

Server WHQL Testing Services Enterprise Platforms and Services Division

Intel® Server Board S5000PALSATA-NR

Server Test Submission (STS) Report

For the Microsoft® Windows® Logo Program (WLP)

Rev 2.0

June 22, 2006

This report describes the Intel[®] S5000PSLSATA Server Platform Windows* Logo Program test run conducted by Intel Enterprise Platforms and Services Division (EPSD). The –NR designation in the product name indicates that this certification applies to non-RAID configuration.

Purpose of this WLP Submission:

System First Time submission for the Microsoft* Designed for Windows Logo submission for the Intel[®] Server Board S5000PALSATA-NR.

Submission Type:	Reason for test run	Check one
First Time Submission	Initial Microsoft Designed for Windows logo submission. New product submission.	V
System Update	Hardware update. (For example, update submission test run with new processor speeds.)	
BIOS Update	BIOS and/or Firmware update. (For example, update submission test run with new BIOS to support additional processor speeds.)	
OS Update	OS update. (For example, update submission test run to add Microsoft Designed for Windows Server 2003 logo to product.)	

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Revision History and Disclaimers

	Revision History		
Revision Date Comments			
1.0	6/12/2006	Internal draft of the STS Report for Windows Server 2003 EE x64 Submission for Intel [®] Server Board S5000PALSATA-NR (non-RAID Configuration).	
2.0	6/22/2006	Addition of Submission ID and other details for 64-bit version of Windows Server 2003 EE	

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Introduction

This report provides an overview of the testing conducted on the Intel® Server Board S5000PSLSATA by Intel EPSD and provides details about this testing run.

Overview of Contents

Section	Content	
Introduction	Brief descriptions of the sections in the report. Table listing terms and definitions.	
Server Product Submission Information	Submission information, ID # and final server board configuration upon completion of WLP including HW, Driver version, BIOS version, and Board AA number	
НСТ	All HCT's used during testing	
Errata and Contingencies	All Microsoft* errata or contingencies used during testing	

Terms and Definitions

Term	Definitions
EPSD	Enterprise Platforms and Services Division
HCL	Windows Hardware Compatibility List. Changed to Windows Server Catalogue. You can view the catalogue at: http://www.microsoft.com/windows/catalog/server/
HCT	Hardware Compatibility Tests. For latest Server HCTs visit: http://www.microsoft.com/whdc/hwtest/system/default.mspx
STS	Server Test Submission Report published by EPSD
WHDC	Windows* Hardware and Driver Central. Provides technical information, development and testing kits, newsletters and support information. http://www.microsoft.com/whdc/default.mspx
WHOS	Windows Hardware Online Service – Secure online web site used to submit products for logo qualification and review submission history. https://winqual.microsoft.com/
WHQL	Windows* Hardware Qualification Lab. For more information visit the WHDC home page at: http://www.microsoft.com/whdc/whql/default.mspx
WLP	Windows Logo Program. For further information see: http://www.microsoft.com/whdc/winlogo/default.mspx
WTS	Workstation Test Submission Report published by EPSD

Server Board Submission Information

Intel Server Board Submission Report: Completion of WLP

Data in this section reflects system submission information at the time of WLP Update submission.

Submission Information

Submission ID			
1134174 – 32-bit OS			
1137101 – 64-bit OS			
Check Submission Type	Comments		
Product Category			
PC System or Server			
Windows Server 2003 32-bit and 64-bit and Windows 2000 (Supported Status only for 2000) families			
Server			
Business/Corporate			
All applicable requirements			
Characterization (optional)			
Check appropriate options	Comments		
\square			
	Check Submission Type Check Submission Type PC System or Server Windows Server 2003 32-bit and of families Server Business/Corporate All applicable requirements Check appropriate options Check appropriate options		

