

Previously Logo'd Motherboard Logo Program (PLMP)

Intel® Desktop Board DX79TO

PLMP Report

11/30/2011

Purpose:

This report describes the DX79TO Previously Logo'd 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	
Desktop Board Configuration	5
Desktop Board DX79TO Final Configuration Report: Completion of PLMP	5
Board Information	5
Product Code	5
Processor	5
Motherboard	5
System Memory	
Power Management	5
Operating System Tested	
Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit	6
Windows Logo Kits Used (WLK)	6
Errata and Contingencies	
Test Notes	9

Introduction

Terms and Definitions

Term	Definitions		
WHQL	Windows* Hardware Qualification Lab		
WLK	Windows Logo Kits		
PLMP	Previously Logo'd Motherboard 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 DX79TO Final Configuration Report: Completion of PLMP

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

Board Information

Product Code ¹	BIOS String/Model	Technologies NOT Logo'd (yet)					
DX79TO	SIX7910J.86A.0281.2011.1019.1612	N/A - all technologies logo'd					
Processor	Processor						
Speed	3.30GHz						
Family	Intel(R) Core(TM) i7-3960X						
Bus Speed	4 GB/s (DMI 2.0)						
Motherboard							
Board AA #	AA G28805-300						
Board FAB #	С						
	es to the production FAB revision; Please of ion you intend to perform logo testing if n	onsult your Intel Corporation representative to clarify the ot the same.					
System Memory							
Speed	Dual Channel, DDR3, 1600MHz						
Memory Type	DIMM						
Connector Type	DDR3, 240 Pin						
Power Management							
BIOS Default	OS Default S3						
Operating System Tested							
	Check Tested Comments						
Windows 7 and 64-bit	1	Windows 7 Ultimate with 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 Windows 7 32-bit and 64-bit

Technology	6	Version	Package version
Chipset Update Utility	Windows7	V 9.2.3.1022	INF_allOS_9.2.3.1022_ PV
Intel [®] Chipset Software Utility	Windows7 64-bit	V 9.2.3.1022	INF_allOS_9.2.3.1022_ PV
			6449_PG334_R265_W
Audio	Windows7	Windeygs Viste9	in7_Vista_XP
Realtek High Definition Audio	Windows7 64-bit	Windows.Vidt6-€49bit	6449_PG334_R265_W in7_Vista_XP
			LAN. HOS 44 42 54 0
LAN1	Windows7	Windows Viste	LAN_allOS_11.13.51.0_ PV
Intel(R) 82574L Gigabit Network Connection	Windows7 64-bit	Windows Vista-4549bit	LAN_allOS_11.13.51.0_ PV
			LAN_allOS_11.13.51.0_
LAN2 Intel(R) 82579LM Gigabit	Windows7	Windows yista	PV
Network Connection	Windows7 64-bit	Windows Vistass49bit	LAN_allOS_11.13.51.0_ PV
MEI			MEI_allOS_7.1.21.1134
Intel(R) Management Engine	Windows7	Mindows Niets4	_PV
Interface	Windows7 64-bit	Windows Vista1644it	MEI_allOS_7.1.21.1134
CIR	Windows7	Windows)Vista28	CIR_Win7_2.2.2011.12
Nuvoton W836x7HG CIR Device	Windows7 Windows7 64-bit	Windows2V2\\$ta16426it	8_PV CIR_Win7_2.2.2011.12
Driver	Willdows/ 04-Dit	MILION 3. KIRCH DHEMIT	8_PV
USB 3.0	\ !!- do7	No describe	USB3_allOS_2.1.19.0_P
Renesas Electronics USB 3.0	Windows7	Windows Aista	V
Host Controller	Windows7 64-bit	Windows/2/ista9594-bit	USB3_allOS_2.1.19.0_P V
RSTE) E- J. 7	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	RSTE_Vista_Win7_3.0.
Intel(R) C600 Series Chipset	Windows7	Windgigs Mista2	0.1112_PV
SATA AHCI Controller	Windows7 64-bit	Windows:Vistá 642bit	RSTE_Vista_Win7_3.0. 0.1112_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	WLK1.6 for Windows 7 SP1	WLK1.6 for Windows 7 SP1	
Windows 7 64-bit	WCK1.0 101 WIIIdoWs 7 3F 1	WCK 1.0 101 WIIIdows 7 3F 1	

Errata and Contingencies

Operating System	Failing Test	Expiry Date	ID Number	Туре	Error Description
Windows 7 Windows 7 64-bit	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 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	528	Erratum	Assertion 5FC5B29C-0F24-423B-856A-87C9E31C6802 Bit 14 (Completion Timeout Mask) in the Uncorrectable Error Mask register (offset 8h) in the Advanced Error Reporting Capability table must be read-writable. Assertion 908C881D-29ED-4B57-A1A6-BE1DBD45522E Bit 14 (Completion Timeout Error Severity) in the Uncorrectable Error Severity register (offset Ch) in the Advanced Error Reporting Capability table must be readwritable. These failures are incorrect for PCI Express switch ports that do not issue Non-Posted Requests on their own behalf (vs. only forwarding such Requests generated by other devices).
Windows 7 Windows 7 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	PCI Hardware Compliance Test For Systems	12/1/2012	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	PCI Hardware Compliance Test For Systems	12/1/2012	2066	Erratum	<h3 xmlns="http://www.w3.org/1999/xhtml">Assertion 3CDD17AF-215E-4921-894F-C99434A3B3CA </h3> Bit range 31:21 (Reserved_3)in the Uncorrectable Error Mask register (offset 8h) in the Advanced Error Reporting Capability table must be read-only and always return 0 . <h3 xmlns="http://www.w3.org/1999/xhtml">Assertion 461CA4DE-9266-4420-9B5F-F33622A5D02B</h3> Bit range 31:21 (Reserved_3)in the Uncorrectable Error Severity register (offset Ch) in the Advanced Error Reporting Capability table must be read-only and always return 0 .
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	1167	Erratum	Assertion EB8AA49D-4825-4542-B549-289F1076C0F9 Bit range 23:21 (Reserved)in the Link Capabilities register (offset Ch) in the PCI Express Capability table must be read-only and always return 0 . It was found to return 1.

Operating System	Failing Test	Expiry Date	ID Number	Туре	Error Description
Windows 7 Windows 7 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.
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2012	1650	Erratum	Assertion 2C79B356-6B37-4BEC-8F4E-DD6588082AC2 Bit range 31:14 (Reserved_3)in the Correctable Error Mask register (offset 14h) in the Advanced Error Reporting Capability table must be read-only and always return 0.
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 - 0x8] as all other Capability IDs are reserved.
Windows 7 Windows 7 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.

Test Notes

Operating System	Test	Description
Windows 7	BIOS download	Internal: http://bios.intel.com/downloads/ External: http://www.intel.com/ click on Support and Download
Windows 7	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 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