

Mini-ITX Form Factor

# Mini-size the High Performance Business PC

Introducing the Intel® Desktop Board DQ67EP, supporting the Intel® Core™ i5 vPro™1 and Intel® Core™ i3 processors



## Built for Business

Engineered in Mini-ITX small form factor (SFF), the tiny Intel® Desktop Board DQ67EP is amazingly loaded with the latest expandability, remote manageability, and data security features. Based on the new Intel® Express Chipset Q67 with embedded Intel® Active Management Technology, this desktop board supports the 2nd generation Intel® Core™ vPro™ processors in the latest LGA1155 package and up to 16 GB<sup>2</sup> DDR3 1333/1066 memory, the gateway to low-power and high-performance business computing starts here. Enjoy hi-speed connectivity with built-in SuperSpeed USB 3.0 and SATA 6.0 Gb/s ports, along with premium features: DisplayPort\*<sup>3</sup> + dual-DVIs triple graphic ports, eSATA ports, and Mini-PCI Express\* slot.

## Seamless PC Remote Manageability

The Intel® Desktop Board DQ67EP is equipped with the improved KVM Remote Control manageability, enabling you to remotely access and control a PC, even when the remote PC is in OOB (out of band) state. Desk-side troubleshooting is greatly reduced with the KVM Remote Control feature.

## Data Security Features

Protect sensitive office data with RAID built into the Intel Q67 Express Chipset, with multiple configurations to support RAID 0, 1, 5, and 10. Encryption and signature keys are protected from software-based attacks with onboard Trusted Platform Module<sup>4</sup> (TPM). Also included with the Intel Desktop Board DQ67EP is the award-winning antivirus software ESET\* Smart Security 4 with a one-year license.

## Eco-Smart Computing<sup>5</sup>

Intel® Desktop Board DQ67EP supports phase-shedding technology, which allows it to shut down unneeded phases to enhance energy efficiency for significant power savings. The board meets ENERGY STAR\*, ErP, and EPEAT compliance standards and is RoHS-compliant for hazardous material reduction.

# Intel® Desktop Board DQ67EP Executive Series

## The Boxed Intel Desktop Board DQ67EP Solution Includes:

- Intel® Desktop Board DQ67EP
- 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:

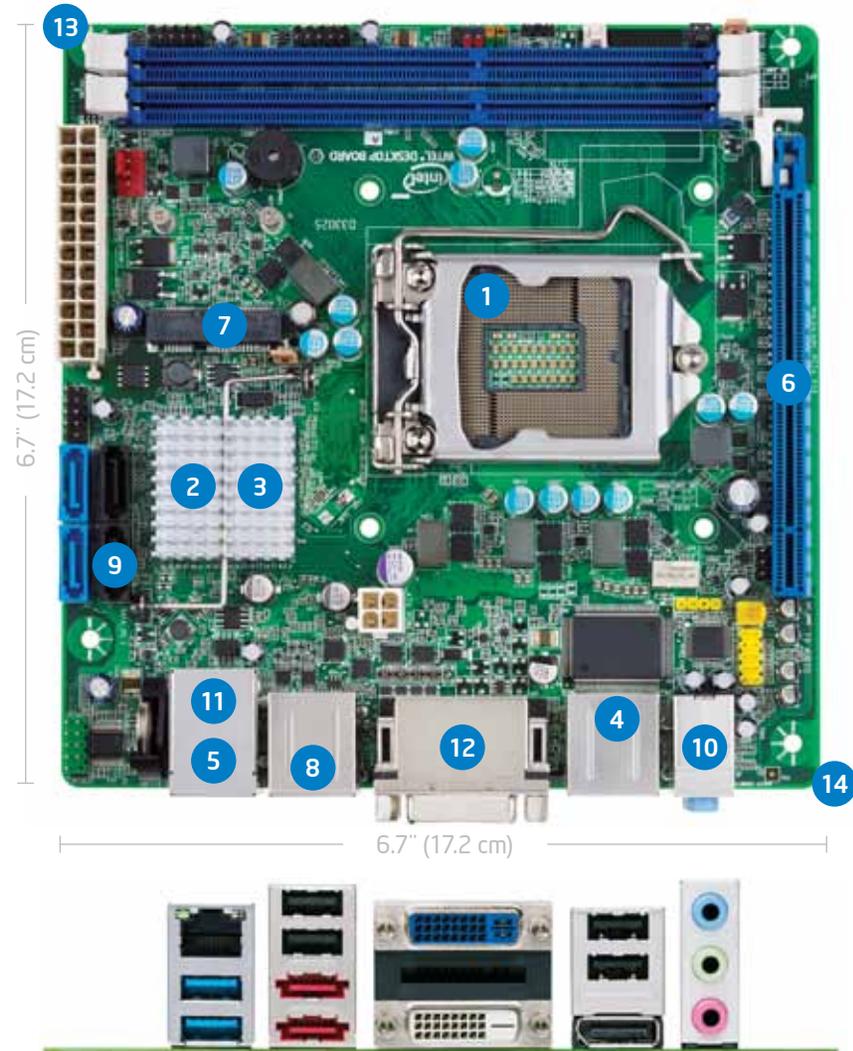
| CAPABILITY    | SOFTWARE INCLUDED  |
|---------------|--|
| Utilities     | <ul style="list-style-type: none"><li>▪ Intel® Core Utilities Bundle<sup>6</sup></li><li>▪ Intel® Desktop Utilities</li></ul>        |
| Security      | <ul style="list-style-type: none"><li>▪ ESET* Smart Security 4 (One-year license)</li><li>▪ Wave* EMBASSY* Security Center</li></ul> |
| Manageability | <ul style="list-style-type: none"><li>▪ RealVNC* Viewer Plus (Internet download)</li><li>▪ Spiceworks* IT Desktop</li></ul>          |
| Productivity  | <ul style="list-style-type: none"><li>▪ Laplink* PCmover* Professional</li></ul>   |



