



# 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**
- 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

CPU Mark Price Performance Sorted by Date

### PassMark - CPU Mark

Laptop & Portable CPU Performance  
Updated 20th of July 2020

CPU	CPU Mark	Price (USD)
AMD Ryzen 9 4900H	19,879	NA
AMD Ryzen 9 4900HS	19,716	NA
AMD Ryzen 7 4800H	19,268	NA
AMD Ryzen 7 4800HS	18,852	NA
AMD Ryzen 7 4800U	17,505	NA
Intel Core i9-10980HK @ 2.40GHz	17,413	\$583.00*
Intel Xeon W-10885M @ 2.40GHz	16,779	\$623.00*
Intel Core i9-10885H @ 2.40GHz	16,735	\$556.00*
AMD Ryzen 7 PRO 4750U	16,020	NA
Intel Core i7-10875H @ 2.30GHz	15,980	\$450.00*
Intel Xeon E-2286M @ 2.40GHz	15,849	\$623.00*
Intel Core i9-9980HK @ 2.40GHz	15,584	\$583.00*
AMD Ryzen 5 4600H	14,928	NA
AMD Ryzen 5 4600U	14,620	NA
Intel Core i9-9880H @ 2.30GHz	14,039	\$556.00*
Intel Core i9-10880H @ 2.30GHz	13,973	NA
AMD Ryzen 7 4700U	13,935	NA
AMD Ryzen 5 PRO 4650U	12,989	NA
Intel Core i7-10750H @ 2.60GHz	12,832	NA
Intel Xeon E-2276M @ 2.80GHz	12,346	\$450.00*
Intel Core i7-10850H @ 2.70GHz	12,172	\$395.00*
Intel Core i7-8700B @ 3.20GHz	12,128	\$303.00*

Home CPU Benchmarks

Most Benchmarked

AMD vs Intel Market Share

Year on Year

Performance

Intel Core i7-9750HF @ 2.60GHz		12,089	\$395.00*
Intel Core i7-9750H @ 2.60GHz		11,426	\$395.00*
Intel Core i9-8950HK @ 2.90GHz		11,215	\$583.00*
Intel Xeon E-2186M @ 2.90GHz		11,203	\$623.00*
AMD Ryzen 5 4500U		11,160	NA
Intel Core i7-1068NG7 @ 2.30GHz		10,839	\$426.00*
Intel Xeon E-2176M @ 2.70GHz		10,697	\$450.00*
Intel Core i7-9700TE @ 1.80GHz		10,675	\$323.00*
Intel Core i7-8850H @ 2.60GHz		10,612	\$395.00*
Intel Core i7-8750H @ 2.20GHz		10,243	\$395.00*
Intel Core i7-10710U @ 1.10GHz		10,076	\$586.81
Intel Core i5-1038NG7 @ 2.00GHz		9,882	\$320.00*
Intel Core i5-8500B @ 3.00GHz		9,712	\$192.00*
Intel Core i5-9400F @ 2.90GHz		9,634	\$159.99
Intel Core i7-8569U @ 2.80GHz		9,251	\$431.00*
Intel Core i7-9850HL @ 1.90GHz		9,216	\$395.00*
Intel Core i5-9500TE @ 2.20GHz		9,212	\$192.00*
Intel Core i5-10300H @ 2.50GHz		9,140	\$250.00*
Intel Core i7-1065G7 @ 1.30GHz		8,979	NA
Intel Core i5-10400H @ 2.60GHz		8,939	\$250.00*
Intel Core i7-8559U @ 2.70GHz		8,847	\$789.98
Intel Core i7-8809G @ 3.10GHz		8,764	NA
Intel Core i5-1035G7 @ 1.20GHz		8,623	\$320.00*
AMD Ryzen 7 3750H		8,475	NA
Intel Core i5-8259U @ 2.30GHz		8,378	\$596.00
Intel Core i5-9400H @ 2.50GHz		8,336	\$250.00*
Intel Core i5-1035G4 @ 1.10GHz		8,286	\$309.00*
Intel Core i5-8257U @ 1.40GHz		8,208	\$320.00*
Intel Core i7-8706G @ 3.10GHz		8,168	NA
AMD Ryzen 5 3550H		8,132	NA
Intel Core i5-8400H @ 2.50GHz		8,121	\$250.00*
Intel Core i7-10810U @ 1.10GHz		8,119	\$443.00*
Intel Core i5-9300H @ 2.40GHz		8,070	\$250.00*
AMD Ryzen 5 3580U		8,060	NA
Intel Core i5-8279U @ 2.40GHz		7,983	\$320.00*
Intel Core i5-1035G1 @ 1.00GHz		7,968	\$297.00*
AMD Ryzen 3 4300U		7,895	NA
Intel Core i7-8557U @ 1.70GHz		7,885	\$431.00*
Intel Core i7-8705G @ 3.10GHz		7,862	\$1,548.81
Intel Core i7-8709G @ 3.10GHz		7,794	NA
Intel Core i5-8260U @ 1.60GHz		7,776	\$297.00*
AMD Ryzen Embedded V1807B		7,764	NA
Intel Core i7-10610U @ 1.80GHz		7,744	\$409.00*
Intel Core i5-9300HF @ 2.40GHz		7,641	\$250.00*
Intel Core i5-8300H @ 2.30GHz		7,576	\$250.00*
AMD Ryzen 7 3700U		7,459	NA
AMD Ryzen 7 2800H		7,432	NA

