

## Samsung announces Exynos 5 Octa for new generation of mobile devices

March 15 2013



Samsung Electronics announced that its new Exynos 5 Octa application processor is scheduled for mass-production in the second quarter of 2013. The Exynos 5 Octa features an unprecedented eight-core ARM big.LITTLE architecture based on the Cortex-A15 CPU, technology built for efficient handling of multitasking abilities for high-end mobile



devices today.

"High processing performance based on multi-cores has become an essential factor for advanced mobile devices, and what users expect more is how long and seamlessly they can enjoy smart mobile computing experiences," said Taehoon Kim, Vice President of Marketing, <a href="System">System</a>
<a href="LSI">LSI</a> Business, Device Solutions Division, <a href="Samsung Electronics">Samsung Electronics</a>, "With the new <a href="mobile platform">mobile platform</a> driven by the Exynos 5 Octa processor, which heralds and fulfills such expectations, consumers will be able to experience a new level of mobile computing in a few months."

As highlighted at CES 2013, the Exynos 5 Octa is the world's first mobile application processor to implement the new concept of processing architecture, big.LITTLE, based on the Cortex-A15 CPU to offer optimal core use. By housing a total of eight cores to draw from—four powerful Cortex-A15 cores for processing-intense tasks along with Cortex-A7 quad cores for lighter workloads—the Exynos 5 Octa enables mobile devices to achieve maximum performance. This approach offers up to 70 percent energy saving when performing various tasks, compared to using Cort - A15 cores only.

The newest Exynos processor will be manufactured using Samsung's latest 28-nanometer (nm) HKMG (High-k Metal Gate) low power process and power-saving design, which increases the <u>power efficiency</u> of the processor by minimizing the static current leakage.

The Samsung Exynos 5 Octa enhances the powerful 3D graphics processing capabilities by more than two-times over the Exynos 4 Quad.

With today's advanced display technology transitioning toward ever higher and sharper resolutions, the Exynos 5 Octa is powerful enough to drive WQXGA (2560x1600) display, the best crystal-clear resolution currently available for mobile devices, enabling users to enjoy crisper



video images on their premium smartphones and tablets.

By adopting e-MMC (embedded multimedia card) 5.0 and USB 3.0 interface for the first time in the industry, the new Exynos application processor boasts fast data transfer speed, a feature that is increasingly required to support advanced processing power on mobile devices so that users can fully experience upgraded mobile computing such as faster booting, web browsing and 3D game loading.

Samsung Exynos 5 Octa incorporates a full HD 60fps (frame per second) video hardware codec engine for 1080p video recording and play-back, an embedded 13 mega-pixel 30fps image signal processor interface for high-quality camera functionality, and 12.8GB/s memory bandwidth interface that enables Full HD Wifi display.

## Provided by Samsung

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