Intel® Server S2600WF Product Family
Intel® Server Board S2600WF Product Family
Intel® Server Chassis R1000WF and R2000WF Product Families
Intel® Server System R1000WF and R2000WF Product Families
Intel® Server System R2000WFTF Product Family

Configuration Guide

A reference document to identify available Intel® Server building blocks, integrated systems, accessories, and spare parts associated with the Intel® Server S2600WF product family.
## Document Revision History

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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 S2600WF product family.

![Figure 1. Intel® Server S2600WF product family overview](image)
1.1 Configuration Overview

The Intel Server S2600WF product family is offered as both building block options and integrated systems.

- Server building blocks:
  - Intel® Server Board S2600WF family – A family of server board only products (server building block option and spare FRU).
  - Intel® Server Chassis R1000WF product family – A family of 1U rack mount server chassis only products.
  - Intel® Server Chassis R2000WF product family – A family of 2U rack mount server chassis only products.

- Integrated server systems:
  - Intel® Server System R1000WF product family – A family of 1U rack mount server chassis integrated with an Intel Server Board S2600WF option.
  - Intel® Server System R2000WF product family – A family of 2U rack mount server chassis integrated with an Intel Server Board S2600WF option.
  - Intel® Server System R2000WFTF product family – A family of 2U rack mount server chassis integrated at level L9 with an Intel® Server Board S2600WFTF, processors, and memory.

**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. S2600WFT(R) covers S2600WFT and S2600WFTR.)
1.1.1 Processor Support

The Intel® Server S2600WF product family has support for 1st and 2nd Gen Intel® Xeon® processor Scalable family as identified in Figure 2.

**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 S2600WF 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 S2600WF 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](https://downloadcenter.intel.com).
The Intel® Server Board S2600WFTF has support for the following Intel® Xeon® processor Scalable family processors:

- Intel® Xeon® Silver 4106H processor
- Intel® Xeon® Gold 6130H processor
- Intel® Xeon® Platinum 8160H processor

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

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

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<tr>
<td>Intel® UPI speed</td>
<td>10.4 GT/s</td>
<td>10.4 GT/s</td>
<td>10.4 GT/s</td>
<td>9.6 GT/s</td>
<td>9.6 GT/s</td>
</tr>
<tr>
<td>Supported topologies</td>
<td>2S-2UPI, 2S-3UPI, 4S-2UPI, 4S-3UPI, 8S-3UPI</td>
<td>2S-2UPI, 2S-2UPI, 2S-3UPI, 4S-2UPI</td>
<td>2S-2UPI, 2S-3UPI, 4S-2UPI, 4S-3UPI</td>
<td>2S-2UPI, 2S-3UPI, 4S-2UPI</td>
<td>2S-2UPI, 2S-3UPI, 4S-2UPI</td>
</tr>
<tr>
<td>Node controller support</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td># of memory channels</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Max DDR4 speed</td>
<td>2666 MT/s</td>
<td>2666 MT/s</td>
<td>2400 MT/s</td>
<td>2400 MT/s</td>
<td>2133 MT/s</td>
</tr>
<tr>
<td>Memory capacity</td>
<td>768 GB, 1.5 TB (select SKUs)</td>
<td>768 GB, 1.5 TB (select SKUs)</td>
<td>768 GB</td>
<td>768 GB</td>
<td>768 GB</td>
</tr>
<tr>
<td>RAS capability</td>
<td>Advanced</td>
<td>Advanced</td>
<td>Advanced</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>Intel® Turbo Boost Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Intel® Hyper-Threading Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Intel® AVX-512 ISA support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intel® AVX-512 - # of 512b FMA units</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td># of PCIe* lanes</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
</tbody>
</table>
Table 2. 1st Gen Intel® Xeon® processor Scalable family with integrated Intel® Omni-Path Fabric feature comparison

<table>
<thead>
<tr>
<th>Feature</th>
<th>81xxF Platinum</th>
<th>61xxF Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td># of cores</td>
<td>≥ 24</td>
<td>&lt; 24</td>
</tr>
<tr>
<td># of Intel® Omni-Path Fabric ports</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td># of Intel® UPI links</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Intel® UPI speed</td>
<td>10.4 GT/s</td>
<td>10.4 GT/s</td>
</tr>
<tr>
<td>Supported topologies</td>
<td>2S-2UPI</td>
<td>2S-2UPI</td>
</tr>
<tr>
<td>Node controller support</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td># of memory channels</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Max DDR4 speed</td>
<td>2666 MT/s</td>
<td>2666 MT/s</td>
</tr>
<tr>
<td>Memory capacity</td>
<td>768 GB</td>
<td>768 GB</td>
</tr>
<tr>
<td></td>
<td>1.5 TB (select SKUs)</td>
<td>1.5 TB (select SKUs)</td>
</tr>
<tr>
<td>RAS capability</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>Intel® Turbo Boost Technology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intel® Hyper-Threading Technology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intel® AVX-512 ISA support</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intel® AVX-512 - # of 512b FMA units</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td># of PCIe* lanes</td>
<td>48</td>
<td>48</td>
</tr>
</tbody>
</table>
## Table 3. 2nd Gen Intel® Xeon® processor Scalable family feature comparison

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

³ Intel® Optane™ DC persistent memory module is supported only by Intel® Server Boards S2600WFTR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor.
1.1.2 Memory Support

The Intel® Server Board S2600WF product family has 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 S2600WFTR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor.

The Intel® Server Board S2600WFTF product family has support for the following memory:

- Registered DDR4 (RDIMM), Load Reduced DDR4 (LRDIMM)
- Memory data transfer rates (Processor dependent. See Table 1 and Table 2.)
  - DDR4 ECC RDIMM up to 2666 MT/s
  - DDR4 ECC LRDIMM up to 2666 MT/s
- DDR4 standard voltage of 1.2 V

1.1.3 System Configuration Notes

- Single processor configurations require the processor to be installed in the processor #1 socket.
- Processor #2 must be installed to use any of its 12 associated DIMM slots.
- To ensure systems meet necessary airflow and thermal requirements, the processor #2 heat sink must be installed at all times, with or without a processor present.
- Support for riser card slots 2 and 3 requires that two processors be installed.
- Riser card slots 1 and 2 can provide a maximum power of 75 W to each installed riser cards. PCIe* add-in cards that require more power than is available directly from the riser card must route the additional power directly to the add-in card from either of the two onboard 12V auxiliary power connectors using a 12V-AUX Power Cable available as a standalone accessory (AXXGPGPUCABLE) or included with some riser card accessory kits.
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](http://www.intel.com/support).

### Table 4. Product family reference collaterals

<table>
<thead>
<tr>
<th>For this information or software</th>
<th>Use this document or software</th>
</tr>
</thead>
</table>
| For in-depth technical information about this product family | Intel® Server Board S2600WF Technical Product Specification  
Intel® Server System R1000WF Product Family Technical Product Specification  
Intel® Server System R2000WF Product Family Technical Product Specification  
Intel® Remote Management Module 4 (Intel® RMM4) and BMC Embedded Web Console User Guide  
Intel® Remote Management Module 4 Technical Product Specification  
Intel® Server System BIOS Setup Utility Guide  
Intel® Server System R2000WFTF IPTrak PIT Users Guide  
Intel® Server Platform Specification Update  
Safety and Regulatory Compliance Information for Intel® Server System 4600/2600/2400/1600 Families |
| For system integration and service instructions | Intel® Server System R1000WF Product Family System Integration and Service Guide  
Intel® Server System R2000WF Product Family System Integration and Service Guide  
Intel® Server System R2000WFTF Product Family System Integration and Service Guide |
| For server configuration guidance and compatibility | Intel® Server Configurator Tool ([http://serverconfigurator.intel.com/](http://serverconfigurator.intel.com/)) |
| For system firmware updates, onboard device drivers, and software | Download Center ([https://downloadcenter.intel.com/search?keyword=S2600WF](https://downloadcenter.intel.com/search?keyword=S2600WF)) |
| For system power budget guidance | Intel® Server Board S2600WF Product Family Power Budget and Thermal Configuration Tool ([https://downloadcenter.intel.com/download/27100/](https://downloadcenter.intel.com/download/27100/)) |
1.3 Intel® Server Board S2600WF Product Family

Figure 3. Intel® Server Board S2600WF 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 boards in the Intel® Server Board S2600WF product family.
## Table 5. Intel® Server Board S2600WF product family features

<table>
<thead>
<tr>
<th>Intel® Server Board Feature</th>
<th>S2600WFT(R)</th>
<th>S2600WF0(R)</th>
<th>S2600WFQ(R)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (2) – LGA3647-0 (Socket P) processor sockets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Supports (1) or (2) processors from the 1st or 2nd Gen Intel® Xeon® processor Scalable family (Platinum, Gold, Silver, and Bronze). Note: Previous generation Intel® Xeon® processors are not supported.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Maximum supported Thermal Design Power (TDP) of up to 205 W (board only) Note: Intel® Server Systems based on this server board family may support a lower maximum Thermal Design Power (TDP). See the appropriate Intel® System TPS for maximum supported TDP.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (24) – total DIMM slots (12 per processor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o (6) – memory channels per processor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o (2) – DIMMs per channel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• DDR4 Registered DIMM (RDIMM) and Load Reduced DIMM (LRDIMM), up to 2793 MT/s (dependent on processor), 1.2 V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module, up to 2666 MT/s, 1.2 V 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intel® C62x Series Chipset</strong></td>
<td>Intel® C624 Chipset</td>
<td>Intel® C624 Chipset</td>
<td>Intel® C628 Chipset</td>
</tr>
<tr>
<td><strong>Intel® QAT</strong></td>
<td>No</td>
<td>No</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Intel® Omni-Path Fabric</strong></td>
<td>Supported</td>
<td>Supported</td>
<td>Support</td>
</tr>
<tr>
<td><strong>Onboard LAN</strong></td>
<td>Dual Port RJ45 10 GbE</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><em><em>OCP</em> Module Support</em>*</td>
<td>Dual Port 10Gb RJ45 – iPC 557T2OCPG1P5</td>
<td>Quad Port 1Gb RJ45 – iPC I357T4OCPG1P5</td>
<td>Quad Port 1Gb RJ45 – iPC I357T4OCPG1P5</td>
</tr>
<tr>
<td></td>
<td>Dual Port SFP+ – iPC 527DA2OCPG1P5</td>
<td>Quad Port SFP+ – iPC X527DA4OCPG1P5</td>
<td>Quad Port SFP+ – iPC X527DA4OCPG1P5</td>
</tr>
<tr>
<td><strong>Intel® Integrated SAS Module</strong></td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td><em><em>Onboard PCIe</em> NVMe</em>**</td>
<td>(4) – OCuLink connectors</td>
<td>(4) – OCuLink connectors</td>
<td>(2) – OCuLink connectors</td>
</tr>
<tr>
<td></td>
<td>Intel® VMD support</td>
<td>Intel® VMD support</td>
<td>Intel® VMD support</td>
</tr>
<tr>
<td></td>
<td>Intel® RSTe/Intel® VROC support (accessory option)</td>
<td>Intel® RSTe/Intel® VROC support (accessory option)</td>
<td>Intel® RSTe/Intel® VROC support (accessory option)</td>
</tr>
<tr>
<td></td>
<td>o (2) – single port 7-pin SATA connectors</td>
<td>o (2) – single port 7-pin SATA connectors</td>
<td>o (2) – single port 7-pin SATA connectors</td>
</tr>
<tr>
<td></td>
<td>o (2) – M.2 connectors – SATA/PCIe*</td>
<td>o (2) – M.2 connectors – SATA/PCIe*</td>
<td>o (2) – M.2 connectors – SATA/PCIe*</td>
</tr>
<tr>
<td></td>
<td>o (2) – 4-port mini-SAS HD (SFF-8643) connectors</td>
<td>Embedded SATA Software RAID</td>
<td>Embedded SATA Software RAID</td>
</tr>
<tr>
<td></td>
<td>Embedded SATA Software RAID</td>
<td>Intel® RSTe 5.0</td>
<td>Intel® RSTe 5.0</td>
</tr>
<tr>
<td></td>
<td>o Intel® RSTe 5.0</td>
<td>o Intel® Embedded Server RAID Technology 2 1.60 with optional RAID 5 key support</td>
<td>o Intel® Embedded Server RAID Technology 2 1.60 with optional RAID 5 key support</td>
</tr>
<tr>
<td><strong>Riser Card</strong></td>
<td>Concurrent support for up to three riser cards</td>
<td>Riser #1 – PCIe* 3.0 x24 (CPU1 x16, CPU2 x8) – 2 and 3 slot riser card options available</td>
<td>Riser #1 – PCIe* 3.0 x24 (CPU1 x16, CPU2 x8) – 2 and 3 slot riser card options available</td>
</tr>
<tr>
<td></td>
<td>Riser #2 – PCIe* 3.0 x24 (CPU2 x24) – 2 and 3 slot riser card options available</td>
<td>Riser #2 – PCIe* 3.0 x24 (CPU2 x24) – 2 and 3 slot riser card options available</td>
<td>Riser #2 – PCIe* 3.0 x24 (CPU2 x24) – 2 and 3 slot riser card options available</td>
</tr>
<tr>
<td></td>
<td>Riser #3 (2U systems only) – PCIe* 3.0 (CPU 2 x12) – 2 slot riser card available</td>
<td>Riser #3 (2U systems only) – PCIe* 3.0 (CPU 2 x12) – 2 slot riser card available</td>
<td>Riser #3 (2U systems only) – PCIe* 3.0 (CPU 2 x12) – 2 slot riser card available</td>
</tr>
<tr>
<td>Intel® Server Board Feature</td>
<td>S2600WFT(R)</td>
<td>S2600WF0(R)</td>
<td>S2600WFQ(R)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Integrated 2D video controller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 16MB of DDR4 video memory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – DB-15 external connector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – 14-pin internal connector for optional front panel video support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (3) – external USB 3.0 ports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – internal type-A USB 2.0 port</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – internal 20-pin connector for optional 2x USB 3.0 port front panel support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – internal 10-pin connector for optional 2x USB 2.0 port front panel support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serial Port</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – external RJ-45 serial-A port connector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (1) – internal DH-10 serial-B port header for optional front or rear serial port support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Server Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Integrated baseboard management controller, IPMI 2.0 compliant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Support for Intel® Server Management software</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dedicated onboard RJ45 management port</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Advanced server management via Intel® RMM4 Lite – iPC AXXRMM4LITE2 (accessory option)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Trusted platform module 2.0 (Rest of World) – iPC AXXTPMENC8 (accessory option)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Trusted platform module 2.0 (China Version) – iPC AXXTPMCHNE8 (accessory option)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>System Fan</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (6) – system fans supported in two different connector formats: hot swap (2U) and cabled (1U)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o (6) – 10-pin managed system fan headers (sys_fan 1-6) – used for 1U system configuration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o (6) – 6-pin hot swap capable managed system fan connectors (sys_fan 1-6) – used for 2U system configuration</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Intel® Optane™ persistent memory module is supported only by Intel® Server Boards S2600WFTR, S2600WF0R, and S2600WFQR with 2nd Gen Intel® Xeon® Scalable processor.
1.4 Intel® Server Board S2600WFTF Product Family

Figure 4. Intel® Server Board S2600WFTF onboard features
### Intel® Server Board Feature | Description
--- | ---
**Processor** | • (2) – LGA3647-0 (Socket P) processor sockets  
• Supports (1) or (2) of the following processors from the Intel® Xeon® processor Scalable family  
  o Intel® Xeon® Silver 4106H processor  
  o Intel® Xeon® Gold 6130H processor  
  o Intel® Xeon® Platinum 8160H processor

**Memory** | • (24) – total DIMM slots (12 per processor)  
  o (6) – memory channels per processor  
  o (2) – DIMMs per channel  
  • Registered DDR4 (RDIMM), Load Reduced DDR4 (LRDIMM)  
  • Memory data transfer rates up to 2666 MT/s (dependent on processor)  
  • DDR4 standard voltage of 1.2 V

**Intel® C62x Series Chipset** | Intel® C624 Chipset

**Intel® Platform Firmware Resilience** | Yes

**_protect-in-transit** | Yes

**Intel® Quick Assist Technology** | No

**Intel® Omni-Path Fabric Support** | No

**Onboard LAN** | Dual Port RJ45 10GbE

**OCP® Module Support** | • Dual Port 10Gb RJ45 – iPC 557T2OC51G1P5  
  • Dual Port SFP+ – iPC 527DA2OC51P5

**Intel® Integrated SAS Module** | Supported

**Onboard PCIe® NVMe® Support** | • (4) – OCuLink connectors  
  • Intel® VMD support  
  • Intel® RSTe/Intel® VROC support (accessory option)

**Onboard SATA** | • (12) – SATA 6 Gbps ports (6 Gb/s, 3 Gb/s and 1.5 Gb/s transfer rates supported)  
  o (2) – single port 7-pin SATA connectors  
  o (2) – M.2 connectors – SATA / PCIe*  
  o (2) – 4-port mini-SAS HD (SFF-8643) connectors  
  • Embedded SATA Software RAID  
    o Intel® RSTe 5.0  
    o Intel® Embedded Server RAID Technology 2 1.60 with optional RAID 5 key support

**Riser Card** | Concurrent support for up to three riser cards  
• Riser #1 – PCIe® 3.0 x24 (CPU1 x16, CPU2 x8) – 2 and 3 slot riser card options available  
• Riser #2 – PCIe® 3.0 x24 (CPU2 x24) – 2 and 3 slot riser card options available  
• Riser #3 (2U systems only) – PCIe® 3.0 (CPU 2 x12) – 2 slot riser card available (low-profile add-in cards only)

**Video** | • Integrated 2D video controller  
• 16MB of DDR4 video memory  
• (1) – DB-15 external connector  
• (1) – 14-pin internal connector for optional front panel video support

---

Table 6. Intel® Server Board S2600WFTF product family features
<table>
<thead>
<tr>
<th>Intel® Server Board Feature</th>
<th>Description</th>
</tr>
</thead>
</table>
| **USB Support**            | • (3) – external USB 3.0 ports  
                            • (1) – internal type-A USB 2.0 port  
                            • (1) – internal 20-pin connector for optional 2x USB 3.0 port front panel support  
                            • (1) – internal 10-pin connector for optional 2x USB 2.0 port front panel support |
| **Serial Port Support**    | • (1) – external RJ-45 serial-A port connector  
                            • (1) – internal DH-10 serial-B port header for optional front or rear serial port support |
| **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) |
| **Security**               | • Trusted platform module 2.0 (Rest of World) – iPC AXXTPMENC8 (accessory option)  
                            • Trusted platform module 2.0 (China Version) – iPC AXXTPMCHNE8 (accessory option) |
| **System Fan**             | • (6) – system fans supported in two different connector formats: hot swap (2U) and cabled (1U)  
                            • (6) – 10-pin managed system fan headers (sys_fan 1-6) – used for 1U system configuration  
                            • (6) – 6-pin hot swap capable managed system fan connectors (sys_fan 1-6) – used for 2U system configuration |
| **Antenna Support**        | RFID near field antenna, I-PEX connector |
1.5 Intel® Server System R1000WF Product Family

This section gives an overview of the available systems in the Intel® Server System R1000WF product family. The “xxx” notation defines the specific product model or code. For complete configuration details, see Section 3.1.

Figure 5. Intel® Server System R1000WF feature set identification
Figure 6. 1U, 3.5” x 4 drive configuration (Intel® Server System R1304xxx)

Figure 7. 1U, 2.5” x 8 drive configuration (Intel® Server System R1208WFxxx)

Figure 8. 1U system back panel
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chassis Type</strong></td>
<td>1U rack mount chassis</td>
</tr>
<tr>
<td><strong>Server Board</strong></td>
<td>Intel® Server Board S2600WF product family</td>
</tr>
<tr>
<td><strong>Maximum Supported Processor Thermal</strong></td>
<td>Up to 165 W <strong>Note:</strong> Intel® Server Systems in this family may support a lower maximum Thermal Design Power (TDP). See the appropriate Intel® System TPS for maximum supported TDP.</td>
</tr>
<tr>
<td>Design Power (TDP)</td>
<td><strong>External I/O Connections</strong></td>
</tr>
<tr>
<td></td>
<td>- DB-15 video connectors</td>
</tr>
<tr>
<td></td>
<td>o Front and back</td>
</tr>
<tr>
<td></td>
<td>o RJ-45 serial port A connector on back panel</td>
</tr>
<tr>
<td></td>
<td>o Dual RJ-45 network interface connectors (S2600WFT-based systems only)</td>
</tr>
<tr>
<td></td>
<td>o Dedicated RJ-45 server management port on back panel</td>
</tr>
<tr>
<td></td>
<td>o (3) – USB 3.0 connectors on back panel</td>
</tr>
<tr>
<td></td>
<td>o (2) – USB 3.0 connectors on front panel (non-storage system configurations only)</td>
</tr>
<tr>
<td><strong>Internal I/O Connectors/Headers</strong></td>
<td>(1) – Type-A USB 2.0 connector</td>
</tr>
<tr>
<td></td>
<td>(1) – DH-10 serial port B connector</td>
</tr>
<tr>
<td><strong>System Fans</strong></td>
<td>(6) – managed 40 mm dual rotor system fans</td>
</tr>
<tr>
<td></td>
<td>One power supply fan for each installed power supply module</td>
</tr>
<tr>
<td><strong>Riser Card Support</strong></td>
<td>Support for two riser cards:</td>
</tr>
<tr>
<td></td>
<td>o Riser #1 – PCIe* 3.0 x24</td>
</tr>
<tr>
<td></td>
<td>o Riser #2 – PCIe* 3.0 x24</td>
</tr>
<tr>
<td></td>
<td>With two riser cards installed, up to two possible add-in cards can be supported (one x16 PCIe* 3.0 add-in card slot per riser card):</td>
</tr>
<tr>
<td></td>
<td>o (2) full height/half-length add-in cards via Risers #1 and #2</td>
</tr>
<tr>
<td><strong>Power Supply Options</strong></td>
<td>The server system can have up to two power supply modules installed, providing support for the following power configurations: 1+0, 1+1 redundant power, and 2+0 combined power.</td>
</tr>
<tr>
<td></td>
<td>(3) power supply options:</td>
</tr>
<tr>
<td></td>
<td>o AC 1100 W Platinum</td>
</tr>
<tr>
<td></td>
<td>o AC 1300 W Platinum</td>
</tr>
<tr>
<td></td>
<td>o DC 750 W Gold</td>
</tr>
<tr>
<td><strong>Drive Bay Options</strong></td>
<td>Hot-swap backplane options:</td>
</tr>
<tr>
<td></td>
<td>o 4 x 3.5” SAS/SATA backplane</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” combo backplane – SAS/SATA/NVMe</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> All available backplane options have support for SAS 3.0 (12 Gb/sec).</td>
</tr>
<tr>
<td></td>
<td>Storage bay options:</td>
</tr>
<tr>
<td></td>
<td>o 4 x 3.5” SAS/SATA hot swap drive bays + front panel I/O</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” SAS/SATA/NVMe hot swap drive bays + front panel I/O</td>
</tr>
<tr>
<td><strong>Supported Rack Mount Kit Accessory</strong></td>
<td>AXCELVRAIL – Enhanced value rack mount rail kit – 424 mm max travel length, 59 kg max supported weight</td>
</tr>
<tr>
<td>Options</td>
<td>A1UFULLRAIL – 1U premium rail kit with CMA support – 780 mm max travel length, 18 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>A1USHTRAIL – 1U premium rail kit without CMA support – 780 mm max travel length, 18 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>AXX2POSTBRCKT – Two post fixed mount bracket kit</td>
</tr>
<tr>
<td></td>
<td>AXX1U2UCMA2– Cable management arm (CMA) (supported with AXXFULLRAIL only)</td>
</tr>
</tbody>
</table>
1.6 Intel® Server System R2000WF Product Family

This section gives an overview of the available systems in the Intel® Server System R2000WF product family. The “xxx” notation defines the specific product model or code. For complete configuration details, see Section 3.2.

Figure 9. Intel® Server System R2000WF feature set identification
Figure 10. 2U, No drive bays, chassis only building block (Intel® Server Chassis R2000WFxxx)

Figure 11. 2U, 3.5” x 8 drive configuration (Intel® Server System R2308WFxxx)

Figure 12. 2U, 3.5” x 12 drive configuration (Intel® Server System R2312WFxxx – storage configuration)
Figure 13. 2U, 2.5” x 8 drive configuration (Intel® Server System R2208WFxxx)

Figure 14. 2U, 2.5” x 16 drive configuration (Intel® Server System R2208WFxxx + 8 drive accessory kit)

Figure 15. 2U, 2.5” x 24 drive configuration (Intel® Server System R2224WFxxx – storage configuration)
Table 8 describes the features of the 2U server system configurations. Storage system configurations include R2312WFxxxx and R2224WFxxxx. Non-storage system configurations include R2308WFxxxx, R2208WFxxxx, and R2208WFxxxx +8 (base 8 drive system with 8 drive add-in module).

### Table 8. Intel® Server System R2000WF product family features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Type</td>
<td>2U rack mount chassis</td>
</tr>
<tr>
<td>Server Board</td>
<td>Intel® Server Board S2600WF product family</td>
</tr>
</tbody>
</table>
| Maximum Supported Processor Thermal Design Power (TDP) | Up to 205 W  
**Note:** Intel® Server Systems in this family may support a lower maximum Thermal Design Power (TDP). See the appropriate Intel® System TPS for maximum supported TDP. |
| External I/O Connections                     | • DB-15 video connectors  
  o Front and back (non-storage system configurations only)  
  • RJ-45 serial port A connector  
  • Dual RJ-45 network interface connectors (S2600WFT-based systems only)  
  • Dedicated RJ-45 server management NIC  
  • (3) – USB 3.0 connectors on back panel  
  • (2) – USB 3.0 connectors on front panel (non-storage system configurations only)  
  • (1) – USB 2.0 connector on rack handle (storage configurations only) |
| Internal I/O Connectors/Headers              | • (1) – Type-A USB 2.0 connector  
  • (1) – DH-10 serial port B connector |
| System Fans                                  | • (6) – managed 60 mm hot swap capable system fans  
  • Integrated fans included with each installed power supply module |
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Riser Card Support</strong></td>
<td>Support for three riser cards:</td>
</tr>
<tr>
<td></td>
<td>• Riser #1 – PCIe* 3.0 x24 - up to 3 PCIe slots</td>
</tr>
<tr>
<td></td>
<td>• Riser #2 – PCIe* 3.0 x24 - up to 3 PCIe slots</td>
</tr>
<tr>
<td></td>
<td>• Riser #3 – PCIe* 3.0 x16 – up to 2 PCIe slots – Low profile cards only (optional)</td>
</tr>
<tr>
<td></td>
<td>With three riser cards installed, up to eight possible add-in cards can be supported:</td>
</tr>
<tr>
<td></td>
<td>• (4) full height/half-length + (2) full height/half-length add-in cards via Risers #1 and #2</td>
</tr>
<tr>
<td></td>
<td>• (2) low profile add in cards via riser #3 (option)</td>
</tr>
<tr>
<td><strong>Power Supply Options</strong></td>
<td>The server system can have up to two power supply modules installed, providing support for the following power configurations: 1+0, 1+1 redundant power, and 2+0 combined power.</td>
</tr>
<tr>
<td></td>
<td>• (3) power supply options:</td>
</tr>
<tr>
<td></td>
<td>o AC 1100 W Platinum</td>
</tr>
<tr>
<td></td>
<td>o AC 1300 W Titanium</td>
</tr>
<tr>
<td></td>
<td>o DC 750 W Gold</td>
</tr>
<tr>
<td><strong>Drive Bay Options</strong></td>
<td>• Hot-swap backplane options:</td>
</tr>
<tr>
<td></td>
<td>o 8 x 3.5” SAS/ SATA</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” combo backplane – SAS/SATA/NVMe*</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” Dual Port SAS</td>
</tr>
<tr>
<td></td>
<td>o 12 x 3.5” SAS/ SATA (supports up to 2 NVMe drives)</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> All available backplane options have support for SAS 3.0 (12 Gb/sec).</td>
</tr>
<tr>
<td></td>
<td>• Storage bay options:</td>
</tr>
<tr>
<td></td>
<td>o 8 x 3.5” SAS/SATA hot swap drive bays</td>
</tr>
<tr>
<td></td>
<td>o 12 x 3.5” SAS/SATA hot swap drive bays (supports up to 2 NVMe drives)</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” SAS/SATA/NVMe hot swap drive bays</td>
</tr>
<tr>
<td></td>
<td>o 16 x 2.5” SAS/SATA/NVMe hot swap drive bays</td>
</tr>
<tr>
<td></td>
<td>o 24 x 2.5” SAS/SATA/NVMe swap drive bays</td>
</tr>
<tr>
<td></td>
<td>o 2 x 2.5” SATA SSD back of chassis hot-swap drive bays (accessory option)</td>
</tr>
<tr>
<td></td>
<td>o 2 x internal fixed mount 2.5” SSDs (all system models)</td>
</tr>
<tr>
<td><strong>Supported Rack Mount Kit Accessory Options</strong></td>
<td>• AXXELVRAIL – Enhanced value rack mount rail kit – 424 mm max travel length, 59 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>• AXXFULLRAIL – 2U premium rail with CMA support – 800 mm max travel length, 45 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>• AXXSHRTRAIL – 2U premium rail without CMA support – 788 mm max travel length, 45 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>• AXX2POSTBRCKT – Two post fixed mount bracket kit</td>
</tr>
<tr>
<td></td>
<td>• AXXCMA2– Cable management arm (supported with AXXFULLRAIL only)</td>
</tr>
</tbody>
</table>
1.7 Intel® Server System R2000WFTF Product Family

This section gives an overview of the available systems in the Intel® Server System R2000WFTF product family. The “xxx” notation defines the specific product model or code. For complete configuration details, see Section 3.2.

Figure 17. Intel® Server System R2000WFTF feature set identification
Figure 18. 2U, 2.5" x 8 drive configuration (Intel® Server System LFRB2208WFTFxxx)

Figure 19. 2U, 3.5" x 12 drive configuration (Intel® Server System LFRB2312WFTFxxx – storage configuration)

Figure 20. System back panel for Intel® Server System R2000WFTF with optional 2 x 2.5" hot-swap drive bay
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chassis Type</strong></td>
<td>2U rack mount chassis</td>
</tr>
<tr>
<td><strong>Server Board</strong></td>
<td>Intel® Server Board S2600WFTF product family</td>
</tr>
<tr>
<td><strong>Maximum Supported Processor Thermal Design Power (TDP)</strong></td>
<td>Up to 150 W</td>
</tr>
</tbody>
</table>
| **External I/O Connections** | • DB-15 video connectors  
 o Front and back (non-storage system configurations only)  
 • RJ-45 serial port A connector  
 • Dual RJ-45 network interface connectors (S2600WFT-based systems only)  
 • Dedicated RJ-45 server management NIC  
 • (3) – USB 3.0 connectors on back panel  
 • (2) – USB 3.0 connectors on front panel (non-storage system configurations only)  
 • (1) – USB 2.0 connector on rack handle (storage configurations only) |
| **Internal I/O Connectors/Headers** | • (1) – Type-A USB 2.0 connector  
 • (1) – DH-10 serial port B connector |
| **System Fans** | • (6) – managed 60 mm hot swap capable system fans  
 • Integrated fans included with each installed power supply module |
| **Riser Card Support** | Support for three riser cards:  
 • Riser #1 – PCIe® 3.0 x24 – up to 3 PCIe slots  
 • Riser #2 – PCIe® 3.0 x24 – up to 3 PCIe slots  
 • Riser #3 – PCIe® 3.0 x16 – up to 2 PCIe slots – Low profile cards only (optional)  
 With three riser cards installed, up to eight possible add-in cards can be supported:  
 • (4) full height/half-length + (2) full height/half-length add-in cards via Risers #1 and #2  
 • (2) low profile add in cards via riser #3 (option) |
| **Power Supply Options** | The server system can have up to two power supply modules installed, providing support for the following power configurations:  
 1+0, 1+1 redundant power, and 2+0 combined power.  
 (1) power supply option:  
 • AC 1300 W Titanium |
<p>| <strong>Remote Management</strong> | Intel® Remote Management Module 4 (Intel® RMM4) Lite activation key |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive Bay Options</strong></td>
<td>• Hot-swap backplane options:</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” combo backplane – SAS/SATA/NVMe*</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” dual port SAS</td>
</tr>
<tr>
<td></td>
<td>o 12 x 3.5” SAS/ SATA (supports up to 2 NVMe drives)</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>All available backplane options have support for SAS 3.0 (12 Gb/sec).</td>
</tr>
<tr>
<td></td>
<td>• Storage bay options:</td>
</tr>
<tr>
<td></td>
<td>o 12 x 3.5” SAS/SATA hot-swap drive bays (supports up to 2 NVMe drives) + storage front panel</td>
</tr>
<tr>
<td></td>
<td>o 8 x 2.5” SAS/SATA/NVMe hot-swap drive bays + PFR front panel</td>
</tr>
<tr>
<td></td>
<td>o 16 (8+8 accessory) x 2.5” SAS/SATA/NVMe hot-swap drive bays + PFR front panel</td>
</tr>
<tr>
<td></td>
<td>o 2 x 2.5” SATA SSD back of chassis hot-swap drive bays (accessory option)</td>
</tr>
<tr>
<td></td>
<td>o 2 x internal fixed mount 2.5” SSDs (all system models)</td>
</tr>
<tr>
<td><strong>Supported Rack Mount Kit Accessory Options</strong></td>
<td>• AXXELVRAIL – Enhanced value rack mount rail kit – 424 mm max travel length, 59 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>• AXXFULLRAIL – 2U premium rail with CMA support – 800 mm max travel length, 45 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>• AXXSHRTRAIL – 2U premium rail without CMA support – 788 mm max travel length, 45 kg max supported weight</td>
</tr>
<tr>
<td></td>
<td>• AXX2POSTBRCKT – Two post fixed mount bracket kit</td>
</tr>
<tr>
<td></td>
<td>• AXXCMA2 – Cable management arm (supported with AXXFULLRAIL only)</td>
</tr>
</tbody>
</table>
1.8 Available Server Board, Chassis, and System SKU Summary

The following tables provide an overview of available Intel product codes for building blocks and systems within the Intel® S2600WF 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.
- **KDK**: Knock Down Kit – Intel term for a chassis only product (L3).
- **BIK**: Server board in KDK – Intel term for integrated (L6 and L9) system product.
- **L3**: Server System Building Block - Chassis components only (KDK). No server board installed.
- **L6**: Integrated system – Chassis and server board, with no processors, memory, or storage devices.
- **L9**: Integrated system – Chassis and server board, with processors and memory, no storage devices, some accessory options included. See server system configurations in Chapter 3 for product code specific details. The L9 systems listed are part of the Intel® Data Center Blocks with Firmware Resilience product.

