

GIGABYTE™

BIOS UPDATE

(For AMD Renoir and Cezanne Platform)

User Guide

Rev. 1.0

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Documentation Classifications

In order to assist in the use of this product, GIGABYTE provides the following types of documentation:

- User Manual: detailed information & steps about the installation, configuration and use of this product (e.g. motherboard, server barebones), covering hardware and BIOS.
- User Guide: detailed information about the installation & use of an add-on hardware or software component (e.g. BMC firmware, rail-kit) compatible with this product.
- Quick Installation Guide: a short guide with visual diagrams that you can reference easily for installation purposes of this product (e.g. motherboard, server barebones).

Please see the support section of the online product page to check the current availability of these documents.

For More Information

For related product specifications, the latest firmware and software, and other information please visit our website at <http://www.gigabyte.com>

For GIGABYTE distributors and resellers, additional sales & marketing materials are available from our reseller portal: <http://reseller.b2b.gigabyte.com>

For further technical assistance, please contact your GIGABYTE representative or visit <https://esupport.gigabyte.com/> to create a new support ticket

For any general sales or marketing enquiries, you may also message GIGABYTE server directly by email: server.grp@gigabyte.com

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Chapter 1 BIOS Update

UEFI Shell



- Follow these instructions to update BIOS:

1. Go to the Gigabyte website (<https://www.gigabyte.com/us/Mini-PcBarebone>) and key in the model name in the search bar to access the product page.

GIGABYTE Products ▾ Service/Support Insight Events / News ▾ Buy ▾ CSR

Mini-PC Barebone (BRIX) 110 items

GB-BMCE-4500C (rev.1.0)

- Fanless design with Intel® Celeron® Processor N5090 6W CPU
- Ultra compact PC design at only 0.67L (06.22x103x116.52mm)
- 1st 10 mm small core CPU
- Support M.2 2280 slot for SSD (support PCI-e x2+ SATA)
- Supports 2.5" HDD/SSD, 7.0/9.5 mm thick (1 x 6 Gbps SATA 3)
- 1 x SO-DIMM DDR4 slots support 2933MHz, Max 16GB
- 802.11ac, Dual Band Wi-Fi & Bluetooth 4.2
- Realtek 8111MS Gigabit LAN
- HDMI 2.0b support 4K@60P HDR10
- Realtek® 4-port GIGABYTE® iHDMI
- Realtek ALC255 Codec
- 1 x USB 3.1 (1 x USB Type-C™)
- Headphone Jack
- Microphone Jack
- VESA Mounting Bracket (75 x 75mm + 100 x 100mm)
- AC-DC adapter : 100-240V input, 19V 65W
- OS Support : Microsoft Windows 10 64bit

2. Go to "Support" page and look for the latest BIOS file. Click "Download".

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Home ▾ Mini-PC Barebone (BRIX) ▾ **GB-BMCE-4500C**

GB-BMCE-4500C (rev. 1.0)
BRIX / Ultra Compact PC kit

Key Features Specifications **Support** News & Awards Buy

- Fanless design with Intel® Celeron® Processor N4500 6W CPU
- Ultra compact PC design at only 0.67L (58.22x103x116.52mm)
- 1st 10 mm small core CPU
- Support M.2 2280 slot for SSD (support PCI-e x2+ SATA)
- Supports 2.5" HDD/SSD, 7.0/9.5 mm thick (1 x 6 Gbps SATA 3)
- 1 x SO-DIMM DDR4 slots support 2933MHz, Max 16GB
- 802.11ac, Dual Band Wi-Fi & Bluetooth 4.2
- Realtek 8111MS Gigabit LAN
- HDMI 2.0b support 4K@60P HDR10

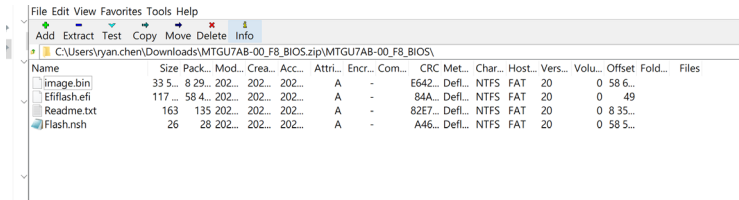
GB-BMCE-4500C (rev. 1.0) Key Features Specification Support News & Awards Buy

