



Intel® Desktop Board D915GRF Specification Update

Release Date: March 2005

Order Number: C80890-003

The Intel® Desktop Board D915GRF 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.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. INTEL PRODUCTS ARE NOT INTENDED FOR USE IN MEDICAL, LIFE SAVING, LIFE SUSTAINING APPLICATIONS.

Intel may make changes to specifications and product descriptions at any time, without notice.

Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

The Intel® desktop board D915GRF 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
P.O. Box 5937
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

Intel, Pentium, Celeron, and the Intel logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

* Other names and brands may be claimed as the property of others.

Copyright © 2004, 2005 Intel Corporation.

CONTENTS

REVISION HISTORY	v
PREFACE	vi
Specification Update for the Intel® Desktop Board D915GRF	
GENERAL INFORMATION	3
ERRATA	5



REVISION HISTORY

Date of Revision	Version	Description
July 2004	-001	This document is the first Specification Update for the Intel® Desktop Board D915GRF.
December 2004	-002	Added Erratum 1, 2.
March 2005	-003	Added Erratum 3.

PREFACE

This document is an update to the specifications contained in the *Intel® Desktop Board D915GRF Technical Product Specification* (Order number C68602). 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.

Refer to the *Intel® Pentium® 4 Processor Specification Update* (Order number 249199) for specification updates concerning the Intel Pentium 4 processor and that may apply to the desktop board D915GRF. 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® 915G and 915P Chipset: Specification Update* (Order Number 301468) for specification updates concerning the 82915G MCH Controller and that may apply to the desktop board D915GRF. 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 Hub 6 (ICH6) Family Specification Update* (Order Number 301474) for specification updates concerning the 82801ER I/O Controller Hub and that may apply to the desktop board D915GRF. Unless otherwise noted in this document, it should be assumed that any ICH 6 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 D915GRF'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 D915GRF**

GENERAL INFORMATION

Basic Desktop Board D915GRF Identification Information

AA Revision	BIOS Revision	Notes
C67706-500	EV91510A.86A.0234	1-5
C67706-501	EV91510A.86A.0234	1-5

NOTES:

1. The AA number is found on a small label on the component side of the board.
2. The 82915G Chipset kit used on this AA revision board consists of two components as follows:

Device	Stepping	S-Spec Numbers
82915G GMCH	B1	SL7LX
82801FB ICH6	B1	SL7AG

3. Refer to the *Intel® Pentium® 4 Processor Specification Update* (Order Number 249199) for errata related to the Pentium 4 processor and that may apply to the desktop board D915GRF.
4. Refer to the *Intel® 915G and 915P Chipset: Specification Update* (Order Number 301468) for errata related to the 82915G MCH that may apply to the desktop board D915GRF.
5. Refer to the *Intel® 82801FB IO Controller Hub 6 (ICH6) Family Specification Update* (Order Number 301474) for errata related to the 82801FB I/O Controller Hub that may apply to the desktop board D915GRF.

Summary Table of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board D915GRF. 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	ERRATA
1	Plan Fix	Trusted Platform Module (TPM) may be undetected by Microsoft Windows* operating systems the first time the TPM is initialized.
2	Plan Fix	Alert Standard Format (ASF) is non-functional.
3	Plan Fix	Wake On LAN may not function after loss and restore of AC power

ERRATA

1. ***Trusted Platform Module (TPM) May Be Undetected By Microsoft Windows* Operating Systems the First Time the TPM is Initialized***

PROBLEM: After enabling TPM in BIOS Setup for the first time and then booting into the Windows operating system, TPM may be missing from Device Manager.

IMPLICATION: TPM may not be available to the operating system for user configuration.

WORKAROUND: When enabling TPM the first time, follow these steps:

1. Enable TPM in BIOS Setup
2. Boot into Windows operating system
3. Shut down Windows operating system
4. Wait 15 seconds
5. Power on the system

STATUS: This issue may be fixed in a future BIOS revision.

2. ***Alert Standard Format (ASF) is Non-Functional***

PROBLEM: BIOS and device driver support is currently not implemented to support Alert Standard Format (ASF).

IMPLICATION: ASF, an interface that provides access and manageability in OS-absent environments, is currently not supported.

WORKAROUND: None.

STATUS: This erratum may be fixed in a future BIOS and driver revision.

3. ***Wake On LAN May Not Function After Loss and Restore of AC Power***

PROBLEM: If AC power is removed, Wake On LAN may not function until the LAN circuit is re-initialized. The sequence of events is as follows:

- AC power removed (AC power cord disconnected, for example)
- AC power restored. +5V Standby voltage is re-applied to the board
- Wake On LAN may not be functional
- Switch power on
- Switch power off to put system back into Standby mode (S5 state)
- Wake On LAN functionality restored

IMPLICATION: Wake on LAN will not function if AC power is interrupted.



WORKAROUND: In the BIOS Setup program, set After Power Failure to “Power On” in the Power Menu.

STATUS: This erratum may be fixed in a future BIOS revision.