

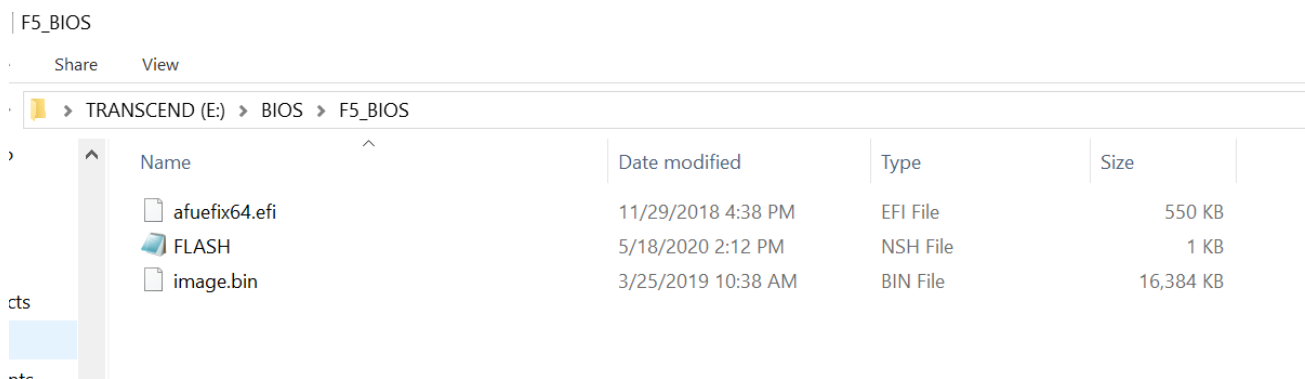
BIOS Update SOP

UEFI Shell

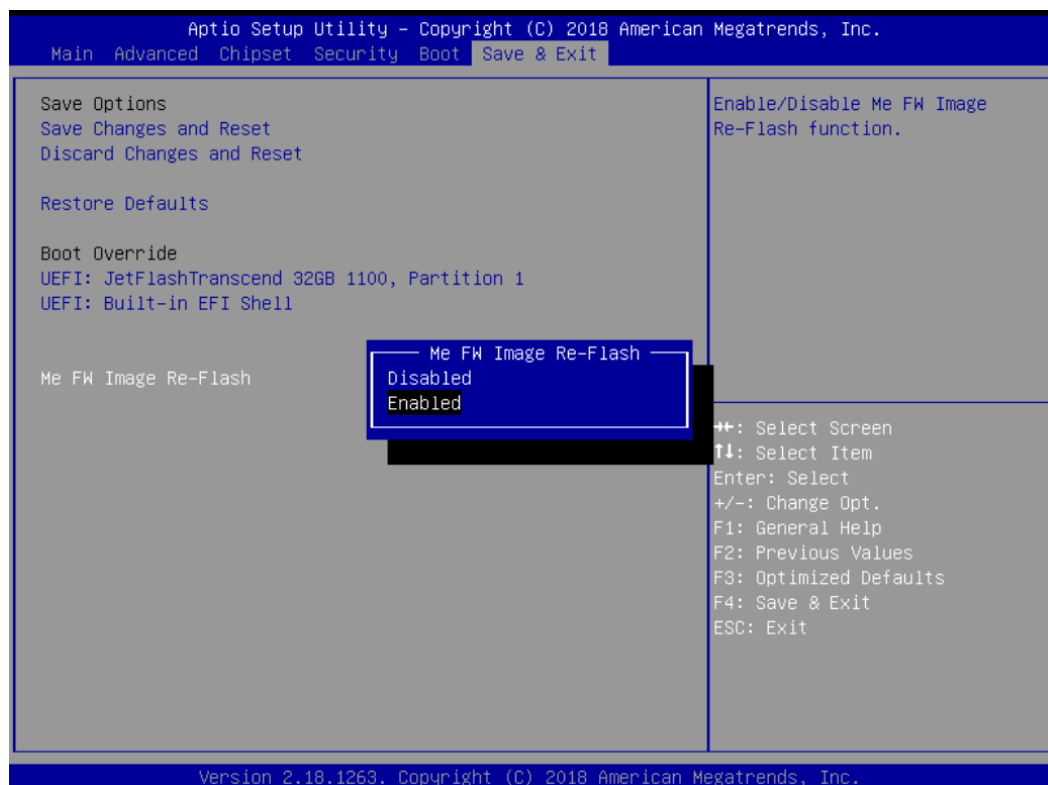
1. Download BIOS Package
2. Download BIOS update tool from AMI website.

