



# Monthly Specification Update

## *Intel<sup>®</sup> Server Board S2600CO Family*



**May, 2012**

**Enterprise Platforms and Services Marketing**

## ***Revision History***

<b>Date</b>	<b>Modifications</b>
May, 2012	Initial release.

## ***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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## Preface

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This document is an update to the specifications contained in the *Intel® Server Board S2600CO 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
DBS2600COE	G29920-204	01.01.1002	1.00	1.03	02.01.05.069
BBS2600CO4	G35870-203	01.01.1002	1.00	1.03	02.01.05.069
BBS2600COE	G29920-204	01.01.1002	1.00	1.03	02.01.05.069
DBS2600COEIOC	G29920-204	01.01.1002	1.00	1.03	02.01.05.069

## 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.	Fix	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.	Fix	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.	Fix	System may halt under specific BIOS configurations
8.	Fix	Microsoft Windows 2003* x86 installation failure under Pass-through mode of SCU controller
9.	Fix	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

**Table 2. Documentation Changes**

No.	Plans	Document Name	Description of Documentation Change
1.			
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

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### 1. Linux Operating Systems are not supported on RSTe mode

Problem	Intel® RSTe mode is not supported on Red Hat* Linux and SUSE* Linux.
Implication	User may not 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 future driver or BIOS releases.
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:  1. Intel® C600 RAID Upgrade Key is installed and SAS HDDs are used on SCU ports.  2. BIOS options “EFI Optimized Boot” and “Use Legacy Video for EFI OS” are enabled.  3. Under RSTe RAID mode.
Implication	User may not able to install UEFI Windows Server 2008* R2 SP1 on Intel® C600 Series Chipset based Server Boards with mentioned configuration.
Status	This issue may be fixed in a future BIOS release.
Workaround	None.

### 3. UEFI Operating System installation is not supported on 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 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 may be fixed in a future RAID driver.

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 while no device is 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 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 both enabled, and RSTe mode is selected, system may halt during the system POST.

**Implication** User may see system hang with mentioned configuration.

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

**Workaround** None.

## 8. Microsoft Windows 2003\* x86 installation failure under Pass-through mode of SCU controller

**Problem** Microsoft Windows Server 2003\* x86 installations on SCU RSTe pass-through mode fail.

**Implication** User may not be able to install Microsoft Windows Server 2003\* x86 on 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 capability under ESRT2 mode while 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 is installed.

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

**Workaround** None.

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

Problem	<p>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.</p> <p>The below SEL entries indicate two resets in a POST process.</p> <p><i>Informational event: Pwr Unit Status reports the power unit is powered off or being powered down.</i></p> <p><i>Informational event: Pwr Unit Status reports the power unit is powered off or being powered down.</i></p>
Implication	<p>The SEL log may indicate that system has an occasional reset in a normal POST during DC cycle test (global reset).</p>
Status	<p>This issue was fixed in BMC 1.04.</p>
Workaround	<p>None.</p>

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

Problem	<p>With ESRT2 SATA RAID 5 config with three HDDs, put the fourth HDD in drive carrier and set it to either unconfigured or global hot spare. System event log may be flooded with HDD faulty entries.</p> <p>With ESRT2 SAS RAID 1 with two HDDs, put third HDD and set to unconfigured or global hot spare. System event log may be flooded flood with HDD faulty entries.</p>
Implication	<p>User may see the SEL flooded with HDD faulty entries when either of the two scenarios above are used.</p>
Status	<p>This issue was fixed in BMC 1.04.</p>
Workaround	<p>None.</p>

## Documentation Changes

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N/A