HighPoint NVMe UEFI ROM Update Guide (PC)

V1.10– Apr 8, 2024

Contents

Overview

This guide explains updating NVMe products' UEFI ROM using a PC platform.

The following is a list of supported NVMe AICs.

Supported AIC	SSD7105 SSD7202 SSD7502 SSD7505 SSD7540 SSD7580A SSD7580B SSD7580C SSD7749M SSD7749E SSD6780A RocketAIC 7105HW Series RocketAIC 7502HW Series RocketAIC 7505HW Series RocketAIC 7540HW Series RocketAIC 7749EW Series RocketAIC 7749MW Series

Prerequisites

This section describes the base hardware and software requirements for NVMe products.

Update UEFI ROM

This section describes how to update the UFEI ROM using a PC.

Troubleshooting

Please consult this section if you encounter difficulties flashing NVMe products UEFI ROM. It includes descriptions and solutions for commonly reported technical issues.

Appendix

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

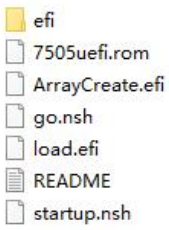
Prerequisites

1. **NVMe Drives must be removed**. Please remove all NVMe drives from the NVMe products to avoid data loss.
2. **SSD6780A NVMe Enclosure requires power on.** The SSD6780A requires an integral connection to the PCIe slot and the Enclosure. First switch on the Enclosure power switch to power up the Enclosure, then power up the motherboard.
3. **A PCIe 3.0/4.0/5.0 slot with x8 or x16 lane.** The NVMe products must be installed into a PCIe 3.0/4.0/5.0 slot with x8 or x16 lanes.
4. **The motherboard needs to be booted into UEFI mode.** Confirm that the motherboard boots in UEFI mode.
5. **USB flash drive: FAT32 format.** Ensure the USB flash drive file system is in FAT32 format.

Update UEFI ROM

Step 1 Prepare UEFI ROM Package

1. Unzip the NVMe products UEFI package to the root dir (/) of a USB flash drive (e.g., FAT32), and insert the USB flash drive into the motherboard;
   Please download the UEFI software from the official website.
   Example screenshot



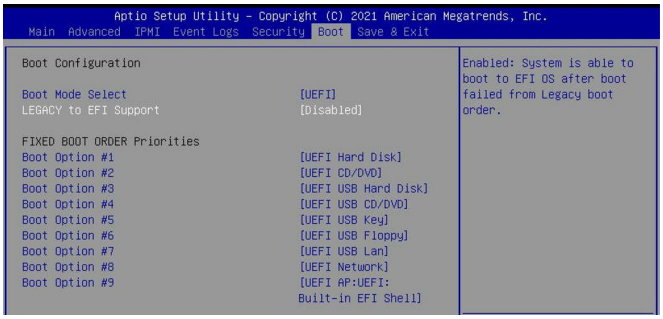
   Note: *the picture is only for reference*

Step 2 Check System EFI Settings

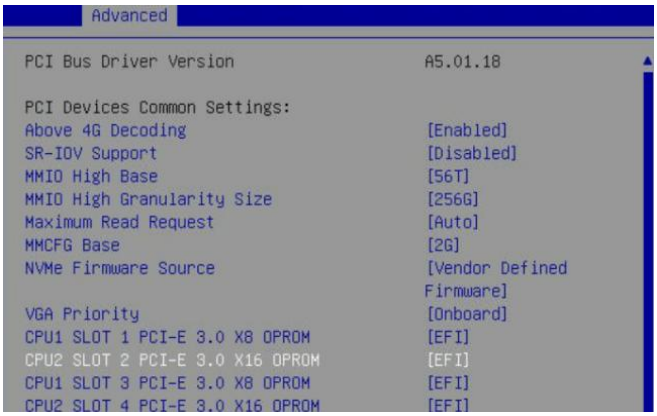
1. Insert the NVMe products into the motherboard, power on the system, and enter the BIOS.

2. Change the UEFI settings (Example: SuperMicro X11DPi-NT motherboard):

   a. Set ‘Boot mode select’ to ‘UEFI’.



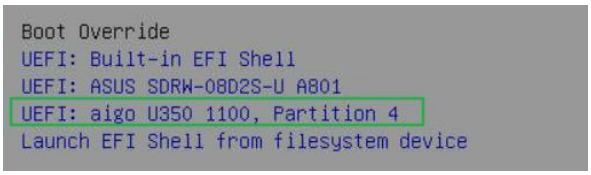
   b. Set the slot where the NVMe product is located in ‘EFI’.



