Intel® Server Board S5000PAL

Intel® Server Chassis SR1500

Intel® Server Chassis SR1550

Intel® Server Chassis SR2500

Spares/Parts List and Configuration Guide

A reference guide to assist customers in ordering the necessary components to configure the Intel® Server Board S5000PAL with the appropriate 1U and 2U Intel Rack Mount Server Chassis.

Revision 2.3

September, 2009

Enterprise Platforms and Services Marketing

Revision History

Date - Revision	Modifications
May 2006 – Revision 1.0	Initial public release.
June 2006 – Revision 1.1	Added new MM# for BB5000PAL due to PCN # 106415; Added link to online configuration tool; Updated tool-less rail kit and cable management arm descriptions; Added ordering flow charts to appendix; Updated MM# for AXXRJ45DB92; Updated MOQ for SAS RAID accessories.
July 2006 – Revision 1.2	Added new entry for spare 2U hot-swap backplane board: FSR2500SASBP. Corrected MM# for AXXIBIOMOD, added new MM# for AXXSCD due to PCN# 106490. Updated MM# for AXXLCPRACK (RoHS compliant version) due to PCN 106158. Added new MM# for ASR2500SIXDRV due to PCN 106588.
August 2006 – Revision 1.3	Removed MM# 880098 (will not be used for product code ADRPCIXRIS); Added new MM numbers for boards & systems due to PCNs 106539, 106535, and 106533; Added product code for Intel® Embedded Server RAID Technology II option (Intel® RAID Activation Key AXXRAKSW5); Updated charts in Appendix 2 to accurately capture integrated system SKUs.
November 2006 – Revision 1.4	Updated MM#'s for OEM board 10 packs due to PCN #106856; Added notation to indicate which board and system SKUs ship with the G1 stepping of the chipset; Added ordering information for the boxed Intel® Xeon® Processors.
April 2007 – Revision 1.5	Added reference to new RMM2 Remote Management Module
July 2007 – Revision 1.6	Added clarification for AXXHERAIL
August 2007 – Revision 1.7	Refreshed product updates
September 2007 – Revision 1.8	Added new MM# for ASR1500PASBP
March 2008 －Revision 1.9	Added new MM# for FALSASMP2, AXXMINIDIMM512, and AXXRAKSAS2
July'08 – Revision 2.0	Added new MM# for Basic slide rail kit
January 2009 － Revision 2.1	Updated MM# for Intel® Server System SR1500AL/SR1550AL/SR2500AL, Intel Server Board S5000PALR/BB5000PALR, ASR1500PASBP, ASR2500SIXDRV, FALPASMP
April 2009 – Revision 2.2	Update MM# for ASR1500PASBP, AXXRMM2. Update description for ASR1500SASBP
September 2009 – Revision 2.3	Added new section for VMware vSphere* and vCenter* Server SKUs. Added new MM# for AXXHERAIL2, AXXRACKARM2. Update MM# for AXXSASIOMOD.

Disclaimers

Table of Contents

Note 1: In addition to this document, there is a web-based tool to assist customers in selecting components for Intel Server Products available here: http://www.intel.com/go/serverconfigurator

Note 2: Unless otherwise noted, all products listed in this document are RoHS compliant using the server exemption for leaded solder. In cases where both RoHS-compliant and non-compliant versions of a particular product exist, both MM numbers are listed to aid customers in selecting the appropriate version.

1.   Production Product Order Codes

1.1   Production Product Descriptions – Overview

Product based on the Intel® Server Board S5000PAL are offered in two models:

1. **Intel® Server Systems (Integrated SKUs)**: Customer orders an integrated system that includes the server board, server chassis, risers, midplane/backplane, and standard front panel. These systems are available in specific popular combinations. Then, the customer can choose to add additional options (second power supply for redundant power, bezels, Intel® Remote Server Management Module, etc.) to get to their desired configuration.

2. **OEM Building Blocks**: Customer orders the exact parts they need to build any combination of a server when their requirements call for a configuration not available as a pre-integrated combination. Required options include a server board, a chassis KDK, a full-height riser, midplane or backplane, and a standard front panel or local control panel (LCD). Some of these OEM building block items are not intended for stocking by the distribution channel.

1.2   Production Intel® Server Systems – (Integrated SKUs)

The following Intel® Server Systems are offered pre-integrated. Each SKU includes the Intel® Server Board S5000PAL together with the chassis and the most widely used key options:

1. Intel® Server Chassis SR2500 with Intel® Server Board S5000PAL (2U Intel® Server System)

- BRP (Base Redundant Power) version SKU contents:

  Intel® Server Board S5000PALR, Intel® Server Chassis SR2500 with hot-swap SAS/SATA backplane, five 3.5–inch hard drive carriers, non-redundant system cooling, 1 (of 2) 750-W power supply, Passive Midplane, Bridge Board, two slot low-profile PCI-Express* Riser Card, Full-height riser with two PCI-Express* and one PCI-X slots, Standard Control Panel, Air duct and baffle, Optical Drive Tray, DH10-to-DB9 Serial A cable, documentation. (This is equivalent to ordering the following building blocks: N/A – this SKU is only offered as a pre-configured option).

  - Optional Accessories: Mounting kit (basic rail kit, tool-less slide rail kit with Cable Management Arm option or fixed mount bracket kit), Cosmetic system bezel (two options: standard control panel version or version with LCD cutout), Slimline optical drive (CD-ROM, DVD-ROM, or DVD/CDR Drive), USB slimline Floppy Conversion Kit, RAID activation key, I/O expansion modules (dual GbE, external SAS or IB), Second power supply module (required for full redundancy), Sixth drive kit, tape drive mounting kit.

  - The following are optional kits that would require removing hardware already included in the integrated System: Full-height PCI-X Riser Card (active or passive), SAS Midplane, Intel® Local Control panel with LCD support, redundant cooling upgrade kit.

- LX version SKU contents:

  Intel® Server Board S5000PALR, Intel® Server Chassis SR2500 with hot-swap SAS/SATA backplane, five 3.5-inch hard drive carriers, hot-swap and redundant system cooling (6 of 6 fans), 1 (of 2) 750-W power supply, active SAS Midplane (with optional RAID), Bridge Board, two slot Low-profile PCI-Express* Riser Card, Full-height riser with two PCI-Express* and one

PCI-X slots, Standard Control Panel, Air duct and baffle, Optical Drive Tray, DH10-to-DB9 Serial A cable, Documentation. (This is equivalent to ordering the following building blocks: SR2500, S5000PALR, FALSASMP, ASR2500FHR, FSR2500LXFAN, and ASR2500FP).

- Optional Accessories: Mounting kit (basic rail kit, tool-less slide rail kit with Cable Management Arm option or fixed mount bracket kit), Cosmetic system bezel (two options: standard control panel version or version with LCD cutout), Slimline optical drive (CD-ROM, DVD-ROM, or DVD/CDR Drive), USB slimline Floppy Conversion Kit, RAID activation key, RAID cache mini-DIMM, RAID battery backup unit, I/O expansion modules (dual GbE, external SAS, or IB), Second power supply module (required for full redundancy), Sixth drive kit, tape drive mounting kit.

- The following are Optional Kits that would require removing hardware already included in the integrated System: Full -height PCI-X Riser Card (active or passive), Passive Midplane, Intel® Local Control panel with LCD support.

2. Intel® Server Chassis SR1500 with Intel® Server Board S5000PAL (1U Intel® Server System)

- SAS backplane version SKU contents:

Intel® Server Board S5000PALR, Intel® Server Chassis SR1500 with hot-swap SAS/SATA backplane with PCI Express* based SAS controller, Bridge Board, three 3.5-inch hard drive carriers, system fans, one (non-redundant) 600-W power supply, Low-profile PCI-Express* riser card, full-height PCI-Express* riser card, standard control panel, Air duct and baffle, Optical Drive Tray, Documentation. (This is equivalent to ordering the following building blocks: S5000PALR, SR1500, ADWPCIEXPR, ASR1500SASBP, and AXXRACKFP).

