

GIGABYTE™

BIOS UPDATE

Intel Pentium Silver/Celeron Platform
(BLPD/BLCE - 5005/4105/4000 Series)

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 search bar to access the product page.

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Mini-PC Barebone (BRIO) 119 items

GB-BMCE-4500C (rev. 1.0)

- Fanless design with Intel® Celeron® Processor N4500 (W CPU)
- Ultra compact PC design at only 0.67L (95.22x100x116.52mm)
- 1st 10 nm small core CPU
- Support M.2 2280 slot for SSD (support PCI-e x2-SATA)
- Supports 2.5" HDD/SSD, 7/9.5 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 8111HS Gigabit LAN
- HDMI 2.0b support 4K@60P HDR10
- MiniDP 1.4 support 4K@60P HDR2
- Realtek ALC255 Codec
- 4 x USB 3.1 (1 x USB Type-C)
- Headphone Jack
- Micro-Phone 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 (BRIO) > **GB-BMCE-4500C**

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

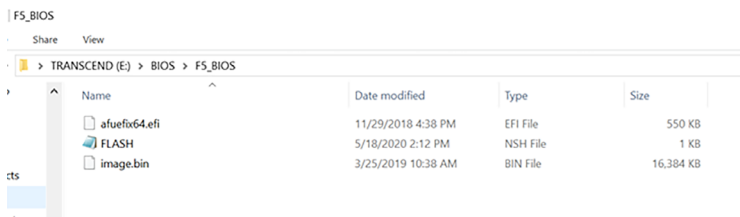
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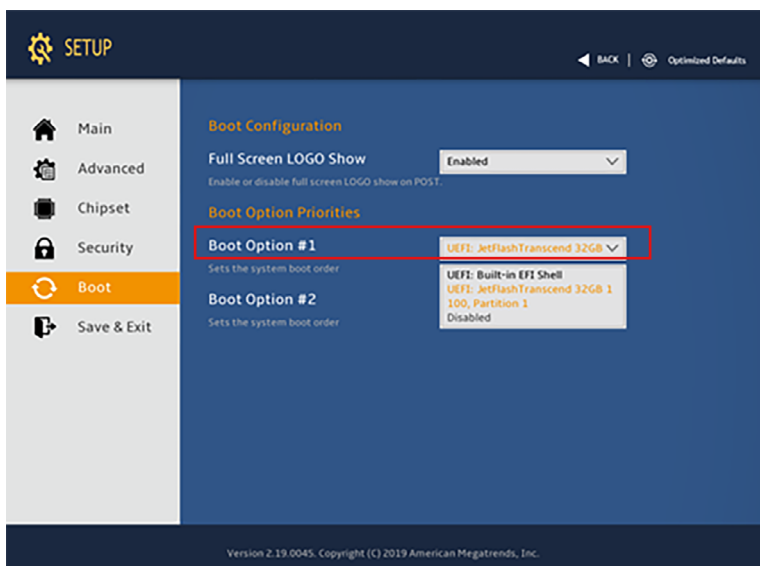
Download from the server closest to you - Asia, China, North America, Europe, Russia
Driver (+9)
BIOS (+3)

Version	Size	Date	Download	Description
F5	5.60 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	5.52 MB	2021/05/05		BRIO Jumper Lake series BIOS initial release

