



Intel® Server Board S7200APR Product Family

Intel® Compute Module HNS7200APR and HNS7200APRL Product Family

Intel® Server Chassis H2000P Product Family

Product Family Configuration Guide & Spares/Accessories List

A Reference document used to assist with ordering parts and accessories available to configure an Intel server system based on the Intel® Server S7200APR product family.

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May 2018

Intel® Server Boards and Systems

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March 2018	1.0	Final
May 2018	1.01	Corrected references to FH2000NPBAP

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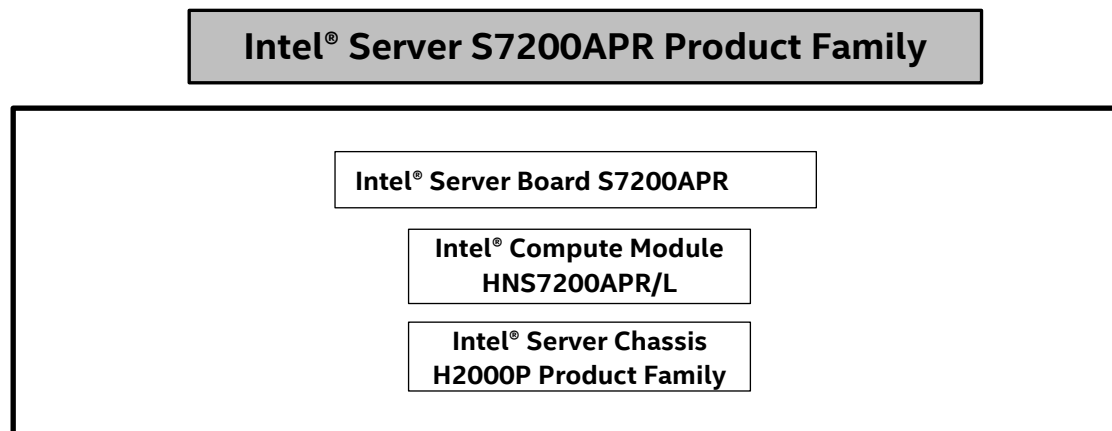
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1. Intel Server Family Overview

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® S7200APR product family consists of the following:

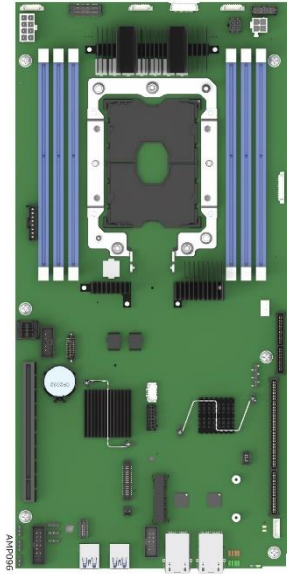


Server Building Blocks:

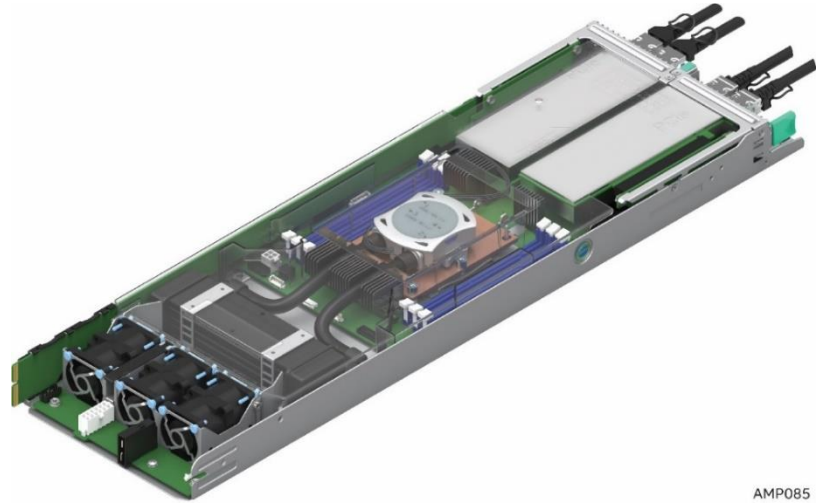
- **Intel® Server Board S7200APR** – Half width Server Board only (Building block option and spare FRU)
- **Intel® Compute Module HNS7200APR** – Compute module integrated with an Intel® Server Board S7200APR, standard air cooling
- **Intel® Compute Module HNS7200APRL** – Compute module integrated with an Intel® Server Board S7200APR, liquid assisted air cooling
- **Intel® Server Chassis H2000P product family** – A 2U multi-node rack mount server chassis designed to support Intel compute modules

The Intel® S7200APR product family supports the following processors and memory:

- Intel® Xeon™ Phi™ x200 Product Family
- Intel® Xeon™ Phi™ x200 Product Family with integrated Intel® Omni-Path fabric
- Intel® Xeon™ Phi™ x205 Product Family
- DDR4 (RDIMM & LRDIMM)



Intel® Server Board S7200APR



AMP085

Intel® Compute Module HNS7200APR



Intel® Server Chassis H2204XXLRE

1.1 Intel® Server S7200APR Product Family

Table 1. Intel® Server S7200APR Product Family Feature Set

Feature	Description
Processor Support	Intel® Xeon™ Phi™ x200 Product Family <ul style="list-style-type: none"> ▪ Single processor socket P (3647 pins) ▪ Thermal Design Power (TDP) up to 245W ▪ 36 lanes of Integrated PCI Express® 3.0 low-latency I/O Intel® Xeon™ Phi™ x200 Product Family with integrated Intel® Omni-Path fabric <ul style="list-style-type: none"> ▪ Single processor socket P (3647 pins) ▪ Integrated 4x25 Gb/s Host Fabric Interface ▪ Thermal Design Power (TDP) up to 260W ▪ 4 lanes of Integrated PCI Express® 3.0 low-latency I/O Intel® Xeon™ Phi™ x205 Product Family <ul style="list-style-type: none"> ▪ Single processor socket P (3647 pins) ▪ Thermal Design Power (TDP) up to 320W ▪ 36 lanes of Integrated PCI Express® 3.0 low-latency I/O
Memory Support	<ul style="list-style-type: none"> ▪ Six DIMM slots in total across six memory channels ▪ Registered DDR4 (RDIMM), Load Reduced DDR4 (LRDIMM) ▪ Memory DDR4 data transfer rates of 2133/2400 MT/s ▪ 1 DIMM per channel ▪ Max memory 384GB
Chipset	Intel C610 “Wellsburg” Platform Controller Hub (PCH)
External I/O Connections	<ul style="list-style-type: none"> ▪ Two USB 3.0 connectors ▪ Two RJ-45 10/100/1000 Mbit Network Interface Controller (NIC) ports
Internal I/O connectors/headers	<ul style="list-style-type: none"> ▪ One USB 2.0 Header ▪ One TPM Header ▪ One Intel® Omni-Path I Fabric Signal Connector (Option) ▪ One mSATA Connector ▪ One Bridge Board Connector ▪ One 2x7 pin header for system fan module ▪ One Aux Front Panel Connector ▪ Three 8-pin fan headers for non-Intel chassis support ▪ One 4 pin CPU fan or liquid cooling pump support header ▪ One PSU Control Header ▪ One RMI header for Intel® RMM4 Lite ▪ One internal RGB Video Header ▪ One Serial Port A Header
PCIe Support	PCIe* 3.0 (2.5, 5, 8 GT/s)

Feature	Description
Power Connections	<ul style="list-style-type: none"> • One 2x4 pin main power connector • One 2x2 pin aux. power connector • One 4 pin power connector for disk drive power
System Fan Support	<ul style="list-style-type: none"> ▪ Three 40x56mm double rotor fans ▪ One 4 pin CPU fan or liquid cooling pump support header
Video	<ul style="list-style-type: none"> ▪ Integrated 2D video graphics controller ▪ 128MB DDR3 memory
Riser Support	<ul style="list-style-type: none"> ▪ One PCIe Gen3 x16 standard riser connector <ul style="list-style-type: none"> ○ Supports a low-profile adapter in Riser slot 1 ▪ One PCIe Gen3 x20 HSEC-8 fine-pitch riser connector <ul style="list-style-type: none"> ○ If not using CPU with integrated OPA fabric, supports a x16 low-profile adapter in Riser slot 2 ○ If using CPU with integrated OPA fabric, supports a x4 low-profile adapter in Riser slot 2
On-board storage controllers and options	<ul style="list-style-type: none"> ▪ Integrated 9-port SATA <ul style="list-style-type: none"> ○ 4 ports to bridge board, ○ 1 port to mSATA ○ 4 ports to MiniSAS HD connector
Fabric	<ul style="list-style-type: none"> ▪ Dual port Intel® Omni-Path Fabric via Intel® Xeon™ Phi™ x200 Product Family with integrated Intel® Omni-Path fabric or ▪ Single Port Intel® Omni-Path Fabric via x16 Gen 3 PCIe Adapter
Network (LAN)	<ul style="list-style-type: none"> ▪ Dual i210 Springvilles ▪ Dual 10/100/1000Gbe RJ45 connectors ▪ NC_SI sideband to BMC. Option to host share or dedicate a Network port to management traffic.
Server Management	<ul style="list-style-type: none"> ▪ Onboard Emulex* Pilot III Controller ▪ Support for Intel® Remote Management Module 4 Lite solutions ▪ Support for Intel® System Management Software ▪ Support for Intel® Intelligent Power Node Manager (Need PMBus*-compliant power supply)

