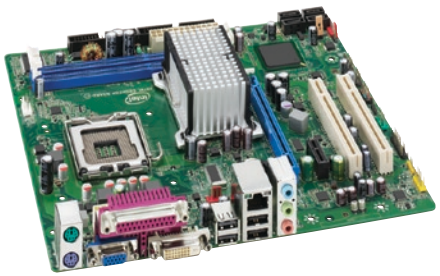
PRODUCT BRIEF
Intel® Desktop Board DG41TX
Classic Series

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 Audio[1] with 5.1-channel surround sound and 2-channel multi-streaming.
- Microsoft* Windows* 7 and Windows Vista* Premium WHQL certified.

Intel® Desktop Board DG41TX Classic Series

The boxed Intel® Desktop Board DG41TX solution includes:

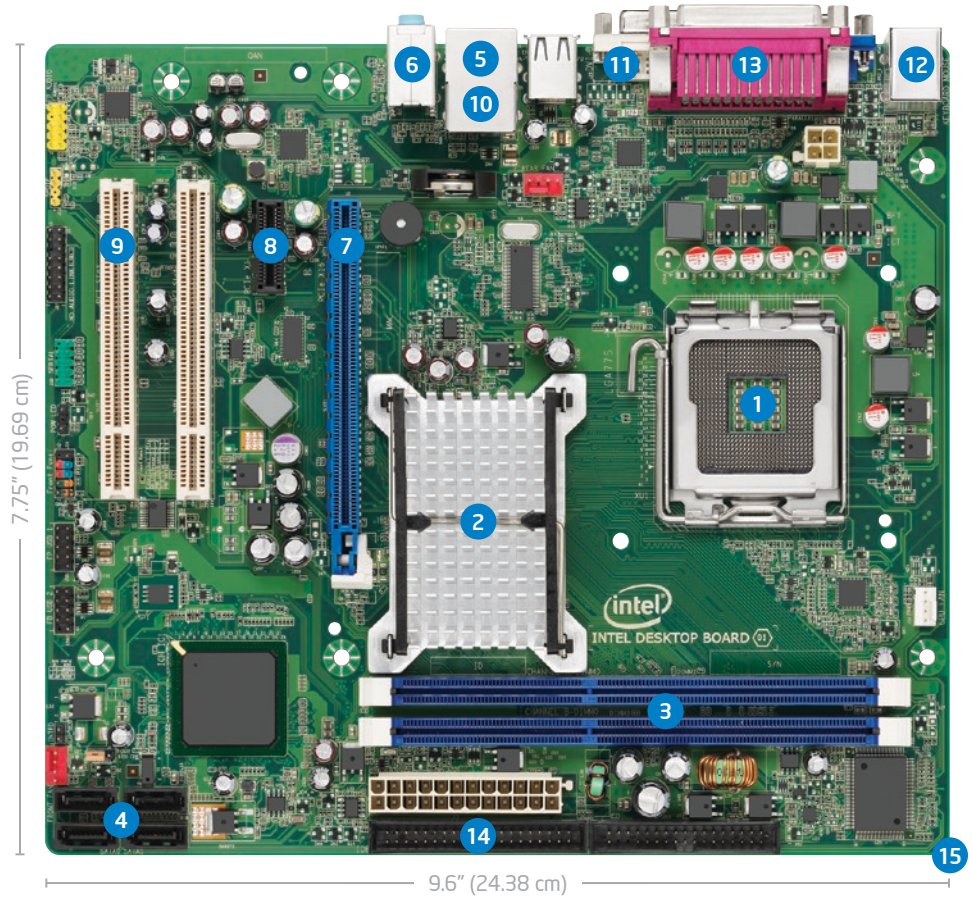
- ATX 2.2 compliant I/O shield
- SATA cables
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Microsoft* Windows* 7 and Windows Vista* Premium WHQL certified

The takeaway software included with the Intel® Desktop Board DG41TX works best for your everyday computing.

CAPABILITY	SOFTWARE INCLUDED:
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[2] featuring Intel® Graphics Media Accelerator X4500 (Intel® GMA X4500)**
3. **Dual-channel DDR3 with two connectors for 1333[3,4] / 1066 / 800 MHz memory support (4 GB[5] 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[1]:** 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

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

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

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[6]

CHIPSET

Intel® G41 Express Chipset[2]
- Designed to support up to 4 GB[5] of system memory using DDR3 1333[3,4] / 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
- 16 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[5] max)

Memory Types
- DDR3 1333[3,4] / 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[1] 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] 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.

* 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