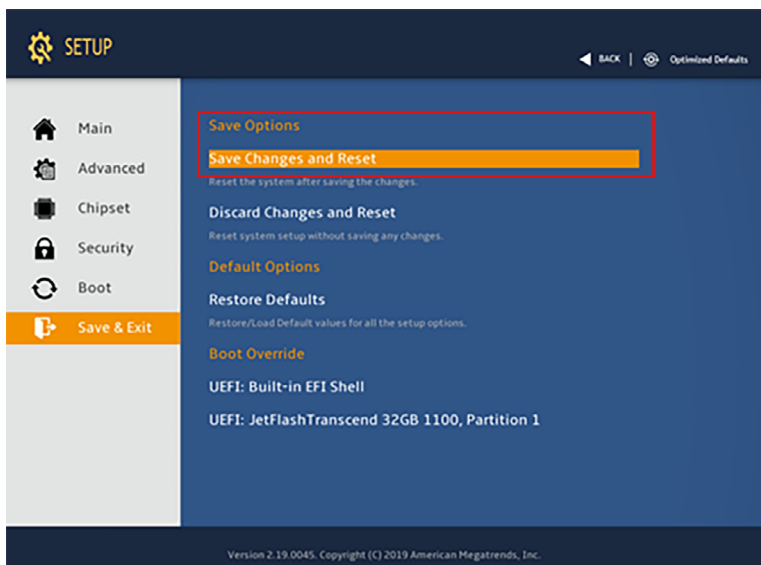
- Download BIOS update tool from AMI website.
- Copy "AfuEfix64.efi" into BIOS folder.



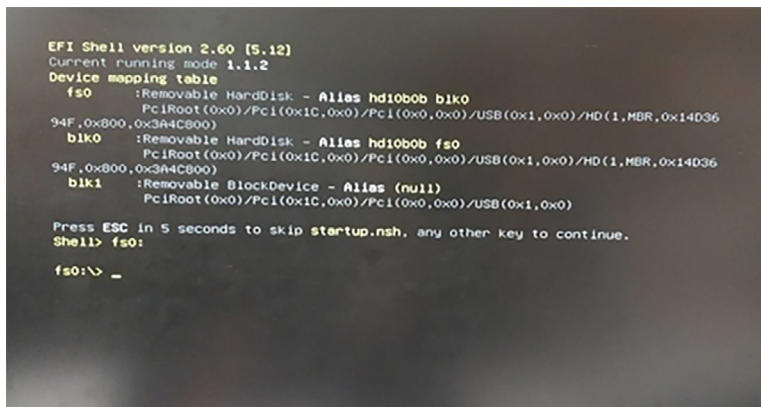
- Power on BR1X and press "DEL" to enter BIOS setting page. Then change Boot Option #1 to "USB Flash device".



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



7. All the devices will be displayed on the Screen, then Type "fs0" to select "USB drive".



8. Enter the BIOS folder and type "flash.nsh" to update the BIOS.

```
fs0 :Removable HardDisk - Alias hd1510b b1k0
PCIRoot(0x0)/Pci(0x15,0x0)/USB(0x8,0x0)/HD(1,MBR,0x1403694F,0x800,0x3A4C000)
b1k0 :Removable HardDisk - Alias hd1510b fs0
PCIRoot(0x0)/Pci(0x15,0x0)/USB(0x8,0x0)/HD(1,MBR,0x1403694F,0x800,0x3A4C000)
b1k1 :Removable BlockDevice - Alias (null)
PCIRoot(0x0)/Pci(0x15,0x0)/USB(0x8,0x0)

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

fs0:\> cd bios

fs0:\BIOS> cd HGHLKAB

fs0:\BIOS\HGHLKAB> cd F4_BIOS

fs0:\BIOS\HGHLKAB\F4_BIOS> cd F4_BIOS

fs0:\BIOS\HGHLKAB\F4_BIOS\F4_BIOS> ls
Directory of: fs0:\BIOS\HGHLKAB\F4_BIOS\F4_BIOS

05/21/20 05:36p <DIR> 16,384 .
05/21/20 05:36p <DIR> 16,384 ..
05/25/20 09:47a 43 FLASH.NSH
12/16/19 09:51a 16,777,216 Image.bin
12/03/19 02:32p 572,016 afuefix64.efi
3 File(s) 17,349,275 bytes
2 Dir(s)

fs0:\BIOS\HGHLKAB\F4_BIOS\F4_BIOS> _
```

