SSD7000系列NVMe RAID解决方案 Mac安装指南(Data RAID)

设备驱动程序和管理软件

V1.00 - 2020.08

目录

1. 概述	3
1. 前提准备	4
2. Apple T2 安全禁用芯片的安全启动	5
2. 安装驱动程序	7
3. 更新设备驱动程序	13
4. 卸载设备驱动程序	15
5. 安装 RAID 管理软件(WebGUI)	16
6. 为 macOS 更新 WEBGUI 10.13 / 10/14 / 10.15	18
7. 卸载适用于 macOS 10.13 / 10.14 / 10.15 的 WebGUI	18
8. 故障排除	20
附录	22

1. 概述

本指南包括macOS操作系统所需重要的硬件/软件要求、安装和升级过程,使用 SSD7101A-1、SSD7120和SSD7204 NVMe RAID控制器、RocketStor 6661A-NVMe Thunderbolt[™]3 NVMe RAID的解决方案,以及具有以下功能的SSD6540 / 6540M RAID 机箱的故障排除提示

前提准备

这部分介绍SSD7000系列NVMe RAID控制器和机箱的基本硬件和软件要求

安装设备驱动程序

这部分介绍了macOS环境中SSD7000系列NVMe RAID控制器和机箱的驱动程序安装、驱动程序升级和驱动程序卸载过程

安装RAID管理软件

这部分介绍了WebGUI管理软件的安装,包括在macOS环境中的升级和卸载

故障排除

如果在安装或使用SSD7000系列NVMe RAID控制器或机箱时遇到任何困难,请查阅这部分,它包括对常见技术问题的描述和解决方案

附录

这部分介绍如何收集通过在线支持门户网站提交申请所需的故障排除信息

1. 前提准备

- 1) 确保在HighPoint NVMe控制器或机箱中至少安装了一个NVMe SSD。除非硬件环境 检测到NVMe SSD,否则驱动程序将无法正确安装
- 2) 必须将SSD7101A-1 / SSD7120 / SSD6540 / SSD6540M NVMe设备安装到具有x16 专用通道的PCIe 3.0插槽中, SSD7204可以安装在PCIe 3.0 x8或x16插槽中。

如果您通过RocketStor 6661A适配器使用RocketStor 6661A-NVMe或SSD7000 NVMe RAID控制器,则必须将RocketStor单元插入Thunderbolt™3端口

- 3) 操作系统支持: macOS 10.13或更高版本
- 4) 在安装驱动程序和RAID管理软件之前,您应该以系统管理员身份登录系统.
- 5) 将系统标识为基于T2或基于非T2,如果系统具有T2芯片请确保在尝试为HighPoint NVMe设备安装任何软件之前符合第3部分的要求

2. Apple T2安全禁用芯片的安全启动

必须在以下产品上禁用安全启动:

了解有关Apple T2安全芯片的更多信息: 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

您也可以使用 System Information 了解您的Mac是否具有此芯片:

- 1. 按住Option键>选择SystemInformation.
- 2. 在边栏中,根据使用的macOS版本选择Controller或iBridge
- 3. 如果您在右侧看到" Apple T2 chip",则您的Mac具有Apple T2安全芯片

	Mad	Book Pro
 Hardware ATA Audio Bluetooth 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 LISB 	Mac Controller Informa Model Name: Firmware Version: Boot UUID:	:Book Pro tion: Apple T2 chip 15P6613 A2CE8882-3D97-40F5-A382-2C9AE89E950D
John's MacBook Pro > Ha	ardware > Controlle	er

禁用安全启动

- 1) 重新启动计算机,然后按住Command+R键,持续按住直到出现Apple标识
- 2) 当菜单显示"macOS Utilities", 您已进入恢复模式,从实用程序菜单中选择 Startup Security Utility application



3) 将出现一个对话框,告诉您需要以管理员身份进行更改,单击the Enter macOS Password... 按钮



4) 当出现Startup Security Utility窗口时,在Secure Boot选项下选择No Security

	Startup Security	Utility
0	Firmware password protection is	s off.
1	Turn on a firmware password to prevent different hard disk, CD, or DVD without	this computer from starting up from a the password.
		Turn On Firmware Password.
ecure B	Soot	
Full Se	ecurity	
Ensure trusted installa	is that only your current OS, or signed oper- d by Apple, can run. This mode requires a n ation time.	ating system software currently stwork connection at software
Mediu	im Security any version of signed operating system sof	tware ever trusted by Apple to run.
No Se Does r	icurity not enforce any requirements on the bootab	le OS.
	or the second data and the sec	
Allowed	Boot Media	
Allowed Disali Restric Thund	Boot Media ow booting from external or removable cts the ability to boot from any device not p lerbolt drives or internally connected PCIe o	e media rotected by the T2 such as USB and r SATA drives.

5) 从Apple菜单中选择重新启动以重新启动Mac, 然后等待桌面出现.

