

Monthly Specification Update

Intel® Server System P4000IP/R2000IP Family, Intel® Workstation System P4000CR Family



August, 2013

Enterprise Platforms and Services Marketing

Revision History

| Date | Date Modifications | | |
|-----------|---|--|--|
| Apr, 2012 | Initial release. | | |
| Jul, 2012 | Add errata 20,21,22,23,24 and update errata 6 and 8 | | |
| Oct,2012 | Add errata 25,26,27 and update errata 2,4,7,9,12-17,21 | | |
| Feb, 2013 | Updated errata 26, added errata 28-32 | | |
| Apr, 2013 | Updated product scope, updated errata 5, 8, 25, added errata 33, 34 | | |
| Jun, 2013 | 13 Added errata 35. | | |
| Aug, 2013 | Updated errata 5, 24, 28 and 33. Added errata 36, 37. Added one documentation change. | | |

Disclaimers

The Monthly Specification Update Server System 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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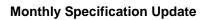
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Preface

This document is an update to the specifications contained in the *Intel*[®] *Server/Workstation Board S2600IP/W2600CR and Intel* [®] *Server/Workstation System P4000IP/CR, R2000IP Technical Product Specification*. 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.

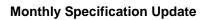
Nomenclature

- 1. **Specification Changes** are modifications to the current published specifications for Intel[®] server boards. These changes will be incorporated in the next release of the specifications.
- 2. **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.
- 3. **Documentation Changes** include typos, errors, or omissions from the current published specifications. These changes will be incorporated in the next release of the specifications.
- 4. **Errata** are design defects or errors. Errata may cause the server board 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

The following specific boards, BIOS and components are covered by this update:

| Product Code | Baseboard PBA Revision | BIOS Revision | BMC Revision | FRU/SDR Revision | ME Revision |
|--------------|---------------------------|---------------|-----------------|---------------------|--------------|
| W2600CR2 | G21602-301 | 01.01.1002 | 1.00 | 1.03 | 02.01.05.069 |
| W2600CR2 | G21602-302 | 01.02.0005 | 1.00 | 1.03 | 02.01.05.091 |
| W2600CR2 | G21602-303 | 01.03.0002 | 1.10 | 1.08 | 02.01.05.107 |
| W2600CR2 | G21602-304 | 01.06.0001 | 1.16 | 1.09 | 02.01.05.107 |
| W2600CR2 | G21602-305 | 01.08.0003 | 1.17 | 1.09 | 02.01.07.112 |
| W2600CR2 | G21602-306 | 01.08.4003 | 1.17 | 1.09 | 02.01.07.112 |
| S2600IP4 | G20993-301 | 01.01.1002 | 1.00 | 1.03 | 02.01.05.069 |
| S2600IP4 | G20993-302 | 01.02.2002 | 1.00 | 1.03 | 02.01.05.069 |
| S2600IP4 | G20993-303 | 01.02.0005 | 1.00 | 1.03 | 02.01.05.091 |
| S2600IP4 | G20993-304 | 01.03.0002 | 1.10 | 1.08 | 02.01.05.107 |
| S2600IP4 | G20993-305 | 01.06.0001 | 1.16 | 1.09 | 02.01.05.107 |
| S2600IP4 | G20993-306 | 01.08.0003 | 1.17 | 1.09 | 02.01.07.112 |
| S2600IP4 | G20993-307 | 01.08.4003 | 1.17 | 1.09 | 02.01.07.112 |



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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 fix this erratum in the future.

Fixed: This erratum has been previously fixed.

