

System Logo Program (SLP)

Intel[®] Desktop System DP67BG

SLP Report

12/16/2010

Purpose:

This report describes the DP67BG System Logo Program testing run conducted by Intel Corporation.

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Contents

| Introduction | 4 |
|---|----|
| Terms and Definitions | |
| Desktop Board Configuration | 5 |
| Desktop Board DP67BG Final Configuration Report: Completion of SLP | 5 |
| Board Information | |
| Product Code | 5 |
| Processor | 5 |
| Motherboard | 5 |
| System Memory | 5 |
| Power Management | |
| Operating System Tested | |
| Onboard Integrated Devices and Driver for Vista 32-bit and 64-bit | 6 |
| Onboard Integrated Devices and Driver for Windows 7 32-bit and 64-bit | |
| Windows Logo Kits Used (WLK) | 8 |
| Errata and Contingencies. | 8 |
| Test Notes | 12 |

Terms and Definitions

| Term | Definitions |
|-----------------------------|---|
| WHQL | Windows* Hardware Qualification Lab |
| WLK | Windows Logo Kits |
| SLP | System 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: <u>http://winqual.microsoft.com/HCL/ProductList.aspx?m=v&cid=105&g=s</u> |

Desktop Board Configuration

Desktop Board DP67BG Final Configuration Report: Completion of SLP

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

Board Information

| Product Code ¹ | BIOS String/Model | Technologies NOT Logo'd (yet) | | | | |
|---------------------------|---|---|--|--|--|--|
| DP67BG | BGP6710J.86A.1569.2010.1101.1220 | N/A - all technologies logo'd | | | | |
| Processor | | | | | | |
| Speed | 3.4GHz | | | | | |
| Family | Intel® Sandybridge i7 2600 D2 | Intel® Sandybridge i7 2600 D2 | | | | |
| Bus Speed | 1333 MHz | | | | | |
| Motherboard | | | | | | |
| Board AA # | G10491 | | | | | |
| Board FAB # | 300 | | | | | |
| | es to the production FAB revision; Please revision you intend to perform logo testing | consult your Intel Corporation representative to clarify if not the same. | | | | |
| System Memory | | | | | | |
| Speed | Dual Channel, DDR3, 1333MHz | | | | | |
| Memory Type | DIMM | | | | | |
| Connector Type | DDR3, 240 Pin | | | | | |
| Power Management | | | | | | |
| BIOS Default | S3 | | | | | |
| Operating Syste | m Tested | | | | | |
| | Check Tested Comments | | | | | |
| Windows 7 and 64-bit | | Windows 7 Ultimate | | | | |
| Windows 7 and 32-bit | ☑ Windows 7 Ultimate | | | | | |

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 | 9.2.0.1015 | 9.2.0.1015 |
| Intel [®] Chipset Software Utility | Windows 7 64-bit | 9.2.0.1015 | 9.2.0.1015 |
| Audio | Windows 7 | 6.0.1.6194 | PG310 |
| Realtek ALC892/889 | Windows 7 64-bit | 6.0.1.6194 | PG310 |
| LAN | Windows Vista | 11.8.74.0 | N/A |
| Intel 82579V | Windows 7 64-bit | 11.8.74.0 | N/A N/A |
| | | | |
| USB 3.0 | Windows 7 | 2.0.20.0 | N/A |
| NEC uPD720200 | Windows 7 64-bit | 2.0.20.0 | N/A |
| МЕ | Windows 7 | 7.0.0.1118 | N/A |
| Intel CPT_1.5M | Windows 7 64-bit | 7.0.0.1118 | N/A |
| | | | |
| ESATA | Windows 7 | 1.2.0.7600 | N/A |
| Marvell SATA | Windows 7 64-bit | 1.2.0.7600 | N/A |
| CIR | Windows 7 | 2.2.2010.714 | N/A |
| Nuvoton W83677HG-I | Windows 7 64-bit | 2.2.2010.714 | N/A |
| IRST | Windows 7 | 10.0.0.1046 | 10.0.01046 |
| Intel P67 | Windows 7 64-bit | 10.0.0.1048 | 10.0.0.1048 |

Additional Devices and Driver for Windows 7 32-bit and 64-bit

| Technology | OS | Version | Package version |
|---------------------------|------------------|--------------|-----------------|
| PCle x16 Graphic Card | Windows 7 | 6.0.1.6194 | 260.99 |
| Nvidia 9800GT | Windows 7 64-bit | 6.0.1.6194 | 260.99 |
| | | | |
| Wireless | Windows 7 | 3.1.4.0 | 3.1.4.0 |
| MSI MS-3871 | Windows 7 64-bit | 3.1.4.0 | 3.1.4.0 |
| | | | |
| Bluetooth | Windows Vista | 3.0.2.272 | N/A |
| MSI MS-3871 | Windows 7 64-bit | 11.8.74.0 | N/A |
| | | | |
| PCIe x1 TV Card | Windows 7 | 1.44.27253.0 | N/A |
| Hauppauge Win TV HVR-1200 | Windows 7 64-bit | 1.44.27253.0 | N/A |
| | | • | |

