

www.phoronix-test-suite.com

test

test

Automated Executive Summary

test2 had the most wins, coming in first place for 50% of the tests.

Based on the geometric mean of all complete results, the fastest (test2) was 1.028x the speed of the slowest (test). test3 was 0.978x the speed of test2 and test was 0.994x the speed of test3.

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

Dbench (12 Clients) at 1.023x
SQLite (Timed SQLite Insertions) at 1.019x
7-Zip Compression (Compress Speed Test) at 1x
Bork File Encrypter (File Encryption Time) at 1x
C-Ray (Total Time) at 1x
CacheBench (Read Cache) at 1x
CacheBench (Write Cache) at 1x
Compile Bench (Test: Compile) at 1x
Compile Bench (Test: Initial Create) at 1x
Compile Bench (Test: Read Compiled Tree) at 1x.

Test Systems:

test

test2

test3

Processor: Intel Xeon E5-26xx @ 2.19GHz (2 Cores), Motherboard: Hetzner vServer v2, Chipset: Intel 440FX- 82441FX PMC, Memory: 1 x 8000 MB RAM QEMU, Disk: 82GB QEMU HDD, Graphics: bochsdrmfb, Network: Red Hat Virtio device

OS: Debian 9.2, Kernel: 4.9.0-4-amd64 (x86_64), Compiler: GCC 6.3.0 20170516, File-System: ext4, Screen Resolution: 1024x768, System Layer: KVM

