Intel® Server System Family R1000BB

Intel® Server System Family R2000BB

Spares/Accessories List and Configuration Guide

A reference guide to assist customers in ordering the necessary components to configure the Intel® Server Board S2400BB and the appropriate 1U and 2U Intel Rack Mount Server Systems

Revision 1.2

December 2013

Platform Collaboration and Systems Marketing

Revision History

Oct'11 – Rev 02 – Initial rev

Dec'11 – Rev 0.5 First customer version

March 12 – 062 – new risers. New planned systems (GS9)

May 12 – 07 – wording/formatting updates. Riser matrix added

June 12 – 1.0 – Production version.

August 12 – 1.01 – Updated production version

June 4, 2013 – 1.02 – Updated SAS cable kits ordering information; added note to Rail kit; added PCN number for the end of life SKUs

July 9, 2013 – 1.03 – updated 1U 4x3.5 Hot swap backplane and RAID module MM number.

Sep 9, 2013 – 1.1 – Removed EOL'ed software products

December, 2013 – 1.2 – Added support for Intel® Xeon® processor E5-2400 v2 product family

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Table of Contents

1. System Product Order Codes

1.1 Product Descriptions – Overview

Product based on the Intel® Server Board S2400BB is offered as integrated system at production. Two main groups are described below: 1U and 2U. Each group has a variety of options to order from, including drive configurations, power supplies type and quantity, and additional components.

Board is offered as a 1-pack spare at launch. Chassis is not offered separately.

1.2 Summary Chart

For a quick overview, all configuration options are summarized on below chart. Reference details below in this document for MM numbers, configuration details, and product order codes.

Pcode	FF	HDD		# of HDD			Power supply	Rails	Storage upgrade	active	RAID	Expander	RMM
R1304BB4DC	1U	3.5	4				2x460W AC	Value	None	4 SATA	SW	None	yes
R1208BB4DC	1U	2.5		8			2x460W AC	Value	RKSATA8 key	8 SATA	SW	None	yes
R2208BB4GC	2U	2.5		8			2x750W AC	Value	RKSATA8 key	8 SATA	SW	None	yes
R2216BB4GC	2U	2.5			16		2x750W AC	Value	RKSAS8 key	16 SAS	SW	RES2CV240	yes
R2224BB4GCSAS	2U	2.5				24	2x750W AC	Value	RMS25PB080 module	24 SAS	HW	RES2CV360	yes
R2308BB4GC	2U	3.5		8			2x750W AC	Value	RKSATA8 key	8 SATA	SW	None	yes
R2312BB4GCSAS	2U	3.5			12		2x750W AC	Value	RMS25PB080+RKSAS4	12 SAS	HW	None	yes
R2312BB4GS9	2U	3.5			12		1x750W AC	None	None	4 SATA	SW	None	no
R2208BB4GS9	2U	2.5		8			1x750W AC	None	None	4 SATA	SW	None	no
R1304BB4GS9	1U	3.5	4				1x750W AC	None	None	4 SATA	SW	None	no
R1208BB4GS9	1U	2.5		8			1x750W AC	None	none	4 SATA	SW	none	no
R2000BB4GS9	2U	2.5		none			1x750W AC	None	None	4 SATA	SW	None	no

1.3 Riser Options

Blackbear Pass board has 2 slots supporting risers: Slot 1 has PCIe3 x16 lanes available (short), and Slot 2 has PCIe3 x24 lanes (long). Riser cards for slot1 and slot2 are not interchangable.

FHHL acronim defines Ful Height Half Length standard card.

R1xxxBB4 Riser (1U)	Riser slot #1 x16 short (1 x16, nearest PSUs)	Riser slot #2 long (2 x24, nearest IO mod)
(1) PCIe 3.0 x16 + (1) PCIe 3.0 x8 ROC module		A1UL16DUORSR 922089
(1) PCIe 3.0 x16 (routed from CPU1)	F1UBBPCIEX16 921698	
(1) PCIe 3.0 x16 (routed from CPU2)		F1UL16RISER 917989
(1) PCIe 3.0 x8 (routed from CPU1)		A1UL8RISER 922057
R2xxxBB4 Riser (2U)	Riser slot #1 x16 short (1 x16, nearest PSUs)	Riser slot #2 long (2 x24, nearest IO mod)
(1) PCIe 3.0 x16 (routed from CPU1)	AXX2UPCIEX16 919822	
(1) PCIe 3.0 x8 and (2) PCIe 3.0 x4 (routed from CPU1)	AXX2UPCIEX8X4 919823	
(1) PCIe 3.0 x16 and (1) PCIe 3.0 x8		A2UL16RISER 917981
(3) PCIe 3.0 x8		A2UL8RISER 917979
(2) PCI-X 133 and (1) PCIe 3.0 x8		A2ULPCIXRISER 917980

1.4   Planned PRODUCTION Board Spare Order Codes

Image	Product Code MM UPC MOQ	Description
	S2400BB4 921290 735858248006 50320370428888 1	Intel® Server Board S2400BB4 • Supports dual Intel® Xeon® E5-2400 processors or dual Intel® Xeon® E5-2400 v2 processors • Maximum supported TDP 95W • Intel C-600 chipset • 12 DDR3/DDR3L DIMMs • 8 SCU ports (4 SATA ports only functional w/NO storage keys) • 1 SATA 6G port thru 7 pin connector • 1 SATA 6G port thru mSATA connector • 4 Integrated 1Gb ports (Intel® Ethernet Controller I350) • Integrated Baseboard Management controller with IPMI 2.0 support • Optional advanced management features activated by AXXRMM4LITE key • Optional dedicated 1Gbe management port • Support for Intel IO expansion module option • Support for Intel SAS module option thru riser. Box contains: one spare motherboard