No Fix: 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. | Fix | Linux Operating Systems are not supported on RSTe mode | | | |
| 2. | Fixed | UEFI Windows Server 2008* R2 SP1 installation on SCU ports may fail under RSTe RAID mode | | | |
| 3. | Fix | UEFI Operating System installation is not supported on ESRT2 mode | | | |
| 4. | Fixed | HDD status LEDs do not function under specific configuration | | | |
| 5. | Fix | RSTe GUI installation may fail if there are no devices attached to any onboard AHCI ports | | | |
| 6. | Fixed | BMC continuously sends RAID volume rebuild event in RSTe mode of the SCU controller | | | |
| 7. | Fixed | System may halt under specific BIOS configurations | | | |
| 8. | Fix | Microsoft Windows 2003* x86 installation failure under Pass-through mode of SCU controller | | | |
| 9. | Fixed | System may halt under unsupported configuration in ESRT2 mode | | | |
| 10. | Fixed | Extra events may be seen in the System Event Log (SEL) during system global reset | | | |
| 11. | Fixed | System may continuously report a faulty or assert/deassert log when having blank HDD carriers or un-configured HDDs | | | |
| 12. | Fixed | Integrated BMC Web Console – Power Statistics page – Minimum wattage reads as zero | | | |
| 13. | Fixed | Integrated BMC Web Console – Power Control page – Perform Action button not functional. | | | |
| 14. | Fixed | IPMI Get Chassis Status command returns incorrect Chassis Identify State | | | |
| 15. | Fixed | The BIOS and ME Firmware can't be updated successfully via Intel® One Boot Flash Update Utility(OFU) under SuSE Linux Enterprise Server 11* (64-bit) with SP2 | | | |
| 16. | Fixed | BMC continuously sends HDD assert/de-assert event during HDD RAID rebuild under ESRT2 mode of the SCU controller | | | |
| 17. | Fixed | High CPU utilization may occur when installing or running Microsoft* Windows* Server 2008 R2 or Microsoft* Windows* 7 with default NIC driver for Intel® Gigabit ET Dual Port Server Adapter E1G42ET and Intel® Gigabit ET Quad Port Server Adapter E1G44ET | | | |
| 18. | Fixed | Bios/ME cannot update using OFU utility after S3 resume on P4000CR System | | | |
| 19. | Fixed | System cannot go to S3 status in UEFI OS on P4000CR System | | | |
| 20. | Fixed | Intel® RAID C600 Upgrade Key replacement Issue | | | |
| 21 | Fixed | Intel® LAN driver installation failure on Windows* 7 | | | |
| 22 | Fix | Hard drives connected through SAS expander can't be detected in legacy mode | | | |

| No. | Plans | Description of Errata | | |
|-----|-------|--|--|--|
| 23 | Fixed | System will boot from on-board video although install add-in video card | | |
| 24 | Fixed | On-board VGA cannot be set to the highest resolution (1920x1080 and higher). | | |
| 25 | Fixed | Integrated BMC Web Console – Sensor Readings Page – Memory Throttling sensor status will stay "Critical" once triggered | | |
| 26 | Fixed | WOL (Wake on LAN) may not function under Red Hat* Linux 6.2 64bit OS | | |
| 27 | Fixed | S3 feature may not be function on P4000CR System with PBA (G21602-302) | | |
| 28 | Fixed | System only reports the first occurance of power redundancy loss | | |
| 29 | Fix | The MAC address of Dual Port Intel® X540 10GbE I/O Module(AXX10GBTWLIOM and AXX10GBTWLHW) in BIOS displays as all zero. | | |
| 30 | Fix | BMC will generate event log until it full and send PEF continuely | | |
| 31 | Fix | System BIOS may report POST error code 0x146 with the Intel® Xeon Phi™ Coprocessor installed | | |
| 32 | Fix | Intel® FDR InfiniBand* ConnectX* -3 I/O Module may not comply with FCC and Industry Canada regulations. | | |
| 33 | Fixed | The Intel [®] Xeon Phi [™] Coprocessor PCI Express* Card Status Sensor may show "Unknown" | | |
| 34 | Fix | The Intel [®] Xeon Phi [™] Coprocessor PCI Express* Card sensors numbering may not be consistent with riser slot numbering | | |
| 35 | Fix | Cannot enter LSI* 9200 family card POST configuration menu | | |
| 36 | Fixed | The activity/link LED of the Intel® I/O Expansion Modules may not be solid green. | | |
| 37 | Fix | With Intel® Storage Upgrade key installed, system may not recognize the Intel® Integrated RAID mezzanine modules. | | |

Table 2. Documentation Changes

| No. | Plans | Document Name | Description of Documentation Change |
|-----|-------|------------------------------------|-------------------------------------|
| 1. | Fix | Technical Product Specification | C600A chipset uplink speed update. |
| 2. | | | |
| 3. | | | |
| 4. | | | |

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 using the RSTe mode

Problem Intel® RSTe mode is not supported on Red Hat* Linux and SUSE* Linux.

