



Intel® Server Board SE7520AF2

Specification Update

Intel Order Number C77867-031



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Enterprise Platforms and Services Marketing

Revision History

Date	Modifications
October 2004	Initial release.
November 2004	Added erratum #16, #17 and documentation change #2.
December 2004	Added erratum #18, #19.
January 2005	Added erratum #20, #21.
February 2005	Added erratum #22 ~ #24.
March 2005	Added erratum #25.
April 2005	Updated erratum #25.
May 2005	No change.
June 2005	Added erratum #26, #27
July 2005	No change
August 2005	No change
September 2005	Updated erratum #5, #21 #22, #26, #27.
October 2005	No change
November 2005	Added erratum #28 ~ 31.
December 2005	No change
January 2006	No change
February 2006	Added erratum #32 ~ 33
March 2006	No change
April 2006	No change
May 2006	No change
June 2006	No change
July 2006	No change
August 2006	No change
September 2006	Added erratum # 34
October 2006	No change.
November 2006	No change.
December 2006	No change.
January 2007	No change.
February	No change.
March 2007	No change.
April 2007	Added erratum # 35.

Disclaimers

The Intel® Server Board SE7520AF2 may contain design defects or errors known as errata that may cause the product to deviate from the published specifications. Current characterized errata are documented in this Specification Update.

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Preface

This document is an update to the specifications contained in the *Intel® Server Board SE7520AF2 Technical Product Specification* (Order Number C77866-002). It is intended for hardware system manufacturers and software developers of applications, operating systems, or tools. It will contain specification changes, specification clarifications, errata, and document changes.

Refer to the *Intel® Xeon™ Processor with 800 MHz System Bus Specification Update* (Order Number 302402-008) for specification updates concerning the Intel® Xeon™ processor. Items contained in the *Intel® Xeon™ Processor Specification Update* that either do not apply to the SE7520AF2 Server board 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.

Nomenclature

- **Specification Changes** are modifications to the current published specifications for the SE7520AF2 server boards. These changes will be incorporated in the next release of the specifications.
- **Specification Clarifications** describe a specification in greater detail or further highlight a specification's impact to a complex design situation. These clarifications will be incorporated in the next release of the specifications.
- **Documentation Changes** include typos, errors, or omissions from the current published specifications. These changes will be incorporated in the next release of the specifications.
- **Errata** are design defects or errors. Errata may cause the SE7520AF2 server board's behavior to deviate from published specifications. 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.

Product Scope

Below are the specific boards, BIOS and components covered by this Specification Update.

Product Code	Product TA#	Board PBA #	Board Fab #	Board BIOS
SE7520AF2 BAF2HPBB BAF2BB	C68969-511 C52143-511 C52145-511	C48105-511 C47886-511 C48105-511	FAB5 (C2 MCH)	P01-081
SE7520AF2 BAF2HPBB BAF2BB	C68969-521 C52143-521 C52145-521	C48105-521 C47886-521 C48105-521	FAB5 (C4 MCH)	P03-085
SE7520AF2 BAF2HPBB BAF2BB	C68969-601 C52143-601 C52145-601	C48105-601 C47886-601 C48105-601	FAB6 (C4 MCH)	P03-085
SE7520AF2 BAF2HPBB BAF2BB	C68969-701 C52143-701 C52145-701	C48105-701 C47886-701 C48105-701	FAB7 (C4 MCH)	P09-107
SE7520AF2 BAF2HPBB BAF2BB	D49744-001 C52143-750 C52145-750	C48105-750 C47886-750 C48105-750	FAB7 (C4 MCH)	P10-109

Summary Tables of Changes

The following tables indicate the errata and the document changes that apply to the Intel® Server Board SE7520AF2. Intel intends to fix some of the errata in a future stepping of components, and to account for the other outstanding issues through documentation or specification changes as noted. The tables use the following notations:

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

Fix: Intel intends to fix this erratum in a future release of the component.

Fixed: This erratum has been previously fixed.

NoFix: There are no plans to fix this erratum.

Shaded: This erratum is either new or has been modified from the previous specification update.

