## Motherboard Logo Program (MLP)

# Intel® Desktop Board QS77SKE-IS

## **MLP Report**

11/08/2012

#### Purpose:

This report describes the QS77SKE-IS Desktop /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

IntroductionIntroduction	4
Terms and Definitions	
Desktop Board Configuration	5
Desktop Board QS77SKE-IS Final Configuration Report: Completion of MLP	5
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	
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://msdn.microsoft.com/zh-TW/library/windows/hardware/gg463010
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: <a href="http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;g=s">http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&amp;cid=105&amp;g=s</a>

## **Desktop Board Configuration**

## Desktop Board QS77SKE-IS Final Configuration Report: Completion of MLP

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

#### **Board Information**

Product Code <sup>1</sup>	BIOS String/Model	Technologies NOT Logo'd (yet)				
QS77SKE-IS	GKPPT10H.86A.0028.2012.1102.1739 N/A - a		technologies logo'd			
Processor	Processor					
Speed	1.10 GHz					
Family	Intel Celeron					
Bus Speed	100 MHz					
Motherboard						
Board AA #	G79416					
Board FAB #	100					
	* 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 Nanya DDR3 1333/8GB					
Connector Type	DDR3, 240 Pin					
Power Management						
BIOS Default	rfault S3					
Operating System Tested						
	Check Tested	C	omments			
Windows 7 and 64- bit	Image: section of the content of the	W	indows 7 Ultimate Service Pack 1			

<sup>&</sup>lt;sup>1</sup> 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 Intel® Chipset Software Utility	Windows 7 Windows 7 64-bit	V9.3.0.1021	V9.3.0.1021
Graphics Intel® HD Graphics	Windows 7 Windows 7 64-bit	V8.15.10.64.2778	V 15.26.14.64.2778
Audio	NA	NA	NA
LAN Intel	Windows 7 Windows 7 64-bit	V12.1.77.0	V17.2
<b>MEI</b> Intel <sup>®</sup> Management Engine Interface	Windows 7 Windows 7 64-bit	V8.1.0.1263	V8.1.0.1248

### Windows Hardware Certification Kit Used (WHCK)

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 and 64-bit	WLK1.6 for Windows 7 SP1	WLK1.6 for Windows 7 SP1	

## **Errata and Contingencies**

Operating System	Failing Test	Expiry Date	ID Number	Туре	Error Description
Windows 7 Windows 7 64-bit	PCI Hardware Compliance Test For Systems	12/1/2015	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	12/1/2015	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.

					This is an acceptable failure: Assertion 0E36472A-0EDB-4685- A67D-7AF1FFBFA81B Data Link Layer Link Active Reporting Capable bit is set but Data Link Layer Link Active is not.
Windows 7 Windows 7 64-bit	UAA Test	12/1/2015	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. This is an acceptable failure.
Windows 7 Windows 7 64-bit	UAA Test	12/1/2015	1666	Erratum	graphics-hdmi-test-intel-two-of-three
Windows 7 Windows 7 64-bit	UAA Test	12/1/2015	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	Signed Driver Check	12/1/2015	1248	Erratum	If a driver is found to be signed by Microsoft that is tested with the chklogo test, the message, ERROR: No Logo Level Attribute on file., is an invalid failure if followed by, This file has a 0 level Logo and followed by, Cannot match the device ID of the driver the device was test within an invidual assertion.  Drivers that may have been logod but are not associated with a valid hardware ID are attributed incorrectly as unclassified drivers and incorrectly failed by this test

## **Test Notes**

Operating System	Test	Description
Windows 7	BIOS download	Internal: <a href="http://bios.intel.com/downloads/">http://bios.intel.com/downloads/</a> External: <a href="http://www.intel.com/">http://www.intel.com/</a> 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	https://sysdev.microsoft.com/member/SubmissionWizard/LegalExemptions/updatefilters.cab
Special H/W that use to PASS the test	None	None