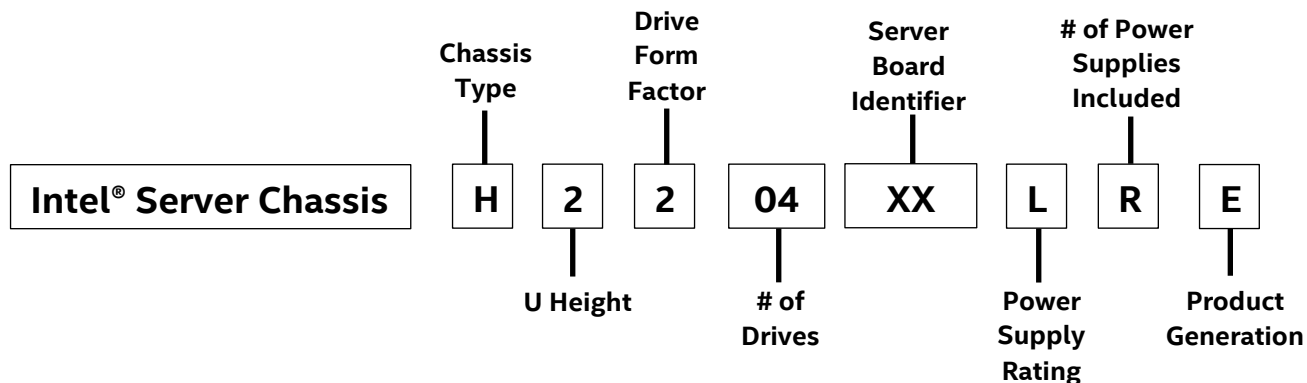
1.2 Intel® Compute Module HNS7200APR Product Family

Table 2. Intel® Compute Module HNS7200APR and HNS7200APRL Feature Set

Feature ¹	HNS7200APR	HNS7200APRL
Server Board Thermal Design Power (TDP):		
Intel® Xeon™ Phi™ x200 Product Family	215W	245W
Intel® Xeon™ Phi™ x200 Product Family with integrated Intel® Omni-Path fabric	230W	260W
Intel® Xeon™ Phi™ x205 Product Family	215W	320W
Processor Support	Maximum supported Thermal Design Power (TDP) of up to 230W	Maximum supported Thermal Design Power (TDP) of up to 320W
Heatsink	<ul style="list-style-type: none"> ▪ Standard Air Cooling 	<ul style="list-style-type: none"> ▪ Liquid Assisted Air Cooling (LAAC)
Fan	Three 40x56mm dual rotor system fans	
Riser Support	One PCIe Gen3 x16 standard riser connector <ul style="list-style-type: none"> ○ Supports a low-profile adapter in Riser slot 1 One PCIe Gen3 x20 HSEC-8 fine-pitch riser connector <ul style="list-style-type: none"> ○ If not using CPU with integrated OPA fabric, supports a x16 low-profile adapter in Riser slot 2 ○ If using CPU with integrated OPA fabric, supports a x4 low-profile adapter in Riser slot 2 	
Compute Module Board	<ul style="list-style-type: none"> ▪ Bridge boards: <ul style="list-style-type: none"> ○ 6G SATA Bridge Board (Default) ▪ One compute module power docking board 	
Air Duct	One transparent air duct	
Form Factor	1U	
Module Dimensions	L=592.8mm, W=177.5mm, H=40.8	

¹ The table lists features that are unique to the compute module or different from the server board

Table 3. 2U Intel® Server Chassis H2000P Product Feature Set for HNS7200APR & HNS7200APRL



The H2204XXLRE chassis supports HNS7200APR and HNS7200APRL

<p>Chassis Type H = Half Width Node Multi-Module</p>		<p>Server Board Identifier XX – Various Compute Modules Supported</p>
<p>U Height 2 = 2U</p>		<p>Power Supply Rating L = 2130W Platinum</p>
<p>Drive Form Factor 2 = 2.5" (configured in a 3.5" carrier)</p>		<p># of Power Supplies Included S = 1 (Single, Non-redundant) R = 2 (Redundant)</p>
<p># of Drives Supported (Specific to front drive bays) 4</p>		<p>Product Generation E = Enhanced Product</p>

1.3 Product Family Summary Chart

The following tables provides an overview of available Intel product codes for the Intel® S7200APR 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 4. Intel Server Board Product Summary

Intel Product Code	Development Status	Packaged quantity	# of CPU sockets	# of DIMM Slots	# of Riser Slots	Onboard RJ45 LAN ports	# of SATA ports (6 Gb)	SATA SW RAID Support	Liquid Assist Air Cooling Support
Server Board only									
S7200APR	Production	1	1	6	2	2 (1 GbE)	10	Yes	Yes

