Product Brief

Intel® Core™2 Extreme Mobile Processor

Extreme Gaming Goes Mobile

Outrageous mobile performance, radical mobile enjoyment.

Designed for gamers and power-users, the Intel® Core™2 Extreme mobile processor is the world's highest performing mobile processor.[Δ] For those who want the most intense, high-performance mobile computing experience available, Intel Core 2 Extreme mobile processors deliver revolutionary mobile dual-core performance, 4 MB of shared L2 Advanced Smart Cache, and an 800 MHz Front Side Bus (FSB).

The Intel Core 2 Extreme mobile processor delivers the raw processing performance needed to crunch the complex algorithms for Artificial Intelligence (AI), physics and game logic needed in the latest generation of games. Two separate and powerful processing cores deliver multi-threading performance to blaze through complex game algorithms, increasing responsiveness and immersion in the most realistic games while enabling users to do other things in the background at the same time, such as backing up data, downloading files and scanning for viruses.

Your gaming foes don't stand a chance.

Today's extreme gamers operate in a fast-moving, high-resolution environment that requires the PC to perform multiple, complex tasks simultaneously without impacting game performance. The latest games combine realistic AI and physics

to produce rich virtual worlds and the immersive experience gamers expect. The Intel Core 2 Extreme mobile processor delivers on this expectation to render dynamic gaming with liquid animation and highly detailed characters, allowing the elite to play at the top of their game. For experienced users who desire more capability, the Intel Core 2 Extreme mobile processor bus ratio locks (overspeed protection) have been removed. This offers added technical flexibility in customizing the system – even beyond the specification limits.[†]

Bring it on and bring it with you. Take your gaming along everywhere.

With a laptop based on the Intel Core 2 Extreme dual-core mobile processor, your next game is right around the corner. The Intel Core 2 Extreme mobile processor is designed for high performance in laptops, and with the mobile power features for notebook-friendly designs, it truly is like having an extreme game room – on the go.

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

Component/Feature	Functionality	Benefit
Dual-Core Processing	Revolutionary mobile, dual-core processor architecture puts two complete execution cores in the same processor.	Improved performance and responsiveness to run multiple demanding applications simultaneously.
Power-Optimized 800 MHz Front Side Bus	Increased process system bus speed.	Provides increased data bus bandwidth, vs. prior generations, for up to 20% faster data transfer rate compared to 667 MHz to help meet the requirements of demanding applications.
Intel® Advanced Smart Cache	A shared L2 cache allows both cores access to the full L2 memory area, and allows shared data to be accessed from cache, minimizing bus traffic. It also allows one core to use the entire cache when the other core is inactive. Provides twice the bandwidth to L1 caches compared to Intel® Core™ Duo processor.	Smarter and efficient cache design enables better performance, responsiveness, and power savings.
Intel® Advanced Digital Media Boost	Improved SIMD streaming extensions, floating-point performance enhancements, and improved thread synchronization. Doubles the rate at which streaming media instructions can be executed.	Enables enhanced performance on floating-point-intensive applications such as video editing, digital music, digital photography, and gaming.
Intel® 64 Architecture°	Allows the user to take advantage of 64-bit applications as they become available. Process more in RAM, resulting in less data caching to and from HDD to enable greater performance.	Headroom for the user to take advantage of 64-bit applications such as rich photo-editing applications in the home as well as multi-media mobile entertainment applications as the ecosystem continues to grow.
Intel® FSB Frequency Switching	At minimal workloads, Intel FSB Frequency Switching helps to lower FSB data transfer rate.	Enhanced Intel SpeedStep® technology§ directly benefits from Intel FSB Frequency Switching because the reduced CPU frequency allows a lower operating voltage to be used in minimal workloads. This ultimately leads to lower power consumption.
Intel® Intelligent Power Capability	Ultra fine-grained control over the CPU's logic circuitry to turn on only the parts that are needed.	Improved power efficiency.