2. 安装驱动程序

可以从每种产品的软件下载网页上下载当前驱动程序

Product	Download Page
SSD7101A-1	http://highpoint-tech.cn/product-detail7101a.html
SSD7120	http://highpoint-tech.cn/product-detail7120.html
SSD7204	http://highpoint-tech.cn/product-detail7204.html
SSD6540	http://highpoint-tech.cn/product-detail6540.html
RS6661A-NVMe	http://highpoint-tech.cn/product-detail6661.html

macOS High Sierra 10.13驱动程序安装过程

1) 重新启动计算机,然后同时按Command + R键,持续按住键,直到出现Apple标 识,单击左上角的实用程序,然后选择终端



2) 打开终端窗口并输入以下命令:

csrutil disable

	Terminal — -bash — 80×24
-bash-3.2# csrutil status System Integrity Protection	status: enabled (Apple Internal).
-bash-3.2# csrutil disable Successfully disabled System r the changes to take effect	Integrity Protection. Please restart the machine f
-bash-3.2#	

3) 从Apple菜单中选择重新启动以重新启动Mac,然后等待桌面出现



4) 重新启动后,请确认SIP处于禁用状态,打开终端并输入以下命令:

csrutil status

1 test — -zsh — 80×24

Last lo	ogin:	Sat	Oct	12	17	:18	:44	on	cons	ole	
test@te	stsME	32016	1015	5~	%	csr	util	st	atus		
System	Integ	grity	Pro	ote	cti	on	stat	us	dis	abled	
test@te	stsME	32016	1015	5~	%						

 接下来,启动驱动程序安装过程找到下载文件,然后双击该软件包以启动 安装程序,点击继续按钮:

0.0	Install HighPoint NVMe RAID Controller
	Welcome to the HighPoint NVMe RAID Controller Installer
Introduction Destination Select Installation Type Installation Summary	You will be guided through the steps necessary to install this software.
nacOS将提示	Go Back Continu 示您安装驱动程序,点击安装继续 Install HighPoint NVMe RAID Controller
	Standard Install on "1014.6"
 Introduction 	This will take 438 KB of space on your computer.
 Introduction Destination Select Installation Type Installation Summary 	Click Install to perform a standard installation of this software for all users of this computer. All users of this computer will be able to use this software.

2)

3) 系统将提示您需要重新启动才能安装该软件。单击继续安装.



4) 如果没有弹出窗口,请继续进行下一步安装,单击重新启动

Introduction Destination Select Installation Type Installation Summary	The installation was completed successfully.
	Click Restart to begin installing the software.

5) 如果您收到一个弹出窗口提示您进行许可,请单击"打开安全性首选项"



6) 确保已选中App Store和确定的开发人员,然后单击允许



7) 您将收到一个弹出窗口,提示您重新启动,单击确定



8) 返回驱动程序安装窗口,单击重新启动

 Install HighPoint NVMe HAIL Controller
 Installation Select
 Installation
 Installation
 Summary

 9) 重新启动系统后,安装HighPoint RAID管理

macOS Mojave10.14和macOS Catalina 10.15驱动程序安装过程

1) 找到下载文件,然后双击该软件包以启动安装程序,点击继续按钮



3) 系统将提示您需要重新启动才能安装软件,单击继续安装

Introductic	When this software finishes installing, yo must restart your computer. Are you surry you want to install the software now?	9
 Destinatio Installatic 	Cancel Continue Installati	software ter will
 Installation 		
 Summary 		

4) 如果没有弹出窗口,请继续进行下一步安装,点击重启

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

5) 如果您收到一个弹出窗口提示您进行许可,请单击"打开安全性首选项"



6) 确保已选中" App Store和确定的开发人员", 然后单击"允许"



		Enabling this system software requires a restart
		Restart OK
8)	返回驱动程序	安装窗口,单击重新启动以重新启动系统 → Install HighPoint NVMe KAID Controller
		The installation was completed successfully.
	 Introduction Destination Select Installation Type Installation Summary 	The installation was successful. The software was installed.
		Click Restart to begin installing the software.
		Go Back Restart

9) 系统重启后,可以在"系统信息"下查看驱动程序的状态,以下屏幕截图显示了驱动程序已加载:

AUGIO	Extension Name			Version	Last Modified	Loaded
Camera	HighPointNVMe			1.1.12	2020/5/19 7:07 PM	Yes
Card Reader	initioFWBridge			439.70.3	2017/8/25, 1:13 PM	NO
Controller	Intel82574L			2.7.2	2017/8/25, 12:56 PM	No
Diagnostics	IO80211Family			12.0	2017/8/25, 1:03 PM	No
Disc Burning	IO80211FamilyV2			12.0	2017/8/25, 1:01 PM	Yes
Ethernet Cards	IO80211NetBoote	er		12.0	2017/8/25, 1:01 PM	No
Fibre Channel	IO80211NetBoote	erV2		12.0	2017/8/25, 1:01 PM	No
FireWire	IOAcceleratorFan	nilv2		378.28	2017/8/25, 1:00 PM	Yes
Graphics/Displays			0			
Hardware RAID	HighPointNVMe	4				
Memory	Version:	1112				
NVMExpress	Last Modified:	2020/5/19, 7:07 PM				
PCI	Bundle ID:	com.highpoint-tech.kext.HighF	PointNVMe			
Parallel SCSI	Loaded:	Yes				
Power	Obtained from: Kind	Identified Developer				
Printers	Architectures:	x86.64				
SAS	64-Bit (Intel):	Yes				
SATA/SATA Express	Location:	/Library/Extensions/HighPointM	WMe.kext			
SDI	Kext Version:	1.1.12				
Storage	Load Address:	18446/43521855800000 Vac				
Thunderheit	Dependencies:	Satisfied				
LICR	Signed by:	Developer ID Application: High	Point Technologies, Inc (DX6G	69M9N2), D	eveloper ID Certification	Authority,
Network						
Eirowall						
Locations						
Volumee						
WIMAN						
WILEI						
Software						
Accessibility						
Applications						
Applications						
Developer						
Developer Dischlad Caftware						
Disabled Software						
Extensions						

7) 您将收到一个弹出窗口,提示您重新启动,点击确定

3. 更新设备驱动程序

注释:更新驱动程序,请确保RAID控制器已连接到主机.

