



Intel® Server Board S2600BP Product Family

Intel® Server Board S2600BP Product Family

Intel® Compute Module HNS2600BP Product Family

Intel® Server Chassis H2000P Product Family

Configuration Guide

A reference document to identify available Intel® Server building blocks, accessories, and spare parts associated with the Intel® Server S2600BP product family.

Rev 2.3

July 2022

Intel® Server Products and Solutions

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Document Revision History

Date	Revision	Revision Change Description
July 2017	1.0	Initial Release
October 2017	1.01	Included H2204XXLRE in Table 7, as compatible chassis. Included the onboard TPM2.0 in the feature set tables and server boards Updated Table 10 Note [1] - removed HDD Corrected Table 6. Video connector on Riser 1
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January 2018	1.1	Add Liquid Cooling Solution SKU and Liquid Cooling Kit Introduced replacement MM# for compute modules with CPU 2 Heat Sink iPN - FXX2678X108HS Introduced new MM# for nodes with FXX2678X108HS
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January 2021	2.1	Corrected IPC name to FXX2678X108HS instead FXXHP78X108HS Updated Table 25 comment about Intel Compute Module HNS2600BPBLCR Updated Table 26 comment about Intel Compute Module HNS2600BPBLC24R Updated Table 36 comment about D2C Liquid Cooling Kit Minor updates for clarity
June 2021	2.2	Added Intel® Compute Module HNS2600BPBRCT, and Liquid Cooling loop Kit AXXBPCTKIT Updated Tables 5, 6, 7, 8, 10, 11, 25, 26, 27, 28, 30, 32, and 34. Updated section 2 Server Building Block Options Minor updates throughout the document for clarity.
July 2022	2.3	Update Table 7. Bridge board product features and compatibility.

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1. Intel® Server Family Overview

This document provides a catalog of available Intel® server products, accessories, and spares in the Intel® Server S2600BP product family.

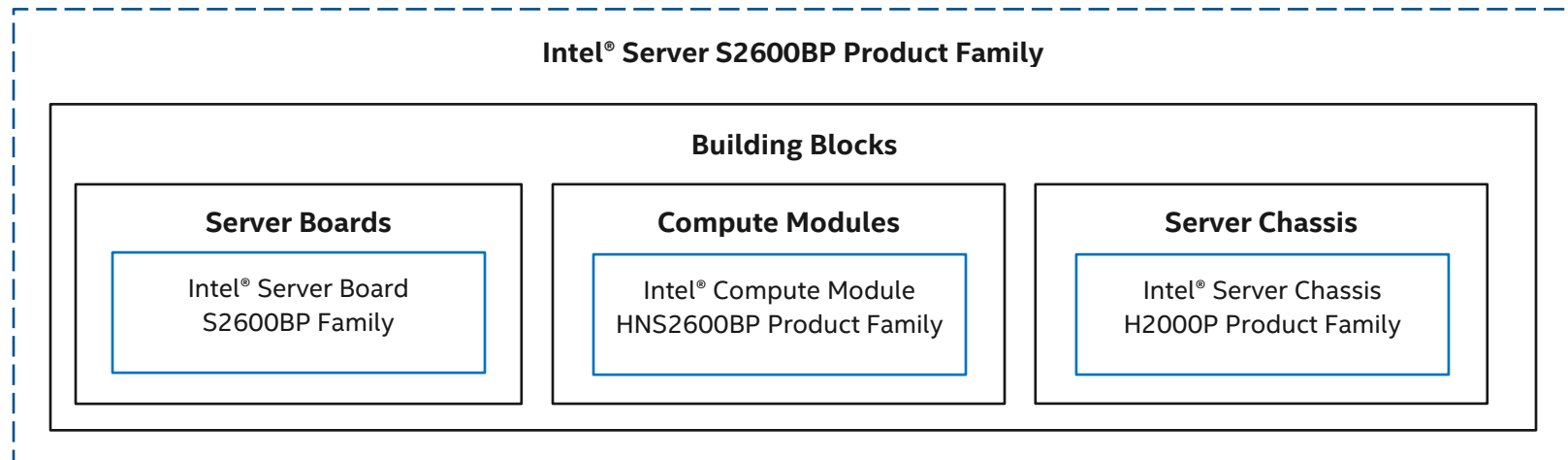


Figure 1. Intel® Server S2600BP product family overview

1.1 Configuration Overview

The density-optimized Intel® Server S2600BP product family is offered as building block options.

- **Intel® Server Board S2600BP family** – A family of server board only products (server building block option and spare FRU).
- **Intel® Compute Module HNS2600BP product family** – A family of density-optimized 1U compute modules integrated with an Intel® Server Board S2600BP option.
- **Intel® Server Chassis H2000P product family** – A family of 2U multi-node rack mount server chassis designed to support Intel compute modules.

Important Note: All product order codes ending with 'R' identify new product versions that are available as of revision 2.0 of this document. While product order codes not ending with 'R' may be referenced within this document, only product order codes ending in '(R)' cover both SKU derivations. (i.e. S2600BPB(R) covers S2600BPB and S2600BPBR.)

1.1.1 Processor Support

The Intel® Server S2600BP product family has support for 1st and 2nd Gen Intel® Xeon® processor Scalable family as identified in Figure 2.

Note: Previous generation Intel® Xeon® processors and previous-generation processor heat sinks are not compatible on server boards described in this document.

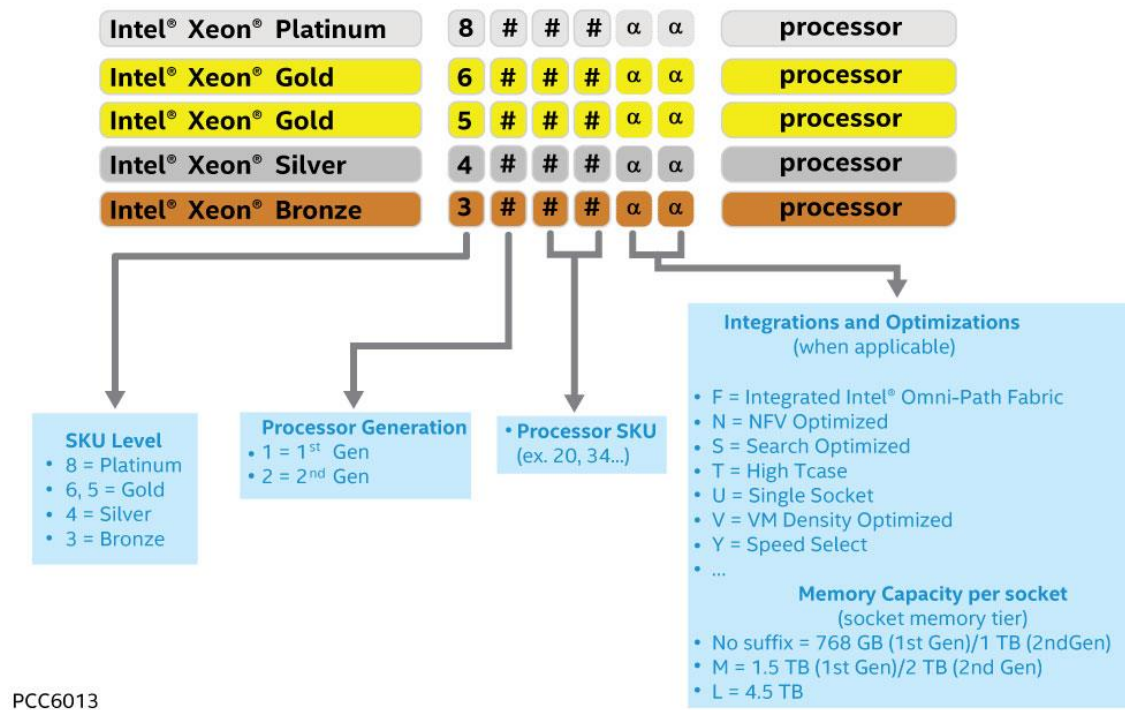


Figure 2. Intel® Xeon® processor Scalable family generation identification

Note: In 2019, Intel released the 2nd Gen Intel® Xeon® processor Scalable family. To enable support for the new processor family, Intel created an updated system software stack including the system BIOS and other system firmware.

In support of the 2nd Gen Intel Xeon processor Scalable family, Intel began pre-loading the supporting system software stack onto all server boards in the Intel® Server S2600BP product family. All server boards with pre-loaded system software stacks compatible with the 2nd Gen Intel® Xeon® processor Scalable family can be identified by a product order code ending in 'R'.

Existing server boards in the Intel® Server S2600BP product family with product codes that do NOT end in 'R' can be made to support the 2nd Gen Intel® Xeon® processor Scalable family by updating the system software stack. A system update package (SUP) with the latest system software stack can be downloaded from <https://downloadcenter.intel.com>.

Table 1. 1st Gen Intel® Xeon® processor Scalable family feature comparison

Feature	81xx Platinum	61xx Gold	51xx Gold	41xx Silver	31xx Bronze
# of Intel® UPI links	3	3	2	2	2
Intel® UPI speed	10.4 GT/s	10.4 GT/s	10.4 GT/s	9.6 GT/s	9.6 GT/s
Supported topologies	2S-2UPI 2S-3UPI 4S-2UPI 4S-3UPI 8S-3UPI	2S-2UPI 2S-3UPI 4S-2UPI 4S-3UPI	2S-2UPI 4S-2UPI	2S-2UPI	2S-2UPI
Node controller support	Yes	Yes	No	No	No
# of memory channels	6	6	6	6	6
Max DDR4 speed	2666 MT/s	2666 MT/s	2400 MT/s	2400 MT/s	2133 MT/s
Memory capacity	768 GB 1.5 TB (select SKUs)	768 GB 1.5 TB (select SKUs)	768 GB	768 GB	768 GB
RAS capability	Advanced	Advanced	Advanced	Standard	Standard
Intel® Turbo Boost Technology	Yes	Yes	Yes	Yes	No
Intel® Hyper-Threading Technology	Yes	Yes	Yes	Yes	No
Intel® AVX-512 ISA support	Yes	Yes	Yes	Yes	Yes
Intel® AVX-512 - # of 512b FMA units	2	2	1	1	1
# of PCIe* lanes	48	48	48	48	48

Table 2. 1st Gen Intel® Xeon® processor Scalable family with integrated Intel® Omni-Path Fabric feature comparison

Feature	81xxF Platinum	61xxF Gold
# of cores	≥ 24	< 24
# of Intel® Omni-Path Fabric ports	1	1
# of Intel® UPI links	2	2
Intel® UPI speed	10.4 GT/s	10.4 GT/s
Supported topologies	2S-2UPI	2S-2UPI
Node controller support	No	No
# of memory channels	6	6
Max DDR4 speed	2666 MT/s	2666 MT/s
Memory capacity	768 GB 1.5 TB (select SKUs)	768 GB 1.5 TB (select SKUs)
RAS capability	Standard	Standard
Intel® Turbo Boost Technology	Yes	Yes
Intel® Hyper-Threading Technology	Yes	Yes
Intel® AVX-512 ISA support	Yes	Yes
Intel® AVX-512 - # of 512b FMA units	2	2
# of PCIe* lanes	48	48

Table 3. 2nd Gen Intel® Xeon® processor Scalable family feature comparison

Feature	82xx Platinum	62xx Gold	52xx Gold	42xx Silver	32xx Bronze
# of Intel® UPI links	3	3	2	2	2
Intel® UPI speed	10.4 GT/s	10.4 GT/s	10.4 GT/s	9.6 GT/s	9.6 GT/s
Supported topologies	2S-2UPI 2S-3UPI 4S-2UPI 4S-3UPI 8S-3UPI	2S-2UPI 2S-3UPI 4S-2UPI 4S-3UPI	2S-2UPI 4S-2UPI	2S-2UPI	2S-2UPI
Node controller support	Yes	Yes	No	No	No
# of memory channels	6	6	6	6	6
Max DDR4 speed (1 DPC)	2933 MT/s	2933 MT/s	2666 MT/s	2400 MT/s	2133 MT/s
Max DDR4 speed (2 DPC)	2666 MT/s	2666 MT/s	2666 MT/s	2400 MT/s	2133 MT/s
Intel® Optane™ DC persistent memory support	Yes ¹	Yes ¹	Yes ¹	4215 only ¹	No
Memory capacity	1 TB 2 TB (select SKUs) 4.5 TB (select SKUs)	1 TB 2 TB (select SKUs) 4.5 TB (select SKUs)	1 TB 2 TB (select SKUs) 4.5 TB (select SKUs)	1 TB	1 TB
RAS capability	Advanced	Advanced	Advanced	Standard	Standard
Intel® Turbo Boost Technology	Yes	Yes	Yes	Yes	No
Intel® Hyper-Threading Technology	Yes	Yes	Yes	Yes	No
Intel® AVX-512 ISA support	Yes	Yes	Yes	Yes	Yes
Intel® AVX-512 - # of 512b FMA units	2	2	1	1	1
Intel® AVX-512 VNNI	Yes	Yes	Yes	Yes	Yes
# of PCIe* lanes	48	48	48	48	48

¹ Intel® Optane™ DC persistent memory module is supported only by Intel® Server Boards BBS2600BPBR, BBS2600BPBSR, and BBS2600BPQR with a 2nd Gen Intel® Xeon® Scalable processor.

The Intel® Server Board S2600BP and Intel® Compute Module HNS2600BP product families have support for the following processor thermal design power (TDP) limits:

- Up to 165 W – Intel Server Board only (OEM option) and Intel Compute Module installed in non-Intel chassis (OEM option).
- Up to 165 W – Intel Compute Module when installed into the Intel® Server Chassis H2204XXLRE.
- Up to 165 W – Intel Compute Module HNS2600BPBLC\HNS2600BPBCRT liquid cooling solutions when installed into the Intel Server Chassis H2312XXLR3 or into the Intel Server Chassis H2204XXLRE.
- Up to 140 W – Intel Compute Module integrated within all other supported Intel server chassis options.