URL: https://ami.com/en/?Aptio_V_AML_Firmware_Update_Utility.zip

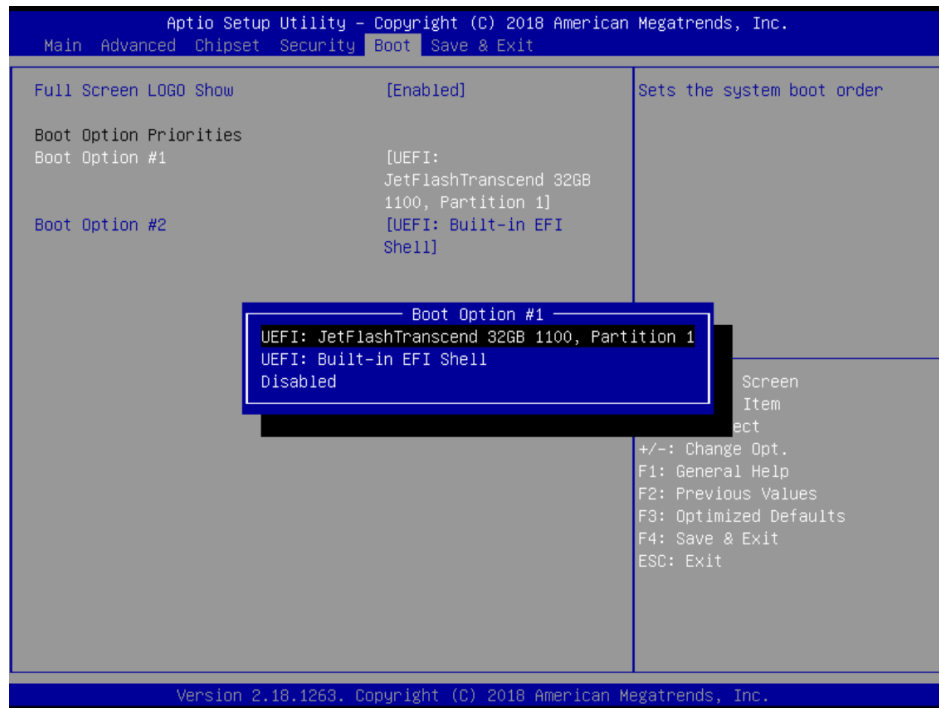
3. Copy "AfuEfix64.efi" into BIOS folder.



