



Motherboard Logo Program (MLP)

Intel® Desktop Board

DZ68DB

MLP Report

4/15/2011

Purpose:

This report describes the DZ68DB 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 estoppel 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.....	4
Desktop Board Configuration	5
Desktop Board DZ68DB Final Configuration Report: Completion of MLP.....	5
Board Information.....	5
Product Code.....	5
Processor	5
Motherboard	5
System Memory.....	5
Power Management.....	5
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.....	7
Windows Logo Kits Used (WLK)	7
Errata and Contingencies	8
Test Notes.....	10

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.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 DZ68DB Final Configuration Report: Completion of MLP

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

Board Information

Product Code ¹	BIOS String/Model	Technologies NOT Logo'd (yet)
DZ68DB	DBZ6810H.86A.0011.2011.0401.1616	N/A - all technologies logo'd
Processor		
Speed	3.3GHz	
Family	Intel Core i5 CPU 2500K	
Bus Speed	100 MHz	
Motherboard		
Board AA #	G27985	
Board FAB #	100 (eg. 10x for fab A, 20x for fab B and etc)	
<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>		
System Memory		
Speed	Dual Channel, 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	<input checked="" type="checkbox"/>	Windows 7 Ultimate with Service Pack 1
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

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 Vista 32-bit and 64-bit

Technology	OS	Version	Package version
Chipset Update Utility Intel® Chipset Software Utility	Windows Vista	V9.2.0.1021	INF_allIOS_9.2.0.1021_PV
	Windows Vista 64-bit	V9.2.0.1021	INF_allIOS_9.2.0.1021_PV
Graphics Intel® HD Graphics Family	Windows Vista	V8.15.10.2321	GFX_Vista32_Win7_32_8.15.10.2321_PV
	Windows Vista 64-bit	V8.15.10.2321	GFX_Vista64_Win7_64_8.15.10.2321_PV
Audio Realtek	Windows Vista	V6.0.1.6316	AUD_Vista_Win7_6.0.1.6316_PV
	Windows Vista 64-bit	V6.0.1.6316	AUD_Vista_Win7_6.0.1.6316_PV
LAN Intel® 82579V Gigabit	Windows Vista	V11.10.84.0	LAN_allIOS_11.10.84.0_PV
	Windows Vista 64-bit	V11.10.84.0	LAN_allIOS_11.10.84.0_PV
MEI Intel® Management Engine Interface	Windows Vista	V7.0.0.1144	MEI_allIOS_7.1.10.1065_PV
	Windows Vista 64-bit	V7.0.0.1144	MEI_allIOS_7.1.10.1065_PV
USB3.0 Renesas	Windows Vista	V2.0.34.0	USB3_allIOS_2.0.34.0_PV
	Windows Vista 64-bit	V2.0.34.0	USB3_allIOS_2.0.34.0_PV

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	V9.2.0.1021	INF_allIOS_9.2.0.1021_PV
	Windows 7 64-bit	V9.2.0.1021	INF_allIOS_9.2.0.1021_PV
Graphics Intel® HD Graphics Family	Windows 7	V8.15.10.2321	GFX_Vista32_Win7_32_8.15.10.2321_PV
	Windows 7 64-bit	V8.15.10.2321	GFX_Vista64_Win7_64_8.15.10.2321_PV
Audio Realtek	Windows 7	V6.0.1.6316	AUD_Vista_Win7_6.0.1.6316_PV
	Windows 7 64-bit	V6.0.1.6316	AUD_Vista_Win7_6.0.1.6316_PV
LAN Intel® 82579V Gigabit	Windows 7	V11.10.84.0	LAN_allIOS_11.10.84.0_PV
	Windows 7 64-bit	V11.10.84.0	LAN_allIOS_11.10.84.0_PV
MEI Intel® Management Engine Interface	Windows 7	V7.0.0.1144	MEI_allIOS_7.1.10.1065_PV
	Windows 7 64-bit	V7.0.0.1144	MEI_allIOS_7.1.10.1065_PV
USB3.0 Renesas	Windows 7	V2.0.34.0	USB3_allIOS_2.0.34.0_PV
	Windows 7 64-bit	V2.0.34.0	USB3_allIOS_2.0.34.0_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	WLK1.6 for Windows 7 SP1	WLK1.6 for Windows 7 SP1
Windows Vista Windows Vista 64-bit	WLK1.6 for Windows Vista SP2	WLK1.6 for Windows Vista SP2

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Type	Error Description
Windows 7 Windows 7 64-bit	Class Driver Fidelity Test - Win7 (System, Manual)	6/1/2011	1012	Erratum	Fidelity uses too small of a buffer and wakes up too infrequently during the System Activity test. This causes errors like: Noise level during system activity on (left or right) channel 73.2016 dB: *** FAIL *** (requirement >= 80 dB)
Windows 7 Windows 7 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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	1) HDAudio Class Driver Test - Vista or Server08 (System) 2) 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 Vista Windows Vista 64bit	HDAudio Class Driver Test - Vista or Server08 (System)	6/1/202	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.
Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	6/1/2011	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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	6/1/2011	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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/31/2011	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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/01/2012	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 Vista Windows Vista 64bit Windows 7 Windows 7 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	UAA Test - Win7 (System)	6/1/2012	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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit	1)UAA Test - Vista or Server08 (System) 2) 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 Vista Windows Vista 64bit Windows 7 Windows 7 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 7 Windows 7 64-bit	UAA Test - Win7 (System)	12/31/2011	1666	Erratum	graphics-hdmi-test-intel-two-of-three

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 (Except CIR) Drive Configuration: Set to AHCI Chipset Configuration: Enable HPET ACPI Suspend State: Set to <S3 State> Boot Device Priority: set <Hard Disk Driver> to first Note: Enhanced Consumer IR (CIR) component is not supported under Windows7.
Windows 7 and Vista filter update	WLK WHQL test	http://winqval.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab
Special H/W that use to PASS the test	None	None