



**PROFESSIONAL WORKSTATIONS
POWERED BY NEW INTEL[®] XEON[®] PROCESSORS**
TECHNICAL SELLING GUIDE

August 2019

INTEL® XEON® PROCESSOR-BASED PROFESSIONAL WORKSTATIONS



PROFESSIONAL-GRADE
PERFORMANCE

RELIABLE,
MANAGEABLE,
MORE SECURE

RELEVANT
SOFTWARE
CERTIFICATION

EXPANDED PLATFORM
CAPABILITIES

CHOOSE A WORKSTATION THAT CAN ENABLE CREATIVE VISIONS AND RESPONDS TO YOUR DESIGN NEEDS

CHOOSING THE RIGHT WORKSTATION IS ESSENTIAL FOR BUSINESS



Using traditional PC as workstation introduce risk and impact productivity and revenue

The right hardware can promote productivity and innovation

Targeted Task Completion Time

Wasted Time

Actual Completion Time

Targeted Task Completion Time

Actual Completion Time

An unresponsive or under-performing workstation can result hours of lost productivity. This could be experienced as missed deadlines, longer workhours, lower profit margin, and restricted creativity

A responsive, powerful and reliable workstation can promote productivity and creativity

■ Productive Time ■ Time waiting due to application lag, and long save or load times ■ Downtime due to crashes and lost work

GENERATE REVENUE FOR YOUR BUSINESS

STAY PRODUCTIVE AND ELIMINATE USER PAIN-POINTS



Wait Time

Users have to wait for time-bound tasks to complete, such as media rendering or complex fluids simulations – this prevents them from moving on to the next job.

Errors and Crashes

Uncaught memory errors can cause system hangs and crashes at the worst possible times, compromising hours or days worth of productivity.

Limited Expandability

Professional power users need to run multiple graphics cards, storage devices, capture cards and network controllers with unconstrained I/O performance to the CPU.

Software Incompatibility

Professional AEC and media applications require platform software certification for guaranteed performance and support.

Performance

Up to 56 cores/112 threads (2 socket). Intel® Turbo Boost 2.0 Technology. Intelligent cache.

Enhanced Reliability

ECC memory support Engineered to run 24/7

Improved Expandability

Up to 96 CPU PCIe lanes and 24 memory channels (2 socket)

ISV Certification

App certification on popular software packages from Autodesk*, AVID*, Dassault* and others.

THE RIGHT WORKSTATION RECIPE TO MEET THE DEMAND

CHOOSE THE RIGHT COMPONENTS & TECHNOLOGY REQUIREMENT FOR THE JOB



Processor

- Total Number of Cores
- Maximum Core Frequency
- Architecture
- New Technologies



Storage

- SSD Interface (SATA/NVMe*)
- SSD Storage Technology
- SSD R/W IOPS
- SSD Sequential R/W
- SSD Endurance / Management

Memory

- Memory Bus Speed
- Total Number of Channels
- Memory Capacity
- Technology



I/O Capacity

- Total Number of Processor PCIe* lanes
- Total Number of Platform PCIe* lanes
- Platform scalability
- Technology
- Bus Speed

Reliability, Availability & Serviceability (RAS)

- Hardware Management & Alerting
- Fault Diagnosis & Product Support



Application Validation

- Application stability
- Fault resolution & support



THERE IS NO "ONE SIZE FITS ALL" WORKSTATION - COMBINE THE RIGHT MIX OF COMPONENTS TO MEET PERFORMANCE, RESPONSE AND AVAILABILITY NEEDS

TECHNOLOGIES FOR YOUR PROFESSIONAL WORKSTATION NEEDS

SPEND LESS TIME WAITING AND MORE TIME CREATING – PROCESSOR KEY FEATURE EXAMPLES



INTEL® XEON® PROCESSORS

In Single-Socket or Dual-Socket Configurations for Fast Visualization, Simulations and Rendering

INTEL® DEEP LEARNING BOOST TECHNOLOGY

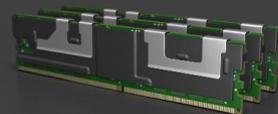
Accelerate Machine Learning Performance

INTEL® VIRTUAL RAID ON CPU (VROC)

