

# BIOS Release Notes

## TITLE

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**SUBJECT:** MP93-FS0 BIOS Release Notes version [F10a](#)

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**System:** [MP93-FS0-000](#),[R183-P90-AAE1-000](#),[R183-P92-AAE1-000](#),  
[R283-P90-AAE1-000](#),[R283-P90-AAE2-000](#),[R283-P92-AAF1-000](#),  
[R283-P92-AAF2-000](#),[R283-P93-AAL1-000](#),[R183-P90-AAJ1-000](#),  
[R183-P92-AAJ1-000](#),[R283-P90-AAJ1-000](#),[R283-P92-AAL1-000](#),  
[CDCR115-00](#)

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## About This Release

**Build Date:** [2024/12/26](#)  
**BIOS Checksum:** [0xF83209E1](#) (64M)  
**Release Owner:** Terry.Chuang

## BIOS Components/Contents

**Processor stepping(s) supported:** AmpereOneX Processors  
**System hardware configurations supported:** MP93-FS0  
**PCB Version:** 2.x  
**Ampere SRP:** 4.4.3.1

**OPROM version :**

OPROM	Version
AST2600	1.13.05

## Installation Notes

### IMPORTANT NOTES:

- Please extract the MP93-FS0\_F10a.zip file to a bootable diskette that use FAT/FAT32 format

### 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

### 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.

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## 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

## Issues fixed in this version

F10a (2024/12/26)

1. [Feature] Update SRP 4.4.3.1.
2. [Feature] Support Setup BBS function SCE Linux tool.

F09e (2024/12/12)

1. [Feature] Support Intel X770 Lan Mac information.
2. [Fix] PCIe present auto detection issue.

F09d (2024/12/06)

1. [Feature] Increase Redfish Hii Package database resource.
2. [Feature] Adjust the display behavior of the BIOS item MB CPLD version.
3. [Feature] Update AST2600 UEFI Driver v1.13.05.
4. [Feature] Update Intel Lan UEFI driver.
5. [Feature] Adjust Pre-Build script for PERST.

F09c (2024/11/07)

1. [Bug Fix] Fix Mellanox CX7 duplicate MAC in boot option.
2. [Bug Fix] Fix SMBIOS Type39 PSU detected issue.
3. [Bug Fix] Modify Redfish BiosAttribute item.

F09b (2024/10/21)

1. [Bug Fix] Modify the PCIe slot mapping information.
2. [Feature] Support R283-P92-AAF1-000 OCP\_2 Retimer card.

F09a (2024/10/03)

1. [Feature] Update SRP 4.4.2.1.
2. [Feature] Change BPB IO Expander pin 6 and pin 7 in sequence.

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F08h (2024/09/26)

1. [Bug Fix] Fix Redfish BIOS item missing issue.
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F08g (2024/09/03)

1. [Feature] Adjust BPB CPLD NVME Port Slave Address and pin number.
  2. [Feature] Add new SKU R183-P90-AAJ1, R183-P92-AAJ1, R283-P90-AAJ1 and R283-P92-AAL1.
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F08f (2024/08/27)

1. [Feature] Added R283-P92-AAF1 NVME BPB CPLD2, CPLD3 HotPlug Info.
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F08e (2024/08/19)

1. [Feature] Adjust BPB CPLD NVME HotPlug info 2nd CPU I2C address.
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F08d (2024/08/16)

1. [Feature] Support BPB CPLD NVME HotPlug Info for R183-P90-AAE1 , R183-P92-AAE1 , R283-P90-AAE1.
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F08c (2024/08/05)

1. [Feature] Support CPU SKU A192-32X, A192-26X, A96-27X information.
  2. [Feature] Support BIOS Setup CPLD version information.
  3. [Feature] Fine tune Serial port console log.
  4. [Bug Fix] Fix the Security PKfail issue.
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F08b (2024/08/02)

1. [Feature] Support SMBIOS Type2 MB Version 3.0+.
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F08a (2024/07/11)

1. [Feature] Update SRP 4.4.1.1.
  2. [Feature] Support Setup menu hotkey <ESC>.
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F07h (2024/07/11)

1. [Feature] Support RTC Wakeup function.
2. [Bug Fix] Fix Redfish Network adapter information failed issue.
3. [Bug Fix] Fix NVMe hotplug function failed in specific CPLD fw.
4. [Feature] Support NVME ACPI device tree sequence by SKU R183-P90-AAE1, R183-P92-AAE1, R283-P90-AAE1, R283-P92-AAF1.

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## F07g (2024/06/24)

1. Modify DDR CE error injection count.
2. Support BMC IPv6 gateway and router address in BIOS setup.
3. Add Power Button shutdown and LogoFail CVE function check module.
4. Adjust Setup Pci Option ROM On/Off item.

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## F07f (2024/06/19)

1. Fix CMOS battery removal can not restore BIOS default issue.
2. Support Power Button shutdown function.
3. Support GCT BIOS LogoFail CVE function check.
4. Support BIOS item Power Policy Quick Settings.
5. Update UEFI Gop driver version 1.13.04.
6. Modify Setup hotkey to DEL only for SRP 4.3.1.1 bl1 issue.

