



SSD7000 Series UEFI ROM Update Guide (PC)

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Overview

This guide explains how to update SSD7000 Series NVMe RAID controllers' UEFI ROM using a PC platform.

Prerequisites

This section describes the base hardware and software requirements for SSD7000 Series NVMe RAID Controllers.

Update UEFI ROM

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

Troubleshooting

Please consult this section if you encounter any difficulties flashing SSD7000 Series NVMe Controller UEFI ROM. 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. **NVMe Drives must be removed.** To avoid data loss, please remove all NVMe drives from the SSD7000 Series NVMe Controller.
2. **A PCIe 3.0/4.0 slot with x8 or x16 lane.** The SSD7202, SSD7502, SSD7105, SSD7505, SSD7540, SSD7580A or SSD7580B must be installed into a PCIe 3.0/4.0 slot with x8 or x16 lanes.
3. **The motherboard needs to be booted into UEFI mode.** Confirm that the motherboard boots in UEFI mode.
4. **USB flash drive: FAT32 format.** Make sure the file system of the USB flash drive is FAT32 format.

Update UEFI ROM

Step 1 Prepare UEFI ROM Package

1. Unzip the SSD7000 Series NVMe Controller 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 UEFI software on the official website.

Product	Download Page Link
SSD7105	https://www.highpoint-tech.com/gen3-nvme-m2-bootable
SSD7202	https://www.highpoint-tech.com/gen3-nvme-m2-bootable
SSD7505	https://www.highpoint-tech.com/ssd/ssd7505-overview
SSD7502	https://www.highpoint-tech.com/ssd/ssd7502-overview
SSD7540	https://www.highpoint-tech.com/ssd/ssd7540-overview
SSD7580A	https://www.highpoint-tech.com/ssd7580a-overview
SSD7580B	https://www.highpoint-tech.com/ssd7580b-overview

SSD7105:

- efi
- 7105uefi.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:

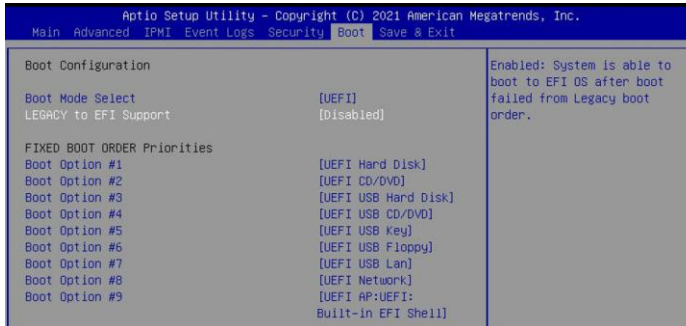
- efi
- 7505uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

SSD7580:

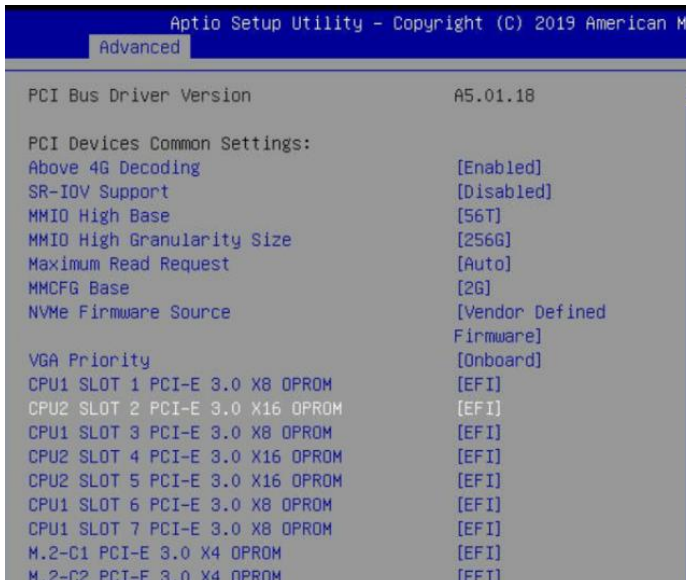
- efi
- 7580uefi.rom
- ArrayCreate.efi
- go.nsh
- load.efi
- README
- startup.nsh

Step 2 Check System EFI Settings

1. Insert the SSD7000 series NVMe controller 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':



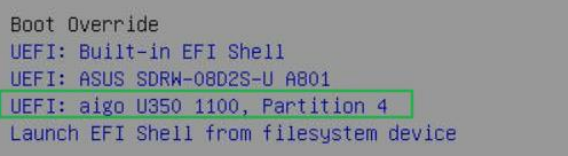
- b. Set the Slot where the SSD7000 Series NVMe Controller is located to 'EFI'.