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Processor		
Quantity	2 (physical processors installed)	
Front Side Bus Speed	1067 MHz	
Family/Model	Dual-Core Intel [®] Xeon [®] processors	
Speed	1.60, 1.86, 2.00, 2.33, 2.66, 3.00, 3.20, and 3.73 GHz	
System Memory		
Amount Installed	32 GB	
Memory Type	FB DDR2-533 (4 GB FBDIMMs, ECC)	
Power Management		
ACPI Sleep States (S1, S2, S3, S4)	S1, S4	
Server Board Product		
System uses logo'd motherboard	NO (Server boards are NOT eligible for logo under the Microsoft* Motherboard logo program)	
Board AA #/Fab	PBA	
Board Manufacturer	Intel Corporation	
Board Model	Intel® Server Board S5000PSLSATA	
Northbridge* Chipset Manufacturer	Intel Corporation	
Northbridge Chipset Model	Intel® 5000P Memory Controller Hub	
Southbridge* Chipset Manufacturer	Intel Corporation	
Southbridge Chipset Model	Intel® ESB2-E I/O Controller	
BIOS		
BIOS Manufacturer	AMI*	
BIOS Version	S5000.86B.01.00.0045	
BIOS Date	5/32/2006	
BIOS URL (For Updates)	htttp://support.intel.com/support/motherboards/server/S5000PAL/	

Bus Types			
	Check all that Apply		Check all that Apply
PS/2	\checkmark	AGP*	
1394		PCCard* (16-bit)	
CF (Compact Flash)		CardBus* (32-bit)	
PCI	\checkmark	USB	
Mini-PCI		USB 2.0	\square
AMR		InfiniBand*	
ACR		Bluetooth*	
COM (Serial)	\checkmark	PCI Express	
Integrated Components			
	Check all that Apply		Check all that Apply
Audio		Display	\checkmark
IDE	\checkmark	Networking	\checkmark
SCSI	\checkmark	RAID	
Modem		Bluetooth*	

Onboard Integrated Devices and Drivers

Data in this section reflects system configuration at the time of WLP submission. The latest drivers for the Intel[®] Server Board S5000PALSATA-NR are available for download at: http://support.intel.com/support/motherboards/server/S5000PALSATA-NR/

Technology	os	Version
Intel® S5000/ESB2-E Chipset		
The chipset contains two main components: the Memory Controller Hub (MCH) for the host bridge and the I/O controller hub for the I/O sub-system. The chipset uses the Enterprise South Bridge (ESB2-E) for the I/O controller hub.	Windows Server 2003 Windows Server 2003 – 64Bit	7.4.0.1005 7.4.0.1005
Embedded SATA RAID (ESB2-E) Controller Enhanced (Native) mode	Windows Server 2003 Windows Server 2003 – 64Bit	Embedded Embedded
LAN 2 X Intel PRO/1000-EB Server Network Connection Supports 10/100/1000 and I/O Accelerated Technology (Intel 82563GB Controller)	Windows Server 2003 Windows Server 2003 – 64Bit	9.3.39.0 9.3.39.0
I/O Accelerated Technology	Windows Server 2003 Windows Server 2003 – 64Bit	1.2.52.0 1.2.52.0

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Display ATI* ES1000 SVGA PCI video controller with 16 MB of video memory	Windows Server 2003 Windows Server 2003 – 64Bit	8.24.3.0 8.24.3.0
Intel® ESG-SHV backplane	Windows Server 2003	5.00.6055.2
(Null driver)	Windows Server 2003 – 64Bit	5.00.6055.2

Product Data for HCL: Completion of WLP

Data in this section reflects product data for HCL at time of WLP submission.

Product Data		
Product Name	Intel® Server Board S5000PALSATA-NR	
Additional Product Names		
Supported Platforms		
	Check Tested	Comments
Windows 2000 Server	$\overline{\checkmark}$	
Windows 2000 Advanced Server	\checkmark	
Windows Server 2003, Web Edition	$\overline{\checkmark}$	
Windows Server 2003, Standard Edition	$\overline{\checkmark}$	
Windows Server 2003, Enterprise Edition	$\overline{\mathbf{V}}$	
Windows Server 2003, Enterprise Edition 64 Bit	$\overline{\checkmark}$	

Hardware Compatibility Tests Used

 $\label{lem:microsoft} \begin{tabular}{ll} Microsoft*\ Windows\ Hardware\ Driver\ Central\ Server\ Testing\ Home\ Page: $$ $$ $$ $$ $http://www.microsoft.com/whdc/hwtest/system/default.mspx. $$ \end{tabular}$

Please check this website regularly for test kit updates.

