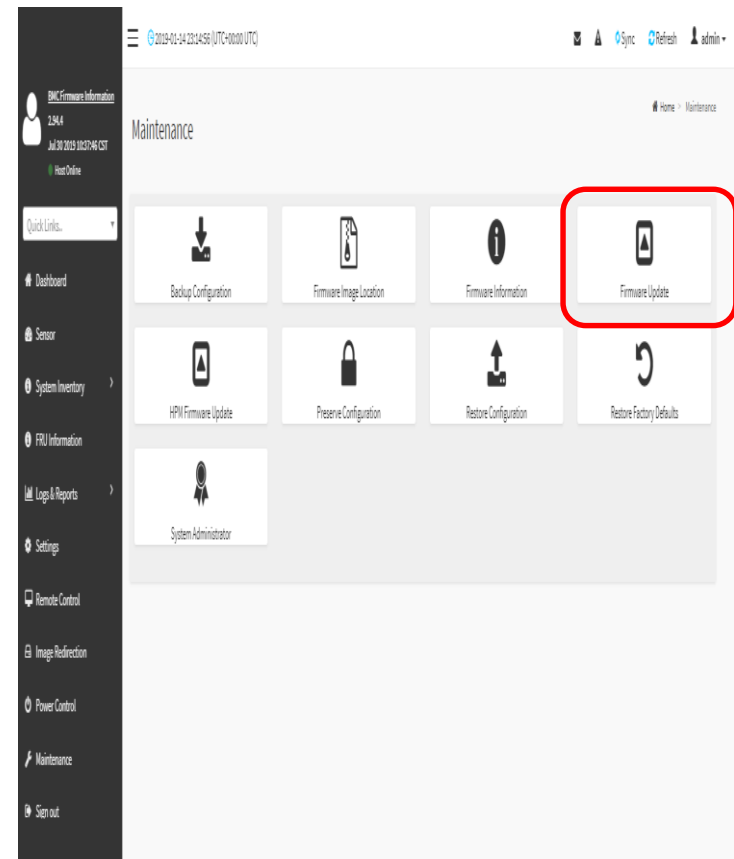
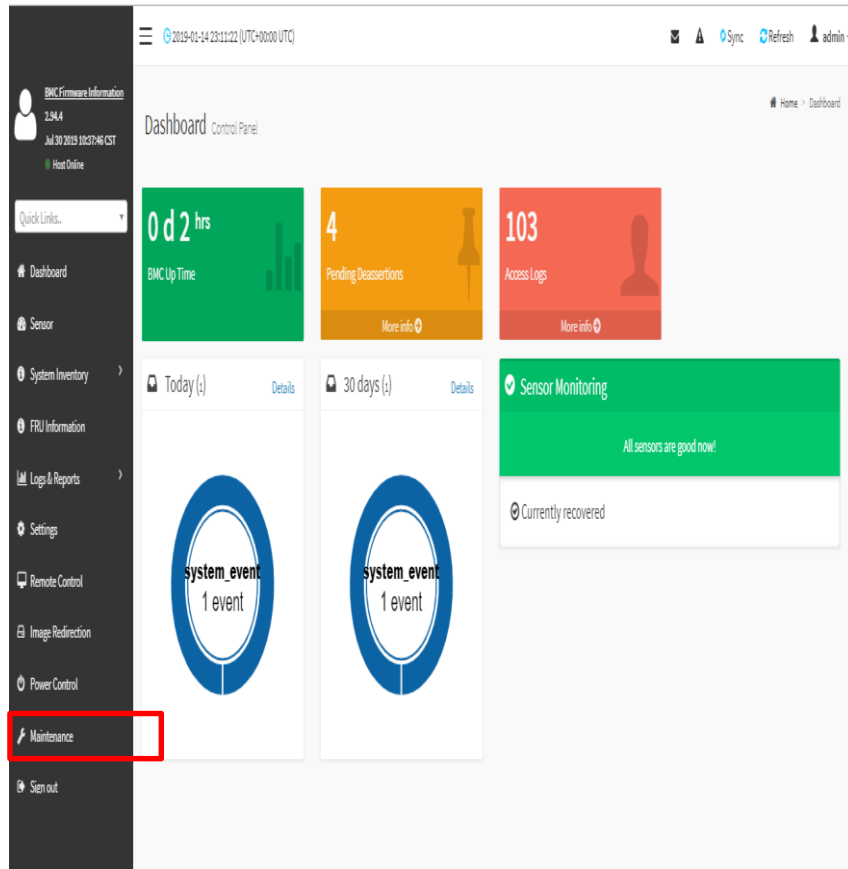


# How to update GBT server FW

- Update via BMCwebGUI P3
- Update with EFI shell utility P12

- Open Firmware Update Page , click Maintenance > firmware Update from the menu bar like below the image ◦



# ● Sample screenshot of firmware Update page shown as below ○

Below the page is for BIOS update

The screenshot shows the 'Firmware Update' page for BIOS. The page has a header with a date and time '2019-01-14 23:19:16 (UTC+00:00 UTC)' and a user 'admin'. The main content area has a title 'Firmware Update' and a breadcrumb 'Home > Maintenance > Firmware Update'. Below the title, there are two instructions: 1. The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Firmware Image Location' under Maintenance. 2. Firmware upgrade is in process. Refreshing this page or Closing this page will interrupt this process and will likely cause the BMC to not work as it should, so it is highly recommended that you do not continue with the refresh or close Page. Below the instructions, there is a 'Protocol Type' dropdown menu set to 'HTTP' and an 'Update Type' dropdown menu set to 'BIOS', both highlighted with a red rectangle. Below the dropdowns, there is a 'Select Firmware Image' section with a 'Choose File' button and 'No file chosen' text. At the bottom, there is a green 'Start firmware update' button.

