



# Monthly Specification Update

***Intel<sup>®</sup> Server Board S1200BTL***

***Intel<sup>®</sup> Server Board S1200BTS***

***Intel<sup>®</sup> Server System R1304BTL SFAN***

***Intel<sup>®</sup> Server System R1304BT SSFAN***

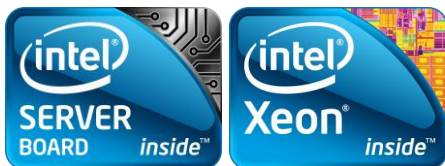
***Intel<sup>®</sup> Server System R1304BTL SHBN***

***Intel<sup>®</sup> Server System P4304BTL SFCN***

***Intel<sup>®</sup> Server System P4304BT SSFCN***

***Intel<sup>®</sup> Server System P4304BTL SHCN***

*Intel Order Number G31821-004*



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**Enterprise Platforms and Services Marketing**

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## *Revision History*

<b>Date</b>	<b>Modifications</b>
April 2011	Initial release.
May 2011	Updated Errata 1-4.
June 2011	Add Errata 16-19; Updated Errata 9-10, 12-14.
July 2011	Add Errata 20 and 21.

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The Intel® products specified may contain design defects or errors known as errata that may cause the products to deviate from the published specifications. Current characterized errata are documented in this Specification Update.

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## Preface

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This document communicates product Errata and Documentation Changes and Corrections for the following Intel® Server Products:

- Intel® Server Board S1200BTL/S1200BTS
- Intel® Server System R1304BTLFAN/R1304BTSSFAN/R1304BTLSHBN
- Intel® Server System P4304BTLFCN/P4304BTSSFCN/R4304BTLHCN

The following defines items communicated in this document:

**Documentation Changes** include typos, errors, or omissions from the current published specifications. These changes will be incorporated in the next release of the specifications.

**Specification Changes** are modifications to the current published specifications for a given product. These include typos, errors, or omissions. Specified changes will be incorporated in the next release of the document.

**Specification Clarifications** describe a supported feature or function in greater detail or further highlight their impact to a complex design requirement. These clarifications will be incorporated in the next release of the document.

**Errata** are design defects or deviations from current published specifications for a given product. Published errata may or may not be corrected. Hardware and software designed to be used with any given processor stepping must assume that all errata documented for that processor stepping are present on all devices.

## Summary Tables of Changes

The following tables provide an overview of known errata and known document changes that apply to the specified Intel® Server Products. The tables use the following notations:

**Doc** Intel® intends to update the appropriate documentation in a future revision.

**Fix** Intel® intends to correct this erratum.

**Fixed** This erratum has been corrected.

**No Fix** There are no plans to correct this erratum.

**Shaded** This item is new or has been modified from the previous specification update.

**Table 1. Errata Summary**

No.	Plans	Description of Errata
1	Fixed	Bios setting is locked after running 'syscfg/bldfs' to load Bios default setting.
2	Fixed	Admin Password is cleared after loading user defaults.
3	Fixed	By using LSI* SCSI storage card 20320 can't enter into Microsoft Windows 2008* R2.
4	Fixed	Intelligent Platform Management Bus (IPMB) functions on devices connected to IPMB connector might not be available on Intel® Server Board S1200BTL.
5	Fix	Unable to install SLES* 11 Service Package 1 to iSCSi drive from onboard Intel® 82579 network card.
6	No Fix	Node Manager does not work with Intel® Core™ Processor i3-2100 series or Intel® Pentium® Processor.
7	Fix	Intel® Integrated RAID Module SRMS2LL040 does not work.
8	Fix	Memory Mapped I/O above 4 GB option can't map 64bit addresses.
9	Fixed	Windows 2008* R2 can't be installed properly or the OS will hang with NIC ROM disabled in BIOS.
10	Fixed	The SGPIO cable is not compatible with Intel® SAS Entry Raid Module AXX4SASMOD, Intel® Integrated RAID Module SRMS2AF040 and Intel® Integrated RAID Module SRMS2LL040.
11	Not Fix	When EULOT 6 is enabled, the system can't boot up by press power button once.
12	Fixed	The value of SMI BIOS type 17 is not correct.
13	Fixed	BMC user SOL payload enable/disable status can't be saved across BMC reset.
14	Fixed	SOL activation is failed when Console Redirection is disabled in BIOS Setup.
15	Fix	The 4th HDD cage interferes with the right side rack handle screws on then Intel® R1304BTL SHBN.
16	Fix	Microsoft* Windows SBS 2011 Essential doesn't recognize ESRT2 driver during installation
17	Fix	System may hang about 20 seconds during system rebooting
18	Fix	Some Function Keys does not work through SOL session
19	Fix	Keyboard does not work under EFI if USB flash disk is inserted/removed when enabled TXT in BIOS
20	Fixed	When using Hardware RAID controller, pressing "Ctrl+G" can not enter RAID configuration utility
21	Fix	The RPM of three fans on Intel® Server System R1304BTL SHBN drops to 0 sometimes after AC cycle