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-target-system-zlib --with-tune=generic -v
Disk Notes: NOOP / data=ordered,discard,errors=remount-ro,relatime,rw
System Notes: Python 2.7.13.

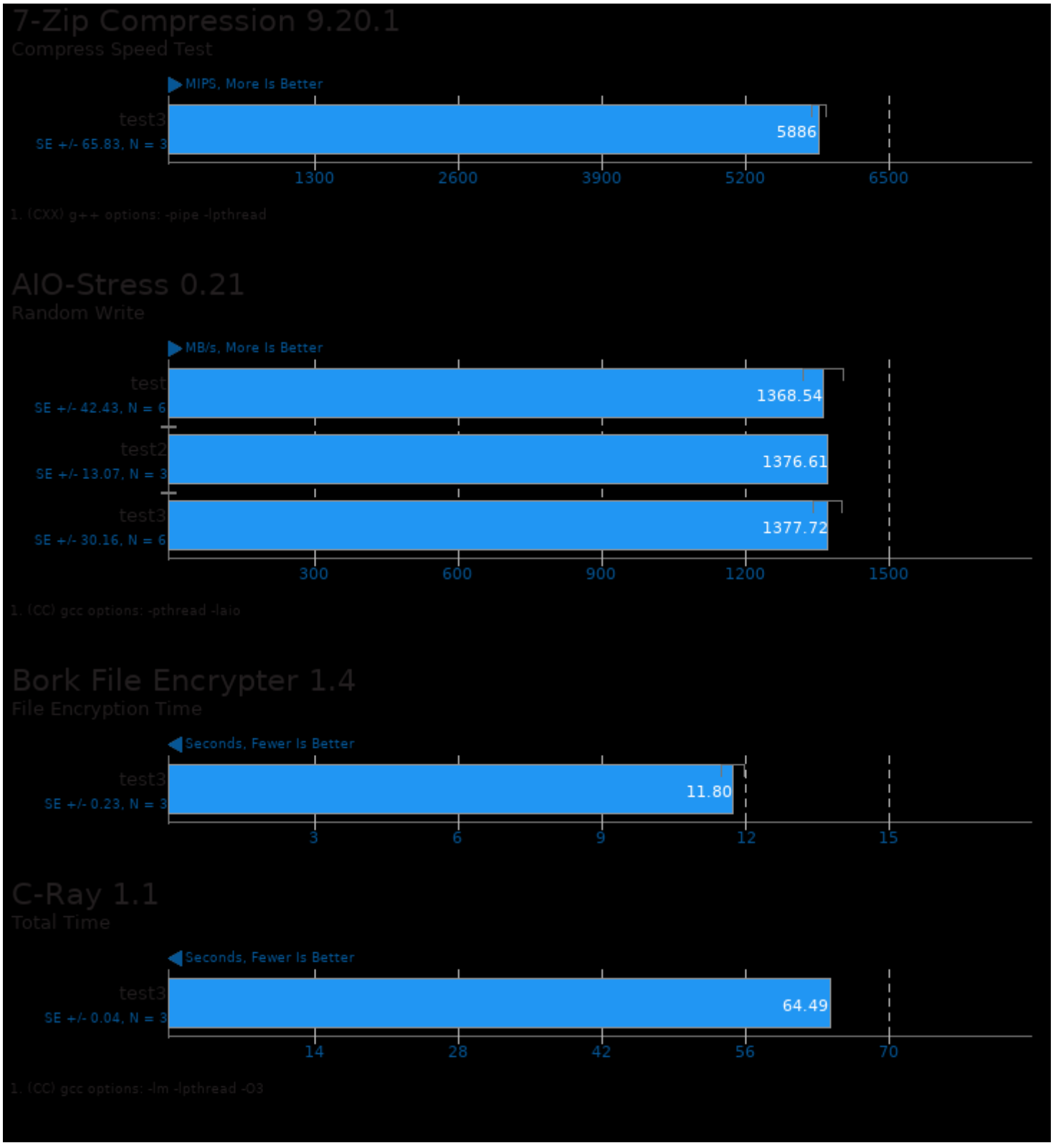
	test	test2	test3
7-Zip Compression - C.S.T (MIPS)			5886
Standard Deviation			1.9%
AIO-Stress - Rand Write (MB/s)	1369	1377	1378
Normalized	99.33%	99.92%	100%
Standard Deviation	7.6%	1.6%	5.4%
Bork File Encrypter - F.E.T (sec)			11.80
Standard Deviation			3.3%
C-Ray - Total Time (sec)			64.49
Standard Deviation			0.1%
CacheBench - Read Cache (MB/s)			2118
Standard Deviation			0.1%
CacheBench - Write Cache (MB/s)			17558
Standard Deviation			0.1%
Compile Bench - Compile (MB/s)			722.29
Standard Deviation			0.2%
Compile Bench - Initial Create (MB/s)			234.63
Standard Deviation			3.3%
Compile Bench - Read Compiled Tree (MB/s)			911.59
Standard Deviation			1%
Crafty - Elapsed Time (sec)			106.06
Standard Deviation			0.2%
Dbench - 12 Clients (MB/s)	1215		1187
Normalized	100%		97.72%
Standard Deviation	0.3%		0.3%
Dbench - 48 Clients (MB/s)			908.38
Standard Deviation			0.3%

