



Motherboard Logo Program (MLP)

Intel® Desktop Board

DQ87PG

MLP Report

2/21/2014

Purpose:

This report describes the DH87MC Motherboard Logo Program testing run conducted by Intel Corporation.

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Introduction

Terms and Definitions

Term	Definitions
WHQL	Windows* Hardware Qualification Lab
WHCK	Windows Hardware Certification Kit
MLP	Motherboard Logo Program. For further information see: http://msdn.microsoft.com/en-us/windows/hardware/gg463010.aspx
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 DQ87PG 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)
DQ87PG	PGQ8710H.86A.0139.2013.1014.1838	N/A - all technologies logo'd
Processor		
Speed	3.5GHz	
Family	Intel Core i7 4770K	
Bus Speed	100 MHz	
Motherboard		
Board AA #	G74154-401	
Board FAB #	400 (eg. 10x for fab A, 20x for fab B and etc)	
* 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, 1600MHz	
Memory Type	DIMM	
Connector Type	DDR3, 240 Pin	
Power Management		
BIOS Default	S3	
Operating System Tested		
	Check Tested	Comments
Windows 8.1 64-bit	<input checked="" type="checkbox"/>	Windows 8.1 Professional
Windows 8 64-bit	<input type="checkbox"/>	Windows 8 Professional
Windows 7 and 64-bit	<input type="checkbox"/>	Windows 7 Ultimate Service Pack 1
Windows Vista and 64-bit	<input type="checkbox"/>	Vista Ultimate with Service Pack 2
Windows Vista	<input type="checkbox"/>	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.

Basic and 64-bit		
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Onboard Integrated Devices and Driver for Windows 8.1 64-bit

Technology	OS	Version	Package version
Chipset Update Utility Intel® Chipset Software Utility	Windows 8.1 64-bit	V9.4.0.1027	INF_allIOS_9.4.0.1027_PV
Graphics Intel® HD Graphics 4600	Windows 8.1 64-bit	V10.18.10.3308	GFX_WinBlue7_64_10.18.10.3308_PV
Audio Realtek	Windows 8.1 64-bit	V6.0.1.7071	7071_PG377_Win8.1_Win8_XP_WHQ L
LAN Intel® Ethernet Connention I217-V	Windows 8.1 64-bit	V12.9.16.0	LAN_WinBlue_12.9.16.0_(18.5)PV
MEI Intel® Management Engine Interface	Windows 8.1 64-bit	V9.5.15.1730	ME_WinBlue_9.5.15.1730_5M_PV
USB 3.0 Intel® Rapid Storage technology	Windows 8.1 64-bit	V2.0.0.100	IRST_WinBlue_12.8.0.1016_PV

Windows Hardware Certification Kit Used (WHCK)

Microsoft website: <http://msdn.microsoft.com/library/windows/hardware/hh833788>

Please check regularly for test kit updates from Microsoft. Please ensure latest filters updated prior to WHQL run.

Operating Systems	Notes	WHQL Testkit
Windows 8.1 64-bit	WHCK for Windows 8.1	WHCK for Windows 8.1

Errata and Contingencie

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 8 64-bit	Class Driver AC3 Test (System)	6/30/2025	84	Errata	The HD Audio class driver hdaudio.sys exposes AC-3 data ranges on S/PDIF Kernel Streaming pins incorrectly. 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. However, the HD Audio class driver sometimes incorrectly exposes a MaximumBitDepth of 24 or even 32.
Windows 8 64-bit	USB Exposed Port System Test	9/30/2013	1435	Errata	The USB Exposed Port Controller Test is known to fail without logs in certain configurations using the xHCI Controller on this system. Please right-click the failed task to review the Error information. If the task failed with ExitCode c0000374, a manual erratum might apply. Before using the manual erratum, it is necessary to review the PortMappingFinder.wtl log for the Port Mapping Tool task. If the log contains any 'No companion port for SuperSpeed port' errors, please contact the xHCI Controller vendor for a firmware update and do not attempt to use the manual erratum. If there are no errors, but there is a 'Couldn't get connector properties for hub' message, please use Manual Errata 1435 in a Readme form. The erratum will only be honored if this AutoTriage filter applies to the Run Test task.
Windows 8 64-bit	UAA Test (System)	7/2/2013	1039	Errata	Input Payload should be 0x1d, but is instead 0x0. This is being requested as a change to the HDAudio spec
Windows 8 64-bit	UAA Test (System)	7/1/2013	244	Errata	Section 3.3.14 of the Intel High Definition Audio specification mandates a reset value of 0 for the Interrupt Control register on HD Audio controllers.
Windows 8 64-bit	UAA Test (System)	7/1/2014	354	Errata	The FIFO size for Input and Output Stream Descriptors should be read only
Windows 8 64-bit	USB3 Termination	10/1/2013	1407	Errata	The USB3 Termination test may fail to find the USB 3.0 (Super Speed) device if the system's USB ports are not numbered contiguously. While nearly all systems have contiguous USB port numbers, it is not technically required. If this filter allows the FindUsb3Device task to pass, then HCK Errata ID 1407 can be used in a Readme form to overturn the remaining cancelled tasks.
Windows 8 64-bit	xHCI Debug Capability Compliance (Logo)	7/31/2014	316	Contingency	The XHCI Debug Capability Compliance Test will fail XHCI controllers that do not provide the debug capability registers.

Test Notes

Operating System	Test	Description
Windows 8	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
Windows 8	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 AHCI 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 8 filter update	WHCK WHQL test	https://sysdev.microsoft.com/member/SubmissionWizard/LegalExemptions/HCKFilterUpdates.cab
Special H/W that use to PASS the test	None	None