**Table 2. Documentation Changes**

No.	Plans	Document Name	Description of Documentation Change
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1	Fix	<i>Intel® Server Board S1200BT Technical Product Specification</i>	The DMI speed with is incorrect.
2	Fixed	<i>Intel® Server System R1304BTLFAN, R1304BTLSHBN, and R1304BTSSFAN Technical Product Specification</i>	The AXXVRAIL is not included in the Intel® Server System R1304BTLFAN, R1304BTLSHBN, and R1304BTSSFAN package.

The following sections provide in-depth descriptions of each erratum/documentation change indicated in the tables above. The errata and documentation change numbers referenced in the following sections correspond to the numbers in the tables above.

## Errata

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### 1. Bios setting is locked after running 'syscfg/bldfs' to load Bios default setting

Problem	The user uses “syscfg/bldfs” to load BIOS default setting, the BIOS setting is locked.
Implication	The user can't change the BIOS setting after the user uses “syscfg/bldfs” to load BIOS default setting on Intel® Server Board S1200BTL.
Status	This issue is fixed in BIOS Revision 24.
Workaround	The user can use CMOS clear to clear the settings and reboot the system, after that the BIOS setting can work.

### 2. Admin Password is cleared after loading user defaults

Problem	Set admin password by using syscfg command “syscfg/bap”, “int123”, and then load user default setting by using “syscfg/bldfs”, reboot the system to enter into BIOS setup, the password is not shown.
Implication	After the user sets the password using the “syscfg” utility, the password does not prompt the user after the first reboot on Intel® Server Board S1200BTL.
Status	This issue is fixed in BIOS Revision 24.
Workaround	Reboot the system twice, the admin password will be shown.

### 3. LSI\* SCSI storage card 20320 can't enter into Microsoft Windows 2008\* R2

Problem	When using the LSI* SCSI storage card 20320, the system can't enter into Microsoft Windows 2008* R2. It hangs on the error “Info: An error occurred while attempting to read the boot configuration data”.
Implication	The user can't use LSI* SCSI storage card 20320 on the Intel® Server Boards S1200BTL.
Status	This issue is fixed in BIOS Revision 24.
Workaround	None.

#### **4. Intelligent Platform Management Bus (IPMB) functions on devices connected to IPMB connector might not be available on Intel® Server Board S1200BTL**

Problem	Intelligent Platform Management Bus (IPMB) functions on devices connected to IPMB connector might not be available on the Intel® Server Board S1200BTL.
Implication	The issue has been root caused to a violation of IPMI and PM Bus specification on the IPMB and PM Bus ports.
Status	This issue is fixed in BMC Revision 01.05.
Workaround	None.

#### **5. Unable to install Linux SLES\* 11 Service Package 1 to iSCSi drive from onboard Intel® 82579 network card**

Problem	Unable to install SLES11* SP1 to iSCSi drive from 82579 network card.
Implication	SLES11* SP1 doesn't include a driver for Intel® 82579 network cards.
Status	The issue is under investigation.
Workaround	N/A.