Table 1. Errata Summary

No.	Plans	Description of Errata
1.	No Fix	Microsoft Windows* 2003 operating system incorrectly shows ATA 133 hard drives operating on UDMA Mode 6
2.	No Fix	Multiple Hot Swap Backplanes (HSBP) are listed under each SCSI channel in Device Manager of Microsoft* Windows 2003 operating system
3.	No Fix	Invalid host error message is displayed by the LSI CIMBrowser* Utility under Microsoft Windows* 2003 operating system when all network connections are absent
4.	Fixed	The RAID Audible alarm is not operational when enabling the Intel® Server RAID SROMBU42E
5.	No Fix	PCI-X 66MHz adapter may not be recognized by Microsoft Windows* operating system when hot-plugged on PCI-X Slot #1 on the Intel Server Board BAF2HPBB board
6.	Fixed	During FRUSDR version 6.2.1 update, the utility prompts user if a front panel is present on the Intel Chassis
7.	Fixed	Some PCI adapters may not power on when plugged into any hot-plug PCI slots of the Intel Server Board BAF2HPBB
8.	Fixed	System intermittently hangs when invoking the Intel Server RAID SRCU42L <CTRL+G> RAID configuration utility
9.	Fixed	When integrating any of the Intel Server Boards SE7520AF2 on a third party reference chassis, the System Status LED is lit amber
10.	Fixed	'Watchdog timer failed on last boot' intermittent error message displayed during POST
11.	Fixed	Current BIOS does not support Legacy Mode for the on-board Serial ATA (S-ATA) ports
12.	Fixed	Memory Mirroring not supported by the System BIOS
13.	Fixed	CPU Fault Diagnostic LEDs not present on the board
14.	No Fix	"Insufficient memory to Shadow PCI ROM" BIOS error message may be displayed during POST
15.	Fixed	Update of Intel Management Module (IMM) Firmware to revision 0.29 fails to initialize the PCI hot-plug (PHP) sensors appropriately on the Intel Server Board BAF2HPBB
16.	No Fix	Potential Data Corruption Manifested Under SuSE* Linux 9.1 Professional Operating System
17.	Fixed	INT 0000006F Unknown Interrupt EFI Error Message

18.	Fixed	Intel Express Installer CD may list wrong system hardware configuration under Microsoft Windows* 2003 operating system.
19.	No Fix	Microsoft Windows* 2003 operating system shows 2 monitors in Device Manager.
20.	Fixed	SC5300 chassis intrusions may not be logged to the System Event Log (SEL) when the front panel side cover is opened.
21.	No Fix	BIOS will display a warning message when the mBMC System Event Log (SEL) is full
22.	Fixed	SC5300 HSBP (Hot-Swap Backplane) firmware version may be wrongly shown during post
23.	Fixed	BMC Timestamp Erratum
24.	No Fix	SCSI interfaces default settings Erratum
25.	No Fix	Events monitoring and logging issue
26.	No Fix	Intel Server board SE7520AF2 does not support WOL (Wake-On-LAN) from Microsoft* Windows soft-off state.
27.	No Fix	SE7520AF2 SUP (System Update Package) CD hangs at ROMDOS loading under specific physical drive or logical drive configurations.
28.	No Fix	With GDT8524RZ RAID card added into SE7520AF2, system may hang during POST if the Onboard Network Interface is disabled.
29.	Fixed	CMOS settings may be cleared if memory retest is performed
30.	No Fix	PCI Hot Plug Driver binaries may not be read successfully on non-English version Microsoft* Windows Server 2003
31.	Fixed	Screen shows Processor Missing Microcode warning during system POST
32.	Fixed	Presence of USB device causes Microsoft* Windows loading hang
33.	Fix	Blinking Green Status LED on BAF2NSBB(SE7520AF2 depop board) Server Boards
34.	No Fix	SAS/SATA Backplanes may fail FRU update on the Intel Server Chassis SC5300
35.	No Fix	Not Able To Enter SATA Embedded RAID BIOS Console to configure RAID

Table 2. Documentation Changes

No.	Plans	Description of Documentation Change
1.	Doc	Integrated Mirroring/Integrating Striping features constraints of the on-board LSI* 53C1030 SCSI controller
2.	Doc	ID LED Functionality with Onboard Platform Instrumentation

Following are in-depth descriptions of each erratum / documentation change indicated in the tables above. The errata and documentation change numbers below correspond to the numbers in the tables.

