



# Intel<sup>®</sup> Desktop Board DG965RY Specification Update

May 2008

Order Number D65907-005US

The Intel<sup>®</sup> Desktop Board DG965RY 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

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Revision	Revision History	Date
-001	This document is the first Specification Update for the Intel® Desktop Board DG965RY.	August 7, 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 and Specification Changes Sections.	May 2008

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The Intel® Desktop Board DG965RY 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:

Intel Corporation  
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Denver, CO 80217-9808

or call in North America 1-800-548-4725, Europe 44-0-1793-431-155, France 44-0-1793-421-777, Germany 44-0-1793-421-333, other Countries 708-296-9333

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# Specification Update for the Intel® Desktop Board DG965RY

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This document is an update to the specifications contained in the *Intel® Desktop Board DP965RY Technical Product Specification* (Order Number D56011). 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 82G965 MCH Controller and that may apply to the desktop board DG965RY. 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 DG965RY. 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 DG965RY Identification Information

AA Revision	BIOS Revision	Notes
D41691-205	MQ96510J.86A.0816	1,2
D41691-206	MQ96510J.86A.1612	1,2
D41691-207	MQ96510J.86A.1612	1,2
D41691-208	MQ96510J.86A.1676	1,2
D41691-209	MQ96510J.86A.1687	1,2
D41691-301	MQ96510J.86A.1687	1,2
D41691-302	MQ96510J.86A.1687	1,2
D41691-303	MQ96510J.86A.1715	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
82G965	C2	L9R5
82801HB	B0	L9MN

## Summary of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board DG965RY. 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 1.7.2 Audio Connectors.
2	Doc	Changes to Section 1.8.1 Intel® 82566DC Gigabit Ethernet Controller.
3	Doc	Section 3.11 has been added to the Technical Specification.
No.	Plans	Errata
		There are no characterized erratum for this product

# Specification Changes

Changes to the feature description in the board technical product specification. Typically the customer does not have to do anything to achieve proper device functionality as a result of the change.

1. The following note will be added to the Technical Product Specification in Section 1.7.2 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 1.8.1 of the Technical Specification will be updated in its entirety as follows to remove reference to Jumbo frame support.

### **1.8.1 Intel® 82566DC Gigabit Ethernet Controller**

The Intel® 82566DC 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

3. Section 3.11 has been added to the Technical Specification.

## **3.11 Intel® System Recovery Tool**

The Intel® Desktop Board DP965LT incorporates the Intel® System Recovery Tool. The Intel System Recovery Tool is an embedded backup and recovery tool located in the BIOS of this Intel® Architecture motherboard.

Intel System Recovery Tool is built on the Unified Extensible Firmware Interface (UEFI) specification and is embedded in the motherboard BIOS. Therefore, it is easy to use and suitable for multiple usage models.

### **Backup**

The Backup feature allows you to backup all data from a specified partition to another partition or to a USB disk.

## Restore

Restore allows you to restore a partition using an image file from a previous backup.

<b>Hard Drives Required</b>	1 or 2
<b>Advantage</b>	Graphic user interface – Simple and easy-to-use Streamlined backup & restore process – Only three quick steps Good for all PC users. No IT background required No installation required, built into BIOS.
<b>Disadvantage</b>	Decreased volume capacity if single drive used, no decrease in volume capacity if second drive used. May be internal or external such as USB disk.
<b>Application</b>	System and data protection; restoration of the master drive to a previous or default state.

You can learn more about Intel System Recovery Tool at <http://platformadmintech.intel.com/srt/>