

# BIOS Release Notes

## TITLE

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**SUBJECT:** MS94-FS0 BIOS Release Notes version [F23](#)  
**System:** [MS94-FS0-000](#), [R184-S91-AAV1-000](#), [MS94-FS0-00A](#), [R184-S90-AAV1-000](#),  
[R184-S92-AAV1-000](#), [R184-S92-LAV1-000](#), [R184-S93-AAV1-GB0](#), [R284-S90-AAJ1-000](#), [R284-S92-AAJ1-000](#), [R284-S92-AAJ2-GB0](#), [R284-S90-AAJ2-GB0](#),  
[R284-S94-AAJ1-GB0](#), [E284-S90-AAJ1-000](#), [R284-S93-AAL1-000](#), [R184-S94-AAV1-000](#), [R284-S91-AAJ1-000](#), [R284-S91-AAJ2-000](#), [R284-S91-AAJ3-GB0](#)

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### About This Release

**Build Date:** [2025/03/13](#)  
**BIOS Checksum:** [0xB4537518](#) (flashabl.rom), [0x52B06DA3](#) (image.bin), [0x528252F2](#) (PFR1.bin), [0x52686B43](#) (PFR2.bin), [0x930F06C3](#) (PFRcap.bin)  
**Release Owner:** yujia.chen

### BIOS Components/Contents

**Processor stepping(s) supported:** Intel® Granite Rapids-SP, Sierra Forest-SP processor

**System hardware configurations supported:** MS94-FS0

**Microcode updates versions:**

CPUID	Family	Microcode Update ID
a06d0	Processor GNR A0	10000680
a06d1	Processor GNR B0	01000380
a06d1	Processor GNR R1S B0	0a0000c0
a06f3	Processor SRF C0	03000330

**IPMI support:**

**AMI Kernel version:** [Gbt\\_Kernel\\_070\\_16](#)

**Intel CSI/MRC Package version:** [3544.P29](#)

**OPROM version :**

OPROM	Version
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## BIOS Release Notes

AST2600 VGA	1.13.05
INTEL RAID PACKAGE	RSTe 9.0.0.1096

### Installation Notes

#### IMPORTANT NOTES:

1. Please extract the MS94-FS0\_ [F23](#).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

#### F23

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

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## F22

1. [Feature] Update RC 3544.P29 (BKC 2025 WW03)
  2. [Feature] 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
  3. [Feature] Update Mapping table : R46
  4. [Feature] Implement Lan disable feature.
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## F21

1. [Bug Fix] Fix the bug about Slot I/O rom fail.
  2. [Feature] Improve KCS protocol.
  3. [Feature] Update Mapping table : R45
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## F20

1. [Feature] Update RC 3544.P22 (BKC 2024 WW48)
  2. [Feature] 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. [Feature] Update Mapping table : R43
  4. [Bug Fix] Fixed the CXL OS issue.
  5. [Feature] First ROT BIOS package release
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## F19

1. [Bug Fix] Fix the bug about device resource related function.
  2. [Feature] Update AST2600 driver : 1.13.05
  3. [Feature] Update VR solution to version A5.
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## F18

1. [Feature] Add TI VR feature.
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## F17

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

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GNR R1S B0 MCU : m\_20\_a06d1\_1a000080

SRF C0 MCU : m\_01\_a06f3\_03000270

3. [Feature] Update Mapping table : R42
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### F16

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 : R38
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### F15

1. [Feature] Support GNR R1S B0 stepping CPU.
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### F14

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

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.
  5. [Feature] Update inventory.bin R37.
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### F13

1. [Feature] Update SRF PROD/QS microcode : m\_01\_a06f3\_03000211
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### F12

1. [Bug Fix] Fix the bug about PCIe device out of resource.
  2. [Feature] Update system mapping table to version 36.
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### F11

1. [Bug Fix] Support SRF PRQ C0 stepping CPU.
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### F10

1. [Bug Fix] Fix the bug about incorrect SVID.
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### F09

