Motherboard Logo Program (MLP)

Intel® Desktop Board DH61HO

MLP Report

04/24/2012

Purpose:

This report describes the DH61HO Motherboard Logo Program testing run conducted by Intel Corporation.

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Introduction

Terms and Definitions

Term	Definitions
WHQL	Windows* Hardware Qualification Lab
WLK	Windows Logo Kits
MLP	Motherboard Logo Program. For further information see: http://www.microsoft.com/whdc/hwtest/default.mspx
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: http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&cid=105&g=s

Desktop Board Configuration

Desktop Board DH61HO Final Configuration Report: Completion of MLP

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

Board Information

Product Code[1]	BIOS String/Model	Technologies NOT Logo'd (yet)
DH61HO	H0H6110H.86A.0010.2012.0424.1632	N/A - all technologies logo'd
Processor		
Speed	2.30 Ghz	
Family	Intel Core I5	
Bus Speed	100 MHz	
Motherboard		
Board AA #	G62445-100	
Board FAB #	A	
* 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.		
System Memory		
Speed	Dual Channel, DDR3, 1333MHz	
Memory Type	DIMM elixir DDR3 1333/2GB	
Connector Type	DDR3, 240 Pin	
Power Management		
BIOS Default	S3	
Operating System Tested		
	Check Tested	**Comments**
Windows 7 and 64-bit	☑	Windows 7 Ultimate Service Pack 1
Windows Vista and 64-bit	☐	
Windows Vista Basic and 64-bit	☐	

[1] 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.

Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit

Technology	OS	Version	Package version
Chipset Update Utility Intel® Chipset Software Utility	**Windows 7**	V9.2.0.1015	INF_allOS_9.2.0.1030_PV
	Windows 7 64-bit	V9.2.0.1015	INF_allOS_9.2.0.1030_PV
Graphics Intel® HD Graphics	**Windows 7**	V8.15.10.2669	GFX_Win7Vista_ 15.26.6.2669_PV
	Windows 7 64-bit	V8.15.10.2669	GFX_Win7Vista_64_ 15.26.6.64.2669_PV
Audio Realtek	**Windows 7**	V6.0.1.6521	AUD_allOS_6521_PV
	Windows 7 64-bit	V6.0.1.6521	AUD_allOS_6521_PV
LAN Realtek	**Windows 7**	V7.49.927.2011	LAN_Win7_7049_PV
	Windows 7 64-bit	V7.49.927.2011	LAN_Win7_7049_PV
MEI Intel® Management Engine Interface	**Windows 7**	V8.0.4.1441	MEI_allOS_8.0.4.1441_PV
	Windows 7 64-bit	V8.0.4.1441	MEI_allOS_8.0.4.1441_PV

Windows Logo Kits Used (WLK)

Microsoft website: http://www.microsoft.com/whdc/DevTools/WDK/DTM.mspx

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

Operating Systems	Notes	WHQL Testkit
Windows 7 Windows 7 64-bit	WLK1.6 for Windows 7 SP1	WLK1.6 for Windows 7 SP1
Windows Vista Windows Vista 64-bit		

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit	Class Driver Fidelity Test	07/31/2015		Filter	-[Filter Number:1670 Row:587] - EU restrictions place a cap on the output level of headphone jacks at 32 Ohm load: headphones are not allowed to have an electrical output of more than 150 mV at that load. We test headphone jacks at 300 Ohm load; the relationship between the output at 32 Ohms and the

					output at 320 Ohms depends on the output impedance of the headphone jack. In particular, if a headphone jack meets the EU requirement of X <= 150 mV at 32 Ohms, depending on the output impedance, it could output a huge amount of power at 300 Ohms, or very slightly over X mV. Since we require X >= 120 mV at 32 Ohms, absent knowledge of the output impedance we can only require X >= 120 mV at 300 Ohms. 120 mV is -18.42 dBV. Any headphone output level at 32 Ohms that is less than -18.42 dBV is a legitimate failure, even if it is targeted at EU compliance. Any headphone output level greater than 1 Vrms (0.707 Vrms for mobile systems) is a legitimate pass, regardless of EU compliance. This errata covers output level failures for headphone jacks between -18.42 dBV and 1 Vrms/0 dBV (0.707 Vrms/-6.93 dBV for mobile systems)) in accordance with note 6 of the WLP fidelity requirements.
Windows 7 Windows 7 64-bit	PCI HW compliance Test	12/01/2012		Filter	1. Data Link Layer Link Active Reporting Capable bit is set but Data Link Layer Link Active is not. 2. -[Filter Number:385 Row:530] - The following PCI Compliance test failure is acceptable: Bit 15 (Bridge Configuration Retry Enable) in the Device Control register (offset 8h) in the PCI Express Capability table must be read-only and always return 0 as it is reserved for devices other than PCI Express to PCI/PCI-X Bridges. Assertion 13A41D3E-2576-41DC-A67C-525DA3637CEA This failure is acceptable because this is a PCIe 1.1 feature and the WLP requires compliance with only PCIe 1.0a.
Windows 7 Windows 7 64-bit	Signed Driver Check test	12/01/2012		Filter	-[Filter Number:2701 Row:43] - If a driver is found to be signed by Microsoft that is tested with the chklogo test, the message, ERROR: No Logo Level Attribute on file., is an invalid failure if followed by, This file has a 0 level Logo and followed by,Cannot match the device ID of the driver the device was test within an invidual assertion.
Windows 7 Windows 7 64-bit	UAA	06/01/2015		Filter	-[Filter Number:1394 Row:561] - 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.

Test Notes

Operating System	Test	Description
Windows 7	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
Windows 7	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 AHCI Chipset Configuration: Enable HPET ACPI Suspend State: Set to <S3 State> Boot Device Priority: set <Hard Disk Driver> to first
Windows 7 filter update	WLK WHQL test	http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab
Special H/W that use to PASS the test	None	None