

**Motherboard Logo Program (MLP)** 

# Intel<sup>®</sup> Desktop Board DG41AN

## **MLP Report**

11/29/2010

#### Purpose:

This report describes the DG41AN Motherboard Logo Program testing run conducted by Intel Corporation.

THIS TEST REPORT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE.

Information in this document is provided in connection with Intel products. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document or by the sale of Intel products. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications.

Intel retains the right to make changes to its test specifications at any time, without notice.

The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty.

Intel® Core™ i7 and Intel® are trademarks of Intel Corporation in the U.S. and other countries.

\*Other names and brands may be claimed as the property of others

Copyright © 2009, Intel Corporation. All rights reserved.

## **Contents**

Introduction	4
Terms and Definitions	
Desktop Board Configuration	5
Desktop Board DG41AN Final Configuration Report: Completion of MLP	
Board Information	
Product Code	5
Processor	
Motherboard	5
System Memory	5
Power Management	
Operating System Tested	5
Onboard Integrated Devices and Driver for Vista 32-bit and 64-bit	6
Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit	
Windows Logo Kits Used (WLK)	6
Errata and Contingencies	7
Test Notes	8

## 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.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: <a href="http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;g=s">http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;g=s</a>

## **Desktop Board Configuration**

#### **Desktop Board DG41AN Final Configuration Report: Completion of MLP**

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

#### **Board Information**

Product Code <sup>1</sup>	BIOS String/Model	Technologies NOT Logo'd (yet)		
DG41AN	ANG4110H.86A.0011.2010.0512.1559	N/A - all technologies logo'd		
Processor				
Speed	2.83GHz			
Family	Intel® Core™2 Quad			
Bus Speed	1333 MHz			
Motherboard				
Board AA #	E92991			
Board FAB #	400			
	* 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	Operating System Tested			
	Check Tested	Comments		
Windows 7 and 64-bit		Windows 7 Ultimate		
Windows 7 and 32-bit	Windows 7 Ultimate			
Windows Vista and 64-bit	✓ Vista Ultimate with Service Pack 2			
Windows Vista and 32-bit	Vista Ultimate with Service Pack 2			

<sup>&</sup>lt;sup>1</sup> 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	Windows Vista	9.1.1.1016	9.1.1.1025
Intel <sup>®</sup> Chipset Software Utility	Windows Vista 64-bit	9.1.1.1016	9.1.1.1025
Graphics	Windows Vista	8.15.10.2125	15.17.5.2125
Intel <sup>®</sup> Graphics Media Accelerator	Windows Vista 64-bit	8.15.10.2125	15.17.5.64.2125
Audio	Windows Vista	6.0.1.6101	PG299
Realtek ALC888	Windows Vista 64-bit	6.0.1.6101	PG299
LAN Broadcom 57788	Windows Vista	6.236.0322.2010	N/A
	Windows Vista 64-bit	6.236.0322.2010	N/A

#### Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit

Technology	os	Version	Package version
Chipset Update Utility	Windows 7	9.1.1.1024	9.1.1.1024
Intel <sup>®</sup> Chipset Software Utility	Windows 7 64-bit	9.1.1.1024	9.1.1.1024
Graphics	Windows 7	8.15.10.2125	15.17.5.2125
Intel <sup>®</sup> Graphics Media Accelerator	Windows 7 64-bit	8.15.10.2125	15.17.5.64.2125
Audio	Windows 7	6.0.1.6101	PG299
Realtek ALC888	Windows 7 64-bit	6.0.1.6101	PG299
LAN Broadcom 57788	Windows 7	7.018.0322.2010	N/A
	Windows 7 64-bit	7.018.0322.2010	N/A

#### Windows Logo Kits Used (WLK)

Microsoft website: <a href="http://www.microsoft.com/whdc/DevTools/WDK/DTM.mspx">http://www.microsoft.com/whdc/DevTools/WDK/DTM.mspx</a>

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		Expiry			
Operating System	Failing Test	Date	ID Number	Туре	Error Description
Windows Vista Windows Vista 64-bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2010	1241	Erratum	PCI Compliance - Data Link Layer Link Active Reporting Capable bit is set but Data Link Layer Link Active is not. Assertion 0E36472A-0EDB- 4685-A67D-7AF1FFBFA81B
Windows Vista Windows Vista 64-bit Windows 7	UAA Test (System)	7/1/2011	1466	Erratum	Issue Description: Preview Filter: UAA Test - Intel Low Power DCN says "EPSS implies KeepAlive, but only after July 1st 2011" Resolution Description:
Windows 7 64-bit					This is an acceptable failure.
Windows Vista Windows Vista 64-bit Windows 7 Windows 7 64-bit	UAA Test (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 Vista Windows Vista 64-bit Windows 7 Windows 7 64-bit	Fidelity Test	1/31/2011	1801	Erratum	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 64-bit Windows 7 Windows 7 64-bit	Win7:Class Drive Fidelity Test - Win7 Vista: HDAudio Class Driver Fidelity Test - Vista	7/31/2011	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 32 Ohms will be *less* than the output level at 330 Ohms. The test assumes that 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.  Resolution Description: This errata covers headphone output level failures where the output level >= 120 mVrms (-45.41 dBV.) 120 mV is -18.42 dBV. Any headphone output level at 32 Ohms that is less than -18.42 dBV is a legitimate failure, even if it is targeted at EU compliance. Any headphone output level greater than 1 Vrms (0.707 Vrms for mobile systems) is a legitimate pass, regardless of EU compliance.
Windows Vista Windows Vista 64-bit Windows 7 Windows 7 64-bit	Win7: Class Drive Fidelity Test - Win7 Vista: HDAudio Class Driver Fidelity Test - Vista	1/31/2011	1801	Erratum	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.

#### **Test Notes**

Operating System	Test	Description
Windows 7 and Vista	BIOS download	Internal: <a href="http://bios.intel.com/downloads/">http://bios.intel.com/downloads/</a> External: <a href="http://www.intel.com/">http://www.intel.com/</a> 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 Chipset Configuration: Enable HPET ACPI Suspend State: Set to <s3 state=""> Boot Device Priority: set <hard disk="" driver=""> to first</hard></s3>
Windows 7 and Vista filter update	WLK WHQL test	http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filerupdates.cab
Special H/W that use to PASS the test	None	None