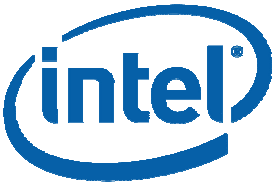
Intel® Server Board *SE7520BB2*

Tested Hardware and Operating System List



Revision 1.0

March, 2006

Enterprise Platforms and Services Marketing

Revision History

Date	Revision Number	Modifications
March 2006	1.0	Initial Release

Disclaimers

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION, OR SAMPLE.

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, or life sustaining applications.

Intel retains the right to make changes to its test specifications at any time, without notice.

The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty.

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

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

Table of Contents

1. Introduction

This document is intended to provide users of the Intel® server board *SE7520BB2* with a guide to the different operating systems, adapter cards, and peripherals tested by Intel on this platform.

This document will continue to be updated as new adapters, peripherals, and operating systems are tested or until the Intel® server board *SE7520BB2* is no longer in production. Each new release of the document will present updated information as well as continue to provide the information from previous releases.

Intel will only provide support for those adapters and peripherals under the specified system configuration (System BIOS and Firmware revisions) and operating systems versions with which they were tested.

1.1 Test Overview

Testing performed on the Intel® server board *SE7520BB2* is classified under two separate categories: Basic Installation Testing, and Adapter / Peripheral Compatibility and Stress Testing.

1.1.1 Basic Installation Testing

Basic installation testing is performed with each supported operating system. Basic installation testing validates that the server board can install the operating system and that the base hardware feature set is functional. A small set of peripherals is used for installation purposes only. No add-in adapter cards are tested. Testing includes network connectivity and running of proprietary and industry standard test suites.

The latest version of an operating system signifies the latest supported version at the time of the actual test run. Each new release of this document may have a newly supported release of a given operating system. Previous releases of a supported operating system may not be tested beyond the basic installation test process.

1.1.1.1 Support Commitment for Basic Installation Testing

Intel commits to provide the following level of customer support for operating systems that receive only basic installation testing:

- Intel will provide and test operating system drivers for each of the server board's integrated controllers, provided that the controller vendor has a driver available upon request. Vendors will not be required by Intel to develop drivers for operating systems that they do not already support. This may limit the functionality of certain server board integrated controllers.
- Intel will support customer issues that involve installation and/or functionality of operating system with the server board's integrated controllers only if a driver has been made available.

- Intel will NOT provide support for issues related to use of any add-in adapters or peripherals installed in the server system when an operating system that received basic installation testing only is in use.
- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the operating system. The resolution may include, but is not limited to, on-board controller driver changes, engaging the vendor for resolution, BIOS changes, firmware changes, or determining a customer acceptable workaround for the issue.

1.1.2 Adapter / Peripheral Compatibility and Stress Testing

Adapter / Peripheral Compatibility and Stress testing is performed only on the most current release of a supported operating system at the time of a given validation run. The Adapter / Peripheral Compatibility and Stress testing process consists of three areas: Base Platform, Adapter Compatibility, and Stress.

Base Platform: Each base platform will successfully install a given operating system, successfully run a disk stress test, and successfully run a network stress test.

Adapter Compatibility: Adapter compatibility validation (CV) testing uses test suites to gain an accurate view of how the server performs with a wide variety of adapters under the primary supported operating systems. These tests are designed to show hardware compatibility between the cards and the server platform and include functional testing only. No heavy stressing of the systems or the cards is performed for CV testing.

Stress Testing: This test sequence uses configurations that include add-in adapters in all available slots, (depending on chassis used) for a minimum 72-hour test run without injecting errors. Each configuration passes an installation test, a Network/Disk Stress test, and tape backup test. Any fatal errors that occur will require a complete test restart.

1.1.2.1 Support Commitment for Adapter / Peripheral Compatibility and Stress Testing

Intel commits to provide the following level of customer support for operating systems that receive Adapter / Peripheral Compatibility and Stress testing:

- Intel will provide support for customer issues with these operating systems involving installation and/or functionality of the server board with or without the adapters and peripherals listed in this document as having been tested under the particular operating system.
- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the operating system. The resolution may include, but is not limited to, on-board controller driver changes, engaging the vendor for resolution, BIOS changes, firmware changes, or determining a customer acceptable workaround for the issue.
- Intel will provide and test operating system drivers for each onboard video, network, and storage controller.
- Intel will enable vendors to provide driver support for add-in adapters using these operating systems.

