

BIOS Release Notes

TITLE

SUBJECT: MZ61-HD0 BIOS Release Notes version [R40](#)
System: [H231-Z60-00](#), [H261-001-NJ2](#), [H261-002-NJ2](#), [H261-Z60-00](#),
[H261-Z60-ES-Ciara-023](#), [H261-Z60-NJ2](#), [H261-Z61-00](#),
[H261-Z62-ES-3Logic-001](#), [MZ61-HD0-00](#), [MZ61-HD0-NJ2](#), [MZ61-HD1-00](#),
[MZ61-HD2-00](#), [TN11-Z60-GB](#), [TO22-Z61-00](#), [TO22-Z62-00](#),
[H261-Z60-ES-DownUnderGeoscience-001](#)

About This Release

Build Date: [2024/10/14](#)
BIOS Checksum: [0xCD4310DD](#) (16M)
Release Owner: Terry.Chuang

BIOS Components/Contents

Processor stepping(s) supported: AMD Rome processors
System hardware configurations supported: MZ61-HD0, MZ61-HD2
Microcode updates versions:

IPMI support:

AGESA PI version: [RomePI 1.0.0.K](#)

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, 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 Release Notes

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

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"

BIOS Release Notes

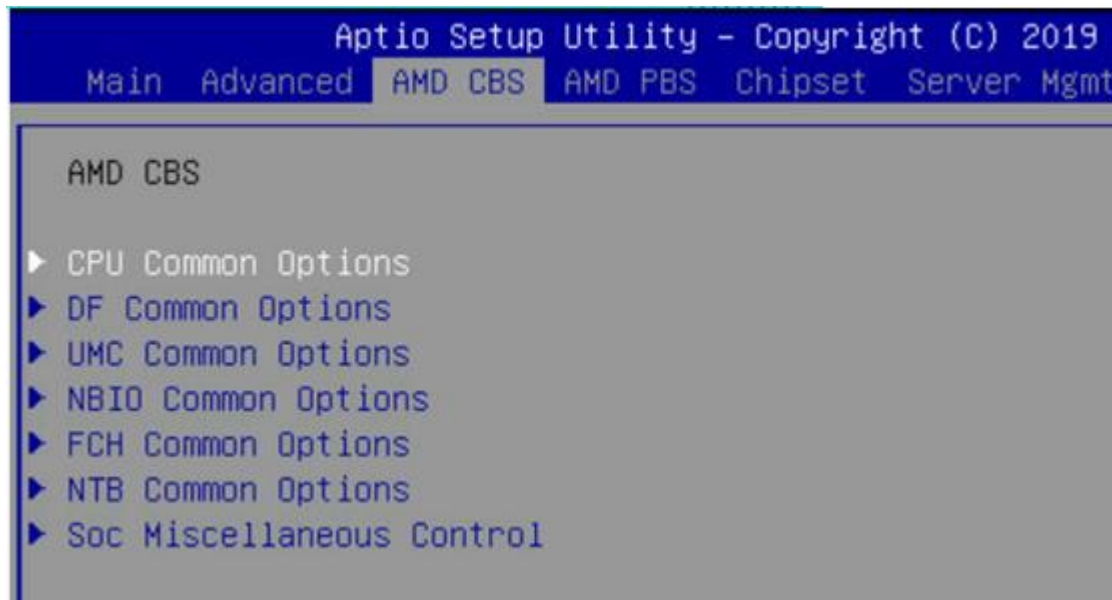
Known Issues/Workarounds

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

BIOS Release Notes

Issues fixed in this version

R40 (2024/10/14)

1. [Feature] Update AGESA 1.0.0.K
2. [Feature] SMM Lock Bypass CVE-2023-31315.
3. [Bug Fix] Fix PKfail issue.
4. [Bug Fix] Fix SMBIOS Type39 PSU detected issue.