Implication User may not be able to install Red Hat* Linux and SUSE* Linux on Intel® C600

Series Chipset based Server Boards under Intel® RSTe mode.

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

Workaround None.

2. UEFI Windows Server 2008* R2 SP1 installation on SCU ports may fail under RSTe RAID mode

Problem

System may encounter blue screen when installing Windows Sever 2008* R2 SP1 under UEFI with below configurations:

- i. Intel[®] C600 RAID Upgrade Key is installed and SAS HDDs are used on SCU ports.
- ii. BIOS options "EFI Optimized Boot" and "Use Legacy Video for EFI OS" are enabled.
- iii. RSTe RAID mode is used.

Implication

User may not be able to install UEFI Windows Server 2008* R2 SP1 on Intel® C600 Series Chipset based Server Boards with the above mentioned configuration.

Status This issue was fixed in BIOS 01.06.0001 release.

Workaround None.

3. UEFI Operating System installation is not supported using the ESRT2 mode

Problem

UEFI OS installation of Windows*, Red Hat* Linux or SUSE* Linux may fail on AHCI or SCU controller when "EFI Optimized Boot" and "Use Legacy Video for EFI OS" are both enabled.

Implication User may not be able to install UEFI OS under the ESRT2 mode on Intel® C600

Series Chipset based Server Boards

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

Workaround None.

4. HDD status LEDs do not function under specific configuration

Problem If drives are connected through expander to SCU ports and configured under

RSTe mode, the HDD status LEDs may not function properly.

Implication HDD status LED may not show the HDD locate, HDD fault or RAID rebuild

message.

Status This issue was fixed in RSTe driver 3.2.0.1134 and later version.

Workaround None.

5. RSTe GUI installation may fail if there are no devices attached to any onboard AHCI ports

Problem When Microsoft Windows 2008* R2 is installed on SCU ports, the installation of

RSTe drivers and the Graphic User Interface (GUI) in Windows 2008* R2 will fail, if the AHCI controller is enabled, and no devices are attached to the AHCI

SATA ports.

Implication User may not be able to install RSTe GUI under mentioned configuration when

the AHCI controller is enabled and no devices are attached to the AHCI SATA

ports.

Status This issue may be fixed in a future RAID driver.

Workaround The workaround is to either plug a SATA device into one of the AHCI SATA

ports or disable the onboard AHCI controller in BIOS

6. BMC continuously sends RAID volume rebuild event in RSTe mode of the SCU controller

Problem When RSTe RAID is in degraded mode and a drive is inserted to start the

RAID rebuild, System Event Log (SEL) records drive plug and rebuild events

and then continuously sends a rebuild event message.

Implication User may see the SEL flooded with RAID volume rebuild event entries.

Status This issue was fixed in the latest RSTe driver ver 3.0.0.3020 upd 2012.02.03.

Workaround None.

7. System may halt under specific BIOS configurations

Problem Once BIOS options "EFI Optimized Boot" and "Memory Mapped I/O Above

4GB" are enabled, and RSTe mode is selected, system may halt during POST.

Implication User may see system hang with the above mentioned configuration.

Status This issue was fixed in Bios 01.03.0002 release.

Workaround None.

8. Microsoft Windows 2003* x86 installation failure occurs using the "Pass-Through" mode of the SCU controller

Problem Microsoft Windows Server 2003* x86 installations on SCU RSTe "pass-

through" mode fail.

Implication User may not able to install Microsoft Windows Server 2003* x86 on the above

mentioned BIOS configuration.

Status This issue may be fixed in a future RSTe driver release.

Workaround None.

9. System may halt under unsupported configuration in ESRT2 mode

Problem If no Intel [®] C600 RAID upgrade key (any of RKSAS4, RKSAS4R5, RKSAS8,

RKSAS8R5) is installed to enable SAS support capablity under the ESRT2 mode and SAS drivers are used, the system may halt at the boot stage.

