

# BIOS Release Notes

## TITLE

**SUBJECT:** MZ31-AR0 BIOS Release Notes version [R20](#)  
**System:** [G221-001-AM](#), [G221-Z30-00](#), [MZ31-AR0-00](#), [MZ31-AR0-ES-Hetzner-001](#),  
[R151-001-00](#), [R151-Z30-00](#), [R151-Z31-00](#), [R151-Z32-00](#),  
[R270-Z30-ES-AMD-001](#), [R271-Z31-00](#), [R271-Z31-ES-AMD-001](#), [S451-Z30-00](#)

### About This Release

**Build Date:** [2020/03/20](#)  
**BIOS Checksum:** [0xCDB3B6A2](#) (16M)  
**Release Owner:** Ben3.Lin

### BIOS Components/Contents

**Processor stepping(s) supported:** AMD Rome processors  
**System hardware configurations supported:** MZ31-AR0

**IPMI support:**

**AGESA PI version:** [RomePI 1.0.0.6](#)

**OPROM version :**

OPROM	Version
AST2500 VGA	1.10

### Installation Notes

#### IMPORTANT NOTES:

1. Please extract the zip file 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, please reboot system

#### BIOS UPDATE INSTRUCTIONS FOR Windows:

1. Insert bios update USB flash drive.
2. Use Command Shell
3. Execute \Tool\Win32\f.bat or \Tool\Win64\f.bat for bios update
4. After bios flash finish, please reboot system

#### BIOS Version CHECK INSTRUCTIONS:

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

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### BIOS UPDATE INSTRUCTIONS FOR Web UI:

1. Connect BMC\_IP by Internet browser.
2. Click Web-UI sub-page button "Update".
3. Select Firmware Type to ROM.
4. Use Command Shell.
5. cd to /RBU.
6. Select File Path to image.RBU.
7. Click Upload.

### BIOS UPDATE INSTRUCTIONS FOR GbtUtility:

1. Please copy the BIOS\_ZIP file to GbtUtility folder.
2. Use Command Shell.
3. cd to GbtUtility folder.
4. Execute "java -jar GbtUtility.jar -H BMC\_IP update bios BIOS\_ZIP 1".

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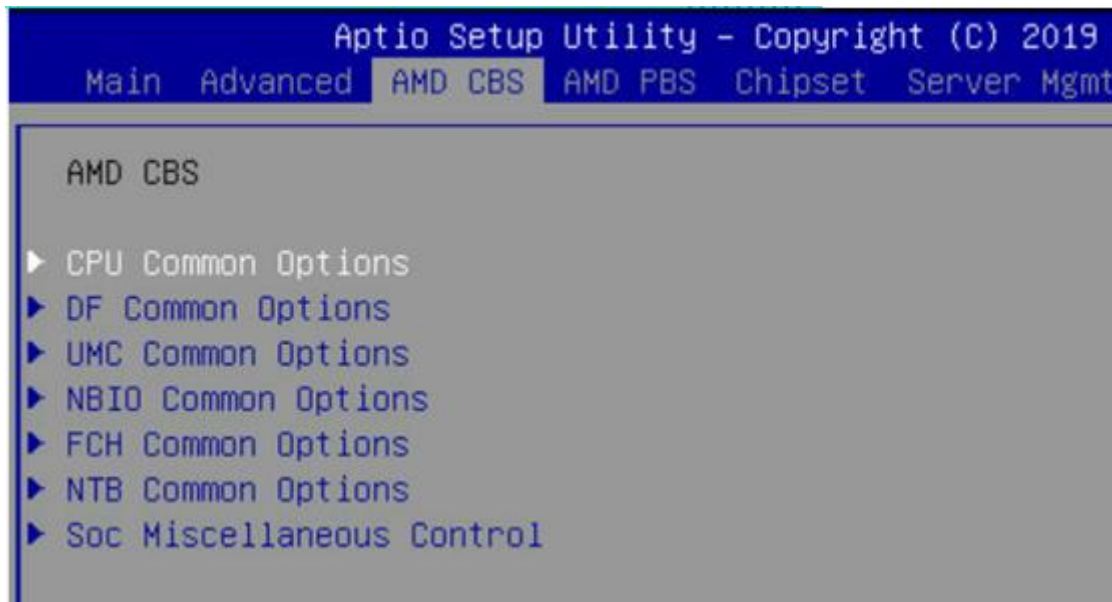
## Known Issues/Workarounds