Below the page for BMC update

The screenshot shows the 'Firmware Update' page for BMC. The page has a header with a date and time '2019-01-14 23:19:16 (UTC+00:00 UTC)' and a user 'admin'. The main content area has a title 'Firmware Update' and a breadcrumb 'Home > Maintenance > Firmware Update'. Below the title, there are two instructions: 1. The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Firmware Image Location' under Maintenance. 2. Firmware upgrade is in process. Refreshing this page or Closing this page will interrupt this process and will likely cause the BMC to not work as it should, so it is highly recommended that you do not continue with the refresh or close Page. Below the instructions, there is a 'Protocol Type' dropdown menu set to 'HTTP' and an 'Update Type' dropdown menu set to 'BIOS', both highlighted with a red rectangle. Below the dropdowns, there is a 'Select Firmware Image' section with a 'Choose File' button and 'No file chosen' text. At the bottom, there is a green 'Start firmware update' button.

Item	Preserve Configuration Item	Preserve Status
1	SDR	Overwrite
2	FRU	Overwrite
3	SEL	Overwrite
4	IPMI	Overwrite
5	NETWORK	Overwrite
6	UTP	Overwrite
7	SNMP	Overwrite
8	SSH	Overwrite
9	SSH	Overwrite
10	SSH	Overwrite
11	SSH	Overwrite
12	SSH	Overwrite
13	SSH	Overwrite
14	SSH	Overwrite
15	SSH	Overwrite
16	SSH	Overwrite
17	SSH	Overwrite
18	SSH	Overwrite
19	SSH	Overwrite
20	SSH	Overwrite
21	SSH	Overwrite
22	SSH	Overwrite
23	SSH	Overwrite
24	SSH	Overwrite
25	SSH	Overwrite
26	SSH	Overwrite
27	SSH	Overwrite
28	SSH	Overwrite
29	SSH	Overwrite
30	SSH	Overwrite
31	SSH	Overwrite
32	SSH	Overwrite
33	SSH	Overwrite
34	SSH	Overwrite
35	SSH	Overwrite
36	SSH	Overwrite
37	SSH	Overwrite
38	SSH	Overwrite
39	SSH	Overwrite
40	SSH	Overwrite
41	SSH	Overwrite
42	SSH	Overwrite
43	SSH	Overwrite
44	SSH	Overwrite
45	SSH	Overwrite
46	SSH	Overwrite
47	SSH	Overwrite
48	SSH	Overwrite
49	SSH	Overwrite
50	SSH	Overwrite
51	SSH	Overwrite
52	SSH	Overwrite
53	SSH	Overwrite
54	SSH	Overwrite
55	SSH	Overwrite
56	SSH	Overwrite
57	SSH	Overwrite
58	SSH	Overwrite
59	SSH	Overwrite
60	SSH	Overwrite
61	SSH	Overwrite
62	SSH	Overwrite
63	SSH	Overwrite
64	SSH	Overwrite
65	SSH	Overwrite
66	SSH	Overwrite
67	SSH	Overwrite
68	SSH	Overwrite
69	SSH	Overwrite
70	SSH	Overwrite
71	SSH	Overwrite
72	SSH	Overwrite
73	SSH	Overwrite
74	SSH	Overwrite
75	SSH	Overwrite
76	SSH	Overwrite
77	SSH	Overwrite
78	SSH	Overwrite
79	SSH	Overwrite
80	SSH	Overwrite
81	SSH	Overwrite
82	SSH	Overwrite
83	SSH	Overwrite
84	SSH	Overwrite
85	SSH	Overwrite
86	SSH	Overwrite
87	SSH	Overwrite
88	SSH	Overwrite
89	SSH	Overwrite
90	SSH	Overwrite
91	SSH	Overwrite
92	SSH	Overwrite
93	SSH	Overwrite
94	SSH	Overwrite
95	SSH	Overwrite
96	SSH	Overwrite
97	SSH	Overwrite
98	SSH	Overwrite
99	SSH	Overwrite
100	SSH	Overwrite

# ● BMC update step (1)

In BMC Web UI  
To update need select “ima\_enc” file

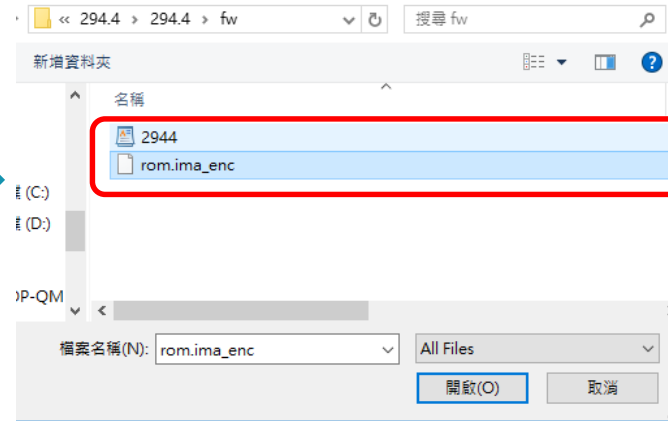
Uploaded signImage Public Key Info  
Tue Jul 30 02:37:25 2019

New signImage Public Key

No file chosen

Select Firmware Image

No file chosen



9 KVM Overwrite

10 AUTHENTICATION Overwrite

11 SYSLOG Overwrite

12 WEB Overwrite

13 REDFISH Overwrite

Uploaded signImage Public Key Info  
Tue Jul 30 02:37:25 2019

New signImage Public Key

No file chosen

Select Firmware Image

rom.ima\_enc

Verifying...

Uploading 100%

Uploaded signImage Public Key Info  
Tue Jul 30 02:37:25 2019

New signImage Public Key

No file chosen

Select Firmware Image

rom.ima\_enc

## ● BMC update step (2) ◦

Uploading to 100% please click “Flash selected sections” to start the firmware update

Select Firmware image

Choose File rom.ima\_enc

Only the selected sections will be updated:

Section Name	Existing version	Uploaded version	
boot	2.4.000000	2.4.000000	✓
conf	2.4.000000	2.4.000000	✓
conf	2.4.000000	2.4.000000	✓
root	2.4.000000	2.4.000000	✓
osimage	2.4.000000	2.4.000000	✓
www	2.4.000000	2.4.000000	✓
testapps	2.4.000000	2.4.000000	✓
ast2500e	2.94.4	2.94.4	✓

Flash selected sections

Uploading 100%



Select Firmware image

Choose File rom.ima\_enc

Only the selected sections will be updated:

Section Name	Existing version	Uploaded version	
boot	2.4.000000	2.4.000000	✓
conf	2.4.000000	2.4.000000	✓
conf	2.4.000000	2.4.000000	✓
root	2.4.000000	2.4.000000	✓
osimage	2.4.000000	2.4.000000	✓
www	2.4.000000	2.4.000000	✓
testapps	2.4.000000	2.4.000000	✓
ast2500e	2.94.4	2.94.4	✓

Processing ...