Implication User may see a system halt with no RAID keys installed with SAS drivers used

and ESRT2 enabled. User should use SATA drives only if no RAID key

installed.

Status This issue was fixed in Bios01.03.0002 BIOS release.

Workaround None.

10. Extra events may be seen in the System Event Log (SEL) during system global reset

Problem

The BMC may sporadically log extra reset event during a system DC reset (global reset). These events may appear as there is an extra reset during BIOS POST.

The following SEL entries indicate two resets in a POST process:

Informational event: Pwr Unit Status reports the power unit is powered off or being powered down.

Informational event: Pwr Unit Status reports the power unit is powered off or being powered down.

Implication The SEL log may indicate that system has an occasional reset in a normal

POST during DC cycle test (global reset).

Status This issue was fixed in BMC 1.04.

Workaround None.

11. System may continuously report a faulty or assert/deassert log when having blank HDD carriers or un-configured HDDs

Problem With ESRT2 SATA RAID 5 config with 3 HDDs, put the 4th HDD in drive carrier

and set it to either unconfigured or global hot spare. System event log may be

flooded with HDD faulty entries.

With ESRT2 SAS RAID 1 with 2 HDDs, put 3rd HDD and set to unconfigured or

global hot spare. System event log may be flooded flood with HDD faulty

entries.

Implication User may see the SEL flooded with HDD faulty entries when either of the two

scenarios above are used.

Status This issue was fixed in BMC 1.04.

12. Integrated BMC Web Console – Power Statistics page – Minimum wattage reads as zero

Problem On some systems the Integrated BMC Web Console Power Statistic page may

display the Minimun wattage as zero (0W) after the system has been powered.

This reading will stay at zero until the next power cycle of the system.

Implication This is an incorrect reading only and does not affect operation.

Status This issue was fixed in BMC 1.10.r3560 release.

Workaround None.

13. Integrated BMC Web Console – Power Control page – Perform Action button not functional

Problem After performing a Graceful shutdown from the Integrated BMC Web Console

Power Control page the Perform Action button is greyed out and cannot be

pressed to request another action.

Implication You cannot perform a power on of the system.

Status This issue was fixed in BMC 1.10.r3560 release.

Workaround Select another page in the Integrated BMC Web Console and then return to the

Power Control Page. The Perform Action button will then be available.

14. IPMI Get Chassis Status command returns incorrect Chassis Identify State

Problem When a Get Chassis Status command is issued, after the Chassis Identify LED

has been forced on, the status of off (00b) is returned for Chassis Identify State

(response data byte 4 – bits [5:4]).

Implication Unable to correctly read when the Chassis Identify LED is on.

Status This issue was fixed in BMC 1.10.r3560 release.

15. The BIOS and ME Firmware can't be updated successfully via Intel® One Boot Flash Update Utility(OFU) under SuSE Linux Enterprise Server 11* (64-bit) with SP2

Problem OFU will fail to update BIOS & ME under SuSE Linux Enterprise Server 11*

(64-bit) with SP2 Operating System.

Implication If the system is running SuSE Linux Enterprise Server 11* (64-bit) with SP2

Operating System, using OFU to update System Firmware Update

Package(SFUP) will fail.

Status This issue was fixed in OFU Version 11.0 Build 8.

Workaround Update System Firmware Update Package(SFUP) from EFI environment using

iFlash32, FWPIAUpdate and FRUSDR Utility.

16. BMC continuously sends HDD assert/de-assert event during HDD RAID rebuild under the ESRT2 mode of the SCU controller

Problem HDD fault will keep asserting and de-asserting frequent during RAID rebuild

under ESRT2.

Implication During HDD ESRT2 RAID rebuild, there's flood HDD fault assert/deassert(SAS

RAID) or Rebuild/remap (SATA RAID) logs into SEL.

Status This issue was fixed in ESRT2 drivers 15.00.0528.2012 release.

Workaround None.

17. High CPU utilization may occur when installing or running Microsoft*
Windows* Server 2008 R2 or Microsoft* Windows* 7 with default NIC
driver for Intel® Gigabit ET Dual Port Server Adapter E1G42ET and Intel®
Gigabit ET Quad Port Server Adapter E1G44ET

Problem There has been high CPU load observed when installing or running Microsoft

Windows Server 2008* R2 or Microsoft Windows 7* with default NIC (Network

Interface Card) driver.

