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MBP: Baseline (lite)

Intel Core i7-8559U testing with an Apple MacBook Pro (13-inch, 2018, Four Thunderbolt 3 Ports) and Intel Iris Plus 655 on macOS via the Phoronix Test Suite.

Automated Executive Summary

Core i7-8559U: macOS 12.0.1 had the most wins, coming in first place for 95% of the tests.

Based on the geometric mean of all complete results, the fastest (Core i7-8559U: macOS 12.0.1) was 1.023x the speed of the slowest (Core i7-8559U: macOS 12.4).

The results with the greatest spread from best to worst included:

SQLite Speedtest (Timed Time - Size 1,000) at 1.147x

Timed ImageMagick Compilation (Time To Compile) at 1.105x

PyBench (Total For Average Test Times) at 1.044x

Zstd Compression (Compression Level: 8, Long Mode - Compression Speed) at 1.038x

Timed FFmpeg Compilation (Time To Compile) at 1.035x

Zstd Compression (Compression Level: 3 - Compression Speed) at 1.03x

Zstd Compression (Compression Level: 19, Long Mode - Compression Speed) at 1.03x

Zstd Compression (Compression Level: 19 - Compression Speed) at 1.026x

Timed LLVM Compilation (Build System: Unix Makefiles) at 1.026x

Zstd Compression (Compression Level: 8 - Compression Speed) at 1.018x.

Test Systems:

Core i7-8559U: macOS 12.0.1

Processor: Intel Core i7-8559U @ 2.70GHz (4 Cores / 8 Threads), Motherboard: Apple MacBook Pro (1715.40.15.0.0 BIOS), Memory: 2 x 8 GB LPDDR3-2133MHz, Disk: 459GB, Graphics: Intel Iris Plus 655 2GB, Monitor: Color LCD

OS: macOS 12.0.1, Kernel: 21.1.0 (x86_64), Compiler: GCC 12.0.5 + Clang 12.0.5 + Xcode 13.1, File-System: APFS, Screen Resolution: 2560x1600

Environment Notes: XPC_FLAGS=0x0

Processor Notes: CPU Microcode: 234

Python Notes: Python 2.7.18 + Python 3.9.7

Core i7-8559U: macOS 12.4

Processor: Intel Core i7-8559U @ 2.70GHz (4 Cores / 8 Threads), Motherboard: Apple MacBook Pro (1731.120.10.0.0 BIOS), Memory: 2 x 8 GB LPDDR3-2133MHz, Disk: 459GB, Graphics: Intel Iris Plus 655 2GB, Monitor: Color LCD

OS: macOS 12.4, Kernel: 21.5.0 (x86_64), OpenCL: OpenCL 1.2 (Apr 19 2022 18:44:25), Compiler: GCC 12.0.5 + Clang 12.0.5 + Xcode 13.4.1, File-System: APFS, Screen Resolution: 2560x1600

Environment Notes: XPC_FLAGS=0x0

Processor Notes: CPU Microcode: 240

Python Notes: Python 3.9.13

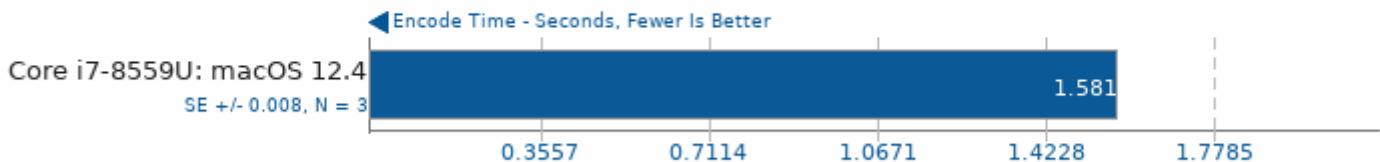
	Core i7-8559U: macOS 12.0.1	Core i7-8559U: macOS 12.4
WebP Image Encode - Default (Encode Time - sec)	1.581	
Standard Deviation	0.9%	
WebP Image Encode - Quality 100 (Encode Time - sec)	2.635	
Standard Deviation	1.2%	
WebP Image Encode - Q.1.L (Encode Time - sec)	19.605	
Standard Deviation	0.5%	
WebP Image Encode - Q.1.H.C (Encode Time - sec)	6.998	
Standard Deviation	0.7%	
WebP Image Encode - Q.1.L.H.C (Encode Time - sec)	51.258	
Standard Deviation	0.5%	
simdjson - Kostya (GB/s)	2.16	
Standard Deviation	0.3%	
simdjson - TopTweet (GB/s)	4.87	
Standard Deviation	0.2%	

simdjson - LargeRand (GB/s)	0.69
Standard Deviation	0%
simdjson - PartialTweets (GB/s)	4.17
Standard Deviation	0%
simdjson - DistinctUserID (GB/s)	4.83
Standard Deviation	0.3%
Zstd Compression - 3 - Compression Speed (MB/s)	1459
Normalized	100%
Standard Deviation	3.1%
Zstd Compression - 3 - D.S (MB/s)	3031
Normalized	100%
Standard Deviation	2.6%
Zstd Compression - 8 - Compression Speed (MB/s)	409.4
Normalized	100%
Standard Deviation	0.4%
Zstd Compression - 8 - D.S (MB/s)	3070
Normalized	100%
Standard Deviation	0.2%
Zstd Compression - 19 - Compression Speed (MB/s)	15.7
Normalized	100%
Standard Deviation	2.2%
Zstd Compression - 19 - D.S (MB/s)	2569
Normalized	100%
Standard Deviation	0.5%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	964.0
Normalized	100%
Standard Deviation	0.2%
Zstd Compression - 3, Long Mode - D.S (MB/s)	3158
Standard Deviation	0.5%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	422.0
Normalized	100%
Standard Deviation	0.1%
Zstd Compression - 8, Long Mode - D.S (MB/s)	3257
Normalized	100%
Standard Deviation	0.8%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	13.6
Normalized	100%
Standard Deviation	2.2%
Zstd Compression - 19, Long Mode - D.S (MB/s)	2643
Normalized	100%
Standard Deviation	0.5%
GraphicsMagick - Swirl (Iterations/min)	47
Standard Deviation	1.2%
GraphicsMagick - Rotate (Iterations/min)	667
Standard Deviation	1%
GraphicsMagick - Sharpen (Iterations/min)	14
Standard Deviation	0%
GraphicsMagick - Enhanced (Iterations/min)	21
Standard Deviation	0%
GraphicsMagick - Resizing (Iterations/min)	106
Standard Deviation	3.7%

