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

PassMark - CPU Mark
Desktop CPU Performance
Updated 17th of October 2022

CPU	CPU Mark	Price (USD)
AMD Ryzen Threadripper PRO 5995WX	98,125	$6,499.00
AMD Ryzen Threadripper PRO 3995WX	83,189	$6,866.10
AMD Ryzen Threadripper 3990X	81,282	$6,541.98
AMD Ryzen Threadripper PRO 5975WX	78,389	$3,299.00
AMD Ryzen Threadripper PRO 5965WX	67,117	$2,399.00
AMD Ryzen 9 7950X	64,250	$699.00
AMD Ryzen Threadripper 3970X	63,544	$1,999.99
AMD Ryzen Threadripper PRO 3975WX	62,907	$3,098.00
AMD Ryzen Threadripper 3960X	54,785	$1,355.00
Intel Core i9-13900K	54,666	$589.00*
AMD Ryzen 9 7900X	51,527	$549.00
AMD Ryzen Threadripper PRO 5955WX	49,726	$1,299.00
AMD Ryzen 9 5950X	45,859	$548.99
Intel Core i9-12900KS	44,766	$648.79
Intel Core i9-12900KF	41,508	$533.92
Intel Core i9-12900K	41,488	$499.98
Apple M1 Ultra 20 Core	41,067	NA
AMD Ryzen Threadripper PRO 5945WX	40,784	NA
Intel Core i5-13600K	39,974	$319.00*
AMD Ryzen Threadripper PRO 3955WX	39,964	$1,186.00
Intel Xeon W-3265M @ 2.70GHz	39,618	$6,353.00*
AMD Ryzen 9 5900X	39,313	$349.99
AMD Ryzen 9 3950X	39,030	$541.32

Intel Core i9-12900F	37,500	$589.47
AMD Ryzen 7 7700X	36,616	$399.00
Intel Core i9-12900	36,107	$508.42
AMD Ryzen 9 5900	34,636	NA
Intel Core i7-12700K	34,627	$409.00*
Intel Core i7-12700KF	34,448	$377.98
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	33,244	$946.03
AMD Ryzen 9 3900XT	32,936	$368.93
Intel Core i9-12900T	32,023	$489.00*
Intel Core i7-12700F	31,421	$312.99
Intel Core i7-12700	31,336	$369.99
Intel Core i5-13500	30,650	NA
Intel Core i9-9990XE @ 4.00GHz	30,162	$2,163.00*
AMD Ryzen 5 7600X	28,665	$299.00
Intel Core i9-10940X @ 3.30GHz	28,364	$739.99
Intel Core i7-12700E	28,217	$344.00*
AMD Ryzen 7 5800X	28,137	$269.00
Intel Xeon W-2275 @ 3.30GHz	27,918	$1,112.00*
Intel Core i5-12600K	27,702	$277.99
AMD Ryzen 7 5800X3D	27,601	$399.00
Intel Core i5-12600KF	27,284	$277.99
AMD Ryzen 7 PRO 5845	26,807	NA
AMD Ryzen 7 5700X	26,624	$219.99
Intel Core i9-10920X @ 3.50GHz	26,538	$659.99
Intel Core i5-13400	26,355	NA
Intel Xeon W-3323 @ 3.50GHz	25,875	$949.00*
AMD Ryzen 7 5800	25,838	NA
Intel Xeon W-1390P @ 3.50GHz	25,558	NA
Intel Core i9-11900K @ 3.50GHz	25,531	$361.85
Intel Core i9-11900KF @ 3.50GHz	25,445	$338.99
Intel Xeon W-1370P @ 3.60GHz	24,975	$479.99
AMD Ryzen 7 PRO 5750G	24,850	NA
AMD Ryzen 7 5700	24,766	NA
Intel Core i7-11700K @ 3.60GHz	24,669	$299.49
AMD Ryzen 7 5700G	24,563	$218.96
Intel Core i7-11700KF @ 3.60GHz	24,113	$253.00
Intel Xeon W-1370 @ 2.90GHz	23,908	$494.60
AMD Ryzen 7 3800XT	23,762	$350.00
Intel Core i9-10900K @ 3.70GHz	23,562	$349.00
Intel Core i9-10900KF @ 3.70GHz	23,242	$269.99
Intel Core i7-12700T	23,053	$339.00*
Intel Core i9-11900 @ 2.50GHz	22,991	$292.99
Intel Core i9-11900F @ 2.50GHz	22,937	$439.99
Intel Core i9-10850K @ 3.60GHz	22,881	$372.75
Intel Core i9-11900KB @ 3.30GHz	22,695	$539.00*

