![intel]

Intel Xeon 5218R processor 2.1 GHz 27.5 MB

Brand : Intel

Product family: Xeon

Product code:
CD8069504446300

Product name : 5218R

Intel® Xeon® Gold 5218R Processor (27.5M Cache, 2.10 GHz)
Intel Xeon 5218R. Processor family: Intel® Xeon® Gold, Processor socket: LGA 3647 (Socket P),
Processor lithography: 14 nm. Memory channels: Hexa-channel, Maximum internal memory supported
by processor: 1.02 TB, Memory types supported by processor: DDR4-SDRAM. Market segment: Server,
Supported instruction sets: SSE4.2, AVX, AVX 2.0, AVX-512, Scalability: 2S. Package type: Retail box.
Processor package size: 76mm x 56.5mm

Processor

Processor manufacturer *	Intel
Processor generation	2nd Generation Intel® Xeon® Scalable
Processor model *	5218R
Processor base frequency *	2.1 GHz
Processor family *	Intel® Xeon® Gold
Processor cores *	20
Processor socket *	LGA 3647 (Socket P)
Component for	Server/workstation
Processor lithography *	14 nm
Processor threads	40
Processor operating modes *	64-bit
Processor boost frequency	4 GHz
Processor cache	27.5 MB
Thermal Design Power (TDP)	125 W
Box *	✘
Cooler included *	✘
Processor codename	Cascade Lake
Processor ARK ID	199342

Memory

Maximum internal memory supported by processor	1.02 TB
Memory types supported by processor	DDR4-SDRAM
Memory clock speeds supported by processor	2667 MHz
Memory channels *	Hexa-channel
ECC	✔

Graphics

On-board graphics card *	✘
Discrete graphics card *	✘
On-board graphics card model *	Not available
Discrete graphics card model *	Not available

Features

Execute Disable Bit	✔
Market segment	Server
Maximum number of PCI Express lanes	48
PCI Express slots version	3.0
Supported instruction sets	SSE4.2, AVX, AVX 2.0, AVX-512
Scalability	2S
Embedded options available	✘

Processor special features

Intel Trusted Execution Technology	✔
Intel® Speed Shift Technology	✔
Intel® Transactional Synchronization Extensions	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel 64	✔
Intel Virtualization Technology (VT-x)	✔
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Turbo Boost Max Technology 3.0	✘
AVX-512 Fused Multiply-Add (FMA) units	1
Intel® Deep Learning Boost (Intel® DL Boost)	✔
Intel® Speed Select technology - Performance Profile (Intel® SST-PP)	✘
Intel® Resource Director Technology (Intel® RDT)	✔
Intel® Volume Management Device (VMD)	✔
Intel® Run Sure Technology	✔
Mode-based Execute Control (MBE)	✔
Intel® Optane™ DC Persistent Memory Supported	✔
Intel® vPro™ Platform Eligibility	✔
Intel Speed Select Technology (SST)	✘
Intel® Speed Select Technology - Base Frequency (Intel® SST-BF)	✘
Intel® Optane™ DC Persistent Memory technology	✔

Operational conditions

Tcase	87 °C

Technical details

Launch date	Q1'20
Product type	Processor
Status	Launched
Supported memory types	DDR4-SDRAM
Memory speed (max)	2667 MHz
Number of UPI links	2
Servicing status	Baseline Servicing

Features

PCI Express CEM revision	3.0
Export Control Classification Number (ECCN)	5A992C
Commodity Classification Automated Tracking System (CCATS)	G077159

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Intel® Turbo Boost Technology	2.0
Intel® AES New Instructions (Intel® AES-NI)	✓
Enhanced Intel SpeedStep Technology	✓

Logistics data

Harmonized System (HS) code	85423119

Packaging data

Package type	Retail box

Weight & dimensions

Processor package size	76mm x 56.5mm

Other features

Maximum internal memory	1 TB

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