### Table 10. Server board product family summary

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S2600WFO(R)</td>
<td>2</td>
<td>24</td>
<td>3</td>
<td>0</td>
<td>12</td>
<td>4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Up to 6</td>
</tr>
<tr>
<td>S2600WFT(R)</td>
<td>2</td>
<td>24</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Up to 6</td>
</tr>
<tr>
<td>S2600WFQ(R)</td>
<td>2</td>
<td>24</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Up to 6</td>
</tr>
</tbody>
</table>

### Table 11. Server chassis (KDK) product family summary

<table>
<thead>
<tr>
<th>Intel Product Code (iPC)</th>
<th>Integration Level</th>
<th>Chassis Form Factor</th>
<th>Server Board Option</th>
<th>Drive Form Factor</th>
<th># of Drives (front)</th>
<th>2.5” NVMe* Support</th>
<th># of SSDs Drives (rear)</th>
<th># of PCIe* Add-in Card Slots</th>
<th>3rd Riser</th>
<th>Power Supply Modules</th>
<th>Rails</th>
<th>SAS RAID</th>
<th>SAS Expander</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1304WFXXX</td>
<td>L3</td>
<td>1U</td>
<td>Opt</td>
<td>3.5”/2.5”</td>
<td>4</td>
<td>No</td>
<td>N/A</td>
<td>Opt (up to 2)</td>
<td>N/A</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>N/A</td>
</tr>
<tr>
<td>R1208WFXXX</td>
<td>L3</td>
<td>1U</td>
<td>Opt</td>
<td>2.5”</td>
<td>8</td>
<td>Yes</td>
<td>N/A</td>
<td>Opt (up to 2)</td>
<td>N/A</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>N/A</td>
</tr>
<tr>
<td>R2312WFXXX</td>
<td>L3</td>
<td>2U</td>
<td>Opt</td>
<td>3.5”/2.5”</td>
<td>12</td>
<td>Opt</td>
<td>Opt (up to 8)</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
</tr>
</tbody>
</table>

Note: The Intel Server Chassis R2000WF can support all available 8x2.5” drive bay accessory options.
<table>
<thead>
<tr>
<th>Intel Product Code</th>
<th>Chassis Form Factor</th>
<th>Server Board Option</th>
<th>Drive Form Factor</th>
<th># of Drives (front)</th>
<th>2.5&quot; NVMe* Support</th>
<th># of SSD Drives (rear)</th>
<th>PCIe* Add-in Card Slots</th>
<th>3rd Riser</th>
<th>Power Supply Modules</th>
<th>Rails</th>
<th>SAS RAID</th>
<th>SAS Expander</th>
<th>Memory Included</th>
<th>Processor Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1304WF0YS(R)</td>
<td>1U</td>
<td>S2600WF0(R)</td>
<td>3.5&quot;/2.5&quot;</td>
<td>4</td>
<td>No</td>
<td>N/A</td>
<td>2</td>
<td>N/A</td>
<td>1x 1100W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R1304WF0YS(R)</td>
<td>1U</td>
<td>S2600WF0(R)</td>
<td>3.5&quot;/2.5&quot;</td>
<td>4</td>
<td>No</td>
<td>N/A</td>
<td>2</td>
<td>N/A</td>
<td>1x 1100W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R1208WF0YS(R)</td>
<td>1U</td>
<td>S2600WF0(R)</td>
<td>2.5&quot;</td>
<td>8</td>
<td>Up to 8</td>
<td>N/A</td>
<td>2</td>
<td>N/A</td>
<td>1x 1100W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2308WF0YS(R)</td>
<td>2U</td>
<td>S2600WF0(R)</td>
<td>3.5&quot;/2.5&quot;</td>
<td>8</td>
<td>No</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>1x 1300W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2312WF0NP(R)</td>
<td>2U</td>
<td>S2600WF0(R)</td>
<td>3.5&quot;/2.5&quot;</td>
<td>12</td>
<td>Up to 2</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2312WF0YS(R)</td>
<td>2U</td>
<td>S2600WF0(R)</td>
<td>3.5&quot;/2.5&quot;</td>
<td>12</td>
<td>Up to 2</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>1x 1300W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2321WFQZS</td>
<td>2U</td>
<td>S2600WF0Q</td>
<td>3.5&quot;/2.5&quot;</td>
<td>12</td>
<td>No</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>1x 1300W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2208WF0YS(R)</td>
<td>2U</td>
<td>S2600WF0(R)</td>
<td>2.5&quot;</td>
<td>8</td>
<td>Up to 8</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>1x 1300W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2224WF0YS(R)</td>
<td>2U</td>
<td>S2600WF0(R)</td>
<td>2.5&quot;</td>
<td>8</td>
<td>Up to 8</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>1x 1300W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>R2224WF0YS(R)</td>
<td>2U</td>
<td>S2600WF0(R)</td>
<td>2.5&quot;</td>
<td>24</td>
<td>Up to 24</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>1x 1300W AC</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>L9 Systems</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LFRB2208WF0YS</td>
<td>2U</td>
<td>S2600WF0T</td>
<td>2.5&quot;</td>
<td>8</td>
<td>Up to 8</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>2x 1300W</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LFRB2208WF0YS</td>
<td>2U</td>
<td>S2600WF0T</td>
<td>2.5&quot;</td>
<td>8</td>
<td>Up to 8</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>2x 1300W</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LFRB2208WF0YS</td>
<td>2U</td>
<td>S2600WF0T</td>
<td>2.5&quot;</td>
<td>8</td>
<td>Up to 8</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>2x 1300W</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LFRB2312WF0YS</td>
<td>2U</td>
<td>S2600WF0T</td>
<td>3.5&quot;/2.5&quot;</td>
<td>12</td>
<td>Up to 2</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>2x 1300W</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LFRB2312WF0YS</td>
<td>2U</td>
<td>S2600WF0T</td>
<td>3.5&quot;/2.5&quot;</td>
<td>12</td>
<td>Up to 2</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>2x 1300W</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LFRB2312WF0YS</td>
<td>2U</td>
<td>S2600WF0T</td>
<td>3.5&quot;/2.5&quot;</td>
<td>12</td>
<td>Up to 2</td>
<td>Opt</td>
<td>8</td>
<td>Yes</td>
<td>2x 1300W</td>
<td>Opt</td>
<td>Opt</td>
<td>Opt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 All front drive bays are 12Gb SAS capable.
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:

- 1U or 2U Intel® Server Chassis
- Intel® Server Board S2600WF product family option
- Power supply module(s)
- SATA/NVMe* data cables
- Power cord(s)
- Rack mount kit – rails or fixed mount
- Processor
- Memory
- Storage devices

![Figure 21. Illustration of building block options](image-url)
**Note:** Preconfigured L9 systems are also offered and require only the addition of power cords and storage devices to become a functional server. L9 systems are a part of the Intel® Data Center Block with Firmware Resilience product.

Optional Intel accessories that can be added include the following:

- Riser cards options
- Intel® SAS/SAS RAID support – PCIe* add-in card or module and appropriate SAS data cable(s)
- Intel® Ethernet Network Adapter for OCP* - to add additional features without losing a PCIe add-in slot
- Intel® Remote Management Module Lite key – to add advanced server management features

See Chapter 5 for all available options.
## 2.1 Intel® Server Board S2600WF Product Family Options

**Table 13. Intel® Server Board S2600WF product family options**

<table>
<thead>
<tr>
<th>Product Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Intel® Server Board S2600WFT** | iPC: S2600WFT, MM#: 952641, UPC: 00735858344463, EAN: 5032037105255, MOQ: 1 | See Table 5 for the complete feature set. Unique board features include:  
  - Intel® C624 chipset  
  - Onboard dual-port RJ45 10 GbE LAN  
  - (4) – onboard PCIe® NVMe® OCuLink connectors  
  - (12) – SATA 6 Gbps ports  
  **Box includes:** (1) server board  
  **Note:** All necessary mounting hardware, cabling, and shielding ship with the chassis and optional accessory kits. |
| **Intel® Server Board S2600WFTR** | iPC: S2600WFTR, MM#: 986004, UPC: 00735858406772, EAN: 5032037151030, MOQ: 1 | See Table 5 for the complete feature set. Unique board features include:  
  - Intel® C624 chipset  
  - Onboard dual-port RJ45 10 GbE LAN  
  - (4) – onboard PCIe® NVMe® OCuLink connectors  
  - (12) – SATA 6 Gbps ports  
  - Support for Intel® Optane™ DC persistent memory module  
  **Box includes:** (1) server board  
  **Note:** All necessary mounting hardware, cabling, and shielding ship with the chassis and optional accessory kits. |
| **Intel® Server Board S2600WF0** | iPC: S2600WF0, MM#: 952644, UPC: 00735858344470, EAN: 5032037105262, MOQ: 1 | See Table 5 for the complete feature set. Unique board features include:  
  - Intel® C624 chipset  
  - No onboard LAN  
  - (4) – onboard PCIe® NVMe® OCuLink connectors  
  - (12) – SATA 6 Gbps ports  
  **Box includes:** (1) server board  
  **Note:** All necessary mounting hardware, cabling, and shielding ship with the chassis and optional accessory kits. |
<table>
<thead>
<tr>
<th>Product Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Intel® Server Board S2600WF0R**
  
iPC | S2600WF0R |
  
MM# | 986005 |
  
UPC | 00735858406796 |
  
EAN | 5032037151054 |
  
MOQ | 1 |
  
Product type | Server board only |
  
Packaged gross wt. | 3.3 kg (7.3 lb) |
  
Un-packaged net wt. | 1.7 kg (4.2 lb) |
| | | See Table 5 for the complete feature set. Unique board features include:
  
- Intel® C624 chipset
- No onboard LAN
- (4) – onboard PCIe* NVMe* OCuLinkconnectors
- (12) – SATA 6 Gbps ports
- Support for Intel® Optane™ DC persistent memory module
| Box includes: | (1) server board |
  
Note: | All necessary mounting hardware, cabling, and shielding ship with the chassis and optional accessory kits. |
| **Intel® Server Board S2600WFQ**
  
iPC | S2600WFQ |
  
MM# | 952645 |
  
UPC | 00735858344456 |
  
EAN | 5032037105248 |
  
MOQ | 1 |
  
Product type | Server board only |
  
Packaged gross wt. | 3.3 kg (7.3 lb) |
  
Un-packaged net wt. | 1.7 kg (4.2 lb) |
| | | See Table 5 for the complete feature set. Unique board features include:
  
- Intel® C628 chipset
- Support for Intel® QuickAssist Technology (Intel® QAT)
- No onboard LAN
- (2) – onboard PCIe* NVMe* OCuLinkconnectors
- (4) – SATA 6 Gbps ports
| Box includes: | (1) server board and (1) Intel QAT cable |
  
Note: | All necessary mounting hardware, cabling, and shielding ship with the chassis and optional accessory kits. OCuLink connectors from CPU1 can be used for NVMe drives. OCuLink connectors from CPU2 are used for the Intel QAT link and do not work for NVMe drives. |
| **Intel® Server Board S2600WFQR**
  
iPC | S2600WFQR |
  
MM# | 986006 |
  
UPC | 00735858406819 |
  
EAN | 5032037151078 |
  
MOQ | 1 |
  
Product type | Server board only |
  
Packaged gross wt. | 3.3 kg (7.3 lb) |
  
Un-packaged net wt. | 1.7 kg (4.2 lb) |
| | | See Table 5 for the complete feature set. Unique board features include:
  
- Intel® C628 chipset
- Support for Intel® QuickAssist Technology (Intel® QAT)
- No onboard LAN
- (2) – onboard PCIe* NVMe* OCuLinkconnectors
- (4) – SATA 6 Gbps ports
- Support for Intel® Optane™ DC persistent memory module
| Box includes: | (1) server board and (1) Intel QAT cable |
  
Note: | All necessary mounting hardware, cabling, and shielding ship with the chassis and optional accessory kits. OCuLink connectors from CPU1 can be used for NVMe drives. OCuLink connectors from CPU2 are used for the Intel QAT link and do not work for NVMe drives. |
2.2  **Intel® Server Chassis Product Family Options**

The product tables found in this section provide order code information and detailed descriptions for each available 1U and 2U 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 5.

**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.

---

**Figure 22. Intel® Server Chassis options**
## Table 14. Intel® Server Chassis R1304WFXXX product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server Chassis R1304WFXXX</th>
<th>iPC</th>
<th>R1304WFXXX</th>
<th>Product type</th>
<th>Chassis only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MM#</td>
<td>952622</td>
<td>Chassis form factor</td>
<td>1U rack mount</td>
</tr>
<tr>
<td></td>
<td>UPC</td>
<td>00735858344722</td>
<td>Packaged gross wt.</td>
<td>19 kg (41.9 lb)</td>
</tr>
<tr>
<td></td>
<td>EAN</td>
<td>5032037105439</td>
<td>Un-packaged net wt.</td>
<td>10.3 kg (22.7 lb)</td>
</tr>
<tr>
<td></td>
<td>MOQ</td>
<td>1</td>
<td>Chassis dimensions</td>
<td>712 x 439 x 43.2 mm (L x W x H)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Package dimensions</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 1U chassis with Quick Reference Label affixed to top cover</td>
<td>Intel® Server Board S2600WF (choose one)</td>
<td>Intel® Ethernet Network Adapter for OCP* - See Section 5.4 for available options</td>
</tr>
<tr>
<td>(4) – 3.5” hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>o iPC S2600WFTR(R)</td>
<td>Intel® RAID Card/Module – See Section 5.5 for options</td>
</tr>
<tr>
<td>• (1) 12 Gb SAS backplane – iPC FR1304S3HSBP</td>
<td>o iPC S2600WFO(R)</td>
<td>SAS/SATA data cables – Cable selection is dependent on desired storage option. See Chapter 4 for available cable options</td>
</tr>
<tr>
<td>• (4) 3.5” hot swap drive tool less carriers – iPC FXX35HSCAR2</td>
<td>o iPC S2600WFQ(R)</td>
<td>Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE</td>
</tr>
<tr>
<td>(1) – Pre-installed standard control panel assembly</td>
<td>Power supply module(s) (choose one type) – (2) common modules required for redundancy</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(board only – iPC FXXFPPANEL2)</td>
<td>o iPC AXX1300TCRPS</td>
<td>DDDC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Server Boards S2600WFTFR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor)</td>
</tr>
<tr>
<td>• 260 mm front panel cable – iPN J25698-xxx</td>
<td>o 1300W AC power supply module – iPC AXX1100PCRPS</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>(1) – Pre-installed front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td>• Power cord(s) – See Section 5.6</td>
<td></td>
</tr>
<tr>
<td>• 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>• Rack mount kit – See Section 5.7</td>
<td></td>
</tr>
<tr>
<td>• 400 mm video cable – iPN H62114-xxx</td>
<td>• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family – see Section 1.1.1 for details on processor support</td>
<td></td>
</tr>
<tr>
<td>(1) – Server board to backplane 150mm I2C cable – iPN H91171-xxx</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td></td>
</tr>
<tr>
<td>(1) – 850mm mini SAS HD cable – iPC AXXCBL850HDHRT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 350mm backplane power cable – iPN H82100-xxx</td>
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<tr>
<td>(1) – Air duct – iPN H90054-xxx</td>
<td></td>
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</tr>
<tr>
<td>(6) – Dual rotor system fans – iPC FR1UFAN10PW</td>
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<tr>
<td>(2) – CPU heat sinks, 39 fin passive – iPN J39509-xxx</td>
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<tr>
<td>(2) – CPU heat sink “No CPU” label inserts – iPN J16115-xxx</td>
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<tr>
<td>(2) – Standard CPU carriers – iPN H72851-xxx</td>
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<td>(2) – 1 slot PCIe x16 Riser Card – iPN H88399-xxx</td>
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<tr>
<td>(8) – DIMM slot blanks – iPN G75158-xxx</td>
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<tr>
<td>(1) – Chassis Stiffener Bar – iPN J16623-xxx</td>
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</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
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<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
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<td></td>
</tr>
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<td>Server board and riser card mounting screws</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 15. Intel® Server Chassis R1208WFXXX product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server Chassis R1208WFXXX</th>
<th><em><em>1U, 8 x 2.5” HDD or 4 x 2.5” SSD SATA/SSD/NVMe</em> front mount drives</em>*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included</strong></td>
<td><strong>Required Items (sold separately)</strong></td>
</tr>
<tr>
<td>(1) – 1U chassis with Quick Reference Label affixed to top cover</td>
<td>Intel® Server Board S2600WF (choose one)</td>
</tr>
<tr>
<td>(8) – 2.5” hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>o IPC S2600WFT(R)</td>
</tr>
<tr>
<td>• (1) SAS/NVMe* Combo backplane – iPC F1U8X25S3PHS</td>
<td>o IPC S2600WFO(R)</td>
</tr>
<tr>
<td>• (8) 2.5” hot swap drive tool less carriers – iPC FXX35HSCAR3</td>
<td>o IPC S2600WFQ(R)</td>
</tr>
<tr>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXFPANEL2)</td>
<td>Power supply module(s) (choose one type) – (2) common modules required for redundancy</td>
</tr>
<tr>
<td>• 260 mm front panel cable – iPN J25698-xxx</td>
<td>o 1300W AC power supply module – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>(1) – Pre-installed front I/O panel assembly (1x VGA and 2x USB)</td>
<td>o 1100W AC power supply module – iPC AXX1100PCRPS</td>
</tr>
<tr>
<td>• 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>o 750 W DC power supply module – iPC AXX750DCCRPS</td>
</tr>
<tr>
<td>• 400 mm video cable – iPN H62114-xxx</td>
<td>Power cord(s) – See Section 5.6</td>
</tr>
<tr>
<td>(1) – 200mm backplane I2C cable – iPN H91170-xxx</td>
<td>Rack mount kit – See Section 5.7</td>
</tr>
<tr>
<td>(1) – 650mm mini SAS HD Cable – iPC AXXCB650HDHRT</td>
<td>(1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family – see Section 1.1.1 for details on processor support</td>
</tr>
<tr>
<td>(1) – 850mm mini SAS HD cable – iPC AXXCB850HDHRT</td>
<td>ECC DDR4 memory (RDIMM or LRDIMM)</td>
</tr>
<tr>
<td>(1) – 400mm backplane power cable – iPN H82099-xxx</td>
<td>Intel® Ethernet Network Adapter for OCP* - See Section 5.4 for available options</td>
</tr>
<tr>
<td>(1) – Air duct – iPN H90054-xxx</td>
<td>Intel® RAID Card/Module – See Section 5.5 for options</td>
</tr>
<tr>
<td>(6) – Dual rotor system fans – iPC FR1UFAN10PW</td>
<td>SAS/SATA data cables – Cable selection is dependent on desired storage option. See Chapter 4 for available cable options</td>
</tr>
<tr>
<td>(2) – CPU heat sinks, 39 fin passive – iPN J39509-xxx</td>
<td>Intel® Remote Management Module 4 Lite for advanced management features – iPC AXXRMM4LITE</td>
</tr>
<tr>
<td>(2) – CPU heat sink “No CPU” label inserts – iPN J16115-xxx</td>
<td>Storage drives</td>
</tr>
<tr>
<td>(2) – Standard CPU carriers – iPN H72851-xxx</td>
<td>DDDC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Server Boards S2600WFTFR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor)</td>
</tr>
<tr>
<td>(2) – 1 slot PCIe x16 Riser Card – iPN H88399-xxx</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – Chassis Stiffener Bar – iPN J16623-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
</tr>
<tr>
<td>Server board and riser card mounting screws</td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Optional Accessories (sold separately)</strong></th>
<th><strong>Product type</strong></th>
<th><strong>Chassis form factor</strong></th>
<th><strong>Packaged gross wt.</strong></th>
<th><strong>Un-packaged net wt.</strong></th>
<th><strong>Chassis dimensions</strong></th>
<th><strong>Package dimensions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Server Chassis R1208WFXXX</td>
<td>Chassis only</td>
<td>1U rack mount</td>
<td>18.5 kg (40.9 lb)</td>
<td>10.3 kg (22.7 lb)</td>
<td>712 x 439 x 43.2 mm (L x W x H)</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>
# Intel® Server Chassis R2000WFXXX product specifications and configuration requirements

**Intel® Server Chassis R2000WFXXX**  
2U, no front mount drives

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Intel® Server Chassis R2000WF sold separately</td>
<td>• Intel® Server Board S2600WF (choose one)</td>
<td></td>
</tr>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>o iPC S2600WFT(R)</td>
<td>• Front storage bay option</td>
</tr>
<tr>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXXPanel2)</td>
<td>o iPC S2600WFD(R)</td>
<td>• Up to (3) 8 x 2.5” drive bay modules:</td>
</tr>
<tr>
<td>o 300 mm front panel cable – iPN H34381-xxx</td>
<td>o iPC S2600WFQ(R)</td>
<td>o SAS/SATA/NVMe combo – iPC A2UX8X25S3PHS</td>
</tr>
<tr>
<td>(1) – Pre-installed front I/O panel assembly (1x VGA and 2x USB 3.0)</td>
<td></td>
<td>o Dual port SAS – iPC A2UX8X25S3DPDK2</td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>• Power supply module(s) (choose one type) – (2) common modules required for redundancy</td>
<td>• 8 x 3.5” drive bay module – iPC A2UX8X35S3HSDK1 (Reuses control panel and front I/O panel. Includes SAS/SATA data cables and peripheral power cable)</td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td>o 1300W AC power supply module – iPC AX21300TCRPS</td>
<td>• Rear storage bay option</td>
</tr>
<tr>
<td>(1) – Standard 2U air duct iPN H90554-xxx</td>
<td>o 1100W AC power supply module - iPC AX21100PCRPS</td>
<td>• Up to (2) hot swap SATA SSDs – iPC A2UXREARHSDK2</td>
</tr>
<tr>
<td>(6) – 60 mm hot swap system fan – iPC FR2UFAN60HWS</td>
<td>o 750 W DC power supply module - iPC AX21750DCCRPS</td>
<td>• Risers Slots #1 and #2 – Available riser cards include:</td>
</tr>
<tr>
<td>(2) – CPU heat sink – iPC H38569-xxx</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>o 3-slot riser card, (3) x8 PCIe* 3.0 slots – iPC A2UL8RISER2</td>
</tr>
<tr>
<td>(2) – CPU heat sink “No CPU” label insert – iPN J16115-xx</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>o 2-slot riser card, (1) x16 PCIe* slot and (1) x8 PCIe* slot – iPC A2UL16RISER2</td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td>• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family – see Section 1.1.1 for details on processor support</td>
<td>• Riser Slot #3 – Available riser cards include:</td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
<td>o 2-slot riser card, (1) low profile x8 PCIe* 3.0 slot and (1) low profile x8 PCIe* 2.0 slot – iPC A2UX8X4RISER</td>
</tr>
<tr>
<td>(16) – DIMM slot blank – iPN G75158-xxx</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>Other</td>
</tr>
<tr>
<td>(1) – 175 mm I2C cable – iPN H91172-xxx</td>
<td></td>
<td>• SAS/SATA/NVMe data cables – Cable selection is dependent on desired storage option. See Chapter 4 for available cable options</td>
</tr>
<tr>
<td>(1) – 250 mm I2C cable – iPN H91166-xxx</td>
<td></td>
<td>• Intel® RAID Card/Module – See Section 5.5 for options</td>
</tr>
<tr>
<td>(1) – 400/525/675 mm HSBP power cable – iPN H82108-xxx</td>
<td></td>
<td>• SAS Expander Options – See Sections 4.6.2 and 4.7.4</td>
</tr>
<tr>
<td>(1) – Internal fixed mount 250 mm SSD drive power cable - iPN J29245-xxx</td>
<td></td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(2) – Riser card mounting brackets supporting up to 3 riser cards (riser cards sold separately – see Section 5.2)</td>
<td></td>
<td>• Intel® Remote Management Module 4 Lite RoHS free key for advanced management features - iPC AXXRMM4LITE2</td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td>• DDCC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Server Boards S2600WFTR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor)</td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>Server board and riser card mounting screws</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Front storage bay option**

- Up to (3) 8 x 2.5” drive bay modules:
  - o SAS/SATA/NVMe combo – iPC A2UX8X25S3PHS
  - o Dual port SAS – iPC A2UX8X25S3DPDK2
  - o 8 x 3.5” drive bay module – iPC A2UX8X35S3HSDK1 (Reuses control panel and front I/O panel. Includes SAS/SATA data cables and peripheral power cable)

**Rear storage bay option**

- Up to (2) hot swap SATA SSDs – iPC A2UXREARHSDK2

**Riser Cards**

- Up to (3) can be installed concurrently
- o Risers Slots #1 and #2 – Available riser cards include:
  - o 3-slot riser card, (3) x8 PCIe* 3.0 slots – iPC A2UL8RISER2
  - o 2-slot riser card, (1) x16 PCIe* slot and (1) x8 PCIe* slot – iPC A2UL16RISER2
- o Riser Slot #3 – Available riser cards include:
  - o 2-slot riser card, (1) low profile x8 PCIe* 3.0 slot and (1) low profile x8 PCIe* 2.0 slot – iPC A2UX8X4RISER

**Other**

- o SAS/SATA/NVMe data cables – Cable selection is dependent on desired storage option. See Chapter 4 for available cable options
- o Intel® RAID Card/Module – See Section 5.5 for options
- o SAS Expander Options – See Sections 4.6.2 and 4.7.4
- o Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- o Intel® Remote Management Module 4 Lite RoHS free key for advanced management features - iPC AXXRMM4LITE2
- o DDCC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Server Boards S2600WFTR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor)

See Chapters 5 and 6 for all available accessory options.

---

**Table 16. Intel® Server Chassis R2000WFXXX product specifications and configuration requirements**
Table 17. Intel® Server Chassis R2312WFXXX product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server Chassis R2312WFXXX</th>
<th>iPC</th>
<th>R2312WFXXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>2U, 2 x 3.5&quot; HDD or 12 x 2.5&quot; SSD SATA/SAS front mount drives (support for up to 2 NVMe* drives)</td>
<td>MM#</td>
<td>952624</td>
</tr>
<tr>
<td></td>
<td>UPC</td>
<td>00735858390309</td>
</tr>
<tr>
<td></td>
<td>EAN</td>
<td>5032037138567</td>
</tr>
<tr>
<td></td>
<td>MOQ</td>
<td>1</td>
</tr>
<tr>
<td><strong>Product type</strong></td>
<td>Chassis only</td>
<td></td>
</tr>
<tr>
<td><strong>Chassis form factor</strong></td>
<td>2U rack mount</td>
<td></td>
</tr>
<tr>
<td><strong>Packaged gross wt.</strong></td>
<td>19 kg (41.9 lb)</td>
<td></td>
</tr>
<tr>
<td><strong>Un-packaged net wt.</strong></td>
<td>13.3 kg (29.3 lb)</td>
<td></td>
</tr>
<tr>
<td><strong>Chassis dimensions</strong></td>
<td>712 x 439 x 89 mm (L x W x H)</td>
<td></td>
</tr>
<tr>
<td><strong>Package dimensions</strong></td>
<td>983 x 577 x 260 mm (L x W x H)</td>
<td></td>
</tr>
</tbody>
</table>

**Included**

- (1) – 2U Chassis with Quick Reference Label affixed to top cover
- (12) – 3.5" hot-swap drive bays with drive carriers and blanks. Includes:
  - (1) SAS/NVMe* combo backplane – iPC F2U12X35S3PH
  - (12) 3.5" hot swap drive tool less carriers – iPC FXX35HSCAR2
- (1) – Storage Rack Handle Assembly – iPC A2UHANDLKIT
  - 1 set Storage Rack Handles
  - Mini-front panel (board only – iPN G28538-xxx)
  - 410 mm front panel cable – iPN H26893-xxx
  - 640 mm front panel USB 2.0 cable iPN H20005-xxx
- (1) – 175 mm Backplane I2C Cable – iPN H91172-xxx
- (1) – 800 mm Mini SAS HD Cable iPC AXXCBL800HDHD
- (1) – 875 mm Mini SAS HD Cable iPC AXXCBL875HDHD
- (1) – 525/675 mm Backplane power cable – iPN H82097-xxx
- (1) – Standard 2U air duct – iPN H90554-xxx
- (6) – Hot swap system fans – iPC FR2UFAN60HSW
- (16) – DIMM slot blanks – iPN G75158-00x
- (1) – Power supply bay blank insert
- (2) – AC Power Cord retention strap assembly – iPN H23961-00x
- (2) – CPU heat sinks – iPC FXXCA78X108HS
- (2) – CPU heat sink “NO CPU” mylar spacer insert – iPN J16115-XXX
- (2) – Standard CPU carrier – iPN H72851-xxx
- (1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
- (1) – 175 mm I2C cable – iPN H91172-xxx
- (1) – Internal fixed mount 250 mm SSD drive power cable – iPN J29245-xxx
- (2) – Riser Card mounting brackets supporting up to 3 riser cards (riser cards sold separately – see Section 5.2)
- (1) – Power supply bay blank insert

**Required Items (sold separately)**

- Intel® Server Board S2600WF (choose one)
  - iPC S2600WFT(R)
  - iPC S2600WF0(R)
  - iPC S2600WFQ(R)
- Power supply module(s) (choose one type)
  - (2) common modules required for redundancy
  - 1300W AC power supply module – iPC AXX1300TCRPS
  - 1100W AC power supply module – iPC AXX1100PCRPS
  - 750 W DC power supply module – iPC AXX750DCRPS
- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family – see Section 1.1.1 for details on processor support
- ECC DDR4 memory (RDIMM or LRDIMM)

**Optional Accessories (sold separately)**

- Rear storage bay option
  - Up to (2) hot swap SATA SSDs – iPC A2UREARHSDK2
- Riser Cards – Up to (3) can be installed concurrently
  - Risers Slots #1 and #2 – Available riser cards include:
    - 3-slot riser card, (3) x8 PCIe* 3.0 slots – iPC A2UL8RISER2
    - 2-slot riser card, (1) x16 PCIe* slot and (1) x8 PCIe* slot – iPC A2UL16RISER2
  - Riser Slot #3 – Available riser cards include:
    - 2-slot riser card, (1) low profile x8 PCIe* 3.0 slot and (1) low profile x8 PCIe* 2.0 slot – iPC A2UX8X4RISER
- Other
  - SAS/SATA/NVMe data cables – Cable selection is dependent on desired storage option. See Chapter 4 for available cable options
  - Intel® RAID Card/Module – See Section 5.5 for options
  - SAS Expander Options – See Sections 4.6.2 and 4.7.4
  - Intel® Ethernet Network Adapter for OCP* – See Chapter 5.4 for available options
  - Intel® Remote Management Module 4 Lite RoHS free key for advanced management features – iPC AXXRMM4LITE2
  - DDAC DDR-compatible Intel® Optane™ DC persistent memory module (supported by Intel® Server Boards S2600WFTR, S2600WF0R, and S2600WFQR with a 2nd Gen Intel® Xeon® Scalable processor) – See Chapters 5 and 6 for all available accessory options.
3. Server System Configurations

The Intel® Server S2600WF product family includes several integrated server system options that include a 1U or 2U chassis with different hot swap drive bay configurations, a specific server board, power supply module, and riser cards. At a minimum, building a functional server from one of these options requires the following:

- Rack mount kit – rails or fixed mount
- Power cord(s)
- Processor(s)
- Memory
- Storage drives

Also offered are preconfigured L9 systems that require only the addition of power cords and storage devices to become a functional server. L9 systems are a part of the Intel® Data Center Block with Firmware Resilience product.

