Written by Marco Attard 14 November 2018

Samsung presents an update to its Exynos system-on-chip (SoC) range-- the Exynos 9 Series 9820, a processor the company says offers a new design and CPU configuration compared to the previous 9810 chip.



According to the S. Korean giant, the 9820 features a 2+2+4 setup, meaning it has two 4th generation custom CPUs as top performing units, two Cortex A75 CPUs as mid-tier performance cores and four Cortex A55 CPUs for maximum power efficiency. The result is a single-core performance boost of 20% compared to the 9810 (the chip inside the Galaxy S9), or a 40% boost in power efficiency. In addition, multi-core performance is up by 15%, while broadband speeds clock at up to 2.0Gbps.

As for graphics, the 9820 carries a Mali G76 GPU promising a 40% increase in power (or 35% increase in efficiency) over the previous generation. The chip also has an NPU (Neural Processing Unit), a AI-accelerator allowing the chip to handle certain tasks (such as photo enhancement or augmented reality) without connecting to the cloud.

Mass production of the 9820 should start by end 2019, before the chip appears in future Samsung devices such as the Galaxy S10.

Go Samsung Exynos 9 Series 9820