



# Intel® Server Board S5000VSA

## *Tested Hardware and Operating System List*

Revision 2.2

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Enterprise Platforms and Services Marketing

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## **Revision History**

Date	Revision Number	Modifications
January 2007	1.0	Initial release
September 2006	1.2	Added SAS drives
February 2007	1.2	Added SAS configuration test data. Refreshed the testing report for Fab 714 S500VSA
September 2007	1.3	Added new updates
January 2008	1.5	Added additional adapters
March 2008	1.6	Added additional adapters
April 2008	1.8	Added HW RAID SAS adapters
May 2008	2.0	Added HW RAID SAS adapters
June 2008	2.1	Added Adaptec 2405
Dec 2008	2.2	Added HW RAID SAS adapters

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# 1. Introduction

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This document is intended to provide users of the Intel® Server Board S5000VSA 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 S5000VSA 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 system versions with which they were tested.

## 1.1 Test Overview

Testing performed on the Intel® Server Board S5000VSA 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. The add-in adapter cards are not tested.



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 the 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 the use of any add-in adapters or peripherals installed in the server system, when an operating system that received only basic installation testing 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, onboard 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 the following three areas:

- **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, onboard 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.



There is no support commitment for operating systems, adapter cards, and peripherals not listed in this document. 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.

The testing of the Intel® Server Board S5000VSA was performed using the Intel® Entry Server Chassis SC5299-E.

## 2. Base System Configurations

The following table lists the tested base system configurations. Base system configurations will change as new revisions of the Intel® Server Board S5000VSA 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 system versions with which they were tested.

Base System Configuration Identifier #	Board Type	PBA Number	BIOS Revision	BMC Firmware Revision	HSC Firmware Revision	Notes
1	SATA	D29137-501	R0039,R0038	SPBMC42	1.4	
2	4DIMM	D52032-501	R0039,R0038	SPBMC42	1.4	
3	SATA	D29137-401	R0030/32/33/34	SPBMC30/33/35/38	N/A	
4	4DIMM	D52032-401	R0030/32/33/34	SPBMC30/33/35/38	N/A	
5	SATA	D29137-401	R0040	SPBMC42	N/A	FSP_21
6	SATA	D29137-712	R0064	SPBMC54	2.02	FSP_34
7	4DIMM	D52032-712	R0064	SPBMC54	2.02	FSP_34
8	SATA	D29137-712	R0064	SPBMC54	N/A	FSP_34
9	4DIMM	D52032-712	R0064	SPBMC54	N/A	FSP_34
10	SATA	D29137-712	R0064	SPBMC54	N/A	FSP_34
11	T75- SAS	D57587-601	R0051/54/55	SPBMC47/48	1.4	FSP_36
12	T75- SAS	D52032-602	R0055	SPBMC48	1.4	FSP_36
13	SATA	D29137-713	R0070	SPBMC54	N/A	FSP_36
14	SATA	D29137-714	R0070	SPBMC54	N/A	FSP_36
15	SAS	E11012-100	R0084	SPBMC62	2.05	FSP_41
16	SAS	E11012-100	R0084	SPBMC62	2.07	FSP_41
17	SAS	D57587-601	R0074	SPBMC58	2.05	FSP_37
18	SATA	D29137-602	R0074	SPBMC58	2.05	FSP_37
19	SAS	E110012-100	R0085	SPBMC62	2.08*	FSP_41
20	SAS	D29137-501	R0086	SPBMC63	N/A	
21	SAS	E11012-100	R0084,85,87	SPBMC63/62	2.07	FSP_41
22	SATA	E11003-100	R0084,85,87	SPBMC63/62	2.07	FSP_41
23	SAS	E11003-100	R0088	SPBMC63	2.07	FSP_41
24	SAS	E11003-100	R0088	SPBMC62	2.07	FSP_42
25	SAS	E11003-100	R0094	SPBMC63	2.07	FSP_42

### 3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® Server Board S5000VSA. Each of the listed operating systems was tested for compatibility with Intel® Server Board S5000VSA 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 versus Adapter / Peripheral Compatibility and Stress testing, see Chapter 1.

