**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 Audio with 5.1-channel surround sound and 2-channel multi-streaming.
- Microsoft® Windows® 7 and Windows Vista® Premium WHQL certified.
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.

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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 1333 / 1066 / 800 SDRAM memory support (4 GB 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 architecture

**CHIPSET**

Intel® G41 Express Chipset
- Designed to support up to 4 GB3 of system memory using DDR3 13333 / 1066 / 800 MHz SDRAM
- Intel® B2G41 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® B2601GB 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 GB4 max)

Memory Types
- DDR3 13333 / 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

**Audio**

- Six-channel Intel® High Definition Audio® 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)

**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)

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1 Intel® High Definition Audio requires a system with an appropriate Intel® chipset and a motherboard with an appropriate codec and the necessary driver’s 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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* 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

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