test

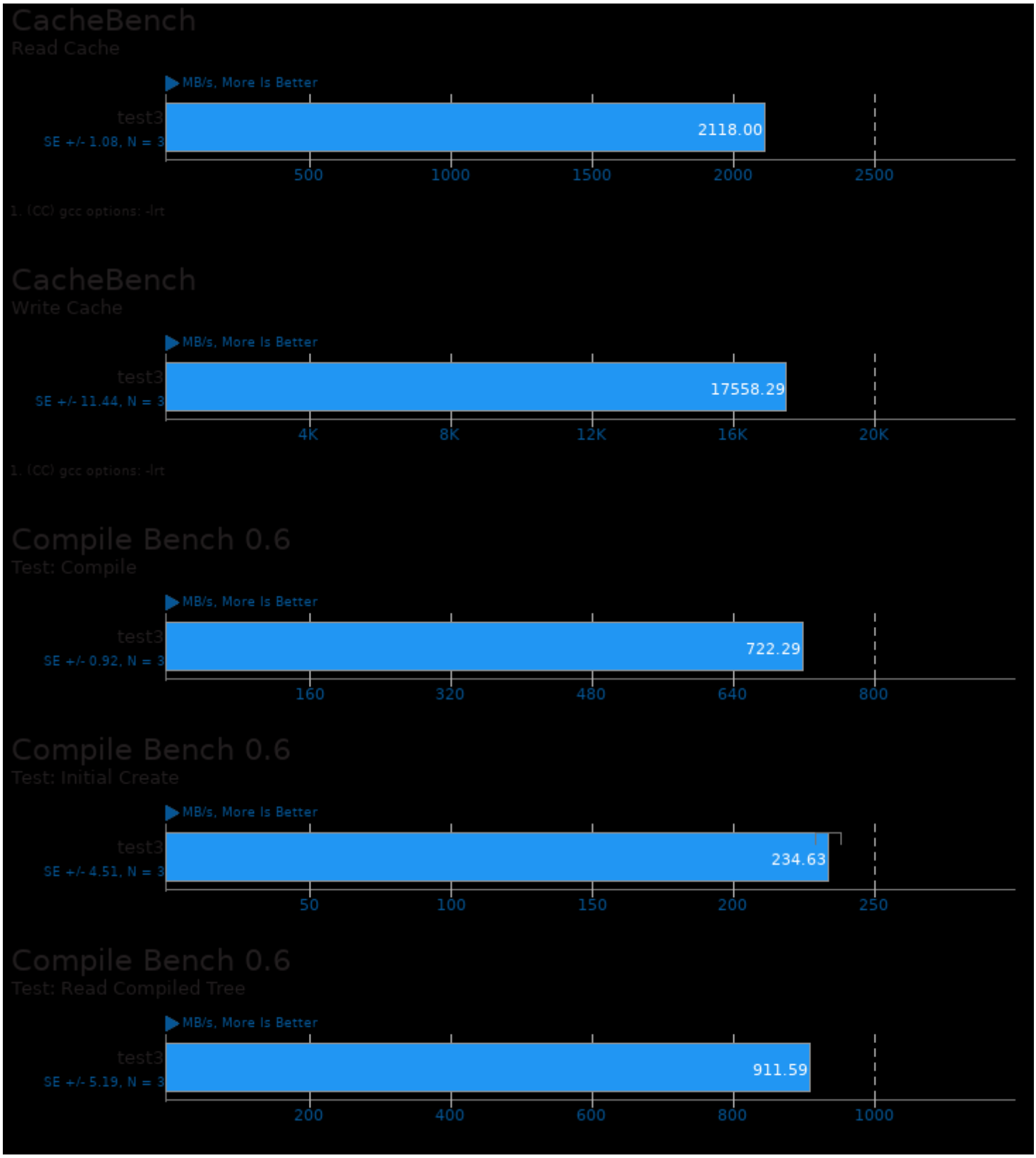
Dbench - 128 Clients (MB/s)			837.59
Standard Deviation			0.1%
Dbench - 1 Clients (MB/s)			399.05
Standard Deviation			0.6%
dcraw - R.T.P.I.C (sec)			65.72
Standard Deviation			0.1%
FFmpeg - H.2.H.T.N.D (sec)			19.13
Standard Deviation			1%
Fhourstones - C.C.4.S (Kpos / sec)			8107
Standard Deviation			0.2%
FLAC Audio Encoding - WAV To FLAC (sec)			8.91
Standard Deviation			0.6%
FS-Mark - 1.F.1.S (Files/s)	**171.28**	**184.13**	175.28
Normalized	93.02%	100%	95.19%
Standard Deviation	13.7%	10%	8.1%
GraphicsMagick - HWB Color Space (Iterations/min)			132
Gzip Compression - 2.F.C (sec)			16.20
Standard Deviation			3.4%
Java SciMark - FFT Performance (Mflops)			835.44
Standard Deviation			3.2%
Java SciMark - SOR Performance (Mflops)			908.41
Standard Deviation			0.1%
Java SciMark - C.P (Mflops)			1439
Standard Deviation			0.6%
Java SciMark - M.C.P (Mflops)			614.16
Standard Deviation			0.7%
LAME MP3 Encoding - WAV To MP3 (sec)			16.77
Standard Deviation			0.4%
LZMA Compression - 2.F.C (sec)			447.03
Standard Deviation			0.4%
Mencoder - AVI To LAVC (sec)			29.05
Standard Deviation			0.6%
Minion - Solitaire (sec)			109.28
Standard Deviation			0.6%
NGINX Benchmark - S.W.P.S (Reqs/sec)			39000
Standard Deviation			0.8%
Parallel BZIP2 Compression - 2.F.C (sec)			33.62
Standard Deviation			0.2%
PHPBench - P.B.S (Score)			325291
Standard Deviation			0.6%
PostMark - D.T.P (TPS)			4190
Standard Deviation			1%
RAMspeed SMP - Integer Add (MB/s)			21184
RAMspeed SMP - Integer Copy (MB/s)			18557
RAMspeed SMP - Integer Scale (MB/s)			19194
RAMspeed SMP - Floating-Point Add (MB/s)			18111
SciMark - Composite (Mflops)			390.06
Standard Deviation			0.3%
SQLite - T.S.I (sec)	8.34	**8.29**	**8.45**
Normalized	99.4%	100%	98.11%
Standard Deviation	0.5%	1.6%	0.3%

