



Server WHQL Testing Services

Enterprise Platforms and Services Division

Intel® Server SE7320VP2

Server Test Submission (STS) Report

For the Microsoft® Windows® Logo Program (WLP)

Rev 1.1

June 17, 2005

This report describes the Intel® SE7320VP2 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 SE7320VP2.

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

Revision History and Disclaimers

Revision History		
Revision	Date	Comments
1.0	11/05/2004	Internal draft of the STS Report for Windows Server 2003 & Windows 2000 WLP Submission for Intel® Server Board SE7320VP2.
1.1	6/17/2005	Added 64 Bit Windows Server 2003 EE

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Introduction

This report provides an overview of the testing conducted on the Intel® Server Board SE7320VP2 without RAID enabled 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	991786	
Submission Type		
	Check Submission Type	Comments
First-Time Hardware and Driver Test Submission	<input checked="" type="checkbox"/>	
System Update Test Submission	<input type="checkbox"/>	
Product Category		
Hardware Category	PC System or Server	
Operating System family	Windows Server 2003 (32 Bit & 64 Bit) 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	<input checked="" type="checkbox"/>	
SQL Database Server	<input checked="" type="checkbox"/>	
File Server	<input checked="" type="checkbox"/>	

Server Board Configuration Information

Processor	
Quantity	2 (physical processors installed)
Front Side Bus Speed	800 MHz
Family/Model	Intel® Xeon processors
Speed	2.8MHz, 3.0MHz, 3.2MHz, 3.4MHz, 3.6MHz
System Memory	
Amount Installed	12 GB
Memory Type	DDR 266/333 (6 DIMMs) ECC 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 C63184-603
Board Manufacturer	Intel Corporation
Board Model	Intel® Server Board SE7320VP2
Northbridge* Chipset Manufacturer	Intel Corporation
Northbridge Chipset Model	Intel E7320 Chipset
Southbridge* Chipset Manufacturer	Intel Corporation
Southbridge Chipset Model	Intel E7320 Chipset
BIOS	
BIOS Manufacturer	AMI*
BIOS Version	P04 SE7320VP20.86B.P.04.00.0029.050320050917
BIOS Date	5/3/2005
BIOS URL (For Updates)	http://support.intel.com/support/motherboards/server/SE7320VP2/

Bus Types			
	Check all that Apply		Check all that Apply
PS/2	<input checked="" type="checkbox"/>	AGP*	<input type="checkbox"/>
1394	<input type="checkbox"/>	PCCard* (16-bit)	<input type="checkbox"/>
CF (Compact Flash)	<input type="checkbox"/>	CardBus* (32-bit)	<input type="checkbox"/>
PCI	<input checked="" type="checkbox"/>	USB	<input type="checkbox"/>
Mini-PCI	<input type="checkbox"/>	USB 2.0	<input checked="" type="checkbox"/>
AMR	<input type="checkbox"/>	InfiniBand*	<input type="checkbox"/>
ACR	<input type="checkbox"/>	Bluetooth*	<input type="checkbox"/>
COM (Serial)	<input checked="" type="checkbox"/>	PCI Express	<input checked="" type="checkbox"/>
Integrated Components			
	Check all that Apply		Check all that Apply
Audio	<input type="checkbox"/>	Display	<input checked="" type="checkbox"/>
IDE	<input checked="" type="checkbox"/>	Networking	<input checked="" type="checkbox"/>
SCSI	<input type="checkbox"/>	RAID	<input checked="" type="checkbox"/>
Modem	<input type="checkbox"/>	Bluetooth*	<input type="checkbox"/>

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 SE7320VP2 are available for download at:

<http://support.intel.com/support/motherboards/server/SE7320VP2/>

Technology	OS	Version
LAN Marvell 88E8050(Yukon-EC)Supports 10/100/1000	Windows Server 2003	v7.19.1.3
	Windows Server 2003 64 Bit	V7.30.1.3
LAN Intel 82541 1000MT Supports 10/100/1000	Windows Server 2003	v7.4.19
	Windows Server 2003 64 Bit	V8.1.8.0
Display ATI* Rage* XL SVGA PCI video controller with 8 MB of video memory	Windows Server 2003	Embedded
	Windows Server 2003	V6.14.3655.6024
Serial RAID ATA (ICH5-R) Contains two independent SATA signal ports that can be configured as either a RAID 1 or 0	Windows Server 2003	v.4.1.0825.2004
	Windows Server 2003 64 Bit	V4.2.0318.2005

