


CPU Benchmarks


Over 1,000,000 CPUs Benchmarked

AMD Ryzen 9 5950X


Price and performance details for the AMD Ryzen 9 5950X can be found below. 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.


 CPU

 High End


High Mid RangeLow Mid RangeLow End

 Best Value (On Market)


Best Value XY ScatterBest Value (All time)

 New Desktop


New Laptop


 Single Thread

Systems with Multiple CPUsOverclockedPower PerformanceCPU Mark by Socket TypeCross-Platform CPU Performance


 CPU Mega List

Search Model

 Compare ⁰

 Common

Most Benchmarked

 AMD vs Intel

AMD Ryzen 9 5950X

Description:

Class:Desktop

Socket:AM4

Clockspeed:3.4 GHZ

Turbo Speed:4.9 GHZ

Cores:16

Threads:32

Typical TDP:105 W

Other names: AMD Ryzen 9 5950X 16-Core Processor

CPU First Seen on Charts: Q4 2020

CPUMark/\$Price: 83.63


Overall Rank: 45

Last Price Change: [\\$548.89 USD](#) (2022-07-02)

CPU Test Suite Average Results for AMD Ryzen 9 5950X

Integer Math	192,687 MOps/Sec
Floating Point Math	99,278 MOps/Sec
Find Prime Numbers	242 Million Primes/Sec
Random String Sorting	67 Thousand Strings/Sec
Data Encryption	40,166 MBytes/Sec
Data Compression	613.5 MBytes/Sec

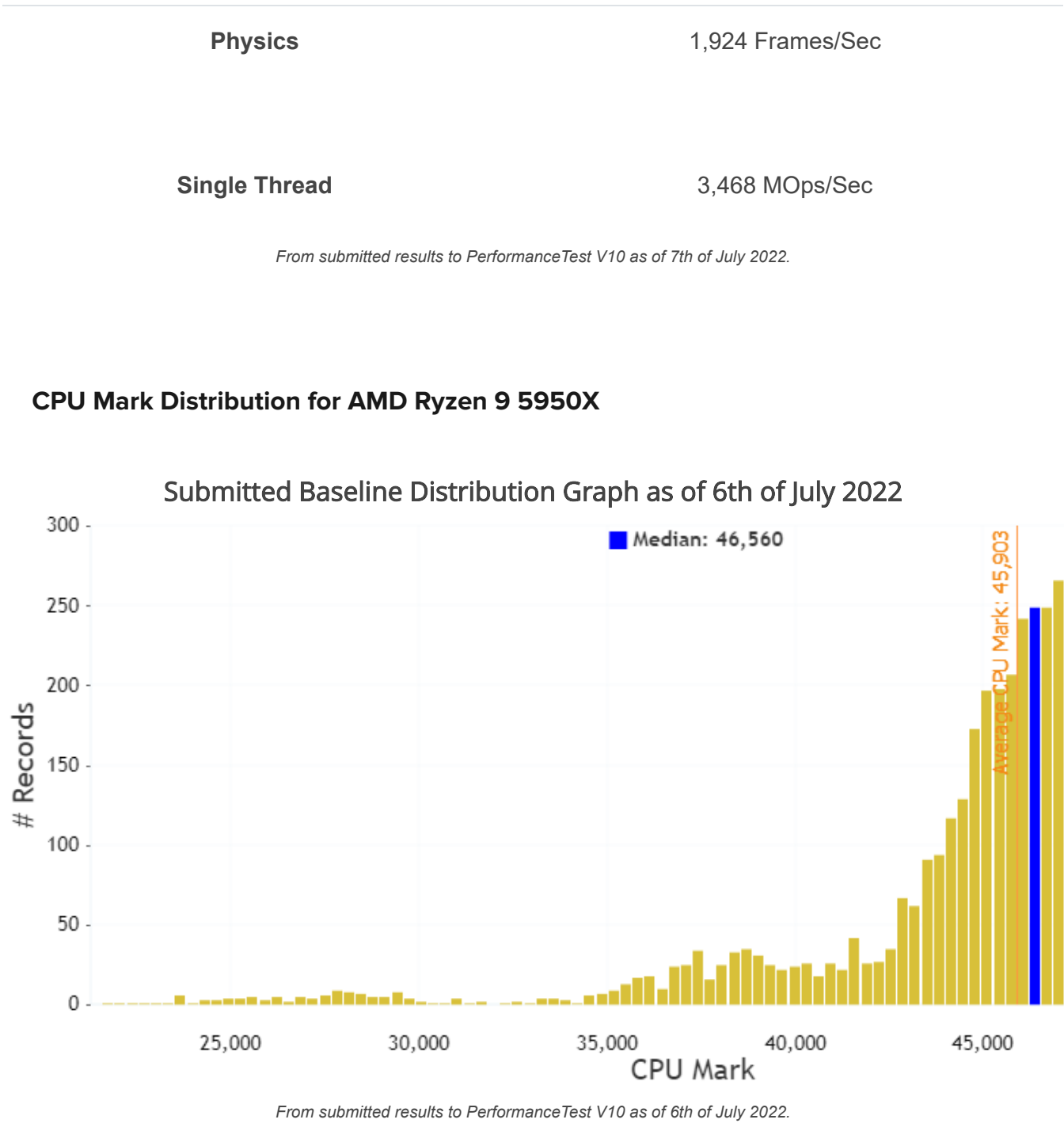
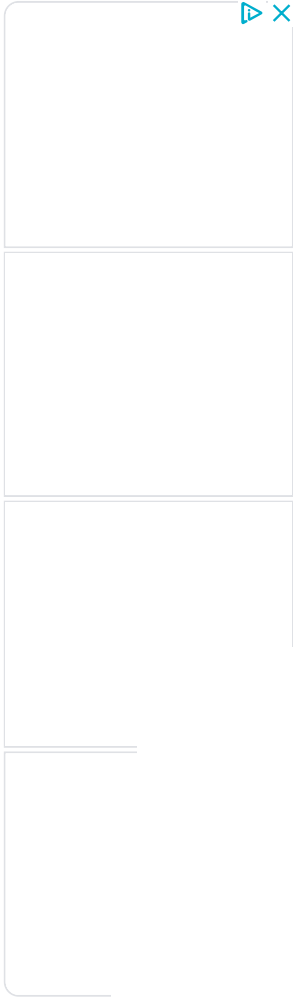
Average CPU Mark



