



# Intel® Server Board S5000PAL/S5000XAL

## *Tested Hardware and Operating System List*

Revision 5.0

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Enterprise Platforms and Services Division

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## Revision History

Date	Revision Number	Modifications
June 8, 2006	1.0	Initial Release
July 10, 2006	1.1	Added Hard Drive Form Factor Column Added several RAID controllers as Similar Adapters
September 6, 2006	1.2	Added 3.5" SAS and SATA hard drives Added 2.5" SATA hard drives Added Fiber Channel Cards Added Tape Drive Replaced Hitachi* T7K250 with T7K500
October 9, 2006	1.3	Added Seagate* 7200.10 family
November 22, 2006	1.4	Updated Supported Operating Systems Updated Adapter Test Configurations Removed QLogic* QLE2362 Updated HDD model Numbers Added Several HDD models Removed Seagate 7200.10 Family
December 19, 2006	1.5	Corrected typos in OS list. Added Operating System Certifications and 3.5" SATA hard drives.
February 15, 2007	2.0	Added Adapter Test Configurations Removed Tested Hard Drive Section. See Section 5 for more information. Added USB floppy drive and DVD-R drives.
March 15, 2007	2.1	Updated DVD drive section
April 11, 2007	2.2	Updated Configuration List and Supported Operating Systems (OS). Added PQI DOM, US Robotic* Modem, and Removable Media (RM).
June 13, 2007	2.3	Updated section 1.1.1
July 2, 2007	2.4	Updated table of "Base system Configuration Tested & Type of Test"
August 1, 2007	2.5	Updated Supported Operating Systems List and Adapter Test Configurations.
August 22, 2007	2.6	Updated Supported Operating Systems List. Added PQI DOM.
September 19, 2007	2.7	Updated table of "Base system Configuration Tested", Supported Operating Systems List, and Adapter Test Configurations.
September 27, 2007	2.8	Added notes for the Intel® RAID Controller SRCAS144E. Added Intel® RAID Controllers SRCASJV, SRCASRB, and SRCATAWB.
December 13, 2007	3.0	Updated Configuration List, Operating System Certifications, PCI SW RAID SATA, PCI NIC Card, PCI HW/SW RAID SCSI, PCI Fiber Channel, Video, PCI HW/SW RAID SAS, CD/DVD Drives, Removable Media, and Tape Drives.
March 31, 2008	4.0	Added Microsoft Windows Server 2008* (32-bit and 64-bit) as Supported Operating System; Added HW RAID SAS adapters; Updated Supported Operating Systems to add Small Business Server operating systems; Added Solid State Drive Z-U130.
April 6, 2008	4.1	Updated PCI Hardware RAID SAS; Updated PCI Software RAID SAS.
April 17, 2008	4.2	Updated Operating System Certifications.

<b>Date</b>	<b>Revision Number</b>	<b>Modifications</b>
December 22, 2008	5.0	Added more configurations in Base System Configurations; updated Supported Operating System List; updated the table of Adapters and Peripherals.

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# 1. Introduction

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This document is intended to provide users of the Intel® Server Board S5000PAL/S5000XAL 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 S5000PAL/S5000XAL 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 S5000PAL/S5000XAL 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. Add-in adapter cards are not tested. On-board RAID testing is conducted during Basic Installation Testing if RAID drivers are available for the operating system. 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 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, 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 on-board 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.

All testing of the Intel® Server Board S5000PAL/S5000XAL was performed using the Intel® Server System SR2500ALLX.

## 2. Intel® Server Board S5000PAL/S5000XAL Base System Configurations

The following table lists the base system configurations that were tested. Base system configurations will change as new revisions of the Intel® Server Board S5000PAL/S5000XAL 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	SR2500 HSC Firmware Revision
1	S5000PAL	D13607-701	R0045	BMC46	Ver 1.41
2	S5000PAL	D13607-703	R0059	BMC52	Ver 1.41
3	S5000PAL	D13607-703	R0064	BMC54	Ver 1.41
4	S5000PAL	D13607-801	R0068	BMC56	Ver 2.02
5	S5000XAL	D46952-801	R0068	BMC56	Ver 2.02
6	S5000PAL/ S5000XAL	D13607-801 D46952-801	R0074	BMC58	Ver 2.05
7	S5000PAL/ S5000XAL	D13607-801 D46952-801	R0079	BMC59	Ver 2.05
8	S5000PAL/ S5000XAL	D13607-901 D46952-901	R0081	BMC60	Ver 2.05
9	S5000PAL/ S5000XAL	D13607-901 D46952-901	R0084	BMC62	Ver 2.05
10	S5000PAL/ S5000XAL	D13607-901	R0085	BMC62	Ver 2.05
11	S5000PAL/ S5000XAL	D13607-901	R0087	BMC63	Ver 2.05
12	S5000XAL	D46952-901	R0091	BMC64	Ver 2.09
13	S5000PAL	D13607-901	R0091	BMC64	Ver 2.09
14	S5000PAL	D50232-100	R0091	BMC64	Ver 2.09

