Arm follows on the October 2018 announcement of the Neoverse "cloud to edge infrastructure foundation" with a pair of platforms based on the technology-- the 7nm-based N1 and the high-efficiency throughput E1.



The N1 is a platform designed for infrastructure-class solutions demanding raw compute speeds. Optimised for 7nm process technology, it promises a 2.5x performance boost on "key cloud workloads," as well as 60% key integer performance improvement. The platform is built with infrastructure-class features, including server-class virtualisation, RAS support, power and performance management and system level profiling.

Also included are a coherent mesh interconnect, industry-leading power efficiency and a compact design enabling scaling from 4- to 128-cores. According to Arm, such scalability allows partners to build diverse solutions by adding accelerators or other features with own on-chip custom silicon.

Meanwhile the E1 is another 7nm platform, if one designed to enable the transition from 4G to more scalable 5G infrastructure. To do so it achieves 2.7x more throughput performance, 2.4x more throughput efficiency and over 2x more compute performance compared to previous Arm generations. It also delivers scalable throughput for edge to core data transport, support everything from a sub-35W base station to a multi-100GB router.

Arm says both N1 and E1 designs are already available to partners, with the first silicon set to hit the market by end 2019.

## Arm Pushes Neoverse to the Cloud, Edge

Written by Frederick Douglas 22 February 2019

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