Downloads Manual Support List FAQ

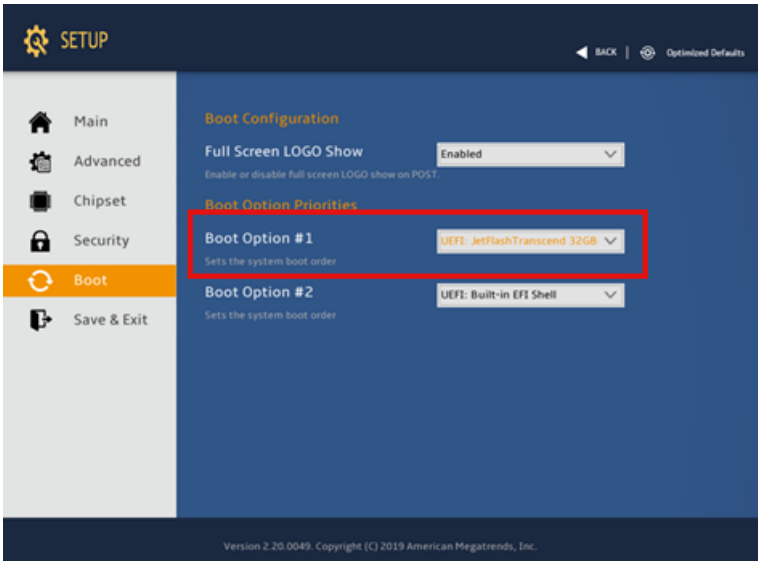
Downloads
Download from the server closest to you - Asia, China, North America, Europe, Russia
Drive(s)
BIOS(+3)

Version	Size	Date	Download	Description
F5	0.00 MB	2021/07/29		BIOS Fixed: Random Boot Failures issue
-	0.00 MB	2021/07/21		Please download BIOS update tool from AMI Website
1.0	0.52 MB	2021/10/05		BRIX Jasper Lake series BIOS initial release

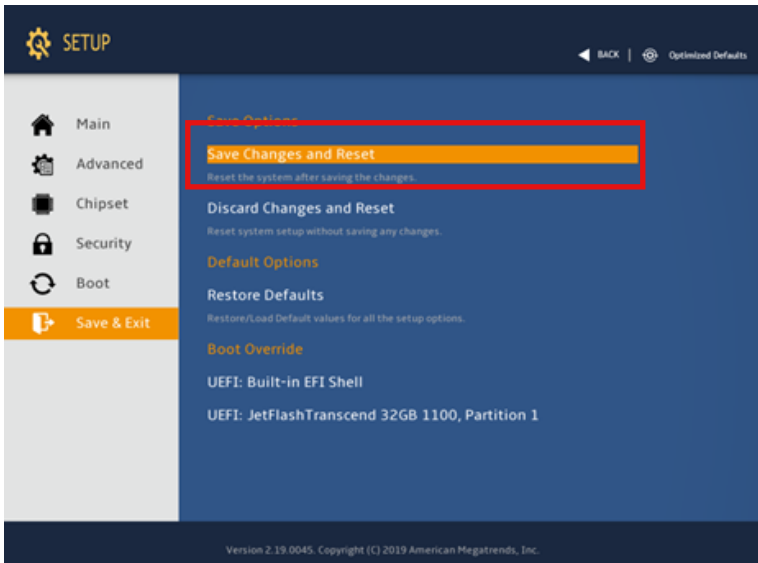
3. Copy BIOS Package into the BIOS folder.



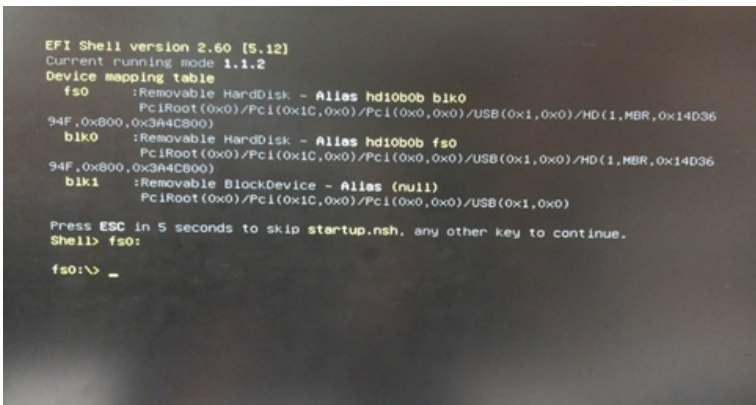
- 5. Power on BRIX and press "DEL" to enter the BIOS setting page.
- 6. Go to Boot Option #1 and choose your USB Flash device accordingly.