Starting flash...

Flashing... (25% done)

## ● BMC update step (3)

Waiting to flashing 100% please click firmware successfully ok button then next page will show will open new page please also click "ok" button

After then please AC cycle system

Select Firmware image

rom.ima\_enc

Only the selected sections will be updated

Section Name	Existing version	New version	Selected
boot	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
conf	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
conf	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
root	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
osimage	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
www	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
testapps	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
ast2500e	2.94.4	2.94.4	<input checked="" type="checkbox"/>

Starting flash...

Flashing... (100% done)

10.1.111.73 says  
firmware image has been updated successfully

OK

Select Firmware image

rom.ima\_enc

Only the selected sections will be updated

Section Name	Existing version	New version	Selected
boot	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
conf	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
conf	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
root	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
osimage	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
www	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
testapps	2.4.000000	2.4.000000	<input checked="" type="checkbox"/>
ast2500e	2.94.4	2.94.4	<input checked="" type="checkbox"/>

Starting flash...

Flashing... (100% done)

10.1.111.73 says  
Firmware reset has been called. Close the current session, and open a new session after a couple of minutes.

OK

## ● BIOS update step (1) .

1. The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Firmware Image Location' under Maintenance.

2. Firmware upgrade is in process. Refreshing this page or Closing this page will interrupt this process and will likely cause the BMC to not work as it should, so it is highly recommended that you do not continue with the refresh or close Page.

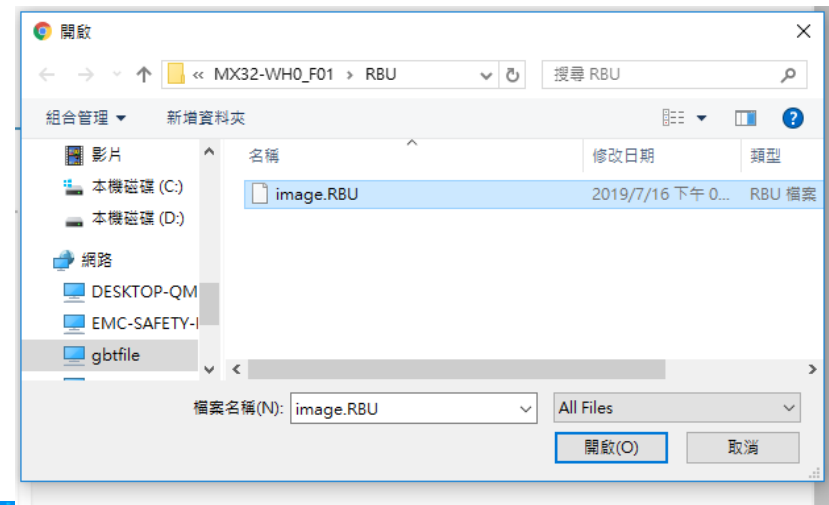
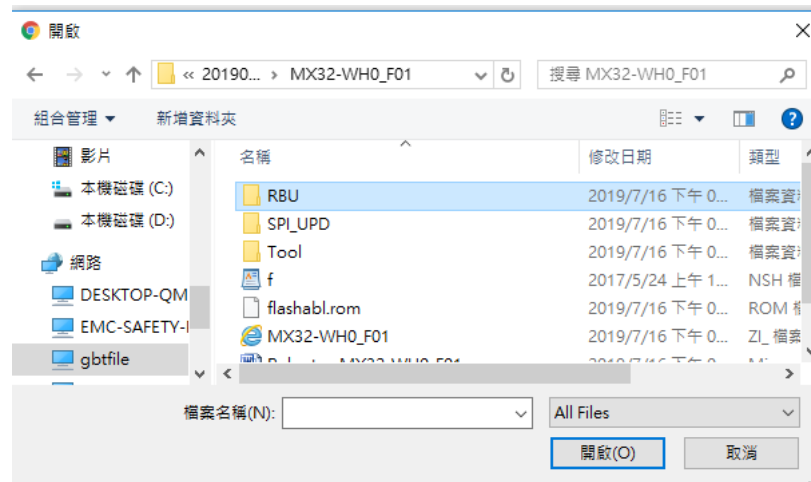
Protocol Type: HTTP

Update Type: BIOS

Select Firmware Image

Choose File No file chosen

Start firmware update





## ● BIOS update step (2) ◦

Upload the image.RBU file click "start firmware update" button ,after then please click another page the "OK" button

Firmware Update

1. The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Firmware Image Location' under Maintenance.

2. Firmware upgrade is in process. Refreshing this page or Closing this page will interrupt this process and will likely cause the BMC to not work as it should, so it is highly recommended that you do not continue with the refresh or close Page.

Protocol Type: HTTP

Update Type: BIOS

Select Firmware Image

Choose File image.RBU

Start firmware update

10.1.111.73/#maintenance/firmware\_update

Firmware Update

10.1.111.73 says  
We will start the firmware upgrade now. Please reset system after BIOS update finish. Do you want to continue?

OK Cancel

1. The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Firmware Image Location' under Maintenance.

2. Firmware upgrade is in process. Refreshing this page or Closing this page will interrupt this process and will likely cause the BMC to not work as it should, so it is highly recommended that you do not continue with the refresh or close Page.