- Intel will go through some of the steps to achieve certification to ensure its customers do not run across any problems, but the actual certification is the responsibility of the individual customer.

For operating systems, adapter cards, and peripherals not listed in this document, there is no support commitment. Intel will consider support requests on a case-by-case basis.

1.2 Pass/Fail Test Criteria

For each operating system, adapter, and peripheral configuration, a test passes if specific criteria are met. Specific configurations may have had particular characteristics that were addressed on a case-by-case basis. In general, a configuration passes testing if the following conditions are met:

- The operating system installed without error.
  - Manufacturer's installation instructions or Intel's best-known methods were used for the operating system installation.
  - No extraordinary workarounds were required during the operating system installation.
  - The server system behaved as expected during and after the operating system installation.
  - Application software installed and executed normally.
- Hardware compatibility tests ran to completion without error.
- Test software suites executed successfully
  - Test and data files were created in the correct directories without error.
  - Files copied from client to server and back compare to the original with zero errors reported.
  - Clients remain connected to the server system.
  - Industry standard test suites run to completion with zero errors reported.

All Intel® server board *SE7520BB2* testing was performed using generic validation test vehicles specifically designed for board level testing. The Intel® Server Board *SE7520BB2* is not compatible in any Intel® Chassis product. The Intel® Server Board *SE7520BB2* is compatible with specific third-party chassis products. Please see the "Reference Chassis List" on the Intel® server support website for details regarding server board compatibility with third-party chassis.

2. Intel® Server Board SE7520BB2 Base System Configurations

The following table lists the base system configurations tested. Base system configurations will change as new revisions of the Intel® server board *SE7520BB2* are released and/or new system BIOS and BMC firmware are cut onto the board in the factory. Each base system configuration is assigned an identifier number that is referenced in the tables throughout this document. New base system configurations are added with each new release of this document.

Intel will only provide support for adapters and peripherals under the specified base system configuration and operating systems versions with which they were tested.

Base System Configuration Identifier #	Board Type	PBA Number	BIOS Revision	BMC Firmware Revision	FRU/SDR	Notes
1	SE7520BB2	D34947-302	P01	2.40	1.08	
2	SE7520BB2	D34947-302	P02	2.40	1.08	

3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® server board *SE7520BB2*. Each of the listed operating systems was tested for compatibility with Intel® server board *SE7520BB2* base system configuration listed in Section 2 of this document. Operating systems are supported only with the specified base system configuration(s) with which they were tested.

The following table also indicates whether each operating system received Basic Installation Testing, or Adapter / Peripheral Compatibility and Stress Testing. For information on the support commitments for Basic Installation Testing vs. Adapter / Peripheral Compatibility and Stress Testing, please reference Section 1 of this document.

Any variations to the standard operating system installation process are documented in the Installation Guidelines section of this document. If there is no installation guidelines noted in the following table, then the operating system installed as expected using manufacturer's installation instructions or Intel's best-known methods.

Operating systems supported by Intel® Server Management software or LANDesk* Client Manager software may be different than the operating systems supported by the Intel Server Board *SE7520BB2*. Please reference the Readme and User Guide documents that are included as part of each Intel Server Management and LANDesk* Client Manager distribution for operating systems that are supported by that release.

Operating System	Base System Configuration Tested & Type of Testing	Notes
Red Hat Enterprise Linux 4.0, Update 2	Compatibility & Stress	
Microsoft Windows Server 2003 Enterprise Edition	Compatibility & Stress	
SuSE 9 Enterprise Linux, Service Pack 2	Compatibility & Stress	
Red Hat Enterprise Linux 3.0, Update 6	Basic Installation	

3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® server board *S7320VP2*. However, the customer is responsible for their own certification from the individual operating system vendors. In many cases, the customer may leverage their operating system certifications from Intel's testing. See the "Comments" section next to each operating system in the table below for additional information. Intel's certifications, pre-certification, and operating system testing may help reduce some of the risk in achieving customer certifications with the operating system vendors.

Operating System	Certification Listing	Comments
Microsoft Windows Server 2003 Enterprise Edition	In process	
RedHat Enterprise Linux 4.0	In process	
SuSE 9.0 Enterprise Linux	In process	

4. Adapters and Peripherals

Add-in adapter card and peripheral compatibility and stress testing will only be performed with the latest version of an operating system at the time the validation testing occurred. The following table shows the operating system and base system configurations used to validate each device. The adapters are divided into categories based on their functionality. All integrated on-board devices are tested by default and are therefore not included in the following tables.

