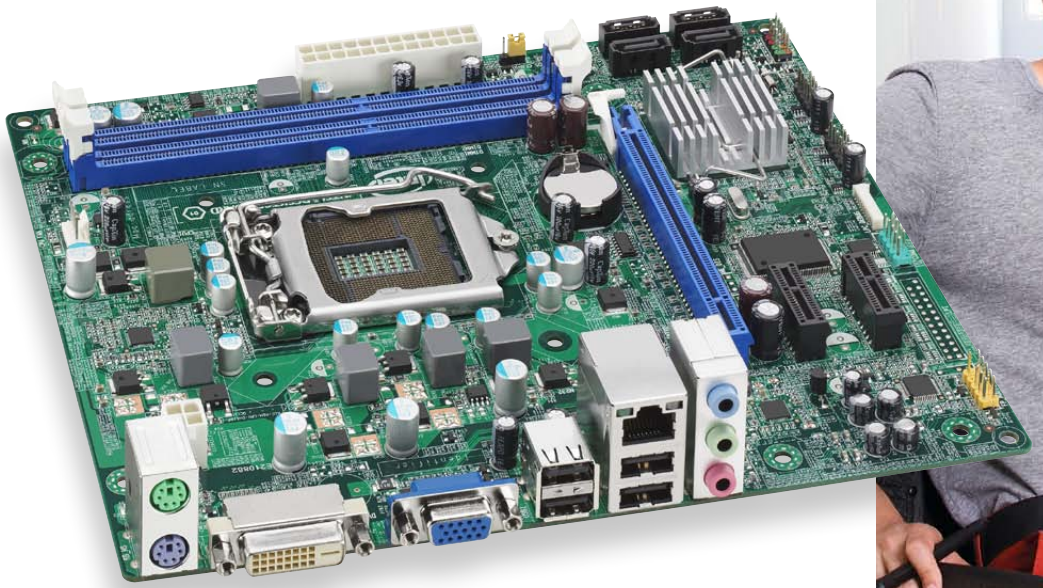
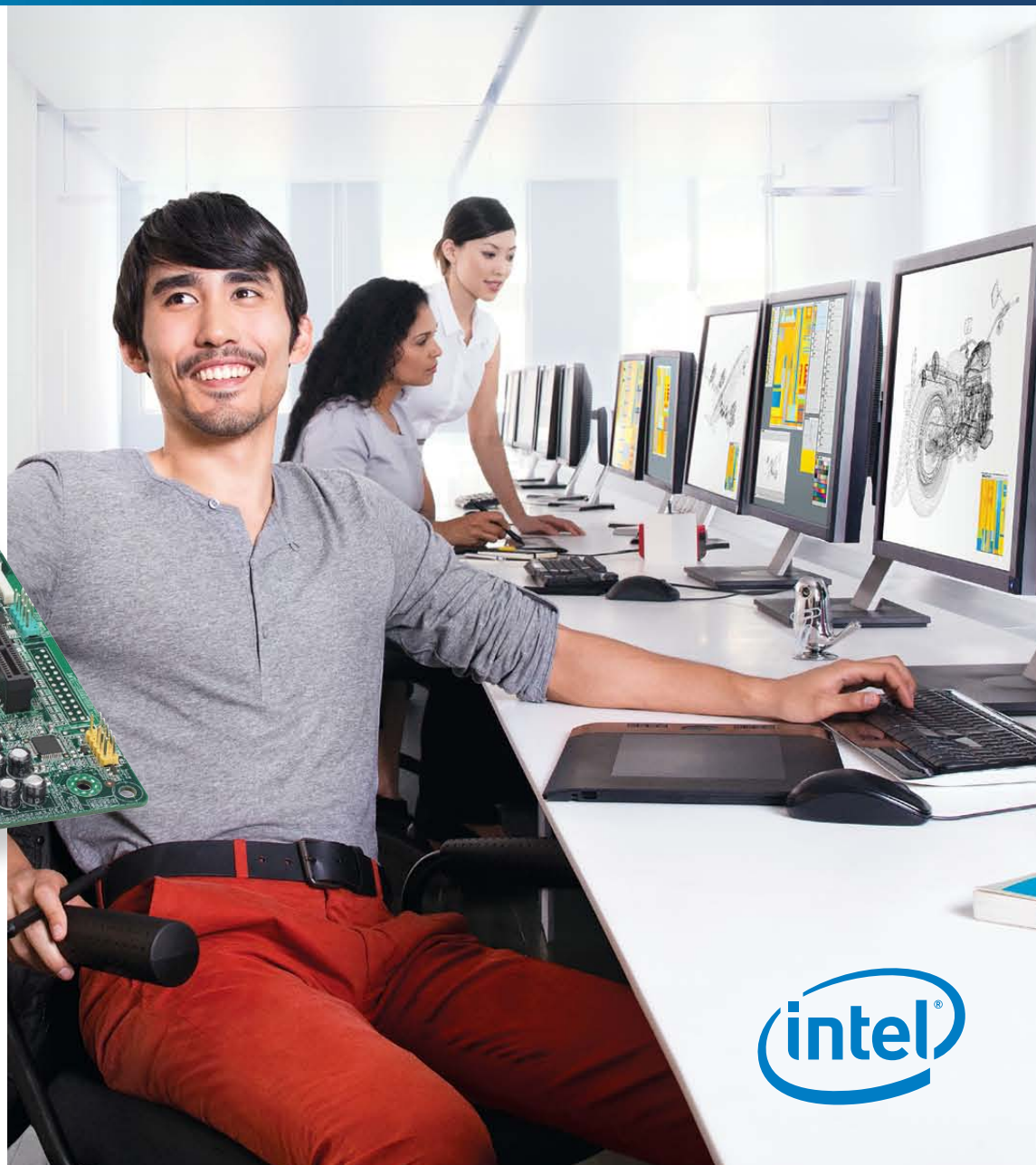
# Intel® Desktop Board DH61BF

