



**Intel® Server Board S2600KP Product Family**

**Intel® Compute Module HNS2600KP Product Family**

**Intel® Server Chassis H2000G Product Family**

## **Spares/Accessories List and Configuration Guide**

A reference guide to assist with ordering parts and accessories available to configure an Intel sever system based on the Intel® Server Board S2600KP Product Family.

Revision 2.1  
January 2016

Intel® Server Boards and Systems



## ***Document Revision History***

Date-Published	Revision	Revision-Change-Description
May 13	Rev. 0.1	Initial release for Alpha
Nov. 13	Rev. 0.61	Updated product code name
Dec. 13	Rev. 0.62	Updated some description
Jan. 14	Rev. 0.66	Updated product code for accessory and spare parts
Apr. 14	Rev. 0.8	Updated description and add some pictures
June 14	Rev. 0.83	Updated some MOQ
July 14	Rev. 0.9	Updated UPC, EAN
Aug. 14	Rev. 0.95	Added some bridge boards and update some description
Sep. 14	Rev. 1.00	Production Candidate
Nov. 14	Rev. 1.1	Added some new accessories
Dec. 14	Rev. 1.2	Updated IO module part
Mar. 15	Rev. 1.3	Updated UPC, EAN
May 15	Rev. 1.4	Added 40G IOM support, update 12G RAID adapters
Aug 15	Rev. 1.5	<ul style="list-style-type: none"> <li>• Removed 6G SAS bridge board, 6G SAS controller RMS25KB040, RS25FB044</li> <li>• Added AXXFULLRAIL premium quality rail</li> </ul>
Sep 15	Rev.1.51	Added AXXKPTPM2IOM
Dec 15	Rev. 2.0	<ul style="list-style-type: none"> <li>• Applied the new format</li> <li>• Complemented missing data</li> </ul>
Jan 16	Rev 2.1	<ul style="list-style-type: none"> <li>• Updated product code and the other order infomation</li> <li>• Updated processor product family supported</li> <li>• Removed I/O Module AXX1P40FRTIOM and AXX2P40FRTIOM</li> </ul>

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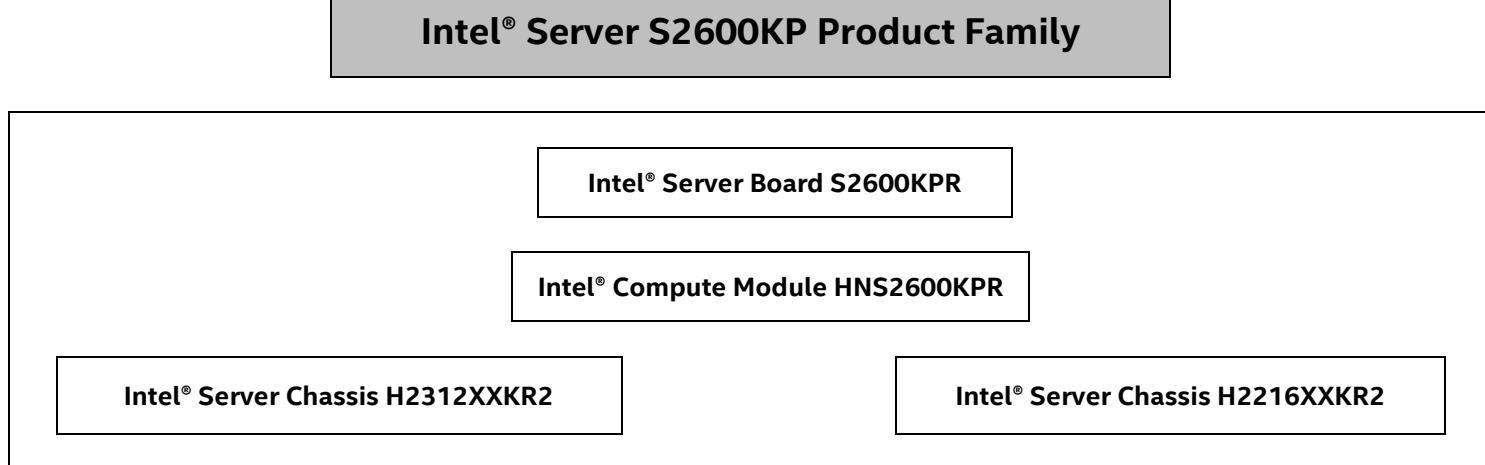
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# 1. Intel® Server Family Overview

This document is provided to assist Intel customers with identifying the right Intel® server system and available accessories, enabling them to create a unique server platform that meets their unique server requirements.

The Intel® S2600KP product family is offered as building block. The product family consists of the following:



Server Building Blocks:

- **Intel® Server Board S2600KPR** – Server Board only (Building block option and spare FRU)
- **Intel® Server Chassis H2000G product family** – 2U Rack Mount Server Chassis
- **Intel® Compute Module HNS2000KP product family** – Compute Module integrated with an Intel® Server Board S2600KP

The Intel® S2600KP product family supports the following processors and memory:

- Intel® Xeon® processor E5-2600 v3
  - **Note: Previous generation Intel® Xeon® processors are not supported.**
- DDR4 ECC RDIMM 1600, 1866, 2133 MT/s
- DDR4 ECC LRDIMM 1600, 1866, 2133 MT/s

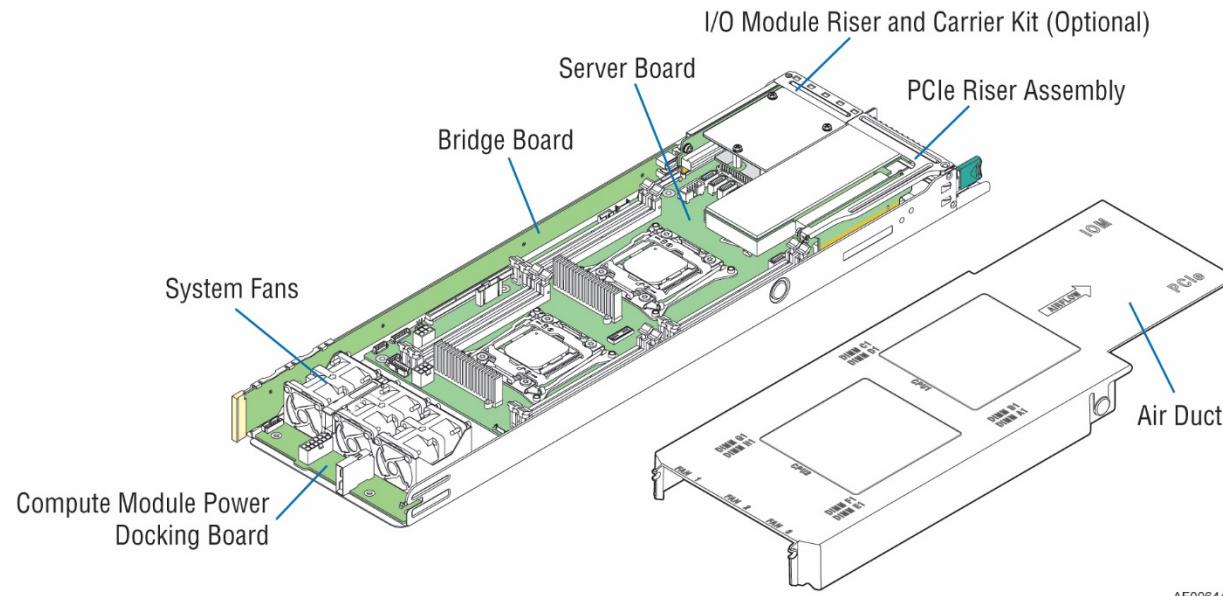
## Additional Information and Software

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>.

