

MicroATX Form Factor

Blazing High Definition for Amazing Computing

Introducing the Intel® Desktop Board DH57DD, supporting the Intel® Core™ i7,¹ Intel® Core™ i5, Intel® Core™ i3, and Intel® Pentium® processors



High Def Everything

Get the most out of your system with the new Intel® Desktop Board DH57DD. Taking advantage of the latest computing technology, this desktop board is breaking barriers and delivering outstanding HD performance and bandwidth to meet the demanding needs of beginners as well as experienced multitaskers. When coupled with the latest Intel processors with Intel® HD Graphics, enjoy an unparalleled computing experience through the HDMI² or DVI-I ports on board.

Multimedia Never Looked or Sounded So Good

Developed for the latest generation of multimedia applications and delivering incredible performance, the Intel Desktop

Board DH57DD is the choice for all your audio and video needs. Ten channel Intel® High Definition Audio³ with Dolby® Home Theater takes music and sound to the next level. Coupled with the Intel® Core™ i5-600 series or Intel® Core™ i3-500 series processor, get Intel HD Graphics for superb high-definition visual performance.

Intel® Desktop Boards Media Series—the Clear Choice

Whether its digital photography, audio, or video editing, entertainment today demands high definition technology. Use the new Intel® Rapid Storage Technology for easy RAID for all your digital content.

The Intel Desktop Board DH57DD delivers great performance and is ideal for great mainstream computing.

Eco-Smart Computing

- When the Intel H57 Express Chipset is paired with an Intel Core i5 or Core i3 processor, the Intel Desktop Board DH57DD runs applications with amazing responsiveness while lowering energy usage costs.⁴
- The Intel Desktop Board DH57DD meets the ENERGY STAR* and ErP specifications and is RoHS-compliant.

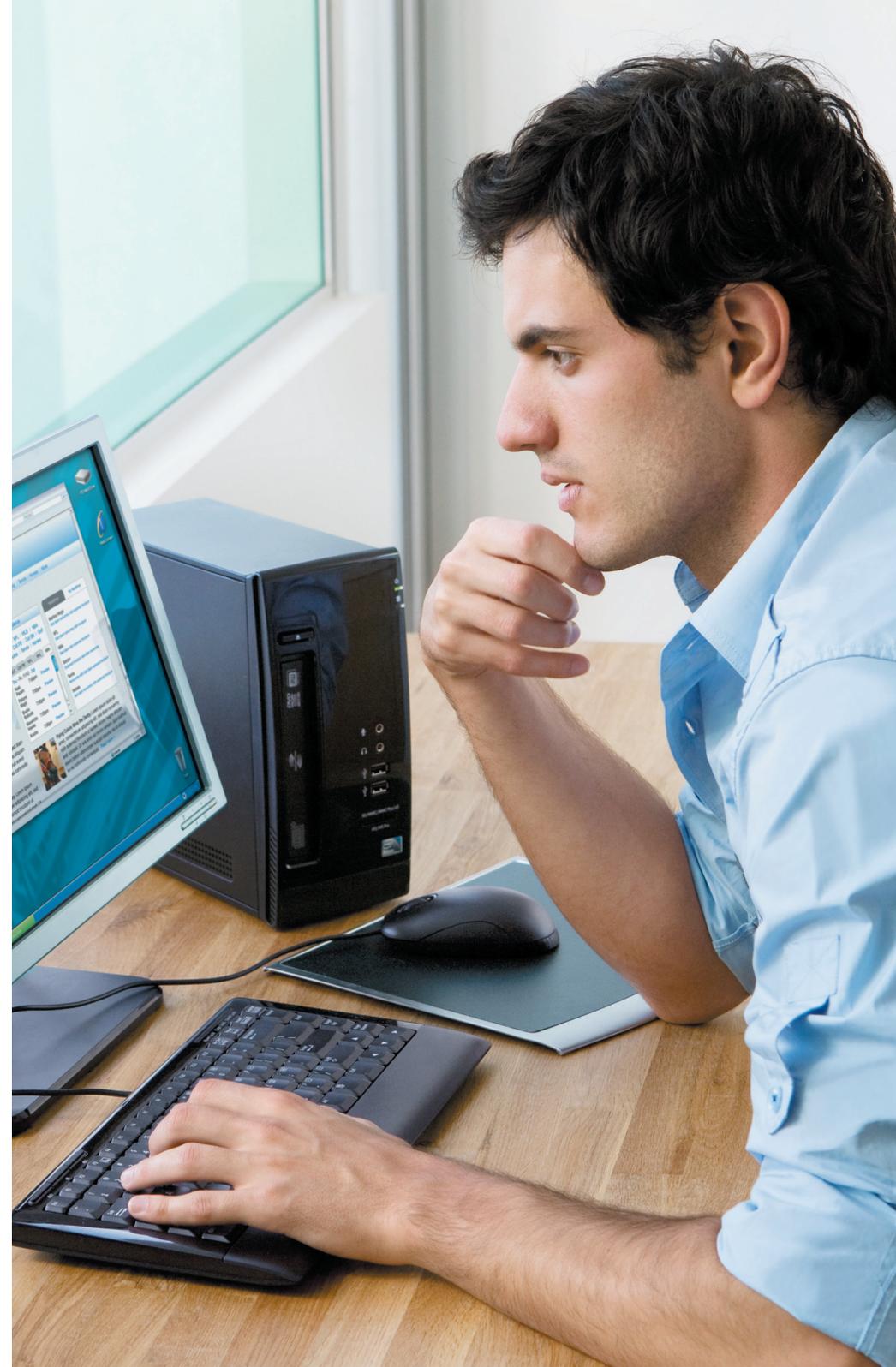
Intel® Desktop Board DH57DD Media Series