Note that not all adapter cards were tested under all operating systems. The following notation is used in the tested adapters and peripherals table below to indicate the support level that Intel provides for a particular adapter under a particular operating system:

Number (i.e. 1)	This adapter or peripheral has been tested and is supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
Number in brackets (i.e. [1])	This adapter or peripheral has been tested, but is NOT supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
NT	This adapter or peripheral has not been tested under this operating system and is not supported under this operating system.
ND	This adapter or peripheral has not been tested under this operating system due to limitations in IHV driver availability, and is not suported under this operating system.
SA (Similar Adapter)	This adapter is supported, but not tested. This adapter model has not been tested with this server board, but Intel will support it based on successful testing of a similar adapter from the same adapter family. Intel has high confidence that this adapter will function correctly with the server board. This adapter uses the same firmware and drivers, and has a nearly identical system interface to another adapter of the same family that has been successfully tested with this server board. In addition, Intel has secured IHV commitment to support the similar adapters equally. Customers should always test adapters as part of the final system configuration prior to deployment. All installation guidelines for the tested adapter also apply to the similar adapter.

Any variations to the standard adapter installation process or to expected adapter functionality are documented in the Installation Guidelines section of this document. If there are installation guidelines affecting a particular adapter and operating system combination, these are referenced in the following table. If there are no installation guidelines noted in the following table, then the adapter installed and functioned as expected using manufacturer's installation instructions or Intel's best-known methods.

Testing of adapters cards normally is performed with unused add-in adapters and onboard controller expansion ROMs disabled in BIOS Setup. Intel recommends that customers disable the option ROM for add-in controllers and/or the on-board controllers when not booting from the controller or needing to use its built in utilities.

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003	Red Hat Enterprise Server 4.0	SuSE 9 Enterprise Linux
4.1 PCI SATA RAID							
AMCC / 3Ware	9500S-8 (PCI-Med)	9500S-8	PCI-X 64/66	SATA RAID, 8 channel	1	1	1
Intel	SRCS28X (PCI-Short)	SRCS28X	PCI-X 64/133	SATA RAID, 8 channel	1	1	1
LSI Logic	MegaRAID SATA 150-6 (PCI-Short)	MegaRAID SATA 150-6	PCI 64/66	SATA RAID, 6 channel	1	1	[1]
4.2 PCI SCSI RAID							
Intel	SRCU41L (PCI-LP/RP)	SRCU41L	PCI 64/66	U320, 2 channel	1	1	1
Intel	SRCU42E (PCI-Med)	SRCU42E	x8 PCI Express	U320, 2 channel	1	1	1
Intel	SRCU42X (PCI-Short)	SRCU42X	PCI-X 64/133	U320, 2 channel	1	1	1
4.3 PCI SCSI							
LSI Logic	LSI22320-R (PCI-Short)	LSI22320-R	PCI-X 64/133	U320, 2 channel	1	1	1
4.4 PCI Fiber Channel							
Emulex	LP10000ExDC (PCI-Short)	LP982-F2	x4 PCI-Express	2 channel 2Gb	1	1	[1]
Qlogic	QLA2342 (PCI-Short)	QLA2342	PCI-X 64/133	2 channel 2Gb	1	1	1
4.5 PCI NIC							
Intel	PRO/100+ S Server Adapter(PCI-Short)	PILA8470D3	PCI 32/33		1	1	1
Intel	PRO/100+ S Server Adapter (PCI-Short)	PILA8470C3	PCI 32/33		SA	SA	SA
Intel	PRO/1000MT Gigabit Server Adapter (PCI-LP/RP)	PWLA8490MT	PCI-X 64/133		1	1	1
Intel	PRO/1000MT Gigabit Server Adapter (PCI-LP/RP)	PWLA8490MF	PCI-X 64/133	100baseLC, Fiber, No bridge	SA	SA	SA
Intel	PRO/1000XT Gigabit Server Adatper	PWLA8490XT	PCI-X 64/133	PCI short	1	1	1