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 UEFI ROM to the SSD7000 NVMe Controller:
go.nsh

When the message **‘Passed’** appears, the flash was successful.

SSD7105:

```
FS0:\> go.nsh
FS0:\> load.efi 7105uefi.rom
Load Utility for Flash EPROM v1.1.0
(built at Jan 5 2021 13:30:42)

Set flash size to 65K
Found adapter 0x71051103 at PCI 199:0:0
Flash size 0x10400, File size 0x10200
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing .....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

Passed !
FS0:\> _
```

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 .....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

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 .....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

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 .....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

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 .....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

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 .....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

Passed !
FS0:\> _
```

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:

```
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)
No supporting host adapter is found.
FS1:\> _
```

Solution:

Shutdown the system and move the SSD7000 controller to another PCIe slot, and repeat the flash procedure. If the problem still occurs, please refer to the appendix for collection.

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**.

```
Shell> echo -off
Enter go.nsh to flash the UEFI rom.
FS0:\> load.efi 7505uefi.rom
Load Utility for Flash EPROM v1.1.0
(built at Jan 5 2021 13:30:42)

Found adapter 0x75051103 at PCI 139:0:0
Flash size 0x10000, File size 0xee00
Offset address 0x20000
EPROM Vendor: WINBOND W25X40BV
Erasing ....Succeeded
Flashing ....

Flashing Success (total retry 0)

Verifying ....

Passed !
FS0:\> ArrayCreate.efi
Highpoint RAID utility for UEFI (version: 20200306)
No supported controller detected.
```

Note: If it cannot be loaded successfully, our UEFI rom is not compatible 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, it means that the BIOS settings do not allow third-party ROM files to be loaded.

```
No supported controller detected
FS0:\> loadpcirom 7505uefi.rom
Image load result: Success
HighPoint NVMe RAID driver version v1.1.13
[81 00 ] SSD7505 found(0).
[ 00] device found (PCI address 85:00:00).
[ 01] device found (PCI address 86:00:00).
[ 02] device found (PCI address 87:00:00).
[ 03] device found (PCI address 88:00:00).
Adding HPT VD0-0 SCSI Disk Device (RAID0) Capacity 8001GB BlockSize 512 Bytes
FS0:\> ArrayCreate.efi
Highpoint RAID utility for UEFI (version: 20200306)
==== Controller information:
      Vendor: HighPoint Technologies, Inc.
      Product: SSD7505 (7505)

==== Physical device list(count 4):
1/1 Samsung SSD 980 PRO 2TB-S69ENGONC00191X, 2000313MB(MaxFree 0MB), Normal
1/2 Samsung SSD 980 PRO 2TB-S69ENGONC00197M, 2000313MB(MaxFree 0MB), Normal
1/3 Samsung SSD 980 PRO 2TB-S69ENGONC00194K, 2000313MB(MaxFree 0MB), Normal
1/4 Samsung SSD 980 PRO 2TB-S69ENGONC00149T, 2000313MB(MaxFree 0MB), Normal

==== Logical device list(count 1):
1 [VD0] RAID_0_1 (RAID0), 8001255MB (Stripe 512KB), Normal
  1/1 Samsung SSD 980 PRO 2TB
  1/2 Samsung SSD 980 PRO 2TB
  1/3 Samsung SSD 980 PRO 2TB
  1/4 Samsung SSD 980 PRO 2TB
-----
>>> Please specify command to execute:
<<< _
```

Appendix

Collecting SSD7000 Series UEFI information

1. Unzip the SSD7000 Series NVMe Controller UEFI package to the root dir (/) of a USB flash drive, and insert the USB flash drive into the PC.
2. Make sure the SSD7000 Series NVMe Controller is installed into a PCIe 3.0/4.0 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

```
FS0:\> drivers
```

The following information will be displayed:

