor ID:	0x1103
Device ID:	0x7202

SSD7505:

Mac Pro				
Hardware	Card	Type	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@21,0,0
Audio	pci144d,a808	NVM Express Controller	Yes	Slot-3@22,0,0
Bluetooth	pci144d,a808	NVM Express Controller	Yes	Slot-3@23,0,0
Camera	pci144d,a808	NVM Express Controller	Yes	Slot-3@24,0,0
Card Reader	pci1000,c010	Other Mass Storage Controller	No	Slot-3@32,0,0
Controller	pci1002,aa10	Audio Device	Yes	Slot-1@7,0,1
Diagnostics	pci1103,7505	RAID Controller	No	Slot-3@27,0,0
Disc Burning	pci8086,15eb	Thunderbolt Controller	Yes	Thunderbolt@149,0,0
Ethernet Cards	XHC4	USB eXtensible Host Controller	Yes	Thunderbolt@148,0,0
Fibre Channel				
FireWire				
Graphics/Displays				
Memory				
NVMeExpress				
PCI				
Parallel SCSI				
Power				
Printers				
SAS				
SATA/SATA Express				
SPI				
Storage				
Thunderbolt				
USB				
Network				
Firewall				
Locations				
Volumes				
WWAN				

pci1103,7505:

Type:	RAID Controller
Driver Installed:	No
MSI:	No
Bus:	PCI
Slot:	Slot-3@27,0,0
Vendor ID:	0x1103
Device ID:	0x7505
Subsystem Vendor ID:	0x1103
Subsystem ID:	0x0001
Revision ID:	0x0001
Link Width:	x2
Link Speed:	5.0 GT/s

SSD7540

Mac Pro				
Hardware	Card	Type	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,aa10	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@151,0,0
Memory	XHC4	USB eXtensible Host Controller	Yes	Thunderbolt@150,0,0
NVMeExpress				
PCI				
Parallel SCSI				
Power				
Printers				
SAS				
SATA/SATA Express				
SPI				
Storage				
Thunderbolt				
USB				
Network				
Firewall				
Locations				
Volumes				
WWAN				

pci1103,7540:

Type:	RAID Controller
Driver Installed:	No
MSI:	No
Bus:	PCI
Slot:	Slot-3@33,0,0
Vendor ID:	0x1103
Device ID:	0x7540
Subsystem Vendor ID:	0x1103
Subsystem ID:	0x0001
Revision ID:	0x0001
Link Width:	x1
Link Speed:	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

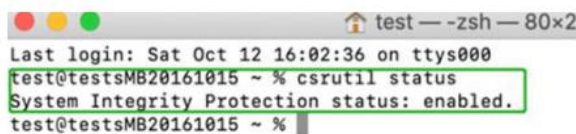
If you can't connect to the WebGUI, please check if a process named raidman-httpsd is running on the system. If it is not running, you can start it manually by opening a terminal window and running the command: “sudo hptdaemonctl restart”.

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):



```
test — -zsh — 80x2
Last login: Sat Oct 12 16:02:36 on ttys000
test@testsmB20161015 ~ % csrutil status
System Integrity Protection status: enabled.
test@testsmB20161015 ~ %
```

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

MacOS Version	SIP Status	Driver Status
10.13.x	Disable	Loaded
10.14.x	Enable	Loaded
10.15.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

Hardware

	Extension Name	Version	Last Modified	Notarized	Loaded	Obtained from
ATA	FWPreferredProtocolSpeed	489.120.1	2019/9/27, 12:50 PM	Yes	No	Apple
Apple Pay	GeForce	14.0.32	2019/9/26, 12:33 PM	Yes	No	Apple
Audio	HFS	522.100.5	2019/9/26, 11:30 AM	Yes	Yes	Apple
Bluetooth	HFSEncodings	1.0	2019/9/26, 11:29 AM	Yes	Yes	Apple
Camera	HighPointIOP	4.4.1	2018/5/4, 6:31 AM	Yes	No	Identified Developer
Card Reader	HighPointNVMe	1.1.10	2020/1/2, 4:38 PM	Yes	Yes	Identified Developer
Controller	HighPointRA	4.10.0	2019/12/9, 9:40 PM	Yes	No	Identified Developer
Diagnostics	initioFWBridge	489.120.1	2019/9/27, 12:49 PM	Yes	No	Apple
Disc Burning						
Ethernet Cards						
Fibre Channel						
FireWire						
Graphics/Displays						
Memory						
NVMeExpress						
PCI						
Parallel SCSI						
Power						
Printers						
SAS						
SATA/SATA Express						
SPI						
Storage						
Thunderbolt						
USB						

