

#### MicroATX Form Factor

# Intel® Desktop Board DQ43AP Executive Series

For the Intel® Core™2 Quad and Intel® Core™2 Duo Processors

The best solutions for business combine great hardware, software, and technologies that help businesses achieve maximum productivity at lower costs. The Intel® Desktop Board DQ43AP brings all of these things together in an easy-to-integrate, energy-efficient package.

#### Intel® Desktop Board DQ43AP

- Supports the latest 45nm Intel® Core™2 Quad and Intel® Core™2 Duo processors
- Features the Intel® Q43 Express Chipset
- Windows Vista\* Premium capable
- Integrated Intel® Trusted Platform Module

**Intel® Desktop Boards Executive Series support Intel® Standard Manageability and deliver measurable advantages.**

#### Proactive security

The Intel® Trusted Platform Module provides hardware-based security to help stop threats and protect critical information.

#### Energy-efficient performance

Run applications with amazing responsiveness while reducing energy use and system noise. Pair the new 45nm processors and the Intel Q43 Express Chipset for increased performance in a more energy-efficient platform.

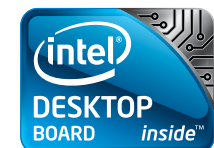
#### Remote manageability

Intel® Standard Manageability, along with leading IT management software, allows remote inventory of PCs including troubleshooting and system restore even if the OS is down, reducing the number of desk-side visits.

**For a complete list of solutions and opportunities, visit:**

[www.intel.com/go/idb](http://www.intel.com/go/idb)

<http://msp.intel.com>



# Intel® Desktop Board DQ43AP



## The boxed Intel® Desktop Board DQ43AP solution includes:

- ATX 2.2 compliant I/O shield
- SATA cables
- Board and back panel I/O layout stickers
- Quick reference and product guides
- Intel® Express Installer driver and software DVD
- Microsoft® Windows Vista® Premium WHQL certified

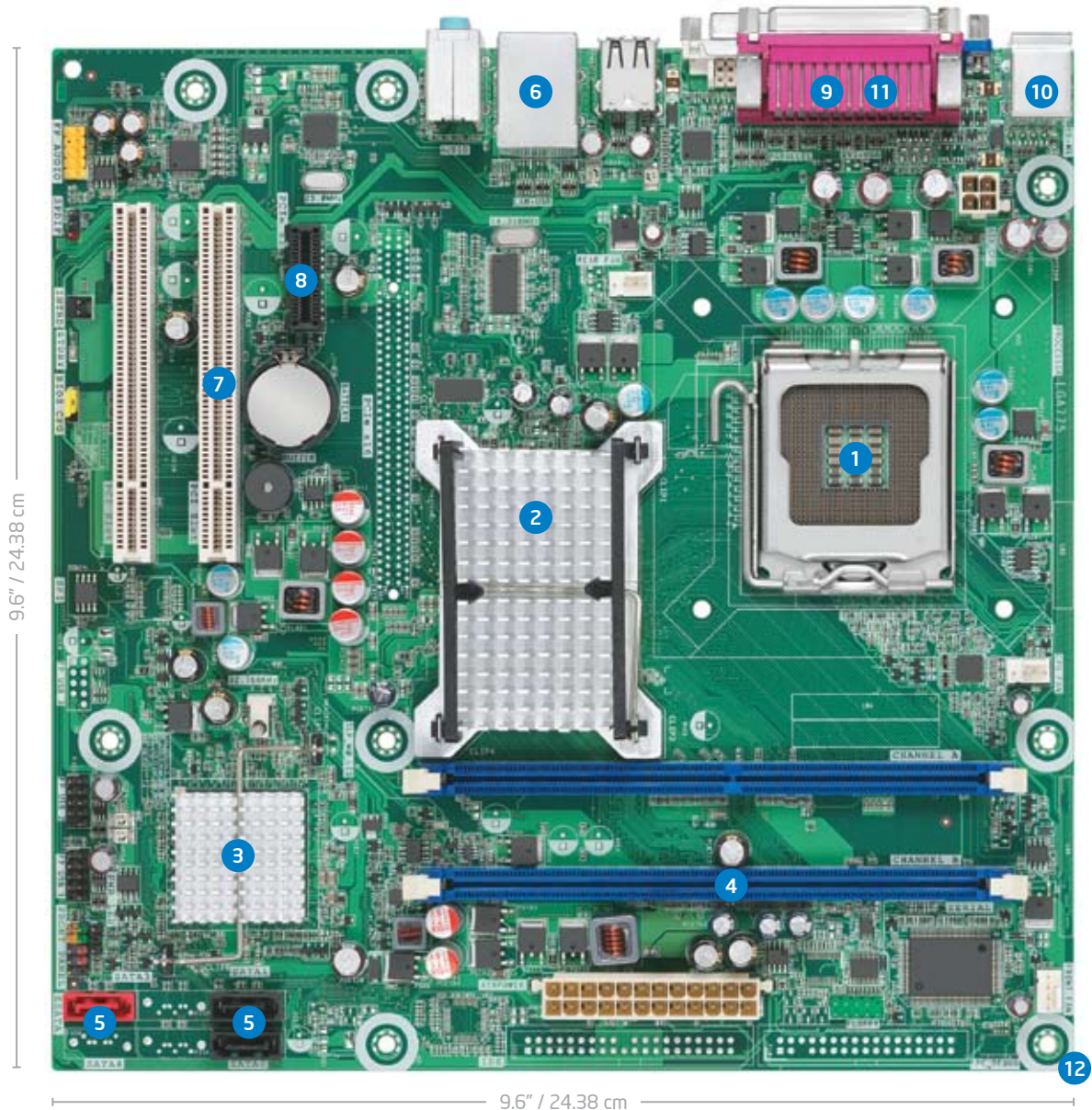
## Intel® Desktop Boards Executive Series include an extensive list of software that supports and enhances capabilities for the digital office.

