

# BIOS Release Notes

## TITLE

**SUBJECT:** MH12-HD0 BIOS Release Notes version [F32](#)

**System:** [MH12-HD0-00](#), [H252-3C0-00](#)

### About This Release

**Build Date:** [2024/06/14](#)

**BIOS Checksum:** [0xBFA26F57](#) (32M), [0xA3385B88](#) (64M)

**Release Owner:** deann.wu

### BIOS Components/Contents

**Processor stepping(s) supported:** Intel® Ice Lake-SP processors

**System hardware configurations supported:** MH12-HD0

**Microcode updates versions:**

CPUID	Family	Microcode Update ID
606a4	IceLake L-0	0b000280
606a5	IceLake C-0	0c0002f0
606a6	IceLake XCC D-0	0d0003e7

**IPMI support:**

**AMI Kernel version:** [Gbt\\_Kernel\\_079\\_01](#)

**Intel CSI/MRC Package version:** [30.P47](#)

**SPI Descriptor version:** [04.04.04.603](#)

**OPROM version :**

OPROM	Version
AST2500 VGA	1.03.05
INTEL RAID PACKAGE	RSTe 8.0.0.4006

### Installation Notes

#### IMPORTANT NOTES:

1. Please extract the MH12-HD0\_[F32](#).zip to a bootable diskette that use FAT/FAT32 format

#### BIOS UPDATE INSTRUCTIONS FOR EFI Shell:

## BIOS Release Notes

1. Insert USB flash drive to system for BIOS upgrade.
2. Power on system and boot to Build-In Shell.
3. Enter your USB filesystem, like "fs0:" or "fsx:", "x" is your USB filesystem number
4. Execute F.nsh for bios update
5. After bios flash finish, system must Power-Off to have the changes take effect.

### BIOS UPDATE INSTRUCTIONS FOR Windows:

1. Insert bios update USB flash drive.
2. Use Command Shell.
3. Enter \Tool\Win32 and execute f.bat for Windows 32bit.  
Or  
Enter \Tool\Win64 and execute f.bat for Windows 64bit.
4. After bios flash finish, system must Power-Off to have the changes take effect.

### BIOS UPDATE FOR Easy BIOS Refresh:

1. The system supports remotely update BIOS if BMC existent.
2. Please download the Easy BIOS Refresh User Guide from Gigabyte website, target system support page.

### BIOS Version CHECK INSTRUCTIONS:

1. Power on system and press <DEL> during POST
2. The bios version shows on the first main page

## Known Issues/Workarounds

## Issues fixed in this version

F32

1. [Feature] Update RC 30.P47 (IceLake BKC 2024.3 IPU-PV)
2. [Feature] Update microcode:  
IceLake CPU XCC D0 Production : m\_87\_606a6\_0d0003e7
3. [Feature] Include Vulnerabilities in EDK2 NetworkPkg for CVE-2023-45236, CVE-2023-45237.
4. [Feature] Include INTEL-SA-01097 for CVE-2024-24968.
5. [Feature] Include INTEL-SA-01083 for CVE-2024-24853.
6. [Feature] Include INTEL-SA-01103 for CVE-2024-23984.
7. [Feature] Include INTEL-SA-01100 for CVE-2024-24980.
8. [Feature] Include INTEL-SA-01079 for CVE-2024-21820, CVE-2024-23918.
9. [Feature] Include INTEL-SA-01071 for CVE-2024-21829, CVE-2024-21781, CVE-2023-

# BIOS Release Notes

43753.

---

F31

1. [Feature] Improve the feature of BMC IPv6 and IPv4 Network setting.
- 

F30

1. [Feature] Update for AMI security

SA50216: CVE-2023-39539

SA50216: CVE-2023-39538

---

F29

1. [Feature] Update RC 30.P41 (IceLake BKC 2024.1 IPU-PV)

2. [Feature] Update microcode:

IceLake CPU XCC D0 Production : m\_87\_606a6\_0d0003d1

3. [Feature] Update RSTe : v8.0.0.4006

4. [Feature] Update VROC : v8.0.0.4006

5. [Feature] Update ME : SPS\_E5\_04.04.04.603.0

6. [Feature] Update for security 2024.1 IPU

INTEL-SA-00950: CVE-2023-23583

INTEL-SA-00960: CVE-2023-22655

INTEL-SA-00923: CVE-2023-35191

7. [Feature] Update for AMI security

SA50236: CVE-2023-5678

SA50229: CVE-2024-3817

SA50229: CVE-2024-2650

8. [Feature] Update for security of PixieFail: vulnerabilities in Tianocore's EDK II IPv6 network stack.

CVE-2023-45229

CVE-2023-45230

CVE-2023-45231

CVE-2023-45232

CVE-2023-45233

CVE-2023-45234

CVE-2023-45235

---

F28

1. [Feature] Improve ECC error logging feature set.
- 

F27

1. [Feature] Update RC 30.P26 (IceLake BKC 2023.3 IPU-PV).