1.5 PRODUCTION System Order Codes for R1000BB Family (1U Rack)

Image	Product Code MM UPC MOQ	Description
	R1304BB4DC 918884 00735858248068 50320370429251	**Intel® Server System R1304BB4DC** Integrated server system with 4 SATA ports standard • S2400BB4 board in 1U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB in dedicated tray • ODD bay for CD/DVD drive support 4x3.5" HS HDD support (carriers included) • No Storage Activation key - 4 SATA ports • One right angle SFF8087 to 4x7pin cable preinstalled • Two CPU heatsinks • Airduct • Two risers: 1x16 electrical CPU1 (F1UBBPCIEX16) and 1x8 electrical CPU1 (A1UL8RISER). Both risers provide x16 mechanical connector, FHHL slot. • Two 460W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rail kit (AXXVRAIL)
	R1304BB4GS9 922000 00735858248105 50320370429631	**Intel® Server System R1304BB4GS9** Integrated server system with 4 SATA ports standard • S2400BB4 board in 1U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB in dedicated tray • ODD bay for CD/DVD drive support 4x3.5" HS HDD support (carriers included) • No Storage Activation key - 4 SATA ports • One right angle SFF8087 to 4x7pin cable preinstalled. Separate straight SFF8087 cable needed to support HBA card or SASM. • Two CPU heatsinks • Airduct • Two risers: 1x16 electrical CPU1 (F1UBBPCIEX16) and 1x8 electrical CPU1 (A1UL8RISER). Both risers provide x16 mechanical connector, FHHL slot. • One 750W AC PSU • Power distribution board for second PSU • No RMM • No rails

Image	Product Code MM UPC MOQ	Description
	R1208BB4DC 918887 735858239714 50320370344941	**Intel® Server System R1208BB4DC** Integrated server system with 8 SATA ports standard • S2400BB4 board in 1U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB in dedicated tray • ODD bay for CD/DVD drive support 8x2.5" HS HDD support (carriers included) • Blue Storage Activation key - 8 SATA ports • Two SFF8087 cables preinstalled • Two CPU heatsinks • Airduct • Two risers: 1x16 electrical CPU1 (F1UBBPCIEX16) and 1x8 electrical CPU1 (A1UL8RISER). Both risers provide x16 mechanical connector, FHHL slot. • Two 460W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rail kit (AXXVRAIL)
	R1208BB4GS9 921999 00735858248099 50320370429561	**Intel® Server System R1208BB4GS9** Integrated server system with 4 SATA ports standard • S2400BB4 board in 1U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB in dedicated tray • ODD bay for CD/DVD drive support 8x2.5" HS HDD support (carriers included) • No storage activation key • One SFF8087 cable preinstalled for chipset SAS (separate cables required for add-in card) • Two CPU heatsinks • Airduct • Two risers: 1x16 electrical CPU1 (F1UBBPCIEX16) and 1x8 electrical CPU1 (A1UL8RISER). Both risers provide x16 mechanical connector, FHHL slot. • One 750W AC PSU • Power distribution board for second PSU • No RMM • No rails

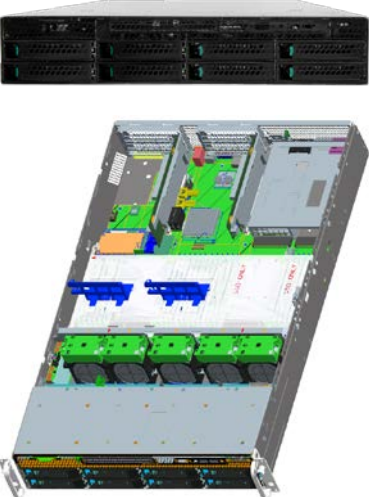## 1.6 PRODUCTION System Order Codes for R2000BB Family (2U Rack)

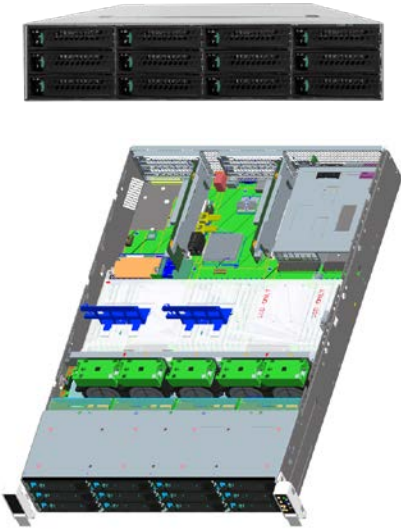| Image	Product Code MM UPC MOQ	Description
	R2000BB4GS9 922001 00735858248112 5032037042970 1	**Intel® Server System R2000BB4GS9** Integrated diskless Intel® Server System • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Standard control panel • ODD bay, USB ports, Video ports. • Provision for 2x2.5" SSD mount on airduct • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: A2UL8RISER (3 x8 PCIe3) and AXX2UPCIEX16 (single x16 PCIe3) with auxiliary power cable in accessory box. • No SAS cables. • No activation keys • Single 750W AC PSU • Power distribution board for second PSU • No RMM • No Rails **Note**: This SKU is end of life. See PCN# 112177-01 for detail.
	R2308BB4GC 918909 735858239790 5032037034579 1	**Intel® Server System R2308BB4GC** Integrated Intel® Server System with 8 SATA ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Standard control panel • 8x3.5" HS HDD support (carriers included) • ODD bay for CD/DVD drive support Provision for 2x2.5" SSD mount on airduct • 2 SFF8087 to SFF8087 cables • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • RKSATA8 storage activation key • Two 750W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rails (AXXVRAIL)

