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Intel® Server Board
S5000VSASAS

Server Test Submission (STS) Report

For the Microsoft® Windows® Logo Program (WLP)

Rev 1.0

August 14, 2006

This report describes the Intel® S5000VSASAS Server Platform Windows* Logo Program test run conducted by Intel Enterprise Platforms and Services Division (EPSD).

Purpose of this WLP Submission:

System First Time submission for the Microsoft* Designed for Windows Logo submission for the Intel® Server Board S5000VSASAS

Submission Type:	Reason for test run	Check one
First Time Submission	Initial Microsoft Designed for Windows logo submission. New product submission.	☑
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.)	☐

Revision History and Disclaimers

Revision History		
Revision	**Date**	**Comments**
1.0	8/14/2006	STS Report for Windows Server 2003 Submission for Intel® Server Board S5000VSASAS.

Contents

Introduction

This report provides an overview of the testing conducted on the Intel® Server Board S5000VSASAS 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
HCT	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		
Submission ID / Master ID	1203076	
Submission Type		
	Check Submission Type	**Comments**
First-Time Hardware and Driver Test Submission	☑	
System Update Test Submission	☐	
Product Category		
Hardware Category	PC System or Server	
Operating System family	Windows Server 2003 (32 & 64 Bit) and Windows 2000 (Supported Status only for 2000) families	
Product Detail		
General Product Information		
Equipment Type	Server	
Primary Target Market	Business/Corporate	
Compliance	All applicable requirements	
Characterization (optional)		
	Check appropriate options	**Comments**
Web Server	☑	
SQL Database Server	☑	
File Server	☑	

Server Board Configuration Information

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	16 GB
Memory Type	FB DDR2-533 (2 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 <u>NOT</u> eligible for logo under the Microsoft* Motherboard logo program)
Board AA #/Fab	PBA : D57857-602
Board Manufacturer	Intel Corporation
Board Model	Intel$^®$ Server Board S5000VSA
Northbridge* Chipset Manufacturer	Intel Corporation
Northbridge Chipset Model	Intel$^®$ 5000V 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.03.00.0057
BIOS Date	7/17/2006
BIOS URL (For Updates)	htttp://support.intel.com/support/motherboards/server/S5000VSA/

Bus Types			
	Check all that Apply		**Check all that Apply**
PS/2	☑	AGP*	☐
1394	☐	PCCard* (16-bit)	☐
CF (Compact Flash)	☐	CardBus* (32-bit)	☐
PCI	☑	USB	☐
Mini-PCI	☐	USB 2.0	☑
AMR	☐	InfiniBand*	☐
ACR	☐	Bluetooth*	☐
COM (Serial)	☑	PCI Express	☑
Integrated Components			
	Check all that Apply		**Check all that Apply**
Audio	☐	Display	☑
IDE	☑	Networking	☑
SCSI	☑	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 S5000VSASAS are available for download at:

ttp://support.intel.com/support/motherboards/server/S5000VSA/

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 1068 SAS RAID Controller SW RAID mode	**Windows Server 2003** **Windows Server 2003 – 64Bit**	4.24.0620.2006 4.24.0620.2006
Embedded SATA RAID (ESB2-E) Controller SW RAID mode	**Windows Server 2003** **Windows Server 2003 – 64Bit**	4.24.0620.2006 4.24.0620.2006
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**	9.4.17..0 9.4.17.0

I/O Accelerated Technology	**Windows Server 2003**	1.2.52.0
	Windows Server 2003 – 64Bit	1.2.52.0
Display ATI* ES1000 SVGA PCI video controller with 16 MB of video memory	**Windows Server 2003**	8.24.3.0
	Windows Server 2003 – 64Bit	8.24.3.0
Intel® ESG-SHV backplane (Null driver)	**Windows Server 2003**	5.00.6055.2
	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 S5000VSASAS	
Additional Product Names		
Supported Platforms		
	Check Tested	**Comments**
Windows 2000 Server	☑	
Windows 2000 Advanced Server	☑	
Windows Server 2003, Web Edition	☑	
Windows Server 2003, Standard Edition	☑	
Windows Server 2003, Enterprise Edition	☑	
Windows Server 2003, Enterprise Edition 64 Bit	☑	

Hardware Compatibility Tests Used

Microsoft* Windows Hardware Driver Central Server Testing Home Page:
http://www.microsoft.com/whdc/hwtest/system/default.mspx.

Please check this website regularly for test kit updates.