- Optional Accessories: Mounting kit (basic rail kit, tool-less slide rail kit with Cable Management Arm option or fixed mount bracket kit), Cosmetic system bezel (two options: standard control panel version or version with LCD cutout), Slimline optical drive (CD-ROM, DVD-ROM, or DVD/CDR Drive), USB floppy drive, I/O expansion modules (dual GbE, external SAS or IB).

- The following are Optional Kits that would require removing hardware already included in the integrated System: Full-height PCI-X Riser Card, Passive backplane, and Intel Local Control panel with LCD support.

- Passive backplane version SKU contents:

Intel® Server Board S5000PALR, Intel® Server Chassis SR1500 with hot-swap SAS/SATA passive backplane, Bridge Board, three 3.5-inch hard drive carriers, system fans, one (non-redundant) 600-W power supply, Low Profile PCI-Express* Riser Card, Full-height PCI-Express* Riser Card, Standard Control Panel, Air duct and baffle, Optical Drive Tray, Documentation. (This is equivalent to ordering the following building blocks: S5000PALR, SR1500, ADWPCIEXPR, ASR1500PASBP, and AXXRACKFP).

- Optional Accessories: Mounting kit (basic rail kit, tool-less slide rail kit with Cable Management Arm option or fixed mount bracket kit), Cosmetic system bezel (two options: standard control panel version or version with LCD cutout), Slimline optical drive (CD-ROM, DVD-ROM, or DVD/CDR Drive), USB floppy drive, I/O expansion modules (dual GbE, external SAS, or IB).

- The following are Optional Kits that would require removing hardware already included in the integrated System: Full-height PCI-X Riser Card, SAS backplane, and Intel® Local Control panel with LCD support.

3. Intel® Server Chassis SR1550 with Intel® Server Board S5000PAL (1U Intel® Server System)–

- SAS version SKU contents:

  Intel® Server Board S5000PALR, Intel® Server Chassis SR1550 with hot-swap SAS/SATA backplane, six 2.5-inch hard drive carriers, system cooling, 1 (of 2) 650-W power supply, active SAS Midplane (with optional RAID), Bridge Board, Low Profile PCI-Express Riser Card, Full-height PCI-Express* Riser Card, Mini Control Panel, Air duct and baffle, Documentation. (This is equivalent to ordering the following building blocks: S5000PALR, SR1550, ADWPCIEXPR, FALSASMP, ASR1550MINFP).

  - Optional Accessories: Mounting kit (basic rail kit, tool-less slide rail kit with cable mgmt arm option or fixed mount bracket kit), Cosmetic system bezel (three options: standard control panel version, version with LCD cutout or mini Front Panel version), Slimline optical drive (CD-ROM, DVD-ROM, or DVD/CDR Drive), RAID activation key, RAID cache mini-DIMM, RAID battery backup unit, I/O expansion modules (dual GbE, external SAS or IB), second power supply module (required for full redundancy), additional 2.5-inch drive carrier blanks to add drives 7 and 8.

  - The following are optional kits that would require removing hardware already included in the integrated System: Full-height PCI-X riser card, and passive midplane.

- Passive version SKU contents:

  Intel® Server Board S5000PALR, Intel® Server Chassis SR1550 with hot-swap SAS/SATA backplane, six 2.5-inch hard drive carriers, system cooling, 1 (of 2) 650-W power supply, Passive Midplane, Bridge Board, Low-profile PCI-Express* Riser Card, Full-height PCI-Express* Riser Card, Mini Control Panel, Air duct and baffle, Documentation. (This is equivalent to ordering the following building blocks: S5000PALR, SR1550, ADWPCIEXPR, FALPASMP, and ASR1550MINFP).

  - Optional Accessories: Mounting kit (basic rail kit, tool-less slide rail kit with Cable Management Arm option or fixed mount bracket kit), Cosmetic system bezel (three options: standard control panel version, version with LCD cutout, or mini FP version), Slimline optical drive (CD-ROM, DVD-ROM, or DVD/CDR Drive), I/O expansion modules (dual GbE, external SAS, or IB), second power supply module (required for full redundancy), additional 2.5-inch drive carrier blanks to add drives 7 and 8.

  - The following are optional kits that would require removing hardware already included in the integrated System: Full-height PCI-X Riser Card, SAS Midplane, Intel® Local Control panel with LCD support, and standard control panel.

Intel® Server Systems – (Integrated SKUs) Order Codes:

Product Code	UPC	MM	Description	Qty
SR2500ALBRPR	00735858197199	900358	S5000PALR / SR2500 BRP 2U integrated platform: Includes server board, 2U chassis with non-redundant cooling, one (of 2) power supply module, backplane, two risers and Passive Midplane	1
SR2500ALBRPRNA	00735858197205	900372	S5000PALR / SR2500 BRP 2U integrated platform: Includes server board, 2U chassis with non-redundant cooling, one (of 2) power supply module, backplane, two risers and Passive Midplane, North American Power Cord.	1
SR2500ALLXR	00735858197212	900362	S5000PALR / SR2500 LX 2U integrated platform: Includes server board, 2U chassis with hot-swap redundant cooling, one (of 2) power supply module, backplane, two risers and SAS Midplane.	1
SR2500ALLXRNA	00735858197229	900371	S5000PALR / SR2500 LX 2U integrated platform: Includes server board, 2U chassis with hot-swap redundant cooling, one (of 2) power supply module, backplane, two risers and SAS Midplane, North American Power Cord.	1
SR1500ALR	00735858197113	900350	S5000PALR / SR1500 Passive Backplane 1U integrated platform: Includes server board, 1U chassis with passive backplane, and two risers.	1
SR1500ALRNA	00735858197120	900353	S5000PALR / SR1500 Passive Backplane 1U integrated platform: Includes server board, 1U chassis with passive backplane, and two risers, North American Power Cord.	1
SR1500ALSASR	00735858197137	900351	S5000PALR / SR1500 SAS 1U integrated platform: Includes server board, 1U chassis with SAS backplane, and risers.	1
SR1500ALSASRNA	00735858197144	900352	S5000PALR / SR1500 SAS 1U integrated platform: Includes server board, 1U chassis with SAS backplane, and risers, North American Power Cord.	1
SR1550ALR	00735858197151	900369	S5000PALR / SR1550 1U integrated platform with Passive Midplane: Includes server board, 1U chassis with one (of 2) power supply module, backplane, risers and passive Midplane.	1
SR1550ALRNA	00735858197168	900397	S5000PALR / SR1550 1U integrated platform with Passive Midplane: Includes server board, 1U chassis with one (of 2) power supply module, backplane, risers and passive Midplane, North American Power Cord.	1
SR1550ALSASR	00735858197175	900370	S5000PALR / SR1550 1U integrated platform with SAS Midplane: Includes server board, 1U chassis with one (of 2) power supply module, backplane, risers and SAS Midplane	1
SR1550ALSASRNA	00735858197182	900381	S5000PALR / SR1550 1U integrated platform with SAS Midplane: Includes server board, 1U chassis with one (of 2) power supply module, backplane, risers and SAS Midplane, North American Power Cord.	1

Not included: Processors, Processor heatsinks, DDR2 Fully Buffered DIMM (FBD) main memory, hard drives, and other customer configuration items are not included in the above SKUs.

1.3 Production Server Board SKU options-

For customers who chose the "building blocks" approach described above in section 1.1, or who utilize their own enclosure, the board will be offered in two versions with differing packaging options:

1. Intel® Server Board S5000PAL - boxed board version

   - Boxed board SKU contents: server board with CEK spring clip pre-installed, software CD, quick start guide (welcome mat), configuration label

   - Intel® 5000P chipset only

2. Intel® Server Board S5000PAL / S5000XALR – 10-pack OEM board version.

   - OEM board SKU contents: 10 server boards with CEK spring clip pre-installed (no other accessories)

   - Choice of Intel® 5000P or 5000X chipset.

