

# BIOS Release Notes

## TITLE

**SUBJECT:** 7PESH3 BIOS Release Notes version [R22](#)

### About This Release

**Build Date:** [2018/3/12](#)  
**BIOS Checksum:** [0x234AD16E](#) (4M), [0x4D318201](#) (8M)  
**Release Owner:** Yilun

### BIOS Components/Contents

**Processor stepping(s) supported:** supports Intel® SandyBridge-EP processors  
**System hardware configurations supported:** GA-7PESH3-RH Rev: [0.1/0.2/1.0](#)  
**Microcode updates versions:**

CPUID	Family	Microcode Update ID
<a href="#">\$(Intel</a>	<a href="#">SandyBridge-EP Processor C-0</a>	<a href="#">ServW</a>
<a href="#">206D5</a>	<a href="#">SandyBridge-EP Processor C-1 and M-0</a>	<a href="#">00000513</a>
<a href="#">206D6</a>	<a href="#">SandyBridge-EN -EP Processor C-2 and M-1</a>	<a href="#">0000061C</a>
<a href="#">206D7</a>	<a href="#">Ivy Bridge-EP -EX -EN Processor B-1, B-2, L-1, L-2, R-0, and R-1</a>	<a href="#">00000713</a>
<a href="#">306E2</a>	<a href="#">Ivy Bridge-EP -EX Processor B-3</a>	<a href="#">0000020D</a>
<a href="#">306E3</a>	<a href="#">Ivy Bridge -EX -EP -EN Processor C-0, C-1, S-0, S-1, M-0, M-1</a>	<a href="#">00000308</a>
<a href="#">306E4</a>	<a href="#">Ivy Bridge -EX Processor D-0</a>	<a href="#">0000042C</a>
<a href="#">306E6</a>		<a href="#">00000600</a>

**IPMI support:**

**AMI Kernel version:** [Gbt\\_Kernel\\_F03zd](#)

**Intel CSI/MRC Package version:** [2.00.03](#)

**SPI Descriptor version:** [02.01.07.129.2\\_05](#)

**OPROM version :**

OPROM	Version
ASPEED VGA	0.97
INTEL 82574	1.3.76
INTEL SAS	3.7

### Installation Notes

**IMPORTANT NOTES:**

## BIOS Release Notes

1. Please extract the 7PESH3\_R22.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
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\fb.cmd or \Tool\Win64\fb.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\fb.sh or \Tool\LNx\afulnx64\fb.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

R22

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

R21

1. Fixed issue that BMC mask random 255.255.255.255

R20

1. Fixed issue that system hang on.

R19

1. Modified IO during SMM.

R18

## BIOS Release Notes

1. Memory Modified.

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R17

1. revise memory voltage

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R15

1. Fixed issue that system hang on 0xB0 inserts two CPU.

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R14

1. Modified SCU port routing.

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R13

1. Fixed issue that Gateway ip can't setting 0.(BMC M/B)  
2. Changed Enforce DIMM default to Enforce DIS for some Memmory marge.

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R12

1. Fixed issue that system hang on 0xB1 sometimes.  
2. Changed Enforce DIMM default to Enforce EN for some Memmory marge.

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R11

1. Fixed issue that insert non-ECC UDIMM can't booting up.  
2. Fixed issue that system hang on 0x2F post code when inserts sandy Bridge CPU.  
3. Fixed issue that BMC IP shows 48.48.48.48 when changed BMC source first time.  
4. Added feature that BMC IP syn on Setup Menu.

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R10

1. modify setup menu slot string and IOH setting issue

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R09

1. fixed QPI ISOC for non-ecc UDIMM issue

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R08

1. Fixed issue that system hang on 0xb0 when inserts two sandy bridge cpu.

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R07

1. Fix POST keep Press [ESC] key, OPROM hang on POST 0xB2 issue.  
2. Modified MRC issue.

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R06

1. System bee sounds when memeory hadn't install.

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R05

1. Fixed issue that system can't booting when memory error occurs.

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R04

## BIOS Release Notes

1. Fixed issue that system hang on when select dynamic pci base
2. Modified BMC ip setting timing.
3. Update Microcode
4. LSI s/w can't update on dos.
5. Fixed issue system hang on memory initial.
6. Fan policy item support.
7. F10 key display.

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F10

1. add ABOVE\_4G\_PCI\_DECODE item on setup menu

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R02

1. fixed PCIE GPIO Switch issue

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R01

1. uEFI Vga support.
2. Fan Curver support.
3. SOL item issue fixed.
4. VBIOS update to 0.97

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T08

1. Add SATA IDE mode Item.
2. Add OS WDT mode Item.

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T06

1. Ivy Bridge release

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T05

1. Update MRC version to 18.
2. Display Enforce Item.

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T04

1. Update AMI Kernel to version 22.
2. Modified smbios data.

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T03

1. Fixed system hang on when write IR value.

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T01

1. Ivy Bridge support
2. ME update to 02.01.07.129.2\_05