



Previously Logo'd Motherboard Program (PLMP)

Intel® Desktop Board

DG43GT

PLMP Report

7/23/2010

Purpose:

This report describes the DG43GT Previously Logo'd Motherboard 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
PLMP	Previously Logo'd Motherboard 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 DG43GT 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)
DG43GT	GTG4310H.86A.0031.2010.0406.1752	N/A - all technologies logo'd
Processor		
Speed	3.00 GHz	
Family	Intel® Core™2 Quad	
Bus Speed	333.8MHz	
Motherboard		
Board AA #	E62768	
Board FAB #	301	
* 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, DDR2, 800MHz	
Memory Type	DIMM	
Connector Type	DDR2,240pin	
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 type="checkbox"/>	Vista Ultimate with Service Pack 2
Windows Vista Basic and 64-bit	<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.

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	6.1.7600.16385	9.1.1.1025
	Windows 7 64-bit	6.1.7600.16385	9.1.1.1025
Graphics Intel® G45/G43 Express Chipset	Windows 7	8.15.10.2119	15.17.4.2119
	Windows 7 64-bit	8.15.10.2119	15.17.4.64.2119
Audio Realtek	Windows 7	6.0.1.5964	6.0.1.5964
	Windows 7 64-bit	6.0.1.5964	6.0.1.5964
LAN Intel® Gigabite Network Connections	Windows 7	10.1.6.0	10.1.6.0
	Windows 7 64-bit	10.1.6.0	10.1.6.0
MEI Intel® Management Engine Interface	Windows 7	5.2.0.1008	5.2.0.1002
	Windows 7 64-bit	5.2.0.1008	5.2.0.1002

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 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	PCI Hardware Compliance Test For Systems	12/31/2010	753	Erratum	Errata 753 Assertion 3EF27DC9-463F-4712-857B-0321832E7383 Bit range 23:0 (Organizationally Unique Identifier)in the Serial Number 1st DW register (offset 4h) in the Device Serial Number Capability table cannot have a value of 0h as it must contain a value assigned by IEEE.
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2010	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	PCI Hardware Compliance Test For Systems	12/1/2010	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	1) GlitchFree WMV HD 720p video playback quality test	6/1/2010	1245	Erratum	SYSFUND-0062 Case 2 and 3 were added to enhance the verification of the video playback test. These cases will be in preview state until this errata expires. If cases 2 or 3 of the GFHD test fail for any reason while this errata is active, then the failures should be filtered out. Cases 0 and 1 do not apply to this errata and remain a requirement
Windows 7 Windows 7 64-bit	1) Graphis HDMI System Test (Manual)	12/31/2010	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	1)Class Driver 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	1)UAA Test - Win7 (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	1)UAA Test - Win7 (System)	6/1/2010	1348	Erratum	Errata 1348 Preview Errata - ASP Channel Mapping 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	1)UAA Test - Win7 (System)	9/30/2010	1198	Erratum	"High Definition Audio Device" devices need to comply with the Intel High Definition Audio spec, as well as revisions (known as Document Change Notifications, or DCNs.) One such DCN - in particular, DCN 34-A2 - clarified the behavior of "pin sense" verbs as applied to digital pins (S/PDIF, HDMI, and DisplayPort.) Prior to the DCN, the language of the spec was unclear and mistakenly implied that the "Impedance" bits could be used by digital pins. The DCN clarified this to say that Impedance bits are reserved for digital pins.
Windows 7 Windows 7 64-bit	1)UAA Test - Win7 (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	1)UAA Test - Win7 (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	1)UAA Test - Win7 (System)	8/9/2010	1299	Erratum	The original HD Audio 1.0 specification contains a notion of "presence detect", using electrical impedance which was intended to apply only to analog pins. However, the language of the specification was such that it could be read to apply to digital pins as well - in particular, to S/PDIF pins. A DCN was released to extend the notion of presence detect to digital pins - in particular, to HDMI pins. This repurposed one of the impedance bits, which were thought to be unused in digital pins, to mean "ELD valid." The correct way for a S/PDIF pin to respond to a Pin Sense verb is to set the highest bit (Presence Detect) to 1 or 0 corresponding to whether a S/PDIF connection is active; set the ELD Valid bit to 0 (since there is no such thing as ELD for S/PDIF); and set the rest of the bits, which are reserved for digital pins, to 0. This errata filter is a preview filter to allow hardware manufacturers time to update any hardware that used the impedance bits on digital pins.

Windows 7 Windows 7 64-bit	1)UAA Test - Win7 (System)	6/1/2010	1288	Erratum	Error: attempted to set unsupported EPT 0b10 (Reserved); previous value was 0b01 (Reserved); response was 0b10 (Reserved) For unsupported EPTs, the pin must either retain the previous value or take the value of 0b00 (Native). See HD Audio specification section 7.3.3.13.
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Test Notes

Operating System	Test	Description
Windows 7	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
Windows 7	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 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