7. Click "Save Changes and Reset" to save configuration and exit, then select "Yes".



8. All the devices will be displayed on the screen, then type "fs0" to select your USB drive.



- Enter the BIOS folder and type "flash.nsh" to start the BIOS update process.

```

EFI Shell version 2.70 [5.16]
Current running mode 1.1.2
Device mapping table
fs0 :Removable HardDisk - Alias hdi4d0d0b blk0
      PciRoot(0x0)/Pci(0x2,0x4)/Pci(0x0,0x0)/USB(0x3,0x0)/USB(0x3,0x0)/HD(1,MBR,0x3520C3E4,0x800,0x3C2F7F)
blk0 :Removable HardDisk - Alias hdi4d0d0b fs0
      PciRoot(0x0)/Pci(0x2,0x4)/Pci(0x0,0x0)/USB(0x3,0x0)/USB(0x3,0x0)/HD(1,MBR,0x3520C3E4,0x800,0x3C2F7F)
blk1 :Removable BlockDevice - Alias (null)
      PciRoot(0x0)/Pci(0x2,0x4)/Pci(0x0,0x0)/USB(0x3,0x0)/USB(0x3,0x0)

Press ESC in 4 seconds to skip startup.nsh, any other key to continue.
Shell>
Shell> fs0:

fs0:\> cd F5_BIOS

fs0\F5_BIOS> dir
Directory of: fs0\F5_BIOS

11/18/21 02:11p <DIR>                4,096 .
11/18/21 02:11p <DIR>                0 ..
06/05/20 07:08p .                    117,888 EfiFlash.efi
09/24/20 04:21p .                      26 flash.nsh
05/05/21 02:44p .                   16,777,216 image.bin
10/27/20 03:52p .                      71 README.txt
4 File(s) 16,895,201 bytes
2 Dir(s)

fs0\F5_BIOS> flash.nsh_

```

- After a few minutes, you will see the following screen during the update.

```

fs0:\BIOS\MCHLUAB\F2_BIOS> flash.nsh
flash.nsh> AfuEfix64.efi image.bin /X /ME

-----
|                               AMI Firmware Update Utility v5.12.03.2074
|                               Copyright (c) 1985-2019, American Megatrends International LLC.
|                               All rights reserved. Subject to AMI licensing agreement.
-----
- ME Data Size Checking ..... ok
- System Secure Flash ..... Enabled
Loading The ME Data To BIOS ..... Done
- Update success for FDR
- Update success for GBER
- Update success for DER2
- Update MER ..... X

```

```

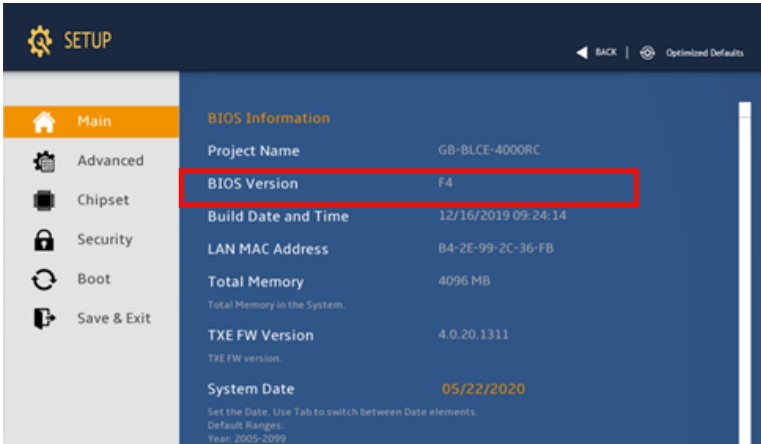
-----
- ME Data Size Checking ..... ok
- System Secure Flash ..... Enabled
Loading The ME Data To BIOS ..... Done
- Update success for FDR
- Update success for GBER
- Update success for DER2
- Update success for MER
WARNING !!
System must power-off to have the changes which take effect!

Process completed.
flash.nsh> AfuEfix64.efi image.bin /X /P /B /N /L /REBOOT

-----
|                               AMI Firmware Update Utility v5.12.03.2074
|                               Copyright (c) 1985-2019, American Megatrends International LLC.
|                               All rights reserved. Subject to AMI licensing agreement.
-----
Reading flash ..... Done
- ME Data Size Checking ..... ok
- System Secure Flash ..... Enabled
- FFS Checksums ..... Pass
- Check RomLayout ..... Pass
Loading File To Verify Memory ..... Done
_Erasing Boot Block ..... 0x008FC000 (5%)

```


11. Reboot the device then you'll find the BIOS version has been updated accordingly.



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