

CPU Benchmarks

Over 1,000,000 CPUs benchmarked

High End CPUs - Intel vs AMD

This chart comparing high end CPUs is made using thousands of [PerformanceTest](#) benchmark results and is updated daily. These are the high end AMD and Intel CPUs are typically those found in newer computers. The chart below compares the performance of Intel Xeon CPUs, Intel Core i7/i9 CPUs, AMD Ryzen/Threadripper CPUs and AMD Epyc with multiple cores. Intel processors vs AMD chips - find out which CPUs performance is best for your new gaming rig or server!

CPU Mark	Price Performance
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PassMark - CPU Mark

High End CPUs

Updated 17th of July 2024

CPU	CPU Mark	Price (USD)
AMD Ryzen Threadripper PRO 7995WX	154,671	\$9,999.00*
AMD Ryzen Threadripper PRO 7985WX	135,597	\$7,349.00
AMD Ryzen Threadripper 7980X	134,981	\$4,992.16
AMD EPYC 9684X	120,780	\$7,987.00*
AMD EPYC 9654	116,990	\$4,675.00
AMD EPYC 9R14	116,475	NA
AMD EPYC 9654P	113,949	\$5,450.00
AMD EPYC 9554	111,635	\$2,600.00
AMD EPYC 9554P	109,858	\$4,450.00
AMD EPYC 9634	107,944	\$3,950.00
AMD EPYC 9474F	105,003	\$3,950.00
AMD EPYC 9754	97,836	\$7,998.95
AMD Ryzen Threadripper 7970X	97,315	\$2,399.00
AMD EPYC 9454P	95,997	\$3,250.00
AMD Ryzen Threadripper PRO 7975WX	94,752	\$4,569.73
AMD Ryzen Threadripper PRO 5995WX	93,192	\$4,799.99
AMD EPYC 7773X	91,491	\$1,950.00
Intel Xeon w9-3495X	91,358	\$5,889.00*
Intel Xeon Platinum 8470 @2.00GHz	89,850	\$9,359.00*
AMD EPYC 9534	88,716	\$4,700.00
Intel Xeon Max 9480	87,420	\$920.40*
AMD EPYC 7J13	84,786	NA
AMD EPYC 7763	84,706	\$1,490.91
AMD Ryzen Threadripper PRO 3995WX	83,761	\$4,499.99
AMD Ryzen Threadripper 7960X	83,285	\$1,397.00
AMD EPYC 7V13	82,878	NA
AMD EPYC 7713	82,666	\$1,444.45


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AMD EPYC 7663	82,087	NA
AMD Rv7en Threadripper PRO 7965WX	82,059	\$2 915 49
AMD EPYC 7713P	81,201	\$1,560.00
AMD Ryzen Threadripper 3990X	80,892	\$3,549.95
AMD EPYC 9374F	79,826	\$3,495.00
AMD EPYC 7B13	77,460	NA
AMD EPYC 9354P	76,556	\$2,490.00
AMD EPYC 7643	76,050	\$4,550.00*
AMD Ryzen Threadripper PRO 5975WX	75,749	\$2,160.00
Intel Xeon Platinum 8461V	74,982	\$4,491.00*
AMD EPYC 9274F	73,463	\$2,995.00*
AMD EPYC 7662	72,653	\$3,999.99*
AMD EPYC 8534P	71,900	NA
AMD EPYC 7702	69,872	\$1,398.95
AMD EPYC 7H12	69,633	\$1,749.95
AMD EPYC 7742	69,629	\$1,695.89
AMD EPYC 7573X	69,432	\$5,250.00
AMD EPYC 75F3	68,505	\$4,978.00
Intel Xeon Platinum 8571N	68,385	NA
AMD EPYC 9254	68,091	\$1,995.00
AMD EPYC 9354	67,842	\$2,895.00
AMD Ryzen Threadripper PRO 5965WX	66,689	\$1,899.99
AMD EPYC 7543P	66,687	\$1,598.92
AMD EPYC 8434P	66,490	NA
AMD EPYC 7B12	66,044	NA
Intel Xeon w7-3465X	65,879	\$2,889.00*
Intel Xeon Gold 6530	65,533	\$2,128.00*
Intel Xeon w9-3475X	64,979	\$3,908.34
AMD EPYC 7702P	64,943	\$1,567.17
AMD EPYC 9334	64,841	\$2,450.00
AMD EPYC 7R32	64,727	NA
AMD EPYC 7C13	63,613	NA
Intel Core i9-14900KS	63,370	\$647.95
AMD Ryzen Threadripper 3970X	63,242	\$1,605.00
AMD EPYC 4584PX	62,877	NA
AMD Ryzen 9 7950X	62,805	\$519.99
AMD Ryzen Threadripper PRO 3975WX	62,720	\$1,349.95
AMD EPYC 7543	62,569	\$3,761.00*
Intel Xeon Platinum 8454H	62,530	\$6,540.00*
AMD Ryzen 9 7950X3D	62,412	\$484.20
Intel Xeon Platinum 8380 @ 2.30GHz	62,318	\$8,978.00*
AMD EPYC 4564P	62,058	NA
Intel Core i9-13900KS	61,755	\$624.99
Intel Core i9-14900K	60,672	\$547.99
AMD EPYC 74F3	60,666	\$2,989.95
Intel Xeon Gold 6448Y	60,449	\$3,583.00*
AMD Ryzen Threadripper PRO 7955WX	60,249	NA
Intel Xeon Gold 5512U	60,227	\$1,230.00*
Intel Core i9-14900KF	59,980	\$861.21*