Any variations to the standard operating system installation process are documented in the Installation Guidelines section of this document. If the installation guidelines are not 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® System Management Software or LANDesk® Client Manager Software may be different than the operating systems supported by the Intel® Server Board S5000VSA. See the Readme and User Guide documents that are included as part of each Intel® System 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
Microsoft Windows Server 2003*/SP1 R2, Microsoft Windows Small Business Server 2003* R2	Configuration 1 – Compatibility and Stress Configuration 2 – Compatibility and Stress Configuration 3 – Compatibility and Stress Configuration 4 – Compatibility and Stress Configuration 17 – Compatibility and Stress Configuration 19 – Compatibility	Intel's testing was completed with Microsoft Windows Server 2003*. The application portion is not tested or supported.
Microsoft Windows Server 2003* (EM64T) R2	Configuration 1 – Compatibility and Stress Configuration 2 – Compatibility and Stress Configuration 3 – Compatibility and Stress Configuration 4 – Compatibility and Stress Configuration 16 – Compatibility and Stress Configuration 17 – Compatibility and Stress Configuration 19 – Compatibility	Intel's testing was completed with Microsoft Windows Server 2003*. The application portion is not tested or supported.
Microsoft Windows Server 2008* RTM	Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2008*. The application portion is not tested or supported.
Microsoft Windows Server 2008* EM64T RTM	Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2008*. The application portion is not tested or supported.

Red Hat* Linux Enterprise Server AS 5.0 Update 1 (EM64T)	Configuration 25 – Compatibility and Stress	
Red Hat* Linux Enterprise Server AS 5.0 Update 1	Configuration 25 – Compatibility and Stress	
Red Hat* Linux Enterprise Server AS 5.0 (EM64T)	Configuration 16 – Compatibility and Stress Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	
Red Hat* Linux Enterprise Server AS 5.0	Configuration 16 – Compatibility and Stress Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	
SuSE* Linux Enterprise Server 10 sp1	Configuration 16 – Compatibility and Stress Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	
SuSE* Linux Enterprise Server 10 SP1 EM64T	Configuration 16 – Compatibility and Stress Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	
Microsoft Windows Server 2008* RTM	Configuration 21 – Compatibility and Stress Configuration 22 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2008*. The application portion is not tested or supported.



Intel's testing was completed with the operating systems and latest available service packs. Microsoft Windows\* operating systems must have the latest service packs installed prior to upgrading to Intel® BIOS revisions 79 and later.

### 3.1 Operating System Certifications

The following table lists the operating systems that Intel will certify with the Intel® Server Board S5000VSA. However, customers are responsible for their own certification from the individual operating system vendors. In many cases, customers may leverage their operating system certifications from Intel's testing. See the "Comments" section next to each operating system in the following table 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* SP1 R2	Intel® Server Board S5000VSA	OEMs must request certification by Microsoft for their specific product. <a href="http://www.microsoft.com/hwdg/hcl/search.asp">http://www.microsoft.com/hwdg/hcl/search.asp</a> (Search on S5000VSA) <a href="http://developer.intel.com/design/servers/whql.htm">http://developer.intel.com/design/servers/whql.htm</a>
Red Hat* Linux Enterprise AS4.0 Update2 (EM64T)	Intel® Server Board S5000VSA	Red Hat checks Intel's results, certifies (if appropriate), and posts the certificate on their web site. Customer can leverage the Intel certification, if customer product meets the operating system vendor standard. <a href="http://hardware.redhat.com/hcl/?pagename=hcl&amp;view=certified&amp;vendor=399&amp;class=8#list">http://hardware.redhat.com/hcl/?pagename=hcl&amp;view=certified&amp;vendor=399&amp;class=8#list</a>
Red Hat* Linux Enterprise AS5.0 (EM64T)	Intel® Server Board S5000VSA	Red Hat checks Intel's results, certifies (if appropriate), and posts the certificate on their web site. Customer can leverage the Intel certification, if customer product meets the operating system vendor standard. <a href="http://hardware.redhat.com/hcl/?pagename=hcl&amp;view=certified&amp;vendor=399&amp;class=8#list">http://hardware.redhat.com/hcl/?pagename=hcl&amp;view=certified&amp;vendor=399&amp;class=8#list</a>
Red Hat* Linux Enterprise AS5.0	Intel® Server Board S5000VSA	Red Hat checks Intel's results, certifies (if appropriate), and posts the certificate on their web site. Customer can leverage the Intel certification, if customer product meets the operating system vendor standard. <a href="http://hardware.redhat.com/hcl/?pagename=hcl&amp;view=certified&amp;vendor=399&amp;class=8#list">http://hardware.redhat.com/hcl/?pagename=hcl&amp;view=certified&amp;vendor=399&amp;class=8#list</a>

## 4. Adapters and Peripherals

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Compatibility and stress testing for add-in adapter cards and peripherals will only be performed with the latest version of an operating system that was available at the time the validation testing occurred. The following tables identify the operating system and base system configurations used to validate each device. The adapters are divided into categories based on their functionality. All integrated onboard devices are tested by default and are therefore not included in the following tables.



All adapter cards were not tested under all operating systems.