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003	Red Hat Enterprise Server 4.0	SuSE 9 Enterprise Linux
Intel	PRO/1000XT Gigabit Server Adatper	PWLA8490XF	PCI-X 64/133	1000baseSX, Fiber	SA	SA	SA
Intel	PRO/1000XT Gigabit Server Adatper	PWLA8490XFL	PCI-X 64/133	LP, 10/100/1000 baseT	SA	SA	SA
Intel	PRO/1000XT Gigabit Server Adatper	PWLA8490XTL	PCI-X 64/133	LP, 10/100/1000baseT	SA	SA	SA
Intel	PRO/1000MT Dual Port Gigabit Adapter	PWLA8492MT	PCI-X 64/133	LP/RP	1	1	1
Intel	PRO/1000MT Dual Port Gigabit Adapter	PWLA8492MF	PCI-X 64/133	Dual port, Fiber, No bridge	SA	SA	SA
Intel	PRO/1000MT Quad Port Gigabit Adapter	PWLA8494MT	PCI-X 64/133	Dual port, Fiber, No bridge	1	1	1
Syskonnect	SK-9E22 (PCI-Short)	SK-9E22	x4 PCI-Express	2 Port 1GB LAN	1	1	1
4.6 Modems							
3COM	USR5610B 56K V.92 Performance Pro (PCI-Short)	USR5610B	PCI 32/33		1	1	1
4.7 Human Interface Devices							
Keytronic	PROPilot	PROPilot	PS/2	Keyboard	1	1	1
Logitech	Optical Mouse	930582-0121	PS2 and USB	Mouse	1	1	1
Logitech	Internet Navigator	967233-0121	PS2 and USB	Keyboard	1	1	1
Microsoft	Intellimouse Optical	B75-00092	PS2 and USB	Mouse	1	1	1
Rainbow	Sentinal Duo Hardware Key	Sentinal Duo	USB	USB Security Key	1	1	NT
4.8 CD R/RW Drives							
Mitsumi	SR244W1	SR244W1	ATA 33	24x Slimline	1	1	1
Samsung	TS-L462A	LS-462A	ATA 33	IDE Slimline	1	1	1
Teac	DW-224E-C83	DW-224E-C83	ATA 33	IDE Slimline	1	1	1
4.9 DVD ± R/RW Drives							
Lite On	SOSC-2482K	SOSC-2482K	ATA 33	IDE Slimline	1	1	1
Pextor	PX-716SA	PX-716SA	SATA	Slimline DVD	1	1	1

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003	Red Hat Enterprise Server 4.0	SuSE 9 Enterprise Linux
4.10 Removable Devices							
Lexar	1GB USB Flash Drive	JD1GB-80-231	USB 2.0	External	1	1	1
IOMega	Micro Mini 1GB Drive	SKU 33136	USB 2.0	External	1	1	1
Sony	VAIO External USB floppy	PCGA-UFD5	USB	3.5” Floppy drive	1	1	1
Teac	FDO5PUB	FDO5PUB	USB	1.44MB, 3.5” Floppy	1	1	1
4.11 KVM							
Avocent	DSR 1021	1021	PS/2 KVM/IP	8 port	1	1	1
Belkin	Omniview PRO2	F1DA108T	PS/2	8 port	1	1	1
4.12 Video Controller							
ATI	RADEON 7000 (PCI-Med)	RADEON 7000	PCI 32/33	VGA	1	1	1

5. Hard Disk Drives

The hard drives listed in the following table have been tested with the Intel® server board *SE7520BB2* by Intel in its validation labs and/or by individual drive vendors. The following operating system identifiers are used in the table to specify which OS each drive was tested under.

Identifier number	Operating System
1	Microsoft Windows* Server 2003 Enterprise Edition
2	Red Hat Enterprise Server 4.0
3	SuSE 9.0 Enteprise Linux

Note that not all hard drives were tested under all operating systems. The following notation is used in the tested hard drives table below to indicate the support level that Intel provides for a particular hard drive with a particular operating system:

Number (i.e. 1)	This hard drive has been tested and is supported under the operating system identified by the operating system identification number.
Number in brackets (i.e. [1])	This hard drive has been tested, but is NOT supported under the operating system identified by the operating system identification number.
SD (Similar Drive)	The hard disk drive is supported, but not tested. This hard drive model/capacity has not been tested with this server board, but Intel will support it based on successful testing of a larger capacity hard drive from the same hard drive family. Intel has high confidence that this hard drive will function correctly with the server board. This drive uses the exact same firmware and drivers as a larger capacity hard drive that has been successfully tested with this server board. The only difference between this drive and the one that was used in testing is the storage capacity. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested or not. Customers should always test hard drives as part of the final system configuration prior to deployment. Given the fact that a larger capacity hard drive from the same drive family has successfully completed testing on this server board, this particular hard drive capacity point will not be tested.
IHVT (IHV Tested)	The hard disk drive was tested according to Intel-approved guidelines and test procedures by the Independent Hardware Vendor (IHV) that manufactured the drive. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested in an Intel lab or not. IHV test reports remain the property of the IHV (Intel cannot provide copies of these reports).

