

CPU Benchmarks

Over 1,000,000 CPUs Benchmarked

New Desktop CPU Performance

This chart comparing performance of CPUs designed for desktop machines is made using thousands of [PerformanceTest](#) benchmark results and is updated daily.

Notes:

- While we try to keep this chart mainly server and laptop CPU free, there might be some rogue processors in the list.
- The chart shows only CPUs that had their benchmark first submitted within the last 36 months. Older desktop CPUs may not appear.


CPU Mark	Price Performance	Sorted by Date
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PassMark - CPU Mark


Desktop CPU Performance


Updated 15th of November 2022

CPU	CPU Mark	Price (USD)
AMD Ryzen Threadripper PRO 5995WX	99,476	\$6,667.01
AMD Ryzen Threadripper PRO 3995WX	83,397	\$7,000.00
AMD Ryzen Threadripper 3990X	81,343	\$6,539.76
AMD Ryzen Threadripper PRO 5975WX	76,110	\$3,299.00
AMD Ryzen Threadripper PRO 5965WX	67,509	\$2,399.00
AMD Ryzen Threadripper 3970X	63,554	\$1,999.99
AMD Ryzen 9 7950X	63,450	\$697.77
AMD Ryzen Threadripper PRO 3975WX	62,894	\$3,098.00
Intel Core i9-13900KF	60,019	\$629.99
Intel Core i9-13900K	59,327	\$625.00
AMD Ryzen Threadripper 3960X	54,758	\$1,355.00
AMD Ryzen 9 7900X	52,008	\$549.00
AMD Ryzen Threadripper PRO 5955WX	49,796	\$1,299.99
Intel Core i7-13700K	46,800	\$439.98
Intel Core i7-13700KF	46,390	\$421.41
AMD Ryzen 9 5950X	45,826	\$549.00
Intel Core i9-12900KS	44,620	\$593.90
Intel Core i9-12900K	41,541	\$499.88
Intel Core i9-12900KF	41,482	\$488.99
Apple M1 Ultra 20 Core	41,008	NA

Intel Xeon W-3265M @ 2.70GHz	39,618	\$6,353.00*
AMD Ryzen 9 5900X	39,301	\$3,420.05
 CPU Benchmarks ▼		
Intel Core i5-13600K	38,144	\$300.00
Intel Core i9-12900F	37,478	\$529.99
AMD Ryzen 7 7700X	36,541	\$398.98
Intel Core i9-12900	35,978	\$499.99
Intel Core i7-12700K	34,671	\$409.00*
AMD Ryzen 9 5900	34,643	NA
Intel Core i7-12700KF	34,531	\$358.91
Intel Core i7-13700	34,431	NA
AMD Ryzen 9 PRO 5945	34,271	NA
AMD Ryzen Threadripper PRO 3945WX	33,302	NA
Intel Core i9-10980XE @ 3.00GHz	33,171	\$999.99
AMD Ryzen 9 3900XT	32,897	\$368.93
Intel Core i9-12900T	31,995	\$489.00*
Intel Core i7-12700F	31,427	\$324.99
Intel Core i7-12700	31,313	\$379.96
Intel Core i5-13500	30,650	NA
Intel Core i9-9990XE @ 4.00GHz	30,162	\$2,163.00*
AMD Ryzen 5 7600X	28,615	\$299.00
Intel Core i9-10940X @ 3.30GHz	28,307	\$681.99
Intel Core i7-12700E	28,292	\$344.00*
AMD Ryzen 7 5800X	28,123	\$243.43
Intel Xeon W-2275 @ 3.30GHz	27,938	\$1,112.00*
Intel Core i5-12600K	27,751	\$279.98
AMD Ryzen 7 5800X3D	27,682	\$402.20
Intel Core i5-12600KF	27,394	\$264.99
AMD Ryzen 7 PRO 5845	26,807	NA
AMD Ryzen 7 5700X	26,691	\$230.75
Intel Core i9-10920X @ 3.50GHz	26,485	\$659.99
Intel Core i5-13400	26,355	NA
Intel Xeon W-3323 @ 3.50GHz	25,875	\$949.00*
AMD Ryzen 7 5800	25,827	NA
Intel Xeon W-1390P @ 3.50GHz	25,558	NA
Intel Core i9-11900K @ 3.50GHz	25,539	\$389.99
Intel Core i9-11900KF @ 3.50GHz	25,416	\$409.99
Intel Xeon W-1370P @ 3.60GHz	24,975	\$469.99
AMD Ryzen 7 PRO 5750G	24,684	NA
Intel Core i7-11700K @ 3.60GHz	24,664	\$278.00
AMD Ryzen 7 5700G	24,576	\$184.00
AMD Ryzen 7 5700	24,283	NA
Intel Core i7-11700KF @ 3.60GHz	24,103	\$264.99
Intel Xeon W-1370 @ 2.90GHz	23,908	\$415.99
AMD Ryzen 7 3800XT	23,761	\$320.00
Intel Core i9-10900K @ 3.70GHz	23,529	\$346.99
Intel Core i9-10900KF @ 3.70GHz	23,160	\$346.99

