

# BIOS Release Notes

## TITLE

**SUBJECT:** MZ91-FS0 BIOS Release Notes version [M15](#)  
**System:** [MZ91-FS0-00](#), [R181-004-AE](#), [R181-007-E2](#), [R181-Z90-00](#), [R181-Z91-00](#),  
[R181-Z92-00](#), [R181-Z93-FK](#), [R281-001-00](#), [R281-002-00](#), [R281-Z90-00](#), [R281-Z91-00](#), [R281-Z92-00](#), [R281-Z93-ES-Cray-001](#), [R281-Z94-00](#), [R281-Z94-SW-SM-001](#)

## About This Release

**Build Date:** [2024/10/11](#)  
**BIOS Checksum:** [0xC9643243](#) (16M)  
**Release Owner:** Terry.Chuang

## BIOS Components/Contents

**Processor stepping(s) supported:** AMD Milan processors  
**System hardware configurations supported:** MZ91-FS0

**IPMI support:**

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

**OPROM version :**

OPROM	Version
AST2500 VGA	1.10

## Installation Notes

### IMPORTANT NOTES:

- 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 UPDATE FOR Easy BIOS Refresh:

1. The system supports remotely update BIOS if BMC existent.

## BIOS Release Notes

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

### 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".

## Known Issues/Workarounds

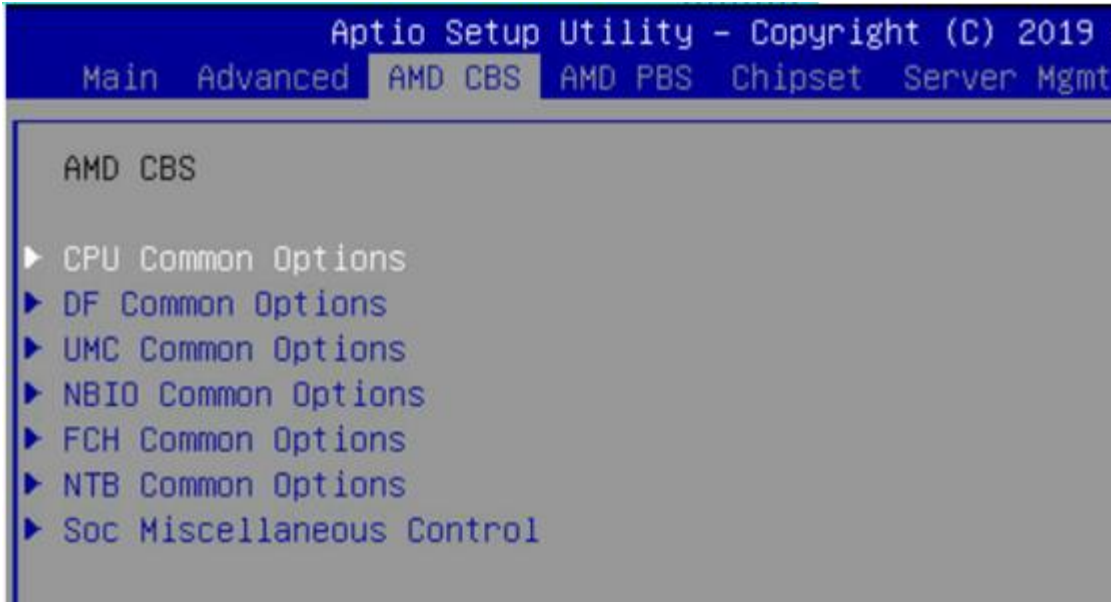
1. Windows 2016 need install KB4022723 first, then enable BIOS setup item "IOMMU"  
Nvidia VGA CUDA not support IOMMU on Linux.
2. Windows OS does not support 256 or more logical. ( Need apply below update )  
2-1 . Windows 2019 can update KB4512534 to support 256 core SMT mode.  
2-2 . Set BIOS setup 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 :

## BIOS Release Notes



AMD CBS ( on BIOS Setup page bar)

