



Motherboard Logo Program (MLP)

Intel® Desktop Board

DB43LD

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MLP Report

9/21/2009

**Purpose:**

This report describes the DB43LD 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
WLK	Windows Logo Kits
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 DB43LD 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)
DB43LD	LDB4310H.86A.0030.2009.0410.1420	N/A - all technologies logo'd
<b>Processor</b>		
Speed	3.0GHz	
Family	Intel® Core™2 Quad	
Bus Speed	1333 MHz	
<b>Motherboard</b>		
Board AA #	E60577	
Board FAB #	200	
* 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	Dual Channel, DDR2, 800MHz	
Memory Type	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 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 1
Windows Vista Basic and 64-bit	<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.

## 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	9.0.0.1011	9.1.1.1011
	Windows Vista 64-bit	9.0.0.1011	9.1.1.1011
Graphics Intel® Graphics Media Accelerator	Windows Vista	7.15.10.1659	15.13.0.1659
	Windows Vista 64-bit	7.15.10.1659	15.13.64.1659
Audio Realtek	Windows Vista	6.0.1.5798	5798
	Windows Vista 64-bit	6.0.1.5798	5798
LAN Intel® PRO Network Connections	Windows Vista	10.4.19.0	13.5
	Windows Vista 64-bit	10.4.19.0	13.5
MEI Intel® Management Engine Interface	Windows Vista	5.0.1.1127	5.1.0.1167
	Windows Vista 64-bit	5.0.1.1127	5.1.0.1167

## 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	9.1.1.1015	9.1.1.1015
	Windows 7 64-bit	9.1.1.1015	9.1.1.1015
Graphics Intel® Graphics Media Accelerator	Windows 7	8.15.10.1840	15.15.1.1840
	Windows 7 64-bit	8.15.10.1840	15.15.1.64.1840
Audio Realtek	Windows 7	6.0.1.5892	5892
	Windows 7 64-bit	6.0.1.5892	5892
LAN Intel® PRO Network Connections	Windows 7	11.0.41.0	14.2
	Windows 7 64-bit	11.0.41.0	14.2
MEI Intel® Management Engine Interface	Windows 7	5.2.0.1008	5.2.0.1018
	Windows 7 64-bit	5.2.0.1008	5.2.0.1018

## 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	<a href="#">WLK1.4 for Windows 7</a>	<a href="#">WLK1.4 for Windows 7</a>
Windows Vista Windows Vista 64-bit	<a href="#">WLK1.4 for Windows Vista SP1</a>	<a href="#">WLK1.4 for Windows Vista SP1</a>

## Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Window 7 Window 7 64-bit	Class Driver AC3 Test - Win7 (System)	06/01/2010	1572	Erratum	<p>The HD Audio class driver hdaudio.sys exposes AC-3 data ranges on S/PDIF Kernel Streaming pins incorrectly.</p> <p>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.</p> <p>However, the HD Audio class driver sometimes incorrectly exposes a MaximumBitDepth of 24 or even 32.</p>
Windows 7 Windows 7 64-bit	1)Class Driver Fidelity Test - Win7 (System, Manual)  2)Fidelity Test - Win7 (System, Manual)	12/31/2009	1547	Erratum	<p>Fidelity Test now includes a "Render Power Transition" test. This preview filter covers all errors in this new test of SYSFUND-0050.</p>
Windows 7 Windows 7 64-bit	Class Driver Fidelity Test - Win7 (System, Manual)	12/01/2009	1670	Erratum	<p>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.</p> <p>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.</p> <p>In particular, if a headphone jack meets the EU requirement of <math>X \leq 150</math> mV at 32 Ohms, depending on the output impedance, it could output a huge amount of power at 300 Ohms, or very slightly over <math>X</math> mV. Since we require <math>X \geq 120</math> mV at 32 Ohms, absent knowledge of the output impedance we can only require <math>X \geq 120</math> mV at 300 Ohms.</p> <p>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.</p> <p>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.</p>
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/31/2009	385	Erratum	<p>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.</p>



Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	06/01/2010	1543	Erratum	Assertion 0E36472A-0EDB-4685-A67D-7AF1FFBFA81B Data Link Layer Link Active Reporting Capable bit is set but Data Link Layer Link Active is not.
Windows 7 Windows 7 64-bit	UAA Test - Win7 (System)	12/01/2009	1394	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	Wave Test - Win7 (System)	06/01/2010	1584	Erratum	WaveTest false-fails DEVICE_STATE_DISABLED endpoints like CD In and Stereo Mix.  This is because it only considers DEVICE_STATE_ACTIVE endpoints when attempting to decide whether communications-class requirements should apply.

## Test Notes

Operating System	Test	Description
Windows 7 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
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 IDE 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	<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