

CPU Benchmarks

Over 1,000,000 CPUs Benchmarked

New Laptop CPU Performance

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

Notes:

- While we try to keep this chart mainly desktop CPU free, there might be some desktop processors in the list. This is because the classification of a laptop CPU is determined at result submission time by the user of PerformanceTest. Some users incorrectly clicked the "Laptop" check box.
- The chart shows only CPUs that had their benchmark first submitted within the last 36 months. Older laptop CPUs may not appear.

Home CPUS

CPU Mark	Price Performance	Sorted by Date
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- High End
- High Mid Range
- Low Mid Range
- Low End

- Best Value (On Market)
- Best Value XY Scatter
- Best Value (All time)

- New Desktop
- New Laptop

- Single Thread
- Systems with Multiple CPUs
- Overclocked
- Power Performance
- CPU Mark by Socket Type
- Cross-Platform CPU Performance

- CPU Mega List
- Search Model

PassMark - CPU Mark

Laptop & Portable CPU Performance
Updated 21st of January 2021

CPU	CPU Mark	Price (USD)
AMD Ryzen 9 5900HX	24,039	NA
AMD Ryzen 9 4900HS	19,854	NA
AMD Ryzen 7 4800H	19,176	NA
AMD Ryzen 9 4900H	19,047	NA
AMD Ryzen 7 4800HS	18,987	NA
AMD Ryzen 7 Extreme Edition	18,284	NA
Intel Xeon W-10885M @ 2.40GHz	17,461	\$623.00*
AMD Ryzen 7 4800U	17,314	NA
Intel Core i9-10980HK @ 2.40GHz	16,594	\$583.00*
Intel Core i7-10870H @ 2.20GHz	16,407	\$417.00*
Intel Core i9-10885H @ 2.40GHz	16,084	\$556.00*
Intel Core i7-10875H @ 2.30GHz	15,998	\$450.00*
Intel Xeon E-2286M @ 2.40GHz	15,678	\$1,618.06*
AMD Ryzen 7 PRO 4750U	15,662	NA
Intel Core i9-10880H @ 2.30GHz	15,310	NA
Intel Core i9-9980HK @ 2.40GHz	15,147	\$583.00*
AMD Ryzen 5 4600H	14,857	NA
AMD Ryzen 5 PRO 4400GE	14,795	NA
AMD Ryzen 5 4600HS	14,239	NA
Intel Core i9-9880H @ 2.30GHz	14,067	\$556.00*
AMD Ryzen 5 4600U	13,835	NA
AMD Ryzen 7 4700U	13,802	NA
Intel Xeon W-10855M @ 2.80GHz	13,413	\$450.00*

Intel Xeon W-10000M @ 2.80GHz	12,712	\$700.00*
AMD Ryzen 5 PRO 4650U	12,864	NA

CPU Benchmarks

most
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AMD vs Intel
Market Share

Year on Year
Performance

Intel Core i7-8700B @ 3.20GHz	12,548	\$303.00*
Intel Xeon E-2276M @ 2.80GHz	12,140	\$450.00*
AMD Ryzen 5 PRO 4500U	12,049	NA
Intel Core i7-9850H @ 2.60GHz	11,715	\$1,305.76*
Intel Core i7-9750HF @ 2.60GHz	11,680	\$395.00*
Intel Core i7-1185G7 @ 3.00GHz	11,526	\$426.00*
Intel Core i7-9750H @ 2.60GHz	11,342	\$395.00*
AMD Ryzen 5 4500U	11,278	NA
Intel Xeon E-2176M @ 2.70GHz	11,091	\$450.00*
AMD Ryzen 3 PRO 4200GE	11,006	NA
Intel Xeon E-2186M @ 2.90GHz	10,878	\$623.00*
Intel Core i7-1068NG7 @ 2.30GHz	10,689	\$426.00*
Intel Core i7-9700TE @ 1.80GHz	10,645	\$323.00*
Intel Core i9-8950HK @ 2.90GHz	10,632	\$583.00*
Intel Core i7-8850H @ 2.60GHz	10,479	\$395.00*
Intel Core i7-1165G7 @ 2.80GHz	10,379	\$426.00*
Intel Core i7-8750H @ 2.20GHz	10,204	\$395.00*
AMD Ryzen 3 PRO 4450U	10,103	NA
Intel Core i7-10710U @ 1.10GHz	10,101	\$587.00
Intel Core i5-1135G7 @ 2.40GHz	9,851	\$309.00*
Intel Core i5-9400F @ 2.90GHz	9,588	\$147.74
Intel Core i5-1038NG7 @ 2.00GHz	9,585	\$320.00*
Intel Core i5-8500B @ 3.00GHz	9,538	\$192.00*
Intel Core i7-8569U @ 2.80GHz	9,251	\$431.00*
Intel Core i5-9500TE @ 2.20GHz	9,212	\$192.00*
Intel Core i7-9850HL @ 1.90GHz	9,112	\$395.00*
Intel Core i7-10810U @ 1.10GHz	9,068	\$443.00*
Intel Core i5-10200H @ 2.40GHz	9,029	\$250.00*
Intel Core i7-1065G7 @ 1.30GHz	8,946	\$426.00*
Intel Core i7-8559U @ 2.70GHz	8,893	\$619.00
Intel Core i5-10300H @ 2.50GHz	8,825	\$250.00*
Intel Core i5-10400H @ 2.60GHz	8,820	\$250.00*
Intel Core i7-8809G @ 3.10GHz	8,778	NA
Intel Core i5-1035G7 @ 1.20GHz	8,442	\$320.00*
AMD Ryzen 7 3750H	8,412	NA
Intel Core i5-1035G4 @ 1.10GHz	8,351	\$309.00*
Intel Core i5-8259U @ 2.30GHz	8,337	\$589.00
Intel Core i5-9400H @ 2.50GHz	8,267	\$250.00*
Intel Core i7-8706G @ 3.10GHz	8,136	NA
AMD Ryzen 5 3550H	8,123	NA
Intel Core i5-8400H @ 2.50GHz	8,116	\$250.00*
AMD Ryzen Embedded V1807B	8,095	NA
Intel Core i5-1035G1 @ 1.00GHz	8,001	\$297.00*
Intel Core i5-8257U @ 1.40GHz	7,955	\$320.00*
AMD Ryzen 5 3580U	7,949	NA
Intel Core i5-9300H @ 2.40GHz	7,926	\$250.00*