Errata

1. Microsoft Windows* 2003 operating system incorrectly shows ATA 133 hard drives operating on UDMA Mode 6

Problem	Microsoft Windows* 2003 operating system incorrectly shows ATA 133 hard drives operating on UDMA Mode 6. The Intel® ICH5-R chipset on the Intel® Server Board SE7520AF2 (all SKUs) supports speeds up to ATA100. All ATA133 hard drives attached to the onboard Parallel ATA port are correctly recognized and setup to operate by the system BIOS as "UDMA Mode 5", the drives are incorrectly displayed by the operating system to operate in "UDMA Mode 6".
Implication	Incorrect information from the operating system is provided to the user. Displayed information does not affect system functionality.
Workaround	None.
Status	No fix.

2. Multiple Hot Swap Backplanes (HSBP) are listed under each SCSI channel in Device Manager of Microsoft* Windows 2003 operating system

Problem	In Microsoft Windows 2003 Device Manager (view option: Devices by Connection), one HSBP connected to each onboard SCSI channel is recognized as 8 HSBPs. Properties of all HSBP on each SCSI channel show different LUNs (0 to 7) with the same bus number and the same target ID. This issue does not occur in Microsoft Windows 2000 AS device manager.
Implication	Innaccurate information displayed under Device Manager.
Workaround	The Microsoft Windows 2003 Registry file must include the following entry (there are four underscores after M15): <pre>[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ScsiPort\SpecialTargetList\ProcessorESG-SHV_SCA_HSBP_M15____] "OneLun"=dword:00000001</pre>
Status	No Fix.

3. Invalid host error message is displayed by the LSI CIMBrowser* Utility under Microsoft Windows* 2003 operating system when all network connections are absent

Problem	Launch of the "LSI CIMBrowser" utility results on "The specified host is invalid" error message. This error message is displayed by the LSI CIMBrowser Utility under Microsoft Windows 2003 operating system only when all network connections are absent.
Implication	LSI CIMBrowser utility cannot be used under this condition.
Workaround	In order to use the LSI CIMBrowser utility, the system must be attached to a network or the computer name must be set to "localhost".
Status	No fix.

4. The RAID Audible alarm is not operational when enabling the Intel® Server RAID SROMBU42E

Problem	The RAID Audible alarm is not operational when enabling the Intel® Server RAID SROMBU42E. The board speaker does not support RAID fault annunciations, BIOS and platform instrumentation faults are supported.
Implication	RAID fault conditions are not annunciated via the speaker. RAID faults will only be logged in the System Event Log (SEL) and reported to Intel® Server Management (ISM), users not monitoring the SEL or ISM may not be aware of RAID fault conditions.
Workaround	Configure ISM to monitor and report RAID fault conditions.
Status	Fixed on FAB6 (PBA C4xxxx-6xx) of the Intel Server Board SE7520AF2, BAF2HPBB and BAF2BB.

5. PCI-X 66MHz adapters may not be recognized by Microsoft Windows* operating system when hot-plugged on PCI-X Slot #1 on the Intel Server Board BAF2HPBB

Problem	PCI-X 66MHz adapters may not be recognized by Microsoft Windows* operating system when hot-plugged on PCI-X Slot #1 of the Intel Server Board BAF2HPBB. During the hot-plug attempt, the power LED will turn ON, but the card will not be identified by the operating system or the Hot-plug PCI Graphical User Interface. This issue is not manifested with PCI-X 133MHz adapters, it is also not manifested on hot-plug events in PCI-X Slot #5.
Implication	Hot-adding or hot-replacing a PCI 66MHz adapter on PCI-X Slot #1 may result on adapter not recognized by the operating system.

Workaround	Reboot the server.
Status	No fix since it's very rare that PCI 66MHz adapters use Hot Plug feature on SE7520AF2.

6. During FRUSDR version 6.2.1 update, the utility prompts user if a front panel is present on the Intel Chassis

Problem	The Intel Server Board SE7520AF2 FRUSDR utility version 6.2.1 incorrectly prompts the user during update if an Intel Front Panel is present on an Intel Chassis.
Implication	All intel chassis ship with Intel Front Panels, the FRUSDR utility should not prompt the user with this question. If the user enters NO as the answer, this results on the system fans blowing at full speed.
Workaround	Answer 'Yes' to this question when updating the system with FRUSDR utility version 6.2.1.
Status	Fixed on server board FRUSDR ver 6.4.1 and later.

