



Intel® Desktop Boards D915GAV/D915GAG Technical Product Specification

December 2004

Order Number: C68600-002

The Intel® Desktop Board D915GAV/D915GAG may contain design defects or errors known as errata that may cause the product to deviate from published specifications. Current characterized errata are documented in the Intel Desktop Board D915GAV/D915GAG Specification Update.

**NOTE**

Most of the illustrations in this document show only the Desktop Board D915GAV. When there are significant differences between the two Desktop Boards, illustrations of both boards are provided.

1.3 Overview

1.3.1 Feature Summary

Table 2 summarizes the major features of the Desktop Boards D915GAV and D915GAG.

Table 2. Feature Summary

Form Factor	<ul style="list-style-type: none"> D915GAV: ATX (12.00 inches by 9.60 inches [304.80 millimeters by 243.84 millimeters]) D915GAG: microATX Form Factor (9.60 inches by 9.60 inches [243.84 millimeters by 243.84 millimeters])
Processor	Support for an Intel® Pentium® 4 processor in an LGA775 socket with an 800 or 533 MHz system bus
Memory	<ul style="list-style-type: none"> Four DDR SDRAM Dual Inline Memory Module (DIMM) sockets Support for DDR 400 MHz and DDR 333 MHz DIMMs Support for up to 4 GB of system memory
Chipset	Intel® 915G Chipset, consisting of: <ul style="list-style-type: none"> Intel® 82915G Graphics Memory Controller Hub (GMCH) Intel® 82801FB I/O Controller Hub (ICH6) 4 Mbit Firmware Hub (FWH)
Video	Intel® GMA900 onboard graphics subsystem
Audio	Intel® High Definition Audio subsystem using the Realtek ALC860 audio codec
I/O Control	LPC Bus I/O controller
USB	Support for USB 2.0 devices
Peripheral Interfaces	<ul style="list-style-type: none"> Eight USB ports One serial port One parallel port Four Serial ATA interfaces One Parallel ATA IDE interface with UDMA 33, ATA-66/100 support One diskette drive interface PS/2* keyboard and mouse ports
LAN Support	<ul style="list-style-type: none"> D915GAV: 10/100 Mbits/sec LAN subsystem using the Intel® 82562EZ Platform LAN Connect (PLC) device D915GAG: Refer to Table 3 on page 13 for a description of LAN subsystem options.
BIOS	<ul style="list-style-type: none"> Intel/AMI BIOS (resident in the 4 Mbit FWH) Support for Advanced Configuration and Power Interface (ACPI), Plug and Play, and SMBIOS

continued

Table 2. Feature Summary (continued)

Expansion Capabilities	<ul style="list-style-type: none"> • PCI Conventional bus connectors (four on the D915GAV; two on the D915GAG) • PCI Express x1 bus add-in card connectors (two on the D915GAV; one on the D915GAG) • One PCI Express x16 bus add-in card connector (both boards)
Instantly Available PC Technology	<ul style="list-style-type: none"> • Support for PCI Local Bus Specification Revision 2.2 • Support for PCI Express Revision 1.0a • Suspend to RAM support • Wake on PCI, RS-232, front panel, PS/2 devices, and USB ports
Hardware Monitor Subsystem	<ul style="list-style-type: none"> • Hardware monitoring and fan control ASIC • Voltage sense to detect out of range power supply voltages • Thermal sense to detect out of range thermal values • Three fan connectors • Three fan sense inputs used to monitor fan activity • Fan speed control

1.3.2 Manufacturing Options

Table 3 describes the manufacturing options on the Desktop Boards D915GAV and D915GAG. Not every manufacturing option is available in all marketing channels. Please contact your Intel representative to determine which manufacturing options are available to you.

Table 3. Manufacturing Options

ATAPI CD-ROM Connector	A connector for attaching an internal CD-ROM drive to the onboard audio subsystem
ATX fan connector	Additional fan connector for use in larger chassis (D915GAV board only)
IEEE-1394a Interface	IEEE-1394a controller and three IEEE-1394a connectors (one back panel connector, two front-panel connectors)
LAN subsystem	<p>The D915GAG board provides one of the following:</p> <ul style="list-style-type: none"> • Gigabit (10/100/1000 Mbits/sec) LAN subsystem using the Marvel* Yukon* 88E8050 PCI Express Gigabit Ethernet Controller • 10/100 Mbits/sec LAN subsystem using the Intel® 82562EZ Platform LAN Connect (PLC) device • No LAN subsystem
SCSI Hard Drive Activity LED Connector	Allows add-in hard drive controllers (SCSI or other) to use the same LED as the onboard IDE controller.
Serial Port B	Second serial port accessible via a connector on the component side of the board
S/PDIF Connector	A 1 x 3 connector (mounted on the component side of the board) that provides digital audio signals in S/PDIF format
Trusted Platform Module (TPM)	A component that enhances platform security

For information about

Available configurations for the Desktop Boards D915GAV and D915GAG

Refer to

Section 1.4, page 19