

Intel® Server Board S2600TP Product Family Intel® Compute Module HNS2600TP Product Family

Monthly Specification Update

June 2017

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Document Revision History

Date	Modifications
September 2016	MSU program re-introduced Standard format introduced Added new Product Codes and updated FW stack EPSD case number introduced
October 2016	Corrected Product Code for boards by removing the "BB" prefix Added more Product Codes and updated FW stack Typographical corrections
November 2016	Added more Product Codes and updated FW stack Font type and source standardized
December 2016	No update
January 2017	Added more Product Codes and updated FW stack Updated the "PCIe* Clock Source by Slot" table
February 2017	No update
March 2017	No update
April 2017	No update
May 2017	Added S2600KPTR board and updated its FW stack Added more Product Codes and updated FW stack
June 2017	Corrected March 2017 Document Revision History to "No update" Corrected April 2017 Document Revision History to "No update" Removed "Update Technical Product Specification to v1.48" from May 2017 in the Document Revision History

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1. Preface

This document is intended to communicate product errata, published specification changes, published specification clarifications, and published document changes for the following Intel server products:

- Intel® Server Board S2600TP product family
- Intel® Compute Module HNS2600TP product family

It is intended for system integrators and software developers of applications, operating systems, or tools.

1.1 Nomenclature

- 1. **Specification Changes** are modifications to the current published specifications for Intel server boards.
- 2. **Specification Clarifications** describe a specification in greater detail or further highlight a specification's impact to a complex design situation.
- 3. **Documentation Changes** include typos, errors, or omissions from the current published specifications.
- 4. **Errata** are design defects or errors. Errata may cause the server board or system 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.

2. Product Scope

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

Product Code	Baseboard PBA Revision	BIOS Revision	ME Revision	BMC Revision	FRU/SDR Revision	
S2600TPR	H26989-261 / 271 / 272	01.01.0016	03.01.03.021	01.39.9375	1.14	
S2600TPFR	H14263-261 / 271 / 272	01.01.0016	03.01.03.021	01.39.9375	1.14	
S2600TPR	H26989-261 / 271 / 272	01.01.0018	03.01.03.032	01.46.9995	1.14	
S2600TPFR	H14263-261 / 271 / 272	01.01.0018	03.01.03.032	01.46.9995	1.14	
S2600TPNR	J46946-271 / 272	01.01.0018	03.01.03.032	01.46.9995	1.14	
S2600TPR	OTPR H26989-261 / 271 / 272 01.01.0019		03.01.03.032	01.47.10181	1.14	
S2600TPFR	H14263-261 / 271 / 272	01.01.0019	03.01.03.032	01.47.10181	1.14	
S2600TPNR	J46946-271 / 272	01.01.0019	03.01.03.032	01.47.10181	1.14	
S2600TPR	H26989-261 / 271 / 272	01.01.0020	03.01.03.043	01.48.10351	1.14	
S2600TPFR	H14263-261 / 271 / 272	01.01.0020	03.01.03.043	01.48.10351	1.14	
S2600TPNR	J46946-271 / 272	01.01.0020	03.01.03.043	01.48.10351	1.14	
S2600TPR	H26989-261 / 271 / 272	01.01.0021	03.01.03.043	01.49.10574	1.17	
S2600TPFR	H14263-261 / 271 / 272	01.01.0021	03.01.03.043	01.49.10574	1.17	
S2600TPNR	J46946-271 / 272	01.01.0021	03.01.03.043	01.49.10574	1.17	

3. 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 information is either new or has been modified from the previous

specification update.

Table 1. Errata Summary

No.	Plans	Description of Errata			
1.	. Workaround SMART NVDIMM connector interferes the air duct pressing the supercap cable.				
2.	Errata	Updated the "PCIe* Clock Source by Slot" table			

Table 2. Documentation Changes

No.	Document Name	Description of Documentation Change
1.	Spares/Accessories List and Configuration Guide v2.25 Service Guide v2.1 Technical Product Specification v1.44	Updated collaterals. Please refer to each collateral for details.
2.	Spares/Accessories List and Configuration Guide v2.26 Technical Product Specification v1.45	Updated collaterals. Please refer to each collateral for details.
3.	Spares/Accessories List and Configuration Guide v2.27 Technical Product Specification v1.46	Updated collaterals. Please refer to each collateral for details.
4.	HNS2600TP H2000G Power Budget Tool v1.4	Power calculation formula on "Compute Module 1" has been updated
5.	Spares/Accessories List and Configuration Guide v2.28 Technical Product Specification v1.47	Updated collaterals. Please refer to each collateral for details.
6.	Technical Product Specification v1.48	Updated collateral. Please refer to each collateral for details.

