Intel® Server Board SE7520AF2 Intel® Server Chassis SC5300 Intel® Server Platform SC5300AF2

Spares / Parts List & Configuration Guide

A reference guide to assist customers in ordering the necessary components to configure the Intel Server Board SE7520AF2 and Intel Server Chassis SC5300 Knock-Down-Kit products

Rev 1.11

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Change History:

8/12/04- initial public release- removed "Intel Confidential" banner, removed code names, added BRP chassis descriptions.

9/22/04- rev 1.1 added integrated SKU information and new board MM numbers.

10/1/04- rev 1.2 – corrected IMM single pack MM numbers.

11/19/04-rev 1.3- added IMM Professional Edition to SC5300AF2 Integrated SKU description, corrected MM# on SC5300AF2NA

11/22/04-rev 1.4- added Fab 6 board MM#s to boards, added SC5300 (Base, BRP or LX) accessory bracket for hard drive or floppy drive installation in a standard 5.25 peripheral bay.

3/11/05-rev 1.5- Updated current board MM#s to reflect current availability and updated boxed processor frequencies and product codes.

4/20/05- rev 1.6- Added Intel® RAID Controller SRCS28X

5/12/05- rev 1.7- Corrected SC5300AF2 description to include Intel ® Management Module- Professional Edition 9/12/05- rev 1.8- Updated MM#s for support of new processors, updated new processor codes.

10/11/05- rev 1.9- Further clarification on MM#'s due to PCN #104880-04. Updated supported processor information. Added new six drive SAS backplane accessory & spare.

01/06/06- rev 1.10- Added clarification that 6 drive SAS backplane accessory & spare will replace 6 drive SATA accessory and spare.

2/3/06- rev 1.11- Removed all references to AXX6SATADB & AXX6SATABRD in accordance with 1/6/06 PDA letter.

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Production Configurations

Overview

The Intel Server Board SE7520AF2 and Intel Server Chassis SC5300 are offered either as building blocks or as a preintegrated system SKU- the Intel Server Platform SC5300AF2. See following sections for more information on each option.

Production Boards and KDK (Building Blocks) Ordering Process

An overview for configuring the Intel® Server Board SE7520AF2 in the Intel Server Chassis SC5300 and for ordering key accessories

Step 1 – Order the Server Board

SE7520AF2

- Boxed board
- Without Hot Plug PCI

Step 2 – Choose a supported Intel Server Chassis

SC5300LX

- Includes 1 Hot Swap (HS) PSU, HS Cooling, fixed 6-drive bay
- Supports one 4-drive bay and one 6-drive bay

SC5300BRP

- Includes one HS PSU, fixed 6-drive bay
- Supports one 4-drive bay and one 6-drive bay

SC5300Base

- Includes PSU and Cooling, fixed 6-drive bay
- Supports one 4-drive bay **OR** one 6-drive bay

Step 3 - Add Optional Hard Drive Bays

AXX4SCSIDB

- 4 drive hot-swap SCSI backplane kit

AXX6SCSIDB

- 6 drive hot-swap SCSI backplane kit

AXX6SASDB

 6 drive hot-swap SAS backplane kit

AXX4FIXDB

4 drive tool-less fixed (cabled) drive kit

Step 4: Choose an optional Intel® Management Module Recommended for SC5300LX and SC5300BRP

AXXIMMPRO

- Intel® Management Module Professional Edition - Bulk SKU (AXXIMMPROBULK)
- or

AXXIMMADV

- Intel® Management Module Advanced Edition
- Bulk SKU (AXXIMMADVBULK)

Step 5: Configure optional integrated Intel® RAID Controller SROMBU42E

AXXRAKU42E

- RAID key- enables ROMB (SROMBU42E) on SE7520AF2 (PCI Express based dual channel U320 SCSI RAID)

AXXRPCM1

- -128MB DIMM with 72 hr. battery for SROMBU42E - Optional, can use DDR333 ECC DIMM if battery
- Optional, van use DDM000 Et backed cache is not required