# Intel® Desktop Board DQ67EP Executive Series

## Features and Benefits

- 1 Support for the Intel® Core™ i5 vPro™ and Intel® Core™ i3 processors in the LGA1155 package:** Features Intel® Turbo Boost Technology<sup>7</sup> and Intel® Hyper-Threading Technology<sup>8</sup> for exceptional performance and scalability.
- 2 Intel® Q67 Express Chipset.**
- 3 Integrated Memory Controller (IMC):** Two slots designed to support up to 16 GB<sup>2</sup> dual-channel DDR3 1333/1066 MHz memory.
- 4 Ten USB 2.0 port (six via internal headers).**
- 5 Two SuperSpeed USB 3.0 ports:** 5.0 Gb/s signaling rate for high-speed connections to peripherals.
- 6 One PCI Express\* 2.0 x16 slot.**
- 7 One Mini-PCI Express Mini Card slot:** Supporting half-length configuration.
- 8 Two eSATA 3.0 Gb/s ports.**
- 9 Two SATA 6.0 Gb/s ports and two SATA 3.0 Gb/s ports with Intel® Rapid Storage Technology supporting RAID 0, 1, 5, and 10.**
- 10 8-Channel Intel® High Definition Audio<sup>9</sup> with multi-streaming:** Features internal S/PDIF output and front panel audio headers.
- 11 Intel® PRO 10/100/1000 Network Connection:** Uses a new low-power design for improved ENERGY STAR\* 5.0.
- 12 Dual independent display with DisplayPort\*<sup>3</sup> + DVI-D + DVI-I triple graphics ports.**
- 13 Lead-free:** Meets all worldwide regulatory requirements for lead-free manufacturing.
- 14 Mini-ITX (6.7" x 6.7") Form Factor.**



# Intel® Desktop Board DQ67EP Executive Series

## Technical Specifications

### PROCESSOR

#### Processor Support

- 2nd generation Intel® Core™ i5 vPro™ and Intel® Core™ i3 processors in the LGA1155 package
- Intel® Hyper-Threading Technology<sup>8</sup>
- Intel® Turbo Boost Technology<sup>7</sup>
- Integrated Memory Controller with support for up to 32 GB of system memory using either DDR3 1333/1066 MHz
- Intel® Fast Memory Access
- Supports Intel® 64 architecture<sup>10</sup>

### CHIPSET

#### Intel® Q67 Express Chipset

- Intel® 82Q67 Platform Controller Hub (PCH)
- Intel® Active Management Technology 7.0
- Intel® Rapid Storage Technology (RAID 0, 1, 5, 10)

#### Integrated Intel® PCH Controllers

- Four Hi-Speed USB 2.0 ports
- Six additional ports via internal headers
- Two SATA 6.0 Gb/s ports and four SATA 3.0 Gb/s ports

#### 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 2.5
- Intel® Express BIOS update support



**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.

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.

<sup>1</sup> Requires the use of a discrete graphics card.

<sup>2</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.

<sup>3</sup> DisplayPort (DP): The next generation in high-performance digital connectivity delivering high-resolution digital display and digital audio.

### 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® 82579LM ENERGY STAR\*-ready 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
- One Mini-PCI Express Mini Card slot supporting half-length configuration

### Audio

- 8-channel Intel® High Definition Audio<sup>9</sup> with multi-streaming
- One front panel audio header
- One S/PDIF output internal header

### SYSTEM MEMORY

#### Memory Capacity

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

#### Memory Types

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

<sup>4</sup> The original equipment manufacturer must provide TPM functionality, which requires a TPM-supported BIOS. TPM functionality must be initialized and may not be available in all countries.

<sup>5</sup> For Intel eco-smart technologies, visit [www.intel.com/go/ecosmart](http://www.intel.com/go/ecosmart).

<sup>6</sup> The Intel® Core Utilities Bundle includes Intel® Integrator Assistant, Intel® Integrator Toolkit, Intel® Express Installer, and Intel® Express BIOS Update.

<sup>7</sup> 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](http://www.intel.com/technology/turboboost) for more information.

<sup>8</sup> 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](http://www.intel.com/info/hyperthreading).

<sup>9</sup> 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](http://www.intel.com/design/chipsets/hdaudio.htm).

### Memory Voltage

- Memory voltage control from 1.2 V to 1.8 V
- 1.5 V standard JEDEC voltage

### 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
- Three front-panel Hi-Speed USB 2.0 headers
- Front-panel audio header

### MECHANICAL

#### Board Style

- Mini-ITX form factor

#### Board Size

- 6.7" x 6.7" (12.7cm x 12.7cm)

#### 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

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[www.intel.com/go/idb](http://www.intel.com/go/idb) or  
<http://ark.intel.com>

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

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