7. Some PCI adapters may not power on when plugged into any hot-plug PCI slots of the Intel Server Board BAF2HPBB

Problem	Slot #1 and #5 of the BAF2HPBB board does not power up when commanded via the Intel Hot-Plug PCI Utility/Driver when users attempt to hot-add certain PCI adapters. This anomaly is due the server board BIOS ver P01-081 not supporting hot-plug PCI resource padding on adapters with PCI-PCI bridges.
Implication	User cannot perform PCI hot-add function with adapters that contain a PCI-PCI bridge. Hot-replace function is supported.
Workaround	Power the system off and install adapter. PCI adapter will be recognized during the next boot.
Status	Fixed on server board BIOS P03-085 and later.

8. System intermittently hangs when invoking the Intel Server RAID SRCU42L <CTRL+G> RAID configuration utility

Problem	System intermittently hangs when invoking the Intel Server RAID SRCU42L <CTRL+G> RAID configuration utility. Intermittent hang root caused to BIOS anomaly.
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Implication	Intermittent system hang during invoke of RAID configuration utility which requires user to reboot.
Workaround	Can use the <CTRL+M> RAID configuration utility.
Status	Fixed on server board BIOS P03-085 and later.

9. When integrating any of the Intel Server Boards SE7520AF2 on a third party reference chassis, the System Status LED is lit amber

Problem	The System Status LED changes from green to amber after POST on the Intel Server Boards SE7520AF2 (all SKUs) when installed on 3rd party reference chassis. This anomaly is only manifested when no Intel Management Module is installed.
Implication	Incorrect Fault Status is reported via the System Status LED.
Workaround	None.
Status	Fixed on server board FRUSDR version 6.4.1 and later.

10. 'Watchdog timer failed on last boot' intermittent error message displayed during POST

Problem	"Error (8190): Watchdog timer failed on last boot" has been found to intermittently manifest during boot. The error message falsely conveys that the board failed to execute BIOS code and failed to disable a timer before expiration.
Implication	Intel found that this false error message is caused by the onboard platform instrumentation not consistently recognizing the BIOS command to disable the timer. This anomaly is present on the server boards with FRU/SDR version 6.2.1 and prior. Currently SE7520AF2 server boards are shipping with FRU/SDR ver 6.2.1 pre-installed from Intel's factory, version 6.1.3 of the FRU/SDR is also included on the Intel Express Installer CD (P.N. C60156--003) shipped with the board.
Workaround	FRU/SDR version 6.4.1 has been developed to address this anomaly on the Intel Server Board SE7520AF2. The FRUSDR 6.4.1 is now available at http://support.intel.com . All customers should refrain from using the FRUSDR available on the Intel® Express Installer CD and should update the server board with the version available in the Intel web site above to prevent this anomaly.
Status	Fixed on server board FRUSDR version 6.4.1 and later.

11. Current BIOS does not support Legacy Mode for the on-board Serial ATA (S-ATA) ports

Problem	The Intel Server Boards SE7520AF2 (all SKUs) ship with the S-ATA ports from the Intel® ICH5-R I/O controller configured in Enhance Mode as the default. The current BIOS does not provide the user the capability to change the on-board S-ATA ports to Legacy Mode.
Implication	Current BIOS limitation prevents users from installing and booting legacy operating systems from the on-board S-ATA ports when not configured in S-ATA RAID mode. Data access to S-ATA drives by Legacy operating systems installed on on-board SCSI controller or alternate HBAs is supported.
Workaround	None.
Status	Fixed on server board BIOS release P07 and later version.

12. Memory Mirroring not supported by the System BIOS

Problem	The Memory Mirroring RASUM feature enabled by the Intel® E7520 Chipset is not currently supported by the Intel Server Board SE7520AF2 BIOS.
Implication	Customers will not be able to use the Memory Mirroring capability.
Workaround	None.
Status	Fixed on BIOS P07.