1.1.2 Memory Support

The Intel® Server Board S2600BP and Intel® Compute Module HNS2600BP product families have support for the following memory:

- Registered DDR4 (RDIMM), Load Reduced DDR4 (LRDIMM)
- Memory data transfer rates (Processor dependent. See Table 1, Table 2, and Table 3.)
 - DDR4 ECC RDIMM up to 2933 MT/s
 - DDR4 ECC LRDIMM up to 2933 MT/s
 - DDR4-compatible DDDC Intel® Optane™ DC persistent memory module up to 2666 MT/s
- DDR4 standard voltage of 1.2 V

Note: Intel® Optane™ DC persistent memory module is supported only by Intel® Server Boards BBS2600BPBR, BBS2600BPSR, and BBS2600BPQR with a 2nd Gen Intel® Xeon® Scalable processor.

1.2 Additional Information and Software

For additional information about this family of products or any of their supported accessories, refer to the following resources available at <http://www.intel.com/support>.

Table 4. Product family reference collaterals

For this information or software	Use this document or software
For in-depth technical information about this product family	<i>Intel® Server Board S2600BP and Intel® Compute Module HNS2600BP Technical Product Specification</i> <i>Intel® Server Chassis H2000P Product Family Technical Product Specification</i> <i>Intel® Remote Management Module 4 (Intel® RMM4) and BMC Embedded Web Console User Guide</i> <i>Intel® Remote Management Module 4 Technical Product Specification</i> <i>Intel® Server System BIOS Setup Utility Guide</i> <i>Intel® Server Platform Specification Update</i> <i>Safety and Regulatory Compliance Information for Intel® Server System 4600/2600/2400/1600 Families</i>
For system integration and service instructions	<i>Intel® Server Board S2600BP and Intel® Compute Module HNS2600BP Product Families System Integration and Service Guide</i> (https://www.intel.com/content/www/us/en/support/server-products/server-boards/000024318.htm)
For server configuration guidance and compatibility	Intel® Server Configurator Tool (http://serverconfigurator.intel.com/)
For system firmware updates, onboard device drivers, and software	Download Center (https://downloadcenter.intel.com/product/93091/)
For system power budget guidance	Intel® Server Board S2600BP Product Family Power Budget and Thermal Configuration Tool (https://downloadcenter.intel.com/download/26955)
For a complete list of supported processors, memory, add-in cards, and peripherals	Intel® Server Board S2600BP Family support site (https://www.intel.com/content/www/us/en/support/server-products/server-boards/dual-socket-server-boards/intel-server-board-s2600bp-family.html)
Product warranty Information	Warranty Terms and Conditions (https://www.intel.com/content/www/us/en/support/services/000005886.html)

1.3 Intel® Server Board S2600BP Product Family

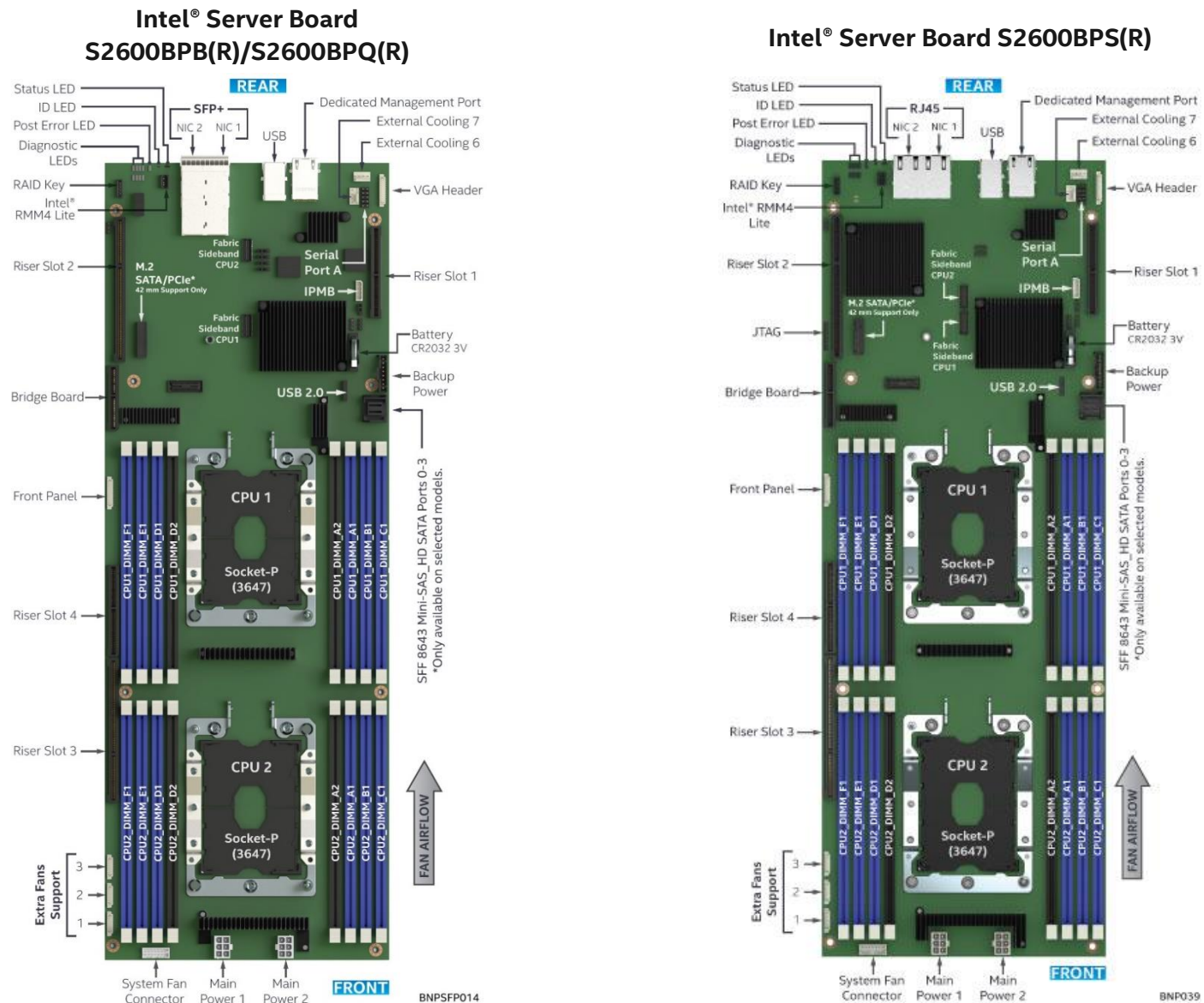


Figure 3. Intel® Server Board S2600BP product family onboard features

Note: Figure 3 provides an overview of available server board features. Some features may not be present on all available server board options. See Table 5 for a complete list of features supported on a given server board option.

Table 5 lists the features of the available server board is the Intel® Server Board S2600BP product family.

Table 5. Intel® Server Board S2600BP product family features

Intel® Server Board Feature	BBS2600BPB(R)	BBS2600BPS(R)	BBS2600BPQ(R)
Processor	• (2) – LGA3647-0 (Socket P) processor sockets • Supports (1) or (2) processors from the 1st or 2nd Gen Intel® Xeon® processor Scalable family (Platinum, Gold, Silver, and Bronze) or 1st Gen Intel® Xeon® processor Scalable family with Intel® Omni-Path Integrated Fabric Connectors (one port per processor, up to 100 Gb/s) Note: Previous generation Intel® Xeon® processors are not supported.		
Maximum Processor TDP	• Up to 165 W – Intel® Server Board only (OEM option) and Intel® Compute Module installed in non-Intel chassis (OEM option) • Up to 165 W – Intel® Compute Module when installed into the Intel® Server Chassis H2204XXLRE • Up to 165 W – Intel® Compute Modules HNS2600BPBLC\HNS2600BPBRCT with liquid cooling solution when installed into the Intel® Server Chassis H2204XXLRE or H2312XXLR3 • Up to 140 W – Intel® Compute Module integrated within all other supported Intel server chassis options		
Memory	• (16) – total DIMM slots (8 per processor) • DDR4 Registered DIMM (RDIMM) and Load Reduced DIMM (LRDIMM), up to 2933 MT/s (dependent on processor), 1.2 V • DDR4-compatible Intel® Optane™ DC persistent memory module, up to 2666 MT/s, 1.2 V ¹		
Intel® C62x Series Chipset	Intel® C621 Chipset	Intel® C622 Chipset	Intel® C628 Chipset
Intel® QAT	No	No	Supported
Onboard LAN	Dual 10GBase-T ports	Dual 10GbE SF+ ports support	Dual 10GBase-T ports
SATA Support	(4) – SATA 6 Gbps ports via mini-SAS HD (SFF-8643) connector (from PCH)		No
M.2 Support	(1) – onboard 42 mm M.2 SATA/PCIe* x4		
USB	Dual stacked rear-panel USB 3.0 ports		
Server Management	• Integrated baseboard management controller, IPMI 2.0 compliant • Support for Intel® Server Management software • Dedicated onboard RJ45 management port • Advanced server management via Intel® RMM4 Lite – iPC AXXRMM4LITE2 (accessory option) • Onboard LEDs: system status, system ID, POST code diagnostic, BMC error code		
Security	Onboard trusted platform module (TPM) 2.0 (not supported in China)		
Expansion Options			
Bridge Board	See supported bridge board options in Table 7		
Riser Card ²	Concurrent support for up to four riser cards • Riser #1 (CPU1) – PCIe* 3.0 x16 • Riser #2 (CPU1) – PCIe* 3.0 x24 • Riser #3 (CPU2) – PCIe* 3.0 x24 • Riser #4 (CPU2) – PCIe* 3.0 x16		Concurrent support for up to three riser cards • Riser #1 (CPU1) – No PCIe*, power only • Riser #2 (CPU1) – PCIe* 3.0 x24 • Riser #3 (CPU2) – PCIe* 3.0 x24 • Riser #4 (CPU2) – PCIe* 3.0 x16

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Intel® Server Board Feature	BBS2600BPB(R)	BBS2600BPS(R)	BBS2600BPQ(R)
Onboard Connectors and Headers			
Video	(1) – 1x12-pin video header, 16 MB of DDR4 video memory		
IPMB	(1) – 1x4-pin IPMB header		
USB Header	(1) – onboard USB 2.0 connector		
Serial Port	(1) – internal DH-10 serial-A port connector		
System Fans	• (1) –managed 2x7-pin header for system fan module (Intel® chassis) • (3) – managed 1x8-pin system fan connectors • (2) – 1x4-pin system fan connectors		
Power	• (1) – 1x8-pin backup power connector • (2) – 2x3-pin main power connectors		

¹ Intel® Optane™ DC persistent memory module is supported only by Intel® Server Boards BBS2600BPBR, BBS2600BPSR, and BBS2600BPQR with 2nd Gen Intel® Xeon® Scalable processor.

² All riser slots on the server board support riser cards only. Plugging a PCIe* card directly into the riser slot may cause permanent server board and/or PCIe* card damage.

