Monthly Specification Update

Intel® Server Board S1200V3RPL
Intel® Server Board S1200V3RPS
Intel® Server Board S1200V3RPO
Intel® Server Board S1200V3RPM
Intel® Server System R1304RPSSFBN
Intel® Server System R1304RPOSHBN
Intel® Server System R1208RPOSHOR
Intel® Server System R1208RPMSHOR
Intel® Server System R1304RPMSHOR
Intel® Server System P4308RPLSHDR

Intel Order Number H12643-001

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Revision History

Date	Modifications
June, 2013	Initial release.
July, 2013	No update.
August, 2013	No update.
September, 2013	Updated Errata 14 and 15.
October, 2013	No update.
November, 2013	No update.
December, 2013	No update.
January, 2014	Updated Errata 16 and 17.
February, 2014	Updated Errata 18.
March, 2014	Updated Errata 19.
April, 2014	No update
May, 2014	No update
June, 2014	No update
July, 2014	No update
August, 2014	No update
September, 2014	Added Errata 20, 21, 22, 23, 24, and 25.
October, 2014	Added Errata 26, 27, and 28.

Disclaimers

The Intel products specified 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 communicates product Errata and Documentation Changes and Corrections for the following Intel Server Products:

- Intel® Server Board S1200V3RPL/S1200V3RPS/S1200V3RPO/S1200V3RPM
- Intel® Server System R1304RPSSFBN/R1304RPOSHBN/R1208RPOSHOR/ R1208RPMSHOR/R1304RPMSHOR
- Intel® Server System P4308RPLSHDN

The items communicated in this document are defined as follows:

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 supported features or functions 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 erratum is new or has been modified from the previous specification update.

Table 1. Errata Summary

No.	Plans	Description of Errata
1.	Fix	Linux* Operating Systems are not supported on RSTe mode.
2.	Fix	VMWare* ESXi 5.1.0 cannot be installed successfully if VT or VT-d option is enabled in BIOS.
3.	Fix	There are assert event logs for SPS FW Health sensor 0x17 when one power supply cord is unplugged.
4.	Fix	Redhat* Enterprise Linux 6 Update4 with KVM x64 uEFI ESRTII RAID 5 installation fails.
5.	Fix	SuSE* SLES10 SP4 with XEN & KVM x32& x64 cannot find hard drive in ENHANCED and COMPATIBILITY mode.
6.	Fix	No video display from display port if 64-bit MMIO is enabled in BIOS.
7.	No Fix	Some monitors cannot work with Intel® Server Board S1200V3RPM display port during POST.
8.	Fix	On some motherboards, SEL log is not cleared from the manufactory.
9.	Fix	Without rebooting after USB 3.0 driver is installed, using syscfg to change boot order cannot work in Windows* Operating System.
10.	No Fix	When installing Redhat* Linux 6 Update 4 with USB device attached, the USB device cannot work.
11.	Fix	500MB memory is reserved in BIOS.
12.	No Fix	The power supply without C6/C7 function may not work with Intel® Server Board S1200V3RP.
13.	No Fix	The USB device cannot be removed when installing Windows* operating system.
14.	Fix	There will be an error of Processor 1 P1 MTT after installing VMware* ESXi 5.1 on the Intel® Server Board S1200V3RP.
15.	No Fix	After installing Windows 2008* R2 SP1 on the Intel® Server Board S1200V3RP, the VM cannot be started when a RemoteFX* 3D virtual graphic card is installed in the VM of Hyper-V.
16.	No Fix	The Intel® ROC Modules RMS25CB080 and RMS25CB040 may not be detected on the Intel® Server Board S1200V3RPL, S1200V3RPM, and S1200V3RPO if any devices are connected on the IO Module connector or PCIe Slot5.
17.	Fix	The Intel® Server Board S1200V3RPS and S1200V3RPL may not recognize certain PCIe storage devices in slot4 during POST.
18.	Fix	Sometimes users may not enter the RAID configuration page by pressing the “Ctrl+C” hot key during system POST.
19.	No Fix	The Media SDK may not work on the S1200V3RPM board when the monitor is connected to the VGA port.
20.	Fixed	The keyboard may be locked when system POST cannot invoke the RAID configuration page.