13. CPU Fault Diagnostic LEDs not present on the board

Problem	The CPU Fault Diagnostic LEDs are not supported on the FAB5 of the Intel Server Boards SE7520AF2 (all SKUs).
Implication	CPU Fault Diagnostic LEDs used to visually identify failed processors are not populated on FAB5 boards. Reporting of processor failures via the System Event Log (SEL) is not affected.
Workaround	Users can still rely on the SEL and Intel Server Management to monitor any failures.
Status	Fixed on FAB6 (PBA C4xxxx-6xx) of the Intel Server Board SE7520AF2, BAF2HPBB and BAF2BB.

14. "Insufficient memory to Shadow PCI ROM" BIOS error message may be displayed during POST

Problem	"Insufficient memory to Shadow PCI ROM" BIOS error message may be displayed during POST under certain system configurations and/or when invoking certain option ROM configuration utilities (including onboard controllers such as <CTRL+E> or <CTRL+A>). The display of this POST error message is a result of certain adapters and/or adapter option ROM utilities requesting a large amount of option ROM space that depletes all space available for other installed PCI adapters and on-board components. The Intel Server Boards SE7520AF2 BIOS displays this POST error message to indicate that it could not load other option ROMs due to lack of insufficient memory.
Implication	This limitation is not a server board specific issue, but rather a legacy BIOS limitation present on all BIOS based platforms. This anomaly may not have any adverse effects when manifested by executing a configuration utility that requires a reboot upon exit as loading the option ROMs for additional on-board components or any other PCI adapters may not be required.
Workaround	At this moment there is no workaround or fix that will work for all adapters available in the market. Users may disable in BIOS Setup (F2) on-board components not being used (e.g. NIC) thereby de-allocating memory space to compensate depletion of BIOS option ROM by these adapters.
Status	No Fix.

15. Update of Intel Management Module (IMM) Firmware to revision 0.29 fails to initialize the PCI hot-plug (PHP) sensors appropriately on the Intel Server Board BAF2HPBB

Problem	Update of IMM Firmware to revision 0.29 fails to initialize the PHP sensors appropriately on the Intel Server Board BAF2HPBB.
Implication	Update of the IMM FW results in the PHP sensors not reflecting correct status.
Workaround	When the IMM FW is updated to FW version 0.29, the system must be AC cycled after the update to correctly initialize the PHP sensors.
Status	Fixed on server board IMM FW 0.30 and later versions.

16. Potential Data Corruption Manifested Under SuSE* Linux 9.1 Professional Operating System

Problem	Intel found through OS stress testing that the IA32 and the IA32e versions of the SuSE Linux 9.1 Professional operating system (kernel 2.6.4-52-smp) can exhibit silent data corruption on server boards based on the Intel(R) E7520 chipset.
Implication	Investigation determined the data corruption stemmed from a race condition in reiser file system that ships with SuSE Linux 9.1 Professional OS (2.6.4-based

kernel). Although the reiser file system is the default file system used by SuSE Linux; tests of alternative file systems supported by the OS have not manifested this data corruption. All investigations and test results ascertain that this anomaly only affects the IA32 and IA32e versions of the SuSE* Linux 9.1 Professional OS. This anomaly is expected to be addressed by the OS vendor on the SuSE Linux Enterprise Server 9.0 version when officially released in early August 2004. SuSE Linux 9.1 Professional version will not be stress tested nor supported on the Intel(R) E7520 server platforms.

Workaround None supported by Intel.

Status No Fix.

17. 'INT 0000006F Unknown Interrupt' Error Message During EFI Boot

Problem Error message "INT 0000006F Unknown Interrupt - HALT !!! (00000010 : 1FF21DF0)" is displayed during EFI boot when the system does not have any bootable devices and the BIOS boots to the EFI shell. The error message is displayed due to a BIOS anomaly; the error message does not present any adverse effects on the functionality of the server board when booting EFI.

Implication Error message displayed during EFI boot only.

Workaround None.

Status Fixed on server board BIOS P05 and later versions.

18. Intel Express Installer CD may list wrong system hardware configuration under Microsoft Windows* 2003 operating system

Problem Intel Express Installer CD may show wrong system hardware configuration under Microsoft Windows* 2003 operating system when running the "Report" option of Intel Express Installer CD.

