

CPU Benchmarks

Over 1,000,000 CPUs Benchmarked

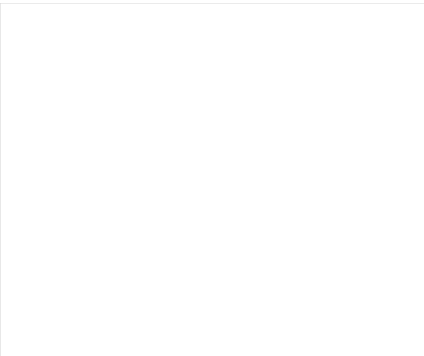
Intel Core i7-13850HX

Benchmarks for the Intel Core i7-13850HX can be found below. Release dates, price and performance comparisons are also listed when available. This is made using thousands of [PerformanceTest](#) benchmark results and is updated daily.

- The first graph shows the relative performance of the CPU compared to the 10 other common (single) CPUs in terms of PassMark CPU Mark.
- The 2nd graph shows the value for money, in terms of the CPUMark per dollar.
- The pricing history data shows the price for a single Processor. For multiple Processors, multiply the price shown by the number of CPUs.

Is the Intel Core i7-13850HX Good for Gaming?

This is relatively new CPU that contains 20 Cores and 28 Threads. The Intel Core i7-13850HX also has reasonable threaded performance that will serve well in games. Paired with a good [videocard](#), *is this CPU Good for Gaming?* Yes, this would be a suitable CPU for gaming. [\[More ...\]](#)



Intel Core i7-13850HX	
Description: Intel UHD Graphics for 13th Gen Intel Processors	
Class: Laptop	Socket: FCBGA1964
Total Cores: 20 Cores, 28 Threads	
Performance Cores: 8 Cores, 16 Threads, 2.1 GHz Base, 5.3 GHz Turbo	
Efficient Cores: 12 Cores, 12 Threads, 1.5 GHz Base, 3.8 GHz Turbo	
Typical TDP: 55 W	TDP Down: 45 W
TDP Up : 157 W	

Average CPU Mark

Multithread Rating

36463

Single Thread Rating

3746

Samples: 616*

*Margin for error: Low

+ COMPARE

L1 Instruction Cache: 8 x 32 KB

Eff. L1 Instruction Cache: 12 x 64 KB



CPU Benchmarks



L3 Cache: 30 MB

Memory Support: Max. Memory Size: 128 GB (Up to DDR5 5600 MT/s Up to DDR4 3200 MT/s, ECC Supported)

Other names: 13th Gen Intel(R) Core(TM) i7-13850HX, 13th Gen Intel Core i7-13850HX

CPU First Seen on Charts: Q1 2023

CPUmark/\$Price: 85.19

Overall Rank:

352nd fastest in multithreading out of 5419 CPUs
295th fastest in single threading out of 5419 CPUs
31st fastest in out of 1513 Laptop CPUs

Last Price Change: [\\$428.00 USD](#) (2023-01-01)

CPU Test Suite Average Results for Intel Core i7-13850HX

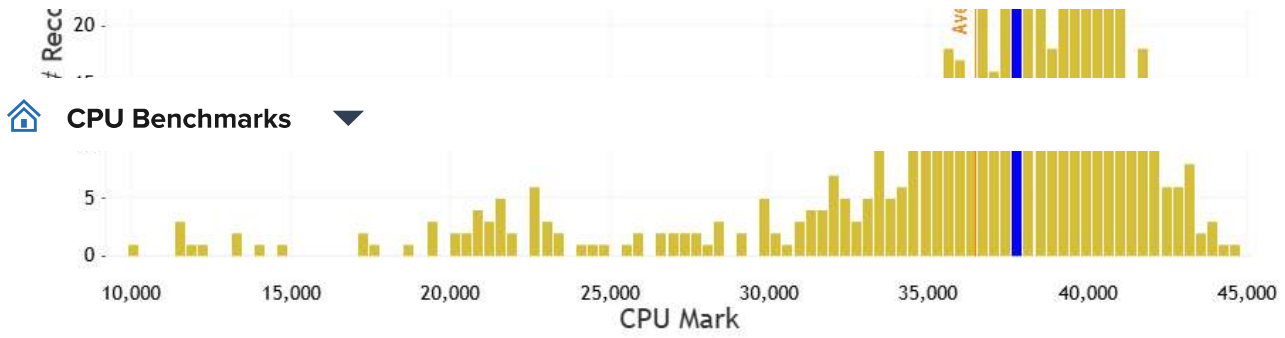
Integer Math	124,913 MOps/Sec
Floating Point Math	91,342 MOps/Sec
Find Prime Numbers	180 Million Primes/Sec
Random String Sorting	48,664 Thousand Strings/Sec
Data Encryption	25,754 MBytes/Sec
Data Compression	437,908 KBytes/Sec
Physics	2,452 Frames/Sec
Extended Instructions	26,327 Million Matrices/Sec
Single Thread	3,746 MOps/Sec