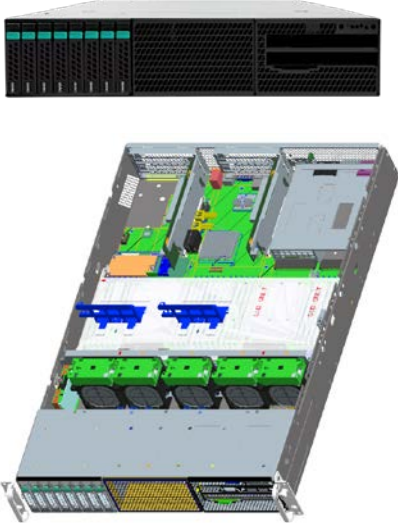| Image	Product Code MM UPC MOQ	Description
	R2312BB4GS9 922002 00735858248129 5032037042987 1	**Intel® Server System R2312BB4GS9** Integrated Intel® Server System with 12 SAS ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Control panel on rack handle • Provision for 2 SSD mount on airduct • 12x3.5" HS HDD support (carriers included) • 3 SFF8087 to SFF8087 cables • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • No storage activation key • One 750W AC PSU • Power distribution board for second PSU • No RMM • No Rails **Note**: There are no required PCSD components to make this system functional.
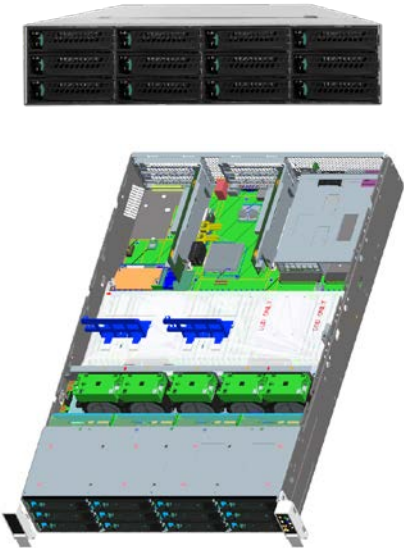
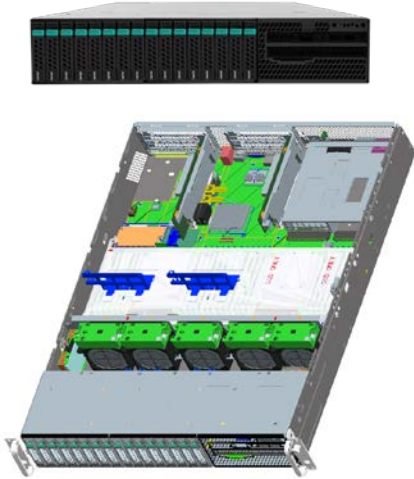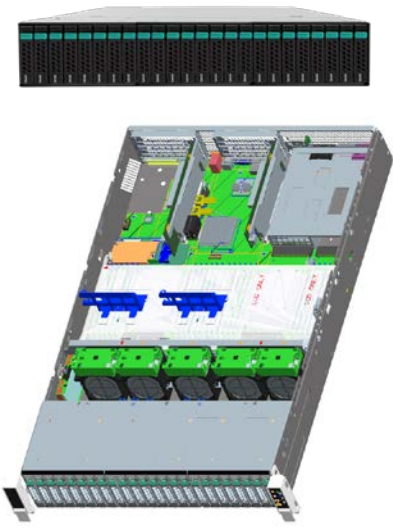| Image	Product Code MM UPC MOQ	Description
	R2312BB4GCSAS 920429 00735858248082 5032037042949 1	**Intel® Server System R2312BB4GCSAS** Integrated Intel® Server System with 12 SAS ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Mini storage front panel • Provision for 2 SSD mount on airduct • 12x3.5" HS HDD support (carriers included) • 3 SFF8087 to SFF8087 cables • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • RKSAS4 storage activation key installed – to enable 4 ports SAS • Onboard ports cabled to drives 8 thru 11 • Two 750W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rails (AXXVRAIL) • RMS25PB080 8-port HW RAID SAS module preinstalled and cabled to drives 0 thru 7 **Note**: There are no required PCSD components to make this system functional. **Note**: This SKU is end of life. See PCN# 112177-01 for detail.
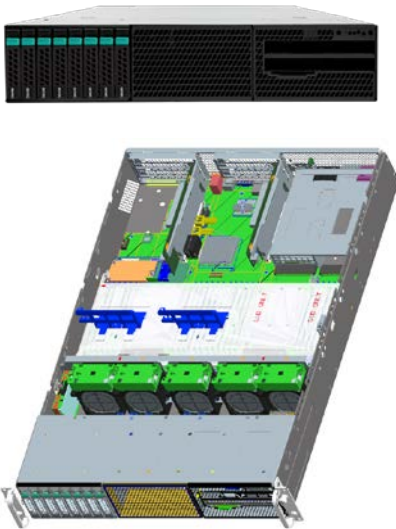
Image	Product Code MM UPC MOQ	Description
	R2208BB4GS9 922003 00735858248136 5032037042994 1	**Intel® Server System R2208BB4GS9** Integrated Intel® Server System with 8 SATA ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB on dedicated tray • Provision for 2 SSD mount on airduct • ODD bay for CD/DVD drive support 8x2.5" HS HDD support (carriers included) • 2 SFF8087 to SFF8087 cables • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • No storage activation key • One 750W AC PSU • Power distribution board for second PSU • No RMM • No rails **Note**: There are no required PCSD components to make this system functional.

