

## ***GBT BMC Firmware Upgrade User Guide***

GIGABYTE Software

Document No.: GBT\_BMC\_FW\_UP\_GID\_0007

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## 0. General Information

### 0.1. Issue Control

This document was edited with **Microsoft Word, Version 2016**. The graphic drawings are originally sketched in **Microsoft PowerPoint Version 2016**.

### 0.2. Record of Changes

Table 0-1. Record of Changes

Issue	Date	Authors	Reason for Changes
1.01	2021/04/08	Popcorn Li	First release.
1.02	2021/09/30	Popcorn Li	Update Files Hierarchy and gigaflash version
1.03	2022/01/20	Frank Cheng	Disable V13 (2600) preserve conf function for now
1.04	2022/03/16	Frank.Cheng	Reenable V13 preserve conf function, Update some Files Hierarchy and gigaflash version
1.05	2022/06/28	Frank.Cheng	Add UEFI arm gigaflash tool, update uefi command for arm uefi.
1.06	2023/05/02	Peter Lin	Add "preserve" parameter to update BMC in preserve mode without ask preserve or not.
1.07	2024/06/18	Duna Chung	Support Insyde

### 0.3. References

NO	Document title

### 0.4. Acronyms

1. Files Hierarchy

Root Folder		
-- fw		
-- 13xxxx.bin		<i>; AMI BMC firmware Binary, file name was BMC firmware version</i>
-- image-bmc		<i>; Insyde BMC firmware Binary</i>
-- Tools		
--x64		<i>; Windows driver for windows x64</i>
--x64_Win8		<i>; Windows driver for windows8 x64</i>
--x86		<i>; Windows driver for windows x32</i>
-- gigaflash		<i>; GBT BMC flash tool for Linux</i>
-- gigaflash.efi		<i>; GBT BMC flash tool for UEFI</i>
-- gigaflash.exe		<i>; GBT BMC flash tool for Windows</i>
-- gigaflash_arm		<i>; GBT BMC flash tool for ARM Linux</i>
-- gigaflash_arm.efi		<i>; GBT BMC flash tool for ARM UEFI</i>
-- gigaflash_x64		<i>; GBT BMC flash tool for Linux x64</i>
-- gigaflash_x64.exe		<i>; GBT BMC flash tool for Windows x64</i>
-- bmc_fw_upgrade_linux.sh		<i>; Linux x86/ARM update BMC firmware script</i>
-- bmc_fw_upgrade_uefi.nsh		<i>; UEFI x86/ARM update BMC firmware script</i>
-- bmc_fw_upgrade_win.bat		<i>; Windows x86 update BMC firmware script</i>
-- BMC_FW_Upgrade_User_Guide.pdf		<i>; GBT BMC firmware upgrade user guide</i>
-- BMC_Release_Note_12xxxx.doc		<i>; GBT BMC firmware release note</i>

## 2. Upgrade BMC Firmware in Linux

1. Get Linux [root permission](#).
2. Change path to the root directory of Upgrade Package.
3. Run "ami\_bmc\_fw\_update\_linux.sh" for programing AMI FW.  
Run "insyde\_bmc\_fw\_update\_linux.sh" for programing Insyde FW
4. Enter "Y/y" to preserve configuration or Enter N/n to flash entire BMC.

User command:

### NAME

ami\_bmc\_fw\_update\_linux.sh - Update script  
insyde\_bmc\_fw\_update\_linux.sh - Update script

### SYNOPSIS

ami\_ami\_bmc\_fw\_update\_linux.sh [OPTION]  
insyde\_bmc\_fw\_update\_linux.sh [OPTION]

### DESCRIPTION

Update BMC flash script. Below is option item:

#### CS

Select to update Active/Backup BMC firmware. (CS=1 only support on GBT Dual Platform).

0: Active

1: Backup

Default value is 0.

#### flashall

Flash entire BMC without warning message.

Default: Ask user preserve configuration or not

#### preserve

Flash BMC and preserve configuration without warning message.

Default: Ask user preserve configuration or not

#### x32

Set update tool to 32-bit mode

Default x86 64-bit mode

#### arm

Set update tool to arm mode (arm Linux only support 64-bit)

Default x86 64-bit mode

Example for flash entire BMC and select BMC address in address 0:

[ami\\_bmc\\_fw\\_update\\_linux.sh cs 0 flashall](#)

[insyde\\_bmc\\_fw\\_update\\_linux.sh cs 0 flashall](#)

### 3. Upgrade BMC Firmware in Windows

1. Open Command line with Windows [Administrator permission](#).
2. Change path to the root directory of Upgrade Package.
3. Run "ami\_bmc\_fw\_update\_win.bat" for programing AMI FW.  
Run "insyde\_bmc\_fw\_update\_win.bat" for programing Insyde FW
4. Enter "Y/y" to preserve configuration or Enter N/n to flash entire BMC.

User command:

#### NAME

ami\_bmc\_fw\_update\_win.bat - Update script  
insyde\_fw\_update\_win.bat - Update script

#### SYNOPSIS

ami\_bmc\_fw\_update\_win.bat [OPTION]  
insyde\_fw\_update\_win.bat [OPTION]

#### DESCRIPTION

Update BMC flash script. Below is option item:

##### CS

Select to update Active/Backup BMC firmware. (CS=1 only support on GBT Dual Platform).

0: Active

1: Backup

Default value is 0.

##### flashall

Flash entire BMC without warning message.

Default: Ask user preserve configuration or not

##### preserve

Flash BMC and preserve configuration without warning message.

Default: Ask user preserve configuration or not

##### x32

Set update tool to 32-bit mode

Default x86 64-bit mode

Example for flash entire BMC and select BMC address in address 0:

[ami\\_bmc\\_fw\\_update\\_win.bat cs 0 flashall](#)

[insyde\\_bmc\\_fw\\_update\\_win.bat cs 0 flashall](#)

## 4. Upgrade BMC Firmware in UEFI

1. Change path to the root directory of Upgrade Package.
2. Run “ami\_bmc\_fw\_update\_uefi.nsh” for programing AMI FW.  
Run “insyde\_bmc\_fw\_update\_uefi.nsh” for programing Insyde FW
3. Enter "Y/y" to preserve configuration or Enter N/n to flash entire BMC.
4. For Insyde FW, configuration preservation feature is not supported in ARM\_UEFI env.

User command:

### NAME

ami\_bmc\_fw\_update\_uefi.nsh - Update script  
insyde\_bmc\_fw\_update\_uefi.nsh - Update script

### SYNOPSIS

ami\_bmc\_fw\_update\_uefi.nsh [OPTION]  
insyde\_bmc\_fw\_update\_uefi.nsh [OPTION]

### DESCRIPTION

Update BMC flash script. Below is option item:

#### cs

Select to update Active/Backup BMC firmware. (CS=1 only support on GBT Dual Platform).

0: Active

1: Backup

Default value is 0.

#### flashall

Flash entire BMC without warning message.

Default: Ask user preserve configuration or not

#### preserve

Flash BMC and preserve configuration without warning message.

Default: Ask user preserve configuration or not

#### arm

Set update tool to arm mode

Default: x86 64 mode

Example for flash entire BMC and select BMC address in address 0 in x86:

ami\_bmc\_fw\_update\_uefi.nsh cs 0 flashall

insyde\_bmc\_fw\_update\_uefi.nsh cs 0 flashall

Example for flash entire BMC and select BMC address in address 0 in uefi-arm:

ami\_bmc\_fw\_update\_uefi.nsh cs 0 flashall arm

insyde\_bmc\_fw\_update\_uefi.nsh cs 0 flashall arm