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UEFI SHELL环境下刷新BMC固件	hongfei.fu	2023/08/02

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1. 准备工作

》服务器设备外接一个显示器。

》准备一个U盘。

》把待升级的BMC固件和socflash.efi工具拷贝到U盘中，如图1所示。

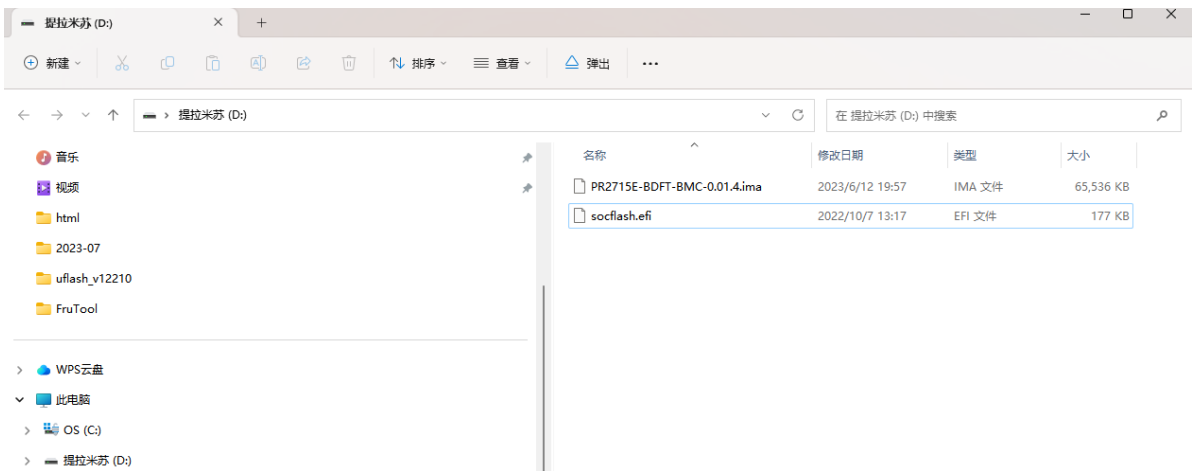


图1 准备工作

》把u盘接到需升级的服务器设备。

2. 进入UEFI SHELL环境

》在系统启动过程中按下键盘Del键进入到BIOS SETUP界面,选择Save & Exit栏下的UEFI: Built-in EFI Shell，等待一会儿后即可进入uefi shell环境，如下图所示。

