

SR870BH2 Configuration Guide

**A quick reference guide to assist customers in ordering the components
necessary to configure the SR870BH2 platform**



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SR870BH2 Configuration Guide

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SR870BH2 Feature Dependencies

Feature	Required Hardware for Model 0 (SBHG2)	Required Hardware for Model 1 (SBHG2X)
1 to 2 Processors	One processor heat sink and one power pod for each processor, plus 1 Y-cable for each pair of power pods.	Model 1 includes two processors with heat sinks, two power pods, and a Y-cable which supports the two power pods.
	Thermal Blanks are required in empty CPU slots (one included in Model 0).	N/A
8 DDR DIMM slots	Memory must be installed in groups of 4 DIMMs (details on DIMM order are provided in the Product Guide ¹).	Model 1 includes 4 x 1GB DIMMs. Additional memory must be installed in groups of 4 DIMMs (details on DIMM order are provided in the Product Guide ¹).
Redundant Power Supplies	Model 0 has 2 power supplies. A 3 rd power supply must be added if redundancy is needed (100 – 240V).	Model 1 has 2 power supplies. A 3 rd power supply must be added if redundancy is needed (100 – 240V).
2 Hot Plug SCSI disk drives	Requires ½ inch height (slim line), 3.5 inch SCSI drives and insert into carriers provided with system. See Intel's list of supported drives ¹ .	Model 1 includes (1) 36GB SCSI HDD. A second SCSI HDD may be installed in the carrier provided with the system. See Intel's list of supported drives ¹ .
Embedded Network Controller (NIC)	Model 0 contains an onboard controller with 2 Ethernet ports.	Model 1 contains an onboard controller with 2 Ethernet ports.
IDE Devices	Model 0 includes (1) CDROM / DVD combo devices. See Intel's list of supported drives ¹ .	Model 1 does NOT include an optical device. See Intel's list of supported drives ¹ .

SR870BH2 - Power Subsystem Supported Features

The SR870BH2 comes with 2 power supplies, which is sufficient for any configuration of processors, memory and I/O devices possible at 100V – 240Vac, but does not provide redundancy (3 power supplies are required for redundancy). A filler panel must be installed in systems using only 2 power supplies.

¹ See "Reference Information" section on page 7 for details on available documents

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Base System Configuration Guide

Product Code: SBHG2, MM#: 880657

1. “Model 0” Base Systems are configured with the following:

- 1 Chassis (2U, Rack Mount)
- 1 Baseboard (includes: 1 Y Cable and 2 sockets for the Itanium® 2 processor, on-board Ultra 320 SCSI controller, 8 DDR RAM DIMM sockets, 4 USB ports (2 in front, 2 in back), 1 Serial port, 2 Video ports (1 in front, 1 in back), and 10/100/1000 Intel 82546EB Ethernet Embedded Network Controller)
- 1 I/O Riser board with 3 PCI-X slots (1x 133MHz, 2x 100MHz), and Baseboard Management Controller (BMC)
- 1 Power Distribution Board
- 1 SCSI Hot Swap Backplane
- 1 Front Panel Board
- 2 350W TPS Power Supply
- 6 60mm Variable Speed Fans
- 2 SCSI Disk Drive Carriers
- 1 DVD / CDROM R-W Combo Drive
- 1 Front Bezel (color: Raven Black)

1 Resource Kit containing the following on CDROM: Documents: Product Guide and Product Quick Start Guide; Utilities: SDR Viewer, SEL Viewer, FRU/SDR Loader, System Maintenance Utility (SMU), EFI Platform Diagnostics, EFI Configuration Tool, and LSI Logic SCSI and Intel 82546EB drivers for Windows† 2003 Server, Red Hat Advanced Server 2.1, and SuSE.

2. “Model 0” does NOT contain the following necessary items:

- Processors
- Processor heat sinks
- MVRs or Processor Power Pods (*processor dependent, see page 5 for more details*)
- External Power Cords
- 3rd Power Supply
- Rack Mount Slide Rail Kit
- Cable Management Arm
- Hard Disk Drives
- Memory

