

## EFI Boot-able disk and auto flash BIOS

Purpose: Update BIOS in EFI instead of in DOS

Recommend : Do not connect hard disk or M.2 on the **BRIX**

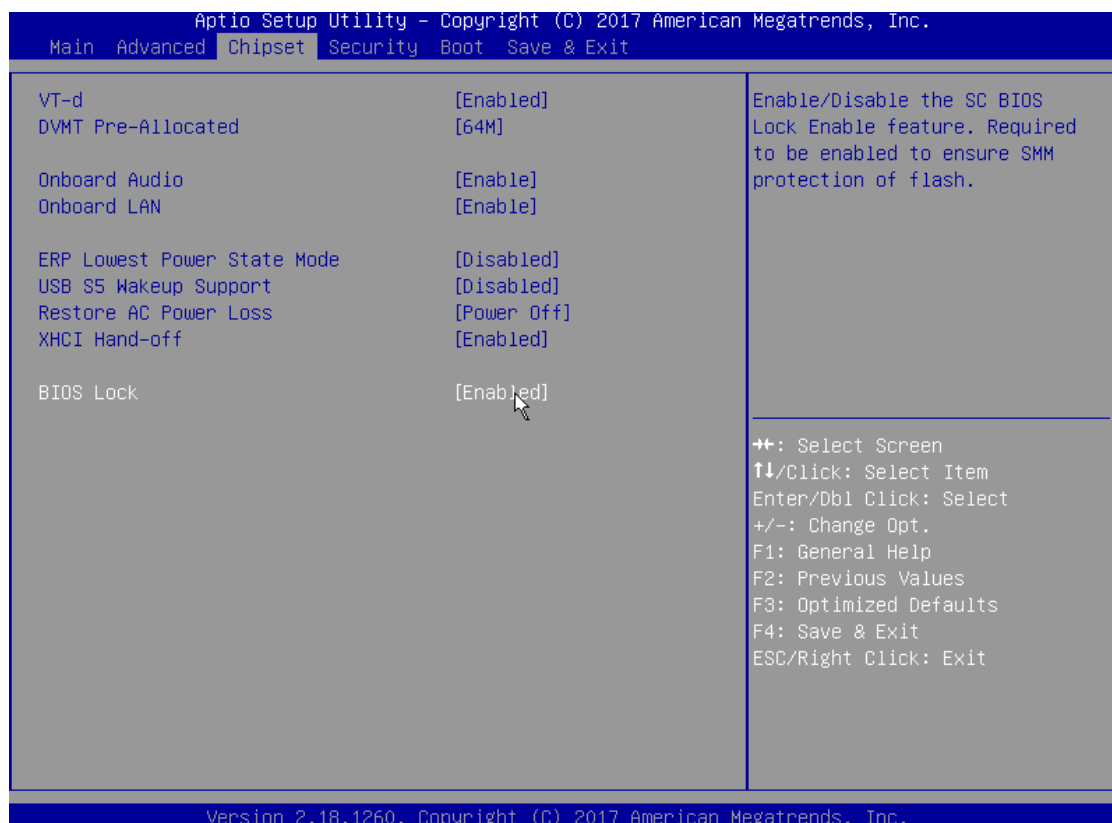
Prepare steps:

1. Include below files:

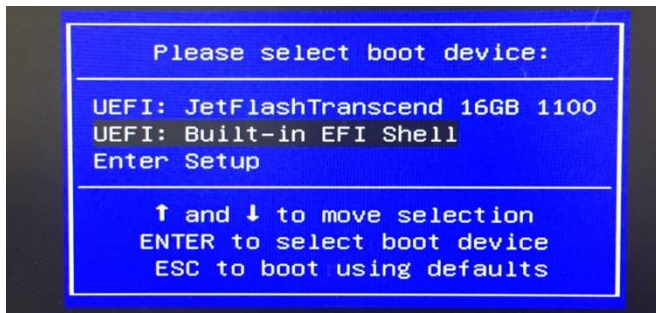
BIOS ROM : Image.bin

EFI flash utility : flash.nsh 、 AfuEfifix64.efi

2. Boot into setup menu and save "BIOS Lock" to **Disabled**.



3. Boot press F12 to select **"UEFI: Built-in EFI Shell"**



4. Type fs0: to select USB disk. Note: if you connect with hard disk or M.2. It will show more disks. In this time, you need find correct USB disk folder.

```
EFI Shell version 2.50 [5.12]
Current running mode 1.1.2
Device mapping table
fs0 :Removable BlockDevice - Alias f10b0 blk0
      PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)
blk0 :Removable BlockDevice - Alias f10b0 fs0
      PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)

Press ESC in 1 seconds to skip startup.nsh, any other key to continue.
Shell> fs0:

fs0:\> dir
Directory of: fs0:\

12/29/16 02:53p <DIR>          8,192 F2
12/29/16 03:06p <DIR>          8,192 F1
0 File(s)                                0 bytes
2 Dir(s)

fs0:\> _
```

5. Log into your BIOS folder and type flash.nsh to flash BIOS.

```
EFI Shell version 2.50 [5.12]
Current running mode 1.1.2
Device mapping table
fs0 :Removable BlockDevice - Alias f10b0 blk0
      PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)
blk0 :Removable BlockDevice - Alias f10b0 fs0
      PciRoot(0x0)/Pci(0x1C,0x0)/Pci(0x0,0x0)/USB(0x1,0x0)

Press ESC in 1 seconds to skip startup.nsh, any other key to continue.
Shell> fs0:

fs0:\> dir
Directory of: fs0:\

12/29/16 02:53p <DIR>          8,192 F2
12/29/16 03:06p <DIR>          8,192 F1
0 File(s)                                0 bytes
2 Dir(s)

fs0:\> cd f2

fs0:\F2> flash.nsh_
```

6. If show the "Do you want to continue?", please type the " Y " to continue.

```
Intel (R) Flash Programming Tool, Version: 3.0.11.1131
Copyright (c) 2007 - 2016, Intel Corporation. All rights reserved.
Reading HSFSTS register... Flash Descriptor: Valid

--- Flash Devices Found ---
MX25U12835F      ID:0xC22530      Size: 16384Kb (131072Kb)

Warning: Not all of the file data will be written to flash because
the file is longer than the flash area to be written to!
File: "image.bin"
File Length: 16777216
Write Length: 16773120

Do you want to continue? Y/<N> or q to quit : N
```

7. Fx version need to update ME. Please check your flash BIOS procedure has below condition.

```
1 0 31 06 8086-156F Intel(R)

1: Writing MAC Address to file 'mac.txt'
flash.nsh> AfuEfix64.efi image.bin /ME
+-----+
|                               AMI Firmware Update Utility
|       Copyright (C)2015 American Megatronics
+-----+

Reading flash ..... done
- ME Data Size checking . ok
- FFS checksums ..... ok
- Update success for DSC
- Update success for GBE. |
- Update MER ..... \
```

8. Reboot and check your BIOS versions already update to Fx.