Manufacturer	Product Family	Model Number	Interface	RPM	Drive size (GB)	Tested Operating Systems	Notes
SCSI Hard Drives							
Hitachi	Ultrastar 15K146	HUS151414VL3800	U320 SCSI SCA	15,000	146GB	1,2,3	
Hitachi	Ultrastar 15K146	HUS151414VL3600	U320 SCSI 68 pin	15,000	146GB	SD,SD,SD	
Hitachi	Ultrastar 15K73	HUS151473VL3800	U320 SCSI SCA	15,000	73GB	SD,SD,SD	
Hitachi	Ultrastar 15K73	HUS151473VL3600	U320 SCSI 68 pin	15,000	73GB	SD,SD,SD	
Hitachi	Ultrastar 15K36	HUS151436VL3800	U320 SCSI SCA	15,000	36GB	SD,SD,SD	
Hitachi	Ultrastar 15K36	HUS151436VL3600	U320 SCSI 68 pin	15,000	36GB	SD,SD,SD	
Parallel ATA (PATA) Hard Drives							
Hitachi	Deskstar 7K400	HDS724040KLAT80	ATA 100	7,200	400GB	1,2,3	
Hitachi	Deskstar 7K250	HDS722516VLAT80	ATA 100	7,200	160GB	1,2,3	
Hitachi	Deskstar 7K250	HDS722512VLAT80	ATA 100	7,200	120GB	SD,SD,SD	
Hitachi	Deskstar 7K250	HDS722525VLAT80	ATA 100	7,200	250GB	SD,SD,SD	
Maxtor	DiamondMax Plus 9	6Y200P0	ATA 133	7,200	200GB	1,2,3	
Maxtor	DiamondMax Plus 9	6Y160P0	ATA 133	7,200	160GB	SD,SD,SD	
Maxtor	DiamondMax Plus 9	6Y120P0	ATA 133	7,200	120GB	SD,SD,SD	
Maxtor	DiamondMax Plus 9	6Y080P0	ATA 133	7,200	80GB	SD,SD,SD	
Seagate	Barracuda 57ATA	ST3160023A	ATA 100	7,200	160GB (8MB cache)	1,2,3	
Seagate	Barracuda 57ATA	ST3120026A	ATA 100	7,200	120GB (8MB cache)	SD,SD,SD	
Seagate	Barracuda 57ATA	ST380013A	ATA 100	7,200	80GB (8MB cache)	SD,SD,SD	
Serial ATA (SATA) Hard Drives							
Maxtor	DiamondMax 10	6V120E0	SATA-300	7,200	120GB	1,2,3	
Maxtor	DiamondMax 10	6V060E0	SATA-300	7,200	60GB	SD,SD,SD	
Maxtor	DiamondMax 10	6V080E0	SATA-300	7,200	80GB	SD,SD,SD	
Maxtor	DiamondMax 10	6V160E0	SATA-300	7,200	160GB	SD,SD,SD	
Maxtor	DiamondMax 10	6V200E0	SATA-300	7,200	200GB	SD,SD,SD	
Seagate	Barracuda 7	ST3160023AS	SATA-150	7,200	160GB	1,2,3	
Seagate	Barracuda 7	ST3120026AS	SATA-150	7,200	120GB	SD,SD,SD	

Manufacturer	Product Family	Model Number	Interface	RPM	Drive size (GB)	Tested Operating Systems	Notes
Seagate	Barracuda 7	ST3200822AS	SATA-150	7,200	200GB	SD,SD,SD	
Seagate	Barracuda 7	ST380013AS	SATA-150	7,200	80GB	SD,SD,SD	
Hitachi	Deskstar 7K250	HDS722525VLST80	SATA-150	7,200	250GB	1,2,3	
Hitachi	Deskstar 7K250	HDS722516VLST80	SATA-150	7,200	160GB	SD,SD,SD	
Hitachi	Deskstar 7K250	HDS722512VLST80	SATA-150	7,200	120GB	SD,SD,SD	
Hitachi	Deskstar 7K250	HDS722580VLST80	SATA-150	7,200	80GB	SD,SD,SD	
Western Digital	WD Raptor	WD360GD	SATA-150	10,000	36GB	SD,SD,SD	
Western Digital	WD Raptor	WD740GD	SATA-150	10,000	74GB	1,2,3	