Base System Configuration Identifier #	Board Type	PBA Number	BIOS Revision	BMC Firmware Revision	SR2500 HSC Firmware Revision
15	S5000XAL	E50387-100	R0091	BMC64	Ver 2.09
16	S5000XAL	D46951-901	R0094	BMC64	Ver 2.09
17	S5000XAL	E50387-100	R0094	BMC64	Ver 2.09
18	S5000PAL	E50232-100	R0094	BMC64	Ver 2.09
19	S5000XAL	D46952-901	R0094	BMC64	Ver 2.09

**Note:** Intel's testing was completed with the Operating System and latest available service packs. Microsoft\* operating systems must have the latest service packs installed prior to upgrading to Intel BIOS revisions 79 and later. The application portion is not tested or supported.

### 3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® Server Board S5000PAL/S5000XAL. Each of the listed operating systems was tested for compatibility with Intel® Server Board S5000PAL/S5000XAL base system configuration listed in Chapter 2. 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 there are 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® System Management software or LANDesk® Client Manager software may be different than the operating systems supported by the Intel® Server Board S5000PAL/S5000XAL. 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 those releases.

Operating System	Base System Configuration Tested – Type of Testing	Notes
Microsoft Windows Server 2008*, 32-bit	Configuration 10, 11 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2008*, 32-bit. The application portion is not tested or supported.
Microsoft Windows Server 2008*, 64-bit	Configuration 10, 11 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2008*, 64-bit. The application portion is not tested or supported.
Microsoft Windows Server 2003* R2 SP2, 32-bit; Microsoft Windows Small Business Server 2003* R2	Configuration 1, 2, 3, 6, 7, 8, 9 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2003* R2, 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports the operating system portion of Microsoft Windows Small Business Server 2003* R2, 32-bit only. The application portion is not tested or supported.
Microsoft Windows Server 2003* R2 SP2, 64-bit; Microsoft Windows Small Business Server 2003* R2, 64-bit	Configuration 1, 2, 3, 6, 7, 8, 9 – Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2003* R2, 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports the operating system portion of Microsoft Windows Small Business Server 2003* R2, 64-bit only. The application portion is not tested or supported.
Red Hat* Enterprise Linux 4.0 AS U4 32-bit	Configuration 1, 2, 3 – Basic Installation Only	Intel's testing was completed with Red Hat* Enterprise Linux 4.0 AS U4. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 4.0 AS U4 32-bit. The application portion is not tested or supported.

Operating System	Base System Configuration Tested – Type of Testing	Notes
Red Hat* Enterprise Linux 4.0 AS U4 64-bit	Configuration 1, 2, 3 – Basic Installation Only	Intel's testing was completed with Red Hat* Enterprise Linux 4.0 AS U4. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 4.0 AS U4 64-bit. The application portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 SP1 32-bit	Configuration 2, 3, 6, 7, 8, 9 – Compatibility	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 SP1 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 SP1 32-bit. The application portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 SP1 64-bit	Configuration 2, 3, 6, 7, 8, 9 – Compatibility	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 SP1 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 SP1 64-bit. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.0 32-bit	Configuration 6, 7, 8, 9 – Installation and Stress	Intel's testing was completed with Red Hat* Enterprise Linux 5.0 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.0 32-bit. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.0 64-bit	Configuration 6, 7, 8, 9 – Installation and Stress	Intel's testing was completed with Red Hat* Enterprise Linux 5.0 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.0 64-bit. The application portion is not tested or supported.
Solaris* 10 08/07	Configuration 9 – Installation and Stress (see the note following this table)	Intel's testing was completed with Solaris* 10 08/07. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Solaris* 10 08/07. The application portion is not tested or supported.
Microsoft Windows 2000* SP4	Configuration 1 – Basic Installation Only	Intel's testing was completed with Microsoft Windows 2000* SP4. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows 2000* SP4. The application portion is not tested or supported.
NetWare* 6.5 SP5	Configuration 1 – Basic Installation Only	Intel's testing was completed with NetWare* 6.5 SP5. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of NetWare* 6.5 SP5. The application portion is not tested or supported.
SUSE* Enterprise Linux 9 SP3 32-bit	Configuration 1 – Basic Installation Only	Intel's testing was completed with SUSE* Enterprise Linux 9 SP3 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Enterprise Linux 9 SP3 32-bit. The application portion is not tested or supported.
SUSE* Enterprise Linux 9 SP3 64-bit	Configuration 1 – Basic Installation Only	Intel's testing was completed with SUSE* Enterprise Linux 9 SP3 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the