Intel Core i9-11900 @ 2.50GHz	22,991	\$399.99
Intel Core i9-10850K @ 3.60GHz	22,855	\$349.99
 CPU Benchmarks ▼		
Intel Core i7-12700T	22,616	\$339.00*
Intel Core i7-11700B @ 3.20GHz	22,600	NA
AMD Ryzen 7 5700GE	22,484	NA
Intel Xeon W-2255 @ 3.70GHz	22,301	\$778.00*
Apple M1 Max 10 Core 3200 MHz	22,236	NA
AMD Ryzen 7 PRO 5750GE	22,212	NA
AMD Ryzen Threadripper 1920	22,066	NA
Apple M1 Pro 10 Core 3200 MHz	22,017	NA
AMD Ryzen 5 5600X	21,955	\$158.00
Intel Core i9-10910 @ 3.60GHz	21,814	NA
AMD Ryzen 5 PRO 5645	21,762	NA
AMD Ryzen 5 5600	21,530	\$134.95
Intel Core i5-12600	21,220	\$249.99
Intel Core i7-11700F @ 2.50GHz	21,185	\$304.99
AMD Ryzen 7 PRO 4700G	20,848	NA
Intel Core i5-12490F	20,811	\$163.13
Intel Core i9-10900E @ 2.80GHz	20,658	\$444.00*
Intel Core i9-10900F @ 2.80GHz	20,606	\$408.38
AMD Ryzen 7 PRO 4750G	20,588	\$259.99
Intel Core i5-12500	20,293	\$202.00*
Intel Core i9-10900 @ 2.80GHz	20,243	\$399.99
AMD Ryzen 7 4700GE	20,218	NA
AMD Ryzen 7 4700G	20,216	\$237.94
AMD Ryzen 5 PRO 5650G	20,100	NA
Intel Core i7-11700 @ 2.50GHz	20,038	\$338.99
AMD Ryzen 5 5600G	19,841	\$128.18
Intel Core i5-12400F	19,783	\$174.99
Intel Core i5-11600K @ 3.90GHz	19,757	\$259.99
Intel Core i5-11600KF @ 3.90GHz	19,700	\$199.77
Intel Core i5-12400	19,511	\$192.00*
AMD Ryzen 5 5500	19,447	\$99.00
Intel Core i7-10700K @ 3.80GHz	19,168	\$230.00
Intel Core i7-10700KF @ 3.80GHz	19,021	\$279.99
AMD Ryzen 5 5600GE	18,879	NA
AMD Ryzen 5 3600XT	18,730	\$349.00
AMD Ryzen 5 PRO 5650GE	18,573	NA
AMD Ryzen 7 PRO 4750GE	18,470	NA
Intel Core i9-11900T @ 1.50GHz	18,293	\$439.00*
Intel Core i5-11600 @ 2.80GHz	18,179	\$239.99
AMD 4700S	18,102	NA
Intel Core i5-11500B @ 3.30GHz	17,801	NA
Intel Core i5-11500 @ 2.70GHz	17,584	\$218.05
Intel Core i5-12500T	17,378	\$202.00*
Apple M1 Pro 8 Core 3200 MHz	17,233	NA

