SSD7000 系列 UEFI ROM 更新指南 (PC)

V1.03 – 2021年11月

目录

概述

本指南介绍如何使用PC平台更新SSD7000系列NVMe RAID控制器的UEFI ROM。

前提条件

本节介绍SSD7000系列NVMeRAID控制器的基本硬件和软件要求。

更新 UEFI ROM

本节介绍如何使用PC更新UFEIROM。

故障排除

如果您在刷新SSD7000系列NVMe控制器UEFI ROM时遇到任何困难，请参阅本节。其中包括常见技术问题的说明和解决方案。

附录

本节介绍如何为您通过我们的在线支持门户提交的案例收集故障排除信息。

概述

前提条件

1. **必须删除NVMe驱动器**。为避免数据丢失，请从SSD7000系列NVMe控制器中移除所有NVMe驱动器。

2. **A带有x8或x16通道的PCIe 3.0/4.0插槽。**SSD7202、SSD7502、SSD7103、SSD7505、SSD7540或SSD7580必须安装到具有x8或x16通道的PCIe 3.0/4.0插槽中。

3. **主板需要被引导到UEFI模式。**确认主板已在UEFI模式下启动。

4. **USB 闪存盘: FAT32 格式。**确保USB闪存驱动器的文件系统为FAT32格式。
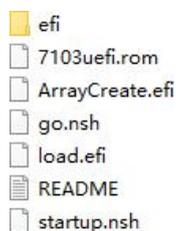
更新 UEFI ROM

步骤 1 准备 UEFI ROM 软件包

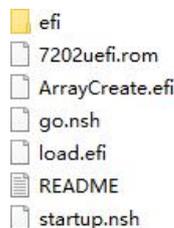1. 将SSD7000系列NVMe控制器UEFI包解压缩到USB闪存驱动器(例如FAT32)的根目录
（/），并将USB闪存驱动器插入主板;

请在官方网站上下载UEFI软件。

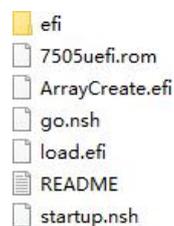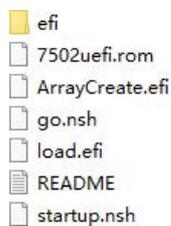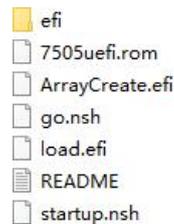| 产品	下载页面链接
SSD7103	https://www.highpoint-tech.com/USA_new/series-ssd7103-overview.htm
SSD7202	https://www.highpoint-tech.com/USA_new/series-ssd7202-overview.htm
SSD7505	https://www.highpoint-tech.com/USA_new/series-ssd7505-overview.htm
SSD7502	https://www.highpoint-tech.com/USA_new/series-ssd7502-overview.html
SSD7540	https://www.highpoint-tech.com/USA_new/series-ssd7540-overview.htm
SSD7580	https://www.highpoint-tech.com/USA_new/series-ssd7580-overview.htm

SSD7103:

- efi
- 7103uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

SSD7202:

- efi
- 7202uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

SSD7505:

- efi
- 7505uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

SSD7502:

- efi
- 7502uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

SSD7540:

- efi
- 7505uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

SSD7580:

- efi
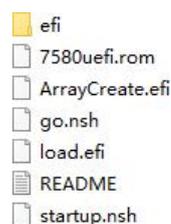- 7580uefi.rom
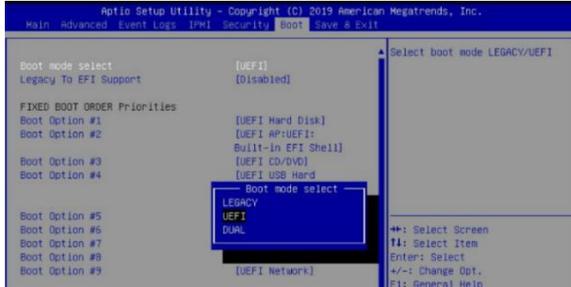- ArrayCreate.efi
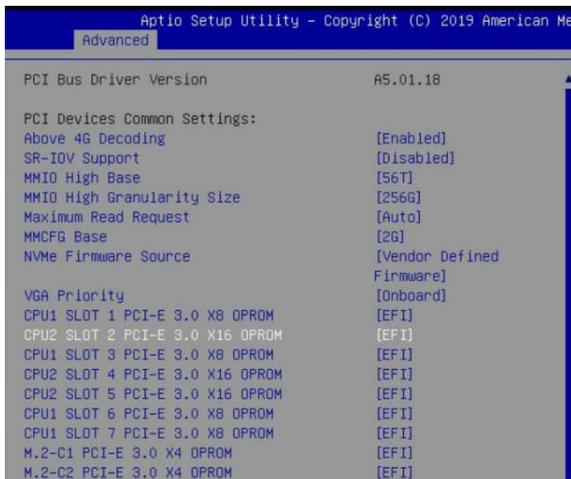- go.nsh
- load.efi
- README
- startup.nsh