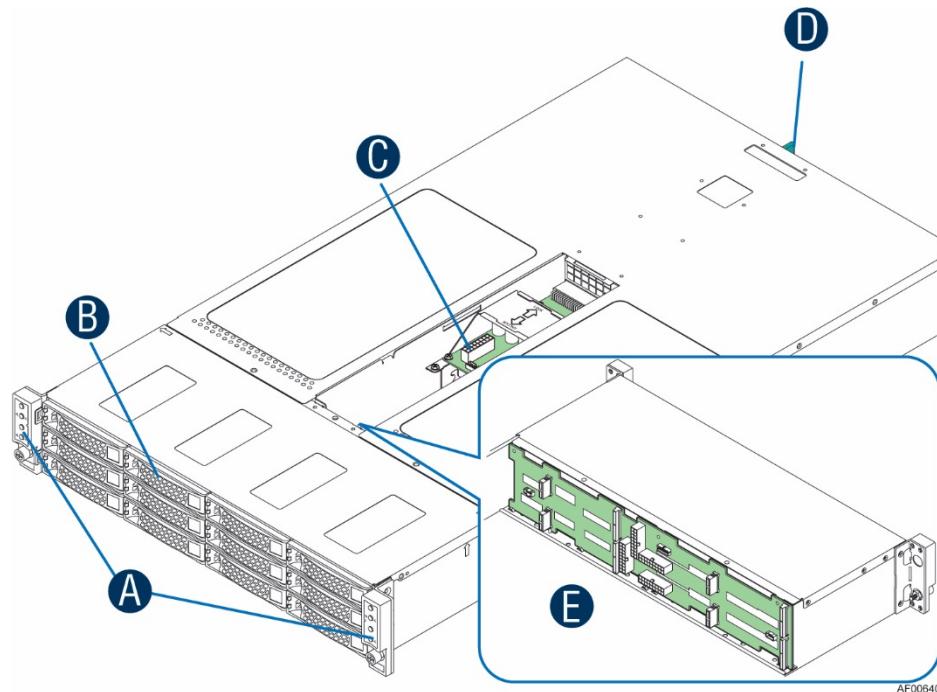
**Table 1. Product Family Reference Collaterals**

For this information or software	Use this Document or Software
For in-depth technical information about this product family	<ul style="list-style-type: none"> <li>• Intel® Server Board S2600KPR Technical Product Specification</li> <li>• Intel® Server System H2000G Product Family Technical Product Specification</li> <li>• Intel® Remote Management Module 4 (Intel® RMM4) and Integrated BMC User Guide</li> <li>• Intel® Remote Management Module 4 Technical Product Specification</li> <li>• Intel® I/O Expansion Modules Hardware Specification</li> <li>• Intel® Server System BIOS Setup Utility Guide</li> <li>• Intel® Server Platform Firmware Specification Update</li> <li>• Product Safety and Regulatory Compliance - Intel® Xeon® Processor E5-2600 v3/v4 <a href="http://www.intel.com/p/en_US/support/highlights/server/s2600kp?wapkw=s2600kp+family">http://www.intel.com/p/en_US/support/highlights/server/s2600kp?wapkw=s2600kp+family</a></li> </ul>
For system integration instructions and service guidance	Intel® Server System H2000KPR product family System Integration and Service Guide <a href="http://www.intel.com/p/en_US/support/highlights/server/s2600kp?wapkw=s2600kp+family">http://www.intel.com/p/en_US/support/highlights/server/s2600kp?wapkw=s2600kp+family</a>
For server configuration guidance and compatibility	Intel® Server Configurator tool <a href="http://serverconfigurator.intel.com">http://serverconfigurator.intel.com</a>
For system power budget guidance	Intel® Server Board S2600KP Product Family Power Budget Tool <a href="https://downloadcenter.intel.com/product/78562/Intel-Server-Board-S2600KP-Family">https://downloadcenter.intel.com/product/78562/Intel-Server-Board-S2600KP-Family</a>
For system firmware updates, onboard device drivers, and software to manage your Intel® Server System.	<a href="https://downloadcenter.intel.com/product/78562/Intel-Server-Board-S2600KP-Family">https://downloadcenter.intel.com/product/78562/Intel-Server-Board-S2600KP-Family</a>
For a complete list of supported processors, memory, add-in cards, and peripherals:	<a href="http://www.intel.com/p/en_US/support/category/server/s2600kp/doc_guide#">http://www.intel.com/p/en_US/support/category/server/s2600kp/doc_guide#</a>



AF006448

Figure 1. Intel® Compute Module HNS2600KPR Feature Set Identification



AF006407

Label	Description
A	Front control panel
B	Drive bays
C	Power distribution module
D	Power supply modules
E	Hot-swap backplane (attached to the drive cage)

Figure 2. Intel® Server Chassis H2000G Feature Set Identification

## 1.1 Product Family Summary Chart

The Intel® S2600KP product family is built around either of two Intel® Server Board S2600KPR options: BBS2600KPR and BBS2600KPFR. The feature set of each server board option is identical except for the integrated InfiniBand\*.

The **S2600KPR** SKU does not offer an integrated InfiniBand\*.

The **S2600KPFR** SKU offers an integrated InfiniBand\*.

The following tables provides an overview of available Intel product codes for building blocks within the Intel® S2600KP 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.

Table 2. Server Board Product Family Summary

Intel Product Code	# of CPU sockets	# of DIMM Slots	# of Riser Slots	Onboard RJ45 LAN ports (1 Gb)	# of SATA ports (6 Gb/s)	Integrated InfiniBand*	Intel® I/O Module support
<b>Server Board only</b>							
BBS2600KPR	2	8	3	2	4	NA	Yes
BBS2600KPFR	2	8	3	2	4	Yes (FDR 56Gb/s)	Yes

Table 3. Compute Module Product Family Summary

Intel Product Code	Server board	Form Factor	# of Heat Sinks	# of Fans	# of Riser Slots	Bridge board	Air Duct
HNS2600KPR	Yes (BBS2600KPR)	1U	2	3	2 <sup>1</sup>	6G/s	Yes
HNS2600KPFR	Yes (BBS2600KPFR)	1U	2	3	2 <sup>1</sup>	6G/s	Yes

### Table NOTE:

1 – One riser card with bracket in riser slot 1 to support one PCIe® 3.0x16 low profile card. One I/O module riser and carrier kit in riser slot 2 to support an Intel® I/O Expansion Module (optional). Riser slot 3 cannot be used with bridge board installed.

