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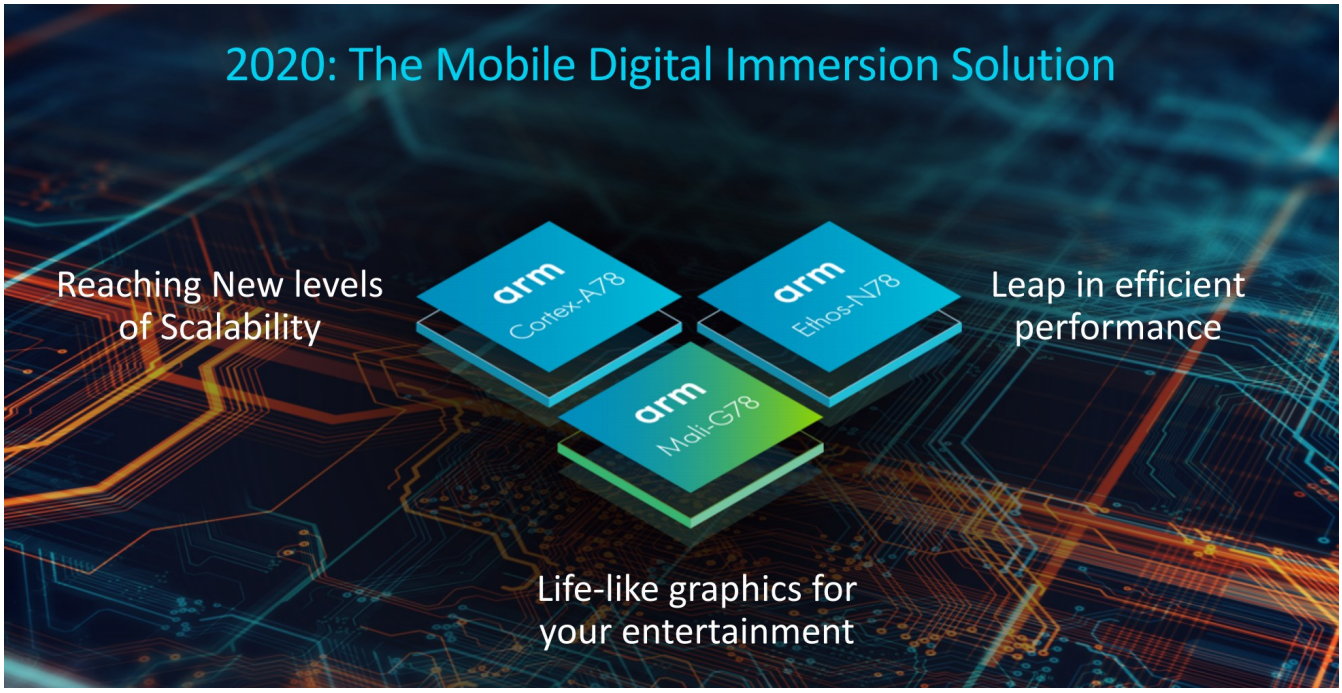
Arm announces a next generation of smartphone chips-- the Cortex-A78 CPU and Mali-G78 GPU, both aimed to power the flagship smartphones of 2021 and beyond by building on the successes of previous chip designs from the company.



The Cortex-A78 CPU promise a 20% increase in performance over the previous Cortex-A77 while using the same 1W power budget. It also claims more efficient compute workload management, as well as greater on-device Machine Learning (ML) performance. The result, Arm says, is smartphones capable of pushing multi-day, immersive 5G experiences, as well as the hardware to run the foldable devices machines of the future.

Partners wanting to create a custom Cortex CPU can join the Cortex-X program. The first example coming from the program is the Cortex-X1, the most powerful Cortex CPU to date claiming a 30% peak performance increase over the Cortex-A77. Arm says it makes for an even more competitive solution for flagship smartphones and large-screen devices.

Moving on to GPUs, Arm offers the Mali-G78-- a flagship chip delivering a 25% graphics performance increase over the Mali-G77. It supports up to 24 cores and promises to extend

battery life through a power- and energy-efficient design. Arm also offers a "sub-premium" GPU option with the Mali-G68, with support for 6 cores and al Mali-G78 features.

A final Arm product addition is the Ethnos-N78, a scalable and efficient neural processing unit (NPU) available in a wide range of configurations, starting at 1 TOP/s and reaching up to 10 TOP/s.

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