

PRODUCT BRIEF

Intel® Desktop Board DB65AL
Classic Series



MicroATX Form Factor

Intel® Desktop Board DB65AL Classic Series



Supports the 2nd-generation Intel® Core™ processors in the LGA1155 package

The Intel® Desktop Board DB65AL is based on the Intel® B65 Express Chipset and supports the 2nd-generation Intel® Core™ processors, including the Intel® Core™ i7 and Intel® Core™ i5 processors and other Intel® processors in the LGA1155 package. The 2nd-generation Intel Core processors feature optimized Intel® Turbo Boost Technology¹ and enhanced Intel® Hyper-Threading Technology², which provide smarter performance and a seamless visual experience.

Dual independent display for processors with Intel® HD Graphics

The Intel Desktop Board DB65AL is equipped with VGA and DVI-D connectors

and supports flexible dual independent display for processors with Intel® HD Graphics. Powered by the 2nd-generation Intel Core processors with Intel HD Graphics, the Intel Desktop Board DB65AL delivers a superb visual performance for sharper images, richer color, and lifelike audio and video. Enjoy a rich, immersive, liquid-smooth visual experience on your monitor or HDTV.

Premium features

The Intel Desktop Board DB65AL offers premium features such as dual-channel DDR3 1333 MHz memory with four connectors (32 GB³ max), Intel® High Definition Audio⁴ with 5.1 surround sound and multi-streaming capability, and an integrated Intel® PRO 10/100/1000 Network Connection in a low-power design.

The Intel Desktop Board DB65AL is designed with a wide range of 1.2 V to 1.8 V memory voltage control to maximize memory DIMM compatibility.

One onboard SATA Revision 3.0 port promises a new level of performance with 6.0 Gb/s link speed between storage devices and the host.

Legacy features such as a PCI connector provides backward compatibility for peripherals.



Intel® Desktop Board DB65AL Classic Series

The boxed Intel® Desktop Board DB65AL solution includes:

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

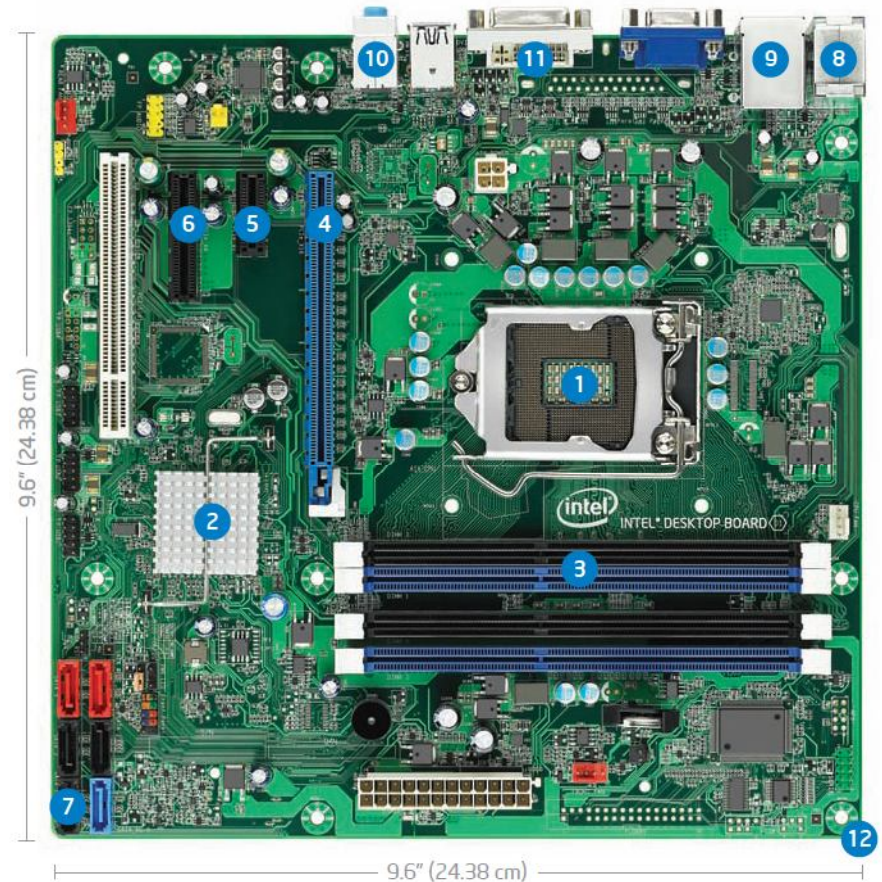
Software included:

| CAPABILITY | SOFTWARE INCLUDED: |
|--------------|---|
| Utilities | ▪ Intel® Desktop Utilities |
| Productivity | ▪ Laplink* PCmover Express* |
| Antivirus | ▪ ESET* Smart Security 4 (45-day license) |

Intel® Desktop Board DB65AL Classic Series

Features and Benefits

- 1 Supports the 2nd-generation Intel® Core™ processors, including the Intel® Core™ i7 and Intel® Core™ i5 processors, and other Intel® processors in the LGA1155 package for exceptional performance
- 2 Intel® B65 Express Chipset PCH
- 3 Dual-channel DDR3 with four connectors for 1333 / 1066 MHz memory support (32 GB³ max): Supports 1.2 V to 1.8 V memory voltage control for maximum DIMM compatibility.
- 4 PCI Express* 2.0 x16 graphics connector
- 5 One PCI Express* x1 connector
- 6 One PCI Express* x4 connector and one PCI connector
- 7 One SATA 6.0 Gb/s port and five SATA 3.0 Gb/s ports, with two ports compatible with eSATA extension
- 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 for high speed and low power consumption
- 10 Eight-channel Intel® High Definition Audio⁴ with multi-streaming capability
- 11 VGA+DVI-D ports: Supports dual independent display and allows for the most flexible display output for Intel processors with Intel® HD Graphics.
- 12 MicroATX Form Factor



Intel® Desktop Board DB65AL Classic Series Technical Specifications

PROCESSOR

Processor Support

- Intel® Core™ i7 and Intel® Core™ i5 processors, and other Intel® processors in the LGA1155 package
- Supports Intel® 64 architecture⁵

CHIPSET

Intel® B65 Express Chipset

- Intel® BD82B65 Platform Controller Hub (PCH)

Peripheral Connectivity

- One SATA 6.0 Gb/s port
- Five SATA 3.0 Gb/s ports with two SATA ports compatible with eSATA extension
- Twelve Hi-Speed USB 2.0 ports (six back panel ports and six additional ports via three 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

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

- Low-power design

Expansion Capabilities

- One PCI Express* 2.0 x16 connector

- One PCI Express 2.0 x4 connector
- One PCI Express 2.0 x1 connector
- One PCI connector

Audio

- 5.1 + 2 multi-streaming Intel® High Definition Audio⁴
- Three stack analog audio ports
- Internal S/PDIF header and front-panel audio header

Video

- VGA+DVI-D ports: support dual independent display for Intel® processors with Intel® HD Graphics

SYSTEM MEMORY

Memory Capacity

- Four 240-pin DIMM connectors supporting up to four double-sided DIMMs
- Maximum system memory up to 32 GB using 8 GB double-sided DIMMs

Memory Types

- DDR3 1333 / 1066 SDRAM memory support
- Non-ECC Memory
- Dual- or single-channel operation support

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

- 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
- Chassis intrusion detect header

MECHANICAL

Board Style

- MicroATX

Board Size

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

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

- 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 (Class B)

United States

- FCC CFR Title 47, Chapter I, Part 15, Subparts A / B

Canada

- ICES-003

Europe

- (EMC Directive 2004 / 108 / EC)
- EN 55022 and EN 55024

Australia / New Zealand

- EN 55022

Japan

- VCCI V-3, V-4

South Korea

- KN-22 and KN-24

Taiwan

- CNS 13438

International

- CISPR 22

Environmental Compliance

Europe

- Europe RoHS (Directive 2002/95/EC)
- WEEE (Directive 2002/96/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/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. See www.intel.com/info/hyperthreading for more information.

³ 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.

⁴ 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/ndaudio.htm

⁵ 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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