3. To order your necessary items use the following table:

Product Codes	MM#	Min Qty	Description
Dual-Core Intel® Itanium® 2 Processor 9000 Series			
BX805499010 ⁺	885382	1	Processor / Heat Sink Kit (includes: 1.60 GHz / 6MB cache Intel® Itanium® 2 9000 series processor with heat sink attached)
BX805499015	885383	1	Processor / Heat Sink Kit (includes: 1.4 GHz / 12MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)
BX805499020	885381	1	Processor / Heat Sink Kit (includes: 1.42 GHz / 12MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)
BX805499030	885380	1	Processor / Heat Sink Kit (includes: 1.60 GHz / 8MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)
BX805499040	885379	1	Processor / Heat Sink Kit (includes: 1.60 GHz / 18MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)
BX805499050	885374	1	Processor / Heat Sink Kit (includes: 1.60 GHz / 24MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)
Intel® Itanium® 2 Processors			
BX80543JC1300G	875045	1	Processor / Heat Sink Kit (includes: 1.3GHz / 3MB cache Itanium® 2 processor with heat sink attached)
BX80543JC1600G	875043	1	Processor / Heat Sink Kit (includes: 1.6GHz / 3MB cache Itanium® 2 processor with heat sink attached)

BX80543KC1500H	874986	1	Processor / Heat Sink Kit (includes: 1.5GHz / 4MB cache Itanium® 2 processor with heat sink attached)
BX80543KC1600J	875042	1	Processor / Heat Sink Kit (includes: 1.6GHz / 6MB cache Itanium® 2 processor with heat sink attached)
BX80543KC1600K	875050	1	Processor / Heat Sink Kit (includes: 1.6GHz / 9MB cache Itanium® 2 processor with heat sink attached)
ATGMVR12V	883849	1	MVR - Modular Voltage Regulator (required for Dual-Core Intel® Itanium® 2 Processor 9000 Series)
ABHMPPOD	882118	1	Power Pod Power Pod with Y cable (supports ONLY BX80543JC1300G, BX80543JC1600G, BX80543KC1500H, BX80543KC1600J and BX80543KC1600K processor kits)
AGFSLRAIL	882216	1	Rackmount Slide Rail Kit for standard EIA compliant 19" inch rack
Hard Disk Drives	N/A	N/A	OEMs purchase directly from vendors. See Intel's list of supported drives ¹
Memory	N/A	N/A	OEMs purchase directly from vendors. See Intel's list of qualified memory DIMMs ¹ .

+ Single Core only and does not support hyper-threading technology.

4. Additional accessories that may be desirable for your configuration are:

Product Codes	MM#	Min Order Qty	Description
AGFTPS350	882215	1	Power Supply, TPS 350W, hot swap
ATGDVDCDRW	854858	1	Liteon * DVD / CDROM RW Combo drive
ABHCBLARM	853965	1	Cable Management Arm

¹ See "Reference Information" section on page 7 for details on available documents
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Integrated System Configuration Guide

Product Code: SBHG2X, MM#: 880672

1. “Model 1” Integrated Systems are configured with the following:

- 1 Chassis (2U, Rack Mount)
- 1 Baseboard (includes: 1 Y Cable and 2 sockets for the Itanium® 2 processor, on-board Ultra 320 SCSI controller, 8 DDR RAM DIMM sockets, 4 USB ports (2 in front, 2 in back), 1 Serial port, 2 Video ports (1 in front, 1 in back), and 10/100/1000 Intel 82546EB Ethernet Embedded Network Controller)
- 1 I/O Riser board with 3 PCI-X slots (1x 133MHz, 2x 100MHz), and Baseboard Management Controller (BMC)
- 1 Power Distribution Board
- 1 SCSI Hot Swap Backplane
- 1 Front Panel Board
- 2 350W TPS Power Supply
- 6 60mm Variable Speed Fans
- 2 SCSI Disk Drive Carriers

0 DVD / CDROM R-W Combo Drive

- 1 Front Bezel (color: Raven Black)

2 1.6G/3M Itanium® 2 processors with heatsinks

2 Processor Power Pods

4 1GB memory DIMMs (total of 4GB memory)

1 73G SCSI HDD

1 Rackmount Slide Rail Kit

Note: Dual-Core Intel® Itanium® 2 9000 series processors are not available with the integrated SKU SBHG2X. Please use Model 0 SKU SBHG2 with Dual-Core Intel® Itanium® 2 9000 series processors.

1 Resource Kit containing the following on CDROM: Documents: Product Guide and Product Quick Start Guide; Utilities: SDR Viewer, SEL Viewer, FRU/SDR Loader, System Maintenance Utility (SMU), EFI Platform Diagnostics, EFI Configuration Tool, and LSI Logic SCSI and Intel 82546EB drivers for Windows† 2003 Server, Red Hat Advanced Server 2.1, and SuSE.

