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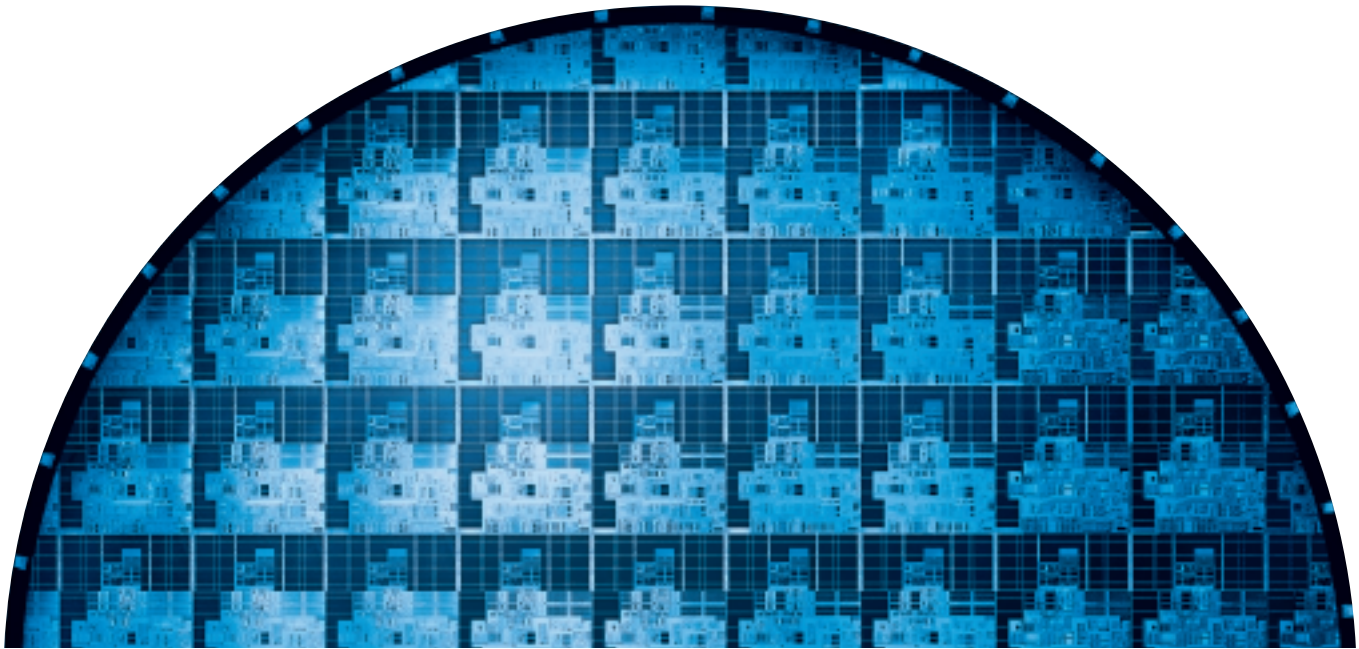
Can microprocessors make a huge difference in content creation?

Yes. Serious processing power is transforming digital content creation. Intel® processor-based platforms shorten production time, deliver content more quickly and allow you to create once and render anywhere. That's why all kinds of businesses—from major Hollywood studios to up-and-coming animation shops—are choosing Intel.

Unleashing the Power

"Imageworks chose Intel-based systems for its newest server farm due to the open, scalable nature of the technology and its superior price-performance."
George Joblove, Vice President of Technology, Sony Pictures Imageworks

As a content creator, you understand the constant pressure to deliver. Each new project demands you find fresh ways to create more realistic digital animation and effects that will dazzle your audience. Add to that the business pressures of having to turn projects around in insane time frames, and you've got a recipe for excitement and an opportunity to excel.



to Create

Chances are you spend huge portions of project time waiting for cloth simulations, fluid dynamics and other compute-intensive effects to render. In an industry where technological improvements can shave weeks off a year-long project, the need for high-performance tools is paramount. By implementing powerful workstations for modeling and animation—and server farms capable of faster rendering and compositing—you gain more time to further refine scenes and create unique effects. And by choosing open Intel®-powered solutions, you gain the luxury of creating once, then rendering anywhere.

Intel® architecture is helping bring ideas to life. Intel® Xeon™ and Pentium® 4 processor-based workstations deliver the headroom, performance and bandwidth you need to create cutting-edge graphics and animation. And since Intel architecture is standards-based, leading software designers like Adobe, Macromedia, Alias/Wavefront and many others gain the flexibility to provide optimized, interoperable software that is compatible with future generations of processors.

Free the Creative Process with Mobile and Wireless Technologies

Reviewing and revising animation sequences to reach a final print is a collaborative process. Too often however, final decisions are delayed by creatives who are multi-tasking, working remotely or traveling. Mobile PCs using Intel® processors can speed the approval process by freeing creators and producers from the confines of the screening room or studio.

