



Intel® Xeon® Silver 4416+ Processor

37.5M Cache, 2.00 GHz

MPN: [PK8071305120201S RMGG](#)

[Ordering and spec information](#)

Intel® Xeon® Silver 4416+ Processor (37.5M Cache, 2.00 GHz) FC-LGA16A, Tray

Spec Code	SRMGG
Ordering Code	PK8071305120201
Shipping Media	TRAY ?
Stepping	S3

ARK Intel® Product Specification Comparison	
01/30/2023 03:02:19 PM	
	Intel® Xeon® Silver 4416+ Processor
Essentials	
Product Collection	4th Generation Intel® Xeon® Scalable Processors
Vertical Segment	Server
Processor Number	4416+
Marketing Status	Launched
Launch Date	Q1'23
Lithography	Intel 7
Use Conditions	Server/Enterprise
Recommended Customer Price	\$1,176.00
CPU Specifications	
Total Cores	20
Total Threads	40
Max Turbo Frequency	3.90 GHz
Processor Base Frequency	2.00 GHz
Cache	37.5 MB

Intel® UPI Speed	16 GT/s
Max # of UPI Links	2
TDP	165 W
Supplemental Information	
Embedded Options Available	Yes
Memory Specifications	
Max Memory Size (dependent on memory type)	6 TB
Memory Types	DDR5-4000
Maximum Memory Speed	4000 MHz
Max # of Memory Channels	8
Intel® Optane™ Persistent Memory Supported	Yes
ECC Memory Supported ‡	Yes
Expansion Options	
Scalability	2S
PCI Express Revision	5
Max # of PCI Express Lanes	80
Package Specifications	
Sockets Supported	FCLGA4677
Package Carrier	E1B
DTS Max	94 °C
TCASE	82
Package Size	77.5mm x 56.5mm
Intel® On Demand Available Upgrades	
Intel® On Demand Available Upgrades	See the specifications
Advanced Technologies	
Intel® On Demand Feature Activation	Yes

Intel® Deep Learning Boost (Intel® DL Boost)	Yes
Intel® Resource Director Technology (Intel® RDT)	Yes
Intel® Speed Shift Technology	Yes
Intel® Turbo Boost Technology ‡	2
Intel® Hyper-Threading Technology ‡	Yes
Intel® Transactional Synchronization Extensions	Yes
Intel® 64 ‡	Yes
Instruction Set Extensions	Intel® AMX Intel® SSE4.2 Intel® AVX Intel® AVX2 Intel® AVX-512
# of AVX-512 FMA Units	2
Security & Reliability	
Intel® Crypto Acceleration	Yes
Intel® Platform Firmware Resilience Support	Yes
Intel® QuickAssist Software Acceleration	Yes
Intel® Control-Flow Enforcement Technology	Yes
Intel® Total Memory Encryption	Yes
Intel® AES New Instructions	Yes
Intel® Software Guard Extensions (Intel® SGX)	Yes with Intel® SPS
Maximum Enclave Page Cache (EPC) Size for Intel® SGX	64 GB
Intel® OS Guard	Yes
Intel® Trusted Execution Technology ‡	Yes
Execute Disable Bit ‡	Yes
Intel® Boot Guard	Yes
Mode-based Execute Control (MBEC)	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes

Intel® Virtualization Technology for Directed I/O (VT-d) ‡	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes