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Server OS Testing Services

Enterprise Platforms and Services Division

Intel® Server Platform SR6850HW4M & SR4850HW4M

Server Test Submission (STS) Report

For the Microsoft® Windows® Logo Program (WLP)

Rev 1.2

May 31, 2006

This report describes the Intel® Server Platform SR6850HW4M & SR4850HW4M 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 SR6850HW4M & SR4850HW4M.

Submission Type:	Reason for test run	Check one
Update Submission	Update for Potomac Processor Support	☑

Revision History and Disclaimers

Revision History		
Revision	**Date**	**Comments**
1.0	5/17/2006	STS Report for WLP Windows 2003 Enterprise Edition First-Time Submission for Intel® Server Platform SR6850HW4M & SR4850HW4M with 3.00GHz 2x2MB Cache [Paxville] Processors on P08 BIOS with 64GB memory support
1.1	5/18.2006	STS Report for WLP Windows 2003 Enterprise Edition Update Submission for Intel® Server Platform SR6850HW4M & SR4850HW4M with 3.66GHz 1MB Cache [Cranford] Processors on P08 BIOS with 64GB memory support
1.2	5/31/2006	STS Report for WLP Windows 2003 Enterprise Edition Update Submission for Intel® Server Platform SR6850HW4M & SR4850HW4M with 3.33GHz 8MB Cache [Potomac]] Processors on P08 BIOS with 64GB memory support

Contents

Introduction

This report provides an overview of the testing conducted on the Intel® Server Platform SR6850HW4MM & SR4850HW4MM 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	1129806
Previously logo'd Submission ID / Master ID	N/A

Submission Type		
	Check Submission Type	**Comments**
First-Time Hardware and Driver Test Submission	☐	
System Update	☑	Potomac with P08 BIOS and 64GB memory support

Update Type (Update Hardware and Drivers Test Submission ONLY)		
	Check Update Type	**Comments**
Hardware (Firmware) Update	☐	
System Update	☑	
Previously Logo'd Operating System		

Update Type Detail (Update Hardware and Drivers Test Submission ONLY)		
	Check Update Type	**Comments**
New CPU Speeds	☑	
Motherboard Updates	☐	
BIOS/Firmware Updates	☐	
OS Updates	☐	

Product Category	
Hardware Category	PC System or Server
Operating System Selected	Windows Server 2003 Enterprise Edition SP1 (x86 and EM64T), Windows Server 2003 Standard Edition and Windows Server 2003 Web Edition

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	☑	Supports 4GB or more of memory
Characterization (optional)		
	Check appropriate options	**Comments**
Web Server	☑	
SQL Database Server	☑	
File Server	☑	

Server Board Configuration Information

Processor	
Quantity	4
Front Side Bus Speed	800MHz
Family/Model	Intel® Xeon™ MP Hyper-Threading Technology
Speed	3.33GHz 8MB Cache
System Memory	
Amount Installed	64 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 D22177-552, Memory Board C53302-501, SCSI Board D21460-251, Front Panel C61338-200, Intel Management Module D23013-452
Board Manufacturer	Intel Corporation
Board Model	Intel® Server Platform SR6850HW4M & SR4850HW4M
Northbridge* Chipset Manufacturer	Intel
Northbridge Chipset Model	E8501
Southbridge* Chipset Manufacturer	Intel
Southbridge Chipset Model	81801EB
BIOS	
BIOS Manufacturer	Intel
BIOS Version	SHW40.86B.P.08.0048
BIOS Date	3/23/2006
BIOS URL (For Updates)	http://support.intel.com/support/motherboards/server/
Firmware	
BMC Version	50
HSC Version	07
FRU/SDR Version	34
Firmware URL (For Updates)	http://support.intel.com/support/motherboards/server/

Bus Types				
	Check all that Apply			**Check all that Apply**
PS/2	☐	AGP*		☐
1394	☐	PCCard* (16-bit)		☐
CF (Compact Flash)	☐	CardBus* (32-bit)		☐
PCI-X	☑	USB		☑
Mini-PCI	☐	USB 2.0		☑
AMR	☐	InfiniBand*		☐
ACR	☐	Bluetooth*		☐
COM (Serial)	☑	PCI-E		☑
Integrated Components				
	Check all that Apply			**Check all that Apply**
Audio	☐	Display		☑
IDE	☐	Networking		☑
SCSI	☑	RAID		☑
Modem	☐	Bluetooth*		☐
Fibre Channel Expansion Module	☑	SATA		☑

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 SR6850HW4M & SR4850HW4M   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 x86	8.48.0.0
	Windows Server 2003 EM64T	8.48.0.0
SCSI RAID Intel RAID Controller SROMBU42E	Windows Server 2003 x86	6.45.2.32
	Windows Server 2003 EM64T	6.45.3.64
Display ATI* RADEON 7000 Series PCI Video Controller (with 16 MB of Video Memory)	Windows Server 2003 x86	6.14.10.6553 (8.15)
	Windows Server 2003 EM64T	6.14.10.6553 (8.15)
Intel Fibre Channel Expansion Module Qlogic* ISP2322 FC PCI-X controller	Windows Server 2003 x86	9.1.0000.16
	Windows Server 2003 EM64T	9.1.0000.16

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 SR6850HW4M & SR4850HW4M	
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

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 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.mspx	HCT 12.1 (Windows XP SP2 and Windows Server 2003 SP1) Test Kit http://www.microsoft.com/whdc/whql/WHQLdwn.mspx

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 SR6850HW4M & SR4850HW4M   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 SR6850HW4M & SR4850HW4M   Windows* Server 2003

Data in this section reflects product data and test exceptions listed in section 2 of the Intel® Server Platform SR6850HW4M & SR4850HW4M   Readme file at time of WLP submission ID 1129806

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)	The **LAN Device Wake** test is not required for the following types of network devices: ▪ Multifunction devices ▪ Broadband and WAN devices: • Cable modems • DSL • ISDN ▪ LAN emulation devices ▪ Wireless LAN devices ▪ Server LAN devices: • Multiport NICs • FDDI • ATM ▪ Gigabit and higher Ethernet devices ▪ Bus-powered USB network devices ▪ Network devices in mobile systems Note: 10/100 single port LAN devices are required to support WOL.	

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 SR6850HW4M & SR4850HW4M :

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
1123603	First-Time Submission	5/17/2006	Windows Server 2003 - Enterprise - Standard - Web	3.00GHz Intel® Xeon™ MP Hyper-Threading Technology	D22177-552 C53302-501 D21460-25 C61338-200 D23013-452	SHW40.86B.P01.01.0001
1124618	Update Submission	5/18/2006	Windows Server 2003 - Enterprise - Standard - Web	3.66 GHz Intel® Xeon™ MP Hyper-Threading Technology	D22177-552 C53302-501 D21460-25 C61338-200 D23013-452	SHW40.86B.P01.01.0001
1129806	Update Submission	5/31/2006	Windows Server 2003 - Enterprise - Standard - Web	3.33 GHz Intel® Xeon™ MP Hyper-Threading Technology	D22177-552 C53302-501 D21460-25 C61338-200 D23013-452	SHW40.86B.P01.01.0001