



Previously Logo'd Motherboard Program (PLMP)

# Intel® Desktop Board

## DG41TY

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# PLMP Report

3/30/2011

**Purpose:**

This report describes the DG41TY Previously Logo'd Motherboard Program testing run conducted by Intel Corporation.

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# Introduction

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## 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: <a href="http://www.microsoft.com/whdc/hwtest/default.msp">http://www.microsoft.com/whdc/hwtest/default.msp</a>
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;q=s">http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;q=s</a>

# Desktop Board Configuration

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## Desktop Board DG41TY Final Configuration Report: Completion of PLMP

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

### Board Information

Product Code <sup>1</sup>	BIOS String/Model	Technologies NOT Logo'd (yet)
DG41TY	TYG4110H.86A.0038.2010.0301.0950	N/A - all technologies logo'd
<b>Processor</b>		
Speed	2.83GHz	
Family	Intel® Core™2 Quad Q9550	
Bus Speed	1333 MHz	
<b>Motherboard</b>		
Board AA #	E47335	
Board FAB #	202	
* 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.		
<b>System Memory</b>		
Speed	Dual Channels, DDR2, 800MHz	
Memory Type	DIMM	
Connector Type	DDR2, 240 Pin	
<b>Power Management</b>		
BIOS Default	S3	
<b>Operating System Tested</b>		
	<b>Check Tested</b>	<b>Comments</b>
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

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<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 Windows 7 32-bit and 64-bit

Technology	OS	Version	Package version
<b>Chipset Update Utility</b> Intel® Chipset Software Utility	Windows 7	9.1.1.1016	9.1.1.1016
	Windows 7 64-bit	9.1.1.1016	9.1.1.1016
<b>Graphics</b> Intel® Graphics Media Accelerator	Windows 7	8.15.10.2104	15.17.2.2104
	Windows 7 64-bit	8.15.10.2104	15.17.2.64.2104
<b>Audio</b> Realtek	Windows 7	6.0.1.5964	5964
	Windows 7 64-bit	6.0.1.5964	5964
<b>LAN</b> Realtek	Windows 7	7.17.304.2010	7.017
	Windows 7 64-bit	7.17.304.2010	7.017

## 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	<a href="#">WLK1.5 for Windows 7</a>	<a href="#">WLK1.5 for Windows 7</a>

## 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	12/1/2010	2051	Erratum	PCIHCT - Bit range 11:10 (ASPM Support)in the Link Capabilities register (offset Ch) in the PCI Express Capability table is 0h. It cannot be in the set of values {0x0, 0x2}. (Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32)
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 Portld not matching the graphics adapter LUID. This cannot be enforced currently. In the future, video drivers will be required to program the ELDv2 Portld 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.
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/31/2010	753	Erratum	PCI Compliance: 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	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 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 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	8/9/2010	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	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"

## 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 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	<a href="http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab">http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab</a>
Special H/W that use to PASS the test	None	None