



Intel[®] Entry Storage System SS4200-EHW

Tested Hardware and Operating System List

Revision 1.1

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EPSD Technical Marketing

Revision History

Date	Revision Number	Modifications
March 6, 2008	0.5	First Review Copy
March 31, 2008	0.9	Final Review Copy
April 1, 2008	1.0	Initial Release
January 22, 2009	1.1	Updated tested memory list on section 4 (indicated in BOLD).

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1. Introduction

This document is intended to provide users of the Intel® Entry Storage System SS4200-EHW with a guide to the different client operating systems, disk drives, and peripherals tested by Intel on this platform.

This document is updated as new disk drives, peripherals, and client operating systems are tested or until the Intel® Entry Storage System SS4200-EHW is no longer in production. Each new release of the document will present updated information and continue to provide the information from previous releases.

Intel will only provide support for those disk drives and peripherals under the specified system configuration (system firmware revisions) and client operating system versions with which they were tested.

1.1 Test Overview

Testing performed on the Intel® Entry Storage System SS4200-EHW is classified as Peripheral Compatibility and Stress Testing.



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 Peripheral Compatibility and Stress Testing

Peripheral Compatibility and Stress testing is performed only on the most current release of a supported operating system (client or Intel® Entry Storage System SS4200-EHW) at the time of a given validation run. The Peripheral Compatibility and Stress testing process consists of three areas: Base Platform, Peripheral Compatibility, and Stress.

Base Platform: Each base platform will successfully install the client software on the particular operating system, successfully run a disk stress test, and successfully run a network stress test.

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

Stress Testing: This test sequence uses configurations that include peripherals for a minimum 24-hour test run without injecting errors (this includes weekend runs of 72 hours). Each configuration passes an installation test and a Network/Disk Stress test. Any fatal errors that occur will require a complete test restart.

1.1.1.1 Support Commitment for Peripheral Compatibility and Stress Testing

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

- Intel will provide support for customer issues with these client operating systems involving installation and/or functionality of the storage system with or without the peripherals listed in this document as having been tested under the particular client operating system.

- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the client operating system. The resolution may include, but is not limited to, peripheral 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 the onboard network and storage controller.
- 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 client operating systems 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 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 were met:

- The client software installed without error.
- Hardware peripheral 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 storage system and back compare to the original with zero errors reported.
- Clients remain connected to the storage system.
- Industry standard test suites run to completion with zero errors reported.

All Intel® Entry Storage System SS4200-EHW testing was performed using the SS4200-EHW chassis.

Component	Release 1.0
System TA Number	D93102-005
Baseboard PBA Number	D71335-303
Baseboard BIOS Firmware Revision	V090L

2. Client Systems

The following table provides a list of tested client systems compatible with the Intel® Entry Storage System SS4200-EHW. The systems presented in this table are particular configurations used in testing the application during the validation process. It is not meant to represent that these are the only systems that will run the application.

Intel Tested Client Platforms				
Manufacturer	Model	Processor	Operating System	Notes
Intel	SR1425BK1	Pentium® 4	See Section 2	Tested for connectivity
Intel	SE7501WV2	Xeon®	See Section 2	Tested for connectivity
Intel	SE7320VP2	Xeon®	See Section 2	Tested for connectivity
Intel	SE7520JR2	Xeon®	See Section 2	Tested for connectivity
Intel	S5000PAL	Dual-Core Xeon®	See Section 2	Tested for connectivity
Intel	D975XBX	Pentium® D	See Section 2	Tested for connectivity

3. Peripherals

Peripheral compatibility and stress testing is only performed with the shipped version of the Storage System operating system as indicated in Section 1 of this document. The peripherals listed in sections 4.4 Disk on Module, 4.5 Input, and 4.6 Video Adapters are listed here for integrators. These may be required to install other software stacks. These peripherals are not required for normal operation.

Manufacturer	Capacity	Model Number	Interface	Comments
3.1 USB External Hard Disk Drives				
Seagate	320 GB	ST3320820U2-RK	USB	Tested
Seagate	250 GB	ST3250824U2-RK	USB	SD
Seagate	160 GB	ST3160812U2-RK	USB	SD
Seagate	160 GB	ST3160203U2-RK	USB	SD
Seagate	80 GB	ST390203U2-RK	USB	SD
Western Digital	250 MB	WDG1U2500N	USB	Tested
Western Digital	120 MB	WDG1U1200N	USB	SD
Western Digital	80 MB	WDG1U800N	USB	SD
Western Digital	320 MB	WDG1U3200N	USB	SD
Western Digital	400 MB	WDG1U4000N	USB	SD
Western Digital	500 MB	WDG1U5000N	USB	SD
Western Digital	500 GB	WDG1SU5000	USB	Tested