可以从每种产品的软件下载网页上下载当前驱动程序

Product	Download Page
SSD7101A-1	http://highpoint-tech.cn/product-detail7101a.html
SSD7120	http://highpoint-tech.cn/product-detail7120.html
SSD7204	http://highpoint-tech.cn/product-detail7204.html
SSD6540	http://highpoint-tech.cn/product-detail6540.html
RS6661A-NVMe	http://highpoint-tech.cn/product-detail6661.html

更新设备驱动程序(对于macOS 10.13 / 10.14 / 10.15)

1) 找到下载文件,然后双击该软件包以启动安装程序,点击继续按钮



2) macOS将提示您安装驱动程序,点击安装继续.



3) 系统将提示您需要重新启动才能安装该软件,单击继续安装



4) 如果没有弹出窗口,请继续进行下一步安装,点击重启.



5) 系统重启后,可以在"系统信息"下查看驱动程序的状态,下面的屏幕快照显示驱动 程序已正确加载

Bluetooth	Extension Name		1	 Version 	Last Modified	Loaded
Camera	HighPointNVMe			1.1.12	2020/5/19, 7:07 PM	Yes
Card Reader	initioFWBridge			439.70.3	2017/8/25, 1:13 PM	NO
Controller	Intel82574L			2.7.2	2017/8/25, 12:56 PM	No
Diagnostics	IO80211Family			12.0	2017/8/25, 1:03 PM	No
Disc Burning	IO80211FamilyV2			12.0	2017/8/25, 1:01 PM	Yes
Ethernet Cards	IO80211NetBoote	er .		12.0	2017/8/25, 1:01 PM	No
Fibre Channel	IO80211NetBoote	erV2		12.0	2017/8/25, 1:01 PM	No
FireWire	IOAcceleratorFam	nily2		378.28	2017/8/25, 1:00 PM	Yes
Graphics/Displays Hardware RAID	HighPointNVMe		0			
NVMExpress PCI	Version: Last Modified: Bundle ID: Loaded:	1.1.12 2020/5/19, 7:07 PM com.highpoint-tech.kext.HighPo Yes	intNVMe			
Parallel SCSI	Obtained from:	Identified Developer				
Power	Kind:	Intel				
Printers	Architectures:	x86_64				
SAS	64-Bit (Intel):	Tes // ibran/Extensions/WighPointNI	Ma kayt			
SATA/SATA Express	Kext Version:	1.1.12	IN B. NOAT			
SPI	Load Address:	18446743521855800000				
Storage	Loadable:	Yes				
Thunderbolt	Dependencies: Signed by:	Satisfied Developer ID Application: HighP	oint Technologies, Inc. (DX60	EQMON21 D	valopar ID Cartification	Authority
USB	Signed by.	Developer in Application. Fight	onit recimologies, inc (bxoc	(03M3N2), D	veloper ib certification	Authority
etwork						
etwork Firewall						
etwork Firewall Locations						
etwork Firewall Locations Volumes						
etwork Firewall Locations Volumes WWAN						
etwork Firewall Locations Volumes WWAN WI-Fi						
etwork Firewall Locations Volumes WWAN WI-Fi ftware						
ttwork Firewall Locations Volumes WWAN WI-Fi ftware Accessibility						
etwork Firewall Locations Volumes WWAN WI-Fi oftware Accessibility Applications						
etwork Firewall Locations Volumes WWAN Wi-Fri oftware Accessibility Applications Components						
twork Firewall Locations Volumes WWAN Wi-Fi Sfware Accessibility Applications Components Developer						
twork Firewall Locations Volumes WWAN WI-Fi Accessibility Applications Components Developer Disabled Software						

4. 卸载设备驱动程序

卸载macOS 10.13和10.14的设备驱动程序

要卸载NVMe驱动程序,您需要打开终端窗口并输入以下命令:

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

test — -zsh — 80×24
Last login: Fri Dec 20 19:34:31 on ttys004
test0testsMB01610152 ~ % sudo rm -rf /Library/Extensions/HighPointNVMe.kext
Password:
test0testsMB01610152 ~ %

卸载macOS 10.15的设备驱动程序

要卸载NVMe驱动程序,您需要打开终端窗口并输入以下命令:

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

sudo kextcache --i /



5. 安装RAID管理软件(WebGUI)

安装适用于macOS的WebGUI 10.13 / 10.14 / 10.15

1) 双击名为HighPointWebGUI.pkg的软件包以启动安装程序,出现窗口时单击继续按钮

🗧 😑 🔘 😜 li	nstall HighPoint Web RAID Controller Management
	Welcome to the HighPoint Web RAID Controller Management Installer
 Introduction Destination Select Installation Type Installation Summary 	You will be guided through the steps necessary to install this software.
	Go Back Continue
2) 您将被提醒	单击"安装"按钮,点击安装继续
🖲 😑 😜 lr	stall HighPoint Web RAID Controller Management
	Standard Install on "1010"
 Introduction Destination Select Installation Type Installation Summary 	This will take 2.7 MB of space on your computer. Click Install to perform a standard installation of this software for all users of this computer. All users of this computer will be able to use this software.