Operating System	Base System Configuration Tested – Type of Testing	Notes
		operating system portion of SUSE* Enterprise Linux 9 SP3 64-bit. The application portion is not tested or supported.
Microsoft Windows Server 2008*, SP1, 32-bit	Configuration 13,17,18 – Basic Installation Configuration 14,6 – Compatibility	Intel's testing was completed with Microsoft Windows Server 2008*, SP1, 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows Server 2008*, SP1, 32-bit. The application portion is not tested or supported.
Microsoft Windows Server 2008*, SP1, 64-bit	Configuration 17, 18 – Basic Installation Configuration 13, 14 – Compatibility	Intel's testing was completed with Microsoft Windows Server 2008*, SP1, 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows Server 2008*, SP1, 64-bit. The application portion is not tested or supported.
Microsoft Windows Server 2003*, SP2, 32-bit	Configuration 16, 17, 18 – Basic Installation Configuration 13, 14, 15 – Compatibility	Intel's testing was completed with Microsoft Windows Server 2003*, SP2, 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows Server 2003*, SP2, 32-bit. The application portion is not tested or supported.
Microsoft Windows Server 2003*, SP2, 64-bit	Configuration 13, 17, 18 – Basic Installation Configuration 14, 15 – Compatibility	Intel's testing was completed with Microsoft Windows Server 2003*, SP2, 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows Server 2003*, SP2, 64-bit. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.1 32-bit	Configuration 14, 15 – Compatibility	Intel's testing was completed with Red Hat* Enterprise Linux 5.1 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.1 32-bit. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.1 64-bit	Configuration 12, 14, 15 – Basic Installation	Intel's testing was completed with Red Hat* Enterprise Linux 5.1 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.1 64-bit. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.2 32-bit	Configuration 17, 18 – Basic Installation Only	Intel's testing was completed with Red Hat* Enterprise Linux 5.2 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.2 32-bit. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.2 64-bit	Configuration 8, 18 – Basic Installation Only	Intel's testing was completed with Red Hat* Enterprise Linux 5.2 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.2 64-bit. The application portion is not tested or supported.
SUSE* Linux Enterprise Server 10 SP1 32-bit	Configuration 12, 15 – Basic Installation Configuration 14 – Compatibility	Intel's testing was completed with SUSE* Linux Enterprise Server 10 SP1 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Server 10 SP1 32-bit. The application

Operating System	Base System Configuration Tested – Type of Testing	Notes
		portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 SP1 64-bit	Configuration 14, 15 – Compatibility	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 SP1 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 SP1 64-bit. The application portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 SP2 32-bit	Configuration 17, 18, 19 – Basic Installation Only	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 SP2 32-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 SP2 32-bit. The application portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 SP2 64-bit	Configuration 17, 18 – Basic Installation Only	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 SP2 64-bit. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 SP2 64-bit. The application portion is not tested or supported.

**Note:** Solaris\* 10 08/07 does not support Intel® Embedded Server RAID Technology II (ESRTII); Drivers for NIC, ESB2 chipset, ESB2 SATA and on-board video are embedded inside the operating system. Go to <http://support.intel.com> for the SAS HW RAID driver.

### 3.1 Operating System Certifications

The following table lists the operating systems that Intel will certify on the Intel® Server Board S5000PAL/S5000XAL. 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 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* R2 (32-bit and 64-bit)	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	OEM must request certification by Microsoft* for their specific product. <a href="http://www.microsoft.com/whdc/hcl/default.mspx">http://www.microsoft.com/whdc/hcl/default.mspx</a> <a href="http://www.intel.com/support/motherboards/server/s5000pal/sb/CS-029644.htm">http://www.intel.com/support/motherboards/server/s5000pal/sb/CS-029644.htm</a>
Microsoft Windows Server 2008* (32-bit and 64-bit)	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	
Microsoft Windows Advanced Server 2000* SP4	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	OEM must request certification by Microsoft* for their specific product. <a href="http://www.microsoft.com/whdc/hcl/default.mspx">http://www.microsoft.com/whdc/hcl/default.mspx</a> <a href="http://developer.intel.com/design/servers/whql.htm">http://developer.intel.com/design/servers/whql.htm</a>

Operating System	Certification Listing	Comments
Red Hat* Enterprise Linux 4.0 AS U4 (32-bit and 64-bit)	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	Red Hat checks Intel's test results, certifies (if appropriate), and posts the certificate on their web site.
Red Hat* Enterprise Linux 5.0 AS (32-bit and 64-bit)	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	Red Hat checks Intel's test results, certifies (if appropriate), and posts the certificate on their web site.
SUSE* Linux Enterprise Server 10 (32-bit and 64-bit)	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	Novell checks Intel's test 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.
Solaris* 10 08/07	Intel® Server Board S5000PAL	Sun checks Intel's results, certifies (if appropriate), and posts the certificate on their web site. <a href="http://www.sun.com/bigadmin/hcl/">http://www.sun.com/bigadmin/hcl/</a>



## 4. Adapters and Peripherals

Compatibility and stress testing for add-in adapter cards and peripherals 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 all adapter cards were not 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 Chapter 2.
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 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 installation guidelines affecting a particular adapter and operating system combination, these are referenced in the following table. If the installation guidelines are not 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 on-board controller expansion ROMs disabled in the 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.

