



**Server WHQL Testing Services**  
**Enterprise Platforms and Services Division**  
**Intel<sup>®</sup> Server Board S5500WB**

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**Server Test Submission (STS) Report**  
**For the Microsoft<sup>®</sup> Windows<sup>®</sup> Logo Program (WLP)**

Rev 1.0

**Mar. 30<sup>th</sup>, 2010**

This report describes the Intel<sup>®</sup> Server Board S5500WB 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<sup>®</sup> Server Board S5500WB.

**Submission Logo ID: 1398035 (SSI Sku) / 1398032 (12 Sku)**

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 2008 logo to product.)	<input type="checkbox"/>

# Revision History and Disclaimers

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Revision History		
Revision	Date	Comments
1.0	3/30/2010	Internal draft of the STS Report for Windows Server 2008 R2 Submission for Intel® Server Board S5500WB

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## Introduction

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This report provides an overview of the testing conducted on the Intel® Server Board S5500WB 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
DTM	All DTM tests 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: <a href="http://www.microsoft.com/windows/catalog/server/">http://www.microsoft.com/windows/catalog/server/</a>
DTM	Driver Test manager. For latest Server DTM tests visit: <a href="http://www.microsoft.com/whdc/hwtest/system/default.aspx">http://www.microsoft.com/whdc/hwtest/system/default.aspx</a>
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. <a href="http://www.microsoft.com/whdc/default.aspx">http://www.microsoft.com/whdc/default.aspx</a>
WHOS	Windows Hardware Online Service – Secure online web site used to submit products for logo qualification and review submission history. <a href="https://winqual.microsoft.com/">https://winqual.microsoft.com/</a>
WHQL	Windows* Hardware Qualification Lab. For more information visit the WHDC home page at: <a href="http://www.microsoft.com/whdc/whql/default.aspx">http://www.microsoft.com/whdc/whql/default.aspx</a>
WLP	Windows Logo Program. For further information see: <a href="http://www.microsoft.com/whdc/winlogo/default.aspx">http://www.microsoft.com/whdc/winlogo/default.aspx</a>
WTS	Workstation Test Submission Report published by EPSD

# Server Board Submission Information

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## 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	1398035 (SSI Sku) / 1398032 (12 Sku)	
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 2008 family	
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	6.40 GT/s
Family/Model	Intel <sup>®</sup> Xeon Processor 5600 series
Speed	1.86,2, 2.13,2.66, 2.40, 2.53, 2.66, 2.80, 2.93 and 3.06 GHz
System Memory	
Amount Installed	64GB
Memory Type	DDR3
Power Management	
ACPI Sleep States (S1, S2, S3, S4)	S1
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: E48472-310 (SSI Sku) / E40367-310 (12V Sku)
Board Manufacturer	Intel Corporation
Board Model	Intel <sup>®</sup> Server Board S5500WB
Northbridge* Chipset Manufacturer	Intel Corporation
Northbridge Chipset Model	Intel <sup>®</sup> 5500 IOH
Southbridge* Chipset Manufacturer	Intel Corporation
Southbridge Chipset Model	Intel <sup>®</sup> ICH10R I/O Controller
BIOS	
BIOS Manufacturer	AMI*
BIOS Version	S5500.86B.01.00.0048.022720101225
BIOS Date	2/27/2010
BIOS URL (For Updates)	<a href="http://support.intel.com/support/motherboards/server/s5500wb">http://support.intel.com/support/motherboards/server/s5500wb</a>

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 checked="" 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 S5500WB are available for download at:

<http://support.intel.com/support/motherboards/server/s5500wb>

Technology	OS	Version
<p><b>Intel® 5500 Chipset</b></p> <p>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.</p>	<p><b>Windows Server 2008 R2</b></p>	<p>Embedded</p>
<p><b>LAN</b></p> <p>2 X Intel 82576 Server Network Connection Supports 10/100/1000 and I/O Accelerated Technology</p>	<p><b>Windows Server 2008 R2</b></p>	<p>Embedded</p>
<p><b>Display</b></p> <p>Server Engine integrated Baseboard Management Controller video controller</p>	<p><b>Windows* Server 2008 R2</b></p>	<p>Embedded</p>

## 2BServer Board Submission Information

### 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 S5500WB	
Additional Product Names		
Supported Platforms		
	Check Tested	Comments
Windows* Server 2003 family	<input type="checkbox"/>	
Windows* Server 2003 x64 family	<input type="checkbox"/>	
Windows* Server 2008 family	<input checked="" type="checkbox"/>	
Windows* Server 2008 x64 family	<input checked="" type="checkbox"/>	



# Hardware Compatibility Tests Used

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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 2008	Logo'd Components Index Full Install	

## Errata and Contingencies

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Microsoft\* System DTM Errata list is available at:

<https://winqual.microsoft.com/EC/>

Operating System	Identification Number	Title
Windows* Server 2008		<i>See Testing Exceptions section below</i>

### 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://www.microsoft.com/whdc/winlogo/WLK/default.msp>

## Testing Exceptions for S5500WB Windows\* Server 2008

Data in this section reflects product data and test exceptions listed in section 2 of the S5500WB Readme file at time of WLP First-Time submission ID Number **1398035**.