Implication When the ports are not electrically "linked" and the embedded driver is loaded

the DPC rate steadily increases until the system slows to the point where it is

essentially unusable.

Status This issue was fixed in NIC driver 16.8 release.

18. Bios/ME cannot update using OFU utility after S3 resume on P4000CR System

Problem BIOS/ME update under OS will fail after S3 resume.

Implication Can not update Bios and ME with OFU utility.

Status This issue was fixed in Bios 01.02.0004. .

Workaround None.

19. System cannot go to S3 status in UEFI OS on P4000CR System

Problem System Cannot goto S3 status in UEFI native OS.

Implication System will lose S3 function if use UEFI native OS.

Status This issue was fixed in Bios 01.02.0004.

Workaround None.

20. Intel® RAID C600 Upgrade Key replacement Issue

Problem With Manageability Engine (ME) Firmware 02.01.05.069, the server may

detect the incorrect Storage Control Unit (SCU) Redundant Array of

Inexpensive/Independent Disks (RAID) information after installing or replacing the RAID upgrade key. The board or system may still show the previous RAID

information even if you replace the key with a new one.

Implication With the ME firmware 02.01.05.069, the system may not detect the new RAID

activation key during the first time AC power on.

Status The issue is fixed with ME firmware 02.01.05.091.

Workaround Do a second AC power cycle to the system after the RAID upgrade key has

been installed or replaced to ensure the correct type of key is identified.

21. Intel® LAN driver installation failure on Windows* 7

Problem The Intel[®] LAN driver version 16.8 and below may not be installed sucessfully

on Windowns* 7 with the .bat installation scripts in the driver package.

Implication The LAN driver can not be installed by the .bat installation scripts in the driver

package.

Status The issue was fixed in a Intel[®] LAN driver version 17.1 release.

Workaround Two workarounds are available:

1. The LAN driver can be manually installed.

2. User can lower the "User Account Control" to "Never Notify", then the driver can be installed with the .bat installation scripts.

22. Hard drives connected through SAS expander can't be detected in legacy mode

Problem If hard drives are connected through expander to SCU ports and configured

under RSTe mode, the hard drives can't be detected by system in legacy

mode (default BIOS setting).

Implication Users can't use the hard drives connected through expander as boot device

to install OS. But users can install OS to other hard drives which are not connected through expander and load RSTe driver to make the hard drives connected through expander visible to OS. Or users can change Boot Options -> EFI Optimized Boot to "Enabled" in BIOS Setup so that hard drives connected through expander can be detected by the system.

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

Workaround None.

23. System will boot from on-board video although install add-in video card

Problem When try to boot from add-in video card, system can not boot up.

Implication Bios video output policy by default was booting from onboard video although

install the add-in video card.

Status This issue was fixed in Bios 01.02.0009 and changed video output to

installed add-in video card by default.

Workaround Need to install internal video cable to boot up system first then disable on-

board video option in Bios.

24. On-board VGA cannot be set to the highest resolution (1920x1080 and higher).

Problem The Graphics ID register in the on-board video controller is getting set

incorrectly.

Implication The video cannot be set to the highest resolutions listed here:

[1920x1080,High 256 Color, 60 Hertz] [1920x1200,High 256 Color, 60 Hertz] [1920x1080,High Color(16bit), 60 Hertz] [1920x1200,High Color(16bit), 60 Hertz]

Status This issue was fixed by BMC version 1.16.4010.

Workaround None.

25. Integrated BMC Web Console – Sensor Readings Page – Memory Throttling sensor status will stay "Critical" once triggered

Problem When Memory Throttling is triggered, the Memory "P1 MTT and/or P2 MTT"

sensor status will stay at "Critical" status in the Integrated BMC Web Console

even after throttling has stopped.

Implication You may observe Memory "P1 MTT and/or P2 MTT" status as "Critical" even

when there is no throttling. No functional impact to the system.

Status This issue will be fixed in ME 03.00.02.203 and later release.

