



Intel[®] Server Board S5000PAL/S5000XAL

Tested Hardware and Operating System List

Revision 2.2

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Enterprise Platforms and Services Division

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	Correcting typos in OS list Added Operating System Certifications Added 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 Added DVD-R drives
March 15, 2007	2.1	Updated DVD drive section
April 11, 2007	2.2	Updated Configuration List Updated Support Operating Systems (OS) Added PQI DOM Added US Robotic* Modem Added Removable Media (RM)

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1. Introduction

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. No add-in adapter cards are tested. Testing includes network connectivity and running of proprietary and industry standard test suites.



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

1.1.1.1 Support Commitment for Basic Installation Testing

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

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

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

1.1.2 Adapter/Peripheral Compatibility and Stress Testing

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

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

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

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

1.1.2.1 Support Commitment for Adapter/Peripheral Compatibility and Stress Testing

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

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

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



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

1.2 Pass/Fail Test Criteria

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

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

All Intel® Server Board S5000PAL/S5000XAL testing 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 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	Notes
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	S5000XAL	D46952-801	R0074	BMC58	Ver 2.05	Tested S5000PAL; displayed identical findings

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 Section 2 of this document. Operating systems are supported only with the specified base system configuration(s) with which they were tested.

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

Any variations to the standard operating system installation process are documented in the Installation Guidelines section of this document. If there 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. Please reference 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 2003* R2, 32 bits	Configuration 1, 2, 3, 6— Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2003* R2. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows Server 2003* R2, 32 bits. The application portion is not tested or supported.
Microsoft Windows Server 2003* R2, 64 bits	Configuration 1, 2, 3, 6— Compatibility and Stress	Intel's testing was completed with Microsoft Windows Server 2003* R2. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Microsoft Windows Server 2003* R2, 64 bits. The application portion is not tested or supported.
Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Configuration 1, 2, 3— Compatibility and Stress	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 bits. 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 bits	Configuration 1, 2, 3 – Compatibility and Stress	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 bits. The application portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 32 bits	Configuration 2, 3, 6– Compatibility	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 32 bits. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 32 bits. The application portion is not tested or supported.
SUSE* Linux Enterprise Sever 10 64 bits	Configuration 2, 3, 6 – Compatibility	Intel's testing was completed with SUSE* Linux Enterprise Sever 10 64 bits. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of SUSE* Linux Enterprise Sever 10 64 bits. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.0 AS RC 32 bits	Configuration 6 – Basic Installation Only	Intel's testing was completed with Red Hat* Enterprise Linux 5.0 AS RC. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.0 AS RC 32 bits. The application portion is not tested or supported.
Red Hat* Enterprise Linux 5.0 AS RC 64 bits	Configuration 6 – Basic Installation Only	Intel's testing was completed with Red Hat* Enterprise Linux 5.0 AS RC. The Intel® Server Board S5000PAL/S5000XAL supports only the operating system portion of Red Hat* Enterprise Linux 5.0 AS RC 64 bits. The application portion is not tested or supported.
Microsoft Windows 2000* SP4	Configuration 1 – Basic Installation Only	
NetWare* 6.5 SP5	Configuration 1 – Basic Installation Only	
Suse* Enterprise Linux 9 SP3 32 bit	Configuration 1 – Basic Installation Only	
Suse* Enterprise Linux 9 SP3 64 bit	Configuration 1 – Basic Installation Only	
Red Hat* Enterprise Linux 4.0 AS U2 32 bits	Configuration 1 – Basic Installation Only	
Red Hat* Enterprise Linux 4.0 AS U2 64 bits	Configuration 1 – Basic Installation Only	

3.1 Operating System Certifications

Listed below are 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 table below for additional information. Intel's certifications, pre-certification, and operating system testing may help reduce some of the risk in achieving customer certifications with the operating system vendors.

Operating System	Certification Listing	Comments
Microsoft Windows Server 2003* R2 (32 bits and 64 bits)	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	OEM must request certification by Microsoft* for their specific product. http://www.microsoft.com/whdc/hcl/default.msp http://developer.intel.com/design/servers/whql.htm
Microsoft Windows Advanced Server 2000* SP4	Intel® Server Board S5000PAL Intel® Server Board S5000XAL	OEM must request certification by Microsoft* for their specific product. http://www.microsoft.com/whdc/hcl/default.msp http://developer.intel.com/design/servers/whql.htm
Red Hat* Enterprise Linux 4.0 AS U4 (32 bits and 64 bits)	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 bits and 64 bits)	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.

