PRODUCT BRIEF
Intel® Desktop Boards DP43BF
and DP43BFL Classic Series

ATX Form Factor

Intel® Desktop Boards DP43BF and DP43BFL Classic Series

DP43BF board shown

The ideal platform for a discrete graphics system with performance and reliability built in

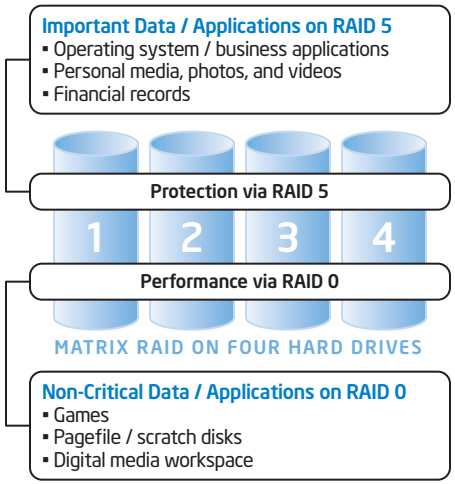
The Intel® Desktop Boards DP43BF and DP43BFL support the Intel® Core™2 Quad**, Intel® Core™2 Duo, Intel® Pentium®, and Intel® Celeron® processors in the LGA775 package. Both boards support dual-channel DDR3 with four connectors for 1333 / 1066 MHz memory support (8 GB[1] max). As ATX form factor discrete graphics desktop boards, the Intel Desktop Boards DP43BF and DP43BFL offer abundant expansion capabilities including one PCI Express* 2.0 x16 graphics connector, two PCI Express* 2.0 x1 connectors, two IEEE 1394a ports (DP43BF only), one eSATA port (DP43BF only), and four PCI connectors. Premium features such as Intel® Matrix Storage Technology (DP43BF only), Intel® High Definition Audio[2] (Intel® HD Audio) with 7.1 + 2-channel multistreaming and an S/PDIF audio port enhance application performance, system reliability, and the digital media experience.

Intel® Matrix Storage Technology (DP43BF only)

The Intel Desktop Board DP43BF features ICH10R and Intel® Matrix Storage Technology that supports RAID 0, 1, 5, and 10. Intel Matrix Storage Technology provides new levels of protection, performance, and expandability for desktop platforms. Whether using one or multiple hard drives, users can take advantage of enhanced performance and lower power consumption. When using more than one drive, the user has additional protection against data loss in the event of hard drive failure.

Valuable digital memories are protected against a hard drive failure when the system is configured for any one of three fault-tolerant RAID levels: RAID 1, 5, or 10. By seamlessly storing copies of data on one or more additional hard drives, any hard drive can fail without data loss or system downtime.

Intel Matrix Storage Technology can also improve the performance of disk-intensive retrieval applications such as editing home videos. By combining two to six drives in a RAID 0 configuration, data can be accessed on each drive simultaneously, speeding up response time on data-intensive applications.



Intel® Desktop Boards DP43BF and DP43BFL Classic Series

The boxed Intel® Desktop Boards DP43BF and DP43BFL solutions include:

- ATX 2.2 compliant I/O shield
- SATA and ATA 100 / 66 cables
- Board and back panel I/O layout labels
- Quick reference guide
- Intel® Express Installer driver and software CD
- Microsoft* Windows* 7 Premium and Windows Vista* Premium WHQL certified

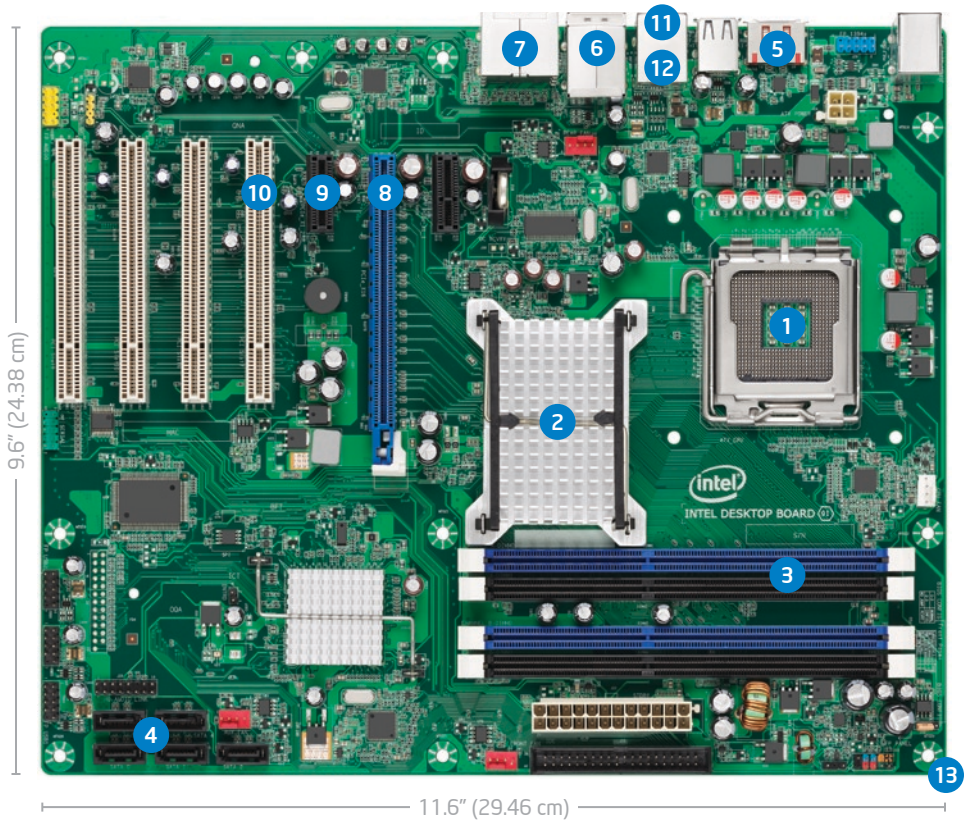
The takeaway software included with the Intel® Desktop Boards DP43BF and DP43BFL works best for your everyday computing.