1.4 Intel® Compute Module HNS2600BP Product Family

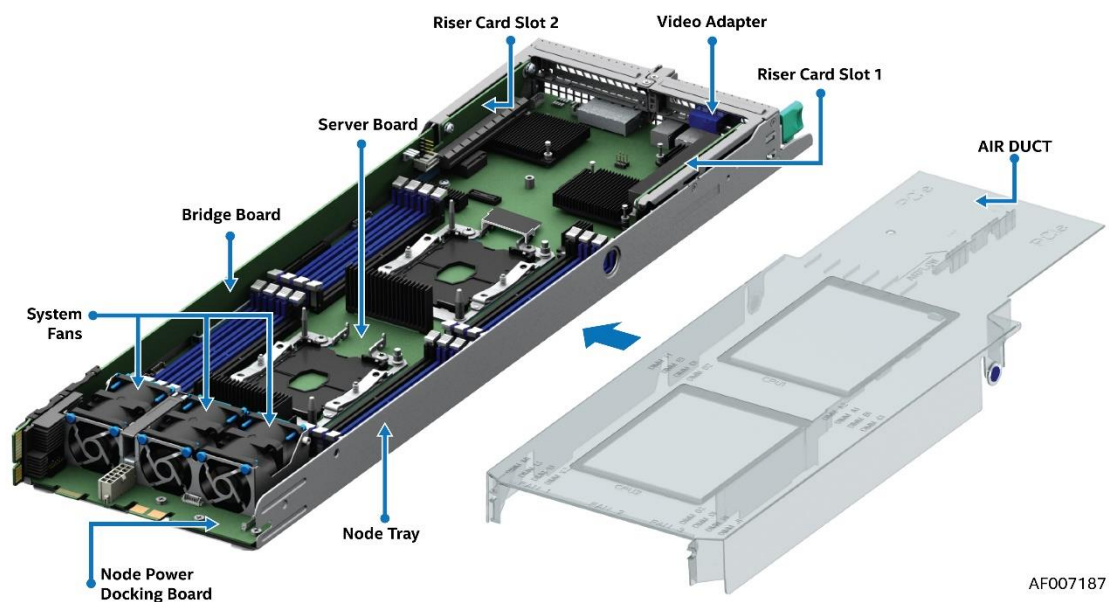


Figure 4. Intel® Compute Module HNS2600BP feature identification

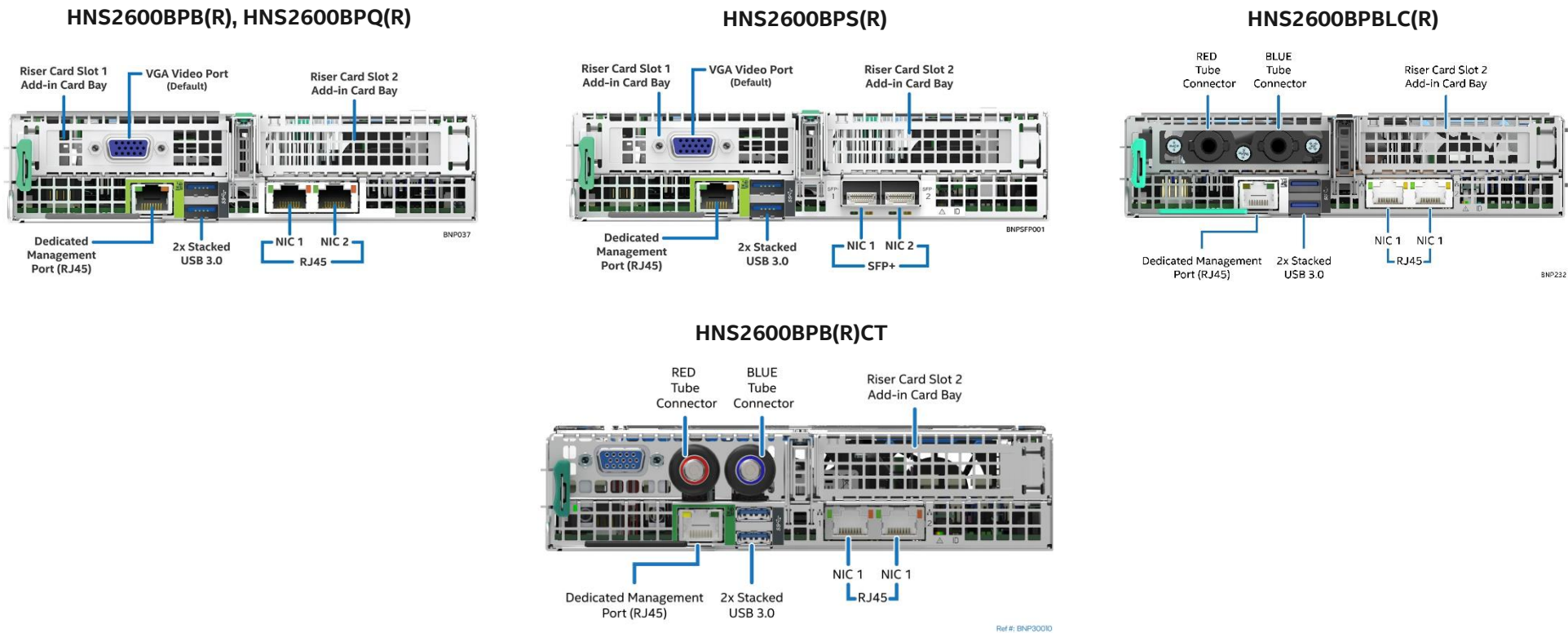


Figure 5. Intel® Compute Module HNS2600BP product family rear connectors

Table 6. Intel® Compute Module HNS2600BP product family features

Intel® Compute Module Feature	HNS2600BPB(R) HNS2600B24(R)	HNS2600BPS(R) HNS2600BPS24(R)	HNS2600BPQ(R) HNS2600BPQ24(R)	HNS2600BPB(R)CT	HNS2600BPBLC(R) HNS2600BPBLC24(R)
Processor	• (2) – LGA3647-0 (Socket P) processor sockets • Supports (1) or (2) processors from the 1st or 2nd Gen Intel® Xeon® processor Scalable family (Platinum, Gold, Silver, and Bronze) or 1st Gen Intel® Xeon® processor Scalable family with Intel® Omni-Path Integrated Fabric Connectors (one port per processor, up to 100 Gb/s) Note: Previous generation Intel® Xeon® processors are not supported.				
Maximum Processor TDP	• Up to 165 W – Intel® Server Board only (OEM option) and Intel® Compute Module installed in non-Intel chassis (OEM option) • Up to 165 W – Intel® Compute Module when installed into the Intel® Server Chassis H2204XXLRE • Up to 165W – Intel® Compute Modules HNS2600BPBLC(R)\HNS2600BPB(R)CT liquid cooling solution when installed in the Intel® Server Chassis H2312XXLR3 or H2204XXLRE and Intel® Compute Module HNS2600BPBLC24(R) liquid cooling solution when installed in Intel® Server Chassis H2224XXLR3. • Up to 140 W – Intel® Compute Module integrated within all other supported Intel server chassis options				
Chipset	Intel® C621 Chipset	Intel® C622 Chipset	Intel® C628 Chipset	Intel® C621 Chipset	Intel® C621 Chipset
Memory	• (16) – total DIMM slots (8 per processor) • DDR4 Registered DIMM (RDIMM) and Load Reduced DIMM (LRDIMM), up to 2933 MT/s (dependent on processor), 1.2 V • DDR4-compatible Intel® Optane™ DC persistent memory module, up to 2666 MT/s, 1.2 V ¹				
Storage	See supported bridge board options in Table 7				
M.2 Support	(1) – onboard 42 mm M.2 SATA/PCIe* x4 (1) – Riser #2 80 mm M.2 PCIe* x4				
Onboard LAN	Dual 10GBase-T ports	Dual 10GbE SF+ ports	Dual 10GBase-T ports	Dual 10GBase-T ports	Dual 10GBase-T ports
Intel® QAT	No	No	Supported	No	No
USB	Dual stacked rear-panel USB 3.0 ports				
Video	DB-15 rear-panel VGA video connector, 16 MB of DDR4 video memory				Not supported with liquid cooling kit installed
Server Management	• Integrated baseboard management controller, IPMI 2.0 compliant • Support for Intel® Server Management software • Dedicated onboard RJ45 management port • Advanced server management via Intel® RMM4 Lite – iPC AXXRMM4LITE2 (accessory option) • Onboard LEDs: system status, system ID, POST code diagnostic, BMC error code				
Fans	(3) – 40x56 mm dual rotor system fans				

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Intel® Compute Module Feature	HNS2600BPB(R) HNS2600B24(R)		HNS2600BPS(R) HNS2600BPS24(R)	HNS2600BPQ(R) HNS2600BPQ24(R)	HNS2600BPB(R)CT	HNS2600BPBLC(R) HNS2600BPBLC24(R)
Expansion Options						
Bridge Board	See supported bridge board options in Table 7					
Riser Slot 1 (CPU1)	• Default: Video adapter, 1U PCIe* x16 riser card for supporting a low-profile PCIe* card • Optional: Support for Intel® Omni-Path Fabric through carrier card	• Default: Video adapter • Optional: Support for Intel® Omni-Path Fabric through carrier card	• Default: Video adapter • Optional: Support for Intel® Omni-Path Fabric through carrier card	• Default: Video adapter • Optional: Support for Intel® Omni-Path Fabric through carrier card	• Default: Video adapter Not available with liquid cooling kit installed	Not available with liquid cooling kit installed
Riser Slot 2 (CPU1)	• Default: 1U PCIe* x16 riser card for supporting (1) low-profile PCIe* card and (1) PCIe* 80 mm M.2 device • Optional: Support for Intel® Omni-Path Fabric through carrier card					
Riser Slot 3 (CPU2)	Not available with bridge board installed					
Riser Slot 4 (CPU2)	Not available with bridge board installed					
Onboard Connectors and Headers						
Liquid Cooling Kit Support	No	No	No		Liquid cooling kit – iPC AXXBPKIT (required, sold separately)	Liquid cooling kit – iPC AXXBPLCKIT (required, sold separately)

For additional details on compute module features and specifications, refer to the *Intel® Server Board S2600BP and Computed Module HNS2600BP Product Family Technical Product Specification*.

Table 7 identifies all available bridge board options supported by the Intel Compute Module HNS2600BP product family.

Note: Beyond the feature set associated with each bridge board option, bridge board selection must also be based on the specific Intel Compute Module and Intel® Chassis into which it is installed.

Table 7. Bridge board product features and compatibility

Intel Product Code (iPC)	Description	SATA/SAS	RAID 0/1/10	RAID 5	Compatible Intel® Compute Modules and Chassis
AHWBPBGB	4-port bridge board	6G SATA PCH	Yes (Intel® Embedded Software RAID Technology 2)	Optional with RKSATA4R5 activation key	Intel® Compute Modules: • HNS2600BPB(R) • HNS2600BPS(R) • HNS2600BPQ(R) • HNS2600BPBLC(R) • HNS2600BPB(R)CT Intel® Chassis: • H2312XXLR3 • H2204XXLRE
AHWBP12GBGBIT	4-port bridge board w/ LSI* 3008 IOC	6G SATA, 12G SAS	No (JBOD mode only)		
AHWBP12GBGB	4-port iMR bridge board w/ LSI* 3008 IOC	6G SATA, 12G SAS	Yes	No	
AHWBP12GBGBR5	4-port iMR bridge board w/ LSI* 3008 IOC	6G SATA, 12G SAS	Yes	Yes (no key required)	
AHWBPBGB24	6-port IT bridge board w/ LSI* 3008 IOC	6G SATA, 12G SAS, NVMe*	No (JBOD mode only)		Intel® Compute Modules: • HNS2600BPB24(R) • HNS2600BPS24(R) • HNS2600BPQ24(R) • HNS2600BPBLC24(R) Intel® Chassis: • H2224XXLR3
AHWBPBGB24R	6-port IT iMR bridge board w/ LSI* 3408 IOC	6G SATA, 12G SAS	Yes	RAID 5 with optional key (AXXRPFKHY5)	
		NVMe*	Optional with Intel® VROC activation key	No	
AHWBPBGB24P	6-Port Pass-Through Bridge Board	N/A	Optional with add-in card	Optional with add-in card	

The Intel Compute Module HNS2600BP product family is compatible with chassis from the Intel® Server Chassis H2000P family listed in Table 8. For additional details on chassis features and specifications, refer to the *Intel® Server Chassis H2000P Product Family Technical Product Specification*.

Note: The Intel® Server Chassis H2000P product family consists of several chassis SKUs compatible with different Intel compute module families. Only the chassis SKUs identified in Table 8 are compatible with the Intel® Compute Module HNS2600BP product family.

Table 8. Intel® Server Chassis H2000P product family features and compatibility

Intel® Server Chassis Feature	H2312XXLR3	H2224XXLR3	H2204XXLRE
Compatible Intel® Compute Modules	• HNS2600BPB(R) • HNS2600BPS(R) • HNS2600BPQ(R) • HNS2600BPBLC(R) • HNS2600BPB(R)CT	• HNS2600BPB24(R) • HNS2600BPS24(R) • HNS2600BPQ24(R) • HNS2600BPBLC24(R)	• HNS2600BPB(R) • HNS2600BPS(R) • HNS2600BPQ(R) • HNS2600BPBLC(R) • HNS2600BPB(R)CT
Number of Compute Modules	Up to 4	Up to 4	Up to 4
Chassis Dimensions	86.9 x 438 x 771 mm	86.9 x 438 x 733 mm	86.9 x 438 x 771 mm
Package Dimensions	983 x 577 x 260 mm	983 x 577 x 260 mm	983 x 577 x 260 mm
Chassis Weight	21.5 kg	20.6 kg	20.6 kg
Package Weight	29.5 kg	28.9 kg	28.9 kg
Maximum Processor TDP	140 W (up to 165 W with Intel® Compute Module HNS2600BPBLC(R)\HNS2600BPB(R)CT liquid cooling solutions)	140 W (up to 165 W with Intel® Compute Module HNS2600BPBLC(R) liquid cooling solution)	165 W
Power Supply	(2) – 2130 W AC common redundant power supply (CRPS)		
Power Supply Efficiency Rating	80 PLUS* Platinum		
Power Configuration	1+0 (no power redundancy), 1+1 (redundant power), 2+0 (combined power, no redundancy)		
Fans	• (3) – system managed fans per module • (1) – fan per power supply		
2.5" PCIe* NVMe* SSD Support	No	Up to 8 (2 per node)	No
Hot-Swap Drive Bays	• (12) – 3.5" bays (with optional bridge board) • 6 Gbps SATA/12 Gbps SAS	• (24) – 2.5" bays (with optional bridge board) • 6 Gbps SATA/12 Gbps SAS/PCIe* NVMe*	• (4) – 2.5" bays (with optional bridge board) • 6 Gbps SATA/12 Gbps SAS



Figure 6. Intel® Server Chassis H2312XXLR3



Figure 7. Intel® Server Chassis H2224XXLR3

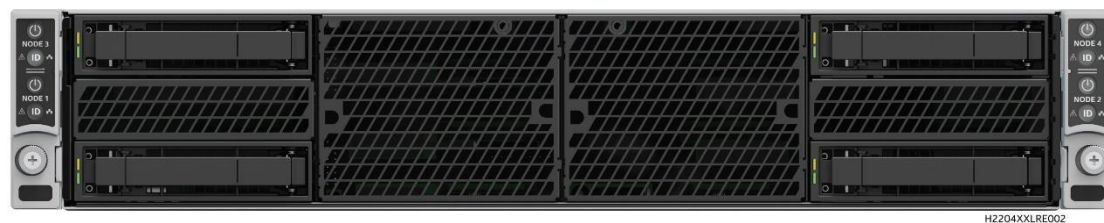


Figure 8. Intel® Server Chassis H2204XXLRE

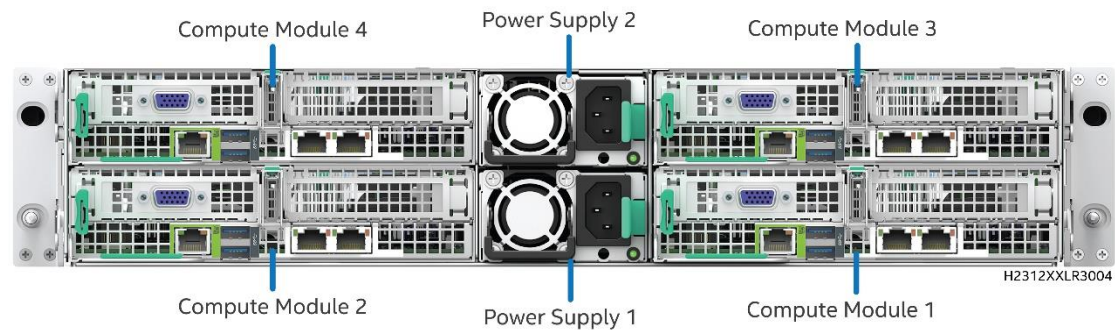


Figure 9. Intel® Server Chassis H2000P Family back panel (Air Cooling)

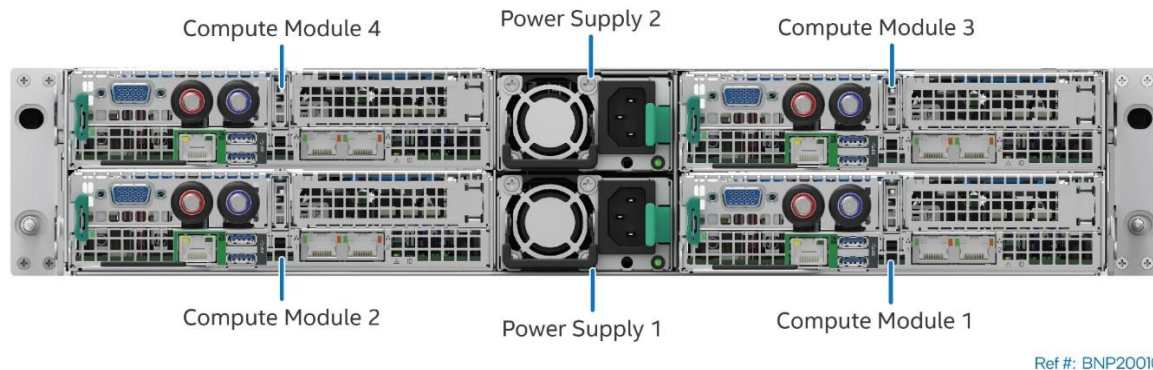


Figure 10. Intel® Server Chassis H2000P Family back panel (Liquid Cooling)

1.5 Available Server Board, Compute Module, and Chassis SKU Summary

The following tables provide an overview of available Intel product codes for building blocks within the Intel® S2600BP product family. Each line item identifies key features supported in the shipping Intel SKU. Additional order code information and full product descriptions for each option are provided in later sections.