 CPU Benchmarks ▼

Intel Core i7-8709G @ 3.10GHz	7,921	NA
Intel Core i5-8279U @ 2.40GHz	7,917	\$320.00*
AMD Ryzen 3 4300U	7,749	NA
Intel Core i5-9300HF @ 2.40GHz	7,668	\$250.00*
AMD Ryzen 7 2800H	7,656	NA
Intel Core i5-8260U @ 1.60GHz	7,630	\$299.99
Intel Core i5-8300H @ 2.30GHz	7,610	\$250.00*
Intel Core i3-10100T @ 3.00GHz	7,555	\$122.00*
AMD Ryzen 5 2600H	7,537	NA
AMD Ryzen 7 PRO 3700U	7,440	NA
AMD Ryzen 5 3450U	7,413	NA
AMD Ryzen 7 3700U	7,339	NA
Intel Core i7-10610U @ 1.80GHz	7,278	\$409.00*
AMD Ryzen 7 3780U	7,194	NA
AMD Ryzen 5 3500U	7,178	NA
AMD Ryzen 7 PRO 2700U	7,176	NA
AMD Ryzen 3 PRO 3200GE	7,113	NA
Intel Core i5-8305G @ 2.80GHz	7,073	NA
Intel Core i7-7820EQ @ 3.00GHz	7,059	\$378.00*
Intel Core i7-5850EQ @ 2.70GHz	7,036	\$435.00*
Intel Core i7-10510U @ 1.80GHz	6,994	\$409.00*
Intel Core i5-10310U @ 1.70GHz	6,959	\$297.00*
AMD Ryzen 5 PRO 3500U	6,950	NA
AMD Ryzen Embedded V1605B	6,852	NA
Intel Core i3-8100B @ 3.60GHz	6,829	\$133.00*
Intel Xeon E3-1268L v5 @ 2.40GHz	6,600	\$456.54*
Intel Core i7-8665U @ 1.90GHz	6,594	\$648.94
Intel Core i7-8665UE @ 1.70GHz	6,587	\$409.00*
AMD Ryzen 5 PRO 2500U	6,566	NA
Intel Core i5-10210U @ 1.60GHz	6,545	\$549.00
Intel Core i3-1115G4 @ 3.00GHz	6,422	\$281.00*
Intel Core i7-8565U @ 1.80GHz	6,417	NA
Intel Core i5-8365U @ 1.60GHz	6,402	\$594.99*
Intel Core i7-1060NG7 @ 1.20GHz	6,234	NA
Intel Core i7-8565UC @ 1.80GHz	6,187	NA
Intel Core i5-8265U @ 1.60GHz	6,163	\$749.00*
AMD Ryzen 3 PRO 2300U	6,149	NA
AMD Ryzen 3 PRO 3300U	6,060	NA
Intel Core i5-8265UC @ 1.60GHz	5,988	NA
AMD Ryzen 3 3300U	5,859	NA
Intel Core i3-9100TE @ 2.20GHz	5,705	\$122.00*
Intel Core i7-10510Y @ 1.20GHz	5,523	\$403.00*
Intel Core i5-1030NG7 @ 1.10GHz	5,416	NA
Intel Core i5-8365UE @ 1.60GHz	5,408	\$297.00*
AMD Ryzen 3 2300U	5,335	NA
Intel Core i3-1005G1 @ 1.20GHz	5,258	\$281.00*
Intel Core i5-10210Y @ 1.00GHz	4,918	NA
Intel Core i5-7442EQ @ 2.10GHz	4,834	\$250.00*

