

Intel® Server Board S5400SF

Intel® Server System SR1560SF

Spares/Parts List and Configuration Guide

A reference guide to assist customers in ordering the necessary components to configure the Intel® Server Board S5400SF and the 1U Intel® Server System SR1560SF.

Subject to Change



Revision 1.9

April, 2010

Enterprise Platforms and Services Marketing

Revision History

May '07 – rev 0.5: Initial release

July '07 – rev 0.8 Beta release

August '07 – rev 0.85 updates for Silver release

October '07 – rev 1.0 production version

November '07 – rev 1.1 – post production update

June '08 – rev 1.2 – post production spare parts and accessories update

July '08 – rev 1.3 – Update for Active Back Plane accessory

July '08 – rev 1.4 – Update part list in spares

August '08 – rev 1.5 – Update new mm# for AXXBASRAIL13

December '08 – rev 1.6 – Update new mm# for SR1560SF,SR1560SFNA,SR1560SFHS,SR1560SFHSNA

June '09 – rev 1.7 – Remove EOL spare parts and add replacement

November '09 – rev 1.8 –VMware vSphere* Virtualization Software added.

April '10 – rev 1.9 – Updated MM# for SR1560SF,SR1560SFNA

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

Intel products are not intended for use in medical, life saving, life sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

Intel server boards, server chassis, and processors may contain design defects or errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Intel, Intel Xeon, Pentium, and the Intel logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

*Other names and brands may be claimed as the property of others.

Copyright © 2010, Intel Corporation

Table of Contents:

| | |
|---|-----------|
| 1. PRODUCT ORDER CODES..... | 4 |
| 1.1 PRODUCT DESCRIPTIONS – OVERVIEW..... | 4 |
| 1.2 INTEL® SERVER SYSTEMS – (INTEGRATED SKUS) | 4 |
| 1.3 SERVER BOARD OPTIONS..... | 5 |
| 1.4 ACCESSORIES..... | 6 |
| 1.5 SPARES..... | 8 |
| 2. INTEL RAID CONTROLLER OPTIONS..... | 9 |
| 3. VMWARE VSPHERE* VIRTUALIZATION SOFTWARE CONFIGURATION GUIDE FOR VSPHERE* SKUS | 10 |
| 3.1 PRODUCT DESCRIPTIONS – OVERVIEW..... | 10 |
| 3.2 VMWARE VSPHERE* AND VCENTER* SERVER SKUS | 10 |

1. Product Order Codes

1.1 Product Descriptions – Overview

Product based on the Intel® Server Board S5400SF will be offered in two models:

1. **Intel® Server Systems (Integrated SKUs).** Customer orders an integrated system that includes the server board, server chassis, riser, hot swap backplane (if desired), and front panel. Then, the customer can choose to add additional options (bezel, Intel Remote Server Management Module, etc.) to get to their desired shipping configuration. Two systems are available with either hot swap or fixed hard drives.
2. **Board only.** For OEM customer with their own chassis solution. This is not intended for stocking in the distribution channel.

Intel will not offer a stand-alone chassis nor will the S5400SF board be compatible with existing Intel server chassis from the S5000PAL product family.

VMware vSphere* software is now available when ordering an Intel® Server Board or Intel® Server System. **Customers can only order these SKUs at the time they are ordering an Intel® Server Board or Intel® Server System.** These SKUs cannot be ordered individually. **The number of VMware vSphere SKU purchase has to coincide with number of system or boards purchased. Example: Order 10 boards – you can order 10 VMware SKUs. Customers will need to join VMware System Builder Program to get sales support from VMware. For support information please visit:**
<http://www.vmware.com/partners/partners.html>

1.2 Intel® Server Systems – (Integrated SKUs)

The following Intel® Server Systems are offered pre-integrated. Each SKU includes the Intel® Server Board S5400SF together with the 1U chassis:

Intel® Server Chassis SR1560 with Intel® Server Board S5400SF (1U Intel® Server System)–

- Fixed drive version contents:

Intel Server Chassis SR1560 with S5400SF server board and support for 2 fixed (cabled) SATA drives, two “cold swap” 3.5” hard drive carriers, system fans, one (non redundant) 600W high efficiency power supply, one full height PCI-Express riser card, basic control panel, air duct and baffle, required cables, optical drive tray, software CD and documentation. Note: this SKU is not intended to be upgradeable to the hot swap version.