Connect more SSDs off the Processor without Compromising Bandwidth

INTEL® OPTANE™ DC PERSISTENT MEMORY

Extract More Value from Large Datasets



ERROR CORRECTING CODE

Help Protect System from Crashes and for Real-Time Code Corrections



INTEL® VPRO™ TECHNOLOGY

For Enhanced Security Features, Identity Protection and Manageability



TECHNOLOGIES FOR YOUR PROFESSIONAL WORKSTATION NEEDS

SPEND LESS TIME WAITING AND MORE TIME CREATING – PLATFORM KEY FEATURE EXAMPLES



INTEL® OPTANE™ SSD 905P

- For demanding storage workloads
- High random read/write performance
- Low latency
- Industry-leading endurance



INTEL® SSD DATA CENTER FAMILY FOR PCIE*

- Brings extreme data throughput directly to Intel® Xeon® processors
- Up to six times faster data transfer speed than 6 Gbps SAS/SATA SSDs
- Combine with Intel® VMD & Intel® VROC for advanced RAID configurations and support for hot swap replacement



THUNDERBOLT™ 3

- 40 Gbps bidirectional bandwidth is 8x faster than USB 3.0 and 40X faster than FireWire* ¹
- Daisy chain up to six devices on a single port, including dual 4K displays
- Connect two PCs, or a PC and a Mac*, at greater than 10 gigabit Ethernet (GbE) speeds
- Connect to USB, DisplayPort*, or any Thunderbolt device



More Protocols



More Speed



40 Gbps—fastest connection**

More Pixels



Dual 4K displays
60 Hz

More Power



100 W charging
15 W device

Results have been estimated or simulated using internal Intel analysis or architecture simulation or modeling, and provided to you for informational purposes. Any differences in your system hardware, software, or configuration may affect your actual performance.

¹ As compared to any other connection to the PC

“APPLICATION & USAGE DEFINES SCALE: WHICH INTEL® WORKSTATION PROCESSOR WORKS BEST FOR YOU?”

	Processing	Memory	IO	Storage
Artificial Intelligence & Analytics <i>Frameworks like TensorFlow* and Caffe*</i>	Choose a CPU with higher total number of cores and threads to promote improved multithreaded performance. Higher performance gain when CPU supports machine learning technology or specialized instructions	For maximum memory capacity, combine compatible 2 nd Generation Intel® Xeon® Scalable Family processors with Intel® Optane™ DC persistent memory modules	Processor configuration, single or dual, should support required I/O channels for all add-in cards. Choose the CPU and platform that will provide the best option to scale for the demanding tasks. Plan for scalability where multiple GPU compute, storage, file transfers, networking or accelerators demand may increase	Heavy workloads, for example, large 3D models and scenes, 4k video editing, ray tracing, simulations, will demand significant amount of storage. Choose a storage solution can have a significant impact on application response times. Storage solutions that can be used on PCI express interface directly from the processor will improve performance and prevent long wait times during executions or file transfers.
3D Rendering and Ray Tracing <i>Keyshot, Arnold Renderer*, integrated into Maya*/3ds Max*</i>				
Simulation <i>Ansys* Solvers, Solidworks* Simulation, Creo* Simulate</i>				
3D Modeling <i>Keyshot, Arnold Renderer*, integrated into Maya*/3ds Max*</i>	Increase core count and frequency for CPU based rendering for simulations and animations. Choose higher processor frequencies to improve general application response when completing modeling or design tasks.	Choose a CPU that can scale in memory channels, total capacity and supports fast memory bus speed with support for Error Correcting Code (ECC).		
CAE, CAD & MCAD <i>Autodesk AutoCAD, Inventor*, Revit*, Solidworks, Creo, Siemens* NX PLM, PLM TcVIs, PLM *Solid Edge, Autodesk Civil 3D</i>				
Content & Video Editing <i>Adobe After Effects, Lightroom, Photoshop Premiere Pro</i>	Select higher core frequencies for general application response. Analyze to what extent the application performance improve with increased core count. Some applications do not scale efficiently with maximum core count – this may support a decision to implement slightly fewer cores at a higher frequency.			
VR Content Creation <i>Adobe*, Autodesk*, Autodesk VRED, Autodesk Photogrammetry Application Remake 4K Video Editing, Stingray* and Spin Digital* 8K HEVC Decoder</i>				
3D Visualization & Prototyping <i>Ansys, Autodesk VRED*, Spin Digital Decoder*</i>				

PROFESSIONAL ENTRY WORKSTATION – MOBILE AND FIXED

The **NEW** Intel® Xeon® E-2200 processor-based workstations deliver professional grade performance with the built-in platform security features and reliability that professional creators demand.