The Boxed Intel Desktop Board DH57DD Solution Includes:

- Intel® Desktop Board DH57DD
- 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

Software Included:

- **Intel® Desktop Utilities:** Monitors system temperatures, voltages, fan speeds, and hard drive health; provides detailed system information; and tests system hardware for common errors.
- **Intel® Integrator Assistant** (Internet download): Streamlines board integration.
- **DivX® for Windows®:** Play DivX videos and try out other cool creative features—post, e-mail, and store for a limited time.
- **Laplink® PCmover® Express:** Moves programs, data, and settings to Microsoft Windows® 7, Windows Vista®, or Windows® XP on your new PC from any version of Windows on your old PC.
- **eSET® Smart Security** (45-day license): Faster, more effective protection against viruses, spyware, spam, and Internet threats.
- **Additional free software:** Helps get your system up and running.



Intel® Desktop Board DH57DD Media Series

Features and Benefits

- 1 **Support for the Intel Core i7, Intel Core i5, Intel Core i3, and Pentium processors in the LGA1156 package:** Features Intel® Turbo Boost Technology⁵ and Intel® Hyper-Threading Technology⁶ for exceptional performance and scalability, Intel® HD graphics², and up to 8 MB L3 Shared Intel® Smart Cache, enabling dynamic and efficient allocation of cache.
- 2 **Intel® H57 Express Chipset:** New solution with the high speed Intel® Flexible Display Interface creates blazing high definition performance while lowering total power consumption.
- 3 **Integrated Memory Controller (IMC):** Four slots designed to support up to 16 GB⁷ dual-channel DDR3 1333/1066 MHz memory.
- 4 **2 IEEE 1394a ports (via internal headers) and 14 USB 2.0 port (eight via internal headers):** Provides for the most flexible connectivity options.
- 5 **1 PCI Express* 2.0 x16 slot:** Improves graphics bandwidth up to 16 GB/s.
- 6 **2 PCI Express 2.0 x 1 slots and 1 PCI expansion slot:** Flexibility to support PCI Express devices.
- 7 **5 SATA 3.0 Gb/s ports with an additional eSATA port:** Allows for a large addition of external mass storage using either single hard drives or SATA enclosures supporting port replication.
- 8 **Intel® Rapid Storage Technology:** RAID 0, 1, 5, and 10 for higher performance data access and/or data protection in a new easy-to-use interface.
- 9 **Dolby* Home Theater with 10-Channel Intel® High Definition Audio³ (7.1):** Enables high-quality integrated audio that rivals the performance of high-end discrete solutions. The Dolby* Control Center software provides an easy-to-use home theater configuration tool for a rich home theater surround sound experience.
- 10 **Intel® PRO 10/100/1000 Network Connection:** Uses a new low-power design for improved Energy Star 5.0.
- 11 **Consumer Infrared Receiver and Transmitter:** Supports receiving, learning, and emitting capabilities, controls up to two additional CE devices with your PC, and eliminates the need for a USB CIR dongle.
- 12 **Dual independent display with HDMI*⁶ + DVI-I graphics ports.**
- 13 **Lead-free:** Meets all worldwide regulatory requirements for lead-free manufacturing.
- 14 **MicroATX (9.6" x 9.6") Form Factor:** MicroATX board supports smaller tower and system designs.



