

Server WHQL Testing Services Enterprise Platforms and Services Division Intel[®] Server Board S3420GPLX Intel[®] Server Board S3420GPLC Intel[®] Server System SR1630GP

Server Test Submission (STS) Report

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

Rev 1.0

Sep. 14th, 2009

This report describes the Intel® Server Board S3420GPLX/LC 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® Server Board S3420GPLX/LC in None RAID configuration.

Windows Server 2008 R2 x64bit Submission Logo ID: 1349281(LX MB)/1350308(LC MB)

| Submission Type: | Reason for test run | Check one |
|--------------------------|--|-----------|
| First Time Submission | Initial Microsoft Designed for Windows logo submission. New product submission. | |
| System Update | Hardware update. (For example, update submission test run with new processor speeds.) | |
| BIOS Update | BIOS and/or Firmware update. (For example, update submission test run with new BIOS to support additional processor speeds.) | |
| OS Update | OS update. (For example, update submission test run to add Microsoft Designed for Windows Server 2008 logo to product.) | |

Revision History and Disclaimers

| Revision History | | | |
|---|------------------------|--|--|
| Revision | Revision Date Comments | | |
| 1.0 09/14/2009 Internal draft of the STS Report for Windows Server 2008 R2 x64bit Submission for Intel® Server Board S3420GPLX/LC configured in None RAID mode | | | |
| | | | |
| | | | |

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 © 2009, Intel Corporation. All rights reserved.

Contents

| Revision History and Disclaimers 2 | |
|---|--|
| Introduction 4 | |
| Overview of Contents4 | |
| Terms and Definitions4 | |
| Server Board Submission Information5 | |
| Intel Server Board Submission Report: Completion of WLP5 | |
| Submission Information | |
| Submission ID5 | |
| Submission Type5 | |
| Product Category5 | |
| Product Detail5 | |
| General Product Information5 | |
| Characterization (optional)5 | |
| Server Board Configuration Information | |
| Processor | |
| System Memory | |
| Power Management | |
| Bios | |
| Integrated Components | |
| Onboard Integrated Devices and Drivers | |
| Product Data for HCL: Completion of WLP | |
| Product Data | |
| Hardware Compatibility Tests Used | |
| Errata and Contingencies | |
| Submission Readme File | |
| Testing Exceptions for S3420GPLX/LC Windows Server 2008 R2 x64bit | |
| Additional Information | |
| Appendix A – Submission History 12 | |

Introduction

This report provides an overview of the testing conducted on the Intel® Server Board S3420GPLX/LC 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: http://www.microsoft.com/windows/catalog/server/ | |
| DTM | Driver Test manager. For latest Server DTM tests 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. <u>http://www.microsoft.com/whdc/default.mspx</u> | |
| WHOS | Windows Hardware Online Service – Secure online web site used to submit products for logo qualification and review submission history. <u>https://winqual.microsoft.com/</u> | |
| WHQL | Windows* Hardware Qualification Lab. For more information visit the WHDC home page at: http://www.microsoft.com/whdc/whql/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 Update submission.

Submission Information

| Submission ID | | | |
|---|------------------------------------|----------|--|
| Submission ID / Master ID | 1349281(LX MB)/1350308(LC MB) | | |
| Submission Type | | | |
| | Check Submission Type | Comments | |
| First-Time Hardware and Driver Test Submission | | | |
| System Update Test Submission | | | |
| Product Category | | | |
| Hardware Category | PC System or Server | | |
| Operating System family | Windows Server 2008 R2 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 | | | |
| SQL Database Server | \checkmark | | |
| File Server | | | |

Server Board Configuration Information

| Processor | | |
|---------------------------------------|---|--|
| Quantity | 1 (physical processors installed) | |
| Front Side Bus Speed | 6.40 GT/s (Gigatransfers per sec) | |
| Family/Model | Intel [®] Xeon Quad-core Processor X3400 series | |
| Speed | 1.86, 2.4, 2.53, 2.66, 2.80, and 2.93 GHz | |
| System Memory | | |
| Amount Installed | 12 GB | |
| 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: E51974-401(LX MB) /E51976-401(LC MB) | |
| Board Manufacturer | Intel Corporation | |
| Board Model | Intel [®] Server Board S3420GPLX/LC | |
| Northbridge* Chipset Manufacturer | N/A | |
| Northbridge Chipset Model | N/A | |
| Southbridge* Chipset Manufacturer | Intel Corporation | |
| Southbridge Chipset Model | Intel [®] 3420 PCH | |
| BIOS | | |
| BIOS Manufacturer | AMI* | |
| BIOS Version | S3420GP.86B.01.00.0026 | |
| BIOS Date | 09/01/2009 | |
| BIOS URL (For Updates) | http://support.intel.com/support/motherboards/server/S3420GP | |