Protocol Type: HTTP

Update Type: BIOS

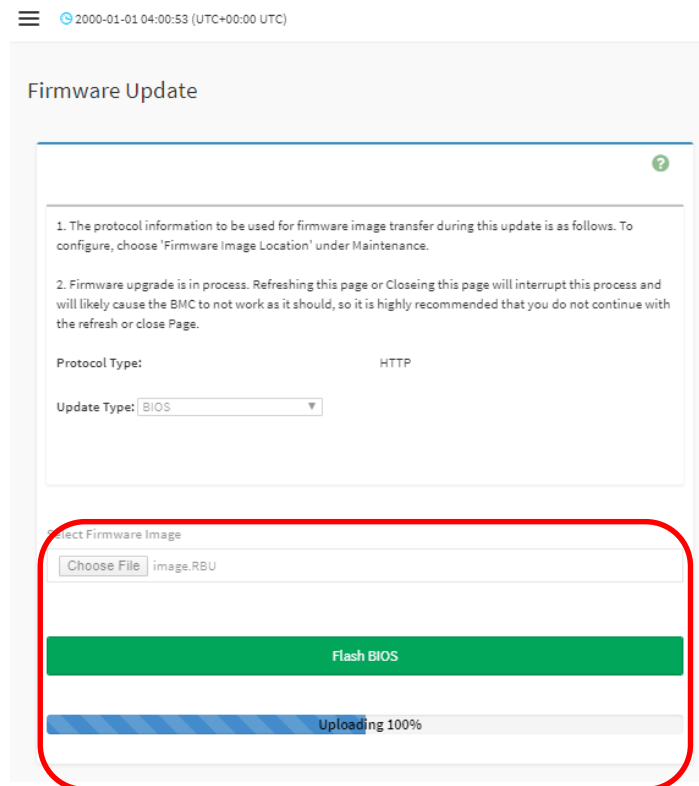
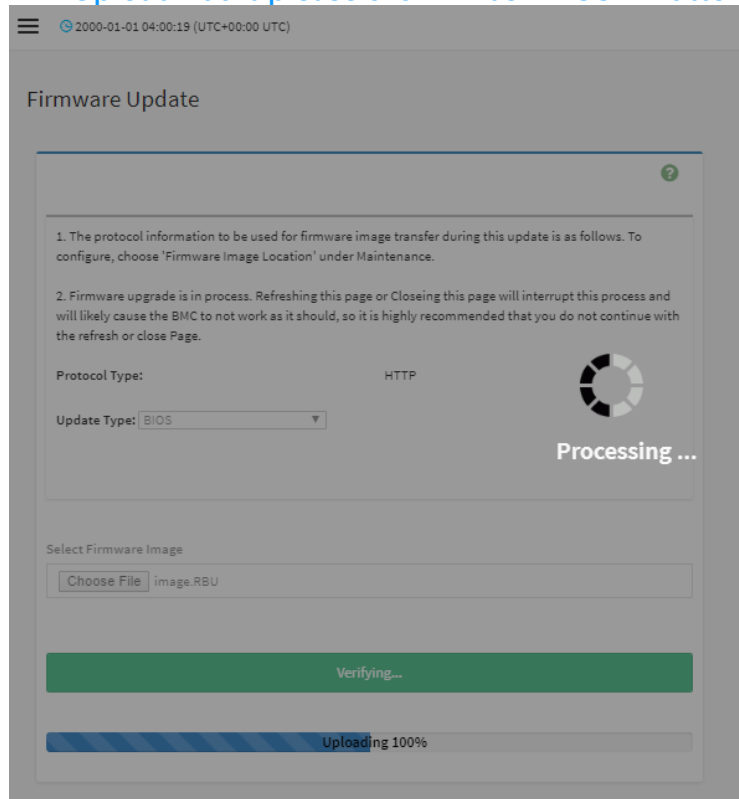
Select Firmware Image

Choose File image.RBU

Start firmware update

# ● BIOS update step (3)

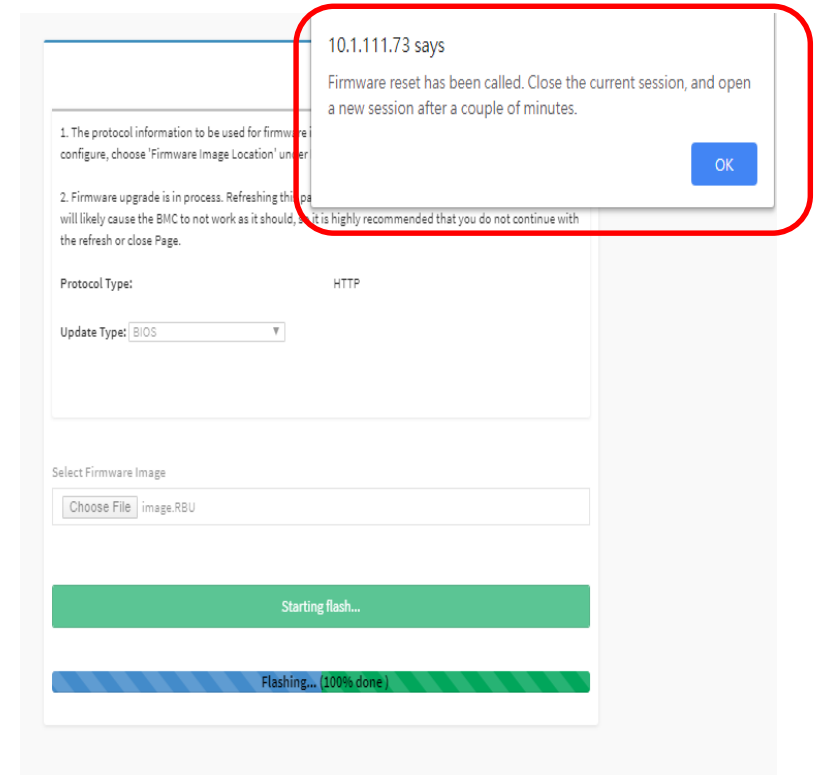
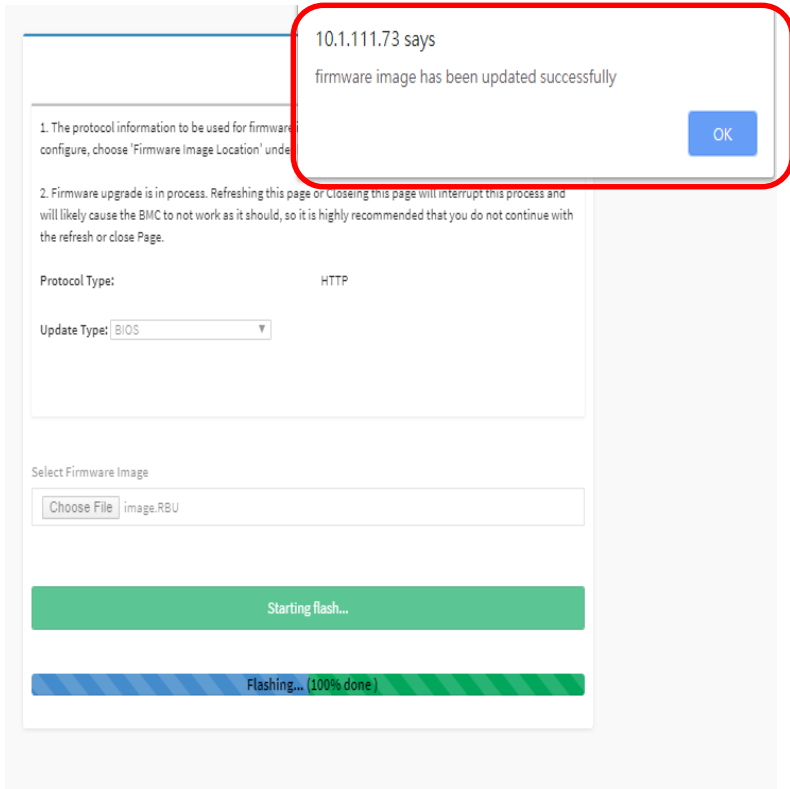
Upload 100% please click "Flash BIOS " Button