**Table 4. Server Chassis & Server System Product Family Summary**

Intel Product Code	Chassis Form Factor	Drive Form Factor	# of Drives (front)	Power Supply Modules	Rails
<b>Chassis Only (KDK)</b>					
H2312XXKR2	2U	3.5"	12	2x1600W AC	Opt
H2216XXKR2	2U	2.5"	16	2x1600W AC	Opt

Terms used in the table:

**NA** – Not Applicable

**Opt** – Accessory option sold separately

**Yes** – Option included

**KDK** – Knock Down Kit – Intel PCSD term for chassis only product

**BIK** – Server Board in KDK – Intel PCSD term for integrated (L6) system product

**L6** – Integrated system with no processors, memory, or storage devices

## 2. Server Building Block Configuration

Server building blocks are offered to give Intel customers the option to configure and assemble a unique server system from the bare chassis up. Each building block component and optional accessory is purchased separately. At a minimum, building up a functional server system using building blocks will require the following:

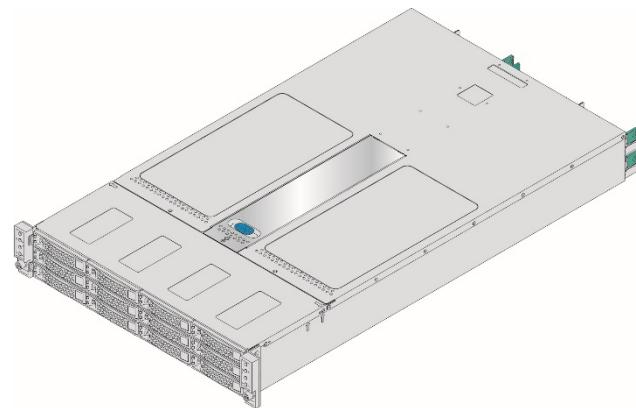
- Intel® Server Chassis H2000G
- Intel® Compute Module HNS2600KPR – HNS2600KPR or HNS2600KPFR
- Power cord(s)

**NOTE:** Chassis shipped to the US & Canada will contain North American power cords.

- Processor
- Memory
- Storage Drives



**Intel® Compute Module  
HNS2600KPFR**



**Intel® Server Chassis H2000G**



**Intel® Server Board S2600KPR**

Optional Intel accessories that can be added include the following: See chapter 3 for available options.

- Riser cards options
- SAS / SAS RAID support – PCIe\* add-in card or module + Appropriate SAS Data cable(s)
- Intel® I/O Module
- Intel® Remote Management Module 4 Lite

## 2.1 Intel® Server Board S2600KP Product Family SKUs

Table 5. Intel® Server Board S2600KP Product Family SKUs

Intel Product Code (iPC)	Order Information	Product Description	Product Type
<b>iPC – BBS2600KPR</b> 	MM# - 943789 UPC - 00735858308908 EAN - 5032037081665 MOQ - 10  <b>Packaged Gross Weight 10 Kgs, 22 Lbs</b>  <b>Un-packaged Net Weight 12.8 Kgs, 28.2 Lbs</b>	<p style="text-align: center;"><b>Intel® Server Board BBS2600KPR</b></p> <ul style="list-style-type: none"> <li>• 6.4" W x 17.7" L</li> <li>• Support for dual Intel® Xeon E5-2600 v3/v4 processor family</li> <li>• 8 DDR4 DIMM Slots</li> <li>• 4 x 6Gb/s SATA ports from secondary AHCI controller and 1 x SATA DOM port</li> <li>• 2 Integrated 1Gb ports (Intel® Ethernet Controller I350)</li> <li>• 2 PCIe* 3.0 x24 capable slots and 1 PCIe* 3.0 x16 capable slot (not PCI-SIG* compatible)</li> <li>• Integrated Baseboard Management controller with IPMI 2.0 support</li> <li>• Optional advanced management features activated by AXXRMM4LITE key</li> <li>• Dedicated 1Gb management port onboard</li> <li>• Support for Intel® I/O expansion module option</li> <li>• Support for Intel® SAS module option</li> </ul> <p><b>Box includes:</b> one server board  <b>NOTE:</b> All necessary mounting hardware, cabling, and shielding will ship with the Intel chassis and optional accessory kits.</p>	<b>Server Board only</b> <ul style="list-style-type: none"> <li>• Building block option</li> <li>• Spare FRU</li> </ul>
<b>iPC – BBS2600KPFR</b> 	MM# - 943790 UPC - 00735858308915 EAN - 5032037081672 MOQ - 10  <b>Packaged Gross Weight 10.4 Kgs, 22.9 Lbs</b>  <b>Un-packaged Net Weight 13.2 Kgs, 29.1 Lbs</b>	<p style="text-align: center;"><b>Intel® Server Board BBS2600KPFR</b></p> <ul style="list-style-type: none"> <li>• 6.4" W x 17.7" L</li> <li>• Support for dual Intel® Xeon E5-2600 v3/v4 processor family</li> <li>• 8 DDR4 DIMM Slots</li> <li>• 4 x 6Gb/s SATA ports from secondary AHCI controller and 1 x SATA DOM port</li> <li>• 2 Integrated 1Gb ports (Intel® Ethernet Controller X-540)</li> <li>• 2 PCIe* 3.0 x24 capable slots and 1 PCIe* 3.0 x16 capable slot (not PCI-SIG* compatible)</li> <li>• Integrated Baseboard Management controller with IPMI 2.0 support</li> <li>• Optional advanced management features activated by AXXRMM4LITE key</li> <li>• Dedicated 1Gb management port</li> <li>• Support for Intel® I/O expansion module option</li> <li>• Support for Intel® SAS module option</li> <li>• <b>Single InfiniBand* FDR IB port (Connect-IB* x8, QSFP+)</b></li> </ul> <p><b>Box includes:</b> one server board  <b>NOTE :</b> All necessary mounting hardware, cabling, and shielding will ship with the Intel chassis and optional accessory kits.</p>	<b>Server Board Only</b> <ul style="list-style-type: none"> <li>• Building block option</li> <li>• Spare FRU</li> </ul>