#### **6. Node Manager does not work with Intel® Core™ Processor i3-2100 series or Intel® Pentium® Processor**

Problem	On Intel® Server Board S1200BTL, node manager is supported with Intel® Xeon® Processor E3-1200 Series, but node manager is not supported with Intel® Core™ Processor i3-2100 series or Intel® Pentium® Processor.
Implication	Hardware required for CPU power limiting is functional on Intel® Xeon® Processor; it is not functional on Intel® Core™ i3 processor or Intel® Pentium® Processor.
Status	No Fix.
Workaround	N/A.

#### **7. Intel® Integrated RAID Module SRMS2LL040 doesn't work**

Problem	OS is installed to the Intel® Integrated RAID module SRMS2LL040 with SATA CDROM (the on-board SATA mode is set to AHCI mode in BIOS Setup), the OS fails to reboot after removing CDROM.
Implication	The OpROM of SRMS2LL040 is not compatible with the BIOS.

Status May be fixed in BIOS Revision 30.

Workaround N/A.

## 8. Memory Mapped I/O above 4 GB option can't map 64bit addresses

Problem There is a setting in BIOS Setup for memory map I/O above 4GB, but this setting can't map 64bit addresses.

Implication A device with a 64-bit BAR region, the memory is still located below 4GB.

Status The issue is under investigation.

Workaround N/A.

## 9. Windows 2008\* R2 can't be installed properly or the OS will reset with NIC ROM disabled in BIOS

Problem On Intel® Server Board S1200BTL and S1200BTS, the installation of Windows 2008\* R2 will hang up or the system will reset after entering into OS if NIC ROM is disabled in BIOS Setup.

Implication The issue is root caused to the watchdog timer which is disabled when the NIC ROM is disabled in BIOS.

Status Fixed in BIOS Revision 28.

Workaround The user needs to enable NIC ROM in BIOS when installing or using Windows 2008\* R2.

## 10. The SGPIO cable is not compatible with Intel® SAS Entry Raid Module AXX4SASMOD, Intel® Integrated RAID Module SRMS2AF040, and Intel® Integrated RAID Module SRMS2LL040

Problem The SGPIO cable isn't compatible between some modules and the backplane in the system.

Implication The SGPIO connector on the backplane in the hotswap system or the hotswap chassis is a 5-pin connector. The SGPIO connector in module is a 4-pin connector. The cable shipped with the system or the chassis is a 5-pin to 5-pin cable. The SGPIO cable is used to connect the Intel® Server Board S1200BTL and the backplane, but not compatible with the affected modules.

Status PCN110781-00 has a customer notification for the new Y-type cable cut-in schedule.

Workaround N/A.

## 11. When EuLOT 6 is enabled, the system can't boot up by pressing the power button one time

Problem	When the user enables EuLOT6 in BIOS Setup, the system can't be powered up by pressing the power button one time.
Implication	The delay for RSMRST to PWRBTN is not enough
Status	No Fix.
Workaround	The user needs to press the power button twice when EuLOT6 is enabled in BIOS to ensure the system can power up.

## 12. The value of SMBIOS Type 17 is not correct

Problem	The value of SMBIOS Type 17 is not correct. The total width shows 128 bit. It should be 72 bit.
Implication	The SMBIOS Type 17 setting is not correct.
Status	Fixed in BIOS Revision 28.
Workaround	NA.

## 13. BMC user SOL payload enable/disable status can't be saved after BMC reset

Problem	When changing the setting of the BMC user SOL payload to enable or disable after resetting the system, the setting can't be saved.
Implication	The function of enabling or disabling the BMC user SOL payload does not work.
Status	Fixed in BMC release Revision 01.07.
Workaround	N/A.

## 14. SOL activation fails when Console Redirection is disabled in BIOS

Problem	SOL activation fails when Console Redirection is disabled in BIOS Setup.
Implication	The BIOS requires the legacy serial console redirection to be enabled before the SOL session is established.
Status	Fixed in BMC release Revision 01.07.

