

ATX Form Factor

Wield the Ultimate Gaming Weapon!

Introducing the Intel® Desktop Board DX58SO, designed to unleash the power of the new Intel® Core™ i7 processors

Next-Generation Breakthrough Design

With the Intel® Desktop Board DX58SO, Intel is breaking down barriers when it comes to the performance and bandwidth that gamers, digital media creators, and ultimate multitaskers need most. The Intel Desktop Board DX58SO provides breakaway performance in production and editing, as well as superior digital media rendering and real-time audio and video preview capabilities. The exclusive layout of the memory and other onboard components improves airflow and thermal performance. The massive data throughput and support for the Intel® Core™ i7 processors runs more applications simultaneously, with less wait time.

Power for the Hottest New Games

With incredible support for up to eight threads of raw processing power, unprecedented bandwidth, triple-channel DDR3 memory, and full support for ATI* CrossfireX* technology, the Intel Desktop Board DX58SO goes where no desktop board has gone before.

The exclusive rotated core delivers more advanced performance tuning¹ and, with superior graphics flexibility, gamers enjoy a smoother, more realistic experience. Intel® Extreme Memory Profiles (Intel® XMP) is a performance-packed expansion of the standard DDR3 memory specification, enabling a robust and stable solution for ultra-fast memory.



Intel® Desktop Board DX58SO



The boxed Intel® Desktop Board DX58SO solution includes:

- Intel® Desktop Board DX58SO
- ATX 2.2 compliant I/O shield
- Low-profile right-angle SATA cables
- 40mm LED fan with mounting bracket
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Windows Vista® Premium WHQL certified

Software included:

- **Intel® Desktop Control Center** (Internet Download)
- **Intel® Desktop Utilities** (Internet Download)
- **Intel® Integrator Assistant** (Internet Download)
- **Intel® Integrator Toolkit** (Internet Download)
- **Ubisoft® Far Cry 2™**: Full version of the most highly anticipated PC game of 2008.
- **Acronis® True Image 11 Home**: Powerful backup protection to help you recover from unforeseen events such as viruses, unstable software, and hard drive failures.
- **CyberLink® Live Premium**: Video, photo, and music files located on your home PC can be accessed remotely anytime, anywhere.
- **Diskeeper® Home Edition**: Boosts computer speed and reliability while minimizing system resource use.
- **DivX® Pro for Windows®**: Everything you need to create, burn, post, e-mail, store, or watch your DivX videos.
- **Dolby® Control Center**: Places listeners in the middle of the action, giving their PCs a powerful set of tools to deliver a cinema-style experience in vivid surround sound.
- **Norton 360®**: Removes viruses automatically, blocks certain Internet worm attacks, and protects e-mail and instant messages.
- **PLAYXPERT® In-Game Platform**: Provides next-generation in-game community management tools to change the way you game.
- **Kaspersky® Anti-Virus** (Russian only): A fully scalable virus database that supports a wide range of operating systems and applications.
- **Kingsoft® Antivirus** (Chinese only): A must-have application for China that checks and alerts for viruses.
- **Kingsoft® Powerword®** (Chinese only): An electronic dictionary for English to Chinese and Japanese to Chinese translations.

Features and Benefits

Intel® Desktop Board DX58SO

1 Support for the next-generation Intel® Core™ i7 processor Extreme Edition in the LGA1366 package:

Features Intel® Turbo Boost Technology³ and Intel® Hyper-Threading Technology⁴ for exceptional performance and scalability, and 8 MB Shared Intel® Smart Cache, enabling dynamic and efficient allocation of cache.

2 Intel® X58 Express Chipset:

Features Intel® QuickPath Interconnect (Intel® QPI) to the processor for 25.6 GB/s maximum peak bandwidth at 6.4 GT/s.

3 Integrated Memory Controller (IMC):

Three channels of DDR3 designed to support up to 16 GB⁵ of DDR3 1600 / 1333 / 1066⁶ MHz memory, delivering up to 32 GB/s memory bandwidth at DDR3 1333 MHz.

4 Up to 2 IEEE 1394a ports (1 external / 1 via internal header) and 12 USB 2.0 ports (8 back ports / 4 via 2 internal headers):

Provides for the most flexible back panel connectivity options.

5 Dual PCI Express* 2.0 x16 slots:

Improved graphics bandwidth and support for Certified dual-card ATI* CrossFire*.

6 PCI Express and PCI connectors:

Flexibility to support PCI Express and legacy PCI devices.

7 6 SATA 3.0 GB/s ports, including two eSATA back ports:

Support for 6 internal ports SATA capability and the ability to disable individual ports via the Intel® Matrix Storage driver stack plus 2 external ports.

