

## DELL Intel Xeon Gold 5416S processor 2 GHz 30 MB

## Brand : DELL

Product code: 338-CLVY

Product name : Intel Xeon Gold 5416S

Intel® Xeon® Gold 5416S 2GHz Sixteen Core Processor, 16C/32T, 16GT/s, 30M Cache, Turbo, HT (150W) DDR5-4400, Customer Install

## DELL Intel Xeon Gold 5416S processor 2 GHz 30 MB:

The Intel Xeon® Gold 5416S 2GHz 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 Gold 5416S 2GHz Sixteen Core Processor is the ideal choice for virtually all of your data demanding or standard enterprise infrastructure applications.

## intel. XEON<sup>°</sup>

| Processor  |                                | Processor special features   |  |
|--|--------------------------------|--|--|
| Processor manufacturer *   | Intel                          | Intel® Transactional   | 1  |
| Processor generation   | Intel Xeon Scalable 4th Gen    | Synchronization Extensions   |  |
| Processor model *  | 5416S                          | Intel® Total Memory Encryption   | ✓  |
| Processor base frequency *                                       | 2 GHz                          | Intel® Control-flow Enforcement<br>Technology (CET)                            | 1  |
| Processor family *   | Intel® Xeon® Gold              | Intel® Crypto Acceleration   | 1  |
| Processor cores *  | 16                             | Intel® Platform Firmware Resilience  |  |
| Processor socket *   | LGA 4677 (Socket E)            | Support  | <ul> <li>Image: A second s</li></ul> |
| Processor threads  | 32<br>16 CT/c                  | Maximum Enclave Size Support for   | 128 GB   |
| System bus rate  | 16 GT/s                        | Intel <sup>®</sup> SGX   | 120 GB   |
| Processor operating modes *                                      | 64-bit                         | Intel VT-x with Extended Page  | 1  |
| Processor boost frequency  | 4 GHz                          | Tables (EPT)   |  |
| High priority cores  | 4                              | Intel <sup>®</sup> OS Guard  | <ul> <li>Image: A start of the start of</li></ul>  |
| High priority core frequency<br>Low priority cores               | 2.1 GHz<br>12                  | Intel Software Guard Extensions<br>(Intel SGX)                                 | 1  |
| Low priority core frequency                                      | 1.7 GHz                        | Intel 64   | 1  |
| Processor cache  | 30 MB                          | Intel Virtualization Technology (VT-   | •  |
| Thermal Design Power (TDP)                                       | 150 W                          | x)   | ✓  |
| Box *  | ×                              | Intel Virtualization Technology for  | 1  |
| Stepping   | 53                             | Directed I/O (VT-d)  | •  |
| Processor codename   | Sapphire Rapids                | AVX-512 Fused Multiply-Add (FMA)<br>units                                      | 2  |
| Processor ARK ID   | 232396                         |  |  |
|  |                                | Intel® Boot Guard  | ✓  |
| Memory   |                                | Intel <sup>®</sup> Deep Learning Boost (Intel <sup>®</sup><br>DL Boost) on CPU | 1  |
| Maximum internal memory supported by processor                   | 4 TB                           | Intel <sup>®</sup> Speed Select technology -                                   |  |
| Memory types supported by  |                                | Performance Profile (Intel® SST-PP)  | 1  |
| processor  | DDR5-SDRAM                     | Intel® Resource Director<br>Technology (Intel® RDT)                            | 1  |
| Memory clock speeds supported by processor                       | 4400 MHz                       | Intel® Run Sure Technology   | 1  |
| Memory channels *  | Octa-channel                   | Mode-based Execute Control (MBE)   | 1  |
| ECC  | 1                              | Intel® Optane <sup>™</sup> DC Persistent                                       | 1  |
| Graphics   |                                | Memory Supported   | •  |
| -  |                                | Intel® Speed Select Technology -   | 1  |
| On-board graphics card *   | ×                              | Base Frequency (Intel® SST-BF)   |  |
| Discrete graphics card *   | <b>X</b>                       | Intel <sup>®</sup> QuickAssist Software<br>Acceleration                        | 1  |
| On-board graphics card model *<br>Discrete graphics card model * | Not available<br>Not available | Intel <sup>®</sup> On Demand Feature<br>Activation                             | 1  |
|  |                                | Intel® QuickAssist Technology  |  |
|  |                                | (QAT)  | 2 default devices  |
|  |                                |  |  |

| Features  |                                       | Processor special features                 |                   |  |
|---|---------------------------------------|--|-------------------|--|
| Execute Disable Bit   | ✓                                     | Intel® Dynamic Load Balancer<br>(DLB)      | 2 default devices |  |
| Market segment  | Server                                | Intel® Data Streaming Accelerator          |                   |  |
| Use conditions  | Server/Enterprise                     | (DSA)                                      | 1 default devices |  |
| Maximum number of PCI Express<br>lanes                      | 80                                    | Intel® Advanced Matrix Extensions<br>(AMX) | 1                 |  |
| PCI Express slots version                                   | 5.0                                   |  |                   |  |
| Supported instruction sets                                  | AMX, SSE4.2, AVX, AVX 2.0,<br>AVX-512 | Operational conditions                     |                   |  |
|   |                                       | Tcase                                      | 79 °C             |  |
| Scalability   | 25                                    | DTS Max                                    | 90 °C             |  |
| Embedded options available                                  | ×                                     | Technical details                          |                   |  |
| Export Control Classification<br>Number (ECCN)              | 5A992C                                | Launch date                                | Q1'23             |  |
| Commodity Classification                                    |                                       | Status                                     | Launched          |  |
| Automated Tracking System                                   | G180729                               | Memory speed (max)                         | 4400 MHz          |  |
| (CCATS)   |                                       | Number of UPI links                        | 3                 |  |
| Processor special features                                  |                                       | Package carrier                            | E1B               |  |
| Intel® Hyper Threading Technology<br>(Intel® HT Technology) | 1                                     | Other features                             |                   |  |
| Intel® Turbo Boost Technology                               | 2.0                                   | Maximum internal memory                    | 4 TB              |  |
| Intel® AES New Instructions (Intel®                         |                                       |  |                   |  |
| AES-NI)   | 1                                     |  |                   |  |

Intel Trusted Execution Technology 🗸 Intel® Speed Shift Technology

1



5397184923566

Disclaimer. The information published here (the "Information") is based on sources that can be considered reliable, typically the manufacturer, but this Information is provided "AS IS" and without guarantee of correctness or completeness. The Information is only indicative and can be changed at any time without notification. No rights can be based on the Information. Suppliers or aggregators of this Information do not accept any liability with regard to the content of (web)pages and other documents, including its Information. The publisher of the Information can not be held liable for the content of 3rd party websites that are linking this Information or are linked to from this Information. You as the User of the Information are solely responsible for the choice and usage of this Information. You are not entitled to transfer, copy or otherwise multiply or distribute the Information. You are obliged to follow the directions of the copyright owner(s) with regard to the use of the Information. Exclusively Dutch law is applicable. With regard to price and stock data on the site, the publisher followed a number of starting points, which are not necessarily relevant for your private or business circumstances. Therefore, the price and stock data are only indicative and are subject to changes. You are personally responsible for the way you use and apply this information. As a user of the Information or sites or documents in which this Information is included, you will adhere to standard fair use including avoidance of spamming, ripping, intellectual-property violations, privacy violations, and any other illegal activity.