步骤 2 检查系统 EFI 设置

1. 将SSD7000系列NVMe控制器插入主板，接通系统电源，并进入BIOS。

2. 更改UEFI设置(例如：SuperMicroX11DPi-NT主板):

    a. 设置"启动模式选择"为"UEFI"：
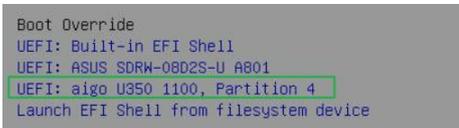

    b. 将SSD7000系列NVMe控制器所在的插槽设置为"EFI"。

3. 保存更改并重新启动。

步骤 3 刷新 UEFI ROM

1. 从UEFI USB闪存驱动器引导，进入UEFI接口；

2. 输入以下命令，将UEFIROM闪存到SSD7000NVMe控制器:

    go.nsh

    当信息"已通过"出现时，闪存已成功。

    SSD7103:

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS1:\> go.nsh
FS1:\> load.efi 7103uefi.rom
Load Utility for Flash EPROM v1.0.9
 (built at Sep  8 2020 10:52:09)

Found adapter 0x71031103 at PCI 67:0:0
Flash size 0x10000, File size 0xe800
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Suceeded
Flashing ....

Flashing Success (total retry 0)

Verifing ....

Passed !
```

SSD7202:

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS1:\> go.nsh
FS1:\> load.efi 7202uefi.rom
Load Utility for Flash EPROM v1.0.9
 (built at Sep  8 2020 10:52:09)

Found adapter 0x72021103 at PCI 28:0:0
Flash size 0x10000, File size 0xe800
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Suceeded
Flashing ....

Flashing Success (total retry 0)

Verifing ....

Passed !
```

SSD7502:

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS1:\> go.nsh
FS1:\> load.efi 7502uefi.rom
Load Utility for Flash EPROM v1.0.9
 (built at Sep  8 2020 10:52:09)

Found adapter 0x75051103 at PCI 69:0:0
Flash size 0x10000, File size 0xe800
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Suceeded
Flashing ....

Flashing Success (total retry 0)

Verifing ....

Passed !
```

SSD7505:

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS1:\> go.nsh
FS1:\> load.efi 7505uefi.rom
Load Utility for Flash EPROM v1.0.9
 (built at Sep  8 2020 10:52:09)

Found adapter 0x75051103 at PCI 69:0:0
Flash size 0x10000, File size 0xe800
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Suceeded
Flashing ....

Flashing Success (total retry 0)

Verifing ....

Passed !
```

SSD7540:

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS1:\> go.nsh
FS1:\> load.efi 7540uefi.rom
Load Utility for Flash EPROM v1.0.9
 (built at Sep  8 2020 10:52:09)

Found adapter 0x75401103 at PCI 75:0:0
Flash size 0x10000, File size 0xe800
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Suceeded
Flashing ....

Flashing Success (total retry 0)

Verifing ....

