

## **Intel Desktop Processors Get 64-Bit Support**

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Intel Corporation announced the availability of five new processors for desktop computers that deliver entertainment and IT benefits for consumers and businesses. When coupled with the widely adopted Intel® 925/915 Express chipset family, the processors can help enable improved performance and more rapid response times for computing platforms.

Intel is now shipping the Intel® Pentium® 4 Processor Extreme Edition 3.73 GHz supporting Hyper-Threading (HT) Technology and four new processors in the Intel Pentium 4 Processor 6xx sequence supporting HT Technology. These new processors represent the latest in Intel's family of high-performance desktop processors.

All five of the new processors support 64-bit memory addressability through Intel® Extended Memory 64 Technology (Intel® EM64T). Intel plans to ship EM64T on versions of every newly introduced Intel desktop processor including the company's Intel® Celeron® D processor lines later this year.

"Intel continues to offer new platform features based on what people are actually doing with their PCs, such as using rich media, communicating with friends or family, and being productive in the office," said Rob Crooke, Intel general manager of Desktop Marketing and Strategic Planning. "As software for the digital home and office matures and becomes more demanding, desktops with Intel EM64T are well-timed to take advantage of emerging new usage models."



Consumers are increasingly turning to the PC as a primary source of entertainment, choosing to spend their time interacting with other PC users around the world, playing games or editing digital video and images. Empowering consumers to take advantage of future software advances in high-definition video, audio and 3D visualization, Intel's new processors support Intel EM64T, enabling 64-bit computing capabilities on mainstream Intel processor-based PCs.

The Intel Pentium 4 Processor 6xx sequence processors help enable new power-saving benefits to the desktop with Enhanced Intel SpeedStep® Technology (EIST). Similar to the technology used in Intel® Centrino<sup>TM</sup> Mobile Technology, EIST can enable power-saving by reducing overall average processor power consumption.

The new processors will support the upcoming Microsoft\* Windows® XP Professional x64 Edition operating system and will enable users to experience the benefits of 64-bit computing.

"Microsoft is excited to work with Intel to help lead the industry's transition to 64-bit computing," said Brad Goldberg, general manager of the Windows Product Marketing Group at Microsoft. "We are working closely to deliver a robust 64-bit client platform that will help customers realize powerful new 64-bit capabilities while maintaining their investment in 32-bit applications."

The Pentium 4 Processor Extreme Edition 3.73 GHz supporting HT Technology features a fast 1066 MHz system bus and 2MB of L2 cache that improves performance for such applications such as high-definition video and gaming that benefit from large amounts of data readily available to the processor.

The Intel Pentium 4 Processor 6xx sequence supporting HT Technology comes in speeds of up to 3.60 GHz, features an 800MHz system bus, a



doubled L2 cache of 2MB, and Enhanced Intel SpeedStep® Technology (EIST). This power-saving capability is supported by Windows XP Service Pack 2. Additionally, the larger L2 cache provides potential performance benefits while Execute Disable Bit technology offers improved protection from certain types of viruses when coupled with Windows XP Service Pack 2.

Intel ended 2004 with more than two-thirds of its Pentium processors shipping with HT Technology and introduced a number of enabling tools, software and programs to lay a strong foundation for its upcoming dual-core platforms coming later in 2005.

With these new processors, Intel continues to lead the way for innovative offerings for the digital home and digital office in 2005, extending the award-winning Intel® 925/915 Express chipset families and providing a strong platform foundation for the latest PC uses.

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