Intel Core i9-10900X @ 3.70GHz	**22,624**	$550.00
Intel Core i7-11700B @ 3.20GHz	**22,600**	NA
AMD Ryzen 7 5700GE	**22,484**	NA
Intel Xeon W-2255 @ 3.70GHz	**22,333**	$778.00*
AMD Ryzen 7 PRO 5750GE	**22,258**	NA
Apple M1 Max 10 Core 3200 MHz	**22,244**	NA
AMD Ryzen Threadripper 1920	**22,066**	NA
Apple M1 Pro 10 Core 3200 MHz	**22,021**	NA
AMD Ryzen 5 5600X	**21,963**	$179.97
AMD Ryzen 5 PRO 5645	**21,762**	NA
Intel Core i9-10910 @ 3.60GHz	**21,753**	NA
AMD Ryzen 5 5600	**21,508**	$149.78
Intel Core i7-11700F @ 2.50GHz	**21,219**	$304.99
Intel Core i5-12600	**21,207**	$228.99
Intel Core i5-12490F	**20,964**	$163.18
AMD Ryzen 7 PRO 4700G	**20,848**	NA
Intel Core i9-10900E @ 2.80GHz	**20,658**	$444.00*
Intel Core i9-10900F @ 2.80GHz	**20,618**	$358.99
AMD Ryzen 7 PRO 4750G	**20,569**	$239.99
Intel Core i5-12500	**20,292**	$202.00*
Intel Core i9-10900 @ 2.80GHz	**20,283**	$399.99
AMD Ryzen 7 4700G	**20,225**	$238.14
AMD Ryzen 7 4700GE	**20,218**	NA
AMD Ryzen 5 PRO 5650G	**20,095**	NA
Intel Core i7-11700 @ 2.50GHz	**20,090**	$334.99
AMD Ryzen 5 5600G	**19,838**	$150.36
Intel Core i5-12400F	**19,808**	$174.99
Intel Core i5-11600K @ 3.90GHz	**19,738**	$239.99
Intel Core i5-11600KF @ 3.90GHz	**19,705**	$233.98
Intel Core i9-9900KS @ 4.00GHz	**19,538**	$1,859.00
Intel Core i5-12400	**19,507**	$192.00*
AMD Ryzen 5 5500	**19,481**	$122.99
Intel Core i7-10700K @ 3.80GHz	**19,178**	$265.99
Intel Core i7-10700KF @ 3.80GHz	**19,027**	$249.99
AMD Ryzen 5 5600GE	**18,879**	NA
AMD Ryzen 5 3600XT	**18,731**	$349.00
AMD Ryzen 5 PRO 5650GE	**18,623**	NA
AMD Ryzen 7 PRO 4750GE	**18,470**	NA
Intel Core i9-11900T @ 1.50GHz	**18,444**	$439.00*
Intel Core i5-11600 @ 2.80GHz	**18,236**	$269.99
AMD 4700S	**18,102**	NA
Intel Core i5-11500B @ 3.30GHz	**17,801**	NA
Intel Core i5-11500 @ 2.70GHz	**17,605**	$200.99
Intel Core i5-12500T	**17,507**	$202.00*
Apple M1 Pro 8 Core 3200 MHz	**17,285**	NA
Intel Core i5-11400F @ 2.60GHz	**17,206**	$149.99
Intel Core i5-11400 @ 2.60GHz	**17,073**	$184.99
Intel Core i7-10700F @ 2.90GHz	**17,009**	$249.88

Intel Core i7-10700 @ 2.90GHz	16,811	$219.75
Intel Core i5-12600T	16,760	NA
Intel Core i5-12400T	16,405	$169.99
AMD Ryzen 5 PRO 4400G	16,354	NA
AMD Ryzen 5 PRO 4650G	16,331	$219.96
AMD Ryzen 5 4500	15,944	$101.61
Intel Core i7-11700T @ 1.40GHz	15,754	$323.00*
AMD Ryzen 5 4600GE	15,641	NA
AMD Ryzen 5 PRO 4650GE	15,603	NA
AMD Ryzen 5 4600G	15,596	$138.42
Apple M2 8 Core 3500 MHz	15,505	NA
Intel Core i9-10900T @ 1.90GHz	15,371	$349.99
Intel Core i3-12300	15,023	$143.00*
Intel Core i5-11600T @ 1.70GHz	14,713	$213.00*
Intel Core i5-10600K @ 4.10GHz	14,510	$199.58
Intel Core i5-10600KF @ 4.10GHz	14,504	$199.99
Intel Xeon W-1250P @ 4.10GHz	14,476	$321.50*
Apple M1 8 Core 3200 MHz	14,436	NA
Intel Core i3-12100F	14,373	$105.98
Intel Core i3-12100	14,336	$122.00*
Intel Core i9-9900T @ 2.10GHz	14,092	$439.00*
AMD Ryzen 3 PRO 5350G	13,911	NA
Intel Core i5-10600 @ 3.30GHz	13,834	$182.38
AMD Ryzen 3 PRO 5350GE	13,685	NA
AMD Ryzen 3 5300GE	13,636	NA
Intel Core i5-11400T @ 1.30GHz	13,330	$182.00*
AMD Ryzen 5 3500X	13,257	$149.99
Intel Core i5-11500T @ 1.50GHz	13,160	$192.00*
Intel Core i7-10700T @ 2.00GHz	13,037	$413.99*
AMD Ryzen 3 5300G	13,003	NA
Intel Core i5-10500 @ 3.10GHz	12,955	$209.99
Intel Core i3-12100T	12,840	$122.00*
AMD Ryzen 5 3500	12,832	NA
Intel Core i7-9700E @ 2.60GHz	12,751	$323.00*
AMD Ryzen 3 3300X	12,684	$250.00
Intel Core i5-10400F @ 2.90GHz	12,376	$128.98
Intel Core i5-10400 @ 2.90GHz	12,307	$145.99
Intel Core i5-10505 @ 3.20GHz	12,293	NA
AMD Ryzen 3 3100	11,646	$134.99
AMD Ryzen 3 4100	11,360	$119.99
Intel Core i3-11100B @ 3.60GHz	11,357	NA
AMD Ryzen 3 PRO 4200G	11,315	NA
AMD Ryzen 3 4300GE	11,311	NA
Intel Core i5-10600T @ 2.40GHz	11,210	$213.00*
AMD Ryzen 3 PRO 4350GE	11,082	NA
AMD Ryzen 3 PRO 4350G	10,888	NA
AMD Ryzen 3 4300G	10,783	NA
Intel Core i7-9700TE @ 1.80GHz	10,740	$323.00*

