

Cost-Efficient Processing Flexibility for Networking Workloads

To scale networks, CTOs and network architects must choose between adding cores or using accelerators. Intel has integrated the accelerators into the processor, eliminating the need to purchase discrete accelerators. This sophisticated approach can deliver more compute power with energy efficiency, reducing TCO and supporting sustainability.

The flexibility of network optimized 4th Gen Intel® Xeon® Scalable processors with Intel® Speed Select Technology (Intel® SST) enables users to dial up and dial down power, frequency, and core profiles to optimize performance for IT, general-purpose compute, or networking workloads.



The performance gains of 4th Gen Intel® Xeon® Scalable processors support networking workloads.



5G core user plane function (UPF)



5G virtualized radio access network (vRAN)

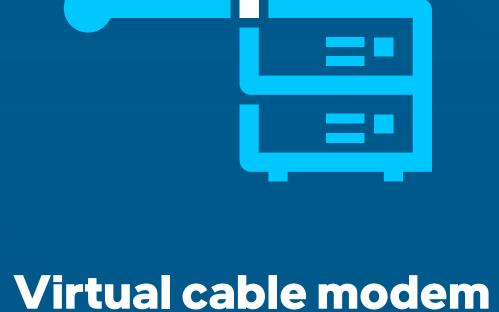


Secure access service edge (SASE)



delivery network (CDN)

Content



termination system (vCMTS)

Upto 30%

performance increase compared to 3rd Gen Intel® Xeon® Scalable processors in the same thermal envelope1



5G Core UPF: Reliably Deliver High Throughput with Low Latency

Network-optimized 4th Gen Intel® Xeon® Scalable processors can help handle fast-expanding UPF data requirements with energy-efficient operation, high-density connections, and increased memory bandwidth. Up to

188 user plane functions in 5G wireless core networks²

higher throughput with



Energy Efficiency Optimized vRAN operation for massive

Performance with

MIMO pipelines with 4th Gen Intel® Xeon® Scalable processors provides high throughput and low latency that can help deliver high performance while reducing energy costs and supporting sustainability goals. Up to

capacity gains for vRAN workloads with Intel® AVX³



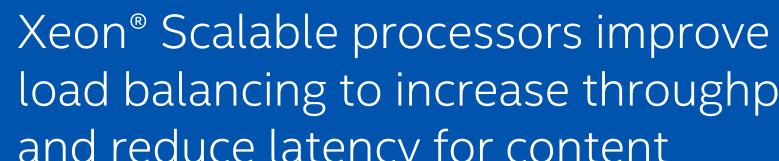
Performance SASE running on 4th Gen Intel® Xeon® Scalable processors enables monitoring

Services Deliver High

SASE: Secure Distributed

of expanded attack surfaces and deployment of next-gen firewalls (NGFWs) to meet end-user expectations for high responsiveness and reduced TCO. Up to

higher throughput compared to the prior generation⁴



load balancing to increase throughput and reduce latency for content delivery while freeing processor

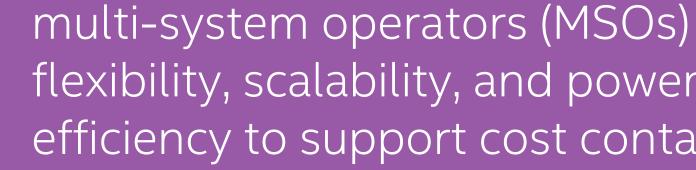
CDN: Boost Cost Efficiency

and Performance

Built-in accelerators of 4th Gen Intel®

resources and reducing energy usage. higher live-linear throughput compared to the prior generation when using NGINX⁵





flexibility, scalability, and power efficiency to support cost containment and sustainability.

vCMTS: Lower TCO,

Greener Networks

vCMTS offers cable networks and

Up to better performance compared to the prior generation⁶

About 4th Gen Intel® Xeon®

Scalable processors

cloud-ready networks with integrated accelerators that deliver more compute power with energy efficiency that can lower costs and support sustainability.

Our 4th Gen Intel® Xeon® Scalable

processors are designed to power



intel.com/4thgenxeon-network

- See [N24] at intel.com/processorclaims: 4th Gen Intel® Xeon® Scalable processors. Results may vary. See [N60] at intel.com/processorclaims: 4th Gen Intel® Xeon® Scalable processors. Results may vary. See [N4] at intel.com/processorclaims: 4th Gen Intel® Xeon® Scalable processors. Results may vary. Intel technologies may require enabled hardware, software, or service activation.

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1, 2. See [N8] at intel.com/processorclaims: 4th Gen Intel® Xeon® Scalable processors. Results may vary.

See [N10] at intel.com/processorclaims: 4th Gen Intel® Xeon® Scalable processors. Results may vary.