

# BIOS Release Notes

## TITLE

**SUBJECT:** MD50-LS0 BIOS Release Notes version [R12](#)  
**System:** [R160-S34](#), [R260-R3C](#)

### About This Release

**Build Date:** [2019/12/3](#)  
**BIOS Checksum:** [0x595B8D1F](#) (8M), [0xCF6F34A0](#) (16M)  
**Release Owner:** Jonas.Hsu

### BIOS Components/Contents

**Processor stepping(s) supported:** supports Intel® Haswell-EP/Broadwell-EP processors  
**System hardware configurations supported:** MD50-LS0  
**Microcode updates versions:**

CPUID	Family	Microcode Update ID
<a href="#">406F0</a>	<a href="#">Broadwell-EP Processor A-0, A-1, L-0</a>	<a href="#">00000014</a>
<a href="#">406F1</a>	<a href="#">Broadwell-EP Processor B-0, M-0, R-0</a>	<a href="#">0B000038</a>
<a href="#">306F0</a>	<a href="#">Haswell-EP Processor A-0</a>	<a href="#">FFFF0017</a>
<a href="#">306F1</a>	<a href="#">Haswell-EP Processor B-0</a>	<a href="#">00000014</a>
<a href="#">306F2</a>	<a href="#">Haswell-EP Processor C-0, C-1, M-0, M-1, R-2</a>	<a href="#">00000043</a>

**IPMI support:**  
**AMI Kernel version:** [Gbt\\_Kernel\\_023\\_170](#)  
**Intel CSI/MRC Package version:** [3.10](#)  
**SPI Descriptor version:** [03.01.03.072.0\\_11](#)  
**OPROM version :**

OPROM	Version
INTEL RAID PACKAGE	RSTe 4.5.0.1333
AST2400 VGA	1.09.00
INTEL 1G PXE	1.5.53
INTEL 1G LAN EFI	6.2.08

### Installation Notes

#### IMPORTANT NOTES:

1. Please extract the MD50-LS0\_[R12](#).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

R12

- 1.Security update for 2019.2 Intel Platform Update (IPU).

[1] Update Microcode:Hasswell-EP M6F306F2\_00000043,Broadwell-EP MEF406F1\_0B000038.

[2] Update ACM :SINIT 3.1.3.

[3] Update Update SPS 03.01.03.72.0.

R11

1. ASPEED VBIOS update to 1.09.0 for CVE-2019-6260.

R10

1. Fix INTEL-SA-00233.

R09

1. Add workaround from MRC V4.4.0 for erratum: Systems That Enable Both OSB And IODC May Exhibit Unexpected System Behavior.

R08

## BIOS Release Notes

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

Haswell-EP M6F306F2\_0000003D

Broadwell-EP MEF406F1\_0B00002E

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R07

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

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R06

1. Add solution of Intel Unsafe Opcodes exposed in Intel SPI based products.

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R05

1. Update Broadwell-EP Microcode 0B000021.

2. Fix ECC UE 0xFF.

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R04

1. Update Broadwell-EP Microcode 0B00001E.

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R01

1. Official release support Broadwell-EP CPU.

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T05

1. Update RC 3.10.

2. Update SPS FW 03.01.03.023.0.

3. Update RSTe 4.5.0.1333.

4. Fine tune QPI TAP and PCIe RXEQ setting.

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T04

1. Update RC 3.00.

2. Update SPS FW 03.01.03.021.0.

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T03

1. Update RC 2.91.

2. Update SPS FW 03.01.03.018.0.

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F09

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.

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F08

1. Fixed BIOS recovery failure.

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F07

## BIOS Release Notes

1. Fixed Add-on VGA resource issue.
  2. Fixed BIOS recovery failure.
  3. Fixed error log when [Active Video] as [Onboard Device].
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### F06

1. Support BMC update BIOS setup.
  2. Fix ipmiboot for both old and new BMC FW.
  3. BMC IPv6 display full IP address information when DHCP mode.
  4. Support display POST code.
  5. Fix LSI2008 and LSI2308 can't used shard OPRM.
  6. Fix HDD Information not display under Web\_UI with UEFI RAID mode.
  7. Support Power/Performance policy quick setting item.
  8. Update SPS FW 03.00.07.154.0.
  9. Update RC 1.10.
  10. Update Microcode to 0x2D.
  11. Fix system hang up when enable COD check error.
  12. Fix S4 stress fail.
  13. Fix 4Kn HDD size display wrong on BIOS setup.
  14. Smart setting for COD and Snoop mode.
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### F05

1. Support BMC IPv6 setup item.
  2. Update SPS FW 03.00.07.114.0.
  3. Fix WHEA logger event ID 16.
  4. Fix F12 network boot can't find HDD.
  5. Update Microcode to 0x2A.
  6. Disable PCIe SSC.
  7. Update RC 1.05.
  8. Support NVMe and PCIe SSD.
  9. Support M/B information to BMC.
  10. Fix system auto wakeup after enter S4.
  11. Fix clear CMOS to load default issue.
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### F04

1. Support riser card.
  2. Disable PCIe SSC.
  3. Update SPS 03.00.05.402.0\_05.
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### F03

1. Update IRROM.
  2. Fix SIO fail message in Linux.
  3. Fix A-DATA SPD ID wrong.
  4. Fix press hot-key during POST cause system hang up.
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### F02

1. Fix LAN controller cannot be disabled with global reset.

# BIOS Release Notes

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F01

1. Display POST code on POST screen.
2. Default disable SERR/PERR.

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D04

1. Update Microcode to 0x1F.
2. Update RSTe to 4.1.0.1047.
3. Fix HWM sometimes reading error from BMC.
4. Update SPS FW to 03.00.05.402.0\_04.
5. Fix sometimes USB keyboard can't work during POST.

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D03

1. Fine tune QPITAP, PCIE RXEQ, USB signal.

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D02

1. Update PXE ROM.
2. Fine tune BIOS setup menu.

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D01

1. Update RC to 1.01.
2. Update C-0, C-1, M-0, M-1 Microcode to 0x1E.
3. Update SPS FW to 3.0.5.402.0.
4. Update Intel TXT to 1.10A.
5. Update SATA/sATA RAID ROM to 4.1.0.1046.

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E07

1. Update IRROM to A2.

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E06

1. Fine tune USB3.0 setting.

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E05

1. Fix LAN OPRM shadow issue.
2. Fix power LED behavior abnormal.

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E04

1. Enable IR power solution.
2. Fine tune SMBIOS.

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E03

1. Correct CPU0 IOU1 bifurcation.

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E02

1. Fix power on issue.
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## BIOS Release Notes

E01

1. First release.

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