Monthly Specification Update

Intel® Server Board S5400SF
Intel® Server System SR1560SF

May 2008

Enterprise Platforms & Service Marketing

Revision History

Date	Modifications
Dec 2007	Initial release.
Mar 2008	Update errata list and Document change
May 2008	Document and Errata list update

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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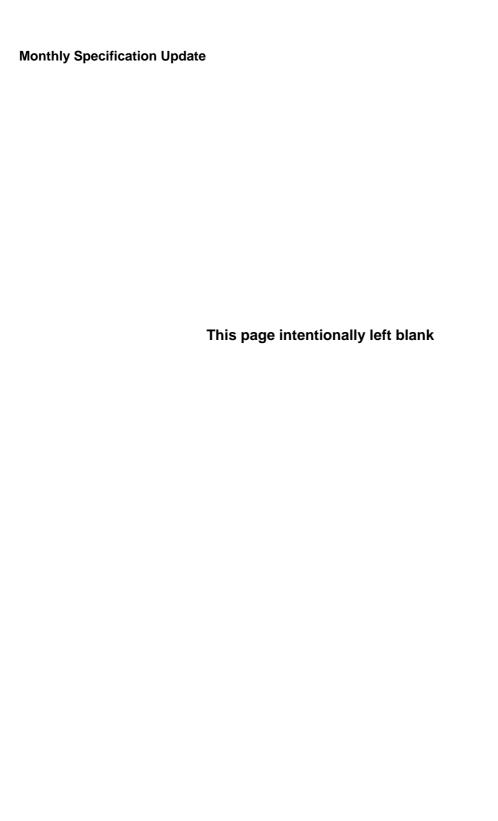
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Preface

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

- Intel® Server Board S5400SF
- Intel® Server System SR1500SF

Refer to the *Dual-Core Intel® Xeon® Processor 5000 Sequence Specification Update* (Order Number 313065) for specification updates concerning the Dual-Core Intel® Xeon® Processor 5000 Sequence. Items contained in the *Dual-Core Intel® Xeon® Processor 5000 Sequence Specification Update* that either do not apply to the Monthly Specification Update or have been worked around are noted in this document. Otherwise, it should be assumed that any processor errata for a given stepping are applicable to the Printed Board Assembly (PBA) revisions(s) associated with that stepping.

The following defines items communicated in this document.

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.

NoFix   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.	Fix	Returning to the BIOS Setup Utility from EFI causes the system to hang after using the Syscfg utility.
2.	Fix	Platform Confidence Test reports a hard disk test error with BIOS Setup option SATA Mode set to 'Enhanced'.
3.	Fix	After clearing the CMOS, BIOS Setup will report that Open Loop Throughput (OLTT) is set even though memory supporting Closed Loop Thermal Throttling (CLTT) is installed.
4.	Fix	Junk characters appear while listing the directories in DOS.
5.	Fix	Memory resource conflicts on device "Intel® 5400chipset Quickdata Technology Device 402F"
6.	NoFix	SR1560SF system doesn't implement chassis intrusion function
7.	Fix	RHEL5 /Xen can not boot with SW RAID enabled
8.	Fix	Current SW RAID drivers are not present in IDA CD
9.	Fix	BIOS changes boot order after removing USB devices
10.	No Fix	Entering the incorrect system password three times will not take user to BIOS error manager and display an error code as specified in BIOS EPS rev 1.5
11.	No Fix	BIOS EPS ver 1.5 incorrectly states system passwords are not case sensitive.

Table 2. Documentation Changes

No.	Plans	Document Name	Description of Documentation Change
1.	Fix	The Intel® Server Board S5400SF BIOS External Product Specification	Administrator/User password is case sensitive.
2.	Fix	The Intel® Server Board S5400SF series Configuration Guide	Remove order item mm# 891283.
3.	Fix	The Intel® Server Board S5400SF BIOS External Product Specification	Memory Mapped I/O Start Address is 2.00GB.

4.	Fix	The Intel® Server Board S5400SF Technical Product Specification	Supported Intel Server Management Software is v2.2.

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. Returning to the BIOS Setup Utility from EFI causes the system to hang after using the Syscfg utility.

Problem	After booting into EFI from the BIOS Boot Manager and using the Syscfg utility, typing the "exit" command will cause the screen to go black and the system hangs.
Implication	After using the Syscfg utility in EFI, the system cannot go back to the BIOS Setup Utility.
Status	Fixed in Syscfg release Build 11.
Workaround	None.

