Motherboard Logo Program (MLP)

Intel® Desktop Board DH61AG

MLP Report

6/13/2011

Purpose:

This report describes the DH61AG 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 DH61AG 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)
DH61AG	AGH6110H.86A.0022.2011.0518.1629	N/A - all technologies logo'd
Processor		
Speed	2.80GHz	
Family	Intel Core i7 2600S	
Bus Speed	100 MHz	
Motherboard		
Board AA #	G23736	
Board FAB #	200 (eg. 10x for fab A, 20x for fab B and etc)	
* 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	
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	☑	Vista Ultimate with Service Pack 2
Windows Vista Basic and 64-bit	☐	Vista Basic with Service Pack 2

[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 Vista 32-bit and 64-bit

Technology	OS	Version	Package version
Chipset Update Utility Intel® Chipset Software Utility	**Windows Vista**	V9.2.0.1030	INF_allOS_9.2.0.1030_PV
	Windows Vista 64-bit	V9.2.0.1030	INF_allOS_9.2.0.1030_PV
Graphics Intel® HD Graphics	**Windows Vista**	V8.15.10.2372	GFX_Vista32_Win7_32_8.15.10.2372_PV
	Windows Vista 64-bit	V8.15.10.2372	GFX_Vista64_Win7_64_8.15.10.2372_PV
Audio Realtek	**Windows Vista**	V6.0.1.6363	AUD_Vista_Win7_6.0.1.6363_PV
	Windows Vista 64-bit	V6.0.1.6363	AUD_Vista_Win7_6.0.1.6363_PV
LAN Intel® 82579V Gigabit	**Windows Vista**	V11.10.84.0	LAN_allOS_11.10.84.0_PV
	Windows Vista 64-bit	V11.10.84.0	LAN_allOS_11.10.84.0_PV
MEI Intel® Management Engine Interface	**Windows Vista**	V7.0.0.1144	MEI_allOS_7.1.10.1065_PV
	Windows Vista 64-bit	V7.0.0.1144	MEI_allOS_7.1.10.1065_PV
USB3.0 Renesas	**Windows Vista**	V2.0.34.0	USB3_allOS_2.0.34.1_PV
	Windows Vista 64-bit	V2.0.34.0	USB3_allOS_2.0.34.1_PV
IRST	**Windows Vista**	V10.5.0.1026	STOR_Vista_Win7_10.5.0.1027_PV
	Windows Vista 64-bit	V10.5.0.1026	STOR_Vista_Win7_10.5.0.1027_PV

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	V9.2.0.1030	INF_allOS_9.2.0.1030_PV
	Windows 7 64-bit	V9.2.0.1030	INF_allOS_9.2.0.1030_PV
Graphics Intel® HD Graphics	Windows 7	V8.15.10.2372	GFX_Vista32_Win7_32_8.15.10.2372_PV
	Windows 7 64-bit	V8.15.10.2372	GFX_Vista64_Win7_64_8.15.10.2372_PV
Audio Realtek	Windows 7	V6.0.1.6363	AUD_Vista_Win7_6.0.1.6363_PV
	Windows 7 64-bit	V6.0.1.6363	AUD_Vista_Win7_6.0.1.6363_PV
LAN Intel® 82579V Gigabit	Windows 7	V11.10.84.0	LAN_allOS_11.10.84.0_PV
	Windows 7 64-bit	V11.10.84.0	LAN_allOS_11.10.84.0_PV
MEI Intel® Management Engine Interface	Windows 7	V7.0.0.1144	MEI_allOS_7.1.10.1065_PV
	Windows 7 64-bit	V7.0.0.1144	MEI_allOS_7.1.10.1065_PV
USB3.0 Renesas	Windows 7	V2.0.34.0	USB3_allOS_2.0.34.1_PV
	Windows 7 64-bit	V2.0.34.0	USB3_allOS_2.0.34.1_PV
IRST	Windows 7	V10.5.0.1026	STOR_Vista_Win7_10.5.0.1027_PV
	Windows 7 64-bit	V10.5.0.1026	STOR_Vista_Win7_10.5.0.1027_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	WLK1.6 for Windows Vista SP2	WLK1.6 for Windows Vista SP2

