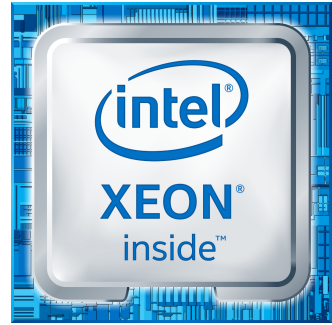intel

Intel Xeon W-2255 processor 3.7 GHz 19.25 MB

Brand : Intel   **Product family:** Xeon   **Product code:** CD8069504393600

Product name : W-2255

Intel® Xeon® W-2255 Processor (19.25M Cache, 3.70 GHz)
Intel Xeon W-2255. Processor family: Intel Xeon W, Processor socket: LGA 2066 (Socket R4), Processor lithography: 14 nm. Memory channels: Quad-channel, Maximum internal memory supported by processor: 1.02 TB, Memory types supported by processor: DDR4-SDRAM. Market segment: Workstation, Supported instruction sets: SSE4.2, AVX, AVX 2.0, AVX-512, Scalability: 1S. Intel® Turbo Boost Max Technology 3.0 frequency: 4.7 GHz. Processor package size: 45mm x 52.5mm

Processor

Processor manufacturer *	Intel
Processor model *	W-2255
Processor base frequency *	3.7 GHz
Processor family *	Intel Xeon W
Processor cores *	10
Processor socket *	LGA 2066 (Socket R4)
Component for	Server/workstation
Processor lithography *	14 nm
Processor threads	20
System bus rate	8 GT/s
Processor operating modes *	64-bit
Processor boost frequency	4.5 GHz
Processor cache	19.25 MB
Thermal Design Power (TDP)	165 W
Box *	✘
Cooler included *	✘
Memory bandwidth supported by processor (max)	93.85 GB/s
Processor codename	Cascade Lake
Processor ARK ID	198016

Memory

Maximum internal memory supported by processor	1.02 TB
Memory types supported by processor	DDR4-SDRAM
Memory clock speeds supported by processor	2933 MHz
Memory channels *	Quad-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	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Market segment	Workstation

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Turbo Boost Technology	2.0
Intel® AES New Instructions (Intel® AES-NI)	✔
Enhanced Intel SpeedStep Technology	✔
Intel Trusted Execution Technology	✔
Intel® Memory Protection Extensions (Intel® MPX)	✔
Intel® Speed Shift Technology	✔
Intel® Turbo Boost Max Technology 3.0 frequency	4.7 GHz
Intel® Transactional Synchronization Extensions	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel Demand Based Switching	✔
Intel® Secure Key	✔
Intel TSX-NI	✔
Intel® OS Guard	✔
Intel Software Guard Extensions (Intel SGX)	✘
Intel 64	✔
Intel Virtualization Technology (VT-x)	✔
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Turbo Boost Max Technology 3.0	✔
Intel® Optane™ Memory Ready	✘
AVX-512 Fused Multiply-Add (FMA) units	2
Intel® Boot Guard	✔
Intel® Deep Learning Boost (Intel® DL Boost)	✔
Intel® Volume Management Device (VMD)	✔
Intel® vPro™ Platform Eligibility	✔

Operational conditions

Tcase	62 °C

Features

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	1S
Physical Address Extension (PAE)	✔
CPU configuration (max)	1
Embedded options available	✖
Physical Address Extension (PAE)	46 bit
PCI Express CEM revision	3.0
Export Control Classification Number (ECCN)	5A992C
Commodity Classification Automated Tracking System (CCATS)	G077159

Technical details

Launch date	Q4'19
Product type	Processor
Status	Launched
Supported memory types	DDR4-SDRAM
Bus speed	8 GT/s

Logistics data

Harmonized System (HS) code	85423119

Weight & dimensions

Processor package size	45mm x 52.5mm

Other features

Maximum internal memory	1 TB

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