2. Platform Confidence Test reports a hard disk test error with BIOS Setup option SATA Mode set to 'Enhanced'.

Problem	When using PCT1.04 and setting the SATA Mode to 'Enhanced' and the AHCI Mode disabled, PCT will report an 'HDD Identify' command error.
Implication	The HDD test tool in PCT may have a defect in SATA 'Enhanced' Mode.
Status	This erratum may be fixed in a future PCT revision.
Workaround	None.

3. After clearing the CMOS, BIOS Setup will report that Open Loop Throughput (OLTT) is set even though memory supporting Closed Loop Thermal Throttling (CLTT) is installed.

Problem	With CLTT supported DIMMs installed, the BIOS Setup Utility will report that OLTT is enabled. This occurs on the first boot, only after performing a CMOS clear. This is a BIOS Setup reporting issue only; CLTT operation is actually set correctly.
Implication	This is a reporting issue in BIOS Setup on a first boot after clearing CMOS.
Status	This is fixed in BIOS release R0025.
Workaround	None.

4. Junk characters appear while listing the directories in DOS.

Problem   If the system is boot to the EFI Shell first and then boot to DOS using the
                 Boot Manager Menu, junk characters appear while listing the directories in
                 DOS. This symptom is not seen if the system is directly booted to DOS.

Implication   The file list under DOS may not be readable.

Status   This is fixed in BIOS release R0022.

Workaround   None.

5.   Memory resource conflicts on device "Intel® 5400 chipset Quickdata Technology Device 402F".

Problem   In Windows 2003, load NIC driver "intel-lan_msft_v12.3_whql", which
                 includes Quickdata driver. Check the device resource status of Intel®
                 chipset Quickdata Technology Device 402F in System device of Device
                 Manager. It reports memory resource conflict on memory address
                 "FE700000 – FE 703FFF"

Implication   There may be a warning message in Windows device manager.

Status   This is fixed in BIOS release R0025 and later.

Workaround   None.

6. SR1560SF system doesn't implement chassis intrusion function

Problem   In ISMS 2.2 (based on Microsoft SCE), chassis status reports intrusion all
                 the time.

Implication   There is no intrusion switch built in SR1560SF chassis.

Status   NoFix.

Workaround   Use a jumper to close chassis intrusion header on S5400SF MB to
                 eliminate the warning message.

7. RHEL5 /Xen can not boot with SW RAID enabled

Problem   If SAS SW RAID enabled with active backplane, the system will report
                 "Kernel panic: unable to sync. Try to kill all inits" and reboot after installing
                 RHEL5 /Xen.

Implication   The current SW RAID driver doesn't support VT technology.

Status   This is fixed in MegaRAID driver V10.19.0411.2008 for Linux* and V10.13.0214.2008 for Windows*

Workaround   None.

8. Current SW RAID drivers are not present in IDA CD

Problem   Current shipping IDA CD does not include all SW RAID drivers.

Implication   All SW RAID drivers are available on iBL for customer to download.

Status   This is fixed in the IDA Rev2.0 CD release.

Workaround   None.

9. BIOS changes boot order after removing USB devices

Problem   BIOS changes the boot order by placing Network(NIC) at 1st bootable option after system boots with USB devices, preventing system boots from HDD

Implication   BIOS can not keep the original boot priority by removing USB bootable devices.

Status   Under investigation.

Workaround   None.

Documentation Changes

1. Administrator/user password is case sensitive that doesn't match BIOS EPS v1.0

Planned Correction – This will be clearly defined in BIOS EPS.

Status: This will be fixed in the new release of BIOS EPS.

2. The Intel® Server Board S5400SF and Server System SR1560SF product Configuration Guide contains non-productized items mm#891283

Planned Correction – This item will be removed from current version.

Status: The FAN board (mm#891283) for Fixed SKU is included in FSR1560SPR kit.

3. Default value for "Memory Mapped I/O Start Address" doesn't match with BIOS EPS v1.0

Planned Correction – The value of "Memory Mapped I/O Start Address" will be changed to 2.00GB.

Status: This will be fixed in the new release of BIOS EPS.

4. Supported ISMS version as documented in the TPS v1.0 is being updated to reflect most current release

Planned Correction – Change the supported ISMS version to v2.2

Status: This will be fixed in the new release of TPS.