Table 5. Intel Compute Module Product Summary

Intel Product Code	Development Status	Form Factor	Intel Server Board	Cooling Support
Compute Module				
HNS7200APR	Production	1U Module	S7200APR	Standard air cooled
HNS7200APRL	Production	1U Module	S7200APR	Liquid assisted air cooled

Table 6. Server Chassis Product Family Summary

Intel Product Code	Development Status	Chassis Form Factor	Drive Form Factor	# of Drives	# of Power Supply Modules	Power Supply Rating	Rack Mount Rails Included
Chassis Only (KDK)							
H2204XXLRE	Production	2U	2.5"	4	2	2130W	Yes

- KDK = Knock Down Kit - Intel nomenclature defining a chassis only product

Additional Product Information

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/content/www/us/en/support/server-products/server-boards/single-socket-server-boards/intel-server-board-S7200APR-family.html>

Table 7. 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 S7200APR Technical Product Specification</i> <i>Intel® Remote Management Module 4 (Intel® RMM4) and Integrated BMC 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 System Integrated Baseboard Management Controller Firmware External Product Specification</i> <i>Product Safety and Regulatory Compliance</i>
For system integration instructions and service guidance	<i>Intel® Server Board S7200APR Product Family and Intel® Compute Module HNS7200APR Service Guide</i>
For server configuration guidance and compatibility	Intel® Server Configurator tool
For system power budget guidance	<i>Intel® Server Board S7200APR Product Family and Intel® Compute Module HNS7200APR Power Budget Tool</i>
For system firmware updates	System Update Package (SUP) – uEFI only One-boot Flash Update Utility (OFU)
For a complete list of supported processors, memory, add-in cards, and peripherals:	See Intel web site listed above

2. Server Building Block Configuration

Server building blocks within this Intel product family are offered to give Intel customers the option to design a custom chassis to support the stand alone Intel server board, or to configure one of the chassis only options with one to four server compute modules. Each building block component and optional accessory is purchased separately. At a minimum, building up a base functional server system using building blocks will require the following:

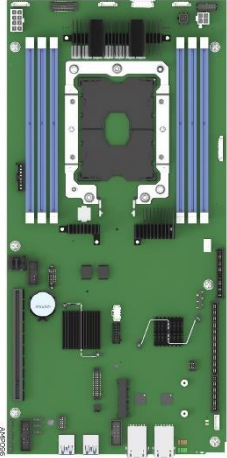
- Intel® Compute Module HNS7200APR Product Family
- Supported 2U Intel Server Chassis – Intel® Server Chassis H2000P product family
- Bridge Board Option
- Processor
- Memory
- Storage Drives

Optional Intel accessories:

- Intel® Omni-path Fabric Accessory Kit
- Intel® Trusted Platform Module (TPM) 2.0
- Intel® Remote Management Module Lite key (RMM4 Lite) – to add advanced server management features
- Video Debug Cable Option

See **Chapter 3** for available Intel accessories that can be added as options to the configured server.

2.1 Intel® Server Board S7200APR Product Family SKUs

Intel Product Code (iPC)	Order Information	Product Description	Product Type
<p>iPC - S7200APR</p> 	<p>MM# - 959387 UPC - 735858370196 EAN - 5032037124324 MOQ - 1</p> <p>Packaged Gross Weight 12.9kg</p> <p>Un-packaged Net Weight 8.1kg</p>	<p style="text-align: center;">Intel® Server Board S7200APR</p> <ul style="list-style-type: none"> • Board Dimensions: 6.8" W x 14.2" L (172.72mm W x 360.68mm L) • 1 Processor Slot – Intel Xeon® Phi™ series only • 6 DIMM Slots supporting DDR4 memory • 2 PCIe* 3.0 capable add-in / riser card slots • 2 RJ45 1GbE Networking Ports • <p>Box includes: one server board</p>	<p>Server Board only</p> <ul style="list-style-type: none"> • Building block option • Spare FRU


2.2 Intel® Compute Module HNS7200APR Product Family SKUs


The product tables found in this section provide order code information and detailed descriptions for each available Intel Compute Module 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.