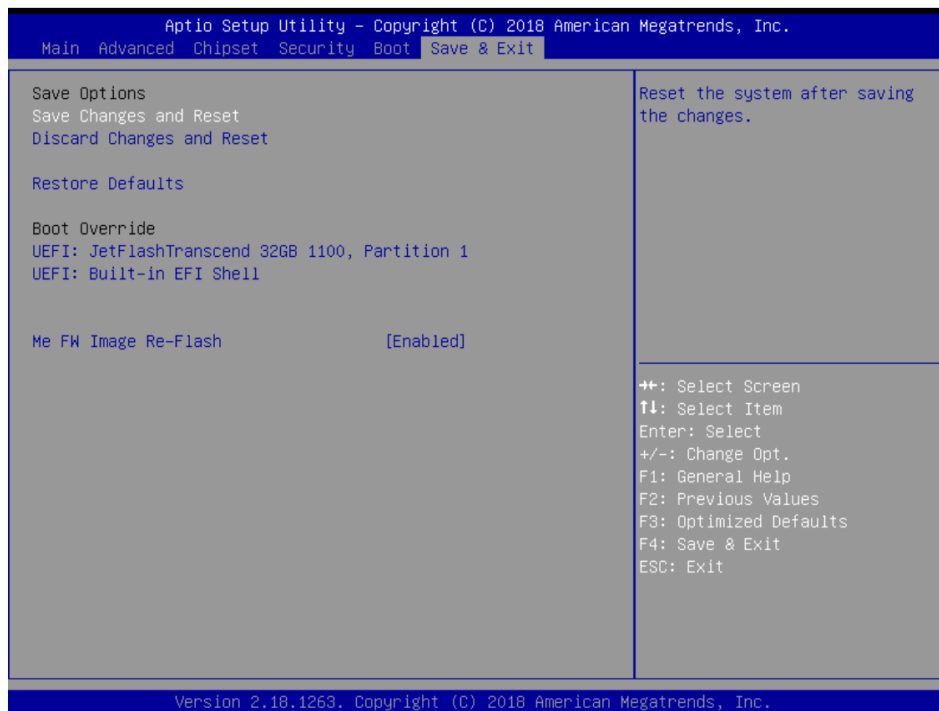
4. Turn on BRIX, press DEL enter BIOS setting then go to Save & Exit tab. Set “ME FW Image Re-Flash” (For Intel platform only) to Enable.



5. Change Boot Option #1 to USB Flash device



6. Press Save Changes and Reset to save configuration and exit. Select Yes.



7. Screen will display all devices. Type **fs0:** to select USB drive.

```
EFI Shell version 2.60 [5.12]
Current running mode 1.1.2
Device mapping table
  fs0      :Removable HardDisk - Alias hd10b0b blk0
            PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)/HD(1,MBR,0x14D36
            94F,0x800,0x3A4C800)
  blk0     :Removable HardDisk - Alias hd10b0b fs0
            PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)/HD(1,MBR,0x14D36
            94F,0x800,0x3A4C800)
  blk1     :Removable BlockDevice - Alias (null)
            PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)

Press ESC in 5 seconds to skip startup.nsh, any other key to continue.
Shell> fs0:
fs0:\> _
```

8. Enter the BIOS folder and then type “flash.nsh” to flash BIOS

```
fs0:\BIOS\MFLP5IP-00\F5_BIOS> ls
Directory of: fs0:\BIOS\MFLP5IP-00\F5_BIOS

05/18/20  02:01p <DIR>          16,384 .
05/18/20  02:01p <DIR>          16,384 ..
11/29/18  04:38p             562,288 afuefix64.efi
05/18/20  02:12p              78 FLASH.NSH
03/25/19  10:38a         16,777,216 image.bin
          3 File(s)  17,339,582 bytes
          2 Dir(s)

fs0:\BIOS\MFLP5IP-00\F5_BIOS> flash.nsh_
```

9. It may take a few minutes and you will see the following screen during BIOS update.

```

fs0:\BIOS\MFLPSIP-00\F5_BIOS> flash.nsh
flash.nsh> AfuEfix64.efi image.bin /X /ME
+-----+
|               AMI Firmware Update Utility v5.11.06.1854               |
|      Copyright (C)2018 American Megatrends Inc. All Rights Reserved.  |
+-----+
- ME Data Size checking . ok
Secure Flash enabled, recalculate ROM size with signature... Enable.
- Update success for FDR
- Update success for GBER
- Update MER ..... /

flash.nsh> AfuEfix64.efi image.bin /X /ME
+-----+
|               AMI Firmware Update Utility v5.11.06.1854               |
|      Copyright (C)2018 American Megatrends Inc. All Rights Reserved.  |
+-----+
- ME Data Size checking . ok
Secure Flash enabled, recalculate ROM size with signature... Enable.
- Update success for FDR
- Update success for GBER
- Update success for MER
WARNING : System must power-off to have the changes take effect!

Process completed.
flash.nsh> AfuEfix64.efi image.bin /X /P /B /N /L /REBOOT
+-----+
|               AMI Firmware Update Utility v5.11.06.1854               |
|      Copyright (C)2018 American Megatrends Inc. All Rights Reserved.  |
+-----+
Reading flash ..... done
- ME Data Size checking . ok
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 ..... 0x0040A000 (10%)
  