Operating Systems	Notes	Hardware Compatibility Tests (HCT)
Windows*	HCT 12.1.01 Test Procedures for Systems, Servers and Cluster Servers (Windows 2000)	HCT 12.1.01 Test Kit (Windows 2000) (35.4 MB)
	http://download.microsoft.com/download/whistler/ Docs/Docs/W982KMeXP/EN- US/HCT9502_Systems.exe	http://download.microsoft.com/download/whistler/Tools/Tools/W98NT42KMeXP/EN-US/HCT9502UPD.EXE
	Logo'd Components Index Full Install	Logo'd Components Index Full Install (~9.8 MB)
		http://download.microsoft.com/download/whistler/Instal l/20.0/W982KMeXP/EN-US/logoidx.exe
	391 NDIS Intermediate Drivers Instructions	Beta NDIS Test Update (ndt391.exe) (2MB)
	http://download.microsoft.com/download/whistler/ Install/20.1/W982KMeXP/EN- US/NDISIntermedDriver.exe	http://download.microsoft.com/download/whistler/Instal I/12.2/W982KMeXP/EN-US/ndt391.exe
	386 NDIS Intermediate Drivers Instructions	NDIS Test Update for Windows 98 SE, Windows Me, and Windows 2000 (ndt386.exe) (2.02MB)
	http://download.microsoft.com/download/whistler/ Install/20.1/W982KMeXP/EN- US/NDISIntermedDriver.exe	http://download.microsoft.com/download/whistler/Instal l/12.2/W982KMeXP/EN-US/ndt386.exe
Windows Server 2003	HCT 12.1.01 Test Procedures and Readme files for Windows XP SP1 and Windows Server 2003 (4.95MB)	HCT 12.1.01 (Windows XP SP1 and Windows Server 2003) Test Kit (4.95MB)
	http://www.microsoft.com/whdc/hwtest/search/de tails.aspx?ID=725	http://www.microsoft.com/whdc/hwtest/search/details.a spx?ID=724
	Logo'd Components Index Full Install	Logo'd Components Index Full Install (~9.8 MB)
		http://download.microsoft.com/download/whistler/Instal l/20.0/W982KMeXP/EN-US/logoidx.exe

Errata and Contingencies

Microsoft* System HCT Errata list is available at:

 $\underline{http://www.microsoft.com/whdc/hwtest/search/results.aspx?type=errata\&key=system\&kit=-1$

Operating System	Identification Number	Title
Windows Server 2003	772	LAN Device Wake test is not required on network devices in mobile systems, multifunction, broadband, LAN emulation, wireless LAN, server LAN, or bus-powered USB network devices
Windows Server 2003	1522	PCI Compliance Test fails when the interrupt line in the North Bridge is defined as Read Only
Windows Server 2003	1306	The PCI Compliance test fails for MSI capability

Submission Readme File

Effective May 1, 2002, the new Microsoft standardized Readme form will be required for all hardware submissions that include any of the following testing exceptions:

- Test failures
- Tests not run
- Missing test logs
- Inconclusive test results

All testing exceptions must be identified with a valid Errata ID, Incident ID, or Contingency ID provided by WHQL. The new Microsoft standardized Readme file is available for download at: http://download.microsoft.com/download/whistler/install/1.0/w98nt42kmexp/en-us/readme.exe

Testing Exceptions for S5000PALSATA-NR Windows Server 2000

As of November 1st, 2004, Windows 2000 logs are no longer required for submission. Windows will only get a "Supported" status when submitted along with Windows Server 2003.