<p>Intel Product Code (iPC):</p> <p>iPC - HNS7200APR</p> 	<p>Order Code Information:</p> <p>MM# - 959388 UPC - 735858359627 EAN - 5032037116039 MOQ - 1</p>	<p>Product Type: Production Compute Module</p> <p>Module dimensions: L=592.8mm, W=177.5mm, H=40.8</p> <p>Packaged Gross Weight: 4.55kg</p> <p>Un-packaged Net Weight: 3.05kg</p> <p>Packaging Dimensions: 720x272x162mm</p>
<p>Product Definition and Configuration Requirements</p>		
<p>Intel product code HNS7200APR is a fully assembled compute module that includes the following components:</p> <ul style="list-style-type: none"> (1) – Intel Server Board S7200APR – iPC S7200APR (3) – System fans – iPC FXX4056DRFAN2 (1) – Slot 1 Riser Card – iPC FHW1UAP16RISER2 (1) – Slot 2 Riser Card – iPC FHW1U20APRISER (1) – I/O Bridge Board – iPC FHWAPBGB (1) – Power Docking Board – iPC FH2000NPBAP (1) – 130mm 2x7 Fan Assembly Cable – iPN H62040-00x (1) – 140mm 2x3 Internal Power Cable – iPN H62040-00x (1) – Air Duct – iPN J56849-00X (1) – Plastic Cover – iPN H35490-00X (1) – Processor Heat Sink – iPC AXXAPHS 	<p>Required Items – Sold Separately:</p> <ul style="list-style-type: none"> • 1 Intel® Xeon® Phi™ Processor Series • ECC DDR4 memory (RDIMM or LRDIMM) 	<p>Optional Intel Accessories – Sold Separately:</p> <ul style="list-style-type: none"> • AXX2PFABKIT – Intel® Omnipath 2-port upgrade kit • AXXRMM4LITE – Remote KVM Upgrade Module • AXXRMM4 – Remote KVM Upgrade module + Dedicated Management Port • AXXTPME5 – TPM 2.0 Module for server systems <p>See Chapter 3 for all available accessory options.</p>

<p>Intel Product Code (iPC):</p> <p>iPC - HNS7200APRL</p> 	<p>Order Code Information:</p> <p>MM# - 959389</p> <p>UPC - 735858359610</p> <p>EAN - 5032037116022</p> <p>MOQ - 1</p>	<p>Product Type: Production Compute Module</p> <p>Module dimensions: L=592.8mm, W=177.5mm, H=40.8</p> <p>Packaged Gross Weight: 4.55kg</p> <p>Un-packaged Net Weight: 3.05kg</p> <p>Packaging Dimensions: 720x272x162mm</p>
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Product Definition and Configuration Requirements

<p>Intel product code HNS7200APR is a fully assembled compute module that includes the following components:</p> <ul style="list-style-type: none"> (1) – Intel Server Board S7200APR – iPC BBS7200APR (3) – System fans – iPC FXX4056DRFAN2 (1) – Slot 1 Riser Card – iPC FHW1UAP16RISER2 (1) – Slot 2 Riser Card – iPC FHW1U20APRISER (1) – I/O Bridge Board – iPC FHWAPBGB (1) – Power Docking Board – iPC FH2000NPBAP (1) – 130mm 2x7 Fan Assembly Cable – iPN H62040-00x (1) – 140mm 2x3 Internal Power Cable – iPN H62040-00x (1) – Air Duct – iPN J56849-001 (1) – Plastic Cover – iPN H35490-00X (1) – Processor Heat Sink (LAAC) – iPC AXXADPRLAAC 	<p><u>Required Items – Sold Separately:</u></p> <ul style="list-style-type: none"> • 1 Intel® Xeon® Phi™ Processor Series • ECC DDR4 memory (RDIMM or LRDIMM) 	<p><u>Optional Intel Accessories – Sold Separately:</u></p> <ul style="list-style-type: none"> • AXX2PFABKIT – Intel® Omnipath 2-port upgrade kit • AXXRMM4LITE – Remote KVM Upgrade Module • AXXRMM4 – Remote KVM Upgrade module + Dedicated Management Port • AXXTPME5 – TPM 2.0 Module for server systems <p>See Chapter 3 for all available accessory options.</p>
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2.3 Intel® Server Chassis H2000P Product Family SKUs

The product tables found in this section provide order code information and detailed descriptions for each available 2U 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.

