

## Previously Logo'd Motherboard Program (PLMP)

# Intel<sup>®</sup> Desktop Board DQ77KB

# **PLMP Report**

6/29/2012

Purpose:

This report describes the DQ77KB Previously Logo'd Motherboard Logo Program testing run conducted by Intel Corporation.

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#### Terms and Definitions

| Term                        | Definitions   |  |  |  |
|-----------------------------|---|--|--|--|
| WHQL                        | Windows* Hardware Qualification Lab   |  |  |  |
| WLK                         | Windows Logo Kits   |  |  |  |
| PLMP                        | Previously Logo'd Motherboard Program. For further information see: <u>http://www.microsoft.com/whdc/hwtest/default.mspx</u>  |  |  |  |
| AP Machine                  | Audio Precision Machine   |  |  |  |
| Winqual                     | Windows Qualification   |  |  |  |
| MSFT Tested<br>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 DQ77KB Final Configuration Report: Completion of PLMP

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)  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|--|
| DQ77KB                            | KBQ7710H.86A.0038.2012.0425.1537   | N/A - all technologies logo'd  |  |  |  |  |
| Processor                         |  |  |  |  |  |  |
| Speed                             | 3.10GHz  |  |  |  |  |  |
| Family                            | Intel(R) Core(TM) i7-3770S CPU   |  |  |  |  |  |
| Bus Speed                         | 100 MHz  |  |  |  |  |  |
| Motherboard                       |  |  |  |  |  |  |
| Board AA #                        | G40294   |  |  |  |  |  |
| Board FAB #                       | 300 (eg. 10x for fab A, 20x for fab B and  | etc)   |  |  |  |  |
|                                   | es to the production FAB revision; Please co<br>ion you intend to perform logo testing if no | onsult your Intel Corporation representative to clarify the ot the same. |  |  |  |  |
| System Memory                     |  |  |  |  |  |  |
| Speed                             | Dual Channel, DDR3, 1600MHz  |  |  |  |  |  |
| Метогу Туре                       | DIMM   |  |  |  |  |  |
| Connector Type                    | DDR3, 204 Pin  |  |  |  |  |  |
| Power<br>Management               |  |  |  |  |  |  |
| BIOS Default                      | OS Default S3  |  |  |  |  |  |
| Operating System Tested           |  |  |  |  |  |  |
|                                   | Check Tested   | Comments   |  |  |  |  |
| Windows 7 and<br>64-bit           |  | Windows 7 Ultimate Service Pack 1  |  |  |  |  |
| Windows Vista<br>and 64-bit       | □ Vista Ultimate with Service Pack 2   |  |  |  |  |  |
| Windows Vista<br>Basic and 64-bit | U Vista Basic with Service Pack 2  |  |  |  |  |  |

<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                         |
|---|------------------|---------------|---|
|   | Viedove 7        |               | INF_allOS_9.3.0.1020_                   |
| Chipset Update Utility                        | Windows 7        | V9.3.0.1020   | PV                                      |
| Intel <sup>®</sup> Chipset Software Utility   | Windows 7 64-bit | V9.3.0.1020   | INF_allOS_9.3.0.1020_<br>PV             |
|   |                  |               |   |
| Graphics                                      | Windows 7        | V8.15.10.2669 | GFX_Vista32_Win7_32<br>_8.15.10.2669_PV |
| Intel(R) HD Graphics 4000                     | Windows 7 64-bit | V8.15.10.2669 | GFX_Vista64_Win7_64<br>_8.15.10.2669_PV |
|   |                  |               |   |
| Audio   | Windows 7        | V6.0.1.6526   | AUD_Vista_Win7_6.0.1.<br>6562_PV        |
| Realtek High Definition Audio                 | Windows 7 64-bit | V6.0.1.6526   | AUD_Vista_Win7_6.0.1.<br>6526_PV        |
|   |                  |               |   |
| LAN-1   | Windows 7        | V11.14.48.0   | LAN_allOS_11.15.16.0_<br>PV             |
| Intel(R) 82574L Gigabit Network<br>Connection | Windows 7 64-bit | V11.14.48.0   | LAN_allOS_11.15.16.0_<br>PV             |
| r   |                  |               | LAN_allOS_11.15.16.0_                   |
| LAN-2<br>Intel(R) 82579LM Gigabit             | Windows 7        | V11.15.16.0   |   |
| Network Connection                            | Windows 7 64-bit | V11.15.16.0   | LAN_allOS_11.15.16.0_<br>PV             |
|   |                  |               |   |
| MEI   | Windows 7        | V8.0.0.1262   | MEI_allOS_8.0.3.1427_<br>PV             |
| Intel <sup>®</sup> Management Engine          | Windows 7 64-bit | V8.0.0.1262   | MEI_allOS_8.0.3.1427_<br>PV             |
|   |                  |               | USB3_allOS_1.0.3.214_                   |
| USB3<br>Intel(R) USB 3.0 eXtensible Host      | Windows 7        | V1.0.3.214    | PV                                      |
| Controller                                    | Windows 7 64-bit | V1.0.3.214    | USB3_allOS_1.0.3.214_<br>PV             |

