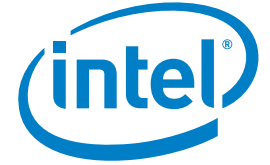


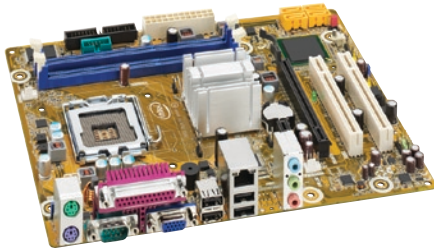
PRODUCT BRIEF

Intel® Desktop Board DG41WV
Essential Series



MicroATX Form Factor

Intel® Desktop Board DG41WV Essential Series



**Enhanced features provide
an extraordinary computing
experience.**

The Intel® Desktop Board DG41WV is designed to support a wide range of processors based on the LGA775 package, including the Intel® Core™2 Quad** and Intel® Core™2 Duo processors.

With enhanced DDR3 memory support for higher bandwidth and full legacy support, the Intel Desktop Board DG41WV brings you a greater computing experience.

**Your PC is your favorite spot for
work and entertainment.**

- Features Intel® Graphics Media Accelerator X4500 (Intel® GMA X4500) with Intel® Clear Video Technology.
- Enhance your gaming experience with DirectX® 10.
- Enjoy smooth high-definition video thanks to built-in hardware video acceleration.
- Gain flexibility with the VGA graphics output.
- Get super fast network connectivity with an integrated 10/100/1000 Network Connection.
- Experience the rich sound quality of Intel® High Definition Audio¹ with 5.1-channel surround sound and 2-channel multi-streaming.
- Microsoft® Windows® 7 and Windows Vista® Premium WHQL certified.



Intel® Desktop Board DG41WV Essential Series

The boxed Intel® Desktop Board DG41WV solution includes:

- ATX 2.2 compliant I/O shield
- SATA cables
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Microsoft* Windows* 7 and Windows Vista* Premium WHQL certified

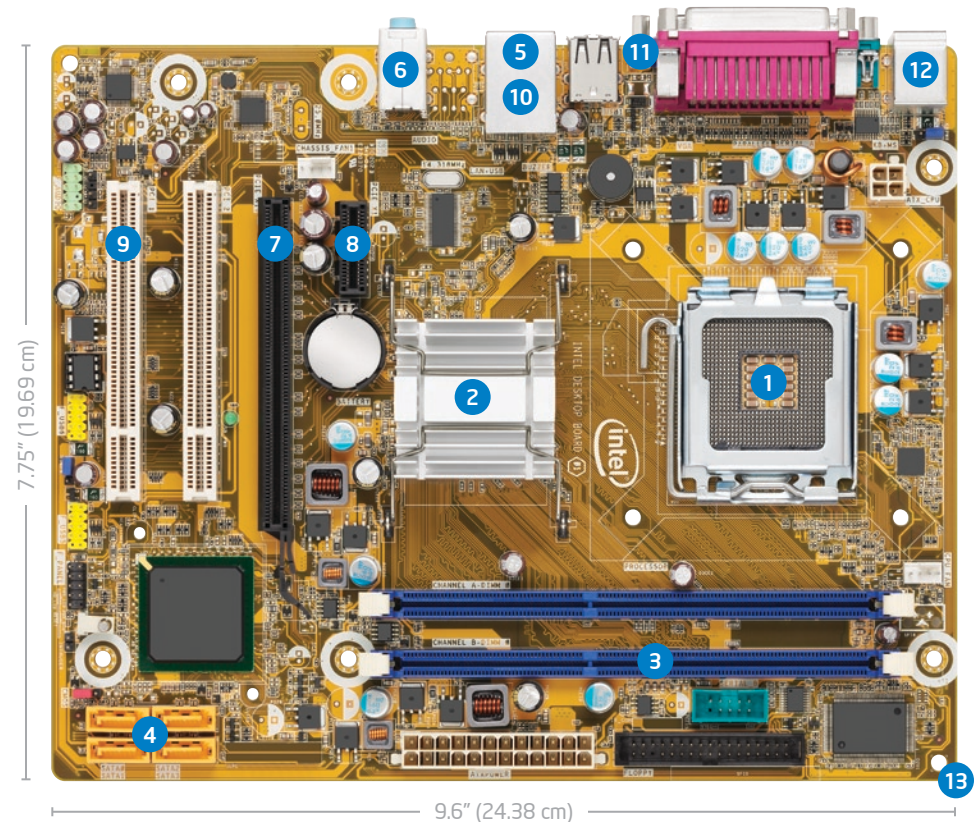
The takeaway software included with the Intel® Desktop Board DG41WV works best for your everyday computing.

