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Intel® Server Board S875WP1-E

Tested Hardware and Operating System List

Revision History

Date	Revision Number	Modifications
June 2003	1.0	Initial Release.
June 2003	1.1	Updated Hard Drives
April 2004	1.2	Aligned Supported Operating system with support sites, removed Red Hat Linux 8.0 added Microsoft* Windows* 2003 Enterprise Server

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1.   Introduction

This document is intended to provide users of the Intel® server board **S875WP1-E** 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 **S875WP1-E** 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.
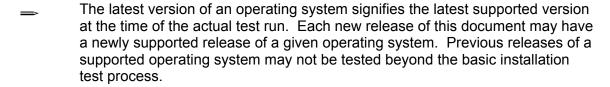
Intel will only provide support for those adapters and peripherals under the specified system configuration (System BIOS and Firmware revisions) and operating systems versions with which they were tested.

1.1   Test Overview

Testing performed on the Intel® server board **S875WP1-E** 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 *S875WP1-E* testing was performed using the Intel® server chassis *SC5200*.

2. Intel® Server Board S875WP1-E 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 *S875WP1-E* 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	Notes
1	S875WP1-E	C28366-300	Production Release 21.P01	
2	S875WP1-E	C26812-300	Production Release 24.P02	
3	S875WP1-E	C26812-302	Production Release P09	

3.   Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® server board **S875WP1-E**. Each of the listed operating systems was tested for compatibility with Intel® server board **S875WP1-E** 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 System	Base System Configuration Tested & Type of Testing	Notes
Microsoft Windows 2000* Advanced Server, Service Pack 3	1,2	
Microsoft * Small Business Server*		Install Only
Microsoft Windows XP Service Pack 1	1	Certification and Hard Drive Testing Only
Microsoft Windows 2003* Enterprise Server	3	
Microsoft Windows* Small Business Server 2003		Install Only

3.1   Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® server board *S875WP1-E*. 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* 2000 Server	Intel® S875WP1-E Server SID# TBD	OEM must request certification by Microsoft for their specific product. http://www.microsoft.com/hwdq/hcl/search.asp (Search on S875WP1-E) http://developer.intel.com/design/servers/whql.htm
Microsoft Windows* XP	Intel® S875WP1-E Server SID# TBD	OEM must request certification by Microsoft for their specific product. http://www.microsoft.com/hwdq/hcl/search.asp (Search on S875WP1-E) http://developer.intel.com/design/servers/whql.htm
Microsoft Windows* 2003 Enterprise Server	Intel® S875WP1-E Server SID# TBD	OEM must request certification by Microsoft for their specific product. http://www.microsoft.com/hwdq/hcl/search.asp (Search on S875WP1-E) http://developer.intel.com/design/servers/whql.htm

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 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.

> ⇒   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 Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
4.1 PCI RAID						
Adaptec*	ASR-2110S	ASR-2110S	PCI-64/66		1,2	1,2
Adaptec	ASR-2200S	ASR-2200S	PCI-64/66		1,2	1,2
Adaptec	ASR-2120S	ASR-2120S	PCI-64/66		SA	SA
ICP-Vortex*	GDT4523RZ	GDT4523RZ	PCI-32/66		1,2	1,2
ICP-Vortex	GDT8623RZ	GDT8623RZ	PCI-64/66		1,2	1.2
Intel®	SRCU31L	SRCU31L	PCI-32/33		1,2	1,2
Intel	SRCU42L	SRCU42L	PCI-64/66		1,2	1,2
LSI Logic*	MegaRAID 475	MegaRAID 475	PCI-32/33		1,2	1,2
4.2 PCI SCSI						
LSI Logic	MegaRAID SCSI 320-2	MegaRAID SCSI 320-2	PCI-64/66		1,2	1,2
Adaptec	ASC-29160N	ASC-29160N	PCI-32/33		1,2	1,2
Adaptec	ASC-29160LP	ASC-29160LP	PCI-32/33		SA	SA
Adaptec	ASC-29160	ASC-29160	PCI-32/33		SA	SA
Adaptec	ASC-39160	ASC-39160	PCI-64/66		1,2	1,2
Adaptec	ASC-39320D-R	ASC-39320D-R	PCI-X133		1,2	1,2
Adaptec	ASC-39320-R	ASC-39320-R	PCI-X133		SA	SA
LSI Logic	LSI20160L	LSI20160L	PCI-32/33		1,2	3
LSI Logic	LSI20320-R	LSI20320-R	PCI-X133		1,2	3
LSI Logic	LSI22320-R	LSI22320-R	PCI-X133		SA	SA
4.3 SATA RAID						
3Ware*	8500-4	Escalade 8500-4	PCI-64/33		1,2	3
3Ware	8500-8	Escalade 8500-8	PCI-64/33		SA	SA
3Ware	8500-12	Escalade 8500-12	PCI-64/33		SA	SA
Intel	SCRU14L	SCRU14L	PCI-64/66		1,2	3
Promise*	FastTrak S150 TX4	FastTrak S150 TX4	PCI-32/66		1,2	3