```
141 0000000A 0 N N 1 0 FAT File System Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(961578FE-B667-44C3-AF35-6BC705CD281F)
142 0000000A 0 N N 2 0 iSCSI Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(86CDDF93-4872-4597-8AF9-A35AE4D3725F)
143 0000000A 0 N N 2 0 iSCSI Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(01670CC4-00F7-4F21-A3EF-3E64870DC8B8)
145 0000000A 7 N N 0 0 SCSI Bus Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(0A66E322-3740-4DCE-AD62-B0172CECD835)
146 0000000A 7 N N 0 0 Scsi Disk Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(0A66E322-3740-4DCE-AD62-B0172CECD835)
14A 0000000B 7 N N 0 0 Intel(R) VROC with VMD Technology 6 Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(117826F1-0A70-4BC1-8B56-3A954FED5121)
14B 00000001 7 N Y 0 0 Volume Management Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(217828C1-0A75-58C1-7B58-31954FED0101)
14C 0001007F 7 N Y 0 0 Intel(R) DCPM 1.0.0.3455 Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
14D 0001007F 7 N Y 0 0 Intel(R) DCPM 1.0.0.3455 HII Drive Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(5038F34E-0774-47A0-A5EF-4B94AF1A43DA)
1B4 00000010 7 N N 0 0 PMI COM Block I/O Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(250CF158-0061-4E64-9A49-55851E3A26C7)
1B5 00000024 7 N N 0 0 BIOS [INT10] Video Driver Fv(5C60F367-A505-419A-859E-2A4FF6C6A6F)
E5)/FvFile(29CF55F8-B675-4F5D-8F2F-B07A3ECFD063)
1B6 00000010 7 N N 0 0 null string>
1FA 00009803 8 N N 1 1 ASPEED Graphics Driver PciRoot(0x0)/Pci(0x1C,0x5)/Pci(0x0,0x0)
0)/Pci(0x0,0x0)/MemoryMapped(0x3,0x64272019,0x6427C498)
354 02040500 8 N Y 1 1 Intel(R) 40GbE 2.4.05 PciRoot(0x1)/Pci(0x0,0x0)/Pci(0x0,0x0)
/Pci(0x3,0x0)/Pci(0x0,0x0)/Offset(0x11038,0x341FF)
355 02040500 8 N Y 1 1 Intel(R) 40GbE 2.4.05 PciRoot(0x1)/Pci(0x0,0x0)/Pci(0x0,0x0)
/Pci(0x3,0x0)/Pci(0x0,0x1)/Offset(0x11038,0x341FF)
356 0000FFFF 7 N N 0 0 HighPoint SSD7xxx NVMe driver PciRoot(0x3)/Pci(0x0,0x0)/Pci(0x0,0x0)
/Pci(0x11,0x0)/Pci(0x0,0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/Offset(0x38,0xFDF)
FS0:\>
```

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

drivers > drivers.txt

```
FS0:\> 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

```
FS0:\> pci
```

The following information will be displayed:

```

00 07 05 02 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 2035 Prog Interface 0
00 07 05 04 ==> Base System Peripherals - PIC
Vendor 8086 Device 2036 Prog Interface 20
00 07 0E 00 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 2058 Prog Interface 0
00 07 0E 01 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 2059 Prog Interface 0
00 07 0F 00 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 2058 Prog Interface 0
00 07 0F 01 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 2059 Prog Interface 0
00 07 12 00 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 204C Prog Interface 0
00 07 12 01 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 204D Prog Interface 0
00 07 12 02 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 204E Prog Interface 0
00 07 15 00 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 2018 Prog Interface 0
00 07 15 01 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 2088 Prog Interface 0
00 07 15 02 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 2018 Prog Interface 0
00 07 16 01 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 2088 Prog Interface 0
00 07 16 04 ==> Base System Peripherals - Other system peripheral
Vendor 8086 Device 2018 Prog Interface 0
00 07 16 05 ==> Data Acquisition & Signal Processing Controllers - Performance Counters
Vendor 8086 Device 2088 Prog Interface 0

```

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

```
pci > pci.txt
```

```
FS0:\> pci > pci.txt
```

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

- 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 SSD7000 Series NVMe Controller was recognized, and the driver loaded normally:

SSD7105:

drivers.txt

```

1A3 0000000A ? - - - MTFTP6 Network Service Driver   Mtftp6Dxe
1A6 0000000A D - - 2 - FAT File System Driver           Fat
1A7 0000000A ? - - - SCSI Bus Driver               ScsiBus
1A8 0000000A ? - - - Scsi Disk Driver             ScsiDisk
1A9 0000000A ? - - - TcpsDxe                       TcpsDxe
1AA 00000001 D - - 1 - SMCI Redfish HI USB CDC-RNDIS Drive SmcRedfishHiUsbCdcRndisDriver
1AB 00000001 B - - 1 1 SMCI USB UNDI Driver           SmcUsbUndiDriver
1B7 00000010 ? - - - AMI CSM Block I/O Driver           CsmBlockIo
1B8 00000024 B - - 1 1 BIOS[INT10] Video Driver       CsmVideo
1B9 00000010 ? - - - <null string>
22D 00000011 D - - 4 - HighPoint NVMe RAID driver v1.1.13 Offset(0x98,0x101FF)

```

pci.txt

```

00 C5 00 00 ==> Mass Storage Controller - Non-volatile memory subsystem
Vendor 1179 Device 0116 Prog Interface 2
00 C6 00 00 ==> Mass Storage Controller - Non-volatile memory subsystem
Vendor 1179 Device 0116 Prog Interface 2
00 C7 00 00 ==> Mass Storage Controller - RAID controller
Vendor 1103 Device 7105 Prog Interface 0
00 C8 00 00 ==> Non-Essential Instrumentation - Non-Essential Instrumentation Function
Vendor 1022 Device 148A Prog Interface 0
00 C8 00 02 ==> Encryption/Decryption Controllers - Other Encrypt/Decrypt

```

SSD7202:**drivers.txt:**

```

112 00000000 ? N N 0 0 IP4 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CB8015FFF)
113 00000000 ? N N 0 0 MFTP4 Network Service Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC3641B8-2FAB-4ED3-BC1F-F9962A03454B)
114 00000000 ? N N 0 0 UDP Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963A8-906D-4A65-A7CA-BD40E5D6AF2B)
115 00000000 ? N N 0 0 IP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(58ED95CC-0B30-4EB2-8742-2D4CC9B54F2C)
116 00000000 ? N N 0 0 UDP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(D912C7BC-F098-4367-92BA-E911083C780E)
117 00000000 ? N N 0 0 DHCP6 Protocol Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E36690-34BE-4775-A651-7E4A1B69089E)
118 00000000 ? N N 0 0 MFTP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-9808-490D-AB03-321900FF41E)
118 00000000 D N N 2 0 FAT File System Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD281F)
11C 00000000 ? N N 0 0 iSCSI Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDD9F3-4872-4597-8AF9-A35AE4D3725F)
11D 00000000 ? N N 0 0 iSCSI Driver
11F 00000000 ? N N 0 0 SCSI Bus Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCC4-D0F7-4F21-A3EF-9E64B7CDE8B)
120 00000000 ? N N 0 0 Scsi Disk Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0A66E322-3740-4CCE-AD62-BD172CECA35)
124 00010092 ? 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 00010092 ? 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 00000024 ? N N 0 0 AHCI 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-B87A3E3CD063)
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 Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(94734718-08BC-47F8-96A5-EE7A5AE6A2AD)
111 00000000 ? N N 0 0 DHCP Protocol Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CB8015FFF)
112 00000000 ? N N 0 0 IP4 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC3641B8-2FAB-4ED3-BC1F-F9962A03454B)
113 00000000 ? N N 0 0 MFTP4 Network Service Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963A8-906D-4A65-A7CA-BD40E5D6AF2B)
114 00000000 ? N N 0 0 UDP Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(58ED95CC-0B30-4EB2-8742-2D4CC9B54F2C)
115 00000000 ? N N 0 0 IP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(D912C7BC-F098-4367-92BA-E911083C780E)
116 00000000 ? N N 0 0 UDP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E36690-34BE-4775-A651-7E4A1B69089E)
117 00000000 ? N N 0 0 DHCP6 Protocol Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-9808-490D-AB03-321900FF41E)
118 00000000 ? N N 0 0 MFTP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD281F)
118 00000000 D N N 2 0 FAT File System Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDD9F3-4872-4597-8AF9-A35AE4D3725F)
11C 00000000 ? N N 0 0 iSCSI Driver
11D 00000000 ? N N 0 0 iSCSI Driver
11F 00000000 ? N N 0 0 SCSI Bus Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCC4-D0F7-4F21-A3EF-9E64B7CDE8B)
120 00000000 ? N N 0 0 Scsi Disk Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0A66E322-3740-4CCE-AD62-BD172CECA35)
124 00010092 ? 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 00010092 ? 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 00000024 ? N N 0 0 AHCI 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-B87A3E3CD063)
184 00000010 ? N N 0 0 <null string>
2EE 00000011 ? N N 1 1 HighPoint NVMe RAID driver v1.1.12 PciRoot(0x2)/Pci(0x0,0x0)/Pci(0x0,0x0)/Pci(0x0,0x0)/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