The following terms are used in the tables:

- **N/A:** Not applicable.
- **Opt.:** Accessory option sold separately.
- **Yes:** Option included.

Table 9. Server board product family summary

Intel Product Code (iPC)	# of CPU Sockets	# of DIMM Slots	# of Riser Slots	Chipset	Onboard RJ45 LAN Ports	Onboard SFP+ LAN Ports	# of SATA Ports (6 Gb)	SATA Software RAID Support
BBS2600BPB(R)	2	16	4	Intel® C621	Dual 10GBase-T ports	N/A	4	Yes
BBS2600BPQ(R)	2	16	4	Intel® C628	Dual 10GBase-T ports	N/A	N/A	No
BBS2600BPS(R)	2	16	4	Intel® C622	N/A	Dual 10 GbE ports	4	Yes

Table 10. Server chassis product family summary

Intel Product Code (iPC)	Chassis Form Factor	# of Nodes	Max. Processor TDP	Drive Form Factor	# of Hot-Swap Drives	NVMe* SSD Support	Compatible Intel® Compute Modules	Power Supply Modules	Rails	SAS RAID
H2312XXLR3	2U	4	140 W or 165 W ¹	2.5"/3.5"	12 (3 per node)	No	HNS2600BPB(R) HNS2600BPS(R) HNS2600BPQ(R) HNS2600BPBLC(R) ¹ HNS2600BPB(R)CT ¹	2 x 2130 W AC	Yes	Opt.
H2224XXLR3	2U	4	140 W	2.5"	24 (6 per node)	Yes (2 per node)	HNS2600BPB24(R) HNS2600BPS24(R) HNS2600BPQ24(R) HNS2600BPBLC24(R)	2 x 2130 W AC	Yes	Opt.
H2204XXLRE	2U	4	165 W	2.5" ²	4	No	HNS2600BPB(R) HNS2600BPS(R) HNS2600BPQ(R) HNS2600BPBLC(R) HNS2600BPB(R)CT	2 x 2130 W AC	Yes	Opt.

¹ Intel® Server Chassis H2312XXLR3 supports 165 W TDP with liquid cooling Intel® Compute Modules HNS2600BPBLC(R)\HNS2600BPB(R)CT.

² Intel® Server Chassis H2204XXLRE includes 4 x 3.5" carriers but supports only 2.5" SSD drives to maintain thermal requirements for 165 W TDP processors.

Table 11. Compute module product family summary

Intel Product Code (iPC)	Form Factor	Intel® Server Board	Intel® QAT	External VGA	PCIe* Riser Card (Slot 1)	PCIe* Riser Card (Slot 2)	Bridge Board	Liquid Cooling Kit	Compatible Intel® Chassis
HNS2600BPB(R)	1U density-optimized	BBS2600BPB(R)	No	Yes	Yes	Yes	Required	No	H2312XXLR3 H2204XXLRE
HNS2600BPB24(R)	1U density-optimized	BBS2600BPB(R)	No	Yes	Yes	Yes	Required	No	H2224XXLR3
HNS2600BPS(R)	1U density-optimized	BBS2600BPS(R)	No	Yes	Opt. ²	Yes	Required	No	H2312XXLR3 H2204XXLRE
HNS2600BPS24(R)	1U density-optimized	BBS2600BPS(R)	No	Yes	Opt. ²	Yes	Required	No	H2224XXLR3
HNS2600BPQ(R)	1U density-optimized	BBS2600BPQ(R)	Yes	Yes	Opt. ²	Yes	Required	No	H2312XXLR3 H2204XXLRE
HNS2600BPQ24(R)	1U density-optimized	BBS2600BPQ(R)	Yes	Yes	Opt. ²	Yes	Required	No	H2224XXLR3
HNS2600BPBLC(R)	1U density-optimized	BBS2600BPB(R)	No	No ¹	No ¹	Yes	Required	Required	H2312XXLR3 H2204XXLRE
HNS2600BPBLC24(R)	1U density-optimized	BBS2600BPB(R)	No	No ¹	No ¹	Yes	Required	Required	H2224XXLR3

Intel® Server S2600BP Product Family Configuration Guide

Intel Product Code (iPC)	Form Factor	Intel® Server Board	Intel® QAT	External VGA	PCIe* Riser Card (Slot 1)	PCIe* Riser Card (Slot 2)	Bridge Board	Liquid Cooling Kit	Compatible Intel® Chassis
HNS2600BPB(R)CT	1U density-optimized	BBS2600BPB(R)	No	Yes	No ¹	Yes	Required	Required	H2312XXLR3 H2204XXLRE

¹ No PCIe* add-in card or fabric carrier card can be installed in riser slot 1 of the liquid cooling Intel® Compute Modules HNS2600BPBLC(R)\HNS2600BPB(R)CT and HNS2600BPBLC24(R);

² Riser slot 1 supports an external VGA video connector bracket by default (no riser card necessary). Optionally, riser slot 1 can support Intel® Omni-Path Fabric through carrier card (riser card AHW10RISER1 required).

2. Server Building Block Options

Server building blocks are offered to provide the option of choosing from available Intel® server components to create a custom system configuration from the chassis up. Each building block component and optional accessory is purchased separately and assembled by a system integrator. At a minimum, a base functional server system using building blocks requires the following:

- Supported 2U Intel® Server Chassis
- Intel® Compute Module HNS2600BP product family option
- Bridge board option
- Processor
- Memory
- Storage devices
- Liquid cooling kit (required for Intel® Compute Modules HNS2600BPBLC\HNS2600BPB(R)CT and HNS2600BPBLC24)

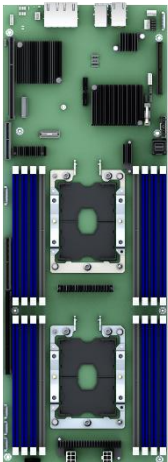
Optional Intel accessories that can be added include the following:

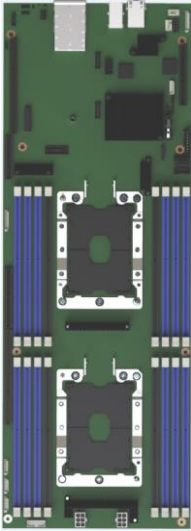
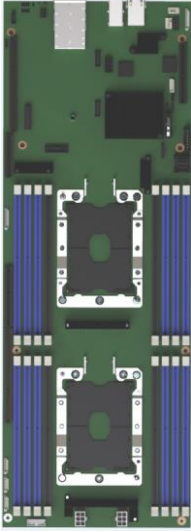
- Riser cards options
- Intel® Omni-Path Fabric accessory kit for use with Intel® Xeon® Scalable processors supporting an integrated fabric interface connector
- Intel® SAS/SAS RAID support – PCIe* add-in card or module and appropriate SAS data cable(s)
- Intel® Remote Management Module Lite key – to add advanced server management features
- NVMe* Intel® Virtual RAID on Chip (Intel® VROC) or Intel® Embedded Server RAID Technology 2 activation keys (configuration specific)

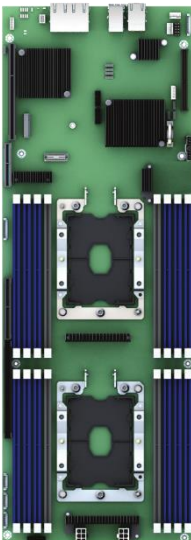
See Chapter 3 for all available options.

2.1 Intel® Server Board S2600BP Product Family Options

Table 12. Intel® Server Board S2600BP product family options

Product Image	Details	Description
	Intel® Server Board S2600BPB iPC S2600BPB MM# 948899 UPC 00735858323567 EAN 5032037090698 MOQ 10 Product type Server board only Building block/spare FRU Packaged gross wt. 16.75 kg (bulk package) Un-packaged net wt. 1.25 kg (single board)	• (2) – processor sockets supporting 1st or 2nd Gen Intel® Xeon® processor Scalable family • (16) – DDR4 memory slots • Intel® C621 chipset • (2) – PCIe* 3.0 x24 capable slots (not PCI-SIG* compatible) • (2) – PCIe* 3.0 x16 capable slots (not PCI-SIG* compatible) • (2) – integrated 10 GbE RJ45 ports based on Intel® Ethernet Controller X550 • (1) – dedicated 1GbE management port • (2) – USB 3.0 ports • (1) – SATA/PCIe* 2242 M.2 SSD connector (42 mm support only) • (4) – SATA 6 Gbps ports via mini-SAS HD (SFF-8643) • Embedded TPM 2.0 (not supported in China) • Support for up to (5) system fans See Table 5 for the complete feature set.
	Intel® Server Board S2600BPBR iPC S2600BPBR MM# 986113 UPC 735858406611 EAN 5032037150873 MOQ 10 Product type Server board only Building block/spare FRU Packaged gross wt. 16.75 kg (bulk package) Un-packaged net wt. 1.25 kg (single board)	• (2) – processor sockets supporting 1st or 2nd Gen Intel® Xeon® processor Scalable family • (16) – DDR4 memory slots • Support for Intel® Optane™ DC persistent memory module • Intel® C621 chipset • (2) – PCIe* 3.0 x24 capable slots (not PCI-SIG* compatible) • (2) – PCIe* 3.0 x16 capable slots (not PCI-SIG* compatible) • (2) – integrated 10 GbE RJ45 ports based on Intel® Ethernet Controller X550 • (1) – dedicated 1GbE management port • (2) – USB 3.0 ports • (1) – SATA/PCIe* 2242 M.2 SSD connector (42 mm support only) • (4) – SATA 6 Gbps ports via mini-SAS HD (SFF-8643) • Embedded TPM 2.0 (not supported in China) • Support for up to (5) system fans See Table 5 for the complete feature set.

Product Image	Details	Description
	Intel® Server Board S2600BPS iPC S2600BPS MM# 952609 UPC 00735858342971 EAN 5032037104104 MOQ 10 Product type Server board only Building block/spare FRU Packaged gross wt. 16.75 kg (bulk package) Un-packaged net wt. 1.25 kg (single board)	• (2) – processor sockets supporting 1st or 2nd Gen Intel® Xeon® processor Scalable family • (16) – DDR4 memory slots • Intel® C622 chipset • (2) – PCIe* 3.0 x24 capable slots (not PCI-SIG* compatible) • (2) – PCIe* 3.0 x16 capable slots (not PCI-SIG* compatible) • (2) – integrated 10 GbE SFP+ ports • (1) – dedicated 1GbE management port • (2) – USB 3.0 ports • (1) – SATA/PCIe* 2242 M.2 SSD connector (42 mm support only) • (4) – SATA 6 Gbps ports via mini-SAS HD (SFF-8643) • Embedded TPM 2.0 (not supported in China) • Support for up to (5) system fans See Table 5 for the complete feature set.
	Intel® Server Board S2600BPSR iPC S2600BPSR MM# 986114 UPC 735858406628 EAN 5032037150880 MOQ 10 Product type Server board only Building block/spare FRU Packaged gross wt. 16.75 kg (bulk package) Un-packaged net wt. 1.25 kg (single board)	• (2) – processor sockets supporting 1st or 2nd Gen Intel® Xeon® processor Scalable family • (16) – DDR4 memory slots • Support for Intel® Optane™ DC persistent memory module • Intel® C622 chipset • (2) – PCIe* 3.0 x24 capable slots (not PCI-SIG* compatible) • (2) – PCIe* 3.0 x16 capable slots (not PCI-SIG* compatible) • (2) – integrated 10 GbE SFP+ ports • (1) – dedicated 1GbE management port • (2) – USB 3.0 ports • (1) – SATA/PCIe* 2242 M.2 SSD connector (42 mm support only) • (4) – SATA 6 Gbps ports via mini-SAS HD (SFF-8643) • Embedded TPM 2.0 (not supported in China) • Support for up to (5) system fans See Table 5 for the complete feature set.

Product Image	Details	Description
	Intel® Server Board S2600BPQ iPC S2600BPQ MM# 948900 UPC 00735858323574 EAN 5032037090704 MOQ 10 Product type Server board only Building block/spare FRU Packaged gross wt. 16.75 kg (bulk package) Un-packaged net wt. 1.25 kg (single board)	• (2) – processor sockets supporting 1st or 2nd Gen Intel® Xeon® processor Scalable family • (16) – DDR4 memory slots • Intel® C628 chipset • Support for Intel® QuickAssist Technology (Intel® QAT) • (2) – PCIe* 3.0 x24 capable slots (not PCI-SIG* compatible) • (1) – PCIe* 3.0 x16 capable slots (not PCI-SIG* compatible) • (2) – integrated 10 GbE RJ45 ports based on Intel® Ethernet Controller X550 • (1) – dedicated 1GbE management port • (2) – USB 3.0 ports • (1) – SATA/PCIe* 2242 M.2 SSD connector (42 mm support only) • Embedded TPM 2.0 (not supported in China) • Support for up to (5) system fans See Table 5 for the complete feature set.
	Intel® Server Board S2600BPQR iPC S2600BPQR MM# 986115 UPC 735858406635 EAN 5032037150897 MOQ 10 Product type Server board only Building block/spare FRU Packaged gross wt. 16.75 kg (bulk package) Un-packaged net wt. 1.25 kg (single board)	• (2) – processor sockets supporting 1st or 2nd Gen Intel® Xeon® processor Scalable family • (16) – DDR4 memory slots • Support for Intel® Optane™ DC persistent memory module • Intel® C628 chipset • Support for Intel® QuickAssist Technology (Intel® QAT) • (2) – PCIe* 3.0 x24 capable slots (not PCI-SIG* compatible) • (1) – PCIe* 3.0 x16 capable slots (not PCI-SIG* compatible) • (2) – integrated 10 GbE RJ45 ports based on Intel® Ethernet Controller X550 • (1) – dedicated 1GbE management port • (2) – USB 3.0 ports • (1) – SATA/PCIe* 2242 M.2 SSD connector (42 mm support only) • Embedded TPM 2.0 (not supported in China) • Support for up to (5) system fans See Table 5 for the complete feature set.