Network

Firewall

Locations

Volumes

WWAN

Wi-Fi

Software

Accessibility

Applications

Developer

Disabled Software

Extensions

HighPointNVMe:

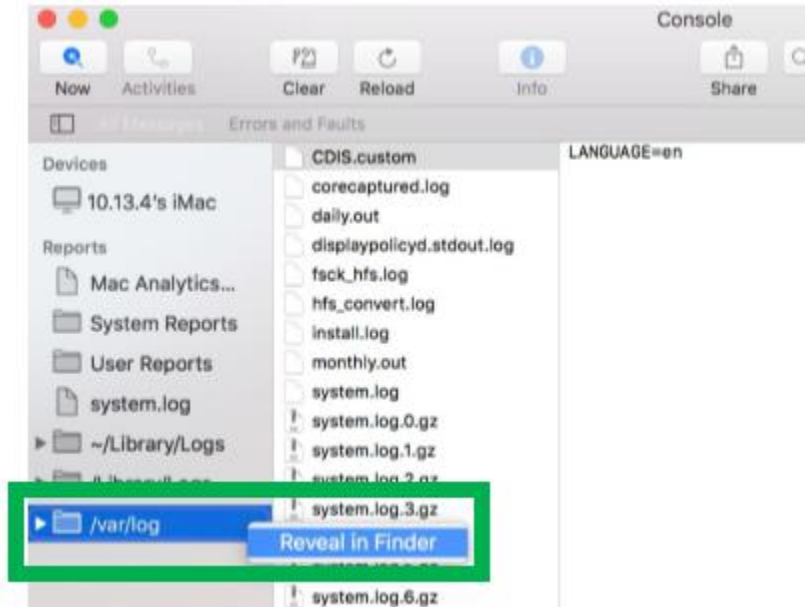
Version:	1.1.10
Last Modified:	2020/1/2, 4:38 PM
Bundle ID:	com.highpoint-tech.kext.HighPointNVMe
Notarized:	Yes
Loaded:	Yes
Obtained from:	Identified Developer
Kind:	Intel
Architectures:	x86_64
64-Bit (Intel):	Yes
Location:	/Library/Extensions/HighPointNVMe.kext
Kext Version:	1.1.10
Load Address:	18446743521862550000
Loadable:	Yes
Dependencies:	Satisfied
Signed by:	Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Apple Root CA

How to Collect System Logs

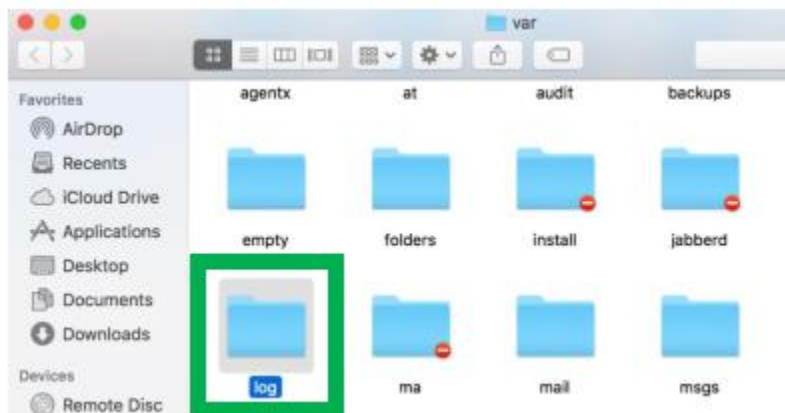
- 1) Please attach a copy of the /var/log folder to your support ticket.
To locate the /var/log Folder: 1. Go to **Applications** → **Utilities** → **Console**:



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



- 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).



- 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

```
test — errlog.command — 69x17
Last login: Tue Dec 11 08:57:48 on ttys000
/Users/test/Desktop/errlog.command ; exit;
tests-iMac2017:~ test$ /Users/test/Desktop/hptsyslog.command ; exit;
HighPoint Collect system log for Mac v1.0.0
Make sure you want to collect system log, press enter to continue.

Collecting system log..
a hptsyslog.txt
hptsyslog.tgz created, you can find it under:/Users/test
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[Process completed]
```

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