45903

Single Thread Rating: 3468
Samples: 4721*
*[Margin for error](#): Low

+ COMPARE



Merchant	Price	Purchase
	\$548.89 USD	BUY NOW!
	\$849.70 USD	BUY NOW!

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

Pricing History





CPU Mark Relative to Top 10 Common Desktop CPUs

As of 8th of July 2022 - Higher results represent better performance

Processor	Average CPU Mark	
AMD Ryzen 9 5950X		45,903
AMD Ryzen 7 3700X		22,729
Apple M1 Max 10 Core 3200 MHz		22,398
Apple M1 Pro 10 Core 3200 MHz		22,174
AMD Ryzen 5 5600X		22,015
Intel Core i7-10700K @ 3.80GHz		19,240
Intel Core i9-9900K @ 3.60GHz		18,663
AMD Ryzen 5 3600		17,829
Apple M1 8 Core 3200 MHz		14,592
Intel Core i7-9700K @ 3.60GHz		14,552
Intel Core i7-8700K @ 3.70GHz		13,839

CPU Value (CPU Mark / \$Price)

As of 8th of July 2022 - Higher results represent better value

Processor	CPU Mark / \$Price	
AMD Ryzen 5 3600		142.64
AMD Ryzen 5 5600X		125.81
AMD Ryzen 9 5950X		83.63
AMD Ryzen 7 3700X		71.49
Intel Core i7-10700K @ 3.80GHz		61.67
Intel Core i7-9700K @ 3.60GHz		45.30
Intel Core i7-8700K @ 3.70GHz		42.71
Intel Core i9-9900K @ 3.60GHz		31.21
Apple M1 8 Core 3200 MHz		NA
Apple M1 Max 10 Core 3200 MHz		NA

Apple M1 Pro 10 Core 3200 MHz		NA
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Single Thread Rating

As of 8th of July 2022 - Higher results represent better performance

Processor	Average Thread Rating	
Apple M1 Max 10 Core 3200 MHz		3,848
Apple M1 Pro 10 Core 3200 MHz		3,837
Apple M1 8 Core 3200 MHz		3,756
AMD Ryzen 9 5950X		3,468
AMD Ryzen 5 5600X		3,359
Intel Core i7-10700K @ 3.80GHz		3,072
Intel Core i9-9900K @ 3.60GHz		2,955
Intel Core i7-9700K @ 3.60GHz		2,898
Intel Core i7-8700K @ 3.70GHz		2,762
AMD Ryzen 7 3700X		2,667
AMD Ryzen 5 3600		2,571

Last 5 Baselines for AMD Ryzen 9 5950X

Most recent listed first

Baseline	CPU Mark	
BL1592307 - Jul 08 2022		47588
BL1592278 - Jul 08 2022		45699
BL1592242 - Jul 08 2022		46099
BL5018741 - Jul 07 2022		46125
BL1592209 - Jul 07 2022		47063

Popular comparisons for AMD Ryzen 9 5950X

As of 8th of July 2022 - Higher results represent better performance

Processor	Average CPU Mark	
AMD Ryzen 9 5950X		45,903
Intel Core i9-12900K		41,270
AMD Ryzen 9 5900X		39,351

Intel Core i9-12900KF		41,223
AMD Ryzen 9 3900XT		32,976
AMD Ryzen Threadripper PRO 3955WX		40,198
Intel Core i9-12900		36,436
Intel Core i9-12900E		36,064
Intel Core i7-12700K		34,432
AMD Ryzen 9 3900X		32,789
AMD Ryzen 9 3900		30,628
Intel Core i9-10920X @ 3.50GHz		26,559

Software

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- [MemTest86](#)
- [WirelessMon](#)
- [Zoom Search Engine](#)
- [Free Software](#)

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