

Motherboard Logo Program (MLP)

Intel® Desktop Board DZ68BC

MLP Report

11/9/2011

Purpose:

This report describes the DZ68BC 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.

 $\ensuremath{^{\star}}\xspace\ensuremath{\text{O}}\xspace the range and brands may be claimed as the property of others$

Copyright ° 2009, Intel Corporation. All rights reserved.

Contents

Introduction	4
Terms and Definitions	
Desktop Board Configuration	5
Desktop Board DZ68BC 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	
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)	8
Errata and Contingencies	8
Test Notes	

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: http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&cid=105&g=s

Desktop Board Configuration

Desktop Board DZ68BC 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)		
DZ68BC	BCZ6810H.86A.0020.2011.0825.1110	N/A - all technologies logo'd		
Processor				
Speed	3.3GHz			
Family	Intel Core i5 2500K			
Bus Speed	100 MHz			
Motherboard				
Board AA #	G30742			
Board FAB #	400 (eg. 10x for fab A, 20x for fab B and	etc)		
	es to the production FAB revision; Please co ion you intend to perform logo testing if no	onsult your Intel Corporation representative to clarify the of the same.		
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		Windows 7 Ultimate Service Pack 1		
Windows Vista and 64-bit	Vista Ultimate with Service Pack 2			
Windows Vista Basic and 64-bit	□ 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	Windows Vista	V9.2.0.1030	INF_allOS_9.2.0.1030_ PV
Intel [®] Chipset Software Utility	Windows Vista 64-bit	V9.2.0.1030	INF_allOS_9.2.0.1030_ PV
Graphics	Windows Vista	V8.15.10.2476	GFX_Vista32_Win7_32 _8.15.10.2476_PV
Intel [®] HD Graphics	Windows Vista 64-bit	V8.15.10.2476	GFX_Vista64_Win7_64 _8.15.10.2476_PV
Audio Realtek	Windows Vista Windows Vista 64-bit	V6.0.1.6410 V6.0.1.6410	AUD_Vista_Win7_6.0.1. 6410_PV AUD_Vista_Win7_6.0.1.
			6410_PV
LAN	Windows Vista	V11.13.51.0	LAN_allOS_11.13.51.0_ PV
Intel [®] 82579V Gigabit	Windows Vista 64-bit	V11.13.51.0	LAN_allOS_11.13.51.0_
MEI	Windows Vista	V7.0.0.1144	MEI_allOS_7.1.20.1119 _PV
Intel [®] Management Engine Interface	Windows Vista 64-bit	V7.0.0.1144	MEI_allOS_7.1.20.1119 _PV
USB3.0	Windows Vista	V2.1.19.0	USB3_allOS_2.1.19.0_P V
Renesas	Windows Vista 64-bit	V2.1.19.0	USB3_allOS_2.1.19.0_P V
IRST	Windows Vista	V10.6.0.1002	STOR_Vista_Win7_10. 6.0.1002_PV
ICAI	Windows Vista 64-bit	V10.6.0.1002	STOR_Vista_Win7_10. 6.0.1002_PV
SATA3	Windows Vista	V1.2.0.1006	DrvSetup-mini
Marvell	Windows Vista 64-bit	V1.2.0.1006	DrvSetup-mini

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

Technology	OS	Version	Package version
Chipset Update Utility	Windows Windows7	V 9.2.0.1030	INF_allOS_9.2.0.1030_ PV
Intel [®] Chipset Software Utility	Windows Windows7 64- bit	V 9.2.0.1030	INF_allOS_9.2.0.1030_ PV
Graphics	Windows Windows7	V 8.15.10.2476	GFX_Vista32_Win7_32 _8.15.10.2476_PV
Intel(R) HD Graphics Family	Windows Windows7 64- bit	V 8.15.10.2476	GFX_Vista64_Win7_64 _8.15.10.2476_PV
Audio	Windows Windows7	V6.0.1.6410	AUD_Vista_Win7_6.0.1. 6410_PV
Realtek High Definition Audio	Windows Windows7 64- bit	V6.0.1.6410	AUD_Vista_Win7_6.0.1. 6410_PV
LAN	Windows Windows7	V11.13.51.0	LAN_allOS_11.13.51.0_ PV
Intel(R) 82579V Gigabit Network Connection	Windows Windows7 64- bit	V11.13.51.0	LAN_allOS_11.13.51.0_ PV
CIR Nuvoton W836x7HG CIR Device	Windows Windows7	V2.2.2011.128	CIR_Win7_2.2.2011.12 8_PV
Driver	Windows Windows7 64- bit	V2.2.2011.128	CIR_Win7_2.2.2011.12 8_PV
HDMI Intel(R) Display Audio	Windows Windows7	V6.14.0.3074	GFX_Vista32_Win7_32 _8.15.10.2476_PV
	Windows Windows7 64- bit	V6.14.0.3074	GFX_Vista64_Win7_64 _8.15.10.2476_PV
SATA3	Windows Windows7	V1.2.0.1006	drvSetup-mini.zip
Marvell 91xx SATA 6G Controller	Windows Windows7 64- bit	V1.2.0.1006	drvSetup-mini.zip
USB 3.0	Windows Windows7	V2.1.19.0	USB3_allOS_2.1.19.0_P
Renesas Electronics USB 3.0 Host Controller	Windows Windows7 64- bit	V2.1.19.0	USB3_allOS_2.1.19.0_P V
IRST Intel(R)	Windows Windows7	V10 6 0 1003	STOR_Vista_Win7_10.
Desktop/Workstation/Server Express Chipset SATA AHCI Controller	Windows Windows7 64- bit	V10.6.0.1002 V10.6.0.1002	6.0.1002_PV STOR_Vista_Win7_10. 6.0.1002_PV
ME	Windows Windows7	V7.0.0.1144	MEI_allOS_7.1.20.1119 _PV
Intel(R) Management Engine Interface	Windows Windows7 64- bit	V7.0.0.1144	MEI_allOS_7.1.20.1119 _PV

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	WLK1.6 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	Туре	Error Description
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)	6/1/2013	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	12/1/2011	2051	Erratum	PCIHCT - Bit range 11:10 (ASPM Support)in the Link Capabilities register (offset Ch) in the PCI Express Capability table is Oh. It cannot be in the set of values {0x0, 0x2}. (Assertion 5CAF4993-B8D1-4E4E-99EC-CC5895364E32)

Operating System	Failing Test	Expiry Date	ID Number	Туре	Error Description
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)	6/1/2015	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 - Win7 (System)	06/01/2013	1666	Erratum	Filter Number:3276 Row:182] - HDMI audio devices are backed by video pipes; if a graphics subsystem exposes three output ports, but only has two video pipes, it is not possible to get all three HDMI audio endpoints "active" simultaneously.
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	1)USB Host Controller Compliance (Automated)	12/1/2012	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

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 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</hard></s3>
Windows 7 and Vista 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