



Motherboard Logo Program (MLP)

Intel® Desktop Board

DZ77SL

MLP Report

5/31/2012

Purpose:

This report describes the DZ77SL Motherboard Logo Program testing run conducted by Intel Corporation.

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Contents

| | |
|--|----------|
| Introduction | 4 |
| Terms and Definitions..... | 4 |
| Desktop Board Configuration | 5 |
| Desktop Board DZ77SL 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..... | 5 |
| Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit..... | 6 |
| Windows Logo Kits Used (WLK) | 6 |
| Errata and Contingencies | 7 |
| Test Notes | 8 |

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.msp |
| 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 DZ77SL 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) |
| DZ77SL | SLZ7710H.86A.0055.2012.0319.2140 | N/A - all technologies logo'd |
| Processor | | |
| Speed | 3.5GHz | |
| Family | Intel Core i7 3770K | |
| Bus Speed | 100 MHz | |
| Motherboard | | |
| Board AA # | G55115 | |
| Board FAB # | 300 (eg. 10x for fab A, 20x for fab B and etc) | |
| * 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, 1600MHz | |
| Memory Type | DIMM | |
| Connector Type | DDR3, 240 Pin | |
| Power Management | | |
| BIOS Default | S3 | |
| Operating System Tested | | |
| | Check Tested | Comments |
| Windows 7 and 64-bit | <input checked="" type="checkbox"/> | Windows 7 Ultimate Service Pack 1 |
| Windows Vista and 64-bit | <input type="checkbox"/> | Vista Ultimate with Service Pack 2 |
| Windows Vista Basic and 64-bit | <input type="checkbox"/> | 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 Intel® Chipset Software Utility | Windows 7 | V9.3.0.1020 | INF_allIOS_9.3.0.1020_PV |
| | Windows 7 64-bit | V9.3.0.1020 | INF_allIOS_9.3.0.1020_PV |
| Graphics Intel® HD Graphics | Windows 7 | V8.15.10.2669 | GFX_Vista32_Win7_32_8.15.10.2669_PV |
| | Windows 7 64-bit | V8.15.10.2669 | GFX_Vista64_Win7_64_8.15.10.2669_PV |
| Audio Realtek | Windows 7 | V6.0.1.6526 | AUD_Vista_Win7_6.0.1.6526_PV |
| | Windows 7 64-bit | V6.0.1.6526 | AUD_Vista_Win7_6.0.1.6526_PV |
| LAN Intel® 82579V Gigabit | Windows 7 | V11.15.16.0 | LAN_allIOS_11.15.16.0_PV |
| | Windows 7 64-bit | V11.15.16.0 | LAN_allIOS_11.15.16.0_PV |
| MEI Intel® Management Engine Interface | Windows 7 | V8.0.0.1262 | MEI_allIOS_8.0.3.1427_PV |
| | Windows 7 64-bit | V8.0.0.1262 | MEI_allIOS_8.0.3.1427_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 |

Errata and Contingencies

| Operating System | Failing Test | Expiry Date | ID Number | Type | Error Description |
|-------------------------------|--|-------------|-----------|---------|---|
| Windows 7 Windows 7 64-bit | Class Driver Fidelity Test - Win7 (System, Manual) | 07/31/2015 | 598 | Erratum | The European Union requires the headphone output level to be ≤ 150 mVrms for headphone jacks. There's a note in WLP requirement AUDIO-0006 that states, in the presence of regional regulations, the output level requirement for headphones is dropped from ≥ 1000 mVrms to ≥ 120 mVrms. This provides freedom for manufacturers to meet both the EU ≤ 150 mVrms @ 32 Ohms and the WLP ≥ 120 mVrms @ 32 Ohms requirements. The Fidelity Test tests headphones at 300 Ohm load, though. Without knowledge of the output impedance at the jack, the test cannot extrapolate what the output level at 32 Ohms would have been from the output level at 300 Ohms. The test assumes that the output level at 32 Ohms will be *less* than the output level at 300 Ohms, though. So any measurement ≥ 120 mVrms at 300 Ohms "could be" a passing result, depending on the output impedance. |
| 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 | 12/01/2012 | 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 7 Windows 7 64-bit | PCI Hardware Compliance Test For Systems | 12/01/2012 | 1241 | Erratum | 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 | 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 |
| 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) | 6/1/2013 | 1670 | Erratum | 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 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 |
| 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 |