Product Code	UPC	MM	Description	Qty
S5000PALR	00735858196130	900354	Intel® Server Board S5000PALR Single Pack Boxed Board (Intel® 5000P Northbridge version). (MOQ = 5)	1
BB5000PALR	00735858196239	900375	Intel® Server Board S5000PALR OEM bulk pack version (Intel® 5000P Northbridge version)	10
BB5000XALR	00735858197106	891956	Intel® Server Board S5000XALR OEM bulk pack version (Intel® 5000X Northbridge version). Lead-free.	10

** indicates G1 stepping of the chipset

1.4 Production SR1500 (1U) Chassis Building Block Order Codes

Product Code	UPC	MM	Description	Qty
SR1500	00735858183383	881037	Intel® Server Chassis SR1500 (1U) KDK - building block chassis: Contains chassis, fans, power supply, ducting, cables, slimline optical drive tray, and low-profile riser, Bridge Board, three hard drive carriers, rack handles; No power cord included. **NOTE:** Requires additional Backplane Kit, Full-height Riser Card, and Control Panel options.	1
SR1500NA	00735858183659	881460	Intel® Server Chassis SR1500 (1U) KDK - building block chassis: Contains chassis, fans, power supply, ducting, cables, slimline optical drive tray, and low-profile riser, Bridge Board, three hard drive carriers, rack handles; Includes North American Power Cord. **NOTE:** Requires additional Backplane Kit, Full-height Riser Card, and Control Panel options.	1

1.4.1 Production SR1500 KDK Required Option #1 – Backplanes (choose one)

Product Code	UPC	MM	Description	Qty
ASR1500SASBP	00735858183741	880524	SR1500 (1U) Hot-swap 4-port SAS Backplane Kit - Compatible with either SAS or SATA 3.5-inch hard drives.	1
ASR1500PASBP	00735858183758	902485	SR1500 (1U) Hot-swap Passive SAS/SATA Backplane Kit - Compatible with either SAS or SATA 3.5-inch hard drives. Kit contents include the following: Hot-swap backplane with pass-through capabilities for either on-board SATA ports or a SAS/SATA add-in card, Enclosure management cable, three SAS/SATA cables (pre-kitted and length matched to the SATA ports on the server board)	1

1.4.2 Production SR1500 KDK Required Option #2 – Full-height Riser (choose one)

Product Code	UPC	MM	Description	Qty
ADWPCIEXPR	00735858164931	856373	SR1500/1550 (1U) Full-height PCI-Express* riser (one PCI-Express* x8 slot).	1
ADWPCIXR	00735858167895	865412	SR1500/1550 (1U) Full-height PCI-X riser (one PCI-X slot).	1

1.4.3 Production SR1500 KDK Required Option #3 – Control Panel (choose one)

Product Code	UPC	MM	Description	Qty
AXXRACKFP	00735858167932	861048	SR1500 Standard Control Panel (unit contains buttons, LEDs, front USB/video).	1
AXXLCPRACK	00735858167949	879580	SR1500 Intel® Local Control Panel (unit contains LCD, buttons, navigation buttons, USB).	1

1.4.4 Production SR1500 KDK Optional Accessories & Spares

Product Code	UPC	MM	Description	Qty
ADWBEZBLACK	00735858169110	865064	SR1400/1500 (1U) - Black Bezel for standard control panel - no cutout for Intel® Local Control Panel (LCD).	10
ADWLCDBEZEL	00735858164993	882435	SR1400/1500 (1U) - Black Bezel with cutout for Intel® Local Control Panel (LCD). **Note:** Requires Intel® Local Control Panel.	1
ASR1500EESPR	00735858183765	880900	SR1500 Electrical Spares Kit contains one each of the following: Bridge board, optical drive interposer board with insulator, control panel board, PCI-X and PCI Express* full-height risers, low-profile PCI Express* riser, optical drive cable, control panel cable, USB control panel cable, USB cable for floppy, I^{2}C cable, set of three ganged SATA cables.	1
ASR1500CHSPR	00735858183772	880907	SR1500 Mechanical spares kit contains one each of the following: PCI bracket assembly, fan mounting bracket, processor air duct, power supply air baffle, hard drive carrier, USB floppy mounting tray, optical drive tray, optical bay filler panel, control panel mounting tray, metal fillers for rear GCM and I/O module knockouts, metal rack handles (1 pair), top cover screw, thumbscrew for backplane,	1
ASR1500PS	00735858183789	880899	SR1500 spare 600-W power supply	1
FSR1500PKG	00735858183796	880898	SR1500 spare packaging - box and set of cushions. **Note:** Box has been designed to include space for the bezel and rails to be shipped along with the unit. This is different than the packaging that ships with the Intel® Server Chassis SR1500 building blocks or Integrated systems.	1

1.5 Production SR1550 (1U) Chassis Building Block SKUs -

Product Code	UPC	MM	Description	Qty
SR1550	00735858184823	881737	Intel® Server Chassis SR1550 (1U) KDK - building block. Kit Content Includes the Following: Base Chassis, Five system fans, One (of 2) 650-W Power Supply Module, Power Distribution board, hot-swap SAS/SATA backplane, Bridge Board, Air Duct and Baffles, USB Cable, slimline optical drive tray and interposer, Six 2.5-inch hard disk drive carriers, and low-profile PCI Express* riser card, rack handles. Power cord is not included. **NOTE:** This requires additional Midplane Kit, Full-height Riser Option, and Control Panel Option Kit.	1
SR1550NA	00735858183666	881752	Intel® Server Chassis SR1550 (1U) KDK - building block. Includes North American power cord. Kit Content Includes the Following: Base Chassis, Five system fans, One (of 2) 650-W Power Supply Module, Power Distribution board, hot-swap SAS/SATA backplane, Bridge Board, Air Duct and Baffles, USB Cable, slimline optical drive tray and interposer, Six 2.5-inch hard disk drive carriers, and low-profile PCI Express* riser card, rack handles. **NOTE:** This requires additional Midplane Kit, Full-height Riser Option, and Control Panel Option Kit.	1

1.5.1 Production SR1550 KDK Required Option #1 – Midplane (choose one):

Product Code	UPC	MM	Description	Qty
FALSASMP	00735858183819	880521	SR1550/SR2500 SAS Midplane with optional Intel® Integrated Server RAID. 8-port SAS controller with optional HW RAID upgrade. Note: RAID requires RAID activation key and RAID mini-DIMM (cache), each sold separately.	1
FALSASMP2	00735858198110	892611	SR1550/SR2500 SAS Midplane-2 with optional Intel® Integrated Server RAID (support RAID 6). 8-port SAS controller with optional HW RAID upgrade. Note: RAID requires new RAID activation key (MM# 891290) and new RAID mini-DIMM (cache), each sold separately (MM# 897046).	1
FALPASMP	00735858183826	901687	SR1550/SR2500 Passive Midplane - Compatible with either SAS or SATA hard drives. Kit contents include the following: Passive midplane with pass-through capabilities for either on-board SATA ports or a SAS/SATA add-in card, Enclosure management cable. Note: SATA drive cables are not included.	1

1.5.2　　Production SR1550 KDK Required Option #2 – Full-height Riser Card (choose one)

Product Code	UPC	MM	Description	Qty
ADWPCIEXPR	00735858164931	856373	SR1500/1550 (1U) Full-height PCI Express* riser (one PCI Express* x8 slot).	1
ADWPCIXR	00735858167895	865412	SR1500/1550 (1U) Full-height PCI-X riser (one PCI-X slot).	1

1.5.3　　Production SR1550 KDK Required Option #3 – Control Panel (choose one)

Product Code	UPC	MM	Description	Qty
ASR1550FP	00735858183833	881677	SR1550 Standard Control Panel (unit contains buttons, LEDs, front USB/video). Also includes one metal filler plate for mini control panel location. NOTE: Maximum drive count is 6 with this option.	1
ASR1550MINFP	00735858183840	881675	SR1550 Mini Control Panel (unit contains buttons, LEDs, front USB but no video). NOTE: Required for 8 drive configuration.	1
ASR1550LCP	00735858183857	881676	SR1550 Intel® Local Control Panel (unit contains LCD, buttons, navigation buttons, USB). NOTE: Maximum drive count is 6 with this option.	1