Optional Intel accessories that can be added include:

- Second power supply module to add power redundancy
- Intel® RAID support – PCIe* add-in card or module and appropriate SAS data cable(s)
- Intel® RAID Maintenance Free Backup unit – Intel RAID backup accessory
- Intel® Ethernet Network Adapter for OCP* - to add additional features without losing a PCIe add-in slot
- Intel® Remote Management Module Lite key – to add advanced server management features

See Chapters 5 and 6 for a full list of available options.
3.1 **Intel® Server System R1000WF Product Family – (1U Rack Mount System)**

The product tables found in this section provide order code information and detailed descriptions for each available 1U and 2U 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 5.

**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.

This product family offers two levels of server system integration:

- **L6** – Integrated system: Chassis and server board, with no processors, memory, or storage devices.
- **L9** – Integrated system: Chassis and server board, with processors and memory, no storage devices.

![Figure 24. Intel® Server System R1000WF product family](image)
### Table 18. Intel® Server System R1304WFOYS product specifications and configuration requirements

**Intel® Server System R1304WFOYS**
1U, Intel® Server Board S2600WF0, 4 x 3.5" HDD or 4 x 2.5" SSD SAS/SATA front mount drives

<table>
<thead>
<tr>
<th>iPC</th>
<th>R1304WFOYS</th>
</tr>
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<tbody>
<tr>
<td>MM#</td>
<td>952626</td>
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<tr>
<td>UPC</td>
<td>00735858344715</td>
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<tr>
<td>EAN</td>
<td>5032037105422</td>
</tr>
<tr>
<td>MOQ</td>
<td>1</td>
</tr>
</tbody>
</table>

**Product type**
- L6 integrated system

**Chassis form factor**
- 1U rack mount

**Packaged gross wt.**
- 20.6 kg (45.3 lb)

**Un-packaged net wt.**
- 12.3 kg (27.1 lb)

**Chassis dimensions**
- 712 x 439 x 43.2 mm (L x W x H)

**Package dimensions**
- 983 x 577 x 260 mm (L x W x H)

#### Included

1. 1U chassis with Quick Reference Label affixed to top cover
2. Riser card assembly with 1 slot PCIe x16 riser card – iPC F1UL16RISER3
3. 3.5" hot-swap drive bays with drive carriers and drive blanks. Includes:
   - (1) 12 Gb SAS backplane – iPC FR1304S3HSBP
   - (4) 3.5" hot swap drive tool less carriers – iPC FXX35HSCAR2
4. Pre-installed standard control panel assembly (board only – iPC FXXFPANEL2)
   - 260 mm front panel cable – iPN J25698-xxx
5. Pre-installed front I/O panel assembly (1 x VGA and 2 x USB)
   - 620 mm USB 3.0 cable – iPN H76899-xxx
   - 400 mm video cable – iPN H62114-xxx
6. 150 mm backplane I2C cable – iPN H91171-xxx
7. 850 mm mini SAS HD cable – iPC AXXCBL850HDHRT
8. 350 mm backplane power cable – iPN H82100-xxx
9. Air duct – iPN H90054-xxx
10. Dual rotor system fans – iPC FR1UFAN10PW
11. 1100W power supply module - iPC AXX1100PCRPS
12. CPU heat sinks, 39 fin passive – iPN J39509-xxx
13. CPU heat sink "No CPU” label inserts – iPN J16115-xxx
14. Standard CPU Carriers – iPN H72851-xxx
15. DIMM slot blanks – iPN G751S58-xxx
16. Chassis Stiffener Bar – iPN J16623-xxx
17. Power supply bay blank insert
18. AC power cord retention strap assembly – iPN H23961-00x

#### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))
- ECC DDR4 memory (RDIMM or LRDIMM)

#### Optional Accessories (sold separately)

- Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Storage drives

**Note:** By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Storage drives

See Chapters 5 and 6 for all available accessory options.
Table 19. Intel® Server System R1304WF0YSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Product Family</th>
<th>iPC</th>
<th>R1304WF0YSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM#</td>
<td>986047</td>
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<td>UPC</td>
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<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 1U chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>• Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WF0R (no onboard LAN) – iPC S2600WF0R</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(2) – Riser card assembly with 1 slot PCIe x16 riser card – iPC F1UL16RISER3</td>
<td>• (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(4) – 3.5” hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o (1) 12 Gb SAS backplane – iPC FR1304S3HSHBP</td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>o (4) 3.5” hot swap drive tool less carriers – iPC FXX35HSCAR2</td>
<td>• Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXXFPANEL2)</td>
<td>• CPU heat sinks, 39 fin passive – iPN J39509-xxx</td>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>o 260 mm front panel cable – iPN J25698-xxx</td>
<td>• CPU heat sink &quot;No CPU&quot; label inserts – iPN J16115-xxx</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>(1) – Pre-installed front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td>• Air duct – iPN H90054-xxx</td>
<td></td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>(8) – DIMM slot blanks – iPN G75158-xxx</td>
<td></td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td>(1) – Chassis Stiffener Bar – iPN J16623-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – 150 mm backplane I2C cable – iPN H91171-xxx</td>
<td>(1) – Power supply bay blank insert</td>
<td></td>
</tr>
<tr>
<td>(1) – 850 mm mini SAS HD cable – iPC AXXCBL850HDHRT</td>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
</tr>
<tr>
<td>(1) – 350 mm backplane power cable – iPN H82100-xxx</td>
<td>Spares for each screw type included</td>
<td></td>
</tr>
<tr>
<td>(1) – Air duct – iPN H90054-xxx</td>
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</tr>
<tr>
<td>(6) – Dual rotor system fans – iPC FR1UFAN10PW</td>
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</tr>
<tr>
<td>(1) – 1100W power supply module - iPC AXX1100PCRPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks, 39 fin passive – iPN J39509-xxx</td>
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<td></td>
</tr>
<tr>
<td>(2) – CPU heat sink &quot;No CPU&quot; label inserts – iPN J16115-xxx</td>
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<td></td>
</tr>
<tr>
<td>(2) – Standard CPU Carriers – iPN H72851-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Chassis Stiffener Bar – iPN J16623-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td></td>
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<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
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Table 20. Intel® Server System R1304WFTYS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
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<tr>
<td>(1) – 1U chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>• Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFT (dual 10 GbE LAN) – iPC S2600WFT</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(2) – Riser card assembly with 1 slot PCIe x16 riser card – iPC F1UL16RISER3</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(4) – 3.5” hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o (1) 12 Gb SAS backplane – iPC FR1304S3HSBP</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>o (4) 3.5” hot swap drive tool-less carriers – iPC FXX35HSCAR2</td>
<td></td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXXFPCASE)</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o 260 mm front panel cable – iPN J25698-xxx</td>
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## Table 21. Intel® Server System R1304WFTYSR product specifications and configuration requirements

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<th>Included</th>
<th>Required Items (sold separately)</th>
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<tbody>
<tr>
<td>(1) – 1U chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>• Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTR (dual 10 GbE LAN) – iPC S2600WFTR</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Intel® Ethernet Network Adapter for OCP* – See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(2) – Riser card assembly with 1 slot PCIe x16 riser card – iPC F1UL16RISER3</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(4) – 3.5” hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• SATA Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o (1) 12 Gb SAS backplane – iPC FR1304S3HSBP</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>o (4) 3.5” hot-swap drive tool less carriers – iPC FXX35HSCAR2</td>
<td></td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXXFPPANEL2)</td>
<td></td>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>o 260 mm front panel cable – iPN J25698-xxx</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>(1) – Pre-installed front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td></td>
<td></td>
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<tr>
<td>(1) – 150 mm backplane I2C cable – iPN H91171-xxx</td>
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<td></td>
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<tr>
<td>(1) – 850 mm mini SAS HD cable – iPC AXXCBL850HDHRT</td>
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<tr>
<td>(1) – 350 mm backplane power cable – iPN H82100-xxx</td>
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<tr>
<td>(1) – SATA optical drive power cable 300 mm – iPN H23901-001</td>
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<tr>
<td>(1) – SATA optical drive bay mounting kit – iPN H19168-xxx</td>
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<tr>
<td>(1) – Air duct – iPN H90054-xxx</td>
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</tr>
<tr>
<td>(6) – Dual rotor system fans – iPC FR1UFAN10PW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 1100W power supply module - iPC AXX1100PCRPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks, 39 fin passive – iPN J39509-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sink &quot;No CPU&quot; label inserts – iPN J16115-xxx</td>
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<td></td>
</tr>
<tr>
<td>(2) – Standard CPU Carriers – iPN H72851-xxx</td>
<td></td>
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</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-xxx</td>
<td></td>
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</tr>
<tr>
<td>(1) – Chassis Stiffener Bar – iPN J16623-xxx</td>
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<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Storage drives
- DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)

See Chapters 5 and 6 for all available accessory options.
### Table 22. Intel® Server System R1208WFTYS product specifications and configuration requirements

#### Intel® Server System R1208WFTYS
1U, Intel® Server Board S2600WFT, 8 x 2.5" SSD SATA/SAS/NVMe* front mount drives

<table>
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<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
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<tr>
<td>iPC R1208WFTYS</td>
<td>1U chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
</tr>
<tr>
<td>MM# 975886</td>
<td>(1) – Intel® Server Board S2600WFT (dual 10GbE LAN) – iPC S2600WFT</td>
<td>• Rack mount kit – See Section 5.7</td>
</tr>
<tr>
<td>UPC 00735858344814</td>
<td>(2) – Riser card assembly with 1 slot PCIe x16 riser card – iPC F1UL16RISER3</td>
<td>• (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
</tr>
<tr>
<td>EAN 5032037105521</td>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXXPANEL2)</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
</tr>
<tr>
<td>MOQ 1</td>
<td>(8) – 2.5&quot; hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>• Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS</td>
</tr>
<tr>
<td></td>
<td>o (1) SAS/NVMe* Combo backplane – iPC F1U8X2553PHS</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td></td>
<td>o (8) 2.5&quot; hot swap drive tool less carriers – iPC FXX35HSCAR3</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td></td>
<td>(1) – Pre-installed standard control panel assembly (board only – iPC FXXPANEL2)</td>
<td>• SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td></td>
<td>o 260 mm front panel cable – iPN J25698-xxx</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td></td>
<td>(1) – Pre-installed front I/O panel assembly (1x VGA and 2x USB)</td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td></td>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>• Storage drives</td>
</tr>
<tr>
<td></td>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td>o Up to (8) SAS/SATA/NVMe drives supported</td>
</tr>
<tr>
<td></td>
<td>(1) – 200mm backplane I2C cable – iPN H91170-xxx</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td></td>
<td>(1) – 650mm mini SAS HD Cable – iPC AXXCBL650HDHRT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) – 850mm mini SAS HD cable – iPC AXXCBL850HDHRT</td>
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</tr>
<tr>
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<td>(1) – 400mm backplane power cable – iPN H82099-xxx</td>
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<td>(1) – SATA optical drive power cable 300 mm – iPN H23901-001</td>
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<td></td>
<td>(1) – SATA optical drive mounting kit – iPN H19168-xxx</td>
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<tr>
<td></td>
<td>(1) – Air duct – iPN H90054-xxx</td>
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</tr>
<tr>
<td></td>
<td>(6) – Dual rotor system fans – iPC FR1UFAN10PW</td>
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<tr>
<td></td>
<td>(1) – 1100W power supply module - iPC AXX1100PCRPS</td>
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</tr>
<tr>
<td></td>
<td>(2) – CPU heat sinks, 39 fin passive – iPN J39509-xxxx</td>
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<td>(2) – CPU heat sink &quot;No CPU&quot; label inserts – iPN J16115-xxxx</td>
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<td>(2) – Standard CPU carriers – iPN H72851-xxx</td>
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<td></td>
<td>(8) – DIMM slot blanks – iPN G75158-xxx</td>
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</tr>
<tr>
<td></td>
<td>(1) – Chassis Stiffener Bar – iPN J16623-xxx</td>
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</tr>
<tr>
<td></td>
<td>(1) – Power supply bay blank insert</td>
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</tr>
<tr>
<td></td>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
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</tr>
</tbody>
</table>

Spare parts for each screw type included

**Note:** By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Storage drives
  - Up to (8) SAS/SATA/NVMe drives supported
Table 23. Intel® Server System R1208WFTYSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
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<tbody>
<tr>
<td>Intel® Server System R1208WFTYSR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1U, Intel® Server Board S2600WFTR, 8 x 2.5&quot; SSD SATA/SAS/NVMe* front mount drives</td>
<td></td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
<td></td>
<td>iPC R1208WFTYSR</td>
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<tr>
<td>iPC F1UL16RISER3</td>
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</tr>
<tr>
<td>1U chassis with Quick Reference Label affixed to top cover</td>
<td>Power cord(s) – See Section 5.6</td>
<td>Second 1100W AC power supply module to support power redundancy – iPC AXX1100PCRPS</td>
</tr>
<tr>
<td>Riser card assembly with 1 slot PCIe x16 riser card – iPC F1U8X2553PHS</td>
<td>Rack mount kit – See Section 5.7</td>
<td>Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>2.5&quot; hot-swap drive bays with drive carriers and drive blanks. Includes:</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>o (1) SAS/NVMe* Combo backplane – iPC FXX35HSVSCAR3</td>
<td>ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o (8) 2.5&quot; hot swap drive toolless carriers – iPC FXX35HSVSCAR3</td>
<td></td>
<td>PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>Pre-installed standard control panel assembly (board only – iPC FXXFPANEL2)</td>
<td></td>
<td>SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSTATA4R5</td>
</tr>
<tr>
<td>o 260 mm front panel cable – iPN J25698-xxx</td>
<td></td>
<td>Storage drives</td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td></td>
<td>Up to (8) SAS/SATA/NVMe drives supported</td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td></td>
<td>DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>200mm backplane I2C cable – iPN H91170-xxx</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>650mm mini SAS HD Cable – iPC AXXCBL650HDHRT</td>
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## Table 24. Intel® Server System R1208WFQYSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Product Type</th>
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<td><strong>MM#</strong></td>
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<tr>
<td><strong>UPC</strong></td>
<td>00735858406918</td>
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<tr>
<td><strong>EAN</strong></td>
<td>5032037151177</td>
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<tr>
<td><strong>MOQ</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

### Included

- (1) – 1U chassis with Quick Reference Label affixed to top cover
- (1) – Intel® Server Board S2600WFQR (Intel® QAT support) – iPC S2600WFQR
- (2) – Riser card assembly with 1 slot PCIe x16 riser card – iPC F1UL16RISER3
- (8) – 2.5" hot-swap drive bays with drive carriers and drive blanks. Includes:
  - (1) SAS/NVMe* Combo backplane – iPC F1U8X2553PHS
  - (8) 2.5" hot swap drive tool less carriers – iPC FXX35HSCAR3
- (1) – Pre-installed standard control panel assembly (board only – iPC FXXFPANEL2)
  - 260 mm front panel cable – iPN J25698-xxx
  - Pre-installed front I/O panel assembly (1x VGA and 2x USB)
  - 620 mm USB 3.0 cable – iPN H76899-xxx
  - 400 mm video cable – iPN H62114-xxx
  - 200mm backplane I2C cable – iPN H91170-xxx
  - 650mm mini SAS HD Cable – iPC AXXCBL650HDHRT
  - 850mm mini SAS HD cable – iPC AXXCBL850HDHRT
  - 400mm backplane power cable – iPN H82099-xxx
  - 290 mm Intel QAT cable – iPN J61138-xxx
  - Air duct – iPN H90054-xxx
- (6) – Dual rotor system fans – iPC FR1UFAN10PW
- (1) – 1100 W power supply module - iPC AXX1100PCRPS
- (2) – CPU heat sinks, 39 fin passive – iPN J39509-xxx
- (2) – CPU heat sink “No CPU” label inserts – iPN J16115-xxx
- (2) – Standard CPU carriers – iPN H72851-xxx
- (8) – DIMM slot blanks – iPN G75158-xxx
- (1) – Chassis Stiffener Bar – iPN J16623-xxx
- (1) – Power supply bay blank insert
- (2) – AC power cord retention strap assembly – iPN H23961-00x

\* Spares for each screw type included

### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family
- ECC DDR4 memory (RDIMM or LRDIMM)

### Optional Accessories (sold separately)

- Second 1100 W AC power supply module to support power redundancy – iPC AXX1100PCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS Data cable – Depending on the location of the SAS Data controller, a new data cable may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSAATA4R5
- Storage drives
  - Up to (8) SAS/SATA/NVMe drives supported
  - DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)

Note: 4-port mini-SAS HD connectors are present on S2600WFQ but are not configured as SATA; these cables are used only for Intel® QAT. An add-in SAS card or module is needed to support SATA/SAS front devices.

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.
3.2 Intel® Server System R2000WF Product Family – (2U Rack Mount System)

The product tables found in this section provide order code information and detailed descriptions for the specified L6 Integrated 2U Intel server system. The lower sections of each table identify:

- The ship along components of the specified chassis product code – (product BOM)
- **Required Items** – The options 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 4

**NOTES:**

- Each **required item** and **optional accessory** are sold separately for the specified Intel L6 server system
- 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.
- **L6** – Integrated system: Chassis and server board, with no processors, memory, or storage devices
- **L9** - Integrated system: Chassis and server board, with processors and memory, no storage devices.

![Figure 20. Intel® Server System R2000WF – L6 integrated 2U system (R2312WFxxx shown)](image-url)
Table 25. Intel® Server System R2308WFTZS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System R2308WFTZS</th>
<th>2U, Intel® Server Board S2600WFT, 8 x 3.5&quot; HDD or 8 x 2.5&quot; SSD SATA/SAS front mount drives</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPC</td>
<td>R2308WFTZS</td>
</tr>
<tr>
<td>MM#</td>
<td>975887</td>
</tr>
<tr>
<td>UPC</td>
<td>00735858344807</td>
</tr>
<tr>
<td>EAN</td>
<td>5032037105514</td>
</tr>
<tr>
<td>MOQ</td>
<td>1</td>
</tr>
<tr>
<td>Product type</td>
<td>L6 integrated system</td>
</tr>
<tr>
<td>Chassis form factor</td>
<td>2U rack mount</td>
</tr>
<tr>
<td>Packaged gross wt.</td>
<td>22.9 kg (50.3 lb)</td>
</tr>
<tr>
<td>Un-packaged net wt.</td>
<td>16.3 kg (35.9 lb)</td>
</tr>
<tr>
<td>Chassis dimensions</td>
<td>712 x 439 x 89 mm (L x W x H)</td>
</tr>
<tr>
<td>Package dimensions</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

**Included**

1. – 2U Chassis with Quick Reference Label affixed to top cover
2. – Intel® Server Board S2600WFT (dual 10 GbE LAN) – iPC S2600WFT
3. – PCIe Riser card brackets. Includes:
   - (2) 3-slot PCIe* riser card – iPC A2UL8RISER2
   - (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
4. – 3.5" hot-swap drive bays with drive carriers and blanks. Includes:
   - (1) 12Gb SAS backplane – iPC A2UX8X35S3HSDK1
   - (8) 3.5" hot-swap drive tool less carriers – iPC FXX35HSCAR2
5. – Standard control panel assembly (board only – iPC FXXPANEL2)
   - 300 mm front panel cable – iPN H34381-xxx
6. – Front I/O panel assembly (1 x VGA and 2 x USB)
   - 620 mm USB 3.0 cable – iPN H76899-xxx
   - 400 mm video cable – iPN H62114-xxx
7. – 175 mm backplane I2C cable – iPN H91172-xxx
8. – 730 mm mini SAS HD cable iPC AXCCBL730HDHD
9. – 875 mm mini SAS HD cable iPC AXCCBL875HDHD
10. – 400 mm Backplane power cable – iPN H82099-xxx
11. – SATA optical drive power cable 300 mm – iPN H23901-001
12. – SATA optical drive bay mounting kit – iPN H19168-xxx
13. – Standard 2U air duct – iPN H90554-xxx
14. – Hot swap system fans – iPC FR2UFAN60H5W
15. – DIMM slot blanks – iPN G75158-00x
16. – 1300W AC power supply module – iPC AX1300TCRPS
17. – Power supply bay blank insert
18. – AC power cord retention strap assembly – iPN H23961-00x
19. – CPU heat sinks – iPC FXXCA78X108HS
20. – CPU heat sink "NO CPU" Mylar* spacer insert – iPN J16115-XXX
21. – Standard CPU carrier – iPN H72851-xxx
22. – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
23. – 250 mm fixed mount SSD power cable – iPN J29245-xxx

**Required Items (sold separately)**

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))
- ECC DDR4 memory (RDIMM or LRDIMM)

**Optional Accessories (sold separately)**

- Second 1300W AC power supply module to support power redundancy – iPC AX1300TCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2URREARHSDK2
- Storage drives

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

See Chapters 5 and 6 for all available accessory options.
### Table 26. Intel® Server System R2308WFTZSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTR (dual 10 GbE LAN) – iPC S2600WFTR</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCSRPS</td>
</tr>
<tr>
<td>(2) – PCIe Riser card brackets. Includes:</td>
<td>• (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td></td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(8) – 3.5&quot; hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>o (1) 12Gb SAS backplane – iPC A2U8X35S3HSK1</td>
<td></td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2</td>
</tr>
<tr>
<td>o (8) 3.5&quot; hot-swap drive tool less carriers – iPC FXX35HSCAR2</td>
<td></td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(1) – Standard control panel assembly (board only – iPC FXXFPGN2)</td>
<td></td>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>o 300 mm front panel cable – iPN H34381-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 175 mm backplane I2C cable – iPN H91172-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 730 mm mini SAS HD cable iPC AXXCBL730HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 875 mm mini SAS HD cable iPC AXXCBL875HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 400 mm Backplane power cable – iPN H82099-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – SATA optical drive power cable 300 mm – iPN H23901-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – SATA optical drive bay mounting kit – iPN H19168-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) – Hot swap system fans – iPC FR2UFAN60HSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See Chapters 5 and 6 for all available accessory options.
Table 27. Intel® Server System R2208WF0ZS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WF0 (no onboard LAN) – iPC S2600WF0</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td></td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(8) – 2.5&quot; hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
<td></td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
<td></td>
</tr>
<tr>
<td>o (8) 2.5” hot-swap drive tool less carriers – iPC FXX25HSCAR3</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
<td></td>
</tr>
<tr>
<td>(1) – Standard control panel assembly (board only – iPC FXXFPANEL2)</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td></td>
</tr>
<tr>
<td>o 300 mm front panel cable – iPN H34381-xxx</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(1) – Front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
<td></td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>• SATA data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
<td></td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm backplane I2C cable – iPN H91166-xxx</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td></td>
</tr>
<tr>
<td>(2) – 730 mm mini SAS HD cable – iPC AXXCB1730HDHD</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(1) – 675 mm backplane power cable – iPN H82108-XXX</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
<td></td>
</tr>
<tr>
<td>(1) – SATA optical drive power cable 300 mm – iPN H23901-001</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
<td></td>
</tr>
<tr>
<td>(1) – SATA optical drive bay mounting kit – iPN H19168-xxx</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U Air duct – iPN H90554-xxx</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
<td></td>
</tr>
<tr>
<td>(6) – Hot swap system fans – iPC FR2UFAN60HSW</td>
<td>(8) – DIMM slot blanks – iPN G75158-00x</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-00x</td>
<td>(1) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td>(1) – Power supply bay blank insert</td>
<td>• SATA data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>(2) – CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td>(2) – CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2</td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td>Spares for each screw type included</td>
<td>Storage drives</td>
</tr>
</tbody>
</table>

See Chapters 5 and 6 for all available accessory options.
## Table 28. Intel® Server System R2208WF0ZSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System R2208WF0ZSR</th>
<th>iPC</th>
<th>MM#</th>
<th>UPC</th>
<th>EAN</th>
<th>MOQ</th>
<th>Product type</th>
<th>Chassis form factor</th>
<th>Packaged gross wt.</th>
<th>Un-packaged net wt.</th>
<th>Chassis dimensions</th>
<th>Package dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2U, Intel® Server Board S2600WF0R, 8 x 2.5&quot; SATA/SAS/NVMe* front mount drives</td>
<td>R2208WF0ZSR</td>
<td>986050</td>
<td>00735858406857</td>
<td>5032037151115</td>
<td>1</td>
<td>L6 integrated system</td>
<td>2U rack mount</td>
<td>22.4 kg (49.2 lb)</td>
<td>15.8 kg (34.7 lb)</td>
<td>712 x 439 x 89 mm (L x W x H)</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

### Included

1. – 2U Chassis with Quick Reference Label affixed to top cover
2. – Intel® Server Board S2600WF0R (no onboard LAN) – iPC S2600WF0R
3. – PCIe* riser card brackets. Includes:
   - (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2
   - (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
4. – 2.5” hot-swap drive bays with drive carriers and blanks. Includes:
   - (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS
   - (8) 2.5” hot-swap drive tool less carriers – iPC FXX25HSCAR3
5. – Standard control panel assembly (board only – iPC FXXFPANEL2)
   - 300 mm front panel cable – iPN H34381-xxx
6. – Front I/O panel assembly (1 x VGA and 2 x USB)
   - 620 mm USB 3.0 cable – iPN H76899-xxx
   - 400 mm video cable – iPN H62114-xxx
7. – 250 mm backplane I2C cable – iPN H91166-xxx
8. – 730 mm mini SAS HD cable – iPC AXXCBL730HDHD
9. – 675 mm backplane power cable – iPN H82108-XXX
10. – SATA optical drive power cable 300 mm – iPN H23901-001
11. – SATA optical drive bay mounting kit – iPN H19168-xxx
12. – Standard 2U Air duct – iPN H90554-xxx
13. – Hot swap system fans – iPC FR2UFAN60HSW
14. – DIMM slot blanks – iPN G75158-00x
15. – 1300W AC power supply module – iPC AXX1300TCRPS
16. – Power supply bay blank insert
17. – AC power cord retention strap assembly – iPN H23961-00x
18. – CPU heat sinks – iPC FXXCA78X108HS
19. – CPU heat sink "NO CPU" Mylar* spacer insert – iPN J16115-XXX
20. – Standard CPU carrier – iPN H72851-xxx
21. – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
22. – 250 mm fixed mount SSD power cable – iPN J29245-xxx

### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family
- ECC DDR4 memory (RDIMM or LRDIMM)

### Optional Accessories (sold separately)

- Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- 8 x 2.5" drive bay module upgrade kit – See Section 4.7 for available options
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2
- Storage drives
- DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)

See Chapters 5 and 6 for all available accessory options.

**Note:** By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Spares for each screw type included
- Power cord(s)
- Rack mount kit
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family
- ECC DDR4 memory (RDIMM or LRDIMM)

*By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.*
### Table 29. Intel® Server System R2208WFTZS product specifications and configuration requirements

#### Included

<table>
<thead>
<tr>
<th>Item Description</th>
<th>IP</th>
<th>R2208WFTZS</th>
<th>MM#</th>
<th>UPC</th>
<th>EAN</th>
<th>MOQ</th>
<th>Quantity</th>
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<td>1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Power cord(s) – See Section 5.6</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Rack mount kit – See Section 5.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
<td>–</td>
<td>–</td>
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<tr>
<td>PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
<td>–</td>
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<tr>
<td>8 x 2.5&quot; drive bay module upgrade kit – See Section 4.7 for available options</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2</td>
<td>–</td>
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<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Storage drives</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</table>

#### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))
- ECC DDR4 memory (RDIMM or LRDIMM)

#### Optional Accessories (sold separately)

- Spares for each screw type included

#### Note:

- By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.
- Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- 8 x 2.5" drive bay module upgrade kit – See Section 4.7 for available options
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2
- Storage drives

See Chapters 5 and 6 for all available accessory options.
<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTR (dual 10 GbE LAN) – iPC S2600WFTR</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>(2) – PCIe® riser card brackets. Includes:</td>
<td>• (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe® riser cards – iPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe® riser card – iPC A2UX8X4RISER</td>
<td></td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
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<tr>
<td>(8) – 2.5&quot; hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td></td>
<td>• PCIe® OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
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<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS</td>
<td></td>
<td>• 8 x 2.5&quot; drive bay module upgrade kit – See Section 4.7 for available options</td>
</tr>
<tr>
<td>o (8) 2.5&quot; hot-swap drive tool less carriers – iPC FXX25HSCAR3</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>(1) – Standard control panel assembly (board only – iPC FXXFPANEL2)</td>
<td></td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2URREARHSDK2</td>
</tr>
<tr>
<td>o 300 mm front panel cable – iPN H34381-xxx</td>
<td></td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(1) – Front I/O panel assembly (1 x VGA and 2 x USB)</td>
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<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
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<td></td>
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### Intel® Server System R2208WFQZS Product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
</table>
| (1) – 2U Chassis with Quick Reference Label affixed to top cover | - Power cord(s) – See Section 5.6  
- Rack mount kit – See Section 5.7  
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))  
- ECC DDR4 memory (RDIMM or LRDIMM) | - Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS  
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options  
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options  
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.  
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4  
- 8 x 2.5" drive bay module upgrade kit – See Section 4.7 for available options  
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5  
- Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2  
- Storage drives | Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.  
Note: 4-port mini-SAS HD connectors are present on S2600WFQ but are not configured as SATA; these cables are used only for Intel® QAT. An add-in SAS card or module is needed to support SATA/SAS front devices.  
Note: Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS |
## Table 32. Intel® Server System R2208WFQZSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>iPC</th>
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<td>MOQ</td>
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### Included

- (1) – 2U Chassis with Quick Reference Label affixed to top cover
- (1) – Intel® Server Board S2600WFQR (Intel® QAT support) – iPC S2600WFQR
- (2) – PCIe* riser card brackets. Includes:
  - (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2
  - (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
- (8) – 2.5” hot-swap drive bays with drive carriers and blanks. Includes:
  - (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS
  - (8) 2.5” hot-swap drive tool less carriers – iPC FXX25HSCAR3
- (1) – Standard control panel assembly (board only – iPC FXXFPANEL2)
  - 300 mm front panel cable – iPN H34381-xxx
- (1) – Front I/O panel assembly (1 x VGA and 2 x USB)
  - 620 mm USB 3.0 cable – iPN H76899-xxx
  - 400 mm video cable – iPN H62114-xxx
- (1) – 250 mm backplane I2C cable – iPN H91166-xxx
- (1) – 290 mm Intel QAT cable – iPN J61138-xxx
- (1) – 400/525/675 mm backplane power cable – iPN H82108-XXX
- (1) – Standard 2U air duct – iPN H90554-xxx
- (6) – Hot swap system fans – iPC FR2UFAN60H5W
- (8) – DIMM slot blanks – iPN G75158-00x
- (1) – 1300W AC power supply module – iPC AXX1300TCRPS
- (1) – Power supply bay blank insert
- (2) – AC power cord retention strap assembly – iPN H23961-00x
- (2) – CPU heat sinks – iPC FXXCA78X108HS
- (2) – CPU heat sink “NO CPU” Mylar* spacer insert – iPN J16115-XXX
- (2) – Standard CPU carrier – iPN H72851-xxx
- (1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
- (1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx
- Spares for each screw type included

### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family
- ECC DDR4 memory (RDIMM or LRDIMM)

### Optional Accessories (sold separately)

- Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS
- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- 8 x 2.5” drive bay module upgrade kit – See Section 4.7 for available options
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UEREARHSDK2
- Storage drives
- DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)

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Note: 4-port mini-SAS HD connectors are present on S2600WFQ but are not configured as SATA; these cables are used only for Intel® QAT. An add-in SAS card or module is needed to support SATA/SAS front devices.

