

SKU Stack Summary Slide: Intel® Xeon® 6 with P-cores

Intel Data Center Group



Intel® Xeon® 6 Processors with P-cores: SKU Summary

Xeon 6900 SKUs for AI, HPC & virtualization workloads

Processor Number	Cores	Base (GHz)	All Core Turbo (GHz)	Max Turbo (GHz)	Cache (MB)	TDP (Watts)	Maximum Scalability	Uncore Freq Base/Turbo (GHz)	Memory Channels	MRDIMM Memory Speed	PCIe Lanes	Intel SGX (GB)	TDX Keys Count
6980P	128	2	3.2	3.9	504	500	2S	1.4/2.2	12	8800	96	512	1024
6979P	120	2.1	3.2	3.9	504	500	2S	1.4/2.2	12	8800	96	512	1024
6972P	96	2.4	3.5	3.9	480	500	2S	1.4/2.2	12	8800	96	512	1024
6952P	96	2.1	3.2	3.9	480	400	2S	1.4/2.2	12	8800	96	512	1024
6960P	72	2.7	3.8	3.9	432	500	2S	1.4/2.2	12	8800	96	512	1024
6944P	72	1.8	3.1	3.9	432	350	2S	1.4/2.2	12	NA	96	512	1024

Performance SKUs—Xeon 6700/6500 Series CPU

Processor Number	Cores	Base (GHz)	All Core Turbo (GHz)	Max Turbo (GHz)	Cache (MB)	TDP (Watts)	Maximum Scalability	Uncore Freq Base/Turbo (GHz)	Memory Channels	MRDIMM Memory Speed	PCIe Lanes	Intel SGX (GB)	TDX Keys Count
6787P	86	2	3.2	3.8	336	350	2S	1.4/2.2	8	8000	88	512	2048
6767P	64	2.4	3.6	3.9	336	350	2S	1.4/2.2	8	8000	88	512	2048
6747P	48	2.7	3.8	3.9	288	330	2S	1.4/2.2	8	8000	88	512	2048
6745P	32	3.1	4.1	4.3	336	300	2S	1.4/2.2	8	NA	88	512	2048
6737P	32	2.9	4	4	144	270	2S	1.4/2.2	8	NA	88	512	2048
6732P	32	3.8	4.2	4.3	144	350	2S	1.4/2.2	8	NA	88	512	2048
6730P	32	2.5	3.6	3.8	288	250	2S	1.4/2.2	8	NA	88	512	2048
6736P	36	2	3.4	4.1	144	205	2S	1.4/2.2	8	NA	88	512	2048
6527P	24	3	4.2	4.2	144	255	2S	1.4/2.2	8	NA	88	512	2048
6517P	16	3.2	4	4.2	72	190	2S	1.4/2.2	8	NA	88	512	1024
6507P	8	3.5	4.3	4.3	48	150	2S	1.4/2.2	8	NA	88	512	2048

Mainline SKUs—Xeon 6700/6500 Series CPU

Processor Number	Cores	Base (GHz)	All Core Turbo (GHz)	Max Turbo (GHz)	Cache (MB)	TDP (Watts)	Maximum Scalability	Uncore Freq Base/Turbo (GHz)	Memory Channels	MRDIMM Memory Speed	PCIe Lanes	Intel SGX (GB)	TDX Keys Count
6760P	64	2.2	3.4	3.8	320	330	2S	1.4/2.2	8	NA	88	128	1024
6740P	48	2.1	3.3	3.8	288	270	2S	1.4/2.2	8	NA	88	128	1024
6530P	32	2.3	3.7	4.1	144	225	2S	1.4/2.2	8	NA	88	128	1024
6520P	24	2.4	3.4	4	144	210	2S	1.4/2.2	8	NA	88	128	1024
6515P	16	2.3	3.8	3.8	72	150	2S	1.4/2.2	8	NA	88	128	1024
6505P	12	2.2	3.9	4.1	72	150	2S	1.4/2.2	8	NA	88	128	1024

Rich 1-Socket Xeon 6700/6500 Series CPU SKUs

Processor Number	Cores	Base (GHz)	All Core Turbo (GHz)	Max Turbo (GHz)	Cache (MB)	TDP (Watts)	Maximum Scalability	Uncore Freq Base/Turbo (GHz)	Memory Channels	MRDIMM Memory Speed	PCIe Lanes	Intel SGX (GB)	TDX Keys Count
6781P	80	2	3.2	3.8	336	350	1S	1.4/2.2	8	8000	136	128	1024
6761P	64	2.5	3.6	3.9	336	350	1S	1.4/2.2	8	8000	136	128	1024
6741P	48	2.5	3.7	3.8	288	300	1S	1.4/2.2	8	NA	136	128	1024
6731P	32	2.5	3.9	4.1	144	245	1S	1.4/2.2	8	NA	136	128	1024
6521P	24	2.6	4.1	4.1	144	225	1S	1.4/2.2	8	NA	136	128	1024
6511P	16	2.3	4.1	4.2	72	150	1S	1.4/2.2	8	NA	136	128	1024

Socket Scalable to 8S Xeon 6700 Series CPU SKUs

Processor Number	Cores	Base (GHz)	All Core Turbo (GHz)	Max Turbo (GHz)	Cache (MB)	TDP (Watts)	Maximum Scalability	Uncore Freq Base/Turbo (GHz)	Memory Channels	MRDIMM Memory Speed	PCIe Lanes	Intel SGX (GB)	TDX Keys Count
6788P	86	2	3.2	3.8	336	350	8S	1.4/2.2	8	NA	88	512	1024
6768P	64	2.4	3.6	3.9	336	330	8S	1.4/2.2	8	NA	88	512	1024
6748P	48	2.5	3.8	4.1	192	300	8S	1.4/2.2	8	NA	88	512	1024
6738P	32	2.9	4.1	4.2	144	270	8S	1.4/2.2	8	NA	88	512	1024
6728P	24	2.7	3.9	4.1	144	210	8S	1.4/2.2	8	NA	88	512	1024
6724P	16	3.6	4.2	4.3	72	210	8S	1.4/2.2	8	NA	88	512	1024
6714P	8	4	4.3	4.3	48	165	8S	1.4/2.2	8	NA	88	512	1024

Priority Core Turbo Xeon 6900/6700 Series CPU SKUs

Processor Number	Cores	Base (GHz)	All Core Turbo (GHz)	Max Turbo (GHz)	PCT-8C (GHz)	Cache (MB)	TDP (Watts)	Maximum Scalability	Uncore Freq Base/Turbo (GHz)	Memory Channels	MRDIMM Memory Speed	PCIe Lanes	Intel SGX (GB)	TDX Keys Count
6962P	72	2.7	3.6	3.9	4.4	432	500	2S	1.4/2.2	12	8800	96	512	1024
6776P	64	2.3	3.6	3.9	4.6	336	350	2S	1.4/2.2	8	8800	88	512	2048
6774P	64	2.5	3.6	3.9	4.6	336	350	1S	1.4/2.2	8	8800	136	512	2048

Intel Xeon 6900/6700/6500 Series

UCC
XCC
HCC
LCC

LL = Long Life (7-year supply) SKUs

For supply guidance and long life reliability details, please contact your Intel sales person for more information



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