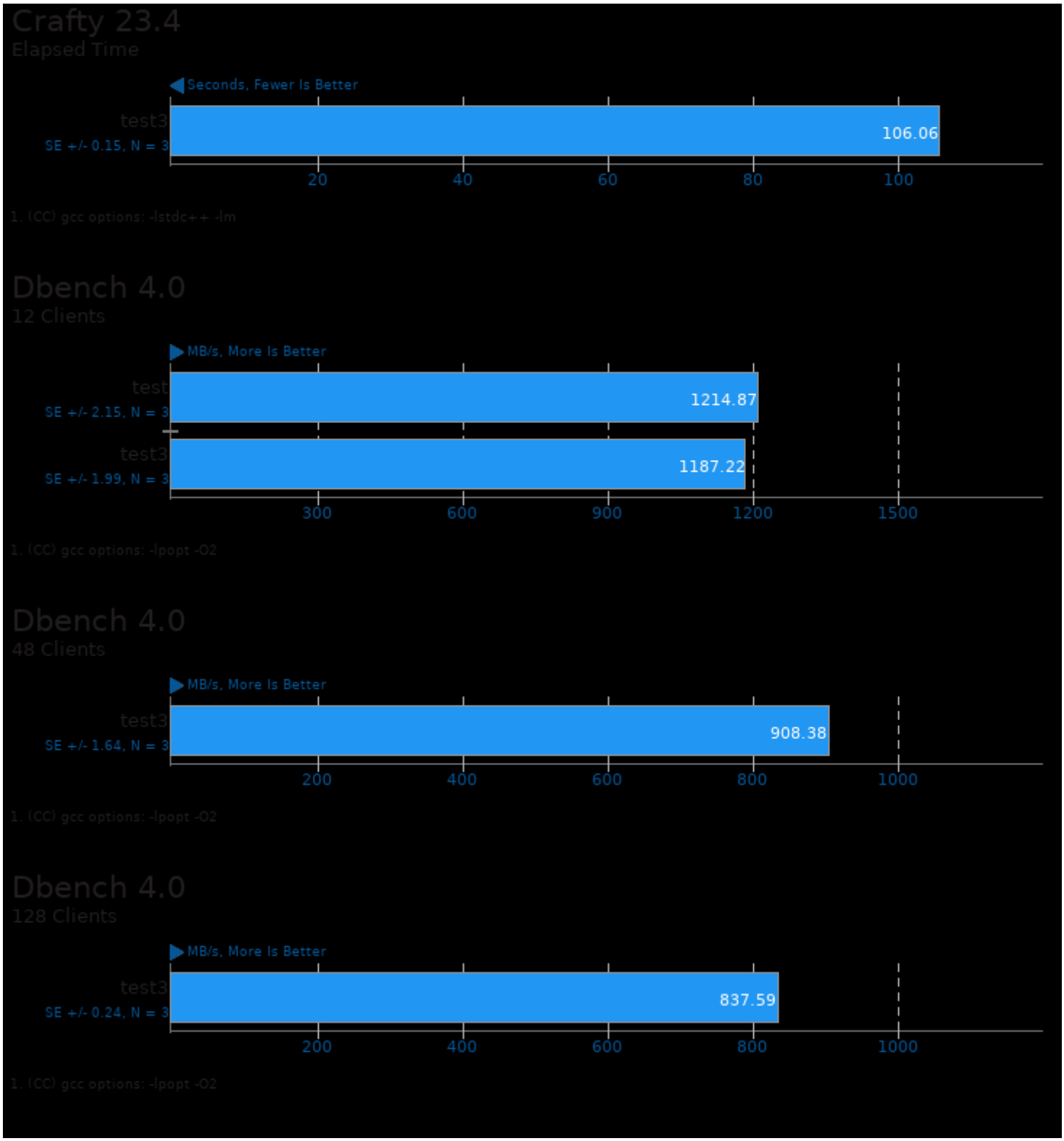
test

Sudokut - Total Time (sec)	17.09
Standard Deviation	0.2%
Sunflow Rendering System - G.I.I.S (sec)	9.02
Standard Deviation	1.2%
Threaded I/O Tester - 64MB Rand Read - 32 Threads (MB/s)	73001
Standard Deviation	3.7%
Threaded I/O Tester - 64MB Rand Write - 32 Threads (MB/s)	2128
Standard Deviation	0.8%
Timed HMMer Search - P.D.S (sec)	30.15
Standard Deviation	1%
Timed ImageMagick Compilation - Time To Compile (sec)	188.72
Standard Deviation	0%
Timed Linux Kernel Compilation - Time To Compile (sec)	485.58
Standard Deviation	1.1%
Timed MPlayer Compilation - Time To Compile (sec)	3.44
Standard Deviation	0.4%
TSCP - A.C.P (Nodes/s)	812631
Standard Deviation	0.7%
WavPack Audio Encoding - WAV To WavPack (sec)	11.57
Standard Deviation	0.2%
x264 - H.2.V.E (FPS)	57.02
Standard Deviation	1.7%


7-Zip Compression 9.20.1
Compress Speed Test
MIPS, More Is Better
test3
SE +/- 65.83, N = 3
5886
1300
2600
3900
5200
6500
1. (CXX) g++ options: -pipe -lpthread
AIO-Stress 0.21
Random Write
MB/s, More Is Better
test
SE +/- 42.43, N = 6
1368.54
test2
SE +/- 13.07, N = 3
1376.61
test3
SE +/- 30.16, N = 6
1377.72
300
600
900
1200
1500
1. (CC) gcc options: -pthread -laio
Bork File Encrypter 1.4
File Encryption Time
Seconds, Fewer Is Better
test3
SE +/- 0.23, N = 3
11.80
3
6
9
12