GraphicsMagick - Noise-Gaussian (Iterations/min)	29	
Standard Deviation	0%	
GraphicsMagick - HWB Color Space (Iterations/min)	188	
Standard Deviation	0.3%	
Timed FFmpeg Compilation - Time To Compile (sec)	163.963	169.620
Normalized	100%	96.66%
Standard Deviation	0.3%	2.4%
Timed ImageMagick Compilation - Time To Compile	59.002	65.203
Normalized	100%	90.49%
Standard Deviation	1.1%	2.2%
Timed LLVM Compilation - Ninja (sec)	1809	1840
Normalized	100%	98.28%
Standard Deviation	0.8%	0.1%
Timed LLVM Compilation - Unix Makefiles (sec)	1862	1910
Normalized	100%	97.49%
Standard Deviation	0.2%	1.8%
SQLite Speedtest - Timed Time - Size 1,000 (sec)	91.708	105.148
Normalized	100%	87.22%
Standard Deviation	0.5%	2.1%
PyBench - T.F.A.T.T (Milliseconds)	1366	1309
Normalized	95.83%	100%
Standard Deviation	0.8%	1.3%
Maxon Cinebench - Multi-Core (Score)		1511
Standard Deviation		2.4%
Maxon Cinebench - Single-Core (Score)		358.84
Standard Deviation		0.7%
Maxon Cinebench - Multi-Core (Score)		4200
Standard Deviation		0.3%
Maxon Cinebench - Single-Core (Score)		1113
Standard Deviation		0.7%
Git - T.T.C.C.G.C (sec)	70.002	70.724
Normalized	100%	98.98%
Standard Deviation	0.7%	0.3%
simdjson - Kostya (GB/s)	2.17	2.14
Normalized	100%	98.62%
Standard Deviation	3%	0.5%
simdjson - LargeRand (GB/s)	0.68	0.68
Standard Deviation	0.8%	0.8%
simdjson - PartialTweets (GB/s)	4.03	4.03
Standard Deviation	0.1%	0.2%
simdjson - DistinctUserID (GB/s)	4.85	4.85
Standard Deviation	0.2%	0.1%