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## F07e (2024/06/14)

1. Support BIOS USB, Sata PCIe control item.
2. Modify Smbios tool type1/2/3 rule to follow the spec.

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## F07d (2024/06/03)

1. Fix remove battery then not display error message on POST issue.
2. Enable Secure boot function.
3. Fix BIOS Boot menu Onboard Lan naming abnormal when enable HTTP boot issue.
4. Modify SMBIOS Type3 / Type4 information.
5. Support Setup item Serial Port Console Redirection.
6. Adjust USB setting for GBT BMC.
7. Adjust NVMe Hotplug interrupt.
8. Adjust OCP Auto Bifurcation common code.

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## F07c (2024/05/23)

1. Fix BIOS Setup Dialog Info Box timer fail cause hang.
2. Support BIOS Setup PCIe, Onboard Lan Option rom control item.
3. Support BIOS Setup Onboard Lan controller enable item.
4. Set S1 RC7 Pcie Gen5 Preset 0x77.

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## F07b (2024/05/17)

1. Update ROT CEC1720 protected area offset.
2. Modify iPXE Guid detected for AmpereOneX platform.
3. Modify HOST smbus switch behavior.
4. Fix Setup menu Memory information incorrect issue.
5. Fix 2DPC platform DIMM info will use 1DPC mapping problem.

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## F07a (2024/04/30)

1. Update SRP 4.3.1.1
2. CVE Patch LogoFAIL CVE-2023-39539 and CVE-2023-39538.
3. Support Endless Retry PXE feature.

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## F06h (2024/01/23)

1. Support Mellanox CX3 Lan MAC feature.
2. Fix Rc active status not sync Default value.
3. Support DIMM Error SEL event.
4. Remove BIOS Setup Memory Slot Information page.

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## F06g (2024/01/16)

1. Add POST Pause HotKey function.
2. Support get Broadcom LAN MAC feature.
3. Fix SMBIOS Type129 NVMe information incorrect issue.
4. Fix Setup IPv6 IP Address not found when IPv4 Disable.
5. Show BMC IP Address in BIOS Setup.
6. Fix RTC default date time wrong problem.

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## F06f (2024/01/08)

1. Fix BMC WebUI VGA device speed and width information incorrect issue.

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## F06e (2023/12/07)

1. Support Afu tool UEFI / Linux BIOS image flash.

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## F06d (2023/12/04)

1. Improve Onboard LAN Name info for Boot Option.
2. Remove Setup FRU Info NOTE.
3. Fix SMBIOS Type 4 CPU wrong Family.

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## F06c (2023/11/21)

1. Update SRP 4.2.2.1
2. Fix BMC WebUI system time not syncing BIOS RTC issue.
3. Fix SMBIOS / Redfish shared memory transfer failure issue.

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## F04b (2023/11/07)

1. Update Boot FW (SRP 3.5.3.1)

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## F04a (2023/11/03)

1. Update SRP 3.5.3.1 .
2. Fix some PCIe Lan device boot hang issue.
3. Fix Auto Bifurcation MapTable wrong RC index problem.
4. Support SEL OEM system event Asserted / Deasserted function.
5. Support Redfish BootOption information.

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## F03a (2023/11/01)

1. Update SRP 3.5.2.1 .
2. Add Network card Mac information in Setup boot option.
3. Fix PCIe slot auto bifurcation failed issue.

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## F02g (2023/10/13)

- 1.Support Setup BMC LAN IPv4 config backup to Nvram in AMI Ipmi2 module.
- 2.Fix NVIDIA A16 GPU PCIe out of resources issue.

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## F02f (2023/08/21)

- 1.Support AmpereOne platform detection for ipxe efi.

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## F02e (2023/08/17)

- 1.Fix Debian OS duplicated boot option issue.

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## F02a (2023/07/25)

1. Adjust BMC I2C SSIF setting.
2. Support BMC Ready GPIO detection function.
3. Support BMC GPIO\_0 SPI access control function.

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## F01 (2023/07/13)

1. PVT first release.
2. Update SRP 3.4.1.3

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## D02h (2023/07/11)

- 1.Add read present pin patch for UP.
- 2.Adjust HB preset value Gen5: 0 Gen4: 5 Gen3: 5 .

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## D02g (2023/06/15)

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- 1.Fix AMI Redfish no collect Network EthernetInterfaces Info problem.

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## D02f (2023/06/14)

- 1.Enable AMI Redfish module.
- 2.Fix BMC MB ID in SMBIOS Type2 Board version will be overwritten problem.
- 3.Cancel SMBIOS Type3 Chassis Type lock present value (Bit7).

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## D02e (2023/06/09)

- 1.Adjust auto detect bifurcation patch for 2P platform.
- 2.Adjust SMBIOS Type1 / Type2 data.
- 3.Adjust SMBIOS tool usage to meet spec.
- 4.Support IPMI Shell built-in command.

