Intel® Server D50TNP Family

Intel® Server M50CYP Family

Intel® Server D40AMP Family

Specification Update

Q2 2023

Revision History

Date	Modifications
February 2023	MSU unified per generation
July 2023	Q2 2023 Update per generation

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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 D50TNP family
- Intel® Server M50CYP family
- Intel® Server D40AMP Family

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

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 corrections for typos, errors, or omissions in 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 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:

Table 1. Product Scope

Product Code	Baseboard PBA Revision	BIOS Revision	ME Revision	BMC Revision	FRU/SDR Revision	PMEM Revision
D50TNP1SB D50TNP1SBCR	K14754-352 M12931-153	R01.01.0005	04.04.04.62	2.88.e5f45b9c	0.40	2.2.0.1553
M50CYP2SB1U M50CYP2SBSTD	K73719-354 M57662-354 K42381-354 M57661-354	R01.01.0005	04.04.04.62	2.88.e5f45b9c	0.40	2.2.0.1553
D40AMP1SB	M21913-251	R01.02.0006	04.04.04.56	2.87.3ccd0377	0.20	2.2.0.1553

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:

Will 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 2. Errata Summary

No.	Impacted Platform	Plans	Description of Errata
1.	**D50TNP/M50CYP/D40AMP**	**No Fix**	SPS FW Health error in SEL events during AC Cycling
2.	**M50CYP**	**Will Fix**	U.2 SSDs generates a DSC correctable errors messages
3.	**D50TNP/M50CYP/D40AMP**	**Will Fix**	Blank Windows appear when connecting to BMC Web Console
4.	**D50TNP/M50CYP/D40AMP**	**Will Fix**	Unknow NM Exception Message in the SEL
5.	**M50CYP**	**Will Fix**	Data Center Manager SW Crash
6.	**M50CYP**	**Will Fix**	Risers FRU Information lost after several of dozens reboot cycles
7.	**M50CYP**	**Will Fix**	Redfish Boot Order list is blank after changing the boot device with Redfish API when OS is booting in M50CYP
8.	**M50CYP**	**Will Fix**	M50CYP system hang during POST while connecting to FC-NVMe devices
9.	**M50CYP**	**Will Fix**	M50CYP inappropriate description in SEL log
10.	**D50TNP**	**Will Fix**	M.2 Temp1 reporting Lower Critical/Non-Critical going low asserted
11.	**M50CYP**	**No Fix**	Broadcom storage/RAID PCIe cards will show controller fault message during POST and BIOS will not detect them.

Table 3. Documentation Summary

No.	Impacted Platform	Document Name	Document Version
1.	**D50TNP**	Intel® Server Board D50TNP Family Technical Product Specification (TPS)	1.4
2.	**D50TNP**	Intel® D50TNP Product Family Configuration Guide	1.6
3.	**M50CYP**	Intel® Server Board M50CYP Family Technical Product Specification (TPS)	1.41-42
4.	**M50CYP**	Intel® M50CYP Product Family Configuration Guide	1.11
5.	**D40AMP**	Intel® Server Board D40AMP Family Technical Product Specification (TPS)	1.1
6.	**D40AMP**	Intel® D40AMP Product Family Configuration Guide	1.1

Table 4. Tools and Firmware

No.	Impacted Platform	Software description	Software version
1.	**D50TNP Server System**	BIOS and firmware update package for the Intel® Server D50TNP Family	BIOS – 01.01.0008 ME FW - 04.04.04.301 BMC FW - 2.91.cb510bad FRUSDR – 0.46 CPLD – 4.7 DCPMM – 2.2.0.1553
2.	**M50CYP Server System**	BIOS and firmware update package for the Intel® Server M50CYP Family	BIOS – 01.01.0008 ME FW - 04.04.04.301 BMC FW - 2.91.8a19dcde CPLD – 4.7 FRUSDR – 0.46 DCPMM – 2.2.0.1553
3.	**D40AMP Server SYstem**	BIOS and firmware update package for the Intel® Server D40AMP Family	BIOS – 01.02.0007 ME FW - 04.04.04.202 BMC FW - 2.90.e5e4d391 FRUSDR – 0.43 DCPMM – 2.2.0.1553
4.	**D50TNP Server System** **M50CYP Server System**	Intel® Server Firmware Update Utility (SysfwUpdt)	16.0.8

4 Product Errata

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.

