

Previously Logo'd Motherboard Program (PLMP)

Intel® Desktop Board DH55PJ

PLMP Report

3/30/2011

Purpose:

This report describes the DH55PJ Previously Logo'd Motherboard Program testing run conducted by Intel Corporation.

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Introduction

Terms and Definitions

| Term | Definitions | | |
|-----------------------------|---|--|--|
| WHQL | Windows* Hardware Qualification Lab | | |
| WLK | Windows Logo Kits | | |
| PLMP | Previously Logo'd 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 DH55PJ 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) | | | | |
|-----------------------------------|---|--|--|--|--|--|
| DH55PJ | TCIBX10H.86A.0036.2010.0525.1620 | N/A - all technologies logo'd | | | | |
| Processor | Processor | | | | | |
| Speed | 3.47GHz | | | | | |
| Family | Intel(R) Core(TM) i5 CPU 670 | | | | | |
| Bus Speed | 1333 MHz | | | | | |
| Motherboard | | | | | | |
| Board AA # | E93812 | | | | | |
| Board FAB # | 300 (eg. 10x for fab A, 20x for fab B and | d etc) | | | | |
| | es to the production FAB revision; Please or 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, 1333MHz | | | | | |
| Memory Type | DIMM | | | | | |
| Connector Type | DDR3, 240 Pin | | | | | |
| Power Management | | | | | | |
| BIOS Default | efault 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 1 | | | | |
| Windows Vista Basic and 64-bit | □ 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.

Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit

| OS | Version | Package version | | |
|------------------|---|---|--|--|
| Windows 7 | 9.1.2.1007 | 9.1.2.1007 | | |
| Windows 7 64-bit | 9.1.2.1007 | 9.1.2.1007 | | |
| | | | | |
| Windows 7 | 8.15.10.2141 | 15.17.7.2141 | | |
| Windows 7 64-bit | 8.15.10.2141 | 15.17.7.64.2141 | | |
| | | | | |
| Windows 7 | 6.0.1.6106 | 6106 | | |
| Windows 7 64-bit | 6.0.1.6106 | 6106 | | |
| | | | | |
| Windows 7 | 11.6.92.0 | 13.3 | | |
| Windows 7 64-bit | 11.6.92.0 | 13.3 | | |
| | | | | |
| Windows 7 | 6.0.0.1179 | 6.1.0.1042 | | |
| Windows 7 64-bit | 6.0.0.1179 | 6.1.0.1042 | | |
| Interface | | | | |
| Windows 7 | 6001179 | 6.1.0.1042 | | |
| Windows 7 64-bit | 6.0.0.1179 | 6.1.0.1042 | | |
| | Windows 7 Windows 7 64-bit Windows 7 Windows 7 64-bit Windows 7 | Windows 7 9.1.2.1007 Windows 7 64-bit 9.1.2.1007 Windows 7 8.15.10.2141 Windows 7 64-bit 6.0.1.6106 Windows 7 64-bit 6.0.1.6106 Windows 7 11.6.92.0 11.6.92.0 Windows 7 64-bit 6.0.0.1179 Windows 7 64-bit 6.0.0.1179 Windows 7 64-bit 6.0.0.1179 | | |

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 TOT WITHOWS 7 | WERT.5 for Williaows 7 | |

Errata and Contingencies

| Operating System | Failing Test | Expiry Date | CPKID /Filer Number | Туре | Error Description |
|-------------------------------|--|----------------|---------------------------|---------|---|
| Windows 7 Windows 7 64-bit | PCI Hardware Compliance Test For Systems | 12/01/2010 | 385/401 | 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 | UAA Test - Win7 (System) | 06/01/2015 | 1394/513 | 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 | UAA Test - Win7 (System) | 01/31/2011 | 2190/1300 | Erratum | UAA Test wrongly tests pin widgets that have their Configuration Default register's Port Connectivity field set to No Connection. |
| | | | | | The Microsoft HD Audio Pin Configuration guidelines specifically call out "set Port Connectivity to No Connection" as the official way to turn a pin off. UAA Test should ignore any such pins, as will the Microsoft HD Audio class driver. |
| Windows 7 Windows 7 64-bit | UAA Test - Win7 (System) | 07/01/2011 | 2195/1466 | Erratum | Preview Filter - Keepalive on low power digital outputs AUDIO-0062, effective June 1 2009, requires that any HD Audio codec that advertises EPSS support comply with the Intel HD Audio Low Power DCN. |
| | | | | | The Low Power DCN, in turn, says that support for EPSS is mandatory after July 1st 2011. |
| Windows 7 Windows 7 64-bit | UAA Test - Win7 (System) | 08/09/2010 | 2365/1299 | Erratum | Preview filter - Jack Detect Override on digital pin widgets 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 - Win7 (System) | 09/30/2010 | 2908/1198 | Erratum | Preview Filter - Reserved "Impedance" bits in Pin Sense response to digital pin widgets |
|-------------------------------|---|------------|-----------|---------|---|
| | | | | | 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. |
| | | | | | For further details visit: https://winqual.microsoft.com/ec/ |
| Windows 7 Windows 7 64-bit | Class Driver AC3 Test - Win7 (System) | 06/30/2025 | 1890/1256 | Erratum | The HD Audio class driver hdaudio.sys exposes AC-3 data ranges on S/PDIF Kernel Streaming pins incorrectly. |
| | | | | | The compressed AC-3 transport is "stereo", "16-bit", and at the same sample rate as the uncompressed format. As such, AC-3 data ranges are expected to have MaximumChannels = 2, and MinimumBitDepth = MaximumBitDepth = 16. |
| | | | | | However, the HD Audio class driver sometimes incorrectly exposes a MaximumBitDepth of 24 or even 32. |
| Windows 7 Windows 7 64-bit | Signed Driver Check (Manual) | 12/31/2010 | 2701/1248 | 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. |

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 (Except CIR) 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 Note: Enhanced Consumer IR (CIR) component is not supported under Windows7.</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 |