Intel® Enterprise Blade Server Family Configuration Guide and Spares/Parts List

A reference guide to assist customers in ordering components
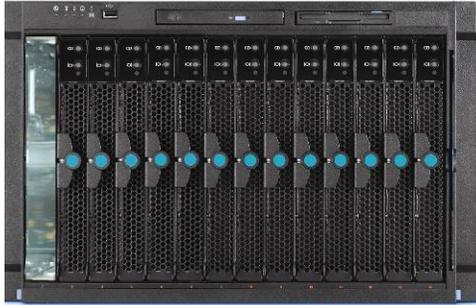to configure Intel® Enterprise Blade Server Family and
all related components.

Rev 3.4

Table of Contents

Intel® Blade Server Chassis SBCE, Accessories, and Spares

Table 1: SBCE Chassis and Accessory Product Codes

Category	Production Code	Production MM	Description	Min Order
Chassis	SBCE	877041 (not RoHS compliant)	The SBCE is a 7U modular chassis that is capable of housing up to 14 blade servers. The chassis allows individual blades to share resources such as power, communications, management and cooling. The SBCE chassis includes compute blade fillers which are required if a slot is not populated by a blade server. All blade fillers (blades and back panel module) are required to provide proper airflow and system cooling. The SBCE chassis can accommodate a total of 1 to 14 blade servers, 1 to 4 Ethernet switches, 1 or 2 fiber channel switches, 2 or 4 power supplies, 2 blowers, and 1 or 2 management modules This product code includes the following: • 1x Chassis • 1x Management module • 2x Blowers • 2x 2000W power supplies • 1x CD-ROM • 1x Floppy • 1x Rack mount kit • 13x Blade fillers • 3x Switch module fillers • 1x Management module filler • 2x Power supply fillers This product code does not include blade servers, Ethernet switches, fiber channel switches, or power cords	1
Chassis	SBCE	876088 (RoHS		1

Category	Production Code	Production MM	Description	Min Order
Accessory	ABCEPSU20	876087 (RoHS)	2000 Watt power supply module The SBCE chassis includes two 2000 Watt hot-swap power supplies which provided power to blade server slots 1 thru 6, fans, and all switch and management modules. To use blade server slots 7 thru 14, two additional ABCEPSU20 power supplies are required. The power supply option does not include a power cord.	1
Accessory	ABCEPSU20	860636 (not RoHS)	2000 Watt power supply module	1
Accessory	SBCECMM	868617 (not RoHS)	Chassis Management Module Each SBCE chassis includes one hot swap Management Module. A second module can be installed for redundant Management Module operation. This module will not be made RoHS compliant.	1
Accessory	SBCECMM2	879895 (RoHS)	Advanced Chassis Managed Module RoHS compliant management module with additional features such as SMASH compliance.	1
Accessory	SBCEMUFF	875906 (RoHS)	Acoustic Muffler For noise sensitive environments. Installed on the SBCE chassis to reduce fan noise.	1

Table 2: SBCE Chassis Spares

Category	Production Code	Production MM	Description	Min Order
Spare	SBCERACK	875905 (RoHS)	Spare rack mount kit	1
Spare	SBCEBLWR	875894 (RoHS)	Spare blower	1
Spare	SBCEMIDP	875910 (RoHS)	Spare SBCE midplane	1
Spare	ABCEFLOP	875904 (RoHS)	Spare floppy drive	1
Spare	ABCEDVD	865263 (RoHS)	Spare DVD ROM drive	1
Spare	SBCEBDKIT	875848 (RoHS)	Spare chassis front customer interface board	1
Spare	ABCEBDCIR	875759 (RoHS)	Spare chassis rear customer interface board	1
Spare	ABCEBDCD	878129 (RoHS)	Spare CD interposer	1

Spare	SBCECBLKIT	875904 (RoHS)	Spare SBCE cable kit
			  1x Media cable and bracket
			  1x Signal, CD interposer to chassis CI card cable
			  1x Power, CD interposer to chassis CI card cable
			  1x Signal, floppy to chassis CI card
			  1x Signal, chassis CI card to media to CP cable
				1