In addition, the following notes apply in the tables below:

Note %: The configurations marked with % in the tables mean those configurations only tested on the specific OS (or Service Package) marked with % in the table header.

Note (a): The SES Enclosure Management function is not supported and will not be fixed when using the Intel® RAID Controller SRCSAS144E together with the backplanes and the Intel® Server Board S5000PAL/S5000XAL.

Note (b): The Intel® RAID Controller SRCSASJV with system configuration #7 is tested under Red Hat\* Enterprise Linux 4.4 64-bit instead of Red Hat\* Enterprise Linux 5.0 64-bit.

Note (c): The Intel® Solid State Drive Z-U130 with system configuration #6 is tested under Red Hat\* Enterprise Linux 4.5 32-bit instead of Red Hat\* Enterprise Linux 5.0 32-bit.

## 4.1 PCI NIC

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Intel	Intel® PRO/100+ S Server	PILA8470D3	PCI-32/33		10	10, 12% (8.0.4 7.0)	1, 6, 7, 8, 9, 12% (8.0.4 7.0)	1	1, 3, 7	1, 3, 7	3, 6	3, 7, 9	9
Intel	Intel® PRO/100+ S Server	PILA8470C3	PCI-32/33				SA	SA	SA	SA	SA	SA, 14%	
Intel	Intel® PRO/100+ Dual Port	PILA8472C3	PCI-64/66				1	1, 6, 7	1, 3, 7	1,3,7	3,6,7	3, 6	
Intel	Intel® PRO / 1000MT Gigabit Server Adapter	PWLA8490MT	PCI-X 133		10, 14% (8.10.1.0)	10	1, 6, 7	1, 9, 14% (8.10.1.0)	1, 3, 7	1,3,7	3	3, 7, 8	9
Intel	Intel® PRO / 1000MT Dual Port Gigabit Server Adapter	PWLA8492MT	PCI-X 133		10	10	1	1, 7	1, 3, 7, 9	1, 3, 7, 8	3, 6, 7	3, 6	9
Intel	Intel® PRO/1000MF Gigabit Server Adapter	PWLA8490MF	PCI-X 133				SA	SA	SA	SA	SA	SA	
Intel	Intel® PRO / 1000MT Dual Port Gigabit Server	PWLA8492MF	PCI-X 133				SA	SA	SA	SA	SA	SA	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
	Adapter												
Syskonnect	SK-9E21	SK-9E21	PCI Express*		10	10	1, 7	1	1,3,7	1,3,7,9	3, 6	3, 7	9
Syskonnect	SK-9E22	SK-9E22	PCI Express* X4		10, 11	10, 11	1	1, 6, 7, 8, 9	3, 7	3, 7	3, 7, 14%	3	9
Intel	Intel® PRO/1000 PT Desktop Adapter	EXPI9300PT	PCI Express* X1		10	10, 13% (9.12.17.0)	1, 6, 7, 9, 15% (9.12.18.0)	1	1, 3, 7, 8	1, 3, 7	3	3, 7	9
Intel	Intel® PRO/1000 PT Server Adapter	EXPI9400PT	PCI Express*				1	1,6,7	1,3,7,8,9	1,3,7	3, 7	3	9
Intel	Intel® PRO/1000 PT Server Adapter	EXPI9400PF	PCI Express*				SA	SA	SA	SA	SA	SA	
Intel	Intel® PRO/1000 PT Dual Port Server Adapter	EXPI9402PT	PCI Express*		10	10	1	1, 7, 8	1, 3, 7	1,3,7,8	3, 7,9	3, 6, 7, 15%	9
Intel	Intel® PRO/1000 PT Dual Port Server Adapter	EXPI9402PF	PCI Express*				SA	SA	SA	SA	SA	SA	
Intel	Intel® PRO/1000 PT Quad Port Server Adapter	EXPI9404PT	PCI Express* X4				15% (9.12.18.0)		15%			14%	9

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Mellanox	Infinihost III Ex	MHGA28-XTC	PCI Express* X8			14%	7, 15%	7, 9	7, 15%	7, 9	7, 9	7, 14%	9
Mellanox	MHGS18-XTC	MHGS18-XTC	PCI Express* X8										9