Implication The results of the reported system hardware configuration may not be correct, including processor information .

Workaround None.

Status Fixed on Intel Express Installer CD version 4.3.

19. Microsoft Windows* 2003 operating system shows 2 monitors in Device Manager

Problem	Microsoft Windows* 2003 operating system shows 2 monitors in Device Manager. The two monitors are listed as : 1. Default monitor 2. Plug & play Monitor
Implication	The SE7520AF2 server board enables only one VGA port for the embedded ATI* Rage XL video controller. Microsoft Windows* Device Manager information may be counterintuitive to end users. The reason two monitors are listed under Windows* is because the CRT and DVI outputs of the ATI RageXL* are both enabled. This is necessary to support the Intel Management Module (IMM) Advanced Edition when installed.
Status	No fix.

20. SC5300 chassis side cover intrusions events are not all logged in the board's System Event Log (SEL)

Problem	SC5300 chassis side cover intrusions events are not all logged in the board's System Event Log (SEL). When the SC5300 chassis side cover is opened, only the first event is logged; subsequent chassis side cover events are not logged. Opening the front panel door resets this condition.
Implication	Only the first side cover open event is logged to the board's SEL. After the event is logged, any further openings and closings of the side cover don't generate SEL events (until the front panel door is opened again).
Workaround	None.
Status	Fixed in latest BMC version.

21. BIOS will display a warning message when the System Event Log (SEL) is full

Problem	During boot, the BIOS may briefly display a red warning message indicating that the System Event Log (SEL) is full. This message appears after multiple reboots, due to the limited SEL storage space of the On-Board Platform Instrumentation. The SEL storage space of the mBMC allows for the storage of 92 SEL entries. A typical reboot adds several informational event messages to the SEL as part of the normal boot process.
Implication	The red warning message displayed by the BIOS is not an error. It is a warning message that the SEL is full and that no more system event messages can be logged until the SEL is cleared.
Workaround	The System Event Log (SEL) of the On-Board Platform Instrumentation should be cleared regularly. There are several methods of clearing the SEL, including: BIOS Setup (F2), SEL Viewer (included on the Intel Server Deployment Toolkit

+ the Software Update Package), and Intel Server Management 8.x (ISM) which includes the capability to manually manage the SEL as well as the capability configure ISM to automatically clear the SEL when it reaches a user defined threshold. Alternatively, some Intel servers have a connector to allow upgrade to the Intel Management Module (IMM) Professional or Advanced editions. The Intel Management Modules include an increased SEL capacity up to 3,276 SEL entries.

Status Intel has no plans to increase the SEL capacity of the On-Board Platform Instrumentation beyond the current 92 entries. Intel is investigating adding a BIOS (F2) Setup option to allow a user to limit the informational boot events logged in the SEL. Information on this BIOS (F2) Setup option will be included in future Spec Updates when implemented.

22. SC5300 HSBP (Hot-Swap Backplane) firmware version may be wrongly shown during post

Problem During post, the SC5300 HSBP firmware version may be shown as 1.0B.

Implication The version 1.0B actually stands for version 1.12. But please expect all other features to be the same.

Workaround None.

Status Fixed on HSC(Hot-Swap Controller) firmware 1.13.

23. BMC Timestamp Erratum

Problem The Intel® Server Board SE7520AF2 has been found to have a BIOS erratum which causes the BMC timestamp information to be incorrect. Beginning on January 1, 2005, the BMC date will lag the system date by 1 day throughout 2005. It will return to the correct date in 2006. This will recur for each year that follows a leap year, i.e. 2009, 2013, etc.

Implication The effect of this erratum is that the BMC will use this incorrect date for all entries in the System Event Log (SEL) maintained by the BMC. This includes informational events as well as error events, e.g. memory error events. Other BMC functions are unaffected.

Workaround None.

Status Fixed on Intel Server board SE7520AF2 BIOS P07 and later versions.

