

# BIOS Release Notes

## TITLE

**SUBJECT:** MZ32-AR0 BIOS Release Notes version R40\_F04  
**System:** MZ32-AR0-00,MZ32-AR1-00,MZ32-001-A1,R152-Z30-00,R152-Z31-00,  
R152-Z32-00,R152-Z33-00,R272-Z30-00,R272-Z31-00,R272-Z32-00,  
R272-Z34-00,W282-001-JN,R272-Z33-FL,R272-Z33-OB,S452-Z30-00,  
S472-Z30-00

### About This Release

**Build Date:** 2024/09/27  
**BIOS Checksum:** 0x9EC7D7A1 (32M)  
**Release Owner:** Auto.Build(Nelson.Lin)

### BIOS Components/Contents

**Processor stepping(s) supported:** AMD Rome / Naples Processors  
**System hardware configurations supported:** MZ32-AR0-00, MZ32-AR1-00, MZ32-001-A1  
**PCB Version:** 1.x,2.x  
**Microcode updates versions:**

CPUID	Family	Microcode Update ID
Rome A0	Family 17h Model 30-3Fh	08300027
Rome B0	Family 17h Model 30-3Fh	0830107C

**IPMI support:**  
**AMI Kernel version:** 5.14\_RomeCrb\_0ACMK032  
**AGESA PI version:** RomePI 1.0.0.J  
**OPROM version:**

OPROM	Version
AST2500	1.09.0

### Installation Notes

#### IMPORTANT NOTES:

1. Please extract the MZ32-AR0\_R40\_F04.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.

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### BIOS UPDATE INSTRUCTIONS FOR Windows:

1. Insert bios update USB flash drive.
2. Use Command Shell.
3. Enter \Tool\afuwin32 and execute f.bat for Windows 32bit.  
Or  
Enter \Tool\afuwin64 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

1. Windows OS does not support 256 or more logical.  
Windows 2019 can update KB44512534 to support it.

OS item	Win2019	Win2016
IOMMU	Enable ※	Enable KB4022723
SMT Control	Enable KB4512534	Disable

※When SMT Enabled, IOMMU need to set Enabled too.

SMT Control: AMD Simultaneous Multi-Threading Technology

KB4022723: Support IOMMU on Windows 2016.

KB4512534: Support SMT on Windows 2019.

2. NVIDIA CUDA didn't support IOMMU.

### Issues fixed in this version

R40

1. [Feature] Update AGESA 1.0.0.J.
2. [Feature] Remove unsupport redfish items:  
IPv6 BMC Lan Option (IPMI601)  
IPv6 BMC Lan IP Address Source (IPMI602)  
Secure Boot (SECB001)  
Secure Boot Mode (SECB002)  
Factory Key Provision (SECB008)  
Option ROM (SECB004)  
Removable Media (SECB005)  
Fixed Media (SECB006)
3. [Security Update] CVE-2023-2650, CVE-2023-3817, CVE-2023-5678, CVE-2023-

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R39

1. [Security Update] PKfail issue.
2. [Feature] Optimize BcpPro tool compatibility.

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R38

1. [Feature] Fine tune BMC IPv6 and IPv4 Network.

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R37

1. Enhance Endless Retry PXE feature.

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R36

1. Update AGESA 1.0.0.H.
2. Security update: CVE-2023-39538, CVE-2023-39539, CVE-2023-45229, CVE-2023-45230, CVE-2023-45231, CVE-2023-45232, CVE-2023-45233, CVE-2023-45234, CVE-2023-45235.

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R35

1. Fine tune SCE tool compatibility.

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R34

1. Improved AMD-SB-7008(CVE-2023-20593).
2. Optimizing specific system M.2 compatibility.

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R33

1. Optimizing specific system PCIE compatibility.

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R32

1. Optimizing PCIE compatibility.

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R31

1. Updated AGESA 1.0.0.F.
2. Optimizing PCIE compatibility.

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R30

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1. Close NVME LED control for system R152-Z32, R272-Z32, S452-Z30.

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### R29

1. Update AGESA 1.0.0.E.
2. Added MMIO resource items.
3. Modify SLOT1 Max Link Capability.
4. Finetune JEDEC manufacture ID 0x8CAB define.
5. Added R272-Z33-OB system support.

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### R28

1. Update AGESA 1.0.0.D.
2. Support 1712 security.

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### R27

1. Fine tune flash tool for dual BIOS.
2. Support NVME LED control for system.
3. Modify BMC major number format in setup menu.
4. Added S472-Z30-00 system support.

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### R26

1. Update AGESA 1.0.0.C.
2. Fixed afu check second BIOS rom failed.
3. Fixed Qlogic MAC issue in WebUI.

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### R25

1. Fixed SMBIOS broken.

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### R24

1. Added redriver for MB 2.1.
2. Added RedFish - System Inventory.
3. Added setup flash.
4. Update SMBIOS type 130/131.
5. Added MZ32-001 support.
6. Fixed system hang without lan oprom.

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### R23

1. Update AGESA 1.0.0.A
2. Changed Slot 7 default width to x4 x4 x4 x4 when slot is empty.
3. Fixed front USB 3.0 port can't immediately remove in BIOS setup page.

