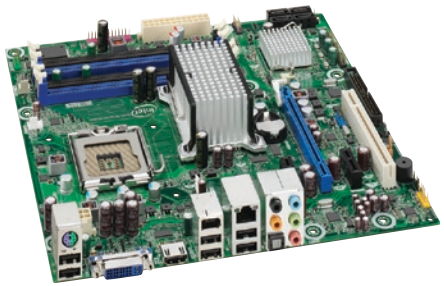
PRODUCT BRIEF
Intel® Desktop Board DG43GT
Classic Series

MicroATX Form Factor

Intel® Desktop Board DG43GT Classic Series



Enhanced features provide an extraordinary computing experience.

Performance

- Supports a wide range of Intel® 45nm processors, including the new Intel® Core™2 Quad** and Intel® Core™2 Duo processors.

Speed

- Delivers dual-channel DDR2 800 / 667 memory support. Four DIMM sockets are designed to support up to 16 GB[1] of DDR2 800 / 667 SDRAM.

Make your PC your favorite spot for work and entertainment.

- Intel® Graphics Media Accelerator X4500 with Intel® Clear Video Technology.
- Supports DirectX* 10, which enhances your gaming experience.
- Enjoy smoother high-definition video thanks to built-in hardware video decode acceleration (full hardware acceleration decode on MPEG-2 and partial on VC1 and AVC / H.264).
- HDMI* and DVI-I graphics output with dual display capability.
- Great network connectivity with integrated Intel® PRO 10/100/1000 Network Connection.
- Rich sound quality of Intel® High Definition Audio[2] with 7.1-channel surround sound and 2-channel multistreaming.
- Microsoft* Windows Vista* Premium WHQL certified.

Access your favorite content without having to worry where you are.

- Intel® Remote Wake technology (Intel® RWT)[3] enables home PCs, enabled services, and mobile devices to communicate with one another remotely over the Internet, for 24/7 access while maintaining PC energy efficiency.

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The boxed Intel® Desktop Board DG43GT solution includes:

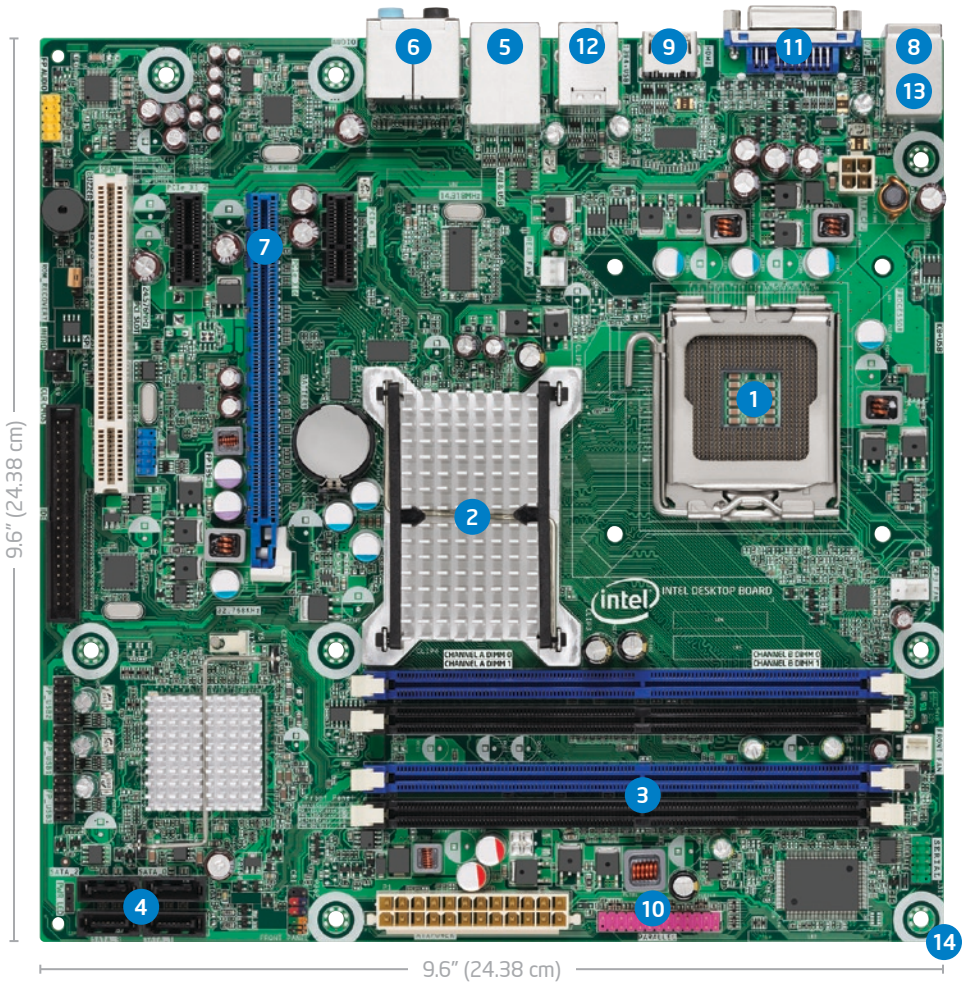
- ATX 2.2 compliant I/O shield
- SATA and ATA 100 / 66 cables
- DVI to VGA adapter—offering the option to select digital or analog display devices as the video output
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Microsoft* Windows Vista* Premium WHQL certified