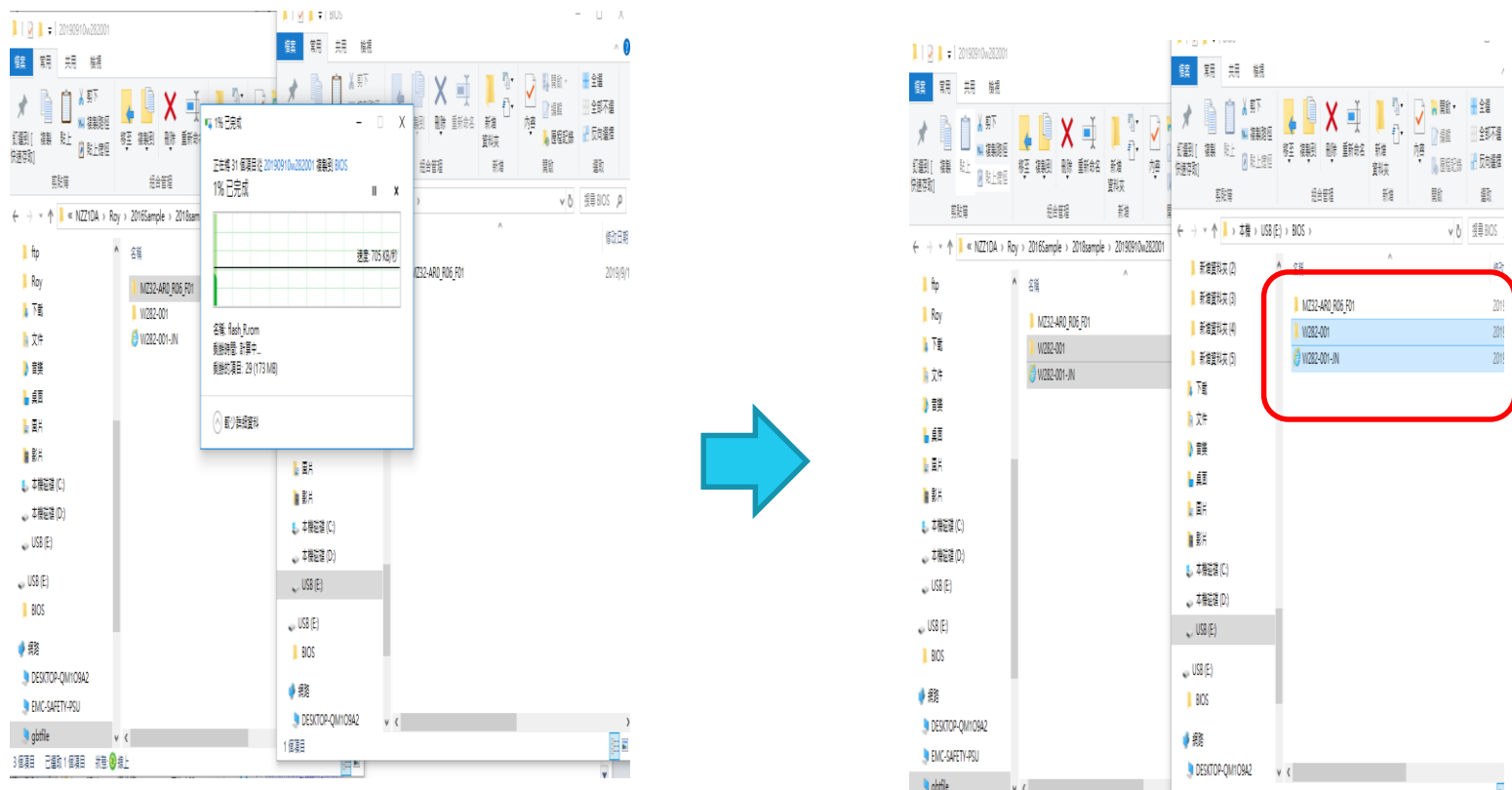
## ● BIOS update step (4)

Waiting for flashing to 100% please click updated successfully "ok" button after will jump another window also click "OK" button