The following notation is used in the following tables to indicate the support level that Intel provides for a particular adapter under a particular operating system:

- **Number:** This adapter or peripheral has been tested and is supported under the specific configuration identified in the Base System Configurations Table in Chapter 2.
- **Number in brackets:** This adapter or peripheral has been tested, but is NOT supported under the specific configuration identified in the Base System Configurations Table in Chapter 2.
- **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 supported 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 specific installation guidelines affecting a particular adapter and operating system combination, these are referenced in the following tables. If the installation guidelines are not noted in the following table, it means that 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 the BIOS setup. Intel recommends that customers disable the option ROM for add-in controllers and/or the onboard controllers when not booting from the controller or needing to use its built-in utilities.

### 4.1 PCI RAID

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
ICP Vortex	ICP9047MA	ICP9047MA	PCI-X 133	4-port SATA II, RAID 0, 1, 10, 5, BIOS FW 5.1.0-9130	SA	SA								
Adaptec	ASR-2200S	ASR-2200S	PCI-64/66	ICP-Taft, 4-channel SATA RAID 1.0, RAID 0, 1, 10, 5	1,11	1,11								
Adaptec	ASR-2120S	ASR-2120S	PCI-64/66	1-channel Ultra320, RAID 0, 1, 10, 5, 50, JBOD	SA	SA								
Adaptec	ASC-39320A-R	ASC-39320A- R	PCI-X 133	PCI-X 133, 2-channel Ultra320 SCSI, 7902B0 chip	1,11, 12,21, 22	1,11, 12,21, 22			21,22	21,22	21,22	21,22		
Adaptec	ASR-29320ALP-R	ASR-29320AL P-R	PCI-X 133	SW-RAID-SCSI, 1-channel Ultra320 SCSI, 7901B chip 1 external / 1 internal	1,11	1,11					21,22	21,22		

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Adaptec	AAR-1430SA	AAR-1430SA	PCIe* x4	4-port PCIe* SATA, SW RAID adapter, RAID 0, 1, 10	21,22	21,22			21,22	21,22	21,22	21,22		
Adaptec	ASC-29320A-R	ASC-29320A-R (Host RAID)	PCI-X 133	1-channel Ultra320 SCSI, 7901B chip 1 external / 2 internal (1 legacy)	SA	SA								
Adaptec	AAR-2410SA	AAR-2410SA	PCI-64/66	HW-RAID-SATA Jaguar, 4-port SATA 1.0, RAID 0, 1, 2x Silicon Image* with Zion*	1,11,12	1,11,12								
Adaptec	ASC-48300	ASC-48300	PCI-X 133	8-port SAS (Razor) - initial Adaptec SAS adapter	1,11,12 (27361)	2,11,12 (27361)								
Adaptec	ASC-48300	ASC-48300 (non- RAID)	PCI-X 133	8-port SAS (Razor) - initial Adaptec SAS adapter	SA, 21,22	SA,21, 22	SA			21,22	21,22	21,22	21,22	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Adaptec	ASR-4800SAS	ASR-4800SA S	PCI-X 133	HW-RAID-SAS, 8-port SAS, fixed DDR2 128 MB or 256 MB, 500 MHz IOP80331, optional battery	1,11, 12	1,11,12	1,11, 12							
Adaptec	Adaptec 31605	Adaptec 31605	PCIe*	Internal 16-port SAS 3G, Brockton + Razor, fixed DDR2 256 MB	16	16	NT							
Adaptec	Adaptec 31205	Adaptec 31205	PCIe*	Internal 12-port SAS 3G, Brockton + Razor, fixed DDR2 256 MB	17	NT	NT							
Adaptec	Adaptec 3805	Adaptec 3805	PCIe*	Internal 8-port SAS 3G, Brockton + Razor, fixed DDR2 256 MB	17	NT	NT							
Adaptec	Adaptec 3085	Adaptec 3085	PCIe*	External 8-port SAS 3G, Brockton + Razor, fixed DDR2 256 MB	SA	NT	NT							

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Adaptec	Adaptec 3405	Adaptec 3405	PCIe*	Internal 4-port SAS 3G, Brockton + Razor, fixed DDR2 128 MB	SA	NT	NT							
Adaptec	Adaptec RAID 5805	Adaptec RAID 5805	PCIe*	2x4 int, SATA/SAS, PCIe* x8, 1.2 GHz, 512 MB	19,24	19,24			24	24	24	24		
Adaptec	Adaptec RAID 5445	Adaptec RAID 5445	PCIe*	1x4 internal/external, SATA/SAS, PCIe* x8, 1.2 GHz, 512 MB	SA	SA								
Adaptec	Adaptec RAID 5405	Adaptec RAID 5405	PCIe*	1x4 internal, SATA/SAS, PCIe* x8, 800 MHz, 256 MB	SA	SA								
Adaptec	Adaptec RAID 5085	Adaptec RAID 5085	PCIe*	2x4 external, SATA/SAS, PCIe* x8, 1.2 GHz, 512 MB	SA	SA								
Adaptec	Adaptec RAID 52245	Adaptec RAID 52245	PCIe*	6x4 internal/1x4 external, SATA/SAS, PCIe* x8, 1.2 GHz, 512 MB	19	19								