Passed !
```

SSD7580:

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS0:\> go.nsh
FS0:\> load.efi 7580uefi.rom
Load Utility for Flash EPROM v1.1.0
 (built at Jan  5 2021 13:30:42)

Found adapter 0x75801103 at PCI 145:0:0
Flash size 0x10000, File size 0xe800
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Suceeded
Flashing ....

Flashing Success (total retry 0)

Verifing ....

Passed !
FS0:\>
```

3. 重新启动以完成更新过程。

故障排除

找不到任何支持的主机适配器

当使用"go.nsh"命令时，该过程不会启动，并显示"没有找到支持的主机适配器"的消息:

解决方法:

关闭系统，将SSD7000控制器移到另一个PCIe插槽，并重复闪存过程。如果问题仍然发生，请参考附录进行收集。

UEFI实用程序报告未检测到受支持的控制器

1. 从UEFI设备启动时，驱动器会在旧的启动后加载UEFIBIOS。输入 ArrayCreate.efi以创建RIAD。UEFI实用程序报告没有检测到受支持的控制器。

注意：如果不能成功加载，则我们的UEFIrom与当前的UEFI环境不兼容。

2.然后在UEFI外壳中输入加载程序xxx.rom。根据这个命令的输出，我们可以确定我们的UEFI驱动程序是否与您的主板兼容，如果可以手动加载，这意味着BIOS设置不允许加载第三方ROM文件。

SSD7000 系列 NVMe 控制器 UEFI ROM 更新指南 (PC)

附录

收集SSD7000系列UEFI信息

1. 将SSD7000系列NVMe控制器UEFI包解压缩到USB闪存盘的根目录（/），并将
   USB闪存盘插入PC中。

2. 确保SSD7000系列NVMe控制器安装在一个带有x8或x16车道的˘Ω3.0/4.0的插槽中；

3. 从UEFI USB闪存驱动器引导，进入UEFI接口;

4. 在命令提示符下，键入以下命令并按Enter键:

   drivers

   此时将显示以下信息：

5. 使用以下命令保存在屏幕上显示的驱动程序信息:

   drivers > drivers.txt

   它将把驱动程序的日志保存到USB驱动器，作为文件"drivers.

6. 在命令提示符下，键入以下命令并按Enter键:

   pci

此时将显示以下信息:

7. 使用以下命令保存屏幕上的pci信息:

pci > pci.txt

这将把pci的日志保存到USB引导驱动器中，作为文件"pci.txt"。

8. 您现在可以检查保存到USB闪存盘中的drivers.txt和pci.txt的内容。下面文件中红色突出显示的项目表明SSD7000系列NVMe控制器已被识别，驱动程序已正常加载：

SSD7103:

drivers.txt:

pci.txt:

SSD7000 系列 NVMe 控制器 UEFI ROM 更新指南 (PC)

SSD7202:

drivers.txt:

```
112 0000000A ? N N   0   0 IP4 Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CBB015FFF)
113 0000000A ? N N   0   0 MTFTP4 Network Service          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC3641B8-2FA8-4ED3-BC1F-F9962A03454B)
114 0000000A ? N N   0   0 UDP Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963AB-906D-4A65-A7CA-BD40E5D6AF2B)
115 0000000A ? N N   0   0 IP6 Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5BEDB5CC-D830-4EB2-8742-2D4CC9B54F2C)
116 0000000A ? N N   0   0 UDP6 Network Service Driver     Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(D912C7BC-F098-4367-92BA-E911083C7B0E)
117 0000000A ? N N   0   0 DHCP6 Protocol Driver           Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E3669D-34BE-4775-A651-7EA41B69D89E)
118 0000000A ? N N   0   0 MTFTP6 Network Service Driver   Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-98D8-49DD-A8D3-3219D0FFE41E)
11B 0000000A D N N   2   0 FAT File System Driver          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD2B1F)
11C 0000000A ? N N   0   0 iSCSI Driver                    Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDDF93-4872-4597-8AF9-A35AE4D3725F)
11D 0000000A ? N N   0   0 iSCSI Driver
11F 0000000A ? N N   0   0 SCSI Bus Driver                 Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCC4-D0F7-4F21-A3EF-9E64B7CDCE8B)
120 0000000A ? N N   0   0 Scsi Disk Driver                Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0A66E322-3740-4CCE-AD62-BD172CECCA35)
124 00010D92 ? N Y   0   0 Intel(R) DCPMM 1.0.0.3474 Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
125 00010D92 ? N Y   0   0 Intel(R) DCPMM 1.0.0.3474 HII Drive Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
182 00000010 ? N N   0   0 AMI CSM Block I/O Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(25ACF158-DD61-4E64-9A49-55851E9A26C7)
183 00000024 B N N   1   1 BIOS[INT10] Video Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(29CF55F8-B675-4F5D-8F2F-B87A3ECFD063)
184 00000010 ? N N   0   0 <null string>
2E7 00000011 ? N N   0   0 HighPoint NVMe RAID driver v1.1.11  PciRoot(0x1)/Pci(0x0,0x0)/Pci(0x0,0x0)/Pci(0x10,0x0)/Pci(0x0,0x0)/Offset(0x98,0xE7FF)
```

