



Server OS Testing Services

Enterprise Platforms and Services Division

Intel[®] Server Platform SR6850HW4

Server Test Submission (STS) Report

For the Microsoft[®] Windows[®] Logo Program (WLP)

Rev 1.1

May 11, 2005

This report describes the Intel[®] Server Platform SR6850HW4 Windows* Logo Program test run conducted by Intel Enterprise Platforms and Services Division (EPSD).

Purpose of this WLP Submission:

System Update submission for the Intel[®] Server Platform SR6850HW4.

Submission Type:	Reason for test run	Check one
Update Submission	Initial Microsoft Designed for Windows logo submission. New product submission.	<input checked="" type="checkbox"/>

Revision History and Disclaimers

Revision History		
Revision	Date	Comments
1.0	5/6/2005	STS Report for WLP Windows 2003 Enterprise Edition First-Time Submission for Intel® Server Platform SR6850HW4 with 3.66GHz 1MB Cache [Cranford] Processors
1.1	5/11/2005	STS Report for WLP Windows 2003 Enterprise Edition First-Time Submission for Intel® Server Platform SR6850HW4 with 3.33GHz 8MB Cache [Potomac] Processors

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Introduction

This report provides an overview of the testing conducted on the Intel® Server Platform SR6850HW4 server board 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 submission.

Submission Information

Submission ID		
Submission ID / Master ID	975817	
Previously logo'd Submission ID / Master ID	974159	
Submission Type		
	Check Submission Type	Comments
First-Time Hardware and Driver Test Submission	<input type="checkbox"/>	Windows Server 2003 Enterprise Edition SP1
System Update	<input checked="" type="checkbox"/>	Windows Server 2003 Enterprise Edition, SP1
Update Type (Update Hardware and Drivers Test Submission ONLY)		
	Check Update Type	Comments
Hardware (Firmware) Update	<input type="checkbox"/>	
System Update	<input checked="" type="checkbox"/>	
Previously Logo'd Operating System	Windows 2003 Enterprise Edition SP1 and Windows 2000 Advanced Server	
Update Type Detail (Update Hardware and Drivers Test Submission ONLY)		
	Check Update Type	Comments
New CPU Speeds	<input checked="" type="checkbox"/>	Potomac 3.33GHz 8MB Cache
Motherboard Updates	<input type="checkbox"/>	
BIOS/Firmware Updates	<input type="checkbox"/>	
OS Updates	<input type="checkbox"/>	
Product Category		
Hardware Category	PC System or Server	
Operating System Selected	Windows Server 2003 Enterprise Edition SP1 & Windows 2000 Advanced Server	

Product Detail		
General Product Information		
Equipment Type	Server	
Primary Target Market	Business/Corporate	
Compliance	All applicable requirements	
Testing Matrix (optional)		
	Check Tested	Comments
PAE_Tested	<input checked="" type="checkbox"/>	Supports 4GB or more of memory
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	4
Front Side Bus Speed	667MHz
Family/Model	Intel® Xeon™ MP Hyper-Threading L2/L3
Speed	3.0GHz & 3.33GHz
System Memory	
Amount Installed	32 GB
Memory Type	ECC DDR2 400 SDRAM
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	I/O Board C51891-600A, , SCSI Board C61492-201AB, Front Panel C61338-200, Intel Management Module C46194-401
Board Manufacturer	Intel Corporation
Board Model	Intel® Server Platform SR6850HW4
Northbridge* Chipset Manufacturer	Intel
Northbridge Chipset Model	E8500
Southbridge* Chipset Manufacturer	Intel
Southbridge Chipset Model	ICH5
BIOS	
BIOS Manufacturer	Intel
BIOS Version	SHW40.86B.P01.01.0001
BIOS Date	3/18/2005
BIOS URL (For Updates)	http://support.intel.com/support/motherboards/server/
Firmware	
BMC Version	30
HSC Version	05
FRU/SDR Version	20
Firmware URL (For Updates)	http://support.intel.com/support/motherboards/server/

