Motherboard Logo Program (MLP)

Intel® Desktop Board DG45FC

Premium Logo

12/23/2008

Purpose:

This report describes the DG45FC Motherboard Logo Program testing run conducted by Intel Corporation.

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Introduction

Terms and Definitions

Term	Definitions
WHQL	Windows* Hardware Qualification Lab
DTM	Driver Test Manager
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 DG45FC 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	Winqual Submission ID	Technologies NOT Logo'd (yet)
DG45FC	IDG4510H.86A.0085.2008.1029.1208	1301160	N/A - all technologies logo'd
Processor			
Speed	3.16 GHz		
Family	Intel® Core™2 Duo E8500		
Bus Speed	1333 MHz		
Motherboard			
Board AA #	E27730		
Board FAB #	305		
* 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, 2GB, 800		
Memory Type	DIMM		
Connector Type	DDR2, 240 Pin		
Power Management			
BIOS Default	S3		
Operating System Tested			
	Check Tested	Comments	
Windows Vista	☑	Vista Ultimate with Service Pack 1	
Windows Vista 64-bit	☑	Vista Ultimate with Service Pack 1	
Windows Vista Basic	☐	Vista Basic with Service Pack 1	
Windows Vista Basic 64-bit	☐	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 and 64bit

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	7.15.10.1511
	Windows Vista 64-bit	7.15.10.1511	7.15.10.1511
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
HECI 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

Driver Test Manager Used (DTM)

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 Vista Windows Vista 64-bit	DTM for Windows Vista SP1 @ WLK1.2	DTM for Windows Vista SP1 @ WLK1.2

Errata and Contingencies

Operating System	Failing Test	Expiry date	ID Number	Type	Error Description
Windows Vista Windows Vista 64-bit	1) HDAudio Class Driver Test (System) 2) Wave Test (System)	7/31/2010	607	Erratum	WaveTest: HDMI Audio devices not required to support 44100 Hz 16 bit stereo. This filter looks for the "44100 not supported" error on devices whose pins call themselves HDMI, and passes that test case.
Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	12/31/2009	385	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 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	12/31/2008	1029	Erratum	Assertion 4BA8F23A-6BB1-48EE-88D8-ED1A3ECD34B9 SSVID register of the Subsystem ID and Subsystem Vendor ID Capability table must be read-only . Assertion 6B0F606E-DBB3-4B8C-8879-32B302412EB8 SSID register of the Subsystem ID and Subsystem Vendor ID Capability table must be read-only . Assertion B576282C-5C66-4253-A275-257F5D49EFEF SSVID register of the Subsystem ID and Subsystem Vendor ID Capability table cannot have a value of 0h. These are valid failures but are not a requirement till January 2009. A filter is being created for the above assertions for this particular device. Added failure: Assertion 7A5587BC-5646-4DC4-9A5D-22F85AB2204E PCI Express ports and bridges must implement Subsystem ID and Subsystem Vendor ID Capability.
Windows Vista Windows Vista 64-bit	1) Fidelity Test (System, Manual) 2) HD Audio Class Fidelity Test (System, Manual)	8/31/2009	1196	Erratum	Fidelity uses too small of a buffer and wakes up too infrequently during the System Activity test. This causes errors like: Noise level during system activity on (left or right) channel 73.2016 dB: *** FAIL *** (requirement >= 80 dB)
Windows Vista Windows Vista 64-bit	1) Fidelity Test (System, Manual) 2) HD Audio Class Fidelity Test (System, Manual)	8/31/2009	1156	Erratum	Fidelity Test includes a "System Activity Test" that verifies audio fidelity is not compromised during system activity. It uses an activity generator called rws.exe (Real World Stress) which has a bug that causes it to hit an access violation. When this happens it exits with return code 0xC00000005, or -1073741819.
Windows Vista Windows Vista 64-bit	UAA Test-Vista(System)	7/31/2009	534	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 64-bit	UAA Test-Vista(System)	7/31/2009	603	Erratum	Intel has published a draft of changes to the HD Audio Specification. One change allows pins to advertise themselves as HDMI sources. This makes a "reserved flags must be 0" error in the UAA Test suspect. According to the official audio spec, bit 7 of the PinCaps register is reserved and should not be set. The draft adds HDMI support which uses this bit to indicate "this pin supports HDMI out." The errata will only apply to bit 7; there are other reserved PinCaps bits that should still be reserved.

Test Notes

Operating System	Test	Description
Vista	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
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, Enable Legacy Front Panel Audio 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
Vista Filter update	DTM WHQL test	http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab
Special H/W that use to PASS the test	DTM WHQL test	None