pci.txt:

```
             Vendor 10B5 Device 8747 Prog Interface 0
00   19   08   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 10B5 Device 8747 Prog Interface 0
00   19   09   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 10B5 Device 8747 Prog Interface 0
00   19   10   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 10B5 Device 8747 Prog Interface 0
00   19   11   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 10B5 Device 8747 Prog Interface 0
00   1C   00   00 ==> Mass Storage Controller - RAID controller
             Vendor 1103 Device 7202 Prog Interface 0
00   1D   00   00 ==> Mass Storage Controller - Non-volatile memory subsystem
             Vendor 1BB1 Device 5016 Prog Interface 2
00   3A   05   00 ==> Base System Peripherals - Other system peripheral
             Vendor 8086 Device 2034 Prog Interface 0
00   3A   05   02 ==> Base System Peripherals - Other system peripheral
             Vendor 8086 Device 2035 Prog Interface 0
00   3A   05   04 ==> Base System Peripherals - PIC
             Vendor 8086 Device 2036 Prog Interface 20
```

SSD7502:

drivers.txt:

```
110 00000000 ? N N   0   0 DNS Network Service Driver
111 0000000A ? N N   0   0 DHCP Protocol Driver            Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(94734718-0BBC-47FB-96A5-EE7A5AE6A2AD)
112 0000000A ? N N   0   0 IP4 Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CBB015FFF)
113 0000000A ? N N   0   0 MTFTP4 Network Service          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC3641B8-2FA8-4ED3-BC1F-F9962A03454B)
114 0000000A ? N N   0   0 UDP Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963AB-906D-4A65-A7CA-BD40E5D6AF2B)
115 0000000A ? N N   0   0 IP6 Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5BEDB5CC-D830-4EB2-8742-2D4CC9B54F2C)
116 0000000A ? N N   0   0 UDP6 Network Service Driver     Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(D912C7BC-F098-4367-92BA-E911083C7B0E)
117 0000000A ? N N   0   0 DHCP6 Protocol Driver           Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E3669D-34BE-4775-A651-7EA41B69D89E)
118 0000000A ? N N   0   0 MTFTP6 Network Service Driver   Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-98D8-49DD-A8D3-3219D0FFE41E)
11B 0000000A D N N   2   0 FAT File System Driver          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD2B1F)
11C 0000000A ? N N   0   0 iSCSI Driver                    Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDDF93-4872-4597-8AF9-A35AE4D3725F)
11D 0000000A ? N N   0   0 iSCSI Driver
11F 0000000A ? N N   0   0 SCSI Bus Driver                 Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCC4-D0F7-4F21-A3EF-9E64B7CDCE8B)
120 0000000A ? N N   0   0 Scsi Disk Driver                Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0A66E322-3740-4CCE-AD62-BD172CECCA35)
124 00010D92 ? N Y   0   0 Intel(R) DCPMM 1.0.0.3474 Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
125 00010D92 ? N Y   0   0 Intel(R) DCPMM 1.0.0.3474 HII Drive Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
182 00000010 ? N N   0   0 AMI CSM Block I/O Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(25ACF158-DD61-4E64-9A49-55851E9A26C7)
183 00000024 B N N   1   1 BIOS[INT10] Video Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(29CF55F8-B675-4F5D-8F2F-B87A3ECFD063)
184 00000010 ? N N   0   0 <null string>
2EE 00000011 B N N   1   0 HighPoint NVMe RAID driver v1.1.12  PciRoot(0x2)/Pci(0x0,0x0)/Pci(0x0,0x0)/Pci(0xC,0x0)/Pci(0x0,0x0)/Pci(0x14,0x0)/Pci(0x0,0x0)/Offset(0x98,0xE7FF)
```