Table 3. Specification Changes

No.	Specification	Description of Specification Change			
1.	Microsoft* Windows* Server 2016 added to the compatible list of Operating Systems	The Intel® Server Board S2600TP Product Family has passed the certification for Microsoft* Windows* Server 2016.			
2.	System Update Package (SUP) and System Firmware Update Package (SFUP) have been released. Version R0018	BIOS, ME and BMC firmware have been updated.			
3.	System Update Package (SUP) and System Firmware Update Package (SFUP) have been released. Version R0019	BIOS, ME and BMC firmware have been updated.			
4.	System Update Package (SUP) and System Firmware Update Package (SFUP) has been released. Version R0020	BIOS, ME and BMC firmware have been updated.			

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5.	System Update Package (SUP) and System Firmware Update Package (SFUP) has been released. Version R0021	BIOS, ME and BMC firmware have been updated.
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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.

4. Product Errata

1. ID Number EPSD100033181 SMART NVDIMM connector interferes the air duct pressing the supercap cable

Problem SMART NVDIMMs (SH1027NR410451SD2 and SH2047NR420451SB2) connector interferes

with the air duct of the HNS2600TP Compute Module Product Families; pressing the SMART

supercap SSC36041INT0011B cable when used on DIMM slots A1 or E1 only.

Implication Cable damage and unappropriate air duct closing.

Status This issue was found with these specific models (form factor and vendor only).

Workaround Use DIMM slots B1 or F1 instead.

2. ID Number NA Updated the "PCIe* Clock Source by Slot" table

Problem The "PCIe* Clock Source by Slot" table for the S2600TP board Technical Product Specification

needs to be updated. Unexpected behavior can be seen if the design only considers the table

as reference.

Implication Designing a PCIe* Slot #3 riser card for the S2600TP board following the clock mapping table

from any of the previous versions of the Technical Product Specification v1.46, the PCIe* x8

card may not be detected when the PCIe* Slot #3 x16 is configured to 2x8.

Status Root cause identified. PCIe* Slot #3 x16 has lane reversal on the CPU side (3A~3D). The "PCIe*

Clock Source by Slot" table needs to be updated to have this reference explicit. BIOS porting is

correct, no update on BIOS. The "S2600KP-S2600TP Developer's Guide" document, in its

Appendix A, implicitly states this CPU lane reversal reference.

Workaround Errata publishing on Technical Product Specification v1.46 and S2600KP-S2600TP

Developer's Guide v2.0. Please refer to the updated table for PCIe* Slot #3 riser design.

PCIE SLOT	x16 PCIE PIN		x8 (lane 0~7) PCIE PIN		x8 (lane 8~15) PCIE PIN		x8 (lane 0~7) PCIE PIN³	
SLOT 1	CPU1 2A-2D	PIN A17/A18	CPU1 2A-2B	PIN B77/B78	CPU1 2C-2D	PIN A17/A18	NA	
SLOT 2 ¹	CPU1 3A-3D	PIN 153/155	CPU1 3A-3B	PIN 152/154	CPU1 3C-3D	PIN 153/155	CPU1 1A-1B	PIN 159/161
SLOT 3 ²	CPU2 3A-3D	PIN 153/155	CPU2 3C-3D	PIN 153/155	CPU2 3A-3B	PIN 152/154	CPU2 1A-1B	PIN 159/161
SLOT 4	CPU2 2A-2D	PIN 105/107	CPU2 2A-2B	PIN 111/113	CPU2 2C-2D	PIN 105/107	NA	

¹ PCIe* Slot #2 riser design using x8 (Lanes 0~7) on CPU 1A-1B is only for S2600TP board.

² PCIe* Slot #3 has lane reversal on the CPU side.

