

Essentials

Product Collection	Intel® Xeon® Scalable Processors
Code Name	Products formerly Skylake
Vertical Segment	Server
Processor Number ?	8165
Lithography ?	14 nm

CPU Specifications

Total Cores ?	24
Total Threads ?	48
Max Turbo Frequency ?	3.70 GHz
Processor Base Frequency ?	2.30 GHz
Cache ?	33 MB
Max # of UPI Links ?	3
TDP ?	205 W

Supplemental Information

Marketing Status	Discontinued
Launch Date ?	Q4'17
Embedded Options Available ?	No
Datasheet	View now

Memory Specifications

Max Memory Size (dependent on memory type) ?	768 GB
Memory Types ?	DDR4-2666
Maximum Memory Speed	2666 MHz
Max # of Memory Channels ?	6
ECC Memory Supported [†] ?	Yes

Expansion Options

Scalability	S4S
PCI Express Revision ?	3.0
Max # of PCI Express Lanes ?	48

Package Specifications

Sockets Supported ?	FCLGA3647
Package Size	76.0mm x 56.5mm

Advanced Technologies

Intel® Optane™ Memory Supported [†] ?	No
Intel® Speed Shift Technology ?	Yes
Intel® Turbo Boost Max Technology 3.0 [†] ?	No
Intel® Turbo Boost Technology [†] ?	2.0
Intel® Hyper-Threading Technology [†] ?	Yes
Intel® Transactional Synchronization Extensions ?	Yes
Intel® 64 [†] ?	Yes
Instruction Set Extensions ?	Intel® SSE4.2, Intel® AVX, Intel® AVX2, Intel® AVX-512
# of AVX-512 FMA Units ?	2

Security & Reliability

Intel vPro® Eligibility [†] ?	Intel vPro® Platform
Intel® AES New Instructions ?	Yes
Intel® Trusted Execution Technology [†] ?	Yes
Intel® Virtualization Technology (VT-x) [†] ?	Yes