



Server WHQL Testing Services  
Enterprise Platforms and Services Division  
**Intel® Workstation board S5520SC**

---

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

Rev 1.0

**April 7, 2010**

This report describes the Intel® Workstation board S5520SC 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® Workstation Board S5520SC in an SATA Enhanced configuration.

**Windows\* 7 Submission Logo ID: 1399359**

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

## Revision History and Disclaimers

---

Revision History		
Revision	Date	Comments
1.0	4/7/2010	Internal draft of the STS Report for Windows* 7 x64 and Windows 7 Submission for Intel® Workstation Board S5520SC.

THIS TEST REPORT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE.

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by the sale of Intel products. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications.

Intel retains the right to make changes to its test specifications at any time, without notice.

The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty.

Intel, Pentium, Itanium and Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

\* Other names and brands may be claimed as the property of others.

Copyright © 2010, Intel Corporation. All rights reserved.

# Contents

---

<b>Revision History and Disclaimers.....</b>	<b>2</b>
<b>Introduction .....</b>	<b>4</b>
Overview of Contents .....	4
Terms and Definitions.....	4
<b>Server/workstation board Submission Information .....</b>	<b>5</b>
Intel Server/workstation board Submission Report: Completion of WLP .....	5
Submission Information .....	5
Submission ID.....	5
Submission Type .....	5
Product Category.....	5
Product Detail .....	5
General Product Information .....	5
Characterization (optional) .....	5
Server/workstation board Configuration Information.....	6
Processor.....	6
System Memory .....	6
Power Management.....	6
BIOS.....	6
Bus Types .....	7
Integrated Components .....	7
Onboard Integrated Devices and Drivers.....	7
Product Data for HCL: Completion of WLP .....	7
Product Data.....	8
<b>Hardware Compatibility Tests Used .....</b>	<b>9</b>
<b>Errata and Contingencies.....</b>	<b>10</b>
Submission Readme File.....	10
Testing Exceptions for S5520SC Windows* 7 .....	11
Testing Exceptions for S5520SC Windows* 7 x64 .....	11
Additional Information.....	11
<b>Appendix A – Submission History.....</b>	<b>12</b>

## Introduction

# Introduction

This report provides an overview of the testing conducted on the Intel® Workstation board S5520SC 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/workstation 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/workstation board Submission Information

---

### Intel Server/workstation 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	1399359	
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* 7 Windows* 7 x64	
Product Detail		
General Product Information		
Equipment Type	Workstation	
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/workstation board Submission Information

### Server/workstation board Configuration Information

Processor	
Quantity	2 (physical processors installed)
Front Side Bus Speed	6.40 GT/s (Gigatransfers per sec)
Family/Model	Intel <sup>®</sup> Xeon Processor 5600 series
Speed	2.4, 2.53, 2.66, 2.80, 2.93, 3.06, 3.33 and 3.46 GHz
System Memory	
Amount Installed	96 GB
Memory Type	DDR3
Power Management	
ACPI Sleep States (S1, S2, S3, S4)	S1, S3, S4
Server/workstation 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: E30682-351
Board Manufacturer	Intel Corporation
Board Model	Intel <sup>®</sup> Workstation board S5520SC
Northbridge* Chipset Manufacturer	Intel Corporation
Northbridge Chipset Model	Intel <sup>®</sup> 5520 I/O Hub (IOH)
Southbridge* Chipset Manufacturer	Intel Corporation
Southbridge Chipset Model	Intel <sup>®</sup> AF82801JIR I/O Controller Hub (ICH10R)
BIOS	
BIOS Manufacturer	Intel Corporation
BIOS Version	S5500.86B.01.00.0048.022720101222
BIOS Date	2/27/2010
BIOS URL (For Updates)	<a href="http://www.intel.com/support/motherboards/server/s5520sc/index.htm">http://www.intel.com/support/motherboards/server/s5520sc/index.htm</a>

