

ATX Form Factor

Let's Go Extreme!

Introducing the Intel® Desktop Board DP45SG Extreme Series showcasing Intel® Core™2 Extreme Processors

Affordability that brings you extreme performance

Welcome to the world of affordable extreme performance platforms, brought to you by the Intel® Desktop Board DP45SG. This board is built to support the latest Intel® Core™2 Extreme processors and DDR3 1333 with overclocking features that bring extreme performance to your gaming and home entertainment machines. With the full-size ATX form factor, you will have incredible expandability options, including dual PCI Express* 2.0 x16 slots, up to twelve USB ports, eSATA, and more.

Award winning game included in the box

The boxed product includes the full version of Tom Clancy's Ghost Recon Advanced Warfighter* 2, an award winning game title optimized to take advantage of all the cores of the Intel Core 2 Extreme processors.



Intel® Desktop Board DP45SG



The boxed Intel® Desktop Board DP45SG solution includes:

- Intel® Desktop Board DP45SG
- 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
- Floppy for Intel® Matrix Storage Technology RAID driver
- Windows Vista® Premium WHQL certified

Software included:

- **Full version of Tom Clancy's Ghost Recon Advanced Warfighter® 2**
- **Intel® Desktop Control Center** (Internet Download)
- **Intel® Integrator Assistant** (Internet Download)
- **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.
- **Laplink® PCmover® Express:** Transfer programs, files, and settings to your new PC—in one easy move.
- **Norton® 360:** Removes viruses automatically, blocks certain Internet worm attacks, and protects e-mail and instant messages.
- **TypePad®:** A premier blogging service for passionate bloggers and businesses. Connect with the people who mean the most.
- **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 DP45SG

1 Support for the Intel® Core™2

Extreme processors: Features quad- or dual-core processing and a faster 1333 / 1066 / 800 MHz FSB.

2 Intel® P45 Express Chipset with

ICH10R: Features PCI Express* 2.0, which delivers up to 16 GB/s, double that of PCI Express 1.0.

3 DDR3 supporting 1333 MHz memory:

Four DIMM sockets designed to support up to 16 GB¹ of DDR3 1333 / 1066 / 800 MHz memory.

4 Up to 2 IEEE 1394a ports (1 internal, 1 via header) and 12 USB 2.0 ports (6 external, 6 via headers):

Provides for the most flexible back panel connectivity options.

5 Dual PCI Express 2.0 x16 slots:

Improved graphics bandwidth up to 16 GB/s in 1 x 16 or 2 x 8 graphic card configuration.

6 2 PCI Express x1 slots and 3 PCI expansion slots:

Flexibility to support PCI Express and legacy PCI devices.

7 5 SATA 3.0 Gb/s ports, including one external eSATA back port:

Facilitates high-speed storage and data transfers, with RAID 0, 1, 5, and 10 support.

8 Dolby® Home Theater, 10-Channel Intel® High Definition Audio (7.1), and 5 stack audio ports (with optical S/PDIF output):

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.

9 Intel® Gigabit Ethernet LAN:

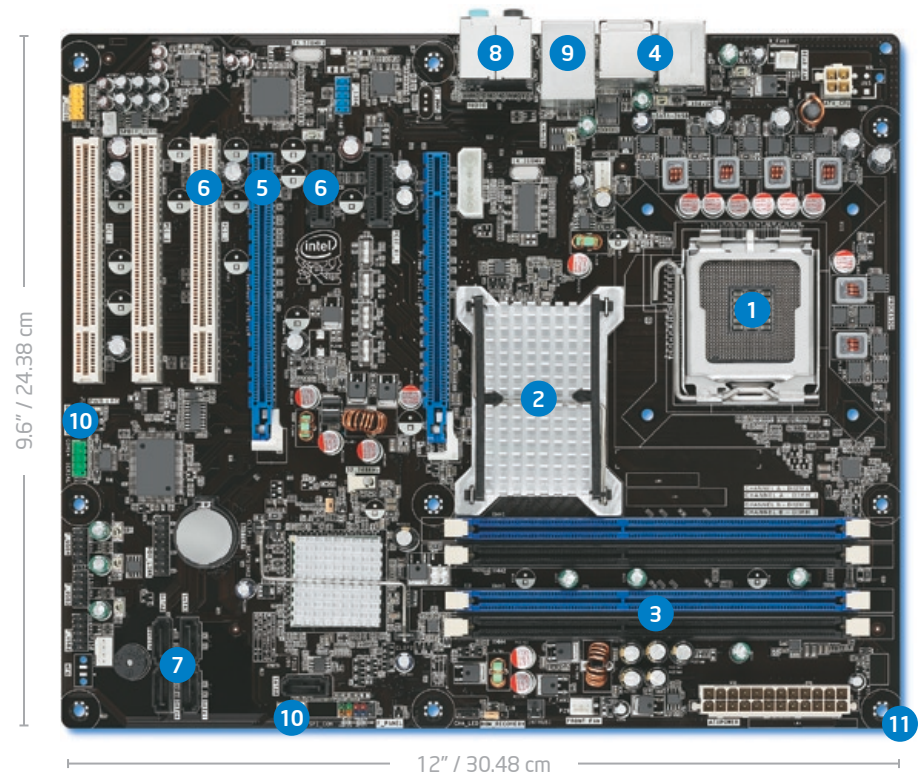
Features onboard 10/100/1000 Mb/s Ethernet LAN connectivity.

10 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.

11 ATX (9.6" x 12") Form Factor:

ATX board supports more fully featured tower designs.





Technical Specifications

Power

Baseboard Power Requirements

- ATX12V

Environment

Operating Temperature

- 0° C to +55° C

Storage Temperature

- -40° 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 sym-
bol is also used to indicate conformance to lead-free
requirements and definitions adopted under the Eu-
ropean 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 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.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT.

Intel products are not intended for use in medical, life-saving, or life-sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel. Leap ahead., Intel. Leap ahead. logo, and Intel Core are trademarks of Intel Corporation in the U.S. and other countries.

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

Copyright © 2008 Intel Corporation. All rights reserved. 0408/TFC/MS/PDF

319799-001US

