Intel® Desktop Board
DQ77KB
Executive Series

Thin Mini-ITX Form Factor
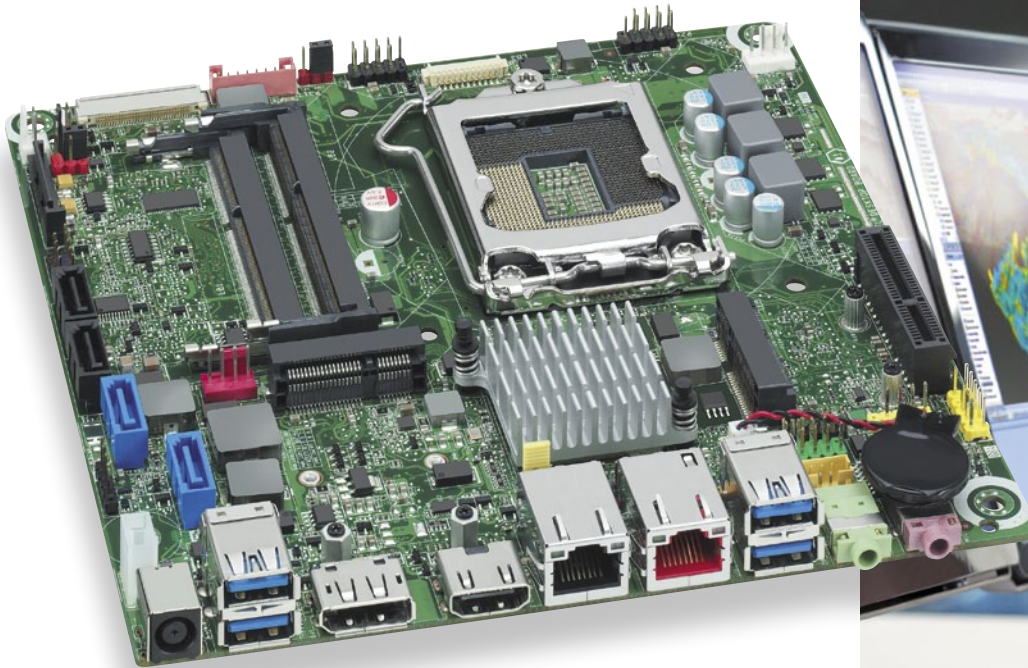
intel DESKTOP BOARD inside™

(intel®)

