

SSD7101A-1 – Configuring a Single, Bootable NVMe SSD with macOS

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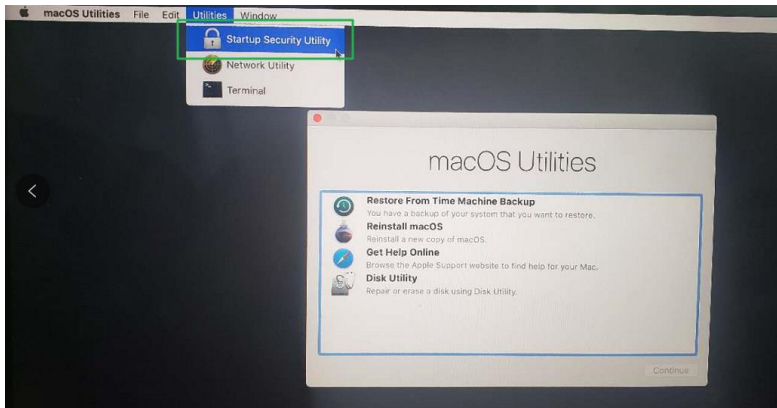
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Overview

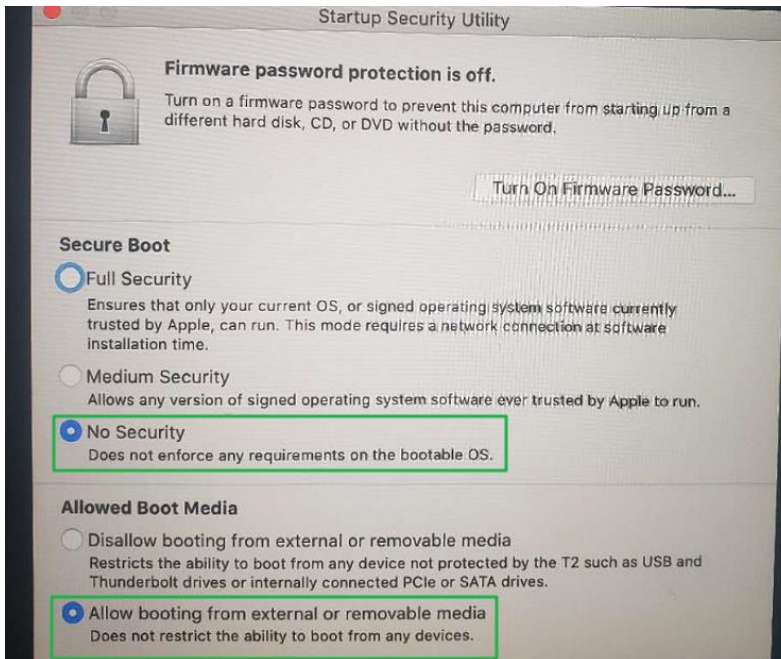
The following guide is intended for users who wish to set up a Single NVME SSD Boot Drive using the SSD7101A-1 NVMe RAID controller with macOS. This guide outlines two procedures – One procedure for Mac systems with a T2 Chip, and another procedure for Mac systems without a T2 Chip.

Installation Procedure (Mac systems With T2 Chips)

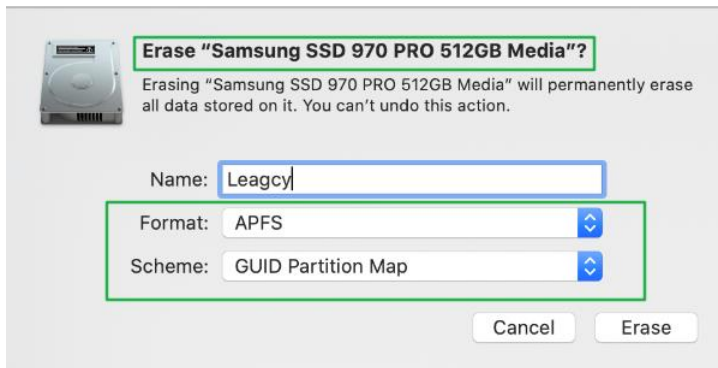
- 1) Remove all other HPT controllers, leaving only one SSD7101A-1 and one single disk.
- 2) If the original macOS installation contains the HighPoint NVMe Driver, please uninstall it first (Refer to the driver installation documentation).
- 3) Restart the Mac and hold down the ‘Command + R’ key combination to enter Recovery Mode. Click ‘Start Security Utility’:



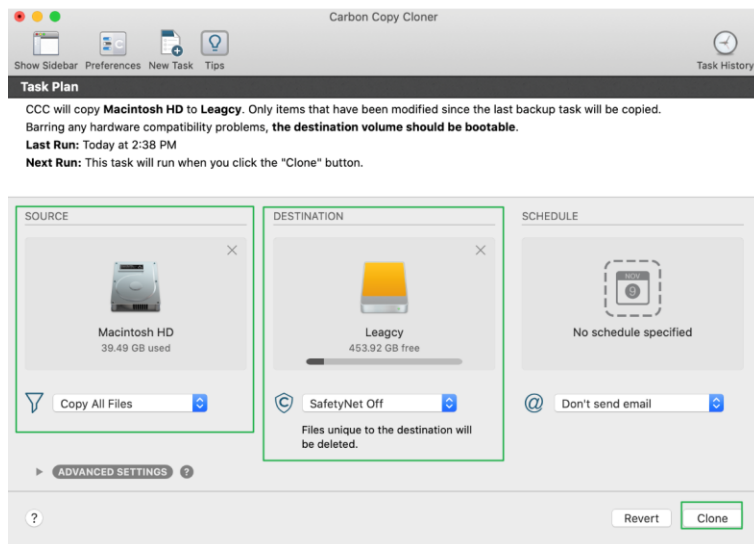
- 4) Select ‘No Security’ and ‘Allow booting from external or removable media’ and then restart the Mac



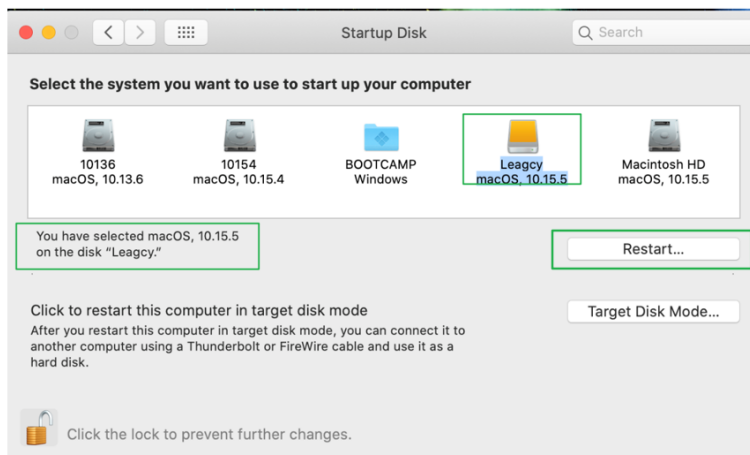
- 5) Open Disk Utility. Format the single disk partition: Format: APFS Scheme: GUID Partition (for this example, the single NVMe SSD was named “Legacy”):



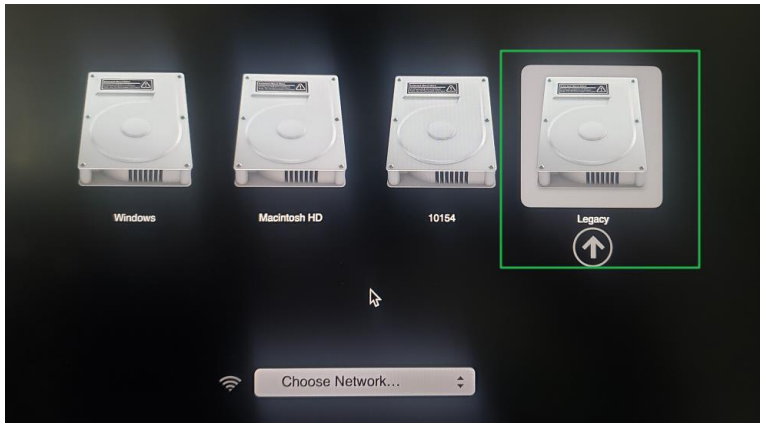
- 6) Download 'Carbon Copy Cloner 5' (https://bombich.com/software/download_ccc.php?v=latest)
7) Open 'Carbon Copy Cloner 5' For 'SOURCE', select the system disk. For 'DESTINATION', select the NVMe SSD, and click 'Clone':