WebP Image Encode 1.1

Encode Settings: Default



WebP Image Encode 1.1

Encode Settings: Quality 100



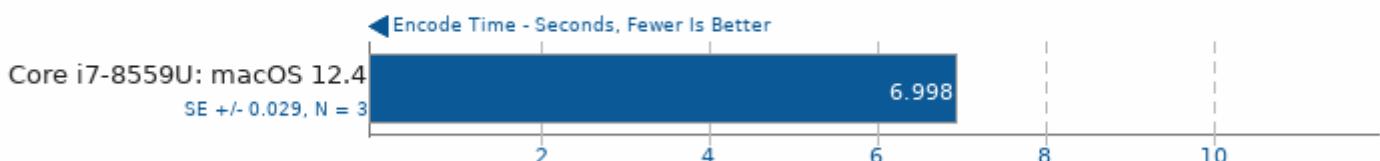
WebP Image Encode 1.1

Encode Settings: Quality 100, Lossless



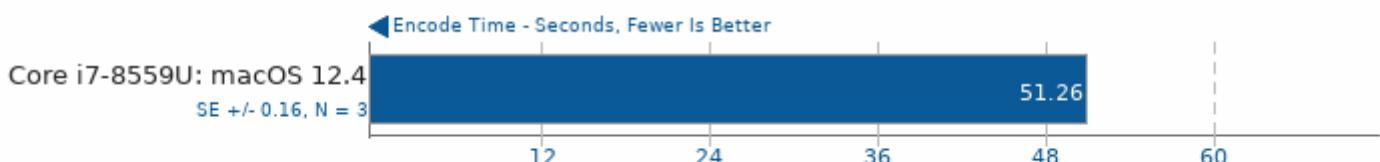
WebP Image Encode 1.1

Encode Settings: Quality 100, Highest Compression



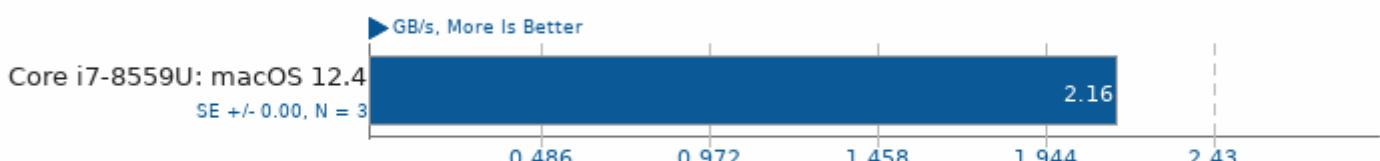
WebP Image Encode 1.1

Encode Settings: Quality 100, Lossless, Highest Compression



simdjson 2.0

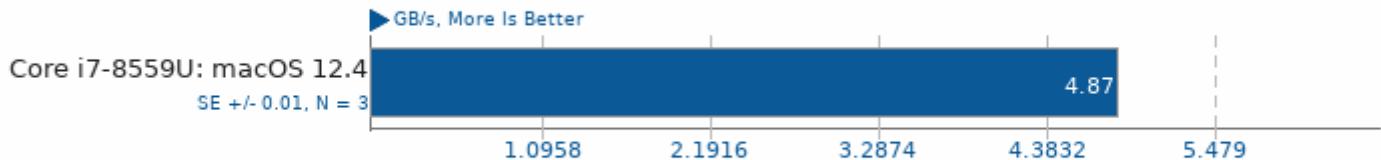
Throughput Test: Kostya



1. (CXX) g++ options: -O3 -isysroot

simdjson 2.0

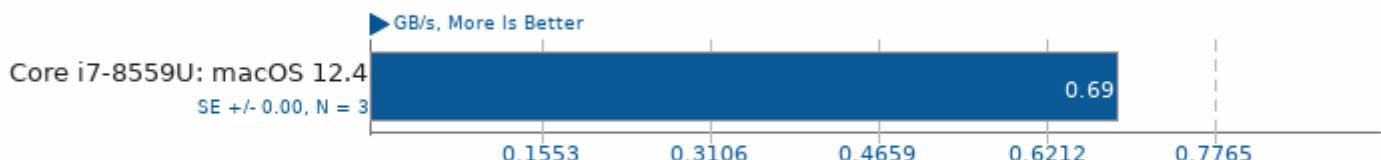
Throughput Test: TopTweet



1. (CXX) g++ options: -O3 -isysroot

simdjson 2.0

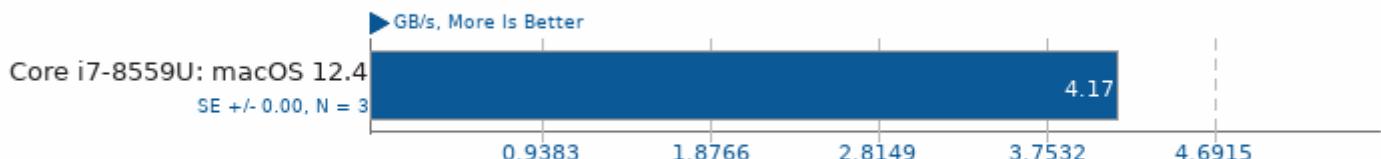
Throughput Test: LargeRandom



1. (CXX) g++ options: -O3 -isysroot

simdjson 2.0

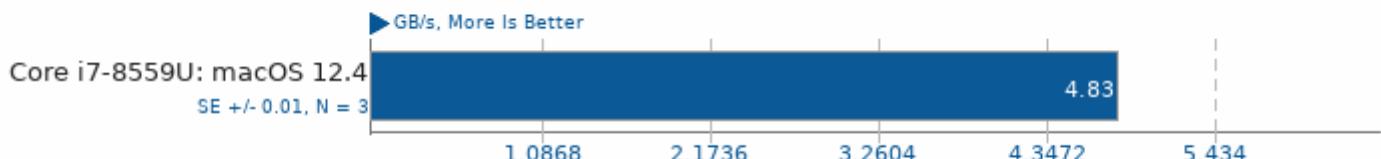
Throughput Test: PartialTweets



1. (CXX) g++ options: -O3 -isysroot

simdjson 2.0

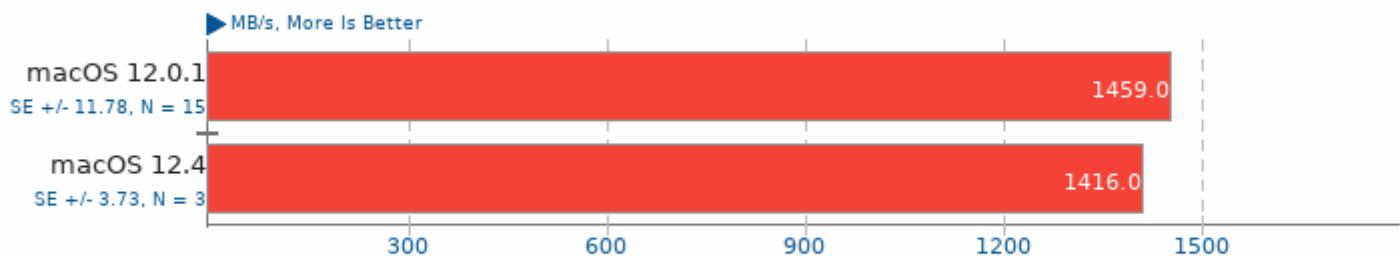
Throughput Test: DistinctUserID



1. (CXX) g++ options: -O3 -isysroot

Zstd Compression 1.5.0

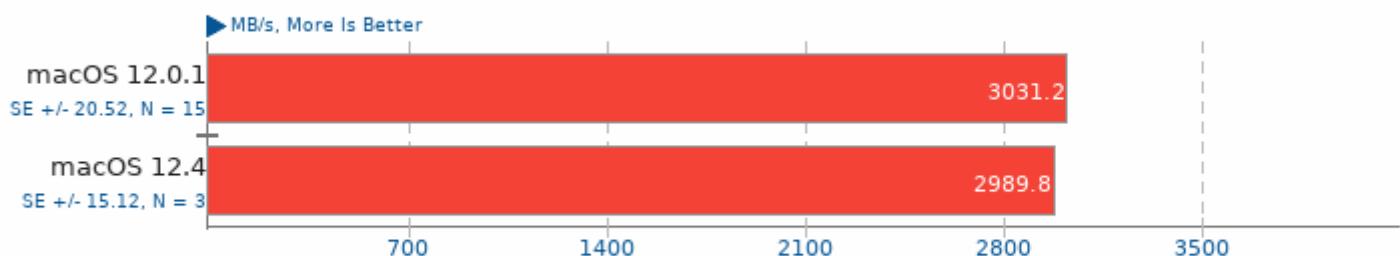
Compression Level: 3 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

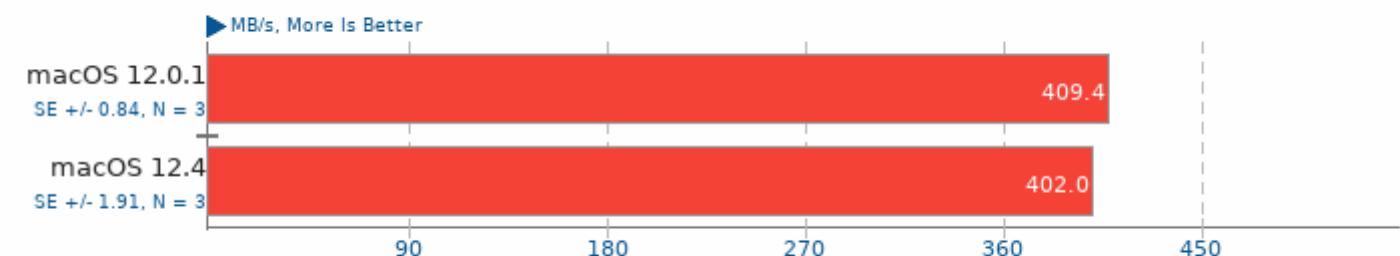
Compression Level: 3 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

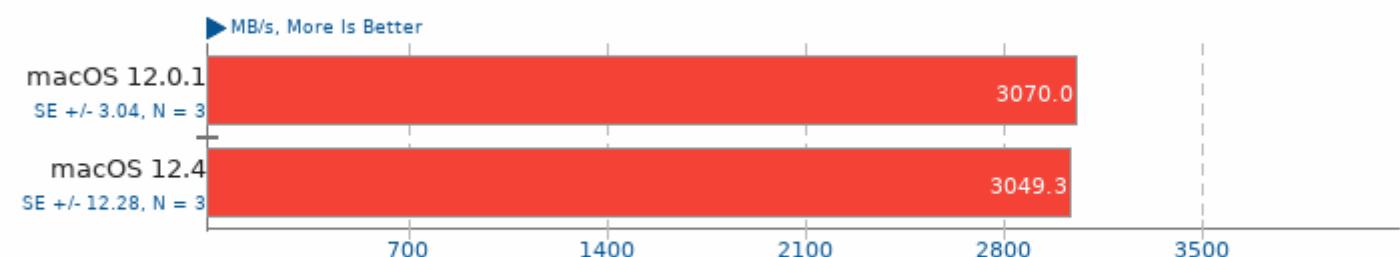
Compression Level: 8 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

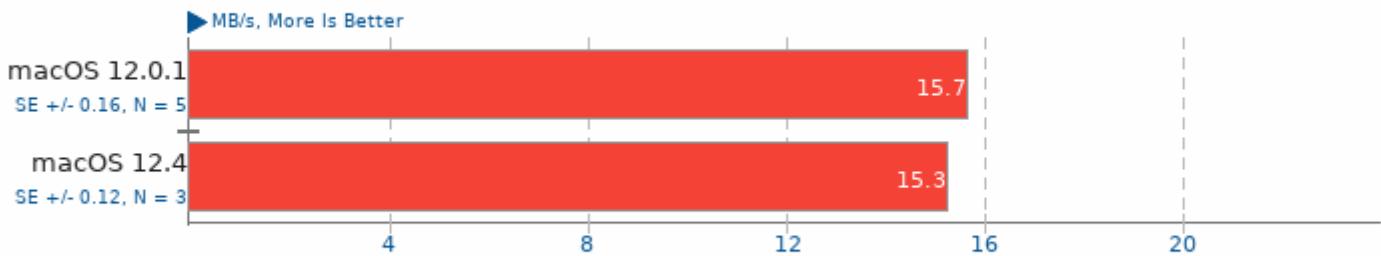
Compression Level: 8 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

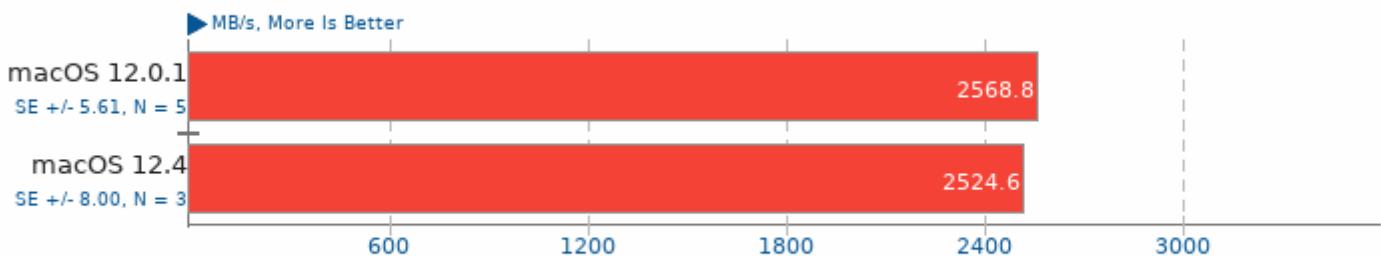
Compression Level: 19 - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