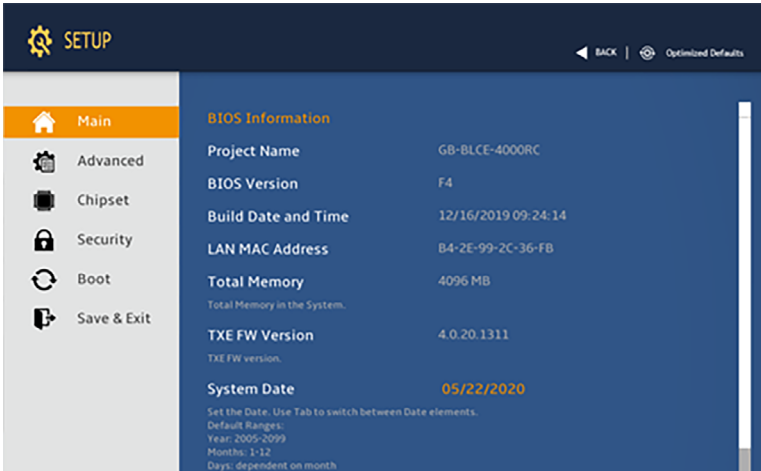
9. After few minutes, you will see following screen during the update.

```
lash> afuefix64.efi Image Bin F4_BIOS\F4_BIOS

-----
AMI Firmware Update Utility v5.12.03.2074
APL FaultTolerance Mode
Copyright (c) 1985-2019, American Megatrends International LLC.
All rights reserved. Subject to AMI licensing agreement.
-----

Reading flash ..... Done
- System Secure Flash ..... Enabled
- FFS Checksums ..... Pass
- Check RomLayout ..... Pass
Loading File To Verify Memory ..... Done
- Fault Tolerance Flash Support Enable.
Fault Tolerant Backup..... done
Erasing ApIFt Block ..... Done
Updating ApIFt Block ..... Done
Verifying ApIFt 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 RomHole Block ..... Done
Updating RomHole Block ..... Done
Verifying RomHole Block ..... Done
```


10. Reboot the BRIX and you will see the latest BIOS version on the screen.

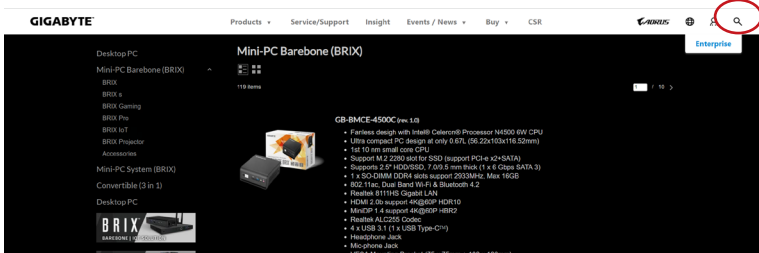


Windows

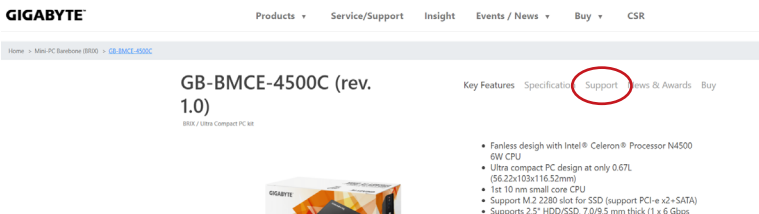


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2. Go to "Support" page and look for the latest BIOS file. Click "Download".





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Divers(4)

BIOS(3)

Version	Size	Date	Download	Description
f5	5.60 MB	2021/07/20		BIOS Fixed - Random Boot Failures Issue
-	0.00 MB	2021/07/21		Please download BIOS update tool from AMI Website

- Download BIOS update tool from AMI website.
- Copy BIOS image.bin file to AMI flash tool folder.