pci.txt:

```
00   40   00   00 ==> Mass Storage Controller - Non-volatile memory subsystem
             Vendor 1BB1 Device 5016 Prog Interface 2
00   43   00   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 1000 Device C010 Prog Interface 0
00   44   14   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 1000 Device C010 Prog Interface 0
00   44   15   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 1000 Device C010 Prog Interface 0
00   45   00   00 ==> Mass Storage Controller - RAID controller
             Vendor 1103 Device 7505 Prog Interface 0
00   5D   02   00 ==> Bridge Device - PCI/PCI bridge
             Vendor 8086 Device 2032 Prog Interface 0
00   5D   05   00 ==> Base System Peripherals - Other system peripheral
             Vendor 8086 Device 2034 Prog Interface 0
00   5D   05   02 ==> Base System Peripherals - Other system peripheral
             Vendor 8086 Device 2035 Prog Interface 0
00   5D   05   04 ==> Base System Peripherals - PIC
             Vendor 8086 Device 2036 Prog Interface 20
00   5D   0E   00 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
             Vendor 8086 Device 2058 Prog Interface 0
```

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SSD7505:

drivers.txt:

```
110 00000000 ? N N    0    0 DNS Network Service Driver
111 0000000A ? N N    0    0 DHCP Protocol Driver          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(94734718-0BBC-47FB-96A5-EE7A5AE6A2AD)
112 0000000A ? N N    0    0 IP4 Network Service Driver    Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CBB015FFF)
113 0000000A ? N N    0    0 MTFTP4 Network Service        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC3641B8-2FA8-4ED3-BC1F-F9962A03454B)
114 0000000A ? N N    0    0 UDP Network Service Driver    Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963AB-906D-4A65-A7CA-BD40E5D6AF2B)
115 0000000A ? N N    0    0 IP6 Network Service Driver    Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5BEDB5CC-D830-4EB2-8742-2D4CC9B54F2C)
116 0000000A ? N N    0    0 UDP6 Network Service Driver   Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(D912C7BC-F098-4367-92BA-E911083C7B0E)
117 0000000A ? N N    0    0 DHCP6 Protocol Driver         Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E3669D-34BE-4775-A651-7EA41B69D89E)
118 0000000A ? N N    0    0 MTFTP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-98D8-49DD-A8D3-3219D0FFE41E)
11B 0000000A D N N    2    0 FAT File System Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD2B1F)
11C 0000000A ? N N    0    0 iSCSI Driver                  Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDDF93-4872-4597-8AF9-A35AE4D3725F)
11D 0000000A ? N N    0    0 iSCSI Driver
11F 0000000A ? N N    0    0 SCSI Bus Driver               Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCC4-D0F7-4F21-A3EF-9E64B7CDCE8B)
120 0000000A ? N N    0    0 Scsi Disk Driver              Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0A66E322-3740-4CCE-AD62-BD172CECCA35)
124 00010D92 ? N Y    0    0 Intel(R) DCPMM 1.0.0.3474 Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
125 00010D92 ? N Y    0    0 Intel(R) DCPMM 1.0.0.3474 HII Drive Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038E34E-0774-47A0-A5EF-4B94AF1A43DA)
182 00000010 ? N N    0    0 AMI CSM Block I/O Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(25ACF158-DD61-4E64-9A49-55851E9A26C7)
183 00000024 B N N    1    1 BIOS[INT10] Video Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(29CF55F8-B675-4F5D-8F2F-B87A3ECFD063)
184 00000010 ? N N    0    0 <null string>
2EF 00000011 B N N    1    2 HighPoint NVMe RAID driver v1.1.11  PciRoot(0x2)/Pci(0x0,0x0)/Pci(0x0,0x0)/Pci(0xC,0x0)/Pci(0x0,0x0)/Pci(0x14,0x0)
/Pci(0x0,0x0)/Offset(0x98,0xE7FF)
```