Intel® Blade Server Ethernet Solutions

Table 3: Ethernet Switches and Adapters

Category	Production Code	Production MM	Description	Min Order
Accessory	SBCEGBESW1	880176	**Intel Gigabit Ethernet Switch SBCEGBESW1 – 6 External/uplink Ports** The SBCEGBESW1 is an Ethernet switch designed to work with the SBCE blade chassis. The SBCE chassis supports one up to four Ethernet switch modules installed in chassis switch-module bays 1, 2, 3, & 4. The switch module in bay 1 provides an internal connection to Ethernet adapter 1 on all blade servers in the chassis and is required for basic operation of the blade servers. To connect to Ethernet adapter 2 on each blade server, install an Ethernet switch module in switch-module bay 2. For 2 additional Ethernet channels, Ethernet I/O adapters must be added to the blades and Ethernet switches can be installed into switch bays 3 and/or 4.	1
Accessory	SBCEGBESW10	880175	**Intel Gigabit Ethernet Switch SBCEGBESW10 – 6x 1GbE & 2 10GbE External/uplink Ports** The SBCEGBESW10 Ethernet switch is identical to the SBCEGBESW1 switch with the addition of 2 10Gb Ethernet ports. Optical transceivers for the 10Gb ports are available under model code TXN181070850X28 (MM#870071).	1
Accessory	TXN181070850X28	870071	10Gb Optical Transceiver for use with SBCEGBESW10	1
Accessory	IXM5414E	883795 (RoHS)	Intel Gigabit Ethernet Switch – 4 External/uplink Ports The SBCE chassis supports one to four hot-swap Ethernet switch modules installed in switch-module bays 1, 2, 3, & 4. The switch module in bay 1 provides an internal connection to Ethernet adapter 1 on all blade servers in the chassis and is required for basic operation of the blade servers. To connect to Ethernet adapter 2 on each blade server, install an Ethernet switch module in switch-module bay 2. For 2 additional Ethernet channels, Ethernet I/O adapters must be added to the blades and Ethernet switches can be installed into switch bays 3 and/or 4. Adapter card pictured not included	1

Category	Production Code	Production MM	Description	Min Order
Accessory	SBEGBE	874280 (RoHS)	GB Ethernet Card – Small Form Factor This is a dual channel Ethernet LAN adapter can be used with SBX82, SBXD62, SBXD132, SBESCSI, SBESAS, and ABBIE. It provides two independent Gb Ethernet connections to switch(es) in switch module bays 3 or 4. Requires that an Ethernet switch be installed in either switch bay 3 and/or bay 4. When using this card the SBX82 can support 2 SCSI HDDs and this card simultaneously.	1
Accessory	32R1923	886114 (RoHS)	1Gb iSCSI Host Bus Adapter (HBA) This HBA can be used with SBX82, SBXD62, SBXD132, SBESCSI, SBESAS, and ABBIE. It provides SCSI access to Ethernet based SANs via two independent 1-Gb Ethernet connections to the Ethernet switch(es) installed in module bays 3 or 4. Requires that an Ethernet switch be installed in either switch bay 3 and/or bay 4.	1

Intel® Blade Server Fibre Channel Solutions

Fibre Channel Host Bus Adapters

Table 4: Fibre Channel Host Bus Adapters

Category	Production Code	Production MM	Description	Min Order
Accessory	SBEFCM4	874895 (RoHS)	4Gb Fibre Channel Host Bus Adapter (HBA) – Small Form Factor This HBA can be used with SBX82, SBXD62, SBXD132, SBESCSI, SBESAS, and ABBIE. It provides two independent 4-Gb Fibre Channel connections to the Fibre Channel switch(es) installed in module bays 3 or 4.	1
Accessory	SBEFCM	863054 (not RoHS)	Fiber Channel Host Bus Adapter (HBA) – Small Form Factor This HBA can be used with SBX82 and SBESCSI and provides two independent 2-Gb Fibre Channel connections to the Fibre Channel switche(s) installed in module bays 3 or 4. The advantage of this card is that the SBX82 can support 2 SCSI HDDs and this card simultaneously. Includes all mounting hardware. Will not be made RoHS compliant	1

