Intel® Xeon® W Processors

With an expanded compute architecture, Intel® Xeon® W-3500 processors and Intel® Xeon® W-2500 processors empower professionals with the flexibility, expandability, and performance to tackle their most demanding workloads.

NEW Up to 60 Processor Cores (60P-cores + 0E-cores) and up to 120 Threads

EXPANDED Processor Core Architecture
Multi-die Design Built for Increased Scalability

INCREASED L2 Cache and L3
Shared Intel® Smart Cache

DESIGNED FOR AI DEVELOPMENT
Intel® Advanced Matrix Extensions (Intel® AMX)
Intel® Advanced Vector Extensions 512 (Intel® AVX-512)

EXPANDABILITY SUPPORT
Up to 8-Channel DDR5 ECC RDIMM (up to 4800 MT/s) for up to 4 TB of Memory Support[2]
Up to 112 CPU PCIe 5.0 Lanes
Up to 16 PCH PCIe 4.0 Lanes

BUILT FOR BUSINESS WITH INTEL vPRO®
ECC Memory Support
Intel vPro® Enterprise Technology Support[3]

8 DMI 4.0 Lanes

Integrated Intel® Wi-Fi 6E Support

Core Frequency Tuning[1]

1. Only on Select SKUs. Altering clock frequency or voltage may void any product warranties and reduce stability, security, performance, and life of the processor and other components.
2. Maximum memory speeds are associated with 1 DIMM per Channel (1DPC) configurations. Additional DIMM loading on any channel may impact maximum memory speed. Maximum memory capacity is achievable with 2DPC configurations.
3. For a full list of Intel vPro® platform technologies by product line visit https://www.intel.com/content/www/us/en/products/details/processors/vpro.html.

INTENDED FOR SALES ENABLEMENT

Intel® Xeon® W-3500 Processors SKU Chart

Processor Number	Processor Cores / Threads	Intel® Smart Cache (L3) (MB)	Intel® Turbo Boost Max Technology 3.0 Frequency (GHz)	Intel® Turbo Boost Technology Maximum Single Core Turbo Frequency (GHz)	Processor Base Frequency (GHz)	Unlocked[1]	CPU PCIe Lanes	Maximum Memory Speed (MT/s)[2]	Memory Channels	Maximum Memory Capacity[2] (TB)	Processor Base Power (W)	Reliability, Availability & Serviceability	Intel Technologies	
													Intel vPro®[3]	Intel® ISM[3]
Intel® Xeon® w9-3595X Processor	60/120	Up to 112.5	Up to 4.8	Up to 4.6	2.0	✓	112	DDR5 4800	8	Up to 4	385	ECC, Standard RAS	✓	✓
Intel® Xeon® w9-3575X Processor	44/88	Up to 97.5	Up to 4.8	Up to 4.6	2.2	✓	112	DDR5 4800	8	Up to 4	340	ECC, Standard RAS	✓	✓
Intel® Xeon® w7-3565X Processor	32/64	Up to 82.5	Up to 4.8	Up to 4.6	2.5	✓	112	DDR5 4800	8	Up to 4	335	ECC, Standard RAS	✓	✓
Intel® Xeon® w7-3555 Processor	28/56	Up to 75	Up to 4.8	Up to 4.6	2.7		112	DDR5 4800	8	Up to 4	325	ECC, Standard RAS	✓	✓
Intel® Xeon® w7-3545 Processor	24/48	Up to 67.5	Up to 4.8	Up to 4.6	2.7		112	DDR5 4800	8	Up to 4	310	ECC, Standard RAS	✓	✓
Intel® Xeon® w5-3535X Processor	20/40	Up to 52.5	Up to 4.8	Up to 4.6	2.9	✓	112	DDR5 4800	8	Up to 4	300	ECC, Standard RAS	✓	✓
Intel® Xeon® w5-3525 Processor	16/32	Up to 45	Up to 4.8	Up to 4.6	3.2		112	DDR5 4800	8	Up to 4	290	ECC, Standard RAS	✓	✓

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).

1. Unlocked features for performance tuning. Altering clock frequency or voltage may void any product warranties and reduce stability, security, performance, and life of the processor and other components.
2. Maximum memory speeds are associated with 1 DIMM per Channel (1DPC) configurations. Additional DIMM loading on any channel may impact maximum memory speed. Maximum memory capacity is achievable with 2DPC configurations.
3. Intel vPro® Enterprise with Intel® Active Management Technology (Intel® AMT) or Intel® Standard Manageability (Intel® ISM) when paired with a motherboard with supporting hardware and software, and potential service activation.

Intel technologies may require enabled hardware, software, or service activation. No product or component can be absolutely secure. Your costs and results may vary.

INTENDED FOR SALES ENABLEMENT

Intel® Xeon® W-2500 Processors SKU Chart

Processor Number	Processor Cores / Threads	Intel® Smart Cache (L3) (MB)	Intel® Turbo Boost Max Technology 3.0 Frequency (GHz)	Intel® Turbo Boost Technology Maximum Single Core Turbo Frequency (GHz)	Processor Base Frequency (GHz)	Unlocked[1]	CPU PCIe Lanes	Maximum Memory Speed (MT/s)[2]	Memory Channels	Maximum Memory Capacity[2] (TB)	Processor Base Power (W)	Reliability, Availability & Serviceability	Intel Technologies	
													Intel vPro®[3]	Intel® ISM[3]
Intel® Xeon® w7-2595X Processor	26/52	Up to 48.75	Up to 4.8	Up to 4.6	2.8	✓	64	DDR5 4800	4	Up to 2	250	ECC, Standard RAS	✓	✓
Intel® Xeon® w7-2575X Processor	22/44	Up to 45	Up to 4.8	Up to 4.6	3.0	✓	64	DDR5 4800	4	Up to 2	250	ECC, Standard RAS	✓	✓
Intel® Xeon® w5-2565X Processor	18/36	Up to 37.5	Up to 4.8	Up to 4.6	3.2	✓	64	DDR5 4800	4	Up to 2	240	ECC, Standard RAS	✓	✓
Intel® Xeon® w5-2555X Processor	14/28	Up to 33.75	Up to 4.8	Up to 4.6	3.3	✓	64	DDR5 4800	4	Up to 2	210	ECC, Standard RAS	✓	✓
Intel® Xeon® w5-2545 Processor	12/24	Up to 30	Up to 4.7	Up to 4.5	3.5		64	DDR5 4800	4	Up to 2	210	ECC, Standard RAS	✓	✓
Intel® Xeon® w3-2535 Processor	10/20	Up to 26.25	Up to 4.6	Up to 4.4	3.5		64	DDR5 4400[4]	4	Up to 2	185	ECC, Standard RAS	✓	✓
Intel® Xeon® w3-2525 Processor	8/16	Up to 22.5	Up to 4.5	Up to 4.3	3.5		64	DDR5 4400[4]	4	Up to 2	175	ECC, Standard RAS	✓	✓

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2. Maximum memory speeds are associated with 1 DIMM per Channel (1DPC) configurations. Additional DIMM loading on any channel may impact maximum memory speed. Maximum memory capacity is achievable with 2DPC configurations.
3. Intel vPro® Enterprise with Intel® Active Management Technology (Intel® AMT) or Intel® Standard Manageability (Intel® ISM) when paired with a motherboard with supporting hardware and software, and potential service activation.
4. DDR5-4400 MT/s memory speed supported with 1DPC and 2DPC configurations.

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