- 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, slim-line optical drive (CDROM, DVD-ROM, or DVD/CDR Drive), I/O expansion modules (dual GbE, external SAS or IB), Intel Remote Management Module (RMM2).

- Hot swap version SKU contents:

Intel Server Chassis SR1560 with S5400SF server board and hot swap drive support, Bridge Board, three 3.5” hot swap hard drive carriers, system fans, one (non redundant) 600W high efficiency power supply, one full height PCI-Express 2.0 riser card, standard control panel, air duct and baffle, optical drive tray, software CD and documentation. (**Note:** does not include a backplane- customer must order either ASR1500PASBP, or ASR1500SASBP).

- 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, slim-line optical drive (CDROM, DVD-ROM, or DVD/CDR Drive), USB floppy drive, I/O expansion modules (dual GbE, external SAS, or IB), Intel Remote Management Module.

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

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

| Product Code | UPC | MM | Description | | MOQ |
|--------------|----------------|--------|--|--|-----|
| SR1560SF | 0073585819601 | 891278 | Intel Server System SR1560SF Fixed Drive integrated system (no power cord) |  | 1 |
| SR1560SFNA | 00735858197588 | 891442 | Intel Server System SR1560SF Fixed Drive integrated system (with North American power cord) | | 1 |
| SR1560SFHS | 00735858196024 | 901845 | Intel Server System SR1560SF Hot Swap Drive integrated system (Note: this requires either ASR1500PASBP or ASR1500SASBP). No Power cord |  | 1 |
| SR1560SFHSNA | 00735858197595 | 901872 | Intel Server System SR1560SF Hot Swap Drive integrated system (Note: this requires either ASR1500PASBP or ASR1500SASBP). With 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 above SKUs.

1.3 Server Board Options-

For customers who utilize their own enclosure, the board will be offered in a 10 pack OEM SKU versions:



- Intel® Server Board S5400SF – 10 pack OEM board version.
 - OEM board SKU contents: 10 server boards with CEK spring clip pre-installed (no other accessories)

| Product Code | UPC | MM | Description | MOQ |
|--------------|----------------|--------|---|-----|
| BB5400SF | 00735858196413 | 892604 | Production Intel Server Board S5400SF 10 pack | 10 |

1.4 Accessories

Note on heat sinks for LGA 771 socket:

Up to 20 heat sinks may be purchased through Shop Intel. Complete information on available heat sinks is available at http://shop.intel.com/shop/category.aspx?category_id=123

| Product Code | UPC | MM | Description | Picture/note | MOQ |
|--------------|----------------|--------|---|---|-----|
| ASR1500SASBP | 00735858183741 | 880524 | Hotswap SAS Backplane Kit. Compatible with either SAS or SATA 3.5" hard drives. Kit contents include the following: Backplane with 4 port SAS controller. NOTE: a backplane is REQUIRED accessory for the hotswap system. |  | 1 |
| ASR1500PASBP | 00735858183758 | 894294 | Hotswap Passive SAS/SATA Backplane Kit . Compatible with either SAS or SATA 3.5" hard drives. Kit contents include the following: Hot swap backplane with pass-through capabilities for either onboard SATA ports or a SAS/SATA add-in card, Enclosure management cable, 3 SAS/SATA cables (pre-kitted and length matched to the SATA ports on the server board). NOTE: a backplane is REQUIRED accessory for the hotswap system. |  | 1 |
| AXXZU130KIT | 00735858196291 | 892675 | Mounting kit for Intel® Z-U130 Value Solid State Drive. Includes holder, cable, and interposer card. | | 10 |
| ADWBEZBLACK | 00735858169110 | 865064 | Black Bezel for SR1560SF | | 10 |
| AXXGBIOMOD | 00735858184779 | 880518 | Dual Gigabit Ethernet I/O Expansion Module | | 1 |
| AXXSASIOMOD | 00735858184786 | 880517 | External 4 port SAS I/O Expansion Module | | 1 |
| AXXIBIOMOD | 00735858185219 | 881891 | InfiniBand SDR I/O Expansion Module. | | 1 |