1.5.4　　Production SR1550 KDK Unique Optional Accessories & Spares

Product Code	UPC	MM	Description	Qty
ASR1550SATA	00735858184816	881673	SATA Cable kit for SR1550- when using passive midplane and KDK. Note: these cables are included in the passive midplane integrated system SKU.	5
ASR1550PS	00735858183864	881674	SR1550 650-W power supply module spare/upgrade - Required to provide redundant power (1+1).	1
FSR1550SAS	00735858183871	881733	SR1550 SAS/SATA hot-swap backplane board spare.	1
ASR1550BEZ	00735858183888	879406	SR1550 black bezel - For use with the standard control panel (ASR1550FP). Note: This is a new bezel for SR1550.	1
ASR1550MINBEZ	00735858183895	879211	SR1550 black bezel - For use with the mini control panel. Note: This is a new bezel for SR1550.	
ASR1550LCDBEZ	00735858183901	879209	SR1550 black bezel with cutout for Intel® Local Control Panel (ASR1550LCP). Note: This requires Intel® Local Control Panel. This is a new bezel for SR1550.	1
ASR1550EESPR	00735858183918	881678	SR1550 Electrical spares kit that contains one each of the following: Hot-swap backplane board, bridge board, mini front panel board, standard control panel board, one of each riser type (FH PCI Express*, FH PCI-X, LP PCI Express*), front panel cable, optical drive cable, USB cable, I^{2}C cable, SATA cable harness, SAS/SATA cable kit (8 total for add-in cards), 2 fans (one of each cable type).	1
ASR1550CHSPR	00735858183925	881679	SR1550 mechanical spares kit that contains one each of the following: PCI riser bracket assembly, processor fan duct, fan bracket, power supply air baffle, 2.5-inch hard drive carrier, HDD bay filler blank, CD-ROM plastic guide/latch and screws (3 each), CD-ROM filler panel, mini front panel filler, power supply filler, GCM NIC filler, I/O expansion module filler, set of rack ears with screws, set of chassis screws.	1

Product Code	UPC	MM	Description	Qty
FXX25HDDCAR	00735858183932	881681	SR1550 2.5-inch hard drive carrier blank – spare. Can also be used to add up to two extra hard drives (maximum capacity = 8) when the mini front panel is installed.	10
FSR1550PKG	00735858183949	881671	SR1550 - spare packaging - box and set of cushions. Box designed to include more space to allow the bezel and rails to be shipped along with the unit. Different than the packaging that ships with the Intel® Server Chassis SR1550 Building Blocks or Integrated Systems.	1
FSR1550PDB	00735858183956	881670	SR1550 - Spare power distribution board	1

1.6   Production SR2500 (2U) Chassis Building Block SKUs -

Product Code	UPC	MM	Description	Qty
SR2500	00735858184809	881105	Intel® Server Chassis SR2500 (2U) KDK - building block. Kit Content Includes the Following: Base Chassis, three LX system fans (2x 80mm & 1x 60mm), one (of 2) 750-W Power Supply Module, Power Distribution board, hot-swap SAS/SATA backplane, Bridge Board, Air Duct and Baffles, DH10-DB9 Serial Cable, slimline optical drive tray and interposer, five hard disk drive carriers, and low-profile PCI Express* riser card, rack handles. Power cord is not included. NOTE: This requires additional Midplane Kit, Full-height Riser Option, and Control Panel Option Kit.	1
SR2500NA	00735858183673	881461	Intel® Server Chassis SR2500 (2U) KDK - building block. Includes North American power cord. Kit Content Includes the Following: Base Chassis, 3 LX system fans (2x 80mm & 1x 60mm), 1 (of 2) 750-W Power Supply Module, Power Distribution board, hot-swap SAS/SATA backplane, Bridge Board, Air Duct and Baffles, DH10-DB9 Serial Cable, slimline optical drive tray and interposer, 5 hard disk drive carriers, and low-profile PCI Express* riser card, rack handles. NOTE: This requires additional Midplane Kit, Full-height Riser Option, and Control Panel Option Kit.	1

1.6.1 Production SR2500 KDK Required Option #1 – Midplane (choose one):

Product Code	UPC	MM	Description	Qty
FALSASMP	00735858183819	880521	SR2500 (2U) SAS Midplane with optional Intel® Integrated Server RAID. 8-port SAS controller with optional HW RAID upgrade. Note: RAID requires RAID activation key and RAID DIMM (cache), each sold separately.	1
FALSASMP2	00735858198110	892611	SR1550/SR2500 SAS Midplane-2 with optional Intel® Integrated Server RAID (support RAID 6). 8-port SAS controller with optional HW RAID upgrade. Note: RAID requires new RAID activation key (MM# 891290) and new RAID mini-DIMM (cache), each sold separately (MM# 897046).	1
FALPASMP	00735858183826	880520	SR2500 (2U) Passive Midplane - Compatible with either SAS or SATA hard drives. Kit contents include the following: Passive midplane with pass-through capabilities for either on-board SATA ports or a SAS/SATA add-in card, Enclosure management (I^2C) cable. Note: No SATA cables are included.	1

1.6.2 Production SR2500 KDK Required Option #2 – Full-height Riser Card (choose one)

Product Code	UPC	MM	Description	Qty
ASR2500FHR	00735858183963	880515	SR2500 (2U) Full-height PCI Express* riser card (two PCI Express* slots, one PCI-X slot).	1
ADRPCIXRIS	00735858167918	863135	SR2500 (2U) Full-height PCI-X riser card (three PCI-X slots).	1
ADRACTRIS	00735858165037	856546	SR2500 (2U) Full-height PCI-X "active" high-performance riser card (three PCI-X slots).	1

1.6.3 Production SR2500 KDK Required Option #3 – Control Panel (choose one)

Product Code	UPC	MM	Description	Qty
ASR2500FP	00735858183970	881452	SR2500 Standard Control Panel (unit contains buttons, LEDs, and front USB/video).	1
ASR2500LCP	00735858183987	881264	SR2500 Intel® Local Control Panel (unit contains LCD, buttons, navigation buttons, and USB).	1

1.6.4 Production SR2500 KDK Unique Optional Accessories & Spares

Product Code	UPC	MM	Description	Qty
ASR2500SATA	00735858183994	880283	SR2500- Set of five length-matched individual SATA cables bundled together. This kit is designed to be used to cable the server board SATA ports to the passive Midplane. Note: This cable kit is already included with the SR2500ALBRP SKU. (5 Pack).	5
ASR2500SAS1	00735858184007	880280	SR2500- SAS PCI Cable Kit (set of two different ganged cables). Supports cabling from a SAS add in-card in the Full-height Slot to the passive Midplane only (5 Pack).	5

