* SeriesCore i9 (10th Gen)
* CORES10 Cores
* THREADS20 Threads
* SPEED3.7 GHz
* SPEED (TURBO)5.3 GHz
* CACHE20 MB
* MAX MEMORY SUPPORT128 GB
* INTEGRATED GRAPHICSIntel UHD Graphics 630
* INCLUDED CPU COOLERNo
* UNLOCKEDYes
* TDP125W
* WARRANTY\*3 Years

10th Gen Intel Core i9-10900K Comet lake Desktop Processor Featured With 10 Cores, 20 Threads, Up To 5.3GHz Boost Clock, LGA 1200 Socket

**Specifications**

|  |  |
| --- | --- |
| **Essentials** | |
| Product Collection | 10th Generation Intel® Core™ i9 Processors |
| Code Name | Products formerly Comet Lake |
| Vertical Segment | Desktop |
| Processor Number | i9-10900K |
| Lithography | 14 nm |
| Use Conditions | PC/Client/Tablet |
| **Performance Specifications** | |
| Cores | 10 |
| Threads | 20 |
| Processor Base Frequency | 3.70 GHz |
| Max Turbo Frequency | 5.30 GHz |
| Intel® Thermal Velocity Boost Frequency | 5.30 GHz |
| Cache | 20 MB Intel® Smart Cache |
| Bus Speed | 8 GT/s |
| Intel® Turbo Boost Max Technology 3.0 Frequency | 5.20 GHz |
| Intel® Turbo Boost Technology 2.0 Frequency | 5.10 GHz |
| TDP | 125 W |
| Configurable TDP-down Frequency | 3.30 GHz |
| Configurable TDP-down | 95 W |
| **Supplemental Information** | |
| Embedded Options Available | No |
| **Memory Specifications** | |
| Max Memory Size (dependent on memory type) | 128 GB |
| Memory Types | DDR4-2933 |
| Max # of Memory Channels | 2 |
| Max Memory Bandwidth | 45.8 GB/s |
| ECC Memory Supported | No |
| **Processor Graphics** | |
| Processor Graphics | Intel® UHD Graphics 630 |
| Graphics Base Frequency | 350 MHz |
| Graphics Max Dynamic Frequency | 1.20 GHz |
| Graphics Video Max Memory | 64 GB |
| 4K Support | Yes, at 60Hz |
| Max Resolution (HDMI 1.4) | 4096x2160@30Hz |
| Max Resolution (DP) | 4096x2304@60Hz |
| Max Resolution (eDP - Integrated Flat Panel) | 4096x2304@60Hz |
| DirectX\* Support | 12 |
| OpenGL\* Support | 4.5 |
| Intel® Quick Sync Video | Yes |
| Intel® InTru™ 3D Technology | Yes |
| Intel® Clear Video HD Technology | Yes |
| Intel® Clear Video Technology | Yes |
| Displays Supported | 3 |
| Device ID | 0x9BC5 |
| **Expansion Options** | |
| Scalability | 1S Only |
| PCI Express Revision | 3.0 |
| PCI Express Configurations | Up to 1x16, 2x8, 1x8+2x4 |
| Max # of PCI Express Lanes | 16 |
| **Package Specifications** | |
| Sockets Supported | FCLGA1200 |
| Max CPU Configuration | 1 |
| Thermal Solution Specification | PCG 2015D |
| Intel® Thermal Velocity Boost Temperature | 70 °C |
| JUNCTION | 100°C |
| Package Size | 37.5mm x 37.5mm |
| **Advanced Technologies** | |
| Intel® Optane™ Memory Supported | Yes |
| Intel® Thermal Velocity Boost | Yes |
| Intel® Turbo Boost Max Technology 3.0 | Yes |
| Intel® Turbo Boost Technology | 2.0 |
| Intel vPro® Platform Eligibility | Yes |
| 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 | No |
| Intel® 64 | Yes |
| nstruction Set | 64-bit |
| Instruction Set Extensions | Intel® SSE4.1, Intel® SSE4.2, Intel® AVX2 |
| Idle States | Yes |
| Enhanced Intel SpeedStep® Technology | Yes |
| Thermal Monitoring Technologiestd | Yes |
| Intel® Identity Protection Technology | Yes |
| Intel® Stable Image Platform Program (SIPP) | Yes |
| **Security & Reliability** | |
| Intel® AES New Instructions | Yes |
| Secure Key | Yes |
| Intel® Software Guard Extensions (Intel® SGX) | Yes with Intel® ME |
| Intel® OS Guard | Yes |
| Intel® Trusted Execution Technology | Yes |
| Execute Disable Bit | Yes |
| Intel® Boot Guard | Yes |
| Warranty | 3 Years |
| Note | \*\*\*Features, Price and Specifications are subject to change without notice. |