No.	Plans	Description of Errata
21.	Fixed	The Integrated Graphic device may be shown as a yellow band in Windows 2012* when a PCIe add-on Video card is installed on the Intel® Server Board S1200V3RP.
22.	Fixed	No video output from the onboard VGA when installing Redhat6U5 if Integrated Graphic is enabled in the BIOS.
23.	Fixed	It takes a long time to log in Windows and results in very high CPU utilization when more than 16G Memory is populated.
24.	No Fix	It shows a black screen when connecting to the S1200V3RPM board through a VNC if Integrated Graphic is enabled in the system.
25.	Fix	It shows a black screen when enabling ESRTII and Integrated Graphic on the S1200V3RPM board.
26.	No Fix	It shows a critical interrupt error in SEL log when an LSI* 9211-8i card is installed on the S1200V3RP series board.
27.	Fixed	It shows “ACPI Error-[RHUB] namespace lookup failure” in RHEL6.5 when running dmesg on the S1200V3RP series board.
28.	No Fix	There is a TPM error shown in the event log after turning on Bitlocker in Windows 2012* R2 on the S1200V3RP series system.

Table 2. Documentation Changes

No.	Plans	Description of Documentation Change
1.		

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. Linux* Operating Systems are not supported on RSTe mode

Problem The Linux* Operating Systems including Redhat* Linux and Suse* Linux cannot be installed successfully on RSTe mode.

Implication The RSTe mode cannot work on Linux* OS.

Status This issue may be fixed in future driver or BIOS release.

Workaround No.

2. VMWare* ESXi 5.1.0 cannot be installed successfully if VT or VT-d option is enabled in BIOS

Problem If VTor VT-d option is enabled in BIOS, VMWare* ESXi 5.1.0 cannot be installed successfully.

Implication The user may not install the VMWare* ESXi 5.1.0 with VT or VT-d enabled in BIOS.

Status The issue may be fixed in future BIOS or VMWare* ESXi.

Workaround The user needs to disable VT and VT-d option in BIOS before installing VMWare* ESXi 5.1.0. After installation is done, the user can enable VT and VT-d option in BIOS.

3. There are assert event logs for SPS FW Health sensor 0x17 when one power supply cord is unplugged

Problem If one power supply cord is unplugged, SPS FW Health sensor 0x17 – critical event will be reported. The log is "CRITICAL Event: Internal error during firmware execution. Image shall be updated to other version or hardware board repair is needed (if error is persistent). – Asserted."

Implication The normal AC should not get this critical event log.

Status This issue may be fixed in future ME.

Workaround The customer can ignore this critical event log when AC happens normally.

4. Redhat* Enterprise Linux 6 Update4 with KVM x64 uEFI ESRTII RAID 5 installation fails

Problem The Redhat* Enterprise Linux 6 Update4 with KVM x64 uEFI version cannot be installded successfully on ESRTII RAID 5 mode.

Implication The user may not use Redhat* Enterprise Linux 6 Update4 with KVM x64 uEFI version on ESRTII RAID 5 mode.

Status The issue is under investigation.

Workaround No.

5. SuSE* SLES10 SP4 with XEN & KVM x32& x64 cannot find hard drive in ENHANCED and COMPATIBILITY mode

Problem In enhanced mode and compatibility mode, SuSE* SLES10 SP4 with Xen & KVM x32 and x64 cannot find hard drive.

Implication The issue is because the SLES10 SP4 does not include the chipset driver.

Status Will not fix.

Workaround The user can use AHCI mode or other RAID mode to use SuSE* SLES10 SP4 with Xen & KVM x32 and x64.

6. No video display from display port if 64-bit MMIO is enabled in BIOS

Problem On Intel® Server Board S1200V3RPM, there is no video display from display port when using graphic process if 64-bit MMIO is enabled in BIOS.

Implication The legacy BIOS does not support graphics when MMIO is greater than 4 GB.

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

Workaround No.

7. Some monitors cannot work with Intel® Server Board S1200V3RPM display port during POST

Problem There is no display from display port on Intel® Server Board S1200V3RPM if using some monitors during POST.

Implication After POST is done, the display port can work.

Status No Fix.

Workaround The user may change to test some of other monitors for the display port.

8. On some motherboards, SEL log is not cleared from the manufactory

Problem The user may get the board with SEL log not cleared. The SEL content is "Event Logging Disabled, System Event Log (#0x7) Informational event: System Event Log reports the log area has been cleared. BMC – LUN#0 (Channel#0)" and "Physical Security (Chassis IntruPhysical Scrty, Physical Scrty (#0x4) Informational event: Physical Scrty reports LAN Leash has been regained."

Implication There is no functional impaction to the user.

Status The issue may be fixed on future board.

Workaround NA.