8 ICH10R with Intel® Matrix Storage Technology:

Performance and reliability with support for RAID 0, 1, 5, 10, and new Intel® Rapid Recover Technology.

9 Dolby* Home Theater with 10-Channel Intel® High Definition Audio (7.1):

Enables high-quality integrated audio that rivals the performance of high-end discrete solutions. New Dolby* Control Center software provides an easy-to-use home theater configuration tool for a rich home theater surround sound experience.

10 Intel® Gigabit Ethernet LAN:

Features onboard 10/100/1000 Mb/s Ethernet LAN connectivity.

11 Consumer infrared receiver and transmitter:

Supports receiving, learning, and emitting capabilities, controls up to two additional CE devices with your PC, and eliminates the need for a USB CIR dongle.

12 Exclusive voltage regulator heatsinks:

Provides reliable and silent cooling for extreme performance tuning.

13 Solid capacitors and exclusive processor voltage regulation design:

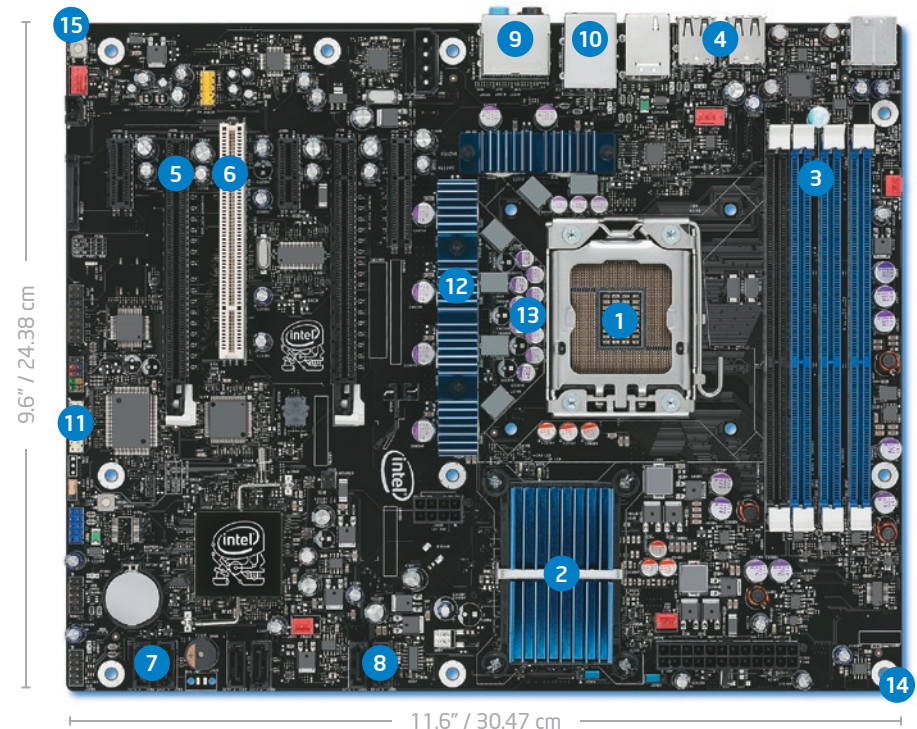
Maximizes stability and power for advanced performance tuning.

14 ATX (9.6" x 11.6") Form Factor:

ATX board supports more fully featured tower designs.

15 Lead-free:

Meets all worldwide regulatory requirements for lead-free manufacturing.





Technical Specifications

Power

Baseboard Power Requirements

- ATX12V

Environment

Operating Temperature

- 0° C to +55° C

Storage Temperature

- -20° C to +70° C

Regulations and Safety Standards

United States and Canada

- UL 1950, Third edition—CAN/CSA C22.2 No. 950-95 with recognized U.S. and Canadian component marks

Europe

- Nemko certified to EN 60950 International
- Nemko certified to IEC 60950 (CB report with CB certificate)

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

Europe

- EMC directive 89/336/EEC; EN 55022:1998 Class B; EN 55024:1998

Australia/New Zealand

- AS/NZS 3548, Class B

Taiwan

- CNS 13438, Class B International
- CISPR 22:1997, Class B

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.



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.

Ordering Information: See the Intel Web site at www.intel.com.

For the most current product information, visit developer.intel.com/design/motherbd/

¹ Warning: altering clock frequency and/or voltage may (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications.

² Expected to be shipping in Q1 2009. Entertainment Software Rating Board (ESRB) rated M for Mature.

³ 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.

⁴ 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

⁵ 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.

⁶ Maximum peak memory bandwidth requires three DDR3 modules to be populated in each of the blue memory slots. DDR3 1600 memory support on this motherboard requires advanced knowledge of BIOS and memory tuning; individual results may vary. For specific supported memory for this motherboard, please visit www.intel.com/products/motherboard/ for more details.

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