intel.

PRODUCTS

SUPPORT

SOLUTIONS

MORE +

Search Intel.com

USA (ENGLISH)

Search specifications

Intel® Xeon® Gold 5218N Processor

22M Cache, 2.30 GHz

Add to Compare

Specifications

Essentials

CPU Specifications

Supplemental Information

Memory Specifications

Expansion Options

Package Specifications

Advanced Technologies

Security & Reliability

Ordering and Compliance

Product Images

Compatible Products

Drivers and Software

Technical Documentation

Essentials

⬇ Export specifications

Product Collection	2nd Generation Intel® Xeon® Scalable Processors
Code Name	Products formerly Cascade Lake
Vertical Segment	Server
Processor Number ?	5218N
Status	Launched
Launch Date ?	Q2'19
Lithography ?	14 nm
Recommended Customer Price ?	

CPU Specifications

# of Cores ?	16
# of Threads ?	32
Processor Base Frequency ?	2.30 GHz
Max Turbo Frequency ?	3.70 GHz
Cache ?	22 MB
# of UPI Links ?	2
TDP ?	110 W

Supplemental Information

Embedded Options Available ?	Yes
Product Brief	View now

Memory Specifications

Max Memory Size (dependent on memory type) ?	1 TB
Memory Types ?	DDR4-2667
Maximum Memory Speed	2667 MHz
Max # of Memory Channels ?	6
ECC Memory Supported ‡ ?	Yes
Intel® Optane™ Persistent Memory Supported ?	Yes

Expansion Options

Scalability	4S
PCI Express Revision ?	3.0
Max # of PCI Express Lanes ?	48

Package Specifications

Sockets Supported ?	FCLGA3647
T$_{CASE}$?	81°C
Package Size	76.0mm x 56.5mm

Advanced Technologies

Intel® Deep Learning Boost (Intel® DL Boost) ?	Yes
Intel® Speed Select Technology - Performance Profile ?	No
Intel® Speed Select Technology - Base Frequency ?	Yes
Intel® Resource Director Technology (Intel® RDT) ?	Yes
Intel® Speed Shift Technology ?	Yes
Intel® Turbo Boost Max Technology 3.0 ‡ ?	No
Intel® Turbo Boost Technology ‡ ?	2.0
Intel vPro® Platform Eligibility ‡ ?	Yes
Intel® Hyper-Threading Technology ‡ ?	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
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 ?	1
Enhanced Intel SpeedStep® Technology ?	Yes
Intel® Volume Management Device (VMD) ?	Yes

Security & Reliability

Intel® AES New Instructions ?	Yes

Intel® Trusted Execution Technology ‡ ?	Yes
Execute Disable Bit ‡ ?	Yes
Intel® Run Sure Technology ?	Yes
Mode-based Execute Control (MBE) ?	Yes

More support options for Intel® Xeon® Gold 5218N Processor (22M Cache, 2.30 GHz)

Product Support

Downloads and Software

Support Community

Warranty and Replacement

Need more help?

Contact support

Give Feedback

All information provided is subject to change at any time, without notice. Intel may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Intel does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

Intel classifications are for informational purposes only and consist of Export Control Classification Numbers (ECCN) and Harmonized Tariff Schedule (HTS) numbers. Any use made of Intel classifications are without recourse to Intel and shall not be construed as a representation or warranty regarding the proper ECCN or HTS. Your company as an importer and/or exporter is responsible for determining the correct classification of your transaction.

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.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

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.

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.

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.

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.

Company Information   Our Commitment   Diversity & Inclusion   Communities   Investor Relations

Contact Us   Newsroom   Jobs

© Intel Corporation | Terms of Use | *Trademarks | Privacy | Cookies | Supply Chain Transparency | Site Map

Intel technologies may require enabled hardware, software or service activation. // No product or component can be absolutely secure. // Your costs and results may vary. // Performance varies by use, configuration and other factors. // See our complete legal Notices and Disclaimers. // Intel is committed to respecting human rights and avoiding complicity in human rights abuses. See Intel's Global Human Rights Principles. Intel's products and software are intended only to be used in applications that do not cause or contribute to a violation of an internationally recognized human right.

intel.