Image	Product Code MM UPC MOQ	Description
	R2208BB4GC 918890 735858239738 50320370345171	**Intel® Server System R2208BB4GC** Integrated Intel® Server System with 8 SATA ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB on dedicated tray • Provision for 2 SSD mount on airduct • ODD bay for CD/DVD drive support 8x2.5" HS HDD support (carriers included) • 2 SFF8087 to SFF8087 cables • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • RKSATA8 storage activation key installed – to enable 8 ports SATA • Two 750W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rails (AXXVRAIL) **Note**: There are no required PCSD components to make this system functional. **Note**: This SKU is end of life. See PCN# 112177-01 for detail.
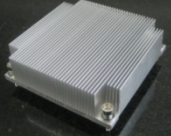
Image	Product Code MM UPC MOQ	Description
	R2216BB4GC 918897 735858239752 50320370345311	**Intel® Server System R2216BB4GC** Integrated Intel® Server System with 16 SAS ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Standard control panel • Front 1xVGA and 2xUSB on dedicated tray • Provision for 2x2.5" SSD mount on airduct • ODD bay for CD/DVD drive support • 16x2.5" HS HDD support (carriers included) • 6 SFF8087 to SFF8087 cables (5 installed and 1 in accessory box) • Two CPU heatsinks • Airduct • Redundant and hotswap cooling fans • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • RES2CV240 Integrated 24 port expander • RKSAS8 storage activation key installed – to enable 8 ports SAS • Two 750W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rails (AXXVRAIL) **Note**: There are no required PCSD components to make this system functional. **Note**: This SKU is end of life. See PCN# 112177-01 for detail.

Image	Product Code MM UPC MOQ	Description
	R2224BB4GCSAS 920424 00735858248075 50320370429321	**Intel® Server System R2224BB4GCSAS** Integrated Server System with 24 SAS ports standard • S2400BB4 board in 2U chassis • Max CPU TDP supported – 95W • Mini storage front panel • Provision for 2x2.5" SSD mount on airduct • 24x2.5" HS HDD support (carriers included) • 8 SFF8087 to SFF8087 cables • Two CPU heatsinks • Airduct • Two risers: 3x8 A2UL8RISER and 1x8+2x4 AXX2UPCIEX8X4 (2xFHFL+ 1xFHHL) • Redundant and hotswap cooling fans • RES2CV360 Integrated 36 port expander • Two 750W AC PSU • Power distribution board for second PSU • Full RMM4 preinstalled (AXXRMM4R) • Value rails (AXXVRAIL) • RMS25PB080 8-port HW RAID SAS module preinstalled and cabled to 36 port expander **Note**: There are no required PCSD components to make this system functional. **Note**: This SKU is end of life. See PCN# 112177-01 for detail.

2. Spares and Accessories Order Codes

2.1 S2400BB Specific Spares and Accessories

Image	Product Code MM UPC	Description	MOQ
	A1UL16DUORSR 922089 00735858248143 5032037043007	Butterfly riser kit 1U for dual slot support. Kit enables standard PCIe x16 FHHL slot and PCIe x8 custom internal SAS module slots. x16 FHHL slot is routed from CPU2 (doesn't work in single CPU config). X8 SAS module slot is routed from CPU1. To support SAS module – adjacent FHHL PCIe card must be 5mm narrower than LP standard.	1
	F1UBBPCIEX16 921698 00735858247788 5032037042642	Spare 1U riser x16 BBP specific, short riser slot. Includes 1 riser	1
	A1UL8RISER 922057 00735858248150 5032037043014	230 pin 1U riser – x8 electrical/x16 mechanical slot – routed from CPU1. Long riser slot.	1
	AXX2UPCIEX16 919822 00735858244510 5032037039086	160pin riser 2U – standard PCIe x 16 slot riser, riser has only 1 PCIe x 16 slot short riser slot.	1
	AXX2UPCIEX8X4 919823 00735858244527 5032037039093	2U riser 3 slot S2400 specific. Riser for short PCIe x 16 slot. Provides 1 PCIe x 8 and 2 PCIe x 4 slots short riser slot. 1 riser and 2 screws included	1
	FXXEA90X90HS 918256 00735858235082 5032037029834	Spare heatsink FXXEA90X90HS for S1400SP,S22400EP, S2400LP, S2400BB families)	2