Step 6: Choose an optional Intel® Local Control Panel

Key = Supported

AXXLCPPED

- LCD accessory for SC5300 family
- Requires an optional Intel® Management Module (Step 4)

Step 7: Choose Intel Server Chassis SC5300 family key accessories

ARIGRACK

- Rack conversion kit

AXXCMA3U7U

- Cable management arm (requires ARIGRACK)

ARIGCDFDBRK

- Used to install one slim-line CD/DVD and a floppy in a 5.25" drive bay

FXX730WPSU

- 730W hot-swap power supply
- Required to provide full redundancy for SC5300BRP and SC5300LX only

AXX04HSBPYCBL

- Permits cabling of both 4 and 6 drive backplanes to a single SCSI/RAID channel

AXXSCD

- Slim-line CD for use with ARIGCDFDBRK

AXXDVDCDR

- Slim-line DVD/CDR used with ARIGCDFDBRK

AXXSFLOPPY

Slim-line floppy for use with ARIGCDFDBRK.

ARIGDLTRAIL

- DLT Accessory Kit (10 pack of rails)

SE7520AF2 and SC5300 are designed to work together with the 2U+ passive boxed Intel® Xeon™ Processor



Frequency	Product Code
3.60 GHz, 2MB L2 Cache	BX80546KG3600FP
3.60 GHz, 1MB L2 Cache	BX80546KG3600EP
3.40 GHz, 2MB L2 Cache	BX80546KG3400FP
3.40 GHz, 1MB L2 Cache	BX80546KG3400EP
3.20 GHz, 2MB L2 Cache	BX80546KG3200FP
3.20 GHz, 1MB L2 Cache	BX80546KG3200EP
3.00 GHz, 2MB L2 Cache	BX80546KG3000FP
3.00 GHz, 1MB L2 Cache	BX80546KG3000EP
2.80 GHz, 1MB L2 Cache	BX80546KG2800EP

SC5300AF2 Integrated SKU Description

The Intel Server Platform SC5300AF2 (SC5300 with SE7520AF2) integrated SKU includes the following:

- 1) SE7520AF2 board with hot plug PCI option. (product code: BAF2HPBB)
- 2) SC5300 LX chassis. (Product code: SC5300)
- 3) Six drive hot swap SCSI backplane kit with SCSI cable pre-routed to backplane. (Product code: AXX6SCSIDB)
- 4) Hot plug PCI Kit (Product code: ARIGHPPCI)
- 5) I/O shield and gasket (Product code: AAF2IO)
- 6) Intel Management Module Professional Edition (Product code: AXXIMMPRO)
- 7) Miscellaneous items (not normally included with above product codes):
 - Resource CD-ROM, with utilities, drivers, and documentation
 - Intel® Server Management CD-ROM with Intel® Server Manager 8

Labels

Not included: Processors, heatsinks, DDR-2 400 main memory, DDR333 RAID cache memory or RAID activation key, hard drives, and other customer configuration items.

Integration note: the SC300 chassis is designed to work with the Intel Passive 2U+ boxed Xeon™ processor.

Production Boards and KDK Descriptions

This section contains information needed to order and configure a production Intel Server SC5300 Chassis KDK with the production Intel Server Board SE7520AF2.