Go Back Install

3) 然后将提示您输入管理员用户名和密码,输入这些内容后,单击"安装软件"以继续

	😞 Install HighPoint Web RAID Controller Management
	Standard Install on "1010"
 Introduction Destination Se Installation T Installation Summary 	Installer is trying to install new software. Type be
) 已安装Wa	Go Back Install ebGUI管理软件,单击关闭以完成该过程 Install HighPoint Web RAID Controller Management
	The installation was completed successfully.
 Introduction Destination Select Installation Type Installation Summary 	The installation was successful. The software was installed.
	Go Back

6. 为macOS更新WEBGUI 10.13 / 10/14 / 10.15

- 1) 首先,卸载当前的WebGUI
- 2) 卸载WebGUI后,重新启动macOS.
- 3) 系统重新启动后,请从相应的"软件下载"网页下载最新版本的WebGUI
- 4) 找到下载文件,然后双击名为HighPointWebGUI.pkg的软件包以启动安装程序

7. 卸载适用于macOS 10.13 / 10.14 / 10.15的WebGUI

要卸载WebGUI,请访问应用程序,单击HPTWEBGUI,选择卸载,然后双击 uninstall-WEBGUI.command,卸载命令将自动打开终端并卸载软件:



Biletooth Extension kamp of version Last Modified Lobourd Camera HintoPoint Vike 438,70.3 2016/16/27,1707 PM Vac Card Reader InitioFWBridge 438,70.3 2017/8/25,173 PM No Occurrent HintoPointVXMe 2,72.2 2017/8/25,173 PM No Diagonostics DOB0211Family 2,20.2 2017/8/25,175 PM No Disc Burnet Cards DOB0211Family 2,20.2 2017/8/25,1701 PM No Disc Burnet Channel DOB0211NetiBooter 2,20.2 2017/8/25,1701 PM No Disc Burnet Channel ChaceleratorFamily 2,378.28 2017/8/25,1700 PM Yes Friewire Channel No DAcceleratorFamily 2,1707 PM Hardware RAID Memory NVMExpress Hat Modified 2020/5/19,707 PM PCI Burdia DV Card Developer Power Kind: Intel Printers Architectures: K86,54 64-Bit (Intel): Yes Set Modified 2020/5/19,707 PM Stardware RAID Stard and RAID Stard from: Lister Modified 2020/5/19,707 PM Burdia DV: Com hipppoint-RecR.K8xLHighPointNVMe Parallel SCSI Obtained from: Lister Modified 2020/5/19,707 PM Stardware RAID Stard and Address IBA46743321855800000 Log Address IBA467432182185800000 Log Address IBA4674321821858800000 Log Address IBA467432185185800000 Log Address IBA467432185185800000 Log Address IBA467432185185800000 Log Address IBA467432185185800000 Log Address IBA467432185185800000 Log Dependencies: Satisfied Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6069M9N2), Developer ID Certification Authority, Network Firewall Locations WWAN WH-Fi	AUGIO	Colorado a Marca			Manalan	Lass Maralleland	London
Camera HishPointVMe 11.12 2020/s180,707 PM Yes Card Read httpl://wishpace.com/s180,707 PM Yes 438,70.3 207/s180,713,717 PM No Controller httpl://wishpace.com/s180,707 PM Yes 2020/s180,707 PM No Diagnostics 060211/smily 12.0 2017/s125,113 PM No Disc Burning 060211/smily/V 12.0 2017/s125,101 PM No Fibre Channel 069211NetBooter 12.0 2017/s125,101 PM No Fibre Channel 069211NetBooter 12.0 2017/s125,101 PM No Fibre Channel 069211NetBooter/V2 12.0 2017/s125,100 PM No Fibre Channel 069211NetBooter/V2 12.0 2017/s125,100 PM No Fibre Channel 10AcceleratorFamily2 378.28 2017/s125,100 PM Yes Memory Version: 1.112 1.112 No HispbenintVMe Yes Parallel SCSI Obtained from: Identified Developer Intel Se4 Gati (Intel): Se5 Gat	Bluetooth	Extension Name		10	version	Last woomed	Loaueu
Card Reader InitioFWBridge 438,70.3 2017/825, 113 PM No Controller InitioFWBridge 2.7.2 2017/825, 113 PM No Diagnostics IO80211Family 12.0 2017/825, 113 PM No Dise Burning IO80211Family/2 12.0 2017/825, 110 PM No Ethernet Cards IO80211NetBooter 12.0 2017/825, 110 PM No Filzer Channel IO80211NetBooter/2 12.0 2017/825, 110 PM No Graphics/Diplays IAdceleratorFamily2 378.28 2017/825, 110 PM No Hardware RAID IAdceleratorFamily2 378.28 2017/825, 110 PM No Hardware RAID IAdceleratorFamily2 378.28 2017/825, 110 PM No Pointer Diver 1.12 Inite/Initinite/Initinininite/Inite/Inite/Inite/Initinite/Inite/Inite/Inite	Camera	HighPointNVMe			1.1.12	2020/5/19, 7:07 PM	Yes
Controller Intel82574L 2.72 2017/825, 12:6 PM No Diagnotisic IO68211Family 12.0 2017/825, 10:3 PM No Dise Burning IO680211Family 12.0 2017/825, 10:1 PM Yes Ethernet Carls IO60211Family 12.0 2017/825, 10:1 PM No Fibre Channel IO60211MelBooter 12.0 2017/825, 10:0 PM No Graphics/Disphays HighPointNVMe: 378.28 2017/825, 10:0 PM Yes Hardware RAID Memory Version: 1.1.12 2017/825, 10:0 PM Yes PCI Last Modified: 2020/5/19, 7:07 PM Last Modified: Yes Yes Power Obtained from: identified Developer Yes NuMExpress Yes Yes SAS 64-811 (Intel9: Yes Load Address: 18446743521855800000 Yes Yes Storage Load Address: Versing Developer ID Application: HighPoint Technologies, Inc (DX6669M9N2), Developer ID Certification Authority, Numer Volumes WWAN Vers Satisfied Yes	Card Reader	initioFWBridge			439.70.3	2017/8/25, 1:13 PM	NO
Diagenostics 1080211Family/v 12.0 2017/825, 103 PM No Disc Burning 1080211Family/v 12.0 2017/825, 101 PM Yes Ethernet Cards 1080211NetiBooter 12.0 2017/825, 101 PM No Filze Channel 1080211NetiBooter 12.0 2017/825, 101 PM No Graphics/Displays Hadvare RAID 378.28 2017/825, 100 PM Yes Hardware RAID Version: 1.12 378.28 2017/825, 100 PM Yes Version: 1.12 1.12 1.12 1.12 1.12 1.14 NVMExpress Last Modified: 2020/5/10, 207 PM Yes Yes Yes Port 1.14 2020/5/10, 207 PM Yes Yes Yes Yes Port Last Modified: 2020/5/10, 207 PM Yes Yes Yes Port Last Modified: 2020/5/10, 207 PM Yes Yes Yes Shifter Coaded: Yes Yes Yes Yes Yes	Controller	Intel82574L			2.7.2	2017/8/25, 12:56 PM	No