24. SCSI interfaces default settings Erratum

Problem	When using on-board SCSI controller, the SCSI interface with the silkscreen of Channel A is seen as Channel 1 and Channel B seen as Channel 0 during system POST which may differ from users' conventional assumptions.
Implication	The on-board SCSI controller scans Channel B firstly and then scans Channel A, which is the default setting. While the RAID-On Motherboard (ROMB) scans Channel A firstly, sees Channel A as Channel 0 and Channel B as Channel 1 during POST.
Workaround	Users who want the on-board SCSI controller to scan Channel A firstly can press Ctrl+C during POST to enter SCSI BIOS in order to change the channel scanning sequence. After the setting, this sequence will not be changed until a second manual configuration is made by users.
Status	No fix.

25. Events monitoring and logging issue

Problem	The Intel® Server Board SE7520AF2 has been found to have an issue where the VRD Therm Monitor, Processor Hot & Throttling events are masked and not passed to the system Baseboard Management Controller (BMC) for event monitoring and logging.
Implication	Even though the processors will throttle in the event of a high temperature condition, this will not be recorded in the system event log or monitored via Intel Server Management. In the unlikely event, the processor temperature increases and exceeds the thermal trip point of the processors, the system will perform a shutdown operation and generate the appropriate system event log entry.
Workaround	None.
Status	No fix.

26. Intel Server board SE7520AF2 does not support WOL (Wake-On-LAN) from Microsoft* Windows soft-off state.

Problem	The Intel Server board SE7520AF2 TPS (Technical Product Specification) says that WOL (Wake-On-Lan) from Microsoft* Windows soft-off state is supported. But actually this feature is not supported.
Implication	Please ignore the description in SE7520AF2 TPS that WOL from Microsoft* Windows soft-off state is supported. This is wrong information But SE7520AF2 still support WOL from Microsoft* Windows Standby or Hibernate states.
Workaround	None.
Status	No fix.

27. SE7520AF2 SUP (System Update Package) CD hangs at ROMDOS loading under specific physical drive or logical drive configurations.

Problem	Sometimes SE7520AF2 SUP CD cannot be read successfully by CD-ROM. It stops at SUP ROMDOS loading.
Implication	When The SE7520AF2 SUP iso image is burned into a SUP CD and try to boot the system, sometimes the CD stops at SUP ROMDOS loading. The message on the screen is such like "123456 ROMDOS loading 789" and then the system hangs. When it occurs, please check the system's backplane. It's very possible that the number of hard drives inserted into the backplane is three (3).
Workaround	If the system's backplane has three hard drives inserted, just change the number of drives. After adding or removing drives, the SUP CD will run properly. If the system has a RAID configuration, avoid the RAID logical drive number to be three. After logical drive number is no longer three. The SUP CD will run properly.
Status	No Fix.

28. With GDT8524RZ RAID card added into SE7520AF2, system may hang during POST if the Onboard Network Interface is disabled.

Problem	With GDT8524RZ RAID card added into SE7520AF2, system may hang during POST if the Onboard Network Interface is disabled.
Implication	Due to some inconsistency between of RAID option ROM and system memory, RAID option ROM parameters may have the possibility to be cleared by system during POST and thus users may see above symptom.
Workaround	When users see this symptom, please enable the onboard network interface card (NIC) in BIOS SETUP utility and reboot system. System will work normally.
Status	No Fix.

29. CMOS settings may be cleared if memory retest is performed

Problem	Sometimes when system is booting, the warning message of "CMOS checksum bad. Default setting loaded." may show on screen. Then, CMOS settings will return to default.
Implication	Please check if "memory retest" was enabled in BIOS SETUP before this system booting. If yes, it has some possibility that above symptom will happen.

Workaround	Write down all CMOS settings before memory retest. During next booting, if above warning message is seen, enter BIOS SETUP to manually configure CMOS settings based on previous record.
Fix	BIOS P10

30. PCI Hot Plug Driver binaries may not be read successfully on non-English version Microsoft* Windows Server 2003

Problem	PCI Hot Plug Driver binaries may not be read successfully on non-English version Microsoft* Windows Server 2003.
Implication	If this is seen, that may due to the driver not fully localized to that local language.
Workaround	Do a manual installation of the driver via device manager>update driver, then point to C:\program files\Intel\HotPlugMonitor\Win
Fix	No Fix

31. Screen shows Processor Missing Microcode warning during system POST

Problem	Screen shows Processor Missing Microcode warning during system POST.
Implication	The processor stepping information is not included in the BIOS the system has. This may due to a relatively old processor stepping version.
Workaround	Firstly, users need to confirm that the system is with the latest BIOS version. If this issue is still seen after BIOS update, then please update the BIOS for a second time. Thus, the warning message should disappear.
Fix	BIOS P10.