Workaround Need a AC cycle or reset ME through IPMI to reset the MTT sensor status.

26. WOL (Wake on LAN) may not be function under Red Hat* Linux 6.2 64bit OS

Problem With Intel® LAN driver version 17.1, WOL (Wake on LAN) may not function

under Red Hat* Linux 6.2 64bit OS.

Implication You may not be able to wake system through onboard NIC port.

Status This issue will be fixed in Intel[®] LAN driver version 17.4 and later release

Workaround None.

27. S3 feature may not be function on P4000CR System with PBA (G21602-302)

Problem The PBA G21602-302 with Bios 01.02.0005 may not enter S3 status even

upgrade to later Bios release with normal capsule.

Implication S3 feature may not work on the system.

Status This issue is fixed by Bios 01.03.0001.

Workaround Upgrade to new Bios with recovery capsule.

28. System only reports the first occurrence of power redundancy lost events

Problem The integrated platform management subsystem will only report the first

occurrence of a power redundancy lost event. Any additional power redundancy lost events that may occur after the initial event, will not be

reported unless an AC cycle of the server is performed.

Implication With the first power redundancy lost event detected, the system status LED will

change the state to flashing Green and the system event log will display the

event as shown below.

Power Unit, Pwr Unit Redund (#0x2) Informational event: Pwr Unit Redund reports full redundancy has been lost. Integrated BMC - LUN#0 (Channel#0)

After hot swapping the faulty power supply, which would change the state of the system back to normal (system status LED goes back to solid Green), the system will NOT report any further power redundancy lost events, until an AC

cycle of the server is performed.

Status This issue was fixed in BMC release 1.17.4151.

29. The MAC address of Dual Port Intel® X540 10GbE I/O Module (AXX10GBTWLIOM and AXX10GBTWLHW) in BIOS displays as all zero

Problem With BIOS R01.06.0001, the MAC address of Dual Port Intel® X540 10GbE I/O

Module(AXX10GBTWLIOM and AXX10GBTWLHW) in BIOS displays as all

zero.

Implication Users are not able to check the MAC address of Dual Port Intel® X540 10GbE

I/O Module(AXX10GBTWLIOM and AXX10GBTWLHW) in BIOS.

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

Workaround None.

30. BMC will generate flood event log and send PEF continuously

Problem 1. Use IPMI tool to set a PEF (6 commands)

ipmitool –H xxx.xxx.xxx.xxx –U xxx –P xxxxxx raw 0x04 0x12 0x01 0x01 ipmitool –H xxx.xxx.xxx.xxx –U xxx –P xxxxxx raw 0x04 0x12 0x02 0x01 ipmitool –H xxx.xxx.xxx.xxx –U xxx –P xxxxxx raw 0x04 0x12 0x9 0x14 0xa8 x1f 0x0

ipmitool –H xxx.xxx.xxx.xxx –U xxx –P xxxxxx raw 0x0c 0x01 0x1 0x12 0xf 0x80 0x5 0x7

ipmitool –H xxx.xxx.xxx.xxx –U xxx –P xxxxxx raw 0x0c 0x01 0x1 0x13 0xf 0x0 0x0 0xa 0x24 0x71 0x7b 0x0 0x0 0x0 0x0 0x0 0x0

2. Go to BMC web console and go to configurations=>alert, check all alert and must set destination IP to remote concole =>Save

3. Try to generate an event (unplug power), you can see there are a lot of event in event log and make event log full.

4. Even when restore the PSU, the SEL is continuing to grow w/o PSU redundancy regain.

Implication The flood even log will fulfill the SEL in several minutes

Status The issue may be fix in future BMC release

Workaround Restore the system and uncheck all alerts in BMC web console.

31. System BIOS may report POST error code 0x146 with the Intel® Xeon Phi™ Coprocessor installed

Problem System BIOS may report POST error code 0x146 "PCI out of resource error"

when one or more Intel® Xeon Phi™ Coprocessors are installed with the BIOS

default setting.

Implication The Intel® Xeon Phi™ Coprocessor might not be recognized using the default

BIOS setting as it requires more PCI space..

