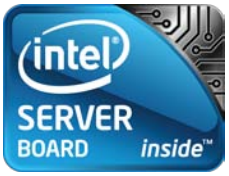
Intel® Server Board S1200KP

Tested Hardware and Operating System List



Revision 1.1

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Enterprise Platforms and Services Division – Marketing

Revision History

Date	Revision Number	Modifications
August 2011	1.0	The initial version.
August 2011	1.1	Add Operating System certification information.

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1. Introduction

This document is intended to provide users of the Intel® server board *S1200KP* 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 *S1200KP* 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 *S1200KP* 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. On-board RAID testing is conducted during Basic Installation Testing if RAID drivers are available for the OS. Testing includes network connectivity and running of proprietary and industry standard test suites.

Note: 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.

Note: 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.

2. 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 *S1200KP* are released and/or new system BIOS is 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.

Note: 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	AA Number	BIOS Revision	Notes
1	S1200KP	-102	12	

3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® Server Board *S1200KP*. Each of the listed operating systems was tested for compatibility with Intel® Server Board *S1200KP* base system configuration listed in Section 2 of this document. Operating systems are supported only with the specified base system configuration(s) with which they were tested.

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

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

Operating System	Type of Testing	Notes
Microsoft Windows 7* Ultimate 64-bit edition	Compatibility & Stress	
Microsoft Windows 7* Ultimate 32-bit edition	Compatibility & Stress	
Microsoft Windows 7* Home Basic 64-bit edition	Compatibility & Stress	
Microsoft Windows 7* Home Premium 64-bit edition	Compatibility & Stress	
Microsoft Windows 7* Home Premium 32-bit edition	Compatibility & Stress	
Microsoft Windows 7* Home Basic 32-bit edition	Compatibility & Stress	
Microsoft Windows Server 2008 R2* SP1 with Hyper-v	Compatibility & Stress	
Microsoft Windows Small Business Server 2011 Essentials*	Compatibility & Stress	
Redhat* Enterprise Linux 6.0	Basic Installation	
SUSE* Linux Enterprise Server 11	Basic Installation	

3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® Server Board S1200KP. 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 For Intel® Server Board S1200KP	Comments
Microsoft Windows 7*	WHQL ID: 1465819	
Microsoft Windows 7* 64Bit	WHQL ID: 1465819	
Microsoft Windows Server 2008 R2*	WHQL ID: 1466150	

4. Adapters

Add-in adapter card 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.

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

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

Note: 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.

Vendor	Model	Description	Interface	Keying	Form Factor	Test Result
Network Controller						
Intel	EXPI9300PT	1000Mbps, 1 port	PCI Express	x1	PCI-LP/RP	1
Video						
NVidia	8400GS	256MB/Hynix VBIOS: 60.86.41.00.48	PCI Express	x1	Single slot	1
NVidia	GTX 460/1GB	1GB/Samsung VBIOS:70.4.2a.0.1	PCI Express	x16	Dual slot	1
NVidia	GTS250/1GB	1GB/ Samsung VBIOS: 62.92.66.0.11	PCI Express	x16	Dual slot	1
AMD	HD4850/1GB	1GB/Samsung VBIOS: 011.022.007.005	PCI Express	x16	Single slot	1
AMD	HD5670	1GB/Hynix VBIOS: 012.020.000.017	PCI Express	x16	Single slot	1
AMD	HD6450	1GB/Hynix VBIOS: 013.010.000.009	PCI Express	x16	Single slot	1

5. Peripherals

The peripherals 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.

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

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

Vendor	Model	Description	Interface	Keying	Form Factor	Test Result
Hard Drive Disk						
Hitachi	HDT722525SL380	250GB, 7200 RPM	SATA-300	SATA	3.5x1	1
Hitachi	HDT721010SLA360	1TB, 7200 RPM	SATA-300	SATA	3.5x1	SA
Hitachi	HDS721010CLA632	1TB, 7200 RPM	SATA-300	SATA	3.5x1	1
Hitachi	HDS722020ALA330	2TB, 7200 RPM	SATA-300	SATA	3.5x1	1

Vendor	Model	Description	Interface	Keying	Form Factor	Test Result
Seagate	ST316318AS	7200 RPM SATA 160GB	SATA-300	SATA	3.5x1	1
Seagate	ST3500418AS	7200 RPM SATA 500GB	SATA-300	SATA	3.5x1	1
Western Digital	WD5000AAKS-60YGA0	3.5" 7200RPM 500GB SATA	SATA-300	SATA	3.5x1	1
Western Digital	WD5000AAKS-65N1A0	3.5" 7200RPM 500GB SATA	SATA-300	SATA	3.5x1	1
Western Digital	WD5000AADS-65S9B0	3.5" 7200RPM 500GB SATA	SATA-300	SATA	3.5x1	1
CD/DVD ROM mR/RW						
LG	GH22NS40	DVD±RW	SATA	n/a		1
PLDS	DH16AAS	DVD±RW	SATA	n/a		1
PLDS	DH16ABS	DVD±RW	SATA	n/a		1
Flash Drive						
SanDisk	SDCZ36-004G-A11	4GB	USB 2.0	n/a	external	1
SanDisk	SDCZ36-008G-A11	8GB	USB 2.0	n/a	external	SA
SanDisk	SDCZ36-016G-A11	16GB	USB 2.0	n/a	external	SA
Input Device						
Microsoft	Microsoft 1047	USB keyboard	USB	n/a	external	1
Microsoft	Microsoft 1047 basic Optical Mouse	USB mouse	USB	n/a	external	1
Logitech	Y-UR83	USB keyboard	USB	n/a	external	1
Logitech	M-UAG96B	USB mouse	USB	n/a	external	1