▶ CPU Common Options

▶ Performance

▶ CCD/Core/Thread Enablement

▶ Accept

SMT Control: **Disable (Default)** / Auto

### Issues fixed in this version

M15 (2024/10/11)

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

M13 (2022/10/03)

1. Support PCI/PCIe Error and Memory Error not to stop at POST.

M13a

(2021/12/20)

1. Support NVME LED control for system.

M12

(2021/11/19)

1. Update AGESA 1.0.0.6
2. Update Microcode Patch3 (November2021)
3. Fix Windows 2022 HLK Test Fail item (SMBIOS / HW / TCG)

M11

(2021/11/05)

## BIOS Release Notes

1. Hide XGMI item for prevent user adjust incorrect speed

M10	(2021/11/01)
<ol style="list-style-type: none"><li>1. Add Erratum #1381 MicroCode</li><li>2. Power Setting to Standard mode</li></ol>	
M08	(2021/07/30)
<ol style="list-style-type: none"><li>1. Update microcode to support B2 CPU.</li><li>2. Adjust the default settings APBDIS to 1.</li></ol>	
M07	(2021/07/16)
<ol style="list-style-type: none"><li>1. Update Agesa version to 1.0.0.4.</li><li>2. Add R181-007-E2 for customer.</li></ol>	
M06	(2021/06/11)
<ol style="list-style-type: none"><li>1. Update Agesa version to 1.0.0.3</li><li>2. Rename Setup item "DRAM Timing Configuration" as "Enforce POR"</li><li>3. Adjust Redfish Inventory string.</li><li>4. Reduce serial port logs.</li></ol>	
M05	(2021/05/12)
<ol style="list-style-type: none"><li>1. Adjust BIOS Setup settings for BIOS Setup spec version 1.4.</li><li>2. Fix MZ91-FS0 Front USB recovery BIOS (Mantis 47740)</li><li>3. Fix the method of adjusting the width of OCP slot according to GPIO. (mantis 47793)</li><li>4. Adjust Pci Subsystem Setting" item "Riser 1/2" and "Riser3". (mantis 47741)</li></ol>	
M04	(2021/04/16)
<ol style="list-style-type: none"><li>1. Update Agesa version to 1.0.0.2.</li><li>2. Fix Qlogic QL45611HLCU MAC address issue in Legacy mode.</li><li>3. Synchronize BIOS settings to BMC while doing remote setup on Power Policy Quick Settings.</li><li>4. Fix booting virtual image fail issue with disabled USB Device boot option in Legacy mode.</li><li>5. Update function "UEFI POST Logo Configuration" to "Graphic Output Configuration".</li><li>6. Fix the lost characters issue on remote setup.</li><li>7. Hide Setup unsupported xGMI speed option. ( 17G to 25G )</li><li>8. Adjust console log during POST.</li><li>9. Support MZ91-FS0 Asmedia USB recovery BIOS (Mantis 47740)</li><li>10. Fix R281-Z91 U.2 (NVMe_#4 &amp; NVMe_#5) hot plug function (Mantis 47797 / 47739)</li></ol>	
M03	(2021/02/26)
<ol style="list-style-type: none"><li>1. Update Agesa version to 1.0.0.1.</li></ol>	
M01	(2021/02/05)
<ol style="list-style-type: none"><li>1. Fix hotkey hang on Legacy PXE.</li><li>2. Update Redfish Inventory.</li></ol>	

## BIOS Release Notes

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### MT05

(2020/12/18)

1. Update AGESA version to 1.0.0.0.
  2. Enable "iSCSI Configuration" SETUP page.
  3. Fix legacy PXE boot option, use hotkey "ctrl+alt+delete" to reset will hang. (mantis 45518)
  4. Add BMC Web show Mellanox Connect-X6 MAC when system under Legacy mode.
  5. Update IRROM A03
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### MT04

(2020/11/20)

1. Update Agesa version to 0.0.9.2
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### MT03

(2020/10/29)

1. Update Agesa version to 0.0.9.1
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### MT02

(2020/10/08)

1. Update Agesa version to 0.0.9.0
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### MT01

(2020/07/24)

1. First release.