Product Code	UPC	MM	Description	Qty
ASR2500SAS2	00735858184014	881261	SR2500- SAS PCI Cable Kit - Supports cabling from an add-in PCI card with SFF-8484 ganged connector in the full-height slot to the passive Midplane only. This cable is recommended for use with the Intel® RAID controller SRCSAS18E (5 Pack).	5
FSR2500LXFAN	00735858184021	880525	SR2500 LX hot-swap redundant fan spare kit - Contains 3 fans (1 x 60mm, 2 x 80mm). Notes: Not compatible with BRP SKU fans. This SKU can also be used to add second bank of fans to upgrade the KDK SKU to achieve redundant cooling.	1
FSR2500BRPFAN	00735858184038	882057	SR2500 BRP Non-redundant fan spare kit - Contains two fans, one of each type (1 x 60mm, 1 x 80mm) - Not compatible with SR2500 LX SKU fans.	1
ASRLXFANS	00735858184045	881263	BRP to LX Fan upgrade kit. This is a complete set of redundant/hot-swap fans (six total) along with hot-swap fan bracket and cabling. The upgrade requires removing the BRP fans and fan brackets and replacing the entire assembly. BRP and LX fans are not interchangeable.	1
ASR2500PS	00735858184052	881262	SR2500 750-W power supply module spare/upgrade. This is required to provide redundant power (1+1).	1
ADRBEZBLACK	00735858165129	857675	SR2400/SR2500 black bezel for use with standard control panel (no LCP cutout).	1
ADRLCDBEZEL	00735858165082	857586	SR2400/SR2500 (2U) black bezel with cutout for Intel® Local Control Panel (LCD). Note: This requires Intel® Local Control Panel.	1
ADRTAPEKIT	00735858165075	882437	SR2400/SR2500 SCSI tape mounting kit that contains tape tray, drive power cable (which connects to backplane) and terminated SCSI cable. Notes: This kit requires a third-party SCSI PCI add-in card with SR2500. Note: Either this option or the sixth SAS/SATA drive kit can be installed (both cannot be supported simultaneously).	1
ASR2500SATAPE	00735858184069	881260	SR2500 SAS/SATA tape drive mounting kit that contains tape drive mounting tray, one SATA/SAS cable and one power cable for tape drive (which connects to backplane). Note: Either this option or the sixth SAS/SATA drive kit can be installed (both cannot be supported simultaneously).	1
ASR2500SIXDRV	00735858184076	901833	SR2500 Sixth SAS / SATA drive kit that contains one 3.5–inch drive carrier, backplane board insert, and cables (one power and one SAS/SATA) to enable a sixth hot-swap SAS or SATA drive. Note: Either this option or a Tape drive kit can be installed (both cannot be supported simultaneously).	1
ASR2500EESPR	00735858184083	881265	SR2500 Electrical spares kit that contains one each of the following: Hot-swap backplane board, sixth drive backplane board and cables, SAS midplane, passive midplane, bridge board, front control panel board, optical drive interposer board, PCI-X active riser, PCI-X passive riser, PCI Express* FH riser, PCI Express* low-profile riser, optical drive (IDE) cable, redundant fan cable bracket assembly, USB floppy cable, serial cable, I²C cable, SATA/SAS cables, tape drive power cable, 80-mm BRP fan, 80-mm LX fan, 60-mm BRP fan, 60-mm LX fan, LCP interposer board.	1
ASR2500CHSPR	00735858184090	880281	SR2500 Mechanical spares kit that contains spare PCI bracket assembly, BRP fan mounting structure, LX fan mounting structure, power supply air baffle, CPU duct assembly, hard drive carrier, hard drive carrier blank (for sixth drive/tape bay), sixth drive filler panel, metal fillers for GCM and I/O module knockouts, optical drive tray, optical drive bay filler panel, USB floppy adapter tray for optical bay, HDD to USB floppy adapter tray, tape drive mounting	1

Product Code	UPC	MM	Description	Qty
			tray, standard control panel mounting tray, power supply blank filler, metal handles (one pair), top cover screw, midplane thumbscrew.	
FSR2500PKG	00735858184106	881106	SR2500 spare packaging box and set of cushions. Box is designed to include more space to allow the bezel and rails to be shipped along with the unit. This is different then the packaging that ships with the Intel® Server Chassis SR2500 Building Blocks or Integrated Systems.	1
FSR2500LPR	00735858184113	880516	SR2500 Low-profile Riser Spare, which features two PCI Express* slot and chassis intrusion switch. Note: This is a spare only and is already included with all chassis and systems configurations.	1
FSR2500PDB	00735858184120	881107	SR2500 Spare power distribution board assembly.	1
FSR2500SASBP	00735858189590	885446	SR2500 Spare hot-swap SAS/SATA backplane board only.	1

1.7   Production New Common Accessories and Spares

New spares and accessories used in more than one S5000PALR chassis configuartion:

Product Code	UPC	MM	Description	Qty
FPWRCABLENA	00735858181129	879287	North American power cord for SR1500, SR1550 and SR2500, 59 inches long, rated at 13 A and 105°C. RoHS compliant. This is the same cord included in the "NA" SKUs.	1
AXXUSBFLOPPY	00735858183260	881267	Internal slimline floppy kit - Works in SR2500 or SR1500 only. Includes USB cable, slim floppy mounting tray for use in an optical bay, hard drive to floppy converter tray, slimline USB floppy drive.	1
AXXDVDROM	00735858184717	881097	Slimline DVD-ROM, single pack with mounting screws.	1
AALIO	00735858184724	881739	S5000PALR/S5000PALR I/O shield/gasket kit for use in third-party chassis only. Note this is not included with either the boxed or OEM board. (MOQ = 50)	50
FALBRIDGE	00735858184731	880519	Spare bridge board for use with SR1500/SR15550/ SR2550 chassis. This connects server board to Midplane (in SR1550/2500) or backplane in SR1500. (MOQ = 30)	30
AXXBASRAIL13	00735858194969	899080	SR1500/1550 Basic slide rail kit. Does not support Cable Management Arm.	
FXX1UFAN	00735858184243	881101	SR1500/SR1550 1U fan spare that contains two 56-mm fans, one with short cable, and one with long cable.	1
ASR15XXLPRIS	00735858184236	880522	SR1500/SR1550 1U low profile riser card spare, which provides one x8 PCI Express* slot with chassis intrusion switch.	1
AXXRAK18E	00735858180443	877661	Intel® RAID Activation Key for SAS Midplane in SR1550/SR2500. This enables full intelligent SAS RAID solution engineered around the Intel® 80333 I/O Processor @ 500MHz. (MOQ = 5). Note: Enabling RAID capability also requires mini DIMM – Intel AXXMINIDIMM MM# 881258 (or qualified third-party mini DIMM).	5
AXXRAKSAS2	00735858194730	891290	Intel® RAID Activation Key for SAS Midplane 2 (MM# 892611) in SR1550/SR2500. (MOQ = 5). Note: Enabling RAID capability also requires mini DIMM – Intel AXXMINIDIMM512 MM# 897046 (or qualified third-party mini DIMM).	5
AXXRSBBU3	00735858181853	883471	Intel® RAID Smart Battery Backup module for use with Intel® Integrated Server RAID (requires AXXRAK18E plus	5

Product Code	UPC	MM	Description	Qty
			mini DIMM) in SR1550/SR2550, provides up to 72 hours of cache memory retention when used with AXXMINIDIMM. (MOQ = 5)	
AXXMINIDIMM	00735858184762	881258	128 MB Mini DIMM registered DDR2 for RAID cache in SR2500/SR1550. (MOQ = 5). Note: Enabling RAID capability also requires Intel® RAID Activation Key – AXXRAK18E.	5
AXXMINIDIMM512	00735858202015	897046	512 MB Mini DIMM registered DDR2 for RAID (MM# 892611) cache in SR2500/SR1550. (MOQ = 5). Note: Enabling RAID capability also requires Intel® RAID Activation Key – AXXRAKSAS2 (MM# 891290).	5
AXXGBIOMOD	00735858184779	880518	Intel® Server Board S5000PALR Dual Gigabit Ethernet I/O Expansion Module	1
AXXSASIOMOD	00735858184786	902300	Intel® Server Board S5000PALR External 4-port SAS I/O Expansion Module	1
AXXIBIOMOD	00735858185219	881891	Intel® Server Board S5000PALR InfiniBand* I/O Expansion Module.	1
AXXRMM2	00735858192408	894383	Intel® Remote Management Module 2 single pack - Provides remote access and management control enabling drive redirection and KVM over IP via dedicated NIC for concurrent sessions to facilitate remote operation and repair.	1
AXXRAKSW5	00735858181860	878958	Intel® RAID Activation Key AXXRAKSW5 – Intel® Embedded Server RAID Technology II option - Adds optional driver-based RAID 5 capability to on-board SATA ports or SAS backplane in SR1500 chassis only. Note: This is not compatible with SAS midplane on SR1550/SR2500.	5

1.8 Production Re-use Common Accessories & Spares

Existing spares and accessories used in more than one S5000PALR chassis configuration:

Product Code	UPC	MM	Description	Qty
FXX10DVCARBLK	00735858181938	880265	Black 3.5-inch hot-swap drive carrier spare for use with SR1500/SR2500.	10
AXXSCD	00735858164269	885100	Slimline CD drive, bare drive plus 4 mounting screws.	1
AXXDVDCDR	00735858164962	880559	DVD/CDR slimline drive. Supports DVD/CD and CD write, bare drive plus 4 mounting screws.	1
AXXHERAIL	00735858164948	881328	SR1500/SR1550/SR2500 Tool-less, full extension sliding rail kit. This is best used with racks featuring square or round mounting holes. NOTE: If cable management arm is required, please order AXXRACKCARM MM# 881329.	1
AXXRACKCARM	00735858167970	881329	SR1500/SR1550/SR2500 Cable management arm for use with AXXHERAIL MM# 881328	1
AXXHERAIL2	735858206549	901082	Full extending Rail Kit, also compatible with SR1500/2500 chassis (new and improved design replacing AXXHERAIL. Existing AXXHERAIL may still be used with 16xx/26xx chassis)	1
AXXRACKARM2	735858206563	901084	Cable Management Arm (Must be used with AXXHERAIL2, not compatible with AXXHERAIL)	1