9. Without rebooting after USB 3.0 driver is installed, using syscfg to change boot order cannot work in Windows* Operating System

Problem After installing the USB 3.0 driver in Windows* Operating System without rebooting the system, changing the boot order using syscfg cannot work.

Implication The user needs to reboot the system after installing USB 3.0 driver. Then the user can change the boot order in Windows* Operating System.

Status The issue may be fixed in future BIOS.

Workaround NA.

10. When installing Redhat* Linux 6 Update 4 with USB device attached, the USB device cannot work

Problem The USB device cannot work during Rehat* Linux 6 Update 4 installation. The user needs to disable "USB 3.0" in BIOS setup page.

Implication The user needs to disable the option of "USB 3.0" in setup page, then the USB can be used to install the Redhat* Linux 6 Update4.

Status Will not fix.

Workaround NA.

11. 500MB memory is reserved in BIOS

Problem In Intel® Server Board S1200V3RP family, the BIOS reserves around 500MB memory.

Implication The user will find 500MB memory loss from operating system.

Status The issue may be fixed in future BIOS.

Workaround NA.

12. The power supply without C6/C7 function may not work with Intel® Server Board S1200V3RP

Problem The power supply without C6/C7 function may not work with Intel® Server Board S1200V3RP. By default C6/C7 is disabled in BIOS setting. But if the user enables C6/C7, the power supply that doesn't have C6/C7 cannot be supported.

Implication The platform doesn't support the power supply that doesn't have C6/C7 function.

Status Will not fix.

Workaround The user needs to make sure C6/C7 is disabled in BIOS setting to use the power supply that doesn't have C6/C7 function.

13. The USB device cannot be removed when installing Windows* operating system

Problem During Windows* operating system installation, the USB device cannot be removed until the installation is done if any USB device is plugged in.

Implication The user needs to keep the USB device in the system when installing Windows* operating system.

Status Will not fix.

Workaround NA.

14. There will be an error of Processor 1 P1 MTT after installing VMware* ESXi 5.1 on the Intel® Server Board S1200V3RP

Problem After installing VMware* ESXi 5.1 on the Intel® Server Board S1200V3RP and going to the vSphere interface to check Motherboard sensors, there will be an "alert" of Processor 1 P1 MTT (Memory Thermal Throttling) – upper fatal error.

Implication It is a fake alert with no functional impact.

Status The issue is fixed in BIOS R01.04.0002

Workaround NA.

15. After installing Windows 2008* R2 SP1 on the Intel® Server Board S1200V3RP, the VM cannot be started when a RemoteFX* 3D virtual graphic card is installed in the VM of Hyper-V

Problem After installing Windows 2008* R2 SP1 on the Intel® Server Board S1200V3RP, the VM cannot be started when a RemoteFX* 3D virtual graphic card is installed in the VM of Hyper-V. If VHD (RmoteFX) is disabled, the Hyper-V VM can start normally.

Implication The VHD feature doesn't work on Windows 2008* R2 SP1.

Status Will not fix.

Workaround Enter the BIOS setup page and set the primary display interface as Processor Integrated Graphics.

16. The Intel® ROC Modules RMS25CB080 and RMS25CB040 may not be detected on the Intel® Server Board S1200V3RPL, S1200V3RPM, and S1200V3RPO if any devices are connected on the IO Module connector or PCIe Slot5

Problem The Intel® ROC Modules RMS25CB080 and RMS25CB040 may not be detected on the Intel® Server Board S1200V3RPL, S1200V3RPM, and S1200V3RPO if any devices are installed on the IO Module connector or PCIe Slot5. If no device is installed on the IO Module connector and PCIe Slot5, this issue will not occur.

Implication The Intel® ROC Modules RMS25CB080 and RMS25CB040 may not be detected. It is a hardware design limitation.

Status Will not fix.

Workaround No.

17. The Intel® Server Board S1200V3RPS and S1200V3RPL may not recognize certain PCIe storage devices in slot4 during POST

Problem Intel has found a corner case compatibility scenario with some add-in storage adapters in PCIe slot4 where the adapters may sometimes not be present on boot. The PCIe slot4 is designed using PCI-Express specification compliant polarity inversion and meets Intel's design and quality criteria.

Implication The Intel® Server Board S1200V3RPS and S1200V3RPL may not recognize certain PCIe storage devices in slot4 during POST.

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

Workaround Intel recommends that customers NOT install the PCIe storage devices in PCIe slot 4. If possible, move the adapter to slot 5, 6, or 7:

1. For the Intel® Server Board S1200V3RPL, use the modular Intel® RAID solutions listed in the supported product list to replace the storage adapters in PCIe slot 4. Options include the Intel® Integrated RAID Module RMS25CB and RMS25JB Families.
2. Utilize alternative adapters listed on the Intel® Server Configurator tool (http://serverconfigurator2.intel.com).