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
4.4 PCI NIC						
3COM*	3C980C-TXM	EtherLink Server 10/100 PCI Managed	PCI-32/33		1,2	3
3COM	3C905C-TX-M	EtherLink* 10/100 PCI	PCI-32/33		1,2	3
Dlink*	DFE-530/TX+	DFE-530/TX+	PCI-32/33		1,2	1
Intel®	PWLA8490MT	PRO/1000MT Gigabit Server Adapter	PCI-X133		1,2	3
Intel	PWLA8490MF	PRO/1000MF Gigabit Server Adapter	PCI-X133		SA	SA
Intel	PWLA8490XT	PRO/1000XT Gigabit Server Adapter	PCI-X133		1,2	3
Intel	PWLA8490XFL	PRO/1000XFL Gigabit Server Adapter	PCI-X133		SA	SA
Intel	PWLA8490XF	PRO/1000XF Gigabit Server Adapter	PCI-X133		SA	SA
Intel	PWLA8490XTL	PRO/1000XTL Gigabit Server Adapter	PCI-X133		SA	SA
Intel	PILA8470D3	PRO/100+ S Server Adapter	PCI-32/33		1,2	3
Intel	PILA8470C3	PRO/100+ S Server Adapter	PCI-32/33		SA	SA
Intel	PILA8472C3	PRO/100 + Dual Port	PCI-64/66		1,2	3
4.5 Modems						
3COM*	3CP3453	V.Everything 56K Corporate Modem	RS-232		1,2	NS
3COM	USR5610B	56K V.92 Performance Pro	PCI-32/33		1,2	NS
4.6 Video						
ATI*	RADEON 7000	RADEON 7000	PCI-32/33		1,2	1
ATI	RADEON 7500	RADEON 7500	PCI-32/33		1,2	1

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
ATI*	RADEON 9000 Pro	RADEON 9000 Pro	AGP-4x		1,2	1
ATI	RADEON 9000	RADEON 9000	AGP-4x		SA	SA

4.7 USB/PS2 Devices

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
Keytronic* keyboard	PRO Pilot	PRO Pilot	PS2		1,2	1
Logitech*	930582-0403	Optical Mouse	USB/PS2		1,2	1
Microsoft*		Intellimouse* Optical	USB/PS2		1,2	1
RAINBOW*	Sentinel Duo	Sentinel Duo Hardware Key	USB		1,2	1

4.8 CDROM Drives

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
Iomega*	CD-RW 24x10x40	CD-RW 24x10x40	USB		1,2	1
Iomega	CD-RW 48x24x48	CD-RW 48x24x48	USB		1,2	1
LG*	GCE-8240B	U2-12X	USB		1,2	1
Mitsumi*	CRMC-FX5401W CDROM	CRMC-FX5401W CDROM	ATA33		1,2	1
Plextor*	CD-RW 40x12x40U	PlexWriter 40x12x40U	USB		1,2	1
Samsung*	SN-124q	SN-124q	ATA33		1,2	1
Samsung	SC-152	SC-152	ATA33		1,2	1
Teac	CD-552E	CD-552E	ATA		1,2	1

4.9 DVD Drives

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
HP*	DVD200i	DVD Writer 200i	ATA33		1,2	1
Panasonic*	SR-8177-B	SR-8177-B	ATA33		1,2	1
Samsung	SD-616	SD-616	ATA33		1,2	1
Toshiba*	SD-C2612	SD-C2612	ATA33		1,2	1
Toshiba	SD-M1612	SD-M1612	ATA33		1,2	1

