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. 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 encoding and editing 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. 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) to simplify processor and memory overclocking so you can send your enemies screaming for their mamas.

Intel® Core™2 Extreme Quad-Core Mobile Processor (QX9300)
### Features and Benefits of the Intel® Core™2 Extreme quad-core mobile processor

<table>
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<tr>
<th>COMPONENTFEATURE</th>
<th>FUNCTIONALITY</th>
<th>BENEFIT</th>
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<tr>
<td>45nm hafnium-based Intel® quad-core processor</td>
<td>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.</td>
<td>Four cores provide mega performance for highly threaded games and applications with over 60 percent better performance on 3DMark® Vantage CPU test.1</td>
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<tr>
<td>Power-Optimized 1066 MHz Front Side Bus (FSB)</td>
<td>Increased process system bus speed</td>
<td>Improved FSB provides increased data bus bandwidth vs. prior generations for incredible gaming performance.</td>
</tr>
<tr>
<td>Larger Intel® Advanced Smart Cache</td>
<td>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.</td>
<td>Larger, smarter, and more efficient cache design can handle complex physics and AI for “like you’re there” realism in games.</td>
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<tr>
<td>Dual Intel® Dynamic Acceleration</td>
<td>Uses headroom of idle cores by dynamically boosting frequency of active cores while maintaining the thermal envelope.</td>
<td>This feature enables power reductions while increasing frequency by 266 MHz.</td>
</tr>
<tr>
<td>Support for Intel® Extreme Tuning Utility (Intel® XTU) and Intel® Extreme Memory Profiles (Intel® XMP)</td>
<td>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.</td>
<td>Intel XTU and Intel XMP simplify processor and memory overclocking to optimize performance for extreme gaming.</td>
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</table>

For more information about extreme mobile gaming, visit [www.intel.com/Consumer/Game/Mobile/index.htm](http://www.intel.com/Consumer/Game/Mobile/index.htm)

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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?ld=perf_mobile+extreme](http://www.intel.com/Performance/mobile/Extreme/index.htm?ld=perf_mobile+extreme) for important additional information.

2 Performance measured based on *3DMark® Vantage*. 

3 Performance measured based on **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.

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 warranty, 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 warranty 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 your memory manufacturer for warranty and additional details.

6 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](http://www.intel.com/Performance/mobile/Extreme/index.htm) for important additional information.

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](http://www.intel.com/Performance/mobile/Extreme/index.htm) for important additional information.