## 4.2 PCI SW RAID SATA

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Adaptec	AAR-21610SA	AAR-21610SA	PCI-X 66				7	NT	7	7	9	7	

### 4.3 PCI SW RAID SCSI

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
LSI Logic	LSI22320-R	LSI22320-R (IME)	PCI-X 133				1	1, 6, 7	1, 3, 7	1, 3, 7, 8, 9	3, 7	3, 6	
LSI Logic	LSI22320-R	LSI22320-R (IS)	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSI22320-R	LSI22320-R (IT)	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSI20320-R	LSI22320-R (IME)	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSI20320-R	LSI22320-R (IS)	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSI20320-R	LSI22320-R (IT)	PCI-X 133				SA	SA	SA	SA	SA	SA	

## 4.4 PCI SW RAID SAS

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
LSI Logic	3442x	3442x (IT)	PCI-X 133				1, 6, 7	1	1, 3, 7	1, 3, 7, 8	3	3, 7	
LSI Logic	3442x	3442x (IR)	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSISAS3041x (IT & IR)	LSISAS3041x	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSISAS3080x (IT & IR)	LSISAS3080x	PCI-X 133				SA	SA	SA	SA	SA	SA	
LSI Logic	LSISAS3800x (IT & IR)	LSISAS3800x	PCI-X 133				SA	SA	SA	SA	SA	SA	
Adaptec	ASC-48300	ASC-48300 (HostRAID)	PCI-X 133		10	10	1	1, 7, 8, 9	1, [3], 8	1, [3], 8	[3]	[3]	
Adaptec	ASC-48300	ASC-48300	PCI-X 133		15*		SA	SA, 15% (1.5.1 1685)	SA	SA	SA	SA	
Intel	SASMF8I	SASMF8I	PCI Express*						7				

## 4.5 PCI Fiber Channel

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Emulex	LP10000DC	LP10000DC-M2	PCI-X 133				1, 4, 7, 14% (1.30 a9)	1, 4, 6	1, 3, 4, 7	1, 3, 4, 7	3, 4	3, 4, 7	9
Emulex	LP10000	LP10000-M2	PCI-X 133		10, 11	10,11	SA	SA	SA	SA	SA	SA	
Emulex	LP1050	LP1050-M2	PCI-X 133				SA	SA	SA	SA	SA	SA	
Emulex	LP1050DC	LP1050DC-M2	PCI-X 133				SA	SA	SA	SA	SA	SA	
Emulex	LP10000ExDC	LP10000ExDC-M2	PCI Express* X8		10, 11	10, 11	1	1	1, 3, 9, 14%	1, 3	3, 6	3	9
Emulex	LP10000Ex	LP10000Ex-M2	PCI Express*				SA	SA	SA	SA	SA	SA	
QLogic	QLA210	QLA210	PCI-X 133				1	1	1	1	NT	NT	
Qlogic	QLA2342	QLA2342	PCI-X 133		10, 15% (9.1.7 .15)	10	1, 6, 7, 8	1, 9, 15% (9.1.7 .15)	1, 3, 7	1, 3, 7	3	3, 6, 7	9
Qlogic	QLE2360	QLE2360	PCI Express*				SA	SA	SA	SA	SA	SA	
Qlogic	QLE2460	QLE2460	PCI Express*				1	1	1	1	NT	NT	



Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Qlogic	QLE2462	QLE2462	PCI Express*				SA	SA	SA	SA	SA	SA	
Qlogic	QLE2362	QLE2362	PCI Express*		10	10							
Emulex	LP11002	LP11002	PCI-X 266		11	11	1, 4, 7	1, 4	1, 4, 7	1, 4, 7, 9	4, 6, 7, 14%	4, 7, 14%	
Emulex	LP1150	LP11050	PCI-X 266				SA	SA	SA	SA	SA	SA	
Emulex	Lpe11002	Lpe11002	PCI Express*		11	11	1	1, 7, 8	1, 3, 7	1, 3, 7	3, 7, 9	3, 6, 7	
Emulex	Lpe11000	Lpe11000	PCI Express*				SA	SA	SA	SA	SA	SA	
Emulex	Lpe1150	Lpe1150	PCI Express*				SA	SA	SA	SA	SA	SA	
LSI Logic	LSI7204EP-LC	LSI7204EP-LC	PCI Express*				7	7	7	7	7	1, 8, 9	

## 4.6 Video

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
ATI	RADEON 7000	RADEON 7000	PCI-32/33		10, 11	10, 11	1, 4, 6, 7	1, 4, 8, 9	1, 3, 4, 7	1, 3, 4, 7	3, 4, 8, 9	3, 4, 6	