PRODUCT BRIEF
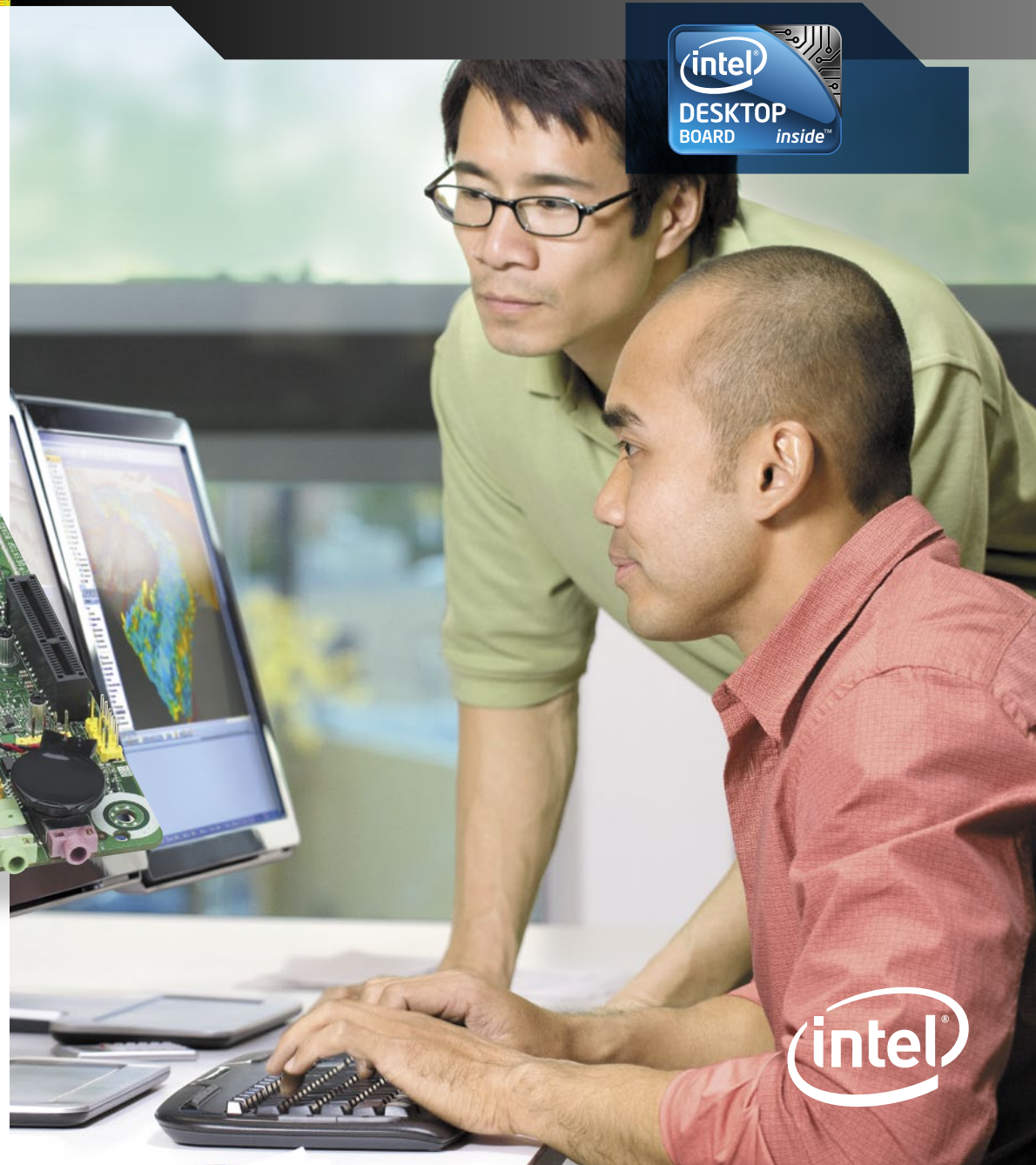
Intel® Desktop Board DQ77KB

Built for Business

Driven by today's sophisticated and competitive business environment, PC effectiveness and efficiency is key to operations success. The Intel® Desktop Board DQ77KB is designed and engineered to provide businesses a stable and reliable platform that enhances office productivity. It comes with better remote manageability and data security features. Based on the new Intel® Q77 Express Chipset with built-in Intel® Active Management Technology (Intel® AMT) 8.0, the Intel® Desktop Board DQ77KB sup-ports 2nd and 3rd Gen Intel® Core™ vPro™ processors in the latest LGA1155 package (up to 65W) – bringing you unprecedented business PC performance. The 3rd Gen Intel® Core processors also feature optimized Intel® Turbo Boost Technology[1] and enhanced Intel® Hyper-Threading Technolgoy[2], which provide smarter performance and a seamless visual experience. Besides essential features, extensive expandability options are available in the Intel® Desktop Board DQ77KB, including 2 high current charging USB3.0, 1 full length PCI Express Mini Card slot (supports mSATA), 1 half length PCI Express Mini Card slot (supports wireless Intel® AMT) and 1 PCI Express 3.0 x 4 connector. The Intel® Desktop Board DQ77KB supports triple independent display when using Flat Panel Display (eDP* or LVDS), Display Port* and HDMI. It also offers dual integrated 10/100/1000 Intel® GbE LAN network connection to enable link aggregation and improves Ethernet throughput. The Intel® Desktop Board DQ77KB supports Intel® Identity Protection and Intel® Anti-Theft Technology to further safeguard businesses. With its thin-mini footprint of 20mm z-height, Intel® Desktop Board DQ77KB is the perfect choice for All-In-One (AIO) usage and applications that require small form factor board.