<p>Intel Product Code (iPC): H2204XXLRE</p>  <p>4 x 3.5" Storage front mount drive bays</p>	<p>Order Code Information:</p> <p>Available as a fully configured system only. Contact your local Intel representative for more information.</p>	<p>Product Type: System</p> <p>Chassis Form Factor: 2U rack mount</p> <p>Chassis dimensions: L=28.86" (733 mm.), W=17.24" (438 mm.), H=3.42" (86.9 mm.)</p> <p>Packaged Gross Weight: ~29.5 Kg, 65.03 Lbs.</p> <p>Un-packaged Net Weight: ~21.5 Kg, 47.39 Lbs.</p> <p>Outer Box Dimensions: L= 983mm, W= 260mm, H= 577mm</p>
<p>Product Definition and Configuration Requirements</p>		
<p>Intel product code H2204XXLRE includes the following components:</p> <p>(1) 2U H2000P Chassis, includes:</p> <p>(1) Front panel - iPC FH2000FPANEL2</p> <p>(1) Power Distribution Board - iPC FXXCRPSPDB2</p> <p>(2) 2130W 80 Plus Platinum PSUs – iPC FXX2130PCRPS</p> <p>(1) HDD enclosure includes 4 x 3.5" HDD drive bays with:</p> <ul style="list-style-type: none"> - (4) Tool-less carriers, iPC - FXX35HSCAR2 - (1) Backplane (hot-swap), iPC - FHW04X35HSBP <p>(4) - Blank Compute Module Slot Fillers</p> <p>(1) - Basic rack rail (AXXELVRAIL)</p> <p>NOTE: The rail kit only supports specific rack type with 3/8" square and 7.1mm round holes.</p>	<p>Required Items – Sold Separately:</p> <ul style="list-style-type: none"> • Up to 4 of the following <ul style="list-style-type: none"> ○ Intel® Compute Module HNS7200APR ○ AC Power Cords 	<p>Optional Intel Accessories – Sold Separately:</p> <ul style="list-style-type: none"> • Storage Drives <p>See Chapter 3 for all available accessory options.</p>

3. Accessory Options



The following sections identify available accessory kits supported by the Intel® S7200APR product family.

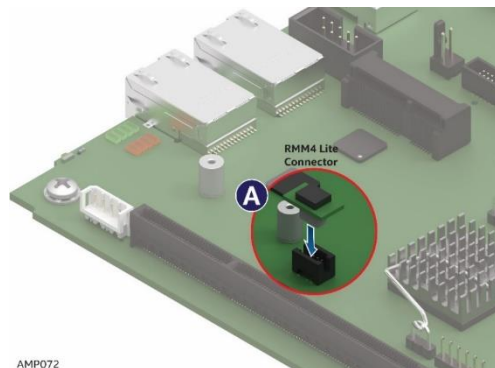
3.1 Remote Management KVM Support Options

The integrated baseboard management controller has support for advanced management features which are enabled when an optional Intel® Remote Management Module 4 or RMM4 Lite is installed. The Intel RMM4 add-on offers convenient, remote KVM access and control through LAN and internet. It captures, digitizes, and compresses video and transmits it with keyboard and mouse signals to and from a remote computer. Remote access and control software runs in the integrated baseboard management controller, utilizing expanded capabilities enabled by the Intel RMM4 hardware.

Key Features of the RMM4 add-on are:


- KVM redirection from the server board NICs used for management traffic; up to two KVM sessions
- Media Redirection – The media redirection feature is intended to allow system administrators or users to mount a remote IDE or USB CDROM, floppy drive, or a USB flash disk as a remote device to the server. Once mounted, the remote device appears just like a local device to the server allowing system administrators or users to install software (including operating systems), copy files, update BIOS, or boot the server from this device.

Intel Product Code	Order Information	Product Description	Product Type
iPC – AXXRMM4LITE 	MM# – 911660 UPC – 00735858219297 EAN – 5032037014946 MOQ – 1	Intel® Remote Management Module 4 Lite Kit Includes: (1) RMM4 Lite module	<ul style="list-style-type: none"> • Accessory Kit
iPC – AXXRMM4LITE2 	MM# – 946514 UPC – 007358307413 EAN – 5032037080750 MOQ – 1	Intel® Remote Management Module 4 Lite 2 Kit Includes: (1) RMM4 Lite 2 module	<ul style="list-style-type: none"> • Accessory Kit

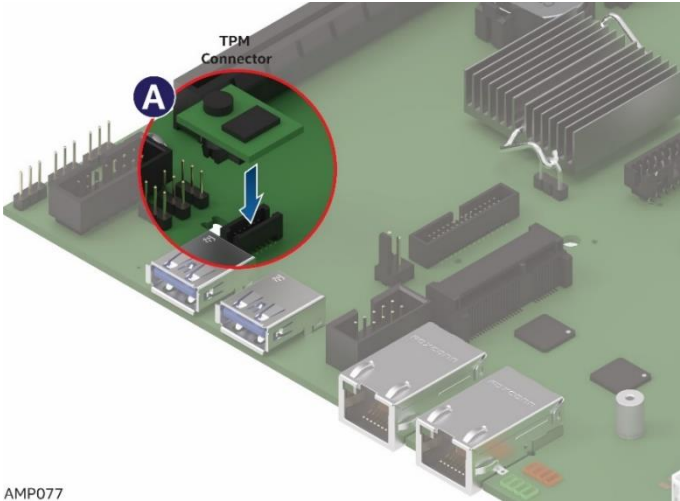


3.2 Intel® Trusted Platform Module (TPM) Security Option

The Intel® Trusted Platform Module (TPM) is a hardware-based security device that addresses the growing concern on boot process integrity and offers better data protection. TPM protects the system start-up process by ensuring it is tamper-free before releasing system control to the operating system. A TPM device provides secured storage to store data, such as security keys and passwords. In addition, a TPM device has encryption and hash functions. The Intel® TPM module implements TPM as per TPM PC Client specifications revision 2.0 by the Trusted Computing Group (TCG).