R38 (2021/11/26)

- 1.Update AGESA version to 1.0.0.C
- 2.Add check old BMC 12.44.06

R36 (2021/11/04)

1. Hide XGMI item for prevent user adjust incorrect speed

R35 (2021/10/28)

- 1.Fix AFU can not upgrade Milan 32MB non-boot Rome BIOS (mantis 47677)
- 2.Add AC Loss default Power On for SKU include sub string H261-Z60-ES

R34 (2021/04/23)

1. Update Redfish Inventory.
2. Synchronize BIOS settings to BMC while doing remote setup on Power Policy Quick Settings.
3. Add support virtual USB when USB boot option disable in Legacy mode
4. Add MCX-354A-FCBT MAC detection.
5. Add support Qlogic QL45611HLCU MAC address issue in Legacy mode.
6. Hide Setup unsupported xGMI speed option. (17G to 25G)
7. Update some characters on remote setup.
8. Supprt OCP LAN card CLNOQ42.

R32 (2021/01/08)

- 1.Add SRIOV device Virtual bus support
- 2.Support Mellanox Connect-X6 to obtain LAN MAC in Legacy mode
- 3.Support Setup flash

R31 (2020/12/08)

1. When PERR/SERR error is triggered, POST will show PERR/SERR error.(mantis 43326)
2. Fix the problem that Micron 2200 NVMe cannot read and write.
3. Fixed multiple boot options after installing CentOS 7.8.
4. Support Refish Inventory.
5. Support dump/restore Setup data from file.

R30 (2020/10/16)

- 1 . Update AGESA version to 1.0.0.9.
- 2 . Support Mellanox ConnexX5 MCX512A to obtain MAC address in Legacy mode.

R28 (2020/09/24)

BIOS Release Notes

- 1 . Fix AC back after new LAN card make incorrect boot order issue before BMC 12.45.01.
- 2 . Update CVE-2020-10713 secure boot key.
- 3 . Fix R25/R26/R27 BIOS full DIMM issue.
- 4 . Use fixed PCI address.

R27 (2020/08/21)

1. Fix the R25/R26 BIOS sometimes meet PMBUS data issue.

R26 (2020/08/14)

- 1 . Update secure boot to resolve security issues (CVE-2020-10713).
- 2 . Fix 1P project R25 BIOS full DIMM issue.
- 3 . Adjust redfish boot order behavior.
- 4 . Adjust order of BIOS setup page of BMC Web
- 5 . Disable Core Performance Boost if some of power-supply are unplugged when the system is power-on.

R25 (2020/07/20)

1. Update AGESA version to 1.0.0.8
2. Add SMBIOS Type39
3. Remote BIOS support on BMC Web (need BMC 12.44.04 or later)
4. Fix Setup CSM can not modify problem

R23 (2020/06/17)

1. Fix the issue that AMD Radeon Instinct MI50 false detection to 4x4.
2. Add message frame for Real-time get bmc ip button.
3. Update SMBIOS Type130 Max speed / Real width.
4. Support Redfish remote setup secure boot.
5. Fix sometimes OS boot takes long time.
6. Fine tune remote setup function. (can adjust boot order via remote setup)
7. Add Intel Omni-path patch
8. Add more UUID detection way
9. Add "CSM Configuration" setup page

R23a (2020/06/15)

1. Support Redfish remote boot option.

R22 (2020/05/08)

1. Update AGESA version to 1.0.0.7
2. Adjust Format of BMC version.
3. Adjust default settings of Setup item "IOMMU" , "SMT Mode"
4. Adjust default settings of Setup item "MCA error thresh enable" , "MCA error thresh count"

R21 (2020/04/28)

1. Fix the issue that BIOS flash tool cannot update the none boot area.
2. By default, the PXE boot option of the external NIC is started first.

BIOS Release Notes

3. Added UEFI logo output device option and set onboard VGA output by default

R20	(2020/03/20)
<ul style="list-style-type: none">1. Update Redfish remote setup protocol.2. Adjusted boot option maximum.	
R19	(2020/03/04)
<ul style="list-style-type: none">1. Increase the ECC Correctable Error Threshold Default2. Update TPM assurance AQ	
R18	(2020/02/14)
<ul style="list-style-type: none">1. Update AGESA version to 1.0.0.62. Adjust the behavior of IPMI boot device setting Legacy or UEFI3. Adjust POST memory PMU error message4. Add BIOS setup item "ERP mode" (Need BMC support , Please check BMC version form Web-site)	
R17a	(2020/01/13)
<ul style="list-style-type: none">1. Fixed the issue that CLNO222 could not be detected.	
R16	(2019/12/25)
<ul style="list-style-type: none">1 . Update AGESA version to 1.0.0.5	
R15	(2019/12/06)
<ul style="list-style-type: none">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)
<ul style="list-style-type: none">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)
<ul style="list-style-type: none">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)
<ul style="list-style-type: none">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)	

BIOS Release Notes

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.