15
C-Ray 1.1
Total Time
Seconds, Fewer Is Better
test3
SE +/- 0.04, N = 3
64.49
14
28
42
56
70
1. (CC) gcc options: -lm -lpthread -O3

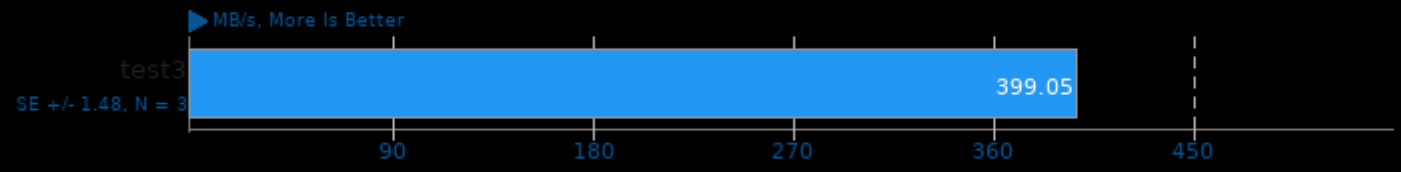
test


CacheBench
Read Cache
MB/s, More Is Better
test3
SE +/- 1.08, N = 3
2118.00
500
1000
1500
2000
2500
1. (CC) gcc options: -lrt
CacheBench
Write Cache
MB/s, More Is Better
test3
SE +/- 11.44, N = 3
17558.29
4K
8K
12K
16K
20K
1. (CC) gcc options: -lrt
Compile Bench 0.6
Test: Compile
MB/s, More Is Better
test3
SE +/- 0.92, N = 3
722.29
160
320
480
640
800
Compile Bench 0.6
Test: Initial Create
MB/s, More Is Better
test3
SE +/- 4.51, N = 3
234.63
50
100
150
200
250
Compile Bench 0.6
Test: Read Compiled Tree
MB/s, More Is Better
test3
SE +/- 5.19, N = 3
911.59
200
400
600
800
1000


Crafty 23.4
Elapsed Time
Seconds, Fewer Is Better
test3
SE +/- 0.15, N = 3
106.06
20
40
60
80
100
1. (CC) gcc options: -lstdc++ -lm
Dbench 4.0
12 Clients
MB/s, More Is Better
test
SE +/- 2.15, N = 3
1214.87
test3
SE +/- 1.99, N = 3
1187.22
300
600
900
1200
1500
1. (CC) gcc options: -lpopt -O2
Dbench 4.0
48 Clients
MB/s, More Is Better
test3
SE +/- 1.64, N = 3
908.38
200
400
600
800
1000
1. (CC) gcc options: -lpopt -O2
Dbench 4.0
128 Clients
MB/s, More Is Better
test3
SE +/- 0.24, N = 3
837.59
200
400
600
800
1000
1. (CC) gcc options: -lpopt -O2

