intel®

Server WHQL Testing Services

Enterprise Platforms and Services Division

Intel® Server SE7520BD2SCSI

Server Test Submission (STS) Report

For the Microsoft® Windows® Logo Program (WLP)

Rev 2.0

November 2, 2004

This report describes the Intel® SE7520BD2SCSI 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 SE7520BD2SCSI.

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**
2.0	11/2/2004	Internal draft of the STS Report for Windows Server 2003 & Windows 2000 WLP Submission for Intel® Server Board SE7520BD2SCSI with 2000 Supported status.

Contents

Introduction

This report provides an overview of the testing conducted on the Intel® Server Board SE7520BD2SCSI 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. You can view the HCL at: http://www.microsoft.com/whdc/hcl/search.mspx
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/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	903073	
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 and Windows 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	800 MHz
Family/Model	Intel® Xeon™ processors with an 800MHz system bus
Speed	2.80, 3, 3.20, 3.40, and 3.60 GHz
System Memory	
Amount Installed	12 GB
Memory Type	Six DIMM sockets for up to 12 GB of Registered ECC DDR 266/333 memory (two memory channels with three DIMMs per channel); support for single-channel DIMM operation; minimum of 128MB memory
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 C44686-701
Board Manufacturer	Intel Corporation
Board Model	Intel® Server Board SE7520BD2SCSI
Northbridge* Chipset Manufacturer	Intel Corporation
Northbridge Chipset Model	Intel Corporation E7520 Chipset
Southbridge* Chipset Manufacturer	Intel Corporation
Southbridge Chipset Model	Intel Corporation E7520 Chipset
BIOS	
BIOS Manufacturer	AMI*
BIOS Version	P04
BIOS Date	9/24/2004
BIOS URL (For Updates)	htttp://support.intel.com/support/motherboards/server/SE7520BD2/

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	□	☑		☑
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 SE7520BD2SCSI are available for download at:

http://support.intel.com/support/motherboards/server/SE7520BD2/

Technology	OS	Version
LAN Intel® 82541PI Gigabit Ethernet Marvell* Yukon* -EC 88E8050 PCI Express* Gigabit Ethernet Controller	**Windows* 2000**	Intel 82541P1 v. 7.4.19
		Marvel Yukon v. 7.19.1.3
	Windows Server 2003	Intel 82541P1 v. 7.4.19
		Marvel Yukon v. 7.19.1.3
Display ATI* RAGE* XL SVGA PCI video controller with 8 MB of video memory	**Windows 2000**	Embedded
	Windows Server 2003	J5.30.10.2
Serial RAID ATA Dual-channel SATA 100 (two connectors on the server board) supporting integrated mirroring and striping (RAID 0 and 1)	**Windows 2000**	4.1.0804.2004
	Windows Server 2003	4.1.0804.2004
SCSI RAID Two Ultra320/LVD channels via the LSI Logic 53C1030 SCSI controllersupporting RAID 0 and 1	**Windows 2000**	1.09.11
	Windows Server 2003	1.09.11

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 SE7520BD2SCSI
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	☑	

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 9.502 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 9.502 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/Instal l/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/Instal l/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/Instal l/12.2/W982KMeXP/EN-US/ndt386.exe
Windows Server 2003	HCT 11.2 Test Procedures and Readme files for Windows XP SP1 and Windows Server 2003 (4.95MB) http://www.microsoft.com/whdc/hwtest/search/de tails.aspx?ID=725	HCT 11.2 (Windows XP SP1 and Windows Server 2003) Test Kit (4.95MB) 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:

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

Operating System	Identification Number	Title
Windows* 2000	298	PCI Power Management Register Interface Test: False Failure
Windows 2000	372	ACPI System test fails systems that support ACPI table version 1.0 or greater
Windows Server 2003	610	Intel ICHx Contingency
Windows 2000	702	Audio tests are not required for servers that do not implement audio devices
Windows 2000	719	DVD test cannot be run on systems without a DVD drive
Windows 2000	722	PCI 2.2 Compliance test and PCI 2.1 (Cards) test might fail test systems with ATA/ATAPI controllers
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 2000	826	PCI 2.1 Compliance test, PCI 2.1 Cards test, PCI 2.2 Compliance test, and CardBus Bridge Register test fail on devices that are PCI 2.3-compliant
Windows Server 2003	860	Enable/Disable – Device I/O test fails on USB 2.0 host controllers
Windows Server 2003	901	The ACPI Verifier test fails the E820 table when the system memory controller is a child of the PCI Bus
Windows Server 2003	1012	Enable/Disable - Device I/O test false-fails because of LPT port errors
Windows 2000	1182	ACPI Sleep test conflicts with Windows 2000 Service Pack 4