- 1) The SE7520AF2 boxed board contains the following:
 - One SE7520AF2 baseboard (non hot-plug)
 - Includes dual Gb Ethernet, dual channel U320 SCSI (upgradeable to RAID 5- activation key not included)
 - CEK spring clips (2)
 - ATX I/O shield and gasket
 - Cables: Floppy, IDE, COM2, U320 SCSI (terminated) and SATA
 - Rubber bumpers for board mounting
 - Resource CD-ROM with utilities, drivers, documentation and technical information.
 - Intel® Server Management CD-ROM with Intel® Server Manager 8 and utilities
 - Three-in-one configuration label
 - Printed Quick Start Guide
- 2) The SE7520AF2 OEM board ten pack contains the following:
 - Ten SE7520AF2 baseboards (SKU without hot plug I/O)
 - Includes dual Gb Ethernet, dual channel U320 SCSI (upgradeable to RAID 5- activation key not included)
 - CEK spring clips (2)
- 3) The SE7520AF2 hot-plug OEM board ten pack contains the following:
 - Ten SE7520AF2 baseboards (SKU with hot plug I/O)
 - Includes dual Gb Ethernet, dual channel U320 SCSI (upgradeable to RAID 5- activation key not included)
 - CEK spring clips (2)
- 4) The SE7520AF2 "depop" OEM board ten pack contains the following:
 - Ten SE7520AF2 baseboards (SKU without hot plug I/O)
 - Includes dual Gb Ethernet,
 - Does not include SCSI or RAID upgrade capability
 - CEK spring clips (2)

5) The SC5300 LX KDK includes:

- Redundant (1+0) 730W PFC power supply with dual line cord support (full redundancy requires additional 730W module)
- Four redundant hot swap fans with ducting
- Support for six tool free non hot-swap hard drives. Upgradeable to hot swap SCSI or SAS (supports SAS or SATA).
- Adapter kit for floppy drive (to mount standard size floppy in an unused 5.25" bay)
- Quick start guide
- Cables (one each):
 - Front Panel Cable (34-pin baseboard header to front panel)
 - USB Cable (USB header to chassis front panel)
 - Pre-routed floppy and IDE cables
- Notes:
 - No AC power cords are included
 - To enable full redundancy monitoring, alerting, and management capabilities for fans and power supplies an Intel® Management Module (IMM) is required with the SC5300 LX chassis.
- 6) The SC5300 Base Redundant Power (BRP) KDK includes:
 - Redundant (1+0) 730W PFC power supply with dual line cord support (full redundancy requires additional 730W module)
 - Two non-redundant cooling fans with ducting
 - Support for six tool free non hot-swap hard drives. Upgradeable to hot swap SCSI or SAS (supports SAS or SATA).
 - Adapter kit for floppy drive (to mount standard size floppy in an unused 5.25" bay)
 - Quick start guide
 - Cables (one each):
 - Front Panel Cable (34-pin baseboard header to front panel)
 - USB Cable (USB header to chassis front panel)
 - Pre-routed floppy and IDE cables
 - Notes:
 - No AC power cords are included
- 7) The SC5300 Base KDK includes:
 - Non-redundant 600W PFC power supply
 - Two non-redundant cooling fans with ducting
 - Support for six tool free non hot-swap hard drives. Upgradeable to hot swap SCSI or SAS (supports SAS or SATA).
 - Adapter kit for floppy drive (to mount standard floppy in an unused 5.25" bay)

- Quick start guide
- Cables (one each):
 - Front Panel Cable (34-pin baseboard header to front panel)
 - Pre-routed floppy and IDE cables
 - USB Cable (USB header to chassis front panel)
- Note: no AC power cords are included

<u>Not included</u>: Processors, heatsinks, DDR-2 400 main memory, DDR333 RAID cache memory or RAID activation key, hard drives, and other customer configuration items.

Integration note: the SC300 chassis is designed to work with the Intel Passive 2U+ boxed Xeon™ processor.

Production Order Code Details

Production Integrated SKUs

Product Code	MM#	UPC	Description
SC5300AF2	867231 876245**	00735858171663	Integrated SE7520AF2/SC5300 System - Includes SE7520AF2 board with hot plug PCI option, SC5300 LX chassis, Six drive hot swap SCSI backplane kit with SCSI cable pre-routed to backplane, Hot plug PCI Kit, I/O shield and gasket, and the Intel ® Management Module – Professional Edition. Also includes: Resource CD-ROM, with utilities, drivers, and documentation, Intel® Server Management CD-ROM with Intel® Server Manager 8, Labels. No power cord included.
SC5300AF2NA	869044 876247**	00735858171762	Same as SC5300AF2 with North American power cord included.

