Intel® Desktop Board DG41KR
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 DDR3 1066 / 800 memory support. Two DIMM sockets are designed to support up to 4 GB of DDR3 1066 / 800 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 VGA graphics output with dual display capability.
• Great network connectivity with an integrated 10/100/1000 Network Connection.

• Rich sound quality of Intel® High Definition Audio with 7.1-channel surround sound and 2-channel multistreaming.
• Microsoft® Windows Vista® Premium WHQL certified.
• Microsoft Windows® 7 ready.
The boxed Intel® Desktop Board DG41KR solution includes:

• ATX 2.2 compliant I/O shield
• SATA and ATA 100 / 66 cables
• 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 DG41KR works best for your everyday computing.

<table>
<thead>
<tr>
<th>CAPABILITY</th>
<th>SOFTWARE INCLUDED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>• Intel® Integrator Assistant (Internet Download)</td>
</tr>
<tr>
<td></td>
<td>• Laplink® PCmover® Express</td>
</tr>
<tr>
<td>Entertainment</td>
<td>• DivX® for Windows®</td>
</tr>
<tr>
<td>Antivirus</td>
<td>• Norton Internet Security®</td>
</tr>
</tbody>
</table>
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.

Intel® G41 Express Chipset featuring Intel® Graphics Media Accelerator X4500

Dual-Channel DDR3 with two slots for 1066 / 800 MHz memory support (4 GB* max)

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.

Integrated 10/100/1000 Network Connection

Intel® High Definition Audio**: 10-channel (7.1 + 2 independent multi-streaming) audio subsystem with five analog audio outputs and one optical S/PDIF digital audio output.

PCI Express* x16 graphics connector: Delivers up to 8 GB/s bandwidth.

Eight Hi-Speed USB 2.0 ports: Provides four back panel ports and an additional four USB ports via two internal headers.

HDMI* 1080p output support

Parallel port: Legacy device compatibility.

VGA port

PS/2 port: Supports keyboard or mouse.

MicroATX form factor
Intel® Desktop Board DG41KR 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

**CHIPSET**
- Intel® G41 Express Chipset
  - Intel® B2G41 Graphics and Memory Controller Hub (GMCH)
  - Intel® B2601GB I/O Controller Hub (ICH7)

**Graphics Memory Controller Hub (GMCH)**
- Designed to support up to 4 GB of system memory using DDR3 1066 / 800 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 10/100/1000 network connection
  - Eight Hi-Speed USB 2.0 ports (four back panel ports and an additional four USB ports via two internal headers)

**System BIOS**
- 16 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**
  - Two 240-pin DIMM connectors supporting up to four double-sided DIMMs
- **Memory Types**
  - DDR3 1066 / 800 SDRAM memory support
  - Non-ECC Memory
- **Memory Modes**
  - Dual- or single-channel operation support
- **Memory Voltage**
  - 1.5 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 x16 graphics connector
- Parallel ATA 100 / 66 devices
- **Headers**
  - One serial port 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
- Two front-panel Hi-Speed USB 2.0 headers
- Front-panel audio header

**MECHANICAL**
- **Board Style**
  - ATX 2.2-compliant
- **Board Size**
  - 9.5” x 8.6” (243.8 x 218.4 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**
    - **EMC Regulations**
      - EN 60950-1:2006
      - United States
        - FCC 47 CFR Part 15, Subpart B
      - **Canada**
        - ICES-003 Class B

**Environmental Compliance**
- **Europe**
  - Directive 2002 / 95 / EC
  - RoHS (Restriction on Hazardous Substances)
  - China RoHS (Mill 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**


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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](http://www.intel.com/design/chipsets/hdaudio.htm)
3. 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](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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* 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://processorsmatch.intel.com](http://processorsmatch.intel.com)

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