2.2 Intel® Compute Module Product Family Options

The product tables found in this section provide order code information and detailed descriptions for each available compute module building block option. The lower sections of each table identify:

- **Included** – The ship along components of the specified compute module product code (product BOM).
- **Required items** – Hardware required to be installed to the base system to achieve basic functionality using the default system feature set. Required items are sold separately.
- **Optional accessories** – Some of the available accessories that can be installed to enhance the basic feature set of the compute module. Optional accessories are sold separately. Additional accessories can be found in Chapter 3.

Note: Items identified with an iPC (Intel Product Code) are orderable building block options, accessories, or spare FRUs. In an effort to provide the complete product bill of materials, the ship along components list in each product table include items identified by description and by iPN (Intel Part Number). The iPN information is provided for reference only. These components are not orderable as spares or accessories.

Table 13. Intel® Compute Module HNS2600BPB (not available) See PCN 116894-02 for more details

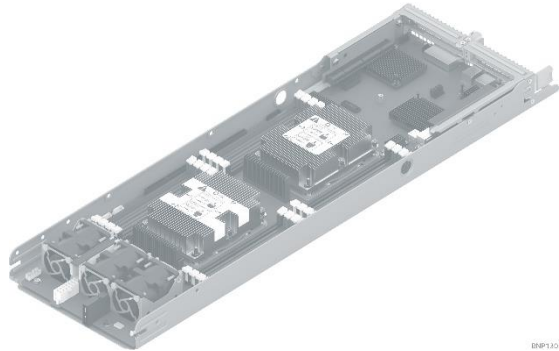
Intel® Compute Module HNS2600BPB		
	This part is no longer available to order; refer to replacement part MM# 976668.	Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 627.4 x 178.6 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPB (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – AL – iPC FXxEA78X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 1 riser card – iPC AHW1URISER1 (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5	• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 14. Intel® Compute Module HNS2600BPB24 (not available) See PCN 116894-02 for more details

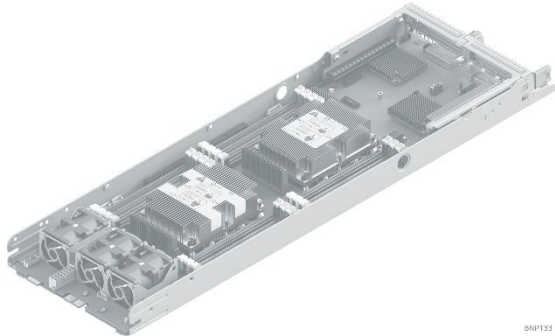
Intel® Compute Module HNS2600BPB24			
	This part is no longer available to order; refer to replacement part MM# 976671.	Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 625.4 x 177.5 x 40.8 mm (L x W x H)	
Included	Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPB (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – AL – iPC FXXA78X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 1 riser card – iPC AHW1URISER1 (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE Compatible Intel® Server Chassis • iPC H2224XXLR3 See Chapters 3 and 4 for all available accessory options.

Table 15. Intel® Compute Module HNS2600BPS (not available) See PCN 116894-02 for more details

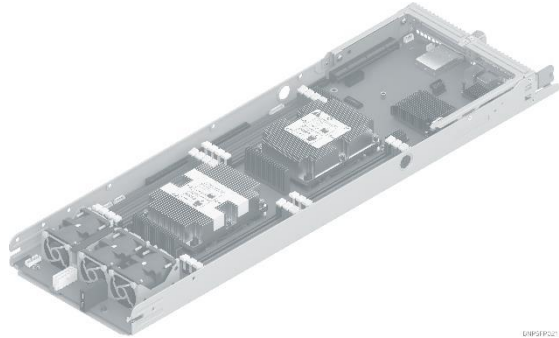
Intel® Compute Module HNS2600BPS			
	This part is no longer available to order; refer to replacement part MM# 976670.	Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 627.4 x 178.6 x 40.8 mm (L x W x H)	
Included	Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPS (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – AL – iPC FXXE78X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 16. Intel® Compute Module HNS2600BPS24 (not available) See PCN 116894-02 for more details

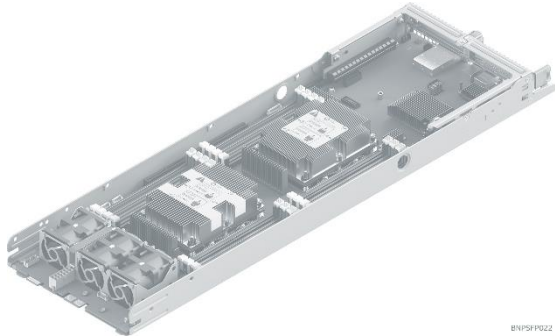
Intel® Compute Module HNS2600BPS24			
	This part is no longer available to order; refer to replacement part MM# 976676.	Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 627.4 x 178.6 x 40.8 mm (L x W x H)	
Included	Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPS (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – AL – iPC FXxEA78X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE Compatible Intel® Server Chassis • iPC H2224XXLR3 See Chapters 3 and 4 for all available accessory options.

Table 17. Intel® Compute Module HNS2600BPQ (not available) See PCN 116894-02 for more details

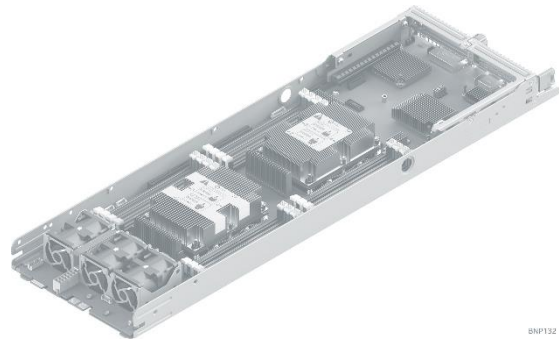
Intel® Compute Module HNS2600BPQ			
 BNP132	This part is no longer available to order; refer to replacement part MM# 976669.	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions	Compute module Density-optimized 1U 5.6 kg 4.3 kg 627.4 x 178.6 x 40.8 mm (L x W x H)
Included		Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPQ (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – AL – iPC FXXEA78X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2 Support for Intel® QAT		• (1) or (2) Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5	• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • Riser card – slot 1 Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 18. Intel® Compute Module HNS2600BPQ24 (not available) See PCN 116894-02 for more details

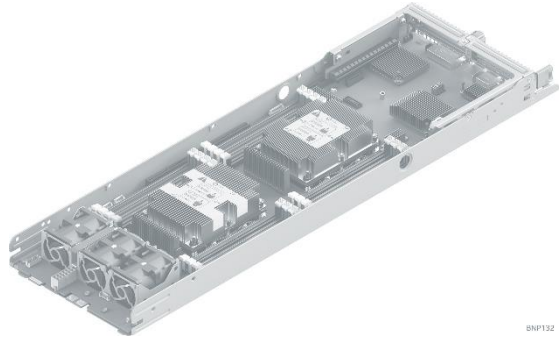
Intel® Compute Module HNS2600BPQ24			
	This part is no longer available to order; refer to replacement part MM# 976675.	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions	Compute module Density-optimized 1U 5.6 kg 4.3 kg 625.4 x 177.5 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPQ (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – AL – iPC FXxEA78X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2 Support for Intel® QAT	• (1) or (2) Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 19. Intel® Compute Module HNS2600BPBR product specifications and configuration requirements

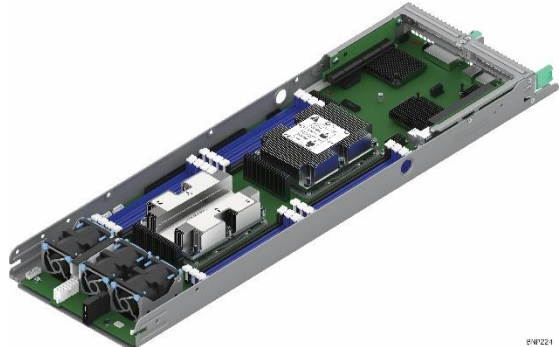
Intel® Compute Module HNS2600BPBR			
	iPC MM# UPC EAN MOQ	HNS2600BPBR 986116 735858406642 5032037150903 1	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions
	Compute module Density-optimized 1U 5.6 kg 4.3 kg 627.4 x 178.6 x 40.8 mm (L x W x H)		
Included		Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPBR (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – CuAL – iPC FXX2678X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 1 riser card – iPC AHW1URISER1 (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2		• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5	• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 20. Intel® Compute Module HNS2600BPB24R product specifications and configuration requirements

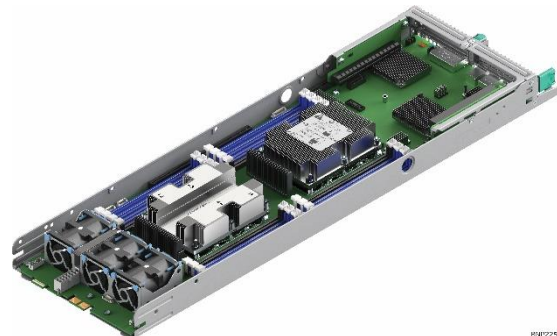
Intel® Compute Module HNS2600BPB24R				
	iPC MM# UPC EAN MOQ	HNS2600BPB24R 986118 735858406673 5032037150934 1	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions	Compute module Density-optimized 1U 5.6 kg 4.3 kg 625.4 x 177.5 x 40.8 mm (L x W x H)
Included		Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPBR (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – CuAL – iPC FXX2678X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 1 riser card – iPC AHW1URISER1 (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2		• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2224XXLR3 See Chapters 3 and 4 for all available accessory options.

Table 21. Intel® Compute Module HNS2600BPSR product specifications and configuration requirements

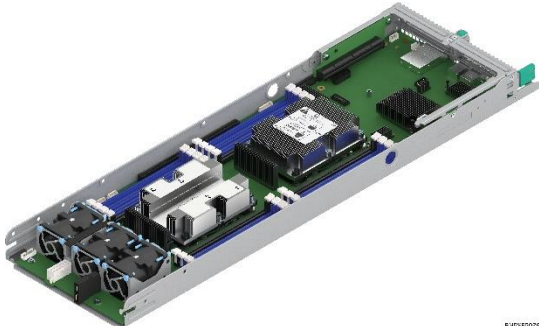
Intel® Compute Module HNS2600BPSR			
	iPC MM# UPC EAN MOQ	HNS2600BPSR 986117 735858406659 5032037150910 1	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions
	Compute module Density-optimized 1U 5.6 kg 4.3 kg 627.4 x 178.6 x 40.8 mm (L x W x H)		
Included	Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPSR (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – CuAL – iPC FXX2678X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 22. Intel® Compute Module HNS2600BPS24R product specifications and configuration requirements

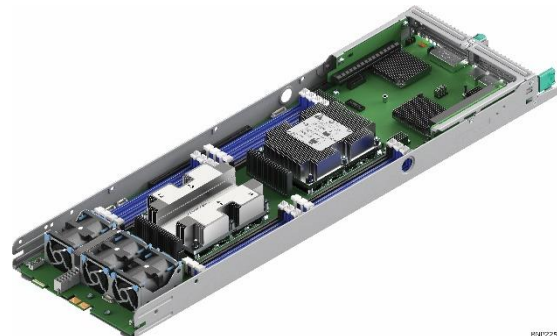
Intel® Compute Module HNS2600BPS24R				
	iPC MM# UPC EAN MOQ	HNS2600BPS24R 986119 735858406703 5032037150965 1	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions	Compute module Density-optimized 1U 5.6 kg 4.3 kg 625.4 x 177.5 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)		Optional Accessories (sold separately)	
(1) – 1U node tray (1) – Intel® Server Board S2600BPSR (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – CuAL – iPC FXX2678X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2224XXLR3 See Chapters 3 and 4 for all available accessory options.	

Table 23. Intel® Compute Module HNS2600BPQR product specifications and configuration requirements

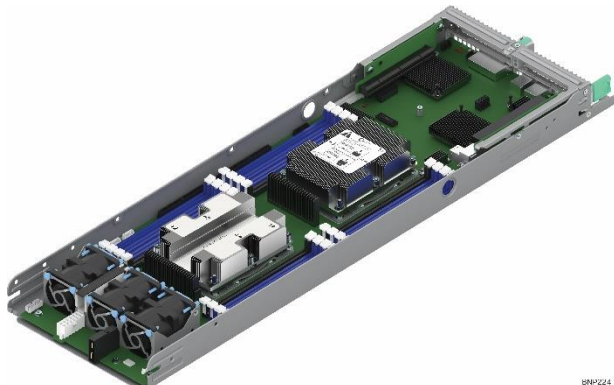
Intel® Compute Module HNS2600BPQR				
 8NP224	iPC MM# UPC EAN MOQ	HNS2600BPQR 985900 735858406666 5032037150927 1	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions	Compute module Density-optimized 1U 5.6 kg 4.3 kg 627.4 x 178.6 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)		Optional Accessories (sold separately)	
(1) – 1U node tray (1) – Intel® Server Board S2600BPQR (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – CuAL – iPC FXX2678X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2 Support for Intel® QuickAssist Technology (Intel® QAT)	• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • Riser card – slot 1 • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.	