## 2.2 Intel® Compute Module HNS2000KP Product Family SKUs

Table 6. Intel® Server Compute Module HNS2600KP Product Family SKUs

Intel Product Code (iPC)	Order Information	Product Description	Product Type
<b>iPC - HNS2600KPR</b> 	MM# - 943787 UPC - 00735858309271 EAN - 5032037081863 MOQ - 1  Packaged Gross Weight <b>3.4 Kgs, 7.5 Lbs</b>  Un-packaged Net Weight <b>4.6 Kgs, 10.1 Lbs</b>	<p style="text-align: center;"><b>Intel® Compute Module HNS2600KPR</b></p> <p>(1) – Intel® Server Board S2600KPR included  (1) – Node Power Board – iPC FH2000NPB2  (1) – 6Gb/s Bridge Board – iPC FHWKPTPBGB  (1) – Slot1 riser card – iPC FHW1U16RISER2  (3) – 40x56mm dual rotor fans FXX4056DRFAN2  (1) – 1U passive heat sinks <ul style="list-style-type: none"> <li>• (1) Front heat sink - iPC FXXEA91X91HS2</li> <li>• (1) Rear heat sink - iPC FXXCA91X91HS</li> </ul> (1) – Air duct  (1) – 1U node tray</p>	<p><b>Server Board only</b></p> <ul style="list-style-type: none"> <li>• Building block option</li> <li>• Spare FRU</li> </ul>
<b>iPC - HNS2600KPFR</b> 	MM# - 943788 UPC - 00735858309288 EAN - 5032037081870 MOQ - 1  Packaged Gross Weight <b>3.4 Kgs, 7.5 Lbs</b>  Un-packaged Net Weight <b>4.6 Kgs, 10.1 Lbs</b>	<p style="text-align: center;"><b>Intel® Compute Module HNS2600KPFR</b></p> <p>(1) – Intel® Server Board S2600KPFR included  (1) – Node Power Board – iPC FH2000NPB2  (1) – 6Gb/s Bridge Board – iPC FHWKPTPBGB  (1) – Slot1 riser card – iPC FHW1U16RISER2  (3) – 40x56mm dual rotor fans FXX4056DRFAN2  (1) – 1U passive heat sinks <ul style="list-style-type: none"> <li>• (1) Front heat sink - iPC FXXEA91X91HS2</li> <li>• (1) Rear heat sink - iPC FXXCA91X91HS</li> </ul> (1) – Air duct  (1) – 1U node tray</p>	<p><b>Server Board Only</b></p> <ul style="list-style-type: none"> <li>• Building block option</li> <li>• Spare FRU</li> </ul>

## 2.3 Intel® Chassis H2000G Product Family SKUs

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:

- 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
- **Optional Accessories** – Some of the available accessories which can be installed to enhance the basic feature set of the server board / chassis.

Additional accessories can be found in Chapter 3.

### NOTES:

- Each **required item** and **optional accessory** is sold separately from the specified Intel server building block.
- Items identified as **iPC** (Intel Product Code), are an orderable building block option, accessory or spare FRU.
- In an effort to provide the complete product bill of materials, the ship along components list in each product table will 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 a spare or accessory.

Table 7. Intel® Server Chassis H2000G Product Family SKUs

<b>Intel Product Code (iPC):</b> <b>iPC - H2312XXKR2</b> 	<b>Order Code Information:</b> MM# - 933689 UPC - 735858288347 EAN - 5032037067669 MOQ - 1	Product Type: <b>Chassis Only</b> Chassis Form Factor: <b>2U rack mount</b> Chassis dimensions: <b>L=771mm, W=438mm, H=86.9mm</b> Packaged Gross Weight: <b>29.5 Kgs, 65 Lbs</b> Un-packaged Net Weight: <b>21.5 Kgs, 47.4 Lbs</b> Outer Box Dimensions: <b>L=984mm, W=578mm, H=266mm</b>
<b>Product Definition and Configuration Requirements</b>		
<p>Intel product code <b>H2312XXR2</b> includes the following components:</p> <ul style="list-style-type: none"> <li>(1) – 2U Chassis with Quick Reference Label affixed to top cover</li> <li>(1) - Pre-installed Standard Control Panel assembly (board only) – iPC <b>FH2000FPANEL2</b></li> <li>(1) - Power Distribution Board – iPC <b>FXXCRPSPDB2</b></li> <li>(2) - 1600W 80 PLUS Platinum PSUs – iPC <b>FX1600PCRPS</b></li> <li>(4) – 3.5" Hot-swap drive bays with drive carriers and drive blanks, includes:           <ul style="list-style-type: none"> <li>• (1) 12 Gb SAS backplane – iPC <b>FHW12X35HS12G</b></li> <li>• (12) 3.5" hot swap drive carriers – iPC <b>FX35HSCAR</b></li> </ul> </li> <li>(4) - Blank node fillers</li> <li>(1) – Basic rack rail – iPC <b>AXXELVRAIL</b></li> </ul> <p><b>NOTE:</b> The rail kit only supports specific rack type with 3/8" square and 7.1mm round holes</p> <ul style="list-style-type: none"> <li>(1) – Power Supply Bay blank insert</li> <li>(8) – DIMM slot blanks – iPN H43597-00x</li> <li>(2) – Chassis handles (1 set) installed – iPN H19171-00x</li> <li>(2) – AC Power Cord retention strap assembly – iPN H23961-00x</li> </ul> <p>Server board and riser card mounting screws Spares for each screw type included</p>	<p><b>Required Items – Sold Separately:</b></p> <ul style="list-style-type: none"> <li>• Intel® Compute Module HNS2600KP (choose one)           <ul style="list-style-type: none"> <li>◦ iPC <b>HNS2600KPR</b> – without an integrated InfiniBand*</li> <li>◦ iPC <b>HNS2600KPFR</b> – with an integrated InfiniBand*</li> </ul> </li> <li>• Power Cord(s) – See Chapter 5. <b>NOTE:</b> Chassis shipped to the US &amp; Canada will contain North American power cords.</li> <li>• 1 or 2 Intel® Xeon® Processor E5-2600 v3/v4 product family</li> <li>• ECC DDR4 memory (RDIMM or LRDIMM)</li> </ul>	<p><b>Optional Intel Accessories – Sold Separately:</b></p> <ul style="list-style-type: none"> <li>• iPC <b>F1UL16RISER2</b> – One x16 PCIe* 3.0 slot Riser Card – (1 for each riser slot)</li> <li>• Intel® I/O Module – See Chapter 3.4 for options</li> <li>• Intel® SAS RAID Card / Module – See Section 3.5 for options</li> <li>• iPC <b>A2UBEZEL</b> – Lockable front system bezel</li> <li>• iPC <b>AXXRMM4LITE</b> – Intel® Remote Management Module Lite key. For advanced management features</li> <li>• Storage Drives</li> </ul> <p>See Chapter 5 for all available accessory options.</p>