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Adaptec	Adaptec RAID 51245	Adaptec RAID 51245	PCle*	3x4 internal/ 1x4 external, SATA/SAS, PCle* x8, 1.2 GHz, 512 MB	SA	SA								
Adaptec	Adaptec RAID 51645	Adaptec RAID 51645	PCle*	6x4 internal/ 1x4 external, SATA/SAS, PCle* x8, 1.2 GHz, 512 MB	SA	SA								
Adaptec	Adaptec RAID 52445	Adaptec RAID 52245	PCle*	6x4 internal/ 1x4 external, SATA/SAS, PCle* x8, 1.2 GHz, 512 MB	19,24	19,24			24	24	24	24		
Adaptec	Adaptec RAID 2405	Adaptec RAID 2405	PCle*	4 internal ports, SAS 3 Gbit/s, PCle*, 128 MB DDR2 memory, RAID 0, 1, & 10	24	24			24	24	24	24		

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
ICP Vortex	ICP9085LI	ICP9085LI	PCI-X 133	8-port SAS, PCI-X, 133 MHz, fixed DDR2 128 MB or 256 MB, 500 MHz IOP80331, optional battery	SA	SA	SA							
LSI Logic	MegaRAID SATA 150-6	MegaRAID SATA 150-6	PCI-64/66	6-channel SATA RAID 1.0, RAID 0, 1, 10, 5	3,11	3,11	3,11							
LSI Logic	MegaRAID SATA 150-4	MegaRAID SATA 150-4	PCI-64/66	4-port SATA 1.5 G, RAID 0, 1, 10, 5	SA	SA	SA							
LSI Logic	MegaRAID SCSI 320-2E	MegaRAID SCSI 320-2E	PCIe* x8	HW-RAID-SCSI, 2-channel Ultra320, RAID 0, 1, 5, 10, 50, x8 PCIe*	1,11	1,11	1,11							
LSI Logic	LSI22320-R	LSI22320-R	PCI-X 133	SW-RAID-SCSI, 2-channel Ultra320 SCSI, 1030 chip	3,11,12, 21,22	3,11,12, 21,22	3,11, 12 (272 31)			21,22	21,22	21,22	21,22	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
LSI Logic	LSI22320-R	LSI2232 0-R (IT)	PCI-X 133	2-channel Ultra320 SCSI, 1030 chip	SA	SA	SA	SA			SA	SA	SA	
LSI Logic	LSI22320-R	LSI2232 0-R (IS)	PCI-X 133	2-channel Ultra320 SCSI, 1030 chip	SA	SA	SA	1,11,12			SA	SA	SA	SA
LSI Logic	3442x	3442x (IT)	PCI-X 133	1068 chip - 8 ports	1,11	2,11	1,11	NT						
LSI Logic	LSISAS3041x	LSISAS3 041x (IT & IR)	PCI-X 133	1064 chip - 4 ports - same FW, OpROM, and SW as LSISAS344 2x	SA	SA	SA	NT						
LSI Logic	LSISAS3080x	LSISAS3 080x (IT & IR)	PCI-X 133	1068 chip - 8 ports with 8x internal connection	SA	SA	SA	NT						
LSI Logic	LSISAS3800x	LSISAS3 800x (IT & IR)	PCI-X 133	1068 chip - 8 ports with 8x external connection	SA	SA	SA	NT						
LSI Logic	3442x	3442x (IR)	PCI-X 133	1068 chip - 8 ports	SA	SA	SA	NT						
Intel	SRCSAS144E	SRCSAS 144E	PCIe* x4	1068 SAS 3 GB, 4 internal ports	1,11	1,11	1,11							