## 4.7 PCI HW RAID SAS

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Adaptec*	ASR-4800SAS	ASR-4800SAS	PCI-X 133				1	1, 7	1, 3, 7, 9	1, 3, 7	3, 7, 8	3, 6, 7	9
Adaptec*	ASR-31205	ASR-31205	PCI Express*				6	6					
Adaptec*	ASR-31605	ASR-31605	PCI Express*				SA	SA					
Adaptec*	ASR-3805	ASR-3805	PCI Express*				6	6					
Adaptec*	ASR-3405	ASR-3405	PCI Express*				SA	SA					

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Adaptec*	ASR-3085	ASR-3085	PCI Express*				SA	SA					
Adaptec	Adaptec RAID 5805	Adaptec RAID 5805	PCI Express*	Tested with ASR2500 SAS1, D47868-002, MM: 880280			10	10					
Adaptec	Adaptec RAID 5445	Adaptec RAID 5445	PCI Express*				SA	SA					
Adaptec	Adaptec RAID 5405	Adaptec RAID 5405	PCI Express*				SA	SA					
Adaptec	Adaptec RAID 5085	Adaptec RAID 5085	PCI Express*				SA	SA					
Adaptec	Adaptec RAID 52245	Adaptec RAID 52245	PCI Express*	Tested with ASR2500 SAS1, D47868-002, MM: 880280			10	10					
Adaptec	Adaptec RAID 51245	Adaptec RAID 51245	PCI Express*				SA	SA					
Adaptec	Adaptec RAID 51645	Adaptec RAID 51645	PCI Express*				SA	SA					
ICP Vortex	ICP9085LI	ICP9085LI	PCI-X 133				SA	SA	SA	SA	SA	SA	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat® Enterprise	Red Hat® Enterprise	SUSE® Linux	SUSE® Linux	Solaris® 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Adaptec	ASR-4805SAS	ASR-4805SAS	PCI Express*	Requires Adaptec Cable #2167100 or #2167000 for use in Intel® Server Chassis			1, 7	1, 6, 8, 9	1, 3, 7	1, 3, 7	3, 7	3, 7	9
ICP Vortex	ICP5085BR	ICP5085BR	PCI Express*				SA	SA	SA	SA	SA	SA	
Intel	SRCSAS18E	SRCSAS18E	PCI Express* X8		10	10	1, 4	1, 4, 7	1, 3, 4, 7, 15%	1, 3, 4, 7	3, 4, 6, 7	3, 4, 7, 9	
Intel	SRCSAS144E(a)	SRCSAS144E(a)	PCI Express*				8	SA	SA	SA	SA	8	
Intel	SRCSASJV	SRCSASJV	PCI Express*		10, 11	10, 11		7	8	7(b)	7		
Intel	SRCSASRB	SRCSASRB	PCI Express*		10	10		SA	SA	SA (b)	SA		
Intel	SRCSASBB8I	SRCSASBB8I	PCI Express*								7		
Intel	SRCSASLS4I	SRCSASLS4I	PCI Express*					7					
LSI Logic	MegaRAID SAS 84016E	MegaRAID SAS 84016E	PCI Express* X8				15% (2.20.0.32)						

## 4.8 PCI HW RAID SATA

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Adaptec	AAR-21610SA	AAR-21610SA	PCI-64/66				1, 6	1	1, 3	1, 3	3	3	9
Adaptec	AAR-2810SA	AAR-2810SA	PCI-64/66				SA	SA	SA	SA	SA	SA	
Adaptec	ASR-2230S	ASR-2230S	PCI-X 133	2-channel U320 SCSI RAID			1	1	1	1	NT	NT	
Adaptec	ASR-2130S	ASR-2130S	PCI-X 133				SA	SA	SA	SA	SA	SA	
ICP Vortex	ICP9014RO	ICP9014RO	PCI-X 133				SA	SA	SA	SA	SA	SA	
ICP Vortex	ICP9024RO	ICP9024RO	PCI-X 133				SA	SA	SA	SA	SA	SA	
Adaptec	AAR-2820SA	AAR-2820SA	PCI-X 133	8-port SATA II RAID			1	1	1	1	NT	NT	
Adaptec	AAR-2420SA	AAR-2420SA	PCI-X 133				SA	SA	SA	SA	SA	SA	
Adaptec	AAR-2620SA	AAR-2620SA	PCI-X 133				SA	SA	SA	SA	SA	SA	
AMCC/3ware	9500S-8	9500S-8	PCI-X 66				1, 5	1, 5, 7	1, 3, 4, 7	1, 3, 4, 7, 8, 9	3, 4, 7	3, 4, 6	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
AMCC/3ware	9500S-4LP	9500S-4LP	PCI-X 66				SA	SA	SA	SA	SA	SA	
AMCC/3ware	9500S-8ML	9500S-8ML	PCI-X 66				SA	SA	SA	SA	SA	SA	
AMCC/3ware	9500S-12	9500S-12	PCI-X 66				SA	SA	SA	SA	SA	SA	
AMCC/3ware	9500S-12ML	9500S-8ML	PCI-X 66				SA	SA	SA	SA	SA	SA	
AMCC/3ware	9550SX	9550SX	PCI-X 133				6						
AMCC/3ware	9550SX-12MI	9550SX-12MI	PCI-X 133				SA						
AMCC/3ware	9550SX-16ML	9550SX-16ML	PCI-X 133				SA						
AMCC/3ware	9550SX-4LP	9550SX-4LP	PCI-X 133				SA						
AMCC/3ware	9550SX-8LP	9550SX-8LP	PCI-X 133				SA						
AMCC/3ware	9590SE-12ML	9590SE-12ML	PCI Express* X4				6						
AMCC/3ware	9590SE-16ML	9590SE-16ML	PCI Express* X4				SA						
AMCC/3ware	9590SE-8ML	9590SE-8ML	PCI Express* X4				SA						
AMCC/3ware	9690SA-8I	9690SA-8I	PCI Express* X4				6						

