DELL Xeon Silver 4314 processor 2.4 GHz 24 MB

Brand : DELL

Product name : Silver 4314

Product family: Xeon

Product code: 338-CBXX

Intel Xeon Silver 4314 Processor (24MB Cache, up to 3.4 GHz)

DELL Xeon Silver 4314 processor 2.4 GHz 24 MB:

The Intel Xeon® Silver 4314 2.4GHz Sixteen Core Processor enhances the performance and the speed of your system. Additionally, the Virtualization Technology enables migration of more environments. It supports enhanced SpeedStep® technology that allows tradeoffs to be made between performance and power consumption.

Its Thermal Monitoring Technologies protect the processor package and the system from thermal failure through several thermal management features. The VT-x with Extended Page Tables (EPT) also known as Second Level Address Translation (SLAT), provides acceleration for memory intensive virtualized applications. Packed with more features, the Xeon Silver 4314 2.4GHz Sixteen Core Processor is the ideal choice for virtually all of your data demanding or standard enterprise infrastructure applications.

Processor

Processor manufacturer *	Intel
Processor generation	3rd Generation Intel® Xeon® Scalable
Processor model *	4314
Processor base frequency *	2.4 GHz
Processor family *	Intel Xeon Silver
Processor cores *	16
Processor socket *	LGA 4189
Component for	Server/workstation
Processor lithography *	10 nm
Processor threads	32
System bus rate	10.4 GT/s
Processor operating modes *	64-bit
Processor boost frequency	3.4 GHz
Processor cache	24 MB
Thermal Design Power (TDP)	135 W
Box *	✘
Cooler included *	✘
Processor codename	Ice Lake
Processor ARK ID	215269

Memory

Maximum internal memory supported by processor	6.14 TB
Memory types supported by processor	DDR4-SDRAM
Memory clock speeds supported by processor	2667 MHz
Memory channels *	Octa-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

Processor special features

Intel® AES New Instructions (Intel® AES-NI)	✔
Intel Trusted Execution Technology	✔
Intel® Speed Shift Technology	✔
Intel® Transactional Synchronization Extensions	✔
Intel® Total Memory Encryption	✔
Intel® Crypto Acceleration	✔
Intel® Platform Firmware Resilience Support	✔
Maximum Enclave Size Support for Intel® SGX	8 GB
Intel VT-x with Extended Page Tables (EPT)	✔
Intel Software Guard Extensions (Intel SGX)	✔
Intel 64	✔
Intel Virtualization Technology (VT-x)	✔
Intel Virtualization Technology for Directed I/O (VT-d)	✔
AVX-512 Fused Multiply-Add (FMA) units	2
Intel® Deep Learning Boost (Intel® DL Boost) on CPU	✔
Intel® Resource Director Technology (Intel® RDT)	✔
Intel® Volume Management Device (VMD)	✔
Mode-based Execute Control (MBE)	✔
Intel® Optane™ DC Persistent Memory Supported	✔

Operational conditions

Tcase	86 °C

Technical details

Launch date	Q2'21
Status	Launched
Supported memory types	DDR4-SDRAM
Memory speed (max)	2667 MHz
Number of UPI links	2

Features

Maximum number of PCI Express lanes	64
PCI Express slots version	4.0
Supported instruction sets	SSE4.2, AVX, AVX 2.0, AVX-512
Scalability	2S
Embedded options available	✔
Export Control Classification Number (ECCN)	5A992CN3
Commodity Classification Automated Tracking System (CCATS)	G178966

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Turbo Boost Technology	2.0

Logistics data

Harmonized System (HS) code	85423119

Packaging data

Package type	Retail box

Weight & dimensions

Processor package size	77.5 x 56.5 mm

Other features

Maximum internal memory	6 TB

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