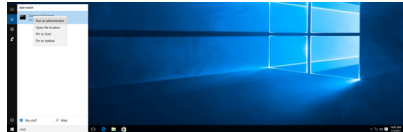
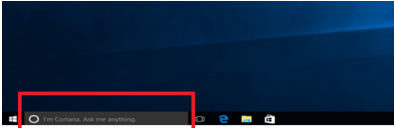
AFU for Aptio V > afu > afuwin > 32 > AfuWin32 > AfuWin32

Name	Type
AFUWIN	Application
AFUWINGUI	Application
AMI_Aptio_Sx_AFU_User_Guide_PUB	PDF File
amifldr32.sys	System file
amigendrv32.sys	System file
image.bin	BIN File
readme	Text Document

AFU for Aptio V > afu > afuwin > 64 > AfuWin64 > AfuWin64

Name	Date modified
AFUWINGUIx64	12/9/2020 7:07 PM
AFUWin64	12/9/2020 6:51 PM
AMI_Aptio_Sx_AFU_User_Guide_PUB	12/10/2020 10:34 AM
amifldr64.sys	11/12/2020 3:20 PM
amigendrv64.sys	11/12/2020 3:20 PM
image.bin	12/5/2019 1:28 PM
readme	12/10/2020 10:50 AM

- Boot to Windows and enter "cmd" mode.



- Enter BIOS Package folder

```

Command Prompt
D:\BIOS\MGMLKAB\F4_BIOS\F4_BIOS>dir/w
Volume in drive D is TRANSCEND
Volume Serial Number is DEEF-BFEB

Directory of D:\BIOS\MGMLKAB\F4_BIOS\F4_BIOS

[.]          [..]          image.bin      flash.bat      amifldr64.sys  afuwin64.exe
4 File(s)   17,417,848 bytes
2 Dir(s)    23,744,768,688 bytes free

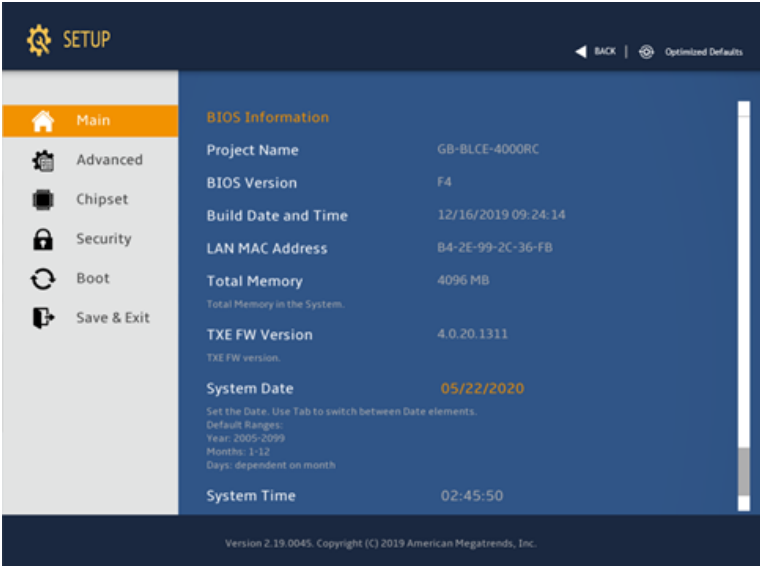
D:\BIOS\MGMLKAB\F4_BIOS\F4_BIOS>flash.bat

```

7. Run "Flash.bat" to update BIOS.

```
D:\BIOS\MGMKAB\F4_BIOS\F4_BIOS\afwin64.exe
-----
AMI Firmware Update Utility v5.11.06.1854
  APL FaultTolerance Mode
  Copyright (C)2018 American Megatrends Inc. All Rights Reserved.
-----
Reading flash ..... done
Secure Flash enabled, recalculate ROM size with signature... Enable.
- FFS checksums ..... OK
- Check RomLayout ..... OK.
Loading capsule to secure memory buffer ... done
- Fault Tolerance Flash Support Enable.
Fault Tolerant Backup..... done
Erasing APLft Block ..... done
Updating APLft Block ..... done
Verifying APLft 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 RomHole Block ..... done
Updating RomHole Block ..... done
Verifying RomHole Block ..... done
```

8. Restart the BRIX and press "DEL" to enter the BIOS page then you'll find the BIOS version has been updated accordingly.



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