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AMD EPYC 7513	59,285	\$1,605.64
AMD FPYC 7473X	59,280	NA
Intel Xeon W-3375 @ 2.50GHz	59,069	\$4,499.00*
Intel Xeon W-3365 @ 2.70GHz	59,038	\$3,851.00*
Intel Xeon w7-2495X	58,833	\$2,603.96*
Intel Xeon Gold 6421N	58,797	\$2,368.00*
Intel Core i9-13900KF	58,587	\$426.72
AMD EPYC 7642	58,248	\$940.50
AMD Ryzen 9 7945HX3D	57,922	NA
Intel Xeon Gold 5420+	57,593	\$1,848.00*
Ampere ARM - 192 Core 3200 MHz	57,444	NA
Intel Xeon Gold 6423N	57,434	\$2,161.00*
ARM Neoverse-V2 72 Core 3519 MHz	57,240	NA
AMD EPYC 7443P	57,215	\$1,382.43
Intel Xeon Gold 6414U	57,200	\$2,296.00*
Intel Xeon w7-3455	57,164	\$2,489.00*
AMD EPYC 7443	56,601	\$2,230.99*
AMD EPYC 8324P	56,482	NA
Intel Xeon Platinum 8375C @ 2.90GHz	56,202	NA
AMD EPYC 7K62	56,169	NA
AMD EPYC 9174F	55,485	\$2,495.00
Intel Xeon w7-2475X	55,124	\$1,789.00*
AMD Ryzen Threadripper 3960X	54,878	\$1,230.00
AMD Ryzen 9 7945HX	54,684	NA
Intel Xeon Platinum 8358 @ 2.60GHz	54,416	\$5,097.75*
Intel Xeon Platinum 8360Y @ 2.40GHz	54,078	\$5,383.00*
AMD Ryzen 9 7940HX	53,704	NA
Intel Core i7-14700K	53,476	\$369.48
Intel Core i7-14700KF	53,362	\$392.99
AMD EPYC 7532	53,051	\$800.00
Intel Xeon Gold 6438N	52,789	\$3,351.00*
Intel Xeon Gold 5412U	52,742	\$1,113.00*
AMD EPYC 7F72	52,597	\$941.45
Intel Xeon Gold 6348 @ 2.60GHz	52,276	\$2,037.41
AMD Ryzen 9 7900X	51,826	\$360.00
Intel Core i9-13900F	51,225	\$475.00
AMD EPYC 4484PX	51,115	NA
AMD EPYC 7552	51,104	\$1,746.96
AMD EPYC 7453	50,575	\$1,496.48
AMD EPYC 7502P	50,382	\$1,171.99
AMD Ryzen 9 7900X3D	50,352	\$379.89
AMD EPYC 9184X	50,344	\$3,950.00
AMD EPYC 7413	50,223	\$1,394.54
AMD Ryzen Threadripper PRO 5955WX	50,054	\$1,089.99
Apple M2 Ultra 24 Core	49,969	NA
AMD Ryzen Threadripper PRO 7945WX	49,599	NA
AMD EPYC 4464P	49,593	NA
Intel Xeon Platinum 8347C @ 2.10GHz	49,386	NA
Intel Core i9-14900F	49,076	\$529.00