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft* Windows* 2000 A.S. SP3	Microsoft* Windows* 2003 E.D
4.10 Tape Drives						
Sony*	SDX-700C/BM	AIT-3 Desktop	SCSI-U160	Tested on Quantum SDTL 320	1,2	1
4.11 Removable Drives						
Iomega*	32324	ZIP 750MB USB 2.0	USB 2.0		1,2	1
Iomega	32548	Mini 128MB USB Drive	USB 2.0		1,2	1
Sony*	PCGA-UFD5	VAIO External USB Floppy	USB		1,2	1
Teac*	CDWF540/KIT	CDWF540/KIT	USB		1,2	1
Teac	FD-235HF	FD-235HF	Floppy		1,2	1
Fujitsu*	MCJ3230AP	MCJ3230AP	ATA		1,2	1
4.12 KVM						
Belkin*	F1D108-OSD	Omniview PRO	PS2		1,2	1
Belkin	F1DA108T	Omniview PRO2	PS2		1,2	1
Avocent*	1160ES	1160ES	PS2		1,2	1

5.   Hard Disk Drives

The hard drives listed in the following table have been tested with the Intel® server board **S875WP1-E** by Intel in its validation labs and/or by individual drive vendors. The following operating system identifiers are used in the table to specify which OS each drive was tested under.

Identifier number	Operating System
1	Microsoft Windows* 2000 Advanced Server
2	Microsoft Windows* XP
3	Microsoft Windiws* 2003 Enterprise Server

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

Number (i.e. 1)	This hard drive has been tested and is supported under the operating system identified by the operating system identification number.
Number in brackets (i.e. [1])	This hard drive has been tested, but is NOT supported under the operating system identified by the operating system identification number.
SD (Similar Drive)	The hard disk drive is supported, but not tested. This hard drive model/capacity has not been tested with this server board, but Intel will support it based on successful testing of a larger capacity hard drive from the same hard drive family. Intel has high confidence that this hard drive will function correctly with the server board. This drive uses the exact same firmware and drivers as a larger capacity hard drive that has been successfully tested with this server board. The only difference between this drive and the one that was used in testing is the storage capacity. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested or not. Customers should always test hard drives as part of the final system configuration prior to deployment. Given the fact that a larger capacity hard drive from the same drive family has successfully completed testing on this server board, this particular hard drive capacity point will not be tested.

Manufacturer	Product Family	Model Number	Interface	RPM	Drive size (GB)	Tested Operating Systems	Notes
SCSI Hard Drives							
Seagate*	Cheetah 73LP	ST373405LC	SCSI-U160-SCA	10k	73	1,2,3	
Seagate	Cheetah 36 ES	ST318406LC	SCSI-U160-SCA	15K	18	1,2,3	
Seagate	Barracuda 36ES	ST3148437LC	SCSI-U160-SCA	15K	18	1,2,3	
Parallel ATA (PATA) Hard Drives							
Seagate*	ST312003A	Barracuda ATA	ATA100	7200	120	1,2,3	

Manufacturer	Product Family	Model Number	Interface	RPM	Drive size (GB)	Tested Operating Systems	Notes
Seagate	ST300023A	Barracuda	ATA-100	7200	80	1,2,3	
Seagate	ST360015A	Barracuda	ATA-100	7200	60	1,2,3	
Seagate	ST340017A	Barracuda	ATA-100	7200	40	1,2,3	
Seagate	ST320414A	Barracuda	ATA-100	7200	20	1,2,3	
Maxtor*	D740X	6L080J4	ATA133	7200	80	1,2,3	
Addonics*	AEMED35AUM	Combo Hard Drive Kit	USB to ATA			1,2,3	
Serial ATA (SATA) Hard Drives							
Seagate	ST3120023AS	Barracuda ATA	SATA/150	7200	120	1,2,3	
Seagate	ST380023AS	Barracuda ATA	SATA/150	7200	80	1,2,3	
Maxtor	DiamondMax	6Y060M0242521A	SATA	7200	60	1,2,3	