For example, content creators can use mobile PCs to test composite images by capturing and synchronizing live action with pre-made animation on the

Alias/Wavefront

Alias/Wavefront's renowned Maya* software offers developers and artists a complete set of 3D rendering tools to create interactive characters, realistic fluid effects and award-winning animation. Running on Intel® Xeon™ processor-based workstations, it offers higher levels of performance thanks to innovative technologies such as Intel® Netburst™ architecture and Hyper-Threading Technology.
www.aliaswavefront.com

Adobe

Whether you want to edit digital video on your laptop or work with multiple layers of uncompressed footage in real time, Adobe Premiere* 6.5 software is the most adaptable DV-editing tool on the market today. Running on an Intel® Pentium® 4 processor 3.06 GHz with Hyper-Threading Technology, it enables even the most demanding PC users to do more in less time. Together, Adobe Premiere and the Intel Pentium 4 processor bring unprecedented power to the PC video editing workstation.
www.adobe.com

"Every single project that comes through The Orphanage—feature, commercial or music video—is processed through Adobe After Effects*. Running on Intel processor-based PCs, After Effects positively screams!"
Stu Maschwitz, Founder, The Orphanage

"For high-end feature film effects, we can go entirely Intel with no sacrifice in quality while maintaining a substantial price-performance advantage. The trick with Intel is there's no reason to use anything else. You can do everything you want on Intel architecture."
Grant Boucher, Technology Consultant, Digital Revelations

set—a real asset in ensuring continuity between the actor and the animated character. This saves time and money by ensuring the director gets the most believable shot while the actors are still on location. It also helps the animator refine the movement of virtual characters based on the body language of the live actors. Using the latest processor technology, powerful graphics chips and secure protocols, mobile workstations allow artists and programmers to create and edit content anywhere, then encrypt, encode and tunnel securely through the Internet to submit their content for final approval.

A wireless network can provide new levels of freedom for creators throughout the studio. An animator could share the work in progress from the day's shoot with an executive producer who is working at the studio offices. The animator sits down in the executive's office, connects to the Wireless Local Area Network (WLAN) using a notebook PC, and can immediately begin sharing the latest animation work. All the animation that resides on the server is immediately available for sharing—in a conference room, an animator's office, the executive cafeteria or anywhere else that is within range of the WLAN. By using a wireless network, and the latest wireless security standards, creators gain the flexibility to work anywhere in the office, boosting productivity and saving time.

Hyper-Threading Technology—The Power to Do More at Once

The power to do more in less time. That's what you get with Intel's innovative Hyper-Threading (HT) Technology. Already available on Intel® Xeon™ processor family-based workstations and servers, and now supported on the Intel® Pentium® 4 processor 3.06 GHz[1], this powerful technology enables the processor to run two software application threads simultaneously. By allowing processors to execute more than one instruction at a time, PC performance is boosted up to 25 percent when multitasking or running multithreaded applications. It's one more way Intel is delivering a technical edge to today's content creators.

"It's important for us to match our top artists with Intel-based technology. The power of Intel-based systems gives our artists the tools they need to succeed, while the flexibility and cost of the systems allows us to stay on the cutting-edge of technology in an affordable way."
Cliff Plumer, Chief Technology Officer, Industrial Light and Magic (ILM)

For More Information

Intel processor-based platforms are the tools behind the art of digital content creation. They're bringing new levels of productivity and affordability to businesses of all sizes. Learn more about Intel-powered solutions by contacting your local representative or field office, or visiting www.intel.com/go/digitalmedia.

Intel Technology: Proven Platforms for Demanding Applications

The future of content creation is in standards-based platforms that allow you to build your business by creating high-impact animation and special effects. For the right mix of outstanding price and performance, Intel® architecture-based platforms are the ideal choice. They're fast becoming the processing backbone of today's leading animation shops.

Intel® Pentium® 4 Processor

Intel's latest-generation microprocessor for high-performance desktops offers exceptional performance that's optimized for leading-edge content creation and editing. The Intel® Pentium® 4 processor supporting Hyper-Threading Technology[1] features an enhanced floating-point/multimedia unit and new Streaming SIMD Extensions 2 that accelerate the processing of 2D and 3D graphics, film/video and streaming media. That explains why Industrial Light & Magic (ILM) is using 600 Pentium 4 processor-based animation workstations for work on "Star Wars: Episode III," "Harry Potter and the Chamber of Secrets," "The Hulk" and "Terminator 3: The Rise of the Machines."

Intel® Xeon™ Processor

When it comes to outstanding price-performance and dependability in 32-bit environments, the Intel® Xeon™ processor family is the intelligent choice. The Intel Xeon processor family for workstations and servers delivers leading performance and headroom for the complex, multithreaded applications used to create and visualize graphically intense digital content. It's one of the many reasons Weta Digital recently used hundreds of Intel Xeon processor-based servers to create the Academy-Award winning visual effects in "Lord of the Rings: The Fellowship of the Rings."

Intel® Itanium™ Processor Family

The Intel® Itanium® 2 processor family for servers and workstations is ideal for the most demanding media and rendering applications. Its new, built-from-the-ground-up architecture boosts productivity by delivering outstanding speed, agility and superior floating-point performance in a full 64-bit environment. Providing enterprise-class support for large, multiprocessing and highly clustered configurations, the Itanium 2 processor offers the performance, scalability and flexibility that creative minds need to produce premium content.

Intel® Software Development Tools

Want to wring every bit of performance out of a system? Intel helps developers do that. Smart developers use the Intel Integrated Performance Primitives (IPP) library to increase the performance on Intel's latest microprocessors. This library of hand-coded, performance-critical software code reduces development costs and helps you get optimized applications to market faster. In essence, IPP lets you access advanced processor features without having to write processor-specific code. The Intel IPP library is optimized for server, desktop and handheld platforms, as well as 32- and 64-bit Windows* and Linux* operating systems.

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[1] Hyper-Threading Technology requires a computer system with an Intel® Pentium® 4 processor at 3.06 GHz or higher, a chipset and BIOS that utilize this technology, and an operating system that includes optimizations for this technology. Performance will vary depending on the specific hardware and software you use. See www.intel.com/info/hyperthreading for information.

[2] Look for systems with the Intel® Pentium® 4 Processor with HT Technology logo which your system vendor has verified utilize Hyper-Threading Technology. Performance will vary depending on the specific hardware and software you use. See www.intel.com/info/hyperthreading for information.

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