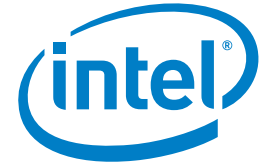


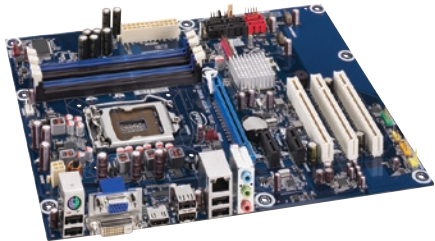
PRODUCT BRIEF

Intel® Desktop Boards DH55HC
and DH55TC Media Series



ATX / MicroATX Form Factor

Intel® Desktop Boards DH55HC and DH55TC Media Series



Embrace the Era of HD

The Intel® Desktop Board DH55HC (ATX) and Intel® Desktop Board DH55TC (microATX) are based on the Intel® H55 Express Chipset. These boards support the Intel® Core™ i7 and Intel® Core™ i5 processors in the LGA1156 package, which feature Intel® Turbo Boost Technology¹ and Intel® Hyper-Threading Technology², for exceptional performance and scalability. These boards support the Intel® Core™ i3 and Intel® Pentium® processors in the LGA1156 package as well. The Intel Desktop Boards DH55HC and DH55TC feature VGA, DVI-D, and HDMI*³ connectors and support dual independent display for processors with Intel® HD Graphics.

Powered by the latest Intel® Core™ processors with Intel HD Graphics, the Intel Desktop Boards DH55HC and DH55TC deliver superb visual performance for sharper images, richer color, and lifelike video and audio. You can enjoy movies and Internet videos in high definition and play popular games with full graphics and media support built in.

Both boards also offer premium features such as the support of dual-channel DDR3 1333 MHz memory with four connectors (16 GB⁴ max), Intel® High Definition Audio⁵ with 5.1 surround sound, and an integrated Intel® PRO 10/100/1000 Network Connection in a new low-power design.

Two onboard SATA ports are compatible with an eSATA dongle, allowing you to conveniently extend the eSATA port to the back panel while keeping the flexibility to support up to six internal SATA ports if eSATA support is not needed.

The Intel Desktop Boards DH55HC and DH55TC also support legacy features such as PCI connectors, a parallel header, a serial header, and a back panel PS/2 connector.

Fun to Tune

Designed with memory overvoltage (DH55HC) and memory overclocking support⁶, memory parameters can be finely tuned to improve memory capabilities and boost system performance.

DH55HC board shown



Intel® Desktop Boards DH55HC and DH55TC Media Series

The boxed Intel® Desktop Boards DH55HC and DH55TC solution includes:

- ATX / MicroATX compliant I/O shield
- SATA cables
- Board and back panel I/O layout labels
- Quick reference guide
- Intel® Express Installer driver and software DVD

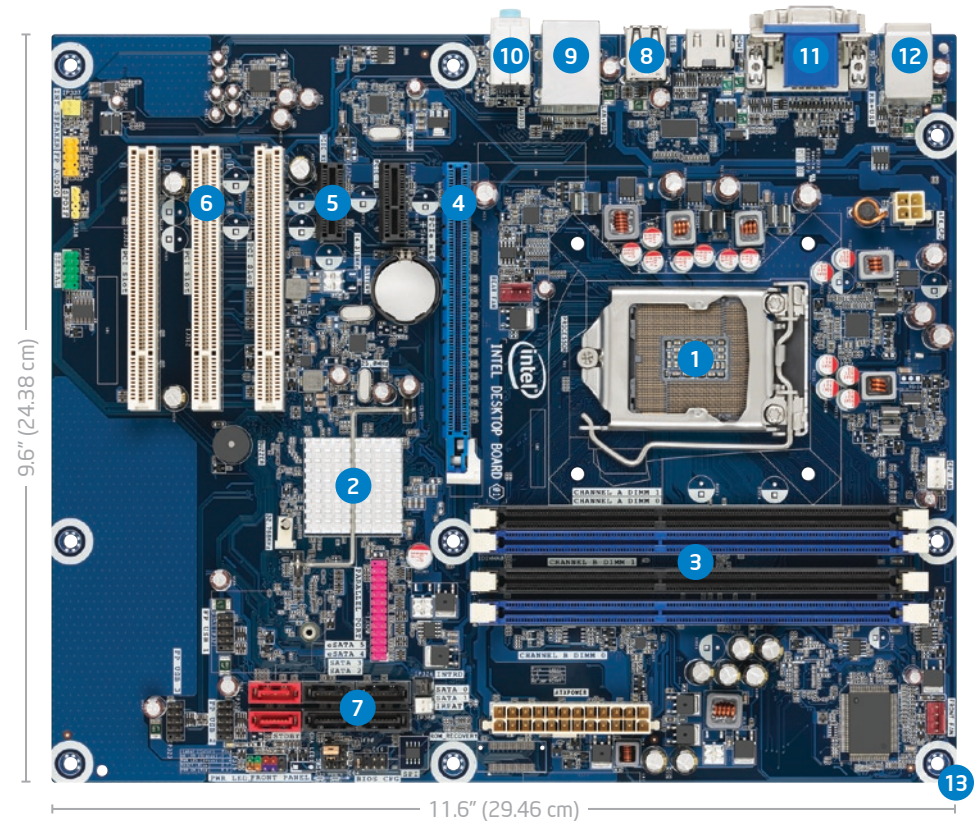
Software included:

CAPABILITY	SOFTWARE INCLUDED:
Utilities	▪ Intel® Desktop Utilities (Internet Download)
Productivity	▪ Laplink* PCmover* Express
Entertainment	▪ DivX* for Windows*
Antivirus	▪ ESET* Smart Security (45-day license)

Intel® Desktop Boards DH55HC and DH55TC Media Series

Features and Benefits

- 1 Supports the Intel® Core™ i7, Intel® Core™ i5, Intel® Core™ i3, and Intel® Pentium® processors in the LGA1156 package:** Select processors feature Intel® Turbo Boost Technology¹ and Intel® Hyper-Threading Technology² for exceptional performance and scalability.
- 2 Intel® H55 Express Chipset PCH**
- 3 Dual-channel DDR3 with four connectors for 1333 / 1066 MHz memory support (16 GB⁴ max):** Supports memory overvoltage (DH55HC) and memory overclocking.⁶
- 4 PCI Express* 2.0 x16 graphics connector**
- 5 Two PCI Express* x1 connectors**
- 6 Three PCI connectors (DH55HC) or one PCI connector (DH55TC)**
- 7 Six SATA ports with two SATA ports compatible with eSATA dongle**
- 8 Twelve Hi-Speed USB 2.0 ports:** Six back panel ports and six additional ports via three internal headers.
- 9 Integrated Intel® PRO 10/100/1000 Network Connection**
- 10 Eight-channel Intel® High Definition Audio⁵:** Features internal S/PDIF header, front panel audio header, and internal speaker header.
- 11 VGA + DVI-D + HDMI*³:** Supports dual independent display and allows for the most flexible display output for Intel® Core™ processors with Intel® HD Graphics.
- 12 PS/2 port:** Supports keyboard or mouse
- 13 ATX Form Factor (DH55HC) MicroATX Form Factor (DH55TC)**



DH55HC board shown

Intel® Desktop Boards DH55HC and DH55TC Media Series Technical Specifications

PROCESSOR

Processor Support

- Intel® Core™ i7, Intel® Core™ i5, Intel® Core™ i3, and Intel® Pentium® processors in the LGA1156 package
- Supports Intel® 64 architecture⁷

CHIPSET

Intel® H55 Express Chipset

- Intel® 82H55 Platform Controller Hub (PCH)

Peripheral Connectivity

- Six SATA ports (3.0 Gb/s) with two SATA ports compatible with eSATA dongle
- Twelve Hi-Speed USB 2.0 ports (six back panel ports and six additional ports via three internal headers)

System BIOS

- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V3.0b, DMI 2.5
- Intel® Express BIOS update support

Hardware Management Features

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

Intel® PRO 10/100/1000 Network Connection

- New low-power design

Expansion Capabilities

- One PCI Express* 2.0 x16 connector
- Two PCI Express 2.0 x1 connectors
- Three PCI connectors (DH55HC)
- One PCI connector (DH55TC)

Audio

- 5.1 + 2 multistreaming Intel® High Definition Audio⁵
- Internal S/PDIF header and speaker headers

Video

- VGA + DVI-D + HDMI*³: supports dual independent display for Intel® Core™ processors with Intel® HD Graphics

SYSTEM MEMORY

Memory Capacity

- Four 240-pin DIMM connectors supporting up to four double-sided DIMMs
- Maximum system memory up to 16 GB⁴ using 4 GB double-sided DIMMs

Memory Types

- DDR3 1333 / 1066 SDRAM memory support
- Non-ECC Memory
- Supports memory overvoltage (DH55TC) and memory overclocking⁶

Memory Modes

- Dual- or single-channel operation support

Memory Voltage

- Memory overvoltage to 1.60 V and 1.65 V (DH55HC)
- 1.5 V standard JEDEC voltage

JUMPERS AND FRONT-PANEL CONNECTORS

Jumpers

- Jumper access for BIOS maintenance mode

Front-Panel Connectors

- Reset, HD LED, Power LEDs, power on/off
- Front-panel audio header

Other Connectors

- One serial port header
- One parallel port header
- Chassis Intrusion Detect header (DH55HC)

MECHANICAL

Form Factor

- ATX (DH55HC)
- MicroATX (DH55TC)

Board Size

- 9.6" x 11.6" (24.38 cm x 29.46 cm) (DH55HC)
- 9.6" x 9.6" (24.38 cm x 24.38 cm) (DH55TC)

Baseboard Power Requirements

- ATX 12 V

ENVIRONMENT

Operating Temperature

- 0° C to +40° C

Storage Temperature

- -40° C to +60° 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)

For ordering information, visit www.intel.com

For the most current product information, visit www.intel.com/go/idb or <http://ark.intel.com>

For specific processor compatibility, visit <http://processormatch.intel.com>

¹ Intel® Turbo Boost Technology requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology 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. For more information including details on which processors support HT Technology, see www.intel.com/info/hyperthreading.

³ Requires a processor with Intel® HD Graphics.

⁴ 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.

⁵ 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/haudio.htm.

⁶ WARNING: Altering PC memory frequency, voltage, and/or latency may: (i) reduce system stability and useful life of the system, memory, and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warrant, the operation of the memory beyond its specifications. Intel assumes no responsibility that the memory, including if used with altered clock frequencies and/or voltages, will be fit for any particular purpose. Check with memory manufacturer for warranty and additional details.

⁷ 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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Actual Intel® Desktop Board may differ from the image shown.

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