

Motherboard Logo Program (MLP)

Intel® Desktop Board DP67DE

MLP Report

12/16/2010

Purpose:

This report describes the DP67DE Motherboard Logo 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 |
| MLP | 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 DP67DE 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) | | | |
|-----------------------------------|--|--|--|--|--|
| DP67DE | BAP6710H.86A.0031.2010.1029.1501 | N/A - all technologies logo'd | | | |
| Processor | | | | | |
| Speed | 3.40GHz | | | | |
| Family | Intel Core i7 CPU 2600 | | | | |
| Bus Speed | 1333 MHz | | | | |
| Motherboard | | | | | |
| Board AA # | G10217 | | | | |
| Board FAB # | 201 (eg. 10x for fab A, 20x for fab B and | etc) | | | |
| | 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 Channel, DDR3, 1333MHz | | | | |
| Memory Type | DIMM | | | | |
| Connector Type | DDR3, 240 Pin | | | | |
| Power Management | | | | | |
| BIOS Default | BIOS Default S3 | | | | |
| 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 Vista 32-bit and 64-bit

| Technology | OS | Version | Package version |
|---|---|---------------|---|
| Chipset Update Utility | Windows Vista | V9.2.0.1015 | INF_allOS_9.2.0.1015_ PV.zip |
| Intel [®] Chipset Software Utility | Windows Vista 64-bit | V9.2.0.1015 | INF_allOS_9.2.0.1015_ PV.zip |
| | | | |
| | N. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | | 258.96_desktop_win7 _winvista_32bit_englis |
| Graphics | Windows Vista | V8.17.12.5896 | h_whql |
| nVIDIA GeForce GTS250 | Windows Vista 64-bit | V8.17.12.5896 | 258.96_desktop_win7 _winvista_64bit_englis h_whql |
| | | | |
| Audio | Windows Vista | V6.0.1.6215 | AUD_Vista_Win7_6.0.1. 6215_PV.zip |
| Realtek | Windows Vista 64-bit | V6.0.1.6215 | AUD_Vista_Win7_6.0.1. 6215_PV.zip |
| | | | |
| LAN | Windows Vista | V11.8.74.0 | LAN_allOS_11.8.74.0_P V.zip |
| Intel [®] 82579V Gigabit | Windows Vista 64-bit | V11.8.74.0 | LAN_allOS_11.8.74.0_P V.zip |
| | | | |
| MEI Intel [®] Management Engine Interface | Windows Vista | V 7.0.0.1118 | MEI_allOS_7.0.0.1135_ PV.zip |
| | Windows Vista 64-bit | V 7.0.0.1118 | MEI_allOS_7.0.0.1135_ PV.zip |

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

| Technology | OS | Version | Package version |
|---|------------------|---------------|---|
| Chipset Update Utility | Windows 7 | V9.2.0.1015 | INF_allOS_9.2.0.1015_ PV.zip |
| Intel [®] Chipset Software Utility | Windows 7 64-bit | V9.2.0.1015 | INF_allOS_9.2.0.1015_ PV.zip |
| | | | |
| Graphics | Windows 7 | V8.17.12.5896 | 258.96_desktop_win7 _winvista_32bit_englis h_whql |
| nVIDIA GeForce GTS250 | | | |
| TIVIDIA GEFOICE G 13250 | Windows 7 64-bit | V8.17.12.5896 | 258.96_desktop_win7 _winvista_64bit_englis h_whql |
| | | | |
| Audio | Windows 7 | V6.0.1.6215 | AUD_Vista_Win7_6.0.1. 6215_PV.zip |
| Realtek | Windows 7 64-bit | V6.0.1.6215 | AUD_Vista_Win7_6.0.1. 6215_PV.zip |
| | | | |
| LAN | Windows 7 | V11.8.74.0 | LAN_allOS_11.8.74.0_P V.zip |
| Intel [®] 82579V Gigabit | Windows 7 64-bit | V11.8.74.0 | LAN_allOS_11.8.74.0_P V.zip |
| | | | |
| MEI | Windows 7 | V7.0.0.1118 | MEI_allOS_7.0.0.1135_ PV.zip |
| Intel [®] Management Engine Interface | Windows 7 64-bit | V7.0.0.1118 | MEI_allOS_7.0.0.1135_ PV.zip |

