



Motherboard Logo Program (MLP)

# Intel® Desktop Board D5400XS

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## MLP Report

6/17/2008

**Purpose:**

This report describes the D5400XS Motherboard Logo Program testing run conducted by Intel Corporation.

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# Introduction

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## Terms and Definitions

Term	Definitions
WHQL	Windows* Hardware Qualification Lab
DTM	Driver Test Manager
MLP	Motherboard Logo Program. For further information see: <a href="http://www.microsoft.com/whdc/hwtest/default.msp">http://www.microsoft.com/whdc/hwtest/default.msp</a>
AP Machine	Audio Precision Machine
Winqual	Windows Qualification
MSFT Tested Product List	Tested Products List. You can view the Windows Marketplace for tested products list at: <a href="http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;q=s">http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;q=s</a>

# Desktop Board Configuration

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## Desktop Board D5400XS Final Configuration Report: Completion of MLP

Data in this section reflects system configuration at time of MLP submission.

### Board Information

Product Code <sup>1</sup>	BIOS String/Model	Technologies NOT Logo'd (yet)
D5400XS	XS54010J.86A.1140.2008.0520.2239	N/A - all technologies logo'd
<b>Processor</b>		
Speed	3.20GHz	
Family	Intel® Xeon	
Bus Speed	1600 MHz	
<b>Motherboard</b>		
Board AA #	D94664	
Board FAB #	500	
* This report applies to the production FAB revision; Please consult your Intel Corporation representative to clarify the motherboard revision you intend to perform logo testing if not the same.		
<b>System Memory</b>		
Speed	Quad Channel, DDR2, 800MHz	
Memory Type	ECC, Full Buffer DIMM	
Connector Type	DDR2, 240 Pin	
<b>Power Management</b>		
BIOS Default	S3	
<b>Operating System Tested</b>		
	<b>Check Tested</b>	<b>Comments</b>
Windows XP Pro	<input checked="" type="checkbox"/>	XP Pro with Service Pack 3
Windows XP Pro 64-bit	<input checked="" type="checkbox"/>	XP Pro with Service Pack 2
Windows Vista	<input checked="" type="checkbox"/>	Vista Ultimate with Service Pack 1
Windows Vista 64-bit	<input checked="" type="checkbox"/>	Vista Ultimate with Service Pack 1
Windows Vista Basic	<input type="checkbox"/>	Vista Basic with Service Pack 1

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<sup>1</sup> These are the product names to enter in the "Submission ID of previously logo'd qualified PC system or server" field during your "System Using a Previously Logo'd Motherboard" submission to Microsoft.

Windows Vista Basic 64-bit	<input type="checkbox"/>	Vista Basic with Service Pack 1
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### Onboard Integrated Devices and Driver for XP Pro 32 and 64bit

Technology	OS	Version
Chipset Update Utility Intel® Chipset Software Utility	Windows XP Pro	8.5.0.1009
	Windows XP Pro 64-bit	8.5.0.1009
Audio IDT	Windows XP Pro	5762_5713_v68
	Windows XP Pro 64-bit	5762_5713_v68
LAN Intel® PRO Network Connections	Windows XP Pro	12.1
	Windows XP Pro 64-bit	12.1
CIR Transceiver Winbond	Windows XP Pro	N/A
	Windows XP Pro 64-bit	N/A

### Onboard Integrated Devices and Driver for Vista 32 and 64bit

Technology	OS	Version
Chipset Update Utility Intel® Chipset Software Utility	Windows Vista	8.5.0.1009
	Windows Vista 64-bit	8.5.0.1009
Audio IDT	Windows Vista	5762_5713_v68
	Windows Vista 64-bit	5762_5713_v68
LAN Intel® PRO Network Connections	Windows Vista	13.0.1
	Windows Vista 64-bit	13.0.1
CIR Transceiver Winbond	Windows Vista	7.0.65.1002
	Windows Vista 64-bit	7.0.65.1002

## Driver Test Manager Used (DTM)

Microsoft website: <http://www.microsoft.com/whdc/DevTools/WDK/DTM.msp>

Please check regularly for test kit updates from Microsoft. Please ensure latest filters updated prior to WHQL run.

