

Essentials					
Product Collection	4th Gen Intel® Xeon® Scalable Processors				
Code Name	Products formerly Sapphire Rapids				
Vertical Segment	Server				
Processor Number ?	8480+				
Lithography ?	Intel 7				
Recommended Customer Price ?	\$10710.00				
CPU Specifications					
Total Cores ?	56				
Total Threads ?	112				
Max Turbo Frequency ?	3.80 GHz				
Processor Base Frequency ?	2.00 GHz				
Cache ?	105 MB				
Intel® UPI Speed	16 GT/s				
Max # of UPI Links ?	4				
TDP ?	350 W				
Supplemental Information					
Marketing Status	Launched				
Launch Date ?	Q1'23				
Servicing Status ?	Baseline Servicing				
Use Conditions ?	Server/Enterprise				
Memory Specifications					
Max Memory Size (dependent on memory type) ?	4 TB				
Memory Types ?	Up to DDR5 4800 MT/s 1DPC Up to DDR5 4400 MT/s 2DPC				
Max # of Memory Channels ?	8				
ECC Memory Supported ¹ ?	Yes				
Expansion Options					
Scalability	2S				
PCI Express Revision ?	5.0				
Max # of PCI Express Lanes ?	80				
Package Specifications					
Sockets Supported ?	FCLGA4677				
Package Carrier	E1A				
DTS Max	97 °C				
T _{CASE} ?	79°C				
Package Size	77.5mm x 56.5mm				
Intel® On Demand Available Upgrades					
Activation Model Products	QAT	DLB	DSA	IAA	SGX512
Communications & Storage Suite 4	4	4	4		
Analytics Suite 4			4	4	
Advanced Technologies					
Intel® On Demand Activation Model ?	Yes				
Intel® QuickAssist Technology (QAT)	1 default devices				
Intel® Dynamic Load Balancer (DLB)	1 default devices				
Intel® Data Streaming Accelerator (DSA)	1 default devices				
Intel® In-memory Analytics Accelerator (IAA)	1 default devices				
Intel® Advanced Matrix Extensions (AMX)	Yes				
Intel® Speed Select Technology – Core Power ?	Yes				
Intel® Speed Select Technology – Turbo Frequency ?	Yes				
Intel® Deep Learning Boost (Intel® DL Boost) on CPU ?	Yes				
Intel® Speed Select Technology - Base Frequency ?	Yes				
High Priority Cores	16				
High Priority Core Frequency	2.10 GHz				
Low Priority Cores	40				
Low Priority Core Frequency	1.70 GHz				
Intel® Resource Director Technology (Intel® RDT) ?	Yes				
Intel® Speed Shift Technology ?	Yes				
Intel® Turbo Boost Technology ¹ ?	2.0				
Intel® Hyper-Threading Technology ¹ ?	Yes				
Intel® Transactional Synchronization Extensions ?	Yes				
Intel® 64 ¹ ?	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® Software Guard Extensions (Intel® SGX) ?	Yes with Intel® SPS				
Default Maximum Enclave Page Cache (EPC) Size for Intel® SGX	512 GB				
Intel® Crypto Acceleration ?	Yes				
Intel® QuickAssist Software Acceleration	Yes				
Intel® Platform Firmware Resilience Support	Yes				
Intel® Control-Flow Enforcement Technology ?	Yes				
Intel® Total Memory Encryption ?	Yes				
Intel® AES New Instructions ?	Yes				
Intel® OS Guard	Yes				
Intel® Trusted Execution Technology ¹ ?	Yes				
Execute Disable Bit ¹ ?	Yes				
Intel® Boot Guard ?	Yes				
Intel® Run Sure Technology ?	Yes				
Mode-based Execute Control (MBEC) ?	Yes				
Intel® Virtualization Technology (VT-x) ¹ ?	Yes				
Intel® Virtualization Technology for Directed I/O (VT-d) ¹ ?	Yes				
Intel® VT-x with Extended Page Tables (EPT) ¹ ?	Yes				