Intel Intros Xeon Scalable Processors

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Intel launches Xeon Scalable-- a range of over 50 server processors (as spread in Bronze, Silver, Gold and Platinum ranges) and 7 chipsets based on the new Skylake SP core.

Chipzilla claims the Scalable range provides a 1.65x performance boost over the previous Xeon generation, with the boost growing to 2.2x when used in deep learning and artificial intelligence applications. Such performance gains are the result of new cores and the new Intel Mesh Architecture, and are described by the company as the greatest in a decade.

For the interested, Mesh Architecture arranges cores, memory controllers and I/O interfaces in a 2D grid (such as 4x4, 4x6 or 6x6, according to core count). Such a design, Intel says, maximises performance and enables consistent, low latencies.

Scalable chips can carry up to 28 cores and 56 threads, while systems can handle up to 6TB of RAM (4-socket systems) and scale to support 2-socket through 8-socket systems. Thus, customers can create Xeon Scalable systems for tasks ranging from entry-level workloads to modeling and simulation, machine learning, HPC and digital content creation.

The various precious metal-themed ranges arrange processors based around core counts, clock speeds, turbo speeds, cache sizes, I/O support and memory support. The most powerful processor is the 8180m, with 28 cores, 56 threads, 2.5GHz base clock, 3.8GHz turbo speed, 1.5TB memory support and a price tag of over $13000.

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