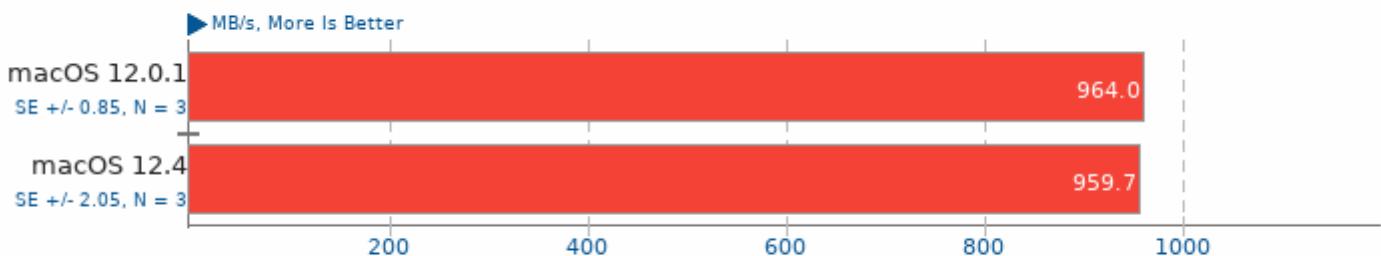
Compression Level: 19 - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

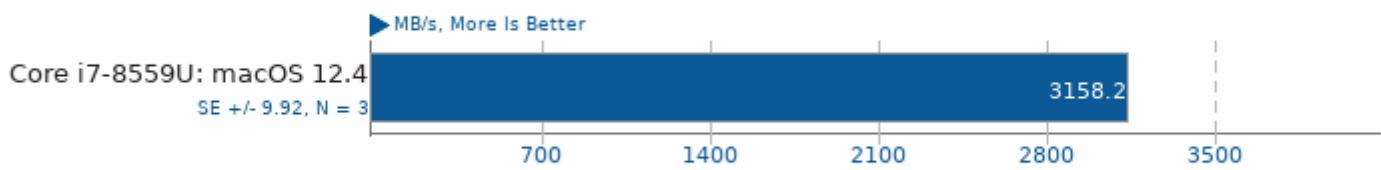
Compression Level: 3, Long Mode - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

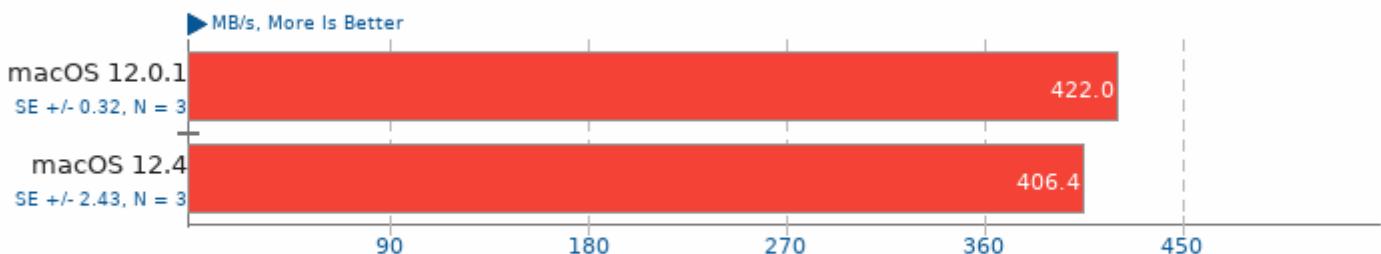
Compression Level: 3, Long Mode - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

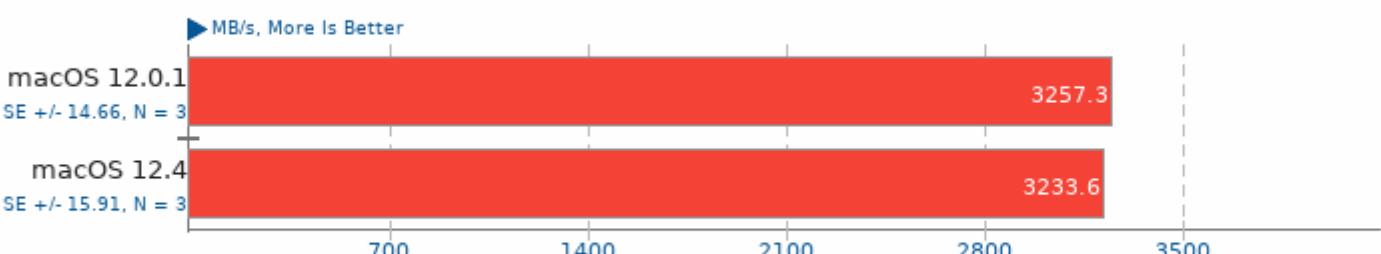
Compression Level: 8, Long Mode - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

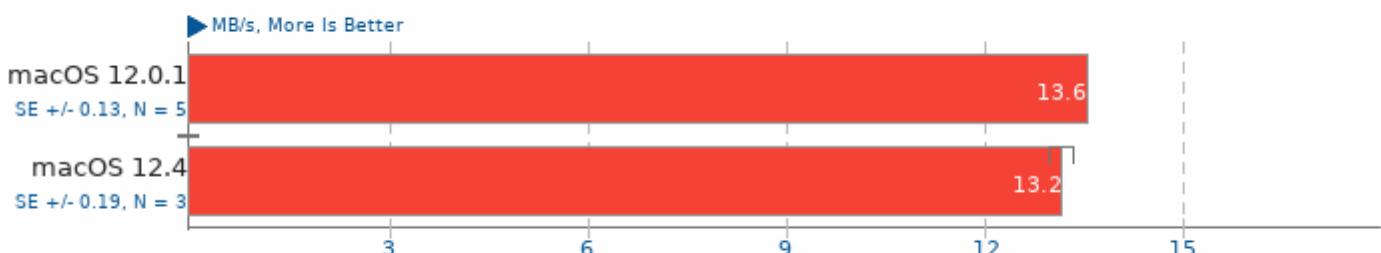
Compression Level: 8, Long Mode - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

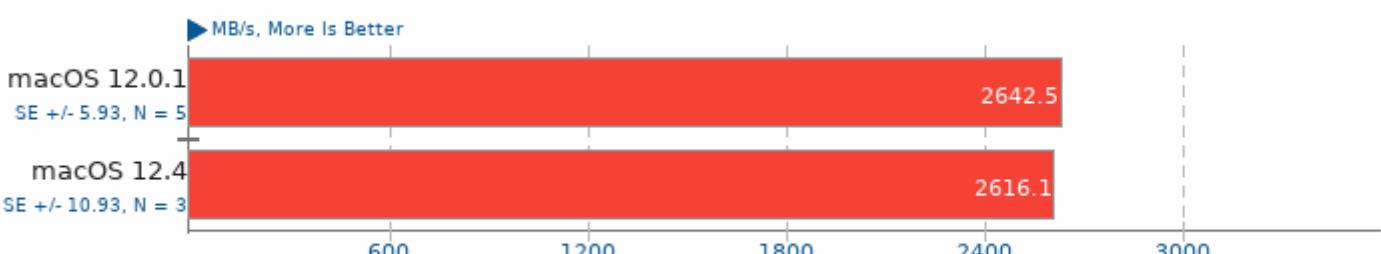
Compression Level: 19, Long Mode - Compression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