Table 24. Intel® Compute Module HNS2600BPQ24R product specifications and configuration requirements

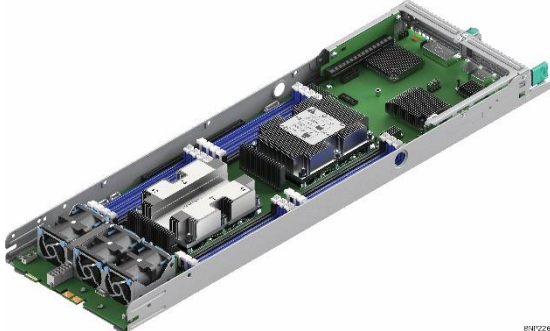
Intel® Compute Module HNS2600BPQ24R				
	iPC MM# UPC EAN MOQ	HNS2600BPQ24R 986120 735858406710 5032037150972 1	Product type Form factor Packaged gross wt. Un-packaged net wt. Dimensions	Compute module Density-optimized 1U 5.6 kg 4.3 kg 625.4 x 177.5 x 40.8 mm (L x W x H)
Included		Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPQR (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (1) – 1U passive heat sink – CPU1 – CuAL – iPC FXXHP78X108HS (1) – 1U passive heat sink – CPU2 – CuAL – iPC FXX2678X108HS (2) – Standard carrier clips (1) – Air duct (1) – External VGA port bracket (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2 Support for Intel® QuickAssist Technology (Intel® QAT)		• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2224XXLR3 See Chapters 3 and 4 for all available accessory options.

Table 25. Intel® Compute Module HNS2600BPBLCR product specifications and configuration requirements

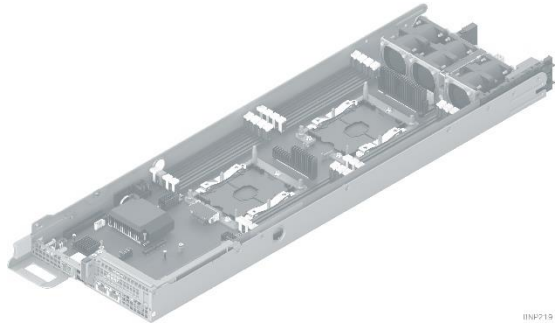
Intel® Compute Module HNS2600BPBLCR		
	Intel Compute Module HNS2600BPBLCR is not available to order. See PCN 117582-00 for more details.	Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 627.4 x 178.6 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPR (liquid cooling compatible) (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (2) – Standard carrier clips (1) – Air duct (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5 • (1) liquid cooling kit – iPC AXXBPLCKIT Note: Riser slot 1 cannot support a PCIe* add-in card, VGA cable connector bracket, or Intel® Omni-Path Fabric through carrier when a liquid cooling kit is installed.	• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

Table 26. Intel® Compute Module HNS2600BPBLC24R product specifications and configuration requirements

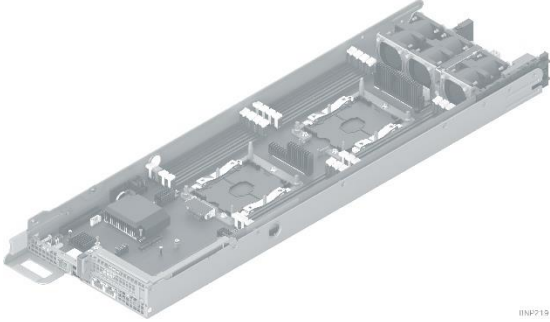
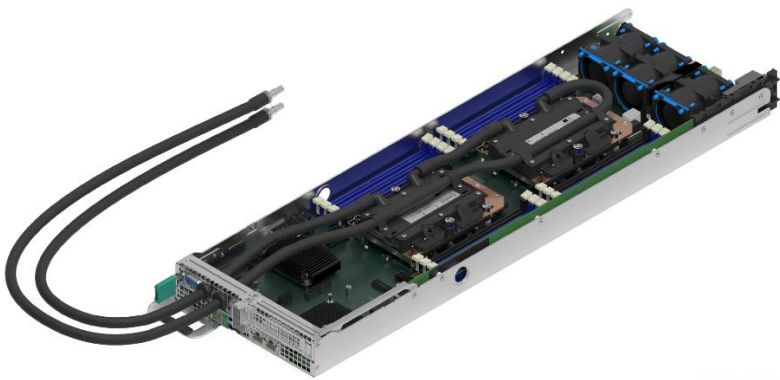
Intel® Compute Module HNS2600BPBLC24R		
	Intel Compute Module HNS2600BPBLC24R is not available to order. See PCN 117582-00 for more details.	Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 625.4 x 177.5 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPR (liquid cooling compatible) (1) – Power docking board – iPC FHWBPNPB24 (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (2) – Standard carrier clips (1) – Air duct (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB24 ○ iPC AHWBPBGB24R ○ iPC AHWBPBGB24P Note: Intel Bridge Board AHWBPBGB24P requires the installation of an add-in PCIe* RAID card in a PCIe* add-in slot on riser 2. • (1) liquid cooling kit – iPC AXXBPLCKIT Note: Riser slot 1 cannot support a PCIe* add-in card, VGA cable connector bracket, or Intel® Omni-Path Fabric through carrier when a liquid cooling kit is installed.	• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2224XXLR3 See Chapters 3 and 4 for all available accessory options.

Table 27. Intel® Compute Module HNS2600BPBRCT product specifications and configuration requirements

Intel® Compute Module HNS2600BPBRCT			
 Ref #: BNP40051	iPC HNS2600BPBRCT MM# 99AF58 UPC 00735858484558 EAN 5032037221375 MOQ 1		Product type Compute module Form factor Density-optimized 1U Packaged gross wt. 5.6 kg Un-packaged net wt. 4.3 kg Dimensions 627.4 x 178.6 x 40.8 mm (L x W x H)
Included	Required Items (sold separately)		Optional Accessories (sold separately)
(1) – 1U node tray (1) – Intel® Server Board S2600BPR (liquid cooling compatible) (1) – Power docking board – iPC FHWBPNPB (3) – 40 x 56 mm dual rotor managed fans – iPC FXX4056DRFAN2 (2) – Standard carrier clips (1) – Air duct (1) – Slot 2 riser card with 80 mm M.2 SSD slot – iPC AHW1UM2RISER2	• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family • Up to (16) ECC DDR4 memory (RDIMM or LRDIMM) • Intel® Bridge Board (choose one) ○ iPC AHWBPBGB ○ iPC AHWBP12GBGB ○ iPC AHWBP12GBGBIT ○ iPC AHWBP12GBGBR5 • (1) liquid cooling kit – iPC AXXBPKIT Note: Riser slot 1 cannot support a PCIe* add-in card, VGA cable connector bracket, or Intel® Omni-Path Fabric through carrier when a liquid cooling kit is installed.		• Intel® SAS RAID Card • Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE • DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor) Compatible Intel® Server Chassis • iPC H2312XXLR3 • iPC H2204XXLRE See Chapters 3 and 4 for all available accessory options.

2.3 Intel® Server Chassis H2000P Product Family Options

The product tables found in this section provide order code information and detailed descriptions for each available Intel server chassis building block option. The lower sections of each table identify:

- **Included** – The ship along components of the specified chassis product code (product BOM).
- **Required items** – Hardware required to be installed to the base system to achieve basic functionality using the default system feature set. Required items are sold separately.
- **Optional accessories** – Some of the available accessories that can be installed to enhance the basic feature set of the server board/chassis. Optional accessories are sold separately. Additional accessories can be found in Chapter 3.

Note: Items identified with an iPC (Intel Product Code) are orderable building block options, accessories, or spare FRUs. In an effort to provide the complete product bill of materials, the ship along components list in each product table include items identified by description and by iPN (Intel Part Number). The iPN information is provided for reference only. These components are not orderable as spares or accessories.

Table 28. Intel® Server Chassis H2312XXLR3 product specifications and configuration requirements

Intel® Server Chassis H2312XXLR3 12 x 3.5" storage front mount drives		
	iPC H2312XXLR3 MM# 954487 UPC 00735858341912 EAN 5032037103206 MOQ 1	Product type Chassis only Chassis form factor 2U rack mount Packaged gross wt. 29.5 kg (65.0 lb.) Un-packaged net wt. 21.5 kg (47.4 lb.) Chassis dimensions 771 x 438 x 86.9 mm (L x W x H) Package dimensions 983 x 577 x 260 mm (L x W x H)
Included	Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 2U chassis with Quick Reference Label affixed to top cover (1) – front control panel – iPC FH2000FPANEL2 (1) – power distribution board – iPC FXXCRPSPDB2 (2) – 2130 W 80 PLUS* Platinum power supply units – iPC FXX2130PCRPS (1) – 12 x 3.5" hot-swap drive bay. Includes: (1) 12 x 3.5" hot-swap backplane – iPC FHW12X35HS12G (12) toolless drive carriers – iPC FXX25HSCAR3 (4) – compute module bay fillers (1) – basic rack rail mount kit – iPC AXXELVRAIL Note: The rail kit only supports rack types with 3/8" square and 7.1 mm round holes.	- Up to (4) Intel® Compute Module HNS2600BP product family options: - iPC HNS2600BPB(R) - iPC HNS2600BPS(R) - iPC HNS2600BPQ(R) - iPC HNS2600BPBLC(R) - iPC HNS2600BPB(R)CT - Intel® Bridge Board (choose one) - iPC AHWBPBGB - iPC AHWBP12GBGB - iPC AHWBP12GBGBR5 - Power cord(s) – See Section 4 (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family (Intel Compute Module HNS2600BPB, HNS2600BPS, HNS2600BPQ, HNS2600BPBLC, and HNS2600BPB(R)CT support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from http://downloadcenter.intel.com) - ECC DDR4 memory (RDIMM or LRDIMM) - Storage drives	- Slot 1 riser card (x16 PCIe* 3.0) – iPC AHW1URISER1 - Intel® SAS RAID Card - Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE 2U+ premium quality rails – iPC AXXFULLRAIL - DDDC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Compute Modules HNS2600BPB(R), HNS2600BPS(R), HNS2600BPQ(R), HNS2600BPBLC(R), and HNS2600BPB(R)CT with a 2nd Gen Intel® Xeon® Scalable processor) See Chapters 3 and 4 for all available accessory options.

Table 29. Intel® Server Chassis H2224XXLR3 product specifications and configuration requirements

Intel® Server Chassis H2224XXLR3 24 x 2.5" storage front mount drives		
	iPC H2224XXLR3 MM# 948907 UPC 00735858323642 EAN 5032037090773 MOQ 1	Product type Chassis only Chassis form factor 2U rack mount Packaged gross wt. 28.9 kg (63.7 lb.) Un-packaged net wt. 20.6 kg (45.4 lb.) Chassis dimensions 733 x 438 x 86.9 mm (L x W x H) Package dimensions 983 x 577 x 260 mm (L x W x H)
Included	Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 2U chassis with Quick Reference Label affixed to top cover (1) – front control panel – iPC FH2000FPANEL2 (1) – power distribution board – iPC FXXCRPSPDB2 (2) – 2130 W 80 PLUS* Platinum power supply units – iPC FXX2130PCRPS (1) – 24 x 2.5" hot-swap drive bay. Includes: (1) 12 x 3.5" hot-swap backplane – iPC HW24X25HS12G (24) toolless drive carriers – iPC FXX25HSCAR3 (4) – compute module bay fillers (1) – basic rack rail mount kit – iPC AXXELVRAIL Note: The rail kit only supports rack types with 3/8" square and 7.1 mm round holes.	- Up to (4) Intel® Compute Module HNS2600BP product family options: - iPC HNS2600BPB(R) - iPC HNS2600BPS(R) - iPC HNS2600BPQ(R) - iPC HNS2600BPBLC(R) - Intel® Bridge Board (choose one) - iPC AHWBPBGB24 - iPC AHWBPBGB24R - iPC AHWBPBGB24P - Power cord(s) – See Section 4 (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family (Intel Compute Module HNS2600BPB, HNS2600BPS, HNS2600BPQ, and HNS2600BPBLC support for 2nd Gen Intel® Xeon® processor Scalable family requires a system software stack update from http://downloadcenter.intel.com) - ECC DDR4 memory (RDIMM or LRDIMM) - Storage drives	- Slot 1 riser card (x16 PCIe* 3.0) – iPC AHW1URISER1 - Intel® SAS RAID Card - Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE 2U+ premium quality rails – iPC AXXFULLRAIL - DDDC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Compute Modules HNS2600BPBR, HNS2600BPSR, HNS2600BPQR, and HNS2600BPBLCR with a 2nd Gen Intel® Xeon® Scalable processor) See Chapters 3 and 4 for all available accessory options.

Table 30. Intel® Server System H2204XXLRE product specifications and configuration requirements

Intel® Server System H2204XXLRE 4 x 3.5" storage front mount drives		
	Available as a fully-configured system only. Contact your local Intel representative for more information.	Product type System Chassis form factor 2U rack mount Packaged gross wt. 29.5 kg (65.0 lb.) Un-packaged net wt. 21.5 kg (47.4 lb.) Chassis dimensions 733 x 438 x 86.9 mm (L x W x H) Package dimensions 983 x 577 x 260 mm (L x W x H)
Included	Required Items (sold separately)	Optional Accessories (sold separately)
(1) – 2U chassis with Quick Reference Label affixed to top cover (1) – front control panel – iPC FH2000FPANEL2 (1) – power distribution board – iPC FXXCRPSPDB2 (2) – 2130 W 80 PLUS* Platinum power supply units – iPC FXX2130PCRPS (1) – 12 x 3.5" hot-swap drives cage. Includes: (1) backplane – iPC FHW04X35HSBP (4) toolless drive carriers – iPC FXX35HSCAR2 (4) – compute module bay fillers (1) – basic rack rail mount kit – iPC AXXELVRAIL Note: The rail kit only supports rack types with 3/8" square and 7.1 mm round holes.	- Up to (4) Intel® Compute Module HNS2600BP product family options: - iPC HNS2600BPB(R) - iPC HNS2600BPS(R) - iPC HNS2600BPQ(R) - iPC HNS2600BPBLC(R) - iPC HNS2600BPB(R)CT - Intel® Bridge Board (choose one) - iPC AHWBPBGB - iPC AHWBP12GBGB - iPC AHWBP12GBGBR5 - Power cord(s) – See Section 4 (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family (Intel Compute Module HNS2600BPB, HNS2600BPS, HNS2600BPQ, HNS2600BPBLC, and HNS2600BPB(R)CT support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from http://downloadcenter.intel.com) - ECC DDR4 memory (RDIMM or LRDIMM) - Storage drives	- Slot 1 riser card (x16 PCIe* 3.0) – iPC AHW1URISER1 - Intel® SAS RAID Card - Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE 2U+ premium quality rails – iPC AXXFULLRAIL - DDDC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Compute Modules HNS2600BPBR, HNS2600BPSR, HNS2600BPQR, HNS2600BPBLCR, and HNS2600BPBRCT with a 2nd Gen Intel® Xeon® Scalable processor) See Chapters 3 and 4 for all available accessory options.