1. [Feature] Support dual BIOS check command.
  2. [Bug Fix] Fix the bug about remote setup error.
  3. [Bug Fix] Fix the ECC/PERR/SERR incorrect format.
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# BIOS Release Notes

## F08

1. [Feature] Update VR solution to version A3.
  2. [Bug Fix] Fix the item "ACPI C1 Enumeration" not post to remote setup.
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## F07

1. [Feature] Update RC 3218.D03 (BKC 2024 WW21)
  2. [Feature] Update microcode:  
SRF A0 MCU : m\_01\_a06f0\_80000360  
GNR A0 MCU : m\_01\_a06f0\_80000640  
SRF C0 MCU : m\_01\_a06f3\_13000132
  3. [Feature] VROC driver : 9.0.0.1096
  4. [Bug Fix] Fix the bug about BIOS recovery feature.
  5. [Bug Fix] Fix the bug about incorrect remote setup menu information.
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## F06

1. [Feature] Update RC 0031.D97 (BKC 2024 WW19)
  2. [Feature] Update microcode:  
SRF A0 MCU : m\_01\_a06f0\_80000360  
GNR A0 MCU : m\_01\_a06f0\_80000640  
SRF C0 MCU : m\_01\_a06f3\_13000132
  3. [Feature] VROC driver : 9.0.0.1096
  4. [Bug Fix] Fix yellow device of com port.
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## F05

1. [Bug Fix] Fix the bug about incorrect information on remote BIOS setup menu.
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## F04

1. [Feature] Set Trigger SW Error Threshold to Disable.
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## F03

1. [Bug Fix] Fixed USB ports show incorrect info.
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## F02

1. [Bug Fix] Fix Windows BSOD bug.
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## F01

1. [Feature] First PVT BIOS release.
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## D26

1. [Bug Fix] Fix the bug about randomly windows crash. (BSOD)

## BIOS Release Notes

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### D25

1. [Feature] Update system mapping to version 33.
  2. [Bug Fix] Fix the bug about no TME related item.
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### D24

1. [Feature] Update system mapping table to version 32.
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### D22

1. [Bug Fix] Fix minor bugs.
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### D21

1. [Feature] Add Power Policy setup item.
  2. [Bug Fix] Update Mapping table version : 31
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### D20

1. [Bug Fix] Fix the bug about hanging code at 0x92 during VMD enable.
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### D19

1. [Feature] Update RC 0031.D27 (BKC 2024 WW15)
  2. [Feature] Update microcode:  
SRF A0 MCU : m\_01\_a06f0\_80000360  
GNR A0 MCU : m\_01\_a06f0\_80000620  
SRF C0 MCU : m\_01\_a06f3\_13000132
  3. [Feature] VROC driver : 9.0.0.1096
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### D18

1. [Bug Fix] Fixed ECC sel log error.
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### D17

1. [Feature] Update RC 0030.D85 (BKC 2024 WW13)
  2. [Feature] Update microcode:  
SRF A0 MCU : m\_01\_a06f0\_80000360  
GNR A0 MCU : m\_01\_a06f0\_80000611  
SRF C0 MCU : m\_01\_a06f3\_13000131
  3. [Feature] VROC driver : 9.0.0.1096
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### D16

1. [Bug Fix] Fine tune release note information.
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## BIOS Release Notes

### D15

1. [Feature] Fine tune WOL default setting to "Enable"
  2. [Bug Fix] Fix SMBIOS Type 16 incorrect information.
  3. [Feature] Support "Power Button 1s shutdown" function under OS.
  4. [Bug Fix] Fix IPV6 setting bug.
  5. [Bug Fix] Fix ECC information during POST.
  6. [Bug Fix] Fix NVMe port number incorrect in POST Text phase with VMD enable.
  7. [Bug Fix] Fix Main page "Processor" incorrect information.
  8. [Bug Fix] Fix ECC Bad DIMM will disappear after UCE occur.
  9. [Bug Fix] Fix SMBIOS Type 129 incorrect information.
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### D14

1. [Bug Fix] Because release VROC driver 9.0.0.1088 have bug, rollback VROC driver to 9.0.0.1096.
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### D13

