

BIOS Release Notes

TITLE

SUBJECT: MD90-FS0 BIOS Release Notes version [R09](#)
System: [R280-G20](#)

About This Release

Build Date: [2019/6/13](#)
BIOS Checksum: [0x594C0706](#) (8M), [0xCF609A7C](#) (16M)
Release Owner: Richard Huang

BIOS Components/Contents

Processor stepping(s) supported: supports Intel® Haswell-EP/Broadwell-EP processors
System hardware configurations supported: MD90-FS0
Microcode updates versions:

| CPUID | Family | Microcode Update ID |
|-----------------------|--|--------------------------|
| 406F0 | Broadwell-EP Processor A-0, A-1, L-0 | 00000014 |
| 406F1 | Broadwell-EP Processor B-0, M-0, R-0 | 0B000036 |
| 306F0 | Haswell-EP Processor A-0 | FFFF0017 |
| 306F1 | Haswell-EP Processor B-0 | 00000014 |
| 306F2 | Haswell-EP Processor C-0, C-1, M-0, M-1, R-2 | 00000043 |

IPMI support:

AMI Kernel version: [Gbt_Kernel_023_165](#)

Intel CSI/MRC Package version: [3.10](#)

SPI Descriptor version: [03.01.03.023.0_09](#)

OPROM version :

| OPROM | Version |
|--------------------|-----------------|
| INTEL RAID PACKAGE | RSTe 4.5.0.1333 |
| AST2400 VGA | 1.09.00 |
| INTEL 1G PXE | 1.5.40 |
| INTEL 10G PXE | 2.3.08 |

Installation Notes

IMPORTANT NOTES:

1. Please extract the MD90-FS0_[R09](#).zip to a bootable diskette that can boot to real DOS
2. Please don't load HIMEM.SYS or any other memory management SW in the diskette

BIOS UPDATE INSTRUCTIONS FOR DOS:

1. Insert USB flash drive to system for BIOS upgrade

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2. Power on system and boot to USB flash
3. Execute FB.BAT for bios update
 - a. Execute "FB.BAT 3" only Flash BIOS Command line
 - b. Execute "FB.BAT 2" need move ME flash jump(AC off) to flash ME firmware
4. After bios flash finish, system will reboot automatically, please do not remove USB flash
5. System will restore DMI data after boot to DOS again, please wait the message below,
"All BIOS flash steps are done! Please AC OFF and AC ON again. Thanks!"
6. Done

BIOS UPDATE INSTRUCTIONS FOR Windows:

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

BIOS UPDATE INSTRUCTIONS FOR LINUX:

1. Insert bios update USB flash drive.
2. Use Command Shell
3. Execute \Tool\LNx\afulnx32\f.sh or \Tool\LNx\afulnx64\f.sh for bios update
4. After bios flash finish, Please reboot windows system

BIOS Version CHECK INSTRUCTIONS:

1. Power on system and press F2 during POST
2. The bios version shows on the first main page

Known Issues/Workarounds

Issues fixed in this version

R09

1. ASPEED VBIOS update to 1.09.0 for CVE-2019-6260.
2. Fix INTEL-SA-00233.

R08

1. update microcode for Security

R07

1. Update microcode for Speculative Execution and Indirect Branch Prediction Side Channel Analysis Method.

R06

1. Fix Intel Unsafe Opcodes exposed in Intel SPI based products issue

R05

1. Fixed issue that CPU report error 0xFF.

R04

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1. Modified send smbios to ipmi feature free buffer

R03

1. Update Microcode.
2. Modified Memory RAS function.

R02

1. Update Microcode.

R01

1. RC refresh release first

T05

1. add FRU function

T04

1. update MRC

T03

1. set mmio to 48T

T02

1. Update PCIe CTLE for Broadwell CPU

T01

1. Broadwell CPU support.

F07

1. Update Microcode to 36.
2. Update sending system information to BMC.
3. Fix 4Kn HDD can't boot into DOS.
4. Fix Load Default Utility can't work.

F06

1. Fixed BIOS recovery fail.
2. Turn off onboard VGA display when display from add-on VGA.

F05

1. Fixed issue that VGA problem.
2. Fixed issue that BIOS Recovery fail.
3. The Nvidia Grid Card is reported POST error on IPMI Event log

F04

1. Update Kernel
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F03

1. Disable ACS
 2. SOL support
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F02

1. Update MRC
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F01

1. Normal release.
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D04

1. SMBIOS to BMC Web
 2. BMC updates BIOS Setup.
 3. NVMe
 4. PCIe SATA
 5. Onboard VGA displays 80 Port during POST.
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D03

1. Sets Above 4G default enabled.
 2. Sets VGA display to onboard.
 3. Sets C6 default to disable.
 4. Sets MMIO to 4T
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D01

1. First Release.
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