



Intel® Core™2 Extreme Quad-Core Mobile Processor (QX9300)

The world's first quad-core mobile processor

Gaming elite—meet your processor

Designed from the ground up for extreme competitive gaming and HD multimedia on the fly, the Intel® Core™2 Extreme quad-core mobile processor (QX9300) is the world's highest performing quad-core mobile processor.¹ Delivering all the revolutionary performance of a desktop, enabled in a sleek and sexy killer notebook, the Intel Core 2 Extreme quad-core mobile processor achieves clock speeds of up to 2.53 GHz, along with an astounding 12 MB of shared L2 cache and a 1066 MHz Front Side Bus (FSB).

As your ultimate engine for hi-def digital content creation, HD multimedia, and a rockin' hardcore gaming experience, these notebooks provide the raw power, responsiveness, and realism you need for the most compute-intensive and multi-threaded apps—wherever you want to be.

Mobile multimedia monster

With next-gen 45nm quad-core technology and new hafnium-based circuitry, you'll perform like a multiple-armed monster. With four cores processing multiple threads and multiple tasks at blistering speeds, the Intel Core 2 Extreme quad-core mobile processor is your ultimate engine for creating rich, HD videos with up to 50 percent faster performance when encoding² and editing³ video.

Make virtual reality your reality

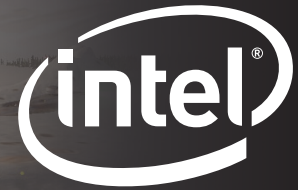
When you want to dominate the latest games, the Intel Core 2 Extreme mobile processor delivers a "like you're there" experience with four cores powering advanced artificial intelligence (AI), particle systems, dynamic physics, and texture generation. With smoother-than-silk rendering of the most intensive multi-threaded games, these processors give you a great gaming experience now and the performance you need to mega-perform in future multi-threaded games.

Gaming power, unleashed

Unleash mobile gaming performance and stay unwired longer. Intel's low leakage, 45nm processors are mobile friendly, with 45W thermal design power (TDP) and advanced power management features for fine tuning your system for optimal performance on the fly.

Control freak? Get tuning

Because you're looking for the ultimate control in game, the Intel Core 2 Extreme mobile processor bus ratio locks (overspeed protection) have been removed, so you can fine tune your notebook experience for maximum gaming performance.³ And when you're really looking to push the boundaries, the Intel Core 2 Extreme mobile processor works with Intel® Extreme Tuning Utility (Intel® XTU) 4 and Intel® Extreme Memory Profiles (Intel® XMP)^{5,6} to simplify processor and memory overclocking so you can send your enemies screaming for their mamas.⁶



- World's highest performing quad-core mobile processor¹
- Up to 50 percent faster performance when encoding HD video²
- Performance headroom for future games with over 60 percent better performance on 3DMark* Vantage CPU test⁷





Optimized for Intel® multi-core technology, Ice Storm Fighters provides explosive realism and stunning advanced game physics for an extreme gaming experience.*

Features and Benefits of the Intel® Core™2 Extreme quad-core mobile processor

COMPONENT/FEATURE	FUNCTIONALITY	BENEFIT
45nm hafnium-based Intel® quad-core processor	Next-gen Intel® 45nm high-k (Hi-k) metal gate silicon technology is roughly twice the density of Intel® 65nm technology, packing more transistors into a single chip.	Four cores provide mega performance for highly threaded games and applications with over 60 percent better performance on 3DMark® Vantage CPU test. ⁷
Power-Optimized 1066 MHz Front Side Bus (FSB)	Increased process system bus speed.	Improved FSB provides increased data bus bandwidth vs. prior generations for incredible gaming performance.
Larger Intel® Advanced Smart Cache	12 MB of shared L2 cache minimizes bus traffic by allowing all four cores access to the L2 memory and shared data to be accessed from the cache.	Larger, smarter, and more efficient cache design can handle complex physics and AI for “like you’re there” realism in games.
Dual Intel® Dynamic Acceleration	Uses headroom of idle cores by dynamically boosting frequency of active cores while maintaining the thermal envelope.	This feature enables power reductions while increasing frequency by 266 MHz.
Support for Intel® Extreme Tuning Utility (Intel® XTU) and Intel® Extreme Memory Profiles (Intel® XMP)⁴	Intel XTU is an overclocking application for manual performance tuning, stress testing, and system monitoring. Intel XMP allows you to manually alter frequency, latency, and voltage parameters.	Intel XTU and Intel XMP simplify processor and memory overclocking to optimize performance for extreme gaming.

For more information about extreme mobile gaming, visit www.intel.com/Consumer/Game/Mobile/index.htm

¹ For more information on why Intel® Core™2 Extreme Processor QX9300 is the world's highest performing quad-core mobile processor see http://www.intel.com/performance/mobile/extreme/index.htm?id=perf_mobile+extreme for important additional information.

² Performance measured based on TPCEnc Xpress* 4.4 comparing notebooks with quad-core Intel® Core 2 Extreme processor QX9300 with notebooks based on dual-core Intel® Core 2 Extreme Processor X9100. Actual performance may vary. See <http://www.intel.com/performance/mobile/extreme/index.htm> for important additional information.

³ Performance measured based on Adobe Premiere Pro* CS3 comparing notebooks with quad-core Intel® Core 2 Extreme processor QX9300 with notebooks based on dual-core Intel® Core 2 Extreme Processor X9100. Actual performance may vary. See <http://www.intel.com/performance/mobile/extreme/index.htm> for important additional information.

⁴ 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 heat or other damage, and (v) affect system data integrity. Intel has not tested, and does not warrant, the operation of the processor beyond its specifications. Intel assumes no responsibility that the processor, including if used with altered clock frequencies and/or voltages, will be fit for any particular purpose.

⁵ WARNING: Altering PC memory frequency, voltage and/or latency may: (i) reduce system stability and useful life of the system, memory, and processor, (ii) cause the processor and other system components to fail, (iii) cause reductions in system performance, (iv) cause additional heat or other damage, and (v) affect system data integrity. Intel has not tested, and does not warrant, the operation of the memory beyond its specifications. Intel assumes no responsibility that the memory, including if used with altered clock frequencies and/or voltages, will be fit for any particular purpose. Check with memory manufacturer for warranty and additional details.

⁶ Intel® Extreme Memory Profiles (Intel® XMP) and Intel® Extreme Tuning Utility (Intel® XTU) are optional features of Intel® Core™2 Extreme quad-core mobile processors. Check with your notebook's manufacturer for availability.

⁷ Performance measured based on 3DMark® Vantage CPU test comparing notebooks with quad-core Intel® Core 2 Extreme processor QX9300 with notebooks based on dual-core Intel® Core 2 Extreme Processor X9100. Actual performance may vary. See <http://www.intel.com/performance/mobile/extreme/index.htm> for important additional information.

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.

The information herein is subject to change without notice.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order. Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting Intel's Web site www.intel.com.

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

Copyright © 2008 Intel Corporation. All rights reserved.

Intel, the Intel logo, the Intel Core 2 Extreme logo and Intel Core are trademarks of Intel Corporation in the U.S. and other countries.

Printed in USA 0708/DC/MESH/PDF Please Recycle

320320-001US

