AMD Athlon 64 X2 Dual-Core Processor Now Available

May 31 2005

Frustrated by staring at the hourglass icon as soon as you try to work on more than three programs at once, especially when youâ€™re working with digital media?
AMD today announced the immediate availability of the AMD Athlon 64 X2 dual-core processor. The AMD Athlon 64 X2 dual-core processor is poised to deliver an experience unmatched in the industry, targeting prosumer and digital media enthusiasts, as well as those who run many software applications simultaneously. These new processors, designed for desktop and desktop-replacement notebooks, shatter the hourglass icon by delivering performance improvements of up to 80 percent on select digital media and productivity applications compared to single-

core AMD Athlon 64 processors.

The AMD Athlon 64 X2 dual-core processor will be supported by leading OEMs including Acer, Alienware, HP and Lenovo, as well as more than 40 leading system-builder partners worldwide.

Dual-core processors contain two processing cores, residing on one chip, that perform calculations on two streams of data, thereby increasing efficiency and speed while running multiple programs and the new generation of multi-threaded software. For the end-user this means a significant increase in response and performance when running multiple applications simultaneously. The AMD Athlon 64 X2 Dual-Core processor outperforms the highest-performing AMD Athlon 64 4000+ single-core processor on multi-tasking benchmarks by up to 30%.

Additionally, the elegant design of the AMD64 architecture allowed for the planning of dual-core processors from the ground up, which means that the AMD Athlon 64 X2 Dual-Core processor is designed to fit in the same 939-pin infrastructure as single-core processors. All that is required is a BIOS update, saving our partners the costs of redesigns and obsolete inventory.

â€œWith the introduction of the AMD Athlon 64 X2 dual-core processor, desktop users will gain incredible performance benefits with the ability to multi-task and do more in less time,â€? said Bob Brewer, Corporate Vice President, Desktop Business, Microprocessor Solutions Sector (MSS), AMD. â€œToday, AMD demonstrates yet another performance lead within the industry as the only company with a broad portfolio of multi-core technology, from server and workstation to now client solutions with the addition of the new AMD Athlon 64 X2 dual-core processor.â€?

PC power-users frustrated by the hourglass icon when trying to work on

multiple programs at once, while also running background applications like anti-virus software, spyware filters, firewall software, and music, can significantly increase performance with the AMD Athlon 64 X2 dual-core processor. For example, the AMD Athlon 64 X2 dual-core processor is designed to allow consumers and businesses to simultaneously download audio files such as MP3s, burn a CD, check and write e- mail, edit a digital photo and run virus protection â€“ all without slowing down their computer.

The AMD Athlon 64 X2 dual-core processor can also deliver superior performance as multi-threaded applications continue to spread from the server to the client and consumer markets. With its impressive performance on existing client multi-threaded applications, the AMD Athlon 64 X2 dual-core processor will take prosumers and digital media enthusiasts to a new level with content creation and multimedia experiences.

AMD Athlon 64 X2 dual-core processor performance benchmarks have already yielded powerful results. Digital media applications can see an average of a 34 percent increase compared to similar single-core AMD Athlon 64 processors, while overall productivity benchmark results can see a 22 percent average increase. These dramatic performance gains available with AMD Athlon 64 X2 dual-core processors allow power-hungry users to usher in the next generation of digital media software with amazing high definition video rendering and editing, digital content creation, imaging, and audio mixing.

Partners including Alienware and HP are among the leading manufacturers planning to offer AMD Athlon 64 X2 dual-core processor-based systems.

A broad portfolio of AMD Athlon 64 X2 dual-core processors will be supported by leading OEMs including Acer, Alienware, HP and Lenovo,

as well as more than 40 leading system builder partners worldwide. For desktop-replacement notebooks, the AMD Athlon 64 X2 dual-core processor is also available to OEMs worldwide.

The AMD Athlon 64 X2 dual-core processors 4800+, 4600+, 4400+ and 4200+ are priced based on performance at $1001, $803, $581 and $537, respectively, in 1,000-unit quantities.

Dual-Core AMD64 Architecture

Dual-core processors are the next evolution of AMD64â€™s Direct Connect Architecture. Because AMD64 technology was designed from the ground up for multi-core technology, the AMD Athlon 64 X2 dual-core processor directly connects two cores on a single die, improving overall system performance and efficiency and helping to eliminate the bottlenecks inherent in a front-side-bus architecture.

In addition, unlike other dual-core systems, migrating to dual-core processing based on AMD64 technology can be seamless because of the non-disruptive upgrade path for existing infrastructures. The AMD Athlon 64 X2 dual-core processor is designed to deliver the incredible performance of a multi-core processor with the same 939-pin infrastructure as the single-core AMD Athlon 64 processors, requiring only a BIOS upgrade. For platform manufacturers, this means the AMD Athlon 64 X2 dual-core processor can eliminate the time and expense involved in redesigning components, which represent savings then passed on to their customers. Systems builders can also have readily available parts to build their branded products without disruption. Digital media enthusiasts will see the infrastructure benefits carry over to performance benefits, especially as multi-tasking takes hold of consumer PC end users.

AMD64 and Gaming

As PC gaming continues to escalate, the award-winning AMD Athlon 64 FX processor consistently outperforms the competition on relevant gaming benchmarks. The AMD Athlon 64 FX processor is recognized throughout the industry as the worldâ€™s highest-performing processor for 3D games. Because todayâ€™s games are single-threaded, gamers who are seeking to break the limits on application performance will continue to be best served with the incredible performance of the single-core AMD Athlon 64 FX processor. AMD plans to introduce a dual-core version of the AMD Athlon 64 FX processor when multi-threaded software games are available to take advantage of its benefits. In the meantime, AMD will continue to scale the performance of the AMD Athlon 64 FX processor to meet gamersâ€™ demanding needs.