2. “Model 1” does NOT contain the following items:

- External Power Cords
- 3rd Power Supply
- Optical device (eg, DVD/CD ROM)
- Cable Management Arm

3. To order these items, use the following table:

Product Codes	MM#	Min Order Qty	Description
AGFTPS350	882215	1	Power Supply, TPS 350W, hot swap
ATGDVDCDRW	854858	1	Liteon * DVD / CDROM RW Combo drive
ABHCBLARM	853965	1	Cable Management Arm
Additional Hard Disk Drives	N/A	N/A	OEMs purchase directly from vendors. See Intel's list of supported drives ¹
Additional Memory	N/A	N/A	OEMs purchase directly from vendors. See Intel's list of qualified memory DIMMs ¹ .

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Reference Documentation Information

1. **SR870BH2 Hardware and Operating System Validation Test List Plan** – contains a prioritized list of operating systems and adapter cards Intel plans to validate.

2. **SR870BH2 System Enabling Components Document** – includes component descriptions, functions, part numbers, and vendor contacts for heat sinks, power supplies, power pods, Y cable, power cables, DC to DC converters, and bezels.

3. **SR870BH2 Product Guide** – provides detailed information on board and system component descriptions and features, SW and utility configurations, hot swappable system components, servicing, and technical reference guide.

SR870BH2 SKU List

	Product Code	MM#	Description	Minimum Order Qty
System	SBHG2	880657	Model 0 System (see page 4 for details)	1
	SBHG2X	880672	Model 1 System (see page 6 for details)	1
Boards	BBHMAIN	882027	Main Board	1
	BBHPCIRISER	882332	PCI Riser Board	1
	BBHFPANEL	883209	Front Panel Board	1
	BBHSCSI	882345	SCSI Board	1
	BBHIDEADPT	882343	IDE Adaptor Board	1
	Processors	Dual-Core Intel® Itanium® 2 Processor 9000 Series		
	BX805499010⁺	885382	Processor / Heat Sink Kit (includes: 1.60 GHz / 6MB cache Intel® Itanium® 2 9000 series processor with heat sink attached)	1
	BX805499015	885383	Processor / Heat Sink Kit (includes: 1.4 GHz / 12MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)	1
	BX805499020	885381	Processor / Heat Sink Kit (includes: 1.42 GHz / 12MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)	1
	BX805499030	885380	Processor / Heat Sink Kit (includes: 1.60 GHz / 8MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)	1
	BX805499040	885379	Processor / Heat Sink Kit (includes: 1.60 GHz / 18MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)	1
	BX805499050	885374	Processor / Heat Sink Kit (includes: 1.60 GHz / 24MB cache Dual-Core Intel® Itanium® 2 9000 series processor with heat sink attached)	1
	Intel® Itanium® 2 Processors			
	BX80543JC1300G	875045	Processor / Heat Sink Kit (includes: 1.3GHz / 3MB cache Itanium® 2 processor with heat sink attached)	1
	BX80543JC1600G	875043	Processor / Heat Sink Kit (includes: 1.6GHz / 3MB cache Itanium® 2 processor with heat sink attached)	1
	BX80543KC1500H	874986	Processor / Heat Sink Kit (includes: 1.5GHz / 4MB cache Itanium® 2 processor with heat sink attached)	1
	BX80543KC1600J	875042	Processor / Heat Sink Kit (includes: 1.6GHz / 6MB cache Itanium® 2 processor with heat sink attached)	1
	BX80543KC1600K	875050	Processor / Heat Sink Kit (includes: 1.6GHz / 9MB cache Itanium® 2 processor with heat sink attached)	1
Accessories	AGFTPS350	882215	Power Supply, TPS 350W, hot swap	1
	ATGMVR12V	883849	MVR - Modular Voltage Regulator (required for Dual-Core Intel® Itanium® 2 Processor 9000 Series)	1
	ABHMPPOD	882118	Power Pod Power Pod with Y cable (supports ONLY BX80543JC1300G, BX80543JC1600G, BX80543KC1500H, BX80543KC1600J and BX80543KC1600K processor kits)	1
	ABHCBLARM	853965	Cable Management Arm	1
	AGFSLRAIL	882216	Slide Rail Kit	1
Spares	FGFSHEETMTL	883212	Chassis (sheet metal kit, no boards)	1
	FGFPSBAY	883213	Power Supply Bay (sheet metal, power board, and internal AC cable)	1
	FGFRISRASSY	855414	IO Riser Lever Arm	1
	FGFAIRDUCT	855413	Processor Air Duct	1
	FGFFAN	883219	Fan	1
	FGFBEZL	882348	Front Bezel (color: Raven Black)	1
	FGFCBLKIT	854812	Cable Spares Kit (includes Qty = 1 of each cable)	1

	ATGDVDCDRW	854858	Liteon * DVD / CDROM RW Combo Drive	1
	AGFCOUNTKIT	871341	Resource Kit (see page 4 for details)	1

+ Single Core only and does not support hyper-threading technology.