1. ID Number HSDES1504748040

SPS FW Health error in SEL events during AC Cycling

Problem	SMLINK1 Fail health event to SEL from time to time during AC Cycling Controller: ME SensorType: NM Capability SensorName: SPS FW Health Description: SMBus Link Failure, SMLINK1 bus link error was detected - GID:002C ER:04 ST:DC S#:17 ET:75 ED:A1 02 FF EXT:00 FF FF FF FF FF FF FF
Implication	In a multi-master PMBus environment it is possible that the client device pulls SCL line low for longer time to signal the masters that it needs more time to handle the requests. If the client device holds SCL low for too long (Exceed Time out, defined in PMBus 1.2 specification) ME will detect the symptom and assert the health event
Status	No Fix This Event means that SMLink1 is temporarily unavailable. If there are no SMART/CLST events recorded in the SEL, this is considered a warning, no function is impacted by it and no action needs to be taken
Workaround	None

2. ID Number HSD14017341335

U.2 SSDs generates a DSC correctable errors messages.

Problem	Some SSDs (Solidign P5520/5620, Samsung PM9A3, Kioxoa CD7, Kioxia CD8) connected to a midplane switch (iPC RES3TV360) can generate correctable errors. Messages appear for drives with Multifunction bit = 0 (Disabled) configurated by default.
Implication	There is no impact on SSDs functionality, SSDs are able to work as normal, however, may experience some correctable messages generated in the logs
Status	Will Fix
Workaround	None

3. ID Number HSD15012619693

Blank Windows appear when connecting to BMC Web Console.

Problem	Blank window with a ¨Caution!¨ message will pop up while login to BMC Web Console.
Implication	“Caution!” message is informational, there is no impact to server usage or performance
Status	Will Fix
Workaround	Restart HTTPS service by using IPMI command impitool -I lanplus -H{IP} -U{User} -P{Password} -C 17 raw 0x3e 0xc0 0x0c 0x01 0x02 0x20

4. ID Number HSD15012125093

Unknown NM Exception Message in the SEL.

Problem	Node Manager Policy Exception reported in the SEL randomly: GID:602C ER:04 ST:DC S#:18 ET:72 ED:A8 03 00 EX: 00 FF FF FF FF FF FF FF SN:NM Exception ST:OEM ED:OEM ET:Asserted EC:OK
Implication	Node Manager Policy Correction Time is Exceeded causing CPU frequency could be limited to 800MHz or below. There is a workaround for reset ME for clearing the NM exception Messages in the SEL and also CPU Frequency can be restored to normal.
Status	Will Fix
Workaround	Use IPMI Command to reset ME: ipmitool -b 0x06 -t 0x2c raw 0x2e 0xdf 0x57 0x01 0x00 0x02

5. ID Number HSD15012894713

Data Center Manager SW Crash

Problem	BMC and ME could crash and display a caution message window when running DCM
Implication	BMC and ME could register an error in SELLOG – Technical Advisory 1182
Status	Will Fix
Workaround	Perform an AC cycle

6. ID Number HSD2103658559

Risers FRU Information lost after several of dozens of reboot cycles.

Problem	M50CYP PCIe Risers Communication lost through FRU
Implication	System could not read FRU information from PCIe Risers
Status	Will Fix
Workaround	Perform an AC cycle

7. ID Number HSD 15013335989

Redfish Boot Order list is blank after changing the boot device with Redfish API when OS is booting in M50CYP.