32. Presence of USB device causes Microsoft* Windows loading hang.

Problem	Presence of USB device causes Microsoft* Windows loading hang.
Implication	Non-proper BIOS configuration causes this happen.
Workaround	Remove all USB devices from system. USB PS/2 keyboard instead of USB keyboard. After Windows loading finishes, system can recognize USB devices successfully.

33. Blinking Green Status LED on BAF2NSBB (SE7520AF2 depop SKU) Server Boards

Problem	The server board BAF2NSBB (SE7520AF2 depop SKU) server boards utilizing the Intel® Management Module (IMM) Advanced Edition or Professional Edition in a SC5300 LX chassis may exhibit a blinking green system status LED. The System Event Log does not indicate a degraded system condition..
Implication	The system status LED may be blinking green indicating a degraded system configuration that does not exist..
Workaround	None.
Fix	Future FRUSDR version.

34. SAS/SATA Backplanes may fail FRU update on the Intel Server Chassis SC5300

Problem	The EEPROM on the SC5300 SAS/SATA backplane is not compatible with the backplane's electrical requirements. This can cause the FRU update on the backplane to fail. This ONLY affects systems that have an IMM installed.
Implication	The FRU information on the SAS/SATA backplane could be unreadable. Systems with an IMM module and SAS/SATA backplane may receive an error when updating FRU. Only the FRU data is impacted by the FRUSDR update. Users who only update the SDR portion will be unaffected.
Workaround	To prevent the error while updating the FRU, remove the I2C cable from the SAS/SATA backplane before running the FRUSDR update. This prevents communication with the backplane and will complete the update successfully.

35. Not Able To Enter SATA Embedded RAID BIOS Console to configure RAID.

Problem	With SATA Embedded RAID enabled in BIOS SETUP, system SATA RAID BIOS Console cannot be entered by pressing Ctrl+E key combination. Although server prompts a message that configuration utility will be invoked after the POST, it continues to boot through the boot devices and doesn't enter RAID BIOS Console.
Implication	This is due to OpROM limitation to the latest version BIOS. BIOS version that is older than or equal to P08 doesn't have this issue.

Workaround In BIOS SETUP, disable onboard NIC, onboard NIC ROM, quick boot & quiet boot. Now RAID BIOS Console can be entered. After RAID configuration, switch above BIOS settings back as needed. .

Fix This erratum will not be fixed.

Documentation Changes

1. Integrated Mirroring/Integrating Striping features constraints of the on-board LSI* 53C1030 SCSI controller

Problem	The onboard LSI 53C1030 U320 SCSI controller supports Integrated Mirroring (RAID 1) or Integrated Striping (IS) as described in section 3.4.3 of the Intel Server Board SE7520AF2 Technical Product Specification. This feature is defaulted to Integrated Mirroring from factory and can be changed by the user to Integrated Striping via the server board BIOS Setup (F2).
Implication	The section on the specification fails to document the drive constraints of this feature. The RAID array can be configured by invoking the onboard <CTRL+A> RAID Configuration utility, but it is limited to one array in SCSI Channel A or Channel B of two to six SCSI hard drives in the same channel.
Workaround	N/A.
Status	Corrected on the Intel Server Board SE7520AF2 Technical Product Specification ver 1.1.

2. ID LED Functionality with Onboard Platform Instrumentation

Problem	“Chassis ID Button and LED” section of the Intel SE7520AF2/BAF2BB Technical Product Specification states the ID switch supports a toggle (ON/OFF) operation of the ID LED. This operation is supported under system configurations that include an Intel Management Module (IMM). When operating with the onboard platform instrumentation only (no IMM present), the ID switch only supports a timed blinking operation.
Implication	Functionality and operation of the ID LED (blue), enabled on the board as part of the Intel Ligth-Guided Diagnostics, is not fully documented in the SE7520AF2 Technical Product Specification.
Workaround	N/A.
Status	Corrected on the Intel Server Board SE7520AF2 Technical Product Specification ver 1.1.