



Intel[®] Desktop Board DQ965GF Specification Update

October 2008

Order Number: D65914-005US

The Intel[®] Desktop Board DQ965GF may contain design defects or errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are documented in this Specification Update.

Revision History

| Revision | Revision History | Date |
|----------|--|-------------------|
| -001 | This document is the first Specification Update for the Intel® Desktop Board DQ965GF | September 6, 2006 |
| -002 | Added Specification Change 1 | November 2006 |
| -003 | Updated General Information table and added Specification Change 2 | February 2007 |
| -004 | Updated General Information table | December 2007 |
| -005 | Updated General Information table | October 2008 |

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The Intel® Desktop Board DQ965GF may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications before placing your product order.

Copies of documents which have an ordering number and are referenced in this document, or other Intel literature, may be obtained from:

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Specification Update for the Intel[®] Desktop Board DQ965GF

This document is an update to the specifications contained in the *Intel[®] Desktop Board DQ965GF Technical Product Specification* (Order Number D56021). It is intended for hardware system manufacturers and software developers of applications, operating systems, or tools. It will contain Specification Changes, Errata, Specification Clarifications, and Documentation Changes.

For specification updates concerning the Intel processor that may apply to this desktop board, refer to the following:

- Intel[®] Core™2 Extreme Processor X6800Δ and Intel[®] Core™2 Duo Desktop Processor E6000Δ Sequence Specification Update (Order Number 313279)
- Intel[®] Pentium[®] 4 Processor 6x1Δ Sequence Specification Update (Order Number 310309)
- Intel[®] Pentium[®] 4 Processor on 90 nm Process Specification Update (Order Number 302352)
- Intel[®] Pentium[®] 4 Processor Specification Update (Order Number 249199)

Unless otherwise noted in this document, it should be assumed that any processor errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

Refer to the *Intel[®] P965 Broadwater Chipset Specification Update* (Order Number 313054) for specification updates concerning the 82Q965 MCH Controller and that may apply to the desktop board DQ965GF. Unless otherwise noted in this document, it should be assumed that any MCH errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

Refer to the *Intel[®] IO Controller Hub8 (ICH8) Family Specification Update* (Order Number 313057) for specification updates concerning the 82801HB I/O Controller Hub and that may apply to the desktop board DQ965GF. Unless otherwise noted in this document, it should be assumed that any ICH8 errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

Terminology

Specification Changes are modifications to the current published specifications. These changes will be incorporated in the next release of the specifications.

Errata are design defects or errors. Characterized errata may cause the desktop board behavior to deviate from published specifications. Hardware and software designed to be used with any given Altered Assembly (AA) and BIOS revision level must assume that all errata documented for that AA and BIOS revision level are present on all desktop boards.

Specification Clarifications describe a specification in greater detail or further highlight a specification's impact to a complex design situation. These clarifications will be incorporated in the next release of the specifications.

Documentation Changes include typos, errors, or omissions from the current published specifications. These changes will be incorporated in the next release of the specifications.

General Information

Basic Desktop Board DQ965GF Identification Information

| AA Revision | BIOS Revision | Notes |
|-------------|-------------------|-------|
| D41676-305 | CO96510J.86A.4462 | 1,2 |
| D41676-400 | CO96510J.86A.4462 | 1,2 |
| D41676-401 | CO96510J.86A.5595 | 1,2 |
| D41676-402 | CO96510J.86A.5773 | 1,2 |
| D41676-601 | CO96510J.86A.5773 | 1,2 |
| D41676-602 | CO96510J.86A.5953 | 1,2 |
| D41676-603 | CO96510J.86A.5953 | 1,2 |

NOTES

1. The AA number is found on a small label on the component side of the board.
2. The 965 Chipset kit used on this AA revision consists of two components as follows:

| Device | Stepping | S-Spec Numbers |
|---------|----------|----------------|
| 82Q965 | C2 | L9QZ |
| 82801HO | B0 | L9MM |

Summary of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board DQ965GF. Intel intends to fix some of the errata in a future revision of the desktop board, and to account for the other outstanding issues through documentation or specification changes as noted.

The following notations are used in the table:

- Doc: Document change or update that will be implemented.
- Plan Fix: This erratum may be fixed in a future revision of the desktop board, driver, or BIOS.
- Fixed: This erratum has been previously fixed.
- No Fix: There are no plans to fix this erratum.
- Shaded: This erratum is either new or modified from the previous version of the document.

| No. | Plans | Specification Changes |
|-----|-------|--|
| 1 | Doc | Changes to Section 1.9.2 Audio Connectors. |
| 2 | Doc | Changes to Section 1.10.1 Intel® 82566DM Gigabit Ethernet Controller |
| No. | Plans | Errata |
| | | There are no characterized erratum for this product |

Specification Changes

1. The following note will be added to the Technical Product Specification in Section 1.9.2 Audio Connectors:

INTEGRATOR'S NOTES

Electrostatic discharge (ESD) can damage desktop board components. Front-panel connectors should provide sufficient protection to prevent ESD damage to components inside the chassis enclosure.

2. Section 1.10.1 of the Technical Specification will be updated in its entirety as follows to remove reference to Jumbo frame support.

1.10.1 Intel® 82566DM Gigabit Ethernet Controller

The Intel® 82566DM Gigabit Ethernet Controller supports the following features:

- PCI Express link
- 10/100/1000 IEEE 802.3 compliant
- Compliant to IEEE 802.3x flow control support
- TCP, IP, UDP checksum offload
- Transmit TCP segmentation
- Advanced packet filtering
- Full device driver compatibility
- PCI Express Power Management Support