3. Save changes and reboot.

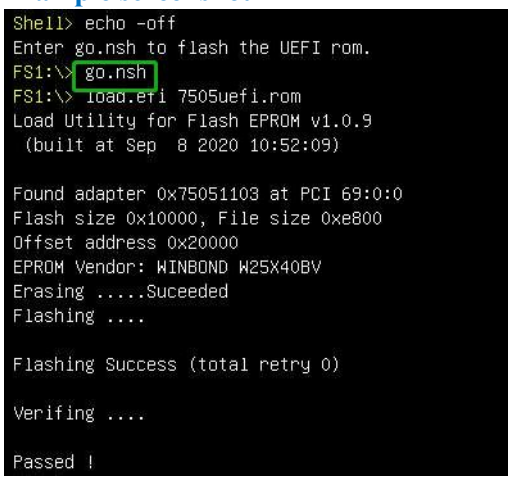
Step 3 Flash the UEFI ROM

1. Boot from the UEFI USB flash drive and enter the UEFI interface;



2. Enter the following command to flash the NVMe products: **go.nsh**
   When the message '**Passed**' appears, the flash is successful.

Example screenshot



Note: *the picture is only for reference; please make the object the standard.*

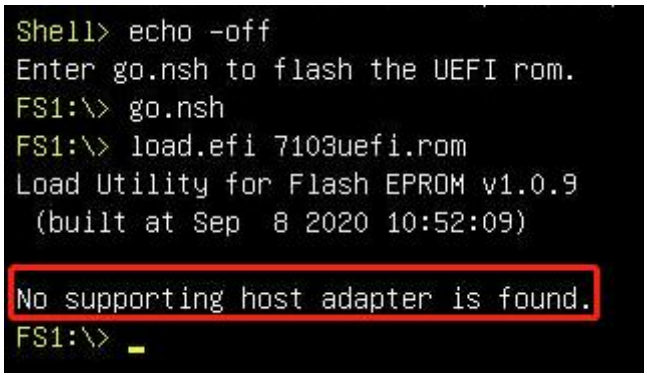
3. Reboot to complete the update process.

Troubleshooting

No supporting host adapter is found

When using the '**go.nsh**' command, the procedure does not start and the message '**No supporting host adapter is found**' is displayed.

Example screenshot



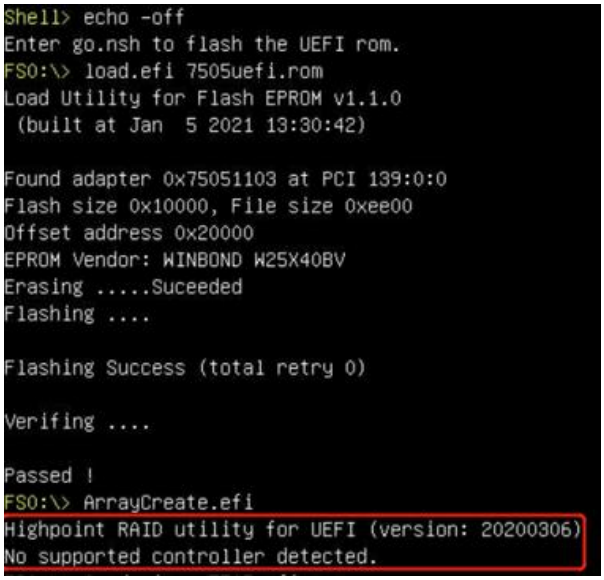
Solution:

Shut down the system, move the controller to another PCIe slot, and repeat the flash procedure. If the problem still occurs, please contact our Support Department. Refer to the Appendix for more information about which files and information should be included with your support case.

The UEFI Utility Reports No Supported Controller Detected

1. Boot from a UEFI device. The drive loads the UEFI BIOS after the old boot. Enter **ArrayCreate.efi** to create RIAD. The UEFI Utility Reports **No Supported Controller Detected**.

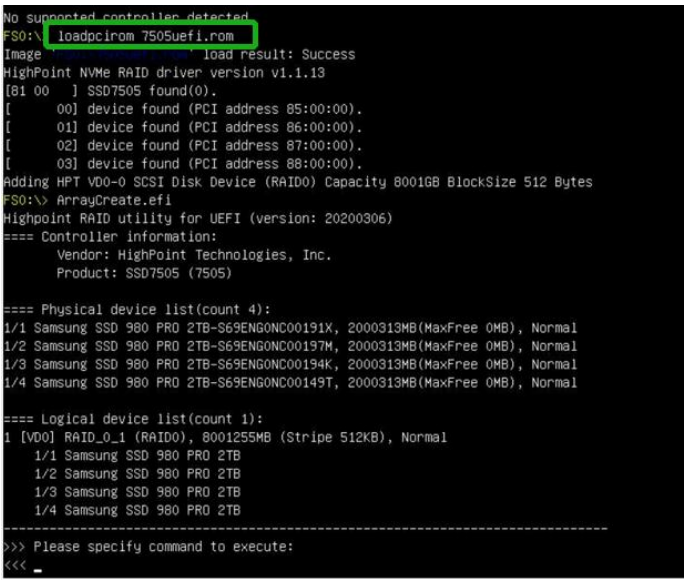
   ### Example screenshot

   Note: *If it cannot be loaded successfully, our UEFI rom is incompatible with the current UEFI environment.*

2. Then enter **loadpcirom xxx.rom** in the UEFI Shell. Based on the output of this command, we can determine whether our UEFI driver is incompatible with your motherboard. If it can be loaded manually, the BIOS settings do not allow third-party ROM files to be loaded.

