

PRODUCT BRIEF  
Intel® Core™ i7 mobile  
processor Extreme Edition  
Extreme Gaming



## Intel® Core™ i7 mobile processor Extreme Edition 920XM

The fastest laptop processor on the planet<sup>1</sup>

### SAVING MANKIND FROM A WORLD AT WAR

EA Games Dragon Age\*: Origins takes the struggle of critical battle into über intense graphics realism that'll have you confronting your enemies with such speed and vibrancy that using any other processor will seem arcane. With the Intel® Core™ i7 mobile processor Extreme Edition, your laptop will become a window into a revolutionary universe that only you can conquer.

For more on Dragon Age: Origins and the Intel Core i7 mobile processor Extreme Edition, visit [www.intel.com/go/gaming](http://www.intel.com/go/gaming)



### FOR THE WIN

Own your extreme gaming universe with the ultimate weapon for your arsenal: the Intel® Core™ i7 mobile processor Extreme Edition. Unleashing the power of a desktop in a laptop designed from the ground up for gaming, the Intel Core i7 mobile processor Extreme Edition has intelligent technology built in, accelerating performance with overclocking enabled for even greater speed.<sup>2</sup>

Containing unimaginable muscle, the Intel Core i7 mobile processor Extreme Edition takes mobile gaming to new levels with up to 3.2 GHz and eight threads, so you can take the virtual world into new realms of stunning reality.

### BATTLE YOUR EVIL NEMESIS AND WIN

When the fate of humanity rests in your hands, you want no less than the

elite. And with a laptop powered by Intel Core i7 mobile processor Extreme Edition you can immerse yourself in epic tales with maximum PC power, enabled by a combination of Intel® Turbo Boost Technology,<sup>3</sup> accelerating processor clock speed up to 60% to match your workload,<sup>4</sup> and Intel® Hyper-Threading Technology (Intel® HT Technology).<sup>5</sup>

### MEETING THE ENEMY WITH MULTI-THREADED VENGEANCE

The latest multi-threaded games are optimized for Intel® architecture. And with the latest in artificial intelligence, particle systems, dynamic physics, and texture-generation engines rendered across eight threads and up to 25 percent improvement over previous generations in highly threaded games,<sup>6</sup> you'll wonder how you ever played on anything else.

### DOMINATE LONGER, UNPLUGGED

Unleash mobile gaming performance and stay unwired longer. Intel's 45nm processors offer industry-leading battery life with mobile-friendly 55W thermal design power. And their advanced power management features mean that you can fine tune your rig for optimal battery life and gaming performance on the fly.

### YOUR RIG, YOUR WAY

Laptops with Intel Core i7 mobile processor Extreme Edition supports Intel® Extreme Memory Profiles (Intel® XMP) and Intel® Extreme Tuning Utility 1.3, the ultimate tuning utility making it possible to overclock and fine tune your mobile rig for incredible performance and battery life optimizations.<sup>2</sup> Plus, with dual discrete graphics support, you'll experience mind-blowing graphics on the go, so you can game in full living color and unprecedented realism.



*EA Games Dragon Age\*: Origins is highly threaded to take advantage of the latest generation of Intel® processors, and runs in lag-free brilliance on laptops with Intel® Core™ i7 mobile processor Extreme Edition.*

## Features and Benefits of the Intel® Core™ i7 mobile processor Extreme Edition

COMPONENT/FEATURE	FUNCTIONALITY	BENEFIT
<b>Integrated Memory Controller with DDR3 1333 MHz support</b>	An integrated memory controller with two channels of DDR3 1333 MHz offers great memory bandwidth.	Combined with the processor's efficient pre-fetching algorithms, the memory controller's lower latency and higher memory bandwidth delivers amazing performance for data-intensive applications .
<b>Intel® Hyper-Threading Technology</b>	Two thread engines per core enable eight-way processing in an Intel quad-core processor, running up to eight threads simultaneously.	When running multi-threaded applications, the more threads available means you can execute more tasks at the same time, for extreme gaming performance.
<b>Intel® Turbo Boost Technology</b>	Dynamically dials-up the core frequency when a single or lighter threaded application demands more performance and thermal design power headroom exists.	Intelligently scales performance and power as needed so you can dominate your gaming universe with greater efficiency.
<b>8 M shared Intel® Smart Cache</b>	Enables efficient data storage and manipulation, dynamically allocating a large cache to match the needs of each core.	The larger, smarter, and more efficient cache design can handle complex physics and artificial intelligence for "like you're there" realism in games.
<b>Support for Intel® Extreme Memory Profiles (Intel® XMP) and Intel® Extreme Tuning Utility 1.3</b>	Intel XMP allows you to manually alter frequency, latency, and voltage parameters, while Intel Extreme Tuning Utility 1.3 offers a user-friendly interface that delivers overclocking capabilities for performance and battery life optimizations.	Simplifies memory overclocking at higher frequencies and lower latencies while ensuring compatibility between DDR3 modules and the laptop for enhanced memory performance.

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

<sup>1</sup> Based on SPECint\*\_rate\_base2006 scores. Results have been based on internal Intel analysis and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance. See <http://www.intel.com/performance/desktop/extreme/index.htm> for additional information.

<sup>2</sup> Warning: Altering clock frequency and/or voltage may (1) reduce system stability and useful life of the system, processor and other system components; (2) cause the processor and other system components to fail; (3) cause reductions in system performance; (4) cause additional heat or other damage; and (5) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications. Intel has not tested, and does not warranty, the operation of other system components beyond their industry standard specifications. Intel assumes no responsibility that the processor and other system components, including if used with altered clock frequencies and/or voltages, will be fit for any particular purpose.

<sup>3</sup> Enabling Intel® Turbo Boost Technology (Intel® TBT) requires a notebook with a processor with Intel TBT capability. Intel TBT performance varies depending on hardware, software, and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel TBT. For more information, see: [www.intel.com/technology/turboboost](http://www.intel.com/technology/turboboost).

<sup>4</sup> Intel® Core™ i7-920XM mobile processor with a 2.0 GHz base frequency reaches a maximum single-core turbo frequency of 3.20 GHz. See <http://www.intel.com/technology/turboboost/>.

<sup>5</sup> Intel® Hyper-Threading Technology (Intel® HT Technology) requires a computer system with an Intel® processor supporting Intel HT Technology and an Intel HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. See [www.intel.com/products/ht/hyperthreading\\_more.htm](http://www.intel.com/products/ht/hyperthreading_more.htm) for more information including details on which processors support Intel HT Technology.

<sup>6</sup> 3DMark® Vantage CPU test covers the two most common CPU-side tasks: physics simulation and artificial intelligence. Measurements compared were for the Intel® Core™ i7 processor 920XM and the Intel® Core™ 2 Extreme processor QX9300.

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