<b>Intel Product Code (iPC):</b> <b>iPC - H2216XXKR2</b> 	<b>Order Code Information:</b> MM# - 933688 UPC - 735858288354 EAN - 5032037067676 MOQ - 1	<b>Product Type: Chassis Only</b> Chassis Form Factor: <b>2U rack mount</b> Chassis dimensions: <b>L=733mm, W=438mm, H=86.9mm</b> Packaged Gross Weight: <b>28.4 Kgs, 62.6 Lbs</b> Un-packaged Net Weight: <b>20.5 Kgs, 45.2 Lbs</b> Outer Box Dimensions: <b>L=984mm, W=578mm, H=266mm</b>
<b>Product Definition and Configuration Requirements</b>		
<p>Intel product code <b>H2216XXKR2</b> includes the following components:</p> <ul style="list-style-type: none"> <li>(1) – 2U Chassis with Quick Reference Label affixed to top cover</li> <li>(1) - Pre-installed Standard Control Panel assembly (board only) – iPC <b>FH2000FPANEL2</b></li> <li>(1) - Power Distribution Board – iPC <b>FXXCRPSPDB2</b></li> <li>(2) - 1600W 80 PLUS Platinum PSUs – iPC <b>FXX1600PCRPS</b></li> <li>(4) – 2.5" Hot-swap drive bays with drive carriers and drive blanks, includes: <ul style="list-style-type: none"> <li>• (1) 12 Gb SAS backplane – iPC <b>FHW16X25HS12G</b></li> <li>• (16) 2.5" hot swap drive carriers – iPC <b>FX25HSCAR</b></li> </ul> </li> <li>(4) - Blank node filters</li> <li>(1) – Basic rack rail – iPC <b>AXXELVRAIL</b></li> </ul> <p><b>NOTE:</b> The rail kit only supports specific rack type with 3/8" square and 7.1mm round holes</p> <ul style="list-style-type: none"> <li>(1) – Power Supply Bay blank insert</li> <li>(8) – DIMM slot blanks – iPN H43597-00x</li> <li>(2) – Chassis handles (1 set) installed – iPN H19171-00x</li> <li>(2) – AC Power Cord retention strap assembly – iPN H23961-00x</li> </ul> <p>Server board and riser card mounting screws Spares for each screw type included</p>	<p><b>Required Items – Sold Separately:</b></p> <ul style="list-style-type: none"> <li>• Intel® Compute Module HNS2600KP (choose one) <ul style="list-style-type: none"> <li>◦ iPC <b>HNS2600KPR</b> – without an integrated InfiniBand*</li> <li>◦ iPC <b>HNS2600KPFR</b> – with an integrated InfiniBand*</li> </ul> </li> <li>• Power Cord(s) – See Chapter 5.</li> </ul> <p><b>NOTE:</b> Chassis shipped to the US &amp; Canada will contain North American power cords.</p> <ul style="list-style-type: none"> <li>• 1 or 2 Intel® Xeon® Processor E5-2600 v3/v4 product family</li> <li>• ECC DDR4 memory (RDIMM or LRDIMM)</li> </ul>	<p><b>Optional Intel Accessories – Sold Separately:</b></p> <ul style="list-style-type: none"> <li>• iPC <b>F1UL16RISER2</b> – One x16 PCIe* 3.0 slot Riser Card – (1 for each riser slot)</li> <li>• Intel® I/O Module – See Chapter 3.4 for options</li> <li>• Intel® SAS RAID Card / Module – See Section 3.5 for options</li> <li>• iPC <b>A2UBEZEL</b> – Lockable front system bezel</li> <li>• iPC <b>AXXRMM4LITE</b> – Intel® Remote Management Module Lite key. For advanced management features</li> <li>• Storage Drives</li> </ul> <p>See Chapter 5 for all available accessory options.</p>

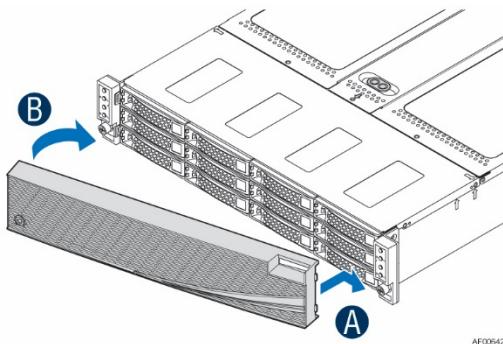
## 3. Server System Configuration Options

### 3.1 Locking Front Bezel Accessory Kit

The Front Bezel is made of back molde plastic and uses a snap-on design. When installed, its design allows for maximum airflow to maintain system cooling requirments. The front bezel includes a keyd locking mechanism which can be used to prevent unauthorized access to installed storage devices and front I/O ports.

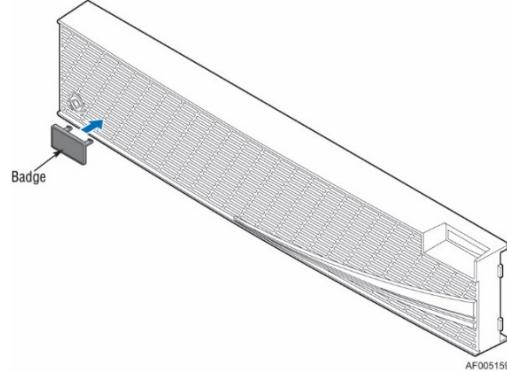
**Table 8. List of Front Bezel Accessory Kit**

Intel Product Code	Order Information	Product Description	Product Type
iPC - A2UBEZEL 	MM# - 918086 UPC - 00735858241137 EAN - 5032037035880 MOQ - 1	<b>2U Bezel A2UBEZEL</b> 2U locking bezel with two branding clip-on inserts	<ul style="list-style-type: none"> <li>Accessory kit</li> </ul>



**Figure 3. Installing the Front Bezel to the Chassis**

The face of the bezel assembly includes snap-in identification badge options and a wave feature option to allow for customize.

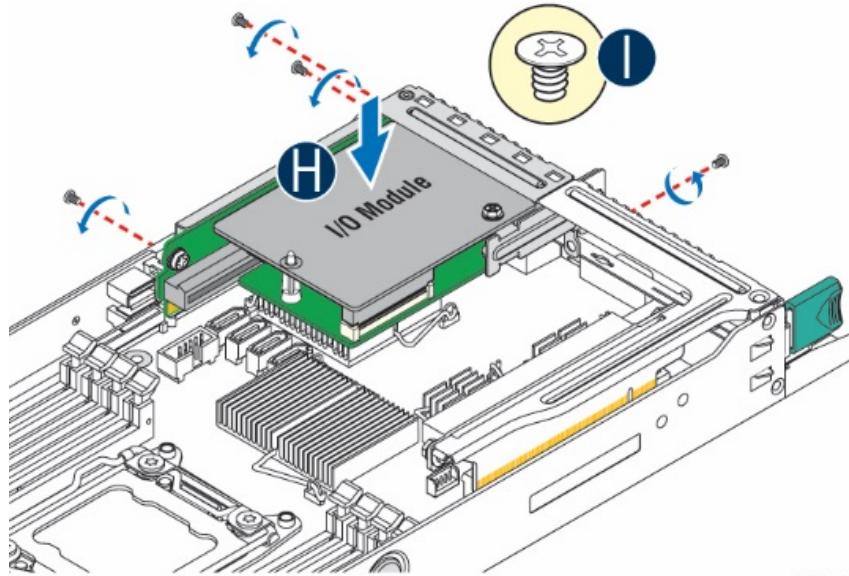


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Figure 4. Installing the Snap-on to the Front Bezel

### 3.2 Intel® I/O Expansion Modules

The Intel® S2600KP product family includes supports for a number of optional Intel® I/O Module that install proprietary connectors on the server board leaving available PCIe\* add-in cards slot available for other add-in cards options.