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

Intel® Desktop Board DG41WV Essential Series

Features and Benefits

- 1 Supports 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® G41 Express Chipset featuring Intel® Graphics Media Accelerator X4500 (Intel® GMA X4500)**
- 3 Dual-channel DDR3 with two connectors for 1333² / 1066 / 800 SDRAM memory support (4 GB³ max):** Two DIMM connectors designed to support the latest DDR3 technology.
- 4 Four SATA 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 Integrated 10/100/1000 Network Connection**
- 6 Six-channel Intel® High Definition Audio¹:** Audio subsystem with three analog audio outputs (5.1 + 2 independent multi-streaming).
- 7 PCI Express* 2.0 x16 graphics connector:** Delivers up to 8 GB/s bandwidth.
- 8 One PCI Express* x1 connector**
- 9 Two PCI connectors**
- 10 Eight Hi-Speed USB 2.0 ports:** Four back panel ports and four additional ports via two internal headers.
- 11 VGA port:** Enables viewing of HD Video multimedia content.
- 12 PS/2 port:** Supports keyboard and mouse.
- 13 MicroATX form factor**



Intel® Desktop Board DG41WV Essential Series

Technical Specifications

PROCESSOR

Processor Support

- Intel® Core™2 Quad** processors in the LGA775 package
- Intel® Core™2 Duo processors in the LGA775 package
- Intel® Pentium® processors in the LGA775 package
- Intel® Celeron® processors in the LGA775 package
- Supports Intel® 64 architecture⁴

CHIPSET

Intel® G41 Express Chipset

- Designed to support up to 4 GB³ of system memory using DDR3 1333² / 1066 / 800 MHz SDRAM
- Intel® 82G41 Graphics and Memory Controller Hub (GMCH)
- Intel® Graphics Media Accelerator X4500 with Intel® Clear Video Technology
- Intel® Fast Memory Access

Intel® I/O Controller Hub (ICH)

- Intel® 82801GB I/O Controller Hub (ICH7)
- Four SATA ports (3.0 Gb/s)
- Integrated 10/100/1000 Network Connection
- Eight Hi-Speed USB 2.0 ports (four back panel ports and four additional ports via two internal headers)

System BIOS

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

SYSTEM MEMORY

Memory Capacity

- Two 240-pin DIMM connectors supporting up to four double-sided DIMMs (4 GB³ max)

Memory Types

- DDR3 1333² / 1066 / 800 SDRAM memory support
- Non-ECC Memory

Memory Modes

- Dual- or single-channel operation support

Memory Voltage

- 1.35 V to 1.65 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

- Two PCI bus add-in card connectors
- One PCI Express* x1 bus add-in card connector
- One PCI Express 2.0 x16 graphics connector

Headers

- One serial port header

For ordering information, visit www.intel.com

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

Audio

- Six-channel Intel® High Definition Audio¹ codec

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
- Front-panel Hi-Speed USB 2.0 headers
- Front-panel audio header

MECHANICAL

Board Style

- MicroATX 2.2-compliant

Board Size

- 9.6" x 7.75" (24.38 cm x 19.69 cm)

Baseboard Power Requirements

- ATX 12 V

ENVIRONMENT

Operating Temperature

- 0° C to +55° C

Storage Temperature

- 20° C to +70° C

REGULATIONS AND STANDARDS

United States

- UL 60950-1

Canada

- CAN / CSA-C22.2 No. 60950-1

Europe

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

International

- IEC 60950-1

EMC Regulations (Class B)

United States

- FCC CFR Title 47, Chapter I, Part 15, Subparts A / B

Canada

- ICES-003

Europe

- (EMC Directive 2004 / 108 / EC)
- EN 55022 and EN 55024

Australia / New Zealand

- EN 55022

Japan

- VCCI V-3, V-4

South Korea

- KN-22 and KN-24

Taiwan

- CNS 13438

International

- CISPR 22

Environmental Compliance

Europe

- Europe RoHS (Directive 2002 / 95 / EC)

China

- China RoHS (MII Order # 39)

¹ 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

² DDR3 1333 MHz SDRAM will run at 1066 MHz speed.

³ 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.

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.

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Actual Intel® Desktop Board may differ from the image shown.

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

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