## Server/workstation board Submission Information

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	<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 checked="" type="checkbox"/>		Display	<input checked="" type="checkbox"/>	
IDE	<input 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® Workstation board S5520SC are available for download at:

<http://support.intel.com/support/motherboards/server/S5520SC>

Technology	OS	Version
<b>LAN</b> Intel® 82575EB Server Network Connection Supports 10/100/1000	<b>Windows* 7</b> <b>Windows* 7 x64</b>	Pkg 14.7 Pkg 14.7
<b>Video</b> NVIDIA nForce 8800GT	<b>Windows* 7</b> <b>Windows* 7 x64</b>	196.21 196.21
<b>Audio</b> High Definition Audio	<b>Windows* 7</b> <b>Windows* 7 x64</b>	R240 R240

### Product Data for HCL: Completion of WLP

Data in this section reflects product data for HCL at time of WLP submission.

## Server/workstation board Submission Information

Product Data		
Product Name	Intel® Workstation board S5520SC	
Additional Product Names	Intel® Server Chassis SC5600LX	
	Intel® Server Chassis SC5600BRP	
	Intel® Server Chassis SC5600BASE	
	Intel® Server Chassis SC5650DP	
	Intel® Server Chassis SC5650BRP	
Supported Platforms		
	Check Tested	Comments
Windows* Server 2003 family	<input type="checkbox"/>	
Windows* Server 2003 x64 family	<input type="checkbox"/>	
Windows* Vista family	<input type="checkbox"/>	
Windows* Vista x64 family	<input type="checkbox"/>	
Windows* Server 2008 R2 x64 family	<input type="checkbox"/>	
Windows* Server 2008 sp2 x64 family	<input type="checkbox"/>	
Windows* Server 2008 sp2 x86 family	<input type="checkbox"/>	
Windows* 7	<input checked="" type="checkbox"/>	
Windows* 7 x64	<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* Server 2003	DTM 1.4 Test Procedures for Systems, Servers and Cluster Servers (Windows* 2000)  <a href="http://download.microsoft.com/download/whistler/Tools/Docs/Docs/W982KMeXP/EN-US/HCT9502_Systems.exe">http://download.microsoft.com/download/whistler/Tools/Docs/Docs/W982KMeXP/EN-US/HCT9502_Systems.exe</a>	DTM 1.4 Test Kit (Windows* 2000)  <a href="http://download.microsoft.com/download/whistler/Tools/Tools/W98NT42KMeXP/EN-US/HCT9502UPD.EXE">http://download.microsoft.com/download/whistler/Tools/Tools/W98NT42KMeXP/EN-US/HCT9502UPD.EXE</a>
	Logo'd Components Index Full Install	Logo'd Components Index Full Install (~9.8 MB)  <a href="http://download.microsoft.com/download/whistler/Install/20.0/W982KMeXP/EN-US/logoidx.exe">http://download.microsoft.com/download/whistler/Install/20.0/W982KMeXP/EN-US/logoidx.exe</a>
	391 NDIS Intermediate Drivers Instructions  <a href="http://download.microsoft.com/download/whistler/Install/20.1/W982KMeXP/EN-US/NDISIntermedDriver.exe">http://download.microsoft.com/download/whistler/Install/20.1/W982KMeXP/EN-US/NDISIntermedDriver.exe</a>	Beta NDIS Test Update (ndt391.exe) (2MB)  <a href="http://download.microsoft.com/download/whistler/Install/12.2/W982KMeXP/EN-US/ndt391.exe">http://download.microsoft.com/download/whistler/Install/12.2/W982KMeXP/EN-US/ndt391.exe</a>
	386 NDIS Intermediate Drivers Instructions  <a href="http://download.microsoft.com/download/whistler/Install/20.1/W982KMeXP/EN-US/NDISIntermedDriver.exe">http://download.microsoft.com/download/whistler/Install/20.1/W982KMeXP/EN-US/NDISIntermedDriver.exe</a>	NDIS Test Update for Windows* 98 SE, Windows* Me, and Windows* 2000 (ndt386.exe) (2.02MB)  <a href="http://download.microsoft.com/download/whistler/Install/12.2/W982KMeXP/EN-US/ndt386.exe">http://download.microsoft.com/download/whistler/Install/12.2/W982KMeXP/EN-US/ndt386.exe</a>
Windows* Vista	DTM 1.4 Test Procedures and Readme files for Windows* Server 2003 and Windows* Vista  <a href="http://www.microsoft.com/whdc/hwtest/search/details.aspx?ID=725">http://www.microsoft.com/whdc/hwtest/search/details.aspx?ID=725</a>	DTM 1.4 Test Kit  <a href="http://www.microsoft.com/whdc/hwtest/search/details.aspx?ID=724">http://www.microsoft.com/whdc/hwtest/search/details.aspx?ID=724</a>
	Logo'd Components Index Full Install	Logo'd Components Index Full Install (~9.8 MB)  <a href="http://download.microsoft.com/download/whistler/Install/20.0/W982KMeXP/EN-US/logoidx.exe">http://download.microsoft.com/download/whistler/Install/20.0/W982KMeXP/EN-US/logoidx.exe</a>