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

Workaround Press F2 to enter BIOS Setup, change Advanced -> PCI Configuration ->

Memory Mapped I/O Size to 256G or larger. The value also depends on your

system PCI configuration

32. InfiniBand* ConnectX* -3 I/O Module may not comply with FCC and Industry Canada regulations

Problem Intel® FDR InfiniBand* ConnectX* -3 I/O Module AXX1FDRIBIOM and

AXX2FDRIBIOM may not comply with Part 15 of the Federal Communications Commission (FCC) and Industry Canada regulations when used with copper

InfiniBand* cables.

Implication Except for not complying with FCC and Industry Canada regulations when used

with copper InfiniBand* cables, no other functionality impact. And except for the United States of America and Canada where the regulations apply, no other

countries are impacted.

Status This issue may be fixed by hardware improvement in the future.

Workaround This product must be used with optical cables in the United States of America

and Canada to comply with FCC and Industry Canada regulations.

33. The Intel® Xeon Phi™ Coprocessor PCI Express® Card Status Sensor may show "Unknown"

Problem When only one Intel® Xeon Phi[™] Coprocessor PCI Express* Card (MIC card)

is installed in the server system, the card status sensor "MIC 1 Status" or "MIC

2 Status" may show "Unknown" in Intel® Integrated BMC Web Console.

Implication Users may not get the correct MIC status in Intel® Integrated BMC Web

Console. There is no function impact to the server system. This issue doesn't happen when two Intel® Xeon Phi™ Coprocessor PCI Express* Cards are

installed.

Status This issue was fixed in BMC release 1.19.4926 or later.

Workaround None.

34. The Intel® Xeon Phi™ Coprocessor PCI Express* Card sensors numbering may not be consistent with riser slot numbering

Problem The Intel® Xeon Phi[™] Coprocessor PCI Express* Card (MIC card) sensors

numbering may not be consistent with riser slot numbering on the server board. When a Intel® Xeon Phi™ Coprocessor PCI Express* Card is installed in the server system, in Intel® Integrated BMC Web Console, the card sensor may show "MIC 2 Status" and "MIC 2 Margin" if the card is installed on "RISER SLOT_1" and "MIC 1 Status" and "MIC 1 Margin" if the card is installed on

"RISER SLOT 2".

Implication Users need to read MIC 2 sensors for a card installed on "RISER SLOT_1" and

read MIC 1 sensors for a card installed on "RISER SLOT 2". There is no

function impact to the server system.

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

Workaround None.

35. Cannot enter LSI* 9200 family card POST configuration menu

Problem When whole new board/node first boots with LSI* 9200 family card, the LSI

setup menu cannot be entered during POST.

Implication The keyboard is not responsive during LSI card POST.

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

Workaround Performing BIOS jumper reset (BIOS Default jumper) can eliminate this issue.

36. The Activity/Link LED of the Intel® I/O Expansion Modules may not be solid green

Problem The Activity/Link LED (on the left side) of the following Intel® I/O Expansion

Modules may not be solid green when there is active connection

Dual Port Intel® X540 10GbE I/O module AXX10GBTWLIOM and AXX10GBTWLHW

Dual Port Intel® 82599 10GbE I/O module AXX10GBNIAIOM.

Implication The LED may keep off instead of solid green. Users cannot figure out whether

an active connection is established through LED behavior.

Status This issue was fixed with new EEPROM cut in at factory, see PCN112163 for

more details.

Workaround None.

37. With Intel® Storage Upgrade key installed, system may not recognize the Intel® Integrated RAID mezzanine modules.

Problem With Intel® Storage Upgrade key installed, system may not recognize the

Intel® Integrated RAID mezzanine modules.

Implication The Intel® Integrated RAID mezzanine module could not be detected in BIOS

setup and the OpROM will not be loaded.

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

Workaround Use PCIe based Intel® Integrated RAID modules.

Documentation Changes

The Technical Product Specification shows incorrect C600A chipset uplink speed

Problem The block diagram of the technical product specification for Intel® Server board

S2600IP and Workstation board W2600CR shows the C600A chipset uplink speed as PCI express gen3, however, the correct information is the uplink

speed is PCI express gen1.

Status May be fixed in later TPS update.