18. Sometimes users may not enter the RAID configuration page by pressing the "Ctrl+C" hot key during system POST

Problem Sometimes users may not enter the RAID configuration page by pressing the "Ctrl+C"hot key during system POST. Users can enter the BIOS setup page.

Implication Users cannot enter the RAID configuration page.

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

Workaround Boot to EFI shell and run the following commands:

1. `Shell> dmpstore -d conout`
2. `Shell> dmpstore -d conoutdev`

19. The Media SDK may not work on the S1200V3RPM board when the monitor is connected to the VGA port

Problem The Medis SDK may not work on the S1200V3RPM board when the monitor is connected to the VGA port.

Implication Users need to connect the monitor to the Display port.

Status Will not fix.

Workaround Upgrade DirectX9 to DirectX11.

20. The keyboard may be locked when system POST cannot invoke the RAID configuration page

Problem The keyboard may be locked when system POST cannot invoke the RAID configuration page.

Implication Users cannot enter the RAID configurarion page.

Status The issue was fixed in BIOS R01040002 and later revision.

Workaround NA

21. The Integrated Graphic device may be shown as a yellow band in Windows 2012* when a PCIe add-on Video card is installed on the Intel® Server Board S1200V3RP

Problem The Integrated Graphic device may be shown as a yellow band in Windows 2012* when a PCIe add-on Video card is installed on the Intel® Server Board S1200V3RP.

Implication The Integrated Video device may be shown as a yellow band in device manager.

Status The issue was fixed in BIOS R02010002 and later revision.

Workaround NA

22. No video output from the onboard VGA when installing Redhat6U5 if Integrated Graphic is enabled in the BIOS

Problem No video output from the onboard VGA when installing Redhat6U5 if Integrated Graphic is enabled in the BIOS.

Implication No video output from the onboard VGA.

Status The issue was fixed in BIOS R02010004 and later revision.

Workaround Disable Integrated Graphic in the BIOS.

23. It takes a long time to log in Windows and results in very high CPU utilization when more than 16G Memory is populated

Problem It takes a long time to log in Windows and results in very high CPU utilization when more than 16G Memory is populated.

Implication It takes a long time to log in Windows and results in very high CPU utilization.

Status The issue was fixed in BIOS R02010002 and later revision.

Workaround NA

24. It shows a black screen when connecting to the S1200V3RPM board through a VNC if Integrated Graphic is enabled in the system

Problem It shows a black screen when connecting to the S1200V3RPM board through a VNC if Integrated Graphic is enabled in the system.

Implication It shows a black screen when using a VNC to connect to the S1200V3RPM board.

Status Will not fix.

Workaround Use the Microsoft Remote Desktop instead of a VNC.

25. It shows a black screen when enabling ESRTII and Integrated Graphic on the S1200V3RPM board

Problem It shows a black screen when enabling ESRTII and Integrated Graphic on the S1200V3RPM board.

Implication Users cannot enter the ESRTII configuration page.

Status The issue will be fixed in a future BIOS release.

Workaround NA

26. It shows a critical interrupt error in SEL log when an LSI* 9211-8i card is installed on the S1200V3RP series board

Problem It shows a critical interrupt error in SEL log when an LSI* 9211-8i card is installed on the S1200V3RP series board. There is no functional impact.

Implication Users can see a critical interrupt error in SEL log.

Status Will not fix.

Workaround Refer to LSI errata and the ID is 2011 ~ SP872.

27. It shows "ACPI Error-[RHUB] namespace lookup failure" in RHEL6.5 when running dmesg on the S1200V3RP series board

Problem It shows "ACPI Error-[RHUB] namespace lookup failure" in RHEL6.5 when running dmesg on the S1200V3RP series board.

Implication Users can see an ACPI error in dmesg log.

Status The issue was fixed in RHEL7.0.

Workaround N/A

28. There is a TPM error shown in the event log after turning on Bitlocker in Windows 2012* R2 on the S1200V3RP series system

Problem	There is a TPM error shown in the event log after turning on Bitlocker in Windows 2012* R2 on the S1200V3RP series system.
Implication	Users can see an error log in Windows event log.
Status	Will not fix.
Workaround	Refer to Microsoft Knowledge Base for more details at http://support.microsoft.com/kb/2919355

Documentation Changes