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

---

See Chapters 5 and 6 for all available accessory options.
Table 33. Intel® Server System LFRB2208WFTF801 product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System LFRB2208WFTF801</th>
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<table>
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<tr>
<th>Product type</th>
<th>L9 integrated system</th>
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<tr>
<td>Chassis form factor</td>
<td>2U rack mount</td>
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<tr>
<td>Packaged gross wt.</td>
<td>22.8 kg (50.2 lb)</td>
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<tr>
<td>Un-packaged net wt.</td>
<td>16.7 kg (36.2 lb)</td>
</tr>
<tr>
<td>Chassis dimensions</td>
<td>712 x 439 x 89 mm (L x W x H)</td>
</tr>
<tr>
<td>Package dimensions</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

**Included**

(1) – 2U Chassis with Quick Reference Label affixed to top cover
(1) – Intel® Server Board S2600WFTF (dual 10GbE LAN) – iPC S2600WFTF
(2) – Intel® Xeon® Platinum 8160H processor
(2) – 16 GB, RDIMM, DDR4, 2666 memory module – iPN J26609-002
(1) – Intel® Remote Management Module 4 Lite 2 – iPC AXXRMM4LITE2
(2) – PCIe* riser card brackets. Includes:
  o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2
  o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
(8) – 2.5” hot-swap drive bays with drive carriers and blanks. Includes:
  o (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS
  o (8) 2.5” hot-swap drive tool less carriers – iPC FXX25HSCAR3
(1) – Standard control panel assembly (board only – iPC FXXFPANEL2)
  o 300 mm front panel cable – iPN H34381-xxx
(1) – Front I/O panel assembly (1 x VGA and 2 x USB)
  o 620 mm USB 3.0 cable – iPN H76899-xxx
  o 400 mm video cable – iPN H62114-xxx
(1) – RFID antenna – iPN H69566-xxx
(1) – 250 mm backplane I2C cable – iPN H91166-xxx
(2) – 730 mm mini SAS HD cable – iPC AXXCBL730HDHD
(1) – 400/525/675 mm backplane power cable – iPN H82108-XXX
(1) – Standard 2U air duct – iPN H90554-xxx
(6) – Hot-swap system fans – iPC FR2UFAN60H5W
(8) – DIMM slot blanks – iPN G75158-00x
(2) – 1300W AC power supply module – iPC AXX1300TCRPS
(2) – AC power cord retention strap assembly – iPN H23961-00x
(2) – CPU heat sinks – iPC FXXCA78X108HS
(2) – Standard CPU carrier – iPN H72851-xxx
(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx

**Required Items (sold separately)**

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7

**Optional Accessories (sold separately)**

**Note:** By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe® OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- 8 x 2.5” drive bay module upgrade kit – See Section 4.7 for available options
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2
- ECC DDR4 memory (RDIMM or LRDIMM)
- Storage drives

See Chapters 5 and 6 for all available accessory options.
Table 34. Intel® Server System LFRB2208WFTF601 product specifications and configuration requirements

<table>
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<th>Intel® Server System LFRB2208WFTF601</th>
<th>iPC</th>
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</thead>
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<tr>
<td>2U, Intel® Server Board S2600WFTF, 8 x 2.5” SATA/SAS/NVMe* front mount drives, Intel® Xeon® Gold 6130H processor</td>
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<tr>
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<td>Chassis form factor</td>
<td>2U rack mount</td>
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<td>Packaged gross wt.</td>
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<td></td>
<td>Un-packaged net wt.</td>
<td>16.7 kg (36.2 lb)</td>
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<tr>
<td></td>
<td>Chassis dimensions</td>
<td>712 x 439 x 89 mm (L x W x H)</td>
</tr>
<tr>
<td></td>
<td>Package dimensions</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

Included

<table>
<thead>
<tr>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTF (dual 10GbE LAN) – iPC S2600WFTF</td>
<td>• Rack mount kit – See Section 5.7</td>
</tr>
<tr>
<td>(2) – Intel® Xeon® Gold 6130H processor</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(2) – 16 GB, RDIMM, DDR4, 2666 memory module – iPN J26609-002</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(1) – Intel® Remote Management Module 4 Lite 2 – iPC AXXRMM4LITE2</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>(8) – 2.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td>• 8 x 2.5” drive bay module upgrade kit – See Section 4.7 for available options</td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS</td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSA4AR5</td>
</tr>
<tr>
<td>o (8) 2.5” hot-swap drive tool less carriers – iPC FX2X5HSCAR3</td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2</td>
</tr>
<tr>
<td>(1) – Standard control panel assembly (board only – iPC FXXFPANEL2)</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
</tr>
<tr>
<td>o 300 mm front panel cable – iPN H34381-xxx</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(1) – Front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td></td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxx</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – RFID antenna – iPN H69566-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm backplane I2C cable – iPN H91166-xxx</td>
<td></td>
</tr>
<tr>
<td>(2) – 730 mm mini SAS HD cable – iPC AXXCL730HDHD</td>
<td></td>
</tr>
<tr>
<td>(1) – 400/525/675 mm backplane power cable – iPN H82108-XXX</td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxx</td>
<td></td>
</tr>
<tr>
<td>(6) – Hot-swap system fans – iPC FR2UFAN60H5W</td>
<td></td>
</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-00x</td>
<td></td>
</tr>
<tr>
<td>(2) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
</tr>
</tbody>
</table>

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
• 8 x 2.5” drive bay module upgrade kit – See Section 4.7 for available options
• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSA4AR5
• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2
• ECC DDR4 memory (RDIMM or LRDIMM)
• Storage drives

See Chapters 5 and 6 for all available accessory options.
### Table 35. Intel® Server System LFRB2208WFTF401 product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System LFRB2208WFTF401</th>
<th>Product type</th>
<th>L9 integrated system</th>
</tr>
</thead>
<tbody>
<tr>
<td>2U, Intel® Server Board S2600WFTF, 8 x 2.5&quot; SATA/SAS/NVMe* front mount drives, Intel® Xeon® Silver 4106H processor</td>
<td>Chassis form factor</td>
<td>2U rack mount</td>
</tr>
<tr>
<td></td>
<td>Packaged gross wt.</td>
<td>22.8 kg (50.2 lb)</td>
</tr>
<tr>
<td></td>
<td>Un-packaged net wt.</td>
<td>16.7 kg (36.2 lb)</td>
</tr>
<tr>
<td></td>
<td>Chassis dimensions</td>
<td>712 x 439 x 89 mm (L x W x H)</td>
</tr>
<tr>
<td></td>
<td>Package dimensions</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

#### Included

- iPC LFRB2208WFTF401
- MM# 974993
- UPC 00735858388764
- EAN 5032037137317
- MOQ 1

#### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7

#### Optional Accessories (sold separately)

- Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- 8 x 2.5” drive bay module upgrade kit – See Section 4.7 for available options
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UEREARHSDK2
- ECC DDR4 memory (RDIMM or LRDIMM)
- Storage drives

See Chapters 5 and 6 for all available accessory options.

---

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>iPC LFRB2208WFTF401</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTF (dual 10GbE LAN) – iPC S2600WFTF</td>
<td></td>
</tr>
<tr>
<td>(2) – Intel® Xeon® Silver 4106H processor</td>
<td></td>
</tr>
<tr>
<td>(2) – 16 GB, RDIMM, DDR4, 2666 memory module – iPN J26609-002</td>
<td></td>
</tr>
<tr>
<td>(1) – Intel® Remote Management Module 4 Lite 2 – iPC AXXRMM4LITE2</td>
<td></td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td></td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td></td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td></td>
</tr>
<tr>
<td>(8) – 2.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td></td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U8X25S3PHS</td>
<td></td>
</tr>
<tr>
<td>o (8) 2.5” hot-swap drive tool less carriers – iPC FXX25HSCAR3</td>
<td></td>
</tr>
<tr>
<td>(1) – Standard control panel assembly (board only) – iPC FXXFPANEL2</td>
<td></td>
</tr>
<tr>
<td>o 300 mm front panel cable – iPN H34381-xxxx</td>
<td></td>
</tr>
<tr>
<td>(1) – Front I/O panel assembly (1 x VGA and 2 x USB)</td>
<td></td>
</tr>
<tr>
<td>o 620 mm USB 3.0 cable – iPN H76899-xxxx</td>
<td></td>
</tr>
<tr>
<td>o 400 mm video cable – iPN H62114-xxxx</td>
<td></td>
</tr>
<tr>
<td>(1) – RFID antenna – iPN H69566-xxxx</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm backplane I2C cable – iPN H91166-xxxx</td>
<td></td>
</tr>
<tr>
<td>(2) – 730 mm mini SAS HD cable – iPC AXXCBL730HDHD</td>
<td></td>
</tr>
<tr>
<td>(1) – 400/525/675 mm backplane power cable – iPN H82108-XXX</td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxxx</td>
<td></td>
</tr>
<tr>
<td>(6) – Hot-swap system fans – iPC FR2UFAN60H5W</td>
<td></td>
</tr>
<tr>
<td>(8) – DIMM slot blanks – iPN G75158-00x</td>
<td></td>
</tr>
<tr>
<td>(2) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxxx</td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
</tr>
</tbody>
</table>
## Table 36. Intel® Server System R2312WF0NP product specifications and configuration requirements

### Included

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>2U Chassis with Quick Reference Label affixed to top cover</td>
</tr>
<tr>
<td>(1)</td>
<td>Intel® Server Board S2600WF0 (no onboard LAN) – iPC S2600WF0</td>
</tr>
<tr>
<td>(2)</td>
<td>PCIe* riser card brackets. Includes:</td>
</tr>
<tr>
<td></td>
<td>(2) 3-slot PCIe* riser cards – iPC A2UX8RISER2</td>
</tr>
<tr>
<td></td>
<td>(1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
</tr>
<tr>
<td>(12)</td>
<td>3.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
</tr>
<tr>
<td></td>
<td>(1) SAS/NVMe combo backplane – iPC F2U12X35S3PH</td>
</tr>
<tr>
<td></td>
<td>(12) 3.5” hot-swap drive tool less carriers – iPC FXS35HSCAR3</td>
</tr>
<tr>
<td>(1)</td>
<td>Storage rack handle assembly – iPC A2UHANDLKIT</td>
</tr>
<tr>
<td></td>
<td>1 set storage rack handles</td>
</tr>
<tr>
<td></td>
<td>Mini front panel (board only – iPN G28538-xxx)</td>
</tr>
<tr>
<td></td>
<td>410 mm front panel cable – iPN H26893-xxx</td>
</tr>
<tr>
<td></td>
<td>640 mm front panel USB 2.0 cable iPN H20005-xxx</td>
</tr>
<tr>
<td>(1)</td>
<td>175 mm Backplane I2C cable – iPN H91172-xxx</td>
</tr>
<tr>
<td>(1)</td>
<td>800 mm Mini SAS HD cable – iPC AXXCBL800HDHD</td>
</tr>
<tr>
<td>(1)</td>
<td>875 mm mini SAS HD cable – iPC AXXCBL875HDHD</td>
</tr>
<tr>
<td>(1)</td>
<td>950 mm mini SAS HD cable – iPC AXXCBL950HDHD</td>
</tr>
<tr>
<td>(1)</td>
<td>525/675 mm backplane power cable – iPN H82097-xxxx</td>
</tr>
<tr>
<td>(1)</td>
<td>Standard 2U air duct – iPN H90554-xxxx</td>
</tr>
<tr>
<td>(6)</td>
<td>Hot-swap system fans – iPC FR2UFAN60HSW</td>
</tr>
<tr>
<td>(16)</td>
<td>DIMM slot blanks – iPN G75158-00x</td>
</tr>
<tr>
<td>(1)</td>
<td>Power supply bay blank insert</td>
</tr>
<tr>
<td>(2)</td>
<td>AC power cord retention strap assembly – iPN H23961-00x</td>
</tr>
<tr>
<td>(2)</td>
<td>CPU heat sinks – iPC FXXCA78X108HS</td>
</tr>
<tr>
<td>(2)</td>
<td>CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPC J16115-XXX</td>
</tr>
<tr>
<td>(2)</td>
<td>Standard CPU carrier – iPN H72851-xxx</td>
</tr>
<tr>
<td>(2)</td>
<td>Chassis handle (1 set) installed – iPN H18229-xxx</td>
</tr>
<tr>
<td>(1)</td>
<td>3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
</tr>
<tr>
<td>(1)</td>
<td>250 mm fixed mount SSD power cable – iPN J29245-xxxx</td>
</tr>
</tbody>
</table>

### Required Items (sold separately)

- Power supply module(s) (choose one type) – (2) common modules required for redundancy
  - 1300W AC power supply module – iPC AXX1300TCRPS
  - 1100W AC power supply module – iPC AXX1100PCRPS
  - 750 W DC power supply module – iPC AXX750DCCRPS
- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))
- ECC DDR4 memory (RDIMM or LRDIMM)

### Optional Accessories (sold separately)

- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSTATA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UEREARHSDK2
- Storage drives

**Note:** By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))

See Chapters 5 and 6 for all available accessory options.
Table 37. Intel® Server System R2312WFONPR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>Power supply module(s) (choose one type)</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WF0R (no onboard LAN) – iPC S2600WF0R</td>
<td>– (2) common modules required for redundancy</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td>o 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td>o 1100W AC power supply module - iPC AXX1100PCRPS</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td>o 750 W DC power supply module - iPC AXX750DCCRPS</td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSA1A45</td>
</tr>
<tr>
<td>(12) – 3.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td>Power cord(s) – See Section 5.6</td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2</td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U12X35S3PH</td>
<td>Rack mount kit – See Section 5.7</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>o (12) 3.5” hot-swap drive tool less carriers – iPC FX3X5SHCAR3</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>(1) – Storage rack handle assembly – iPC A2UHANDLKIT</td>
<td>ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o 1 set storage rack handles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Mini front panel (board only – iPN G28538-xxx)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 410 mm front panel cable – iPN H26893-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 640 mm front panel USB 2.0 cable iPN H20005-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 175 mm Backplane I2C cable – iPN H91172-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 800 mm Mini SAS HD cable – iPC AXXCBL800HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 875 mm mini SAS HD cable – iPC AXXCBL875HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 950 mm mini SAS HD cable – iPC AXXCBL950HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 525/675 mm backplane power cable – iPN H82097-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) – Hot-swap system fans – iPC FR2UFAN60HWSW</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td></td>
</tr>
<tr>
<td>(16) – DIMM slot blanks – iPN G75158-00x</td>
<td>ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
<td>Power supply module(s) (choose one type)</td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sink “NO CPU” Mylar* spacer insert – iPN J16115-XXX</td>
<td>– (2) common modules required for redundancy</td>
<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td>o 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(2) – Chassis handle (1 set) installed – iPN H18229-xxx</td>
<td>o 1100W AC power supply module - iPC AXX1100PCRPS</td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td>o 750 W DC power supply module - iPC AXX750DCCRPS</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td>Power cord(s) – See Section 5.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spares for each screw type included</td>
<td></td>
</tr>
</tbody>
</table>

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.
Table 38. Intel® Server System R2312WFTZS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System R2312WFTZS</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2U, Intel® Server Board S2600WFT, 12 x 3.5” HDD or 12 x 2.5” SSD SATA/SAS front mount drives (support for up to 2 NVMe* drives)</td>
<td></td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
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<td></td>
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</tr>
</tbody>
</table>

Included

(1) – 2U Chassis with Quick Reference Label affixed to top cover
(1) – Intel® Server Board S2600WFT (dual 10 GbE LAN) – iPC S2600WFT
(2) – PCIe* riser card brackets. Includes:
  o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2
  o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
(12) – 3.5” hot-swap drive bays with drive carriers and blanks. Includes:
  o (1) SAS/NVMe combo backplane – iPC F2U12X35S3PH
  o (12) 3.5” hot-swap drive tool less carriers – iPC FXX35HSCAR2
(1) – Storage rack handle assembly – iPC A2UHANDLKIT
  o 1 set storage rack handles
  o Mini front panel (board only – iPN G28538-xxx)
  o 410 mm front panel cable – iPN H26893-xxx
  o 640 mm front panel USB 2.0 cable iPN H20005-xxx
(1) – 175 mm backplane I2C Cable – iPN H91172-xxx
(1) – 800 mm mini SAS HD cable – iPC AXXCBL800HDHD
(1) – 875 mm mini SAS HD cable – iPC AXXCBL875HDHD
(1) – 950 mm mini SAS HD cable – iPC AXXCBL950HDHD
(1) – 525/675 mm backplane power cable – iPN H82097-xxx
(1) – Standard 2U air duct – iPN H90554-xxx
(6) – Hot-swap system fans – iPC FR2UFAN60HSW
(16) – DIMM slot blanks – iPN G75158-00x
(1) – 1300W AC power supply module – iPC AXX1300TCRPS
(1) – Power supply bay blank insert
(2) – AC power cord retention strap assembly – iPN H23961-00x
(2) – CPU heat sinks – iPC FXXCA78X108HS
(2) – CPU heat sink "NO CPU" Mylar* spacer insert – iPN J16115-XXX
(2) – Standard CPU carrier – iPN H72851-xxx
(2) – Chassis handle (1 set) installed – iPN H18229-xxx
(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx
Spares for each screw type included

Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7
- (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from [http://downloadcenter.intel.com](http://downloadcenter.intel.com))
- ECC DDR4 memory (RDIMM or LRDIMM)

Optional Accessories (sold separately)

Product type | L6 integrated system
---|---
Chassis form factor | 2U rack mount
Packaged gross wt. | 23.4 kg (51.5 lb)
Un-packaged net wt. | 16.9 kg (37.1 lb)
Chassis dimensions | 712 x 439 x 89 mm (L x W x H)
Package dimensions | 983 x 577 x 260 mm (L x W x H)

MM# | 975892
---|---
UPC | 00735858344791
EAN | 5032037105507
MOQ | 1
Table 39. Intel® Server System R2312WFTZSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTR (dual 10 GbE LAN) – iPC S2600WFTR</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>(2) – PCIe® riser card brackets. Includes:</td>
<td>• (1) or (2) 1st or 2nd Gen Intel® Xeon® processor Scalable family</td>
<td>• Intel® Ethernet Network Adapter for OCP* – See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe® riser cards – iPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe® riser card – iPC A2UX8X4RISER</td>
<td></td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(12) – 3.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td></td>
<td>• PCIe® OCuLink data cables (1 per NVMe® drive) - See Chapter 4</td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U12X35S3PH</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RK5ATA4R5</td>
</tr>
<tr>
<td>o (12) 3.5” hot-swap drive tool less carriers – iPC FXX35HSCAR2</td>
<td></td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARCHDK2</td>
</tr>
<tr>
<td>(1) – Storage rack handle assembly – iPC A2UHANDLKIT</td>
<td></td>
<td>• Storage drives</td>
</tr>
<tr>
<td>o 1 set storage rack handles</td>
<td></td>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>o Mini front panel (board only – iPN G28538-xxxx)</td>
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<td></td>
</tr>
<tr>
<td>o 410 mm front panel cable – iPN H26893-xxxx</td>
<td></td>
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<tr>
<td>o 640 mm front panel USB 2.0 cable iPN H20005-xxxx</td>
<td></td>
<td></td>
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<tr>
<td>(1) – 175 mm backplane I2C Cable – iPN H91172-xxxx</td>
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<tr>
<td>(1) – 800 mm mini SAS HD cable – iPC AXXCBL800HDHD</td>
<td></td>
<td></td>
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<tr>
<td>(1) – 875 mm mini SAS HD cable – iPC AXXCBL875HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 950 mm mini SAS HD cable – iPC AXXCBL950HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 525/675 mm backplane power cable – iPN H82097-xxxx</td>
<td></td>
<td></td>
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<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxxx</td>
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<tr>
<td>(6) – Hot-swap system fans – iPC FR2UFAN60H5W</td>
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<tr>
<td>(16) – DIMM slot blanks – iPN G75158-00x</td>
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<tr>
<td>(1) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
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<tr>
<td>(1) – Power supply bay blank insert</td>
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<td></td>
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<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
<td></td>
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<tr>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
<td></td>
<td></td>
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<tr>
<td>(2) – CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
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<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
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</tr>
<tr>
<td>(2) – Chassis handle (1 set) installed – iPN H18229-xxxx</td>
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<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket –</td>
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</tr>
<tr>
<td>iPN H18238-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxxx</td>
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</tr>
</tbody>
</table>

Spares for each screw type included
Table 40. Intel® Server System R2312WFQZS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: 4-port mini-SAS HD connectors are present on S2600WFQ but are not configured as SATA; these</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFQ (Intel® QAT support) – iPC S2600WFQ</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>cards are used only for Intel® QAT. An add-in SAS card or module is needed to support SATA/SAS</td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system</td>
<td>front devices.</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td>software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® Ethernet Network Adapter for OCP* – See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(12) – 3.5&quot; hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for</td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U12X35S3PH</td>
<td></td>
<td>available options</td>
</tr>
<tr>
<td>o (12) 3.5&quot; hot-swap drive tool less carriers – iPC FX3X5HSCAR2</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be</td>
</tr>
<tr>
<td>(1) – Storage rack handle assembly – iPC A2UHAN DLKIT</td>
<td></td>
<td>necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o 1 set storage rack handles</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>o Mini front panel (board only – iPN G28538-xxx)</td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UEREARHS DK2</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>o 410 mm front panel cable – iPN H26893-xxx</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o 640 mm front panel USB 2.0 cable – iPN H20005-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 175 mm backplane I2C Cable – iPN H91172-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 950 mm mini SAS HD cable – iPC AXXCBL950HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 525/675 mm backplane power cable – iPN H82097-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 290 mm Intel QAT cable – iPN J61138-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) – Hot-swap system fans – iPC FR2UFA N60H5W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(16) – DIMM slot blanks – iPN G75158-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – AC Power cord retention strap assembly – iPN H23961-00x</td>
<td>• CPU heat sinks – iPC FXC A78X108HS</td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td>• Chassis handle (1 set) installed – iPN H18229-xxx</td>
<td></td>
</tr>
<tr>
<td>(2) – Chassis handle (1 set) installed – iPN H18229-xxx</td>
<td>• 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN</td>
<td>• Spares for each screw type included</td>
<td></td>
</tr>
<tr>
<td>H18238-00x</td>
<td></td>
<td></td>
</tr>
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</table>
Table 41. Intel® Server System LFRB2312WFTF801 product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System LFRB2312WFTF801</th>
</tr>
</thead>
<tbody>
<tr>
<td>2U, Intel® Server Board S2600WFTF, 12 x 3.5&quot; HDD or 12 x 2.5&quot; SSD SATA/SAS front mount drives (support for up to 2 NVMe* drives), Intel® Xeon® Platinum 8160H processor</td>
</tr>
</tbody>
</table>

### Included

<table>
<thead>
<tr>
<th>Item</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPC</td>
<td>LFRB2312WFTF801 982902</td>
</tr>
<tr>
<td>MM#</td>
<td>00735858387330</td>
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<tr>
<td>UPC</td>
<td>5032037136242</td>
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<tr>
<td>EAN</td>
<td>1</td>
</tr>
</tbody>
</table>

### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7

### Optional Accessories (sold separately)

- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2
- ECC DDR4 memory (RDIMM or LRDIMM)
- Storage drives

See Chapters 5 and 6 for all available accessory options.

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Intel® Xeon® Platinum 8160H processor
- 16 GB, RDIMM, DDR4, 2666 memory module – iPN J26609-002
- Intel® Remote Management Module 4 Lite 2 – iPC AXXRMM4LITE2
- PCIe* riser card brackets. Includes:
  - (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2
  - (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
- 3.5" hot-swap drive bays with drive carriers and blanks. Includes:
  - (1) SAS/NVMe combo backplane – iPC F2U12X35S3PH
  - (12) 3.5" hot-swap drive tool less carriers – iPC FXX35HSCAR2
- Storage rack handles set – iPN H98453-001
- Mini front panel (board only – iPN G28538-xxx)
- 410 mm front panel cable – iPN H26893-xxx
- 640 mm front panel USB 2.0 cable – iPN H20005-xxx
- RAID antenna – iPN H69566-xxx
- 175 mm backplane I2C cable – iPN H91172-xxx
- 800 mm mini SAS HD cable – iPC AXXCBL800HDHD
- 875 mm mini SAS HD cable – iPC AXXCBL875HDHD
- 950 mm mini SAS HD cable – iPC AXXCBL950HDHD
- 525/675 mm backplane power cable – iPN H82097-xxx
- Standard 2U air duct – iPN H90554-xxx
- Hot-swap system fans – iPC FR2UFAN60H5W
- DIMM slot blanks – iPN G75158-00x
- 1300W AC power supply module – iPC AXX1300TCRPS
- AC power cord retention strap assembly – iPN H23961-00x
- CPU heat sinks – iPC FXXCA78X108HS
- Standard CPU carrier – iPN H72851-xxx
- 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
- 250 mm fixed mount SSD power cable – iPN J29245-xxx
- Spares for each screw type included

Product type: L9 integrated system
Chassis form factor: 2U rack mount
Packaged gross wt.: 25.0 kg (55.0 lb)
Un-packaged net wt.: 17.9 kg (39.5 lb)
Chassis dimensions: 712 x 439 x 89 mm (L x W x H)
Package dimensions: 983 x 577 x 260 mm (L x W x H)
Table 42. Intel® Server System LFRB2312WFTF601 product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFTF (dual 10GbE LAN) – iPC S2600WFTF</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(2) – Intel® Xeon® Gold 6130H processor</td>
<td></td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(2) – 16 GB, RDIMM, DDR4, 2666 memory module – iPN J26609-002</td>
<td></td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>(1) – Intel® Remote Management Module 4 Lite 2 – iPC AXXRMM4LITE2</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td></td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSDK2</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td></td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td></td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(12) – 3.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o (1) SAS/NVMe combo backplane – iPC F2U12X35S3PH</td>
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<tr>
<td>o (12) 3.5” hot-swap drive tool less carriers – iPC FXX35HSCAR2</td>
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</tr>
<tr>
<td>(1) – Storage rack handles set – iPN H98453-001</td>
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<tr>
<td>(1) – Mini front panel (board only – iPN G28538-xxx)</td>
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<td></td>
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<tr>
<td>(1) – 410 mm front panel cable – iPN H26893-xxx</td>
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<tr>
<td>(1) – 640 mm front panel USB 2.0 cable – iPN H20005-xxx</td>
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<tr>
<td>(1) – RFID antenna – iPN H69566-xxx</td>
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<tr>
<td>(1) – 175 mm backplane I2C cable – iPN H91172-xxx</td>
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<td>(1) – 800 mm mini SAS HD cable – iPC AXXCBL800HDHD</td>
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<td>(1) – 875 mm mini SAS HD cable – iPC AXXCBL875HDHD</td>
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<td>(1) – 950 mm mini SAS HD cable – iPC AXXCBL950HDHD</td>
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<td>(1) – 525/675 mm backplane power cable – iPN H82097-xxx</td>
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<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxx</td>
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<td>(6) – Hot-swap system fans – iPC FR2UFAN60H5W</td>
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<tr>
<td>(16) – DIMM slot blanks – iPN G75158-00x</td>
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<tr>
<td>(2) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
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<tr>
<td>(2) – AC power cord retention strap assembly – iPN H23961-00x</td>
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<tr>
<td>(2) – CPU heat sinks – iPC FXXCA78X108HS</td>
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<td></td>
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<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
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<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
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<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
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<td></td>
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### Table 43. Intel® Server System LFRB2312WFTF401 product specifications and configuration requirements

#### Intel® Server System LFRB2312WFTF401

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<tr>
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<th>MM#</th>
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<td>UPC</td>
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<td>EAN</td>
<td>5032037136235</td>
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<tr>
<td>MOQ</td>
<td>1</td>
<td></td>
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</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Product type</th>
<th>L9 integrated system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis form factor</td>
<td>2U rack mount</td>
</tr>
<tr>
<td>Packaged gross wt.</td>
<td>25.0 kg (55.0 lb)</td>
</tr>
<tr>
<td>Un-packaged net wt.</td>
<td>17.9 kg (39.5 lb)</td>
</tr>
<tr>
<td>Chassis dimensions</td>
<td>712 x 439 x 89 mm (L x W x H)</td>
</tr>
<tr>
<td>Package dimensions</td>
<td>983 x 577 x 260 mm (L x W x H)</td>
</tr>
</tbody>
</table>

#### Included

- (1) – 2U Chassis with Quick Reference Label affixed to top cover
- (1) – Intel® Server Board S2600WFTF (dual 10GbE LAN) – iPC S2600WFTF
- (2) – Intel® Xeon® Silver 4106H processor
- (2) – 16 GB, RDIMM, DDR4, 2666 memory module – iPN J26609-002
- (1) – Intel® Remote Management Module 4 Lite 2 – iPC AXXRMM4LITE2
- (2) – PCIe* riser card brackets. Includes:
  - (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2
  - (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER
- (12) – 3.5" hot-swap drive bays with drive carriers and blanks. Includes:
  - (1) SAS/NVMe combo backplane – iPC F2U12X3553PH
  - (12) 3.5" hot-swap drive tool less carriers – iPC FXX35HSCAR2
- (1) – Storage rack handles set – iPN H98453-001
- (1) – Mini front panel (board only – iPN G28538-xxx)
- (1) – 410 mm front panel cable – iPN H26893-xxx
- (1) – 640 mm front panel USB 2.0 cable – iPN H20005-xxx
- (1) – RFID antenna – iPN H69566-xxx
- (1) – 175 mm backplane 12C cable – iPN H91172-xxx
- (1) – 800 mm mini SAS HD cable – iPC AXXCBL800HDHD
- (1) – 875 mm mini SAS HD cable – iPC AXXCBL875HDHD
- (1) – 950 mm mini SAS HD cable – iPC AXXCBL950HDHD
- (1) – 525/675 mm backplane power cable – iPN H82097-xxx
- (1) – Standard 2U air duct – iPN H90554-xxx
- (6) – Hot-swap system fans – iPC FR2UFAN606SHW
- (16) – DIMM slot blanks – iPN G75158-00x
- (2) – 1300W AC power supply module – iPC AXX1300TCRPS
- (2) – AC power cord retention strap assembly – iPN H23961-00x
- (2) – CPU heat sinks – iPC FXXCA78X108HS
- (2) – Standard CPU carrier – iPN H72851-xxx
- (1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x
- (1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx
- Spares for each screw type included

#### Required Items (sold separately)

- Power cord(s) – See Section 5.6
- Rack mount kit – See Section 5.7

#### Optional Accessories (sold separately)

- Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
- SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
- PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATAA4R5
- Rear mount hot-swap drive bay accessory kit – iPC A2UEREARHS DK2
- ECC DDR4 memory (RDIMM or LRDIMM)
- Storage drives

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

- Intel® Ethernet Network Adapter for OCP*
- Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit
- SAS data cables
- PCIe* OCuLink data cables
- SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support
- Rear mount hot-swap drive bay accessory kit
- ECC DDR4 memory
- Storage drives

See Chapters 5 and 6 for all available accessory options.
Table 44. Intel® Server System R2224WFQZS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: 4-port mini-SAS HD connectors are present on S2600WFQ but are not configured as SATA; these cables are used only for Intel® QAT. An add-in SAS card or module is needed to support SATA/SAS front devices.</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFQ (Intel® QAT support) – iPC S2600WFQ</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>(2) – PCIe* riser card brackets. Includes:</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td></td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(24) – 2.5&quot; hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td></td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>o (3) SAS/NVMe combo backplane – iPC F2U8X25S3PHS</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RK5ATA4R5</td>
</tr>
<tr>
<td>o (24) 2.5&quot; hot-swap drive tool less carriers – iPC FX2X25SHCAR3</td>
<td></td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSOK2</td>
</tr>
<tr>
<td>(1) – Storage rack handle assembly – iPC A2UHANDLKIT</td>
<td>• 4-port PCIe Gen3 x8 switch add-in card – iPC AXXP3SWX08040</td>
<td>• 4-port PCIe Gen3 x8 switch add-in card – iPC AXXP3SWX0808</td>
</tr>
<tr>
<td>o 1 set storage rack handles</td>
<td>• 8-port PCIe Gen3 x8 switch add-card – iPC AXXP3SWX0808</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>o Mini front panel (board only – iPN G28538-xxxx)</td>
<td></td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>o 410 mm front panel cable – iPN H26893-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o 640 mm front panel USB 2.0 cable iPN H20005-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm backplane I2C cable – iPN H91166-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – 100 mm backplane to backplane I2C jumper cable – iPN H91163-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) – 875 mm mini SAS HD VT-VT cable – iPC AXXCBL875HDHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 400/525/675 mm backplane power cable – iPN HB2108-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 290 mm Intel QAT cable – iPN J61138-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) – Hot-swap system fans – iPC FR2UFAN60HSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(16) – DIMM slot blanks – iPN G75158-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – AC Power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks – iPC FXCCA78X108HS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXXX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS
• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options
• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RK5ATA4R5
• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSOK2
• 4-port PCIe Gen3 x8 switch add-in card – iPC AXXP3SWX08040
• 8-port PCIe Gen3 x8 switch add-card – iPC AXXP3SWX08080
• Storage drives

See Chapters 5 and 6 for all available accessory options.
### Table 45. Intel® Server System R2224WFTZS product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Intel® Server System R2224WFTZS</th>
<th>2U, Intel® Server Board S2600WFT, 12 x 3.5” HDD or 12 x 2.5” SSD SATA/SAS front mount drives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included</strong></td>
<td><strong>Required Items (sold separately)</strong></td>
</tr>
<tr>
<td>(1) – 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
</tr>
<tr>
<td>(1) – Intel® Server Board S2600WFT (dual 10 GbE LAN) – IPC S2600WFT</td>
<td>• Rack mount kit – See Section 5.7</td>
</tr>
<tr>
<td>(2) – PCIe riser card brackets. Includes:</td>
<td>• (1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe riser cards – IPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – IPC A2UX8X4RISER</td>
<td><strong>Optional Accessories (sold separately)</strong></td>
</tr>
<tr>
<td>(24) – 2.5” hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td>• Second 1300W AC power supply module to support power redundancy – IPC AXX1300TCRPS</td>
</tr>
<tr>
<td>o (3) SAS/NVMe combo backplane – IPC F2U8X25S3PHS</td>
<td>• Intel® Ethernet Network Adapter for OCP* – See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (24) 2.5” hot-swap drive tool less carriers – IPC FX2X25HSCAR3</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>(1) – Storage rack handle assembly – IPC A2UHANDLKIT</td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>o 1 set storage rack handles</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>o Mini front panel (board only – iPN G28538-xxx)</td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSAT4R5</td>
</tr>
<tr>
<td>o 410 mm front panel cable – iPN H26893-xxx</td>
<td>• Rear mount hot-swap drive bay accessory kit – IPC A2UEREARHSDK2</td>
</tr>
<tr>
<td>o 640 mm front panel USB 2.0 cable iPN H20005-xxx</td>
<td>• 4-port PCIe Gen3 x8 switch add-in card – IPC AXXP3SWX08040</td>
</tr>
<tr>
<td>(1) – 250 mm backplane I2C cable – iPN H91166-xxx</td>
<td>• 8-port PCIe Gen3 x8 switch add-card – IPC AXXP3SWX08080</td>
</tr>
<tr>
<td>(2) – 75 mm backplane to backplane I2C jumper cable – iPN H91163-xxx</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>(2) – 730 mm mini SAS HD VT-VT cable – iPC AXXCBL730HDHD</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>(4) – 875 mm mini SAS HD VT-VT cable – iPC AXXCBL875HDHD</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family (support for 2nd Gen Intel Xeon processor Scalable family requires a system software stack update from <a href="http://downloadcenter.intel.com">http://downloadcenter.intel.com</a>)</td>
<td></td>
</tr>
<tr>
<td>(1) – 400/525/675 mm backplane power cable – iPN H82108-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – Standard 2U air duct – iPN H90554-xxx</td>
<td></td>
</tr>
<tr>
<td>(6) – Hot-swap system fans – IPC FR2UFAN60HSW</td>
<td></td>
</tr>
<tr>
<td>(16) – DIMM slot blanks – iPN G75158-00x</td>
<td></td>
</tr>
<tr>
<td>(1) – 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td></td>
</tr>
<tr>
<td>(1) – Power supply bay blank insert</td>
<td></td>
</tr>
<tr>
<td>(2) – AC Power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sinks – iPC FXCCA78X108HS</td>
<td></td>
</tr>
<tr>
<td>(2) – CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td></td>
</tr>
<tr>
<td>(2) – Standard CPU carrier – iPN H72851-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) – 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
</tr>
<tr>
<td>(1) – 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td></td>
</tr>
<tr>
<td>Spares for each screw type included</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.

* • Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS
  • Intel® Ethernet Network Adapter for OCP* – See Chapter 5.4 for available options
  • Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options
  • SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.
  • PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4
  • SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSAT4R5
  • Rear mount hot-swap drive bay accessory kit – IPC A2UEREARHSDK2
  • 4-port PCIe Gen3 x8 switch add-in card – iPC AXXP3SWX08040
  • 8-port PCIe Gen3 x8 switch add-card – iPC AXXP3SWX08080
  • Storage drives

See Chapters 5 and 6 for all available accessory options.
Table 46. Intel® Server System R2224WFTZSR product specifications and configuration requirements

<table>
<thead>
<tr>
<th>Included</th>
<th>Required Items (sold separately)</th>
<th>Optional Accessories (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) - 2U Chassis with Quick Reference Label affixed to top cover</td>
<td>• Power cord(s) – See Section 5.6</td>
<td>Note: By default the front drive bays are cabled to onboard SATA only ports. An add-in SAS card or module is needed to support SAS devices.</td>
</tr>
<tr>
<td>(1) - Intel® Server Board S2600WFTR (dual 10 GbE LAN) – iPC S2600WFTR</td>
<td>• Rack mount kit – See Section 5.7</td>
<td>• Second 1300W AC power supply module to support power redundancy – iPC AXX1300TCRPS</td>
</tr>
<tr>
<td>(2) - PCIe* riser card brackets. Includes:</td>
<td>(1) or (2) 1st or 2nd Intel® Xeon® processor Scalable family</td>
<td>• Intel® Ethernet Network Adapter for OCP* - See Chapter 5.4 for available options</td>
</tr>
<tr>
<td>o (2) 3-slot PCIe* riser cards – iPC A2UL8RISER2</td>
<td>• ECC DDR4 memory (RDIMM or LRDIMM)</td>
<td>• Intel® 12G SAS RAID module and Intel® RAID Maintenance Free Backup unit - See Chapter 5.5 for available options</td>
</tr>
<tr>
<td>o (1) 2-slot low profile PCIe* riser card – iPC A2UX8X4RISER</td>
<td></td>
<td>• SAS data cables – Depending on the location of the SAS data controller, new data cables may be necessary. See Chapter 4.</td>
</tr>
<tr>
<td>(24) - 2.5&quot; hot-swap drive bays with drive carriers and blanks. Includes:</td>
<td>(24) 2.5&quot; hot-swap drive tool less carriers – iPC FXX25HSCAR3</td>
<td>• PCIe* OCuLink data cables (1 per NVMe* drive) - See Chapter 4</td>
</tr>
<tr>
<td>o (3) SAS/NVMe combo backplane – iPC F2U8X25S3PHS</td>
<td></td>
<td>• SATA upgrade key for Intel® Embedded Server Technology 2 RAID 5 support – iPC RKSATA4R5</td>
</tr>
<tr>
<td>o (24) 2.5&quot; hot-swap drive tool less carriers – iPC FXX25HSCAR3</td>
<td></td>
<td>• Rear mount hot-swap drive bay accessory kit – iPC A2UREARHSK2</td>
</tr>
<tr>
<td>(1) - Storage rack handle assembly – iPC A2UHANDLKIT</td>
<td>(1) - Standard 2U air duct – iPN H90554-xxx</td>
<td>• 4-port PCIe Gen3 x8 switch add-in card – iPC AXXP3SWX08040</td>
</tr>
<tr>
<td>o 1 set storage rack handles</td>
<td>(6) - Hot-swap system fans – iPC F2U4FAN60H5W</td>
<td>• 8-port PCIe Gen3 x8 switch add-card – iPC AXXP3SWX08080</td>
</tr>
<tr>
<td>o Mini front panel (board only – iPN G28538-xxx)</td>
<td>(16) - DIMM slot blanks – iPN G75158-00x</td>
<td>• Storage drives</td>
</tr>
<tr>
<td>o 410 mm front panel cable – iPN H26893-xxx</td>
<td>(1) - 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td>• DDR4-compatible Intel® Optane™ DC persistent memory module (requires an installed 2nd Gen Intel Xeon Scalable processor)</td>
</tr>
<tr>
<td>o 640 mm front panel USB 2.0 cable iPN H20005-xxx</td>
<td>(2) - 75 mm backplane to backplane I2C jumper cable – iPN H911063-xxx</td>
<td>See Chapters 5 and 6 for all available accessory options.</td>
</tr>
<tr>
<td>(25) - 240 mm backplane I2C cable – iPN H911066-xxx</td>
<td>(2) - 730 mm mini SAS HD VT-VT cable – iPC AXXCBL730HDHD</td>
<td></td>
</tr>
<tr>
<td>(2) - 730 mm mini SAS HD VT-VT cable – iPC AXXCBL730HDHD</td>
<td>(4) - 875 mm mini SAS HD VT-VT cable – iPC AXXCBL750HDHD</td>
<td></td>
</tr>
<tr>
<td>(1) - 400/525/675 mm backplane power cable – iPN H82108-xxx</td>
<td>(1) - Standard 2U air duct – iPN H90554-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) - Standard 2U air duct – iPN H90554-xxx</td>
<td>(6) - Hot-swap system fans – iPC F2U4FAN60H5W</td>
<td></td>
</tr>
<tr>
<td>(6) - Hot-swap system fans – iPC F2U4FAN60H5W</td>
<td>(16) - DIMM slot blanks – iPN G75158-00x</td>
<td></td>
</tr>
<tr>
<td>(1) - 1300W AC power supply module – iPC AXX1300TCRPS</td>
<td>(1) - Power supply bay blank insert</td>
<td></td>
</tr>
<tr>
<td>(1) - Power supply bay blank insert</td>
<td>(2) - AC Power cord retention strap assembly – iPN H23961-00x</td>
<td></td>
</tr>
<tr>
<td>(2) - AC Power cord retention strap assembly – iPN H23961-00x</td>
<td>(2) - CPU heat sinks – iPC FXXCA78X108HS</td>
<td></td>
</tr>
<tr>
<td>(2) - CPU heat sinks – iPC FXXCA78X108HS</td>
<td>(2) - CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td></td>
</tr>
<tr>
<td>(2) - CPU heat sink &quot;NO CPU&quot; Mylar* spacer insert – iPN J16115-XXX</td>
<td>(2) - Standard CPU carrier – iPN H72851-xxx</td>
<td></td>
</tr>
<tr>
<td>(2) - Standard CPU carrier – iPN H72851-xxx</td>
<td>(1) - 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td></td>
</tr>
<tr>
<td>(1) - 3x Intel® RAID Maintenance Free Backup unit mounting bracket – iPN H18238-00x</td>
<td>(1) - 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td></td>
</tr>
<tr>
<td>(1) - 250 mm fixed mount SSD power cable – iPN J29245-xxx</td>
<td>Spares for each screw type included</td>
<td></td>
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<td></td>
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</tbody>
</table>
4. **SAS/SATA/NVMe* Data Cable Guide**

By default, all WFT and WF0 L6 integrated systems include SATA data cables routed from the front hot swap backplane to the onboard SATA controller connectors.

SAS/SATA/NVMe* data cables are not included with any of the chassis only building block SKUs. They must be ordered separately to match the desired system configuration.

On the backside of each installed backplane is a multi-port SFF-8643 mini-SAS HD data connector for each set of four SATA/SAS drives. Backplanes that include support for 2.5" PCIe* NVMe drives also include one PCIe OCuLink connector for each PCIe NVMe drive it supports. Drive numbers in the cable configuration tables match the specific cable connectors found on the given backplane.

![Figure 21. SAS backplane](image)

**Note:** The back side (cable connector side) of a backplane will have one OCuLink cable connector for each PCIe NVMe SFF drive it supports. If a backplane has no OCuLink cable connectors, then it does not have support for NVMe drives. Drive bay population rules may apply for backplanes that support SATA/SAS and PCIe NVMe drives. See the appropriate System Technical Product Specification for drive support information.
### 4.1 Cable Connector Types

#### Table 47. Single-port SATA cable connector

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>7-pin Single Port SATA</strong>&lt;br&gt;Support for up to 6 GB/sec SATA devices&lt;br&gt;Where used:&lt;br&gt;• On the server board – (2) single port SATA connectors (sSATA 4, sSATA 5)&lt;br&gt;• 2U Rear Mount Hot-Swap Backplane (iPC A2UREARHSK2)</td>
</tr>
</tbody>
</table>

#### Table 48. Multiport mini SAS HD cable connectors

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><strong>SFF-8643</strong>&lt;br&gt;Support for up to 12 Gb/Sec SAS&lt;br&gt;Where used:&lt;br&gt;• On the server board – (2) 4-port SATA connectors – (SATA 0-3 &amp; SATA 4-7)&lt;br&gt;• All 12 Gb/sec SAS capable hot swap backplanes&lt;br&gt;• All 12 Gb/sec SAS RAID Controllers&lt;br&gt;• All 12 Gb/sec SAS Expander Cards</td>
</tr>
</tbody>
</table>

#### Table 49. PCIe® OCuLink cable connectors

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><strong>OCuLink connector</strong>&lt;br&gt;Support for PCIe NVMe SFF (2.5&quot;) SSDs&lt;br&gt;Where used:&lt;br&gt;• On the server board – 2 or 4 connectors (depending on the board model)&lt;br&gt;• All backplanes that include support for NVMe SFF SSDs</td>
</tr>
</tbody>
</table>

#### Table 50. Intel® Omni-Path cable connectors

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><strong>Fabric IFT Carrier connector</strong>&lt;br&gt;Support for fabric processors&lt;br&gt;Support for IFT Carrier/Mezzanine boards&lt;br&gt;Where Used:&lt;br&gt;• Connects a fabric processor to the SB Intel® Omni-Path IFT Carrier Kit Mezz (AWF1PFABKITM) or the SB Intel Omni-Path IFT Carrier Kit PCIe® (AWF1PFABKITP)</td>
</tr>
</tbody>
</table>
4.2 1U/2U Server System SAS/SATA/NVMe* Cable Kits

Product tables in this section reference specific SAS/SATA and NVMe cables. Different cable kits are offered to support specific system configurations. The product order code for each cable kit is made up of a string of letters and numbers to identify the type of cable included in the kit. The following table identifies the different data cable connector types and the identifiers used in the cable kit product codes.

**Table 51. Data cable connector identification**

<table>
<thead>
<tr>
<th>Connector Image</th>
<th>Cable Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="HR" /></td>
<td>HR</td>
<td>Right angle SFF-8643 mini SAS HD connector</td>
</tr>
<tr>
<td><img src="image" alt="HD" /></td>
<td>HD</td>
<td>Straight SFF-8643 mini SAS HD connector</td>
</tr>
<tr>
<td><img src="image" alt="CV" /></td>
<td>CV</td>
<td>Straight NVMe* OCuLink SFF-8611 connector</td>
</tr>
<tr>
<td><img src="image" alt="CR" /></td>
<td>CR</td>
<td>Right angle NVMe* OCuLink SFF-8611 connector</td>
</tr>
<tr>
<td><img src="image" alt="R1" /></td>
<td>R1</td>
<td>IFT Carrier card to Fabric Processor (Fabric Processor side) connector</td>
</tr>
</tbody>
</table>
| ![L1](image)    | L1         | R1 = Right angle, right exit  
|                 |            | L1 = Right angle, left exit |
| ![IFP](image)   | IFP        | IFT Carrier card to Fabric Processor (Add-in Carrier Board/Mezzanine side) connector |
4.2.1 Cable Kit Product Code Decoder Examples

SAS/SATA Data Cable Example – iPC AXXCBL950HDMS

- AXXCBL – Identifies an accessory cable kit
- 950 – Identifies the length of the cable in mm
- HD – Identifies that one end of the cable is an SFF-8643 type connector
- MS – Identifies that one end of the cable is an SFF-8087 type connector

NVMe OCuLink Cable Example – iPC AXXCBL600CVCR

- AXXCBL – Identifies an accessory cable kit
- 600 – Identifies the length of the cable in mm
- CV – Identifies that one end of the cable is a straight NVMe OCuLink SFF-8611 connector
- CR – Identifies that one end of the cable is a right angle NVMe OCuLink SFF-8611 connector

4.2.2 Cable Kit Order Information

Note: The minimum order quantity (MOQ) refers to the cable kit. The kit contents may include one or more cables as listed in the product description.

<p>| Table 52. SATA/SAS/NVMe* data cable kit description and order information |
|---|---|---|
| Image | Details | Description |
| <img src="image1.png" alt="Image" /> | iPC AXXCBL950HDMS MM# 936122 UPC 00735858286596 EAN 5032037066495 MOQ 1 | 950 mm long, cable kit (2 cables included) straight SFF8643 to straight SFF8643 Used in multiple systems as spare and/or accessory (R1304, R2308, R2312) |
| <img src="image2.png" alt="Image" /> | iPC AXXCBL875HDMS MM# 936123 UPC 00735858284769 EAN 5032037065054 MOQ 1 | 875 mm long, cable kit (2 cables included) straight SFF8643 to straight SFF8643 Used in multiple systems as spare and/or accessory (R1304, R1208, R2208, R2224, R2312) |
| <img src="image3.png" alt="Image" /> | iPC AXXCBL800HDMS MM# 937312 UPC 00735858286015 EAN 5032037066006 MOQ 1 | 800 mm long, cable kit (2 cables included in kit) straight SFF8643 to straight SFF8643 Used in multiple systems as spare and/or accessory (R1304, R1208, R2308, R2312) |</p>
<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>iPC AXXCBL730HDHD MM# 936178 UPC 00735858284745 EAN 5032037065030 MOQ 1</td>
<td><strong>730 mm</strong> long, cable kit (2 cables included) straight SFF8643 to straight SFF8643 Used in multiple systems as spare and/or accessory (R1208, R2208, R2308)</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>iPC AXXCBL650HDHD MM# 937129 UPC 00735858284752 EAN 5032037065047 MOQ 1</td>
<td><strong>650 mm</strong> long, cable kit (2 cables included) straight SFF8643 to straight SFF8643 Used as accessory when installing 12G ROC module in R1208 for optimal cabling. (longer cable may be used)</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>iPC AXXCBL235IFPR1 MM# 958250 UPC 00735858346078 EAN 5032037106351 MOQ 1</td>
<td><strong>Accessory/Spare cable kit – 235 mm</strong> long (iPN H79272-xxx), 1 cable included  - This is an accessory cable for IFT Carrier Kit AWF1PFABKITP. A required cable to connect fabric processor #2 to the PCIe add-in IFT Carrier card installed to Riser #2  - This is a replacement cable for IFT Carrier kit AWF1PFABKITM.</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>iPC AXXCBL235IFPL1 MM# 958252 UPC 00735858346092 EAN 5032037106375 MOQ 1</td>
<td><strong>Spare cable kit – 235 mm</strong> long (iPN H79267-xxx), 1 cable included This is a replacement cable for IFT Carrier kit AWF1PFABKITP. Updated 10/19</td>
</tr>
<tr>
<td><img src="image5.png" alt="Image" /></td>
<td>iPC AXXCBL370IFPS1 MM# 958251 UPC 00735858346085 EAN 5032037106368 MOQ 1</td>
<td><strong>Accessory cable kit - 370 mm</strong> long (iPN H79275-xxx), 1 cable included This is an accessory cable for IFT Carrier Kit AWF1PFABKITM. A required cable to connect fabric processor #2 to the Mezzanine IFT Carrier card. Update 10/19</td>
</tr>
<tr>
<td><img src="image6.png" alt="Image" /></td>
<td>iPC AXXCBL430IFTSBY MM# 958253 UPC 00735858346108 EAN 5032037106382 MOQ 1</td>
<td><strong>430 mm</strong> long, spare cable kit (1 cable included), bundled straight 430mm, 2x12 HFI Sideband Y Cable, Single Intel® Omni-Path Sideband IFT Carrier to dual Intel Omni-Path CPU connectors Used to connect SB Intel Omni-Path IFT Carrier board or Mezzanine to the server board in support of fabric processors</td>
</tr>
<tr>
<td><img src="image7.png" alt="Image" /></td>
<td>iPC AXXCBL650HDHRT MM# 958254 UPC 00735858346115 EAN 5032037106399 MOQ 1</td>
<td><strong>650 mm</strong> long, spare/accessory cable kit (2 cables included), straight HD Mini SAS SFF8643 connector to right angle HD Mini SAS SFF8643 connector Used in a R1208 as a spare and/or accessory to connect on-board mSAS-HD connectors to the HSBP connector for drives 0-3 Not compatible with SAS ROC Modules with vertical connectors in 1U systems</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| iPC   | AXXCBL850HDHRS 958255 | 850 mm long, spare/accessory cable kit (2 cables included), straight HD Mini SAS SFF8643 connector to right angle HD Mini SAS SFF8643 connector<br>Used in a R1208 as a spare and/or accessory:  
  - To connect on-board mSAS-HD connectors to the HSBP drives 4-7  
  - Required cable to support SAS ROC Modules with **vertical** connectors to the HSBP drives 0-3 connectors in 1U based systems |
<p>| iPC   | AXXCBL850HDHRT 958257 | 850 mm long, cable kit (2 cables included), straight HD Mini SAS SFF8643 connector to right angle HD Mini SAS SFF8643 connector&lt;br&gt;Used in a R1304 as a spare and/or accessory to connect mSAS-HD connectors on the server board to the HSBP to support drives 0-3&lt;br&gt;Not compatible with SAS ROC Modules with vertical connectors in 1U systems |
| CV CR | iPC AXXCBL470CVCR 958258 | 470 mm long, accessory cable kit (1 cable included), straight OCuLink SFF-8611 connector to right angle OCuLink SFF-8611 connector&lt;br&gt;Used in R1208, R2208, R2208+8, and R2224 systems to connect a server board OCuLink SSD connector to a HSBP SSD connector |
| CV CR | iPC AXXCBL530CVCR 958260 | 530 mm long, accessory cable kit (1 cable included), straight OCuLink SFF-8611 connector to right angle OCuLink SFF-8611 connector&lt;br&gt;Used in R1208, R2208, R2208+8, and R2224 systems to connect the server board OCuLink SSD connector to a HSBP SSD connector |
| CV CR | iPC AXXCBL600CVCR 959345 | 600 mm long, accessory cable kit (1 cable included), straight OCuLink SFF-8611 connector to right angle OCuLink SFF-8611 connector&lt;br&gt;Used to connect a server board OCuLink connector SSD#3 to HSBP drive 11 of the R2312 system SKUs |
| CV CR | iPC AXXCBL700CVCR 958261 | 700 mm long, accessory cable kit (1 cable included), straight OCuLink SFF-8611 connector to right angle OCuLink SFF-8611 connector&lt;br&gt;Used in R1208, R2208, R2208+8, and R2224 systems to connect the server board OCuLink SSD connector to a HSBP SSD connector |
| CV CR | iPC AXXCBL800CVCR 958262 | 800 mm long, accessory cable kit (1 cable included), straight OCuLink SFF-8611 connector to right angle OCuLink SFF-8611 connector&lt;br&gt;Used in R1208, R2208, R2208+8, and R2224 systems to connect the server board OCuLink SSD connector to a HSBP SSD connector |</p>
<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> AXXCBL620CRCR MM# 958263 UPC 00735858346191 EAN 5032037106474 MOQ 1</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> A1U4PRTCXCK MM# 958358 UPC 00735858346207 EAN 5032037106481 MOQ 1</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> A2U4PRTCXCK MM# 958264 UPC 00735858346214 EAN 5032037106498 MOQ 1</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> A1U4PSWCXCVK MM# 964522 UPC 00735858366502 EAN 5032037121002 MOQ 1</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> A2U4PSWCXCK1 MM# 958266 UPC 00735858346221 EAN 5032037106504 MOQ 1</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> A2U4PSWCXCK2 MM# 958267 UPC 00735858346238 EAN 5032037106511 MOQ 1</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
<td><strong>iPC</strong> A2U8PSWCXCK1 MM# 958268 UPC 00735858346245 EAN 5032037106528 MOQ 1</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>iPC A2U8PSWCXCK2 MM# 958270 UPC 00735858346252 EAN 5032037106535 MOQ 1</td>
<td><strong>2U</strong> 8 port Switch accessory cable kit, Riser 1 or Riser 2 (2 cables included). Contains the following OCuLink bundled cables: 875 mm long, bundled cable kit (2 cables included) straight OCuLink SFF-8611 connectors to straight/right angle OCuLink SFF-8611 connectors Used in the R2208+8 and R2224 to connect switch AIC installed in Riser 2 to HSBP PCIe SSD ports 0 - 7</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>iPC A2U8PSWCXCK3 MM# 958272 UPC 00735858346269 EAN 5032037106542 MOQ 1</td>
<td><strong>2U</strong> 8 port Switch accessory cable kit, Riser 2 (2 cables included). Contains the following OCuLink bundled cables: 810 mm long, bundled cable kit (2 cables included) straight OCuLink SFF-8611 connectors to straight/right angle OCuLink SFF-8611 connectors Used in the R2224 to connect switch AIC 2 installed in Riser 2 to HSBP PCIe SSD ports 0 - 7</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>iPC AXXCBL700HDCV MM# 958273 UPC 00735858346276 EAN 5032037106559 MOQ 1</td>
<td>700 mm, cable kit (2 cables included) straight SFF-8643 connector to dual straight OCuLink SFF-8611 connectors Used to connect Trimode RAID AICs to HSBP PCIe #0 &amp; PCIe #1 and PCIe #2 &amp; PCIe #3</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>iPC A1U4PTRICXCVK MM# 984361 UPC 00735858393270 EAN 5032037140836 MOQ 1</td>
<td>Cable kit includes: (1) – 600 mm dual right angle SFF-8643 connector to dual straight OCuLink SFF-8611 connectors (1) – 700 mm dual right angle SFF-8643 connector to dual straight OCuLink SFF-8611 connectors Used to connect Trimode RAID AICs to HSBP PCIe #0 &amp; PCIe #1 and PCIe #2 &amp; PCIe #3 Used to connect Trimode RAID AICs to HSBP PCIe #4 &amp; PCIe #5 and PCIe #6 &amp; PCIe #7</td>
</tr>
</tbody>
</table>
4.2.3 Cable Recommendations

Each table in the following sections identify the cable connections and recommended cable lengths for each supported storage controller option in the specified system. Each recommended cable length for a given connector pair provides enough cable to attach the two devices and provides the least amount of excess cable, providing the cleanest cable routing.

Refer to the following diagrams when Right or Left cable routing is specified for a given cable configuration. All cable recommendations are for a system configured for two processors.
### 4.3 1U 4 x 3.5" – R1304WFxxx SAS/SATA Data Cable Guide

![Server System](image)

**Figure 23.** R1304WFxxx SAS/SATA backplane (no NVMe* drive support)

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>SATA Onboard Mini-SAS HD SATA Connector to Backplane (BP)</th>
<th>SAS Mezzanine 12 Gb SAS ROC Module to Backplane (BP)</th>
<th>SAS 12 Gb SAS RAID PCIe* add-in card to Backplane (BP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1304WF...</td>
<td>4 x 3.5&quot;</td>
<td>SATA 0-3 → BP 0-3 850 mm HR --- HD AXXCBL850HDHRT</td>
<td>The following cable is required for Mezzanine SAS ROC modules with Horizontal connectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 Gb SATA all drives 12 Gb SAS all drives</td>
<td>L6 system ships with 1 cable</td>
<td>SAS Mezz → BP 0-3 800 mm HD --- HD AXXCBL800HDHD</td>
<td>SAS PCIe → BP 0-3 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The following cable is required for Mezzanine SAS ROC modules with Vertical connectors AXXCBL850HDHRS</td>
<td>From Riser #1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>From data above, select appropriate cable kits from list below: See note below AXXCBL730HDHD</td>
<td>SAS PCIe → BP 0-3 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AXXCBL875HDHD AXXCBL950HDHD</td>
<td>From Riser #2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>From data above, select appropriate cable kits from list below: See note below AXXCBL730HDHD</td>
<td>730 or 875 mm HD --- HD</td>
</tr>
</tbody>
</table>

1 or 2 cable lengths may be specified for a PCIe* add-in card. Generally, if the cable connector of the add-in card is located on the back edge of the card, a shorter cable is specified. Cable connectors on the top edge or near the front of the add-in card will require the longer cable length.
## 4.4 1U 8 x 2.5" – R1208WFxxx SAS/SATA/NVMe* Data Cable Guide

![Figure 24. R1208WFxxx SAS/SATA backplane](image)

### Table 54. Data cable guide for Intel® Server System R1208WFxxx

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>SATA Onboard Multi-port SATA Ports to Backplane (BP)</th>
<th>SAS Mezzanine 12 Gb SAS ROC Module to Backplane (BP)</th>
<th>SAS 12 Gb SAS RAID PCIe* Add-In card to Backplane (BP)</th>
<th>NVMe* Onboard PCIe* OCuLink to Backplane (BP)</th>
<th>NVMe 4 Port PCIe Switch Card to Backplane (BP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1208WF...</td>
<td>8 x 2.5&quot;</td>
<td>SATA 0-3 → BP 0-3 650 mm HR --- HD AXXCBL650HDHRT</td>
<td>The following cables are required for Mezzanine SAS ROC modules with Horizontal connectors: SAS Mezz → BP 0-3 650 mm HD --- HD AXXCBL650HDHHD</td>
<td>From Riser #1 SAS PCIe → BP 0-3 650 mm HD --- HD SAS PCIe → BP 4-7 1 730 or 800 mm HD --- HD</td>
<td>From Riser #2 SAS PCIe → BP 0-3 650 or 730mm HD --- HD SAS PCIe → BP 4-7 ** 800 or 875 mm HD --- HD</td>
<td>PCIe SSD 0 (CR) → BP 0 (CV) 470mm – AXXCBL470CVCR PCIe SSD 1 (CR) → BP 1 (CV) 530mm – AXXCBL530CVCR PCIe SSD 2 (CR) → BP 2 (CV) 800mm – AXXCBL800CVCR PCIe SSD 3 (CR) → BP 3 (CV) 700mm – AXXCBL700CVCR</td>
</tr>
<tr>
<td></td>
<td>6Gb SATA all drives 12 Gb SAS all drives PCIe NVMe SFF all drives</td>
<td>SATA 4-7 → BP 4-7 850 mm HR --- HD AXXCBL850HDHRS</td>
<td>SAS Mezz → BP 4-7 800 mm HD --- HD AXXCBL800HDHDD</td>
<td>From data above, select appropriate cable kits from list below: See notes below</td>
<td>From data above, select appropriate cable kits from list below: See notes below</td>
<td>Switch Card → BP 4-7 890mm - A1U4PSWCCVK From Riser #2 Retimer Card → BP 4-7 945mm - A1U4PRTCCXK</td>
</tr>
<tr>
<td></td>
<td>L6 systems ship with 1 each cable</td>
<td>Mezzanine SAS ROC Modules with vertical connectors require the following cable kit AXXCBL850HDHRS for backplane drives 0-3</td>
<td></td>
<td>AXXCBL650HDHHD AXXCBL730HDHHD AXXCBL800HDHDD AXXCBL875HDHDD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 1 or 2 cable lengths may be specified for a PCIe* add-in card. Generally, if the cable connector of the add-in card is located on the back edge of the card, a shorter cable is specified. Cable connectors on the top edge or near the front of the add-in card will require the longer cable length.
### 4.5 2U 8 x 3.5" – R2308WFxxx SAS/SATA Data Cable Guide

**Figure 25. R2308WFxxx SAS/SATA backplane (no NVMe* support)**

**Table 55. Data cable guide for Intel® Server System R2308WFxxx**

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>SATA Onboard Multi-port SATA Ports to Backplane (BP)</th>
<th>SAS Mezzanine 12 Gb SAS ROC Module to Backplane (BP)</th>
<th>SAS 12 Gb SAS RAID PCIe* add-in card to Backplane (BP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2308WF....</td>
<td>8 x 3.5&quot;</td>
<td>SATA 0-3 → BP 0-3 730 mm HD --- HD AXXCBL730HDHD</td>
<td>SAS Mezz → BP 0-3 730 mm HD --- HD AXXCBL730HDHD</td>
<td>From Riser #1:</td>
</tr>
<tr>
<td></td>
<td>6 Gb SATA all drives 12 Gb SAS all drives</td>
<td>SATA 4-7 → BP 4-7 875 mm HD --- HD AXXCBL875HDHD</td>
<td>SAS Mezz → BP 4-7 875 mm HD --- HD AXXCBL875HDHD</td>
<td>SAS PCIe → BP 0-3 ¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L6 systems ship with 1 each cable</td>
<td></td>
<td>650 or 730 mm HD --- HD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SAS PCIe → BP 4-7 ¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>800 or 950 mm HD --- HD</td>
</tr>
</tbody>
</table>

¹ 1 or 2 cable lengths may be specified for a PCIe* add-in card. Generally, if the cable connector of the add-in card is located on the back edge of the card, a shorter cable is specified. Cable connectors on the top edge or near the front of the add-in card will require the longer cable length.
## 4.6 2U 12 x 3.5 – R2312WFxxx SAS/SATA/NVMe* Data Cable Guide

![Figure 26. R2312WFxxx SAS/SATA backplane](image)

### 4.6.1 2U 12 x 3.5" - R2312WFxxx SAS/SATA/NVMe* Data Cable Guide (with no SAS Expander)

#### Table 56. Data cable guide (no SAS expander) for Intel® Server System R2312WFxxx

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>SATA Onboard Multi-port SATA Ports to Backplane (BP)</th>
<th>SAS Mezzanine 12 Gb SAS ROC Module to Backplane (BP)</th>
<th>SAS 12 Gb SAS RAID PCIe* add-in card to Backplane (BP)</th>
<th>Up to 2 x NVMe Onboard PCIe OCuLink to Backplane (BP) drive bays 10 &amp; 11 only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 x 3.5&quot;</td>
<td>6 Gb SATA all drives 12 Gb SAS all drives PCIe NVMe SFF drives 10 &amp; 11 only</td>
<td>SAS Mezz → BP 4-7 875 mm HD --- HD</td>
<td>From Riser #1 SAS PCIe → BP 4-7 ¹</td>
<td>PCie SSD3 (CR) → BP SSD1 (CV) 600mm AXXCBL600CVCR</td>
</tr>
<tr>
<td>R2312WF...</td>
<td></td>
<td>800mm HD --- HD AXXCBL800HDDH</td>
<td>SAS Mezz → BP 8-11 950 mm HD --- HD</td>
<td>SAS PCIe → BP 8-11 875 mm HD --- HD</td>
<td>PCie SSD2 (CR) → BP SSD0 (CR) 620mm AXXCBL620CRCR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SATA 4-7 → BP 4-7 875 mm HD --- HD AXXCBL875HDDH</td>
<td>From data above, select appropriate cable kits from list below: AXXCBL800HDDH AXXCBL875HDDH AXXCBL950HDDH</td>
<td>From Riser #2 SAS PCIe → BP 4-7 ¹</td>
<td>Retimer add-in card is not compatible with R2312WFxxx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L6 systems ship with 1 each of the cables listed.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ 1 or 2 cable lengths may be specified for a PCIe* add-in card. Generally, if the cable connector of the add-in card is located on the back edge of the card, a shorter cable is specified. Cable connectors on the top edge or near the front of the add-in card will require the longer cable length.
4.6.2 2U 12 x 3.5" - R2312WTxxx SAS/SATA/NVMe* Data Cable Guide (with SAS Expander)

For server configurations with 12 drives, Intel recommends a 16-port SAS controller. In the 2U 12x3.5" system configuration, the SAS expander must be installed in any available PCIe* add-in slot. Intel provides one SAS expander options to support this drive configuration.