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
AMCC/3ware	9690SA-8E	9690SA-8E	PCI Express* X4				SA						
AMCC/3ware	9690SA-414E	9690SA-414E	PCI Express* X8		12%	12%	SA		12%	12%			
AMCC/3ware	9650SE-12ML	9650SE-12ML	PCI Express* X4 LP				6						
AMCC/3ware	9650SE-16ML	9650SE-16ML	PCI Express* X4 LP				SA						
AMCC/3ware	9650SE-24M8	9650SE-24M8	PCI Express* X4 LP				SA						
AMCC/3ware	9650SE-2LP	9650SE-2LP	PCI Express* X4 LP				SA						
AMCC/3ware	9650SE-4LPML	9650SE-4LPML	PCI Express* X4 LP				SA						
AMCC/3ware	9650SE-8LPML	9650SE-8LPML	PCI Express* X4 LP		12*	12*	SA		12*	12*			
ICP Vortex	ICP9047MA	ICP9047MA	PCI-X 133				SA	SA	SA	SA	SA	SA	
ICP Vortex	ICP9087MA	ICP9087MA	PCI-X 133				SA	SA	SA	SA	SA	SA	
Intel	SRCS16	SRCS16	PCI-64/66				[1], 7	[1], 6	1, 3, 7, 8, 9	1, 3, 7	3	3, 7	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Intel	SRCS28X	SRCS28X	PCI-X 133			14%	[1], 9	[1], 6, 7	1, 3, 7	1, 3, 7	3, 7	3	
Intel	SRCSATAWB	SRCSATAWB	PCI Express*		10	10		7	8	7(b)	7		
LSI Logic	MegaRAID SATA 300-8x	MegaRAID SATA 300-8x	PCI-X 133				1,7	1	1,3,7	1, 3, 7	3, 6	3, 7, 9	
LSI Logic	MegaRAID SATA 300-8x	MegaRAID SATA 300-8XLP	PCI-X 133				SA	SA	SA	SA, 15%	SA	SA	



### 4.9 PCI HW RAID SCSI

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Intel	SRCU42E	SRCU42E	PCI Express*				1, 6, 7	1, 8, 9	1, 3, 7	1, 3, 7	3, 6	3, 7	
Intel	SRCU42X	SRCU42X	PCI-X		10	10							

### 4.10 CD-ROM Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Mitsumi	SR244W1	SR244W1	IDE / Slimline				1, 6, 7, 8, 9	1	1, 3, 7	1, 3, 7	3	3, 7	

## 4.11 DVD Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Lite On	SOSC-2482K	SOSC-2482K	IDE / Slimline	DVD±R /RW CD-R /RW			1	1	1, 3	1, 3	3	2, 3	
Lite On	SOSC-2483K	SOSC-2483K	IDE / Slimline	DVD-ROM CD-R/RW			SA	SA	SA	SA	SA	SA	
Lite On	SOSC-2485K	SOSC-2485K	IDE / Slimline	DVD-ROM CD-R/RW			SA	SA	SA	SA	SA	SA	
HLDS	GWA-4082N	GWA-4082N	IDE / Slimline	DVD±R /RW CD-R/RW			4, 6, 7	4	4, 7	4, 7	4	4	
TEAC	DV-28E-V	DV-28E-V	IDE / Slimline	DVD-ROM			3, 9	1, 7, 8	1, 3, 7	1, 3, 7	2, 3, 6, 7	2, 3	9
TEAC	DW-224E-VZ3	DW-224E-VZ3	IDE/Slimline	DVD-ROM	10	10	7	7	7, 8, 15%	7	7	7, 9, 15%*	9
Toshiba	SD-C2732	SD-C2732	IDE / Slimline	DVD-ROM			1, 6	1, 6	1, 3, 7, 9	1, 3, 7	2, 3	2, 3	
Toshiba	SD-R2212	SD-R2212	IDE / Slimline	DVD-ROM CD-R/RW	10	10	1	1, 7	1, 3, 7	1, 3, 7, 15%	2, 3, 7, 9, 15%	2, 3, 6, 8	9
QSI	DDU810A	DDU810A	IDE / Slimline	DVD									9