Manufacturer	Capacity	Model Number	Interface	Comments
3.2 USB External Flash Drives				
lomega	1 GB	SKU33136	USB	Tested
lomega	512 MB	SKU33105	USB	SD
lomega	2 GB	SKU33268	USB	SD
Lexar	1 GB	JDFF1GB-431	USB	Tested
Lexar	2 GB	JDFF2GB-431	USB	SD
Lexar	4 GB	JDFF4GB-431	USB	SD
Lexar	256 MB	JDFF256-431	USB	SD
Lexar	512 MB	JDFF512-431	USB	SD

Manufacturer	Capacity	Model Number	Interface	Comments
3.3 USB External Mini-Drives				
Western Digital	6 GB	WDXMM60WP	USB	Tested
Seagate	6 GB	ST660211U-RK	USB	Tested
Seagate	5 GB	ST650211U-RK	USB	SD
Seagate	2.5 GB	ST625211U-RK	USB	SD

Manufacturer	Capacity	Model Number	Interface	Comments
3.4 Disk On Module				
PQI	256 MB	DJ0256M22R10	40-Pin	Tested
Super Talent	256 MB	SFM25640VP	40-Pin	Tested

Manufacturer	Model Number	Name	Interface	Comments
3.5 Input				
Logitech	9675590403	Media Keyboard Elite	USB	Tested
Microsoft	B75-00113	Intellimouse Explorer 3.0	USB	Tested
NMB	RT6656TW	NMB RT6656TW Keyboard	USB	Tested
Keytronic	KT800U2	USB Keyboard	USB	Tested
Logitech	MX518	Gaming Grade Optical Mouse	USB	Tested

Manufacturer	Model Number	Name	Interface	Comments
3.6 Video Adapters and Extenders				
Matrox	G55-MDDE32LPD	Millenium G550	N/A	Tested
ATI	V3400	FireGL V3400	N/A	Tested
PNY	VCFX560-PCIE-PB-V	Quadro FX560	N/A	Tested
Adex Electronics	N/A	PCIe Flexible Connector (x1 to x16)	N/A	Tested

NOTE: Video is possible with an extender for the purpose of operating system installation. Add-in video is not supported for regular usage.

4. Memory

This section documents memory components that were tested in the Intel® Entry Storage System SS4200-EHW system. The Technical Product Specification indicates the supported memory type is DDR2 PC4200 SDRAM. The nomenclature used to represent memory may differ.

Note: Memory is included in the system at purchase and should only be serviced by qualified service personnel.

Manufacturer	DRAM Component	Capacity	Frequency	Comments
Qimonda	HYS64T64000HU-3.7-B	512MB	533MHz	Tested
Qimonda	HYS64T128020HU-3.7-B	1GB	533MHz	Tested
Hynix	HYMP564U64CP8-C4	512MB	533MHz	Tested
Hynix	HYMP512U64CP8-C4	1GB	533MHz	Tested
Micron	MT8HTF6464AY-53ED7	512MB	533MHz	Tested
Micron	MT8HTF12864AY-53EE1	1GB	533MHz	Tested
Micron	MT16HTF25664AY-667E1	2GB	667MHz¹	Tested
Samsung	M378T6553EZS-CE6	512MB	533MHz	Tested
Samsung	M378T2953EZ3-CE6	1GB	533MHz	Tested
Crucial Technology	CT25664AA53E.16FE	2GB	667MHz¹	Tested
Crucial Technology	CT25664AA667.16FE	2GB	667MHz¹	Tested

¹ While the memory requirement is listed as 667MHz, the system only runs at 533 MHz due to limited bus speed.

5. Hard Disk Drives

The hard drives listed in the following table were tested with the Intel® Entry Storage System SS4200-EHW 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 operating system each drive was tested under. The following table contains both SATA I (1.5Gb/s) and SATA II (3.0 Gb/s) drives.