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 SE7320VP2	
Additional Product Names		
Supported Platforms		
	Check Tested	Comments
Windows 2000 Server	<input checked="" type="checkbox"/>	
Windows 2000 Advanced Server	<input checked="" type="checkbox"/>	
Windows Server 2003, Web Edition	<input checked="" type="checkbox"/>	
Windows Server 2003, Standard Edition	<input checked="" type="checkbox"/>	
Windows Server 2003, Enterprise Edition	<input checked="" type="checkbox"/>	
Windows Server 2003, Standard Edition 64 Bit	<input checked="" type="checkbox"/>	
Windows Server 2003, Enterprise Edition 64 Bit	<input checked="" type="checkbox"/>	

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/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 11.2 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 11.2 (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* 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 SE7320VP2 Windows 2000 Submission

Windows 2000 logs are no longer required after November 1, 2004. When a blank readme.doc is submitted with a qualifying Windows 2003, Windows 2000 will be granted a “Supported” status.

Testing Exceptions for Intel® Server SE7320VP2 Windows Server 2003

Data in this section reflects product data and test exceptions listed in section 2 of the Intel® Server SE7320VP2 Readme file at time of WLP First-Time submission ID Number 904681.

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)	<pre> ID=PCI\VEN_8086&DEV_25AA&SUBSYS_34508086&REV_02\3&267A616A&0&E9 Friendly Name=(null) DevDesc=Intel(R) 6300ESB USB Universal Host Controller - 25AA Test Interface=(null) PnP Interface=\\?\PCI#VEN_8086&DEV_25AA&SUBSYS_34508086&REV_02#3&267a616a&0 &E9#{3abf6f2d-71c4-462a-8a92-1e6861e6af27} TEST 3 :FAIL VARIATION 1:FAIL </pre>	
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 2003 Enterprise Edition	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; Pcsid.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	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 - 0x9e000	
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 2003 Enterprise Edition	Contingency	781
Failing test name	PCI Compliance from HCT 12 Test Kit	
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	68C.7B8 : +TEST+SEV2 : FAIL: 4.55.3 - The Programming Interface in the Class Code register must be read only.	
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 2003 Enterprise Edition	Errata	1306
Failing test name	PCI Compliance from HCT 12 Test Kit	
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	68C.7B8 : +TEST+SEV2 : FAIL: - A PCI-X device that generates interrupts must have an MSI or MSI-X capability.	
Additional information (for example, test system in a multiple system configuration)		

Additional Information:

The PCI Compliance errors reported in this readme.doc were run with the HCT 12 test kit per MS instructions as the PCI Compliance test in the HCT 11.2 test kit would hang. I referred to both the errata #1306 and incident #1320 in the above failure to make sure we were covered on this. There is a folder located with the whqlhct.cab labeled PCI Compliance that holds the HCT 12 test and logs.

Testing Exceptions for Intel® Server SE7320VP2 Windows Server 2003 64 Bit

Data in this section reflects product data and test exceptions listed in section 2 of the Intel® Server SE7320VP2 Readme file at time of WLP First-Time submission ID Number 991786.

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number
Windows Server 2003 Enterprise Edition 64 Bit	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)	Both onboard NICs are Gigabit	

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number
Windows Server 2003 Enterprise Edition 64 Bit	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)	730.734 : DEVICE INFO : Intel(R) PRO/1000 MT Network Connection 730.734 : DEVICE INFO : PCI\VEN_8086&DEV_1076&SUBSYS_34508086&REV_05\4&3abfd0ac&0&18F0 730.734 : +TEST+SEV2 : FAIL: - A PCI-X 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 Enterprise Edition 64 Bit	Contingency	781
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)	730.734 : DEVICE INFO : Intel Embedded Server RAID Technology 730.734 : DEVICE INFO : PCI\VEN_8086&DEV_25B0&SUBSYS_34518086&REV_02\3&267a616a&0&FA 730.734 : +TEST+SEV2 : FAIL: 4.55.3 - The Programming Interface in the Class Code register must be read only.	
Additional information (for example, test system in a multiple system configuration)		

Appendix A – Submission History

Microsoft “Designed for Windows*” logo submission history for the Intel® Server SE7320VP2:

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
904681	First-Time	11/04/2004	Windows 2003 Windows 2000 (Supported status only)	2.8MHz, 3.0MHz, 3.2MHz, 3.4MHz, 3.6MHz	Fab 3	P02 10/21/2004
991786	First-Time	6/17/2005	Windows 2003 64 Bit Windows 2003 32 Bit Windows 2000 (Supported status only)	2.8MHz, 3.0MHz, 3.2MHz, 3.4MHz, 3.6MHz	PBA C63184-603	P04 5/3/2005