1. Windows 2016 need install KB4022723 first, then enable BIOS setup item "IOMMU"  
Nvidia VGA CUDA not support IOMMU on Linux.
2. Windows OS does not support 256 or more logical. ( Need apply below update )  
2-1 . Windows 2019 can update KB4512534 to support 256 core SMT mode.  
2-2 . Set BIOS setup item "SMT Mode" to "Auto"
3. If your side use 64 core CPU x2.  
3-1. Linux kernel need 4.19 or later version and apply AMD X2APIC patch.  
( AMD X2APIC patch Implement OS version by OS vendor define )  
3-2. Windows 2019 need install KB4512534 for Support SMT.

PS.

BIOS setup item "SMT Mode" meant ( Simultaneous Multi-Threading ) Technology.

BIOS setup item "SMT Mode" Location as below :



AMD CBS ( on BIOS Setup page bar)

- ▶ CPU Common Options
    - ▶ Performance
      - ▶ CCD/Core/Thread Enablement
        - ▶ Accept
- SMT Control: Disable (Default) / Auto

- 3 . HDD LED are not light.
- 4 . COM port loop back failed.

## BIOS Release Notes

### Issues fixed in this version

- R20 (2020/03/20)
1. Update Redfish remote setup protocol.
  2. Adjusted boot option maximum.
  3. Fixed the problem that the setup item " PCIE 6 Lanes Configuration" changed to a value other than Auto has no effect.
- R19 (2020/03/04)
1. Increase the ECC Correctable Error Threshold Default
  2. Update TPM assurance AQ
- R18 (2020/02/14)
1. Update AGESA version to 1.0.0.6
  2. Adjust the behavior of IPMI boot device setting Legacy or UEFI
  3. Adjust POST memory PMU error message
  4. Add BIOS setup item "ERP mode"  
( Need BMC support , Please check BMC version form Web-site )
- R16 (2019/12/24)
- 1 . Update AGESA version to 1.0.0.5
- R15 (2019/12/06)
- 1 . Fix "Trigger memory single or multi bit error, BMC log have some problem." (mantis 39870, 38650, 38448, 38449)
  - 2 . Add boot options for "Citrix Xenserver (Hypervisor)" and "VMware ESXi"
  - 3 . Open BMC Virtual USB device list for BIOS setup (mantis 39856)
  - 4 . Adjust SMBIOS type 10/41 information
- R14 (2019/11/29)
- 1 . Adjust Redhat 7 BIOS setup boot option (mantis 39000)
  - 2 . Hide BMC Virtual USB LAN setup options (mantis 39856)
  - 3 . Update VBIOS version to v110
- R13 (2019/11/22)
- 1 . Fix RTC default Year not same as BIOS build when clear CMOS (mantis 39641)
  - 2 . Add NVIDIA GTX1080 Windows driver boot support
- R12 (2019/11/12)
- 1 . Fix POST VGA resolution less than 1024x768 (mantis 40477)
  - 2 . Hidden AMD PBS page item "SPI Lock"
  - 3 . Ubuntu/Rhel/windows show different information ( Mantis 39000 / 39144)
  - 4 . Fix the non-synchronization issue of items related to Console Redirection between BIOS Setup & Remote Setup.
  - 5 . Display BMC version information on the POST log (SOL / COM port)

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6 . Adjust USB device tree.(mantis 40421)

R11 (2019/10/25)

- 1 . Update AGESA RomePI version to 1.0.0.4
- 2 . Fix press F9 load default will show message in POST ( Mantis 39780 )
- 3 . Fix BMC Virtual CDROM abnormal boot option name (mantis 39493)
- 4 . Fix BMC detected PCIe SERR error log when install NVIDIA Tesla T4 ( Mantis 39622 )
- 5 . Fix above 4G decode caused legacy LAN option rom exception (mantis 39287)
- 6 . Fix BMC will detect PCIe SERR error log when system reboot with NVIDIA Tesla V100.

R10 (2019/10/09)

- 1 . Update AGESA version to 1.0.0.3
- 2 . Hidden un-use item ( CBS USB / HD Audio / NBIO FAN )
- 3 . Fix Apacer DDR4 in BIOS setup show unkoown
- 4 . Auto detect BMC vendor for hidden BMC LAN mode.