- 7 . Update IR rom version to A5.

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.
- 5 . Update NVMe sequence form 00 start

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".
- 8 . Fix NVMe sequence error.(mantis 39006)
- 9 . Fix some external LAN devices causing system errors (mantis 39854)

R08

- 1 . Fix NVMe Setup page display error for some systems
- 2 . Fix some external LAN devices causing system errors (mantis 39854)
- 3 . Fix ECC DIMM location error
- 4 . Fix Windows can not automatically detect U.2 hot plug (mantis 39949)
(Windows Server 2019 requires KB4512534)
- 5 . Fix Windows NVMe sequence error.(mantis 39006)

R07

1. Update behavior for Power Policy Quick Settings "Standard".
2. Adjust AC loss behavior. (BIOS load default will be synchronized to BMC)
3. Adjust NVMe setup page and Web UI NVMe information

R06

BIOS Release Notes

1. Fixed "Use Amideefix64.efi to modify BIOS version, it will be change." (Issue ID : 39779)

2. Adjust the behavior of the "Determinism Slider".
 3. Adjust USB device tree.
 4. Add Power Policy Quick Settings item which controls CPU performance items Interlocking.
 5. BIOS setup item XGMI default string show Auto.
-

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 CPU1 get wrong ECC location.
 - 4 . Adjusted SEL sensor number.
-

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.
-

R03

- 1 . Fix Windows HLK TPM 2.0 preboot interface test failed.
 - 2 . Adjust low temperature setting
-

R02

- 1 . Support for future BMC versions of Redfish and Remote Setup
 - 2 . Update IR rom version to A4.
-

R01

- 1 . Console redirection disable by default.
 - 2 . Adjust the default max xGMI speed of the PCB 2.0 board
 - 3 . Fix the NVMe sequence under Windows. (mantis 39006)
-

T07

- 1 . PXE Boot item add LAN MAC. (mantis 38850)
 - 2 . Adjust BIOS password clear behavior.
 - 3 . Adjust Memory ECC behavior.
 - 4 . Modify recovery rom file name.
 - 5 . Adjust BMC FW version format
 - 6 . Fix NVMe does not display POST and BIOS. (mantis 38812)
 - 7 . Adjust BIOS Boot option item. (mantis 39000)
 - 8 . Fix PCB 1.X board xGMI default max speed is not 10.667Gbps
-

T06

- 1 . Adjust PPL.
- 2 . Modify "PXE boot wait time" item default value to sync BIOS setup menu spec.

BIOS Release Notes

- 3 . Default XGMI 10.6G for PCB 1.x.
 - 4 . Setup show “PSP firmware version”, hidden “CSM configuration”
 - 5 . SR-IOV is enabled by default.
-

T05

- 1 . USB signal fine-tune.
 - 2 . POST will check that BMC is ready
-

T04

- 1 . Update AGESA RomePI version to 1.0.0.0
 - 2 . BIOS setup menu show “CSM configuration” page
 - 3 . Support Intel i350 PXE driver
 - 4 . Increase I2C hold time.
 - 5 . Fix redhat 7 hang issue
 - 6 . Fix PCI Subsystem Vendor ID don't match spec issue
 - 7 . Add LAN 2 option rom switch on setup
 - 8 . Fix Setup option SMT can't enable issue.
-

T03

- 1 . Update CPU SATA controller setting
- 2 . Fix POST will output log when disable “COM 1 / Serial Over LAM” redirection
- 3 . Add OS NVMe sequence patch.
- 4 . Add CPU information on BIOS setup main page.
- 5 . Update IR rom version to A3.
- 6 . Fix dram speed can't exceed 2666 issue.
- 7 . Support BMC Web UI PCI information show link speed and link width.
- 8 . Fixed an issue that external LAN card on the BMC Web UI does not have a MAC

address.

T02

- 1 . Update AGESA version to 0.0.9.0
 - 2 . Support Web UI Hardware information
 - 3 . Fix SMBUS host change to BMC issue
 - 4 . Fix SATA HDD disappearing issue
-

T01

First release.