```

10. Reboot and you can find BIOS updated to the one flashed.

```

  Aptio Setup Utility - Copyright (C) 2019 American Megatrends, Inc.
Main Advanced Chipset Security Boot Save & Exit

BIOS Information
Project Name          GB-BRi5(H)-8250
BIOS Version          F5
Build Date and Time   02/25/2019 12:07:05
LAN MAC Address       E0-D5-5E-C6-E1-15
Total Memory          4096 MB
ME FW Version         11.8.60.3561
System Date           [Sun 05/17/2020]
System Time           [23:17:52]

Set the Date. Use Tab to
switch between Date elements.

++: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

Version 2.18.1263. Copyright (C) 2019 American Megatrends, Inc.
  
```

Windows

1. Download BIOS Package
2. Download BIOS update tool from AMI website.

URL: https://ami.com/en/?Aptio_V_AMI_Firmware_Update_Utility.zip

3. Copy below file to BIOS Package

Folder	File
Tool\WIN\Win32	AFUWIN.EXE amifldr32.sys
Tool\WIN\Win64	AFUWINx64.EXE amifldr64.sys

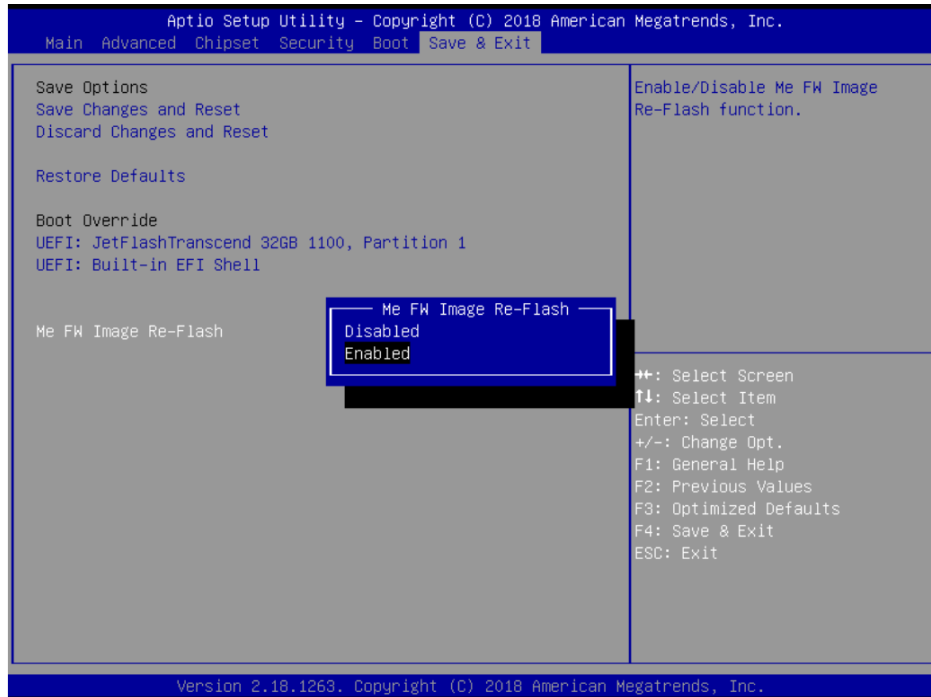
TRANSCEND (E:) > BIOS > F5_BIOS

Name	Date modified	Type	Size
image.bin	3/25/2019 10:38 AM	BIN File	16,384 KB
flash	5/18/2020 3:30 PM	Windows Batch File	1 KB
amifldr32.sys	7/23/2019 4:03 PM	System file	10 KB
AFUWIN	12/3/2019 2:30 PM	Application	534 KB

