

Previously Logo'd Motherboard Program (PLMP)

Intel® Desktop Board DP43BFL

PLMP Report

7/23/2010

Purpose:

This report describes the DP43BFL Previously Logo'd Motherboard 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 DP43BFL Final Configuration Report: Completion of PLMP	
Board Information	
Product Code	
Processor	5
Motherboard	5
System Memory	5
Power Management	5
Operating System Tested	
Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit	
Windows Logo Kits Used (WLK)	
Errata and Contingencies	7
Test Notes	

Introduction

Terms and Definitions

Term	Definitions		
WHQL	Windows* Hardware Qualification Lab		
WLK	Windows Logo Kits		
PLMP	Previously Logo'd Motherboard 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 DP43BFL 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)					
DP43BFL	RKG4310H.86A.0079.2010.0406.1853	N/A - all technologies logo'd					
Processor	Processor						
Speed	3.00 GHz						
Family	Intel® Core™2 Quad						
Bus Speed	1333MHz						
Motherboard							
Board AA #	E80808						
Board FAB #	302						
	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 Channels, DDR3, 1333MHz						
Memory Type	DIMM						
Connector Type	DDR3,240pin						
Power Management							
BIOS Default	BIOS Default S3						
Operating System	Operating System Tested						
	Check Tested	Comments					
Windows 7 and 64-bit		Windows 7 Ultimate					
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	OS	Version	Package version
Chipset Update Utility	Windows 7	9.1.1.1016	9.1.1.1025
Intel [®] Chipset Software Utility	Windows 7 64-bit	9.1.1.1016	9.1.1.1025
Graphics	Windows 7	8.17.11.9745	197.45
NVIDIA GeForce GTX 275	Windows 7 64-bit	8.17.11.9745	197.45
Audio	Windows 7	6.0.1.5964	5964
Realtek	Windows 7 64-bit	6.0.1.5964	5964
LAN	Windows 7	12.4.0.3	12.1.59.01
Broadcom	Windows 7 64-bit	12.4.0.3	12.1.59.01

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	WLK1.5 for Windows 7	WLK1.5 for Windows 7
Windows 7 64-bit	WENT.5 TOF WINDOWS 7	WERT.5 101 WIIIdOWS 7

Errata and Contingencies

On continue Countries	Sallia a Tant	Expiry	ID Number	Tues	Corre Decordation
Windows 7 Windows 7 64-bit	Failing Test UAA Test - Vista or Server08 (System)	Date 8/9/2010	Number 1299	Erratum	The original HD Audio 1.0 specification contains a notion of "presence detect", using electrical impedance which was intended to apply only to analog pins. However, the language of the specification was such that it could be read to apply to digital pins as well - in particular, to S/PDIF pins. A DCN was released to extend the notion of presence detect to digital pins - in particular, to HDMI pins. This repurposed one of the impedance bits, which were thought to be unused in digital pins, to mean "ELD valid." The correct way for a S/PDIF pin to respond to a Pin Sense verb is to set the highest bit (Presence Detect) to 1 or 0 corresponding to whether a S/PDIF connection is active; set the ELD Valid bit to 0 (since there is no such thing as ELD for S/PDIF); and set the rest of the bits, which are reserved for digital pins, to 0. This errata filter is a preview filter to allow hardware manufacturers time to update any hardware that used the impedance bits on digital pins.
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	1/31/2011	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 - Vista or Server08 (System)	7/1/2011	1466	Erratum	Preview Filter: UAA Test - Intel Low Power DCN says "EPSS implies KeepAlive, but only after July 1st 2011"
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	9/30/2010	1198	Erratum	"High Definition Audio Device" devices need to comply with the Intel High Definition Audio spec, as well as revisions (known as Document Change Notifications, or DCNs.) One such DCN - in particular, DCN 34-A2 - clarified the behavior of "pin sense" verbs as applied to digital pins (S/PDIF, HDMI, and DisplayPort.) Prior to the DCN, the language of the spec was unclear and mistakenly implied that the "Impedance" bits could be used by digital pins. The DCN clarified this to say that Impedance bits are reserved for digital pins.
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (System)	6/30/2010	1299	Erratum	Preview filter - Jack Detect Override on digital pin widgets Errata 1299 The HD Audio configuration default register (7.3.3.31 in the HD Audio specification) includes a "Jack Detect Override" flag that can be used to indicate that although a pin widget would normally be capable of jack detection, there is something about this particular system that causes this to be impossible. This was intended to be used, for example, for analog pin widgets that are connected to RCA jacks, which do not allow for impedance detection. Some digital pin widgets are using the Presence Detect pin sense response to indicate that a digital handshake has occured - indeed, HDMI pins have entire DCNs built around this concept, and it applies equally well to S/PDIF pins. A digital converter that supports presence detection should be able to do so in any system, so the "Jack Detect Override" concept should not apply to digital pins.
Windows 7 Windows 7 64-bit	UAA Test - Vista or Server08 (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	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	12/1/2010	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	12/1/2010	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.

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 IDE 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