Zstd Compression 1.5.0

Compression Level: 19, Long Mode - Decompression Speed



1. (CC) gcc options: -O3 -pthread -lz -llzma

GraphicsMagick 1.3.33

Operation: Swirl



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

GraphicsMagick 1.3.33

Operation: Rotate



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

GraphicsMagick 1.3.33

Operation: Sharpen



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

GraphicsMagick 1.3.33

Operation: Enhanced



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

GraphicsMagick 1.3.33

Operation: Resizing



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

GraphicsMagick 1.3.33

Operation: Noise-Gaussian



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

GraphicsMagick 1.3.33

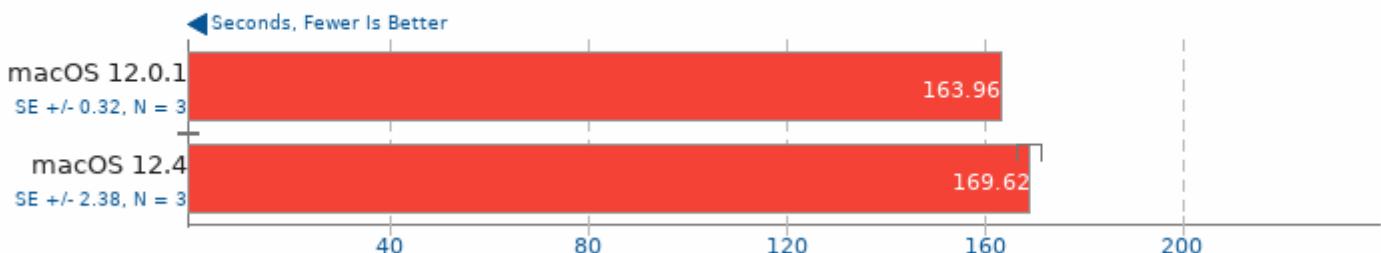
Operation: HWB Color Space



1. (CC) gcc options: -O2 -lwebp -lwebpmux -ltiff -lfreetype -jpeg -lXext -lX11 -llzma -lbz2 -lxml2 -lz -lzstd -lm -lpthread

