BIOS Release Notes

TITLE

SUBJECT:	MSG4-GU1 BIOS Release Notes version F22
System:	MSG4-GU1-000, R164-SG5-AAV1-000, R164-SG6-AAJ1-000, R264-SG2-AAS1-000, R264-SG2-AAS2-000, R264-SG3-AAJ1-000, R264-SG5-AAJ1-000

About This Release

Build Date: **2026/09/03**
BIOS Checksum: **0xAF85B40B (flashabl.rom), 0x4DE2B375 (image.bin), 0x4DB440B2 (PFR1.bin), 0x4D9A5BC5 (PFR2.bin), 0x97B77745 (PFRcap.bin)**
Release Owner: **jeff.huang**

BIOS Components/Contents

Processor stepping(s) supported: IntelR Granite Rapids-SP, Sierra Forest-SP processor
System hardware configurations supported: MSG4-GU1
Microcode updates versions:

CPUID	Family	Microcode Update ID
a06d0	Processor GNR A0	10000680
a06d1	Processor GNR B0	01000444
a06d1	Processor GNR R1S B0	0a000164
a06f3	Processor SRF C0	030003c4

IPMI support:
AMI Kernel version: **Gbt_Kernel_110_10**
Intel CSI/MRC Package version: **3545.P53**
OPROM version:

OPROM	Version
AST2600 VGA	1.13.05
INTEL RAID PACKAGE	RSTe 9.0.0.1096

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Installation Notes

IMPORTANT NOTES:

1. Please extract the MSG4-GU1_F22.zip to a bootable diskette that use FAT/FAT32 format

BIOS UPDATE INSTRUCTIONS FOR EFI Shell:

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

F22

1. [Feature] Update RC 3545.P53 (2026 BKC WW31)
2. [Feature] Update microcode:

GNR A0 MCU : m_95_a06d0_1000068

GNR B0 MCU : m_95_a06d1_01000444

GNR R1S B0 MCU : m_20_a06d1_0a000164
SRF C0 MCU : m_01_a06f3_030003c4
3. [Feature] Include AMI SA50352 for CVE-2026-31789, CVE-2026-31790, CVE-2026-28387, CVE-2026-28388, CVE-2026-34874, CVE-2026-25835, CVE-2026-34876, CVE-2026-25834, CVE-2026-25833
4. [Feature] Include AMI SA50347 for CVE-2026-33198

F21
1. [Feature] Update RC 3545.P22 (2026 BKC WW21)
2. [Feature] Update microcode:
GNR A0 MCU : m_95_a06d0_1000068
GNR B0 MCU : m_95_a06d1_01000434
GNR R1S B0 MCU : m_20_a06d1_0a000151
SRF C0 MCU : m_01_a06f3_030003b2
3. [Bug Fix] Include AMI SA50336 for CVE-2025-58771, CVE-2025-58772, CVE-2025-58773, CVE-2025-58774
4. [Bug Fix] Include AMI SA50344 for CVE-2026-20716
5. [Bug Fix] Include AMI SA50348 for CVE-2026-33197
6. [Bug Fix] Include INTEL-SA-01442 for CVE-2026-20713
7. [Bug Fix] Include INTEL-SA-01437 for CVE-2026-20712
8. [Bug Fix] Include INTEL-SA-01439 for CVE-2026-20898
9. [Bug Fix] Include INTEL-SA-01436 for CVE-2026-20775, CVE-2026-20885, CVE-2026-20705

F20
1. [Feature] Set default value of "Maximum 2DPC Frequency" from 5200 to 6000.
2. [Bug Fix] Fine tune remote setup menu setting.

F19
1. [Bug Fix] 1. Update RC 3545.P22 (2026 BKC WW11)
2. [Bug Fix] 2. Update microcode:
GNR A0 MCU : m_95_a06d0_10000680
GNR B0 MCU : m_95_a06d1_01000423
GNR R1S B0 MCU : m_20_a06d1_0a000142
SRF C0 MCU : m_01_a06f3_030003a3
3. [Feature] 3. Support Memory 2DPC frequency 6000.
4. [Bug Fix] 4. Include AMI SA50338 solution for CVE-2025-35973.
5. [Bug Fix] 5. Include AMI SA50342 solution for CVE-2025-15467, CVE-2025-68160, CVE-2025-69418, CVE-2025-69419, CVE-2025-69421, CVE-2026-22795, CVE-2026-22796, CVE-2026-11187
6. [Bug Fix] 6. Include AMI SA50328 solution for CVE-2025-9613, CVE-2025-9614, CVE-2025-

9612.
7. [Bug Fix] 7. Include AMI SA50337 solution for CVE-2026-0893.
8. [Bug Fix] 8. Include INTEL-SA-01419 for CVE-2025-31356

F18
1. [Feature] Support Memory "Team Group".
2. [Feature] Support "Clear CMOS IPMI command".

F17
1. [Feature] Update RC 3545.P03 (2025 BKC WW47)
2. [Feature] Update microcode:
GNR A0 MCU : m_95_a06d0_10000680
GNR B0 MCU : m_95_a06d1_01000405
GNR R1S B0 MCU : m_20_a06d1_0a000133
SRF C0 MCU : m_01_a06f3_03000393
3. [Feature] Include INTEL-SA-01397 solution for CVE-2025-30513, CVE-2025-32007, CVE-2025-32467, CVE-2025-27572, CVE-2025-27940, CVE-2025-31944
4. [Feature] Include INTEL-SA-01396 solution for CVE-2025-31648
5. [Feature] Include AMI SA50321 solution for CVE-2025-31938

F16
1. [Feature] Support Data link feature exchange (DLFE) setup item for each slot.