Disc Burning 1080211Family0/2 12.0 2017/8/25, 101 PM Yes Etherent Cards 12.0 2017/8/25, 101 PM No Fibre Channel 12.0 2017/8/25, 101 PM No Graphics/Displays 12.0 2017/8/25, 100 PM No Graphics/Displays HighPointkVMe: 378.28 2017/8/25, 100 PM Yes Memory Witspress HighPointkVMe:	Diagnostics	IO80211Family			12.0	2017/8/25, 1:03 PM	No
Ethernet Cards 1080211NetBooter 12.0 2017/825, To1 PM No Fire/Wire 12.0 2017/825, To1 PM No OAcceleratorFamily2 378.28 2017/825, To0 PM Yes Graphics/Displays Hardware RAID Memory NVMExpress 1.1.12 PCI Ust Modified: 2020/F17.07 PM PCI Loaded: Yes Parallel SCSI Obtiend from: Loam https://www.tengla.com/ptpsoint-tech.kext.HighPointNVMe Loaded: Yes SATA/SATA Express Loadford: Yes SATA/SATA Express Loadford: Yes 1.44.69 A521855800000 Storage Loadford: Tech.kext.HighPointNVMe.kext Koat/Metrice: 144.69 A521855800000 Storage Loadford: Yes Satisfied Storage Loadford: Yes Satisfied Storage Satisfied Storage Satisfied Storage Satisfied Storage Satisfied Storage Satisfied Storage S	Disc Burning	IO80211FamilyV2			12.0	2017/8/25, 1:01 PM	Yes
Filter Channel IQ80211NetBooterV2 12.0 2017/8/25, 1-01 PM No FireWire IOAcceleratorFamily2 378.28 2017/8/25, 1-00 PM Yes GraphicyDisplays HighPointtVWe: ************************************	Ethernet Cards	IO80211NetBoote	r		12.0	2017/8/25, 1:01 PM	No
Firewire TokceleratorFamily2 378.28 2017/8/25, 1:00 PM Yes GraphicSDisplays HighPointNVME Hardware RAID Nemory Memory 1.112 Last Modified: 2020//519.7:07 PM PCI Date of the intervent with the intervent withe intervent with the intervent with the intervent with the interv	Fibre Channel	IO80211NetBoote	rV2		12.0	2017/8/25, 1:01 PM	No
Graphics/Displays ************************************	FireWire	IOAcceleratorFan	nily2		378.28	2017/8/25, 1:00 PM	Yes
Hardware RAID Index Weekee Memory Version: 1.112 Last Modified: 2020/5/19,7:07 PM PCI Last Modified: 2020/5/19,7:07 PM PCI Loaded: Yes Parallel SCSI Obtained from: Identified Developer Power Architectures: x86.54 SAS 64-81 (Intel): Yes SATA/SATA Express Kert Version: 1.112 SPI Load Address: 1844674521855800000 Storage Loadable: Yes Thunderbolt Dependencies: Satisfied USB Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Loadions Volumes WWAN WI-Fi Software Accessibility Applications Components Developer Disabided Software	Graphics/Displays	HighDointNVMg	•	0			
Memory Version: 1.12 NVMExpress Last Modified: 2020/K19, 7:07 PM PCI Bundle ID: com.highpoint-tech.kaxt.HighPointNVMe Parallel SCSI Obtained from: Identified Developer Power Kind: Intel Printers Architectures: x86.64 SAS 64-Bit (Intel): Yes SarAJSATA/SXTA/Express Location: /Library/Extensions/HighPointNVMe.kext Sarage Load Address: 184:46743521855800000 Storage Load Address: 184:46743521855800000 Storage Load Address: 184:46743521855800000 US8 Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Locations: Volumes Volumes WVAN Vi-Fi Software Software Developer Developer Developer Developer Developer Developer Developer Extensions	Hardware RAID	night-officiation	•				
NVMExpress Last Modified: 2020/5/19, 7:07 PM PCI Bundle ID: Costnahppoint-Reckin, Kat, HighPointNV/Me Parallel SCSI Loaded: Yes Power Kind: Intel Printers Archited Trom: Kind: SAS Costloarder Tom: Library/Extensions/HighPointNVMe.kext SATA/SATA Express Kostloarder Tom: Library/Extensions/HighPointNVMe.kext SATA/SATA Express Kostloardo Kostloardo Storage Load Address: 18446743521855800000 Storage Load Address: Ves Thunderbolt Dependencies: Satisfied US8 Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6669MSN2), Developer ID Certification Authority, Network Firewall Locations: Ves WWAN VH-Fi Software Ves Software Ves Ves Opendencies: Ves Ves Software Ves Ves Volumes Ves Ves Volumes Ves	Memory	Version:	1.1.12				
PCI Bundle ID: com.hipppoint-tech.kxxt.HighPointVVMe Parallel SCS Com.hipppoint-tech.kxxt.HighPointVVMe Parallel SCS Obtained from: Identified Developer Power Kind: Intel Printers Architecture: x86.64 SAS 64-bit (Intel): 'Yey/Detensions/HighPointNVMe.kext SATA/SATA/SATA/SATA Express Location: /Livy/Detensions/HighPointNVMe.kext Spi Location: /Livy/Detensions/HighPointNVMe.kext Spi Location: /Livy/Detensions/HighPointNVMe.kext Thunderbolt Dependencies: Satisfied USB Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G669M9N2), Developer ID Certification Authority, Wix/Fi Firewall Locations Volumes Volumes Volumes WiX-Fi Software Satisfied Components Developer Satisfied Developer Developer Satisfied Developer Developer Developer Software Satisfied Satisfied Developer Disatisfied Satisfied Developer Disatisfied Satisfied Disatisfied Satisfied Satisfied Disatisfied Sat	NVMExpress	Last Modified:	2020/5/19, 7:07 PM				
