



Motherboard Logo Program (MLP)

Intel® Desktop Board

DX38BT

MLP Report

6/17/2008

Purpose:

This report describes the DX38BT Motherboard Logo Program testing run conducted by Intel Corporation.

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Introduction

Terms and Definitions

Term	Definitions
WHQL	Windows* Hardware Qualification Lab
DTM	Driver Test Manager
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&q=s

Desktop Board Configuration

Desktop Board DX38BT 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)
DX38BT	BTX3810J.86A.1554.2008.0501.1628	N/A - all technologies logo'd
Processor		
Speed	3.0GHz	
Family	Intel® Core™2 Extreme	
Bus Speed	1333 MHz	
Motherboard		
Board AA #	D85848	
Board FAB #	503	
* 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 Tested		
	Check Tested	Comments
Windows XP Pro	<input checked="" type="checkbox"/>	XP Pro with Service Pack 3
Windows XP Pro 64-bit	<input checked="" type="checkbox"/>	XP Pro with Service Pack 2
Windows Vista	<input checked="" type="checkbox"/>	Vista Ultimate with Service Pack 1
Windows Vista 64-bit	<input checked="" type="checkbox"/>	Vista Ultimate with Service Pack 1
Windows Vista Basic	<input type="checkbox"/>	Vista Basic with Service Pack 1

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.

Windows Vista Basic 64-bit	<input type="checkbox"/>	Vista Basic with Service Pack 1
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Onboard Integrated Devices and Driver for XP Pro 32 and 64bit

Technology	OS	Version
Chipset Update Utility Intel® Chipset Software Utility	Windows XP Pro	8.3.1.1010
	Windows XP Pro 64-bit	8.3.1.1010
Audio IDT	Windows XP Pro	5762_5713_v68
	Windows XP Pro 64-bit	5762_5713_v68
LAN Intel® PRO Network Connections	Windows XP Pro	12.1
	Windows XP Pro 64-bit	12.1
CIR Transceiver Winbond	Windows XP Pro	N/A
	Windows XP Pro 64-bit	N/A

Onboard Integrated Devices and Driver for Vista 32 and 64bit

Technology	OS	Version
Chipset Update Utility Intel® Chipset Software Utility	Windows Vista	8.3.1.1010
	Windows Vista 64-bit	8.3.1.1010
Audio IDT	Windows Vista	5762_5713_v68
	Windows Vista 64-bit	5762_5713_v68
LAN Intel® PRO Network Connections	Windows Vista	13.0.1
	Windows Vista 64-bit	13.0.1
CIR Transceiver Winbond	Windows Vista	7.0.65.1002
	Windows Vista 64-bit	7.0.65.1002

Driver Test Manager Used (DTM)

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 XP Pro Windows XP Pro 64-bit	DTM for Windows XP SP3	DTM for Windows XP SP3
Windows Vista Windows Vista 64-bit	DTM for Windows Vista SP1 @ WLK1.2	DTM for Windows Vista SP1 @ WLK1.2

Errata and Contingencies

Operating System	Failing Test	Expiry date	ID Number	Type	Error Description
Windows Vista Windows Vista 64-bit	Fidelity Test (System, Manual), HDAudio Class Driver Fidelity Test (System, Manual)	8/1/2008	1182	Erratum	The following test cases in Fidelity Test are new for WLK 1.2 and were not previewed in WLK 1.1: * Render System Activity Test * Capture Input Level Test * Capture Skew Test * Capture THD+N Test * Capture Dynamic Range Test * Capture Frequency Response Test
Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	12/31/2008	566	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 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	12/31/2008	709	Erratum	Certain devices are known to have incompatibilities with the test causing a system hang during testing. This erratum is for those devices The PCIHCT tests Bit 15 of the Device Control Register in the PCI Express Capability table. The testing of Bit 15, specifically the writing of a 1 to the bit causes a function level reset making the device unavailable for a maximum of 100ms. All writes to the PCI config space of the device are ignored during the reset. All reads to the PCI config space of the device return all ones (1). This confuses the PCIHCT test and it incorrectly fails the assertions for Bits 4, 11, 12, 13 and 14. Assertion 73C19B53-84B8-4BA4-97EA-3FF6DEF57273: FAILED. Bit 4 (Enable Relaxed Ordering) in the Device Control register (offset 8h) in the PCI Express Capability table must be read-writable if it's implemented. Assertion C0846E74-2CFE-4CC2-A492-6AAF16F206CD: FAILED. Bit 11 (Enable No Snoop) in the Device Control register (offset 8h) in the PCI Express Capability table must be read-writable if it's implemented. Assertion A56B0EE0-0C2C-47A4-90C4-5F8EEB30D427: FAILED. Bit range 14:12 (Max_Read_Request_Size) in the Device Control register (offset 8h) in the PCI Express Capability table must be read-writable if implemented. Assertion 13A41D3E-2576-41DC-A67C-525DA3637CEA: FAILED. 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.
Windows Vista Windows Vista 64-bit	PCI Hardware Compliance Test For Systems Running Windows Vista (PCIHCT)	1/1/2009	1078	Erratum	The Bit 5 (Surprise Down Error Severity) in the Uncorrectable Error Severity register (offset Ch) in the Advanced Error Reporting Capability table must be read-only and always return 1 if the Bit 5 (Surprise Down Error Mask) in the Uncorrectable Error Mask Register in the Advanced Error Reporting Capability table is not implemented
Windows Vista Windows Vista 64-bit	UAA Test - Vista (System)	7/31/2009	534	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	UAA Test - Vista (System)	7/31/2008	636	Erratum	Certain HD Audio codecs allow setting unsupported VRef settings in the pin control register. They have hardware validation that prevents the unsupported VRef settings from affecting the actual voltage, but subsequent reads from the pin control register will return values that are out of sync with what the actual voltage is. This requires a hardware fix so the failure is forgiven for these specific codecs. Future designs must advertise the VRefs correctly. The failing test log is UAATest.wtl.

Test Notes

Operating System	Test	Description
XP and Vista	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
XP 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
XP and Vista Filter update	DTM WHQL test	http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filterupdates.cab
Special H/W that use to PASS the test	None	None