3. Accessory Options

The following sections identify available accessory kits supported within the Intel® Server S2600BP product family.

3.1 Bridge Board Options

This section lists the available bridge board options. For full feature comparison and compatibility information, see Table 7.

Table 31. Bridge board options

Image	Details	Description
	4-Port SATA Bridge Board AHWBPBGB iPC AHWBPBGB MM# 948925 UPC 00735858323673 EAN 5032037090803 MOQ 1 Product type Accessory kit Building block	• 6G SATA • RAID 0/1/10 with Intel® Embedded Server RAID Technology 2 • RAID 5 with activation key Note: • A bridgeboard is required for the node to power on
	4-Port SATA Bridge Board AHWBP12GBGBIT iPC AHWBP12GBGBIT MM# 960803 UPC 00735858347914 EAN 5032037107198 MOQ 1 Product type Accessory kit Building block	• 6G SATA/12G SAS • JBOD mode • LSI 3008 IOC • A bridgeboard is required for the node to power on Note: • Requires a second installed processor. • A bridgeboard is required for the node to power on
	4-Port 12G SAS Bridge Board AHWBP12GBGB iPC AHWBP12GBGB MM# 948926 UPC 00735858323680 EAN 5032037090810 MOQ 1 Product type Accessory kit Building block	• 6G SATA/12G SAS • RAID 0/1/10 • LSI 3008 IOC Note: • Requires a second installed processor. • A bridgeboard is required for the node to power on

Image	Details	Description
	4-Port 12G SAS Bridge Board AHWBP12GBGBR5 iPC AHWBP12GBGBR5 MM# 948927 UPC 00735858323697 EAN 5032037090827 MOQ 1 Product type Accessory kit Building block	6G SATA/1 G SAS - RAID 0/1/10 and RAID 5 - LSI 3008 IOC Note: - Requires a second installed processor. - A bridgeboard is required for the node to power on
	6-Port SAS Bridge Board AHWBPBGB24 iPC AHWBPBGB24 MM# 948928 UPC 00735858323703 EAN 5032037090834 MOQ 1 Product type Accessory kit Building block	6G SATA/12G SAS/NVMe* - JBOD mode - LSI 3008 IOC Note: - Requires a second installed processor. - A bridgeboard is required for the node to power on
	6-Port Pass-Through Bridge Board AHWBPBGB24P iPC AHWBPBGB24P MM# 948930 UPC 00735858323727 EAN 5032037090858 MOQ 1 Product type Accessory kit Building block	- RAID 0/1/10 with optional RAID add-in card - RAID 5 with optional RAID add-in card Note: - A bridgeboard is required for the node to power on
	6-Port RAID Bridge Board AHWBPBGB24R iPC AHWBPBGB24R MM# 948929 UPC 00735858323710 EAN 5032037090841 MOQ 1 Product type Accessory kit Building block	6G SATA/12G SAS - RAID 0/1/10 - RAID 5 with activation key - NVMe* - RAID 0/1/10 with optional Intel® VROC activation key - No RAID 5 support - LSI 3408 IOC Note: - Requires a second installed processor. - A bridgeboard is required for the node to power on

3.2 PCIe* Riser Card Accessory Options

Table 32. Riser card options

Image	Details	Description
	PCIe* x16 Riser Card for Low-Profile PCIe* Card iPC AHW1URISER1 MM# 948931 UPC 00735858323734 EAN 5032037090865 MOQ 1 Product type Accessory kit	Riser card option for riser slot #1. Support for low-profile PCIe* add-in card intended for optional Intel® Omni-Path fabric through carrier card. Note: No PCIe* card can be installed in riser slot #1 of the liquid cooling Intel® Compute Module HNS2600BPBLC/ HNS2600BPBRCT and HNS2600BPBLC24.
Top Side  Bottom Side  M.2 connector 80mm support only	PCIe* x16 Riser Card for Low-Profile PCIe* Card and M.2 Device iPC AHW1UM2RISER2 MM# 948932 UPC 00735858323741 EAN 5032037090872 MOQ 1 Product type Accessory kit Spare FRU	Riser card option for riser slot #2. Support for low-profile PCIe* add-in card on the top side and one PCIe* 80 mm M.2 device on the back side.

3.3 Mount Kits

Caution: Exceeding the rail kit's specified maximum weight limit or misalignment of the server in the rack may result in failure of the rack rails, resulting in damage to the system or personal injury. Using two people or the use of a mechanical assist tool to install and align the server into the rack is highly recommended.

Table 33. Rack mount kits

Image	Details	Description
	1U/2U Enhanced Value Rail Kit iPC AXXELVRAIL MM# 920970 UPC 00735858244367 EAN 5032037038980 MOQ 1 Product type Accessory kit Spare FRU	• Works for all 438 mm wide Intel® Chassis 1U, 2U, 4U • Adjustment within 609.6 mm ~ 765 mm to fit difference depth rack • 424.2 mm maximum travel length • 2/3 extension from rack • 130 lbs. (59 Kg) max support weight • Tool-less chassis attach • Tools required to attach to rails to rack Note: No cable management arm support.
	2U+ Premium quality rails with CMA support iPC AXXFULLRAIL MM# 939209 UPC 00735858291989 EAN 5032037070546 MOQ 1 Product type 2U accessory kit	• Travel distance 800 mm • 99.2 lb. (45 kg) max support weight • Full extension from rack Kit includes: Rails, screws, and installation manual. Note: No cable management arm support on the Intel® Server Chassis H2000P product family.

3.4 Miscellaneous Accessory Options

Table 34. Miscellaneous accessory options

Image	Details	Description
	Intel® Remote Management Module 4 Lite Activation Key iPC AXXRMM4LITE2 MM# 946514 UPC 00735858307413 EAN 5032037080750 MOQ 1 Product type 1U/2U accessory kit	Installation of this activation key on to the server board enables support for the following advanced server management features: • Integrated KVM • Media Redirection See the <i>Intel® Remote Management Module 4 and Integrated Web Console Users Guide</i> for more information.
	Fabric Kit for Dual Fabric Processor Configuration iPC AHWBPFABKIT MM# 948933 UPC 00735858343756 EAN 5032037104708 MOQ 1 Product type Accessory kit	This kit allows external access to the Intel® Omni-Path Host Fabric Interface (Intel® OP HFI) of fabric supported processors. Kit includes: (1) – Dual-port IFT carrier (2) – Fabric processor clip (2) – Fabric sideband cable (1) – Internal fabric cable – CPU2, riser #2 (left curved cable assy., 371 mm, non-inverted) (1) – Internal fabric cable – CPU1, riser #2 (straight cable assy., 150 mm, non-inverted) (1) – Internal fabric cable – CPU1, riser #1 (straight cable assy. 160 mm, inverted) (1) – Internal fabric cable – CPU2, riser #1 (curved cable assy., 318 mm, inverted) (1) – Screw M2 x 0.4, 4.0 mm STL, Zn (1) – Mylar* air baffle assembly Note: The IFT carrier has support for two IFT ports, one from each processor. Note: Fabric kit cannot be installed in riser slot #1 of the liquid cooling Intel® Compute Module HNS2600BPBLC/ HNS2600BPBRCT and HNS2600BPBLC24.
	Fabric Kit for Single Fabric Processor Configuration iPC AHWBPFABKITCPU1 MM# 958620 UPC 00735858344371 EAN 5032037105163 MOQ 1 Product type Accessory kit	This kit allows external access to the Intel® Omni-Path Host Fabric Interface (Intel® OP HFI) of fabric supported processors. Kit includes: (1) – Dual-port IFT carrier (1) – Fabric processor clip (1) – Fabric sideband cable (1) – Internal fabric cable – CPU1, riser #2 (straight cable assy., 150 mm, non-inverted) (1) – Screw M2 x 0.4, 4.0 mm STL, Zn (1) – Mylar* air baffle assembly Note: Fabric kit cannot be installed in riser slot #1 of the liquid cooling Intel® Compute Module HNS2600BPBLC and HNS2600BPBLC24.

4. Intel® RAID Controller Add-In Cards

4.1 Intel® RAID Add-In Cards, Modules, and Accessories

Intel® RAID offers a broad portfolio of RAID solutions designed to address the storage-related challenges of the modern day datacenter as well as the small business. The Intel® S2600BP product family includes support for the latest generation of 12 Gb/s SAS Intel® RAID add-in cards, modules, expanders, and accessories. For a full list of validated Intel RAID cards, see the published Tested Hardware and Operating System List at <http://www.intel.com/support>.

Additional information for Intel RAID products can be found in the following documents:

- <https://www.intel.com/content/dam/www/public/us/en/documents/product-briefs/integrated-raid-module-rms3-family-brief.pdf>
- <https://www.intel.com/content/dam/www/public/us/en/documents/product-briefs/raid-matrix.pdf>

Table 35. Intel® RAID controller add-in cards

Image	Details	Description
	Intel® RAID Controller RS3DC080 iPC RS3DC080 MM# 934643 UPC 00735858265355 EAN 5032037107174 MOQ 5	Low-profile, half length, (MD2 Compliant) PCIe* add-in card 8 internal SAS/SATA ports LSI* SAS3108 ROC RAID Levels – 0, 1, 5, 6, 10, 50, and 60 Embedded 1GB DDR3 Cache Memory Supports Maintenance Free Backup Unit – iPC AXXRMFBU4 (supported at server board level only; not compatible with Intel® compute module within Intel® chassis) Supports the following Intel® RAID Accessory Options: • Intel® RAID High Availability Activation Key – iPC AXXRPFKHA2 • Intel® RAID SSD Cache with Fast Path I/O – iPC AXXRPFKSSD2 • Intel® RAID Drive Encryption Management – iPC AXXRPFKDE2 • Intel® RAID Rapid Recovery Snapshot – iPC AXXRPFKSNSH2 SAS data cables not included and must be purchased separately.
	Product type Accessory kit	

Image	Details	Description
	Intel® RAID Controller RS3DC040 iPC RS3DC040 MM# 934644 UPC 00735858265362 EAN 5032037107167 MOQ 5 Product type Accessory kit	Low-profile, half length, (MD2 Compliant) PCIe* add-in card 4 internal SAS / SATA ports LSI* SAS3108 ROC RAID Levels – 0, 1, 5, 6, 10, 50, and 60 Embedded 1GB DDR3 Cache Memory Supports Maintenance Free Backup Unit – iPC AXXRMFBU4 (supported at server board level only; not compatible with Intel® compute module within Intel® chassis) Supports the following Intel® RAID Accessory Options: • Intel® RAID SSD Cache with Fast Path I/O – iPC AXXRPFKSSD2 • Intel® RAID Drive Encryption Management – iPC AXXRPFKDE2 • Intel® RAID Rapid Recovery Snapshot – iPC AXXRPFKSNSH2 SAS data cables not included and must be purchased separately.
	Intel® RAID Controller RS3SC008 iPC RS3SC008 MM# 928223 UPC 00735858266956 EAN 5032037068567 MOQ 5 Product type Accessory kit	Low-profile, half length, (MD2 Compliant) PCIe* add-in card 8 external SAS / SATA ports LSI* SAS3108 ROC RAID Levels – 0, 1, 5, 6, 10, 50, and 60 Embedded 1GB DDR3 Cache Memory Supports Maintenance Free Backup Unit – iPC AXXRMFBU4 (supported at server board level only; not compatible with Intel® compute module within Intel® chassis) Supports the following Intel® RAID Accessory Options: • Intel® RAID High Availability Activation Key – iPC AXXRPFKHA2 • Intel® RAID SSD Cache with Fast Path I/O – iPC AXXRPFKSSD2 • Intel® RAID Drive Encryption Management – iPC AXXRPFKDE2 • Intel® RAID Rapid Recovery Snapshot – iPC AXXRPFKSNSH2 SAS data cables not included and must be purchased separately.
	Intel® RAID Controller RS3GC008 iPC RS3GC008 MM# 928220 UPC 00735858267175 EAN 5032037053839 MOQ 5 Product type Accessory kit	Low-profile, half length, (MD2 Compliant) PCIe* add-in card Entry Level SAS Card 8 external SAS / SATA ports LSI* SAS3008 IOC RAID Levels – JBOD (SAS/SATA Connectivity) SAS data cables not included and must be purchased separately.

Image	Details	Description
	Intel® RAID Controller RS3UC080 iPC RS3UC080 MM# 928218 UPC 00735858267649 EAN 5032037053938 MOQ 5 Product type Accessory kit	Low-profile, half length, (MD2 Compliant) PCIe* add-in card Entry Level SAS RAID Card 8 internal SAS / SATA ports LSI* SAS3008 IOC RAID Levels – 0, 1, 1E, 10, and JBOD SAS data cables not included and must be purchased separately.
	Intel® RAID Controller RS3WC080 iPC RS3WC080 MM# 928215 UPC 00735858267656 EAN 5032037053945 MOQ 5 Product type Accessory kit	Low-profile, half length, (MD2 Compliant) PCIe* add-in card Entry-/level SAS RAID Controller 8 internal SAS / SATA ports LSI* SAS3008 IOC RAID Levels – JBOD, 0, 1, 10 & Hybrid 5, 50 SAS data cables not included and must be purchased separately.