## Intel® Desktop Board with Intel® H61 Chipset

- **Supports Intel® Core™ processors and other Intel® processors in the LGA1155 package**
- **Intel® H61 Express chipset in a single chipset design**





**PRODUCT BRIEF**

# Intel® Desktop Board DH61BF

**The latest Intel® Desktop Board DH61BF brings outstanding multitasking performance with support for dual independent display with VGA and DVI-D display connectors. The DH61BF also supports Core™ i7 as well as all other processors in the LGA 1155 package.**

The DH61BF board is able to support all 2nd and 3rd generation Intel® Core™ processors and Intel® Celeron™ processors in the LGA1155 socket. This board is designed in the micro-ATX form factor with the capability to support dual independent display through the onboard VGA and DVI-D ports. The DH61BF also supports other premium features such as PCI Express* 3.0 ×16 slot, 2 PCI Express* ×1, 4 SATA 2.0, and 8 USB 2.0 (4 at back panels ports and 4 onboard headers). The Intel® Turbo Boost Technology 2.0[1] and enhanced Intel® Hyper-Threading Technology[2], provides smarter performance and a seamless visual experience.

**Make your PC your favorite spot for work and entertainment.**

- Support DirectX 11 when used with 3rd Generation Intel® Core™ processor.
- Great network connectivity with integrated 10/100/1000 Network Connection.
- Capable of dual-independent display support thru on-board VGA and DVI-D ports.
- Expandability support with PCI Express* ×16, and ×1 connectors.
- Intel® High Definition Audio (Intel® HD Audio) with capability to support 6-channel (5.1) audio subsystem configuration.


**The boxed Intel® Desktop Board DH61BF solution includes:**

- ATX 2.2 compliant I/O shield
- SATA cable
- Board and back panel I/O layout stickers
- Intel® Express Installer driver and software DVD

| Capability | Software included |
|---|---|
| **Utilities** | ▪ Intel® Core Utilities Bundle[3]<br>▪ Intel® Desktop Utilities<br>▪ Splashtop* Remote Desktop |
| **Productivity** | ▪ Laplink* PCmover* Express |
| **Antivirus** | ▪ Eset* Smart Security 5 (45-day license)<br>▪ McAfee* AntiVirus Plus (60-day license) |