Dbench 4.0

1 Clients



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

dcraw

RAW To PPM Image Conversion



1. (CC) gcc options: -lm

FFmpeg 3.3.3

H.264 HD To NTSC DV



1. (CC) gcc options: -lavdevice -lavfilter -lavformat -lavcodec -lswresample -lswscale -lavutil -ldl -lm -llzma -lbz2 -pthread -std=c11 -fomit-frame-pointer -

Fhourstones 3.1

Complex Connect-4 Solving



1. (CC) gcc options: -O3

FLAC Audio Encoding 1.3.1

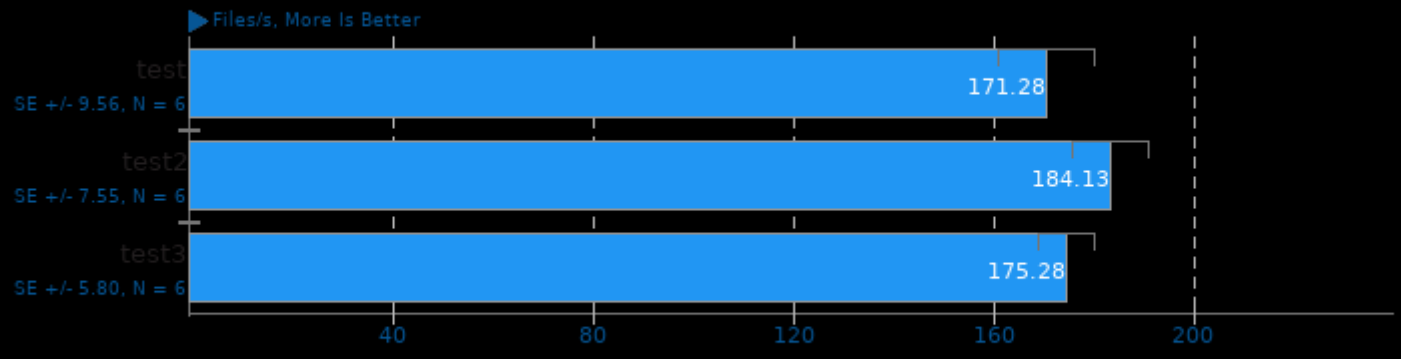
WAV To FLAC



1. (CXX) g++ options: -O2 -fvisibility=hidden -lm

FS-Mark 3.3

1000 Files, 1MB Size



1. (CC) gcc options: -static

GraphicsMagick 1.3.19

Operation: HWB Color Space



1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -ltiff -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lz -lm -lgomp -lpthread