F15
1. [Feature] Update RC 3544.P80 (2025 BKC WW38 UPLR1.5)
2. [Feature] Update microcode:
GNR B0 MCU : m_95_a06d1_010003f3
GNR R1S B0 MCU : m_20_a06d1_0a000124
SRF C0 MCU : m_01_a06f3_03000382
3. [Bug Fix] Include INTEL-SA-01314 solution for CVE-2025-22885
4. [Bug Fix] Include AMI SA50318 solution for CVE-2025-30185, CVE-2025-31936

F14
1. [Bug Fix] 1. Include AMI SA50315 solution for CVE-2025-3052.

F13
1. [Bug Fix] Fix the bug about incorrect remote setup item.
2. [Bug Fix] Support setup item PXE boot enable/disable for slot.

F12

1. [Bug Fix] 1. Update RC 3544.P60 (BKC 2025 WW20)
2. [Bug Fix] 2. Update microcode:

GNR B0 MCU : m_95_a06d1_010003c2
GNR R1S B0 MCU : m_20_a06d1_0a0000f2
SRF C0 MCU : m_01_a06f3_03000362

3. [Bug Fix] 3. Include AMI SA50313 solution for CVE-2025-26403, CVE-2025-32086
4. [Bug Fix] 4. Include INTEL-SA-01313 solution for CVE-2025-21090, CVE-2025-20053
5. [Bug Fix] 5. Include INTEL-SA-01234 solution for CVE-2025-20027, CVE-2025-20028, CVE-2025-22444, CVE-2025-22850
6. [Bug Fix] 6. Include INTEL-SA-01312 solution for CVE-2025-22853, CVE-2025-21096, CVE-2025-20613

F11

1. [Bug Fix] 1. Fix BIOS recovery fail issue.
2. [Bug Fix] 2. Fix the bug about linux command "numactl -H" will show node distance as 0xFF.
3. [Bug Fix] 3. Fix the bug about some remote BIOS setup item disappear.

F10

1. [Feature] Update RC 3544.P48 (BKC 2025 WW14)
2. [Feature] Update microcode:

GNR B0 MCU : m_95_a06d1_010003A3
GNR R1S B0 MCU : m_20_a06d1_0a0000d1
SRF C0 MCU : m_01_a06f3_03000341

3. [Bug Fix] Include AMI SA50306 solution for CVE-2024-13176

F09

1. [Bug Fix] 1. Fine tune IDPIN function setting.

F08

1. [Feature] Support Microsoft Option ROM UEFI CA 2023 for Secure Boot
2. [Feature] Support GBTGSI feature.

F07

1. [Bug Fix] Update RC 3544.P29 (BKC 2025 WW03)
2. [Bug Fix] Update microcode:

GNR A0 MCU : m_95_a06d0_10000680
GNR B0 MCU : m_95_a06d1_01000380
GNR R1S B0 MCU : m_20_a06d1_0a0000c0
SRF C0 MCU : m_01_a06f3_03000330

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F06

1. [Bug Fix] Fix the bug about Slot I/O rom fail.
2. [Feature] Improve KCS protocol.

F05

1. [Bug Fix] Update RC 3544.P22 (BKC 2024 WW48)
2. [Bug Fix] Update microcode:

GNR A0 MCU : m_95_a06d0_10000680
GNR B0 MCU : m_95_a06d1_01000360
GNR R1S B0 MCU : m_20_a06d1_0a000080
SRF C0 MCU : m_01_a06f3_03000270

3. [Bug Fix] Update VR solution : A9

F04

1. [Bug Fix] Fix the bug about device resource related function.
2. [Bug Fix] Update AST2600 driver : 1.13.05

F03

1. [Feature] Update RC 3544P.08 (BKC 2024 WW43)
2. [Feature] Update microcode:

GNR A0 MCU : m_95_a06d0_10000680
GNR B0 MCU : m_95_a06d1_01000311
GNR R1S B0 MCU : m_20_a06d1_1a000080
SRF C0 MCU : m_01_a06f3_03000270

3. [Feature] Update Mapping table : R22

F02

1. [Bug Fix] Update Mapping table : v22

F01

1. [Feature] First release PVT BIOS.
2. [Feature] Update Mapping table : v21

D03

1. [Bug Fix] Add intel patch for preventing boot failed with Samsung's specific dimms.
2. [Bug Fix] Fix the bug about system will hang code after changing slot lanes.
3. [Feature] Update Mapping table : v13

D02

1. [Feature] Update RC 34.D65 (BKC 2024 WW33)

2. [Feature] Update microcode:
GNR A0 MCU : m_95_a06d0_80000670
GNR B0 MCU : m_95_a06d1_810002e0
GNR R1S B0 MCU : m_20_a06d1_8a000030
SRF C0 MCU : m_01_a06f3_03000211
3. [Feature] VROC driver : 9.0.0.1096
4. [Bug Fix] Fix the bug about incorrect ECC CE/UCE sel information.

D01
1. [Feature] First release.