## Errata and Contingencies

---

Microsoft\* System DTM Errata list is available at:

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

Operating System	Identification Number	Title
Windows* 7	1192	<i>See Testing Exceptions section below</i>
Windows* 7 x64	1192	<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 S5520SC Windows\* 7

Data in this section reflects product data and test exceptions listed in section 2 of the S5520SC Readme file at time of WLP First-Time submission ID Number **1399359**.

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* 7	<i>Errata</i>	1192
<b>Failing test name</b>	<i>Logo - S3 Resume time verification</i>	
<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)	<i>The total resume time of this machine is longer than 2000ms</i>	
<b>Additional information</b> (for example, test system in a multiple system configuration)	<i>Since the current DTM can't support more than 16 cores during System IO tests, the Hyper threading has been disabled during this certification. And Fred has confirmed that there will be errata to cover this issue. Any more questions please contact Fred. (WHQL/DTM Contact: <a href="mailto:xiz@microsoft.com">xiz@microsoft.com</a>)</i>	

### Testing Exceptions for S5520SC Windows\* 7 x64

Data in this section reflects product data and test exceptions listed in section 2 of the S5520SC Readme file at time of WLP First-Time submission ID Number **1399359**.

<b>Operating system</b> (Windows* XP, Windows* 2000, etc.)	<b>Failure type</b> (Contingency, Errata, Incident)	<b>ID number</b>
Windows* 7 x64	<i>Errata</i>	1192
<b>Failing test name</b>	<i>Logo - S3 Resume time verification</i>	
<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)	<i>The total resume time of this machine is longer than 2000ms</i>	
<b>Additional information</b> (for example, test system in a multiple system configuration)	<i>Since the current DTM can't support more than 16 cores during System IO tests, the Hyper threading has been disabled during this certification. And Fred has confirmed that there will be errata to cover this issue. Any more questions please contact Fred. (WHQL/DTM Contact: <a href="mailto:xiz@microsoft.com">xiz@microsoft.com</a>)</i>	

### Additional Information

No additional information entered in section 3 of the S5520SC Submission Readme file at time of WLP submission ID 1399359.

## Appendix A – Submission History

---

Microsoft “Designed for Windows\*” logo submission history for the Intel® Workstation board S5520SC

Submission ID	Type	Date	OS Qualified	Processor Speeds	Board Revision	BIOS Version
1399359	First-Time	4/7/2010	Windows* 7, Windows* 7 x64	1.86, 2.00, 2.13, 2.26, 2.53, 2.66, 2.80, 2.93 and 3.33 GHz	351	S5500.86B.01.00.0048.022720101222