1. [Feature] Support SRF QS C0 stepping CPU.
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### D12

1. [Feature] Update kernel 5.34\_0ACQZ\_30D54\_SRFSP\_48\_BETA
  2. [Feature] Update RC 0030.D54 (BKC 2024 WW11)
  3. [Feature] Update microcode:  
SRF A0 MCU : m\_01\_a06f0\_80000360  
GNR A0 MCU : m\_01\_a06f0\_80000600
  4. [Feature] VROC driver : 9.0.0.1088
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### D11

1. [Feature] Implement USB mapping.
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### D10

1. [Feature] Update Mapping table version : 29.
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### D09

1. [Feature] Add in system "R184-S92-LAV1-000".
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### D08

1. [Bug Fix] Fixed Lan disabled error.
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### D07

1. [Feature] Update RC 0030.D34 (BKC 2024 WW09)

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2. [Feature] Update microcode:

SRF A0 MCU : m\_01\_a06f0\_80000360

GNR A0 MCU : m\_01\_a06f0\_800005c0

3. [Feature] VROC driver : 9.0.0.1096

4. [Bug Fix] Update mapping table version : 28.

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D06

1. [Feature] Update RC 0029.D87 (BKC 2024 WW07)

2. [Feature] Update microcode:

SRF A0 MCU : m\_01\_a06f0\_80000360

GNR A0 MCU : m\_01\_a06f0\_800005c0

3. [Feature] VROC driver : 9.0.0.1096

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D05

1. [Feature] Add GPU SKU related feature set.

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D04

1. [Bug Fix] Fixed ECC memory error.

2. [Feature] Add VMD & non-hotplug VMD feature.

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D03

1. [Feature] Update MPS VR version : A2.

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D02

1. [Feature] Update RC 0029.D28 (BKC 2024 WW05)

2. [Feature] Update microcode:

SRF A0 MCU : m\_01\_a06f0\_80000351

GNR A0 MCU : m\_01\_a06f0\_80000593

3. [Feature] Update MPS VR version : A1.

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D01

1. [Feature] First DVT release BIOS.

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E18

1. [Bug Fix] Fine tune MS94-FS0-00A SKU setting.

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E17

1. [Bug Fix] Fixed present pin bifurcation error.

2. [Bug Fix] Fixed one CPU hang on mapping table.

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## BIOS Release Notes

E16

1. [Feature] Fine tune Setup menu item.
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E15

1. [Bug Fix] Fixed VPP settings solution.
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E13

1. [Feature] Update system mapping table to version 17.
- system "R184-S91-AAV1-000" with BPB region.
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E12

1. [Feature] Add BPB region into system mapping table for system "R184-S91-AAV1-000".
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E11

1. [Feature] Modified OCP bifurcation ready GPIO setting.
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E10

1. [Feature] Implement VPP settings.
  2. [Feature] Update the system mapping table to version 15.
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E09

1. [Feature] Update VROC driver to 9.0.0.1096.
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E08

1. [Bug Fix] Fix the bug about shell.efi not show correct information.
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E07

1. [Feature] Update RC 2780.D02 (BKC 2023 WW47)
  2. [Feature] Update microcode:  
SRF A0 MCU : m\_01\_a06f0\_80000340  
GNR A0 MCU : m\_01\_a06f0\_80000520
  3. [Feature] VROC driver : 9.0.0.1044\_2
  4. [Feature] Support SRF CPU VROC.
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E06

1. [Bug Fix] Fine tune OCP related GPIO setting.
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E05

1. [Feature] Add first VR MPS solution.
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## BIOS Release Notes

### E04

1. [Feature] Add SEC phase bifurcation setting.
  2. [Bug Fix] Modify vGPIO pins 80 ~ 83 GPIO reset config.
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### E03

1. [Bug Fix] Fix the bifurcation feature bug.
  2. [Feature] Implement test version VR solution.
- Version: MSB4-G40 A1
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### E02

1. [Feature] Update system mapping to R14.
  2. [Bug Fix] Modified system bifurcation.
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### E01

1. [Feature] First release BIOS.
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