| Bus Types | | | |
|-----------------------|----------------------|-------------------|----------------------|
| | Check all that Apply | | Check all that Apply |
| PS/2 | | AGP* | |
| 1394 | | PCCard* (16-bit) | |
| CF (Compact Flash) | | CardBus* (32-bit) | |
| PCI | | USB | |
| Mini-PCI | | USB 2.0 | |
| AMR | | InfiniBand* | |
| ACR | | Bluetooth* | |
| COM (Serial) | | PCI Express | |
| Integrated Components | | | |
| | Check all that Apply | | Check all that Apply |
| Audio | | Display | |
| IDE | | Networking | |
| SCSI | | RAID | |
| Modem | | Bluetooth* | |

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 S3420GPLX/LC are available for download at:

http://support.intel.com/support/motherboards/server/S3420GP

| Technology | OS | Version |
|---|------------------------|-------------------|
| Intel® S3420 PCH Chipset | Windows Server 2008 R2 | Embedded |
| LAN Intel 82574L and Intel 82578DM Server Network Connection Supports 10/100/1000 | Windows Server 2008 R2 | 14.4 |
| Display Server Engine iBMC video controller | Windows Server 2008 R2 | WMD20090714i.WHQL |

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 Boar | d S3420GPLX/ Intel® Server Board S3420GPLC | |
| Additional Product Names | Intel® Server System SR1630GP | | |
| | Intel® Server System SR1630HGP | | |
| Supported Platforms | | | |
| | Check Tested | Comments | |
| Windows Server 2003 family | | | |
| Windows Server 2003 x64 family | | | |
| Windows Server 2008 family | | | |
| Windows Server 2008 R2 x64 family | \checkmark | | |

Hardware Compatibility Tests Used

Microsoft* Windows Hardware Driver Central Server Testing Home Page: <u>http://www.microsoft.com/whdc/hwtest/system/default.mspx</u>.

Please check this website regularly for test kit updates.

| Operating Systems | Notes | Hardware Compatibility Tests (HCT) |
|-------------------------------------|--|--------------------------------------|
| Windows Server 2008 R2 x64bit | DTM 1.4 Test Procedures for Systems, Servers and Cluster Servers | DTM 1.4 Test Kit |
| | Logo'd Components Index Full Install | Logo'd Components Index Full Install |

Errata and Contingencies

Microsoft* System DTM Errata list is available at:

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

| Operating System | Identification Number | Title |
|----------------------------------|-----------------------|--------------------------------------|
| Windows Server 2008 R2 x64bit | | See Testing Exceptions section below |
| | | |
| | | |

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.mspx

Testing Exceptions for S3420GPLX/LC Windows Server 2008 R2 x64Bit

Data in this section reflects product data and test exceptions listed in section 2 of the S3420GPLX/LC Readme file at time of WLP First-Time submission ID Number 1349281(LX MB)/1350308(LC MB).

| Operating system (Windows XP, Windows 2000, etc.) | Failure type (Contingency, Errata, Incident) | ID number | |
|---|---|-----------|--|
| Windows Server 2008 R2 x64b | | | |
| Failing test name | | | |
| Applicable error message (Type N/A if the error message or failing text is excessive or if there is no text) | | | |
| Additional information (for example, test system in a multiple system configuration) | no errata included with this submission | | |

Additional Information

No additional information entered in section 3 of the S3420GPLX/LC Submission Readme file at time of WLP submission ID 1349281(LX MB)/1350308(LC MB)

Appendix A – Submission History

Microsoft "Designed for Windows*" logo submission history for the Intel[®] Server Board S3420GPLX/LC

| Submission ID | Туре | Date | OS Qualified | Processor Speeds | Board Revision | BIOS Version |
|------------------------------------|----------------|---------|------------------------------------|---|-------------------|------------------------|
| 1349281 (LX MB) 1350308 (LC MB) | First- Time | 9/14/09 | Windows Server 2008 R2 - 64 Bit | 1.86, 2.4, 2.53, 2.66, 2.80, and 2.93 GHz | 401 | S3420GP.86B.01.00.0026 |