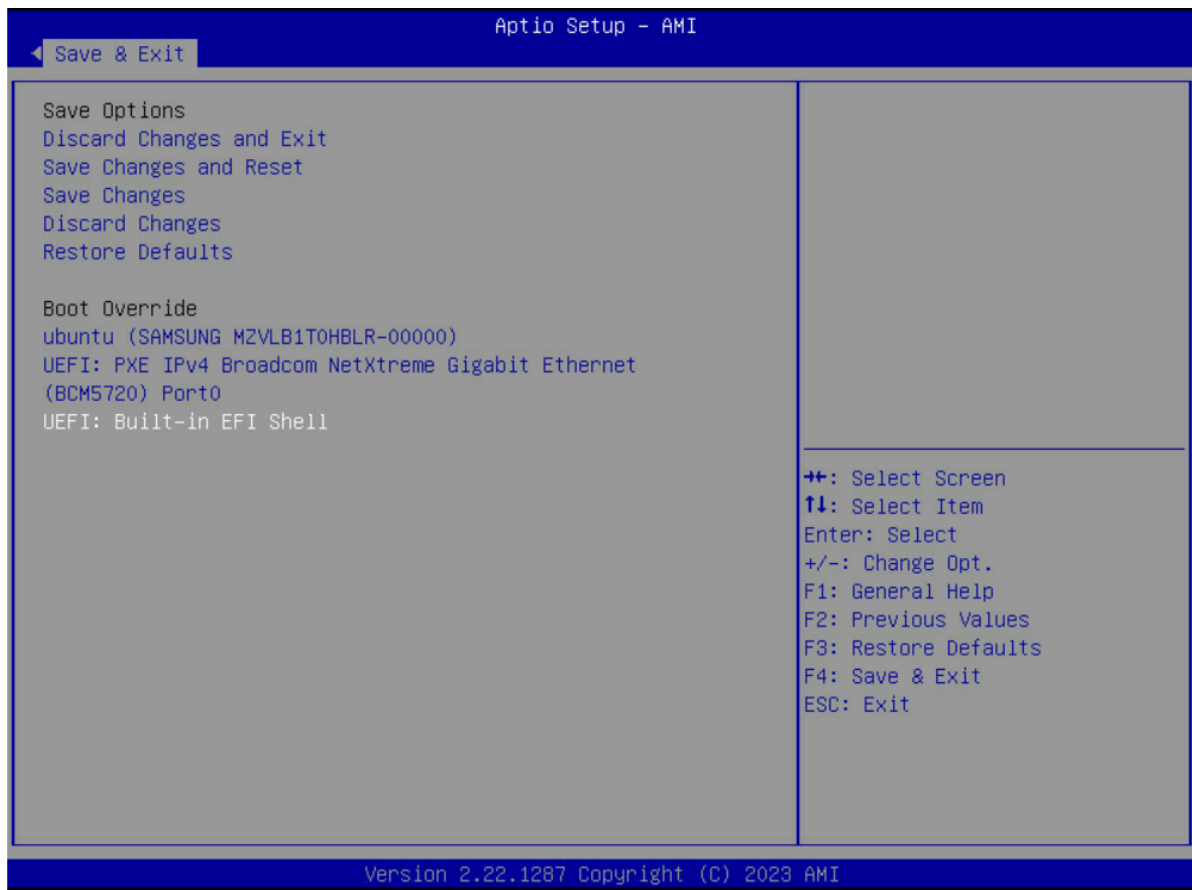


图2 BIOS设置界面下选择UEFI SHELL

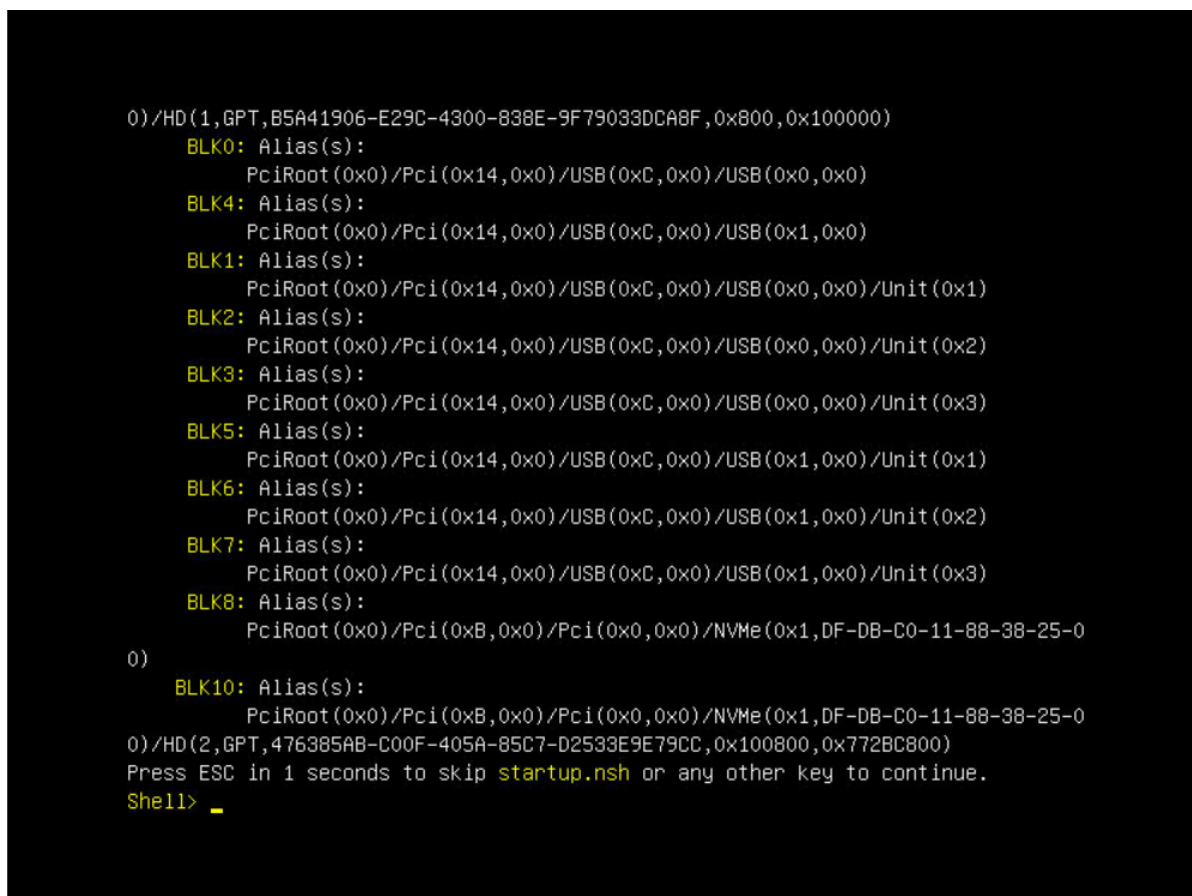


图3 UEFI SHELL环境

3. 进入U盘，使用工具升级BMC

》输入命令进入U盘目录。

```
FS0:
```

》输入命令ls可查看u盘中的文件，如图4所示。

```
ls
```

```
FS0:\> ls
Directory of: FS0:\
06/12/2023  19:57          67,108,864  PR2715E-BDFT-BMC-0.01.4.ima
10/07/2022  13:17          180,736    socflash.efi
           2 File(s)  67,289,600 bytes
           0 Dir(s)
```

图4 查看u盘文件

》升级ROM1 执行以下命令，如图5所示。

```
socflash.efi if=你要升级的bmc固件          #升级BMC ROM1
```

》此时会有是否确认升级的提示，输入“y”并回车开始升级。

```
FS0:\> socflash.efi if=PR2715E-BDFT-BMC-0.01.4.ima
ASPEED SOC Flash Utility v.1.22.10
Warning:
SoCflash utility is only for engineers to update the firmware in lab,
it is not a commercialized software product,
ASPEED has not done compatibility/reliability stress test for SoCflash.
Please do not use this utility for any mass production purpose.
Press y to continue if you are agree ....
y
Relocate IO Base: 2000
MMIO Virtual Address: 95000000
Found ASPEED Device 1a03:2600 rev. 52
Static Memory Controller Information:
CS0 Flash Type is SPI
CS1 Flash Type is SPI
CS2 Flash Type is SPI
Boot CS is 0
Option Information:
CS: 0
Flash Type: SPI
[Warning] Don't AC OFF or Reboot System During BMC Firmware Update!!
Find Flash Chip #1: 64MB SPI Flash
Update Flash Chip #1 O.K.
Update Flash Chip O.K.
```

图5 升级BMC ROM1

》升级ROM2 执行以下命令，如图6所示。

```
socflash.efi if=你要升级的bmc固件 CS=1
```