4. Adapters and Peripherals

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

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

Number (i.e. 1)	This adapter or peripheral has been tested and is supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
Number in brackets (i.e. [1])	This adapter or peripheral has been tested, but is NOT supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
NT	This adapter or peripheral has not been tested under this operating system and is not supported under this operating system.
ND	This adapter or peripheral has not been tested under this operating system due to limitations in IHV driver availability, and is not 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 there are no installation guidelines noted in the following table, then the adapter installed and functioned as expected using manufacturer's installation instructions or Intel's best-known methods.



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

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
4.1 PCI NIC										
Intel	PILA8470D3	PRO/100+ S Server	PCI-32/33		1, 6	1	1, 3	1, 3	3, 6	3
Intel	PILA8470C3	PRO/100+ S Server	PCI-32/33		SA	SA	SA	SA	SA	SA
Intel	PILA8472C3	PRO/100+ Dual Port	PCI-64/66		1	1, 6	1, 3	1, 3	3, 6	3, 6
Intel	PWLA8490MT	PRO/1000MT Gigabit Server Adapter	PCI-X* 133		1, 6	1	1, 3	1, 3	3	3
Intel	PWLA8490MF	PRO/1000MF Gigabit Server Adapter	PCI-X 133		SA	SA	SA	SA	SA	SA
Intel	PWLA8492MT	PRO/1000MT Dual Port Gigabit Server Adapter	PCI-X 133		1	1	1, 3	1, 3	3, 6	3, 6
Intel	PWLA8492MF	PRO/1000MT Dual Port Gigabit Server Adapter	PCI-X 133		SA	SA	SA	SA	SA	SA
Syskonnect*	SK-9E21	SK-9E21	PCI Express*		1	1	1, 3	1, 3	3, 6	3
Syskonnect	SK-9E22	SK-9E22	PCI Express		1	1, 6	3	3	3	3
Intel	EXPI9300PT	PRO/1000 PT Desktop Adapter	PCI Express		1, 6	1	1, 3	1, 3	3	3
Intel	EXPI9400PT	Intel® PRO/1000 PT Server Adapter	PCI Express		1	1, 6	1, 3	1, 3	3	3
Intel	EXPI9400PF	Intel® PRO/1000 PT Server Adapter	PCI Express		SA	SA	SA	SA	SA	SA

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
Intel	EXPI9402PT	Intel® PRO/1000 PT Dual Port Server Adapter	PCI Express		1	1	1, 3	1, 3	3	3, 6
Intel	EXPI9402PF	Intel® PRO/1000 PT Dual Port Server Adapter	PCI Express		SA	SA	SA	SA	SA	SA
4.2 PCI SW RAID SATA										
AMCC/3ware *	9500S-8	9500S-8	PCI-X 66		1,5	1,5	1, 3,4	1, 3,4	3,4	3,4,6
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
4.3 PCI SW RAID SCSI										
LSI Logic*	LSI22320-R	LSI22320-R (IME)	PCI-X 133		1	1, 6	1, 3	1, 3	3	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

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
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

LSI Logic	3442x	3442x (IT)	PCI-X 133		1, 6	1	1, 3	1, 3	3	3
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		1	1	1, [3]	1, [3]	[3]	[3]
Adaptec	ASC-48300	ASC-48300	PCI-X 133		SA	SA	SA	SA	SA	SA

4.5 PCI Fiber Channel

Emulex*	LP10000DC	LP10000DC-M2	PCI-X 133		1,4	1,4,6	1, 3,4	1, 3,4	3,4	3,4
Emulex	LP10000	LP10000-M2	PCI-X 133		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		1	1	1, 3	1, 3	3, 6	3

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
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		1, 6	1	1, 3	1, 3	3	3, 6
Qlogic	QLE2360	QLE2360	PCI Express		SA	SA	SA	SA	SA	SA
Qlogic	QLE2460	QLE2460	PCI Express		1	1	1	1	NT	NT
Qlogic	QLE2462	QLE2462	PCI Express		SA	SA	SA	SA	SA	SA
Emulex	LP11002	LP11002	PCI-X 266		1,4	1,4	1,4	1,4	4, 6	4
Emulex	LP1150	LP11050	PCI-X 266		SA	SA	SA	SA	SA	SA
Emulex	Lpe11002	Lpe11002	PCI Express		1	1	1, 3	1, 3	3	3, 6
Emulex	Lpe11000	Lpe11000	PCI Express		SA	SA	SA	SA	SA	SA
Emulex	Lpe1150	Lpe1150	PCI Express		SA	SA	SA	SA	SA	SA
4.6 Video										
ATI*	RADEON 7000	RADEON 7000	PCI-32/33		1,4,6	1,4	1,3,4	1,3 4	3,4	3,4,6
4.7 PCI HW RAID SAS										
Adaptec	ASR-4800SAS	ASR-4800SAS	PCI-X 133		1	1	1, 3	1, 3	3	3, 6
ICP Vortex*	ICP9085LI	ICP9085LI	PCI-X 133		SA	SA	SA	SA	SA	SA