The **NEW** Intel® Xeon® E processor-based workstations are purpose built for 2D/3D CAD, BIM, and VR content development in tower, AIO, small form factor, and mobile designs

- **NEW** up to 5 GHz with Intel® Turbo Boost Technology
- **NEW** up to 8 cores and 16 threads with Intel® Hyper-Threading Technology
- **NEW** up to 128 GB DDR4-2666 with ECC memory
- **NEW** up to 16 MB Intel® Smart Cache
- **NEW** Intel® Wi-Fi 6 AX200 (Gig+ support)
- **NEW** Intel® Optane™ memory H10 with Solid State Storage support
- Up to 40 PCIe* 3.0 lanes
- Application certifications on Intel® UHD Graphics P630¹
- Error-correcting code (ECC) support
- Intel® vPro™ platform support
- Ultra-Fast IO bandwidth with Thunderbolt™ 3 support



¹ There are a wide range of Workstation/CAD apps that will be certified. Certification results will be available shortly after production drivers are available. Certifications are targeted within two quarters of the new Intel® Xeon® E platform launch. For a list of certified apps on production products, please visit: [intel.com/content/www/us/en/workstations/certified-applications.html](https://www.intel.com/content/www/us/en/workstations/certified-applications.html).

PROFESSIONAL MAINSTREAM WORKSTATION

Intel® Xeon® W-2100 Series Processors deliver optimized performance for the needs of mainstream workstation professionals.

Hardware-enhanced workload performance, security, and reliability for the increasing demands of professional workstations and ready for professional quality VR design.

- Up to 4.50 GHz with Intel® Turbo Boost Technology
- Up to 18 cores and 36 threads with Intel® Hyper-Threading Technology
- Up to 512 GB DDR4-2666 with ECC memory
- Up to 48 processor PCIe* lanes

- Support for Intel® Optane™ SSDs
- Intel® vPro™ platform support
- Built-in reliability, availability, and serviceability (RAS)
- Up to 24.75 MB Intel® Smart Cache



PROFESSIONAL EXPERT WORKSTATION – SINGLE SOCKET PROCESSOR

The **NEW** Intel® Xeon® W-3200 Series processors are purpose built and optimized for advanced workstation professionals in a single-socket solution.

These processors are designed for heavily and lightly threaded, I/O-intensive workloads across architecture, engineering, and construction (AEC), media and entertainment (M&E), artificial intelligence (AI), oil & gas, and data sciences.

- **NEW** up to 4.6 GHz with Intel® Turbo Boost Max Technology 3.0
- **NEW** Scalable options of 8–28 cores with Intel® Hyper-Threading Technology
- **NEW** up to 2 TB DDR4-2933 with ECC memory
- **NEW** up to 64 processor PCIe* lanes
- **NEW** Intel® Deep Learning Boost

- Up to 82 platform PCIe* lanes
- Error-correcting code (ECC) support
- Built-in reliability, availability, and serviceability (RAS)
- Intel® Virtual RAID On CPU (Intel® VROC) support
- Intel® vPro™ platform support
- Intel® Optane™ SSD 905P support



PROFESSIONAL EXPERT WORKSTATION – DUAL SOCKET PROCESSOR

The **NEW** 2nd Generation Intel® Xeon® Scalable processors deliver breakthrough performance for photorealistic design, modeling, and content creation done in real-time.

Stunning professional quality VR experiences immerse the creator into the design, simulation, animation, and video.

