News Fact Sheet

3rd Generation Intel® Core™ Processor Family for Intelligent Systems

May 15, 2012 – Intel's 3rd generation Intel® Core™ processor family will help accelerate the move from disconnected, fixed-function systems to more intelligent systems in retail, healthcare and other industrial sectors. The technology package offers significant improvements in compute performance and graphics capabilities, as well as secure manageability for improved security and remote support.

Unprecedented Performance
Manufactured on Intel's industry-leading 22nm process technology with 3-D tri-gate transistors, the 3rd generation Intel Core processors are the highest-performing Intel Core processors to-date with up to 15 percent performance improvement over the previous generation. When paired with Intel® 7 Series chipsets, the platform offers faster connectivity with integrated next-generation I/O technologies such as PCI Express* Gen 3 and USB 3.0. Additionally, Intel® Rapid Start Technology improves OS boot time experience and wakes up from deep sleep quickly for better system responsiveness.

Examples include:

- Industrial computing systems can use the advanced performance of 3rd generation Intel Core processors to consolidate multiple automation functions onto one platform and more effectively connect devices and systems. Once modern factory systems are connected, system administrators and factory managers can leverage real-time data collected for improved decision making and predictive maintenance.
- Medical diagnostic equipment can convert and process digital images and video streams quickly, delivering smoother visuals and enabling healthcare professionals to make timely and accurate diagnoses.
- Digital signs and retail solutions can use the significant performance of the 3rd generation Intel Core processors for compute-intensive, real-time analytics applications, such as Intel® Audience Impression Metric (AIM) suite software which can instantly access anonymous demographic data for improved customer targeting.

Enhanced Media and Graphics
Integrated visual features in the 3rd generation Intel Core processor family support the growing media and graphics capabilities that enable compelling user experiences across a range of intelligent systems. These enhanced graphics capabilities mean smoother video quality and an improvement in 3-D performance over the previous generation.

-- more --

New features include:

- **Multiple independent displays** -- allows an application to drive more displays out of one system with the same or lower power consumption, footprint and bill-of-materials (BOM) cost, all while delivering stunning visuals.
- **Intel® Quick Sync Video 2.0** – speeds video conversion, editing and sharing for medical imaging, digital signs and video surveillance.
- **Integrated processor graphics** – provides a high-density media processing solution for communications network infrastructure.
- **Intel® Clear Video HD Technology** – delivers visual quality and color fidelity enhancements for spectacular HD media playback for digital signage platforms.

Secure Manageability
Secure manageability is a key feature of an Intelligent System and the 3rd generation Intel Core processors deliver improved security with new features such as Intel® OS Guard to detect and prevent malware and Intel® Secure Key to protect media, data and assets from loss. Additional security is achieved through continued support for Intel® vPro™ Technology and Intel® AES New Instructions (Intel® AES-NI).

The 3rd generation Intel Core processor family continues to feature Intel® Active Management technology (Intel® AMT) for remote diagnosis and management of problems and repairs without the need for costly on-site service visits. This is especially valuable to retailers with large quantities of point-of-sale machines in numerous stores, where the ability to remotely diagnose and quickly mend problems over the network prevents interruptions to consumer transactions.

Cross-Platform Compatibility
For the first time, the 3rd generation Intel Core processor-based platform delivers a streamlined cross-platform upgrade capability to simplify and accelerate development of visibly smart intelligent systems. Drop-in compatibility of 2nd generation and 3rd generation Intel Core processors and Intel® 6 Series and Intel® 7 Series chipsets provides flexibility in platform design, reduced design costs and accelerated time to market by minimizing redesign efforts.

CONTACT: Krystal Temple
480-552-1760
krystal.temple@intel.com

For more complete information about performance and benchmark results, visit Performance Test Disclosure.