



# Intel® Xeon® Silver 4310 Processor

18M Cache, 2.10 GHz

Spec Code

SRKXN

Ordering Code

CD8068904657901

| Intel® Xeon® Silver 4310 Processor (18M Cache, 2.10 GHz) |   |
|--|---|
| <b>Essentials</b>  |   |
| Product Collection                                       | 3rd Generation Intel® Xeon® Scalable Processors |
| Code Name  | Products formerly Ice Lake                      |
| Vertical Segment   | Server  |
| Processor Number   | 4310  |
| Status   | Launched  |
| Launch Date  | Q2'21   |
| Lithography  | 10 nm   |
| Recommended Customer Price                               | \$501.00  |
| <b>CPU Specifications</b>                                |   |
| # of Cores   | 12  |
| # of Threads   | 24  |
| Processor Base Frequency                                 | 2.10 GHz  |
| Max Turbo Frequency                                      | 3.30 GHz  |
| Cache  | 18 MB   |
| # of UPI Links   | 2   |
| TDP  | 120 W   |
| <b>Supplemental Information</b>                          |   |
| Embedded Options Available                               | Yes   |
| <b>Memory Specifications</b>                             |   |
| Max Memory Size (dependent on memory type)               | 6 TB  |
| Memory Types   | DDR4-2667                                       |
| Maximum Memory Speed                                     | 2667 MHz  |
| Max # of Memory Channels                                 | 8   |
| ECC Memory Supported ‡                                   | Yes   |
| Intel® Optane™ Persistent Memory Supported               | No  |
| <b>Expansion Options</b>                                 |   |
| Scalability  | 2S  |
| PCI Express Revision                                     | 4   |
| Max # of PCI Express Lanes                               | 64  |
| <b>Package Specifications</b>                            |   |
| Sockets Supported  | FCLGA4189                                       |
| TCASE  | 82°C  |
| Package Size   | 77.5mm x 56.5mm                                 |
| <b>Advanced Technologies</b>                             |   |

|  |  |
|--|--|
| Intel® Deep Learning Boost (Intel® DL Boost)               | Yes  |
| Intel® Resource Director Technology (Intel® RDT)           | Yes  |
| Intel® Speed Shift Technology                              | Yes  |
| Intel® Turbo Boost Technology ‡                            | 2  |
| 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                                     | 2  |
| Intel® Volume Management Device (VMD)                      | Yes  |
| <b>Security &amp; Reliability</b>                          |  |
| Intel® AES New Instructions                                | Yes  |
| Intel® Software Guard Extensions (Intel® SGX)              | Yes with Intel® SPS                                    |
| Intel® Trusted Execution Technology ‡                      | Yes  |
| Execute Disable Bit ‡                                      | Yes  |
| Mode-based Execute Control (MBE)                           | Yes  |
| Intel® Total Memory Encryption                             | Yes  |
| Execute Disable Bit ‡                                      | Yes  |
| Intel® Run Sure Technology                                 | Yes  |
| Mode-based Execute Control (MBE)                           | Yes  |
| Intel® Total Memory Encryption                             | Yes  |