Testing Exceptions for S5000PALSATA-NR Windows Server 2003 EE x86

Data in this section reflects product data and test exceptions listed in section 2 of the S5000PALSATA-NR Readme file at time of WLP First-Time submission **ID 1134174**.

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number	
Windows Server 2003 EE x86	Errata	1522	
Failing test name	PCI Compliance Test		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	0D4.0D8: DEVICE INFO: Intel(R) 5000 Series Chipset PCI Express x4 Port 3 - 25E3 0D4.0D8: DEVICE INFO: PCI\VEN_8086&DEV_25E3&SUBSYS_00000000&REV_92\3&11583659&0&18 0D4.0D8: +TEST+SEV2: FAIL: 4.52.3 - If the device uses an interrupt, the Interrupt Line field must be implemented as read/write.		
Additional information (for example, test system in a multiple system configuration)			

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number	
Windows Server 2003 EE x86	Errata	1306	
Failing test name	PCI Compliance		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)			
Additional information (for example, test system in a multiple system configuration)			

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number	
Windows Server 2003 EE x86	Errata 772		
Failing test name	Wake Device Server		

Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	
Additional information (for example, test system in a multiple system configuration)	This test is not required for servers with Gb Ethernet devices, such as the Intel [®] PRO/1000 EB

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number	
Windows Server 2003 EE x86	Errata	772	
Failing test name	LAN Device Wake Up		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)			
Additional information (for example, test system in a multiple system configuration)	This test is not required for servers with Gb Ethernet devices, such as the Intel [®] PRO/1000 EB		

Testing Exceptions for S5000PALSATA-NR Windows Server 2003 EE x64

Data in this section reflects product data and test exceptions listed in section 2 of the S5000PALSATA-NR Readme file at time of WLP First-Time submission **ID 1137010**.

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number	
Windows Server 2003 EE x64	Errata	1522	
Failing test name	PCI Compliance Test		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	664.668: DEVICE INFO: PCI standard PCI-to-PCI bridge 664.668: DEVICE INFO: PCI\VEN_8086&DEV_25E3&SUBSYS_00000000&REV_92\3&11583659&0&18 664.668: +TEST+SEV2: FAIL: 4.52.3 - If the device uses an interrupt, the Interrupt Line field must be implemented as read/write.		
Additional information (for example, test system in a multiple system configuration)			

Operating system	Failure type	ID number
(Windows XP, Windows 2000, etc.)	(Contingency, Errata, Incident)	

Windows Server 2003 EE x64	Errata	1306	
Failing test name	PCI Compliance		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	664.668: DEVICE INFO: PCI standard PCI-to-PCI bridge 664.668: DEVICE INFO: PCIIVEN_8086&DEV_3500&SUBSYS_00000000&REV_01\4&18c5d6a3&0&0010 664.668: +TEST+SEV2: FAIL: - A PCI-Express device that generates interrupts must h		
Additional information (for example, test system in a multiple system configuration)			

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)		
Windows Server 2003 EE x64	Errata 772		
Failing test name	Wake Device Server		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)			
Additional information (for example, test system in a multiple system configuration)	This test is not required for servers with Gb Ethernet devices, such as the Intel [®] PRO/1000 EB		

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)		
Windows Server 2003 EE x64	Errata 772		
Failing test name	LAN Device Wake Up		
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)			
Additional information (for example, test system in a multiple system configuration)	This test is not required for servers Intel® PRO/1000 EB	s with Gb Ethernet devices, such as the	

Additional Information

No additional information entered in section 3 of the S5000PALSATA-NR Readme file at time of WLP submission ID 1134174 and ID 1137101.

Appendix A – Submission History

Microsoft "Designed for Windows*" logo submission history for the ${\rm Intel}^{\rm @}$ Server S5000PALSATANR:

Submission ID	Туре	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
1134174	First-Time First-Time	6/12/06 6/21/06	Windows 2003 EE 32-Bit Windows 2003 EE 64-Bit	1.60, 1.86, 2.00, 2.33, 2.66, 3.00, 3.20, and 3.73 GHz	603	\$5000.86B.01.00.45 5/23/2006