



Motherboard Logo Program (MLP)

Intel® Desktop Board

DG45ID

MLP Report

9/29/2009

Purpose:

This report describes the DG45ID 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 DG45ID 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)
DG45ID	IDG4510H.86A.0101.2009.0526.1006	N/A - all technologies logo'd
Processor		
Speed	3.0GHz	
Family	Intel® Core™2 Quad	
Bus Speed	1333 MHz	
Motherboard		
Board AA #	E27729	
Board FAB #	307	
* 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, DDR2, 800MHz	
Memory Type	DIMM	
Connector Type	DDR2, 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 1
Windows Vista Basic and 64-bit	<input type="checkbox"/>	Vista Basic with Service Pack 1

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	9.0.0.1009	9.0.0.1009
	Windows Vista 64-bit	9.0.0.1009	9.0.0.1009
Graphics Intel® Graphics Media Accelerator	Windows Vista	7.15.10.1511	15.11.3.1511
	Windows Vista 64-bit	7.15.10.1511	15.11.3.64.1511
Audio IDT	Windows Vista	6.10.6087.0	6087 v1.30
	Windows Vista 64-bit	6.10.6087.0	6087 v1.30
LAN Intel® PRO Network Connections	Windows Vista	9.52.10.0	9.52.10.0
	Windows Vista 64-bit	9.52.10.0	9.52.10.0
MEI Intel® Management Engine Interface	Windows Vista	5.0.1.1055	5.0.0.1081
	Windows Vista 64-bit	5.0.1.1055	5.0.0.1081
CIR Winbond Consumer Infrared	Windows Vista	7.0.65.1006	7.0.65.1002
	Windows Vista 64-bit	7.0.65.1006	7.0.65.1002

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	8.15.10.1808	15.15.0.1808
	Windows 7 64-bit	8.15.10.1808	15.15.64.1808
Audio IDT	Windows 7	6.10.6212.0	6212 v169
	Windows 7 64-bit	6.10.6212.0	6212 v169
LAN Intel® PRO Network Connections	Windows 7	10.0.6.0	14.2
	Windows 7 64-bit	10.0.6.0	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.mspix>

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	WLK1.4 for Windows 7	WLK1.4 for Windows 7
Windows Vista Windows Vista 64-bit	WLK1.4 for Windows Vista SP1	WLK1.4 for Windows Vista SP1

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 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)	12/01/2009	1424	Erratum	<p>Fidelity plays a quiet (-60 dB FS) test tone during System Activity test which is filtered out of the noise level measurement.</p> <p>However, Fidelity is quite prone to glitches during system activity... the glitches leak into the measured noise, causing false failures.</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	Graphic HDMI System Test (Manual)	06/01/2010	1529	Erratum	<p>AMD/ATI HDMI codecs set the "HDMI Capable" bit of the Pin Capabilities register to 1, but do not respond to ELD verbs.</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	12/31/2009	1029	Erratum	<p>Assertion B576282C-5C66-4253-A275-257F5D49EFEF SSVID register of the Subsystem ID and Subsystem Vendor ID Capability table cannot have a value of 0h .</p> <p>Assertion 4BA8F23A-6BB1-48EE-88D8-ED1A3ECD34B9 SSVID register of the Subsystem ID and Subsystem Vendor ID Capability table must be read-only .</p> <p>Assertion 6B0F606E-DBB3-4B8C-8879-32B302412EB8 SSID register of the Subsystem ID and Subsystem Vendor ID Capability table must be read-only .</p> <p>Assertion 7A5587BC-5646-4DC4-9A5D-22F85AB2204E PCI Express ports and bridges must implement Subsystem ID and Subsystem Vendor ID Capability.</p>

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 Windows 7 64-bit	UAA Test - Win7 (System)	06/01/2010	1587	Erratum	<p>The Intel HD Audio DCN 35-A, HDMI/High Bit Rate, repurposes bits 0 and 1 of the Pin Widget Control verb to be the Encoded Packet Type (for example, "native" or "high bit rate.") See section 7.3.3.13 of the DCN for further information: http://www.intel.com/standards/hdaudio/</p> <p>The codec is expected to perform validation on EPT values set in this fashion. From the DCN:</p> <p>If the value written to this control does not correspond to a supported value as defined in the Pin Capabilities parameter, the control must either retain the previous value or take the value of 00, which will select the default native audio packet type.</p>
Windows 7 Windows 7 64-bit	UAA Test - Win7 (System)	06/01/2010	1665	Erratum	<p>The Intel HD Audio DCN 34-A2, HDMI/Multichannel, defines a mapping between digital converter channels and HDMI slots; see section 7.3.3.41 of the DCN. Much of the verbiage is generalized in DCN 36-A to apply equally to DisplayPort slots. The latest versions of all DCNs are posted on Intel's HD Audio standards page: http://www.intel.com/standards/hdaudio/</p> <p>The default mapping from digital converter channels to slots is expected to be 0 --> 0, 1 --> 1, 2 --> ***3***, 3 --> ***2***, 4 --> 4, 5 --> 5, 6 --> 6, and 7 --> 7.</p>

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 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	http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab
Special H/W that use to PASS the test	None	None