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Intel	SRCS28X	SRCS28X	PCI-X 133	8-channel SATA II 1.5/3.0 G, SATA RAID 1.0, RAID 0, 1, 10, 5, 50	1,11,12	1,11,12	1,11,12							
Intel	SRCS16	SRCS16	PCI-64/66	6-port	1,11	1,11	1,11							
Intel	SRCU41L PCI-64/66	SRCU41L PCI-64/66	PCI-64/66	1-channel Ultra320 RAID	3,11	3,11	3,11							
Intel	SRCU42X	SRCU42X	PCI-X	2-channel Ultra320 RAID	3,11,21,22	3,11,21,22	3,11				21,22	21,22	21,22	21,22
Intel	SRCU42E	SRCU42E	PCIe* x8	RAID/SCSI	1,11,12	1,11,12	1,11,12							
Intel	SRCSAS18E	SRCSAS 18E	PCIe* x8	SAS 3 GB 8 internal ports	11,12,21,22	11,12,21,22	11,12		21,22	21,22	21,22	21,22	21,22	21,22
Intel	SRCSASBB8I	SRCSASBB8I	PCIe* x8	SAS 8 internal ports	NT	NT	20	SA						
Intel	SRCSASPH16I	SRCSASPH16I	PCIe* x8	SAS 16 internal ports	NT	NT	20	3,11						
Intel	SRCSASLS4I	SRCSASLS4I	PCIe* x8	SAS 4 internal ports	NT	NT	20	SA						
Intel	SASMF8I	SASMF8I	PCIe* x8	SAS 8 internal ports	NT	NT	20	1,11						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Intel	SRCSATAWB	SRCSATAWB	PCIe* x4	Two SAS SFF8087 Mini-SAS 4i internal connectors	23	23	23	23	23	23	23	23	23	23
Intel	SRCSAS144E	SRCSAS144E	Low-profile PCI	SAS 8 internal ports	23	23	23	23	23	23	23	23	23	23
AMCC/3ware	9500/8/1 PCI-X-66	9500/8/1 PCI-X-66	PCI-64/66	8-channel SATA 1.0, RAID 0, 1, 10, 5	3,11,12	3,11,12	3,11,12	SA						
AMCC/3ware	9500S-12	9500S-12	PCI-64/66	12-channel SATA 1.0, RAID 0, 1, 10, 5, PCI 64/66	SA	SA	SA	1,11,12						
AMCC/3ware	9500S-12MI	9500S-12ML	PCI-64/66	12-channel SATA 1.0, RAID 0, 1, 10, 5, PCI 64/66	SA	SA	SA	NT						
AMCC/3ware	9500S-4LP	9500S-4LP	PCI-64/66	4-channel SATA 1.0, RAID 0, 1, 10, 5, PCI 64/66	SA	SA	SA	NT						
AMCC/3ware	9500S-8MI	9500S-8ML	PCI-64/66	8-channel SATA 1.0, RAID 0, 1, 10, 5, PCI 64/66	SA	SA	SA	NT						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
AMCC/3ware	9650SE-12ML	9650SE-12ML	PCIe* x4	8-channel SATA 1.0, RAID 0, 1, 10, 5, PCIe* x4	11	NT	NT	NT						
AMCC/3ware	9650SE-8ML	9650SE-8ML	PCIe* x4	8-channel SATA 1.0, RAID 0, 1, 10, 5, PCI Express x4	21,22	21,22	NT	NT	21,22	21,22	21,22	21,22		
AMCC/3ware	9650SE-16ML	9650SE-16ML	PCIe* x4	8-channel SATA 1.0, RAID 0, 1, 10, 5, PCIe* x4	SA	NT	NT							
AMCC/3ware	9650SE-8LPML	9650SE-8LPML	PCIe* x4	8-channel SATA 1.0, RAID 0,1,5,6,10,50	25		25						NT	NT
AMCC/3ware	9690SA-414E L	9690SA-414E L	PCIe* x8	8-channel SATA 1.0, RAID 0,1,5,6,10,50	25		25						NT	NT
Promise	FastTrak SX8300	FastTrak SX8300	PCI-X 133	8 channels, RAID 0, 1, 5, 10 – 3 Gb SATA	SA	SA	SA							
Promise	FastTrak SX4300	FastTrak SX4300	PCI-64/66	SW-RAID-SATA, 4 channels, RAID 0, 1, 5, 10 – 3 Gb SATA	11,12	11,12			11,12					

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS5.0 U1 EM64T	Red Hat* Linux AS5.0 U1 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* 10 update 1	SuSE* 10 update 1 EM64T
Intel	SRCSASJV	SRCSASJV	PCIe*		15,21,22	15,21,22	21,22	21,22	15	15,21,22	21,22	15,21,22	15,21,22	
Intel	SRCSASRB	SRCSASRB	PCIe*		16,21,22	16,21,22	21,22	21,22	16	16,21,22	21,22	16,21,22	16,21,22	

## 4.2 PCI SCSI

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
LSI Logic	LSI20160	LSI20160	PCI-32/33	1-channel Ultra160 SCSI, 1000 chip (low cost)	1,11, 12,21, 22	1,11, 12,21,22	1,11, 12			21,22	21,22	21,22	21,22
LSI Logic	LSI20160L	LSI20160L	PCI-32/33	1-channel Ultra160 SCSI, 1000 chip	SA	SA	SA						

## 4.3 Graphics Adapter

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
ATI	RADEON 7000	RADEON 7000	PCI-32/33	PCI video with single monitor support	3,11	3,11	3,11	21,22	21,12				
XGI	Volari V3XT	Volari V3XT	PCI-32/33	PCI video with dual monitor support	1,11 (25632)	1,11 (25632)	1,11 (25632)						