Intel Product Code	Order Information	Product Description	Product Type
<p>iPC – AXXTPME6</p> 	<p>MM# – 947921 UPC – 00735858314534 EAN – 5032037086059 MOQ – 1</p>	<p>Intel® Trusted Platform Module (TPM) 2.0</p> <p>Kit Includes: (1) TPM Module for server systems</p>	<ul style="list-style-type: none"> • Accessory Kit

Are

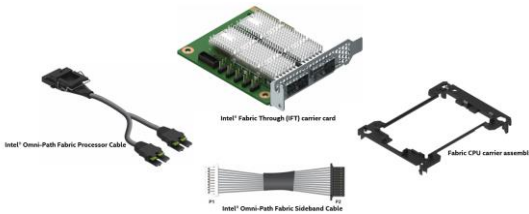


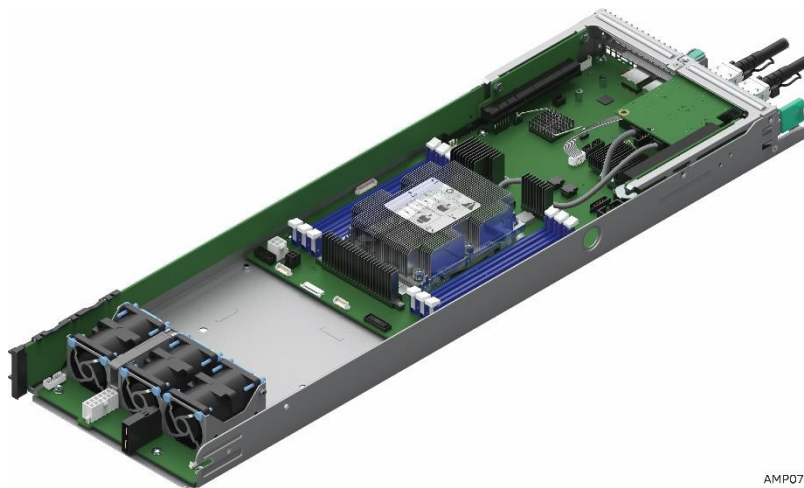
AMP077

3.3 Intel® Omni-path Host Fabric Interface Support Option

The Intel® Server Board S7200APR supports the bootable Intel® Xeon™ Phi™ x200 Product Family with integrated Intel® Omni-Path. These processors have two 25 GB/s fabric I/O ports with up to 50 GB/s bi-directional peak total bandwidth.

Intel's Fabric Through (IFT) Carrier kit allows external access to the Intel® Omni-Path Host Fabric Interface (HFI) socket of the processor. The external connection access is accomplished through use of two QSFP+28 style connections.

Intel Product Code	Order Information	Product Description	Product Type
<p>iPC – AXX2PFABKIT</p> 	<p>MM# – 945579 UPC – 735858322911 EAN – 5032037090162 MOQ – 1</p>	<p>Intel® Fabric Through (IFT) Carrier Kit</p> <p>Kit Includes:</p> <ul style="list-style-type: none"> (1) KNL Fabric Carrier – iPN H53248-00x (1) 2 Port IFP card (1) 2 Port IFP cable (1) Sideband cable 	<ul style="list-style-type: none"> • Accessory Kit



AMP076




3.4 S7200APR Video Debug Cable Option

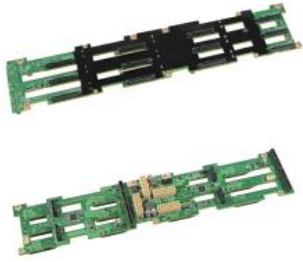



The S7200APR Video Debug Cable Option is a VGA video cable that connects to a header on the S7200APR board which can be routed to a connector bracket on the rear node panel when used with the HNS7200APR product. The cable is intended for debug use when deploying S7200APR-based systems and is not intended for normal product operation.




Intel Product Code	Order Information	Product Description	Product Type
iPC – AXXADPVIDCBL	MM# – 953982 UPC – 735858328081 EAN – 5032037094320 MOQ – 1	S7200APR Video Debug Cable Option Kit Includes: (1) VGA video cable (2) Rear panel mounting bracket for VGA port	<ul style="list-style-type: none">• Accessory Kit

4. 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.