Production Boards

Product Code	MM #	UPC	Description
SE7520AF2	867704 871306**	00735858167789	Boxed SE7520AF2 non-hot plug boxed board –single pack. Minimum Order Quantity (MOQ) = 5
BAF2HPBB	868079 871303**	00735858167819	SE7520AF2 Hot Plug OEM board - ten pack (MOQ=10).
BAF2NSBB	871308**	00735858170963	SE7520AF2 depop OEM board, no SCSI, no RAID on Motherboard, no-hot plug I/O – ten pack. (MOQ=10)
BAF2BB	868078 871305**	00735858167802	SE7520AF2 non-hot plug OEM board – ten pack. (MOQ=10).

^{**} these MM#'s Support the Dual-Core Intel® Xeon™ Processor (Socket F).

Production Chassis

Product Code	MM#	UPC	Description
SC5300BASE	857678	00735858164580	SC5300 Base Chassis w/600W PFC Fixed PSU, 2 chassis fans, 1 PSU fan, supports up to 6 tool-free cabled drives, upgradeable to 6 hot-swap drives (SCSI or SAS (supports SAS or SATA)) without power cord
SC5300BASENA	857702	00735858168502	Same as Base above, includes North American power cord
SC5300BRP	862502	00735858168694	SC5300 Base Redundant Power (BRP) Chassis w/730W PFC redundant PSU (2nd PSU module is required for redundancy). 2 chassis fans, 1 PSU fan, supports up to 6 tool-free cabled drives, upgradeable to 10 hot-swap SCSI drives or 6 hot-swap SAS (supports SAS or SATA) drives, without power cord
SC5300BRPNA	865077	00735858170291	Same as BRP above, includes North American power cord.
SC5300LX	857677	00735858164597	SC5300 LX Chassis w/730W PFC redundant PSU (2nd PSU module is required for redundancy) 4 hot-swap redundant fans, 1 PSU fan per module, supports up to 6 tool-free cabled drives, upgradeable to 10 hot-swap SCSI drives or 6 hot-swap SAS (supports SAS or SATA) drives, without power cord
SC5300LXNA	857703	00735858168519	Same as LX above, includes North American power cord

Production Board Spares & Accessories

Product Code	MM #	UPC	Description
AAF2IO	856965	00735858167796	I/O Shield and Gasket for SE7520AF2 and Intel® Server Board SE7520BD2 - 50 pack (MOQ = 50)
AXXRAKU42E	861717	00735858168427	Intel® RAID Activation Key kit- single pack for use with SE7520AF2. (MOQ = 5)
AXXRPCM1	861697	00735858168434	Intel® Portable Cache Module (battery back-up unit) with 128MB ECC DDR333- single pack. Works with SE7520AF2 ROMB and SRCU42E. (MOQ = 5)
AXXRIBBU1	867464	00735858171649	Battery back-up unit for use with SRCS28X - up to 48 hours battery retention time
ARIGHPPCI	857577	00735858164696	Hot plug I/O kit (single pack). Includes warning label, green PCI rocker latches. LED light pipe and ESD protective curtain/rug. Intended for use with BAF2HPBB (OEM 10 pack hot plug

			baseboard) and SC5300.
AXXIMMPRO	861840 865783	00735858167086	Intel® Server Management Module "Professional Edition" Single pack
AXXIMMPROBULK	864393	00735858169998	Intel Server Management Module "Professional Edition" OEM 10 pack. (MOQ = 10)
AXXIMMADV	861843 865669	00735858167093	Intel Server Management Module "Advanced Edition"
AXXIMMADVBULK	864396	00735858169981	Intel Server Management Module "Advanced Edition". OEM 10 pack (MOQ = 10)

