

Tegra 4: NVIDIA introduces world's fastest mobile processor

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NVIDIA today introduced NVIDIA Tegra 4, the world's fastest mobile processor, with record-setting performance and battery life to flawlessly power smartphones and tablets, gaming devices, auto infotainment and navigation systems, and PCs.

Tegra 4 offers exceptional graphics processing, with lightning-fast web browsing, stunning visuals and new camera capabilities through computational photography.

Previously codenamed "Wayne," Tegra 4 features 72 custom NVIDIA GeForce GPU cores—or six times the GPU horsepower of Tegra 3—which deliver more realistic [gaming experiences](#) and higher resolution displays. It includes the first quad-core application of ARM's most advanced [CPU core](#), the Cortex-A15, which delivers 2.6x faster web browsing and breakthrough performance for apps.

Tegra 4 also enables worldwide 4G LTE voice and data support through an optional chipset, the fifth-generation NVIDIA Icera i500 processor. More efficient and 40 percent the size of conventional modems, i500 delivers four times the processing capability of its predecessor.

"Tegra 4 provides enormous processing power and efficiency to power smartphones and tablets, gaming devices, auto systems and PCs," said Phil Carmack, [senior vice president](#) of the Tegra business at NVIDIA. "Its new capabilities, particularly in the area of computational photography, will help improve a whole range of existing products and

lead to the creation of exciting new ones."

Computational Photography Capability

Among the Tegra 4 processor's breakthroughs is its Computational Photography Architecture, which automatically delivers high dynamic range (HDR) photos and video by fusing together the processing power of the GPU, CPU and the camera's image-signal processor.

Its HDR capability captures images, including those taken with a flash, the way they are seen by the human eye—with detail in both bright and dark areas.

Unprecedented [Power Efficiency](#)

Designed for maximum energy efficiency, Tegra 4 includes a second-generation battery saver core for low power during standard use, and PRISM 2 Display technology to reduce backlight power while delivering superior visuals.

Tegra 4 consumes up to 45 percent less [power](#) than its predecessor, Tegra 3, in common use cases. And it enables up to 14 hours of HD video playback on phones.

Tegra 4 Key Features

- GeForce GPU with 72 custom cores
- Quad-core ARM Cortex-A15 CPU, plus a 2nd Generation Battery Saver Core
- Computational Photography Architecture
- LTE capability with optional Icera i500 chipset
- 4K ultra-high-def video support

Provided by NVIDIA

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