2.2 General Spares and Accessories

Image	Product Code MM UPC EAN	Description	MOQ
	A2USTOPANEL 918248 735858241038 5032037035781	Storage control panel kit. Includes cable and adapter board, screws, second matching (empty) rack handle, can be used for upgrade. Compatible with R2000 family.	1
	A2UBKTMFBUSSD 921747 735858250146 5032037044707	Auxilary bracket to be mounted over power supply area of R2000GZ/GL/BB families. Can support 3 MFBU (Maintenance-free battery backup) units, or 2 2.5" SSDs and 1 MFBU.	1
	FXX750PCRPS 915604 735858234979 5032037030601	750W AC CRPS 80+ Platinum efficiency power supply spare/accessory.	1
	FXX460GCRPS 915603 735858235846 5032037030595	460W CRPS 80+ Gold efficiency power supply spare/accessory.	1
	FXX750DCCRPS	750W -48v DC (Direct current) CRPS 80+ Gold efficiency power supply spare/accessory. **Not available at launch. Targeting Dec 2012**	1
	AXXDCCRPSCBL	Spare DC power cable **Not available at launch. Targeting Dec 2012**	1
	A1U2ULCP 921028 735858245302 5032037039826	LCP Module (local control panel) Enables system to display critical errors from SEL for instant diagnostic. Also allows custom message for branding. When installed – replaces ODD on 1208 family, and replaces IO ports tray on 1304,2208,2216,2308 families. Not compatible with 2224 and 2312 families. Module has 2 USB ports. No front video connector. **Not available at launch. Targeting Dec 2012**	1
	FXXFPANEL 915982 00735858222419 5032037018968 MOQ=1	Front Panel board spare for use on 1U/2U rack systems (R1000, R2000 except R2224 and R2312) Rack chassis and P4300 Pedestal Chassis	1

Image	Product Code MM UPC EAN	Description	MOQ
	F1UL16RISER 917989 735858240482 5032037035217	Spare 1U riser for R1000GZ/GL/BB family. PCIe x16 FHHL. Includes 2 mounting screws.	1
	A2UL8RISER 917979 735858240499 5032037035224	Spare 2U 3 slot riser for GZ/GL/BB boards: Three PCIe x8 Gen3 ports electrical. Top two connectors are x16 mechanical. Lower connector is x8 mechanical. Includes 1 mounting screw.	1
	A2UL16RISER 917981 735858240512 5032037035248	Accessory 2U 2 slot riser for GZ/GL/BB boards: Top connector: PCIe x16 electrical with x16 mechanical. Bottom connector: one PCIe x8 electrical with x8 mechanical connector. Middle location is empty. Includes 1 mounting screw and power cable for graphic cards.	1
	A2ULPCIXRISER 917980 735858240505 5032037035231	Accessory 2U PCI-X riser for GZ/GL/BB boards: Top two PCI-X 133 MHZ connectors (separate buses) in upper two locations. Bottom connector: PCIe x8 electrical/mechanical Includes 1 mounting screw.	1
	FR1000FAN10P 917871 735858240918 5032037035668	One spare fan for 1U R1000GZ/GL/BB system. 40x56mm dual rotor with 10p connector	1
	FR2000FAN60HS 921117 735858246279 5032037040761 replaced FR2000FAN10P	One spare fans for 2U R2000GZ/GL/BB system. 60x38mm, with hot swap connector Includes 1 fans and two cables.	1
	A1UBEZEL 917983 735858241120 5032037035873	1U locking bezel with two branding clip-on inserts for logo, and one snap-on swoosh	1
	A2UBEZEL 918086 735858241137 5032037035880	2U locking bezel with two branding clip-on inserts for logo, and one snap-on swoosh	1
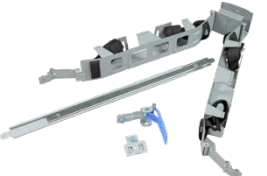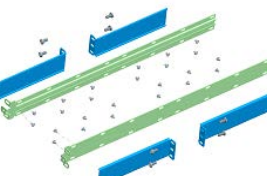
Image	Product Code MM UPC EAN	Description	M O Q
	AXXVRAIL 912796 735858219693 5032037015202	Value Rail Kit Works for all 438mm wide Intel Rack Chassis 1U, 2U, 4U. Rail allows adjustment within 609.6mm~765mm to fit difference depth rack. Maximum extension when installed (travel distance) 424.2mm **Note**: It will only support specific rack type with 3/8" square and 7.1mm round holes.	1
	AXXELVRAIL 920970 735858244367 5032037038980	Enhanced Value Rail Kit Works for all 438mm wide Intel Rack Chassis 1U, 2U, 4U. Rail allows adjustment within 609.6mm~765mm to fit difference depth rack. Maximum extension when installed (travel distance) 424.2mm Improved robustness over AXXVRAIL, same mechanical spec **Note**: It will only support specific rack type with 3/8" square and 7.1mm round holes.	1
	AXXPRAIL 924417 735858219686 5032037014823	1U/2U Premium Rail Kit Full extension and toolless rail kit. Supports cable management arm. Rail allows adjustment within 609.6mm~762mm to fit difference depth rack. Maximum extension when installed (travel distance) 800 mm **Note**: It will only support specific rack type with 3/8" square and 7.1mm round holes.	1
	AXXPRAIL755 924418 735858249065 5032037043724	Short 1U/2U Premium Rail Kit, no CMA support Full extension and toolless rail kit. Rail allows adjustment within 609.6mm~762mm to fit difference depth rack. Maximum extension when installed (travel distance) 755 mm **Note**: It will only support specific rack type with 3/8" square and 7.1mm round holes.	1
	AXX1U2UCMA 913117 735858224604 5032037019972	Cable management arm for Premium 1U/2U rail kit (works only with AXXPRAIL)	1
	AXX2POSTBRCKT 918808 735858245319 5032037039833	Fixed mount bracket kit for 2-post racks	1