R09

- 1 . Fix "Upgrade BIOS does not show loading default message" (mantis 39780)
- 2 . When OS Clear TPM through BIOS, the related message will be displayed.  
(mantis 39942 / 38711 / 35798)
- 3 . Hide SPI TPM support options. (mantis 39944)
- 4 . Fix ""PCIE AER" enable, then XGMI speed will go to 16 gbps". (mantis 40195)
- 5 . Fix "Found wrong sentence format in text mode" (mantis 39637)
- 6 . Fix the issue that item "Power Policy Quick Settings" can't be adjusted by Remote Setup.
- 7 . Fix the Load Default Function on the item "Power Policy Quick Settings".

R08

1. Fix NVMe Setup page display error for some systems
2. Fix some external LAN devices causing system errors
3. Fix ECC DIMM location error

R07

1. Update behavior for Power Policy Quick Settings "Standard".
2. Adjust AC loss behavior. (BIOS load default will be synchronized to BMC)

R06

- 1 . Fixed anomalies caused by conflict between Riser FRU and DRAM SPD
- 2 . Adjust the behavior of the "Determinism Slider".
- 3 . Fix the problem that the BIOS version of SMBIOS type 0 can be modified.

R05

- 1 . Add Setup "AMD CBS" > "SMU Common options" > "Determinism Control": Enable > "Determinism Slider" power and performance related settings
- 2 . Disable Audio device for Server HLK
- 3 . Fixed an issue where using the "Remote Setup" setting option failed
- 4 . Adjusted SEL sensor number.

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## R04

1. Update AGESA version to 1.0.0.2
2. Adjust DRAM ECC SEL Log
3. Disable this feature if the BMC does not support Redfish
4. Fixed can not boot Windows when enable “Enable AER Cap” item issue
5. Fixed an error in the onboard LAN MAC when the network stack was disabled
6. Set SMT to be enabled by default

## R03

- 1 . Support for future BMC versions of Redfish and Remote Setup.
- 2 . Fix Windows HLK TPM 2.0 preboot interface test failed.
- 3 . Adjust low temperature setting

## R02

- 1 . Console redirection disable by default.

## T11

- 1 . Update AGESA RomePI version to 1.0.0.1
- 2 . Update VR(IR) version to A02(8144)
- 3 . PXE Boot item add LAN MAC
- 4 . Adjust BIOS password clear behavior
- 5 . Adjust Memory ECC behavior
- 6 . Modify recovery rom file name.

## T10

- 1 . Fix CBS variable modification failed.
- 2 . Support SMBIOS 2.0.
- 3 . Fix AMI BMC update SKU Hang issue.
- 4 . Fix BMC IPv6 address cannot show on setup.
- 5 . Default XGMI 10.6G for PCB 1.x. (mantis 38620)
- 6 . Adjust PPL.

## T09

- 1 . Fix SATA redriver I2C error issue. (mantis 38531)
- 2 . Fix M.2 NVMe can't find option rom issue. (mantis 38559)
- 3 . POST screen will show CPU spec information. (mantis 38409)
- 4 . SR-IOV is enabled by default.
- 5 . Setup show “PSP firmware version”, hidden “CSM configuration”
- 6 . POST will check that BMC is ready

## R01

- 1 . Add BIOS setup switch for PCI slot and onboard LAN. (mantis 38426, 38427, 38428)
- 2 . Fix Setup option SMT can't enable issue (mantis 38503)
- 3 . Support S5 RTC Wake settings (mantis 38438)
- 4 . Fix PCI SVID don't match spec issue (mantis 38445)
- 5 . Support “PCI AER Enable” setup option (mantis 38454)

## T08

## BIOS Release Notes

- 1 . Update AGESA RomePI version to 0.0.9.0
- 2 . BIOS setup menu show “CSM configuration” page
- 3 . Support Intel i350 PXE driver
- 4 . Increase I2C hold time.
- 5 . Add CPU information on BIOS setup main page.
- 6 . Fix POST will output log when disable “COM 1 / Serial Over LAM” redirection.
- 7 . Enable SATA SGPIO.
- 8 . Support BMC Web UI PCI information show link speed and link width.
- 9 . Update CPU SATA controller setting.
- 10 . Fix system always keep load default after reboot. (mantis 38242)
- 11 . Fix part of PCIe device can't show Web UI.

### T07

- 1 . Fix BMC web some Sensor no data ( Like VR )

### T06

- 1 . Update VR(IR) rom version(20190411)

### T05

- 1 . Support PCIe riser setting

### T04

- 1 . First release.