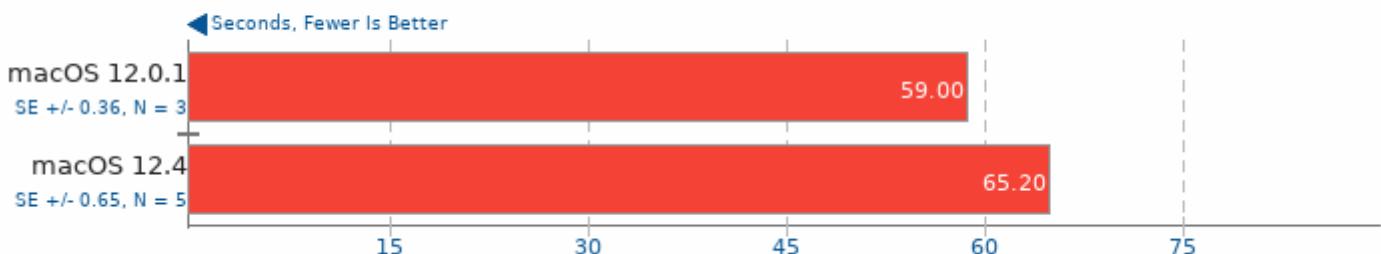
Timed FFmpeg Compilation 4.4

Time To Compile



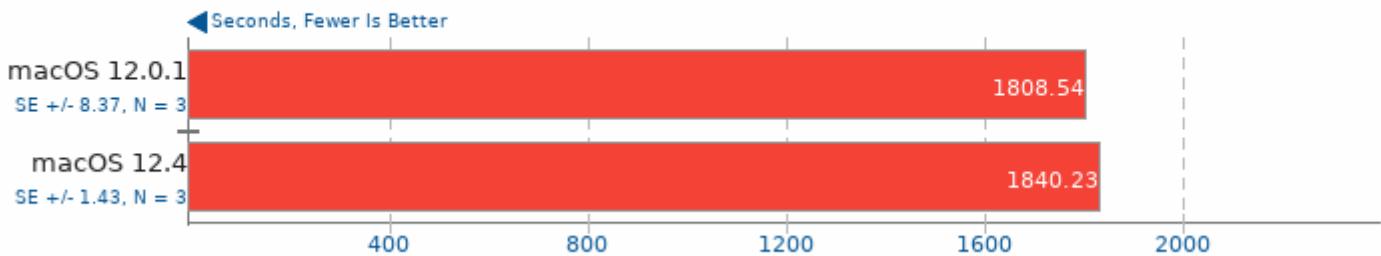
Timed ImageMagick Compilation 6.9.0

Time To Compile



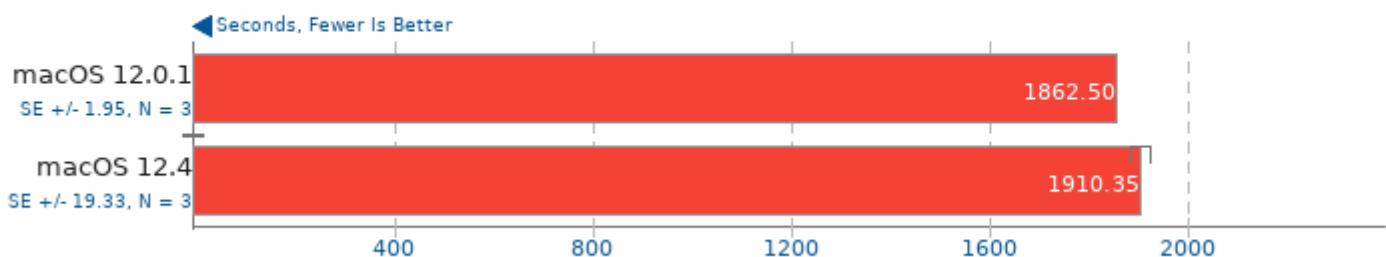
Timed LLVM Compilation 13.0

Build System: Ninja



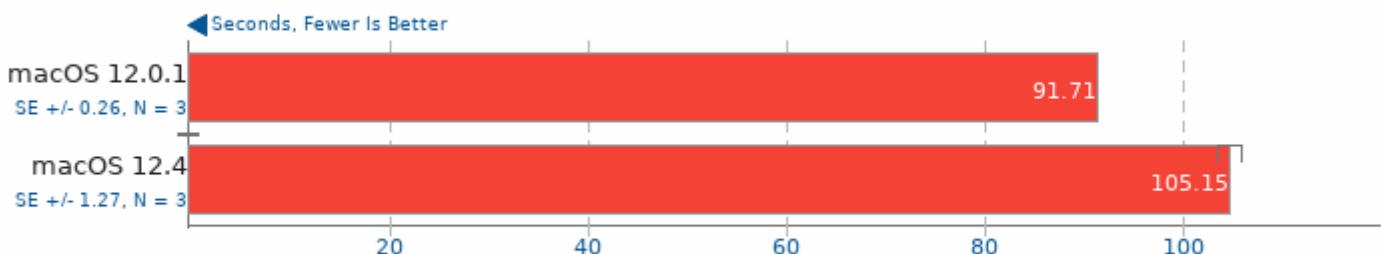
Timed LLVM Compilation 13.0

Build System: Unix Makefiles



SQLite Speedtest 3.30

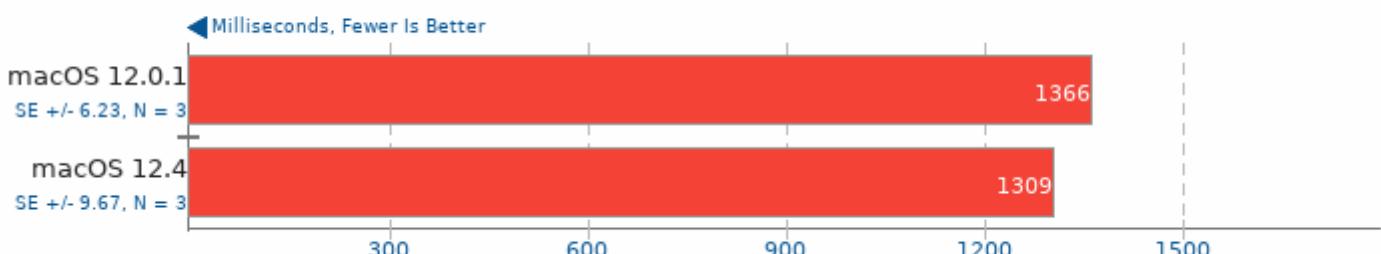
Timed Time - Size 1,000



1. (CC) gcc options: -O2 -lz

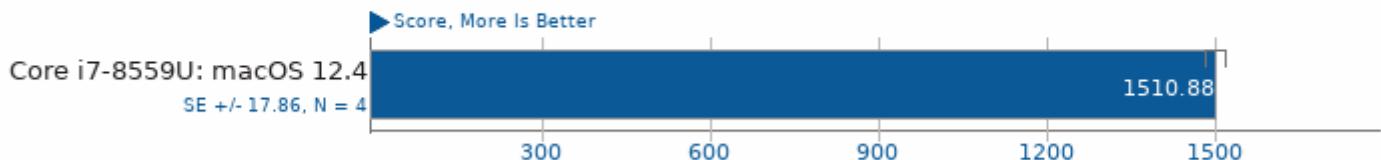
PyBench 2018-02-16

Total For Average Test Times



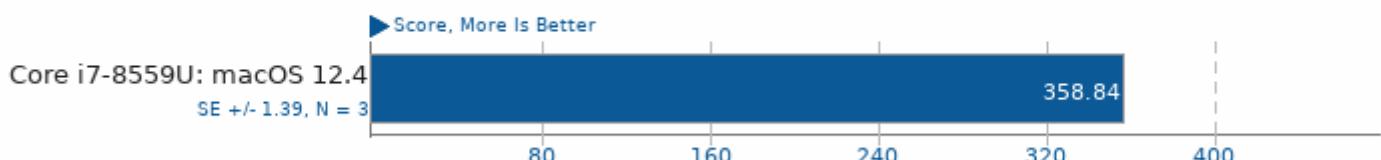
Maxon Cinebench 20

Test: Multi-Core



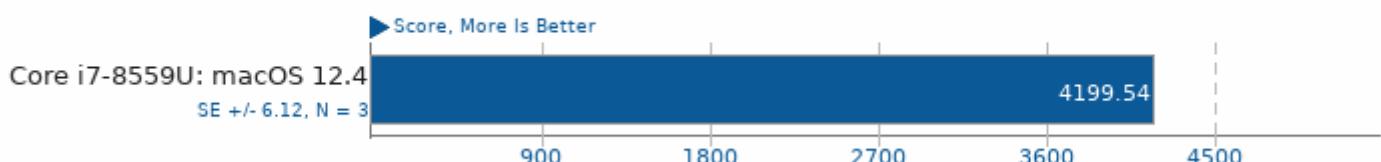
Maxon Cinebench 20

Test: Single-Core



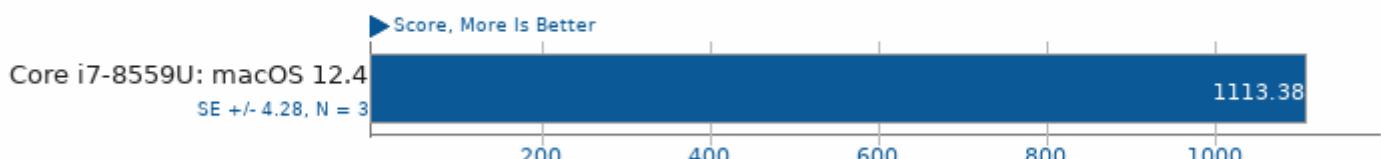
Maxon Cinebench 23

Test: Multi-Core



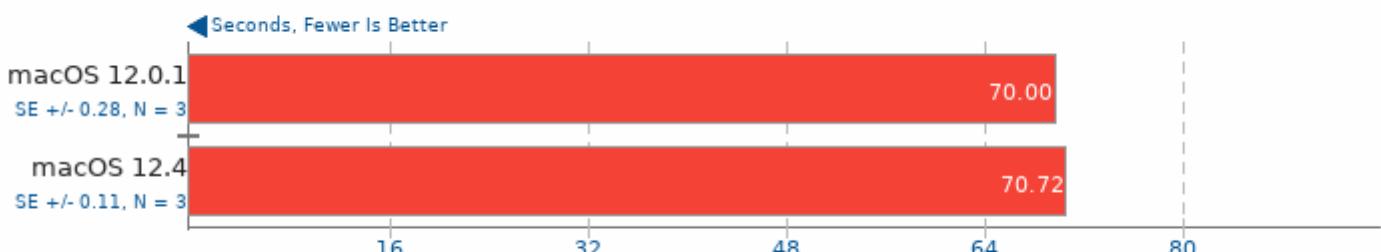
Maxon Cinebench 23

Test: Single-Core



Git

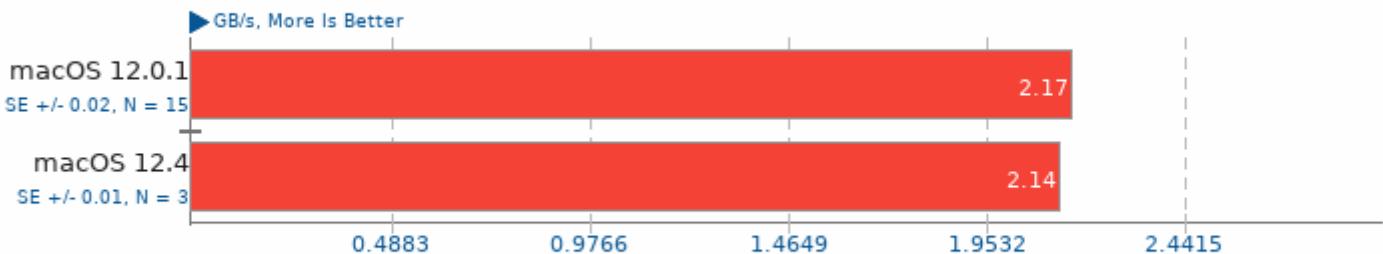
Time To Complete Common Git Commands



1. git version 2.30.1 (Apple Git-130)