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## R22

1. Update AGESA 1.0.0.9
2. Adjusted onboard USB driving 20210120A.
3. Support MB v2.0 onboard driver new address.
4. Added ISL FW v0008.
5. Adjusted R272-Z34 and R152-Z33 redriving.

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## R21

1. Fixed M.2 detect issue.
2. Fixed when PCIE error occurs, there is no pause and warning message on the POST screen.
3. Fixed BIOS crash when used non-specification PSU device.
4. Fixed R152-Z33 WHQL SMBIOS/USB issue.
5. Adjusted R152-Z33 OCP Re-driver Value.
6. Fixed RTC fail issue.
7. Fixed NVME Timeout when keep hold Ctrl + Alt + Del
8. Fixed SATA display abnormal in the middle port.
9. Adjusted Wakeup events not support with ROT systems.
10. Fine Tune BIOS item Default string.

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## R20

1. Updated AGESA 1.0.0.8.
2. Updated Redfish feature for remote setup function.
3. Fixed Clean CMOS reboot system hang.
4. Fixed UUID lost with lan card in legacy mode.
5. Added Fabric Resource Setup Items.
6. Security update for CVE-2020-10255 and CVE-2020-10713.

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## R19

1. Fixed system wait long time randomly when boot in OS.
2. Fixed redfish load boot order default fail.

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## R18

1. Update AGESA 1.0.0.7
2. Adjusted R272-Z34 & R152-Z34 Redriver
3. Adjusted USB Redriver
4. Change SMT & IOMMU Default to Auto & Enable
5. Adjusted R272-Z34 & R152-Z34 Redriver for OCP
6. Fixed PCIe device Sequence.
7. Fixed Server manager setup setting message box lost.

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8. Fixed SATA port information didn't match system configuration.
9. Adjusted M.2 PCIe Max Speed default from Gen3 to Gen4.

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### R17

1. Add onboard VGA output first with add-on VGA card in UEFI mode.
2. Fixed system hang when user adjust PCIE\_2 slot lanes.

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### R16

1. Adjusted boot option maximum.
2. Fixed NPAR mode hang issue.
3. Adjusted R272-Z34-00 system PCIE speed behavior.
4. Fixed Windows 2019 HLK Assurance AQ failed issue.
5. Update Redfish feature.

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### R15

1. Support R152-Z33-00, R272-Z34-00 systems.

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### R14

1. Fixed hot plug function failed.
2. Support MZ32-AR1.

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### R13

1. Update AGESA PI to 1.0.0.6.
2. Added Erp Lot 9 Item.
3. Fixed SVID issue.
4. Fixed IPMI command change boot order fail issue.
5. Fixed Shell screen re-flash issue

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### R12

1. Update AGESA PI to 1.0.0.5.
2. Fixed NVDIMM had exclamation mark in Windows.
3. Fixed X540, X550 legacy PXE boot failed.
4. Added PCIE slot link speed control items.
5. Adjusted boot option label.
6. Runtime disable turbo boost.

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### R11

1. Added R272-Z33-FL system support.
2. Adjusted SMBIOS Type 10.

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3. Fixed NVDIMM hang at POST screen

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R10

1. Fixed NVIDIA and AMD GPU card driver BSOD issue.

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R09

1. Update AGESA 1.0.0.4.

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R08

1. Fixed OCP auto detect failed.
2. Fixed PXE legacy boot failed issue.
3. Update AGESA 1.0.0.3
4. Added R272-Z33 system support
5. Fixed OCP detect issue.
6. Adjusted Setup Menu default.
7. Added S452-Z30 system support.
8. Added Dimm information.
9. Fixed BMC got wrong PCIe PERR SEL log.

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R07

1. Fixed Intel lan card compatibility issue.
2. Modify SMBIOS type131 data for Windows 2019 server HLK fail.
3. Default disable “HD Audio” for Windows 2019 server HLK fail
4. Fixed riser porting failed issue.
5. Modify USB device tree.

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R06

1. Update AGESA 1.0.0.2

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R05

1. Fixed system hang at low temperature.
2. Update AGESA 1.0.0.1
3. Modify memory size format.
4. Adjusted FCLK.
5. Fixed Customer System SKU lost.

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R04

1. Modify the BMC version display format.

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### R03

1. Adjusted memory size.
2. Adjusted recovery file name.
3. Adjusted BIOS setup password case policy.
4. Fixed system hang 0xA50E.
5. Adjusted SMBIOS size to fix legacy boot issue.
6. Add wait BMC item.
7. Adjust PPL.
8. Added SMBIOS 2.x Support.

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### R02

1. Fix the BMC about ECC display (Channel, DIMM).
2. Display the CECC or UECC on post report.
3. Fix 32MB hang 0x00d1.
4. Skip memory SMI error, when SMT control set disabled.
5. Update AGESA 1.0.0.0.
6. Add SKU list.
7. Adjust PCIe slot7 policy.

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### R01

1. Release PVT version.
  2. Fix BMC IPv6 address cannot show on setup.
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