INTEL 45NM CORE 2 DUO PROCESSOR ENHANCES SECURITY FOR EMBEDDED APPLICATIONS

April 15, 2008 – At the Embedded Systems Conference Silicon Valley, Intel Corporation announced the 45-nanometer (nm) Intel® Core™2 Duo Processor E8400 with 7-year lifecycle support for embedded applications. To enhance security in embedded solutions, the processor also supports Intel® Trusted Execution Technology.

- **Intel® Core™2 Duo Processor E8400**
  Based on Intel’s revolutionary high-k metal gate transistor formula and manufactured on the company’s 45nm process, the E8400 processor offers increased performance by doubling transistor density and increasing cache size up to 6 MB, which is a three-fold enhancement over the previous generation Intel® Core™2 Duo E6400. The Intel Core 2 Duo Processor E8400 is available to customers today and costs $183 USD in quantities of 1000.

- **Intel® Trusted Execution Technology**
  A hardware extension to the E8400 processor, Intel Trusted Execution Technology brings hardware data security to the embedded market, making the dual-core processor ideal for military and government, mid-range network security appliances, and retail applications. This security technology is designed to guard data within tamper-resistant virtualized computing environments and to protect against software attacks, viruses and other threats.

- **Enhanced Multimedia Performance**
  The 45nm processor includes a Super Shuffle Engine that enhances Intel® Streaming SIMD Extensions (SSE) algorithms optimized for graphics and multimedia processing. The Super Shuffle Engine reduces latency and improves the speed of existing SSE instructions while enabling significant gains on the latest Intel® Streaming SIMD Extensions 4 (SSE4) instruction set. Developers can benefit from the SSE4 media instruction sets for the enhancement of video editing and encoding that is inherent in many embedded applications, such as interactive clients or digital signage.