



Motherboard Logo Program (MLP)

Intel® Desktop Board

DP45SG

MLP Report

7/15/2009

Purpose:

This report describes the DP45SG 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 DP45SG 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)
DP45SG	SGP4510H.86A.0116.2009.0505.1452	N/A - all technologies logo'd
Processor		
Speed	3.0GHz	
Family	Intel® Core™2 Extreme	
Bus Speed	1333 MHz	
Motherboard		
Board AA #	E27733	
Board FAB #	402	
* 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, 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 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
Audio IDT	Windows Vista	6.10.6033.2	6033 v1.24
	Windows Vista 64-bit	6.10.6033.2	6033 v1.24
LAN Intel® PRO Network Connections	Windows Vista	9.51.4.0	13.0
	Windows Vista 64-bit	9.51.4.0	13.0
CIR Winbound Consumer Infrared	Windows Vista	7.0.65.1002	7.0.65.1006
	Windows Vista 64-bit	7.0.65.1002	7.0.65.1006

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	6.1.7100.0	Inbox Driver
	Windows 7 64-bit	6.1.7100.0	Inbox Driver
Audio IDT	Windows 7	6.1.7100.0	Inbox Driver
	Windows 7 64-bit	6.1.7100.0	Inbox Driver
LAN Intel® PRO Network Connections	Windows 7	10.0.2.2	Inbox Driver
	Windows 7 64-bit	10.0.2.2	Inbox Driver

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 Vista Windows Vista 64-bit	WLK1.4 for Windows Vista SP1	WLK1.4 for Windows Vista SP1
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	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	PCI Hardware Compliance Test For Systems	12/31/2009	423	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	1012	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 7 Windows 7 64-bit	1)Class Drive Fidelity Test - Win7 (System, Manual) 2)Fidelity Test - Win7 (System, Manual)	12/1/2009	1013	Erratum	Fidelity measures left channel noise first, then right channel noise; during the switch from left channel to right channel, the measuring instrument produces a "click"; Fidelity doesn't wait long enough for the click to subside, and some of the "click" bleeds into the right-channel measurement. This creates a false failure.
Windows 7 Windows 7 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	1)AC3 Test (System) 2)Class Drive AC3 Test - Win7 (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.
Windows 7 Windows 7 64-bit	Signed Driver Check (Win7)(Manual)	6/1/2010	1248	Erratum	If a driver is found to be signed by Microsoft that is tested with the chklogo test, the message, ERROR: No Logo Level Attribute on file., is an invalid failure if followed by, This file has a 0 level Logo and followed by, Cannot match the device ID of the driver the device was test within an invidual assertion.
Windows 7 Windows 7 64-bit	UAA Test - Win7 (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.

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