CAPABILITY	SOFTWARE INCLUDED
Utilities	▪ Intel® Desktop Utilities (Internet Download)
Antivirus	▪ Norton Internet Security* ▪ Kaspersky* Anti-Virus (Russian) ▪ Kingsoft* Antivirus (Chinese)
Productivity	▪ Intel® Integrator Assistant (Internet Download) ▪ Diskeeper* Home Edition ▪ Laplink* PCmover* ▪ Kingsoft* Powerword* (Chinese)
Manageability	▪ Intel® IT Director (Internet Download) ▪ Intel® System Defense Utility (Internet Download) ▪ SyAM* System Client
Security	▪ Wave* EMBASSY* Trust Suite

## Features and Benefits

# Intel® Desktop Board DQ43AP

- 1 Support for the latest 45nm Intel® Core™2 Quad and Intel® Core™2 Duo processors:** Features quad-core and dual-core processing with 1333 / 1066 / 800 MHz system bus in the LGA775 package.
- 2 Intel® Q43 Express Chipset:** Offers a new level of visual quality with integrated Intel® Graphics Media Accelerator 4500, DirectX® 10, and support for Intel® Standard Manageability.
- 3 Integrated Intel® Trusted Platform Module 1.2:** Hardware-based encryption to protect sensitive data.
- 4 Dual-Channel DDR2 800 / 667 memory support:** Two DIMM sockets, designed to support up to 8 GB<sup>1</sup> of DDR2 800 / 667 SDRAM memory, delivering greater platform performance and flexible memory support.
- 5 Three onboard SATA ports including one internal eSATA (3.0 Gb/s) port:** Facilitates high-speed storage and data transfers at up to 3.0 Gb/s for each of three ports.
- 6 Intel® 82567LM ENERGY STAR\*-ready 10/100/1000 network connection**
- 7 Two PCI connectors:** Provide expansion slots for custom system configurations and future add-in card upgrades.
- 8 PCI Express\* x1 connector:** Designed for bandwidth-intensive applications, PCI Express\* x1 I/O offers up to 3.5 times the bandwidth over traditional PCI architecture.
- 9 Back panel connectors:** Includes one parallel port connector and two PS/2 connectors.
- 10 Up to eight Hi-Speed USB 2.0 ports:** Provides four back panel ports and an additional four USB ports via two internal headers.
- 11 Dual-independent display with DVI and VGA graphics output**
- 12 MicroATX form factor**