After then please AC cycle

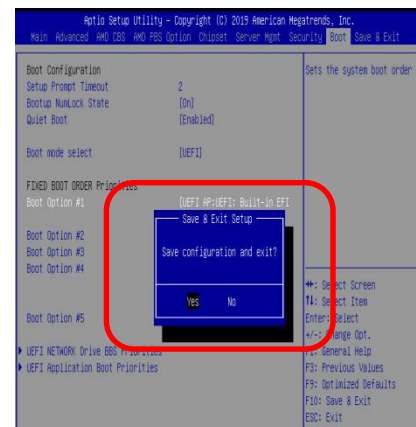
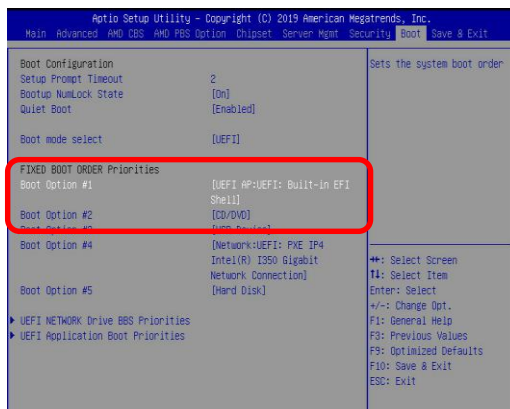
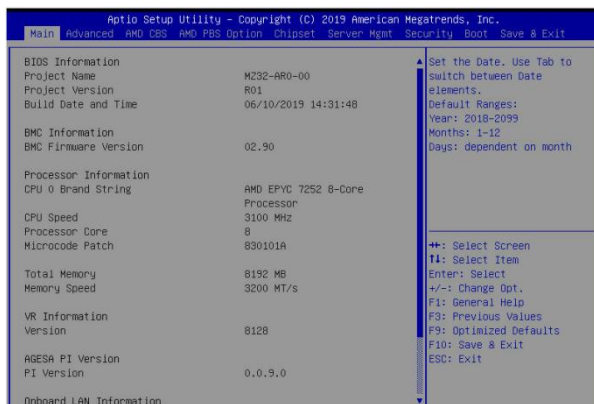


- Update BIOS BMC SKU in UEFI mode (1)  
please extract BIOS /BMC/ SKU zip archive to USB disk



## ● Update BIOS BMC SKU in UEFI mode (2)

- 1) Install USB disk on system then power on
- 2) Into the BIOS setup menu
- 3) Select to boot page
- 4) boot option # 1 select “UEFI: Built-in EFI Shell”
- 5) Press F10 save & Exit to reboot



- Update BIOS BMC SKU in UEFI mode (3)

1) Boot to UEFI Shell interface

2) Find out USB disk

3) if USB disk is for "fs0" ,please type command "fs0:" into the USB disk

```
UEFI Interactive Shell v2.2
EDK II
UEFI v2.70 (American Megatrends, 0x0005000E)
Mapping table
FS0: Alias(s):HD0b0c0b:BLK1:
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x2,0x0)/HD(1,MBR,0x00E511CF,0x3F,
0x3C87C1)
BLK10: Alias(s):
PciRoot(0x2)/Pci(0x8,0x2)/Pci(0x0,0x0)/Sata(0x0,0xFFFF,0x0)
BLK0: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x2,0x0)
BLK2: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)
BLK6: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)
BLK3: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)/Unit(0x1)
BLK4: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)/Unit(0x2)
BLK5: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)/Unit(0x3)
BLK7: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)/Unit(0x1)
BLK8: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)/Unit(0x2)
BLK9: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)/Unit(0x3)
Press ESC in 1 seconds to skip startup.nsh or any other key to continue.
Shell>
```



```
EDK II
UEFI v2.70 (American Megatrends, 0x0005000E)
Mapping table
FS0: Alias(s):HD0b0c0b:BLK1:
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x2,0x0)/HD(1,MBR,0x00E511CF,0x3F,
0x3C87C1)
BLK10: Alias(s):
PciRoot(0x2)/Pci(0x8,0x2)/Pci(0x0,0x0)/Sata(0x0,0xFFFF,0x0)
BLK0: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x2,0x0)
BLK2: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)
BLK6: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)
BLK3: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)/Unit(0x1)
BLK4: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)/Unit(0x2)
BLK5: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x0,0x0)/Unit(0x3)
BLK7: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)/Unit(0x1)
BLK8: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)/Unit(0x2)
BLK9: Alias(s):
PciRoot(0x1)/Pci(0x8,0x1)/Pci(0x0,0x3)/USB(0x1,0x0)/USB(0x3,0x0)/USB(0x2,0x0)/Unit(0x3)
Press ESC in 1 seconds to skip startup.nsh or any other key to continue.
Shell> fs0:
FS0:\>
```

- Update BIOS BMC SKU in UEFI mode (4)

Type “ls” or “dir” command into the USB disk to check the folders which has BMC, BIOS and SKU files in.

```
FS0:\> ls
Directory of: FS0:\
09/10/2019  15:44 <DIR>          4,096  BIOS
            0 File(s)          0 bytes
            1 Dir(s)
FS0:\> cd bios
FS0:\bios\> ks
'ks' is not recognized as an internal or external command, operable program, or script file.
FS0:\bios\> ls
Directory of: FS0:\bios\
09/10/2019  15:44 <DIR>          4,096  .
09/10/2019  15:44 <DIR>           0  ..
09/10/2019  15:40 <DIR>          4,096  M232-AR0_R06_F01
09/10/2019  15:38 <DIR>          4,096  W282-001
09/02/2019  11:11             256,239  W282-001-JN.zi_
08/30/2019  20:55 <DIR>          4,096  W282-001-JN
            1 File(s)      256,239 bytes
            5 Dir(s)
FS0:\bios\> dir
Directory of: FS0:\bios\
09/10/2019  15:44 <DIR>          4,096  .
09/10/2019  15:44 <DIR>           0  ..
09/10/2019  15:40 <DIR>          4,096  M232-AR0_R06_F01
09/10/2019  15:38 <DIR>          4,096  W282-001
09/02/2019  11:11             256,239  W282-001-JN.zi_
08/30/2019  20:55 <DIR>          4,096  W282-001-JN
            1 File(s)      256,239 bytes
            5 Dir(s)
FS0:\bios\> _
```