- 8) After the Clone procedure has completed, select 'Legacy' as the default system startup disk in **Startup Disk** and click **Restart**:



- 9) Restart the Mac and hold down the 'option' key to enter the **Startup Manager** window. Select the startup disk to boot the system ("Legacy", shown below):

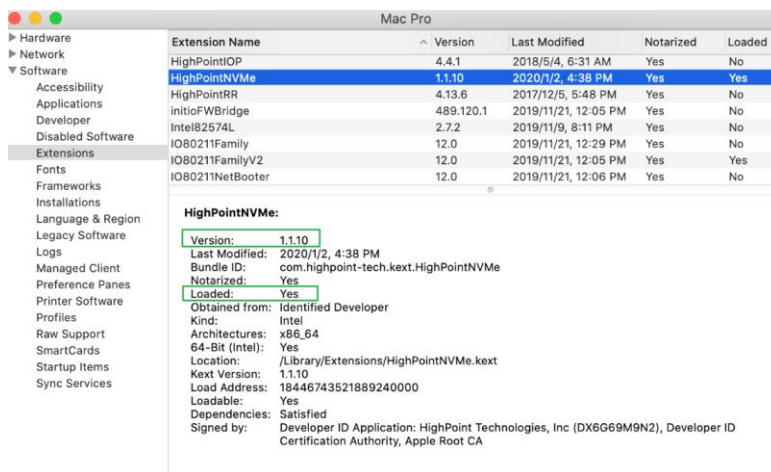


- 10) After booting the system, make sure the correct boot disk was used:



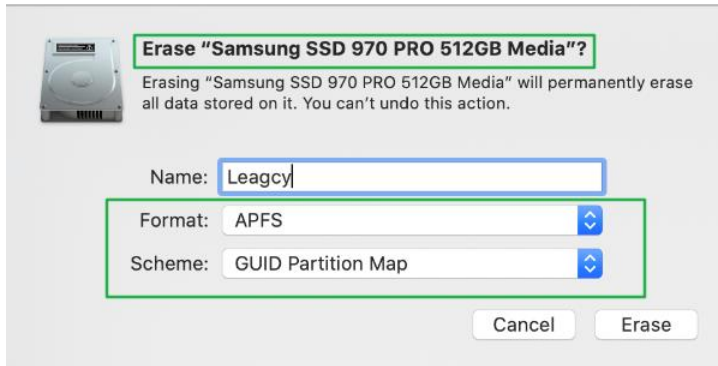
- 11) Install the HighPoint NVMe driver and the WebGUI (Refer to the driver installation documentation).

- 12) You can now shutdown the system and reinstall the other NVMe devices/controllers. Power on the system and boot macOS using the NVMe SSD ('Legacy'). Make sure the HighPoint NVMe driver is loading:

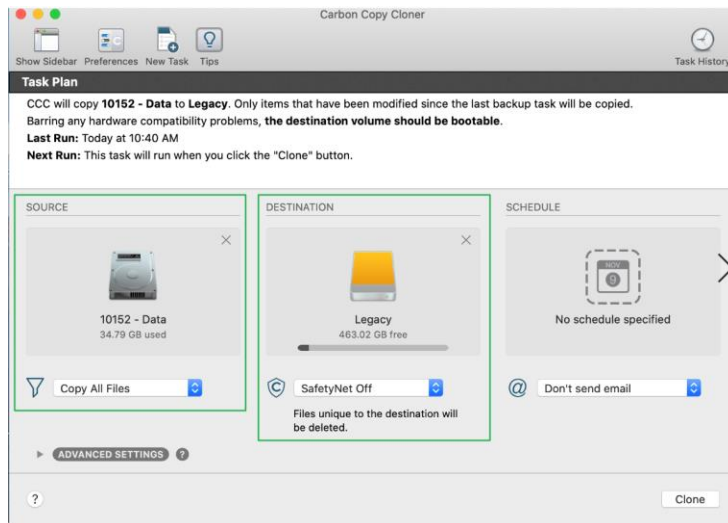


Installation Procedure (Mac systems Without T2 Chips)

