Motherboard Logo Program (MLP)

Intel® Desktop Board DP55KG

MLP Report

8/31/2009

Purpose:

This report describes the DP55KG 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 DP55KG 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)
DP55KG	KGIBX10J.86A.3191.2009.0804.1849	N/A - all technologies logo'd
Processor		
Speed	2.93 GHz	
Family	Intel® Core™ i7	
Bus Speed / DMI	2.5 GT/s	
Motherboard		
Board AA #	E47218	
Board FAB #	401	
* 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 Channels, 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
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**	9.1.1.1013	9.1.1.1015
	Windows Vista 64-bit	9.1.1.1013	9.1.1.1015
Audio Realtek	**Windows Vista**	6.0.1.5892	5892
	Windows Vista 64-bit	6.0.1.5892	5892
LAN Intel® PRO Network Connections	**Windows Vista**	10.7.31.0	14.3
	Windows Vista 64-bit	10.7.31.0	14.3
CIR Nuvoton Consumer Infrared	**Windows Vista**	1.8.2009.514	2.1.2009.619
	Windows Vista 64-bit	1.8.2009.514	2.1.2009.619

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**	9.1.1.1013	9.1.1.1015
	Windows 7 64-bit	9.1.1.1013	9.1.1.1015
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	14.3
	Windows 7 64-bit	11.0.41.0	14.3
CIR Nuvoton Consumer Infrared	**Windows 7**	2.1.2009.619	2.1.2009.619
	Windows 7 64-bit	2.1.2009.619	2.1.2009.619

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 Vista Windows Vista 64-bit	WLK1.4 for Windows Vista SP2	WLK1.4 for Windows Vista SP2
Windows 7 Windows 7 64-bit	WLK1.4 for Windows 7	WLK1.4 for Windows 7

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	12/31/2009	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 7 Windows 7 64-bit Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	6/1/2010	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 7 Windows 7 64-bit Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	12/31/2009	424	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 7 Windows 7 64-bit	1)Class Drive Fidelity Test - Win7 (System, Manual) 2)Fidelity Test - Win7 (System, Manual)	12/1/2009	966	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 7 Windows 7 64-bit Windows Vista Windows Vista 64-bit	1)Class Drive Fidelity Test - Win7 (System, Manual) 2)Fidelity Test - Win7 (System, Manual)	12/31/2009	1238	Erratum	Fidelity Test now includes a "Render Power Transition" test. This preview filter covers all errors in this new test of SYSFUND-0050.
Windows 7 Windows 7 64-bit Windows Vista Windows Vista 64-bit	1)Class Drive AC3 Test - Win7 (System) 2)HDAudio Class Driver Test (System)	6/1/2010	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.

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit Windows Vista Windows Vista 64-bit	1)UAA Test - Win7 (System) 2)UAA Test-Vista(System)	12/1/2009	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 Windows Vista Windows Vista 64-bit	1)Wave Test - Win7 (System) 2)Wave Test - Vista or Server08 (System)	6/1/2010	1281	Erratum	Run "Data Intersection Test\Capture Streaming\Check Supported Formats" out of WaveTest on a system containing audio devices that are "disabled" via the Sound Control panel. Expected results: should succeed. Actual results: fail with "Failed to find any endpoints for the current pin" and "Failed to decide if current data intersection test should be skipped"
Windows Vista Windows Vista 64-bit	Wave Test - Vista or Server08 (System)	6/1/2010	1297	Erratum	WaveTest can't find endpoint on Vista driver.
Windows 7 Windows 7 64-bit	WDDM CCD Test for Forced Projection	6/1/2010	1268	Erratum	The WDDM CCD Test for forced projection test fails due to not recognizing SDTV dongle as a forcible target.

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 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
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