- Steps to update BIOS (1)

Type command "cd " into BIOS firmware folder

```
FS0:\> ls
Directory of: FS0:\
09/10/2019 15:44 <DIR>          4,096 BIOS
0 File(s)          0 bytes
1 Dir(s)
FS0:\> cd bios
FS0:\bios> ks
'ks' is not recognized as an internal or external command, operable program, or script file.
FS0:\bios> ls
Directory of: FS0:\bios\
09/10/2019 15:44 <DIR>          4,096 .
09/10/2019 15:44 <DIR>          0 ..
09/10/2019 15:40 <DIR>          4,096 M232-AR0_R06_F01
09/10/2019 15:38 <DIR>          4,096 W282-001
09/02/2019 11:11          256,239 W282-001-JN.zi_
08/30/2019 20:55 <DIR>          4,096 W282-001-JN
1 File(s)          256,239 bytes
5 Dir(s)
FS0:\bios> dir
Directory of: FS0:\bios\
09/10/2019 15:44 <DIR>          4,096 .
09/10/2019 15:44 <DIR>          0 ..
09/10/2019 15:40 <DIR>          4,096 M232-AR0_R06_F01
09/10/2019 15:38 <DIR>          4,096 W282-001
09/02/2019 11:11          256,239 W282-001-JN.zi_
08/30/2019 20:55 <DIR>          4,096 W282-001-JN
1 File(s)          256,239 bytes
5 Dir(s)
FS0:\bios> cd M232-AR0_R06_F01_
```



```
1 File(s)          256,239 bytes
5 Dir(s)
FS0:\bios> dir
Directory of: FS0:\bios\
09/10/2019 15:44 <DIR>          4,096 .
09/10/2019 15:44 <DIR>          0 ..
09/10/2019 15:40 <DIR>          4,096 M232-AR0_R06_F01
09/10/2019 15:38 <DIR>          4,096 W282-001
09/02/2019 11:11          256,239 W282-001-JN.zi_
08/30/2019 20:55 <DIR>          4,096 W282-001-JN
1 File(s)          256,239 bytes
5 Dir(s)
FS0:\bios> cd M232-AR0_R06_F01
FS0:\bios\M232-AR0_R06_F01> ls
Directory of: FS0:\bios\M232-AR0_R06_F01\
09/10/2019 17:18 <DIR>          4,096 .
09/10/2019 17:18 <DIR>          4,096 ..
08/14/2019 10:36          156 f.nsh
08/21/2019 13:50          16,777,216 flash_R.rom
08/21/2019 14:51          27,223,259 M232-AR0_R06_F01.zi_
07/25/2019 00:00          491,458 ReInotes_M232-AR0_F01_Naples.pdf
08/21/2019 14:43          358,705 ReInotes_M232-AR0_R06_F01.pdf
08/21/2019 14:45          362,652 ReInotes_M232-AR0_R06_Rome.pdf
09/10/2019 15:40 <DIR>          4,096 RBU
09/10/2019 15:40 <DIR>          4,096 SPI_UPD
09/10/2019 15:40 <DIR>          4,096 Tool
6 File(s)          45,213,446 bytes
5 Dir(s)
FS0:\bios\M232-AR0_R06_F01> _
```



- Steps to update BIOS (2)

Type command “f.nsh” to fresh BIOS

```
1 File(s)      256,239 bytes
5 Dir(s)
FS0:\bios> dir
Directory of: FS0:\bios\
09/10/2019  15:44 <DIR>          4,096 .
09/10/2019  15:44 <DIR>           0 ..
09/10/2019  15:40 <DIR>          4,096 M232-AR0_R06_F01
09/10/2019  15:38 <DIR>          4,096 W282-001
09/02/2019  11:11             256,239 W282-001-JN.zi_
08/30/2019  20:55 <DIR>          4,096 W282-001-JN
1 File(s)      256,239 bytes
5 Dir(s)
FS0:\bios> cd M232-AR0_R06_F01
FS0:\bios\M232-AR0_R06_F01> ls
Directory of: FS0:\bios\M232-AR0_R06_F01\
09/10/2019  17:18 <DIR>          4,096 .
09/10/2019  17:18 <DIR>          4,096 ..
08/14/2019  10:36             156 f.nsh
08/21/2019  13:50          16,777,216 flash_R.rom
08/21/2019  14:51          27,223,259 M232-AR0_R06_F01.zi_
07/25/2019  00:00           491,458 ReInotes_M232-AR0_F01_Naples.pdf
08/21/2019  14:43           358,705 ReInotes_M232-AR0_R06_F01.pdf
08/21/2019  14:45           362,652 ReInotes_M232-AR0_R06_Rome.pdf
09/10/2019  15:40 <DIR>          4,096 RBU
09/10/2019  15:40 <DIR>          4,096 SPI_UPD
09/10/2019  15:40 <DIR>          4,096 Tool
6 File(s)      45,213,446 bytes
5 Dir(s)
FS0:\bios\M232-AR0_R06_F01> _
```



```
09/10/2019  15:40 <DIR>          4,096 M232-AR0_R06_F01
09/10/2019  15:38 <DIR>          4,096 W282-001
09/02/2019  11:11             256,239 W282-001-JN.zi_
08/30/2019  20:55 <DIR>          4,096 W282-001-JN
1 File(s)      256,239 bytes
5 Dir(s)
FS0:\BIOS> cd M232-AR0_R06_F01
FS0:\BIOS\M232-AR0_R06_F01> ls
Directory of: FS0:\BIOS\M232-AR0_R06_F01\
09/10/2019  17:18 <DIR>          4,096 .
09/10/2019  17:18 <DIR>          4,096 ..
08/14/2019  10:36             156 f.nsh
08/21/2019  13:50          16,777,216 flash_R.rom
08/21/2019  14:51          27,223,259 M232-AR0_R06_F01.zi_
07/25/2019  00:00           491,458 ReInotes_M232-AR0_F01_Naples.pdf
08/21/2019  14:43           358,705 ReInotes_M232-AR0_R06_F01.pdf
08/21/2019  14:45           362,652 ReInotes_M232-AR0_R06_Rome.pdf
09/10/2019  15:40 <DIR>          4,096 RBU
09/10/2019  15:40 <DIR>          4,096 SPI_UPD
09/10/2019  15:40 <DIR>          4,096 Tool
6 File(s)      45,213,446 bytes
5 Dir(s)
FS0:\BIOS\M232-AR0_R06_F01> f.nsh
FS0:\BIOS\M232-AR0_R06_F01> SPI_UPD\AfuEfix64.efi SPI_UPD\image.bin /p /b /n /k /RLC:F
-----+-----
|                               |
|   AMI Firmware Update Utility v5.12.01.1977   |
|   Copyright (C)2019 American Megatrends Inc. All Rights Reserved.   |
|                               |
|-----+-----
Reading flash ..... 0x000D9000 (5%)
```