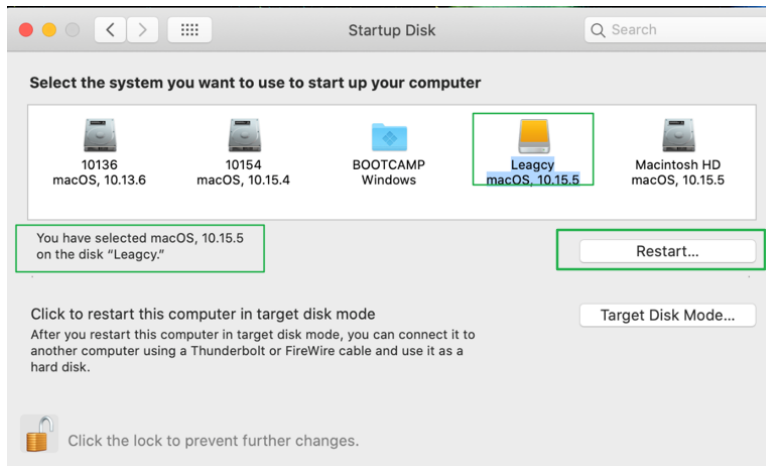
- 1) Remove all other HPT controllers, leaving only one SSD7101A-1 and one single disk.
- 2) If the original macOS installation contains the HighPoint NVMe Driver, please uninstall it first (Refer to the driver installation documentation).
- 3) Open Disk Utility. Format the single disk partition: Format: APFS Scheme: GUID Partition (for this example, the single NVMe SSD was named “Legacy”):



- 4) Download ‘Carbon Copy Cloner 5’ (https://bombich.com/software/download_ccc.php?v=latest)
- 5) Open ‘Carbon Copy Cloner 5’ For ‘SOURCE’, select the system disk. For ‘DESTINATION’, select the NVMe SSD, and click ‘Clone’:



- 6) After the Clone procedure has completed, select 'Legacy' as the default system startup disk in **Startup Disk** and click **Restart**:



- 7) Restart the Mac and hold down the 'option' key to enter the **Startup Manager** window. Select the startup disk to boot the system ("Legacy", shown below):



- 8) After booting the system, make sure the correct boot disk was used:



- 9) Install the HighPoint NVMe driver and the WebGUI (Refer to the driver installation documentation).

- 10) You can now shutdown the system and reinstall the other NVMe devices/controllers. Power on the system and boot macOS using the NVMe SSD ('Legacy'). Make sure the HighPoint NVMe driver is loading:

The screenshot shows the macOS System Information window for a Mac Pro. The 'Software' section is expanded to show a list of software extensions. The 'HighPointNVMe' extension is highlighted in blue. Below the list, the 'HighPointNVMe:' section provides detailed information about the extension, with several fields (Version, Notarized, Loaded) highlighted in green.

Extension Name	Version	Last Modified	Notarized	Loaded
HighPointOP	4.4.1	2018/5/4, 6:31 AM	Yes	No
HighPointNVMe	1.1.10	2020/1/2, 4:38 PM	Yes	Yes
HighPointRR	4.13.6	2017/12/5, 5:48 PM	Yes	No
initioFWBridge	489.120.1	2019/11/21, 12:05 PM	Yes	No
IntelS2574L	2.7.2	2019/11/9, 8:11 PM	Yes	No
IO80211Family	12.0	2019/11/21, 12:29 PM	Yes	No
IO80211FamilyV2	12.0	2019/11/21, 12:05 PM	Yes	Yes
IO80211NetBooter	12.0	2019/11/21, 12:06 PM	Yes	No

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: 18446743521889240000
- Loadable: Yes
- Dependencies: Satisfied
- Signed by: Developer ID Application: HighPoint Technologies, Inc (DX6G69M9N2), Developer ID Certification Authority, Apple Root CA