Seamless PC Remote Manageability

Uniquely powered by Intel® vPro™ technology, the Intel® Desktop Board DQ77KB is equipped with improved KVM Remote Control manageability, enabling remote access and control of a PC, even when the PC is in OOB (Out-Of-Band) state. Desk-side troubleshooting is tremendously reduced with KVM Remote Control, saving both time and money.

Data Security Features

Protect sensitive office data with RAID built into the Intel® Q77 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 (TPM). Also included in the Intel® Desktop Board DQ77KB are the award-winning antivirus software McAfee* Antivirus Plus and ESET* Smart Security 5 with 60-day and 45-day license respectively.

Multiple Operating System Certifications

The Intel® Desktop Board DQ77KB is certified with Windows* 7, RedHat* and SUSE* Linux*.

Product Stability

Intel® Desktop Board DQ77KB comes under Intel® Stable Image Platform Program (SIPP) and Intel® Extended Life Program (XLP).

The boxed Intel® Desktop Board DQ77KB solution includes:

- ATX 2.2 full- and half-height compliant I/O shield
- SATA data cables
- SATA power cable
- Board and back panel I/O layout stickers
- Integration Guide
- TPM Quick reference guide
- Intel® Express Installer driver and software DVD

VALUE-ADDED SOFTWARE

CAPABILITY	SOFTWARE INCLUDED
Utilities	▪ Intel® Integrator Toolkit
Productivity	▪ Splashtop* Remote Desktop ▪ Laplink* PCmover* Express ▪ RealVNC* Viewer Plus ▪ Spiceworks* IT Desktop
Security	▪ McAfee* Antivirus Plus (60 days license) ▪ ESET* Smart Security 5 (45 days license)

Intel® Desktop Board DQ77KB

Features and Benefits

6.7" (17cm)

6.7" (17cm)
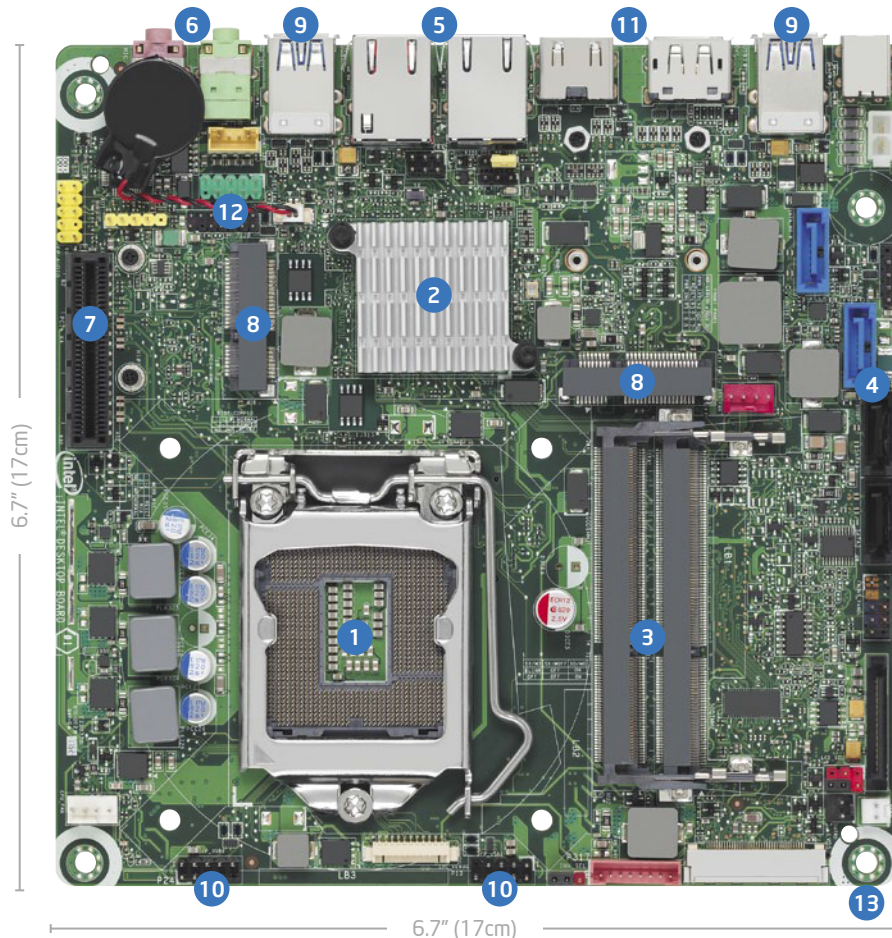
1. **Supports the 2nd and 3rd Generation Intel® Core™ vPro™ processors and other Intel® processors in the LGA1155 package , up to 65W**