- Steps to update BIOS (3)

waiting for flash completed then AC power cycle

```
FS0:\BIOS\M232-AR0_R06_F01\> SPI_UPD\AfuEfix64.efi SPI_UPD\image.bin /p /b /n /k /RLC:F
+-----+
|          AMI Firmware Update Utility v5.12.01.1977          |
| Copyright (C)2019 American Megatrends Inc. All Rights Reserved. |
+-----+
- ACAU Support .....Enabled.
- ACAU Version : 100.
Reading flash ..... done
Check Bin file is multi tank ROM ..... done
User <<OACMK010>> ROM to Flash.
- Secure Flash enabled, recalculate ROM size with signature... Enable.
- FFS checksums ..... ok
- Check RomLayout ..... ok.
Loading capsule to secure memory buffer ... done
Erasing Boot Block ..... done
Updating Boot Block ..... done
Verifying Boot Block ..... done
Erasing Main Block ..... done
Updating Main Block ..... done
Verifying Main Block ..... done
Erasing NVRAM Block ..... done
Updating NVRAM Block ..... done
Verifying NVRAM Block ..... done
Erasing NCB Block ..... done
Updating NCB Block ..... done
Verifying NCB Block ..... done
Process completed.
FS0:\BIOS\M232-AR0_R06_F01\> _
```

- Steps to update BMC (1)

please use "cd" command into BMC folder then move to utility > fwud > uefi

```
0 File(s)          0 bytes
3 Dir(s)
FS0:\bios\W282-001\utility> cd ..
FS0:\bios\W282-001> ls
Directory of: FS0:\bios\W282-001\
09/10/2019  17:22 <DIR>          4,096  .
09/10/2019  17:22 <DIR>          4,096  ..
09/10/2019  15:38 <DIR>          4,096  fw
09/10/2019  15:38 <DIR>          4,096  utility
0 File(s)          0 bytes
4 Dir(s)
FS0:\bios\W282-001> cd utility
FS0:\bios\W282-001\utility> cd fwud
FS0:\bios\W282-001\utility\fwud> uefi
'uefi' is not recognized as an internal or external command, operable program, or script file.
FS0:\bios\W282-001\utility\fwud> cd uefi
FS0:\bios\W282-001\utility\fwud\uefi> ls
Directory of: FS0:\bios\W282-001\utility\fwud\uefi\
09/10/2019  17:24 <DIR>          4,096  .
09/10/2019  17:24 <DIR>          4,096  ..
06/21/2019  17:05              86  flashall.nsh
07/18/2018  16:17          85,824  Kcs.efi
07/13/2018  13:26         171,456  socflash.efi
3 File(s)      257,366 bytes
2 Dir(s)
FS0:\bios\W282-001\utility\fwud\uefi> _
```

- Steps to update BMC (2)

please type “flashall.nsh” to update the BMC firmware , then waiting firmware complete doing it AC cycle

```
FS0:\BIOS\W282-001\utility\fwud\uefi> flashall.nsh
FS0:\BIOS\W282-001\utility\fwud\uefi> Kcs.efi 2e 0 20 a 3c 0 24 0
Ipmit command responds Success
Ipmit command Completion Code 0
Response Data 0A 3C 00
FS0:\BIOS\W282-001\utility\fwud\uefi> socflash.efi cs=0 if=../../../../fw/299.bin count=0x4000000
ASPEED SOC Flash Utility v.1.15.00
Relocate IO Base: e000
MMIO Virtual Address: 9a000000
Found ASPEED Device 1a03:2500 rev. 41
Static Memory Controller Information:
CS0 Flash Type is SPI
CS1 Flash Type is SPI
CS2 Flash Type is SPI
CS3 Flash Type is NOR
CS4 Flash Type is NOR
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.
```

- Steps to update SKU

1) please use "cd" command into the SKU folder

2) type "upsku.nsh" to update SKU

3) complete the firmware update please do AC power cycle

```
09/10/2019 17:26 <DIR>          4,096  ..
08/30/2019 20:55             85,824  Kcs.efi
08/30/2019 20:55          171,456  socflash.efi
08/30/2019 20:55              272   sample.nsh
08/30/2019 20:55          454,240  Bmcprog018.efi
08/30/2019 20:55           14,397  SKU_Readme.docx
08/30/2019 20:55           3,935   SKU.xml
08/30/2019 20:55           269   upsku.nsh
01/02/2019 18:17           4,548  mysku.xml
01/02/2019 18:17           2,759  mysku.xml.gz
01/02/2019 18:17           3,328  SKU.BIN
      10 File(s)      741,028 bytes
       2 Dir(s)
FS0:\BIOS\W282-001-JN\  upsku.nsh
FS0:\BIOS\W282-001-JN\> if %* == ENSHM then
FS0:\BIOS\W282-001-JN\>      Bmcprog018.efi WS=UPDATE DSBSHM

bmcprog.exe Version 0.18

bmcprog.exe is used for GIGABYTE BMC firmware
configuration under DOS/Linux. It helps production line
to program FRU, MAC Address and Fan Policy into BMC.

      Board ID       : 0x1008
      Rand Code      : 25620675

FS0:\BIOS\W282-001-JN\>      Kcs.efi 2e 0 20 a 3c 0 24 0 > null
```