The takeaway software included with the Intel® Desktop Board DG43GT works best for your everyday computing.

CAPABILITY	SOFTWARE INCLUDED:
Productivity	▪ Intel® Integrator Assistant (Internet Download) ▪ Laplink* PCmover* Express
Entertainment	▪ DivX* for Windows*
Antivirus	▪ Norton Internet Security*

Intel® Desktop Board DG43GT Classic Series
Features and Benefits

1. **Support for the Intel® Core™2 Quad** and Intel® Core™2 Duo processors:** Features quad-core and dual-core processing with 1333 / 1066 / 800 MHz system bus in the LGA775 package.
2. **Intel® G43 Express Chipset featuring Intel® Graphics Media Accelerator X4500**
3. **Dual-Channel DDR2 800 / 667 memory support:** Four DIMM sockets, designed to support up to 16 GB[1] of DDR2 800 / 667 SDRAM memory, delivering greater platform performance and flexible memory support.
4. **Four Serial ATA ports (3.0 Gb/s):** Facilitate high-speed storage and data transfers at up to 3.0 Gb/s for each of four ports.
5. **Intel® PRO 10/100/1000 Network Connection**
6. **Intel® High Definition Audio[2]:** 10-channel (7.1+2 independent multi-streaming) audio subsystem with five analog audio outputs and one optical S/PDIF digital audio output.
7. **PCI Express* 2.0 x16 graphics connector:** Delivers up to 16 GB/s bandwidth, double that of PCI Express 1.0.
8. **Twelve Hi-Speed USB 2.0 ports:** Provides six back panel ports and an additional six USB ports via three internal headers.
9. **HDMI* 1080p output support**
10. **Parallel port header:** Legacy device compatibility.
11. **DVI-I:** Built-in HDCP support enables viewing of protected HD Video multimedia content. It also switches to analog display with an adapter.
12. **Two IEEE 1394a ports:** One external port and one via internal header.
13. **PS/2:** Supports keyboard or mouse.
14. **MicroATX form factor**



Intel® Desktop Board DG43GT Classic Series
Technical Specifications

PROCESSOR
Processor Support
- Intel® Core™2 Quad** processor in the LGA775 package
- Intel® Core™2 Duo processor in the LGA775 package
- Intel® Pentium® processor in the LGA775 package
- Intel® Celeron® processor in the LGA775 package
- Supports Intel® 64 architecture[4]

CHIPSET
Intel® G43 Express Chipset
- Intel® 82G43 Graphics and Memory Controller Hub (GMCH)
- Intel® 82801JB I/O Controller Hub (ICH10)

Graphics Memory Controller Hub (GMCH)
- Designed to support up to 16 GB[1] of system memory using DDR2 800 / 667 SDRAM memory
- Intel® Fast Memory Access
- Intel® Graphics Media Accelerator X4500 with Intel® Clear Video Technology

Intel® I/O Controller Hub (ICH)
- Four SATA (3.0 Gb/s) ports
- Integrated Intel® PRO 10/100/1000 network connection
- Twelve Hi-Speed USB 2.0 ports (six back panel ports and an additional six USB ports via three internal headers)