#CS=1 表示选择升级BMC ROM2

```
FS0:\> socflash.efi if=PR2715E-BDFT-BMC-0.01.4.ima cs=1
ASPEED SOC Flash Utility v.1.22.10
Warning:
SoCflash utility is only for engineers to update the firmware in lab,
it is not a commercialized software product,
ASPEED has not done compatibility/reliability stress test for SoCflash.
Please do not use this utility for any mass production purpose.
Press y to continue if you are agree ....
y
Relocate IO Base: 2000
MMIO Virtual Address: 95000000
Found ASPEED Device 1a03:2600 rev. 52
Static Memory Controller Information:
CS0 Flash Type is SPI
CS1 Flash Type is SPI
CS2 Flash Type is SPI
Boot CS is 0
Option Information:
CS: 1
Flash Type: SPI
[Warning] Don't AC OFF or Reboot System During BMC Firmware Update!!
Find Flash Chip #1: 64MB SPI Flash
Update Flash Chip #1 O.K.
Update Flash Chip O.K.
```

图6 升级BMC ROM2

4. 验证是否升级成功

》可以通过以下命令查询ROM1和ROM2对应的版本号来确定升级是否成功。

```
ipmitool -I lanplus -H IP -U username -P password raw 0x32 0x8f 0x9 0x1 //查询
ROM1固件版本信息
```

```
ipmitool -I lanplus -H IP -U username -P passwordraw 0x32 0x8f 0x9 0x2 //查询
ROM2固件版本信息
```

》查询ROM1 版本号，如图7所示。

```
PS C:\ipmitool-1.8.18-windows> .\ipmitool.exe -I lanplus -H 192.168.43.63 -U admin -P admin123. raw 0x32 0x8f 0x9 0x1
00 01 04 00 00 00
```

图7 查询ROM1 版本号

》查询ROM2版本号，如图8所示。

```
PS C:\ipmitool-1.8.18-windows> .\ipmitool.exe -I lanplus -H 192.168.43.63 -U admin -P admin123. raw 0x32 0x8f 0x9 0x2
00 01 04 00 00 00
```

图8 查询ROM2 版本号

