

Server WHQL Testing Services

Enterprise Platforms and Services Division

Intel[®] Server Board S3420GPRX Intel[®] Server System SR1630GPRX Intel[®] Server System SR1630HGPRX

Server Test Submission (STS) Report

For the Microsoft® Windows® Logo Program (WLP)

Rev 1.0

Mar. 22nd, 2010

This report describes the Intel® Server Board S3420GPRX 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 S3420GPRX in None RAID configuration.

Windows Server 2008 R2 Submission Logo ID: 1393422

| 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 | 03/22/2010 | Internal draft of the STS Report for Windows Server 2008 R2 Submission for Intel® Server Board S3420GPRX configured in None RAID mode |
| | | |
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Introduction

This report provides an overview of the testing conducted on the Intel® Server Board S3420GPRX 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. 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/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 | 1393422 | | |
| Submission Type | | | |
| | Check Submission Type | Comments | |
| First-Time Hardware and Driver Test Submission | $\overline{\mathbf{C}}$ | | |
| System Update Test Submission | | | |
| Product Category | | | |
| Hardware Category | PC System or Server | | |
| Operating System family | Windows Server 2008 R2 | | |
| 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 | V | | |

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 | 32 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 NOT eligible for logo under the Microsoft* Motherboard logo program) | |
| Board AA #/Fab | PBA: E77063-301 | |
| Board Manufacturer | Intel Corporation | |
| Board Model | Intel [®] Server Board S3420GPRX | |
| 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.01.00.0037 | |
| BIOS Date | 01/30/2010 | |
| 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 | \square |
| AMR | | InfiniBand* | |
| ACR | | Bluetooth* | |
| COM (Serial) | $\overline{\mathcal{Q}}$ | PCI Express | |
| Integrated Components | | | |
| | Check all that Apply | | Check all that Apply |
| Audio | | Display | |
| IDE | | Networking | \square |
| SCSI | | RAID | \square |
| 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 $Intel^{\circledR}$ Server Board S3420GPRX 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 | 15.0 15.0 |
| Display Server Engine iBMC video controller | Windows Server 2008 R2 | Embedded |

Product Data for HCL: Completion of WLP

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

Server Board Submission Information

| Product Data | | | |
|--------------------------------|----------------------------------|----------|--|
| Product Name | Intel® Server Board S3420GPRX | | |
| Additional Product Names | Intel® Server System SR1630GPRX | | |
| | Intel® Server System SR1630HGPRX | | |
| Supported Platforms | Supported Platforms | | |
| | Check Tested | Comments | |
| Windows Server 2003 family | | | |
| Windows Server 2003 x64 family | | | |
| Windows Server 2008 family | \checkmark | | |
| Windows Server 2008 x64 family | V | | |

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 2008 R2 | DTM 1.5 Test Procedures for Systems, Servers and Cluster Servers | DTM 1.5 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 | | 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 S3420GPRX Windows Server 2008 R2

Data in this section reflects product data and test exceptions listed in section 2 of the S3420GPRX Readme file at time of WLP First-Time submission ID Number 1393422

| Operating system (Windows XP, Windows 2000, etc.) | Failure type (Contingency, Errata, Incident) | ID number | |
|---|---|-----------|--|
| Windows Server 2003 | | | |
| 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 S3420GPRX Submission Readme file at time of WLP submission ID 1393422

Appendix A – Submission History

Microsoft "Designed for Windows*" logo submission history for the Intel® Server Board S3420GPRX

| Submission ID | Туре | Date | OS Qualified | Processor Speeds | Board Revision | BIOS Version |
|---------------|----------------|---------|---------------------------|---|-------------------|------------------------|
| 1393422 | First- Time | 3/22/09 | Windows Server 2008 R2 | 1.86, 2.4, 2.53, 2.66, 2.80, and 2.93 GHz | 301 | S3420GP.86B.01.00.0037 |