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## D02d (2023/05/29)

- 1.Support BMC network ipv6 setting.
- 2.Update linux flash tool ampfwu v1.5.g1.
- 3.Fix UEFI Shell and linux ampfwu update error message.
- 4.Set SPI speed 20Mhz (SPI0 config SDCKDV to 0xD)
- 5.Fix ipmi boot device pxe priority issue.
- 6.Fix POST console BMC IP show incorrect IP address.
- 7.Adjust HOST\_SMBUS POST behavior.
- 8.Add CPU information POST log.
- 9.Cancel Auto detect bifurcation patch.

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## D02b (2023/05/15)

1. Support PCIe present auto lanes detection.
2. Adjust system PCIe initialize behavior, system will not reset after BIOS update.
3. Set SPI speed 10Mhz (SPI0 config SDCKDV to 0x19)
4. Set SPI0\_CLK\_IO\_CONFIG to 0x13
5. Set IPMI I2C\_BMC\_BUS\_SPEED to 100kHz

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## D02a (2023/05/03)

- 1.Update SRP 3.3.3.1

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## D01j (2023/03/22)

- 1.Fix R283-P92-AAF1 Slot1/OCP2 NVME cannot find root port in sequence list problem.
- 2.Fix NVMe and SATA device detected fail when system connect BP\_1 Cable.
- 3.Remove Setup ServerMgmt Power Control Policy item.

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### D01i (2023/03/15)

- 1.Upgrade IPMI module to IPMI2.

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### D01h (2023/03/09)

- 1.Support Setup item PXE retry function. (Default Disable)
- 2.Fix SMBIOS Type129 HDD wrong device information.
- 3.Fix system auto reset loop after PXE IPv6 boot fail issue.
- 4.Fix Setup CPU1 RC Bifur do not hide selecting item when mode is auto.
- 5.Fix Setup NVME info sequence not follow the BPB cable routing.
- 6.Modify the I2C\_2 and I2C\_BMC bus speed to 100 kHz.

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### D01g (2023/02/24)

- 1.Support GBT Redfish feature.
- 2.Support Dump and Restore Setup data feature.
- 3.Update SMBIOS Type128 OEM version information.
- 4.Fix SMBIOS Type129 HDD wrong device information

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### D01f (2023/02/17)

- 1.Set R283-P92-AAF1-000 S0\_RC4 (OCP1) default Bifur x16.
- 2.Set R283-P92-AAF1-000 S1\_RC4 (OCP2) default Bifur x4x4x4x4.
- 3.Set R283-P92-AAF1-000 S1\_RC5 (Slot4) default Bifur x16.
- 4.Set R283-P92-AAF2-000 S0\_RC2 (MCIOP0\_0CD1/MCIOP0\_0AB1) default Bifur x4x4x8.
- 5.Set R283-P92-AAF2-000 S0\_RC7 (Slot1) default Bifur x16.
- 6.Set R283-P92-AAF2-000 S1\_RC1 (MCIOP1\_4AB1/SATA2&SATA1) default Bifur x4x4x4x4.
- 7.Set R283-P92-AAF2-000 S1\_RC5 (Slot4) default Bifur x16.

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### D01e (2023/02/16)

- 1.Set R183-P92-AAE1 S1\_RC0 (MCIOP1\_3AB1/MCIOP3CD1) default Bifur x4x4x4x4.
- 2.Set R283-P92-AAF1 S1\_RC4 (OCP2) default Bifur x4x4x4x4.

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### D01d (2023/02/09)

- 1.Fix Setup do not correctly show CPU1 Dimm Info in 2P System.
- 2.Update AMI Tse module version 2\_22\_1287.
- 3.Remove the PXE retry item in setup menu.
- 4.Update AST2600 VBIOS driver uefi\_arm\_2600\_13\_2.
- 5.Support PCIe system SKU auto bifurcation setting.
- 6.Support all system SKU max number of SATA device in Setup SATA Configuration



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7.Adjust DDR speed 4800 Mhz.

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D01c (2023/02/06)

1. Add Ampere Patch MP93 SRP 3.3.1.1 Hang BL32 Flash partition MM driver issue.

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D01b (2023/02/01)

1. Adjust DDR speed 3600 Mhz.

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E03a (2023/01/31)

1. Update SRP 3.2.5.1
2. Add UEFI and Linux flash script and tool.
3. Adjust BIOS ROT CEC block offset region.
4. Support Redfish Setup item modify.
5. Adjust CEC1702 block offset to 64M region.
6. Redefine the FLASH\_SIZE token.

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D01a (2023/01/13)

1. Update SRP 3.3.1.1

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E01e (2023/01/12)

1.Fix can not find CPU1 RC Id in boardsetting problem.

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E01d (2023/01/07)

1. Support BMC WebUI inventory information.
2. Adjust SMBIOS Type4 CPU information.
3. Support Redfish inventory feature.
4. Adjust SMBIOS CPU asset tag default value.
5. Adjust SATA controller inventory onboard flag.

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E01c (2022/12/13)

1. Fix remote console hotkey function failure.
2. Adjust BIOS ROT CEC key.

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E01b (2022/12/09)

1. Adjust MP93-FS0 pcie boardsetting.
2. Adjust spi0\_ctrl from 0x50370 to 0xD70 (for match EEPROM).

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E01a (2022/12/05)

1. First release.

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