2. **Intel® Q77 Express Chipset PCH**

3. **Dual-Channel DDR3 with two connectors for 1600/1333 MHz memory support:** Supports 1.2V to 1.8V memory voltage control for maximum DIMM compatibility

4. **4 SATA ports (2 SATA 6.0 Gb/s; 2 SATA 3.0 Gb/s):** Facilitates high-speed storage and data transfers at up to 6.0 Gb/s

5. **Dual Integrated 10/100/1000 Network Connection:** Enables link aggregation and improves Ethernet throughput

6. **Four-channel Intel® High Definition Audio[3]:** Audio subsystem with two analog audio outputs (2 + 2 independent multi-streaming)

7. **PCI Express* 3.0 x4 connector**

8. **1 Full Length PCI Express* Mini Card(supports mSATA) and 1 Half Length PCI Express* Mini Card (supports wireless Intel® AMT) slots**

9. **4 USB 3.0 ports:** 4 back panel ports – 2 ports support high current

10. **5 USB 2.0 ports:** 5 ports via internal headers

11. **eDP*, LVDS, DisplayPort* and HDMI*:** Support tripal independent display capability for multiple display support

12. **Serial and Custom Solutions headers**

13. **Thin Mini-ITX form factor**

PROCESSOR
Processor Support
- Intel® Core™ i7 and Intel® Core™ i5 processors and other
- Intel® processors in the LGA1155 package.
- Supports Intel® 64 architecture [4]

CHIPSET
- Intel® Q77 express chipset
- Intel® Q77 Platform Controller Hub (PCH)

PERIPHERAL CONNECTIVITY
- 4 SATA ports (2 SATA 6.0 Gb/s; 2 SATA 3.0 Gb/s)
- Dual Integrated 10/100/1000 Network Connection
- 4 Super-Speed USB 3.0 ports (4 back panel ports)
- 5 Hi-Speed USB 2.0 ports (5 internal headers)

SYSTEM BIOS
- 96 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V3.0b, SMBIOS 2.5
- Intel® Express BIOS update support

SYSTEM MEMORY
Memory capacity
- Two 204-pin SODIMM connectors supporting up to two double-sided SODIMMs (16 GB [5] max)

Memory Types
- DDR3 1600 [6] / 1333 SDRAM memory support
- Non-ECC Memory

MEMORY MODES
- Dual- or single-channel operation support

MEMORY VOLTAGE
- 1.2 V to 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
- ACPI-compliant power management control

INTEL® PRO 10/100/1000 NETWORK CONNECTION
- Low-power design

EXPANSION CAPABILITIES
- One PCI Express* 3.0 x4 connector
- One Full-length PCI Express* Mini Card slot – supports mSATA
- One Half-length PCI Express* Mini Card slot – supports wireless Intel® AMT

HEADERS
- One serial port header
- Custom Solutions header
- Digital microphone (DMIC) header
- Stereo speaker header

AUDIO
- Four-channel Intel® High Definition Audio [3] 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
- Thin Mini-ITX

BOARD SIZE
- 6.7" × 6.7" (17 cm × 17 cm)

BASEBOARD POWER REQUIREMENTS
- Thin Mini-ITX 19 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
Europe RoHS (Directive 2002/95/EC) china
China RoHS (MII Order # 39)

(intel®)