Image	Product Code MM UPC EAN	Description	M O Q
	AXXSATADVDROM 906872 735858197663 5032037015127	Slimline SATA DVDROM Device	1
	AXXSATADVDRWR OM 906873 735858197670 5032037015134	Slim SATA DVD+/-RW ROM Accessory	1
	FPWRCABLENA 879287 735858181129 5032037015738	North American Power Cord Spare	1
	AXXRJ45DB93 920430 735858242820 5032037037525	Kit of the following cables: 1040mm Serial 10pin header to DB9 Cable 520mm Serial 10pin header to DB9 Cable 100mm DCD RJ45 to DB9 Cable 100mm DSR RJ45 to DB9 Cable	1

2.3 Drive/storage Subsystem Spares and Accessories
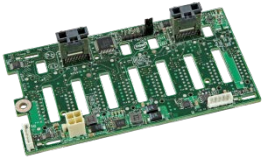
Image	Product Code MM UPC	Description	M O Q
	FXX1304HSBP 920317 735858219334 5032037015783	Hot swap backplane board spare for 1U 4x3.5" chassis (R1304 family)	1
	FXX8X25HSBP 917973 735858240987 5032037035736	Single port hot swap backplane board spare for 2U 8x2.5" cage (R2200 and P4000 families)	1
	FXX8X25DPBP 917974 735858240994 5032037035743	Dual Port hot swap backplane board spare for 2U 8x2.5" cage (R2200 and P4000 families) Not available at launch	1
	F2U8X35HSBP 917975 735858241007 5032037035750	Hot swap backplane board spare for 2U 8x3.5" chassis (R2308 family)	1
	F1U8X25HSBP 917977 735858241014 5032037035767	Hot swap backplane board spare for 1U 8x2.5" chassis (R1208 family)	1
	F2U12X35HSBP 917976 735858241021 5032037035774	Hot swap backplane board spare for 2U 12x3.5" chassis (R2312 family)	1
	RES2CV360 918935 735858241168 5032037035897	Integrated 36 port 6G SAS expander, compatible with R2200, P4000M/L families of chassis (2U/4U 2.5" chassis). Based on LSI* LSISAS2x36 chip. Includes 3 screws and bumpers, power cable, 6 Mini-SAS cables (3x165mm, 2x185mm, 1x245mm).	1
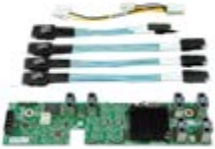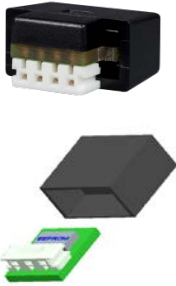
Image	Product Code MM UPC	Description	MOQ
	RES2CV240 918934 735858241175 5032037035903	Integrated 24 port 6G SAS expander, compatible with R2200, P4000M/L families of chassis (2U/4U 2.5" chassis). Based on LSI* LSISAS2x36 chip. Includes 3 screws and bumpers, power cable, 4 Mini-SAS cables (3x165mm, 1x185mm).	1
	RES2SV240 908137 735858216289 5032037017053	24 Port SAS 6Gb expander card with ports configurable for input or output. Retail SKU includes cables. Requires empty PCIe slot. Compatible with every system, including R2312 family.	5
	FXX25HSCAR 918807 735858241182 5032037035910	Spare 2.5" HDD hot swap carriers	8
	FXX35HSADPB 912771 735858219495 5032037016391	Spare 3.5" HDD hot swap carriers Includes mounting screws for mounting 2.5" drives	8
	When no key installed:	4 SATA channels active with SW RAID 'basic' which includes RSTe SW RAID 0/1/10/5 + LSI SW RAID 0/1/10	-
	RKSATA4R5 916346 735858238861 5032037033640	Enables LSI SATA SW RAID 5, Black	5
	RKSATA8 916347 735858238878 5032037033657	Activates 8 SATA ports and includes RSTe SW RAID 0/1/10/5 and LSI SW RAID 0/1/10, Blue	5
	RKSATA8R5 916348 735858238885 5032037033664	Activates 8 SATA ports and includes RSTe SW RAID 0/1/10/5 and LSI SW RAID 0/1/10/5 (enables LSI SWR5), White	5
	RKSAS4 916349 735858238892 5032037033671	Activates 4 SAS ports and includes RSTe SW RAID 0/1/10 (no RAID 5) and LSI SW RAID 0/1/10, Green	5
	RKSAS4R5 916350 735858238908 5032037033688	Activates 4 SAS ports and includes RSTe SW RAID 0/1/10 (no RAID 5) and LSI SW RAID 0/1/10/5 (enables LSI SWR5), Yellow	5