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 | WLK1.5 for Windows 7 | WLK1.5 for Windows 7 |
| Windows Vista Windows Vista 64-bit | WLK1.5 for Windows Vista SP2 | WLK1.5 for Windows Vista SP2 |

Errata and Contingencies

| Operating | | Expiry | | | |
|-------------------------------|--|-----------|-----------|---------|--|
| System | Failing Test | Date | ID Number | Туре | Error Description |
| Windows 7 Windows 7 64-bit | Class Drive AC3 Test - Win7 | 6/30/2025 | 1256 | Erratum | Issue Description: |
| | (System) | | | | 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. |
| | | | | | Resolution Description: |
| | | | | | This is an acceptable failure. |
| Windows 7 | 1)Class Drive AC3 Test - Win7 | 1/31/2011 | 1801 | Erratum | Issue Description: |
| Windows 7 64-bit | (System) 2) Fidelity Test - Win7 (System, Manual) | | | | There is a test bug which causes the measurement of system noise during Render Power Transition Test to be about 3 dB worse than it should be. This filter forgives errors up to 6 dB. |
| | | | | | Resolution Description: |
| | | | | | This is an acceptable failure. |
| Windows 7 | 1)Class Drive AC3 Test - Win7 | 6/1/2011 | 1012 | Erratum | Issue Description: |
| Windows 7 64-bit | (System) 2) Fidelity Test - Win7 (System, Manual) | | | | Fidelity uses too small of a buffer and wakes up too infrequently during the System Activity test. This causes errors like: Noise level during system activity on (left or right) channel 73.2016 dB: *** FAIL *** (requirement >= 80 dB) |
| | | | | | Resolution Description: |
| | | | | | The signature of this failure is a lot of good- looking noise measurements during System Activity Test (noise levels down around -90 dBV) with a few sporadic bad noise measurements (- 80 dB, -70 dBV) sprinkled throughout (where the glitches happen.) This filter will forgive noise level during system activity of up to -65 dB. |
| Windows 7 64-bit | Class Drive Fidelity Test - Win7 (System, Manual) | 7/31/2011 | 598 | Erratum | Issue Description: 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 |

| Windows 7 | DCI Hardware | 6/4/2014 | 404 | | 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 300 Ohms, though. So any measurement >= 120 mVrms at 300 Ohms "could be" a passing result, depending on the output impedance. Resolution Description: This errata covers headphone output level failures where the output level >= 120 mVrms (-45.41 dBV.) 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 systems) is a legitimate pass, regardless of EU compliance. |
|------------------|---------------------------------|----------|------|---------|--|
| Windows 7 | PCI Hardware Compliance Test | 6/1/2011 | 401 | Erratum | Issue Description: |
| Windows 7 64-bit | For Systems | | | | 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 | PCI Hardware Compliance Test | 6/1/2011 | 923 | Erratum | Issue Description: |
| Windows 7 64-bit | For Systems | | | | 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. Resolution Description: This erratum is in place because the PCI Compliance test doesn't recognize Extended Capability IDs greater that 0xB. The PCI Compliance test will be updated to correct this in the future. |
| Windows 7 | PCI Hardware | 6/1/2011 | 1241 | Erratum | Issue Description: |
| Windows 7 64-bit | Compliance Test For Systems | | | | 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. Resolution Description: 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 | UAA Test - Vista | 2/28/2011 | 1299 | Erratum | Issue Description: |
| Windows7 64 bit | or Server08 (System) | | | | 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 occurred - 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. Resolution Description: When this Errata expires, the issue described will be considered a valid failure. |
| Windows 7 | UAA Test - Vista | 6/1/2011 | 1300 | Erratum | Issue Description: |
| Windows7 64 bit | or Server08 (System) | | | | 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. Resolution Description: This is an acceptable failure. |
| Windows 7 Windows7 64 bit | UAA Test - Vista or Server08 (System) | 6/1/2015 | 513 | Erratum | Issue Description: 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 Windows7 64 bit | USB Host Controller | 6/1/2012 | 1787 | Erratum | Issue Description: |
| | Compliance (Automated) | | | | 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 |
|--|--|---|
| | | Resolution Description: |
| | | XHCI spec compliance test is in preview For further details visit: https://winqual.microsoft.com/ec/ |

Test Notes

| Operating System | Test | Description |
|---|------------------|---|
| Windows 7 and Vista | BIOS download | Internal: <u>http://bios.intel.com/downloads/</u> External: <u>http://www.intel.com/</u> 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 Enhance customer IR: Enable Boot Device Priority: set <hard disk="" driver=""> to first Others: BIOS default setting</hard> |
| Windows 7 and Vista filter update | WLK WHQL test | http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/fi Iterupdates.cab |
| Special H/W that use to PASS the test | None | None |