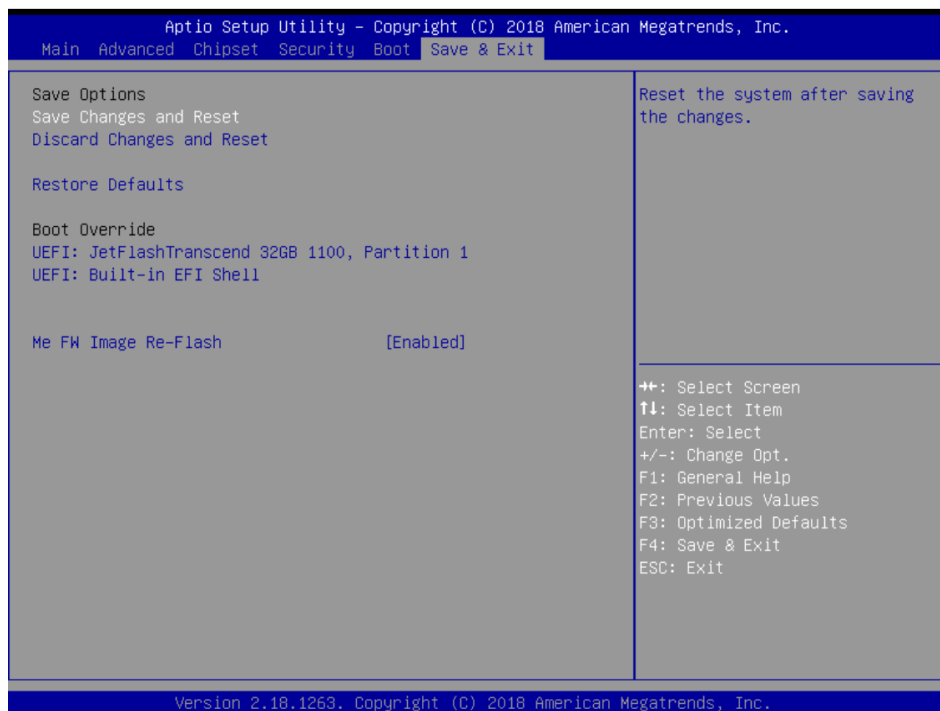
TRANSCEND (E:) > BIOS > F5_BIOS

Name	Date modified	Type	Size
image.bin	3/25/2019 10:38 AM	BIN File	16,384 KB
amifldr64.sys	3/30/2017 12:05 AM	System file	19 KB
afuwinx64	11/29/2018 4:37 PM	Application	607 KB
flash	5/18/2020 3:30 PM	Windows Batch File	1 KB