Intel® Desktop Board DH57DD Media Series

Technical Specifications

PROCESSOR

Processor Support

- New 2010 Intel® Core™ i7, Intel® Core™ i5, Intel® Core™ i3, and Intel® Pentium® processors in the LGA1156 package
- Intel® Hyper-Threading Technology
- Intel® Turbo Boost Technology
- Integrated Memory Controller with support for up to 16 GB of system memory using either DDR3 1333/1066 MHz
- Intel® Fast Memory Access
- Supports Intel® 64 Architecture¹

CHIPSET

Intel® H57 Express Chipset

- Intel® 82H57 Platform Controller Hub (PCH)
- Intel® Rapid Storage Technology (RAID 0, 1, 5, 10)
- Five onboard SATA ports plus one eSATA (3.0 Gb/s) connector on the back panel

Integrated Intel® PCH Controllers

- Six Hi-Speed USB 2.0 ports
- Eight additional ports via internal headers

System BIOS

- 32 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive auto-configure
- Advanced configuration and power interface V1.0b, DMI 2.0, multilingual support

Intel® Rapid BIOS Boot

- Intel® Rapid BIOS Boot
- Intel® Express BIOS Update support: BIOS update via F7 function key

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

Intel® PRO 10/100/1000 Network Connection

- High quality and reliability with Intel's world-class manufacturing and validation
- New low-power design

Expansion Capabilities

- One PCI Express* 2.0 x16 slot
- Two PCI Express x1 slots
- One PCI expansion slot

Audio

- 10-channel Intel® High Definition Audio⁵ codec
- 8-channel via the back panel
- 2-channel via the front panel
- Back panel support for output via optical cable
- One internal header for S/PDIF output

SYSTEM MEMORY

Memory Capacity

- Four 240-pin DIMM connectors supporting up to four double-sided DIMMs

Memory Types

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

Memory Modes

- Dual- or single-channel operation support

Memory Voltage

- 1.8 V

JUMPERS AND FRONT-PANEL CONNECTORS

Jumpers

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

Front-Panel Connectors

- Reset, HD LED, Power LEDs, power on/off
- Four front-panel Hi-Speed USB 2.0 headers
- Front-panel audio header
- Front panel IEEE 1394a header

MECHANICAL

Board Style

- MicroATX

Board Size

- 9.6" x 9.6" (24.38 cm x 24.38 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)
UL 1950, Third edition—CAN/CSA C22.2
No. 950-95 with recognized U.S. and Canadian component marks

Europe

(Low Voltage Directive 2006/95/EC)
EN 60950-1:2006
Nemko certified to EN 60950 International
Nemko certified to IEC 60950
(CB report with CB certificate)
EMC directive 89/336/EEC; EN 55022:1998
Class B; EN 55024:1998

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

Australia/New Zealand

- AS/NZS 3548, Class B

Taiwan

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

Power requirements vary. Complies with US CRF via EN55022 +6 db in system configurations with an open chassis and EU Directive 89/336/EEC and use via EN55022 and EN50082-1 in a representative chassis.

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

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

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

1. Requires the use of a discrete graphics card.

2. Requires the use of a processor with Intel® HD Graphics.

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/hdaudio.htm.

4. For Intel eco-smart technologies, visit www.intel.com/go/ecosmart.

5. 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.

6. 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.

7. 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.

8. 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.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT.

Intel products are not intended for use in medical, life-saving, or life-sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice. All products, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice. Availability in different channels may vary. Actual Intel® Desktop Board may differ from the image shown.

Copyright © 2010 Intel Corporation. All rights reserved. Intel, the Intel logo, Pentium, and Intel Core are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