Intel Core i5-12600T	17,074	NA
Intel Core i7-10700F @ 2.90GHz	16,980	\$249.99
 CPU Benchmarks ▼		
Intel Core i7-10700 @ 2.90GHz	16,783	\$228.78
AMD Ryzen 5 PRO 4400G	16,354	NA
AMD Ryzen 5 PRO 4650G	16,315	\$209.98
AMD Ryzen 5 4500	16,039	\$79.00
Intel Core i7-11700T @ 1.40GHz	15,694	\$323.00*
AMD Ryzen 5 4600GE	15,641	NA
AMD Ryzen 5 PRO 4650GE	15,607	NA
AMD Ryzen 5 4600G	15,607	\$113.55
Intel Core i9-10900T @ 1.90GHz	15,520	\$339.99
Apple M2 8 Core 3500 MHz	15,408	NA
Intel Core i3-12300	15,023	\$143.00*
Intel Core i5-11600T @ 1.70GHz	14,713	\$213.00*
Intel Core i5-10600KF @ 4.10GHz	14,495	\$169.99
Intel Core i5-10600K @ 4.10GHz	14,489	\$195.10
Intel Xeon W-1250P @ 4.10GHz	14,476	\$321.50*
Apple M1 8 Core 3200 MHz	14,368	NA
Intel Core i3-12100F	14,340	\$105.98
Intel Core i3-12100	14,294	\$122.00*
AMD Ryzen 3 PRO 5350G	13,898	NA
Intel Core i5-10600 @ 3.30GHz	13,789	\$208.88
AMD Ryzen 3 PRO 5350GE	13,685	NA
AMD Ryzen 3 5300GE	13,636	NA
Intel Core i5-11400T @ 1.30GHz	13,231	\$182.00*
Intel Core i5-11500T @ 1.50GHz	13,160	\$192.00*
AMD Ryzen 3 5300G	13,034	NA
Intel Core i7-10700T @ 2.00GHz	13,030	\$413.99*
Intel Core i5-10500 @ 3.10GHz	12,953	\$226.69
Intel Core i3-12100T	12,788	\$122.00*
Intel Core i7-9700E @ 2.60GHz	12,751	\$323.00*
AMD Ryzen 3 3300X	12,683	\$225.00
Intel Core i5-10400F @ 2.90GHz	12,370	\$128.98
Intel Core i5-10400 @ 2.90GHz	12,306	\$164.00
Intel Core i5-10505 @ 3.20GHz	12,237	NA
AMD Ryzen 3 3100	11,648	\$134.99
Intel Core i3-11100B @ 3.60GHz	11,357	NA
AMD Ryzen 3 PRO 4200G	11,315	NA
AMD Ryzen 3 4300GE	11,309	NA
AMD Ryzen 3 4100	11,299	\$114.00
Intel Core i5-10600T @ 2.40GHz	11,210	\$213.00*
AMD Ryzen 3 PRO 4350GE	11,082	NA
AMD Ryzen 3 PRO 4350G	10,898	NA
AMD Ryzen 3 4300G	10,776	\$165.91
Intel Core i7-9700TE @ 1.80GHz	10,740	\$323.00*
Intel Core i3-10325 @ 3.90GHz	10,362	\$190.10*

