MicroATX Form Factor

Intel® Desktop Board DG41TX
Classic Series

Premium features provide a rich computing experience.
The Intel® Desktop Board DG41TX 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 DVI-D support, the Intel Desktop Board DG41TX brings you a richer computing experience.

Your PC is your favorite spot for work and entertainment.
• Features Intel® Graphics Media Accelerator 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 DVI-D and VGA graphics outputs.

• 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.
The boxed Intel® Desktop Board DG41TX 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 DG41TX works best for your everyday computing.

<table>
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<tr>
<th>CAPABILITY</th>
<th>SOFTWARE INCLUDED:</th>
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| Productivity| • Intel® Integrator Assistant (Internet Download)  
               • Laplink® PCmover® Express  
               • Phoenix® HyperSpace® |
| Entertainment| • DivX® for Windows® |
| Antivirus    | • Norton Internet Security® |
Intel® Desktop Board DG41TX Classic 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 MHz 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 Audio*: 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. DVI-D and VGA ports: Enables viewing of HD Video multimedia content.

12. PS/2 port: Supports keyboard and mouse.

13. Parallel port and serial port header: Provides legacy device compatibility.

14. One Parallel ATA connector

15. MicroATX form factor
## Intel® Desktop Board DG41TX Classic 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 GB of system memory using DDR3 1333/1066/800 MHz SDRAM
- Intel® B2C41 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® B8201GB 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

- 36 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 GB* max)

**Memory Types**
- DDR3 1333/1066/800 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 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

**Japan**
- VCCI V-3, V-4

**South Korea**
- KN-22 and KN-24

**Taiwan**
- CNS 13438

**International**
- IEC 60950-1
- EMC Regulations (Class B)
- United States
  - FCC Regulations Title 47, Chapter 1, 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
- 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 drivers installed. Sound system 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/chipssets/hdaudio.htm](http://www.intel.com/design/chipssets/hdaudio.htm)

² The Intel® G41 Express Chipset is a variant derived from the Intel® G43 Express Chipset.

³ DDR3 1333 is supported through overclocking in BIOS.

⁴ Memory Overclocking warning: Altering memory frequency, voltage, or latency may cause damage and is not warranted by Intel. Check with memory manufacturer for warranty details.

⁵ 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.

⁶ 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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**Supports 95 W Thermal Design Power, Intel® Core™2 Quad Processors with 1333 / 1066 MHz system bus. For information, visit [http://processormatch.intel.com](http://processormatch.intel.com)**

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