Intel Core i3-10325 @ 3.90GHz	10,362	$190.10*
Intel Core i5-10500T @ 2.30GHz	10,272	$192.00*
Intel Core i3-10320 @ 3.80GHz	10,037	$139.99
Intel Core i5-10400T @ 2.00GHz	9,991	$182.00*
Intel Core i3-10305 @ 3.80GHz	9,689	$149.99
AMD Ryzen 5 PRO 3350GE	9,643	NA
AMD Ryzen 5 PRO 3350G	9,431	NA
AMD Ryzen 5 3350GE	9,343	NA
Intel Core i3-10300 @ 3.70GHz	9,153	$169.99
Intel Core i3-10105F @ 3.70GHz	9,114	$79.99
AMD Ryzen 5 3350G	9,113	NA
Intel Core i7-9850HL @ 1.90GHz	9,112	$395.00*
AMD Ryzen 5 3400GE	8,900	NA
Intel Core i3-10100F @ 3.60GHz	8,851	$78.99
Intel Core i3-10105 @ 3.70GHz	8,797	$109.00
Intel Core i3-10100 @ 3.60GHz	8,766	$106.00
Intel Core i5-10300H @ 2.50GHz	8,646	$250.00*
Intel Core i5-9600T @ 2.30GHz	8,464	$213.00*
Intel Core i3-10100E @ 3.20GHz	8,229	$125.00*
Intel Core i3-10305T @ 3.00GHz	8,136	$143.00*
Intel Core i3-10300T @ 3.00GHz	8,119	$177.72*
Intel Core i3-10105T @ 3.00GHz	8,049	$122.00*
Intel Core i3-9350K @ 4.00GHz	7,722	$293.22*
AMD Athlon Gold PRO 3150G	7,702	NA
AMD Ryzen 3 3200GE	7,317	NA
AMD Athlon Gold 3150G	7,093	NA
AMD Athlon Gold PRO 3150GE	7,068	NA
Intel Pentium Gold G7400	6,759	$78.95
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 N5095A @ 2.00GHz	4,412	NA
Intel Pentium Gold G6600 @ 4.20GHz	4,396	$130.42
Intel Celeron G6900	4,394	$49.95
Intel Pentium Gold G6505 @ 4.20GHz	4,378	$75.00*
AMD Athlon 300GE	4,301	NA
AMD Athlon 320GE	4,285	NA
Intel Pentium Gold G6405 @ 4.10GHz	4,285	$51.89
AMD Ryzen Embedded R1606G	4,166	NA
Intel Pentium Gold G6500 @ 4.10GHz	4,147	$92.99
Intel Pentium Gold G6400 @ 4.00GHz	4,139	$57.99
Intel Pentium Gold G5620 @ 4.00GHz	4,102	$125.00*
Intel Celeron G6900T	4,024	$42.00*
Intel Celeron N5095 @ 2.00GHz	4,015	NA
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 Pentium Gold G5420T @ 3.20GHz	**3,508**	[$64.00*](#)
Intel Pentium Silver J5040 @ 2.00GHz	**3,426**	[NA](#)
Intel Celeron J4125 @ 2.00GHz	**2,987**	[NA](#)
Intel Celeron G5905 @ 3.50GHz	**2,816**	[$44.99](#)
Intel Celeron G5925 @ 3.60GHz	**2,721**	[$30.93](#)
Intel Celeron G4950 @ 3.30GHz	**2,714**	[$1,008.65*](#)
Intel Celeron J4115 @ 1.80GHz	**2,708**	[NA](#)
Intel Celeron G5900 @ 3.40GHz	**2,672**	[$57.99](#)
Intel Celeron G5900T @ 3.20GHz	**2,620**	[$42.00*](#)
AMD Athlon II X4 557	**2,567**	[NA](#)
Intel Celeron G5920 @ 3.50GHz	**2,482**	[$53.88](#)
Intel Celeron G5905T @ 3.30GHz	**2,313**	[$42.00*](#)
Intel Celeron G4930T @ 3.00GHz	**2,258**	[$42.00*](#)
Intel Celeron J3455E @ 1.50GHz	**2,139**	[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	**1,687**	[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](#)