Workaround To use SOL, the user needs to enable the console redirection in BIOS.

### **15. The 4<sup>th</sup> HDD cage interferes with the right side rack handle screws on the Intel<sup>®</sup> Server System R1304BTLSHBN**

**Problem** The screws used to attach the rack handle to the chassis are too long. The screw in the rack handle package is 6mm.

**Implication** The issue has been root caused to the incorrect rack handle screws. The incorrect rack handle screw length is 6mm while the correct screw length is 4mm. The incorrect rack handle screw causes a conflict with the 4<sup>th</sup> HDD carrier.

**Status** The shorter screws (4mm length) can fix this issue. Intel<sup>®</sup> will cut-in the new screws in the next build.

**Workaround** A 4mm screw will fix this issue.

### **16. Microsoft\* Windows SBS 2011 Essential doesn't recognize ESRT2 driver during installation**

**Problem** Microsoft\* Windows SBS 2011 Essential doesn't recognize ESRT2 driver during installation.

**Implication** During operating system installation over ESRT2 RAID, system doesn't load ESRT2 driver successfully.

**Status** This issue is under investigation.

**Workaround** Before putting the driver into driver media, change MegaSR.INF file name into megasr.inf, which has all lower case letters in the file name.

### **17. System may hang about 20 seconds during system reboot**

**Problem** On Intel<sup>®</sup> Server Board S1200BTS, when trying to reboot the system, it may hang about 20s during reboot.

**Implication** Users have to wait for 20s to let the system boot up normally.

**Status** May be fixed in BIOS Revision 30.

**Workaround** None

### **18. Some Function Keys does not work during a SOL session**

**Problem** The below function keys does not work during a SOL session: "Backspace", "Insert", "Delete", "Home", "End", "PgUp" and "PgDn".

Implication The user can't use those function keys during a SOL session.

Status The issue is under investigation.

Workaround None

### **19. Keyboard does not work under EFI if USB flash disk is inserted/removed when TXT is enabled in BIOS Setup**

Problem Enable TXT function in BIOS and then insert or remove USB flash disk, keyboard will not work under EFI sometimes.

Implication The user can not do action for USB flash disk if the user needs to use keyboard under EFI.

Status May be fixed in BIOS Revision 30.

Workaround None

### **20. When using Hardware RAID controller, pressing "Ctrl+G" can not enter RAID configuration utility**

Problem If using hardware RAID controller, pressing "Ctrl+G" cannot enter RAID configuration utility.

Implication The user can not configure hardware RAID controller using RAID configuration utility.

Status This issue has been fixed in BIOS Rev.28. After updating to BIOS Rev.28, the user need to load BIOS default setting.

Workaround None

### **21. The RPM of three fans on Intel® Server System R1304BTLSHBN drops to 0 sometimes after AC cycle**

Problem After AC power off and power on, the RPM of three fans on Intel® Server System R1304BTLSHBN drops to 0 sometimes.

Implication This issue happens after 1000 AC cycles with R1304BTLSHBN. After this issue happens, an AC cycle will recover the system.

Status May be fixed in BMC Rev1.10.

Workaround None

## Documentation Changes

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### 1. DMI speed in Intel® Server Board S1200BT Technical Product Specification is incorrect

Problem	The DMI speed in the <i>Intel® Server Board S1200BT TPS 1.0</i> is 2.5GT/s. This information is incorrect. It should be 5GT/s.
Implication	The documentation is incorrect.
Status	Will fix in <i>Intel® Server Board S1200BT TPS 1.1</i> .
Workaround	N/A.

### 2. The AXXVRAIL is not included in the Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN

Problem	The information in <i>Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN Technical Product Specification 1.0</i> indicates the AXXVRAIL is included in the system package. This information is not correct.
Implication	The AXXXVRAIL is not included in the Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN package.
Status	Fixed in <i>Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN Technical Product specification 1.1</i>
Workaround	N/A.