#### Windows Logo Kits Used (WLK)

Microsoft website: <a href="http://www.microsoft.com/whdc/DevTools/WDK/DTM.mspx">http://www.microsoft.com/whdc/DevTools/WDK/DTM.mspx</a>

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

### Errata and Contingencies

| Operating System              | Failing Test                                   | Expiry<br>Date | ID<br>Number | Туре    | Error Description   |
|-------------------------------|--|----------------|--------------|---------|---|
| Windows 7<br>Windows 7 64-bit | Class Driver AC3<br>Test - Win7<br>(System)    | 6/30/2025      | 1256         | Erratum | Run AC3 test on a system with the Microsoft HD Audio class<br>driver installed. Expected results: All AC3 kernel streaming data<br>ranges should advertise MinimumBitsPerSample = 16 and<br>MaximumBitsPerSample = 16. Actual results: HD Audio class<br>driver sometimes advertises MaximumBitsPerSample = 24.   |
| Windows 7<br>Windows 7 64-bit | PCI Hardware<br>Compliance Test<br>For Systems | 12/1/2012      | 1167         | Erratum | Assertion EB8AA49D-4825-4542-B549-289F1076C0F9<br>Bit range 23:21 (Reserved)in the Link Capabilities<br>register (offset Ch) in the PCI Express Capability table<br>must be read-only and always return 0 . It was found to<br>return 1.  |
| Windows 7<br>Windows 7 64-bit | PCI Hardware<br>Compliance Test<br>For Systems | 12/01/2012     | 401          | Erratum | The following PCI Compliance test failure is acceptable: Bit 15<br>(Bridge Configuration Retry Enable) in the Device Control<br>register (offset 8h) in the PCI Express Capability table must be<br>read-only and always return 0 as it is reserved for devices other<br>than PCI Express to PCI/PCI-X Bridges. Assertion 13A41D3E-<br>2576-41DC-A67C-525DA3637CEA This failure is acceptable<br>because this is a PCIe 1.1 feature and the WLP requires<br>compliance with only PCIe 1.0a.   |
| Windows 7<br>Windows 7 64-bit | PCI Hardware<br>Compliance Test<br>For Systems | 12/01/2012     | 1241         | Erratum | This happens because the PCI Compliance test assumes that if<br>the Data Link Layer Link Active Reporting Capable bit in the Link<br>Capabilities register for a given PCIe port is set then that<br>indicates that the Data Link Layer Link Active bit will also be set.<br>This is an incorrect assumption because the Data Link Link<br>Layer Link Active bit can be reset when there is no device<br>below the port. This assertion needs to be removed from the<br>PCIHCT. The current architecture of the PCIHCT prevents it from<br>knowing whether devices exist below a bridge/port. |
| Windows 7<br>Windows 7 64-bit | PCI Hardware<br>Compliance Test<br>For Systems | 12/1/2012      | 923          | Erratum | Assertion FAE18121-9177-4FB2-A081-0D04C285EFF2<br>Bit range 15:0 (Extended Capability ID)in the Enhanced<br>Capability Header register (offset 0h) in the<br>Unrecognized Enhanced Capability ID 13 table is Dh. It<br>must be in the range [0x0 - 0xB] as all other Capability<br>IDs are reserved.  |

| Operating System              | Failing Test                | Expiry<br>Date | ID<br>Number | Туре    | Error Description   |
|-------------------------------|-----------------------------|----------------|--------------|---------|---|
| Windows 7<br>Windows 7 64-bit | UAA Test - Win7<br>(System) | 6/1/2015       | 513          | Erratum | UAA Test requires the Traffic Priority bit to be read/write -<br>however there are two specs that apply, and they conflict. One<br>says the bit must be read/write, the other says it must be read-<br>only. Contact has been made with the author of both specs<br>(Intel) but until this point is clarified we cannot fail submissions<br>containing this test failure. |
| Windows 7<br>Windows 7 64-bit | UAA Test - Win7<br>(System) | 6/1/2015       | 1300         | Erratum | HD Audio pin configuration document calls out setting<br>Port Connectivity to No Connection as the way to turn a<br>pin off in a particular system. UAA Test incorrectly tests<br>such pins.  |
| Windows 7<br>Windows 7 64-bit | UAA Test - Win7<br>(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.   |

#### **Test Notes**

| Operating System                            | Test             | Description   |
|---|------------------|---|
| Windows 7                                   | BIOS<br>download | Internal: <u>http://bios.intel.com/downloads/</u><br>External: <u>http://www.intel.com/</u> click on Support and Download   |
| Windows 7                                   | BIOS setup       | Please make sure the BIOS setting are as below, otherwise use default<br>settings.<br>System Date and Time: Current date and time<br>Peripheral Configuration: Enable all onboard component<br>Drive Configuration: Set to AHCI<br>Chipset Configuration: Enable HPET<br>ACPI Suspend State: Set to <s3 state=""><br/>Boot Device Priority: set <hard disk="" driver=""> to first</hard></s3> |
| Windows 7 filter<br>update                  | WLK WHQL<br>test | http://winqual.microsoft.com/member/SubmissionWizard/LegalExemptions/filte<br>rupdates.cab  |
| Special H/W that<br>use to PASS the<br>test | None             | None  |