Bus Types			
	Check all that Apply		Check all that Apply
PS/2	<input 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-X	<input checked="" type="checkbox"/>	USB	<input checked="" 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-E	<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 type="checkbox"/>	Networking	<input checked="" type="checkbox"/>
SCSI	<input checked="" type="checkbox"/>	RAID	<input checked="" type="checkbox"/>
Modem	<input type="checkbox"/>	Bluetooth*	<input type="checkbox"/>
Fibre Channel Expansion Module	<input checked="" type="checkbox"/>	SATA	<input checked="" 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 Platform SR6850HW4 server board are available for download at:

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

Technology	OS	Version
LAN Broadcom* BCM5704 NetXtreme* Gigabit Ethernet controller	Windows Server 2003	7.100
SCSI RAID Intel RAID Controller SROMBU42E	Windows Server 2003	6.45.2.32
SCSI LSI Logic* 53C1030 SCSI controller	Windows Server 2003	
Display ATI* RADEON 7000 Series PCI Video Controller (with 16 MB of Video Memory)	Windows Server 2003	6.14.10.6497
Intel Fibre Channel Expansion Module Qlogic* ISP2322 FC PCI-X controller	Windows Server 2003	9.0.1.17

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 Platform SR6850HW4	
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"/>	

Hardware Compatibility Tests

Microsoft* Windows Hardware Driver Central Server Testing Home Page:

<http://www.microsoft.com/whdc/hwtest/system/default.aspx>.

Please check this website regularly for test kit updates.

Operating Systems	Notes	Hardware Compatibility Tests (HCT)
Windows Server 2003 SP1	HCT 12.1 Test Procedures and Readme files for Windows XP SP2 and Windows Server 2003 SP1 http://www.microsoft.com/whdc/whql/WHQLdwn.aspx	HCT 12.1 (Windows XP SP2 and Windows Server 2003 SP1) Test Kit http://www.microsoft.com/whdc/whql/WHQLdwn.aspx

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 Up test is not required on network devices in mobile systems, multifunction, broadband, LAN emulation, wireless LAN, server LAN, or bus-powered USB network devices

Intel® Server Platform SR6850HW4 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 Platform SR6850HW4 Windows* Server 2003

Data in this section reflects product data and test exceptions listed in section 2 of the Intel® Server Platform SR6850HW4 Readme file at time of WLP submission ID 972415

Operating system (Windows XP, Windows 2000, etc.)	Failure type (Contingency, Errata, Incident)	ID number
Windows 2003 Enterprise Server 32bit	Errata	772
Failing test name	LAN Device Wake Up test	
Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text)	LAN Device Wake Up test is not required on network devices in mobile systems, multifunction, broadband, LAN emulation, wireless LAN, server LAN, or bus-powered USB network devices	
Additional information (for example, test system in a multiple system configuration)	<p>The LAN Device Wake test is not required for the following types of network devices:</p> <ul style="list-style-type: none"> ▪ Multifunction devices ▪ Broadband and WAN devices: <ul style="list-style-type: none"> • Cable modems • DSL • ISDN ▪ LAN emulation devices ▪ Wireless LAN devices ▪ Server LAN devices: <ul style="list-style-type: none"> • Multiport NICs • FDDI • ATM ▪ Gigabit and higher Ethernet devices ▪ Bus-powered USB network devices ▪ Network devices in mobile systems <p>Note: 10/100 single port LAN devices are required to support WOL.</p>	

Additional Information

Due to Windows* 2003 Enterprise operating system limitations server systems that support 4GB or more of memory are tested with maximum memory installed for all HCTs except for the ACPI HCTs. Memory is removed in order to bring the total system memory below 4GB to enable Windows* 2003 Enterprise to go into hibernation. Refer to errata ID: 92 and the AWE Test procedures for more information.

Appendix A – Submission History

Microsoft “Designed for Windows” logo submission history for the Intel® Server Platform SR6850HW4:

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
974159	First-Time Submission	5/6/2005	Windows Server 2003 - Enterprise - Standard - Web	3.16GHz & 3.66GHz Intel® Xeon™ MP Hyper-Threading Technology	C61338-200, C51891-600A, C46194-401, C61492-201AB	SHW40.86B.P01.01.0001