Image	Product Code MM UPC	Description	M O Q
	RKSAS8 916351 735858238922 5032037033701	Activates 8 SAS ports and includes RSTe SW RAID 0/1/10 (no RAID 5) and LSI SW RAID 0/1/10, Orange	5
	RKSAS8R5 916352 735858238915 5032037033695	Activates 8 SAS ports and includes RSTe SW RAID 0/1/10 (no RAID 5) and LSI SW RAID 0/1/10/5 (enables LSI SWR5), Purple	5
	A2U8X25HSDK 917914 735858241076 5032037035828	Spare/accessory 8x2.5" HDD drive kit for 2U system. (R2200 family) R2208 can take 1 additional bay with no other upgrades. For upgrading up to 24 drives (R2208 +2 bays, or R2216 + 1 bay) – standard control panel and ODD bay has to be replaced with storage panel (A2USTOPANEL) Includes cage, backplane board, 8 drive carriers, power Y-cable and I2C jumper cable	1
	A2U8X25DPDK 917966 735858241069 5032037035811	Spare/accessory Dual Ported 8x2.5" HDD drive upgrade kit for 2U system. (R2200 family) R2208 can take 1 additional bay with no other upgrades. For upgrading up to 24 drives (R2208 +2 bays, or R2216 + 1 bay) – standard control panel and ODD bay has to be replaced with rack ear panel (A2USTOPANEL) Includes cage, backplane board, 8 drive carriers, power jumper Y-cable and I2C jumper cable Not available at launch	1

2.4   Expansion Modules: IO Module, SAS Module, RMM4, TPM
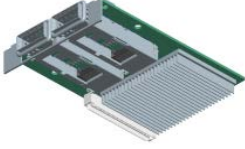
Image	Product Code MM UPC	Description	M O Q
	AXXRMM4LITE 911660 735858219297 5032037014946	Activation key for advanced management features	1
	AXXRMM4R 920858 735858245296 5032037039819	Intel® Remote Management Module RMM4 for rack systems – Remote KVM upgrade key and Dedicated NIC Module	1
	AXXTPME5 919737 735858240352 5032037035088	TPM Module for server systems supporting S2600 and S2400 board families.	1
	AXX10GBNIAIOM 917905 735858241090 5032037035842	Dual SFP+ port 10GbE IO module based on Intel® 82599 10 Gigabit Ethernet Controller Supports direct connect or transceiver. Cables/transceivers not included. Includes three screws, port label sticker	1
	AXX10GBTWLIOM 917907 735858241113 5032037035866	Dual RJ-45 port 10GBASE-T IO module, based on Intel® Ethernet Controller X540 Includes three screws, port label sticker.	1
 *Dual port module shown	AXX1FDRIBIOM 918607 735858241106 5032037035859	Single port, FDR 56GT/S speed Intel® I/O Expansion Infiniband module, with QSFP connector, based on Mellanox CX3 MT27504A1-FCCR-FV chip. Includes three screws, port label sticker *Dual port shown on picture	1

Image	Product Code MM UPC	Description	MOQ
	AXX2FDRIBIOM 920627 UPC/EAN to be udpated	Dual port, FDR 56GT/S (per port capable) speed Infiniband module, with QSFP connector, based on Mellanox CX3 MT27508A1-FCCR-FV chip. Note, due to PCIe3 x8 bandwidth limitation, both ports can't simultaneously function at full speed. Includes three screws, port label sticker	1
	AXX4P1GBPWLIOM 917911 735858241083 5032037035835	Quad port 1GbE IO Module based on Intel® Ethernet Controller I350 Includes three screws, port label sticker	1
CB JB	PCIe card: 8 ports RMS25PB080 923072 924868 00735858238946 5032037033725 PCIe card: 4 ports RMS25PB040 923083 924869 735858238953 5032037033732	HW RAID SAS Module: 4/8 port internal SAS-2.1 version, Full HW RAID, LSI MegaRAID-based Firmware, 1GB DDR3, R0,1,10,5,50,6,60 Supports Battery Backup Unit. Based on LSI2208. • Mezzanine card form factor – does not occupy PCIe slot, only compatible with systems enabled with SAS Module connector. • PCIe card form factor – compatible with all PCSD boards, requires PCIe x8 slot.	5
KB	PCIe card: 8 ports RMS25KB080 917089 924454 PCIe card: 4 ports RMS25KB040 917090 924455 735858239035 5032037033817	Entry-raid SAS Module: internal SAS-2.1 version, Entry-level LSI IR-based RAID 0,1,1E/straight SAS Based on LSI2308. • Mezzanine card form factor – does not occupy PCIe slot, only compatible with systems enabled with SAS Module connector. • PCIe card form factor – compatible with all PCSD boards, requires PCIe x8 slot.	5

