PRODUCT BRIEF Intel® Desktop Board DP55WB Media Series



MicroATX Form Factor

Intel® Desktop Board DP55WB Media Series





Flexible, reliable, and affordable

The Intel® Desktop Board DP55WB was designed to deliver new levels of performance and innovative features to mainstream PC users. Taking advantage of the latest computing technology, this desktop board is breaking barriers and delivering outstanding performance and bandwidth to meet the demanding needs of beginners as well as experienced multitaskers. With incredible support for up to eight threads of processing power and dual-channel DDR3 memory, the Intel Desktop Board DP55WB offers great tools for any application.

Multimedia never looked so good

Developed for the latest generation of multimedia applications and delivering incredible performance, the Intel Desktop Board DP55WB features the revolutionary Intel* P55 Express Chipset. The two-chip layout enables lower power consumption and support for multiple platform capabilities. A PCI Express* 2.0 x16 slot takes computing to the next level in creating and sharing high-definition content quickly and easily.

Designed for ease and flexibility

Build systems quickly with easy-to-locate, aligned front-panel headers at the edge of the board. Six SATA ports provide more data flexibility.

Intel® Desktop Boards Media Series the clear choice

Whether its digital photography or video editing, super-sized entertainment today demands breakthrough technology. The Intel Desktop Board DP55WB delivers great performance and the Intel P55 Express Chipset series of boards is ideal for mid-level, high-performance desktops.



Intel® Desktop Board DP55WB Media Series

The boxed Intel® Desktop Board DP55WB solution includes:

- 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:

- Intel® Desktop Utilities: Monitors system temperatures, voltages, fan speeds, and hard drive health; provides detailed system information; and tests system hardware for common errors.
- •Intel® Integrator Assistant (Internet download): Streamlines board integration.
- **DivX* for Windows*:** Play DivX* videos and try out other features—post, e-mail, and store videos for a limited time.
- Laplink* PC mover* Express: Transfer three software programs, files, and settings from your old PC to your new PC, quickly and easily.
- **Norton Internet Security* 2009** (90-day trial): Removes viruses automatically, blocks certain Internet worm attacks, and protects e-mail and instant messages.
- Additional free software

Intel® Desktop Board DP55WB Media Series

Features and Benefits

- 1 Support for the Intel® Core™ i7 and Intel® Core™ i5 processors in the LGA1156 package: Features Intel® Turbo Boost Technology¹ and Intel® Hyper-Threading Technology² for exceptional performance and scalability, and 8 MB Shared Intel® Smart Cache, enabling dynamic and efficient allocation of cache.
- Intel® P55 Express Chipset: Revolutionary new single chip increases routing space for additional onboard features and lowers power consumption.
- 3 Dual-Channel DDR3 1333 / 1066 MHz memory support: Four DIMM slots support up to 16 GB³ memory connected directly to the processor via the Integrated Memory Controller.
- 4 One PCI Express* 2.0 x16 slot: Improves graphics bandwidth up to 16 GB/s.
- 5 Two PCI Express 2.0 x1 slots and one PCI expansion slot: Flexibility to support PCI Express and legacy PCI devices.
- 6 Six SATA 3.0 GB/s ports: Facilitates high-speed storage and data transfers.

- 7 Intel® Matrix Storage Technology: RAID 0, 1, 5, and 10 with Intel® Rapid Recover Technology increases performance data access and/or data protection.
- 8 One IEEE 1394a port with one additional port via internal header; eight Hi-Speed USB 2.0 ports with six additional ports via three internal headers: Provides the most flexible connectivity options for front and back panels.
- 9 Intel® PRO 10/100/1000 Network Connection: Uses a new low-power design and meets Energy Star* 5.0 specifications.
- 5.1-Channel Intel® High Definition
 Audio4: Enables high-quality integrated audio.
- 11 Lead-free: Meets all worldwide regulatory requirements for lead-free manufacturing.
- 12 ATX (9.6" x 9.6") Form Factor: MicroATX board supports smaller towers and systems.



9.6" (24.38 cm)

Intel® Desktop Board DP55WB Media Series

Technical Specifications

PROCESSOR

Processor Support

- Intel® Core™ i7 and Intel® Core™ i5 processors in the LGA1156 package
- Intel® Turbo Boost Technology
- Intel[®] Hyper-Threading Technology²
- Supports Intel® 64 architecture⁵

CHIPSET

New Intel® P55 Express Chipset

- Intel® 82P55 Platform Controller Hub (PCH)
- Intel® Matrix Storage Technology (RAID 0, 1, 5, 10)
- Six onboard SATA ports

USB 2.0

Integrated Intel® PCH controllers

- Eight Hi-Speed USB 2.0 ports via back panel
- Six additional ports via internal headers

System BIOS

- 16 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive autoconfigure
- Advanced configuration and power interface V3.0b, DMI 2.5
- Intel* Express BIOS update support: BIOS update via new F7 function key

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 3.0b

Intel® PRO 10/100/1000 Network Connection

New low-power design can meet Energy Star* 5.0 specifications

Expansion Capabilities

- One PCI Express* 2.0 x16 slot
- Two PCI Express 2.0 x1 slots
- One PCI slot

Audio

• 5.1-channel Intel® High Definition Audio4 codec

SYSTEM MEMORY

Memory Capacity

Four 240-pin DIMM connectors

Memory Types

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

Memory Modes

Dual- or single-channel operation support

Memory Voltage

• 1.5 V standard |EDEC voltage

JUMPERS AND FRONT-PANEL CONNECTORS Jumpers

- Single configuration jumper design
- lumper 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

MicroATX

Board Size

• 9.6" x 9.6" (24.38 cm x 24.38 cm)

Baseboard Power Requirements

ATX 12 \/

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)

Еигоре

(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 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.

For ordering information, visit www.intel.com

For the most current product information, visit www.intel.com/go/idb or http://ark.intel.com

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

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¹ 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.

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.

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/hdaudio.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/