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Montage Jintide C5418Y	49,045	NA
AMD FPYC 7R12	48.934	NA
Intel Core i9-14900	48,062	\$578.99
Intel Xeon Gold 6314U @ 2.30GHz	48,013	\$2,782.00*
AMD EPYC 7502	47,983	\$796.96
AMD Ryzen 9 PRO 7945	47,847	NA
Intel Core i9-13900	47,398	\$579.99
Intel Xeon Gold 6342 @ 2.80GHz	47,320	\$2,400.00
Intel Core i9-13980HX	47,301	\$668.00*
Intel Xeon w7-3445	47,108	\$1,989.00*
Intel Xeon w5-2465X	46,855	\$1,451.56
Intel Xeon Platinum 8368Q @ 2.60GHz	46,681	NA
Intel Core i7-13700K	46,512	\$303.44
Intel Xeon w5-3435X	46,466	\$1,665.49*
Intel Core i9-14900HX	46,434	\$679.00*
Intel Core i7-13790F	46,309	\$459.00
Intel Core i7-13700KF	46,267	\$289.99
Intel Xeon Silver 4416+	46,208	\$1,176.00*
AMD EPYC 73F3	46,103	\$2,248.10
Intel Xeon Gold 6526Y	46,025	\$1,517.00*
AMD EPYC 7402	45,873	\$799.00
AMD Ryzen 9 7845HX	45,734	NA
Intel Xeon W-3345 @ 3.00GHz	45,694	\$2,499.00*
AMD Ryzen 9 5950X	45,648	\$307.99
Intel Xeon Gold 6336Y @ 2.40GHz	45,517	\$1,949.96
AMD EPYC 7542	45,003	\$499.99
AMD EPYC 8224P	44,990	NA
Intel Xeon Gold 6538N	44,895	\$3,351.00*
AMD EPYC 7452	44,759	\$730.99
Intel Core i9-13900HX	44,549	\$668.00*
Intel Core i7-14700	44,492	\$349.99
Intel Xeon Gold 5418Y	44,487	\$1,483.00*
Intel Core i7-14700F	44,475	\$364.52
Intel Core i9-14900T	44,248	\$549.00*
AMD EPYC 7343	44,189	\$1,111.30
Intel Core i9-13900T	44,037	\$549.00*
Intel Core i9-12900KS	44,028	\$299.99
AMD EPYC 9124	43,963	\$1,095.00
Intel Core i9-13950HX	43,936	\$590.00*
AMD EPYC 7402P	43,905	\$889.95
ARM Neoverse-N1 128 Core 3000 MHz	43,229	NA
ARM Neoverse-N1 128 Core 2800 MHz	43,111	NA
Intel Xeon Gold 6330 @ 2.00GHz	43,056	\$994.69
AMD EPYC 7D12	42,762	NA
AMD EPYC 9224	42,448	\$1,950.00
Intel Xeon Gold 6312U @ 2.40GHz	42,124	\$1,809.59*
Intel Xeon Gold 6338N @ 2.20GHz	42,086	\$4,671.69*
AMD EPYC 7313P	42,034	\$1,204.21
Intel Xeon Gold 6426Y	41,625	\$1,517.00*


