MicroATX Form Factor

**Intel® Desktop Board DH61SA Classic Series**

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

The **Intel® Desktop Board DH61SA** 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 Technology® 2.0 and enhanced Intel® Hyper-Threading Technology®, which provide smarter performance and a seamless visual experience.

Great value with uncompromised performance

- Get great network connectivity with an integrated 10/100/1000 Network Connection.
- Get expansion support with PCI Express® 2.0 x1 and a legacy PCI connector.
- Experience the rich sound quality of Intel® High Definition Audio® with 5.1-channel surround sound.
Intel® Desktop Board DH61SA Classic Series

The boxed Intel® Desktop Board DH61SA solution includes:
- ATX 2.2 compliant I/O shield
- SATA cable
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD

Software included:

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<td>• Intel® Core Utilities Bundle 4</td>
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<td>Antivirus</td>
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Intel® Desktop Board DH61SA 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 GB per 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. One PCI connector

6. Two SATA ports (3.0 Gb/s): Facilitate high-speed storage and data transfers at up to 3.0 Gb/s for each of two ports.

7. Six USB 2.0 ports: Four back panel ports and two additional ports via internal headers.

8. Integrated Intel® PRO 10/100/1000 Network Connection

9. Six-channel Intel® High Definition Audio:
   Audio subsystem with three analog audio ports (5.1 + 2 independent multi-streaming).

10. PS/2 port: Supports keyboard or mouse.

11. MicroATX form factor
Intel® Desktop Board DH61SA 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 architecture®

CHIPSET
Intel® H61 Express Chipset
• Intel® B2B61 Platform Controller Hub (PCH)

Peripheral Connectivity
• Two SATA (3 Gb/s) ports
• Six Hi-Speed USB 2.0 ports (four back panel ports and two 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
• One PCI connector

Headers
• One serial port header
• 5/PDIF audio header

Audio
• Six-channel Intel® High Definition Audio® codec

SYSTEM MEMORY
Memory Capacity
• Two 240-pin DIMM connectors supporting up to two double-sided DIMMs (8 GB® max)

Memory Voltage
• 1.2 V to 1.8 V

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

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

MECHANICAL
Board Style
• MicroATX 2.2-compliant

Board Size
• 9.6” x 7.75” (243.8cm x 19.7cm)

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
UL 1950, Third edition—CAN/CSA C22.2 No. 950-95 with recognized U.S. and Canadian component marks

Europe
Nemko certified to EN 60950 International
Nemko certified to IEC 60950 (CB report with CB certificate)

EMC Regulations (tested in representative chassis)
United States
FCC Part 15, Class B
FCC Part 15, Class B open-chassis (cover off) testing

Canada
ICES-003, Class B

Europe
Class B; EN 55024:1998

Australia/New Zealand
AS/NZS 3548, Class B

Taiwan
CNS 13438, Class B 
International
CISPR 22:1997, Class B


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.

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.

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.

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.

The Intel® Core Utilities Bundle includes Intel® Integrator Assistant, Intel® Integrator Toolkit, Intel® Express Installer and Intel® Express BIOS Update.

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 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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