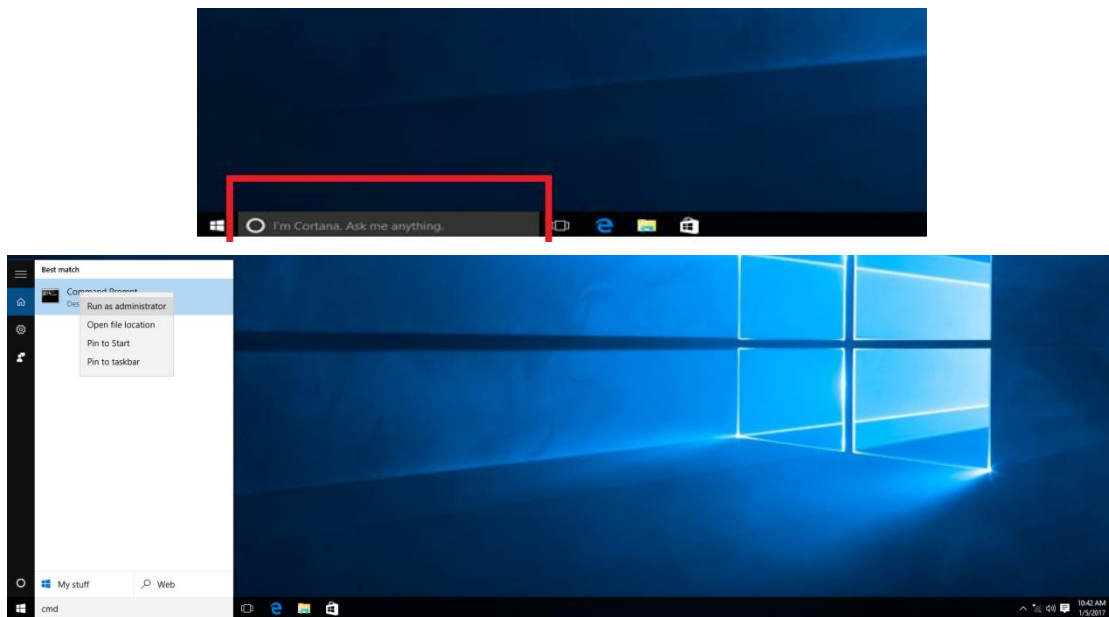
- Turn on BRIX, press DEL enter BIOS setting then go to Save & Exit tab. Set “ME FW Image Re-Flash” (For Intel platform only) to Enable.



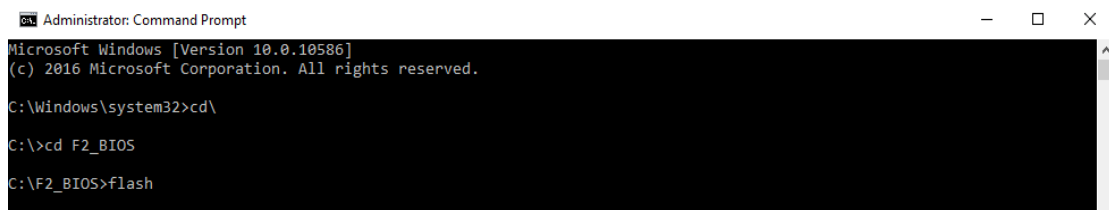
- Press Save Changes and Reset to save configuration and exit. Select Yes.



