



Motherboard Logo Program (MLP)

Intel® Desktop Board DH67BL

MLP Report

12/16/2010

Purpose:

This report describes the DH67BL 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.msp
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&q=s

Desktop Board Configuration

Desktop Board DH67BL 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)
DH67BL	BLH6710H.86A.0062.2010.1025.1539	N/A - all technologies logo'd
Processor		
Speed	3.4GHz	
Family	Intel Core i7 CPU 2600	
Bus Speed	1333 MHz	
Motherboard		
Board AA #	G10189	
Board FAB #	201 (eg. 10x for fab A, 20x for fab B and etc)	
<i>* 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.</i>		
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	<input checked="" type="checkbox"/>	Windows 7 Ultimate
Windows Vista and 64-bit	<input checked="" type="checkbox"/>	Vista Ultimate with Service Pack 2
Windows Vista Basic and 64-bit	<input type="checkbox"/>	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	V9.2.0.1015	INF_alIOS_9.2.0.1015_PV.zip
	Windows Vista 64-bit	V9.2.0.1015	INF_alIOS_9.2.0.1015_PV.zip
Graphics Intel® HD Graphics Family	Windows Vista	V8.15.10.2219	GFX_Vista32_Win7_32_8.15.10.2219_PV.zip
	Windows Vista 64-bit	V8.15.10.2219	GFX_Vista64_Win7_64_8.15.10.2219_PV.zip
Audio Realtek	Windows Vista	V6.0.1.6215	AUD_Vista_Win7_6.0.1.6215_PV.zip
	Windows Vista 64-bit	V6.0.1.6215	AUD_Vista_Win7_6.0.1.6215_PV.zip
LAN Intel® 82579V Gigabit	Windows Vista	V11.8.74.0	LAN_alIOS_11.8.74.0_PV.zip
	Windows Vista 64-bit	V11.8.74.0	LAN_alIOS_11.8.74.0_PV.zip
MEI Intel® Management Engine Interface	Windows Vista	V 7.0.0.1118	MEI_alIOS_7.0.0.1135_P V.zip
	Windows Vista 64-bit	V 7.0.0.1118	MEI_alIOS_7.0.0.1135_P V.zip

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_allIOS_9.2.0.1015_PV.zip
	Windows 7 64-bit	V9.2.0.1015	INF_allIOS_9.2.0.1015_PV.zip
Graphics Intel® HD Graphics Family	Windows 7	V8.15.10.2219	GFX_Vista32_Win7_32_8.15.10.2219_PV.zip
	Windows 7 64-bit	V8.15.10.2219	GFX_Vista64_Win7_64_8.15.10.2219_PV.zip
Audio Realtek	Windows 7	V6.0.1.6215	AUD_Vista_Win7_6.0.1.6215_PV.zip
	Windows 7 64-bit	V6.0.1.6215	AUD_Vista_Win7_6.0.1.6215_PV.zip
LAN Intel® 82579V Gigabit	Windows 7	V11.8.74.0	LAN_allIOS_11.8.74.0_PV.zip
	Windows 7 64-bit	V11.8.74.0	LAN_allIOS_11.8.74.0_PV.zip
MEI Intel® Management Engine Interface	Windows 7	V 7.0.0.1118	MEI_allIOS_7.0.0.1135_P V.zip
	Windows 7 64-bit	V 7.0.0.1118	MEI_allIOS_7.0.0.1135_P V.zip

Windows Logo Kits Used (WLK)