Production Chassis Accessories

AXXLCPPED	861304	00735858167956	Intel® Local Control Panel (LCD) for SC5300 and Intel® Entry-Server Chassis SC5275-E pedestal chassis. Fits in unused 5.25" peripheral bay. Note: Requires IMM Pro or IMM Advanced.
ARIGRACK	856670	00735858164603	SC5300 pedestal to rack conversion kit. Includes: hinge cover; rack handles, intrusion switch jumper, new rail kit assembly, rack hardware kit, icon label, installation guide
ARIGRACKCVR	860747	00735858168496	SC5300 optional unpainted removable side (top) cover. Can be used in rack conversion mode if unpainted top cover is desired.
AXXCMA3U7U	862119	00735858168533	Universal 3U though 7U Rack Mode Cable Management Arm (CMA). Requires ARIGRACK.
AXX04HSBPYCBL	864463	00735858169882	SC5300 SCSI "Y Cable" with unique lengths for 4 drive and 6 drive bay. Permits cabling two backplanes to one SCSI/RAID channel.
AXX6SASDB	875063	00735858178662	This replaces AXX6SATADB per PCN105809-00. SC5300 6-drive hot swap SATA/SAS backplane assembly. Compatible with either SAS or SATA 3.5" hard drives. Includes: Board, 6ea drive carriers, 6ea SATA cables, 6-drive bay, 2ea I2C cables, common installation guide, SATA/SAS config label (also compatible with SC5275-E).
AXX4SCSIDB	856603	00735858164757	SC5300 4 drive hot swap SCSI backplane assembly. Includes: Board, 4 drive carriers, SCSI cable, 4-drive bay, I2C Cable, common installation guide
AXX6SCSIDB	856604	00735858164764	SC5300 6-drive hot swap SCSI backplane assembly. Includes: Board, 6ea drive carriers, SCSI cable, 6-drive bay, I2C cable, common installation guide (also compatible with SC5275-E)

AXX4FIXDB	857882	00735858164702	SC5300 cabled 4 drive tool-less drive bay assembly. Includes hardware to mount 4 additional non-hot swap drives (for total of up to 10).
AXXFHDDBRK	868171	00735858172462	SC5300 (Base, BRP or LX) accessory bracket for hard drive or floppy drive installation in a standard 5.25 peripheral bay.
ARIGDLTRAIL	856600	00735858164610	SC5300 DLT Accessory Kit left and right rails (10 Pack) Permits mounting a full height 5.25" peripheral (e.g. DLT tape drive) in two half height bays.
ARIGCDFDBRK	856599	00735858164634	SC5300 5.25" slim-line CD/DVD/Floppy bracket, hardware kit, interface board, installation guide. Permits installation of a slim-line floppy and slim-line optical drive in one 5.25" peripheral bay.
ARIGHSFANKIT	856963	00735858164641	SC5300 hot swap fan upgrade kit- 2 pairs of ea fan, hot swap fan cables (4ea), installation guide and label. Adds redundant cooling to chassis with base cooling.
ARIGBEZPNL	860750	00735858168489	SC5300 bezel branding panels- (1) upper and (1) lower bezel customization panel (10 sets)
ARIGPMKIT	857002	00735858164689	SC5300 chassis preventive maintenance kit. Includes; front panel board, front panel cable, serial cable, USB cable, (1) 92mm HS fan and plastic housing, (1) 120mm HS fan and plastic housing, 4ea HS fan wires, (1) fixed 92 mm fan, (1) fixed 120mm fan, bezel intrusion switch, power supply filler panel, 2 sets (4) 5.25" tool-less bay rails, 2 sets (4) of fixed hard drive bay rails, (1) IDE cable and (1) FDD cable.

