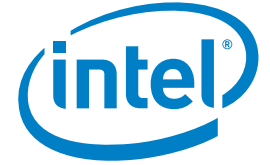


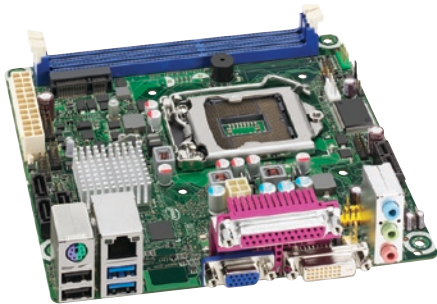
PRODUCT BRIEF

Intel® Desktop Board DH61DL
Classic Series



Mini-ITX Form Factor

Intel® Desktop Board DH61DL Classic Series



Supports 2nd generation Intel® Core™ processors in the LGA1155 package

The Intel® Desktop Board DH61DL is based on the Intel® H61 Express Chipset and supports 2nd generation Intel® Core™ processors, including Intel® Core™ i7 and Intel® Core™ i5 processors and other Intel® processors in the LGA1155 package. The 2nd generation Intel Core processors feature optimized Intel® Turbo Boost Technology¹ 2.0 and enhanced Intel® Hyper-Threading Technology², which provide smarter performance and a seamless visual experience. The mini-ITX form factor provides maximum design flexibility to support system designs ranging from all-in-one PCs to portable systems.

Dual independent display for processors with Intel® HD Graphics

The Intel Desktop Board DH61DL is equipped with DVI-D and VGA ports to support flexible, dual independent display for processors with Intel® HD Graphics. Powered by the 2nd generation Intel Core processors with Intel HD Graphics, the Intel Desktop Board DH61DL delivers superb visual performance for sharper images, richer color, and lifelike video.

Premium features

The Intel Desktop Board DH61DL offers premium features such as Intel® High Definition Audio³ with 5.1 surround sound and multi-streaming capability and an integrated Intel® PRO 10/100/1000 Network Connection in a low-power design.

The Intel Desktop Board DH61DL is designed to support a wide range of memory voltage from 1.2 V to 1.8 V to maximize memory DIMM compatibility.

Two back panel SuperSpeed USB 3.0 ports address the needs of higher performance connections between the PC and increasingly sophisticated peripherals by offering a higher transfer rate of 5.0 Gb/s.

Legacy features such as PCI connectors, a parallel port, and a PS/2 port are also supported for backward compatibility with peripherals.



Intel® Desktop Board DH61DL Classic Series

The boxed Intel® Desktop Board DH61DL solution includes:

- Mini-ITX compliant I/O shield
- SATA cables
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD

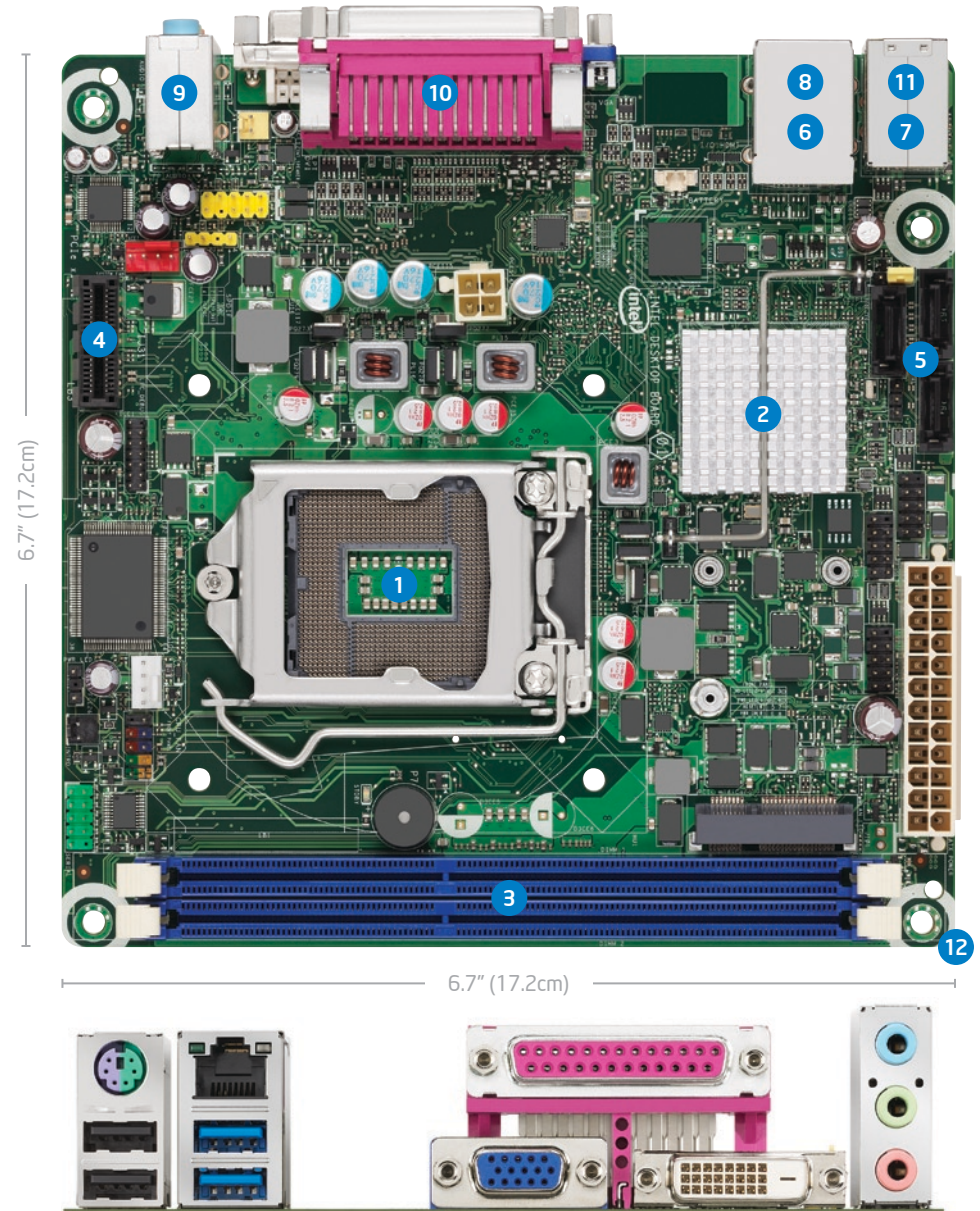
Software included:

CAPABILITY	SOFTWARE INCLUDED:
Utilities	▪ Intel® Core Utilities Bundle⁴ ▪ Intel® Desktop Utilities
Productivity	▪ Laplink® PCmover Express*
Antivirus	▪ ESET® Smart Security 4 (1-year license)

Intel® Desktop Board DH61DL Classic Series

Features and Benefits

- 1 Supports 2nd generation Intel® Core™ processors, including Intel® Core™ i7 and Intel® Core™ i5 processors and other Intel® processors in the LGA1155 package for exceptional performance
- 2 Intel® H61 Express Chipset PCH
- 3 Dual-channel DDR3 with two connectors for 1333 / 1066 / 800 MHz memory support (8 GB⁵ max): Supports 1.2 V to 1.8 V memory voltage control for maximum DIMM compatibility.
- 4 One PCI Express* 2.0 x1 connector
- 5 Three SATA ports (3.0 Gb/s)
- 6 Two SuperSpeed USB 3.0 ports: 5.0 Gb/s signaling rate for high-speed connections to peripherals.
- 7 Eight USB 2.0 ports: Two back panel ports and six additional ports via internal headers.
- 8 Integrated Intel® PRO 10/100/1000 Network Connection
- 9 Six-channel Intel® High Definition Audio³: Audio subsystem with three analog audio outputs (5.1 + 2 independent multi-streaming).
- 10 DVI-D and VGA ports: Dual independent display capability for multiple display support.
- 11 PS/2 port: Supports keyboard or mouse.
- 12 Mini-ITX form factor



Intel® Desktop Board DH61DL Classic Series

Technical Specifications

PROCESSOR

Processor Support

- Intel® Core™ i7 and Intel® Core™ i5 processors and other Intel® processors in the LGA1155 package
- Supports Intel® 64 architecture⁵

CHIPSET

Intel® H61 Express Chipset

- Intel® 82H61 Platform Controller Hub (PCH)

Peripheral Connectivity

- Three SATA 3.0 Gb/s ports
- Two SuperSpeed USB 3.0 ports with 5.0 Gb/s link speed
- Eight Hi-Speed USB 2.0 ports (two back panel ports and six additional ports via internal headers)
- Parallel port

System BIOS

- 32 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V3.0b, SMBIOS2.5
- Intel® Express BIOS update support

Hardware Management Features

- Processor fan speed control
- System chassis fan speed control
- Voltage and temperature sensing
- Fan sensor inputs used to monitor fan activity
- ACPI-compliant power management control

Intel® PRO 10/100/1000 Network Connection

- Low-power design

Expansion Capabilities

- One PCI Express* 2.0 x1 connector

Headers

- One serial port header
- Chassis intrusion header
- S/PDIF audio header

Audio

- 7.1 multi-streaming Intel® High Definition Audio³
- Five stack analog audio ports and one optical S/PDIF out port

SYSTEM MEMORY

Memory Capacity

- Two 240-pin DIMM connectors supporting up to four double-sided DIMMs (8 GB⁶ max)

Memory Types

- DDR3 1333 / 1066 / 800 SDRAM memory support
- Non-ECC Memory

Memory Modes

- Dual- or single-channel operation support

Memory Voltage

- Memory voltage control from 1.2 V to 1.8 V
- 1.5 V standard JEDEC voltage

JUMPERS AND FRONT-PANEL CONNECTORS

Jumpers

- Single configuration jumper design
- Jumper access for BIOS maintenance mode

For ordering information, visit www.intel.com

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

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

- Mini-ITX

Board Size

- 6.7" x 6.7" (17.2cm x 17.2cm)

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

International

- IEC 60950-1

EMC Regulations (tested in representative chassis)

United States

- FCC 47 CFR Part 15, Subpart B

Canada

- ICES-003 Class B

Europe

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

Australia / New Zealand

- EN 55022 Class B

Japan

- VCCI V-3, V-4 Class B

South Korea

- KN-22 and KN-24

Taiwan

- CNS 13438 Class B

International

- CISPR 22 Class B

Environmental Compliance

Europe

- Europe RoHS (Directive 2002 / 95 / EC)

China

- China RoHS (MII Order # 39).

¹ Intel® Turbo Boost Technology 2.0 requires a PC with a processor with Intel Turbo Boost Technology 2.0 capability. Intel Turbo Boost Technology 2.0 performance varies depending on hardware, software, and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost for more information.

² Intel® Hyper-Threading Technology requires a computer system with a processor supporting HT Technology and an HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. See www.intel.com/info/hyperthreading for more information.

³ 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/ndaudio.htm

⁴ The Intel® Core Utilities bundle includes Intel® Integrator Assistant, Intel® Integrator Toolkit, Intel® Express Installer and Intel® Express Bios Update.

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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