Product Code	UPC	MM	Description	Qty
AXXBRACKETS	00735858168618	863262	Fixed Mount Brackets. Set of brackets to hard mount chassis to rack. Supports 4 post mounting and 2 post center mounting.	1
ADWPCIEXPR	00735858164931	856373	SR1500/SR1550 (1U) Full-height PCI Express* riser (one PCI-Express* x8 slot). Note: This riser is included in the integrated systems.	1
ADWPCIXR	00735858167895	865412	SR1500/SR1550 (1U) Full-height PCI-X riser (one PCI-X slot).	1
AXXRJ45DB92	735858155212	881944	Serial cable adapter kit that contains two serial cable converter dongles (RJ45 to DB9) one for DSD and one for DCD (Modem). The kit also includes one serial ribbon cable for cabling second serial port from the server board. Note: This ribbon cable is not used with the Intel® Server Chassis SR1500/SR1550/SR2500.	1

2. Intel® RAID Controller Options

In addition to the Intel® Integrated Server RAID option offered in the SR1550 and SR2500 systems, the following Intel® RAID Controllers are validated with the S5000PALR/S5000PALR product family:

Product Code	MM	Description	Qty
SRCS28X	866296	Intel® RAID Controller SRCS28X - 64/133 MHz PCI-X, 8 port SATA RAID Controller - Intel® 80331 IOP @ 250 MHz, 128 MB embedded memory. Compatible with Battery SKU: AXXRIBBU1	5
SRCS16	858577	Intel® RAID Controller SRCS16 - 64/66 MHz PCI, 6 port SATA RAID Controller - Intel® 80302 IOP @ 100 MHz, 64MB embedded memory	5
SRCSAS18E	874656	Intel® RAID Controller SRCSAS18E - SAS RAID controller. PCI Express* x8, 8P SAS RAID Controller - Intel® 80333 IOP @ 500 MHz, Supports 128 MB-1GB DDR2 or AXXRPCM2	5
SRCSAS144E	882019	Intel® RAID Controller SRCSAS144E - SAS RAID controller. PCI Express*, 4-port internal, 4P external with 128 MB embedded cache memory.	5

Note: To use these (or any other third-party SAS or SATA RAID card) with an Intel® Server Chassis, the passive version of the midplane or backplane must be ordered.

3.   VMware vSphere* and vCenter* Server SKUs

The following VMware vSphere SKUs are offered when purchasing a qualifying Intel® Server Board or Intel® Server System. Each SKU contains a software product activation code for user to enter to download software and install. As directed on the certificate, the end user must register the product activation code with VMware at http://www.vmware.com/code/intel within 30 days to access VMware Software, Support and Subscription Services.

VMware vSphere* and vCenter* Server SKUs

- Essentials

    This license activation code gives the user VMware vSphere* 4 Essentials Bundle for 3 hosts (Max 2 processors per host and 6 cores per processor), with 1 year VMware Subscription.

- Essentials Plus

    This license activation code gives the user VMware vSphere* 4 Essentials Plus Bundle for 3 hosts (Max 2 processors per host and 6 cores per processor), with 1 year VMware Gold Support and Subscription.

- Standard

    This license activation code gives the user VMware vSphere* 4 Standard for 1 Processor (Max 6 cores per CPU), with 1 year VMware Gold Support and Subscription.

- Advanced

    This license activation code gives the user VMware vSphere* 4 Advanced for 1 Processor (Max 12 cores per CPU), with 1 year VMware Gold Support and Subscription.

- Enterprise Plus

    This license activation code gives the user VMware vSphere* 4 Enterprise Plus for 1 Processor (Max 12 cores per CPU), with 1 year VMware Gold Support and Subscription.

- VMware vCenter* Server Standard for vSphere*

    This license activation code gives the user VMware vCenter* Server 4 Standard for vSphere* (Includes Orchestrator and Linked Mode), with 1 year VMware Gold Support and Subscription.

VMware vSphere* and VMware vCenter* Standard – Order Codes:

Product Code	UPC	MM	Description	MOQ
VMW4ESS	7 35858 21272 4	904791	Software license activation code certificate for VMware vSphere* 4 Essentials Bundle for 3 hosts (Max 2 CPUs per host and 6 cores per CPU) with 1 year VMware Subscription.	1
VMW4ESSPLUS	7 35858 21273 1	904792	Software license activation code certificate for VMware vSphere* 4 Essentials Plus Bundle for 3 hosts (Max 2 CPUs per host and 6 cores per CPU) with 1 year VMware Gold Support and Subscription.	1

VMW4STD	7 35858 21274 8	904793	Software license activation code certificate for VMware vSphere* 4 Standard for 1 Processor (Max 6 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMW4ADV	7 35858 21275 5	904797	Software license activation code certificate for VMware vSphere* 4 Advanced for 1 Processor (Max 12 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMW4ENTPLUS	7 35858 21276 2	904800	Software license activation code certificate for VMware vSphere* 4 Enterprise Plus for 1 Processor (Max 12 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMWVCSTD	7 35858 21277 9	904801	Software license activation code certificate for VMware vCenter* Server 4 Standard (includes Orchestrator and Linked Mode) with 1 year VMware Gold Support and Subscription.	1

4. Appendix 1: Boxed Processor Support

The Intel® Server Board S5000PAL supports the Intel® Xeon® processor 5000 sequence (5000 & 5100 series) and the Intel® Xeon® processors (5300 series).

The following boxed processors are designed and validated for use with the SR2500 (2U) and SR1500/SR1550 (1U) chassis:

Heatsink Type	2U Passive Heatsink	1U Heatsink
Product Code *(Intel® Xeon® Processor 5000 series)*	BX80555xxxxP	BX80555xxxxA
Product Code *(Intel® Xeon® Processor 5100 series)*	BX80556xxxxP	BX80556xxxxA
Product Code *(Intel® Xeon® Processor 5200 series)*	BX80573xxxxP	BX80573xxxxA
Product Code *(Intel® Xeon® Processor 5300 series)*	BX80563xxxxxP	BX80563xxxxxA
Product Code *(Intel® Xeon® Processor 5400 series)*	BX80574xxxxP	BX80574xxxxA
Notes	For use in 2U rack mount chassis which provide ducted airflow to the heatsink.	The fan must be removed prior to use in a 1U chassis.
Compatible Intel® Server Chassis	SR2500	SR1500 / SR1550

Note: "xxxx" in product code represents the processor number, for example 5150 is the 2.67 GHz 5100 series processor, E5320 is the 1.86 GHz 5300 series processor.

For more information on supported processors, see http://support.intel.com/support/motherboards/server/s5000pal/compat.htm.