- **NEW** up to 4.4 GHz with Intel® Turbo Boost Technology
- **NEW** up to 3 TB DDR4-2933 per socket with ECC memory
- **NEW** Intel® Deep Learning Boost
- **NEW** Intel® Optane™ DC persistent memory

- Scalable options of 4–28 cores with Intel® Hyper-Threading Technology
- Up to 96 processor PCIe* lanes
- Up to 116 platform PCIe* lanes
- Error-correcting code (ECC) support
- Built-in reliability, availability, and serviceability (RAS)
- Intel® Virtual RAID On CPU (Intel® VROC) support
- Intel® vPro™ platform support
- Intel® Optane™ SSD 905P support



	Intel® Xeon® E-2200 Series <i>Start</i>	Intel® Xeon® E-2200 Series <i>Highest Per Core Max Frequency & Highest Core Count</i>	Intel® Xeon® W-2100 Series <i>Start</i>	Intel® Xeon® W-2100 Series <i>Highest Per Core Max Frequency & Max Core Count</i>	Intel® Xeon® W-3200 Series <i>Start</i>	Intel® Xeon® W-3200 Series <i>Highest Per Core Max Frequency & Max Core Count</i>	2 nd Gen Intel® Xeon® Scalable <i>Dual Max Frequency</i>	2 nd Gen Intel® Xeon® Scalable <i>Dual Socket Highest Core Count</i>
Cores/Threads	4/4	8/16	4/8	18/36	8/16	28/56	16/32	56/112
Max Turbo Frequency	4.6 GHz	5.0 GHz	3.9 GHz	4.5 GHz	4.0 GHz	4.4 GHz	4.4 GHz	4.0 GHz
Intel® Smart Cache	8 MB	16 MB	8.25 MB	24.75 MB	16.5 MB	38.5 MB	25MB	39. MB
DDR4 ECC RDIMM	128GB	128GB	512 GB	512 GB	1TB	1TB/2TB	2TB	3TB/6TB
Memory Channels	2	2	4	4	6	6	12	12
Processor PCIe* Lanes	16	16	48	48	64	64	96	96
Solution Considerations	Essential performance and advanced security technologies for professional entry workstation. Available with integrated Intel® UHD Graphics and certifications for top workstation applications.		Optimized performance for the needs of mainstream workstation professionals. Hardware-enhanced workload performance, security, and reliability for the increasing demands of professional workstations and ready for professional quality VR design		Designed for heavily and lightly threaded, I/O-intensive workloads across architecture, engineering, and construction (AEC), media and entertainment (M&E), artificial intelligence (AI), oil & gas, and data sciences in a single-socket solution.		Deliver breakthrough performance for photorealistic design, modeling, and content creation done in real-time. Stunning professional quality VR experiences immerse the creator into the design, simulation, animation, and video.	

INTEL® XEON® E-2200 PROCESSOR DETAILS

PROCESSOR NUMBER	BASE CLOCK SPEED (GHZ)	INTEL® TURBO BOOST TECHNOLOGY 2.0 FREQUENCY (GHZ)	CORES/ THREADS	INTEL® SMART CACHE	TOTAL PLATFORM PCIE* 3.0 LANES	TDP	MEMORY SUPPORT	INTEL® PROCESSOR GRAPHICS	ERROR CORRECTING CODE (ECC)	INTEL® VPRO™ TECHNOLOGY SUPPORT	INTEL® OPTANE™ TECHNOLOGY SUPPORT	RCP PRICING (USD 1K)
STATIONARY WORKSTATIONS												
Intel® Xeon® E-2288G processor	3.7	5.0	8 / 16	16 MB	Up to 40	95 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2286G processor	4.0	4.9	6 / 12	12 MB	Up to 40	95 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2278G processor	3.4	5.0	8 / 16	16 MB	Up to 40	80 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2276G processor	3.8	4.9	6 / 12	12 MB	Up to 40	80 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2274G processor	4.0	4.9	4 / 8	8 MB	Up to 40	83 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2246G processor	3.6	4.8	6 / 12	12 MB	Up to 40	80 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2244G processor	3.8	4.8	4 / 8	8 MB	Up to 40	71 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2236 processor	3.4	4.8	6 / 12	12 MB	Up to 40	80 W	Two channels DDR4-2666	N/A	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2234 processor	3.6	4.8	4 / 8	8 MB	Up to 40	71 W	Two channels DDR4-2666	N/A	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2226G processor	3.4	4.7	6 / 6	12 MB	Up to 40	80 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2224G processor	3.5	4.7	4 / 4	8 MB	Up to 40	71 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2224 processor	3.4	4.6	4 / 4	8 MB	Up to 40	71 W	Two channels DDR4-2666	N/A	✓	✓	✓	See Pricing Guidance
MOBILE WORKSTATIONS												
Intel® Xeon® E-2286M processor	2.4	5.0	8 / 16	16 MB	Up to 40	45 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance
Intel® Xeon® E-2276M processor	2.8	4.7	6 / 12	12 MB	Up to 40	45 W	Two channels DDR4-2666	Intel® UHD Graphics P630	✓	✓	✓	See Pricing Guidance