System BIOS
- 32 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive auto-configure
- Advanced configuration and power interface V2.0b, DMI 2.0, multilingual support
- Serial Peripheral Interface (SPI) Flash

SYSTEM MEMORY
Memory Capacity
- Four 240-pin DIMM connectors supporting up to four double-sided DIMMs

Memory Types
- DDR2 800 / 667 SDRAM memory support
- Non-ECC Memory

Memory Modes
- Dual- or single-channel operation support

Memory Voltage
- 1.8 V

Hardware Management Features
- Processor fan speed control
- System chassis fan speed control
- Voltage and temperature sensing
- Fan sensor inputs used to monitor fan activity
- Power management support for ACPI 1.0b

Expansion Capabilities
- One PCI bus add-in card connector
- Two PCI Express* x1 bus add-in card connectors
- One PCI Express 2.0 x16 graphics connector
- Parallel ATA 100 / 66 devices

Headers
- One serial port header
- One parallel port header
- One 1394a header

JUMPERS AND FRONT-PANEL CONNECTORS
Jumpers
- Single configuration jumper design
- Jumper access for BIOS maintenance mode

Front-Panel Connectors
- Reset, HDD LED, Power LEDs, power on / off
- Three front-panel Hi-Speed USB 2.0 headers
- Front-panel audio header
- One 1394a header

MECHANICAL
Board Style
- ATX 2.2-compliant

Board Size
- 9.6" x 9.6" (24.38 cm x 24.38 cm)

Baseboard Power Requirements
- ATX 12 V

ENVIRONMENT
Operating Temperature
- 0° C to +55° C

Storage Temperature
- -20° C to +70° C

REGULATIONS AND SAFETY STANDARDS
United States and Canada
CSA / UL 60950-1, First Edition (Binational Standard)

Europe
(Low Voltage Directive 2006 / 95 / EC)
EN 60950-1:2006

International
IEC 60950-1:2001, First Edition

EMC Regulations (tested in representative chassis)
United States
FCC 47 CFR Part 15, Subpart B

Canada
ICES-003 Class B

Europe
(EMC Directive 2004 / 108 / EC)
EN 55022:2006 and EN 55024:1998

Australia / New Zealand
EN 55022:2006 Class B

Japan
VCCI V-3 / 04.04, V-4 / 03.04, Class B

South Korea
KN-22:2005 and KN-24:2005

Taiwan
CNS 13438:2006 Class B

International
CISPR 22:2005 +A1:2005 +A2:2006 Class B

Environmental Compliance
Europe
Europe RoHS (Directive 2002 / 95 / EC)

China
China RoHS (MII Order # 39)

Lead-Free: The symbol is used to identify electrical and electronic assemblies and components in which the lead (Pb) concentration level in any of the raw materials and the end product is not greater than 0.1% by weight (1000 ppm). This symbol is also used to indicate conformance to lead-free requirements and definitions adopted under the European Union's Restriction on Hazardous Substances (RoHS) directive, 2002 / 95 / EC.

For ordering information, visit **www.intel.com**

For the most current product information, visit **http://developer.intel.com/products/desktop/motherboard/**

[1] System resources and hardware (such as PCI and PCI Express*) require physical memory address locations that can reduce available addressable system memory. This could result in a reduction of as much as 1 GB or more of physical addressable memory being available to the operating system and applications, depending on the system configuration and operating system.

[2] Intel® High Definition Audio requires a system with an appropriate Intel® chipset and a motherboard with an appropriate codec and the necessary drivers installed. System sound quality will vary depending on actual implementation, controller, codec, drivers, and speakers. For more information about Intel® HD Audio, refer to www.intel.com/design/chipsets/hdaudio.htm

[3] The home PC is required to be in sleep mode. The home PC's Internet configuration requires a router connected to the PC via an Ethernet cable. Requires third-party applications and services enabled for Intel® Remote Wake Technology. Intel does not represent or warrant the third-party applications and services featured in this material.

[4] 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See http://developer.intel.com/technology/intel64/index.htm for more information.

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

** Supports 95 W Thermal Design Power, Intel® Core™2 Quad Processors with 1333 / 1066 MHz system bus. For information, visit http://processormatch.intel.com