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 7 Windows 7 64-bit	WLK1.5 for Windows 7	WLK1.5 for Windows 7
Windows Vista Windows Vista 64-bit	WLK1.5 for Windows Vista SP2	WLK1.5 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) Fidelity Test - Vista (System, Manual) 2) HDAudio Class Driver Fidelity Test - Vista (System, Manual) 3) Class Driver Fidelity Test - Win7 (System, Manual) 4) Fidelity Test - Win7 (System, Manual)	1/31/2011	1801	Erratum	Fidelity Render Power Transition test does not work properly. The test is not going to be enforced until a fix can be released.
Windows 7 Windows 7 64-bit	Class Driver Fidelity Test - Win7 (System, Manual)	6/1/2011	1012	Erratum	Fidelity plays a quiet (-60 dB FS) test tone during System Activity test which is filtered out of the noise level measurement. However, Fidelity is quite prone to glitches during system activity... the glitches leak into the measured noise, causing false failures.
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	The HD Audio class driver hdaudio.sys exposes AC-3 data ranges on S/PDIF Kernel Streaming pins incorrectly. The compressed AC-3 transport is "stereo", "16-bit", and at the same sample rate as the uncompressed format. As such, AC-3 data ranges are expected to have MaximumChannels = 2, and MinimumBitDepth = MaximumBitDepth = 16. However, the HD Audio class driver sometimes incorrectly exposes a MaximumBitDepth of 24 or even 32.
Windows Vista Windows Vista 64bit	HDAudio Class Driver Test - Vista or Server08 (System)	1/31/2011	142	Erratum	Errata 142 The Vista version of the Microsoft HD Audio class driver only plays 48 kHz sample rate audio over HDMI audio devices; it does not play the required 44.1 kHz sample rate. The Windows 7/Server 2008 R2 version of the Microsoft HD Audio class driver, on the other hand, will play both 44.1 and 48 kHz sample rate audio over HDMI devices. This errata filter thus only applies to Vista and the initial release of Windows Server 2008 (not to Windows 7 or Windows Server 2008 R2.)
Windows Vista Windows Vista 64bit	HDAudio Class Driver Test - Vista or Server08 (System)	1/31/2011	1444	Erratum	PREVIEW FILTER - HDMI is required to support 44.1 kHz on Windows 7 Errata 1444 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 preview 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	6/1/2011	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	6/1/2011	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	1)UAA Test - Vista or Server08 (System) 2) UAA Test - Win7 (System)	6/1/2011	1300	Erratum	UAA Test wrongly tests pin widgets that have their Configuration Default register's Port Connectivity field set to No Connection. The Microsoft HD Audio Pin Configuration guidelines specifically call out "set Port Connectivity to No Connection" as the official way to turn a pin off. UAA Test should ignore any such pins, as will the Microsoft HD Audio class driver.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	1)UAA Test - Vista or Server08 (System) 2) UAA Test - Win7 (System)	2/28/2011	1299	Erratum	Preview filter - Jack Detect Override on digital pin widgets Errata 1299 The HD Audio configuration default register (7.3.3.31 in the HD Audio specification) includes a "Jack Detect Override" flag that can be used to indicate that although a pin widget would normally be capable of jack detection, there is something about this particular system that causes this to be impossible. This was intended to be used, for example, for analog pin widgets that are connected to RCA jacks, which do not allow for impedance detection. Some digital pin widgets are using the Presence Detect pin sense response to indicate that a digital handshake has occurred - indeed, HDMI pins have entire DCNs built around this concept, and it applies equally well to S/PDIF pins. A digital converter that supports presence detection should be able to do so in any system, so the "Jack Detect Override" concept should not apply to digital pins.
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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	USB Host Controller Compliance (Automated)	6/1/2012	1787	Erratum	Errata 1787 XHCI spec compliance test is in preview For further details visit: https://winqual.microsoft.com/ec/
Windows Vista 64bit	System - Common Scenario Stress With IO	6/1/2011	1537	Erratum	The Common Scenario Stress with IO test enumerates devices that can be disabled early in the boot cycle. Some devices can be disabled during the boot process, but later cannot be disabled. Since the test does not check the device status each time, it may attempt to disable a device that cannot be disabled.
Windows 7 Windows 7 64-bit	Graphics HDMI System Test (Manual)	6/1/2011	1717	Erratum	HDMI Audio pins that have "port connectivity" set to "no physical connection" should be ignored as they are not used by the system. Graphics HDMI Test is false-failing systems that have them.
Windows 7 Windows 7 64-bit	1)Graphics HDMI System Test (Manual) 2) UAA Test - Win7 (System)	12/31/2011	1666	Erratum	HDMI audio codecs sometimes expose more HDMI audio pins (audio outputs) than can be plugged in at any given time, due to resource constraints in the video hardware. Test will need to be rejiggered to allow testing each in turn. 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 7 Windows 7 64-bit	Graphics HDMI System Test (Manual)	6/1/2011	1945	Erratum	Failure is due to the ELdV2 PortId not matching the graphics adapter LUID. This cannot be enforced currently. In the future, video drivers will be required to program the ELdV2 PortId with either, The AdapterLUID for the corresponding display adapter - OR- 0

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