Operating Systems	Notes	Hardware Compatibility Tests (HCT)
Windows* 2000	HCT 12.1.01 Test Procedures for Systems, Servers and Cluster Servers (Windows 2000) http://download.microsoft.com/download/whistler/Docs/Docs/W982KMeXP/EN-US/HCT9502_Systems.exe	HCT 12.1.01 Test Kit (Windows 2000) (35.4 MB) 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/Install/20.0/W982KMeXP/EN-US/logoidx.exe
	391 NDIS Intermediate Drivers Instructions http://download.microsoft.com/download/whistler/Install/20.1/W982KMeXP/EN-US/NDISIntermedDriver.exe	Beta NDIS Test Update (ndt391.exe) (2MB) http://download.microsoft.com/download/whistler/Install/12.2/W982KMeXP/EN-US/ndt391.exe
	386 NDIS Intermediate Drivers Instructions http://download.microsoft.com/download/whistler/Install/20.1/W982KMeXP/EN-US/NDISIntermedDriver.exe	NDIS Test Update for Windows 98 SE, Windows Me, and Windows 2000 (ndt386.exe) (2.02MB) http://download.microsoft.com/download/whistler/Install/12.2/W982KMeXP/EN-US/ndt386.exe
Windows Server 2003	HCT 12.1.0 Test Procedures and Readme files for Windows XP SP1 and Windows Server 2003 (4.95MB) http://www.microsoft.com/whdc/hwtest/search/details.aspx?ID=725	HCT 12.1.01 (Windows XP SP1 and Windows Server 2003) Test Kit (4.95MB) http://www.microsoft.com/whdc/hwtest/search/details.aspx?ID=724
	Logo'd Components Index Full Install	Logo'd Components Index Full Install (~9.8 MB) http://download.microsoft.com/download/whistler/Install/20.0/W982KMeXP/EN-US/logoidx.exe

Errata and Contingencies

Microsoft* System HCT Errata list is available at:

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 S5000VSASAS 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 S5000VSASAS Windows Server 2003

Data in this section reflects product data and test exceptions listed in section 2 of the S5000VSASAS Readme file at time of WLP First-Time submission ID Number 1203076.

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)	4A8.1E0 : DEVICE INFO : Intel(R) 5000 Series Chipset PCI Express x4 Port 3 - 25E3 4A8.1E0 : DEVICE INFO : PCI\VEN_8086&DEV_25E3&SUBSYS_00000000&REV_92\3&61aaa01&0&18 4A8.1E0 : +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)	4A8.1E0 : DEVICE INFO : Intel(R) 6311ESB/6321ESB PCI Express Upstream Port - 3500 4A8.1E0 : DEVICE INFO : PCI\VEN_8086&DEV_3500&SUBSYS_00000000&REV_01\4&25c5d7df&0&0010 4A8.1E0 : +TEST+SEV2 : FAIL: - A PCI-Express device that generates interrupts must have an MSI or MSI-X capability.	
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 S5000VSASAS Windows Server 2003 64 Bit

Data in this section reflects product data and test exceptions listed in section 2 of the S5000VSASAS Readme file at time of WLP First-Time submission ID Number 1203076.

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)	5C4.564 : DEVICE INFO : Intel(R) 5000 Series Chipset PCI Express x4 Port 3 - 25E3 5C4.564 : DEVICE INFO : PCI\VEN_8086&DEV_25E3&SUBSYS_00000000&REV_92\3&61aaa01&0&18 5C4.564 : +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 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)	5C4.564 : DEVICE INFO : Intel(R) 6311ESB/6321ESB PCI Express Upstream Port - 3500 5C4.564 : DEVICE INFO : PCI\VEN_8086&DEV_3500&SUBSYS_00000000&REV_01\4&25c5d7df&0&0010 5C4.564 : +TEST+SEV2 : FAIL: - A PCI-Express device that generates interrupts must have an MSI or MSI-X capability.	
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 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)	**ID number**
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 with Gb Ethernet devices, such as the Intel® PRO/1000 EB	

Additional Information

No additional information entered in section 3 of the S5000VSASAS Readme file at time of WLP submission ID 1203076.

Appendix A – Submission History

Microsoft "Designed for Windows*" logo submission history for the Intel® Server S5000VSASAS:

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
1203076	First-Time	8/14/06	Windows 2003 EE 32 & 64 Bit	1.60, 1.86, 2.00, 2.33, 2.66, 3.00, 3.20, and 3.73 GHz	602	S5000.86B.03.00.57 7/17/2006