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Intel Xeon W-3275 @ 2.50GHz	41,554	\$4,894.00*
Intel Core i9-12900K	41,476	\$277.99
Intel Core i9-12900KF	41,137	\$267.28
Apple M1 Ultra 20 Core	41,114	NA
Intel Xeon Platinum 8275CL @ 3.00GHz	40,794	NA
Apple M3 Max 16 Core	40,776	NA
Intel Xeon Gold 6416H	40,606	\$1,444.00*
AMD Ryzen Threadripper PRO 5945WX	40,542	NA
AMD Ryzen Threadripper PRO 3955WX	40,348	\$1,450.00
AMD EPYC 7352	40,096	\$255.54
AMD EPYC 7F52	39,923	\$1,705.52
Intel Xeon W-3275M @ 2.50GHz	39,834	\$7,453.00*
Intel Core i5-14600KF	39,474	\$292.99
Intel Xeon W-3335 @ 3.40GHz	39,293	\$1,299.00*
Intel Core i5-14600K	39,261	\$339.99
AMD Ryzen 9 5900X	39,156	\$233.69
AMD EPYC 7313	39,091	\$959.50
Intel Core i7-13700F	38,974	\$379.99
AMD Ryzen 9 3950X	38,776	\$485.95
Intel Core i7-14700T	38,482	\$384.00*
Intel Core i7-14650HX	38,352	\$495.00*
Intel Xeon Platinum 8180 @ 2.50GHz	38,259	\$1,798.95
AMD EPYC 7551P	38,117	\$267.99
Intel Core i5-13600K	38,057	\$259.99
Intel Core i7-13850HX	37,987	\$428.00*
Intel Xeon w5-2455X	37,918	\$1,091.20
Intel Core i5-13600KF	37,848	\$222.84
Intel Xeon Gold 6346 @ 3.10GHz	37,665	\$1,735.00
Intel Xeon Gold 5320 @ 2.20GHz	37,558	\$1,816.94
Intel Xeon Gold 6238R @ 2.20GHz	37,511	\$1,635.00
Intel Xeon W-3175X @ 3.10GHz	37,167	\$3,039.28*
Intel Core i7-13700	37,149	\$349.99
Intel Core i9-12900F	36,812	\$348.71
Intel Xeon w5-3425	36,590	\$1,189.00*
AMD EPYC 8124P	36,470	NA
Intel Xeon Gold 5416S	36,400	\$944.00*
Intel Xeon Gold 6330N @ 2.20GHz	36,360	\$2,188.86
Intel Xeon Gold 6248R @ 3.00GHz	36,186	\$2,288.30
Apple M3 Max 14 Core	36,123	NA
Intel Core i7-14700HX	36,103	\$495.00*
AMD Ryzen 7 7700X	35,933	\$257.89
AMD EPYC 4364P	35,865	NA
Intel Xeon Gold 6326 @ 2.90GHz	35,270	\$1,400.00
AMD EPYC 4344P	35,191	NA
Intel Core i9-12900TE	35,057	\$544.00*
Intel Core i5-14600	35,047	\$255.00*
Intel Xeon Gold 6242R @ 3.10GHz	34,963	\$1,652.58
Intel Core i7-13700E	34,728	\$390.00*
AMD Ryzen 7 PRO 7745	34,652	NA