Problem	After executing a Redfish command to change OS boot order and review it again after system has rebooted the list appears empty
Implication	RedFish command could provide misleading result
Status	Will Fix
Workaround	None

8. ID Number HSD 15013447979

M50CYP system hang during POST while connecting to FC-NVMe devices.

Problem	Systems may experiencing a hang during POST when BCM957508-P2100G NIC cards are installed and may or may not have JBOD/JBOF connected to it.
Implication	OS is trying to connect to FC-NVMe devices it found during the boot and runs into some critical error.
Status	Will Fix
Workaround	None

9. ID Number HSD 15012618644

M50CYP inappropriate description in SEL log

Problem	M50CYP system register a “Last Panic” message within SELLOG which may be incorrect.
Implication	“Last Panic” message in SELLOG register may be confusing, however this message doesn’t imply an incident and wording will be changed.
Status	Will Fix
Workaround	None

10. ID Number HSD2103655912

M.2 Temp1 reporting Lower Critical/Non-Critical going low asserted

Problem	SEL is reporting M.2 Temp2 Lower Critical/Non-Critical going low asserted while performing DC Cycles.
Implication	SEL Log is reporting M.2 Temp2 Lower Critical/Non-Critical going low asserted when many DC Cycles are performed in the 2U D50TNP Systems.
Status	Will Fix
Workaround	None. Unnecessary SEL message, no functional impact.

11. ID Number HSD2103656264

Broadcom storage/RAID PCIe cards will show controller fault message during POST and BIOS will not detect them.

Problem	Broadcom PCIe cards models 9670w-16i, 9670-24i and 9600-16e installed in Riser1: Slot3 or Riser2: Slot 3 of M50FCP2U systems, will be showing a controller fault message during POST and BIOS will not detect them.
Implication	Per product design, Riser1 and Riser2: Slot 3 only support up to 25W, which is less than the Broadcom cards minimum requirements.
Status	No Fix
Workaround	Broadcom PCIe cards mentioned can be installed in Riser 1: Slot 1 and Slot2, and Riser2: Slot 1 and Slot 2.

5 Documentation Changes

1. Intel® Server System D50TNP Family Technical Product Specification (TPS)

Latest Version	1.4
Latest Changes	• Updated the thermal configuration matrices for Intel® Xeon® Gold 6338T, Intel® Xeon® Platinum 8352M, and Intel® Xeon® Platinum 8362 in tables 51–56. • Minor format edits throughout the document for consistency.
Download	https://www.intel.com/content/dam/support/us/en/documents/single-node-servers/d50tnp-tps.pdf

2. Intel® Server System D50TNP Family Configuration Guide

Latest Version	1.6
Latest Changes	• Table 20, “Miscellaneous Accessory Options.” Updated images and added new TPM AXXTPMENC9.
Download	https://www.intel.com/content/dam/support/us/en/documents/server-products/d50tnp-config-guide.pdf

3. Intel® Server System M50CYP Family Technical Product Specification (TPS)

Latest Version	1.41 and 1.42
Latest Changes	1.41: • Table 2, updated supported Intel® Xeon® processors. • Figure 26, updated supported Intel® Xeon® processors. • Updated the thermal tables: 72, 73, 74, 75, 76, 77, 78, and 80. • Updated the notes for the thermal tables in Appendix E 1.42: • Corrected table about regulatory certification in Appendix H
Download	https://www.intel.com/content/www/us/en/content-details/617211/intel-server-system-m50cyp2ur-product-family-technical-product-specification.html

4. Intel® Server System M50CYP Family Configuration Guide

Latest Version	1.11
Latest Changes	• Discontinued Trusted Platform Module (TPM) accessory kit – MM# AXXTPMENC8 • Added new Trusted Platform Module (TPM) accessory kit – MM# AXXTPMENC9
Download	https://www.intel.com/content/www/us/en/content-details/638427/intel-server-m50cyp-family-configuration-guide.html