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Figure 5. Intel® I/O Module Installation

#### **IMPORTANT NOTICE:**

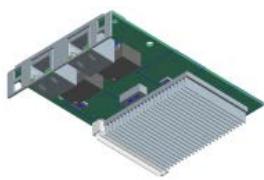
All below I/O modules MUST have **AXXKPTPIOM** (MM# 935524) pre-installed in system.

Table 9. List of Intel® I/O Expansion Modules

**Intel® Server S2600KP Product Family Configuration Guide and Spares/Accessories List**

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC -AXXKPTPIOM</b> 	MM# -935524 UPC – 00735858288385 EAN – 5032037067706 MOQ – 1	<b>Intel® I/O Modules AXXKPTPIOM</b> PCI Express x16 (200 pin) rIOM riser and rIOM carrier board kit for supporting Intel® I/O module (on slot 2) for Intel® Compute Module HNS2600KP Product Family or Intel® Compute Module HNS2600TP Product Family  <b>NOTE:</b> Intel® I/O modules must have AXXKPTPIOM pre-installed. The production compute module and chassis configurations do <b>NOT</b> include AXXKPTPIOM.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC -AXXKPTPM2IOM</b> 	MM# -943483 UPC – 00735858302715 EAN – 5032037077491 MOQ – 1	<b>Intel® I/O Modules AXXKPTPM2IOM</b> PCI Express x16 (200 pin) rIOM riser and rIOM carrier board kit for supporting Intel® I/O module (on slot 2) and/or one SATA M.2 device for Intel® Compute Module HNS2600KPR, or Intel® Compute Module HNS2600TPR, HNS2600TP24R, HNS2600TP24SR.  1 x SATA cable included.  <b>NOTE:</b> The M.2 device installation is only supported on non-InfiniBand* skus - HNS2600KPR.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AHWKPTPBOB</b> 	MM# - 936274 UPC - 00735858288408 EAN - 5032037067720 MOQ - 1	<b>Breakout Board AHWKPTPBOB</b> Break out board accessory providing additional SATA ports for board only customers for Intel® Server Board S2600KP Product Family and Intel® Server Board S2600TP Product Family.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXX10GBNIAIOM</b> 	MM# - 917905 UPC - 735858241090 EAN - 5032037035842 MOQ - 1	<b>Dual Port Intel® 82599EB 10GbE I/O Module</b> Dual SFP+ port 10GbE IO module based on Intel® 82599 10 Gigabit Ethernet Controller  Supports direct connect or transceiver. Cables/transceivers not included.  Includes three screws.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>

**Intel® Server S2600KP Product Family Configuration Guide and Spares/Accessories List**

<b>Intel Product Code</b>	<b>Order Information</b>	<b>Product Description</b>	<b>Product Type</b>
<b>iPC - AXX10GBTWLHW3</b> 	MM# - 941868 UPC - 735858296649 EAN - 5032037072465 MOQ - 1	<b>Dual RJ-45 port 10GBASE-T IO Module</b> Dual RJ-45 port 10GBASE-T IO module, based on Intel® Ethernet Controller X540 –Available in early Q2 2015	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXX1FDRIBIOM</b> 	MM# - 918607 UPC - 735858241106 EAN - 5032037035859 MOQ - 1	<b>FDR InfiniBand* ConnectX-3* I/O Module</b> Single port, FDR 56GT/S speed Intel® I/O Expansion Infiniband* module, with QSFP connector, based on Mellanox* CX3 MT27504A1-FCCR-FV chip.  Includes three screws	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXX2FDRCIBIOM</b> 	MM# - 920627 UPC - 735858245722 EAN - 5032037040235 MOQ - 1	<b>FDR InfiniBand* ConnectX-3* I/O Module</b> Dual-port, FDR 56GT/S (per port capable) speed Infiniband* module, with QSFP connector, based on Mellanox* CX3 MT27508A1-FCCR-FV chip. <b>NOTE:</b> Due to PCIe3 x8 bandwidth limitation, both ports can't simultaneously function at full speed. Includes three screws.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXX4P1GBPWLIO</b> 	MM# - 917911 UPC - 735858241083 EAN - 5032037035835 MOQ - 1	<b>Quad Port Intel® I350-AE4 GbE I/O Module</b> Quad-port 1GbE IO Module based on Intel® Ethernet Controller I350	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>

### 3.3 Intel® SAS Bridge Board Options

The Intel® compute module HNS2600KP include a 6Gb/s bridge board which have the following upgraded options.

**Table 10. Intel® SAS Bridge Board**

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC - AHWKPTP12GBGB</b> 	MM# - 935580 UPC - 735858288484 EAN - 5032037067805 <b>MOQ - 1</b>	<b>Spare 12Gb SAS Bridge Board AHWKPTP12GBGB</b> 12Gb SAS Bridge Board (RAID 0/1/10) for Intel® Compute Module HNS2600KP Product Family  <b>NOTE:</b> 12Gb/s LSI* SAS3008 is included on the bridge board, RAID FW is based on MegaRAID*	<ul style="list-style-type: none"> <li>Upgrade Kit</li> </ul>
<b>iPC - AHWKPTP12GBGBR5</b> 	MM# - 937453 UPC - 735858288903 EAN - 5032037068185 MOQ - 1	<b>12Gb SAS Bridge Board AHWKPTP12GBGBR5 (with RAID 5)</b> 12Gb SAS Bridge Board (RAID 0/1/10/5) for Intel® Compute Module HNS2600KP Product Family  <b>NOTE:</b> 12Gb/s LSI* SAS3008 is included on the bridge board, RAID FW is based on MegaRAID*	<ul style="list-style-type: none"> <li>Upgrade Kit</li> </ul>

### 3.4 Intel® SAS RAID Add-in Cards, Module, 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® S2600KP product family include support for the latest generation of 12Gb/s SAS Intel® RAID add-in cards, modules, expanders, and accessories. Previous 6Gb/s Intel RAID cards can also be supported. See the published Tested Hardware and OS List for a full list of validated Intel RAID cards. Additional information for Intel RAID products can be found at the following Intel web sites:

[http://www.intelraid.com/files/Intel\\_RMS3\\_Brief\\_Final.pdf](http://www.intelraid.com/files/Intel_RMS3_Brief_Final.pdf)

[http://www.intelraid.com/files/Intel-1106-RAID-Brochure\\_New2014102.pdf](http://www.intelraid.com/files/Intel-1106-RAID-Brochure_New2014102.pdf)