**Table 57. SAS expander option**

<table>
<thead>
<tr>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAS 3.0 12 Gb/s Expander</td>
<td>• 6Gbps data aggregation for 12Gbps data transfer with 6Gb/s devices</td>
</tr>
<tr>
<td>iPC</td>
<td>• Low Profile MD2 PCIe* add-in card form factor</td>
</tr>
<tr>
<td>MM# (Model)</td>
<td>• 28 internal ports and 8 external ports</td>
</tr>
<tr>
<td>UPC (Part Number)</td>
<td>• Redundant dual-port capable for HA and high performance systems</td>
</tr>
<tr>
<td>EAN (European Article Number)</td>
<td>• Power from PCIe x1</td>
</tr>
<tr>
<td>MOQ (Minimum Order Quantity)</td>
<td>• Mini-SAS HD 8643 Connectors</td>
</tr>
<tr>
<td>Product type</td>
<td><strong>Kit includes:</strong> (1) SAS expander card, (2) HD-HD 250mm Expander-to-RAID card cables, PCI brackets for low profile and full height</td>
</tr>
<tr>
<td></td>
<td><strong>Required (sold separately):</strong> HD-HD SAS data cables – Expander to backplane – See Table 58</td>
</tr>
</tbody>
</table>

**Note:** The onboard SATA ports are not compatible with SAS expander cards. The onboard SATA ports can only be cabled directly to a specified backplane.
Table 58. Data cable guide (with SAS expander) for Intel® Server System R2312WFxxx

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>SATA Onboard Multi-port SATA Ports</th>
<th>SAS + Expander Mezzanine 12Gb SAS ROC Module + 12 Gb SAS Expander to Backplane (BP)</th>
<th>SAS + Expander 12Gb SAS RAID PCIe* add-in card + 12 Gb SAS Expander to Backplane (BP)</th>
<th>Up to 2 x NVMe* Cables for Onboard PCIe* OCuLink to Backplane (BP) drive bays 10 &amp; 11 only</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2312WF...</td>
<td>12 x 3.5&quot;</td>
<td>Onboard SATA controllers do not support SAS expanders.</td>
<td>With 12 Gb SAS Expander RES3FV288 installed in Riser #1: Use cables in Expander Kit to attach SAS ROC to Expander Card Use the following cables to attach Expander to Backplane: Expander → BP 0-3 800 mm HD --- HD Expander → BP 4-7 875 mm HD --- HD Expander → BP 8-11 950 mm HD ---HD From data above, select appropriate cable kits from list below: AXXCBL800HDHD AXXCBL875HDHD L6 systems ship with 1 each of the cables listed.</td>
<td>With 12 Gb PCIe RAID and 12 Gb SAS Expander RES3FV288 installed in riser #1: Use cables in Expander Kit to attach PCIe SAS card to Expander Card Use the following cables to attach Expander to Backplane: Expander → BP 0-3 800 mm HD --- HD Expander → BP 4-7 875 mm HD --- HD Expander → BP 8-11 950 mm HD ---HD From data above, select appropriate cable kits from list below: AXXCBL800HDHD AXXCBL875HDHD AXXCBL950HDHD</td>
<td>PCIe SSD3 (CR) → BP SSD1 (CV) 600 mm AXXCBL600CVCVR PCIe SSD2 (CR) → BP SSD0 (CR) 620 mm AXXCBL620CRCR Note: Retimer add-in card is not compatible with R2312WFxxx</td>
</tr>
</tbody>
</table>
4.7 2U 2.5” Front Mount Drive Bay Cable Guide

The front drive bay of the 2U system can support up to three 2.5" x 8-drive bay modules providing support for the following system configurations: 8 drives (R2208), 16 drives (R2208 + 8 Drive Accessory Kit), or 24 drives (R2224). Each of the three drive bay modules is identified by number as shown below. All eight drives of the standard 8 x 2.5" combo backplane can support SAS, SATA, and NVMe drive types. The backside (Cable connector side) of the standard combo backplane will include two 4-port 8643 Mini-SAS HD data connectors (Ports 0 – 3 & Ports 4 – 7) for SAS/SATA support, and eight PCIe OCuLink connectors for NVMe support (one connector for each PCIe NVMe SFF drive). Each OCuLink connector is labeled with a Drive ID (0 – 7) which corresponds to a matching drive interface connector on the front side (drive interface side) of the backplane.

Note: The dual port SAS backplane option includes four 4-port 8643 mini-SAS HD connectors and does not have support for PCIe NVMe drives.
The following sections should be used to identify the appropriate data cables to order for specific drive configurations. Each section identifies the data cable kits necessary to route between a given data source and the backplane of a specific Drive Bay Module location within the chassis. Reference each drive bay module section as necessary to determine the cable requirements relevant to your specific drive bay configuration.

### 4.7.1 2U - 8x2.5” Drive Bay Module #1 – Cable Guide (with no SAS Expander)

#### 4.7.1.1 Drive Bay Module # 1 - SAS/SATA Cable Guide

The following table identifies the appropriate SATA/SAS data cable kit(s) necessary to route data signals from Onboard SATA ports or available SAS RAID mezzanine and PCIe add-in options to the 8x2.5” backplane installed to Drive Bay Module #1.

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>SAS /SATA Drive Support</th>
<th>SATA Onboard Multi-port SATA Ports to Backplane (BP) #1</th>
<th>SAS Mezzanine 12 Gb SAS ROC Module to Backplane (BP) #1</th>
<th>SAS 12 Gb SAS RAID PCIe* add-in card to Backplane (BP) #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay #1</td>
<td>Up to eight 2.5&quot; SAS / SATA Drives</td>
<td>SATA 0-3 → BP 0-3 730mm HD --- HD AXXCBL730HDHD</td>
<td>SAS Mezz → BP 0-3 730 mm HD --- HD AXXCBL730HDHD</td>
<td>From Riser #1: SAS PCIe → BP 0-3 730 mm HD --- HD SAS PCIe → BP 4-7 730 mm HD --- HD</td>
</tr>
<tr>
<td>R2208WF... R2208WF+8 R2224WF</td>
<td></td>
<td>SATA 4-7 → BP 4-7 730 mm HD --- HD AXXCBL730HDHD</td>
<td>SAS Mezz → BP 4-7 730 mm HD --- HD AXXCBL730HDHD</td>
<td>From Riser #2: SAS PCIe → BP 0-3 730 mm HD --- HD SAS PCIe → BP 4-7 730 mm HD --- HD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) 730mm Cables included with all WFT and WFO 2.5&quot; L6 Integrated systems</td>
<td>(2) 730mm Cables included with all WFT and WFO 2.5&quot; L6 Integrated systems</td>
<td>(2) 730mm Cables included with all 2.5&quot; L6 Integrated systems</td>
</tr>
</tbody>
</table>
### 4.7.1.2 Drive Bay Module #1 – NVMe* Cable Guide

The following table identifies the appropriate PCIe NVMe data cable kit(s) necessary to route PCIe signals from any of the onboard PCIe OCuLink connectors and / or PCIe switch add-in card options to the 8x2.5" combo backplane installed to Drive Bay Module #1.

Select the cable kit or kits required to support the specific PCIe source or sources and the appropriate number of NVMe drives being installed to Drive Bay Module #1 only.

**Note:** CR and CV refer to the connector types at each end of the PCIe OCuLink cable. See Table 51.

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>NVMe Drive Support</th>
<th>Onboard PCIe OCuLink to Drive Bay Module (BP) #1 Cable Kits</th>
<th>PCIe Switch Card Option on Riser #1</th>
<th>PCIe Switch Card Option on Riser #2</th>
<th>PCIe Switch Card Option on Riser #3 (NOT SUPPORTED)</th>
<th>PCIe Switch Card to Drive Bay Module (BP) #1 Cable Kits</th>
<th>Cable Routing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay #1</td>
<td>Up to Eight 2.5&quot; NVMe SSDs</td>
<td>PCIe SSD 0 (CR) → BP 0 (CV) 470mm – AXXCBL470CVCR</td>
<td>4-port PCIe Switch Add-in Card AXXP3SWX08040 any open PCIe slot</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U4PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 1 (CV) 530mm – AXXCBL530CVCR</td>
<td>4-port PCIe Switch Add-in Card AXXP3SWX08040 any open PCIe slot</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U4PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 2 (CV) 700mm – AXXCBL700CVCR</td>
<td>4-port PCIe Switch Add-in Card AXXP3SWX08040 any open PCIe slot</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U4PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 3 (CV) 700mm – AXXCBL700CVCR</td>
<td>8-port PCIe Switch Add-in Card AXXP3SWX08080 PCIe slot #2</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U8PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 0 (CR) → BP 4 (CV) 700mm – AXXCBL700CVCR</td>
<td>8-port PCIe Switch Add-in Card AXXP3SWX08080 PCIe slot #2</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U8PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 5 (CV) 700mm – AXXCBL700CVCR</td>
<td>8-port PCIe Switch Add-in Card AXXP3SWX08080 PCIe slot #2</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U8PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 6 (CV) 700mm – AXXCBL700CVCR</td>
<td>8-port PCIe Switch Add-in Card AXXP3SWX08080 PCIe slot #2</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U8PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 7 (CV) 700mm – AXXCBL700CVCR</td>
<td>8-port PCIe Switch Add-in Card AXXP3SWX08080 PCIe slot #2</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U8PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>All cables routed left</td>
<td>8-port PCIe Switch Add-in Card AXXP3SWX08080 PCIe slot #2</td>
<td>Switch → BP ports 0-3 or Switch → BP ports 4-7 A2U8PSWXCKXK1</td>
<td>Left</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 PCIe switch cards installed to Riser #3 cannot be supported at this time.
<table>
<thead>
<tr>
<th>System Configuration</th>
<th>NVMe Drive Support</th>
<th>Onboard PCIe OCuLink to Drive Bay Module (BP) #1 Cable Kits</th>
<th>PCIe Retimer Card Option on Riser #1 (NOT SUPPORTED)</th>
<th>PCIe Retimer Card Option on Riser #2</th>
<th>PCIe Retimer Card to Drive Bay Module (BP) #1 Cable Kits</th>
<th>Cable Routing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay #1</td>
<td></td>
<td>PCIe SSD 0 (CR) → BP 0 (CV) 470mm – AXXCBL470CVCR</td>
<td></td>
<td>4-port PCIe Retimer Add-in Card</td>
<td>Retimer → BP ports 0-3 or Retimer → BP ports 4-7</td>
<td>Left</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 1 (CV) 530mm – AXXCBL530CVCR</td>
<td></td>
<td>AXXP3RXTX16040</td>
<td>A2U4PRTCXCXK</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 2 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td>top PCIe slot #1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 3 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 0 (CR) → BP 4 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 5 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 6 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 7 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>All cables routed left</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 PCIe retimer card installed to Riser #1 is not supported.
### 4.7.2 2U - 8x2.5" Drive Bay Module #2 – Cable Guide (with no SAS Expander)

#### 4.7.2.1 Drive Bay Module #2 - SAS/SATA Cable Guide

The following table identifies the appropriate SATA/SAS data cable kit(s) necessary to route data signals from Onboard SATA ports or available SAS RAID mezzanine and PCIe add-in options to the 8x2.5" backplane installed to Drive Bay Module #2.

**Table 61. Drive bay module #2 SAS/SATA cable guide**

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>SATA Onboard Multi-port SATA Ports to Backplane (BP) #2</th>
<th>SAS Mezzanine 12 Gb SAS ROC Module to Backplane (BP) #2</th>
<th>SAS 12 Gb SAS RAID PCIe* add-in card to Backplane (BP) #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay #2 (no SAS Expander)</td>
<td>8 x 2.5&quot; SATA – All Drives SAS – All Drives</td>
<td>SATA 0-3 → BP 0-3 730mm HD -- HD</td>
<td>SAS Mezz → BP 0-3 730mm HD -- HD</td>
<td>From Riser #1: SAS PCIe → BP 0-3 ¹ 650 or 730mm HD -- HD SAS PCIe → BP 4-7 ¹ 730 or 800mm HD -- HD</td>
</tr>
<tr>
<td>R2208WF...+ 8 drive option R2224WF...</td>
<td></td>
<td>SATA 4-7 → BP 4-7 875mm HD -- HD</td>
<td>SAS Mezz → BP 4-7 875mm HD -- HD</td>
<td>From Riser #2: SAS PCIe → BP 0-3 ¹ 800 or 875mm HD -- HD SAS PCIe → BP 4-7 ¹ 730 or 875mm HD -- HD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>From data above, select appropriate cable kits from list below: AXXCBL730HDHD (1) 730mm Included in all 2.5&quot; L6 AXXCBL875HDHD (1) 875mm Included in R2224 L6</td>
<td>From data above, select appropriate cable kits from list below: AXXCBL730HDHD (1) 730mm Included in all 2.5&quot; L6 AXXCBL875HDHD (1) 875mm Included in R2224 L6</td>
<td>From data above, select appropriate cable kits from list below: AXXCBL650HDHD AXXCBL730HDHD (2) 730mm Included in all 2.5&quot; L6 AXXCBL800HDHD AXXCBL875HDHD (4) 875mm Included in R2224 L6</td>
</tr>
</tbody>
</table>

¹ 1 or 2 cable lengths may be specified for a PCIe add-in card. Generally, if the cable connector of the add-in card is located on the back edge of the card, a shorter cable is specified. Cable connectors on the top edge or near the front of the add-in card will require the longer cable length.
4.7.2.2 Drive Bay Module #2 – NVMe* Cable Guide

Table 62 identifies the appropriate PCIe NVMe data cable kit(s) necessary to route PCIe signals from any of the onboard PCIe OCuLink connectors and/or PCIe switch add-in card options to the 8x2.5” combo backplane installed to Drive Bay Module #2. Select the cable kit or kits required to support the specific PCIe source or sources and appropriate number of NVMe drives being installed to Drive Bay Module #2 only.

Note: CR and CV refer to the connector types at each end of the PCIe OCuLink cable. See Section 4.1.

Table 62. Drive bay module #2 NVMe* cable guide

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>NVMe Drive Support</th>
<th>Onboard PCIe OCuLink to Drive Bay Module (BP) #2 Cable Kits</th>
<th>PCIe Switch Card Option on Riser #1</th>
<th>PCIe Switch Card Option on Riser #2</th>
<th>PCIe Switch Card Option on Riser #3 (NOT SUPPORTED)</th>
<th>PCIe Switch Card to Drive Bay Module (BP) #2 Cable Kits</th>
<th>Cable Routing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay #2</td>
<td>Up to Eight 2.5” NVMe SSDs</td>
<td>PCIe SSD 0 (CR) → BP 0 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Left</td>
<td>4-port PCIe Switch Add-in Card <strong>AXXP3SWX08040</strong> any open PCIe slot</td>
<td>4-port PCIe Switch Add-in Card <strong>AXXP3SWX08040</strong> any open PCIe slot</td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Left</td>
</tr>
<tr>
<td>R2208WF + 8 R2224WF</td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 1 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Left</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 2 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Right</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 3 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Right</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 0 (CR) → BP 4 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Left</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Left</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 5 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Left</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Left</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 6 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Right</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK2</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 7 (CV) 700mm – <strong>AXXCBL700VCVR</strong> Route Right</td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td><strong>A2U4PSWCXCKK3</strong></td>
<td>Right</td>
</tr>
</tbody>
</table>

* PCIe switch cards installed to Riser #3 cannot be supported at this time.
### 4.7.3 2U - 8x2.5” Drive Bay Module #3 – Cable Guide (with no SAS Expander)

#### 4.7.3.1 Drive Bay Module #3 - SAS/SATA Cable Guide

The following table identifies the appropriate SATA/SAS data cable kit(s) necessary to route data signals from onboard SATA ports or available SAS RAID mezzanine and PCIe add-in options to the 8 x 2.5” backplane installed to **Drive Bay Module #3**.

**Table 63. Drive bay module #3 SAS/SATA cable guide**

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>Drive Support</th>
<th>Cables for Onboard Multi-port SATA Ports to Drive Bay #3</th>
<th>Cables for Mezzanine 12 Gb SAS ROC Module to Drive Bay #3</th>
<th>Cables for 12 Gb SAS RAID PCIe* add-in card to Drive Bay #3</th>
</tr>
</thead>
</table>
| **Drive Bay #3 (no SAS Expander)** | 8 x 2.5” SATA – All Drives SAS – All Drives NVMe – All Drives | SATA 0-3 → BP 0-3 800mm HD → HD  
SATA 4-7 → BP 4-7 730mm HD → HD  
From data above, select appropriate cable kits from list below:  
AXXCBL730HDHD (2) 730mm cables Included in all 2.5” L6  
AXXCBL800HDHD | SAS Mezz → BP 0-3 730mm HD → HD  
SAS Mezz → BP 4-7 730mm HD → HD  
From data above, select appropriate cable kits from list below:  
AXXCBL730HDHD (2) 730mm cables Included in all 2.5” L6 | From Riser #1:  
SAS PCIe → BP 0-3  730 or 875mm HD → HD  
SAS PCIe → BP 4-7  800 or 950mm HD → HD |
| R2224WF... | | | | From Riser #2:  
SAS PCIe → BP 0-3  730 or 875mm HD → HD  
SAS PCIe → BP 4-7  650 or 800mm HD → HD  
From data above, select appropriate cable kits from list below:  
AXXCBL650HDHD  
AXXCBL730HDHD  
(2) 730mm Included in all 2.5” L6  
AXXCBL800HDHD  
AXXCBL875HDHD  
(4) 875mm Included in R2224 L6  
AXXCBL950HDHD |

1 or 2 cable lengths may be specified for a PCIe add-in card. Generally, if the cable connector of the add-in card is located on the back edge of the card, a shorter cable is specified. Cable connectors on the top edge or near the front of the add-in card will require the longer cable length.
### 4.7.3.2 Drive Bay Module #3 – NVMe* Cable Guide

The following table identifies the appropriate PCIe NVMe data cable kit(s) necessary to route PCIe signals from any of the onboard PCIe OCuLink connectors and/or PCIe switch add-in card options to the 8 x 2.5" combo backplane installed to **Drive Bay Module #3**.

Select the cable kit or kits required to support the specific PCIe source or sources and the appropriate number of NVMe drives being installed to **Drive Bay Module #3** only.

**Note:** CR and CV refer to the connector types at each end of the PCIe OCuLink cable. See Table 9.

<table>
<thead>
<tr>
<th>System Configuration</th>
<th>NVMe Drive Support</th>
<th>Onboard PCIe OCuLink to Drive Bay Module (BP) #3 Cable Kits</th>
<th>PCIe Switch Card Option on Riser #1</th>
<th>PCIe Switch Card Option on Riser #2</th>
<th>PCIe Switch Card Option on Riser #3 (NOT SUPPORTED)</th>
<th>PCIe Switch Card to Drive Bay Module (BP) #3 Cable Kits</th>
<th>Cable Routing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay Module #3</td>
<td>Up to Eight 2.5&quot; NVMe SSDs</td>
<td>PCIe SSD 0 (CR) → BP 1 (CV) 800mm – <strong>AXXCBC800CVCR</strong></td>
<td>4-port PCIe Switch Add-in Card <strong>AXXP3SWX08400</strong> any open PCIe slot</td>
<td>4-port PCIe Switch Add-in Card <strong>AXXP3SWX08400</strong> any open PCIe slot</td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK2</strong></td>
<td>Right</td>
</tr>
<tr>
<td>R2224WF...</td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 2 (CV) 800mm – <strong>AXXCB800CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 2 (CV) 600mm – <strong>AXXCB600CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 3 (CV) 600mm – <strong>AXXCB800CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 0 (CR) → BP 4 (CV) 800mm – <strong>AXXCB800CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 5 (CV) 800mm – <strong>AXXCB800CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 6 (CV) 530mm – <strong>AXXCB800CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 7 (CV) 530mm – <strong>AXXCB530CVCR</strong></td>
<td></td>
<td></td>
<td></td>
<td>Switch → BP ports 0-3 Or Switch → BP ports 4-7 <strong>A2U4PSWCXCKK1</strong></td>
<td>Right</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All cables routed Right</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 PCIe switch cards installed to Riser #3 cannot be supported at this time.
<table>
<thead>
<tr>
<th>System Configuration</th>
<th>NVMe Drive Support</th>
<th>Onboard PCIe OCuLink to Drive Bay Module (BP) #1 Cable Kits</th>
<th>PCIe Retimer Card Option on Riser #1 (NOT SUPPORTED)¹</th>
<th>PCIe Retimer Card Option on Riser #2</th>
<th>PCIe Retimer Card to Drive Bay Module (BP) #3 Cable Kits</th>
<th>Cable Routing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Bay #3</td>
<td>Up to Eight 2.5&quot; NVMe SSDs</td>
<td>PCIe SSD 0 (CR) → BP 0 (CV) 800mm – AXXCBL800CVCR</td>
<td></td>
<td></td>
<td></td>
<td>Right</td>
</tr>
<tr>
<td>R2224WF...</td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 1 (CV) 800mm – AXXCBL800CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 2 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 3 (CV) 600mm – AXXCBL600CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 0 (CR) → BP 4 (CV) 800mm – AXXCBL800CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 1 (CR) → BP 5 (CV) 800mm – AXXCBL800CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 2 (CR) → BP 6 (CV) 530mm – AXXCBL530CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PCIe SSD 3 (CR) → BP 7 (CV) 530mm – AXXCBL530CVCR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>All cables routed Right</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-port PCIe Retimer Add-in Card AXXP3RTX16040 top PCIe slot #1</td>
<td>Retimer → BP ports 0-3 or Retimer → BP ports 4-7 A2U4PRTCXCKK</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ PCIe retimer card installed to Riser #1 is not supported.
4.7.4 2U 2.5" Front Mount Drive Configurations – Cable Guide (with SAS Expander)

Server configurations consisting of 8 drive configurations requiring SAS support are recommended to use an 8-port SAS controller. For 12 and 16 drive configurations, Intel recommends a 16-port SAS controller. While for 24 drive configurations, Intel recommends an 8-port SAS controller paired with the RES3TV360 SAS expander. In the 2U 16x2.5” or 24x2.5” system configurations, a SAS expander can be mounted in the area directly behind the drive bays.

![SAS expander module identification and placement](image)

Intel provides the following SAS expander option to support these drive configurations:

**Table 65. SAS expander option**

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="SAS 3.0 12 Gb/s Expander" /></td>
<td>SAS 3.0 12 Gb/s Expander</td>
<td>• 6Gbps data aggregation for 12Gbps data transfer with 6Gb/s devices&lt;br&gt;• Internal mount mid-plane form factor&lt;br&gt;• 36 internal ports supporting point-to-point 12, 6, and 3 Gb/s data transfer rates&lt;br&gt;• RA 4-pin power connector&lt;br&gt;• HD Mini-SAS 8643 Connectors</td>
</tr>
<tr>
<td>iPC</td>
<td>RES3TV360</td>
<td>Kit includes: (1) SAS expander card; (1) 130mm Power cable; (1 set) Expander-to-backplane cables: (4) HD-HD 165mm, (1) HD-HD 300mm, (1) HD-HD 250mm; (3) Rubber Pads; mounting screws</td>
</tr>
<tr>
<td>MM#</td>
<td>932894</td>
<td>Required (sold separately)&lt;br&gt;• HD-HD 12 Gb/sec Raid Controller-to-Expander cables – See Chapter 4</td>
</tr>
<tr>
<td>UPC</td>
<td>00735858287364</td>
<td></td>
</tr>
<tr>
<td>EAN</td>
<td>5032037067102</td>
<td></td>
</tr>
<tr>
<td>MOQ</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Product type</td>
<td>2U accessory kit</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The onboard SATA ports are not compatible with SAS expander cards. The onboard SATA ports can only be cabled directly to a specified backplane.
Table 66. Front mount drive cable guide

<table>
<thead>
<tr>
<th>4 or 8-port Mezzanine 12Gb SAS ROC Module to 12 Gb SAS Expander</th>
<th>4 or 8-port 12Gb SAS RAID PCIe* add-in card to 12 Gb SAS Expander</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12 Gb SAS Expander RES3TV360 installed:</strong></td>
<td>12 Gb SAS Expander RES3TV360 installed:</td>
</tr>
<tr>
<td>SAS Mezz → Exp 0-3 (G)</td>
<td>From Riser #1:</td>
</tr>
<tr>
<td>730mm HD -- HD</td>
<td>SAS PCIe → Exp 0-3 (G)</td>
</tr>
<tr>
<td>730mm HD -- HD</td>
<td>650mm HD -- HD</td>
</tr>
<tr>
<td><strong>SAS Mezz → Exp 4-7 (H)</strong></td>
<td>SAS PCIe → Exp 4-7 (H)</td>
</tr>
<tr>
<td>From data above, select appropriate cable kits from list below:</td>
<td>730mm HD -- HD</td>
</tr>
<tr>
<td><strong>AXXCBL730HDHD</strong></td>
<td>From Riser #2:</td>
</tr>
<tr>
<td>(2) 730mm cables Included in all 2.5” L6 systems</td>
<td>SAS PCIe → Exp 0-3 (G)</td>
</tr>
<tr>
<td></td>
<td>730mm HD -- HD</td>
</tr>
<tr>
<td></td>
<td>SAS PCIe → Exp 4-7 (H)</td>
</tr>
<tr>
<td></td>
<td>730mm HD -- HD</td>
</tr>
</tbody>
</table>

From data above, select appropriate cable kits from list below:

**AXXCBL650HDHD**

**AXXCBL730HDHD**

(2) 730mm cables Included in all 2.5” L6 systems

---

Use cables included in SAS Expander Kit

---

Figure 30. SAS expander port mapping
5. **1U/2U System Optional Accessories**

The following sections identify available accessory kits supported within the Intel® Server S2600WF product family.

### 5.1 2U Rear Mount Hot Swap Drive Bay Accessory Kits

The 2U product family provides the option to support two 2.5" 6 Gb/s hot-swap SSDs installed to a modular drive bay mounted in the back of the system.

#### Figure 31. 2U rear-mount hot-swap drive bay accessory

#### Table 67. 2U rear-mount hot-swap drive bay accessory kits

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Image](image1.png) | **2U Rear Mount Hot Swap Drive Bay Accessory Kit**  
 iPC: A2UREARHSDK2  
 MM#: 958243  
 UPC: 00735858344876  
 EAN: 5032037105583  
 MOQ: 1  
 Product type: 2U accessory kit, Building block | Kit Includes:  
(1) Drive Bay Assembly and mounting hardware  
(2) 2.5" Hot Swap Drive Carriers  
(2) SATA Data Cables  
(1) Power Cable  
(1) I2C Cable  
(1) SGPIO cable |
| ![Image](image2.png) | **2U Fixed Mount SSD and Rear Drive Bay Cable Kit**  
 iPC: A2UCBLSSD  
 MM#: 937328  
 UPC: 735858287005  
 EAN: 5032037066747  
 MOQ: 1  
 Product type: 2U cable kit | This kit includes cables to provide simultaneous support for up to two internal fixed mount SATA SSDs and rear drive bay.  
**Kit includes:**  
(1) Power Cable – Connectors to support rear drive bay and 2 internal mount SSDs (No CD/DVD Drive support)  
(1) Fan out multiport SATA Data cable – Cable connectors include (1) HD mini-SAS SFF8643 + (4) 7-pin SATA + (1) SGPIO |
5.2 1U/2U PCIe* Riser Card Accessory/Spare FRU Options

Each of the server board options within the Intel® Server S2600WF product family provides three riser slots. Riser slots #1 and #2 are capable of supporting different riser card options to meet needs of specific system configurations. Riser card options for riser slots #1 and #2 are common. Riser slot 3 is only supported in 2U system configurations and can only support a riser capable of supporting low profile PCIe* add-in cards.

All PCIe bus lanes to the riser slots are routed from the processors. Riser slot 1 has a total of 24 PCIe 3.0 bus lanes routed from both processors; 16 lanes from processor #1 and 8 lanes from processor #2. Riser slot #2 has a total of 24 PCIe 3.0 bus lanes routed from CPU 2. Riser slot #3 has a total of 12 PCIe 3.0 bus lanes routed from CPU 2. See the product Technical Product Specifications (TPS) for additional information.

Riser slots #1 and #2 are capable of supporting up to 75W maximum power each. Available power to each add-in card slot on a given riser card is defined by the PCIe specification. The server board provides two auxiliary 12V power connectors that when cabled (iPC AXGPGPUCABLE), can provide additional power to high power PCIe add-in cards.

5.2.1 1U Riser Card Options

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Image" /></td>
<td><em><em>1U 1-Slot PCIe</em> Riser Card</em>*&lt;br&gt;iPC: F1UL16RISER3&lt;br&gt;MM#: 958249&lt;br&gt;UPC: 00735858345682&lt;br&gt;EAN: 5032037106177&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 1U building block/spare FRU 1U accessory kit</td>
<td>One PCIe* add-in card slot – PCIe x16, x16 mechanical&lt;br&gt;Kit includes:&lt;br&gt;(1) Riser card PCBA</td>
</tr>
</tbody>
</table>

Each riser card assembly has support for a single full height, ½ length PCIe* add-in card. However, riser card #2 may be limited to ½ length, ½ height add-in cards if either of the two mini-SAS HD connectors on the server board are used.