Parallel SCSi Loaded: Yes Power Kind: Identified Developer Power Kind: Identified Developer Printers 64-Bit (Intel): Yes SATA/SATA Express Ket Version: 1.112 SPI Load Address: 18446743521855800000 Storage Load Address: 18446743521855800000 Storage Load Address: Yes Thunderbolt Dependencies: Satisfied US8 Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Volumes WWAN WI-Fi Software Software Software Developer Developer Diabided Software Firewall Developer Eventions	PCI	Bundle ID:	com.highpoint-tech.kext.HighPointNVMe				
Dockaries Distance inclusione Distance inclusione Distance inclusione Printers Ad-Bit (inclus: sec) Ad-Bit (inclus: sec) Ad-Bit (inclus: sec) SAS Exaction: /// Disray/Extensions/HighPointNVMe.kext SATA/SATA Express Kext Version: 1.112 SPI Loadable: Yes Thunderbot Dependencies: Satisfied USB Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G699M9N2), Developer ID Certification Authority, Network Firewall Locations Locations Volumes Versite WVAN Vinters Versite Software Accessibility Applications Components Developer Developer Developer Developer Extensions	Parallel SCSI	Loaded:	Yes				
Printers Architectures: x86,64 SAS 64-bit (Intel): Yes SATA/SATA Express Location:: VibraryExtensions/HighPointNVMe.kext Kax Load Address: 1446743521856800000 Storage Load Address: 1446743521856800000 Storage Load Address: 19 Dependencies: Satisfied US8 Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Locations Volumes WWAN WI-Fi Software Components Developer Developer Diabided Software	Power	Kind:	Intel				
SAS 64-bit (Intel): Yes SATA/SATA Express Cactoric::::/Library/Extensions/HighPointNVMe.kext SATA/SATA Express Location::::/Library/Extensions/HighPointNVMe.kext Kext Version: 1.12 SPI Locatoric::::/Library/Extensions/HighPointNVMe.kext Kext Version: 1.12 Storage Locatoric:::/Library/Extensions/HighPointTechnologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Locations Volumes WUVAN Vi-Fi Software Accessibility Applications Volumes Developer Developer	Printers	Architectures:	x86 64				
SAT/SATA Express Location: /Library/Extensions/HighPointNVMe.kext SPI Load Address: 18446743521855800000 Storage Load Address: 18446743521855800000 Usadble: vsi Dependencies: Satisfied Dependencies: Satisfied US8 Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Locations Volumes Volumes WWAN Virian Volumes Software Developer Developer Disbid Software Extensions	SAS	64-Bit (Intel):	Yes				
SPI Kott Version: 1.1.12 Storage Laddress: 186743521855800000 Laddress: 18674352185580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 186743521858000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 1867435218580000 Laddress: 18674580000 Laddress: 186745800000 Laddress: 1867458000000000000000000000000000000000000	SATA/SATA Express	Location:	/Library/Extensions/HighPointNVMe.kext				
Storage Ladable: Yes Thunderbolt Dependencies: Satisfied USB Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Locations Locations Volumes WWAN Wi-Fi Software Software Components Developer Developer Developer Developer Extensions	SPI	Kext Version:	1.1.12 18446743521855800000				
Thunderbolt Dependencies: Satisfied USB Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Network Firewall Locations Locations WWAN WI-Fi Software Accessibility Applications Applications Volumes Developer D Developer D Developer D	Storage	Loadable:	Yes				
USB Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G699M9N2), Developer ID Certification Authority, Network Firewall Locations Volumes WWAN W-Fi Software Accessibility Applications Components Developer Disabled Software	Thunderbolt	Dependencies:	Satisfied				
Network Firewall Locations Volumes WWAN WI-Fi Software Accessibility Applications Components Developer Disabled Software	USB	Signed by:	Developer ID Application: HighPoint Technologies, Inc (E	X6G6	9M9N2), D	eveloper ID Certification	Authority,
Firewall Locations Volumes WWAN WI-Fi Software Accessibility Applications Components Developer Disabled Software	Network						
Locations Volumes WWAN WI-Fi Software Accessibility Applications Components Developer Disabled Software	Firewall						
Volumes WVAN WI-Fi Software Accessibility Applications Components Developer Disabled Software	Locations						
WVAN WI-FI Software Accessibility Applications Components Developer Disabled Software	Volumes						
WI-FI Software Accessibility Applications Components Developer Disabled Software	WWAN						
Software Accessibility Applications Components Developer Disabled Software	Wi-Fi						
Accessibility Applications Components Developer Disabled Software Extensions	Software						
Applications Components Developer Disabled Software	Accessibility						
Components Developer Disabled Software Extension	Applications						
Developer Disabled Software	Components						
Disabled Software	Developer						
Extensions	Disabled Software						
	Extensions						