Image	Product Code MM UPC	Description	M O Q
PB	PCIe card: 8 ports RMT3PB080 ~~923084~~ 924870 735858238960 5032037033749	HW RAID SATA Module: 8 Port internal SATA-3 version, Full HW RAID, LSI MegaRAID-based Firmware, 512MB DDR3, R0,1,10,5,50,6,60 Supports Battery Backup. Based on LSI2208. Mezzanine card form factor – does not occupy PCIe slot, only compatible with systems enabled with SAS Module connector. PCIe card form factor – compatible with all PCSD boards, requires PCIe x8 slot.	5
	AXXRSBBU9 919738 735858220286 5032037039567	Lithium Polymer RAID module battery backup unit.	5
	AXXRMFBU2 919876 735858244541 5032037039116	Maintenance Free Backup Unit with NAND Flash and Supercapacitor Requires A2UBKTMFBUSSD accessory to install.	5
	AXXRPFKSSD2 ~~915316~~ 919499 735858221467	Upgrade Key to enable SSD Cache with Fastpath I/O for Intel's RAID RS25 family of ROC products.	5
	AXXRPFKDE2 915317 735858221474	Upgrade Key to enable Drive Encryption Management for Intel's RAID RS25 family of ROC products	5
	AXXRPFKSNSH2 915318 735858221481	Upgrade Key to enable Rapid Recovery Snapshot for Intel's RAID RS25 family of ROC products.	5

2.5 SAS Cable Kits (for Upgrade to SAS Modules, HBA Cards, and Spares)

Image	Product Code MM UPC	Description	MOQ
	AXXCBL500MSMS 921858 735858245289 5032037039802	Kit of 2 cables, 500mm length, straight SFF-8087 to SFF-8087 connectors.	1
	AXXCBL650MSMS 918376 735858224444 5032037019910	Kit of 2 cables, 650mm length, straight SFF-8087 to SFF-8087 connectors.	10
	AXXCBL730MSMS 921049 735858245340 5032037039864	Kit of 2 cables, 730mm length, straight SFF-8087 to SFF-8087 connectors. Spare for R2308	1
	AXXCBL600MSMS 921048 735858245272 5032037039796	Kit of 2 cables, 600mm length, straight SFF-8087 to SFF-8087 connectors.	1
	AXXCBL585MSMR 921047 735858245265 5032037039789	Kit of 2 cables, 585mm length, straight SFF-8087 to right angle SFF-8087 connectors.	1
	AXXCBL850MS7R 921114 735858245371 5032037039895	Kit of 2 cables, 850mm length, straight SFF-8087 to right angle 7-pin SATA connectors.	1
	AXXCBL730MRMR ~~921045~~ 930836 735858245234 5032037039758	Kit of 2 cables, 730mm length, right angle SFF-8087 to right angle SFF-8087 connectors.	1
	AXXCBL550MRMR ~~921043~~ 930837 735858245227 5032037039741	Kit of 2 cables, 550mm length, right angle SFF-8087 to right angle SFF-8087 connectors.	1
	AXXCBL1030MR7R 921079 735858245258 5032037039772	Kit of 2 cables, 1030mm length, right-angle SFF-8087 to right angle 7-pin SATA connectors.	1
	AXXCBL770MSMR 921044 735858245241 5032037039765	Kit of 2 cables, 770mm length, straight SFF-8087 to right angle SFF-8087 connectors.	1
	AXXCBL165MSMS ~~921284~~ 930838 735858245692 5032037040204	Kit of 2 cables, 165mm length, straight SFF-8087 to right angle SFF-8087 connectors. Works for: integrated expander RES2CV240 and RES2CV240 connection, chassis R2200 family.	1

Image	Product Code MM UPC	Description	MOQ
	AXXCBL185MSMS ~~921285~~ 930840 735858245708 5032037040211	Kit of 2 cables, 185mm length, straight SFF-8087 to straight SFF-8087 connectors. Used with expanders RES2CV240 and RES2CV240 in R2200 family.	1
	AXXCBL245MSMS ~~921286~~ 930841 735858245715 5032037040228	Kit of 2 cables, 245mm length, straight SFF-8087 to straight SFF-8087 connectors. Used with expanders RES2CV240 and RES2CV240 in R2200 family.	1
	AXXCBL880SATA 922988 735858250290 5032037044806	SATA ODD cable for rack chassis family – 880mm long	10

2.6   Third-party Devices Completed Fit-check

Follow the complete THOL for a list of validated devices.

Image	Description
	Cableless SATA DOM from Innodisk. PCSD enabled selected boards with VCC thru pin 7 to support cableless Innodisk DOMs. Below models have passed basic fit-check. Please refer to manufacturer's web site for ordering information. Part is not manufactured or supplied by Intel. SATADOM D150SV SATADOM D150QV innoLite SATADOM D150QV
	2.5in SATA Removable Hard Drive Bay for PC Expansion Slot • Utilize a free expansion card slot to add a removable 2.5" SATA hard drive bay • Vented aluminum/steel design and a 50,000+ insertion rating ensures reliability of the drive and drive rack • Backed by a StarTech.com 2-year warranty and free lifetime technical support Below models have passed basic fit-check. Please refer to manufacturer's web site for ordering information. Part is not manufactured or supplied by Intel. S25SLOTR
	Industrial Grade Embedded USB SSD Z-U130 DOM / eUSB Horizontal 2.00 Low Profile pitch standard 10-pin female USB connector Multiple vendors have this item available to purchase.

3.   Extended Warranty

Image	Product Code MM UPC	Description
	SVCEWDPSY 911295 1	Two year extended warranty for Intel® Server Systems or Intel® Server Knock Down Kits + Intel® Server Boards that support two processors. Intel® RAID controller extended warranty is purchased separately.
	SVCEWDPBD 911294 1	Two year extended warranty for Intel® Server Boards that support two processors.