Identifier number	Operating System
1	Microsoft Windows Home Server* SP2

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

Number (for example, 1)	This hard drive was tested and is supported under Microsoft Windows Home Server*.
SD (Similar Drive)	<p>The hard disk drive is supported but not tested. This hard drive model/capacity was not tested with the SS4200-EHW, 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 this hard drive will function correctly with the storage system. It is assumed this drive uses the same firmware revision and drivers as a larger capacity hard drive that has been successfully tested with this storage system. If the firmware revision is different than the one tested, Intel cannot guarantee it is compatible.</p> <p>The only difference between this drive and the one used in testing is the hard drive 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, but drives not running the same firmware revision as that tested cannot be supported. Given the fact that a larger capacity hard drive from the same drive family has successfully completed testing on the SS4200-EHW, this particular hard drive capacity point will not be tested.</p> <p>Customers should always test hard drives as part of the final system configuration prior to deployment.</p>
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, but drives not running the same firmware revision as that tested cannot be supported. 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
3.0 Gb/s Serial ATA (SATA) Hard Drives						
Hitachi						
Hitachi	Deskstar 7K1000	HDS721010KLA330	SATA300	7200	1000	4,6
Hitachi	Deskstar 7K1000	HDS721075KLA330	SATA300	7200	750	SD
Hitachi	Deskstar E7K500	HDS725050KLA360	SATA300	7200	500	1,6
Hitachi	Deskstar T7K500	HDT725050VLA360	SATA300	7200	500	4,6
Hitachi	Deskstar T7K500	HDT725040VLA380	SATA300	7200	400	SD
Hitachi	Deskstar T7K500	HDT725032VLA380	SATA300	7200	320	SD
Hitachi	Deskstar T7K500	HDT725025VLA380	SATA300	7200	250	SD
Hitachi	Deskstar T7K500	HDT725040VLA360	SATA300	7200	400	SD
Hitachi	Deskstar T7K500	HDT725032VLA360	SATA300	7200	320	SD
Hitachi	Deskstar T7K500	HDT725025VLA360	SATA300	7200	250	SD
Maxtor						
Seagate	DiamondMax21	STM3320820AS	SATA300	7200	320	5,6
Seagate	DiamondMax21	STM3250820	SATA300	7200	250	SD
Seagate						
Seagate	Barracuda ES	ST3750640NS	SATA300	7200	750	4,6
Seagate	Barracuda ES	ST3500630NS	SATA300	7200	500	SD
Seagate	Barracuda ES	ST3400620NS	SATA300	7200	400	SD
Seagate	Barracuda ES	ST3320620NS	SATA300	7200	320	SD
Seagate	Barracuda ES	ST3250620NS	SATA300	7200	250	SD
Seagate	Barracuda ES	ST3250820NS	SATA300	7200	250	SD
Seagate	Barracuda ES	ST3750640AS	SATA300	7200	750	2,6
Seagate	Barracuda ES	ST3500630AS	SATA300	7200	500	SD
Seagate	Barracuda ES	ST3400620AS	SATA300	7200	400	SD
Seagate	Barracuda ES	ST3320620AS	SATA300	7200	320	SD
Seagate	Barracuda ES	ST3250620AS	SATA300	7200	250	SD
Seagate	Barracuda ES	ST3250820AS	SATA300	7200	250	SD
Seagate	Barracuda ES	ST3200820AS	SATA300	7200	200	SD
Seagate	Barracuda ES	ST3160815AS	SATA300	7200	160	SD
Seagate	Barracuda ES	ST3160215AS	SATA300	7200	160	SD
Seagate	Barracuda ES	ST380815AS	SATA300	7200	80	SD
Seagate	Barracuda ES	ST380215AS	SATA300	7200	80	SD
Seagate	Barracuda ES.2	ST31000340NS	SATA300	7200	1000	6
Seagate	Barracuda ES.2	ST3750330NS	SATA300	7200	750	SD
Seagate	Barracuda ES.2	ST3500320NS	SATA300	7200	500	SD
Western Digital						

Manufacturer	Product Family	Model Number	Interface	RPM	Drive size (GB)	Tested Operating Systems
Western Digital	Caviar RE2	WD5000YS	SATA300	7200	500	3,6
Western Digital	Caviar RE2	WD4000YS	SATA300	7200	400	SD
Western Digital	Caviar SE16	WD7500AAKS	SATA300	7200	750	6
Western Digital	Caviar SE16	WD5000AAKS	SATA300	7200	500	6
Western Digital	Caviar SE16	WD4000AAKS	SATA300	7200	400	SD
Western Digital	Caviar SE16	WD3200AAKS	SATA300	7200	320	SD
Western Digital	Caviar SE16	WD2500AAKS	SATA300	7200	250	SD
Western Digital	Caviar SE16	WD2500KS-00MJB0	SATA300	7200	250	6
Western Digital	Caviar SE16	WD3200KS	SATA300	7200	320	SD
Western Digital	Caviar SE16	WD4000KS	SATA300	7200	400	SD
Western Digital	Caviar SE16	WD5000KS	SATA300	7200	500	SD
Western Digital	Cavier GP	WD10EACS-00ZJB0	SATA300	7200	1000	6
Western Digital	Cavier GP	WD7500AACS	SATA300	7200	750	SD
Western Digital	Cavier GP	WD5000AACS	SATA300	7200	500	SD
Western Digital	Cavier RE2	WD7500AYYS01RCA0	SATA300	7200	750	6
Western Digital	CavierSE16	WD5000ABKS	SATA300	7200	500	6
1.5 Gb/s Serial ATA (SATA) Hard Drives						
Maxtor						
None						
Seagate						
None						
Western Digital						
Western Digital	Raptor	WD1500ADFD	SATA150	10000	150	2,6

6. Network Switches & Wireless Routers

The network switches and wireless routers listed in the following table were tested with the Intel® Entry Storage System SS4200-EHW by Intel in its validation labs.

Manufacturer	Model	Name	Type	Notes
3COM	3CGSU08	Gigabit Switch 8	Switch	Tested
3COM	3CR17402-91	SuperStack 3 3848	Switch	Tested
Linksys	WRT54GX	WRLS G Broadband Router	Router	Tested
Netgear	WPN824	RangeMax Wireless Router	Router	Tested
D-Link	DI-724GU	Wireless 108G Router	Router	Tested