Monthly Specification Update

Intel® Server Board S1200BTL
Intel® Server Board S1200BTS
Intel® Server System R1304BTLSFAN
Intel® Server System R1304BTSSFAN
Intel® Server System R1304BTLSHBN
Intel® Server System P4304BTLSFCN
Intel® Server System P4304BTSSFCN
Intel® Server System P4304BTLSHCN

Revision History

Date	Modifications
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.
Nov.2011	Add Errata 27 and Add Errata 28; add document change 3.
Dec.2011	No update.
April. 2012	Add Errata 29, 30; update Errata 8, 23, 26; update Documentation changes 1, 3
May. 2012	Add Errata 31, 32;

Disclaimers

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

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

- Intel® Server Board S1200BTL/S1200BTS
- Intel® Server System R1304BTLSFAN/R1304BTSSFAN/R1304BTLSHBN
- Intel® Server System P4304BTLSFCN/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	Fixed	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® R1304BTLSHBN.
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 R1304BTLSHBN 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 R1304BTLSHBN
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	Fixed	The NMI button on front panel does not work as expected
27	Fix	Consistency Check in S1200BTL/S1200BTS motherboard's ESRT2 OpROM Configuration Utility returns error message
28	No Fix	There is no driver for Intel® 82579 network card on VMWare ESXi* 5.0, VMWare ESXi* 4.1 Update 1 and VMWare* ESX 4.1 Update1
29	Fixed	Using the 4K section HDDs in USB port and set it as non boot device, it needs 10 minute to pass through. It is should be in less than one minutes
30	Fixed	Server Management Settings cannot be configured using latest SysCfg Version 10 Build6 on S1200BTL.
31	Fix	Function key can not work on KVM remote console on S1200BTL board.
32	Fix	ME downgrade is not supported by IDA and OFU.

Table 2. Documentation Changes

No.	Plans	Document Name	Description of Documentation Change
1	Fixed	*Intel® Server Board S1200BT Technical Product Specification*	The DMI speed with is incorrect.
2	Fixed	*Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN Technical Product Specification*	The AXXVRAIL is not included in the Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN package.
3	Fix	*Intel® Server Board S1200BT Technical Product Specification*	Add Expected Post Code diagnostics LEDs status after system booting into operating system

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

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 netw**ork** 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   Fixed in BIOS Revision 33.

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 compatiable 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 playload 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 4th HDD cage interferes with the right side rack handle screws on the Intel® 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® 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® 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   Fixed in 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   Fixed in BIOS Rev.35

Workaround   None.

27.   Consistency Check in S1200BTL/S1200BTS motherboard's ESRT2 OpROM Configuration Utility returns error message

Problem   Consistency Check in S1200BTL/S1200BTS motherboard's ESRT2 OpROM
                   Configuration Utility returns error message

Implication   The screen may pop up message "Error In Reading Sectors To Drive0 !
                   Proceed Anyway (Y/N)?". If Y is pressed, the screen may pop up the same
                   message after a while. The Consistency Check may not complete
                   successfully. User has to abort the Consistency Check.

Status   It is under investigation of why ESRT2 OpROM Configuration Utility has such a
                   limitation.

Workaround   In the operating system environment, use Intel® RAID Web Console 2 to
                   implement Consistency Check. The failure to complete Consistency Check
                   during ESRT2 OpROM Configuration Utility doesn't impact normal usage under
                   operating system environment.

28.   There is no driver for Intel® 82579 network card on VMWare ESXi* 5.0, VMWare ESXi* 4.1 Update 1 and VMWare* ESX 4.1 Update 1

Problem   There is no driver for Intel® 82579 network card on VMWare ESXi* 5.0,
                   VMWare ESXi* 4.1 Update 1 and VMWare* ESX 4.1 Update 1   .

Implication   Intel® 82579 network card can not be recoginized under VMWare ESXi* 5.0,
                   VMWare ESXi* 4.1 Update 1 and VMWare* ESX 4.1 Update 1

Status   NA.

Workaround   None.

29.   The boot time is 10 mins if using 4k section HDDs

Problem   Using the 4K section HDDs in USB port and set it as non boot device, it needs
                   10 minute to pass through. It is should be in less than one minutes.   .

Implication   The boot up time is too long.

Status   Fixed in BIOS Rev. 35.

Workaround   None.

30.   Unable to get Server Management variables on BTP using SysCfg.

Problem   Server Management Settings cannot be configured using latest SysCfg Version
                10 Build6 on S1200BTL.   .

Implication   The user can't change BMC setting by the latest syscfg tool on Intel® Server
                Board S1200BTL.

Status   Fixed in BIOS Rev. 35.

Workaround   None.

31.   Function key can not work on KVM remote console on S1200BTL board.

Problem   Function key can not work on KVM remote console on S1200BTL board.   .

Implication   The user can't enter into BIOS setting from KVM remote console during server
                is booting up.

Status   Will fix in future BIOS.

Workaround   Enter BIOS setting to set the option "System Boot Timeout" from 0 to 3
                seconds.

32.   ME downgrade is not supported by IDA and OFU.

Problem   IDA and OFU can not support ME downgrade.

Implication   IDA and OFU doesn't support ME downgrade from 02.02.00.036 or higher
                version to 02.00.09.032 or lower version.

Status   Will fix in the future IDA and OFU release.

Workaround   EFI shell is applicable to downgrade ME.

Documentation Changes

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

Problem   The DMI speed in the *Intel® Server Board S1200BT TPS 1.0* is 2.5GT/s. This information is incorrect. It should be 5GT/s.

Implication   The documentation is incorrect.

Status   Fixed in *Intel® Server Board S1200BT TPS 2.0.*

Workaround   N/A.

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

Problem   The information in *Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN Technical Product Specification 1.0* indidcates 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 *Intel® Server System R1304BTLSFAN, R1304BTLSHBN, and R1304BTSSFAN Technical Product specification 1.1*

Workaround   N/A.

3. Add Expected Post Code diagnostics LEDs status after system booting into the operating system

Problem   In Intel® Server Board S1200BT Technical Specification 1.0, there is no information for the Post Code after system booting into the operating system.

Implication   The Post Code is 0x00 after booting into DOS. The Post Code is 0xA0 after system booting into the other operating system.

Status   The information will be added into Intel® Server Board S1200BT Technical Product Specification R2.1.

Workaround   N/A.