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Samsung Unveils the Latest Application Processor, Exynos 8 Octa, Built on 14-Nanometer FinFET Process Technology

First premium chipset with Samsung custom-designed CPU and embedded LTE modem

Seoul, Korea – Nov. 12, 2015 – Samsung Electronics Co., Ltd., a world leader in advanced semiconductor technology, today announced the newest member of its Exynos family of application processors, the Exynos 8 Octa 8890. This chip is Samsung's second premium application processor built on 14nm FinFET process technology. Unlike the previous Exynos 7 Octa 7420, the Exynos 8 Octa is an integrated one-chip solution that features the company's first custom designed CPU based on 64-bit ARMv8 architecture and the latest LTE Rel.12 Cat.12/13 modem. This brings a new level of performance to Samsung's Exynos processor premium line-up for mobile applications.

"The Exynos 8 Octa is a leading-edge application processor for next-generation mobile devices that incorporates Samsung's mobile technology leadership in CPU, ISP, and modem as well as process technology," said Dr. Kyushik Hong, Vice President of System LSI marketing, Samsung Electronics. "With our custom designed CPU cores and the industry's most advanced LTE modem, consumers using mobile devices with the Exynos 8 Octa will experience a new level of mobile computing."

The Exynos 8 Octa is Samsung's first application processor to include the company's initial premium custom CPU cores based on 64-bit ARMv8 architecture providing over 30 percent improvement in performance and 10 percent in power efficiency compared to the Exynos 7 Octa. This chip also supports enhanced heterogeneous multi-processing for efficient usage of the eight cores, four custom and four ARM® Cortex®-A53, to deliver the highest performance and power efficiency in its class.

The Exynos 8 Octa is Samsung's first integrated one-chip solution in its premium line-up that combines the application processor and modem. Samsung has delivered one-chip Exynos solutions for mid to high-end smartphones in recent years. The Exynos 8 Octa integrates the most advanced LTE Rel.12 Cat.12/13 modem that enables maximum download speed of up to 600Mbps (Cat.12) and upload speed of up to 150Mbps (Cat.13) with carrier aggregation. With such a high data transfer rate, the Exynos 8 Octa will contribute to delivering an excellent mobile experience, allowing users to enjoy and share high resolution video content on the go with ease. Also the one-chip solution benefits OEMs with a reduced number of parts needed and overall space required for a device, allowing more flexible design options.

For a graphic-intensive user interface, highly immersive 3D gaming and life-like virtual reality experiences, the Exynos 8 Octa employs ARM®'s latest GPU, Mali™-T880.

Samsung plans to begin mass production of the Exynos 8 Octa in late 2015.

For more information about Samsung's Exynos products, please visit www.samsung.com/exynos.

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies, redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems, and semiconductor and LED solutions. We are also leading in the Internet of Things space through, among others, our Smart Home and Digital Health initiatives. We employ 319,000 people across 84 countries with annual sales of US $196 billion. To discover more, please visit our official website at http://www.samsung.com and our official blog at global.samsungtomorrow.com.