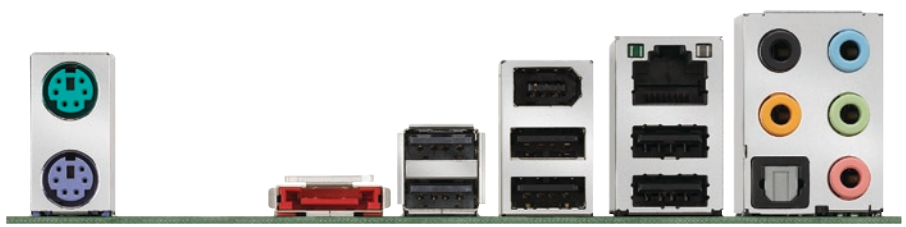
CAPABILITY	SOFTWARE INCLUDED:
Productivity	▪ Intel® Integrator Assistant (Internet Download) ▪ Laplink* PCmover* Express
Entertainment	▪ DivX* for Windows*
Antivirus	▪ Norton Internet Security*

Intel® Desktop Boards DP43BF and DP43BFL Classic Series

Features and Benefits

1. **Supports the Intel® Core™2 Quad**, Intel® Core™2 Duo, Intel® Pentium®, and Intel® Celeron® processors in the LGA775 package.**
2. **Intel® P43 Express Chipset with ICH10R (DP43BF) or ICH10 (DP43BFL)**
3. **Dual-channel DDR3 with four connectors for 1333 / 1066 MHz memory support (8 GB[1] max):** Four DIMM connectors designed to support the latest DDR3 technology.
4. **Five SATA ports (3.0 Gb/s) with Intel® Matrix Storage Technology (DP43BF):** Facilitate high-speed storage and data transfers at up to 3.0 Gb/s for each of five ports. Supports RAID 0, 1, 5, and 10.
5. **One eSATA port (3.0 Gb/s) (DP43BF):** For high-speed external storage.
6. **Integrated 10/100/1000 Network Connection**
7. **Ten-channel Intel® High Definition Audio[2]:** Audio subsystem with five analog audio outputs and one optical S/PDIF digital audio output (7.1 + 2 independent multistreaming).
8. **PCI Express* 2.0 x16 graphics connector:** Delivers up to 8 GB/s bandwidth.
9. **Two PCI Express* x1 connectors**
10. **Four PCI connectors**
11. **Twelve Hi-Speed USB 2.0 ports:** Six back panel ports and six additional ports via three internal headers.
12. **Two IEEE 1394a ports (DP43BF):** One external port and one additional port via internal header.
13. **ATX form factor**





DP43BF board shown

Intel® Desktop Boards DP43BF and DP43BFL Classic Series
Technical Specifications

For ordering information, visit **www.intel.com**

For the most current product information, visit **http://developer.intel.com/products/desktop/motherboard/**

PROCESSOR

Processor Support
- Intel® Core™2 Quad** processors in the LGA775 package
- Intel® Core™2 Duo processors in the LGA775 package
- Intel® Pentium® processors in the LGA775 package
- Intel® Celeron® processors in the LGA775 package
- Supports Intel® 64 architecture[3]

CHIPSET

Intel® P43 Express Chipset
- Intel® 82P43 Graphics and Memory Controller Hub (GMCH)
- Intel® 82801JR I/O Controller Hub (ICH10R) (DP43BF) Intel® 82801JB I/O Controller Hub (ICH10) (DP43BFL)
- Intel® Fast Memory Access

Intel® I/O Controller Hub (ICH)
- Five SATA ports (3.0 Gb/s)
- One eSATA port (3.0 Gb/s) (DP43BF)
- Integrated 10/100/1000 Network Connection
- Twelve Hi-Speed USB 2.0 ports (six back panel ports and six additional ports via three internal headers)

System BIOS
- 16 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive auto-configure
- Advanced configuration and power interface V2.0b, DMI 2.0, multilingual support
- Serial Peripheral Interface (SPI) Flash

SYSTEM MEMORY

Memory Capacity
- Four 240-pin DIMM connectors supporting up to four double-sided DIMMs (8 GB[1] max)

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

Memory Modes
- Dual- or single-channel operation support

Memory Voltage
- 1.35 V to 1.65 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

Expansion Capabilities
- Four PCI bus add-in card connectors
- Two PCI Express* x1 bus add-in card connectors
- One PCI Express 2.0 x16 graphics connector

Headers
- One serial port header
- Two IEEE 1394a ports (one external port and one additional port via internal header) (DP43BF)

Audio
- Ten-channel Intel® High Definition Audio[2] 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
- ATX 2.2-compliant

Board Size
- 9.6" x 11.6" (24.38 cm x 29.46 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] 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.

[2] 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

[3] 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.

* Other names and brands may be claimed as the property of others.

** Supports 95 W Thermal Design Power, Intel® Core™2 Quad Processors with 1333 / 1066 MHz system bus. For information, visit http://processormatch.intel.com