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CPU Specifications	Product Collection	Intel® Xeon® 6 processors
Intel® Speed Select Technology - Performance (Intel® SST-PP)	Code Name	Products formerly Granite Rapids
Supplemental Information	Vertical Segment	Server
Memory Specifications	Processor Number ?	6747P
Expansion Options	Lithography ?	Intel 3
Package Specifications	Recommended Customer Price ?	\$6497.00

CPU Specifications	
Total Cores ?	48
Total Threads ?	96
Max Turbo Frequency ?	3.9 GHz
All Core Turbo Frequency ?	3.8 GHz
Processor Base Frequency ?	2.7 GHz
Cache ?	288 MB
Intel® UPI Speed	24 GT/s
Max # of UPI Links ?	4
TDP ?	330 W

Intel® Speed Select Technology - Performance Profile (Intel® SST-PP)

Config	Active Cores	Base Frequency	TDP	Description
6747P(3)	48	2.70	330	Server Mode
6747P(4)	48	3.10	330	Compute Mode

Supplemental Information	
Marketing Status	Launched
Launch Date ?	Q1'25
Embedded Options Available ?	No

Memory Specifications	
Max Memory Size (dependent on memory type) ?	4 TB
Memory Types ?	DDR5(6400MT/s), MRDIMM(8800MT/s)
Maximum Memory Speed	8000 MT/s
Max # of Memory Channels ?	8
ECC Memory Supported [†] ?	Yes

Expansion Options	
Scalability	25
PCI Express Revision ?	5.0
Max # of PCI Express Lanes ?	88

Package Specifications	
Sockets Supported ?	FCLGA4710
Package Carrier	E2A
DTS Max	94 °C
T _{CASE} ?	78 °C
Package Size	77.5mm x 56.5mm

Advanced Technologies

Intel® QuickAssist Technology (QAT)	4 default devices
Intel® Dynamic Load Balancer (DLB)	4 default devices
Intel® Data Streaming Accelerator (DSA)	4 default devices
Intel® In-memory Analytics Accelerator (IAA)	4 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 - Performance Profile ?	Yes
Intel® Speed Select Technology - Base Frequency ?	No
Intel® Resource Director Technology (Intel® RDT) ?	Yes
Intel® Speed Shift Technology ?	Yes
Intel® Turbo Boost Technology † ?	2.0
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
Intel® Volume Management Device (VMD) ?	Yes
Security & Reliability	
Intel® Trust Domain Extensions (Intel® TDX) ?	Yes
Intel® Secure Key ?	Yes
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 - Multi Key	Yes
Intel® Total Memory Encryption ?	Yes
Intel® AES New Instructions ?	Yes
Intel® Software Guard Extensions (Intel® SGX) ?	Yes
Default Maximum Enclave Page Cache (EPC) Size for Intel® SGX	512 GB
Intel® OS Guard	Yes
Intel® Trusted Execution Technology † ?	Yes
Execute Disable Bit † ?	Yes
Intel® Boot Guard ?	Yes
Intel® Run Sure Technology ?	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

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Refer to Datasheet for formal definitions of product properties and features.

† This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See <http://www.intel.com/content/www/us/en/processors/processor-numbers.html> for details.

Recommended Customer Price (RCP) is pricing guidance only for Intel products. Prices are for direct Intel customers, usually represent 1,000-unit purchase quantities, and are subject to change without notice. Prices may vary for other package types and shipment quantities. In bulk, price represents individual unit. Listing of RCP does not constitute a formal pricing offer from Intel.

System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

Announced SKUs are not yet available. Please refer to the Launch Date for market availability.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See <https://www.intel.com/content/www/us/en/gaming/resources/turbo-boost.html> for more information and applicability of this technology.

See <http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html#wapkw=hyper+threading> for more information including details on which processors support Intel® HT Technology.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

Some products can support AES New Instructions with a Processor Configuration update, in particular, I7-2630QM/I7-2635QM, I7-2670QM/I7-2675QM, I5-2430M/I5-2435M, I5-2410M/I5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

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