



Motherboard Logo Program (MLP)

**Intel® Desktop Board**

**DX580G**

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**MLP Report**

4/20/2011

**Purpose:**

This report describes the DX580G Motherboard Logo 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
MLP	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 DX580G 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)
DX580G	SOX5820J.86A.0765.2011.0228.1549	N/A - all technologies logo'd
<b>Processor</b>		
Speed	3.47GHz	
Family	Intel® Core™ i7 CPU x990	
Bus Speed	1333 MHz	
<b>Motherboard</b>		
Board AA #	AA G10926-203	
Board FAB #	B	
<i>* 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.</i>		
<b>System Memory</b>		
Speed	Dual Channel, DDR3, 1333MHz	
Memory Type	DIMM	
Connector Type	DDR3, 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 checked="" 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	6	Version	Package version
<b>Chipset Update Utility</b> Intel® Chipset Software Utility	Windows 7	9.2.0.1025	INF_allIOS_9.2.0.1025
	Windows 7 64-bit	9.2.0.1025	INF_allIOS_9.2.0.1025
<b>Audio</b> Realtek High Definition Audio	Windows 7	6.0.1.6299	AUD_Vista_Win7_6.0.1.6299_PV
	Windows 7 64-bit	6.0.1.6299	AUD_Vista_Win7_6.0.1.6299_PV
<b>LAN</b> Intel® 82567LF-2 Gigabit Network Connection	Windows 7	10.1.9.0	PROWin32_v16.0
	Windows 7 64-bit	10.1.9.0	PROWin64_v16.0
<b>CIR</b> Nuvoton W836x7HG CIR Device Driver	Windows 7	2.2.2010.714	CIR_Win7_2.2.2010.0714_PV
	Windows 7 64-bit	2.2.2010.714	CIR_Win7_2.2.2010.0714_PV

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

Technology	6	Version	Package version
<b>Chipset Update Utility</b> Intel® Chipset Software Utility	Vista	9.2.0.1025	INF_allIOS_9.2.0.1025
	Vista 64-bit	9.2.0.1025	INF_allIOS_9.2.0.1025
<b>Audio</b> Realtek High Definition Audio	Vista	6.0.1.6299	AUD_Vista_Win7_6.0.1.6299_PV
	Vista 64-bit	6.0.1.6299	AUD_Vista_Win7_6.0.1.6299_PV
<b>LAN</b> Intel® 82567LF-2 Gigabit Network Connection	Vista	10.1.9.0	PROWin32_v16.0
	Vista 64-bit	10.1.9.0	PROWin64_v16.0
<b>CIR</b> Nuvoton W836x7HG CIR Device Driver	Vista	1.8.2009.514	CIR_Vista_1.8.2009.514_PV
	Vista 64-bit	1.8.2009.514	CIR_Vista_1.8.2009.514_PV

## Windows Logo Kits Used (WLK)

Microsoft website: <http://www.microsoft.com/whdc/DevTools/WDK/DTM.msp>

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="#">WLK1.6 for Windows 7</a>	<a href="#">WLK1.6 for Windows 7</a>
Windows Vista Windows Vista 64-bit	<a href="#">WLK1.6 for Windows Vista</a>	<a href="#">WLK1.6 for Windows Vista</a>

## Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit  Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	6/1/2011	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  Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	12/31/2011	423	Erratum	Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32 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}.
Windows 7 Windows 7 64-bit  Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	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 Windows 7 64-bit  Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	923	Erratum	Assertion FAE18121-9177-4FB2-A081-0D04C285EFF2 Bit range 15:0 (Extended Capability ID)in the Enhanced Capability Header register (offset 0h) in the Unrecognized Enhanced Capability ID 13 table is Dh. It must be in the range [0x0 - 0xB] as all other Capability IDs are reserved.
Windows 7 Windows 7 64-bit  Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	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.

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit  Windows Vista Windows Vista 64-bit	Class Driver Fidelity Test - Win7 (System, Manual)	7/31/2012	598	Erratum	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 300 Ohms. The test assumes that the output level at 32 Ohms will be *less* than 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.
Windows 7 Windows 7 64-bit	Class Driver KS TopologyTest - Win7 (System)	6/1/2015	1709	Erratum	Run Class Driver KS Topology Test on an HDMI audio device that does not implement the Intel HD Audio HDMI DCNs.
Windows 7 Windows 7 64-bit  Windows Vista Windows Vista 64-bit	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  Windows Vista Windows Vista 64-bit	USB Host Controller Compliance (Automated)	6/1/2012	1787	Erratum	Errata 1787 This Preview Test is being filtered until the expiration date of this Errata. After the expiration date of this filter these failures must be fixed to have a passing submission. Microsoft strongly recommends that these errors be investigated prior to this test or job being required for submission. XHCI spec compliance test is in preview
Windows Vista Windows Vista 64-bit	HDAudio Class Driver Test - Vista or Server08 (System)	6/1/2011	142	Erratum	Errata 142 HDMI is required to support 44.1 kHz on Windows 7 The Windows Vista HD Audio class driver does not support 44.1 kHz sample rates. There is an errata to cover this violation of AUDIO-0023. It was mistakenly applied to third-party drivers. As of Windows 7, the Windows Vista HD Audio class driver supports 44.1 kHz sample rates on hardware that advertises support for it. AUDIO-0023 is applicable. This is a filter to allow vendors to ship with systems that violated AUDIO-0023 but were incorrectly filtered by the Vista filter. Hardware that does not support 44.1 needs to be updated to support 44.1, and advertise that support in a way that the Microsoft HD Audio class driver can pick up on. Third-party drivers need to relay this support to the OS correctly.



## 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 CIR 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