



# Intel® Desktop Board D945GRW Specification Update

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The Intel® Desktop Board D945GRW 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.

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The Intel® desktop board D945GRW 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.

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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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## REVISION HISTORY

<b>Date of Revision</b>	<b>Version</b>	<b>Description</b>
December 12, 2005	-001	This document is the first Specification Update for the Intel® Desktop Board D945GRW.
July 2006	-002	Updated General Information table.
November 2006	-003	Added Specification Change 1.
February 2007	-004	Added Specification Change 2.



## PREFACE

This document is an update to the specifications contained in the *Intel® Desktop Board D945GRW Technical Product Specification* (Order number D36108). 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® Pentium® D Processor 900Δ Sequence and Intel® Pentium® Processor Extreme Edition 955Δ, 965Δ Specification Update* (Order Number 310307)
- *Intel® Pentium® D Processor 800Δ Sequence and Intel® Pentium® Processor Extreme Edition 840Δ Specification Update* (Order Number 306832)
- *Intel® Celeron® D Processors 300Δ Sequence Specification Update* (Order Number 302354)
- *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® 945G/945GZ/945P/945PL Express Chipset Family Specification Update* (Order Number 307503) for specification updates concerning the 82945G GMCH Controller and that may apply to the desktop board D945GRW. 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® I/O Controller Hub 7 (ICH7) Family EDS Specification Update* (Order Number 307014) for specification updates concerning the 82801GB ICH7 I/O Controller Hub and that may apply to the desktop board D945GRW. Unless otherwise noted in this document, it should be assumed that any ICH7 errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

## Nomenclature

**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 D945GRW's 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.

# **Specification Update for the Intel® Desktop Board D945GRW**







## GENERAL INFORMATION

**Basic Desktop Board D945GRW Identification Information**

<b>AA Revision</b>	<b>BIOS Revision</b>	<b>Notes</b>
D30998-500	ME94510M.86A.0067	1-2
D30998-501	ME94510M.86A.0067	1-2
D30998-503	ME94510M.86A.0074	1-2
D30999-500	ME94510M.86A.0067	1-2
D30999-501	ME94510M.86A.0067	1-2
D30999-502	ME94510M.86A.0074	1-2

NOTES:

1. The AA number is found on a small label on the component side of the board.
2. The 82945G Chipset kit used on this AA revision consists of two components as follows:

<b>Device</b>	<b>Stepping</b>	<b>S-Spec Numbers</b>
82945G MCH	A2	SL8FU
82801GB ICH7	A1	SL8FX



### Summary Table of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board D945GRW. 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. This table uses the following notations:

#### CODES USED IN SUMMARY TABLE

- Doc: Document change or update that will be implemented.
- PlanFix: This erratum may be fixed in a future revision of the desktop board, driver, or BIOS.
- Fixed: This erratum has been previously fixed.
- NoFix: 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 1.10.2 Audio Connectors
2	Doc	Changes to Section 1.11.1 Intel® 82573E/82573L Gigabit Ethernet Controller
NO.	PLANS	ERRATA
		There is not characterized erratum for this product.



## SPECIFICATION CHANGES

1. *The following note will be added to the Technical Product Specification in Section 1.10.2 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 1.11.1 of the Technical Specification will be updated in its entirety as follows to remove reference to Jumbo frame support.*

#### 1.11.1 INTEL® 82573E/82573L GIGABIT ETHERNET CONTROLLER

The Intel® 82573E/82573L 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