## 4.4 PCI Fiber Channel

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Emulex	LP10000DC	LP10000DC	PCI-X 133	Dual Channel 2 Gb FC controller, Universal PCI-LP/RP Optical	2,11,12,21,22	2,11,12,21,22	1,11,12	21,22	21,22	21,22	21,22	21,22	21,22
Emulex	LP10000	LP10000-M2	PCI-X 133	Single Channel 2 Gb FC controller, Universal PCI-LP/RP Optical	SA	SA	SA						
Emulex	LP1050	LP1050-F2	PCI-X 133	Single Channel 2 Gb FC controller, Universal PCI-LP/RP Optical	SA	SA	SA						
Emulex	LP1050DC	LP1050DC-F2	PCI-X 133	Dual Channel 2 Gb FC controller, Universal PCI-LP/RP Optical	SA	SA	SA						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
QLogic	QLE2462	QLE2362	PCle* x4	Dual channel 2 Gb PCle* HBA - LC Multi-mode Optical	1,11,21, 22	1,11, 21,22	1,11	21,22	21,22	21,22	21,22	21,22	21,22
QLogic	QLE2360	QLE2360	PCle* x4	Single channel 2 Gb PCle* HBA - LC Multi-mode Optical	SA	SA	SA						
Emulex	LP10000D C-EX	LP10000 DC-EX	PCle* x4	2-channel 2 Gb FC controller, PCle* x8	3,11	3,11	3,11						
Emulex	LP1050Ex	LP1050E x-F2	PCle* x4	Single channel 2 Gb FC controller, PCle*	SA	SA	SA						
QLogic	QLA2342	QLA2342	PCI-X 133	Dual channel 2 Gb FC controller Optical, 2312 chip	4,11,12	4,11,12	3,11, 12	21,22	21,22				
QLogic	QLA2340	QLA2340	PCI-X 133	Single channel 2 Gb FC controller Optical, 2312 chip	SA	SA	SA						

## 4.5 PCI NIC

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Intel	EXPI9300PT	1 port	PCIe* x1	1 Gb Ethernet, copper, desktop	3,11, 21, 22	3,11, 21,22	3,11	21,22	21,22	21,22	21,22	21,22	21,22
Intel	EXPI9400PT	1 port	PCIe* x1	1000Base-T, 1 Gb Ethernet, PCIe*	3,11,12, 21,22	3,11,12, 21,22	3,11,12	21,22	21,22	21,22	21,22	21,22	21,22
Intel	EXPI9400PF	Intel® PRO/1000 PF Server Adapter	PCIe* x4	1 port Fiber, 1 Gb Ethernet, PCIe*	SA	SA	SA			15		15	15
Intel	EXPI9404PT	PRO/1000 PT	PCIe* x4	4 port, copper, 1 Gb Ethernet, 2x82571 GB (Ophir), I/OAT enabled	21,22	21,22				21,22	21,22	21,22	21,22
Intel	EXPI9402PT	2 port	PCIe* x4	1000Base-T, 1 Gb Ethernet, PCIe*	1,11, 21,22	1,11, 21,22	1,11			21,22	21,22	21,22	21,22
Intel	EXPI9402PF	Intel® PRO/1000 PF Dual Port Server Adapter	PCIe* x4	2-port Fiber, 1 Gb Ethernet, PCIe*, 82571EB	SA	SA	SA	21,22	21,22				

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Intel	PWLA8490MT	Intel® PRO/100 OMT Gigabit Server Adapter	PCI-X 133	PWLA8490 MT PRO/1000 M T Gigabit Server Adapter	3,11,12, 21,22	3,11,12, 21,22	3,11,12			21,22	21,22	21,22	21,22
Intel	PWLA8490MF	Intel® PRO/100 OMF Gigabit Server Adapter	PCI-X 133	1000baseL C, Fiber, No bridge	SA	SA	SA						
Intel	PWLA8492MT	Intel® PRO/100 OMT Dual Port Gigabit Server Adapter	PCI-X 133	PWLA8492 MT PRO/1000 M T Dual Port Gigabit Server Adapter	1,11	1,11	2,11						
Intel	PWLA8492MF	Intel® PRO/100 OMF Dual Port Gigabit Server Adapter	PCI-X 133	1000baseL C, Dual Port, Fiber, No bridge	SA	SA	SA						
Intel	PILA8740D3	Intel® Pro100S	PCI-32/33	10/100base	21,22	21,22		21,22	21,22	21,22	21,22	21,22	21,22
Intel	PILA8472C3	Intel® Pro100S DualPort	PCI-64/66	10/100base T, Dual port	1,11, 21,22	1,11, 21,22	2,11	21,22	21,22	21,22	21,22	21,22	21,22