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 | WCK1.5 for Willidows 7 | WERT.5 for Willidows 7 | |
| Windows Vista | WLK1.5 for Windows Vista SP2 | VII K1 E for Viadovia Viato CD2 | |
| Windows Vista 64-bit | WCK 1.5 101 WIIIUUWS VISIA SPZ | WLK1.5 for Windows Vista SP2 | |

Errata and Contingencies

| Operating System | Failing Test | Expiry Date | ID Number | Туре | Error Description |
|---|--|----------------|--------------|---------|---|
| Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | 1) Fidelity Test - Vista (System, Manual) 2) HDAudio Class Driver Fidelity Test - Vista (System, Manual) 3)Class Driver Fidelity Test - Win7 (System, Manual) 4)Fidelity Test - Win7 (System, Manual) | 1/31/2011 | 1801 | Erratum | Fidelity Render Power Transition test does not work properly. The test is not going to be enforced until a fix can be released. |
| Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | 1) HDAudio Class Driver Test - Vista or Server08 (System) 2) Class Driver AC3 Test - Win7 (System) | 6/30/2025 | 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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | PCI Hardware Compliance Test For Systems | 6/1/2011 | 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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | PCI Hardware Compliance Test For Systems | 6/1/2011 | 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 - 0xB] as all other Capability IDs are reserved. |
| Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | 1)UAA Test - Vista or Server08 (System) 2) UAA Test - Win7 (System) | 6/1/2011 | 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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | 1)UAA Test - Vista or Server08 (System) 2) 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. |

| Windows Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | 1)UAA Test - Vista or Server08 (System) 2) UAA Test - Win7 (System) | 2/28/2011 | 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 Vista Windows Vista 64bit Windows 7 Windows 7 64-bit | USB Host Controller Compliance (Automated) | 6/1/2012 | 1787 | Erratum | Errata 1787 XHCI spec compliance test is in preview For further details visit: https://winqual.microsoft.com/ec/ |
| Windows Vista Windows Vista 64bit | HDAudio Class Driver Fidelity Test - Vista (System, Manual) | 6/1/2011 | 1012 | Erratum | Fidelity plays a quiet (-60 dB FS) test tone during System Activity test which is filtered out of the noise level measurement. However, Fidelity is quite prone to glitches during system activity the glitches leak into the measured noise, causing false failures. |
| Windows Vista Windows Vista 64bit | HDAudio Class Driver Fidelity Test - Vista (System, Manual) | 7/31/2011 | 598 | Erratum | EU restrictions place a cap on the output level of headphone jacks at 32 Ohm load: headphones are not allowed to have an electrical output of more than 150 mV at that load. We test headphone jacks at 300 Ohm load; the relationship between the output at 32 Ohms and the output at 320 Ohms depends on the output impedance of the headphone jack. In particular, if a headphone jack meets the EU requirement of X <= 150 mV at 32 Ohms, depending on the output impedance, it could output a huge amount of power at 300 Ohms, or very slightly over X mV. Since we require X >= 120 mV at 32 Ohms, absent knowledge of the output impedance we can only require X >= 120 mV at 300 Ohms. 120 mV is -18.42 dBV. Any headphone output level at 32 Ohms that is less than -18.42 dBV is a legitimate failure, even if it is targeted at EU compliance. Any headphone output level greater than 1 Vrms (0.707 Vrms for mobile systems) is a legitimate pass, regardless of EU compliance. This errata covers output level failures for headphone jacks between -18.42 dBV and 1 Vrms/0 dBV (0.707 Vrms/-6.93 dBV for mobile systems)) in accordance with note 6 of the WLP fidelity requirements. |
| Windows 7 | GlitchFree WMV HD 720p video playback quality test | 6/1/2011 | 2018 | Erratum | The GlitchFree WMV HD 720p video playback quality test enforces SYSFUND-0062. A problem has been found in Case 3 that may cause the test to improperly fail. |
| Windows Vista 64bit | System - Common Scenario Stress With IO | 6/1/2011 | 1537 | Erratum | The Common Scenario Stress with IO test enumerates devices that can be disabled early in the boot cycle. Some devices can be disabled during the boot process, but later cannot be disabled. Since the test does not check the device status each time, it may attempt to disable a device that cannot be disabled. |

Test Notes

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