pci.txt:

```
           Vendor 1000 Device C010 Prog Interface 0
00   44   14     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   44   15     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   45   00     00 ==> Mass Storage Controller - RAID controller
           Vendor 1103 Device 7505 Prog Interface 0
00   47   00     00 ==> Mass Storage Controller - Other mass storage controller
           Vendor 1000 Device C010 Prog Interface 0
00   5D   02     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 8086 Device 2032 Prog Interface 0
00   5D   05     00 ==> Base System Peripherals - Other system peripheral
           Vendor 8086 Device 2034 Prog Interface 0
00   5D   05     02 ==> Base System Peripherals - Other system peripheral
           Vendor 8086 Device 2035 Prog Interface 0
00   5D   05     04 ==> Base System Peripherals - PIC
           Vendor 8086 Device 2036 Prog Interface 20
```

SSD7540:

drivers:

```
114 0000000A ? - - - - UDP Network Service Driver    Udp4Dxe
115 0000000A ? - - - - IP6 Network Service Driver    Ip6Dxe
116 0000000A ? - - - - UDP6 Network Service Driver   Udp6Dxe
117 0000000A ? - - - - DHCP6 Protocol Driver         Dhcp6Dxe
118 0000000A ? - - - - MTFTP6 Network Service Driver Mtftp6Dxe
11B 0000000A D - - 2 - FAT File System Driver        Fat
11C 0000000A ? - - - - iSCSI Driver                  IScsiDxe
11D 0000000A ? - - - - iSCSI Driver                  IScsiDxe
11F 0000000A ? - - - - SCSI Bus Driver               ScsiBus
120 0000000A ? - - - - Scsi Disk Driver              ScsiDisk
124 00010D92 ? - X - - Intel(R) DCPMM 1.0.0.3474 Driver      FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
125 00010D92 ? - X - - Intel(R) DCPMM 1.0.0.3474 HII Drive FvFile(5038E34E-0774-47A0-A5EF-4B94AF1A43DA)
182 00000010 ? - - - - AMI CSM Block I/O Driver      CsmBlockIo
183 00000024 B - - 1 1 BIOS[INT10] Video Driver      CsmVideo
184 00000010 ? - - - - <null string>
2FB 00000011 D - - 8 - HighPoint NVMe RAID driver v1.1.11  Offset(0x98,0xE7FF)
```

pci.txt:

```
00   44   08     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   44   0C     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   49   00     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   4A   14     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   4A   15     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00   4B   00     00 ==> Mass Storage Controller - RAID controller
           Vendor 1103 Device 7540 Prog Interface 0
00   4D   00     00 ==> Mass Storage Controller - Other mass storage controller
           Vendor 1000 Device C010 Prog Interface 0
00   5D   02     00 ==> Bridge Device - PCI/PCI bridge
           Vendor 8086 Device 2032 Prog Interface 0
00   5D   05     00 ==> Base System Peripherals - Other system peripheral
           Vendor 8086 Device 2034 Prog Interface 0
00   5D   05     02 ==> Base System Peripherals - Other system peripheral
           Vendor 8086 Device 2035 Prog Interface 0
00   5D   05     04 ==> Base System Peripherals - PIC
           Vendor 8086 Device 2036 Prog Interface 20
```

SSD7580:

drivers:

SSD7000 系列 NVMe 控制器 UEFI ROM 更新指南 (PC)

```
197 0000000A D N N  2  0 HttpDxe
198 00000000 D N N  3  0 DNS Network Service Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(B219E140-DFFC-11E3-B956-0022681E6906)
199 00000000 D N N  2  0 DNS Network Service Driver
19C 0000000A D N N  3  0 DHCP Protocol Driver            Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(94734718-0BBC-47FB-96A5-EE7A5AE6A2AD)
19D 0000000A B N N  7  34 IP4 Network Service Driver       Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CBB015FFF)
19E 0000000A B N N  4  4 MTFTP4 Network Service           Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC3641B8-2FA8-4ED3-BC1F-F9962A03454B)
19F 0000000A B N N  20 34 UDP Network Service Driver       Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963AB-906D-4A65-A7CA-BD40E5D6AF2B)
1A0 0000000A B N N  4  24 IP6 Network Service Driver       Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5BEDB5CC-D830-4EB2-8742-2D4CC9B54F2C)
1A1 0000000A B N N  14 24 UDP6 Network Service Driver      Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(D912C7BC-F098-4367-92BA-E911083C7B0E)
1A2 0000000A B N N  2  2 DHCP6 Protocol Driver          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E3669D-34BE-4775-A651-7EA41B69D89E)
1A3 0000000A B N N  2  2 MTFTP6 Network Service Driver     Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-98D8-49DD-A8D3-3219D0FFE41E)
1A6 0000000A D N N  2  0 FAT File System Driver          Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD2B1F)
1A7 0000000A D N N  2  0 iSCSI Driver               Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDDF93-4872-4597-8AF9-A35AE4D3725F)
1A8 0000000A D N N  2  0 iSCSI Driver
1AA 0000000A ? N N  0  0 SCSI Bus Driver             Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCC4-D0F7-4F21-A3EF-9E64B7CDCE8B)
1AB 0000000A ? N N  0  0 Scsi Disk Driver            Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0A66E322-3740-4CCE-AD62-BD172CECCA35)
1AC 0000000A D N N  1  0 TcpsDxe                 Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FE6C519-86DA-49DC-8725-C2594628AD46)
1AE 00000001 D N N  1  0 SMCI Redfish HI USB CDC-RNDIS Drive Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(E71044B4-0BD7-4448-9133-BB323D5BE85B)
1AF 00000001 B N N  1  1 SMCI USB UNDI Driver         Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(C0C2AB85-93D8-44C5-84CB-28B62A52E197)
1B9 00000010 ? N N  0  0 AMI CSM Block I/O Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(25ACF158-DD61-4E64-9A49-55851E9A26C7)
1BA 00000024 ? N N  0  0 BIOS[INT10] Video Driver        Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(29CF55F8-B675-4F5D-8F2F-B87A3ECFD063)
1BB 00000010 ? N N  0  0 <null string>
1E2 00011001 B N N  1  1 ASPEED Graphics Driver        PciRoot(0x1)/Pci(0x3,0x4)/Pci(0x0,0x0)/Pci(0x0,0x0)/Offset(0x80E0,0x113FF)
235 00140E1B B Y Y  1  1 Broadcom Gigabit Ethernet Driver   PciRoot(0x1)/Pci(0x3,0x6)/Pci(0x0,0x0)/Offset(0xF834,0x2B7FF)
236 00140E1B B Y Y  1  1 Broadcom Gigabit Ethernet Driver   PciRoot(0x1)/Pci(0x3,0x6)/Pci(0x0,0x1)/Offset(0xF834,0x2B7FF)
237 00000011 ? N N  0  0 HighPoint NVMe RAID driver v1.1.11  PciRoot(0x2)/Pci(0x3,0x1)/Pci(0x0,0x0)/Pci(0xC,0x0)/Pci(0x0,0x0)/Pci(0x14,0x0)/Pci(0x0,0x0)/Offset(0x98,0xE7FF)
```

pci.txt:

```
00  8A  0C   00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00  8F  00   00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00  90  14   00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00  90  15   00 ==> Bridge Device - PCI/PCI bridge
           Vendor 1000 Device C010 Prog Interface 0
00  91  00   00 ==> Mass Storage Controller - RAID controller
           Vendor 1103 Device 7580 Prog Interface 0
00  93  00   00 ==> Mass Storage Controller - Other mass storage controller
           Vendor 1000 Device C010 Prog Interface 0
00  94  00   00 ==> Non-Essential Instrumentation - Non-Essential Instrumentation Function
           Vendor 1022 Device 148A Prog Interface 0
00  94  00   02 ==> Encryption/Decryption Controllers - Other Encrypt/Decrypt
           Vendor 1022 Device 1498 Prog Interface 0
00  95  00   00 ==> Non-Essential Instrumentation - Non-Essential Instrumentation Function
           Vendor 1022 Device 1485 Prog Interface 0
00  95  00   02 ==> Encryption/Decryption Controllers - Other Encrypt/Decrypt
           Vendor 1022 Device 1498 Prog Interface 0
```

如果您未能更新SSD7000系列NVMe控制器UEFIROM，请使用我们的在线支持门户提交信息，尽可能详细地包含对问题的描述，并上传driver.txt&pci.txt信息.