Table 36. Intel® RAID accessory options

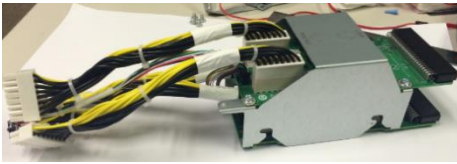
Image	Details	Description
	Intel® Embedded Server RAID Technology 2 SATA Software RAID Activation Key iPC RKSATA4R5 MM# 916346 UPC 00735858238861 EAN 5032037033640 MOQ 5 Product type Accessory kit	Activation key to enable onboard SATA controllers to support Intel® Embedded Server RAID Technology 2 software RAID 5
	Intel® RAID Premium Feature Key iPC AXXRPFKHY5 MM# 933690 UPC 00735858276856 EAN 5032037060462 MOQ 5 Product type Accessory kit	Upgrade key to enable RAID 5 functionality (enables LSI* IOC down on bridge board). This part is no longer available to order, see PCN 117214-00 for more details.
	Intel® Virtual RAID on CPU (Intel® VROC) - Standard Model Key iPC VROCSTANMOD MM# 951605 UPC 00735858337243 EAN 5032037100007 MOQ 5 Product type Accessory kit	Activation key to support Intel and non-Intel NVMe* SSDs and enable RAID (0, 1, 10) functionality.
	Intel® RAID SSD Cache with Fast Path I/O iPC AXXRPFKSSD2 MM# 919499 UPC 00735858221467 EAN 5032037051699 MOQ 5 Product type Accessory kit	Upgrade key to enable SSD cache with fast path I/O for Intel® RAID Controller RS25 and RS3 (based on LSI* 3108) families of ROC products.

Image	Details	Description
	Intel® RAID Drive Encryption Management iPC AXXRPFKDE2 MM# 915317 UPC 00735858221474 EAN 5032037051705 MOQ 5 Product type Accessory kit	Upgrade key to enable drive encryption management for Intel® RAID Controller RS25 and RS3 (based on LSI* 3108) families of ROC products.
	Intel® RAID Rapid Recovery Snapshot iPC AXXRPFKSNSH2 MM# 915318 UPC 00735858221481 EAN 5032037051712 MOQ 5 Product type Accessory kit	Upgrade key to enable rapid recovery snapshot for Intel® RAID Controller RS25 and RS3 (based on LSI* 3108) families of ROC products.
	Intel® RAID High Availability Activation Key iPC AXXRPFKHA2 MM# 927236 UPC 00735858257909 EAN 5032037049672 MOQ 1 Product type Accessory kit	Activation key to enable the Intel® RAID Controller RS3SC008 to provide failover for two servers in a cluster or shared storage environment.

5. Spare and Replacement Parts (FRUs)

System integrators and distributors may choose to hold additional stock of individual system components. Intel makes available the following spare and replacement parts (FRUs) compatible with the specified Intel® server family.

Table 37. Spare and replacement parts

Image	Details	Description
	Spare 4-Port Node Power Board iPC FHWPBPNPB MM# 952109 UPC 00735858329019 EAN 5032037095181 MOQ 1 Product type Spare FRU	Spare node power board (compute module power docking board) for Intel® Compute Module HNS2600BP product family
	Spare 6-Port Node Power Board iPC FHWPBPNPB24 MM# 952110 UPC 00735858329026 EAN 5032037095198 MOQ 1 Product type Spare FRU	Spare node power board (compute module power docking board) for Intel® Compute Module HNS2600BP24 product family
	Spare North America Power Cable iPC FPWRCABLENA MM# 879287 UPC 00735858181129 EAN 503203702015738 MOQ 1 Product type Spare FRU	Spare North America power cord
	Spare Power Distribution Board iPC FXXCRSPDB2 MM# 935576 UPC 00735858288460 EAN 5032037067782 MOQ 1 Product type Spare FRU	Spare power distribution board module including two boards, cables, a bus pair and supporting bracket, for common redundant power supply 2130 W of Intel® Server Chassis H2000P product family

Intel® Server S2600BP Product Family Configuration Guide

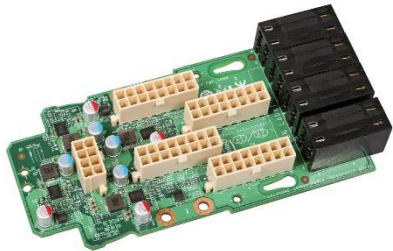
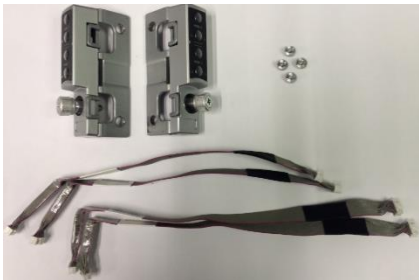
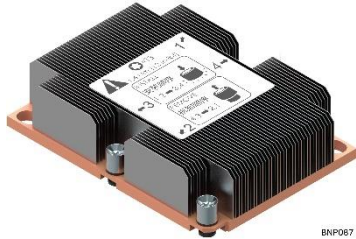
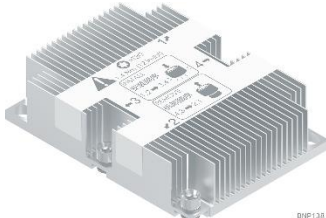
Image	Details	Description
	Spare Power Interposer Board Module iPC FXXCRPSPIB MM# 943484 UPC 00735858302722 EAN 5032037077507 MOQ 1 Product type Spare FRU	Spare power interposer board module for Intel® Server Chassis H2224XXLR3 Includes: • (1) bracket • (1) 5 V power cable • (1) power interposer board
	Spare Front Control Panel Kit iPC FH2000FPANEL2 MM# 935578 UPC 00735858288415 EAN 5032037067737 MOQ 1 Product type Spare FRU	Spare front control panel kit (2 mini-front panel boards and rack handle assembly, etc.) for Intel® Server Chassis H2000P product family
	Spare 1U Standard Rear Heat Sink iPC FXXHP78X108HS MM# 956548 UPC 00735858337595 EAN 5032037100274 MOQ 1 Product type Spare FRU	1U standard Cu/Al 78 mm x 108 mm 53fin heat sink (rear heat sink) – CPU 1 use only
	Spare 1U Standard Front Heat Sink iPC FXxEA78X108HS This part is no longer available to order. Refer to replacement heat sink model MM# 964013.	1U standard Ex-Al 78 mm x 108 mm heat sink (front heat sink) – CPU 2 use only

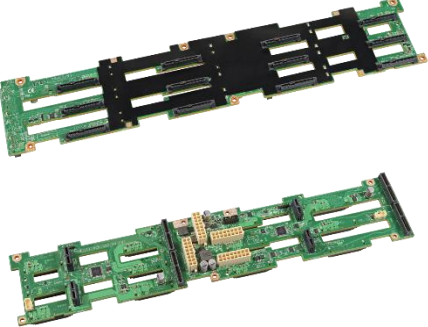
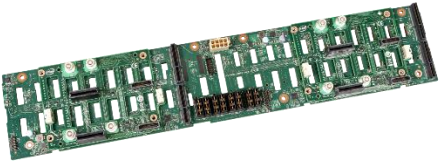
Image	Details	Description
 ISNP197	Spare 1U Standard Front Heat Sink iPC FXX2678X108HS MM# 964013 UPC 00735858366168 EAN 5032037120845 MOQ 1 Product type Spare FRU	1U standard Cu/Al 78 mm x 108 mm 26fin heat pipe – heat sink (rear heat sink) – CPU 2 use only
	Spare 12 x 3.5" Backplane iPC FHW12X35HS12G MM# 935567 UPC 00735858288446 EAN 5032037067768 MOQ 1 Product type Spare FRU	12 Gb SAS/SATA 12 x 3.5" spare backplane for Intel® Server Chassis H2312XXLR3
	Spare 24 x 2.5" Backplane Kit iPC FHW24X25HSBP MM# 948934 UPC 00735858343695 EAN 5032037104692 MOQ 1 Product type Spare FRU	12 Gb SAS/SATA 24 x 2.5", spare backplane for Intel® Server Chassis H2224XXLR3 Includes: • (1) backplane board • (2) backplane interposer boards
	Spare Dual Rotor Fan iPC FXX4056DRFAN2 MM# 935566 UPC 00735858288439 EAN 5032037067751 MOQ 1 Product type Spare FRU	40 x 56 mm dual rotor fan spare

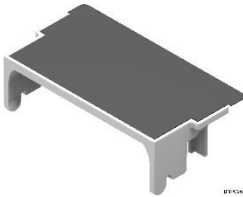
Image	Details	Description
	2130 W AC Common Redundant Power Supply iPC FXX2130PCRPS MM# 948196 UPC 00735858311939 EAN 5032037084062 MOQ 1 Product type Spare FRU	2130 W AC common redundant power supply, 80 PLUS* Platinum efficiency
	Processor Clip iPC FXXCPUCLIP MM# 958248 UPC 00735858344425 EAN 5032037105217 MOQ 2 Product type Spare FRU	Spare processor clips Includes: (1) standard processor clip
	Fabric Processor Clip iPC FXXCPUCLIPF MM# 958275 UPC 00735858344432 EAN 5032037105224 MOQ 2 Product type Spare FRU	Spare fabric processor clip Includes: (1) fabric processor clip
	Bolster Plate Insulator Cover for CPU1 iPC AXXPBPINSCOV MM# 958483 UPC 00735858344388 EAN 5032037105170 MOQ 1 Product type Spare FRU	(1) bolster plate insulator cover for CPU #1 processor socket

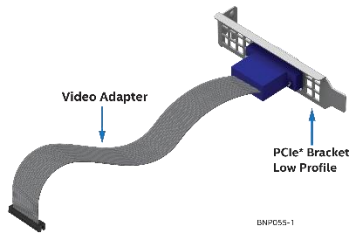
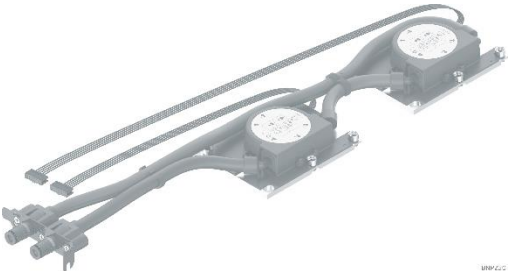
Image	Details	Description
 Diagram showing a Video Adapter connected to a PCIe Bracket Low Profile. The part number BNP055-1 is visible.	VGA Cable Bracket iPC AXXBPVIDCBL MM# 958366 UPC 00735858344364 EAN 5032037105156 MOQ 1 Product type Spare FRU	(1) VGA cable bracket accessory Note: No VGA video connector can be installed in riser slot #1 of the liquid cooling Intel® Compute Module HNS2600BPBLC(R) and HNS2600BPBLC24(R).
 Diagram showing a 2.5 inch toolless hot swap drive carrier.	2.5" Toolless Hot Swap Drive Carrier iPC FXX25HSCAR3 MM# 958244 UPC 00735858345668 EAN 5032037106153 MOQ 1 Product type Spare FRU	Spare 2.5" toolless drive hot swap carrier
 Diagram showing a 3.5 inch toolless hot swap drive carrier.	3.5" Toolless Hot Swap Drive Carrier iPC FXX35HSCAR2 MM# 958245 UPC 00735858345675 EAN 5032037106160 MOQ 1 Product type Spare FRU	Spare 3.5" toolless drive hot swap drive carrier Includes mounting screws for mounting 2.5" SSDs.
 Diagram showing the D2C liquid cooling kit assembly.	D2C Liquid Cooling Kit iPC AXXBPBLCKIT This part is no longer available to order, see PCN 117582-00 for details.	D2C liquid cooling kit exclusively for Intel® Compute Modules HNS2600BPBLC(R) and HNS2600BPBLC24(R) Kit includes: • Pump and cold plate assembly • Liquid tubes • Liquid coolant (contained in the tubes) • Quick connectors Note: The server cooler kit is delivered fully assembled and the assembly filled with liquid coolant.

Image	Details	Description
 Ref # BKP4006	Liquid Cooling Loop Kit iPC AXXBPCTKIT MM# 99AF68 UPC 00735858484541 EAN 5032037221368 MOQ 1 Product type Spare FRU	liquid cooling loop kit exclusively for Intel® Compute Module HNS2600BPB(R)CT Kit includes: • Cold plate assembly • Liquid tubes • Liquid coolant (contained in the tubes) • Quick connectors • Chassis bracket with VGA support for tubes Note: The server cooler kit is delivered fully assembled and the assembly filled with liquid coolant.

6. Extended Warranty

Table 38. Extended warranty options

Image	Details	Description
	Intel® Server System Extended Warranty iPC SVCEWHWSY MM# 923113 MOQ 1 Product type Extended warranty	Two year extended warranty for Intel® Server Systems or Intel® Sever Chassis with four Intel® Compute Modules.
	Intel® Server Board Extended Warranty iPC SVCEWDPBD MM# 911294 MOQ 1 Product type Extended warranty	Two year extended warranty for Intel® Server Boards supporting two processors.
	Intel® Compute Module Extended Warranty iPC SVCEWHWB MM# 914905 MOQ 1 Product type Extended warranty	Two year extended warranty for single Intel® Compute Module.

Appendix A. Glossary

Term	Definition
AIC	Add-in Card
BOM	Bill of Materials
CRPS	Common Redundant Power Supply
DDDC	Double Device Data Correction
EAN	International Article Number (Barcode)
ECC	Error Correcting Code
EMI	Electromagnetic Interference
FRU	Field-Replaceable Unit
iPC	Intel Product Code –used to identify an orderable Intel product
iPN	Intel Product Number –an internal part number for a component in a product BOM. Individual iPNs are orderable only if included in an orderable iPC.
JBOD	Just a bunch of drives
KVM	Keyboard, Video, Mouse
MM#	Master Material order number –used to identify an orderable Intel product.
MOQ	Minimum Order Quantity
NVMe*	NVM Express* – based on Non-Volatile Memory Host Controller Interface Specification (NVMHCI)
Intel® OP HFI	Intel® Omni-Path Host Fabric Interface
Optional Accessory	Hardware that can be added to the system to enhance the default feature set of the shipping configuration
Intel® QAT	Intel® QuickAssist Technology
RAID	Redundant Array of Independent Drives
Required Option	Hardware that must be added to the shipping configuration for the system to operate
RMFBU	RAID Maintenance Free Backup Unit
Intel® RMM4 Lite	Intel® Remote Management Module 4 Lite Activation key
PCN	Product Change Notification
ROC	RAID on Chip
SAS	Serial Attached SCSI
SATA	Serial ATA
SFP	Small Form factor Pluggable
SKU	Stock Keeping Unit
SSD	Solid State Drive
TPM	Trusted Platform Manager
UPC	Universal Product Code (Barcode)
Intel® VROC	Intel® Virtual RAID on CPU