| Product Code | UPC | MM | Description | Picture/note | MOQ |
|--------------|----------------|--------|--|--------------|-----|
| 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 SR1560 chassis only. | | 5 |
| AXXUSBFLOPPY | 00735858183260 | 881267 | Internal slim-line floppy kit. Includes USB cable, slim floppy mounting tray for use in optical bay, hard drive to floppy converter tray, slim-line USB floppy drive. NOTE: Supported in the hot swap system only. | | 1 |
| AXXSCD | 00735858164269 | 885100 | Slim line CD drive | | 1 |
| AXXDVDROM | 00735858184717 | 881097 | Slim-line DVD-ROM | | 1 |
| AXXDVDCDR | 00735858164962 | 880559 | DVD/CDR slim line drive. Supports DVD/CD and CD write | | 1 |
| AXXBASRAIL13 | 00735858194969 | 899080 | Basic slide rail kit. Does not support Cable Management Arm. | | 1 |
| AXXHERAIL | 00735858164948 | 881328 | Tool-less, full extension sliding rail kit. NOTE: If cable management arm is required please order AXXRACKCARM MM# 881329. | | 1 |
| AXXRACKCARM | 00735858167970 | 881329 | Cable management arm. For use with AXXHERAIL MM# 881328 | | 1 |
| 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 |
| AXXRJ45DB92 | 735858155212 | 881944 | Serial cable adapter kit. 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 2nd serial port from the baseboard. Note: this ribbon cable is not used with the Intel Server Chassis SR1560. | | 1 |
| FPWRCABLENA | 00735858181129 | 879287 | North American power cord, 59 inches long, rated at 13A and 105°C. RoHS compliant. This is the same cord included in the "NA" SKUs. | | 1 |
| AXXRMM2 | 00735858192408 | 894383 | Intel Remote Management Module 2 | | 1 |
| I/O Shield | N/A | N/A | I/O shield not available. CAD drawings for the I/O shield are available on the S5400SF product page at support.intel.com | | |

1.5 Spares

| Product Code | UPC | MM | Description | Picture/note | MOQ |
|---------------|----------------|--------|---|---|-----|
| FXX10DVCARBLK | 00735858181938 | 880265 | Black 3.5" hot swap drive carrier spare. For use with hotswap chassis. | | 10 |
| FALBRIDGE | 00735858184731 | 880519 | Spare bridge board (for use with hot swap chassis only). Connects baseboard backplane. (MOQ = 30) | | 30 |
| AXXRACKFP | 00735858167932 | 861048 | Standard Control Panel (unit contains buttons, LEDs, front USB cable, flat control cable). This is a spare for the hotswap system (not compatible with the fixed drive system) | | 1 |
| FSR1500PKG | 00735858183796 | 880898 | Spare packaging - box & set of cushions for 1U system. Note: box has been designed to allow space to include shipping bezel and rails along with the unit. Different than the packaging that ships with the Intel Server System SR1560SF | | 1 |
| FXX1UFAN | 00735858184243 | 881101 | Intel Server System SR1560SF fan spare. Contains two 56mm fans, one with short cable, and one with long cable. | | 1 |
| FSR1560PS | 00735858196031 | 891281 | Intel Server System SR1560SF 600W Power Supply Spare | | 1 |
| FSR1560RISER | 00735858196253 | 891280 | Intel Server Board S5400SF x16 PCIe Riser Card Spare (MOQ= 10) | | 10 |
| FSR1560SPR | 00735858196277 | 891282 | Intel Server System SR1560SF spares kit | Including PCI-e x16 riser, Fan distribution board for fixed HDD SKU, Bridge board, HDD/CD drive carriers/interposer and necessary cables/fillers. | 1 |

2. Intel RAID Controller Options

The following Intel® RAID Controllers will be validated with the S5400SF product family:

| Product Code | UPC Code | MM | Description | MOQ |
|--------------|----------------|--------|---|-----|
| SRCSAS144E | 00735858182621 | 882019 | Intel RAID Controller SRCSAS144E SAS RAID controller. PCI-e, 4-port internal, 4P external with 128MB embedded cache memory. | 5 |

Note: to use these (or any other 3rd party SAS or SATA RAID card) with an Intel Server Chassis the passive version of the hotswap backplane must be ordered.

3. VMware vSphere* Virtualization Software Configuration Guide for vSphere* SKUs

3.1 Product Descriptions – Overview

VMware vSphere* software is now available when ordering an Intel® Server Board or Intel® Server System. **Customers can only order these SKUs at the time they are ordering an Intel® Server Board or Intel® Server System.** These SKUs cannot be ordered individually. The number of VMware vSphere SKU purchase has to coincide with number of system or boards purchased. Example: Order 10 boards – you can order 10 VMware SKUs. Customers will need to join VMware System Builder Program to get sales support from VMware. For support information please visit: <http://www.vmware.com/partners/partners.html>

3.2 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 |

End of Configuration Guide