



**Server WHQL Testing Services**

**Enterprise Platforms and Services Division**

**Intel<sup>®</sup> Server Board S5520UR**

**Intel<sup>®</sup> Server System SR1600UR**

**Intel<sup>®</sup> Server System SR1625UR**

**Intel<sup>®</sup> Server System SR2600URBRP**

**Intel<sup>®</sup> Server System SR2625URBRP**

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## **Server Test Submission (STS) Report**

**For the Microsoft<sup>®</sup> Windows<sup>®</sup> Logo Program (WLP)**

Rev 1.0

**March 27, 2009**

This report describes the Intel<sup>®</sup> Server Board S5520UR 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 S5520UR in an ICH10R SATA SW RAID configuration.

**Windows Server 2003 Submission Logo ID: 1323046**

| 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              | 3/27/2009 | Internal draft of the STS Report for Windows Server 2003 Submission for Intel® Server Board S5520UR configured in SATA SW RAID mode |
|                  |           |   |
|                  |           |   |

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# Introduction

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This report provides an overview of the testing conducted on the Intel® Server Board S5520UR 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:<br><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:<br><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 EPSSD   |
| 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:<br><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:<br><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 EPSSD  |

# 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                      | 1323046                             |          |
| 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 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 Submission Information

### Server Board Configuration Information

| <b>Processor</b>                   |   |
|------------------------------------|---|
| Quantity                           | 2 (physical processors installed)   |
| Front Side Bus Speed               | 6.40 GT/s (Gigatransfers per sec)   |
| Family/Model                       | Intel <sup>®</sup> Xeon Quad-core Processor 5500 series   |
| Speed                              | 1.86, 2.00, 2.13, 2.26, 2.53, 2.66, 2.80, and 2.93 GHz  |
| <b>System Memory</b>               |   |
| Amount Installed                   | 96 GB   |
| Memory Type                        | DDR3  |
| <b>Power Management</b>            |   |
| ACPI Sleep States (S1, S2, S3, S4) | S1  |
| <b>Server Board Product</b>        |   |
| 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: E22554-601   |
| Board Manufacturer                 | Intel Corporation   |
| Board Model                        | Intel <sup>®</sup> Server Board S5520UR   |
| Northbridge* Chipset Manufacturer  | Intel Corporation   |
| Northbridge Chipset Model          | Intel <sup>®</sup> 5520 Chipset IOH   |
| Southbridge* Chipset Manufacturer  | Intel Corporation   |
| Southbridge Chipset Model          | Intel <sup>®</sup> 82801 Jx I/O Controller (ICH10R)   |
| <b>BIOS</b>                        |   |
| BIOS Manufacturer                  | AMI*  |
| BIOS Version                       | S5500.86B.01.00.0033.03062009   |
| BIOS Date                          | 3/6/2009  |
| BIOS URL (For Updates)             | <a href="http://support.intel.com/support/motherboards/server/s5520ur">http://support.intel.com/support/motherboards/server/s5520ur</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 S5520UR are available for download at:

<http://support.intel.com/support/motherboards/server/s5520ur>

| Technology   | OS   | Version                                      |
|--|--|--|
| <b>Intel® S5000/ESB2-E Chipset</b><br>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. | <b>Windows Server 2003</b><br><b>Windows Server 2003 – 64Bit</b> | 9.1.0.1012<br>9.1.0.1012                     |
| <b>Embedded ICH10R SATA Controller</b><br>SATA RAID mode   | <b>Windows Server 2003</b><br><b>Windows Server 2003 – 64Bit</b> | 12.08.1023.2008<br>12.08.1023.2008           |
| <b>LAN</b><br>2 X Intel 82575EB Server Network Connection Supports 10/100/1000 and I/O Accelerated Technology  | <b>Windows Server 2003</b><br><b>Windows Server 2003 – 64Bit</b> | 9.12.16.0 (Pkg 13.5)<br>9.12.16.0 (Pkg 13.5) |
| <b>Display</b><br>Server Engine iBMC video controller  | <b>Windows Server 2003</b><br><b>Windows Server 2003 – 64Bit</b> | WDM20080228.1996-R4<br>WDM20080228.1996-R4   |