Operating Systems	Notes	WHQL Testkit
Windows XP Pro Windows XP Pro 64-bit	<a href="#">DTM for Windows XP SP3</a>	<a href="#">DTM for Windows XP SP3</a>
Windows Vista Windows Vista 64-bit	<a href="#">DTM for Windows Vista SP1 @ WLK1.2</a>	<a href="#">DTM for Windows Vista SP1 @ WLK1.2</a>

## Errata and Contingencies

Operating System	Failing Test	Expiry date	ID Number	Type	Error Description
Windows Vista Windows Vista 64-bit	Fidelity Test (System, Manual), HDAudio Class Driver Fidelity Test (System, Manual)	8/1/2008	1182	Erratum	The following test cases in Fidelity Test are new for WLK 1.2 and were not previewed in WLK 1.1: * Render System Activity Test * Capture Input Level Test * Capture Skew Test * Capture THD+N Test * Capture Dynamic Range Test * Capture Frequency Response Test
Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	6/30/2009	566	Erratum	Assertion 7A5587BC-5646-4DC4-9A5D-22F85AB2204E: FAILED. PCI Express ports and bridges must implement Subsystem ID and Subsystem Vendor ID Capability. This requirement not in effect until 2009
Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	1/1/2009	1029	Erratum	Assertion 4BA8F23A-6BB1-48EE-88D8-ED1A3ECD34B9 SVID register of the Subsystem ID and Subsystem Vendor ID Capability table must be read-only . Assertion 6B0F606E-DBB3-4B8C-8879-32B302412EB8 SSID register of the Subsystem ID and Subsystem Vendor ID Capability table must be read-only . Assertion B576282C-5C66-4253-A275-257F5D49EFEF SVID register of the Subsystem ID and Subsystem Vendor ID Capability table cannot have a value of 0h. These are valid failures but are not a requirement till January 2009. A filter is being created for the above assertions for this particular device. Added failure: Assertion 7A5587BC-5646-4DC4-9A5D-22F85AB2204E PCI Express ports and bridges must implement Subsystem ID and Subsystem Vendor ID Capability.
Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	1/1/2009	1078	Erratum	The Bit 5 (Surprise Down Error Severity) in the Uncorrectable Error Severity register (offset Ch) in the Advanced Error Reporting Capability table must be read-only and always return 1 if the Bit 5 (Surprise Down Error Mask) in the Uncorrectable Error Mask Register in the Advanced Error Reporting Capability table is not implemented
Windows Vista Windows Vista 64-bit	UAA Test - Vista (System)	7/31/2009	534	Erratum	UAA Test requires the Traffic Priority bit to be read/write - however there are two specs that apply, and they conflict. One says the bit must be read/write, the other says it must be read-only. Contact has been made with the author of both specs (Intel) but until this point is clarified we cannot fail submissions containing this test failure.
Windows Vista Windows Vista 64-bit	UAA Test - Vista (System)	7/31/2008	636	Erratum	Certain HD Audio codecs allow setting unsupported VRef settings in the pin control register. They have hardware validation that prevents the unsupported VRef settings from affecting the actual voltage, but subsequent reads from the pin control register will return values that are out of sync with what the actual voltage is. This requires a hardware fix so the failure is forgiven for these specific codecs. Future designs must advertise the VRefs correctly. The failing test log is UAATest.wtl.

## Test Notes

Operating System	Test	Description
XP and Vista	BIOS download	Internal: <a href="http://bios.intel.com/downloads/">http://bios.intel.com/downloads/</a> External: <a href="http://www.intel.com/">http://www.intel.com/</a> click on Support and Download
XP and Vista	BIOS setup	Please make sure the BIOS setting are as below, otherwise use default settings.  System Date and Time: Current date and time Peripheral Configuration: Enable all onboard component Drive Configuration: Set to IDE Chipset Configuration: Enable HPET ACPI Suspend State: Set to <S3 State> Boot Device Priority: set <Hard Disk Driver> to first
XP and Vista Filter update	DTM WHQL test	<a href="http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab">http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab</a>
Special H/W that use to PASS the test	None	None