



# Innovation, Reinvention on Intel® Architecture Fuel Wave of 2-in-1 Devices, New Mobile Computing Experiences

## NEWS HIGHLIGHTS

- Intel introduced 4th generation Intel® Core™ processors that serve as foundation to wave of new 2-in-1s that combine stunning PC performance with tablet-like mobility in one device and deliver on Ultrabook™ vision.
- New Intel Core processors deliver biggest power savings in company history, enabling over 9 hours of battery life<sup>1</sup> with stunning performance and two times the graphics capability versus the previous generation<sup>2</sup>.
- Intel demonstrated for the first time its next-generation 22nm quad-core Intel® Atom™ SoC for tablets in conjunction with its forthcoming 4G LTE multimode data solution.
- Showed first smartphone reference design platform based on next-generation 22nm Intel Atom SoC for smartphones.

TAIPEI, Taiwan--(BUSINESS WIRE)-- COMPUTEX – Ushering in a wave of new [Ultrabook™](#) and emerging 2-in-1 devices that deliver a PC when you need it and a tablet when you want it, Intel Corporation today introduced its ground-breaking [4th generation Intel® Core™ Processor](#) family.

Speaking at [Computex Taipei 2013](#), Executive Vice President [Tom Kilroy](#) said Intel has more than 50 different 2-in-1 designs in the pipeline across a range of price points, including premium Ultrabook 2-in-1s powered by the new Intel Core processors, and other designs powered by forthcoming processors based on the company's 22nm Silvermont microarchitecture.

"Today we deliver on the vision set forth 2 years ago to reinvent the laptop with the introduction of our 4th generation Intel Core processors that were designed from the ground up for the Ultrabook and serve as the foundation for a new era of 2-in-1 computing," said Kilroy. "We made one of the most seismic changes to our roadmap ever to build these new Core processors that deliver the stunning performance of the PC and the mobility of a tablet in one device. The new processors power the most exciting 2-in-1 designs to-date."

Kilroy also highlighted momentum in ultra-mobility, pointing to Intel's next-generation 22nm quad-core and most powerful Intel® Atom™ system-on-chip (SoC; codenamed "Bay Trail-T") yet for tablets coming this holiday, the company's forthcoming 4G LTE multimode solution and its next-generation 22nm Atom SoC (codenamed "Merrifield") for smartphones.

"With the new Intel Core processors introduced today, our next-generation Atom SoC for

tablets and other 22nm products coming soon, the advances in Intel® architecture are accelerating the pace of innovation, enabling new experiences and powering some of the best mobile devices coming to market this year,” said Kilroy.

### **New Intel Core Processors Foundational to 2-in-1 Computing, New Experiences**

Designed first and foremost with the Ultrabook in mind and based on the company’s flagship 22nm Haswell microarchitecture, the [4th generation Intel Core processors](#) deliver a 50 percent increase in battery life in active workloads over the previous generation<sup>1</sup>. This is the largest generation-over-generation gain in the company’s history, equating to over 9 hours of battery life in active workloads<sup>1</sup> for some Ultrabooks based on the new processors.

Intel’s newest Core processors are the first SoCs for PCs with stunning performance, and power a variety of innovative devices, including Ultrabook, 2-in-1 and portable all-in-one designs. Systems based on the quad-core version of the new Core processors are available now, with additional versions available in the coming months.

The 4th generation Intel Core processors also have built-in graphics that deliver discrete-level performance, or up to 2 times the performance of Intel’s prior generation<sup>2</sup>. Offered on select versions of the new Intel Core processors, [Intel® Iris™ graphics](#) bring the Ultrabook and other mobile PCs to life with built-in, eye-popping visual experiences.

Select Ultrabooks powered by 4th generation Intel Core processors will deliver the Intel performance people expect combined with the mobility and responsiveness of a tablet, making them the premium, ultra-versatile 2-in-1 devices. With touch capability and a keyboard, the system adapts to the user and also offers full application compatibility. People can lean forward to work and lean back to relax using just one device.

Kilroy also showcased progress in bringing human-like senses to 2-in-1 and other Intel-based devices through the addition of touch, voice and facial recognition and other technologies. Called perceptual computing, these technologies take advantage of Intel processing power to make interaction with devices natural, intuitive and immersive.

He demonstrated immersive, short-range gesture and voice-based interaction by giving new Intel Core-based Ultrabook 2-in-1 devices “eyes” with the Creative Senz3D\* peripheral camera, noting general availability for the camera starting next quarter. Looking to the future, he said Intel is working on an integrated solution to build 3-D depth camera technology directly into future Intel-based devices targeted for the second half of 2014.

### **Accelerating Fast: Tablets, Smartphones and LTE**

Intel’s 22nm low-power, high-performance [Silvermont](#) microarchitecture is enabling the company to accelerate and significantly enhance its tablet and smartphone offerings.

For tablets on shelves for holiday 2013, Intel’s next-generation, 22nm quad-core Atom SoC (“Bay Trail-T”) will deliver superior graphics and more than two times the CPU performance of the current generation. It will also enable sleek designs with 8 or more hours<sup>3</sup> of battery life and weeks of standby, as well as support Android\* and Windows 8.1\*.

For the first time, Kilroy demonstrated Intel’s 4G LTE multimode solution in conjunction with

the next-generation 22nm quad-core Atom SoC for tablets. The Intel® XMM 7160 is one of the world's smallest<sup>4</sup> and lowest-power multimode-multiband LTE solutions and will support global LTE roaming in a single SKU.

With a number of phones with Intel silicon inside having shipped across more than 30 countries, Kilroy previewed what's coming. He showed for the first time a smartphone reference design platform based on "Merrifield," Intel's next-generation 22nm Atom SoC for smartphones that will deliver increased performance and battery life. The platform includes an integrated sensor hub for personalized services, as well as capabilities for data, device and privacy protection.

## About Intel

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<sup>1</sup> Measured on OEM system using battery life during local offline video playback of a 1080p MP4 in landscape mode. Measured on OEM System using MobileMark\* 2012. For more information, see [www.bapco.com](http://www.bapco.com).

<sup>2</sup> As measured by 3DMark11\*, an industry standard benchmark from Futuremark\*

<sup>3</sup> Based on a 30W Hour battery on 19x10 resolution on 10.1" display. Higher resolution will require larger battery. Active use measured as 1080/30 fps local video playback. Battery life may differ based on SKU and SoC performance.

<sup>4</sup> Compared with competitive solutions shipping in market today and projections of forthcoming solutions.

Intel

Kari Aakre, 503-696-5068

[kari.e.aakre@intel.com](mailto:kari.e.aakre@intel.com)

Shardae Chiu, 8862-2544-7752

[shardae.chiu@intel.com](mailto:shardae.chiu@intel.com)

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