---

**Note:** Add-in cards that exceed the PCI specification for ½ length PCI add-in cards (167.65mm or 6.6in) may interfere with other installed devices on the server board.
## 2U Riser Card Options

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Image" /></td>
<td><em><em>2U 3-Slot PCIe</em> Riser Card</em>*&lt;br&gt;iPC: A2UL8RISER2&lt;br&gt;MM#: 934885&lt;br&gt;UPC: 00735858288675&lt;br&gt;EAN: 5032037067959&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U building block/spare FRU 2U accessory kit</td>
<td>Riser card option for riser slots #1 and #2.&lt;br&gt;Each three-slot riser card assembly has support for up to two full height full length add-in cards (top and middle slots) and one full height ½ length add-in card (bottom slot).&lt;br&gt;• Slot 1 (top) – PCIe* x8 elec, x16 mechanical&lt;br&gt;• Slot 2 (middle) – PCIe* x8 elec, x16 mechanical&lt;br&gt;• Slot 3 (bottom) – PCIe* x8 elec, x8 mechanical&lt;br&gt;<strong>Kit includes:</strong> (1) riser card PCBA</td>
</tr>
<tr>
<td><img src="image2.jpg" alt="Image" /></td>
<td><em><em>2U 2-Slot PCIe</em> Riser Card</em>*&lt;br&gt;iPC: A2UL16RISER2&lt;br&gt;MM#: 934886&lt;br&gt;UPC: 00735858288668&lt;br&gt;EAN: 5032037067942&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U building block/spare FRU 2U accessory kit</td>
<td>Riser card option for riser slots #1 and #2. Required for Intel® Xeon Phi™ coprocessor or high power PCIe* add-in card support.&lt;br&gt;Each two-slot riser card assembly has support for one full-height full-length add-in card (top slot) and one full-height half-length add-in card (bottom slot).&lt;br&gt;• Slot 1 (top) – PCIe* x16 elec, x16 mechanical&lt;br&gt;• Slot 2 (bottom) – PCIe* x8 elec, x8 mechanical&lt;br&gt;<strong>Kit includes:</strong>&lt;br&gt;(1) Riser card PCBA&lt;br&gt;(1) 12 V AUX power cable (to provide additional 12 V power for high power PCIe add-in cards that require it)</td>
</tr>
<tr>
<td><img src="image3.jpg" alt="Image" /></td>
<td><strong>2U 2-Slot Short Riser Card</strong>&lt;br&gt;iPC: A2UX8X4RISER&lt;br&gt;MM#: 934883&lt;br&gt;UPC: 00735858283311&lt;br&gt;EAN: 5032037064378&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U building block/spare FRU 2U accessory kit</td>
<td>Riser card option for riser slot #3 only.&lt;br&gt;Provided to support up to two additional PCIe* add-in card slots for 2U server configurations. The available riser card option is designed to support low profile add-in cards only.&lt;br&gt;• Slot 1 (top) – PCIe* x4 elec, x8 mechanical&lt;br&gt;• Slot 2 (bottom) – PCIe* x8 elec, x8 mechanical&lt;br&gt;<strong>Kit includes:</strong>&lt;br&gt;(1) Riser card PCBA</td>
</tr>
</tbody>
</table>
5.3 2U 8x2.5" Drive Bay Module Options

2U system configurations that include support for 2.5" front mount storage devices can support up to three 8x2.5" drive bay modules. Intel makes available different types of 8x2.5" drive bay modules and can support from one to three of the same module or a mix of different modules.

![Figure 32. R2208WF based system with front I/O module bay assembly](image1)

![Figure 33. 2U 2.5" drive identification for each drive bay](image2)

Drive numbering in the illustrations above is for general reference only. Actual drive numbering is dependent on SAS/SATA/NVMe controller configuration and how they are cabled to the backplane. Each drive bay will include a single backplane. Each backplane will include a multi-port data connector for each set of four drives. Ex) for an 8 drive configuration, the backplane will include 2 four port data connectors. In the illustration above, drives showing a common Drive ID label color share a common data connector on the backside of the given backplane.

**R2208WF** (8x2.5" – 1 drive bay) and **R2208WF + 8 drive bay module** (16x2.5" – 2 drive bays) system configurations utilize the same front I/O module bay assembly containing the System Control Panel and Front I/O Panel (shown in Figure 14). When upgrading a R2208WF based system to a 16 drive based system, all that is needed is the removal of the Bay #2 face plate to insert the new drive bay and adding the required data cables. No other chassis changes or additions are required.
Available 8x25" drive bay module accessory kits are listed in Table 70.

### Table 70. 8x2.5" drive bay module accessory kits

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>2U Hot-Swap 8 x 2.5&quot; Dual-Port Upgrade Drive Bay Kit</strong>&lt;br&gt;&lt;br&gt;<strong>iPC</strong> A2U8X2553DPDK2&lt;br&gt;<strong>MM#</strong> 958247&lt;br&gt;<strong>UPC</strong> 00735858288774&lt;br&gt;<strong>EAN</strong> 5032037068055&lt;br&gt;<strong>MOQ</strong> 1&lt;br&gt;&lt;br&gt;<strong>Product type</strong> 2U drive upgrade kit 2U building block</td>
<td>8x2.5&quot; dual-port SAS front mount hot-swap drive bay module for all 2U 2.5&quot; systems. &lt;br&gt;&lt;br&gt;<strong>Kit includes:</strong>&lt;br&gt;(1) Drive bay assembly module&lt;br&gt;(1) 8x2.5&quot; hot-swap backplane&lt;br&gt;(8) 2.5&quot; drive carriers and drive blanks&lt;br&gt;(1) 75 mm I2C backplane-to-backplane jumper cable&lt;br&gt;(1 set) mounting hardware&lt;br&gt;&lt;br&gt;<strong>Required (sold separately):</strong>&lt;br&gt;SAS/SATA data cables - See Chapter 4</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><em><em>2U Hot-Swap 8 x 2.5&quot; SAS/NVMe</em> Combo Drive Bay Kit</em>*&lt;br&gt;&lt;br&gt;<strong>iPC</strong> A2U8X2553PHS&lt;br&gt;<strong>MM#</strong> 955858&lt;br&gt;<strong>UPC</strong> 00735858344852&lt;br&gt;<strong>EAN</strong> 5032037105569&lt;br&gt;<strong>MOQ</strong> 1&lt;br&gt;&lt;br&gt;<strong>Product type</strong> 2U drive upgrade kit 2U building block</td>
<td>8x2.5&quot; SAS/NVMe Combo Front Mount Hot Swap Drive Bay Module for all 2U 2.5&quot; systems. &lt;br&gt;&lt;br&gt;<strong>Kit includes:</strong>&lt;br&gt;(1) Drive bay assembly module&lt;br&gt;(1) 8x2.5 SAS/NVMe combo backplane&lt;br&gt;(8) 2.5&quot; drive carriers and drive blanks&lt;br&gt;(1) 75mm 6pin – 6pin I2C jumper cable&lt;br&gt;(1) 75mm 5pin-6pin I2C jumper cable&lt;br&gt;&lt;br&gt;<strong>Required (sold separately):</strong>&lt;br&gt;SAS/SATA data cables - See Chapter 4&lt;br&gt;PCIe* OCuLink cables - See Chapter 4</td>
</tr>
</tbody>
</table>
5.4 Intel® Ethernet Network Adapters for OCP*

The Intel® S2600WF product family includes support for a number of optional OCP* modules that install onto proprietary connectors on the server board leaving all available PCIe* add-in cards slots available for other add-in card options.

Figure 34. Intel® Ethernet Network Adapter for OCP* installation
## Table 71. Intel® Ethernet Network Adapters for OCP*

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Intel® Ethernet Network Connection OCP* X557-T2" /></td>
<td><em><em>Intel® Ethernet Network Connection OCP</em> X557-T2</em>*&lt;br&gt;iPC: X557T2OCPG1P5&lt;br&gt;MM#: 950179&lt;br&gt;UPC: 00735858328821&lt;br&gt;EAN: 5032037095020&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Dual Port 10GB RJ45 OCP* Module&lt;br&gt;OCP PHY Mezzanine Type1/Type 2 AIC&lt;br&gt;2 x 10GB uplinks&lt;br&gt;2 x KR host connections via OCP PHY Mezzanine Connector C</td>
</tr>
<tr>
<td><img src="image" alt="Intel® Ethernet Network Connection OCP* X527-DA2" /></td>
<td><em><em>Intel® Ethernet Network Connection OCP</em> X527-DA2</em>*&lt;br&gt;iPC: X527DA2OCPG1P5&lt;br&gt;MM#: 950126&lt;br&gt;UPC: 00735858328845&lt;br&gt;EAN: 5032037095044&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Dual port SFP+ OCP* Module&lt;br&gt;OCP PHY Mezzanine Type1/Type 2 AIC&lt;br&gt;2 x SFP+ uplinks&lt;br&gt;2 x KR host connections via OCP PHY Mezzanine Connector C</td>
</tr>
<tr>
<td><img src="image" alt="Intel® Ethernet Network Connection OCP* X527-DA4" /></td>
<td><em><em>Intel® Ethernet Network Connection OCP</em> X527-DA4</em>*&lt;br&gt;iPC: X527DA4OCPG1P5&lt;br&gt;MM#: 950127&lt;br&gt;UPC: 00735858328852&lt;br&gt;EAN: 5032037095051&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Quad port SFP+ OCP* Module&lt;br&gt;OCP PHY Mezzanine Type1/Type 2 AIC&lt;br&gt;4 x SFP+ uplinks&lt;br&gt;4 x KR host connections via OCP PHY Mezzanine Connector C&lt;br&gt;• Only available for S2600WF0 and S2600WFQ</td>
</tr>
<tr>
<td><img src="image" alt="Intel® Ethernet Network Connection OCP* I357-T4" /></td>
<td><em><em>Intel® Ethernet Network Connection OCP</em> I357-T4</em>*&lt;br&gt;iPC: I357T4OCPG1P5&lt;br&gt;MM#: 948352&lt;br&gt;UPC: 00735858328869&lt;br&gt;EAN: 5032037095068&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Quad Port 1GB RJ45 OCP* Module&lt;br&gt;OCP PHY Mezzanine Type1/Type 2 AIC&lt;br&gt;4 x 1GB uplinks&lt;br&gt;4 x SGMII host connections via OCP PHY Mezzanine Connector C&lt;br&gt;• Only available for S2600WF0 and S2600WFQ</td>
</tr>
</tbody>
</table>
5.5 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® S2600WF 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](http://www.intel.com/support).

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


### Table 72. Intel® Integrated RAID module RMS3 product family – SAS 3.0 (12 Gb/s)

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
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</thead>
</table>
| ![Intel® Integrated RAID Module RMS3CC080](image1) | **Intel® Integrated RAID Module RMS3CC080**  
  **iPC** RMS3CC080  
  **MM#** 932474  
  **UPC** 00735858276832  
  **EAN** 5032037060448  
  **MOQ** 5  
  **Product type** 1U/2U accessory kit | SAS 3.0 (12 Gb/s) Mezzanine Form Factor HW RAID Module  
8 internal SAS/SATA ports  
Mini-SAS HD SFF8643 connectors  
LSI* SAS3108 ROC with 1GB DDR3  
RAID Levels 0, 1, 5, 6, 10, 50, 60  
Embedded 1GB DDR3 Cache Memory  
Supports Maintenance Free Backup Unit – iPC AXXRMFBU5  
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® Integrated RAID Module RMS3CC040](image2) | **Intel® Integrated RAID Module RMS3CC040**  
  **iPC** RMS3CC040  
  **MM#** 932473  
  **UPC** 00735858276849  
  **EAN** 5032037060455  
  **MOQ** 5  
  **Product type** 1U/2U accessory kit | SAS 3.0 (12 Gb/s) Mezzanine Form Factor HW RAID Module  
4 internal SAS / SATA ports  
Mini-SAS HD SFF8643 connectors  
LSI* SAS3108 ROC with 1GB DDR3  
RAID Levels 0, 1, 5, 6, 10, 50, 60  
Embedded 1GB DDR3 Cache Memory  
Supports Maintenance Free Backup Unit – iPC AXXRMFBU5  
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. |
<table>
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<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><img src="image1" alt="Intel® Integrated RAID Module RMS3HC080" /></td>
<td><strong>Intel® Integrated RAID Module RMS3HC080</strong>&lt;br&gt;iPC: RMS3HC080&lt;br&gt;MM#: 932469&lt;br&gt;UPC: 00735858276818&lt;br&gt;EAN: 5032037060424&lt;br&gt;MOQ: 5&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>SAS 3.0 (12 Gb/s) Mezzanine Form Factor Entry-RAID Module 8 internal SAS / SATA ports Mini-SAS HD SFF8643 connectors LSI* SAS3008 SAS IOC with Advanced Management Entry hardware RAID levels – JBOD, RAID 0,1,10 and Hybrid 5,50 128MB server board memory utilized as cache memory for RAID 5/50 SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image2" alt="Intel® Integrated RAID Module RMS3JC080" /></td>
<td><strong>Intel® Integrated RAID Module RMS3JC080</strong>&lt;br&gt;iPC: RMS3JC080&lt;br&gt;MM#: 932472&lt;br&gt;UPC: 00735858276825&lt;br&gt;EAN: 5032037060431&lt;br&gt;MOQ: 5&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>SAS 3.0 (12 Gb/s) Mezzanine Form Factor Entry-RAID Module 8 internal SAS / SATA ports Mini-SAS HD SFF8643 connectors LSI* SAS3008 IOC with Basic Firmware Entry hardware RAID levels – JBOD, RAID 0, 1E, 10 SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image3" alt="Intel® Integrated RAID Module RMS3VC160" /></td>
<td><strong>Intel® Integrated RAID Module RMS3VC160</strong>&lt;br&gt;iPC: RMS3VC160&lt;br&gt;MM#: 946902&lt;br&gt;UPC: 00735858308595&lt;br&gt;EAN: 5032037081351&lt;br&gt;MOQ: 5&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Mezzanine Form Factor RAID Module Entry Level SAS RAID Controller 16 internal SAS / SATA ports Avago* SAS3216 IOC RAID Levels – JBOD (SAS/SATA Connectivity) SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image4" alt="Intel® Integrated RAID Module RMS3AC160" /></td>
<td><strong>Intel® Integrated RAID Module RMS3AC160</strong>&lt;br&gt;iPC: RMS3AC160&lt;br&gt;MM#: 947032&lt;br&gt;UPC: 00735858308571&lt;br&gt;EAN: 5032037081337&lt;br&gt;MOQ: 5&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Mezzanine Form Factor RAID Module Full Featured SAS RAID Controller 16 internal SAS / SATA ports Avago* SAS3316 IOC RAID Levels – 0, 1, 5, 6, 10, 50, and 60 Supports Maintenance Free Backup Unit – iPC <strong>AXXRMFBU6</strong> SAS data cables not included and must be purchased separately.</td>
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<td>Image</td>
<td>Details</td>
<td>Description</td>
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</table>
| ![Image](33x482 to 177x553) | Intel® Integrated RAID Module RMSP3JD160J  
**iPC** | RMSP3JD160J  
**MM#** | 954490  
**UPC** | 00735858329118  
**EAN** | 5032037095235  
**MOQ** | 5  
**Product type** | 1U/2U accessory kit  
Intel® Integrated RAID Module RMSP3JD160J  
Entry Level SAS RAID Controller  
16 internal SAS / SATA ports / 4 NVMe  
Avago* SAS3516 IOC  
RAID Levels – JBOD (SAS/SATA/NVMe Connectivity)  
SAS and NVMe data cables not included and must be purchased separately. |
| ![Image](33x377 to 177x448) | Intel® Integrated RAID Module RMSP3HD080E  
**iPC** | RMSP3HD080E  
**MM#** | 954553  
**UPC** | 00735858329125  
**EAN** | 5032037095242  
**MOQ** | 5  
**Product type** | 1U/2U accessory kit  
Intel® Integrated RAID Module RMSP3HD080E  
Entry Level TRI-Mode RAID Module  
8 internal SAS / SATA ports / 2 NVMe  
Avago* SAS3508 IOC  
RAID Levels – 0/1/10/5 and JBOD  
SAS and NVMe data cables not included and must be purchased separately. |
| ![Image](33x271 to 177x343) | Intel® Integrated RAID Module RMSP3AD160F  
**iPC** | RMSP3AD160F  
**MM#** | 954552  
**UPC** | 00735858329149  
**EAN** | 5032037095266  
**MOQ** | 5  
**Product type** | 1U/2U accessory kit  
Intel® Integrated RAID Module RMSP3AD160F  
Full Featured TRI-Mode RAID Controller  
16 internal SAS / SATA ports / 4 NVMe  
Avago* SAS3516 ROC  
RAID Levels – 0/1/10/5/6/50/60 and JBOD  
Supports Maintenance Free Backup Unit – iPC AXXRMFBUS  
Supports the following Intel® RAID Accessory Options:  
• Intel® RAID Drive Encryption Management – iPC AXRPFKDE  
SAS and NVMe data cables not included and must be purchased separately. |
| ![Image](33x149 to 177x221) | Intel® Integrated RAID Module RMSP3CD080F  
**iPC** | RMSP3CD080F  
**MM#** | 954489  
**UPC** | 00735858329132  
**EAN** | 5032037095259  
**MOQ** | 5  
**Product type** | 1U/2U accessory kit  
Intel® Integrated RAID Module RMSP3CD080F  
Full Featured TRI-Mode RAID Controller  
8 internal SAS / SATA ports / 2 NVMe  
Avago* SAS3508 ROC  
RAID Levels – 0/1/10/5/6/50/60 and JBOD  
Supports Maintenance Free Backup Unit – iPC AXXRMFBUS  
Supports the following Intel® RAID Accessory Options:  
• Intel® RAID Drive Encryption Management – iPC AXRPFKDE  
SAS and NVMe data cables not included and must be purchased separately. |
### Table 73. Intel® RAID controller add-in cards – SAS 3.0 (12 Gb/s)

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Image](image1.png) | Intel® RAID Controller RS3DC080 | - **iPC**: RS3DC080  
- **MM#**: 934643  
- **UPC**: 00735858265355  
- **EAN**: 5032037107174  
- **MOQ**: 5  
- **Product type**: 1U/2U accessory kit  
- 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 AXXRPFKBU4  
- 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 AXXRPFKSNH2  
- SAS data cables not included and must be purchased separately. |
| ![Image](image2.png) | Intel® RAID Controller RS3DC040 | - **iPC**: RS3DC040  
- **MM#**: 934644  
- **UPC**: 00735858265362  
- **EAN**: 5032037107167  
- **MOQ**: 5  
- **Product type**: 1U/2U 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 AXXRPFKBU4  
- 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 AXXRPFKSNH2  
- SAS data cables not included and must be purchased separately. |
| ![Image](image3.png) | Intel® RAID Controller RS3SC008 | - **iPC**: RS3SC008  
- **MM#**: 928223  
- **UPC**: 00735858266956  
- **EAN**: 5032037068567  
- **MOQ**: 5  
- **Product type**: 1U/2U 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 AXXRPFKBU4  
- 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 AXXRPFKSNH2  
- SAS data cables not included and must be purchased separately. |
<table>
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<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
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<tbody>
<tr>
<td><img src="image1" alt="Intel® RAID Controller RS3GC008" /></td>
<td><strong>Intel® RAID Controller RS3GC008</strong>&lt;br&gt;iPC: RS3GC008&lt;br&gt;MM#: 928220&lt;br&gt;UPC: 00735858267175&lt;br&gt;EAN: 5032037053839&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card&lt;br&gt;Entry Level SAS Card&lt;br&gt;8 external SAS / SATA ports&lt;br&gt;LSI* SAS3008 IOC&lt;br&gt;RAID Levels – JBOD (SAS/SATA Connectivity)&lt;br&gt;SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image2" alt="Intel® RAID Controller RS3UC080" /></td>
<td><strong>Intel® RAID Controller RS3UC080</strong>&lt;br&gt;iPC: RS3UC080&lt;br&gt;MM#: 928218&lt;br&gt;UPC: 00735858267649&lt;br&gt;EAN: 5032037053938&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card&lt;br&gt;Entry Level SAS RAID Card&lt;br&gt;8 internal SAS / SATA ports&lt;br&gt;LSI* SAS3008 IOC&lt;br&gt;RAID Levels – 0, 1, 1E, 10, and JBOD&lt;br&gt;SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image3" alt="Intel® RAID Controller RS3WC080" /></td>
<td><strong>Intel® RAID Controller RS3WC080</strong>&lt;br&gt;iPC: RS3WC080&lt;br&gt;MM#: 928215&lt;br&gt;UPC: 00735858267656&lt;br&gt;EAN: 5032037053945&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card&lt;br&gt;Entry Level SAS RAID Controller&lt;br&gt;8 internal SAS / SATA ports&lt;br&gt;LSI* SAS3008 IOC&lt;br&gt;RAID Levels – JBOD, 0, 1, 10 &amp; Hybrid 5, 50&lt;br&gt;SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image4" alt="Intel® RAID Controller RS3UC080J" /></td>
<td><strong>Intel® RAID Controller RS3UC080J</strong>&lt;br&gt;iPC: RS3UC080J&lt;br&gt;MM#: 952709&lt;br&gt;UPC: 00735858323840&lt;br&gt;EAN: 5032037090971&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card&lt;br&gt;Entry Level SAS RAID Controller&lt;br&gt;8 internal SAS / SATA ports&lt;br&gt;LSI* SAS3008 IOC&lt;br&gt;RAID Levels – JBOD (SAS/SATA Connectivity)&lt;br&gt;SAS data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td>Image</td>
<td>Intel® RAID Controller RSP3QD160J</td>
<td>Intel® RAID Controller RSP3GD016J</td>
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<td>iPC</td>
<td>RSP3QD160J</td>
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<tr>
<td>MOQ</td>
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<td>5</td>
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<tr>
<td>Product type</td>
<td>1U/2U accessory kit</td>
<td>1U/2U accessory kit</td>
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<tr>
<td>Description</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card Entry level Tri-Mode SAS/SATA/NVMe adapter. 16 internal SAS / SATA ports / 4 NVMe LSI* SAS3416 IOC RAID Levels – JBOD (SAS/SATA/NVMe Connectivity) SAS and NVMe data cables not included and must be purchased separately.</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card Entry level Tri-Mode SAS/SATA/NVMe adapter. 16 external SAS / SATA ports / 4 NVMe LSI* SAS3416 IOC RAID Levels – JBOD (SAS/SATA/NVMe Connectivity) SAS and NVMe data cables not included and must be purchased separately.</td>
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<td>Image</td>
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<td><img src="image1.png" alt="Image" /></td>
<td><strong>Intel® RAID Controller RSP3DD080F</strong>&lt;br&gt;iPC RSP3DD080F&lt;br&gt;MM# 954562&lt;br&gt;UPC 00735858329187&lt;br&gt;EAN 5032037095303&lt;br&gt;MOQ 5&lt;br&gt;Product type 1U/2U accessory kit</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card&lt;br&gt;Full Featured Tri-Mode RAID Controller&lt;br&gt;8 internal SAS / SATA ports / 2 NVMe&lt;br&gt;Avago® SAS3508 ROC&lt;br&gt;RAID Levels – 0/1/5/6/50/60 and JBOD&lt;br&gt;Supports Maintenance Free Backup Unit – iPC AXXRMFBU7&lt;br&gt;Supports the following Intel® RAID Accessory Options:&lt;br&gt;• Intel® RAID Drive Encryption Management – iPC AXXRPFKDE2&lt;br&gt;SAS and NVMe data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><strong>Intel® RAID Controller RSP3MD088F</strong>&lt;br&gt;iPC RSP3MD088F&lt;br&gt;MM# 954551&lt;br&gt;UPC 00735858329194&lt;br&gt;EAN 5032037095310&lt;br&gt;MOQ 5&lt;br&gt;Product type 1U/2U accessory kit</td>
<td>Low Profile, half length, (MD2 Compliant) PCIe* add-in card&lt;br&gt;Full Featured Tri-Mode RAID Controller&lt;br&gt;8 internal + 8 external SAS / SATA ports / 4 NVMe&lt;br&gt;Avago® SAS3516 ROC&lt;br&gt;RAID Levels – 0/1/10/5/6/50/60 and JBOD&lt;br&gt;Supports Maintenance Free Backup Unit – iPC AXXRMFBU7&lt;br&gt;Supports the following Intel® RAID Accessory Options:&lt;br&gt;• Intel® RAID Drive Encryption Management – iPC AXXRPFKDE2&lt;br&gt;SAS and NVMe data cables not included and must be purchased separately.</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
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</tbody>
</table>
| ![Image](Image1.png) | **Intel® RAID SSD Cache with Fast Path I/O**  
iPC: AXXRPFKSSD2  
MM#: 919499  
UPC: 00735858221467  
EAN: 5032037051699  
MOQ: 5  
**Product type**: 1U/2U 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](Image2.png) | **Intel® RAID Drive Encryption Management**  
iPC: AXXRPFKDE2  
MM#: 915317  
UPC: 00735858221474  
EAN: 5032037051705  
MOQ: 5  
**Product type**: 1U/2U accessory kit | Upgrade key to enable drive encryption management for Intel® RAID Controller RS25 and RS3 (based on LSI* 3108) families of ROC products. |
| ![Image](Image3.png) | **Intel® RAID Rapid Recovery Snapshot**  
iPC: AXXRPFKNSH2  
MM#: 915318  
UPC: 00735858221481  
EAN: 5032037051712  
MOQ: 5  
**Product type**: 1U/2U accessory kit | Upgrade key to enable rapid recovery snapshot for Intel® RAID Controller RS25 and RS3 (based on LSI* 3108) families of ROC products. |
| ![Image](Image4.png) | **Intel® RAID High Availability Activation Key**  
iPC: AXXRPFKHA2  
MM#: 927236  
UPC: 00735858257909  
EAN: 5032037049672  
MOQ: 1  
**Product type**: 1U/2U accessory kit | Activation key to enable the Intel® RAID Controller RS3SC008 to provide failover for two servers in a cluster or shared storage environment. |
<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="61x505.png" alt="Image" /></td>
<td><strong>Intel® Embedded Server RAID Technology 2 SATA Software RAID Activation Key</strong>&lt;br&gt;iPC: RKSATA4R5&lt;br&gt;MM#: 916346&lt;br&gt;UPC: 00735858238861&lt;br&gt;EAN: 5032037033640&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U accessory kit</td>
<td>Used to enable onboard SATA controllers to support Intel® Embedded Server RAID Technology 2 software RAID 5</td>
</tr>
<tr>
<td><img src="75x398.png" alt="Image" /></td>
<td><strong>Intel® Virtual RAID on CPU (Intel® VROC) – Intel® SSD Only Key</strong>&lt;br&gt;iPC: VROCISSDMOD&lt;br&gt;MM#: 956822&lt;br&gt;UPC: 00735858337274&lt;br&gt;EAN: 5032037100021&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U accessory kit</td>
<td>Activation key to support RAID (0, 1, 5, 10) functionality only on NVMe® SSDs from Intel</td>
</tr>
<tr>
<td><img src="75x282.png" alt="Image" /></td>
<td><strong>Intel® Virtual RAID on CPU (Intel® VROC) - Standard Model Key</strong>&lt;br&gt;iPC: VROCSTANMOD&lt;br&gt;MM#: 951605&lt;br&gt;UPC: 00735858337243&lt;br&gt;EAN: 5032037100007&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U accessory kit</td>
<td>Activation key to support non-NVMe® SSDs and enable RAID (0, 1, 10) functionality</td>
</tr>
<tr>
<td><img src="74x164.png" alt="Image" /></td>
<td><strong>Intel® Virtual RAID on CPU (Intel® VROC) - Premium Model Key</strong>&lt;br&gt;iPC: VROCPREMMOD&lt;br&gt;MM#: 951606&lt;br&gt;UPC: 00735858337267&lt;br&gt;EAN: 5032037100014&lt;br&gt;MOQ: 5&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U accessory kit</td>
<td>Activation key to support non-NVMe® SSDs and enable Intel® VROCPremium, RAID (0, 1, 5, 10) with RAID write hole closure</td>
</tr>
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<td>Image</td>
<td>Details</td>
<td>Description</td>
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</tr>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>Intel® RAID Maintenance Free Backup Unit</strong>&lt;br&gt; AXXRMFBU7&lt;br&gt;&lt;br</td>
<td>iPC</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><strong>Intel® RAID Maintenance Free Backup Unit</strong>&lt;br&gt; AXXRMFBU6&lt;br&gt;&lt;br</td>
<td>iPC</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><strong>Intel® RAID Maintenance Free Backup Unit</strong>&lt;br&gt; AXXRFMBU5&lt;br&gt;&lt;br</td>
<td>iPC</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><strong>Intel® RAID Maintenance Free Backup Unit</strong>&lt;br&gt; AXXRFMBU4&lt;br&gt;&lt;br</td>
<td>iPC</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
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</tr>
<tr>
<td><img src="image1.jpg" alt="Image" /></td>
<td><strong>1U/2U RMFBU Mounting Option Kit</strong>&lt;br&gt;iPC: AWTAUXBBUBKT&lt;br&gt;MM#: 937082&lt;br&gt;UPC: 00735858289344&lt;br&gt;EAN: 5032037068321&lt;br&gt;MOQ: 1&lt;br&gt;<strong>Product type</strong>: 1U/2U accessory kit</td>
<td>Kit includes:&lt;br&gt;(1) – 2U RMFBU mounting plate. The mounting plate installs in one of two possible mounting locations on the 2U air duct and can support up to two AXXRMFBU5 or AXXRSBBU9 units. Full length PCIe cards cannot be supported when this mounting plate is installed behind the given riser slot.&lt;br&gt;(1) – RMFBU plastic housing bracket to support two stacked AXXRMFBU5 units in a 1U chassis.</td>
</tr>
</tbody>
</table>
## 5.6 Power Supply Modules and Power Cords

### Table 75. Power supply modules and power cords

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>1100W AC Common Redundant Power Supply</strong>&lt;br&gt;iPC: AXX1100PCRPS&lt;br&gt;MM#: 936183&lt;br&gt;UPC: 00735858287920&lt;br&gt;EAN: 5032037067478&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U building block/spare FRU 1U/2U accessory kit</td>
<td>1100 W AC common redundant power supply with 80 PLUS* Platinum efficiency. Power cord sold separately.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><strong>1300W AC Common Redundant Power Supply</strong>&lt;br&gt;iPC: AXX1300TCRPS&lt;br&gt;MM#: 956542&lt;br&gt;UPC: 00735858345705&lt;br&gt;EAN: 5032037106191&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U building block/spare FRU 1U/2U accessory kit</td>
<td>1300 W AC common redundant power supply with 80 PLUS* Titanium efficiency. Power cord sold separately.</td>
</tr>
</tbody>
</table>
| ![Image](image3.png) | **750W AC Common Redundant Power Supply**<br>iPC: AXX750DCCRPS<br>MM#: 927253<br>UPC: 00735858260862<br>EAN: 5032037051354<br>MOQ: 1<br><br>**Product type**: 1U/2U building block/spare FRU 1U/2U accessory kit | 750 W DC common redundant power supply with 80 PLUS* Gold efficiency.  
**Kit includes:**  
(1) – power supply  
(1) – O-ring terminal adapter  
Power cable sold separately. |
<p>| <img src="image4.png" alt="Image" /> | <strong>4000 mm (13 ft) DC power cable</strong>&lt;br&gt;iPC: AXXDCCRPSCL&lt;br&gt;MM#: 922062&lt;br&gt;UPC: 00735858247993&lt;br&gt;EAN: 5032037042871&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;<strong>Product type</strong>: 1U/2U spare FRU 1U/2U accessory kit | Optional power cord for DC input power supplies. Connects directly to power supply instead of O-ring terminals adapter. |</p>
<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Image" /></td>
<td><strong>1500 mm (59 in) North America power cable</strong>&lt;br&gt;iPC: FPWRCABLENA&lt;br&gt;MM#: 879287&lt;br&gt;UPC: 00735858181129&lt;br&gt;EAN: 5032037015738&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 1U/2U spare FRU 1U/2U accessory kit</td>
<td>1500 mm (59 in) North America power cable</td>
</tr>
</tbody>
</table>
5.7 1U/2U 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 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 76. Rack mount kits