Brocade* 4Gb Fibre Channel SAN Switches

Table 5: Brocade* 4Gb SAN Switch Product Codes

Category	Production Code	Production MM	Description	Min Order
Accessory	SBCEBFCSW4	874889 (RoHS)	Brocade* 4Gb SAN Switch Module (installs into SBCE chassis) This 4Gb SAN switch is a 10-port Fibre Channel switch with 7 internal server ports & 3 external uplinks. This switch is field upgradeable to 15 or 20-ports using Ports Upgrade software key (ABRSWPTUPD4) to support 14 server blades and 6 external uplinks. This 4Gb Fibre Channel switch can be installed in switch module bay 3, module bay 4 or both. The switch module in bay 3 provides an internal connection to channel 1 on 4Gb or 2Gb FC host bus adapter (SBEFCM4 or SBEFCM) which can be installed on any or all blade servers in the chassis. To connect to HBA channel 2 on each blade server, install a switch module in switch-module bay 4 This SAN Switch Module has total of six external uplink ports. However, the 10-port switch has only 3 uplinks active. The remaining 3 uplinks can be activated by using Ports Upgrade key as explained above. Each of the external port requires a Fibre Channel optical transceiver to attach the optical cable to the switch. The switch can support either 4Gb optical transceivers (See SBCEFCSWFS4) or 2Gb optical transceivers (See SBCEFCSWFL and SBCEFCSWFS).	1

Table 6: Brocade* 4Gb SAN Switch Module Software License Key Upgrades

Category	Production Code	Production MM	Description	Min Order
Accessory	ABRSWPTUPD4	874946 (RoHS)	Brocade* Port Upgrade Software Key for 4Gb Switch. This key allows a 5-port upgrade to Brocade 4Gb SAN Switch Module. This key will upgrade a 10-port switch to 15-ports consisting of 9 internal server ports & 6 external uplinks. (or) It will upgrade a 15-port switch configuration to activate all 20-ports to support 14 internal server ports & 6 external uplinks.	1
Accessory	ABRSWPERBDL4	874913 (RoHS)	Brocade* Performance Bundle Software Key for 4Gb Switch Software License Key: Brocade Performance Bundle includes ISL Trunking & Advanced Performance Monitoring described below	1
Accessory	ABRSWISLTRK4	874914 (RoHS)	Brocade* ISL Trunking Software Key for 4Gb Switch Software License Key: Brocade Inter-switch Link Trunking.	1
Accessory	ABRSWAPMON4	874923 (RoHS)	Brocade* Advanced Performance Monitoring Software Key for 4Gb Switch Software License Key: Brocade Advanced Performance Monitoring	1
Accessory	ABRSWEXFAB4	874940 (RoHS)	Brocade* Extended Fabrics Software Key for 4Gb Switch Software License Key: Brocade Extended Fabrics upgrade	1
Accessory	ABRSWSFABOS4	874945 (RoHS)	Brocade* Advanced Security Software Key for 4Gb Switch Software License Key: Brocade Advanced Security OS upgrade	1
Accessory	ABRSWFABW4	874947 (RoHS)	Brocade* Fabric Watch Software Key for 4Gb Switch Software License Key: Brocade Fabric Watch upgrade	1

Optical Transceivers

Table 7: 2Gb & 4Gb Optical transceivers

Category	Production Code	Production MM	Description	Min Order
Accessory	SBCEFCSWFS4	878324 (RoHS)	Short Wavelength, Multi Mode 4Gbit Fibre Channel Optical Transceiver for the SBCEBFCSW4 switch	1
Accessory	TXN22125D000003	883307 (RoHS)	Long Wavelength 4Gbit Fibre Channel Optical Transceiver for the SBCEBFCSW4 switch	1