## Server 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 S5520UR         |          |
| Additional Product Names       | Intel® Server System SR1600UR       |          |
|                                | Intel® Server System SR1625UR       |          |
|                                | Intel® Server System SR2600URBRP    |          |
|                                | Intel® Server System SR2625URBRP    |          |
| Supported Platforms            |                                     |          |
|                                | Check Tested                        | Comments |
| Windows Server 2003 family     | <input checked="" type="checkbox"/> |          |
| Windows Server 2003 x64 family | <input checked="" type="checkbox"/> |          |
| Windows Server 2008 family     | <input type="checkbox"/>            |          |
| Windows Server 2008 x64 family | <input 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 1.2 Test Procedures for Systems, Servers and Cluster Servers (Windows 2000)<br><br><a href="http://download.microsoft.com/download/whistler/Docs/Docs/W982KMeXP/EN-US/HCT9502_Systems.exe">http://download.microsoft.com/download/whistler/Docs/Docs/W982KMeXP/EN-US/HCT9502_Systems.exe</a> | DTM 1.2 Test Kit (Windows 2000) (35.4 MB)<br><br><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)<br><br><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<br><br><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)<br><br><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<br><br><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)<br><br><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 Server 2008 | DTM 1.2 Test Procedures and Readme files for Windows Server 2003 and Windows Server 2008 (4.95MB)<br><br><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 1.2 Test Kit (4.95MB)<br><br><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)<br><br><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

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Microsoft\* System DTM Errata list is available at:

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

| Operating System    | Identification Number | Title                                       |
|---------------------|-----------------------|---|
| Windows Server 2003 |                       | <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 S5520UR-SATA-SWR Windows Server 2003

Data in this section reflects product data and test exceptions listed in section 2 of the S5520UR-SAS-IR Readme file at time of WLP First-Time submission ID Number **1323046**.

| <b>Operating system</b><br>(Windows XP, Windows 2000, etc.)   | <b>Failure type</b><br>(Contingency, Errata, Incident) | <b>ID number</b> |
|---|--|------------------|
| Windows Server 2003   |  |                  |
| <b>Failing test name</b>  |  |                  |
| <b>Applicable error message</b><br>(Type <b>N/A</b> if the error message or failing text is excessive or if there is no text) |  |                  |
| <b>Additional information</b><br>(for example, test system in a multiple system configuration)                                |  |                  |
| <i>no errata included with this submission</i>  |  |                  |

### Testing Exceptions for S5520UR-SATA-SWR Windows Server 2003 x64

Data in this section reflects product data and test exceptions listed in section 2 of the S5520UR-SAS-IR Readme file at time of WLP First-Time submission ID Number **1323046**.

| <b>Operating system</b><br>(Windows XP, Windows 2000, etc.)   | <b>Failure type</b><br>(Contingency, Errata, Incident) | <b>ID number</b> |
|---|--|------------------|
| Windows Server 2003 x64   |  |                  |
| <b>Failing test name</b>  |  |                  |
| <b>Applicable error message</b><br>(Type <b>N/A</b> if the error message or failing text is excessive or if there is no text) |  |                  |
| <b>Additional information</b><br>(for example, test system in a multiple system configuration)                                |  |                  |
| <i>no errata included with this submission</i>  |  |                  |

#### Additional Information

No additional information entered in section 3 of the S5520UR-SATA-SWR Submission Readme file at time of WLP submission ID 1323046.

## Appendix A – Submission History

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Microsoft “Designed for Windows\*” logo submission history for the Intel<sup>®</sup> Server Board S5520UR-SATA-SWR

| Submission ID | Type       | Date    | OS Qualified                         | Processor Speeds   | Board Revision | BIOS Version                   |
|---------------|------------|---------|--------------------------------------|--|----------------|--------------------------------|
| 1323046       | First-Time | 3/27/09 | Windows Server<br>2003 - 32 & 64 Bit | 1.86, 2.00, 2.13,<br>2.26, 2.53, 2.66,<br>2.80, and 2.93 GHz | 601            | S5500.86B.01.00.33<br>3/6/2009 |