Intel® processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.
 All processors are lead-free (per EU RoHS directive July 2006) and halogen free (residual amounts of halogens are below November 2007 proposed IPC/JEDEC J-STD-709 standards).
 All processors support Intel® Virtualization Technology (Intel® VT-x).
 Intel® Optane™ memory requires specific hardware and software configuration. Visit www.intel.com/Optanememory for configuration requirements.
 For more complete information about performance and benchmark results, visit www.intel.com/benchmarks.

INTEL® XEON® W-2100 PROCESSOR DETAILS

PROCESSOR NUMBER ¹	BASE CLOCK SPEED (GHZ)	INTEL® TURBO BOOST TECHNOLOGY 2.0 FREQUENCY (GHZ)	CORES/ THREADS	INTEL® AVX-512	L3 CACHE (MB)	PCI EXPRESS 3.0 LANES	MEMORY SUPPORT	THERMAL DESIGN POWER (TDP)	SOCKET (LGA)	RCP PRICING (USD)
Intel® Xeon® W-2195 Processor	2.3	4.3	18/36	2 512-bit FMA	24.75	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance
Intel® Xeon® W-2175 Processor	2.5	4.3	14/28	2 512-bit FMA	19.25	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance
Intel® Xeon® W-2155 Processor	3.3	4.5	10/20	2 512-bit FMA	13.75	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance
Intel® Xeon® W-2145 Processor	3.7	4.5	8/16	2 512-bit FMA	11	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance
Intel® Xeon® W-2135 Processor	3.7	4.5	6/12	2 512-bit FMA	8.25	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance
Intel® Xeon® W-2133 Processor	3.6	3.9	6/12	2 512-bit FMA	8.25	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance
Intel® Xeon® W-2125 Processor	4.0	4.5	4/8	2 512-bit FMA	8.25	48	Four channels DDR4-2666	120W	2066	See Pricing Guidance
Intel® Xeon® W-2123 Processor	3.6	3.9	4/8	2 512-bit FMA	8.25	48	Four channels DDR4-2666	120W	2066	See Pricing Guidance
Intel® Xeon® W-2195 Processor	2.3	4.3	18/36	2 512-bit FMA	24.75	48	Four channels DDR4-2666	140W	2066	See Pricing Guidance

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INTEL® XEON® W-3200 PROCESSOR DETAILS