³ Part of x16 PCIE (Can configure as 2x8 PCIE)

3. ID Number NA

Removed "ED2 – 4: CATERR due to CPU 3-strike timeout" from CATERR Sensor section

Problem Dengate (hardware-enhanced diagnostics and fault isolation) is not supported by current

generation BMC

Implication The SEL log cannot identify "CATERR due to CPU 3-strike timeout" 0x04h value in ED2 events

Status Root cause identified. ME firmware doesn't support this feature

Workaround Errata publishing on *Technical Product Specification v1.48.* Removed "ED2 – 4: CATERR due to

CPU 3-strike timeout" from CATERR Sensor section

5. Documentation Changes

1. The following collaterals have been updated to revision #:

- a. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Configuration Guide to v2.25
- b. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Service Guide to v2.1
- c. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Technical Product Specification to v1.44

Please refer to each collateral for details.

2. The following collaterals have been updated to revision #:

- a. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Configuration Guide to v2.26
- b. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Technical Product Specification to v1.45

Please refer to each collateral for details.

3. The following collaterals have been updated to revision #:

- a. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Configuration Guide to v2.27
- b. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Technical Product Specification to v1.46

Please refer to each collateral for details.

4. The following collaterals have been updated to revision #:

a. Intel® HNS2600TP Compute Module / H2000G Chassis Power and Thermal Budget Configuration Tool to v1.4

Please refer to each collateral for details.

5. The following collaterals have been updated to revision #:

- a. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Configuration Guide to v2.28 <u>Link</u>
- b. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Technical Product Specification to v1.47 <u>Link</u>

Please refer to each collateral for details.

6. The following collaterals have been updated to revision #:

a. Intel® Server Board S2600TP and Intel® Computer Module HNS2600TP Product Family Technical Product Specification to v1.48 - <u>Link</u>

Please refer to each collateral for details.

6. Specification Changes

1. Microsoft* Windows* Server 2016 added to the compatible list of Operating Systems.

The Intel® Server Board S2600TP Product Family has passed the certification for Microsoft* Windows* Server 2016 Operating System. Please refer to the Operating System Compatibility webpage http://www.intel.com/content/www/us/en/support/boards-and-kits/000007872.html.

2. System Update Package (SUP) and System Firmware Update Package (SFUP) have been released. Package version is R0018.

- a. BIOS release has been updated to version 01.01.0018
- b. ME release has been updated to version 03.01.03.032
- c. BMC release has been updated to version 01.46.9995

Please refer to the download webpages:

- a. Via EFI-Shell Console: https://downloadcenter.intel.com/download/26201/
- b. Via Intel® OFU Tool: https://downloadcenter.intel.com/download/26202/

3. System Update Package (SUP) and System Firmware Update Package (SFUP) have been released. Package version is R0019.

- a. BIOS release has been updated to version 01.01.0019
- b. ME release has been updated to version 03.01.03.032
- c. BMC release has been updated to version 01.47.10181

Please refer to the download webpages:

- a. Via EFI-Shell Console: https://downloadcenter.intel.com/download/26368/
- b. Via Intel® OFU Tool: https://downloadcenter.intel.com/download/26382/

4. System Update Package (SUP) and System Firmware Update Package (SFUP) have been released. Package version is R0020.

- a. BIOS release has been updated to version 01.01.0020
- b. ME release has been updated to version 03.01.03.043
- c. BMC release has been updated to version 01.48.10351

Please refer to the download webpages:

- a. Via EFI-Shell Console: https://downloadcenter.intel.com/download/26517/
- b. Via Intel® OFU Tool: https://downloadcenter.intel.com/download/26533/

5. Intel® HNS2600TP Compute Module / H2000G Chassis Power and Thermal Budget Configuration Tool has been released. Tool version is v1.4.

Power calculation formula on "Compute Module 1" has been updated.

Please refer to the download webpages:

a. Excel spreadsheet: https://downloadcenter.intel.com/download/24525/

6. System Update Package (SUP) and System Firmware Update Package (SFUP) have been released. Package version is R0021.

- a. BIOS release has been updated to version 01.01.0021
- b. ME release has been updated to version 03.01.03.043
- c. BMC release has been updated to version 01.49.10574

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Please refer to the download webpages:

- a. Via EFI-Shell Console: https://downloadcenter.intel.com/download/26690/
- b. Via Intel® OFU Tool: https://downloadcenter.intel.com/download/26724/