



# 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***

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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.
Sep. 2011	Add Errata 22, 23 and 24.
Oct. 2011	Add Errata 25 and Add Errata 26; updated Errata 5, 7, 9, 16, 17, 19, 20, 21, 23 and 24.

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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/R4304BTLSHCN

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	Fixed	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	Fixed	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	Fixed	The 4th HDD cage interferes with the right side rack handle screws on then Intel® R1304BTL SHBN.
16	Fixed	Microsoft* Windows SBS 2011 Essential doesn't recognize ESRT2 driver during installation
17	Fixed	System may hang about 20 seconds during system rebooting
18	Fix	Some Function Keys does not work through SOL session
19	Fixed	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	Fixed	The RPM of three fans on Intel® Server System R1304BTL SHBN drops to 0 sometimes after AC cycle
22	Fix	PCT reports "Processor Does Not Support Brand ID"
23	Fixed	The SEL is keep reporting when RAID is rebuilding on Intel® Server System R1304BTL SHBN
24	Fixed	The system can not detect more than 8 USB devices
25	Fix	USB Keyboard mouse cannot wakeup the system from the Standby mode



26	Fix	The NMI button on front panel does not work as expected
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**Table 2. Documentation Changes**

No.	Plans	Document Name	Description of Documentation Change
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.
3			

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 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 This issue may be fixed in a future BIOS revision.

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 installation of Windows 2008\* R2 will hang up or the system will reset after entering into OS if NIC ROM is disabled.

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 long 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	Using the screw for the rack handle will interfere with the chassis.
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	Fixed in BIOS Rev.30.
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 20 seconds during reboot.
Implication	Users have to wait for 20s to let the system boot up normally.
Status	Fixed in BIOS Revision 30.
Workaround	None

### **18. Some Function Keys do 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 may be fixed in a future BIOS version.
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 may not work under EFI.
Implication	The user can not insert or remove USB flash disk if the user needs to use keyboard under EFI when TXT is enabled.
Status	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 needs to load BIOS default setting.
Workaround	None

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

Problem	After AC power off and power on, the RPM of three fans on Intel® Server System may R1304BTLSHBN drop to 0.
Implication	This issue happens after 1000 AC cycles with R1304BTLSHBN. After this issue happens, an AC cycle will recover the system.
Status	Fixed in BMC Rev1.10.
Workaround	None

### **22. PCT reports "Processor Does Not Support Brand ID"**

Problem	When running PCT(platform confidence test utility) on Intel® Server Board S1200BTL, PCT reports "Processor Does Not Support Brand ID".
Implication	This is actually not an error message, it indicates that this Processor ID is not in the list of processors can be recognized by PCT.

Status May update the processor list in future PCT utility.

Workaround N/A.

### **23. The SEL is keep reporting when RAID is rebuilding on Intel® Server System R1304BTLSHBN**

Problem When the RAID is rebuilding, the Rebuild/Remap is recorded in SEL until the SEL is full.

Implication The user will see the hot swap backplane rebuild SEL.

Status May fix in the next BMC Rev. 1.10.

Workaround None

### **24. The system can not detect more than 8 USB devices**

Problem On Intel® Server Board S1200BTL/S1200BTS, the board can not detect more than 8 USB devices. It can only detect 8 USB devices or less than 8 USB devices.

Implication The BIOS fails to control the USB controller if more than 8 USB devices plugged in.

Status Fixed in BIOS Rev.30.

Workaround None

### **25. The board will allocate about 250MB memory for PCIe device under Microsoft\* windows OS**

Problem On Intel® Server Board S1200BTL/S1200BTS, the board will reserve 250MB memory for PCIe device under Microsoft\* windows OS.

Implication The memory size showed in Windows\* OS will be the memory the user installs minus about 250MB. For example, if there is 1GB memory installed in the board, the Microsoft\* Windows OS will show about 750GB.

Status Will not fix.

Workaround None

### **26. The NMI button on front panel does not work as expected**

Problem When pressing the NMI button on the front panel the system does not generate an Non-Maskable Interrupt.



Implication      Cannot create NMI interrupt through the NMI button on front panel.

Status            This issue may be fixed in a future BIOS release.

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.