PRODUCT BRIEF
Intel® Desktop Boards DH55PJ
Classic Series

MicroATX Form Factor

Intel® Desktop Boards DH55PJ Classic Series

DH55PJ board shown

Embrace the Era of HD

The Intel® Desktop Board DH55PJ (microATX) is based on the Intel® H55 Express Chipset. The board supports the Intel® Core™ i7 and Intel® Core™ i5 processors in the LGA1156 package, which feature Intel® Turbo Boost Technology[1] and Intel® Hyper-Threading Technology[2], for exceptional performance and scalability. The board supports the Intel® Core™ i3 and Intel® Pentium® processors in the LGA1156 package as well. Intel Desktop Board DH55PJ features VGA and DVI-D connectors and supports dual independent display for processors with Intel® HD Graphics.

Powered by the latest Intel® Core™ processors with Intel HD Graphics, the Intel Desktop Board DH55PJ delivers 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. The board offers premium features such as the support of dual-channel DDR3 1333 MHz memory with two connectors (8 GB[4] max), Intel® High Definition Audio[5] with 5.1 surround sound, and an integrated Intel® PRO 10/100/1000 Network Connection in a new low-power design.

The Intel Desktop Board DH55PJ also supports legacy features such as PCI connector, a parallel header, a serial header, and a back panel PS/2 connector.

Fun to Tune

Designed with memory overvoltage and memory overclocking support[6], memory parameters can be finely tuned to improve memory compatibility and boost system performance.

Intel® Desktop Boards DH55PJ Classic Series

The boxed Intel® Desktop Board DH55PJ solution includes:

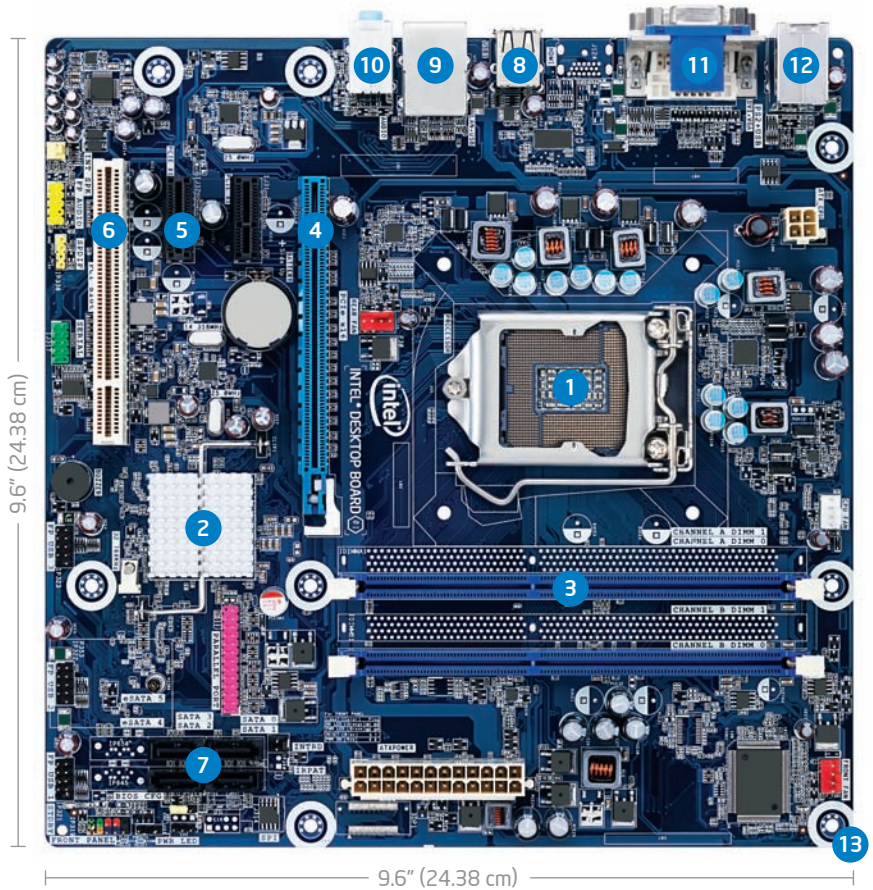
- ATX / MicroATX compliant I/O shield
- SATA cables
- Board and back panel I/O layout labels
- Quick reference guide
- Intel® Express Installer driver and software DVD

Software included:

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

Intel® Desktop Boards DH55PJ
Classic 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 Technology[1] and Intel® Hyper-Threading Technology[2] for exceptional performance and scalability.
2. **Intel® H55 Express Chipset PCH**
3. **Dual-channel DDR3 with two connectors for 1333 / 1066 MHz memory support (8 GB[4] max):** Supports memory overvoltage and memory overclocking.[6]
4. **PCI Express* 2.0 x16 graphics connector**
5. **Two PCI Express* x1 connectors**
6. **One PCI connector**
7. **Four SATA ports**
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 Audio[5]:** Features internal S/PDIF header, front panel audio header, and internal speaker header.
11. **VGA + DVI-D[3]:** Supports dual independent display for Intel® Core™ processors with Intel® HD Graphics.
12. **PS/2 port:** Supports keyboard or mouse
13. **MicroATX Form Factor**



DH55PJ board shown

Intel® Desktop Boards DH55PJ Classic 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 architecture[7]

CHIPSET

Intel® H55 Express Chipset

- Intel® 82H55 Platform Controller Hub (PCH)

Peripheral Connectivity

- Four SATA ports (3.0 Gb/s)
- 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
- One PCI connector

Audio

- 5.1 + 2 multi-streaming Intel® High Definition Audio[5]
- Internal S/PDIF header and speaker header

Video

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

SYSTEM MEMORY

Memory Capacity

- Two 240-pin DIMM connectors supporting up to two double-sided DIMMs
- Maximum system memory up to 8 GB[4]

Memory Types

- DDR3 1333 / 1066 SDRAM memory support
- Non-ECC Memory
- Supports memory overvoltage and memory overclocking[6]

Memory Modes

- Dual- or single-channel operation support

Memory Voltage

- Memory overvoltage to 1.60 V and 1.65 V
- 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

MECHANICAI

Form Factor

- 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 +40° C

Storage Temperature

- -40° C to +60° C

REGULATIONS AND STANDARDS

Safety Regulations

United States
UL 60950-1

Canada
CAN/CSA-C22.2 No. 60950-1

Europe
(Low Voltage Directive 2006/95/EC)
EN 60950-1

International
IEC 60950-1

EMC Regulations

United States
FCC CFR Title 47 – Chapter I - Part 15 – Subparts A/B

Canada
ICES-003 Class B

Europe
(EMC Directive 2004/108/EC)
EN 55022 Class B
EN 55024 Class B

Australia/New Zealand
EN 55022 Class B

Japan
VCCI V-3 Class B

South Korea
KN-22 Class B
KN-24 Class B

Taiwan
CNS 13438 Class B

International
CISPR 22 Class B

Environmental Compliance
Europe RoHS (Directive 2002/95/EC)
China RoHS (MII Order # 39)

[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/hdaudio.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 warranty, 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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