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008	Errata	759
<b>Failing test name</b>	Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Bit range 11:10 (ASPM Support) in the Link Capabilities register (offset Ch) in the PCI Express Capability table is 0h. It cannot be in the set of values {0x0, 0x2}	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008	Errata	1998
<b>Failing test name</b>	Assertion 9322F624-9817-4A1E-8C97-7C4A74052129	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Network and storage controllers must be PCI Express devices.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008	Errata	1543
<b>Failing test name</b>	Assertion 0E36472A-0EDB-4685-A67D-7AF1FFBFA81B	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Data Link Layer Link Active Reporting Capable bit is set but Data Link Layer Link Active is not.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

## 4BErrata and Contingencies

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008	Errata	2475
<b>Failing test name</b>	Assertion 7229E848-31C2-482A-88F2-73ADA2C32B79	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Bit range 9:4 (Negotiated Link Width)in the Link Status register (offset 12h) in the PCI Express Capability table is 1h. It cannot be in the set of values {0x1, 0x2} for PCI Express display controllers.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008	Errata	1098
<b>Failing test name</b>	Assertion FAE18121-9177-4FB2-A081-0D04C285EFF2	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Bit range 15:0 (Extended Capability ID)in the Enhanced Capability Header register (offset 0h) in the Unrecognized Enhanced Capability ID 13 table is Dh. It must be in the range [0x0 - 0xB] as all other Capability IDs are reserved.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

Data in this section reflects product data and test exceptions listed in section 2 of the S5500WB Readme file at time of WLP First-Time submission ID Number **1398032**.

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008 x64	Errata	759
<b>Failing test name</b>	Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Bit range 11:10 (ASPM Support)in the Link Capabilities register (offset Ch) in the PCI Express Capability table is 0h. It cannot be in the set of values {0x0, 0x2} .	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008 x64	Errata	1998
<b>Failing test name</b>	Assertion 9322F624-9817-4A1E-8C97-7C4A74052129	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Network and storage controllers must be PCI Express devices.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008 x64	Errata	1543
<b>Failing test name</b>	Assertion 0E36472A-0EDB-4685-A67D-7AF1FFBFA81B	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Data Link Layer Link Active Reporting Capable bit is set but Data Link Layer Link Active is not.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008 x64	Errata	2475
<b>Failing test name</b>	Assertion 7229E848-31C2-482A-88F2-73ADA2C32B79	
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Bit range 9:4 (Negotiated Link Width)in the Link Status register (offset 12h) in the PCI Express Capability table is 1h. It cannot be in the set of values {0x1, 0x2} for PCI Express display controllers.	
<b>Additional information</b> (for example, test system in a multiple system configuration)		

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* Server 2008 x64	Errata	1098

## 4BErrata and Contingencies

<b>Failing test name</b>	Assertion FAE18121-9177-4FB2-A081-0D04C285EFF2
<b>Applicable error message</b> (Type <b>N/A</b> if the error message or failing text is excessive or if there is no text)	Bit range 15:0 (Extended Capability ID)in the Enhanced Capability Header register (offset 0h) in the Unrecognized Enhanced Capability ID 13 table is Dh. It must be in the range [0x0 - 0xB] as all other Capability IDs are reserved.
<b>Additional information</b> (for example, test system in a multiple system configuration)	

### Additional Information

No additional information entered in section 3 of the S5500WB Submission Readme file at time of WLP submission ID **1398035 (SSI Sku) / 1398032 (12 Sku)**.

## Appendix A – Submission History

Microsoft “Designed for Windows\*” logo submission history for the Intel® Server Board S5500WB

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
1398035 (SSI Sku) / 1398032 (12 Sku)	First-Time	3/30/10	Windows* Server 2008 R2 64 Bit	1.86, 2, 2.13, 2.26, 2.40, 2.53, 2.66, 2.80, , 2.93 and 3.06 GHz	310	S5500.86B.01.00.00 48.022720101225