PROCESSOR NUMBER	BASE CLOCK SPEED (GHZ)	INTEL® TURBO BOOST TECHNOLOGY MAXIMUM SINGLE CORE TURBO FREQUENCY (GHZ)	INTEL® TURBO BOOST MAX TECHNOLOGY 3.0 FREQUENCY (GHZ)	CORES/ THREADS PER SOCKET	INTEL® SMART CACHE	TOTAL PLATFORM PCIE® 3.0 LANES	TDP	MEMORY CAPACITY	MEMORY SUPPORT	ERROR CORRECTING CODE (ECC)	RELIABILITY, AVAILABILITY, AND SERVICEABILITY (RAS)	INTEL® VPRO™ PLATFORM SUPPORT	INTEL® OPTANE™ SSD SUPPORT**	RCP PRICING (USD 1K)
Intel® Xeon® W-3275M processor	2.5	4.4	4.6	28 / 56	38.5 MB	Up to 88	205 W	2 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3275 processor	2.5	4.4	4.6	28 / 56	38.5 MB	Up to 88	205 W	1 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3265M processor	2.7	4.4	4.6	24 / 48	33 MB	Up to 88	205 W	2 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3265 processor	2.7	4.4	4.6	24 / 48	33 MB	Up to 88	205 W	1 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3245M processor	3.2	4.4	4.6	16 / 32	22 MB	Up to 88	205 W	2 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3245 processor	3.2	4.4	4.6	16 / 32	22 MB	Up to 88	205 W	1 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3235 processor	3.3	4.4	4.5	12 / 24	19.25 MB	Up to 88	180 W	1 TB	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3225 processor	3.7	4.3	4.4	8 / 16	16.5 MB	Up to 88	160 W	1 TB	Six channels DDR4-2666	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® W-3223 processor	3.5	4.0	4.2	8 / 16	16.5 MB	Up to 88	140 W	1 TB	Six channels DDR4-2666	✓	✓	✓	✓	See Pricing Guidance

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All processors support Intel® Virtualization Technology (Intel® VT-x)

++ With 1 DIMM per channel. Additional DIMM loading on any channel may impact maximum memory speed by one bin.

** Intel® Optane™ memory requires specific hardware and software configuration. Visit www.intel.com/Optanememory for configuration requirements

For more complete information about performance and benchmark results, visit www.intel.com/benchmarks.

2ND GEN INTEL® XEON® SCALABLE PROCESSOR DETAILS

PROCESSOR NUMBER	BASE CLOCK SPEED (GHZ)	INTEL® TURBO BOOST TECHNOLOGY 2.0 FREQUENCY (GHZ)	CORES/ THREADS PER SOCKET	INTEL® SMART CACHE	TOTAL PLATFORM PCIE® 3.0 LANES	TDP	MEMORY SUPPORT	ERROR CORRECTING CODE (ECC)	RELIABILITY, AVAILABILITY, AND SERVICEABILITY (RAS)	INTEL® VPRO™ TECHNOLOGY	INTEL® OPTANE™ DC PMM SUPPORT	RCP PRICING (USD 1K)
Intel® Xeon® Platinum 8280 processor	2.7	4.0	28/56	38.5 MB	Up to 116	205 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® Platinum 8270 processor	2.7	4.0	26/52	35.75 MB	Up to 116	205 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® Platinum 8268 processor	2.9	3.9	24/48	35.75 MB	Up to 116	205 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® Platinum 8256 processor	3.8	3.9	4/8	16.5 MB	Up to 116	105 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® Gold 6254 processor	3.1	4.0	18/36	24.75 MB	Up to 116	200 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® Gold 6244 processor	3.6	4.4	8/16	24.75 MB	Up to 116	150 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance
Intel® Xeon® Gold 6242 processor	2.8	3.9	16/32	22 MB	Up to 116	150 W	Six channels DDR4-2933**	✓	✓	✓	✓	See Pricing Guidance

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All processors are lead-free (per EU RoHS directive July 2006) and halogen free (residual amounts of halogens are below November 2007 proposed IPC/JEDEC J-STD-709 standards) All processors support Intel® Virtualization Technology (Intel® VT-x)

This list is not comprehensive of all available 2nd Gen Intel® Xeon® Scalable processor SKUs. Contact your Intel® field representative for details.

** With 1 DIMM per channel. Additional DIMM loading on any channel may impact maximum memory speed by one bin.

For more complete information about performance and benchmark results, visit www.intel.com/benchmarks.

Notices & Disclaimers

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No product or component can be absolutely secure.

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance.

For more complete information about performance and benchmark results, visit <http://www.intel.com/benchmarks>.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit <http://www.intel.com/benchmarks>.

Intel® Advanced Vector Extensions (Intel® AVX)* provides higher throughput to certain processor operations. Due to varying processor power characteristics, utilizing AVX instructions may cause a) some parts to operate at less than the rated frequency and b) some parts with Intel® Turbo Boost Technology 2.0 to not achieve any or maximum turbo frequencies. Performance varies depending on hardware, software, and system configuration and you can learn more at <http://www.intel.com/go/turbo>.

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