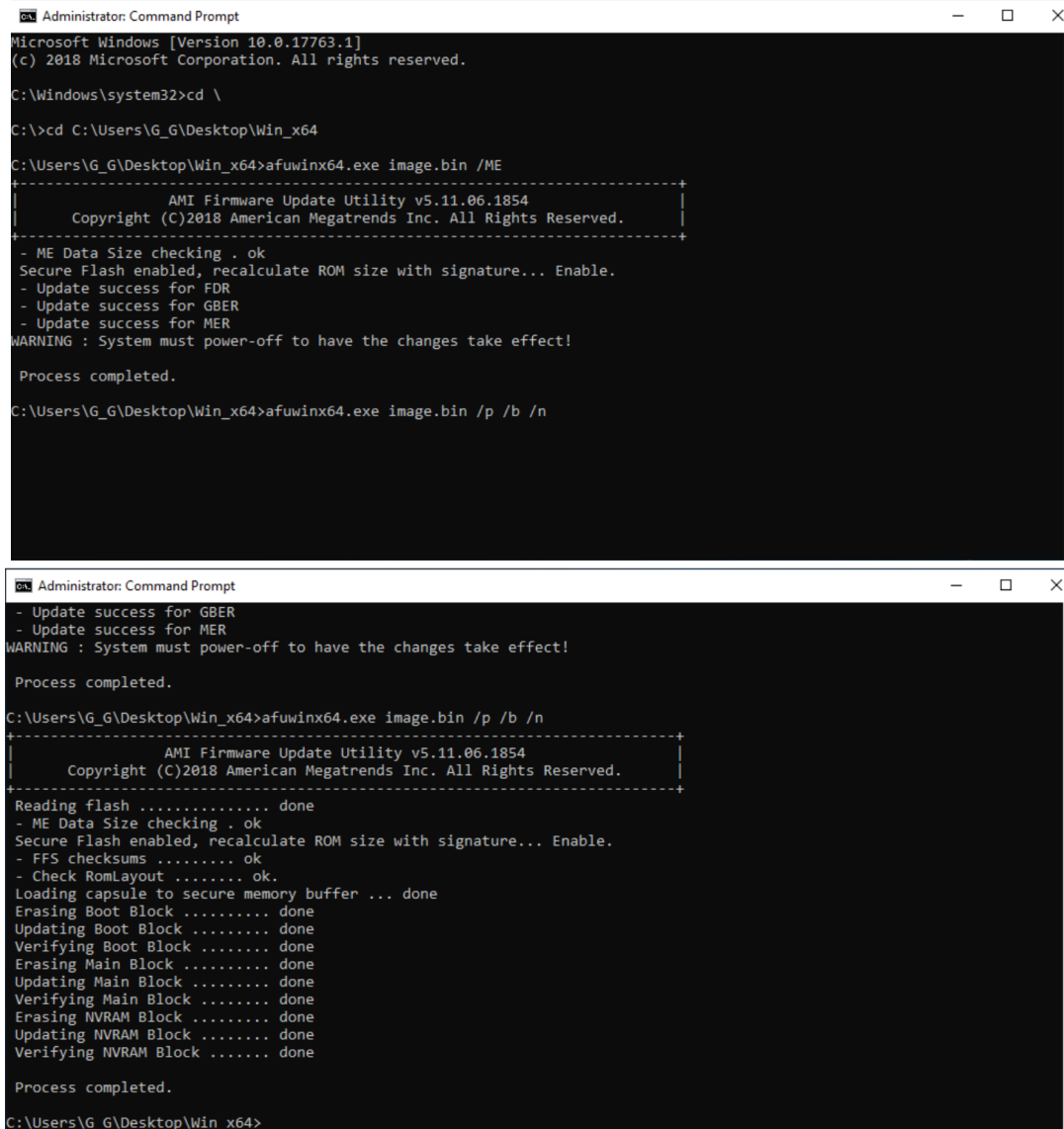
6. Boot to Windows and into "cmd" mode



7. into BIOS Package folder



8. Run "Flash.bat" to start update BIOS.



The image shows two screenshots of a Windows Command Prompt window, titled "Administrator: Command Prompt".

The first screenshot shows the following commands and output:

```
Microsoft Windows [Version 10.0.17763.1]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd \

C:\>cd C:\Users\G_G\Desktop\Win_x64

C:\Users\G_G\Desktop\Win_x64>afuwinx64.exe image.bin /ME

-----+
|          AMI Firmware Update Utility v5.11.06.1854          |
|    Copyright (C)2018 American Megatrends Inc. All Rights Reserved.    |
|-----+
- ME Data Size checking . ok
Secure Flash enabled, recalculate ROM size with signature... Enable.
- Update success for FDR
- Update success for GBER
- Update success for MER
WARNING : System must power-off to have the changes take effect!

Process completed.

C:\Users\G_G\Desktop\Win_x64>afuwinx64.exe image.bin /p /b /n
```

The second screenshot shows the continuation of the command and its output:

```
- Update success for GBER
- Update success for MER
WARNING : System must power-off to have the changes take effect!

Process completed.

C:\Users\G_G\Desktop\Win_x64>afuwinx64.exe image.bin /p /b /n
-----+
|          AMI Firmware Update Utility v5.11.06.1854          |
|    Copyright (C)2018 American Megatrends Inc. All Rights Reserved.    |
|-----+
Reading flash ..... done
- ME Data Size checking . ok
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

Process completed.

C:\Users\G_G\Desktop\Win_x64>
```

9. BRIX will restart automatically, you can press DEL enter BIOS to check BIOS version.