## Technical Specifications

### Processor

#### Processor Support

- Intel® Core™2 Quad and Intel® Core™2 Duo processors in the LGA775 package
- Supports Intel® 64 Architecture

### Chipset

#### Intel® Q43 Express Chipset

- Intel® 82Q43 Graphics and Memory Controller Hub (GMCH)
- Intel® 82801JD I/O Controller Hub (ICH10D)
- Intel® Standard Manageability

#### Graphics Memory Controller Hub (GMCH)

- Designed to support up to 8 GB<sup>1</sup> of system memory using DDR2 800 / 667 SDRAM memory
- Intel® Fast Memory Access
- Intel® Graphics Media Accelerator 4500 with DirectX® 10
- DVI and VGA integrated graphics output

#### Intel® I/O Controller Hub

- Three onboard SATA ports including one internal eSATA (3.0 Gb/s) port

### USB 2.0

Integrated Intel® ICH10D controllers:

- Four back-panel ports (two dual-stack)
- Four additional ports (via two headers)

### System BIOS

- 32 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- 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

### System Memory

#### Memory Capacity

- Two 240-pin DIMM connectors supporting two double-sided DIMMs

#### Memory Type

- DDR2 800 / 667 SDRAM memory support
- Non-ECC Memory

#### Memory Modes

- Dual- or single-channel operation support

#### Memory Voltage

- 1.8 V

#### 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® 82567LM ENERGY STAR\*-ready 10/100/1000 Network Connection

- High quality and reliability with Intel's world-class manufacturing and validation
- Supports Intel® Standard Manageability-based software and applications with added security and manageability

#### Expansion Capabilities

- Two PCI bus add-in card connectors
- One PCI Express\* x1 add-in card connector

#### Audio

- 5.1-channel Intel® High Definition Audio codec

### Jumpers and Other Connectors

#### Jumpers

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

#### Front-Panel Connectors

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

#### Other Connectors

- One back-panel parallel port connector
- Two back-panel PS/2 connectors
- One serial header

### Mechanical

#### Board Style

- MicroATX 2.2 compliant

#### Board Size

- 9.6" x 9.6" (24.38cm x 24.38cm)

#### Baseboard Power Requirements

- ATX12V

### 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 60950-1:2006

#### International

IEC 60950-1:2001, First Edition

### EMC Regulations

#### (tested in representative chassis)

#### United States

FCC 47 CFR Part 15, Subpart B

#### Canada

ICES-003, Issue-004 Class B

#### Europe

(EMC Directive 2004/108/EC)

EN 55022:2006 and EN 55024:1998

#### Australia/New Zealand

EN 55022:2006 Class B

#### Japan

VCCI V-3/04.04, V-4/03.04, Class B

#### South Korea

KN-22:2005 and KN-24:2005

#### Taiwan

CNS 13438:2006 Class B

#### International

CISPR 22:2005 +A1:2005 +A2:2006 Class B

### Environmental Compliance

#### Europe

Europe RoHS (Directive 2002/95/EC)

#### China

China RoHS (MII Order # 39)



**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.

**Ordering Information: See the Intel Web site at [www.intel.com](http://www.intel.com). For the most current product information, visit [www.intel.com/products/desktop/motherboard](http://www.intel.com/products/desktop/motherboard)**

<sup>1</sup> 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.

Desktop PCs with Intel® Standard Manageability and Intel® 64 architecture require a computer system with a processor, chipset, BIOS, enabling software and/or operating system, device drivers, and applications designed for these features. Performance will vary depending on your configuration. The original equipment manufacturer must provide Intel® Trusted Platform Module functionality, which requires an Intel® Trusted Platform Module-supported BIOS. Intel® Trusted Platform Module functionality must be initialized and may not be available in all countries.

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