```

SSD7505:**drivers.txt:**

```

110 00000000 ? N N 0 0 DNS Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(94734718-08BC-47FB-96A5-EE7A5AE6A2AD)
111 0000000A ? N N 0 0 DHCP Protocol Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9F81A1F3-3B71-4324-B39A-745CB0015FFF)
112 0000000A ? N N 0 0 IP4 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(DC364188-2FA8-4ED3-BC1F-F9962A034548)
113 0000000A ? N N 0 0 MFTFP4 Network Service Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(6D6963A8-906D-4A65-A7CA-BD40E5D6AF28)
114 0000000A ? N N 0 0 UDP Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(58ED95CC-0830-4EB2-8742-2DACC9B54F2C)
115 0000000A ? N N 0 0 IP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0912C78C-F898-4367-92BA-E911083C780E)
116 0000000A ? N N 0 0 UDP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(95E36690-348E-4775-A651-7EA41B90D89E)
117 0000000A ? N N 0 0 DHCP6 Protocol Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(99F03B99-9808-490D-A8D3-3219D0FF641E)
118 0000000A ? N N 0 0 MFTFP6 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(961578FE-B6B7-44C3-AF35-6BC705CD2B1F)
118 0000000A D N N 2 0 FAT File System Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(86CDDF93-4872-4597-8AF9-A35AE4D3725F)
11C 0000000A ? N N 0 0 iSCSI Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0167CCCA-D0F7-4F21-A3EF-9E64B7DCE8B8)
11D 0000000A ? N N 0 0 iSCSI Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(0466E322-3740-4CCE-AD62-BD172CECC335)
11F 0000000A ? N N 0 0 SCSI Bus Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4894AF1A43DA)
120 0000000A ? N N 0 0 Scsi Disk Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(5038F34E-0774-47A0-A5EF-4894AF1A43DA)
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-4894AF1A43DA)
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-4894AF1A43DA)
182 00000010 ? N N 0 0 AMI CSM Block I/O Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(29CF55F8-B675-4F5D-8F2F-B87A3ECFD063)
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 00000000 ? - - - - - UDP Network Service Driver Udp6Dxe
115 0000000A ? - - - - - IP6 Network Service Driver Ip6Dxe
116 0000000A ? - - - - - UDP6 Network Service Driver Udp6Dxe
117 0000000A ? - - - - - DHCP6 Protocol Driver Dhcp6Dxe
118 0000000A ? - - - - - MFTFP6 Network Service Driver Mftfp6Dxe
118 0000000A D - - - - - 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-4894AF1A43DA)
125 00010D92 ? - X - - - Intel(R) DCPMM 1.0.0.3474 HII Drive Fvfile(5038F34E-0774-47A0-A5EF-4894AF1A43DA)
182 00000010 ? - - - - - AMI CSM Block I/O Driver CsmBlockIo
183 00000024 B - - - - - 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

```

SSD7580A:**drivers:**

```

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-EET7A5AE6A2AD)
19D 0000000A B N N 7 34 IP4 Network Service Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(9FB1A1F3-3B71-4324-B39A-745CB015FFF)
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 DHCP 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-ABD3-3219D0FFE41E)
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(E7104484-0BD7-4448-9133-BB323D58E85B)
1AF 00000001 B N N 1 1 SMCI USB UNDI Driver Fv(5C60F367-A505-419A-859E-2A4FF6CA6FE5)/FvFile(C0C2AB85-93D8-44C5-84C8-28B62A52E197)
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(0x80E,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.T.TI 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

```

If you fail to update SSD7000 Series NVMe Controller UEFI ROM, please submit a support ticket using our [Online Support Portal](#), include a description of the problem in as much detail as possible, and upload the **driver.txt** & **pci.txt** information.