 CPU Benchmarks ▼

Intel Core i5-6442EQ @ 1.90GHz	4,519	\$250.00*
AMD Athlon 220GE	4,505	\$216.00
Intel Core i3-8109U @ 3.00GHz	4,357	\$270.43
Intel Core i3-8121U @ 2.20GHz	4,356	\$397.00
AMD Ryzen 3 3250U	4,223	NA
AMD Athlon Gold 3150U	4,211	NA
Intel Core i3-8145UE @ 2.20GHz	4,193	\$281.00*
Intel Core i5-7287U @ 3.30GHz	4,149	NA
Intel Core i3-10110U @ 2.10GHz	4,087	\$329.73
AMD Athlon 300U	4,051	NA
AMD Ryzen 3 3200U	4,004	NA
AMD Ryzen Embedded R1505G	3,878	NA
Intel Core i7-6660U @ 2.40GHz	3,845	\$415.00*
AMD Ryzen Embedded V1202B	3,823	NA
Intel Core i3-8145U @ 2.10GHz	3,796	\$281.00*
Intel Core i3-8130U @ 2.20GHz	3,642	\$281.00*
Intel Core i3-10110Y @ 1.00GHz	3,639	\$287.00*
AMD A8-7680	3,553	\$50.08*
Intel Core i3-7167U @ 2.80GHz	3,489	NA
AMD Embedded R-Series RX-418GD Radeon R6	3,426	NA
Intel Core i5-L16G7 @ 1.40GHz	3,331	\$281.00*
AMD Athlon Silver 3050U	3,204	NA
AMD Ryzen Embedded R1305G	3,170	NA
Intel Core i7-8500Y @ 1.50GHz	3,071	\$393.00*
Intel Core m3-8100Y @ 1.10GHz	3,065	\$281.00*
AMD Athlon Silver 3050e	3,015	NA
Intel Core i5-8210Y @ 1.60GHz	2,905	NA
AMD A6-9400	2,717	NA
AMD 3015e	2,678	NA
Intel Pentium Silver N5030 @ 1.10GHz	2,670	NA
AMD 3020e	2,652	NA
Intel Pentium Silver N5000 @ 1.10GHz	2,587	\$161.00*
Intel Core i3-7020U @ 2.30GHz	2,577	\$281.00*
Intel Core i3-7102E @ 2.10GHz	2,521	\$225.00*
Intel Celeron N4120 @ 1.10GHz	2,499	NA
Intel Celeron N4100 @ 1.10GHz	2,471	\$107.00*
Intel Pentium 6405U @ 2.40GHz	2,358	\$161.00*
Intel Core i3-6102E @ 1.90GHz	2,349	\$225.00*
Intel Core i5-8200Y @ 1.30GHz	2,308	\$291.00*
Intel Pentium 5405U @ 2.30GHz	2,305	\$161.00*
Intel Celeron 6305 @ 1.80GHz	2,251	NA
Intel Pentium 4417U @ 2.30GHz	2,229	\$161.00*
Intel Pentium G4400TE @ 2.40GHz	2,190	\$64.00*
Intel Celeron G3900TE @ 2.30GHz	1,967	\$42.00*
Intel Celeron 4305UE @ 2.00GHz	1,950	NA
Intel Atom E3940 @ 1.60GHz	1,940	NA
AMD GX-420MC SOC	1,796	NA
AMD PRO A6-7350B	1,679	NA

 CPU Benchmarks ▼

Intel Pentium 4425Y @ 1.70GHz	1,654	\$161.00*
Intel Pentium 4415V @ 1.60GHz	1,621	\$161.00*
Intel Celeron N4000C @ 1.10GHz	1,596	NA
AMD A9-9425	1,559	NA
Intel Celeron 3867U @ 1.80GHz	1,467	\$107.00*
Intel Celeron N4000 @ 1.10GHz	1,454	\$107.00*
Intel Celeron 5205U @ 1.90GHz	1,432	\$107.00*
AMD A6-9225	1,343	NA
Intel Atom T5700 @ 1.70GHz	1,326	NA
Intel Celeron 4205U @ 1.80GHz	1,278	\$107.00*
Intel Celeron 1020M @ 2.10GHz	1,275	NA
AMD A6-9220C	1,273	NA
Intel Pentium A1020 @ 2.41GHz	1,265	NA
AMD A4-9125	1,235	NA
Intel Celeron 3965Y @ 1.50GHz	1,220	\$107.00*
AMD R-272F APU	1,215	NA
AMD A9-9420e	1,177	NA
Intel Celeron 2002E @ 1.50GHz	1,091	\$86.00*
Intel Atom C2538 @ 2.40GHz	1,086	\$104.00*
AMD A6-9200	1,062	NA
AMD PRO A4-4350B	1,046	NA
AMD A6-9220e	968	NA
AMD A4-9120C	937	NA
AMD A4-9120e	908	NA
AMD G-T40R	120	NA

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