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ARM Neoverse-N1 80 Core 3000 MHz	34,639	NA
Intel Core i7-12700K	34,623	\$409.00*
Intel Xeon Gold 6268CL @ 2.80GHz	34,558	NA
AMD Ryzen 7 7700	34,544	\$285.00
Intel Xeon Platinum 8268 @ 2.90GHz	34,483	\$6,005.98*
AMD Ryzen 9 5900	34,418	NA
Intel Core i7-12700KF	34,403	\$203.49
Intel Xeon w5-3433	34,297	NA
Intel Core i9-12900	34,282	\$427.81
AMD Ryzen 7 7800X3D	34,267	\$379.99
Intel Xeon Silver 4510	34,170	\$563.00*
Intel Core i9-12900HX	34,114	\$606.00*
AMD EPYC 7601	34,079	\$329.95
Intel Core i9-13900E	34,049	\$554.00*
Intel Xeon Platinum 8260M @ 2.30GHz	33,970	\$7,705.00*
Intel Core i7-13700HX	33,916	\$485.00*
Intel Xeon Gold 6338 @ 2.00GHz	33,814	\$1,765.60
Intel Xeon D-2799 @ 2.40GHz	33,792	\$1,933.00*
Intel Xeon Gold 6230R @ 2.10GHz	33,724	\$1,098.93
AMD Ryzen Threadripper PRO 3945WX	33,527	NA
Intel Xeon Gold 5220R @ 2.20GHz	33,370	\$1,290.00
Intel Xeon Gold 6240R @ 2.40GHz	33,353	\$1,549.95
Intel Xeon Gold 5318Y @ 2.10GHz	33,283	\$1,477.72*
Intel Xeon Platinum 8168 @ 2.70GHz	33,099	\$1,349.95
AMD EPYC 7302	33,002	\$786.96
Intel Xeon Gold 6278C @ 2.60GHz	32,835	NA
Intel Xeon W-3265M @ 2.70GHz	32,810	\$6,353.00*
Intel Core i9-10980XE @ 3.00GHz	32,809	\$1,035.00
Intel Xeon Platinum 8280 @ 2.70GHz	32,781	\$3,099.95
AMD Ryzen 7 7745HX	32,770	NA
Intel Core i5-14500	32,750	\$239.99
AMD EPYC 7302P	32,740	\$798.95
AMD Ryzen 9 3900XT	32,690	\$355.00
AMD Ryzen 9 3900X	32,646	\$219.99
AMD Ryzen 7 PRO 8700G	32,522	NA
Intel Core i9-12950HX	32,420	\$590.00*
Intel Core i7-12800HX	32,419	\$457.00*
Intel Core i5-13600	32,383	\$255.00*
Intel Xeon w5-2445	32,301	\$839.00*
AMD Ryzen Threadripper 2990WX	32,142	\$2,698.95
Intel Core i9-9980XE @ 3.00GHz	32,081	\$1,050.19
Intel Core i5-13500	31,982	\$244.85
AMD Ryzen 9 8945H	31,930	NA
AMD Ryzen 9 PRO 8945HS	31,774	NA
AMD Ryzen 7 8700G	31,743	\$297.99
AMD Ryzen 9 PRO 3900	31,609	NA
Intel Core i9-13900HK	31,569	\$697.00*
Intel Core i7-13650HX	31,561	\$485.00*
Intel Xeon Silver 4316 @ 2.30GHz	31,341	\$977.03


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Intel Xeon Platinum 8259CL @ 2.50GHz	31,142	NA
AMD FPYC 7371	31,094	\$609.99*
AMD Ryzen 7 8700F	30,918	\$269.00
Intel Xeon W-3245 @ 3.20GHz	30,824	\$2,683.99*
AMD Ryzen 9 3900	30,818	\$504.05*
Intel Core i7-12700	30,786	\$264.99
Intel Core i7-12850HX	30,680	\$428.00*
Intel Core i7-12700F	30,645	\$249.99
Intel Xeon W-2295 @ 3.00GHz	30,640	\$1,574.67
Intel Xeon Platinum 8171M @ 2.60GHz	30,632	NA
AMD Ryzen 7 PRO 8700GE	30,588	NA
AMD EPYC Embedded 7292P	30,542	NA
Intel Xeon Gold 6246R @ 3.40GHz	30,468	\$1,955.50
AMD Ryzen 9 7940HS	30,412	NA
Intel Core i9-9960X @ 3.10GHz	30,360	\$499.00
Intel Xeon Platinum 8260 @ 2.40GHz	30,347	\$2,051.94
Intel Core i9-9990XE @ 4.00GHz	30,162	\$2,163.00*
Intel Core i9-13905H	30,133	\$697.00*
Intel Core i9-7980XE @ 2.60GHz	30,130	\$899.95
Intel Xeon W-3265 @ 2.70GHz	30,105	\$4,551.37*
Intel Core i9-12900T	30,093	\$489.00*
AMD Ryzen Threadripper 2970WX	30,009	\$999.99*