

AMD: New 64-Bit Applications Demonstrate Performance Increases Up To 57 Percent

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AMD today announced that 64-bit versions of software applications Crafty and The Panorama Factory running on the beta version of the upcoming Microsoft® Windows® XP 64-bit Edition for 64-bit Extended Systems demonstrate significant increases in performance, up to 57 percent for the Panorama Factory, compared to 32-bit software versions. Crafty is an open-source, high-performance chess program scheduled to compete in the World Computer Chess Championship this July. The Panorama Factory V3 digitally renders a set of photos to create a panoramic picture on your desktop.

“The AMD64 platform enables best-in-class performance, while allowing customers to seamlessly transition to powerful 64-bit applications as we move closer to the day when 32-bit-only systems will become obsolete,” said Marty Seyer, corporate vice president and general manager of AMD’s Microprocessor Business Unit. “AMD knows that anyone doing multimedia activity such as digital photos and intense gaming on their PC can benefit tremendously by using an AMD Athlon™ 64 processor. The 64-bit versions of Crafty and The Panorama Factory demonstrate the kind of performance benefits we expect our customers and partners to realize by leveraging AMD64 technology.”

Built for 64-bit computing, Crafty has grown from a simple PC-based computer chess program to one that runs on all known general-purpose platforms. Benchmark testing shows the 64-bit version of Crafty running on the AMD Athlon FX-53 processor outperformed the 32-bit version by almost 47 percent. The 64-bit version also evaluates more nodes per

second than the 32-bit engine.

“Crafty is a program built for the 64-bit architecture on an AMD Athlon 64 processor-enabled system. With AMD64 technology, developing Crafty with a unique methodology called ‘rotated bitmaps’ enabled me to significantly improve the performance of the chess engine,” said Robert Hyatt, author of Crafty and associate professor, University of Alabama at Birmingham. “The AMD Athlon 64 FX processor-powered system is the fastest I have seen. I can’t see anybody buying anything else.”

Crafty has won several chess competitions including bi-annual events held by the Internet Chess Club. Most recently, Hyatt used AMD64 technology to compete in and win the Internet Computer Chess Tournament in February.

The Panorama Factory (www.panoramafactory.com), built by Smoky City Design, seamlessly joins separate photos into a single high-quality panoramic picture. As digital photography continues to stretch the limits of 32-bit computing, AMD64 technology enables The Panorama Factory to create larger panoramas with more pictures than what is possible on a 32-bit architecture. The 64-bit version also can complete a full panorama up to 57 percent faster compared to 32-bit versions.

“Applications like The Panorama Factory are typically restricted by 32-bit architectures that limit the amount of virtual memory available. When ported to the AMD64 platform, The Panorama Factory breaks the 32-bit barrier to create images that are almost unlimited in size,” said John Strait, author of The Panorama Factory. “AMD Athlon 64 processors enable our customer base to purchase 64-bit enabled computers to take advantage of high-performance applications that also support their legacy 32-bit software programs.”

All AMD Athlon 64 processors have the added security benefit of

Enhanced Virus Protection (EVP) capability. This capability, enabled by the upcoming Microsoft® Windows® XP Service Pack 2, can prevent the execution of certain types of malicious viruses. The award-winning AMD64 desktop processors also feature Cool'n'Quiet™ technology, an innovative system-level feature that lowers the power consumption of the PC when maximum performance is not needed. A PC with AMD's Cool'n'Quiet technology enabled will consume less power, and run cooler and quieter on most applications. AMD64 processors also feature the exclusive Direct Connect Architecture that directly connects the memory controller and I/O to the central processor unit, improving overall system performance and efficiency.

About AMD64

AMD64 evolves the industry-standard 32-bit x86 architecture to support the demanding 64-bit environment that will enable future generations of computer functionality and productivity. AMD designed the AMD64 platform to allow end users to enjoy reliable, best-in-class performance on the 32-bit software they own today while preparing for a seamless transition to high-performance 64-bit applications. The AMD64 architecture also enables a more secure computing environment by integrating capabilities that can take advantage of advanced anti-virus features in upcoming software.

Since the introduction of the AMD64 architecture in 2003, the AMD Opteron™ processor for servers and workstations and the AMD Athlon™ 64 processors for desktop and notebook computers have earned more than 45 awards for innovation and performance and the support of more than 1,000 OEMs, hardware and software developers, system builders, and distributors.

The original press release is available [here](#).

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