# Intel® Desktop Board with Intel® H61 Chipset

## Features and Benefits

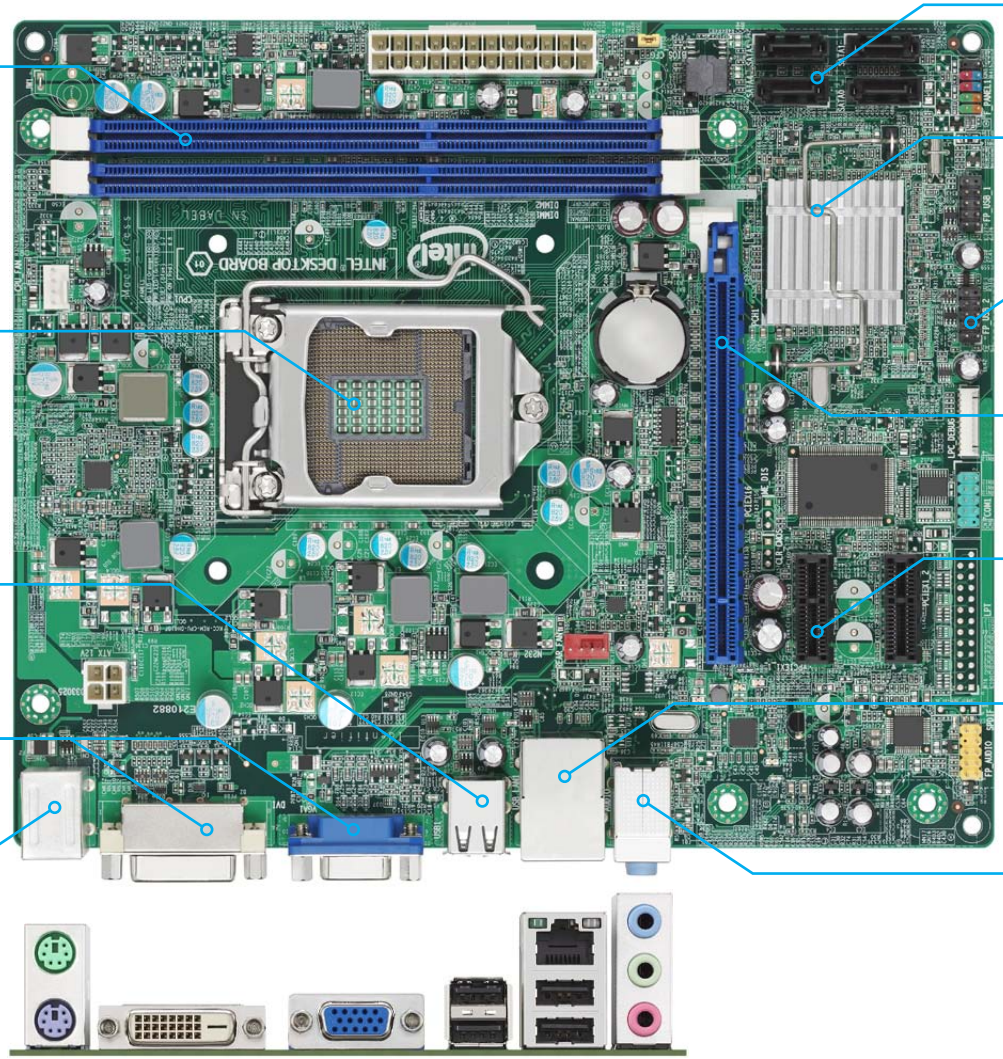
**Dual-Channel DDR3 with two connectors for 1333[4]/1066/800 MHz memory support (16 GB max)**

**Full support of all the 2nd and 3rd-generation Intel® Core™ processors and Intel® Celeron® processors in the LGA1155 package**

**Four back panel USB 2.0 ports**

**Support for dual independent display with DVD-D + VGA ports for processors with Intel® HD Graphics**

**Two PS/2 connectors for keyboard and mouse**



**Four SATA ports (3.0 Gb/s):** Facilitate high-speed storage and data transfers

**Intel® H61 Express Chipset PCH**

**Four USB 2.0 ports via internal headers**

**PCI Express* 3.0 ×16 graphics connector:** Delivers up to 8 GB/s bandwidth when used with a compatible processor

**Two PCI Express* ×1 connectors**

**Integrated 10/100/1000 Network Connection**

**Six-channel Intel® High Definition Audio[6]:** Audio subsystem with three analog audio outputs (5.1 + 2 independent multi-streaming)

# Intel® Desktop Board DH61BF

## Technical Specifications

### PROCESSOR

**Processor Support**

- Supports 2nd and 3rd-generation Intel® Core™ processors and Intel® Celeron® processors in the LGA1155 package
- Supports Intel® 64-bit architecture[7]

### CHIPSET

**Intel® H61 Express Chipset**

- Intel® 82H61 Platform Controller Hub (PCH)

### PERIPHERAL CONNECTIVITY

- Four SATA (3.0 Gb/s) ports
- Integrated 10/100/1000 Network Connection
- Eight Hi-Speed USB 2.0 ports (four back panel ports and four additional ports via internal headers)

### 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

### SYSTEM MEMORY

**Memory Capacity**

- Two 240-pin DIMM connectors supporting up to two double-sided DIMMs (16 GB[5] max)

**Memory Types**

- DDR3 1333[4]/1066/800 SDRAM memory support
- Non-ECC Memory

**Memory Modes**

- Dual- or single-channel operation 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

### EXPANSION CAPABILITIES

- Two PCI Express* ×1 bus add-in card connectors
- One PCI Express 3.0 ×16 graphics connector

### HEADERS

- One serial port header

### AUDIO

- Six-channel Intel® High Definition Audio[6] codec

### 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

### MECHANICAL

**Board Style**

- MicroATX 2.2-compliant

**Board Size**

- 8.86" × 7.48" (22.5 cm × 19 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)

**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 – maximum single-core turbo frequency (GHz). 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/tuboboost 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. The Intel® Core Utilities bundle includes Intel® Integrator Assistant, Intel® Integrator Toolkit, Intel® Express Installer and Intel® Express Bios Update.
4. 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.
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. 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.
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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