Intel® Optical Pass-thru Module and Cables

Table 8: Intel®Optical Pass-thru Module Product Codes

Category	Production Code	Production MM	Description	Min Order
Accessory	SBCEOPM	878137 (RoHS)	Optical Pass-thru Module (installs into SBCE chassis) This Optical Pass-thru Module can be installed in switch module bay 1, module bay 2, or both; module bay 3, module bay 4 or both to easily integrate a blade server into your existing Fibre Channel SAN or Optical Gigabit Ethernet network environment. This optical pass-thru device supports 2Gb Fibre Channel but does not support 2Gb Fibre Channel operation. The optical pass-thru module in bay 3 provides an internal connection to channel 1 on a fibre channel host bus adapter (HBA) or Gigabit Ethernet Card (NIC) which can be installed on any or all blade servers in the chassis. To connect to HBA or NIC channel 2 on each blade server, install an optical pass-thru module in bay 4. Similarly, the optical pass-thru module in bay 1 provides an internal connection to channel 1 on the Gigabit Ethernet integrated on the blade server. To connect to channel 2 on the Gigabit Ethernet integrated on the blade server, install an optical pass-thru module in bay 2. Each Optical Pass-thru Module has four external optical ports. Each port requires an Optical Pass-thru Module Cable to attach each blade server in the chassis in a one-on-one ratio to an external Fibre Channel switch port or Optical Gigabit Ethernet switch port. See SBCEOPMSC and SBCEOPMLC.	1

Optical Pass-thru Module Cables

Table 9: Optical Pass-thru Module Cables

Category	Production Code	Production MM	Description	Min Order
Accessory	SBCEOPMSC	878139 (RoHS)	Short wavelength cable for Optical Pass-thru module SBCEOPM. Each cable supports Eight industry-standard duplex SC fiber-optic cable connections to support four bi-directional optical channels.	1
Accessory	SBCEOPMLC	878199 (RoHS)	Long wavelength cable for Optical Pass-thru module SBCEOPM. Each cable supports Eight industry-standard duplex LC fiber-optic cable connections to support four bi-directional optical channels.	1

Intel® Server Compute Blade SBX82, Accessories, and Spares

Table 10: SBX82 Blade Product Codes

Category	Production Code	Production MM	Description	Min Order
Blade	SBX82	870607 (not RoHS)	The Intel® Server Compute Blade SBX82 provides up to two Intel® Xeon™ processors Other blade features include: • Support for one or two Intel® Xeon™ processors • 800 MHz front-side bus • 4 memory sockets supporting 256 MB, 512 MB, 1 GB, 2 GB DIMMs, DDR II 400 • Integrated small form factor SCSI disk drives, 36GB or 73GB capacities, with embedded RAID-0/RAID-1 • Optional SCSI storage expansion unit with embedded RAID-1 The SBX82 does not include processors, processor heat sinks, memory, or hard disks.	1
Blade	SBX82	874466 (RoHS)		1

Table 11: SBX82 Blade Accessory Product Codes

Category	Production Code	Production MM	Description	Min Order
Accessory	AB36SCSIHDKIT	863483 (RoHS)	36 GB SFF (2.5") SCSI HDD Kit	1
Accessory	AB73SCSIHDKIT	863482 (RoHS)	73 GB SFF (2.5") SCSI HDD Kit	1
Accessory	SBESCSI	879892 (RoHS)	Blade Storage Expansion for the SBX82 This is the blade storage expansion unit which is supported only on the SBX82 compute blade. This storage blade supports 2 3.5" SCSI HDDs as well as 2 mezzanine I/O cards (either Ethernet, SBEGBE or Fibre Channel, SBEFCM).	1
Accessory	ABCR320PAK24	854749 (RoHS)	24 pack of SCSI drive carriers for use with the SBESCSI SCSI expansion module	

Category	Production Code	Production MM	Description	Min Order
Accessory	ABNOCHS	863237 (RoHS)	Processor Heat Sink for the SBX82	1