🏠 CPU Benchmarks ▼

AMD Ryzen 7 PRO 3700U		7,422	NA
AMD Ryzen 7 PRO 2700U		7,351	NA
AMD Ryzen 7 PRO 3700U		7,344	NA
Intel Core i5-8305G @ 2.80GHz		7,245	NA
AMD Ryzen 5 PRO 3500U		7,221	NA
AMD Ryzen 5 3500U		7,191	NA
AMD Ryzen 7 3780U		7,185	NA
Intel Core i7-10510U @ 1.80GHz		7,159	\$409.00*
Intel Core i7-7820EQ @ 3.00GHz		7,087	\$378.00*
Intel Core i3-8100B @ 3.60GHz		6,907	\$133.00*
AMD Ryzen Embedded V1605B		6,841	NA
Intel Core i7-5850EQ @ 2.70GHz		6,829	\$435.00*
AMD Ryzen 5 PRO 2500U		6,821	NA
Intel Core i7-8665U @ 1.90GHz		6,788	\$409.00*
Intel Core i5-10310U @ 1.70GHz		6,753	\$297.00*
Intel Xeon E3-1268L v5 @ 2.40GHz		6,680	\$456.54*
Intel Core i7-8665UE @ 1.70GHz		6,626	\$409.00*
AMD Ryzen 5 2500U		6,621	NA
Intel Core i7-8650U @ 1.90GHz		6,602	\$1,049.00*
Intel Core i7-8565U @ 1.80GHz		6,584	NA
AMD Ryzen 7 2700U		6,523	NA
Intel Core i5-8365U @ 1.60GHz		6,448	\$699.99
Intel Core i5-10210U @ 1.60GHz		6,421	\$604.95
Intel Core i5-8350U @ 1.70GHz		6,421	\$297.00*
Intel Core i5-8265U @ 1.60GHz		6,300	\$297.00*
Intel Core i7-1060NG7 @ 1.20GHz		6,234	NA
Intel Core i5-8365UE @ 1.60GHz		6,079	\$297.00*
Intel Core i7-8550U @ 1.80GHz		6,022	NA
Intel Core i5-8265UC @ 1.60GHz		5,999	NA
AMD Ryzen 3 PRO 3300U		5,977	NA
AMD Ryzen 3 PRO 2300U		5,788	NA
Intel Core i5-1030NG7 @ 1.10GHz		5,754	NA
AMD Ryzen 3 3300U		5,741	NA
Intel Core i3-1005G1 @ 1.20GHz		5,269	\$281.00*
AMD Ryzen 3 2300U		5,205	NA
Intel Core i5-10210Y @ 1.00GHz		4,900	NA
Intel Core i5-7442EQ @ 2.10GHz		4,853	\$250.00*
Intel Core i5-6442EQ @ 1.90GHz		4,573	\$250.00*
AMD Athlon 220GE		4,465	\$71.55
AMD Ryzen 3 3250U		4,443	NA
Intel Core i3-8109U @ 3.00GHz		4,385	\$449.00
Intel Core i3-8121U @ 2.20GHz		4,297	\$399.00
AMD Ryzen Embedded R1505G		4,270	NA
Intel Core i3-10110U @ 2.10GHz		4,209	\$489.95
AMD Ryzen 3 3200U		4,154	NA
AMD Athlon Gold 3150U		4,047	NA
Intel Core i3-1000NG4 @ 1.10GHz		4,035	NA
Intel Core i5-7287U @ 3.30GHz		4,029	NA
AMD Athlon 300U		4,010	NA

Intel Core i3-8145U @ 2.10GHz	3,700	\$281.00*
Intel Core i3-10110Y @ 1.00GHz	3,639	\$287.00*