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
Adaptec	ASR-4805SAS	ASR-4805SAS	PCI Express	Requires Adaptec Cable #2167100 or #2167000 for use in Intel® Server Chassis	1	1, 6	1, 3	1, 3	3	3
ICP Vortex	ICP5085BR	ICP5085BR	PCI Express		SA	SA	SA	SA	SA	SA
Intel	SRCSAS18E	SRCSAS18E	PCI Express		1,4	1,4	1, 3,4	1, 3,4	3,4,6	3,4
Intel	SRCSAS144E	RCSAS144E	PCI Express		SA	SA	SA	SA	SA	SA
4.8 PCI HW RAID SATA										
Adaptec	AAR-21610SA	AAR-21610SA	PCI-64/66		1, 6	1	1, 3	1, 3	3	3
Adaptec	AAR-2810SA	AAR-2810SA	PCI-64/66		SA	SA	SA	SA	SA	SA
Intel	SRCS16	SRCS16	PCI-64/66		[1]	[1], 6	1, 3	1, 3	3	3
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

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
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
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	SRCS28X	SRCS28X	PCI-X 133		[1]	[1], 6	1, 3	1, 3	3	3
LSI Logic	MegaRAID SATA 300-8x	MegaRAID SATA 300-8x	PCI-X 133		1	1	1, 3	1, 3	3, 6	3
LSI Logic	MegaRAID SATA 300-8x	MegaRAID SATA 300-8XLP	PCI-X 133		SA	SA	SA	SA	SA	SA
4.9 PCI HW RAID SCSI										
Intel	SRCU42E	SRCU42E	PCI Express		1, 6	1	1, 3	1, 3	3, 6	3
4.10 CD ROM Drives										
Mitsumi*	SR244W1	SR244W1	IDE / Slimline		1, 6	1	1, 3	1, 3	3	3
4.11 DVD Drives										
Lite On*	SOSC-2482K	SOSC-2482K	IDE / Slimline	DVD±R/RW CD-R/RW	1	1	1, 3	1, 3	3	2, 3

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
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	4	4	4	4	4
TEAC*	DV-28E	DV-28E	IDE / Slimline	DVD ROM	3	1	1, 3	1, 3	2, 3, 6	2, 3
Toshiba*	SD-C2732	SD-C2732	IDE / Slimline	DVD ROM	1, 6	1, 6	1, 3	1, 3	2, 3	2, 3
Toshiba	SD-R2212	SD-R2212	IDE / Slimline	DVD ROM CD-R/RW	1	1	1, 3	1, 3	2, 3	2, 3, 6
4.12 Tape Drives										
Sony*	SDX-470V	SDX-470V	SATA-150		1,4,6	1,4	1,4	1,4	4	4,6
4.13 Input										
Microsoft*	B75-00092	Intellimouse Optical	PS/2 and USB		1, 6	1	1	1	3	3
4.14 Removable Media										
Lexar*	JD1GB-80-231	1GB USB Flash Drive	USB 2.0		1, 6	1	1, 3	1, 3	3	3
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
TEAC	FD005U396	FD005U396	USB	Internal	4	4	4	4	4	4

Manufacturer	Model Name	Model Number	Interface	Comments	Microsoft Windows Server 2003* R2 32 bits	Microsoft Windows Server 2003* R2 64 bits	Red Hat* Enterprise Linux 4.0 AS U4 32 bits	Red Hat* Enterprise Linux 4.0 AS U4 64 bits	SUSE* Linux Enterprise Server 10 32 bits	SUSE* Linux Enterprise Server 10 64 bits
				Slimline USB Drive						
TEAC	FD005U397	FD005U397	USB	Internal Slimline USB Drive	SA	SA	SA	SA	SA	SA
TEAC	FD-O5PUB	FD-O5PUB	USB		NT	NT	NT	NT	NT	6
Memina	829222120101	1GB Pocket Rocket Flash Drive	USB 2.0		1, 6	1	1, 3	1, 3	3	3
Mitsumi	D353FUE	D353FUE	USB	USB Floppy Drive	1	1	1, 3	1, 3	2, 3	3, 6
Maxtor*	Maxtor One Touch II	E01G300	USB 2.0		NT	NT	NT	NT	NT	6
4.15 Other										
PQI*	DOM	DH0010G44RK6	IDE-133		NT	NT	6	6	NT	NT
PQI	DOM	DH0010G44RK7	IDE-133		NT	NT	6	6	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

The hard drives previously 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>