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Intel	PWLA8494GT	PWLA8494GT	PCI-X 133	4-port copper, 2x82546 GB	1,11,12, 21,22	1,11,12, 21,22	1,11,12	21,22	21,22	21,22	21,22	21,22	21,22
Intel	PWLA8492MT	PWLA8492MT	PCI-X 133	Pro/1000	21,22	21,22	21,22	21,22	21,22	21,22	21,22	21,22	21,22
Intel	PRO/100+ S Server	PILA8470D3	PCI-32/33	82550GY Moab, WfM2.0 with WOL, LP	3,11,12	3,11,12	3,11,12						
Intel	PRO/100+ S Server	PILA840C3	PCI-32/33	10/100base T + Security	SA	SA	SA						
SysKonnect	SK-9E21	SK-9E21	PCIe* x1	1 x 10/100/1000 LAN	1,11,21, 22	1,11,21, 22	1,11	21,22	21,22	21,22	21,22	21,22	21,22
SysKonnect	SK-9E21D	SK-9E21D	PCIe* x1		3,11,21, 22	3,11,21, 22	3,11	21,22	21,22	21,22	21,22	21,22	21,22
SysKonnect	SK-9E22	SK-9E22	PCIe* x4		1,11,21, 22,12	1,11,12, 21,22	2,11,12	21,22	21,22	21,22	21,22	21,22	21,22

## 4.6 USB/PS2 Devices

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
AOpen	KB858 Keyboard PS/2	KB858 Keyboard PS/2	PS/2	Keyboard	3,11,12	3,11,12	3,11,12						
AOpen	O 35M	O 35M	PS/2	Optical Mouse	1,11,12	1,11,12	1,11,12						
Logitech	930582-0121	930582-0121	PS/2 and USB	Optical mouse	1,11,12	1,11,12	1,11,12			15		15	15
Logitech	930582-0403	Optical mouse	PS/2 and USB	Optical mouse	SA	SA	SA			16		16	16
Logitech	967415-0403	967415-0403	Keyboard	Keyboard	1,11	1,11	1,11						
Logitech	931145-403	931145-403	Optical mouse	Optical mouse	1,11,12	1,11,12	1,11,12						
Logitech	967233-0121	967233-0121	Internet Navigator	Internet Navigator	1,11	1,11	1,11						
Logitech	967233-0403	Internet Navigator	PS/2 and USB	Keyboard	SA	SA	SA						
Keytronic	PRO Pilot	PRO Pilot	Keyboard	Keyboard	1,11	1,11	1,11						
Keytronic	E06101US B-C	E06101U SB-C	Keyboard/USB	Keyboard with 2-port USB hub	1,11	1,11	1,11						
Microsoft	B75-00092	B75-00092	Intellimouse Optical PS/2 and USB	Intellimouse Optical PS/2 and USB	3,11,12	3,11,12	3,11,12						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
RAINBOW	SRB10741/ ERB01221	SRB10741/ ERB01221		Sentinel Duo Hardware Key USB security key	1,11	1,11	1,11						

## 4.7 CD-ROM Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
LG	GCC-4522B	GCC-4522B	ATA33	CD-RW / DVD-ROM 52x write, 52x16x read	3,11	3,11	3,11						

## 4.8 CD-RW Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Sony	CRX320A U	CRX320AU	ATA33	ATA33 52X/32/52 CD-RW Combo	1,11,12	2,11,12	2,11,12						
Lite-on	SHC-52S7K	SHC-52S7K	SATA	CD-RW / DVD-ROM	21,22	21,22		21,22	21,22	21,22	21,22	21,22	21,22

## 4.9 DVD Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Lite On	SHD-16S1S	SHD-16S1S	SATA	DVD-ROM	21,22	21,22		21,22	21,22	21,22	21,22	21,22	21,22

## 4.10 Sound Adapter

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
TBD													

### 4.11 Tape Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Certance	STU4200L W-s	STU4200 LW-s	SCSI-U2	Certance LTO Ultrium 1 SCSI-U2 100/200 G, LTO FH, 8.3" length external	3,11, 21,22	3,11, 21,22	3,11			21,22	21,22	21,22	21,22
Quantum	DLT, VS160	BH2AA-YF	SCSI-U2	80 GB native capacity, 8 Mb transfer rate	21,22	21,22				21,22	21,22	21,22	21,22
Sony	SDX-S500V/P	SDX-S500V/P	SCSI-U2	AIT-2 Desktop 50 GB native capacity, 6 MB/s transfer rate	1,11, 21,22	2,11, 21,22	2,11			21,22	21,22	21,22	21,22
Sony	SDX-S500C/BM	AIT-2 Desktop	SCSI-U2	50 GB native capacity, 6 MB/s transfer rate	SA	SA	SA						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Quantum	DLT-VS160	BH2AA-YF	SCSI U2	SCSI-U2 80 GB native capacity, 8 Mb transfer rate internal	3	3	3						
HP	DAT72USB	DW026A	USB2.0	Internal USB 2.0 Tape Drive	1	1							