[http://www.intelraid.com/files/RAID\\_Matrix\\_20142.pdf](http://www.intelraid.com/files/RAID_Matrix_20142.pdf)

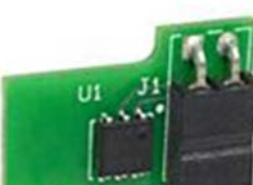
### 3.4.1 Intel® RAID Controller Add-in Cards – SAS 3.0 (12Gb/s)

Table 11. List of Intel® RAID Controller Add-in Cards – SAS 3.0 (12Gb/s)

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC - RS3GC008</b> 	MM# - 928220 UPC - 735858267175 EAN - 5032037053839 <b>MOQ - 5</b>	<p><b>Intel® RAID Controller RS3GC008</b></p> <p>Intel® RAID Controller RS3GC008  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 Connectivity)</p> <p><b>NOTE:</b> SAS Data cables not included. Must be purchased separately</p>	<ul style="list-style-type: none"> <li>Accessory Kit</li> </ul>
<b>iPC - RS3SC008</b> 	MM# - 928223 UPC - 735858266956 EAN - 5032037068567 <b>MOQ - 5</b>	<p><b>Intel® RAID Controller RS3SC008</b></p> <p>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 AXXRMFBU4.</p> <p><b>NOTES:</b>  AXXRMFBU4 support is only for server board customer, H2000G chassis cannot support it as no enough space.  SAS Data cables not included . Must be purchased separately</p>	<ul style="list-style-type: none"> <li>Accessory Kit</li> </ul>

### 3.4.2 Intel® RAID Accessoried Options

Table 12. List of Intel® RAID Accessoried Options

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC - RKSATA4R5</b> 	MM# - 916346 UPC - 735858238861 EAN - 5032037033640 MOQ - 5	<b>Intel® RAID C600 Upgrade Key RKSATA4R5</b> Raid activation key. Activates RSTe SW RAID 0/1/10/5 and LSI* SW RAID 0/1/10/5 (enables LSI* SWR5), Black.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXXRPFKSSD2</b> 	MM# - 915316 UPC - 735858221467 EAN - 5032037051699 MOQ - 5	<b>Intel® RAID SSD Cache with Fast Path *I/O</b> Upgrade Key to enable SSD Cache with Fast path I/O for Intel's RAID RS25 family of ROC products.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXXRPFKDE2</b> 	MM# - 915317 UPC - 735858221474 EAN - 5032037051705 MOQ - 5	<b>Intel® RAID Drive Encryption Management</b> Upgrade Key to enable Drive Encryption Management for Intel's RAID RS25 family of ROC products	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>
<b>iPC - AXXRPFKSNSH2</b> 	MM# - 915318 UPC - 735858221481 EAN - 5032037051712 MOQ - 5	<b>Intel® RAID Rapid Recovery Snapshot</b> Upgrade Key to enable Rapid Recovery Snapshot for Intel's RAID RS25 family of ROC products.	<ul style="list-style-type: none"> <li>• Accessory Kit</li> </ul>

### 3.5 Rack Mount kits

The Intel® S2600KP provides the upgrade option to the rack 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 systems 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 13. List of Rack Mount Kits**

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC - AXXFULLRAIL</b> 	MM# - 939209 UPC - 735858291989 EAN - 5032037070546 MOQ - 1	<p><b>2/4U Premium Rail AXXFULLRAIL (with CMA support)</b></p> <p>2U+ Premium quality rails.</p> <ul style="list-style-type: none"> <li>• Travel distance 780mm</li> <li>• Full extension from rack</li> <li>• Kit includes: Rails, screws, installation manual</li> </ul> <p>Cable Management arm cannot be supported by H2000G chassis</p>	<ul style="list-style-type: none"> <li>• Upgrade kit</li> </ul>

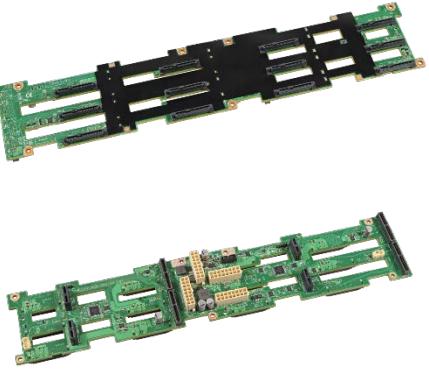
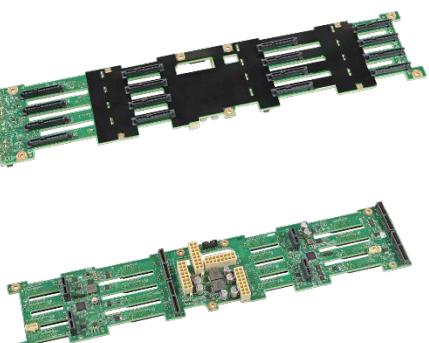
## 4. Miscellaneous Accessory Options

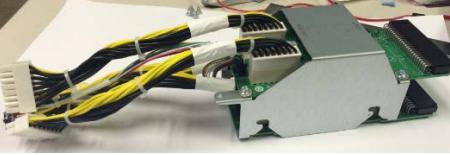
Table 14. List of Miscellaneous Accessory Options

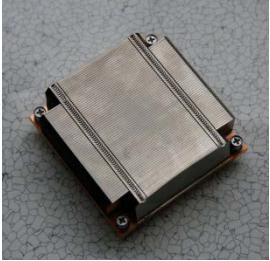
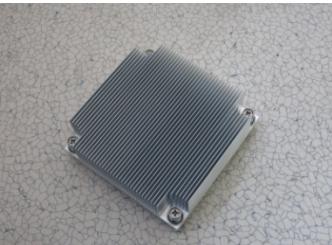
Intel Product Code	Order Information	Product Description	Product Type
iPC - AXXRMM4LITE  	MM# - 911660 UPC - 735858219297 EAN - 5032037014946 MOQ - 1	Activation key for advanced management features	<ul style="list-style-type: none"><li>• Accessory kit</li></ul>

## 5. Spare and Replacement Parts (FRUs)

Table 15. List of Spare and Replacement Parts

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC -FHW1U16RISER2</b> 	MM# – 935565 UPC – 00735858288392 EAN – 5032037067713 MOQ – 1	<b>PCI Express Riser FHW1U16RISER2 (Slot 1)</b> 1U PCI Express x16 riser card for supporting in-board low-profile PCIe card (on slot 1) on Intel® Compute Module HNS2600KP Product Family or Intel® Compute Module HNS2600TP Product Family	<ul style="list-style-type: none"> <li>Spare FRU</li> </ul>
<b>iPC - FHW12X35HS12G</b> 	MM# - 935567 UPC - 735858288446 EAN - 5032037067768 MOQ - 1	<b>Spare 12Gb SAS/SATA 12 x 3.5" Backplane</b> 12 x 3.5" spare backplane for Intel® Server Chassis H2312XXKR2.	<ul style="list-style-type: none"> <li>Spare FRU for H2312XXKR2</li> </ul>
<b>iPC - FHW16X25HS12G</b> 	MM# - 935573 UPC - 735858288453 EAN - 5032037067775 MOQ - 1	<b>Spare 12Gb SAS/SATA 16 x 2.5" Backplane</b> 16 x 2.5" spare backplane for Intel® Server Chassis H2216XXKR2.	<ul style="list-style-type: none"> <li>Spare FRU for H2216XXKR2</li> </ul>