simdjson 1.0

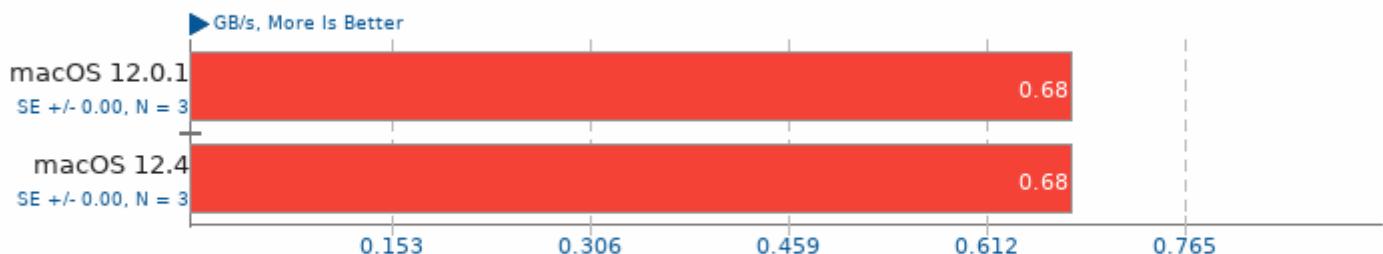
Throughput Test: Kostya



1. (CXX) g++ options: -O3 -isysroot

simdjson 1.0

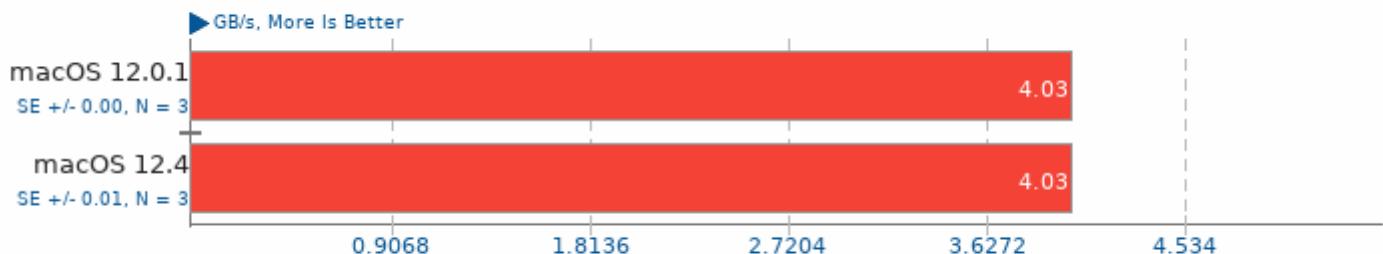
Throughput Test: LargeRandom



1. (CXX) g++ options: -O3 -isysroot

simdjson 1.0

Throughput Test: PartialTweets



1. (CXX) g++ options: -O3 -isysroot

simdjson 1.0

Throughput Test: DistinctUserID

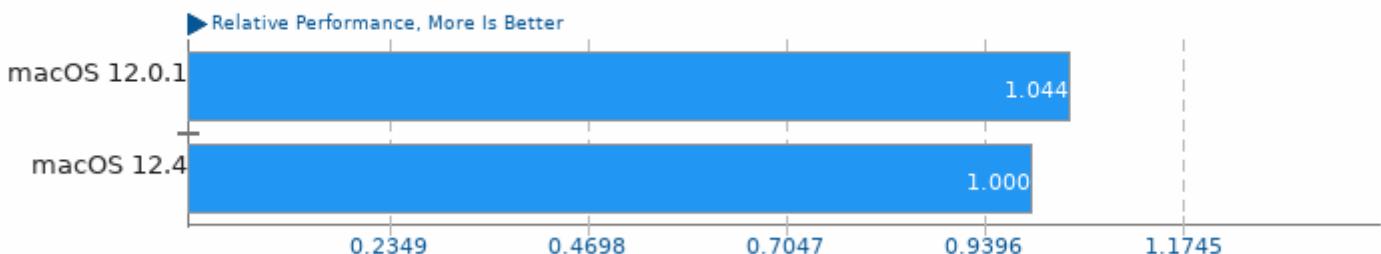


1. (CXX) g++ options: -O3 -isysroot

These geometric means are based upon test groupings / test suites for this result file.

Geometric Mean Of Timed Code Compilation Tests

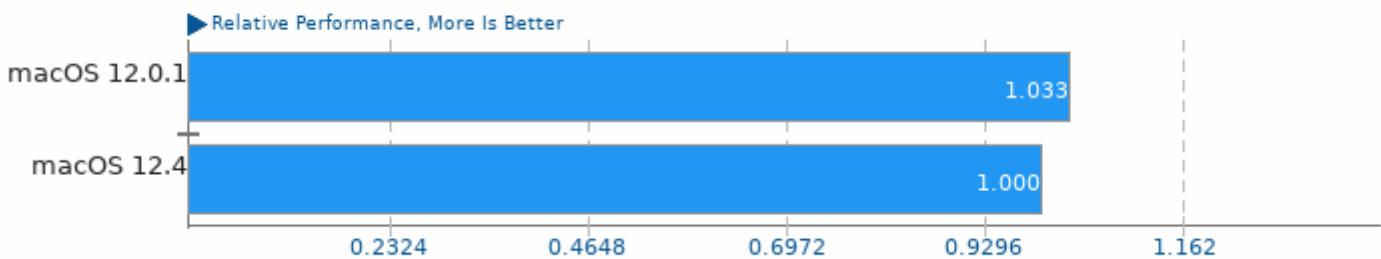
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/build-imagemagick, pts/build-llvm and pts/build-ffmpeg

Geometric Mean Of C/C++ Compiler Tests

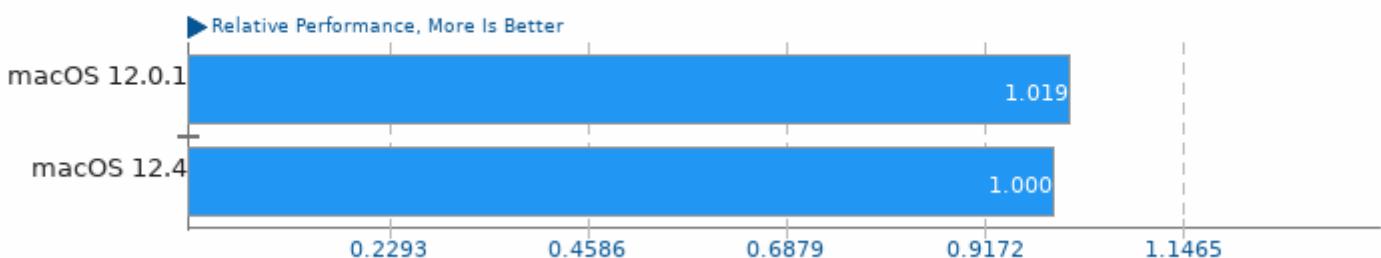
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/graphics-magick, pts/build-imagemagick, pts/build-llvm, pts/sqlite-speedtest, pts/compress-zstd and pts/build-ffmpeg

Geometric Mean Of CPU Massive Tests

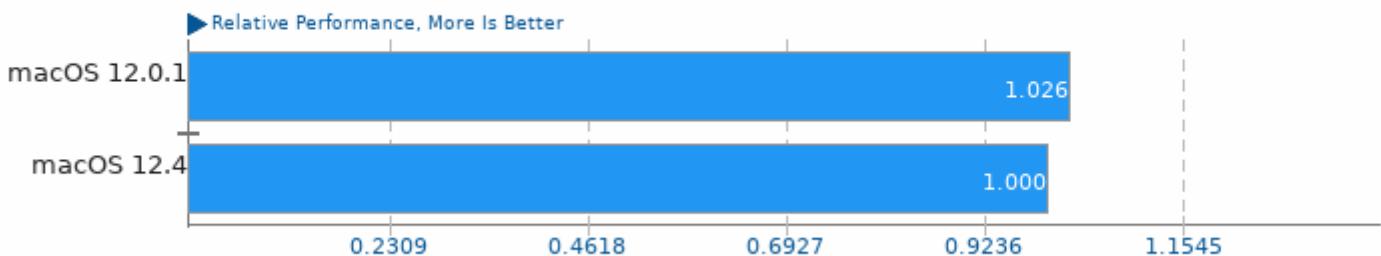
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/build-llvm, pts/compress-zstd and pts/graphics-magick