Intel Product Code	Order Information	Product Description	Product Type
iPC – AXXADPRLAAC 	MM# – 974947 UPC – 735858369589 EAN – 5032037123785 MOQ – 1	Spare 1U Liquid Assisted Air Cooled (LAAC) Module	<ul style="list-style-type: none"> • Spare FRU
iPC – FXX4056DRFAN2 	MM# – 935566 UPC – 735858288439 EAN – 5032037067751 MOQ – 1	40x56mm Dual Rotor Fan spare	<ul style="list-style-type: none"> • Spare FRU
iPC – FXX2130PCRPS 	MM# – 948196 UPC – 00735858311939 EAN - 5032037084062 MOQ – 1	2130W AC Common Redundant Power Supply 80Plus Platinum-Efficiency	<ul style="list-style-type: none"> • Spare FRU

Intel Product Code	Order Information	Product Description	Product Type
<p>iPC – FHW12X35HS12G</p> 	<p>MM# – 935567 UPC – 735858288446 EAN – 5032037067768 MOQ – 1</p>	<p>12Gb SAS spare 12 x 3.5" backplane for H2000XXLR2 Chassis family</p>	<ul style="list-style-type: none"> • Spare FRU
<p>iPC – FH2000NPBAP</p> 	<p>MM# – 954595 UPC – 7358583332705 EAN – 5032037097734 MOQ – 1</p>	<p>Spare Node Power Board for H2000XXKR2 Chassis with the HNS7200APR Compute Module</p>	<ul style="list-style-type: none"> • Spare FRU
<p>iPC – FXXCRRPSPDB2</p> 	<p>MM# – 935576 UPC – 735858288460 EAN – 5032037067782 MOQ – 1</p>	<p>Spare Power Distribution Board Module including 2 boards, cables, a bus pair and supporting bracket, etc. for Common Redundant Power Supply 1600W of H2000XXKR2 chassis</p>	<ul style="list-style-type: none"> • Spare FRU
<p>iPC – FH2000FPANEL2</p> 	<p>MM# – 935578 UPC – 735858288415 EAN – 5032037067737 MOQ – 1</p>	<p>Spare front control panel kit(2 mini-front panel boards and rack handle assembly) for H2000KR2 Chassis family</p>	<ul style="list-style-type: none"> • Spare FRU

Intel Product Code	Order Information	Product Description	Product Type
<p>iPC – FXX35HSCAR2</p> 	<p>MM# – 958245 UPC – 00735858345675 EAN – 5032037106160 MOQ – 1</p>	<p>3.5" Tool-less Hot Swap Drive Carrier Spare 3.5" Tool-less drive hot swap carrier Includes mounting screws for mounting 2.5" SSDs</p>	<ul style="list-style-type: none"> • Spare FRU
<p>iPC – AXXELVRAIL</p> 	<p>MM# – 920970 UPC – 00735858244367 EAN – 5032037038980 MOQ – 1</p>	<p>1U / 2U Enhanced Value Rail Kit</p> <p>Value Rail Kit, half extension, extended inner slide member:</p> <ul style="list-style-type: none"> • Works for all 438mm wide Intel® Rack Chassis 1U, 2U, 4U • Adjustment within 609.6mm~765mm to fit difference depth rack • 424.2mm maximum travel length • 2/3 extension from rack • 130 lbs. (59 Kgs) max support weight • Tool-less chassis attach • Tools required to attach to rails to rack <p>NOTE: No cable management arm support on Intel® Server H2000P Chassis</p>	<ul style="list-style-type: none"> • Spare FRU
<p>iPC – FPWRCABLENA</p> 	<p>MM# – 879287 UPC – 735858181129 EAN – 5032037015738 MOQ – 1</p>	<p>North American Power Cord Spare</p>	<ul style="list-style-type: none"> • Spare FRU

5. Extended Warranty

Image	Order Information	Description
	iPC – SVCEWHWSY MM# – 923113 MOQ – 1	Extended Warranty for complete system (1x Intel® Server Chassis H2000P + 4x Intel® Compute Module HNS7200APR). Not available for HNS7200APRL Single.
	iPC - SVCEWHWB MM# – 914905 MOQ – 1	Extended Warranty for single node (1x Intel® Compute Module HNS7200APR). Not available for HNS7200APRL. Single
	iPC - SVCEWDPBD MM# – 911294 MOQ – 1	Extended warranty for the mainboard only (for use with 3 rd party chassis; applies to board only SKU S7200APR)

Glossary of Terms

A list of Acronyms and Terms used throughout this document

Acronym or Term	Definition	Acronym or Term	Definition
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
LAAC	Liquid Assisted Air Cooled unit	SKU	Stock Keeping Unit
LCP	Intel® Local Control Panel	SSD	Solid State Drive
JBOD	Just a bunch of drives	UPC	Universal Product Code (Barcode)
KDK	Knock-Down-Kit – (Chassis only product)		
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 (NVMHCI)		
Optional Accessory	Hardware that can be added to the system to enhance the default feature set of the shipping configuration		
PCBA	Printed Cricuit Board Assembly		

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