Table 12: SBX82 Blade Spares

Category	Production Code	Production MM	Description	Min Order
Spare	ABXECVRL	863236 (RoHS)	SBX82 Top Cover	1
Spare	SBEASMSCSI	878101 (RoHS)	SBESCSI Access Door	1
Spare	SBESCSIHDBRKT	878036 (RoHS)	SCSI HDD Mounting tray	1
Spare	SBXEFPNL	863246 (RoHS)	Bezel/Front Panel Assembly	1
Spare	SBXEINTKIT	863248 (RoHS)	Miscellaneous Parts Kit for Blade	1
Spare	SBESCM	863240 (RoHS)	SBX82 Spare - I/O card mounting tray	1

Intel® Server Compute Blade SBXD62, Accessories, and Spares

Table 13: SBXD62 Blade Product Codes

Category	Production Code	Production MM	Description	Min Order
Blade	SBXD62	880046 (RoHS)	The Intel® Server Compute Blade SBXD62 provides up to two Intel® Xeon™ LV processors. Other blade features include: • Support for one or two Intel® Xeon™ LV processors • 677 MHz front-side bus • 4 memory sockets supporting 256 MB, 512 MB, 1 GB, 2 GB, 4 GB DIMMs, DDR II 400 • Integrated small form factor SAS disk drives, 36GB or 73GB capacities, with embedded RAID-0/RAID-1 The SBXD62 does not include processors, processor heat sinks, memory, or hard disks.	1

Table 14: SBXD62 Blade Accessory Product Codes

Category	Production Code	Production MM	Description	Min Order
Accessory	AB36SAS	880050 (RoHS)	36 GB 2.5" SAS Hard Drive for SBXD62 and SBESAS	1
Accessory	AB73SAS	880049 (RoHS)	73 GB 2.5" SAS Hard Drive for SBXD62 and SBESAS	1
Accessory	ABSHSX	880577 (RoHS)	Processor Heat Sink for the SBXD62	1

Intel® Server Compute Blade SBXD132, Accessories, and Spares

Table 15: SBXD132 Blade Product Codes

Category	Production Code	Production MM	Description	Min Order
Blade	SBXD132	884672	The Intel® Server Compute Blade SBXD132 supports up to two Intel® Dual-Core Xeon® Processor 5100 series processors up to 2.66GHz (5150). Other blade features include: • 1333 MHz front-side bus • 4 memory sockets supporting 256 MB, 512 MB, 1 GB, 2 GB, 4 GB DIMMs, DDR II 400 • Integrated small form factor SAS disk drives, 36GB or 73GB capacities, with embedded RAID-0/RAID-1 The SBXD132 does not include processors, processor heat sinks, memory, or hard disks.	1
Blade	SBXD132	887441	Hardware update adding support for the Intel® Dual-Core Xeon® Processor 5100 series 5160 2.99GHz processor and the Intel® Quad-Core Xeon® Processor 5300 series processors, E5310, E5320, E5335, and E5345.	1

Table 16: SBXD132 Blade Accessory Product Codes

Category	Production Code	Production MM	Description	Min Order
Accessory	AB36SAS	880050	36 GB 2.5" SAS Hard Drive for SBXD62, SBXD132 and SBESAS	1
Accessory	AB73SAS	880049	73 GB 2.5" SAS Hard Drive for SBXD62, SBXD132 and SBESAS	1
Accessory	ABSWHSX	884710	Processor Heat Sink for the SBXD132	1
Accessory	ABBIE	884707	I/O and Memory Expansion for Intel® Server Compute Blade SBXD132	1
Accessory	SBESAS	880051	Intel® Blade Storage Expansion Module (BSE3) for Intel® Server Compute Blade SBXD132	1
Accessory	AB256BSE	880052	Intel® Blade Storage Expansion Module (BSE3) accessory, 256MB cache memory and battery backup for Intel® Blade Storage Expansion Module SBESAS	1
Accessory	SBESASCAR	880055	3 hot swappable hard drive carriers for SBESAS	1