5. Appendix 2: Order Code Summary – Integrated Systems

S5000PAL/SR2500 1U Integrated Server Systems Options

Step 1 – Pick an Integrated Server System (Choose one)

Integrated System with Passive Midplane (BRP)

1) SR2500ALBRP
   - Server Board S5000PAL and Server Chassis SR2500 with non redundant fan kit
   - Passive midplane, full-height PCI-e/PCI-X riser, low-profile PCI-e riser, standard control panel
2) SR2500ALBRPNA
   - As above with North America power cord

Integrated System with SAS Midplane (LX)

1) SR2500ALLX
   - Server Board S5000PAL and Server Chassis SR2500 and redundant, hot swap fans
   - SAS midplane with optional Intel® Integrated Server RAID, full-height PCI-e/PCI-X riser, low-profile PCI-e riser, standard control panel
2) SR2500ALLXNA
   - As above with North America power cord

Step 2 – Pick Optional Accessories

Rack Mounting Options

1) AXXBASICRAIL
   - Basic slide rail kit
2) AXXHERAIL
   - Tool less slide rail kit
3) AXXRACKCARM
   - Cable management arm
4) AXXBRACKETS
   - Rack mount bracket kit

SR2500 Front Bezel

1) ADRLCDBEZEL
   - Bezel supporting Intel Local Control Panel (ASR2500LCP)
2) ADRBEZBLACK
   - Bezel for use with Standard Control Panel

Slim-Line Optical or USB Floppy

1) AXXSCD
   - Slim-line CD-ROM drive
2) AXXDVDROM
   - Slim-line DVD-ROM drive
3) AXXDVDCDR
   - Slim-line DVD/CD and CD Writer
4) AXXUSBFLOPPY
   - Slim USB floppy drive

6th Drive/Tape Bay Option Kits

1) ASR2500SATAPE
   - SAS/SATA tape drive mounting kit
2) ADRTAPEKIT
   - SCSI tape mounting kit
3) ASR2500SIXDRV
   - 6th SAS/SATA drive kit

Remote Mgmt. Module

AXXRMM
   - Intel® Remote Management Module
   - Enables KVM and advanced, remote manageability functionality

Intel I/O Expansion Modules

1) AXXGBIOMOD
   - Dual Gb Ethernet
2) AXXSASIOMOD
   - 4 port external SAS
3) AXXIBIOMOD
   - Single port InfiniBand*

Step 3– Optional RAID (SR2500ALLX Only)

SR2500 RAID Activation

1) AXXRAK18E
   - Intel® RAID Activation Key for SAS Midplane
2) AXXMINIDIMM
   - 128MB mini-DIMM for RAID cache (requires AXXRAK18E)

Optional RAID Battery Back-up

1) AXXRSBBU3
   - Intel® RAID Smart Battery Backup module for use with Intel® Integrated Server RAID

Spares – For Field Replacements

SR2500 Spares & Maintenance Kits

1) ASR2500CHSPR
   - Chassis mechanical parts preventive maintenance kit
2) ASR2500EESPR
   - Electronic parts & cables preventive maintenance kit

Individual Spares

1) ASR2500PS
   - Spare 750W power supply module
2) FSR2500PKG
   - Spare packaging
3) FSR2500LXFAN
   - Hot swap fan spare/upgrade kit
4) FSR2500LPR
   - Spare low profile PCI-e riser

S5000PAL/SR1500 1U Integrated Server Systems Options

Step 1 – Pick an Integrated Server System (Choose one)

Integrated System with Passive Backplane

1) SR1500AL
   - Server Board S5000PAL and Server Chassis SR1500
   - Passive backplane, full-height PCI-e riser, low-profile PCI-e riser, standard control panel
2) SR1500ALNA
   - As above with North America power cord

Integrated System with SAS Backplane

1) SR1500ALSAS
   - Server Board S5000PAL and Server Chassis SR1500
   - SAS backplane, full-height PCI-e riser, low-profile PCI-e riser, standard control panel
2) SR1500ALSASNA
   - As above with North America power cord

Step 2 – Pick Optional Accessories

Rack Mounting Options

1) AXXBASICRAIL
   - Basic slide rail kit
2) AXXHERAIL
   - Tool less slide rail kit
3) AXXRACKCARM
   - Cable management arm
4) AXXBRACKETS
   - Rack mount bracket kit

SR1500 Front Bezel

1) ADWLCDBEZEL
   - Bezel supporting Local Control Panel (AXXLCPRACK)
2) ADWBEZBLACK
   - Bezel for Standard Control Panel

Slim-Line Optical or USB Floppy

1) AXXSCD
   - Slim-line CD-ROM drive
2) AXXDVDROM
   - Slim-line DVD-ROM drive
3) AXXDVDCDR
   - Slim-line DVD/CD and CD Writer
4) AXXUSBFLOPPY
   - Slim USB floppy drive

Remote Mgmt. Module

AXXRMM
   - Intel® Remote Management Module
   - Enables KVM and advanced, remote manageability functionality

Intel I/O Expansion Modules

1) AXXGBIOMOD
   - Dual Gb Ethernet
2) AXXSASIOMOD
   - 4 port external SAS
3) AXXIBIOMOD
   - Single port InfiniBand*

Spares – For Field Replacements

SR1500 Spares & Maintenance Kits

1) ASR1500CHSPR
   - SR1500 Chassis Preventive Maintenance Kit
2) ASR1500EESPR
   - SR1500 Electronic parts & cables Preventive Maintenance Kit

Individual Spares

1) ASR1500PS
   - SR1500 power supply spare
2) FSR1500PKG
   - Spare SR1500 packaging
3) FXX1UFAN
   - Spare SR1500 fan kit
4) ASR15XXLPRIS
   - Spare low profile PCI-e riser

S5000PAL/SR1550 1U Integrated Server Systems Options

Step 1 – Pick an Integrated Server System (Choose one)

Integrated System with Passive Midplane

1) SR1550AL
- Server Board S5000PAL and Server Chassis SR1550
- Passive midplane, full-height PCI-e riser, low-profile PCI-e riser, mini control panel
2) SR1550ALNA
- As above with North America power cord

Integrated System with SAS Midplane

1) SR1550ALSAS
- Server Board S5000PAL and Server Chassis SR1550
- SAS midplane with optional Intel® Integrated Server RAID, full-height PCI-e riser, low-profile PCI-e riser, mini control panel
2) SR1550ALSASNA
- As above with North America power cord

Step 2 – Pick Optional Accessories

Rack Mounting Options

1) AXXBASICRAIL
- Basic slide rail kit
2) AXXHERAIL
- Tool less slide rail kit
3) AXXRACKCARM
- Cable management arm
4) AXXBRACKETS
- Rack mount bracket kit

SR1550 Front Bezel

1) ASR1550LCDBEZ
- Bezel supporting Local Control Panel (ASR1550LCP)
2) ASR1550BEZ
- Bezel for standard control panel
3) ASR1550MINBEZ
- Bezel for mini control panel

Slim-Line Optical or USB Floppy

1) AXXSCD
- Slim-line CD-ROM drive
2) AXXDVDROM
- Slim-line DVD-ROM drive
3) AXXDVDCDR
- Slim-line DVD/CD and CD Writer

Remote Mgmt. Module

AXXRMM
- Intel® Remote Management Module
- Enables KVM and advanced, remote manageability functionality

Intel I/O Expansion Modules

1) AXXGBIOMOD
- Dual Gb Ethernet
2) AXXSASIOMOD
- 4 port external SAS
3) AXXIBIOMOD
- Single port InfiniBand*

Step 3– Optional RAID (SR1550ALSAS Only)

SR1550 RAID Activation

1) AXXRAK18E
- Intel® RAID Activation Key for SAS Midplane
2) AXXMINIDIMM
- 128MB mini-DIMM for RAID cache (requires AXXRAK18E)

Optional RAID Battery Back-up

1) AXXRSBBU3
- Intel® RAID Smart Battery Backup module for use with Intel® Integrated Server RAID

Spares – For Field Replacements

SR1550 Spares & Maintenance Kits

1) ASR1550CHSPR
- SR1550 Chassis Preventive Maintenance Kit
2) ASR1550EESPR
- SR1550 Electronic parts & cables Preventive Maintenance Kit

Individual Spares

1) ASR1550PS
- 650W power supply module
2) FSR1550PKG
- Spare SR1550 packaging
3) FXX1UFAN
- Spare 1U fan kit
4) ASR15XXLPRIS
- Spare low profile PCI-e riser

6.   Appendix 3: Order Code Summary – Building Blocks

SR1500 1U Chassis Building Block Option

Step 1 – Pick Required Items (Choose one item from each box)

Server Board S5000PAL	Server Chassis SR1500	Hot Swap Backplane	Riser Options- Adaptive Slot	Front Control Panel
1) S5000PAL - Boxed board (5000P chipset) 2) BB5000PAL - OEM board (5000P chipset) 3) BB5000XAL - OEM board (5000X chipset)	1) SR1500 - One low-profile PCI-e riser 2) SR1500NA - One low-profile PCI-e riser & North America power cord	1) ASR1500SASBP - SAS hot-swap backplane 2) ASR1500PASBP - Passive hot-swap backplane	1) ADWPCIEXPR - 1U PCI Express riser 2) ADWPCIXRIS - 1U PCI-X riser	1) AXXRACKFP - Front Control Panel kit 2) AXXLCPRACK - Intel Local Control Panel

