



Intel® Desktop Board D945GCZ Product Guide

Order Number: D10476-004

1 Desktop Board Features

This chapter briefly describes the main features of Intel® Desktop Board D945GCZ. Table 1 summarizes the major features of the desktop board.

Table 1. Feature Summary

Form Factors	MicroBTX (10.4-inches x 10.5-inches)
Processor	Support for an Intel® processor in the LGA775 package
Main Memory	<ul style="list-style-type: none"> • Four 240-pin, 1.8 V SDRAM Dual Inline Memory Module (DIMM) sockets • 667/533/400 MHz single or dual channel DDR2 SDRAM interface • Designed to support up to 4 GB of system memory <p>NOTE: System resources (such as PCI and PCI Express*) require physical memory address locations that reduce available memory addresses above 3 GB. This may result in less than 4 GB of memory being available to the operating system and applications. For the latest list of tested memory, refer to the Intel World Wide Web site at: http://support.intel.com/support/motherboards/desktop/</p>
Chipset	Intel® 945G Express Chipset consisting of: <ul style="list-style-type: none"> • Intel® 82945G Graphics and Memory Controller Hub (GMCH) with Direct Media Interface • Intel® 82801GB I/O Controller Hub (ICH7) or Intel® 82801GR I/O Controller Hub (ICH7R) supporting Intel® Matrix Storage Technology • Firmware Hub (FWH)
Graphics	Intel 945G Express Chipset with Intel® Graphics Media Accelerator 950
Audio	<ul style="list-style-type: none"> • Intel 945G Express Chipset • Intel® High Definition Audio interface • SigmaTel* codec
Expansion Capabilities	<ul style="list-style-type: none"> • Two PCI bus add-in card connectors (SMBus routed to PCI bus 2) • One PCI Express* x16 connector • One PCI Express x1 connector
Peripheral Interfaces	<ul style="list-style-type: none"> • Up to eight USB 2.0 ports <ul style="list-style-type: none"> — Four ports routed to the back panel — Four ports routed to two USB headers • Four Serial ATA (SATA) channels (3.0 Gb/s), via the ICH7 or ICH7R, one device per channel • One IDE interface with ATA-66/100 support (two devices) • One VGA connector • One diskette drive interface • One parallel port • One serial port • PS/2* keyboard and mouse ports

continued

Table 1. Feature Summary (continued)

BIOS	<ul style="list-style-type: none"> • Intel® Platform Innovation Framework for extensible firmware interface • 4 Mbit symmetrical flash memory • Support for SMBIOS • Intel® Rapid BIOS Boot • Intel® Express BIOS Update
Power Management	<ul style="list-style-type: none"> • Support for Advanced Configuration and Power Interface (ACPI) • Suspend to RAM (STR) • Wake on USB, PCI, PCI Express, PS/2, LAN, and front panel
Hardware Management	<p>Hardware monitor with:</p> <ul style="list-style-type: none"> • Three fan sensing inputs used to monitor fan activity • Remote diode temperature sensing • Intel® Precision Cooling Technology fan speed control • Voltage sensing to detect out of range values

Related Links:

For more information about desktop board D945GCZ, including the Technical Product Specification (TPS), BIOS updates, and device drivers, go to:

<http://support.intel.com/support/motherboards/desktop/>

Manufacturing Options

Table 2 shows the manufacturing options for desktop board D945GCZ.

Table 2. Manufacturing Options

Option	Description
Peripheral interface	<p>Up to three IEEE 1394a ports</p> <ul style="list-style-type: none"> • One port routed to the back panel • Two ports routed to two IEEE 1394a headers <ul style="list-style-type: none"> • Intel® 82562GZ 10/100 Mbit/sec Platform LAN Connect (PLC) device with RJ-45 connector • Intel® 82573E Gigabit Ethernet Controller with RJ-45 connector
Hardware management	<ul style="list-style-type: none"> • Trusted Platform Module • Intel® Active Management Technology

Supported Operating Systems

The desktop board supports the following operating systems:

- Microsoft Vista* Home Premium
- Microsoft Vista Home Premium 64-bit edition
- Microsoft Vista Home Basic
- Microsoft Vista Home Basic 64-bit edition
- Microsoft Windows* XP Media Center Edition 2005
- Microsoft Windows XP Professional
- Microsoft Windows XP Professional x64 Edition
- Microsoft Windows XP Home Edition
- Microsoft Windows 2000