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AMD Ryzen Embedded V1202B	3,625	NA
AMD Ryzen 3 2200U	3,593	NA
Intel Core i3-8130U @ 2.20GHz	3,559	\$281.00*
Intel Core i3-7100H @ 3.00GHz	3,464	\$225.00*
Intel Core i5-6287U @ 3.10GHz	3,449	\$304.00*
Intel Core i3-7167U @ 2.80GHz	3,389	NA
AMD Embedded R-Series RX-418GD Radeon R6	3,365	NA
AMD Athlon Silver 3050U	3,225	NA
Intel Core i7-8500Y @ 1.50GHz	3,119	\$393.00*
Intel Core i5-8200Y @ 1.30GHz	3,070	\$291.00*
Intel Core m3-8100Y @ 1.10GHz	3,024	\$281.00*
Intel Core i5-8210Y @ 1.60GHz	2,860	NA
Intel Core i3-7130U @ 2.70GHz	2,848	\$459.99*
Intel Pentium Silver N5000 @ 1.10GHz	2,732	\$161.00*
AMD 3020e	2,727	NA
Intel Core m3-7Y32 @ 1.10GHz	2,724	NA
AMD A6-9400	2,717	NA
AMD PRO A10-9700B	2,703	NA
AMD A10-9620P	2,616	NA
Intel Core i3-7020U @ 2.30GHz	2,597	\$281.00*
Intel Pentium Silver N5030 @ 1.10GHz	2,566	NA
Intel Core i3-7102E @ 2.10GHz	2,531	\$225.00*
Intel Celeron N4100 @ 1.10GHz	2,507	\$107.00*
AMD PRO A12-8830B	2,462	NA
Intel Core i3-6102E @ 1.90GHz	2,455	\$225.00*
Intel Pentium 6405U @ 2.40GHz	2,430	\$161.00*
Intel Celeron N4120 @ 1.10GHz	2,344	NA
Intel Pentium 5405U @ 2.30GHz	2,340	\$161.00*
Intel Pentium 4417U @ 2.30GHz	2,272	\$161.00*
Intel Pentium G4400TE @ 2.40GHz	2,217	\$64.00*
Intel Atom C2538 @ 2.40GHz	2,086	\$104.00*
Intel Atom T5700 @ 1.70GHz	2,039	NA
Intel Celeron G3900TE @ 2.30GHz	1,991	\$42.00*
Intel Celeron 4305UE @ 2.00GHz	1,961	NA
Intel Core i5-4422E @ 1.80GHz	1,931	\$266.00*
Intel Atom E3940 @ 1.60GHz	1,916	NA
Intel Core i5-4230U @ 1.90GHz	1,891	NA
AMD GX-420MC SOC	1,796	NA
Intel Celeron N4020 @ 1.10GHz	1,777	NA
Intel Celeron 3965U @ 2.20GHz	1,770	\$107.00*
AMD PRO A6-7350B	1,681	NA
Intel Pentium 4415Y @ 1.60GHz	1,648	\$161.00*
AMD A9-9420	1,560	NA
AMD A9-9425	1,553	NA
Intel Celeron N4000C @ 1.10GHz	1,545	NA
AMD Embedded G-Series GX-420G Radeon R7E	1,519	NA

Intel Celeron N4000 @ 1.10GHz	●	1,464	\$107.00*
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## 🏠 CPU Benchmarks ▼

AMD A6-9220	●	1,397	NA
Intel Pentium 4410Y @ 1.50GHz	●	1,366	\$161.00*
AMD A6-9225	●	1,327	NA
Intel Pentium A1020 @ 2.41GHz	●	1,279	NA
AMD Embedded G-Series GX-224IJ Radeon R4E	●	1,272	NA
Intel Celeron 1020M @ 2.10GHz	●	1,270	NA
AMD A4-9125	●	1,270	NA
AMD A4-9120	●	1,255	NA
AMD A6-9220C	●	1,229	NA
AMD R-272F APU	●	1,219	NA
Intel Celeron 4205U @ 1.80GHz	●	1,205	\$107.00*
Intel Celeron 3965Y @ 1.50GHz	●	1,203	\$107.00*
AMD A9-9420e	●	1,172	NA
Intel Celeron 2002E @ 1.50GHz	●	1,105	\$86.00*
AMD A6-9200	●	1,076	NA
AMD Embedded G-Series GX-215JJ Radeon R2E	●	1,072	NA
AMD PRO A4-4350B	●	1,065	NA
AMD A6-9220e	●	987	NA
AMD A4-9120C	●	938	NA
VIA Eden 1000MHz		124	NA
AMD G-T40R		116	NA

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