8. 故障排除

无法连接到WebGUI

安装驱动程序和管理软件后,尝试启动界面时,管理软件将显示"连接失败"警告:



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

下列问题可能触发此错误:

- 1. HighPoint NVMe硬件无法被macOS识别
- 2. HighPoint NVMe设备驱动程序未安装或未正确加载
- 3. WEBGUI服务未运行
- 4. 系统的SIP状态不正确
- 5. 如果您使用的是T2系统,安全启动可能未禁用

1. 验证HighPoint NVMe硬件

请参考附录验证产品安装(第23页)确保macOS可以正确识别HighPoint NVMe 设备

注释: 如果您使用的是RocketStor 6661A-NVMe

- 如果您通过我们的RocketStor 6661A适配器和Thunderbolt™3连接器使用 RocketStor 6661A-NVMe(RS6661A-NVMe)或其他SSD7000系列控制器,请 参阅-附录-验证产品安装下显示的第一个屏幕截图,如果存在RS6661A条目请 继续截屏2
- 2. 如果未显示RocketStor 6661A条目,则可能与连接问题有关,将RS6661A移 至另一个Thunderbolt™3端口或更换数据线,然后重新检查该条目

2. 确保已加载HighPoint NVMe驱动程序

请参考附录-检查驱动程序的状态和版本(第24页),确保已正确安装了 HighPoint NVMe驱动程序

- 1. 如果未加载HighPoint NVMe驱动程序,请继续执行步骤3-检查SIP状态
- 2. 如果驱动程序加载正确但是WebGUI仍然无法启动,请尝试重新启动WEBGUI 服务,参考附录-重新启动WEBGUI服务(页24)进行设置

如果仍未连接WEBGUI,请联系我们的支持部门。请确保包括所有您可以收 集的屏幕截图和系统信息(有关更多信息,请参见附录)

3. 检查SIP状态

1. 请参阅附录-检查SIP状态(第24页)

2. 如果您的系统设置不正确,请参阅每个系统的驱动程序安装手册以重置SIP 状态

4. 对于T2系统:确保禁用安全启动

1. 请参阅附录-带有T2芯片组的系统-安全启动状态(第24页),如果设置不正确,则需要重新引导系统以更改设置

如果在检查项目1-4时遇到任何问题,请参阅附录以收集有关您的系统和配置的信息,并使用我们的在线支持门户网站向我们的客户支持部门提交支持申请: http://highpoint-tech.cn/service.html

WebGUI无法连接到远程系统

如果无法连接到远程系统,请确保raidman-httpsd在目标系统上运行,并确认您可以通过 TCP/IP连接访问远程系统;如果已配置防火墙,请确保未阻止TCP端口7402 附录

通过我们的在线支持门户网站提交支持申请时,以下信息将帮助我们的支持部门尽快诊 断并解决您的问题

验证产品安装

1) 单击位于桌面左上角附近的Apple徽标, 然后选择"关于本机"

RocketStor 6661A-NVMe (Thunderbolt条目):

		масвоок Рго
▼ Hardware	Thunderbolt Device Tree	
ATA	Thursdeshelt Rue 0	
Apple Pay	Thunderbolt Bus 0	
Audio	PacketStar 66614	
Bluetooth	ROCKELSIOF 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	RocketStor 6661A:	
Storage		
Thunderbolt	Vendor Name: HighPoint Techno	logies, Inc.
USB	Device Name: RocketStor 66614	
▼ Network	Vendor ID: 0x43	
Firewall	Device Revision: 0x1	
Locations	UID: 0x0043053BE549	9ED00
Volumes	Route String: 1	
WWAN	Firmware Version: 26.1	
Wi-Fi	Status:	Device connected
▼ Software	Link Status:	0x2
Accessibility	Speed:	Up to 40 Gb/s x1
Applications	Current Link Width:	0x2
Developer	Link Controller Firmware Version:	0.36.0
Disabled Software	Port:	0.00.0
Extensions	Status:	No device connected
Fonts	Link Status:	0x7
Frameworks	Speed: Current Link Width:	Up to 40 Gb/s x1 0x1

2) 如果您使用的是SSD7000系列NVMe RAID控制器,请在"硬件PCI"下进行检查,每个产品的 参考屏幕截图如下所示

r Hardware	Card		~ Туре	Driver Installed	Slot
ATA	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@71,0,0
Apple Pay	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@72,0,0
Audio	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@69,0,0
Camera	pci144d,a804		NVM Express Controller	Yes	Thunderbolt@70,0,0
Controller Diagnostics Disc Burning Ethernet Cards Fibre Channel FireWire	pci144d,a804:	NVM Exprass Controller			
Graphics/Displays	Driver Installed: Tunnel Compatible:	Yes	••• ZS m		localh
Memory	Pause Compatible:	No			locan
PCI Decellel SCSL	MSI: Bus: Slot:	Yes PCI Thunderbolt@71,0,0	Controller(1): NVMe		
Power Printers	Vendor ID: Device ID: Subsystem Vendor ID:	0x144d 0xa804 0x144d			
SAS SATA/SATA Express	Subsystem ID: Revision ID:	0xa801 0x0000	Global View Pl	hysical Log	jical Setting
SPI Storage	Link Width: Link Speed:	x4 8.0 GT/s	Create Array		Logica

SSD7101A / 7104 / 7204 / 7120 /6540 /6540M, or RS661A-NVMe:

SSD7103:

