Previously Logo'd Motherboard Program (PLMP)

Intel® Desktop Board DG41KR

PLMP Report

3/30/2011

Purpose:

This report describes the DG41KR Previously Logo'd Motherboard Program testing run conducted by Intel Corporation.

Contents

Introduction

Terms and Definitions

Term	Definitions
WHQL	Windows* Hardware Qualification Lab
WLK	Windows Logo Kits
PLMP	Previously Logo'd 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 DG41KR Final Configuration Report: Completion of PLMP

Data in this section reflects system configuration at time of PLMP submission.

Board Information

Product Code[1]	BIOS String/Model	Technologies NOT Logo'd (yet)
DG41KR	KRG4110H.86A.0032.2010.0628.1643	N/A - all technologies logo'd
Processor		
Speed	3.0GHz	
Family	Intel® Core™2 Quad Q9650	
Bus Speed	1333 MHz	
Motherboard		
Board AA #	E62839	
Board FAB #	304	
* 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 Windows 7 32-bit and 64-bit

Technology	OS	Version	Package version
Chipset Update Utility Intel® Chipset Software Utility	**Windows 7**	9.1.2.1007	9.1.2.1007
	Windows 7 64-bit	9.1.2.1007	9.1.2.1007
Graphics Intel® Graphics Media Accelerator	**Windows 7**	8.15.10.2189	15.17.10.2189
	Windows 7 64-bit	8.15.10.2189	15.17.10.64.2189
Audio Realtek	**Windows 7**	6.0.1.6106	6106
	Windows 7 64-bit	6.0.1.6106	6106
LAN Realtek	**Windows 7**	7.23.623.2010	7.023
	Windows 7 64-bit	7.23.623.2010	7.023

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

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	2/28/2011	1299	Erratum	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 occured - 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 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	1/31/2011	1300	Erratum	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 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	7/1/2011	1466	Erratum	Preview Filter: UAA Test - Intel Low Power DCN says "EPSS implies KeepAlive, but only after July 1st 2011"
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	2/28/2011	1288	Erratum	Preview Filter - Encoded Packet Type: The Intel HD Audio DCN 35-A, HDMI/High Bit Rate, repurposes bits 0 and 1 of the Pin Widget Control verb to be the Encoded Packet Type (for example, "native" or "high bit rate.) See section 7.3.3.13 of the DCN for further information: The codec is expected to perform validation on EPT values set in this fashion. From the DCN: If the value written to this control does not correspond to a supported value as defined in the Pin Capabilities parameter, the control must either retain the previous value or take the value of 00, which will select the default native audio packet type.
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	03/31/2011	3114	Contingency	Various Intel HDMI HD Audio codecs do not correctly implement Encoded Packet Type. The Intel HD Audio DCN 35-A, HDMI/High Bit Rate, repurposes bits 0 and 1 of the Pin Widget Control verb to be the Encoded Packet Type (for example, "native" or "high bit rate.) See section 7.3.3.13 of the DCN for further information: http://www.intel.com/standards/hdaudio/ The codec is expected to perform validation on EPT values set in this fashion. From the DCN: If the value written to this control does not correspond to a supported value as defined in the Pin Capabilities parameter, the control must either retain the previous value or take the value of 00, which will select the default native audio packet type.
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	03/31/2011	3115	Contingency	Various Intel HDMI codecs do not correctly default to the specified ASP channel mapping, which switches channels 2 and 3. The Intel HD Audio DCN 34-A2, HDMI/Multichannel, defines a mapping between digital converter channels and HDMI slots; see section 7.3.3.41 of the DCN. Much of the verbiage is generalized in DCN 36-A to apply equally to DisplayPort slots. The latest versions of all DCNs are posted on Intel's HD Audio standards page: http://www.intel.com/standards/hdaudio/ The default mapping from digital converter channels to slots is expected to be 0 --> 0, 1 --> 1, 2 --> ***3***, 3 --> ***2***, 4 --> 4, 5 --> 5, 6 --> 6, and 7 --> 7.

Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	6/1/2015	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	Class Drive AC3 Test - Win7 (System)	6/30/2025	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	Graphis HDMI System Test (Manual)	6/1/2011	1945	Erratum	Failure is due to the ELDv2 PortId not matching the graphics adapter LUID. This cannot be enforced currently. In the future, video drivers will be required to program the ELDv2 PortId with either, The AdapterLUID for the corresponding display adapter -OR- 0
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	6/1/2011	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.

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