



Motherboard Logo Program (MLP)

Intel® Desktop Board DQ670W

MLP Report

3/24/2011

Purpose:

This report describes the DQ670W 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 DQ670W FAB C 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)
DQ670W	SWQ6710H.86A.0037.2010.1222.1328	N/A - all technologies logo'd
Processor		
Speed	3.4GHz	
Family	Intel® Core i7-2600 D2	
Bus Speed	100 MHz	
Motherboard		
Board AA #	G12528	
Board FAB #	300	
* 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 32 and 64-bit	<input checked="" type="checkbox"/>	Windows 7 Ultimate
Windows Vista 32 and 64-bit	<input checked="" type="checkbox"/>	Windows Vista Ultimate 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	9.2.0.1016	9.2.0.1019
	Windows Vista 64-bit	9.2.0.1016	9.2.0.1019
On-board GFX Intel(R) HD Graphics Family	Windows Vista	8.15.10.2266	15.21.5.2266
	Windows Vista 64-bit	8.15.10.2266	15.21.5.64.2266
On-board Audio Realtek High Definition Audio	Windows Vista	6.0.1.6257	PG314
	Windows Vista 64-bit	6.0.1.6257	PG314
LAN Intel 82579LM Gigabit Network Connection	Windows Vista	11.8.78.0	N/A
	Windows Vista 64-bit	11.8.78.0	N/A
ME Intel Management Engine Interface	Windows Vista	7.0.0.1144	N/A
	Windows Vista 64-bit	7.0.0.1144	N/A
IRST	Windows Vista	10.0.0.1008	N/A
	Windows Vista 64-bit	10.0.0.1008	N/A

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	9.2.0.1016	9.2.0.1019
	Windows 7 64-bit	9.2.0.1016	9.2.0.1019
On-board GFX Intel(R) HD Graphics Family	Windows 7	8.15.10.2266	15.21.5.2266
	Windows 7 64-bit	8.15.10.2266	15.21.5.64.2266
Audio Realtek High Definition Audio	Windows 7	6.0.1.6257	PG314
	Windows 7 64-bit	6.0.1.6257	PG314
LAN Intel 82579LM Gigabit Network Connection	Windows 7	11.8.81.0	N/A
	Windows 7 64-bit	11.8.81.0	N/A
ME Intel Management Engine Interface	Windows 7	7.0.0.1144	N/A
	Windows 7 64-bit	7.0.0.1144	N/A
IRST	Windows 7	10.0.0.1008	N/A
	Windows 7 64-bit	10.0.0.1008	N/A

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	WLK1.5 for Windows 7	WLK1.5 for Windows 7
Windows Vista Windows Vista 64-bit	WLK1.5 for Windows Vista SP2	WLK1.5 for Windows Vista SP2

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows Vista Windows Vista-64bit windows 7 windows 7 -64bit	Vista: HDAudio Class Driver Fidelity Test - Vista (System, Manual) Win7: Class Drive Fidelity Test - Win7 (System, Manual)	07/31/2011	598	Erratum	Issue Description: The European Union requires the headphone output level to be ≤ 150 mVrms for headphone jacks. There's a note in WLP requirement AUDIO-0006 that states, in the presence of regional regulations, the output level requirement for headphones is dropped from ≥ 1000 mVrms to ≥ 120 mVrms. This provides freedom for manufacturers to meet both the EU ≤ 150 mVrms @ 32 Ohms and the WLP ≥ 120 mVrms @ 32 Ohms requirements. The Fidelity Test tests headphones at 300 Ohm load, though. Without knowledge of the output impedance at the jack, the test cannot extrapolate what the output level at 32 Ohms would have been from the output level at 300 Ohms. The test assumes that the output level at 32 Ohms will be *less* than the output level at 300 Ohms, though. So any measurement ≥ 120 mVrms at 300 Ohms "could be" a passing result, depending on the output impedance.
Windows Vista Windows Vista-64bit windows 7 windows 7 -64bit	Vista: HDAudio Class Driver Fidelity Test - Vista (System, Manual) Win7: Class Drive Fidelity Test - Win7 (System, Manual)	06/1/2011	1801	Erratum	Issue Description: There is a test bug which causes the measurement of system noise during Render Power Transition Test to be about 3 dB worse than it should be. This filter forgives errors up to 6 dB.
Windows Vista Windows Vista-64bit windows 7 windows 7 -64bit	Vista: HDAudio Class Driver Test - Vista or Server08 (System) Win7: Class Drive AC3 Test - Win7 (System)	06/30/2025	1256	Erratum	Issue Description: 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 Vista	PCI Hardware Compliance Test	06/01/2011	401	Erratum	Issue Description:

Windows Vista-64bit windows 7 windows 7 -64bit	For Systems				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-64bit windows 7 windows 7 -64bit	Vista: UAA Test - Vista or Server08 (System) Win7: UAA Test - Win7 (System)	06/01/2011	1300	Erratum	Issue Description: HD Audio pin configuration document calls out setting Port Connectivity to No Connection as the way to turn a pin off in a particular system. UAA Test incorrectly tests such pins.
Windows Vista Windows Vista-64bit windows 7 windows 7 -64bit	Vista: UAA Test - Vista or Server08 (System) Win7: UAA Test - Win7 (System)	07/01/2011	1466	Erratum	Issue Description: Preview Filter: UAA Test - Intel Low Power DCN says "EPSS implies KeepAlive, but only after July 1st 2011"
Windows Vista Windows Vista-64bit windows 7 windows 7 -64bit	Vista: UAA Test - Vista or Server08 (System) Win7: UAA Test - Win7 (System)	02/28/2011	1299	Erratum	Issue Description: Preview filter - Jack Detect Override on digital pin widgets Errata 1299 The HD Audio configuration default register (7.3.3.31 in the HD Audio specification) includes a "Jack Detect Override" flag that can be used to indicate that although a pin widget would normally be capable of jack detection, there is something about this particular system that causes this to be impossible. This was intended to be used, for example, for analog pin widgets that are connected to RCA jacks, which do not allow for impedance detection. Some digital pin widgets are using the Presence Detect pin sense response to indicate that a digital handshake has occurred - indeed, HDMI pins have entire DCNs built around this concept, and it applies equally well to S/PDIF pins. A digital converter that supports presence detection should be able to do so in any system, so the "Jack Detect Override" concept should not apply to digital pins.
Windows Vista	Vista: UAA Test - Vista or	06/01/2015	513	Erratum	Issue Description:

Windows Vista-64bit	Server08 (System) Win7:UAA Test - Win7 (System)				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 -64bit					

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 Trusted Platform Module: Enable Others: BIOS default setting
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