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC - FXX1600PCRPS</b> 	MM# - 915606 UPC - 735858243650 EAN - 5032037038294 MOQ - 1	<b>1600W Common Redundant Power Supply FXX1600PCRPS (Platinum-Efficiency)</b> 1600W AC Common Redundant Power Supply FXX1600PCRPS 80Plus Platinum-Efficiency	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - FH2000NPB2</b> 	MM# - 935574 UPC - 735858288477 EAN - 5032037067799 MOQ - 1	<b>Spare Node Power Board FH2000NPB2</b> Spare Node Power Board (Compute Module Power Docking Board) for Intel® Compute Module HNS2600KP Product Family or Intel® Compute Module HNS2600TP Product Family.	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - FXXCRPSPDB2</b> 	MM# - 935576 UPC - 735858288460 EAN - 5032037067782 MOQ - 1	<b>Power Distribution Board Spare</b> Spare Power Distribution Board Module including 2 boards, cables, a bus pair and supporting bracket, etc for Common Redundant Power Supply 1600W of Intel® Server Chassis H2000G Product Family.	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - FPWRCABLENA</b> 	MM# - 879287 UPC - 735858181129 EAN - 5032037015738 MOQ - 1	<b>North American Power Cord Spare</b>	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - FHWKPTPBGB</b> 	MM# - 935575 UPC - 735858288422 EAN - 5032037067744 MOQ - 1	<b>Spare 6Gb/s SATA Bridge Board</b> Spare 6Gb/s SATA Bridge Board for Intel® Compute Module HNS2600KP Product Family or Intel® Compute Module HNS2600TP Product Family.	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>

Intel Product Code	Order Information	Product Description	Product Type
<b>iPC - FXX4056DRFAN2</b> 	MM# - 935566 UPC - 735858288439 EAN - 5032037067751 MOQ - 1	40x56mm Dual Rotor Fan spare	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - BXSTS200P</b> 	MM# - 915972 UPC - 735858221795 EAN - 5032037014472 MOQ - 1	1U Standard Boxed Cu/Al 91.5mm x 91.5mm Heat Sink (Rear Heat Sink)	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - FXXCA91X91HS</b> 	MM# - 918250 UPC - 735858236614 EAN - 5032037031387 MOQ - 2	1U Standard Cu/Al 91.5mm x 91.5mm Heat Sink (Rear Heat Sink)	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
<b>iPC - FXXEA91X91HS2</b> 	MM# - 937228 UPC - 735858287982 EAN - 5032037067539 MOQ - 2	1U Standard Ex-Al 91.5mm x 91.5mm Heat Sink (Front Heat Sink)	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>

Intel Product Code	Order Information	Product Description	Product Type
iPC - FXX25HSCAR2 	MM# - 937542 UPC - 735858289405 EAN - 5032037068383 MOQ - 8	Spare 2.5" HDD hot swap carriers	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
iPC - FXX35HSCAR 	MM# - 936192 UPC - 735858289412 EAN - 5032037068390 MOQ - 8	Spare 3.5" HDD hot swap carriers	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
iPC - AXELVRAIL 	MM# - 920970 UPC - 735858244367 EAN - 5032037038980 MOQ - 1	<b>Enhanced Value RAIL AXELVRAIL</b> Value Rail Kit, half extension, extended inner slide member	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>
iPC - FH2000FPANEL2 	MM# - 935578 UPC - 735858288415 EAN - 5032037067737 MOQ - 1	<b>Spare Front Control Panel Kit</b> Spare front control panel kit (2 mini-front panel boards and rack handle assembly, etc) for Intel® Server Chassis H2000G Product Family.	<ul style="list-style-type: none"> <li>• Spare FRU</li> </ul>

## 6. Extended Warranty

Table 16. Extended Warranty

Image	Order Information	Description
 Intel® Server Component Extended Warranty Key MM# - 923113 MOQ - 1	<b>iPC - SVCEWHWSY</b>  MM# - 923113  MOQ - 1	Extended Warranty for complete system (1x Intel® Server Chassis H2000G + 4x Intel® Compute Module HNS2600KP), Single
 Intel® Server Component Extended Warranty Key MM# - 914905 MOQ - 1	<b>iPC - SVCEWHWB</b>  MM# - 914905  MOQ - 1	Extended Warranty for single node (1x Intel® Compute Module HNS2600KP), Single
 Intel® Server Component Extended Warranty Key MM# - 911294 MOQ - 1	<b>iPC - SVCEWDPBD</b>  MM# - 911294  MOQ - 1	Extended warranty for the mainboard only (for use with 3 <sup>rd</sup> party chassis; applies to board only skus BBS2600KPR, BBS2600KPFR)

## **Glossary of Terms**

**Table 17. A list of Acronyms and Terms used throughout this document**

<b>Acronym or Term</b>	<b>Definition</b>	<b>Acronym or Term</b>	<b>Definition</b>
BIK	Baseboard In Knock-Down-Kit – Integrated System	QSFP	Quad Small Form factor Pluggable
CRPS	Common Redundant Power Supply	RAID	Redundant Array of Independent Drives
EAN	International Article Number (Barcode)	Required Option	Hardware that must be added to the shipping configuration for the system to operate
EMI	Electromagnetic Interference	RMFBU	RAID Maintenance Free Backup Unit
ESRT2	Intel® Embedded Server RAID Technology 2	RMM4 Lite	Intel® Remote Management Module 4 Lite Activation key
FDR Infiniband	Fourteen Data Rate Infiniband	ROC	RAID on Chip
FRU	Field Replaceable Unit	RSTe	Intel® Rapid Storage Technology
GPGPU	General Purpose computing on Graphics Processing Unit	SAS	Serial Attached SCSI
iPC	Intel Product Code	SATA	Serial ATA
iPN	Intel Product Number	SFP	Small Form factor Pluggable
LCP	Intel® Local Control Panel	SKU	Stock Keeping Unit
JBOD	Just a bunch of drives	SSD	Solid State Drive
KDK	Knock-Down-Kit – (Chassis only product)	UPC	Universal Product Code ( Barcode)
KVM	Keyboard / Video / Mouse		
MM#	Master Material order number		
MOQ	Mimimum Order Quantity		
NVMe	NVM Express – based on Non-Volatile Memory Host Controller Interface Specification (NVMeCI)		
Optional Accessory	Hardware that can be added to the system to enhance the default feature set of the shipping configuration		
PCBA	Printed Circuit Board Assembly		