Geometric Mean Of Multi-Core Tests

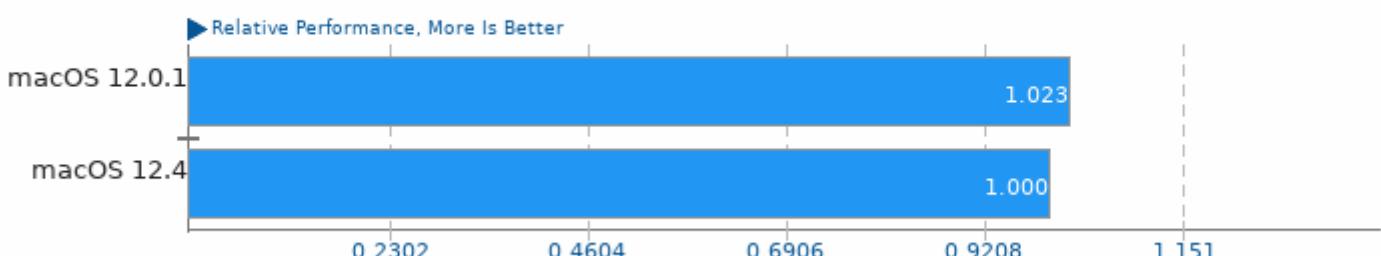
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/graphics-magick, pts/compress-zstd, pts/build-imagemagick, pts/build-llvm, pts/build-ffmpeg and pts/cinebench

Geometric Mean Of Programmer / Developer System Benchmarks Tests

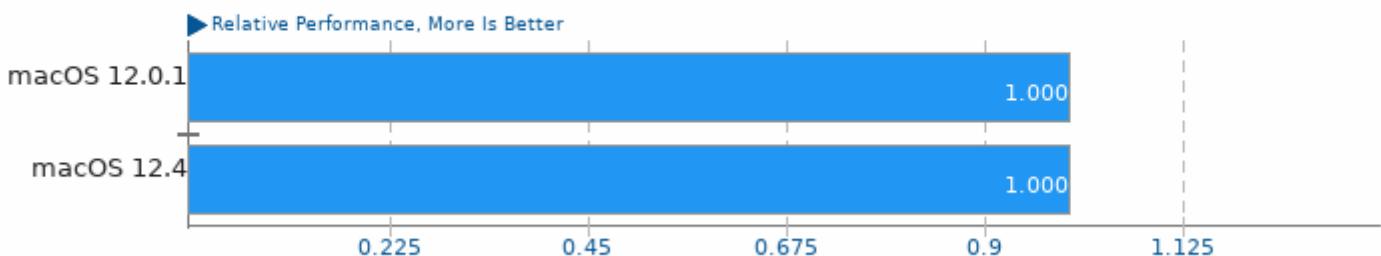
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/simjson, pts/sqlite-speedtest, pts/git, pts/compress-zstd, pts/pybench, pts/build-imagemagick, pts/build-llvm and pts/build-ffmpeg

Geometric Mean Of Python Tests

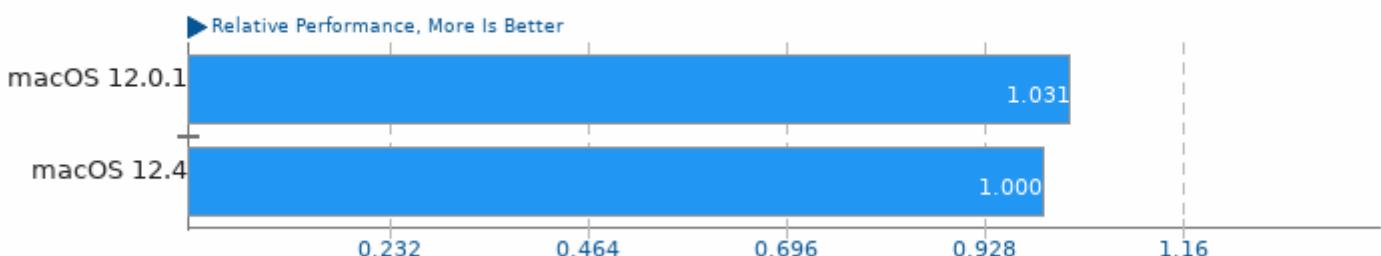
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/build-llvm and pts/pybench

Geometric Mean Of Server Tests

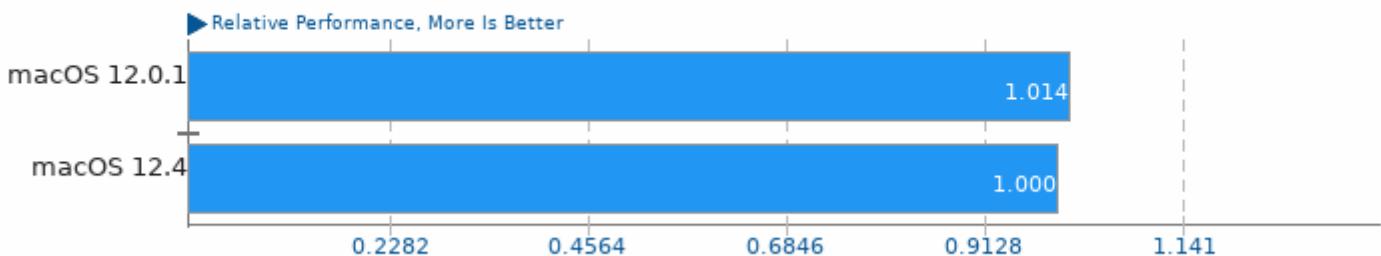
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/simdjson and pts/sqlite-speedtest

Geometric Mean Of Server CPU Tests

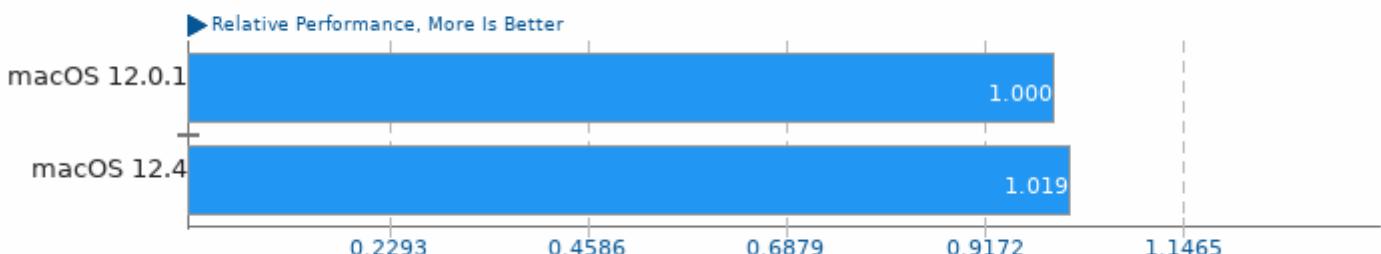
Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/build-llvm, pts/compress-zstd and pts/pybench

Geometric Mean Of Single-Threaded Tests

Result Composite - MBP: Baseline (lite)



Geometric mean based upon tests: pts/pybench and pts/git

This file was automatically generated via the Phoronix Test Suite benchmarking software on Monday, 8 August 2022 12:49.