Production Chassis Spares (Field Replaceable Units)

FXX600WPSU	856597	00735858164726	SC5300 Base / SC5275-E 600W Power Supply
FXX730WPSU	856596	00735858164719	SC5300LX/BRP 730W Power Supply Module and power supply filler panel.
FRIGHSFANS	857578	00735858164658	SC5300LX hot swap fan spare kit- includes one 120mm and one 92mm hot swap fan
FRIGFIXFANS	856960	00735858164665	SC5300 non hot swap fan spare kit- includes one 120mm and one 92mm standalone fans (fixed fans for Base/BRP)
FXX6SASBRD	875064	00735858178679	This replaces FXX6SATABRD per PCN105809-00. SC5300 / SC5275-E 6 Drive SATA/SAS Backplane Board only. This replaces FXX6SASBRD.
FXX4SCSIBRD	857005	00735858164740	SC5300 4 Drive SCSI Backplane Board only

FXX6SCSIBRD	857004	00735858164733	SC5300 / SC5275-E 6 Drive SCSI Backplane Board only
FRIGPDB	856819		SC5300LX Power Distribution board, power supply cage, power supply divider

Existing Production Spares & Accessories

PWRCABLEUS	816324	00735858162883	North American AC power cord
AXXSCD	856519	00735858164269	Slim-line CD drive- for use with ARIGCDFDBRK
AXXSFLOPPY	856444	00735858164276	Slim-line Floppy drive- for use with ARIGCDFDBRK
AXXDVDCDR	857593	00735858164962	Slim-line DVD/CDR drive- for use with ARIGCDFDBRK
FXX2DRVCARBLK	835853	7 35858 14621 0	Hot swap drive carrier spare. MOQ = 10
FHDEYE2C	823392	7 35858 12720 2	Spare I2C Cable MOQ = 10
FHDLVDSCBL	823391	7 35858 12705 9	Spare LVDS SCSI Cable. Use with SC5300 hot swap SCSI backplane (not terminated). MOQ = 10
AXXEXTSCSICBL	830656	7 35858 13953 3	External SCSI cable. For use with SCSI knockout on rear of chassis.
AXX2ICMBKIT	836017	7 35858 14653 1	ICMB Board Assembly for use with SE75020BD2, SE7520AF2 or SE7520JR2- Note: requires IMM Pro or Advanced

Intel RAID Options

Note: The Intel® Server Board SE7520AF2 features integrated U320 SCSI RAID on mother board (ROMB). To enable this integrated Intel RAID controller SROMBU42E capability, one must purchase the RAID activation key listed in the board spares and accessory section above. Should additional RAID capability be desired, the following Intel RAID controllers have been validated with the SE7520AF2 platform.

SRCU42E	861692	Intel® RAID Controller SRCU42E - x8 PCI Express, 2 channel Ultra 320 SCSI RAID controller - Intel® 80332 IOP @ 500 MHz, Support 128-512 MB Memory DIMM- 128MB DIMM included (MOQ = 5)

SRCU42EBLK	863376	00735858170758	Intel® RAID Controller SRCU42EBLK - x8 PCI Express, 2 channel Ultra 320 SCSI RAID controller - Intel® 80332 IOP @ 500 MHz, Support 128-512 MB Memory DIMM- NO MEMORY INCLUDED - ideal for customers using the Portable Cache Module (MOQ = 5)
SRCU42X	855829	00735858163545	Intel® RAID Controller SRCU42X - 64/133 MHz PCI-X, 2 Channel Ultra320 SCSI RAID Controller - Intel® 80321 IOP @ 400MHz, Supports 128-512 MB Memory DIMM- 128MB DIMM included (MOQ = 5)
SRCS16	858577	00735858167116	Intel® RAID Controller SRCS16 - 64/66 MHz PCI, 6 port SATA RAID Controller - Intel® 80302 IOP @ 100 MHz, 64MB embedded memory (MOQ = 5)
SRCS28X	866296	00735858171625	Intel® RAID Controller SRCS28X - 64/133MHz PCI-X, 8 port SATA RAID Controller - Intel® 80331 IOP @ 250MHz, 128MB embedded memory (MOQ = 5)

NOTES:

Unless noted otherwise, all items are individually orderable.

MOQ = Minimum Order Quantity.