   Example screenshot



Appendix

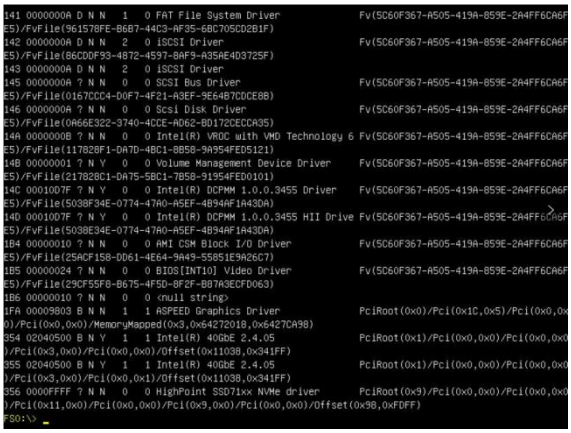
Collecting NVMe products UEFI information

1. Unzip the NVMe products UEFI package to the root dir (/) of a USB flash drive, and insert the USB flash drive into the PC.
2. Ensure the NVMe product is installed into a PCIe 3.0/4.0/5.0 slot with x8 or x16 lanes.
3. Boot from the UEFI USB flash drive and enter the UEFI interface;
4. At the command prompt, type the following command and press Enter:

   drivers

   The following information will be displayed:

5. Save the driver information that is displayed on the screen using the following command:

   drivers > drivers.txt

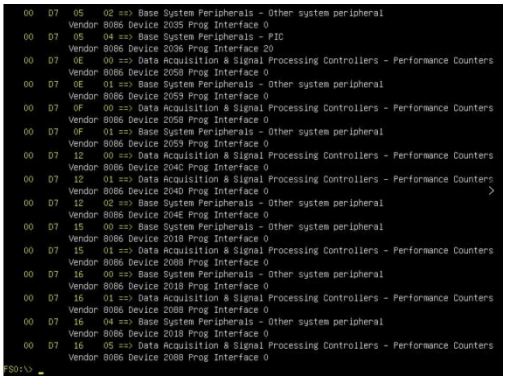
   It will save drivers' log to the USB drive, as the file "**drivers.txt**".

6. At the command prompt, type the following command and press Enter:

   pci

The following information will be displayed:



7. Save the on-screen pci information using the following command:

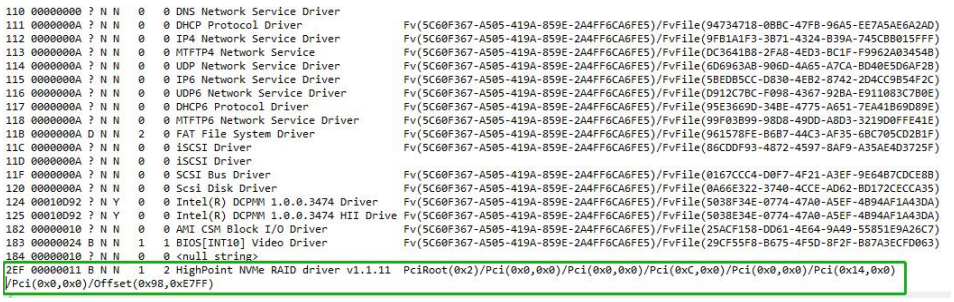
   pci > pci.txt

   This will save the pci's log to the USB boot drive, as the file "**pci.txt**".

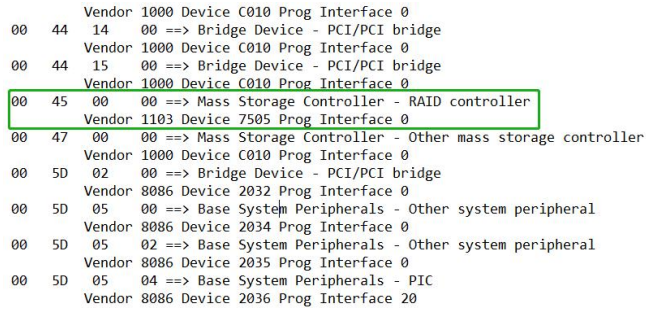
8. You can now check the contents of the drivers.txt and pci.txt that were saved to the USB flash drive. The items highlighted in green below file indicate that the NVMe product was recognized and the driver loaded normally:

   ### Example screenshot

   drivers.txt:



   pci.txt:



If you fail to update NVMe product UEFI ROM, please submit a support ticket using our Online Support Portal, including a description of the problem in as much detail as possible, and upload the **driver.txt** & **pci.txt** information.