Step 2 – Pick Optional Accessories

Rack Mounting Options	SR1500 Front Bezel	Slim-Line Optical or USB Floppy	Remote Mgmt. Module	Intel I/O Expansion Modules
1) AXXBASICRAIL - Basic slide rail kit 2) AXXHERAIL - Tool less slide rail kit 3) AXXRACKCARM - Cable management arm 4) AXXBRACKETS - Rack mount bracket kit	1) ADWLCDBEZEL - Bezel supporting Local Control Panel(AXXLCPRACK) 2) ADWBEZBLACK - Bezel for Standard Control Panel	1) AXXSCD - Slim-line CD-ROM drive 2) AXXDVDROM - Slim-line DVD-ROM drive 3) AXXDVDCDR - Slim-line DVD/CD and CD Writer 4) AXXUSBFLOPPY - Slim USB floppy drive	AXXRMM - Intel® Remote Management Module - Enables KVM and advanced, remote manageability functionality	1) AXXGBIOMOD - Dual Gb Ethernet 2) AXXSASIOMOD - 4 port external SAS 3) AXXIBIOMOD - Single port InfiniBand*

Spares – For Field Replacements

SR1500 Spares & Maintenance Kits	Individual Spares
1) ASR1500CHSPR - SR1500 Chassis Preventive Maintenance Kit 2) ASR1500EESPR - SR1500 Electronic parts & cables Preventive Maintenance Kit	1) ASR1500PS - SR1500 power supply spare 2) FSR1500PKG - Spare SR1500 packaging 3) FXX1UFAN - Spare SR1500 fan kit 4) ASR15XXLPRIS - Spare low profile PCI-e riser

SR2500 2U Chassis Building Block Option

Step 1 – Pick Required Items (Choose one item from each box)

Server Board S5000PAL	Server Chassis SR2500	Midplane	Riser Option- Adaptive Slot	Front Control Panel
1) S5000PAL - Boxed board (5000P chipset) 2) BB5000PAL - OEM board (5000P chipset) 3) BB5000XAL - OEM board (5000X chipset)	1) SR2500 - One low-profile PCI-e riser 2) SR2500NA - One low-profile PCI-e riser & North America power cord	1) FALSASMP - SAS midplane with optional Intel® Integrated Server RAID 2) FALPASMP - Passive midplane	1) ASR2500FHR - 2U PCIe / PCI-X riser 2) ADRPCIXRIS - 2U PCI-X riser (passive) 3) ADRACTRIS - 2U Active PCI-X riser	1) ASR2500FP - Front Control Panel kit 2) ASR2500LCP - Intel Local Control Panel

Step 2 – Pick Optional Accessories

Rack Mounting Options	SR2500 Front Bezel	Slim-Line Optical or USB Floppy	6th Drive/Tape Bay Option Kits	Remote Mgmt. Module	Intel I/O Expansion Modules
1) AXXBASICRAIL - Basic slide rail kit 2) AXXHERAIL - Tool less slide rail kit 3) AXXRACKCARM - Cable management arm 4) AXXBRACKETS - Rack mount bracket kit	1) ADRLCDBEZEL - Bezel supporting Intel Local Control Panel (ASR2500LCP) 2) ADRBEZBLACK - Bezel for use with Standard Control Panel	1) AXXSCD - Slim-line CD-ROM drive 2) AXXDVDROM - Slim-line DVD-ROM drive 3) AXXDVDCDR - Slim-line DVD/CD and CD Writer 4) AXXUSBFLOPPY - Slim USB floppy drive	1) ASR2500SATAPE - SAS/SATA tape drive mounting kit 2) ADRTAPEKIT - SCSI tape mounting kit 3) ASR2500SIXDRV - 6th SAS/SATA drive kit	AXXRMM - Intel® Remote Management Module - Enables KVM and advanced, remote manageability functionality	1) AXXGBIOMOD - Dual Gb Ethernet 2) AXXSASIOMOD - 4 port external SAS 3) AXXIBIOMOD - Single port InfiniBand*

Step 3– Optional RAID (Requires FALSASMP)

SR2500 RAID Activation	Optional RAID Battery Back-up
1) AXXRAK18E - Intel® RAID Activation Key for SAS Midplane 2) AXXMINIDIMM - 128MB mini-DIMM for RAID cache (requires AXXRAK18E)	1) AXXRSBBU3 - Intel® RAID Smart Battery Backup module for use with Intel® Integrated Server RAID

Spares – For Field Replacements

SR2500 Spares & Maintenance Kits	Individual Spares
1) ASR2500CHSPR - Chassis mechanical parts preventive maintenance kit 2) ASR2500EESPR - Electronic parts & cables preventive maintenance kit	1) ASR2500PS - Spare 750W power supply module 2) FSR2500PKG - Spare packaging 3) FSR2500LXFAN - Hot swap fan spare/upgrade kit 4) FSR2500LPR - Spare low profile PCI-e riser

SR1550 1U Chassis Building Block Option

Step 1 – Pick Required Items (Choose one item from each box)

Server Board S5000PAL
1) S5000PAL
 - Boxed board (5000P chipset)
2) BB5000PAL
 - OEM board (5000P chipset)
3) BB5000XAL
 - OEM board (5000X chipset)

Server Chassis SR1550
1) SR1550
 - One low-profile PCI-e riser
2) SR1550NA
 - One low-profile PCI-e riser & North America power cord

Midplane
1) FALSASMP
 - SAS midplane with optional Intel® Integrated Server RAID
2) FALPASMP
 - Passive midplane

Riser Option- Adaptive Slot
1) ADWPCIEXPR
 - 1U PCI Express riser
2) ADWPCIXRIS
 - 1U PCI-X riser

Front Control Panel
1) ASR1550FP
 - Front control panel
2) ASR1550MINFP
 - Mini control panel
3) ASR1550LCP
 - Intel Local Control Panel

Step 2 – Pick Optional Accessories

Rack Mounting Options
1) AXXBASICRAIL
 - Basic slide rail kit
2) AXXHERAIL
 - Tool less slide rail kit
3) AXXRACKCARM
 - Cable management arm
4) AXXBRACKETS
 - Rack mount bracket kit

SR1550 Front Bezel
1) ASR1550LCDBEZ
 - Bezel supporting Local Control Panel (ASR1550LCP)
2) ASR1550BEZ
 - Bezel for standard control panel
3) ASR1550MINBEZ
 - Bezel for mini control panel

Slim-Line Optical or USB Floppy
1) AXXSCD
 - Slim-line CD-ROM drive
2) AXXDVDROM
 - Slim-line DVD-ROM drive
3) AXXDVDCDR
 - Slim-line DVD/CD and CD Writer

Remote Mgmt. Module
AXXRMM
 - Intel® Remote Management Module
 - Enables KVM and advanced, remote manageability functionality

Intel I/O Expansion Modules
1) AXXGBIOMOD
 - Dual Gb Ethernet
2) AXXSASIOMOD
 - 4 port external SAS
3) AXXIBIOMOD
 - Single port InfiniBand*

Step 3– Optional RAID (Requires FALSASMP)

SR1550 RAID Activation
1) AXXRAK18E
 - Intel® RAID Activation Key for SAS Midplane
2) AXXMINIDIMM
 - 128MB mini-DIMM for RAID cache (requires AXXRAK18E)

Optional RAID Battery Back-up
1) AXXRSBBU3
 - Intel® RAID Smart Battery Backup module for use with Intel® Integrated Server RAID

Spares – For Field Replacements

SR1550 Spares & Maintenance Kits
1) ASR1550CHSPR
 - SR1550 Chassis Preventive Maintenance Kit
2) ASR1550EESPR
 - SR1550 Electronic parts & cables Preventive Maintenance Kit

Individual Spares
1) ASR1550PS
 - 650W power supply module
2) FSR1550PKG
 - Spare SR1550 packaging
3) FXX1UFAN
 - Spare 1U fan kit
4) ASR15XXLPRIS
 - Spare low profile PCI-e riser