

BIOS Release Notes

TITLE

SUBJECT: MZ33-AR1 BIOS Release Notes version R22_F15
System: MZ33-AR1-000,S453-Z30-AAV2-000,S463-Z30-AAB1-000

About This Release

Build Date: 2026/04/01
BIOS Checksum: 0x6DC6D25F (32M)
Release Owner: Nelson.Lin

BIOS Components/Contents

Processor stepping(s) supported: AMD Turin / Genoa Processors
System hardware configurations supported: MZ33-AR1-000
PCB Version: 3.x
Microcode updates versions:

CPUID	Family	Microcode Update ID
Turin A0	Family 1Ah Model 00h-0Fh	0x0B00004D
Turin B0	Family 1Ah Model 00h-0Fh	0x0B001016
Turin C0	Family 1Ah Model 00h-0Fh	0x0B002032
Turin C1	Family 1Ah Model 00h-0Fh	0x0B00215A
Turin Dense A0	Family 1Ah Model 00h-0Fh	0x0B10000F
Turin Dense B0	Family 1Ah Model 00h-0Fh	0x0B101054

IPMI support:
AMI Kernel version: 5.35_0ACST_PI1.0.0.9_023
AGESA PI version: TurinPI 1.0.0.9
OPROM version:

OPROM	Version
AST2600	1.13.00

Installation Notes

IMPORTANT NOTES:

1. Please extract the MZ33-AR1_R22_F15.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.

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3. Enter your USB filesystem, like "fs0:" or "fsX:", "X" is your USB filesystem number
4. Flash script for bios update:
 - 4.1 For AMD EPYC 9004 series CPU, execute f_GtoT.nsh
 - 4.2 For AMD EPYC 9005 series CPU, execute f.nsh
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. For AMD EPYC 9004 series CPU:
 - 3.1 Enter \Tool\WIN\afuwin32 and execute f_GtoT.bat for Windows 32bit.
 - 3.2 Enter \Tool\WIN\afuwin64 and execute f_GtoT.bat for Windows 64bit.
4. For AMD EPYC 9005 series CPU:
 - 4.1 Enter \Tool\WIN\afuwin32 and execute f.bat for Windows 32bit.
 - 4.2 Enter \Tool\WIN\afuwin64 and execute f.bat for Windows 64bit.
5. 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 during POST
2. The bios version shows on the first main page

Known Issues/Workarounds

Issues fixed in this version

R22

1. [Feature] Update Genoa AGESA 1.0.0.H.

R21

1. [Feature] Update AGESA 1.0.0.9
2. [Feature] Enhance Redfish.
3. [Feature] Enhance PLX function.
4. [Security] CVE-2023-45236, CVE-2023-45237, CVE-2025-54502, CVE-2025-54507, CVE-2025-54510, CVE-2025-61971, CVE-2025-61972, CVE-2025-62626.

R20

1. [Feature] Support S463-Z30-AAB1-000.
2. [Feature] M.2 Speed limit Gen4 to follow SPEC.

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R19

1. [Feature] Update inventory v10.
 2. [Feature] Support HDD OPAL.
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R18

1. [Feature] Update AGESA 1.0.0.7.
 2. [Security] CVE-2025-0033, CVE-2025-3770, CVE-2025-29943.
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R17

- 1.[Feature] Update AGESA 1.0.0.6.
 - 2.[Security]: CVE-2025-52533, CVE-2023-31364, CVE-2025-29950, CVE-2024-36355, CVE-2025-29939, CVE-2025-0012, CVE-2023-20539, CVE-2025-52536, CVE-2024-21961, CVE-2025-29948, CVE-2024-21953, CVE-2025-0027, CVE-2025-29952, CVE-2025-52534, CVE-2025-48517, CVE-2025-0031, CVE-2024-36310, CVE-2025-29946, CVE-2025-48514, CVE-2025-0029, CVE-2025-48509.
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R16

1. [Feature] Update Mapping Table ver:08.
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R15

1. [Feature] Update AGESA 1.0.0.5.
 2. [Security] CVE-2024-13176
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R14

1. [Feature] Update DDR manufacturer information.
 2. [Feature] Add Microsoft Option ROM UEFI CA 2023 key.
 3. [Feature] Enhance SMBIOS type9.
 4. [Feature] Enhance Redfish.
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R13

- 1.[Feature] Update AGESA 1.0.0.4.
 - 2.[Security] CVE-2023-6237, CVE-2024-6119, CVE-2024-7344.
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R12

- 1.[Fix] Fix PCIE compatibility when install GPU card.
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R11

1. [Feature] Add S453-Z30-AAV2-000 System.

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2. [Feature] Update Mapping Table version:03.

R10

- 1.[Feature] Adjust the default maximum DDR speed.

R09

1. [Fix] SCE tool import/export issue.
2. [Fix] Fix Redfish sends data twice after the system has completed booting.
3. [Feature] Adjust the maximum speed limit during automatic memory training.
4. [Feature] Add support for PCIe Re-Sizeable BAR functionality.

R08

- 1.[Feature] Update AGESA 1.0.0.3.
- 2.[Feature] Support DDR speed up to 6400, but it requires manual adjustment in the BIOS settings.
UMC Common Options => Enforce POR => Accept => Memory Target Speed set [DDR6400].
Note: The maximum supported speed is based on product specifications.
- 3.[Fix] Fix the issue where NVMe speed is reduced to Gen4 after a hot plug.
- 4.[Fix] Fix the issue where SEL reports incorrect DDR channel information when associated with CPU1.
- 5.[Fix] Fix the issue where the system ready to boot process gets stuck when the BMC is unresponsive.

R07

- 1.[Feature] Update AGESA 1.0.0.2.
- 2.[Fix] Fix the network configuration switching issue in the BIOS Server Manager setup.
- 3.[Fix] Fix the issue where having too many installed devices causes the system to hang at the BIOS logo screen.
- 4.[Security] CVE-2024-0179, CVE-2024-21925, CVE-2024-21944, CVE-2020-10255.

R06

- 1.[Fixed] Fixed hotplug function.

R05

- 1.[Fixed] Sata info match spec.
 - 2.[Feature] Prevent AC Loss send 0xF to BMC, the BMC power policy will change to always-off status.
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R04

- 1.[Fixed] NVME HOT PLUG Function .
 - 2.[Feature] Correct SATA Information on setup page.
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R03

- 1.[Feature] AGESA 1000 NDA_Patch3 .
 - 2.[Feature] Correct SATA Information on setup page.
 - 3.[Feature] Sync with Genoa solution for fix PCIe Linke speed couldn't modify by bios item.
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R02

- 1.[Feature]Fixed WebUI Display.
 - 2.[Feature]Fixed SATA Display on setupmenu.
 - 3.Fix F12 hot key is no functioning issue.
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R01

- 1.[Feature]update inventory_02.
 - 2.[AGESA] 1.0.0.0 RC1.
 - 3.[Feature]Hot plug function.
 - 4.[Feature]ECC function.
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