## BIOS Release Notes

2. [Feature] Update DCPMM UEFI driver v02.00.00.3887.
3. [Feature] Update microcode:  
IceLake CPU XCC D0 Production : m\_87\_606a6\_0d0003a5
4. [Feature] Update RSTe : v8.0.0.4006.
5. [Feature] Update VROC : v8.0.0.4006.
6. [Feature] Update ME : SPS\_E5\_04.04.04.500.0.
7. [Feature] Update for security AMI SA50170.

---

### F26

1. [Bug Fix] Fix the bug about incorrect setup item name.

---

### F25

1. [Feature] Update RC 30.P19 (IceLake BKC 2023.2 IPU-PV)
2. [Feature] Update DCPMM UEFI driver v02.00.00.3887
3. [Feature] Update microcode:  
IceLake CPU XCC D0 Production : m\_87\_606a6\_0d000390
4. [Feature] Update RSTe : v7.8.0.1012
5. [Feature] Update VROC : v7.8.0.1012
6. [Feature] Update ME WilsonCity : SPS\_E5\_04.04.04.301.0
7. [Feature] Update for security 2023.1 IPU INTEL-SA-00700: CVE-2022-21216.
8. [Feature] Update for security 2023.1 IPU INTEL-SA-00717: CVE-2022-32231, CVE-2021-0187, CVE-2022-26837.
9. [Feature] Update for security 2023.1 IPU INTEL-SA-00718: CVE-2022-36348
10. [Feature] Update for security 2023.1 IPU INTEL-SA-00730: CVE-2022-33972
11. [Feature] Update for security 2023.1 IPU INTEL-SA-00738: CVE-2022-33196, CVE-2022-33196
12. [Feature] Update for security 2023.1 IPU INTEL-SA-00767: CVE-2022-38090
13. [Feature] Update for security AMI SA50162: CVE-2022-34301, CVE-2022-34302, CVE-2022-34303
14. [Feature] Update for security AMI SA50130

---

### F24

1. [Bug Fix] Fix the bug about remote BIOS item on WEBUI.

---

### F23

1. [Bug Fix] Fix the bug about incorrect information on Redfish.

---

### F22

1. [Feature] Update RC 29.P30 (IceLake BKC 2022 WW40)
2. [Feature] Update DCPMM UEFI driver v02.00.00.3887 (IceLake BKC 2022 WW40)

## BIOS Release Notes

3. [Feature] Update microcode:

IceLake CPU XCC D0 Production : m\_87\_606a6\_0d00037b

4. [Feature] Update RSTe : v7.7.6.1004
5. [Feature] Update VROC : v7.7.6.1004
6. [Feature] Update ME WilsonCity : SPS\_E5\_04.04.04.202.0

---

### F21

1. [Feature] Update RC 27.P52 (IceLake BKC 2021 WW52)
2. [Feature] Update DCPMM UEFI driver v02.00.00.3885 (IceLake BKC 2021 WW52)
3. [Feature] Update microcode:  
IceLake LCC CPU : m\_97\_606a0\_80000031  
IceLake HCC CPU : m\_87\_606a4\_8b0003f0  
IceLake XCC C0 CPU : m\_87\_606a5\_8c0002f0  
IceLake XCC D0 CPU : m\_87\_606a6\_8d000280  
IceLake CPU HCC Production : m\_87\_606a4\_0b000280  
IceLake CPU XCC C0 Production : m\_87\_606a5\_0c0002f0  
IceLake CPU XCC D0 Production : m\_87\_606a6\_0d000331
4. [Feature] Update RSTe : v7.7.0.1054
5. [Feature] Update VROC : v7.7.0.1054
6. [Feature] Update ME WilsonCity : SPS\_E5\_04.04.04.062.0
7. [Bug Fix] Fix the bug about Setup menu incorrect information.

---

### F20

1. [Bug Fix] Fix the bug about setup menu item : Active Video.

---

### F18

1. [Feature] Update VR to A02.

---

### F17

1. [Feature] Update VR version A01.

---

### F16

1. [Feature] Add Ti solution.

---

### F15

1. [Bug Fix] Fix the bug about changing Memory voltage by setup item.
2. [Feature] Change the setup item PowerPolicy default setting to [Standard].

---

### F14

1. [Bug Fix] Fix some bug about SMBIOS table.

## BIOS Release Notes

---

### F13

1. [Bug Fix] Fix the bug about disable Turbo mode fail.
  2. [Bug Fix] Fix the bug about NVMe hotplug fail.
- 

### F12

1. [Bug Fix] Fix the VROC incorrect name.
  2. [Bug Fix] Fix incorrect information in subsystem page.
-