From submitted results to PerformanceTest V10 as of 27th of October 2025.

CPU Mark Distribution for Intel Core i7-13850HX

Submitted Baseline Distribution Graph as of 21st of October 2025





Search for **Intel Core i7-13850HX**
from the Featured Merchants below:



Note: PassMark Software may earn compensation for sales from links on this site through affiliate programs.

Pricing History



Machines with this CPU (or similar)

CPU Benchmarks ▼



[core \(20 Core\) 2.20 GHz - 32 GB Total RAM - 512 GB SSD](#)

(www.amazon.com)



[HP Essential 2025 Laptop, 17.3" FHD, CORE 7 \(Beats i7 1355\), 64GB RAM, 2TB SSD, FP Reader, Backlit KB, Webcam, Wi-Fi 6, Windows 11 Home, Silver, Bundle with ADATA 512GB External SSD](#)

\$978.83

(www.amazon.com)



[Dell Precision 7000 7780 17.3" Mobile Workstation - Full HD - Intel Core i7 13th Gen i7-13850HX - 32 GB - 1 TB SSD - Aluminum Titan Gray](#)

\$2366.80

(www.amazon.com)



[Dell Precision 7000 7780 17.3" Mobile Workstation - Full HD - 1920 x 1080 - Intel Core i7 13th Gen i7-13850HX Icosa-core \(20 Core\) 2.20 GHz - 32 GB Total RAM - 512 GB SSD - Aluminum Titan Gray](#)

\$2569.77

(www.amazon.com)



[Dell Precision 7780 Mobile Workstation - 17.3" FHD AG Display Display - Intel Core i7-13850HX 20-Core \(13th Gen\) - 1TB SSD - 64GB CAMM RAM - NV RTX 5000 ADA \(16GB GDDR6\) - Windows 11 pro](#)

\$4868.77

(www.amazon.com)

Note: PassMark Software may earn compensation for sales from links on this site through affiliate programs.

CPU Mark Relative to Top 10 Common Laptop CPUs

As of 27th of October 2025 - Higher results represent better performance

Processor	Average CPU Mark	
Intel Core i7-13850HX		36,463
Intel Core i7-12700H		25,416
Apple M1 Max 10 Core 3200 MHz		22,151
AMD Ryzen 7 5800H		20,715
Intel Core i7-11800H @ 2.30GHz		19,884
AMD Ryzen 7 4800H		18,117
AMD Ryzen 5 5600H		16,582
Apple M2 8 Core 3500 MHz		15,652
Apple M1 8 Core 3200 MHz		14,145
Intel Core i7-9750H @ 2.60GHz		10,624
Intel Core i5-1135G7 @ 2.40GHz		9,427

CPU Value (CPU Mark / \$Price)

As of 27th of October 2025 - Higher results represent better value

Processor	CPU Mark / \$Price	
Intel Core i7-13850HX		85.19
		55.62

Intel Core i7-11800H @ 2.30GHz		50.34
<div><div> CPU Benchmarks</div><div>▼</div></div>		
Intel Core i7-9750H @ 2.60GHz		11.07
Apple M1 8 Core 3200 MHz		NA
Apple M2 8 Core 3500 MHz		NA
Apple M1 Max 10 Core 3200 MHz		NA
AMD Ryzen 7 5800H		NA
AMD Ryzen 5 5600H		NA
AMD Ryzen 7 4800H		NA