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	1) HDAudio Class Driver Test - Vista or Server08 (System) 2) Class Driver AC3 Test - Win7 (System)	6/30/2025	1256	Erratum	Run AC3 test on a system with the Microsoft HD Audio class driver installed. Expected results: All AC3 kernel streaming data ranges should advertise MinimumBitsPerSample = 16 and MaximumBitsPerSample = 16. Actual results: HD Audio class driver sometimes advertises MaximumBitsPerSample = 24.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	HDAudio Class Driver Test - Vista or Server08 (System)	6/1/2013	142	Erratum	Errata 142 HDMI is required to support 44.1 kHz on Windows 7 The Windows Vista HD Audio class driver does not support 44.1 kHz sample rates. There is an errata to cover this violation of AUDIO-0023. It was mistakenly applied to third-party drivers. As of Windows 7, the Windows Vista HD Audio class driver supports 44.1 kHz sample rates on hardware that advertises support for it. AUDIO-0023 is applicable. This is a filter to allow vendors to ship with systems that violated AUDIO-0023 but were incorrectly filtered by the Vista filter. Hardware that does not support 44.1 needs to be updated to support 44.1, and advertise that support in a way that the Microsoft HD Audio class driver can pick up on. Third-party drivers need to relay this support to the OS correctly.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2011	2051	Erratum	PCIHCT - Bit range 11:10 (ASPM Support)in the Link Capabilities register (offset Ch) in the PCI Express Capability table is 0h. It cannot be in the set of values {0x0, 0x2}. (Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32)
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	6/1/2011	423	Erratum	Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32 Bit range 11:10 (ASPM Support)in the Link Capabilities register (offset Ch) in the PCI Express Capability table is 0h. It cannot be in the set of values {0x0, 0x2}.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/01/2012	401	Erratum	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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	923	Erratum	Assertion FAE18121-9177-4FB2-A081-0D04C285EFF2 Bit range 15:0 (Extended Capability ID)in the Enhanced Capability Header register (offset 0h) in the Unrecognized Enhanced Capability ID 13 table is Dh. It must be in the range [0x0 - 0xB] as all other Capability IDs are reserved.

Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/01/2012	1241	Erratum	This happens because the PCI Compliance test assumes that if the Data Link Layer Link Active Reporting Capable bit in the Link Capabilities register for a given PCIe port is set then that indicates that the Data Link Layer Link Active bit will also be set. This is an incorrect assumption because the Data Link Link Layer Link Active bit can be reset when there is no device below the port. This assertion needs to be removed from the PCIHCT. The current architecture of the PCIHCT prevents it from knowing whether devices exist below a bridge/port.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	1)UAA Test - Vista or Server08 (System) 2) UAA Test - Win7 (System)	6/1/2015	513	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 7 Windows 7 64-bit	UAA Test - Win7 (System)	6/1/2015	1300	Erratum	HD Audio pin configuration document calls out setting Port Connectivity to No Connection as the way to turn a pin off in a particular system. UAA Test incorrectly tests such pins.
Windows 7 Windows 7 64-bit	UAA Test - Win7 (System)	6/1/2013	Filter number 3276	Erratum	HDMI audio devices are backed by video pipes; if a graphics subsystem exposes three output ports, but only has two video pipes, it is not possible to get all three HDMI audio endpoints "active" simultaneously.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	USB Host Controller Compliance (Automated)	12/1/2012	1787	Erratum	Errata 1787 This Preview Test is being filtered until the expiration date of this Errata. After the expiration date of this filter these failures must be fixed to have a passing submission. Microsoft strongly recommends that these errors be investigated prior to this test or job being required for submission. XHCI spec compliance test is in preview

Test Notes

Operating System	Test	Description
Windows 7 and Vista	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
Windows 7 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 (Except CIR) 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 Note: Enhanced Consumer IR (CIR) component is not supported under Windows7.
Windows 7 and Vista 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