### 4.12 Removable Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
PNY	Attache' 2 GB	P-FD02GU 20	USB2.0	2 GB	3	3	3						
Memorex	1 GB Travel Drive	32509363	USB 2.0	1 GB	3,21,22	3, 21,22	3			21,22	21,22	21,22	21,22
Crucial	CT1GBUFD	CT1GBUFD	USB 2.0	1 GB, Read 11 MB/s and Write 10 MB/s	3,11, 21,22	3,11,21, 22	3,11			21,22	21,22	21,22	21,22

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Maxtor	E01G300 One Touch II	E01G300 One Touch II	USB2.0	300 GB Firewire/1394/2.0, 16 MB cache, 7200 RPM	1,11	2,11	2,11						
Addonics	AEMED35AUM	AEMED35AUM	USB2.0	Combo Hard Drive Kit , USB 2.0 Converter, cable to ATA HD (Seagate ST380021A Barracuda 4)	3,11	3,11	3,11						
Memina	829222120101	SKU33105	USB 2.0	1 GB, Read 18 MB/s and Write 15 MB/s	4,11,12	4,11,12	4,11,12						
Mitsumi	D353FUE	22P9025	USB 2.0	External 3½" Floppy, Industry standard USB connectivity	3,11, 21,22	3,11,21, 22	3,11			21,22	21,22	21,22	21,22
Lexar	JD1GB-80-231	JD1GB-80-231	USB2.0 external RM	1 GB USB Flash Drive USB2.0 external RM JumpDrive Pro 80X USB Flash Drive	3,11,12	3,11,12	3,11,12						
TEAC	FD-O5PUB	FD-O5PUB	USB external	3½" Floppy, USB external	3,11, 12, 21, 22	3,11,12, 21,22	3,11,12	21,22	21,22	21,22	21,22	21,22	21,22
Sony	PCGA- UFD5	PCGA-UFD5	USB external	3½" Floppy, USB	1,11	2,11	2,11						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Sony	MPF88E/UA/181	MPF88E/UA/181	USB external	3½" Floppy, USB external	3,11,12	3,11,12	3,11,12						
SanDisk	SDCZ2-4096	SDCZ2-4096	USB external		1,11,21,22	2,11,21,22	2,11			21,22	21,22	21,22	21,22

## 4.13 Modem

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
3COM	3CP3453 V.Everthing 56K Corporate Modem	3CP3453 V.Everthing 56K Corporate Modem	PCI-32/33	V.Everthing 56K Corporate Modem	1,11,12	2,11,12	NT (25904)						
3COM	USR5610B	USR5610B	COM	56K V.92 Performance Pro	3,11	4,11	4,11						

## 4.14 Others

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
AOPEN	KB-858	KB-858	PS/2	Keyboard	21,22	21,22				21,22	21,22	21,22	21,22
AOPEN	O 35M	O 35M	PS/2 and USB	Keyboard	21,22	21,22				21,22	21,22	21,22	21,22
Logitech	931145- 403	931145- 403	PS/2 and USB	Mouse	21,22	21,22				21,22	21,22	21,22	21,22

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Microsoft	B75-00092	B75-00092	PS/2 and USB	Mouse	21,22	21,22				21,22	21,22	21,22	21,22

### 4.15 KVM

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2	Microsoft Windows Server 2003* EM64T R2	Red Hat* Linux AS4.0 U2 EM64T	Microsoft Windows Server 2008*	Microsoft Windows Server 2008* EM64T	Red Hat* Linux AS 5	Red Hat* Linux AS 5 EM64T	SuSE* Linux Enterprise Server 10, SP1 (32-bit)	SuSE* Linux Enterprise Server 10, SP1 (64-bit)
Belkin	F1DA108T Omniview PRO2 KVM	F1DA108T Omniview PRO2 KVM		8-port, keyboard, mouse and video with 25' cable	1,3,11, 21,22	1,3,11, 21,22	1,3,11,			21,22	21,22	21,22	21,22

## 5. Hard Disk Drives

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The hard drives previously listed in this section are now listed separately in the *Server Hard Drive Validation Test Report*, which includes the qualified hard drives for the Intel® Server Board S5000VSA. The *Server Hard Drive Validation Test Report* is located on Intel's secure IBL website and at the following web link:

<http://www.intel.com/support/motherboards/server/sb/CS-025416.htm>