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 Intel® Server SE7520BD2SCSI Windows 2000 Submission

Data in this section reflects product data and test exceptions listed in section 2 of the Intel® Server SE7520BD2SCSI Readme file at time of WLP First-Time submission ID Number 903073

Additional Information

No additional information entered in section 3 of the Intel® Server SE7520BD2SCSI Readme file at time of WLP submission ID 903073.

As of November 1, 2004 Windows 2000 logs are no longer required for submission nor are is a 2000 logo obtainable. In its place, by submitting a blank readme.doc in place of Windows 2000 logs; we can receive a 'Supported' status by submitting with Windows 2003.

Testing Exceptions for Intel® Server SE7520BD2SCSI Windows Server 2003

Data in this section reflects product data and test exceptions listed in section 2 of the Intel® Server SE7520BD2SCSI Readme file at time of WLP First-Time submission ID Number 903073.

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number
	Errata	670
Failing test name	PCI Pre-OS Tests: PCI Configuration Header Dump test; **Pcidump.log** PCI Power Management Register Interface test; **Pcicap.log** Subsystem ID and Subsystem Vendor ID test; **Pcisid.log** PCI Test Adapter Diagnostic test; **Pmdiag.log** PME# Signal Routing test; **Pcipme1.log** PME# Signal Routing - Simultaneous test; **Pcipme2.log** PCI 3.3 Volt Auxiliary Power Load test; **Pcivaux.log** System Wake Up test; **Pciwake.log** PCI Voltage Requirement test; **Pcivolt.log** PCI Voltage Requirement - 3.3 Vaux test; **Pcivoltz.log** S3 Compliance test; **S3test.log**	
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)	PCI Pre-OS tests that use FoxFire cards are no longer required	

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number
Windows 2003 Enterprise Edition	Errata	860
Failing test name	Enable/Disable - Device I/O	
Applicable error message (Type **N/A** if the error message or failing text is excessive or if there is no text)	|ID=PCI\VEN_8086&DEV_24D2&SUBSYS_34398086&REV_02\3&267A616A&0&E8 |Friendly Name=(null) |Status=25175040 Prob=22 |Status=DN_HAS_PROBLEM,DN_DISABLEABLE,DN_NT_ENUMERATOR,DN_NT_DRIVER, |Prob=CM_PROB_DISABLED TEST 3 :FAIL	
Additional information (for example, test system in a multiple system configuration)	Enable/Disable – Device I/O test fails on USB 2.0 host controllers	

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number
Windows 2003 Enterprise Edition	Errata	901
Failing test name	ACPI Verifier	
Applicable error message (Type **N/A** if the error message or failing text is excessive or if there is no text)	| The memory range specified is in conflict with the system's E820 table. | The E820 table says that this memory range is in the AcpiAddressRangeMemory range | which is conflicting with the requested memory range which is | between 0x0 - 0x9d800	
Additional information (for example, test system in a multiple system configuration)	The ACPI Verifier test falsely fails test systems that have AcpiAddressRangeMemory conflicts in the E820 table in the following cases:	

Additional Information

- Due to Windows 2003 Enterprise Server operating system limitations, server systems that support 4GB or more of memory are tested with maximum memory installed for all HCTs with PAE enabled except for the ACPI HCTs where PAE is not enabled in order to bring the total system memory below 4GB to enable the system to go into hibernation. Refer to errata ID: 92.

Appendix A – Submission History

Microsoft "Designed for Windows*" logo submission history for the Intel® Server SE7520BD2SCSI:

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
903073	First-Time	11/2/2004	Windows 2003 EE Windows 2000 (Supported status only)	2.80, 3, 3.20, 3.40, and 3.60 GHz	PBA C44686-701	P04 9/24/2004