## 4.12 Tape Drives

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Sony	SDX-470V	SDX-470V	SATA-150				1, 4, 6, 7	1, 4, 7, 8	1, 4, 7	1, 4, 7	4, 7, 9	4, 6, 7	

## 4.13 Input

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Microsoft	B75-00092	Intellimouse Optical	PS/2 and USB		10	10	1, 6, 7	1, 9	1, 7	1, 7	3, 8	3, 7	9

## 4.14 Removable Media

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2008* (SP1%) 32 bits	Microsoft Windows Server 2008* (SP1%) 64 bits	Microsoft Windows Server 2003* R2/SP2% 32 bits	Microsoft Windows Server 2003* R2/SP2% 64 bits	Red Hat* Enterprise Linux 5.0/5.1% 32 bits	Red Hat* Enterprise Linux 5.0/5.1% 64 bits	SUSE* Linux Enterprise Server 10 SP1 32 bits	SUSE* Linux Enterprise Server 10 SP1 64 bits	Solaris* 10 08/07
Lexar	JD1GB-80-231	1 GB USB Flash Drive	USB 2.0				1, 6, 9	1, 7	1, 3, 7	1, 3, 7	3, 7	3	9
TEAC	FD-O5UW-297	FD-O5UW-297	USB	Internal Slimline USB Drive			1	1	1	1	NT	NT	
Intel	AXXUSBFLOPPY	AXXUSBFLOPPY	USB	Internal Slimline USB Drive			1, 4	1, 4	1, 3, 4	1, 3, 4	3, 4	3, 4	
Intel	Z-U130 (1GB/2GB/4GB)	Z-U130 (1GB / 2GB / 4GB)	USB	Solid State Drive					6(c)				
TEAC	FD005U396	FD005U396	USB	Tested with FD005U397			4, 7	4, 7	4, 7	4, 7	4, 7	4, 7, 8	9
TEAC	FD005U397	FD005U397	USB	Internal Slimline USB Drive			SA	SA	SA	SA	SA	SA	
TEAC	FD-O5PUB	FD-O5PUB	USB		10	10	7	8,9	7	7	NT	6, 7	9
Memina	829222120101	1GB Pocket Rocket Flash Drive	USB 2.0				1, 6, 7	1	1, 3, 7, 8, 9	1, 3, 7	3	3, 7	9
Mitsumi	D353FUE	D353FUE	USB	USB Floppy Drive			1	1, 7	1, 3, 7	1, 3, 7, 9	2, 3, 7	3, 6	

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
Maxtor	E01G300	E01G300	USB 2.0		11	11	NT	7	7	7, 8, 9	7	6	9

### 4.15 Other

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Red Hat* Enterprise	Red Hat* Enterprise	SUSE* Linux	SUSE* Linux	Solaris* 10 08/07
					Server 2008* (SP1%) 32 bits	Server 2008* (SP1%) 64 bits	Server 2003* R2/SP2% 32 bits	Server 2003* R2/SP2% 64 bits	Linux 5.0/5.1% 32 bits	Linux 5.0/5.1% 64 bits	Enterprise Server 10 SP1 32 bits	Enterprise Server 10 SP1 64 bits	
PQI	DOM	DH0010G44RK6	IDE-133				NT	NT	6	6	NT	NT	
PQI	DOM	DH0010G44RK7	IDE-133				NT	NT	6	6	NT	NT	
PQI	DOM	DH0010G22RN7	IDE	Tested with Red Hat* Enterprise Linux 4 only			NT	NT	7	7	NT	NT	
US Robotics	Modem	USR802972A-OEM	PCI-32/33				NT	NT	6	6	NT	NT	
US Robotics	Modem	USR64-005610-02	PCI-32/33				NT	NT	6	6	NT	NT	

## 5. Hard Disk Drives

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The hard drives previously listed in this section have now been listed separately in the Intel® Server Boards/Systems Tested Hard Drive List, which includes the qualified hard drives for the Intel® Server Board S5000PAL/S5000XAL. It is located on Intel's secure website IBL and at the following web link: <http://www.intel.com/support/motherboards/server/sb/CS-025416.htm>