		MacBo	ook Pro		
▼ Hardware	Card	^	Туре	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 Card Reader	pci1103,7103		RAID Controller	No	Thunderbolt@137,0,0
Controller		_			
Diagnostics					
Disc Burning					
Ethernet Cards			0		
Fibre Channel	pci144d,a808:				
FireWire	Type:	NVM Expres	s Controller		
Graphics/Displays	Driver Installed:	Yes	a controller		
Hardware RAID	Tunnel Compatible:	Yes			
Memory	Pause Compatible:	Yes			
NVMExpress	MSI: Bus:	Yes			
PCI	Slot:	Thunderbolt	@130,0,0		
Parallel SCSI	Vendor ID:	0x144d	attenden Acatelie		

SSD7110:

		MacBook Pro	-	
F Hardware	Card	∽ Туре	Driver Installed	Slot
ATA Apple Day	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
Camera	pci1103,7110	RAID Controller	No	Thunderbolt@133,0,0
Card Reader				
Controller				
Diagnostics				
Disc Burning		0		
Ethernet Cards	pci144d,a804:			
FireWire				
Graphics/Displays	Type: Driver Installed:	NVM Express Controller		
Hardware RAID	Tunnel Compatible:	Yes		
Memory	Pause Compatible:	Yes		
NVMExpress	MSI:	Yes		
PCI	Slot:	Thunderbolt@135.0.0		
Parallel SCSI	Vendor ID:	0x144d		

SSD7202:

		MacBo	ook Pro		
▼ Hardware	Card	<u>[</u>	Туре	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
Camera					
Card Reader					
Controller					
Diagnostics					
Disc Burning			0		
Ethernet Cards					
Fibre Channel	pc1103,7202:				
FireWire	Type:	RAID Contro	ller		
Graphics/Displays	Driver Installed:	No			
Hardware RAID	Tunnel Compatible:	No			
Memory	Pause Compatible:	No			
NVMExpress	MSI:	NO			
PCI	Slot:	Thunderbolt	@133.0.0		
Parallel SCSI	Vendor ID:	0x1103	C. Indiala		
Power	Device ID:	0x7202			

WEBGUI截图

请为每个选项卡拍摄WEBGUI的屏幕截图(例如Physical, Logical, Event,等)并将其上传到您的 申请,然后检查事件日志选项卡并保存当前日志的副本将此文件同时上传

WEBGUI服务重启

无法连接到WebGUI时请检查系统上是否正在运行名为raidman-httpsd的进程,如果未运行,则可 以通过打开终端窗口并运行它来手动启动它 sudo hptdaemonctl restart

检查SIP状态

打开一个终端窗口并输入以下命令:

csrutil status

请截取输出的屏幕截图,并将其附加到支持申请中(请参见下面的示例)



状态将根据所使用的macOS版本而有所不同:

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

带有T2芯片组的系统-安全启动状态

您将需要重启系统并进入恢复模式以检查安全启动状态,此设置应保持禁用状态

检查驱动程序状态和版本

- 1) 单击位于桌面左上角附近的Apple标识,然后选择"关于本机"
- 2) 单击扩展,然后选择HighPoint NVMe条目,请截屏并附加在申请中(请参见下面的示例)

System Information→Software→Extensions→HighPointNVMe

lardware	Extension Name		 Version 	Last Modified	Notarized	Loaded	Obtained from
ATA	FWPreferredProtoc	olSpeed	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	HighPointRR		4.13.0	2017/12/5, 5:40 PM	Yes	No	Identified Developer
Diagnostics	initioFWBridge		489.120.1	2019/9/27, 12:49 PM	Yes	No	Apple
Disc Burning				0			
Ethernet Cards	HighPointNVMe						
Fibre Channel	ingin onter the						
FireWire	Version:	1.1.10					
Graphics/Displays	Last Modified:	2020/1/2, 4:38 PM					
Memory	Bundle ID:	com.highpoint-tech.kex	t.HighPointNVMe				
NVMExpress	Notarized:	Yes					
PCI	Obtained from:	Identified Developer					
Parallel SCSI	Kind:	Intel					
Power	Architectures:	x86_64					
Printers	64-Bit (Intel):	Yes					
SAS	Location:	/Library/Extensions/Higl	nPointNVMe.kext				
SATA/SATA Express	Kext Version:	1.1.10					
SPI	Load Address:	1844674352186255000 Vec	00				
Storage	Dependencies:	Satisfied					
Thunderholt	Signed by:	Developer ID Application	n: HighPoint Techno	ologies, Inc (DX6G69M9N	2), Developer	ID Certificatio	n Authority, Apple Root
LISE		CA					
twork							
Eirourall							
Firewali							
Locations							
volumes							
WWAN							
WI-FI							
ftware							
Accessibility							
Applications							
Developer							
Disabled Software							
Extensions							

如何收集系统日志

 请将/var/log文件夹的副本附加到支持申请上 要找到/var/log文件夹: 1. Applications → Utilities → Console



2) 在控制台应用程序的左侧右键单击/var/log文件夹,然后选择在Finder中显示



3) 然后将您自动定向到var目录中的log文件夹,请注意将文件夹发送为zip文件时应首先将其定向 到单独的位置(例如桌面)



- 4) 除了上面详述的/var/log文件夹外,请附加errlog.txt文件的副本
 - a. 打开终端并输入以下内容,然后按Enter:
 - log show |grep kernel > hptsyslog.txt

😑 😑 👔 test — erriog.command — 69×17
Last login: Tue Dec 11 08:57:48 on ttys000 /Users/test/Desktop/errlog.command ; exit; tests-iMac2017:~ test\$ /Users/test/Desktop/hptsyslog.command ; exi 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
Saving session copying shared history saving historytruncating history files completed.
[Process completed]

5) 请将hptsyslog.txt附加到您的申请中