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="1U/2U Enhanced Value Rail Kit Image" /></td>
<td><strong>1U/2U Enhanced Value Rail Kit</strong>&lt;br&gt;iPC AXXELVRAIL&lt;br&gt;MM# 920970&lt;br&gt;UPC 00735858244367&lt;br&gt;EAN 5032037038980&lt;br&gt;MOQ 1&lt;br&gt;Product type 1U/2U accessory kit</td>
<td>• Works for all 438 mm wide Intel® Chassis 1U, 2U, 4U&lt;br&gt;• Adjustment within 609.6 mm ~ 765 mm to fit difference depth rack&lt;br&gt;• 424.2 mm maximum travel length&lt;br&gt;• 2/3 extension from rack&lt;br&gt;• 130 lbs. (59 Kgs) max support weight&lt;br&gt;• Tool-less chassis attach&lt;br&gt;• Tools required to attach to rails to rack&lt;br&gt;Note: No cable management arm support.</td>
</tr>
<tr>
<td><img src="image" alt="1U Premium quality rails with no CMA support Image" /></td>
<td><strong>1U Premium quality rails with no CMA support</strong>&lt;br&gt;iPC A1USHRTRAIL&lt;br&gt;MM# 939208&lt;br&gt;UPC 0073585829931&lt;br&gt;EAN 5032037068772&lt;br&gt;MOQ 1&lt;br&gt;Product type 1U accessory kit</td>
<td>• Travel distance 780 mm&lt;br&gt;• Adjustment within 609.6 mm ~ 762 mm to fit difference depth rack.&lt;br&gt;• Tool-less installation&lt;br&gt;• Full extension from rack&lt;br&gt;Kit includes: Rails, screws, installation manual</td>
</tr>
<tr>
<td><img src="image" alt="1U Premium quality rails with CMA support Image" /></td>
<td><strong>1U Premium quality rails with CMA support</strong>&lt;br&gt;iPC A1UFULLRAIL&lt;br&gt;MM# 939207&lt;br&gt;UPC 00735858291972&lt;br&gt;EAN 5032037070539&lt;br&gt;MOQ 1&lt;br&gt;Product type 1U accessory kit</td>
<td>• Travel distance 780 mm&lt;br&gt;• Adjustment within 609.6 mm ~ 762 mm to fit difference depth rack.&lt;br&gt;• Tool-less installation&lt;br&gt;• Full extension from rack&lt;br&gt;Kit includes: Rails, screws, installation manual&lt;br&gt;Compatible with Cable Management Arm <strong>AXX1U2UCMA</strong></td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
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<tr>
<td><img src="image1.jpg" alt="Image" /></td>
<td><strong>2U+ Premium quality rails with CMA support</strong>&lt;br&gt;iPC: AXXFULLRAIL&lt;br&gt;MM#: 939209&lt;br&gt;UPC: 00735858291989&lt;br&gt;EAN: 5032037070546&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 2U accessory kit&lt;br&gt;&lt;br&gt;Kit includes: Rails, screws, installation manual</td>
<td>- Travel distance 800 mm&lt;br&gt;- Adjustment within 594.8 mm~813 mm to fit difference depth rack.&lt;br&gt;- Tool-less installation&lt;br&gt;- Full extension from rack&lt;br&gt;&lt;br&gt;Compatible with Cable Management Arm <strong>AXXCMA2</strong></td>
</tr>
<tr>
<td><img src="image2.jpg" alt="Image" /></td>
<td><strong>2U+ Premium quality rails with no CMA support</strong>&lt;br&gt;iPC: AXXSHRTRAIL&lt;br&gt;MM#: 939210&lt;br&gt;UPC: 00735858291996&lt;br&gt;EAN: 5032037070553&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 2U accessory kit&lt;br&gt;&lt;br&gt;Kit includes: Rails, screws, installation manual</td>
<td>- Travel distance 788 mm&lt;br&gt;- Adjustment within 594.8 mm ~ 813 mm to fit difference depth rack.&lt;br&gt;- Bracket adjustment from 594.8mm to 813mm&lt;br&gt;- Tool-less installation&lt;br&gt;- Supports up to 45Kg&lt;br&gt;- Full extension from rack</td>
</tr>
<tr>
<td><img src="image3.jpg" alt="Image" /></td>
<td><strong>1U/2U 2-Post fixed mount bracket kit</strong>&lt;br&gt;iPC: AXX2POSTBRCKT&lt;br&gt;MM#: 918808&lt;br&gt;UPC: 00735858245319&lt;br&gt;EAN: 5032037039833&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 1U/2U accessory kit</td>
<td>- 1U and 2U compatible&lt;br&gt;- Tools required to attach components to rack</td>
</tr>
<tr>
<td><img src="image4.jpg" alt="Image" /></td>
<td><strong>1U/2U Cable Management Arm (CMA)</strong>&lt;br&gt;iPC: AXX1U2UCMA&lt;br&gt;MM#: 913117&lt;br&gt;UPC: 00735858224604&lt;br&gt;EAN: 5032037019972&lt;br&gt;MOQ: 1&lt;br&gt;&lt;br&gt;Product type: 1U accessory kit</td>
<td>Compatible with Premium 1U <strong>A1UFULLRAIL</strong> rail kit option only</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
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<tr>
<td>Image Pending</td>
<td><strong>Cable Management Arm (CMA)</strong></td>
<td>Compatible with Premium 2U+ AXXFULLRAIL only</td>
</tr>
<tr>
<td>iPC</td>
<td>AXXCMA2</td>
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<tr>
<td>MM#</td>
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<tr>
<td>MOQ</td>
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<tr>
<td><strong>Product type</strong></td>
<td>2U accessory kit</td>
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</table>
6. **1U/2U Miscellaneous Accessory Options**

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Slimline SATA DVDROM Drive" /></td>
<td><strong>Image</strong>&lt;br&gt;Slimline SATA DVDROM Drive&lt;br&gt;<strong>iPC</strong>&lt;br&gt;AXXSATADVDRWROM&lt;br&gt;<strong>MM#</strong>&lt;br&gt;937569&lt;br&gt;<strong>UPC</strong>&lt;br&gt;00735858197663&lt;br&gt;<strong>EAN</strong>&lt;br&gt;5032037015127&lt;br&gt;<strong>MOQ</strong>&lt;br&gt;1&lt;br&gt;<strong>Product type</strong>&lt;br&gt;1U/2U accessory kit</td>
<td>Includes 880 mm SATA cable AXXCBL880SATA&lt;br&gt;Peripheral power cable and mounting kit are included with systems that have support for an optical drive.&lt;br&gt;Optical drives are not supported in R2312WF and R2224WF based systems</td>
</tr>
<tr>
<td><img src="image2.jpg" alt="Slimline SATA DVD+/- ROM Drive" /></td>
<td><strong>Image</strong>&lt;br&gt;Slimline SATA DVD+/- ROM Drive&lt;br&gt;<strong>iPC</strong>&lt;br&gt;AXXSATADVDRWROM&lt;br&gt;<strong>MM#</strong>&lt;br&gt;937575&lt;br&gt;<strong>UPC</strong>&lt;br&gt;00735858197670&lt;br&gt;<strong>EAN</strong>&lt;br&gt;5032037015134&lt;br&gt;<strong>MOQ</strong>&lt;br&gt;1&lt;br&gt;<strong>Product type</strong>&lt;br&gt;1U/2U accessory kit</td>
<td>Includes 880 mm SATA cable AXXCBL880SATA&lt;br&gt;Peripheral power cable and mounting kit are included with systems that have support for an optical drive.&lt;br&gt;Optical drives are not supported in R2312WF and R2224WF based systems</td>
</tr>
<tr>
<td><img src="image3.jpg" alt="1U/2U Rack Handle Kit" /></td>
<td><strong>Image</strong>&lt;br&gt;1U/2U Rack Handle Kit&lt;br&gt;<strong>iPC</strong>&lt;br&gt;A2UHANDLKIT&lt;br&gt;<strong>MM#</strong>&lt;br&gt;936038&lt;br&gt;<strong>UPC</strong>&lt;br&gt;00735858288866&lt;br&gt;<strong>EAN</strong>&lt;br&gt;5032037068147&lt;br&gt;<strong>MOQ</strong>&lt;br&gt;1&lt;br&gt;<strong>Product type</strong>&lt;br&gt;2U drive upgrade kit&lt;br&gt;1U/2U spares kit</td>
<td>This kit includes (3) different rack handles, including:&lt;br&gt;• (1) – Set of 2U storage rack handles with control panel and USB support (R2312WFxxxx &amp; R2224WFxxxx)&lt;br&gt;• (1) – Set of 2U non-storage rack handles (R2208WFxxxx &amp; R2208WFxxxx + 8 Drive Accessory Kit)&lt;br&gt;• (1) – Set of 1U rack handles (R1304WFxxxx &amp; R1208WFxxxx)&lt;br&gt;This kit includes replacement chassis handles for all product family 1U and 2U systems. In addition, this kit must be purchased for 2U building block configurations consisting of 24x2.5&quot; drives (3 drive bay modules) or when upgrading a R2208WF or R2208WF + 8 Drive Accessory Kit system to a 24 drive R2224WF system, where the standard chassis rack handles must be replaced with a pair of storage rack handles that include the system front panel and front USB 2.0 port.&lt;br&gt;See the appropriate Intel® Server System Product Family System Integration and Service Guide for complete system integration, upgrade, and part replacement instructions.&lt;br&gt;&lt;strong&gt;Note:&lt;/strong&gt; The 2U storage rack handles are not supported on R2312WFTF systems.</td>
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## Intel® Server S2600WF Product Family Configuration Guide

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| Serial Port Cable Kit | **iPC** AXXRJ45DB93  
**MM#** 920430  
**UPC** 00735858242820  
**EAN** 5032037037525  
**MOQ** 1  
**Product type** 1U/2U accessory kit | This kit provides serial port cables for use with systems that include a back panel cut out to support a DB9 Serial 'B' port as routed from the server board and for systems that include an external RJ45 Serial 'A' port that need to convert the connector to a DB9 style connector.  
**Kit includes:**  
(1) – 1040 mm Internal Serial 'B' port cable – Onboard DH10 header- to- External Mount DB9 – for 2U systems  
(1) – 520 mm Internal Serial 'B' port cable – Onboard DH10 header- to- External mount DB9 – for 2U systems  
(1) – 100 mm DCD RJ45 to DB9 Dongle  
(1) – 100 mm DSR RJ45 to DB9 Dongle |
| 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 [Intel® Remote Management Module 4 and Integrated Web Console Users Guide](#) for more information. |
| Trusted Platform Module (TPM) 2.0 | **iPC** AXXTPMENC8  
**MM#** 955867  
**UPC** 00735858345712  
**EAN** 5032037106207  
**MOQ** 1  
**Product type** 1U/2U accessory kit | A 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.  
AXXTPMENC8 implements TPM as per TPM PC Client specifications revision 2.0 by the Trusted Computing Group (TCG)  
**Note:** Products having an S2600WFTF baseboard have the TPM installed down rather than using this module. |
| Intel® Trusted Platform Module (TPM) 2.0 | **iPC** AXXTPMCHNE8  
**MM#** 960608  
**UPC** 00735858347341  
**EAN** 5032037107068  
**MOQ** 1  
**Product type** 1U/2U accessory kit | A 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.  
AXXTPMCHNE8 implements TPM as per TPM PC Client specifications revision 2.0 by the Trusted Computing Group (TCG)  
**Note:** AXXTPMCHNE8 compatible for use in China. |
<table>
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<th>Image</th>
<th>Details</th>
<th>Description</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>*<em>4-Port PCIe</em> (x16 to x16) SSD Retimer Add-In Card 4P (OCuLink)**&lt;br&gt;<strong>iPC</strong> AXXP3RTX16040&lt;br&gt;<strong>MM#</strong> 958240&lt;br&gt;<strong>UPC</strong> 00735858345613&lt;br&gt;<strong>EAN</strong> 5032037106108&lt;br&gt;<strong>MOQ</strong> 1&lt;br&gt;<strong>Product type</strong> 1U/2U accessory kit&lt;br&gt;<strong>Note:</strong> For Riser #2 only.&lt;br&gt;The SSD retimer add-in card connects up to four x4 PCIe Gen3 links from any standard x16 PCIe slot on the baseboard to a PCIe SSD capable HSBP via four bundled OCuLink cables. The retimer is a low profile form factor standard x16 PCIe card.&lt;br&gt;<strong>Kit includes:</strong>&lt;br&gt;(1) – 4-Port PCIe SSD Retimer AIC – iPN H88402-xxx&lt;br&gt;(1) – 350 mm PEM Cable – iPN J14812-xxx&lt;br&gt;(1) – Low profile bracket – iPN J32838-xxx&lt;br&gt;<strong>Additional required accessory:</strong>&lt;br&gt;Connection to a PCIe capable HSBP requires the addition of one of the following cable kits for each retimer:&lt;br&gt;• R1208 – iPC A1U4PRTCXCXK&lt;br&gt;• R2208, R2208+8 and R2224 – iPC A2U4PRTCXCXK&lt;br&gt;<strong>Note:</strong> PCIe retimer card installed to Riser #1 is not supported. PCIe retimer card is not compatible with R2312WFxxx systems.</td>
<td></td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><em><em>4 Port PCIe</em> x8 Switch Add-In Card</em>*&lt;br&gt;<strong>iPC</strong> AXXP3SWX08040&lt;br&gt;<strong>MM#</strong> 958241&lt;br&gt;<strong>UPC</strong> 00735858345620&lt;br&gt;<strong>EAN</strong> 5032037106115&lt;br&gt;<strong>MOQ</strong> 1&lt;br&gt;<strong>Product type</strong> 1U/2U accessory kit&lt;br&gt;This switch add-in card is used to increase the number of PCIe SSD drives within the system by 4. The 4-drive switch is a low profile MD2 form factor PCIe card.&lt;br&gt;<strong>Additional required accessory:</strong>&lt;br&gt;The following cable kit is required to connect the 4-port switch to the HSBP in R1208 system:&lt;br&gt;• iPC A1U4PSWCXCVK&lt;br&gt;One of the following cable kits is required to connect the 4 port switch to the HSBP in R2208, R2208+8 and R2224 systems:&lt;br&gt;• iPC A2U4PSWCXCXK1&lt;br&gt;• iPC A2U4PSWCXCXK2</td>
<td></td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><em><em>8 Port PCIe</em> x8 Switch Add-In Card</em>*&lt;br&gt;<strong>iPC</strong> AXXP3SWX08080&lt;br&gt;<strong>MM#</strong> 958242&lt;br&gt;<strong>UPC</strong> 00735858345637&lt;br&gt;<strong>EAN</strong> 5032037106122&lt;br&gt;<strong>MOQ</strong> 1&lt;br&gt;<strong>Product type</strong> 2U accessory kit&lt;br&gt;This switch add-in card is used to increase the number of PCIe SSD drives within the system by 8. The 8-drive switch is a full height form factor PCIe card.&lt;br&gt;<strong>Additional required accessory:</strong>&lt;br&gt;One of the following cable kits is required to connect the 8 port switch to the HSBP in R2208, R2208+8 and R2224 systems:&lt;br&gt;• iPC A2U8PSWCXCXK1&lt;br&gt;• iPC A2U8PSWCXCXK2&lt;br&gt;• iPC A2U8PSWCXCXK3</td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
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</tr>
</tbody>
</table>
|       | **Fabric Processor Clip** | This accessory kit provides the clip necessary to attach a fabric supported Intel® Xeon® Scalable processor to the CPU heat sink. This kit must be ordered to support dual fabric CPU configurations when installing either of the following IFT Carrier Accessory Kits:  
- **IPC AWF1PFABKITM**  
- **IPC AWF1PFABKITP**  
Kit includes: (1) fabric processor clip |
| ![Fabric Processor Clip](image) | iPC | FXXCPUCLIPF |
|       | MM# | 958275 |
|       | UPC | 0073585834432 |
|       | EAN | 5032037105224 |
|       | MOQ | 2 |
|       | Product type | 1U/2U accessory kit  
1U/2U spare kit |

| Mezzanine Fabric Carrier Kit | This board allows external access to the Intel® Omni-Path Host Fabric Interface (Intel® OP HFI) of fabric supported processors. The connection to the external access is done through two QSFP+28 style connections. The mezzanine fabric carrier board is designed to be mounted within the OCP* module bay of either the 1U or 2U chassis. All required signals/power for the board are passed through the included sideband cable.  
Kit includes:  
(1) – IFT Carrier Mezzanine Board – iPN H88405-xxx  
(1) – 235 mm cable (iPN H79272-xxx), 1 port, Mezzanine card to Fabric Processor #1  
(1) – 430 mm cable (iPN H77497-xxx), 2x12 HFI Sideband Y Cable, Single Intel® Omni-Path Sideband IFT Carrier to dual Intel Omni-Path CPU connectors (Mezzanine card to server board CPU HFI Sideband connectors)  
(1) – Fabric Processor Clip (iPN J61895-xxx)  
Note: The 4 screws used to mount the IFT Mezzanine card to the OCP Mezz stand-offs are pre-installed in the chassis/system.  
Additional required accessory for dual fabric processor support:  
Dual Fabric processor configurations require the following additional accessory kits to be ordered separately:  
- Cable kit AXXCBL370IFPS1 (Mezzanine card to Fabric Processor #2)  
- Fabric Processor Clip Kit FXXCPUCLIPF – Used to attach fabric enabled processor to processor heat sink  
Important: This product is only compatible with external Intel Omni-Path passive cables (copper) and active cables (optical) up to class 3. For a list of recommended cables, contact your Intel representative. | |
<p>| <img src="image" alt="Mezzanine Fabric Carrier Kit" /> | iPC | AWF1PFABKITM |
|       | MM# | 955873 |
|       | UPC | 00735858345644 |
|       | EAN | 5032037106139 |
|       | MOQ | 1 |
|       | Product type | 1U/2U accessory kit |</p>
<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCIe Add-in Fabric Carrier Kit</td>
<td><strong>iPC</strong> AWF1PFABKITP <strong>MM#</strong> 955859 <strong>UPC</strong> 00735858345651 <strong>EAN</strong> 5032037106146 <strong>MOQ</strong> 1</td>
<td>This kit allows external access to the Intel® Omni-Path Host Fabric Interface (Intel® OP HFI) of fabric supported processors. The connection to the external access is done through two QSFP+28 style connections. The IFT Carrier add-in card can only be supported when installed to a PCIe add-in card slot on Riser 2. No PCIe related signals are passed through; the slot is only being used for mechanical mounting along with drawing power and SMBus signals. <strong>Kit includes:</strong> (1) – IFT Carrier PCIe Add-in Board (1) – 235 mm cable (iPN H79267-xxx), 1 port, PCIe add-in card to Fabric Processor #1 (1) – 430 mm 2x12 HFI Sideband Y Cable, Single Intel Omni-Path Sideband IFT Carrier to dual Intel Omni-Path CPU connectors (PCIe add-in card to server board CPU HFI Sideband connectors) (1) – Fabric Processor Clip <strong>Additional required accessory for dual fabric processor support:</strong> Dual Fabric processor configurations require the following additional accessory kits to be ordered separately: • Cable kit AXXCBL235IFPR1 – 235mm cable (iPN H79272-xxx), PCIe Add-in card to Fabric Processor #2 • Fabric Processor Clip Kit FXXCPUCLIPF – Used to attach fabric enabled processor to processor heat sink <strong>Important:</strong> This product is only compatible with external Intel® Omni-Path passive cables (copper) and active cables (optical) up to class 3. For a list of recommended cables, contact your Intel representative.</td>
</tr>
<tr>
<td>High Airflow Air Duct Kit</td>
<td><strong>iPC</strong> AWFCOPRODUCTAD <strong>MM#</strong> 961767 <strong>UPC</strong> 00735858351270 <strong>EAN</strong> 5032037109666 <strong>MOQ</strong> 1</td>
<td>Required 2U accessory kit when installing an Intel® Xeon Phi™ coprocessor card with passive heat sink (heat sink only, no fan) or non-Intel GPGPU with passive heat sink. <strong>Kit includes:</strong> (1) – High airflow air duct <strong>Note:</strong> Intel Xeon Phi cards with active heat sinks are not supported in systems configured with the high air flow air duct. <strong>Additional required accessory:</strong> • High Air flow Air Duct Bracket Kit which includes the metal shipping bracket and non-Intel GPGPU secure mounting adapters – iPC AWFCOPRODUCTBKT • 2-slot PCIe* Riser card option which includes a 2-slot riser PCBA and a 12V AUX power cable – iPC A2UL16RISER2</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
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<td>-------</td>
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</tr>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>High Airflow Air Duct Bracket Kit</strong>&lt;br&gt;iPC AWFPRODUCTBKT&lt;br&gt;MM# 961675&lt;br&gt;UPC 00735858351720&lt;br&gt;EAN 5032037109949&lt;br&gt;MOQ 1&lt;br&gt;<strong>Product type</strong> 2U accessory kit</td>
<td>Required 2U accessory kit when installing an Intel® Xeon Phi™ coprocessor card with passive heat sink (heat sink only, no fan) or non-Intel GPGPU with passive heat sink.&lt;br&gt;&lt;br&gt;<strong>Kit includes:</strong>&lt;br&gt;(1) – Metal shipping bracket&lt;br&gt;(2) – Non-Intel GPGPU secure mounting adapters&lt;br&gt;&lt;br&gt;<strong>Note:</strong> Intel Xeon Phi cards with active heat sinks are NOT supported in systems configured with the high airflow air duct.&lt;br&gt;&lt;br&gt;<strong>Note:</strong> Systems configured with any type of Intel® Xeon Phi™ card and/or non-Intel GPGPU card must have the shipping bracket installed before the system is exposed to any level of shock or vibration or is shipped to the end user location. Failure to install the shipping bracket has the potential to cause serious damage to various components within the system.&lt;br&gt;&lt;br&gt;<strong>Additional required accessory:</strong>&lt;br&gt;High Airflow Duct Kit which includes a high flow air duct – iPC AWFPRODUCTAD&lt;br&gt;2-slot PCIe* Riser card option which includes a 2-slot riser PCBA and a 12V AUX power cable – iPC A2UL16RISER2</td>
</tr>
</tbody>
</table>
# 7. 1U/2U 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>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Front Panel Board" /></td>
<td><strong>Front Panel Board</strong>&lt;br&gt;iPC: FXXFPANEL2&lt;br&gt;MM#: 937543&lt;br&gt;UPC: 00735858288712&lt;br&gt;EAN: 5032037067997&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 1U/2U spare FRU</td>
<td>Front Panel board spare for all R1000WF and R2000WF systems, except R2224 and R2312. Includes one front panel board.</td>
</tr>
<tr>
<td><img src="image" alt="1U Spare Fan Assembly (3 Fans)" /></td>
<td><strong>1U Spare Fan Assembly (3 Fans)</strong>&lt;br&gt;iPC: FR1UFAN10PW&lt;br&gt;MM#: 974906&lt;br&gt;UPC: 00735858283342&lt;br&gt;EAN: 5032037064408&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 1U spare FRU</td>
<td>Three spare fans for R1000WF systems as an assembly. 40x56 mm dual rotor with 10p connector. Includes three fans in the bracket with grommets preinstalled.</td>
</tr>
<tr>
<td><img src="image" alt="2U Spare Fan (2 Fans/Kit)" /></td>
<td><strong>2U Spare Fan (2 Fans/Kit)</strong>&lt;br&gt;iPC: FR2UFAN60HSW&lt;br&gt;MM#: 934990&lt;br&gt;UPC: 00735858283359&lt;br&gt;EAN: 5032037064415&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U spare FRU</td>
<td>Two spare fans for R2000WF systems. 60x38mm, with hot swap connector. Includes two fans with finger guards and housing.</td>
</tr>
<tr>
<td><img src="image" alt="4x3.5&quot; Spare Hot Swap Backplane" /></td>
<td><strong>4x3.5&quot; Spare Hot Swap Backplane</strong>&lt;br&gt;iPC: FR1304S3HSBP&lt;br&gt;MM#: 934887&lt;br&gt;UPC: 00735858288835&lt;br&gt;EAN: 5032037068116&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 1U spare FRU</td>
<td>Hot swap backplane board spare for R1304 systems. Includes one backplane board.</td>
</tr>
<tr>
<td>Image</td>
<td>Details</td>
<td>Description</td>
</tr>
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<td>-------</td>
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</tr>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>8x2.5&quot; SAS/NVMe Hot Swap Backplane</strong>&lt;br&gt;iPC: F1U8X25S3PHS&lt;br&gt;MM#: 955868&lt;br&gt;UPC: 00735858344890&lt;br&gt;EAN: 5032037105606&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 1U spare FRU</td>
<td>Combination hot swap backplane board spare supporting SAS and NVMe* drives in the R1208 system. Includes one backplane board.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><strong>8x3.5&quot; Hot Swap Backplane</strong>&lt;br&gt;iPC: F2U8X35S3HSBP&lt;br&gt;MM#: 934892&lt;br&gt;UPC: 00735858288811&lt;br&gt;EAN: 5032037068093&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U spare FRU</td>
<td>Hot swap backplane board spare for R2308 systems. Includes one backplane board.</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><strong>8x2.5&quot; SAS/NVMe Hot Swap Backplane</strong>&lt;br&gt;iPC: F2U8X25S3PHS&lt;br&gt;MM#: 955870&lt;br&gt;UPC: 00735858344913&lt;br&gt;EAN: 5032037105620&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U spare FRU</td>
<td>Combination hot swap backplane board spare supporting SAS and NVMe* drives in the R2208 systems. Includes one backplane board.</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><strong>12x3.5&quot; SAS and 2x NVMe Hot Swap Backplane</strong>&lt;br&gt;iPC: F2U12X35S3PH&lt;br&gt;MM#: 955869&lt;br&gt;UPC: 00735858344906&lt;br&gt;EAN: 5032037105613&lt;br&gt;MOQ: 1&lt;br&gt;Product type: 2U spare FRU</td>
<td>Hot-swap backplane board spare supporting 12GB SAS drives plus 2 NVMe* drives. Includes one backplane board.</td>
</tr>
</tbody>
</table>
## 1U/2U Rack Handle Kit

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Image](image1.png) | **iPC** A2UHANDLKIT | This kit includes (3) different rack handles, including:  
  - (1) – Set of 2U storage rack handles with control panel and USB support (R2312WFxxxx and R2224WFxxxx)  
  - (1) – Set of 2U non-storage rack handles (R2208WFxxxx and R2208WFxxxx + 8 Drive Accessory Kit)  
  - (1) – Set of 1U rack handles (R1304WFxxxx and R1208WFxxxx)  
  This kit includes replacement chassis handles for all product family 1U and 2U systems. In addition, this kit must be purchased for 2U building block configurations consisting of 24x2.5” drives (3 drive bay modules) or when upgrading a R2208WF or R2208WF + 8 Drive Accessory Kit system to a 24 drive R2224WF system, where the standard chassis rack handles must be replaced with a pair of storage rack handles that include the system front panel and front USB 2.0 port.  
  See the appropriate Intel® Server System Product Family System Integration and Service Guide for complete system integration, upgrade, and part replacement instructions.  
  **Note:** The 2U storage rack handles are not supported on R2312WFTF systems.  |

### Product type
- 2U drive upgrade kit
- 1U/2U spares kit

### Image Details
- **iPC** A2UHANDLKIT
- **MM#** 936038
- **UPC** 00735858288866
- **EAN** 5032037068147
- **MOQ** 1

## 2.5” Tool Less Hot Swap Drive Carrier

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><strong>iPC</strong> FXX25HSCAR3</td>
<td>Spare 2.5” tool less drive hot swap carrier</td>
</tr>
</tbody>
</table>

### Image Details
- **iPC** FXX25HSCAR3
- **MM#** 958244
- **UPC** 00735858345668
- **EAN** 5032037106153
- **MOQ** 1

## 3.5” Tool Less Hot Swap Drive Carrier

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Image](image3.png) | **iPC** FXX35HSCAR2 | Spare 3.5” tool less drive hot swap drive carrier  
  Includes mounting screws for mounting 2.5” SSDs. |

### Image Details
- **iPC** FXX35HSCAR2
- **MM#** 958245
- **UPC** 00735858345675
- **EAN** 5032037106160
- **MOQ** 1

## ODD Data Cable

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Image](image4.png) | **iPC** AXXCBL880SATA | Spare optical disk drive data cable for rack chassis family, 880 mm long.  
  Included with optical drives AXXSATAVDROM and AXXSATAVDWRWROM. |

### Image Details
- **iPC** AXXCBL880SATA
- **MM#** 929288
- **UPC** 00735858250290
- **EAN** 50320370448060
- **MOQ** 10

### Product type
- 1U/2U spare FRU

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*Intel® Server S2600WF Product Family Configuration Guide*
8. Intel® Visual Compute Accelerators

The Intel® Visual Compute Accelerator 2 (Intel® VCA 2) brings high definition (HD) and ultra high definition (UHD) media processing capabilities to Intel® Xeon® processor Scalable family platforms. The Intel VCA 2 card integrates three Intel® Xeon® E3 processors with Intel® Iris™ Pro Graphics P580 enabled hardware accelerated video processing into a PCIe* card form factor that fits into servers based on Intel® Xeon® processor Scalable family.

- Full complement of bare metal operating systems for the onboard Intel Xeon processor E3-1500 v5 nodes for application software support across multiple market segments: CentOS 7.x, Windows® 10, Windows® Server 2016.
- PCIe x8 to each of the three on-board Intel Xeon processor E3-1500L v5 nodes supports highly bandwidth intensive media ingest.
- Multiple 1U and 2U server system options and a strong ISV ecosystem for ease of solution deployment.

<table>
<thead>
<tr>
<th>Image</th>
<th>Details</th>
<th>Description</th>
</tr>
</thead>
</table>
| Intel® Visual Compute Accelerator 2 VCA1585LMV MM# 954907 UPC 00735858334532 EAN 5032037099127 MOQ 1 | **Product type** 1U/2U accessory kit | • Full-length, full-height, double-width Gen3 PCIe x16, 8 lanes per processor  
• 4 cores supported  
• 45W TDP  
• Processor number E3-1585LV5  
• Base freq 3.0 GHz, Max turbo freq 3.7 GHz  
• Max memory size 192 GB (DDR4 2133/2400 at 1.2V) |
## Appendix A. Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIC</td>
<td>Add-In Card</td>
</tr>
<tr>
<td>BIK</td>
<td>Baseboard In Knock-Down-Kit – Integrated System</td>
</tr>
<tr>
<td>CMA</td>
<td>Cable Management Arm</td>
</tr>
<tr>
<td>CRPS</td>
<td>Common Redundant Power Supply</td>
</tr>
<tr>
<td>DDDC</td>
<td>Double Device Data Correction</td>
</tr>
<tr>
<td>EAN</td>
<td>International Article Number (Barcode)</td>
</tr>
<tr>
<td>ECC</td>
<td>Error Correcting Code</td>
</tr>
<tr>
<td>EMI</td>
<td>Electromagnetic Interference</td>
</tr>
<tr>
<td>FRU</td>
<td>Field Replaceable Unit</td>
</tr>
<tr>
<td>GPGPU</td>
<td>General Purpose computing on Graphics Processing Unit</td>
</tr>
<tr>
<td>iPC</td>
<td>Intel Product Code</td>
</tr>
<tr>
<td>iPn</td>
<td>Intel Product Number</td>
</tr>
<tr>
<td>JBOD</td>
<td>Just a bunch of drives</td>
</tr>
<tr>
<td>L6 BIK</td>
<td>Integrated system with no processors, memory, or storage devices installed</td>
</tr>
<tr>
<td>L9 BIK</td>
<td>Integrated system including storage devices, but no processors or memory</td>
</tr>
<tr>
<td>KDK</td>
<td>Knock-Down-Kit – (Chassis only product)</td>
</tr>
<tr>
<td>KVM</td>
<td>Keyboard, Video, Mouse</td>
</tr>
<tr>
<td>MM#</td>
<td>Master Material order number</td>
</tr>
<tr>
<td>MOQ</td>
<td>Minimum Order Quantity</td>
</tr>
<tr>
<td>NVMe*</td>
<td>NVM Express* – based on Non-Volatile Memory Host Controller Interface Specification (NVMHCI)</td>
</tr>
<tr>
<td>ODD</td>
<td>Optical disk drive</td>
</tr>
<tr>
<td>Intel® OP HFI</td>
<td>Intel® Omni-Path Host Fabric Interface</td>
</tr>
<tr>
<td>Optional Accessory</td>
<td>Hardware that can be added to the system to enhance the default feature set of the shipping configuration</td>
</tr>
<tr>
<td>PCBA</td>
<td>Printed Circuit Board Assembly</td>
</tr>
<tr>
<td>Intel® QAT</td>
<td>Intel® QuickAssist Technology</td>
</tr>
<tr>
<td>QSFP</td>
<td>Quad Small Form factor Pluggable</td>
</tr>
<tr>
<td>RAID</td>
<td>Redundant Array of Independent Drives</td>
</tr>
<tr>
<td>Required Option</td>
<td>Hardware that must be added to the shipping configuration for the system to operate</td>
</tr>
<tr>
<td>RMFBU</td>
<td>RAID Maintenance Free Backup Unit</td>
</tr>
<tr>
<td>Intel® RMM4 Lite</td>
<td>Intel® Remote Management Module 4 Lite Activation key</td>
</tr>
<tr>
<td>ROC</td>
<td>RAID on Chip</td>
</tr>
<tr>
<td>Intel® RSTe</td>
<td>Intel® Rapid Storage Technology enterprise</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>SAS</td>
<td>Serial Attached SCSI</td>
</tr>
<tr>
<td>SATA</td>
<td>Serial ATA</td>
</tr>
<tr>
<td>SFF NVMe*</td>
<td>NVMe SSD in a 2.5&quot; form factor</td>
</tr>
<tr>
<td>SFP</td>
<td>Small Form factor Pluggable</td>
</tr>
<tr>
<td>SKU</td>
<td>Stock Keeping Unit</td>
</tr>
<tr>
<td>SSD</td>
<td>Solid State Drive</td>
</tr>
<tr>
<td>TPM</td>
<td>Trusted Platform Manager</td>
</tr>
<tr>
<td>UPC</td>
<td>Universal Product Code (Barcode)</td>
</tr>
<tr>
<td>Intel® VCA</td>
<td>Intel® Visual Compute Accelerator</td>
</tr>
<tr>
<td>Intel® VROC</td>
<td>Intel® Virtual RAID on CPU</td>
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</tbody>
</table>