Intel Core i5-10400T @ 2.00GHz	9,986	\$182.00*
AMD Ryzen 5 PRO 3350G	9,643	NA
 CPU Benchmarks ▼		
AMD Ryzen 5 3350GE	9,343	NA
Intel Core i3-10300 @ 3.70GHz	9,248	\$169.99
AMD Ryzen 5 3350G	9,113	NA
Intel Core i7-9850HL @ 1.90GHz	9,112	\$395.00*
Intel Core i3-10305 @ 3.80GHz	9,108	\$169.99
Intel Core i3-10105F @ 3.70GHz	9,107	\$79.99
AMD Ryzen 5 3400GE	8,922	NA
Intel Core i3-10100F @ 3.60GHz	8,837	\$78.99
Intel Core i3-10100 @ 3.60GHz	8,753	\$104.90
Intel Core i3-10105 @ 3.70GHz	8,720	\$117.95
Intel Core i5-10300H @ 2.50GHz	8,644	\$250.00*
Intel Core i3-10100E @ 3.20GHz	8,229	\$125.00*
Intel Core i3-10300T @ 3.00GHz	8,205	\$177.72*
Intel Core i3-10305T @ 3.00GHz	8,136	\$143.00*
Intel Core i3-10105T @ 3.00GHz	7,943	\$122.00*
Intel Core i3-9350K @ 4.00GHz	7,722	\$293.22*
AMD Athlon Gold PRO 3150G	7,702	NA
AMD Ryzen 3 3200GE	7,312	NA
AMD Athlon Gold 3150G	7,093	NA
AMD Athlon Gold PRO 3150GE	7,068	NA
Intel Pentium Gold G7400	6,759	\$94.99
AMD Ryzen Embedded V1404I	6,241	NA
Intel Pentium Gold G7400T	5,883	\$64.00*
Intel Core i5-4470S @ 3.00GHz	4,742	NA
AMD Athlon Silver PRO 3125GE	4,633	NA
Intel Pentium Gold G6605 @ 4.30GHz	4,526	\$164.99
AMD Athlon 3000G	4,483	\$89.99*
Intel Celeron G6900	4,408	\$74.68
Intel Pentium Gold G6600 @ 4.20GHz	4,396	\$130.42
Intel Pentium Gold G6505 @ 4.20GHz	4,378	\$75.00*
Intel Celeron N5095A @ 2.00GHz	4,340	NA
AMD Athlon 300GE	4,301	NA
Intel Pentium Gold G6405 @ 4.10GHz	4,287	\$70.40
AMD Athlon 320GE	4,285	NA
AMD Ryzen Embedded R1606G	4,166	NA
Intel Pentium Gold G6500 @ 4.10GHz	4,147	\$92.99
Intel Pentium Gold G6400 @ 4.00GHz	4,130	\$44.99
Intel Pentium Gold G5620 @ 4.00GHz	4,102	\$120.00*
Intel Celeron N5095 @ 2.00GHz	4,028	NA
Intel Celeron G6900T	4,024	\$42.00*
Intel Pentium Gold G6500T @ 3.50GHz	4,005	\$75.00*
Intel Pentium Gold G6405T @ 3.50GHz	3,746	\$64.00*
Intel Pentium Gold G5600T @ 3.30GHz	3,601	NA
Intel Pentium Gold G6400T @ 3.40GHz	3,586	\$64.00*

Intel Celeron G5905 @ 3.50GHz	2,830	\$49.94
Intel Celeron G5925 @ 3.60GHz	2,721	\$64.99
 CPU Benchmarks ▼		
Intel Celeron J4115 @ 1.80GHz	2,708	NA
Intel Celeron G5900 @ 3.40GHz	2,672	\$35.99
Intel Celeron G5900T @ 3.20GHz	2,620	\$42.00*
AMD Athlon II X4 557	2,567	NA
Intel Celeron G5920 @ 3.50GHz	2,482	\$53.99
Intel Celeron G4930T @ 3.00GHz	2,284	\$42.00*
Intel Celeron G5905T @ 3.30GHz	2,234	\$42.00*
Intel Celeron J3455E @ 1.50GHz	2,157	NA
Intel Core2 Extreme Q9200 @ 2.40GHz	2,011	NA
AMD Athlon X4 730	1,936	NA
AMD Athlon X4 530	1,786	NA
Intel Celeron J4025 @ 2.00GHz	1,695	NA
Intel Pentium G2120T @ 2.70GHz	1,613	NA
AMD Athlon X2 450	1,295	NA
AMD R-272F APU	1,215	NA
Intel Core i5-4470 @ 3.30GHz	1,180	NA

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