Single Thread Rating

As of 27th of October 2025 - Higher results represent better performance

Processor	Average Thread Rating	
Apple M2 8 Core 3500 MHz		3.893
Apple M1 Max 10 Core 3200 MHz		3.834
Intel Core i7-13850HX		3,746
Apple M1 8 Core 3200 MHz		3.679
Intel Core i7-12700H		3.519
Intel Core i7-11800H @ 2.30GHz		3.034
AMD Ryzen 7 5800H		3.013
AMD Ryzen 5 5600H		2.899
Intel Core i5-1135G7 @ 2.40GHz		2.624
AMD Ryzen 7 4800H		2.592
Intel Core i7-9750H @ 2.60GHz		2.396

Last 5 Baselines for Intel Core i7-13850HX

Most recent listed first

Baseline	
	36139

BL2999536 - Oct 23 2025		38721
 CPU Benchmarks ▼		
BL2998426 - Oct 23 2025		38065
BL2996706 - Oct 22 2025		39880

Additional baselines can be obtained using Windows version of [PerformanceTest's Manage Baselines](#) feature.

Popular comparisons for Intel Core i7-13850HX

As of 27th of October 2025 - Higher results represent better performance

Processor	Average CPU Mark	
Intel Core i7-13850HX		36,463
Intel Core i7-13700HX vs Intel Core i7-13850HX		32,337 (-11.3%)
Intel Core i7-13650HX vs Intel Core i7-13850HX		30,600 (-16.1%)
Intel Core i7-14700HX vs Intel Core i7-13850HX		37,166 (+1.9%)
Intel Core i5-13500HX vs Intel Core i7-13850HX		27,860 (-23.6%)
Intel Core i9-13950HX vs Intel Core i7-13850HX		41,183 (+12.9%)
Intel Core i7-14650HX vs Intel Core i7-13850HX		34,629 (-5.0%)
Intel Core i7-12800HX vs Intel Core i7-13850HX		31,380 (-13.9%)
Intel Core i7-12850HX vs Intel Core i7-13850HX		30,579 (-16.1%)
AMD Ryzen 9 7940HS vs Intel Core i7-13850HX		29,995 (-17.7%)
AMD Ryzen 7 7840HS vs Intel Core i7-13850HX		28,569 (-21.6%)
Intel Core i5-14500HX vs Intel Core i7-13850HX		28,582 (-21.6%)
Intel Core i9-13900H vs Intel Core i7-13850HX		27,520 (-24.5%)

Is the Intel Core i7-13850HX Good for Gaming?

As of 27th of October 2025 - Higher results represent better performance

Processor	Relative Gaming Score	
Intel Core Ultra 9 285HX		9,933
		9,644

Intel Core Ultra 5 235HX		9,113
<div><div> CPU Benchmarks ▼</div></div>		
Intel Core Ultra 7 255HX		8,057
Intel Core Ultra 7 265HX		8,009
Intel Core Ultra 7 265H		7,811
AMD Ryzen 9 9850HX		7,301
Intel Core i9-14900HX		6,991
AMD Ryzen AI Max 390		6,756
Intel Core i9-13980HX		6,723
AMD Ryzen AI Max Pro 390		6,694
Intel Core i7-13850HX		5,996

Software

- [BurnInTest](#)
- [PerformanceTest](#)
- [OSForensics](#)
- [MemTest86](#)
- [WirelessMon](#)
- [Management Console](#)
- [Zoom Search Engine](#)
- [Free Software](#)

Benchmarks

- [CPU Benchmarks](#)
- [Video Card Benchmarks](#)
- [Hard Drive Benchmarks](#)
- [RAM B](#)
- [PC Sys](#)

Hardware

- [USB3.0 Loopback Plugs](#)
- [USB2.0 Loopback Plugs](#)
- [PCIe Test Cards](#)
- [USB Power Delivery Tester](#)
- [Serial and Parallel Loopback Plugs](#)
- [USB Short Circuit Testers](#)

About Us

- [Company](#)
- [Contact Us](#)
- [The Press Room](#)

[Software Marketshare](#)

[Database Benchmarks](#)



CPU Benchmarks



[iOS Benchmarks](#)

[Internet Bandwidth](#)

[Services](#)

[Store](#)

[Support](#)

[Forums](#)

[Compliance](#)

[International](#)

[Disclaimer](#)

[Refunds](#)

[Privacy](#)

[Social](#)



Copyright © 2025 PassMark® Software