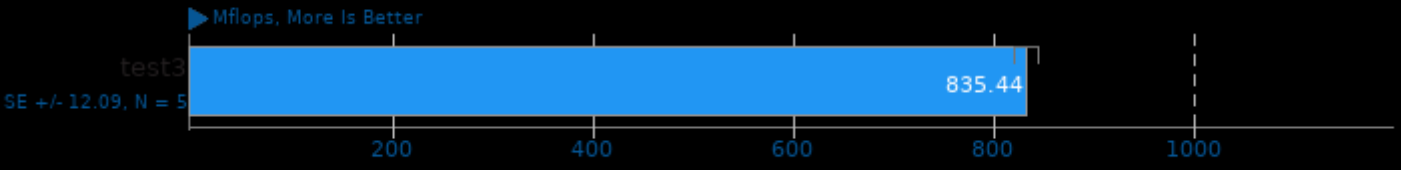
Gzip Compression

2GB File Compression



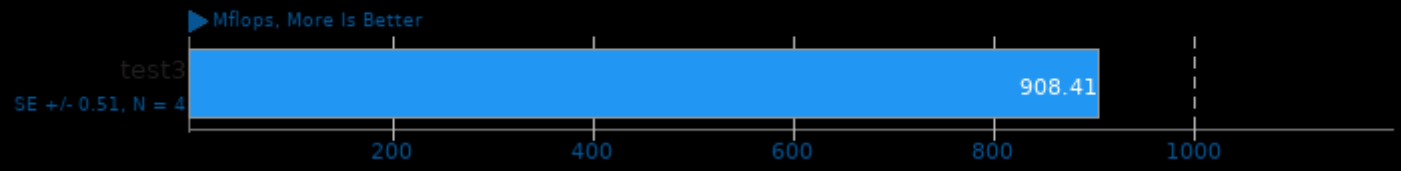
Java SciMark 2.0

FFT Performance



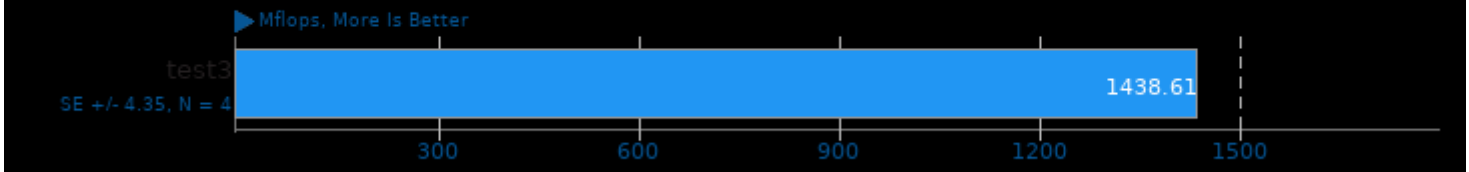
Java SciMark 2.0

SOR Performance

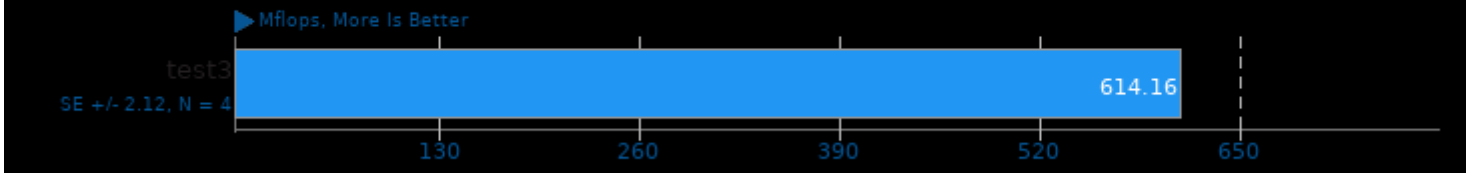


test

Java SciMark 2.0
Composite Performance



Java SciMark 2.0
Monte Carlo Performance

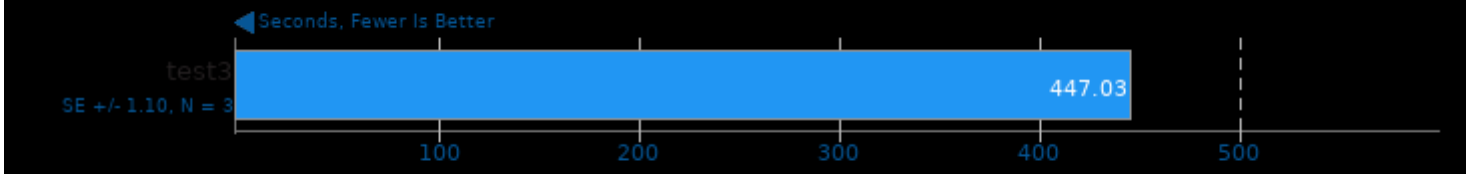


LAME MP3 Encoding 3.99.5
WAV To MP3



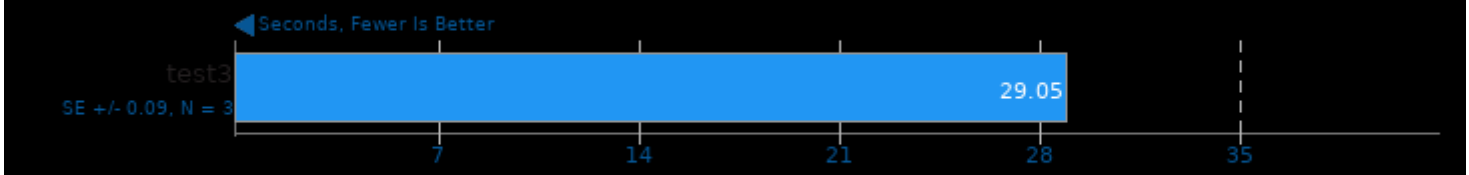
1. (CC) gcc options: -O3 -ffast-math -funroll-loops -fschedule-insns2 -fbranch-count-reg -fforce-addr -pipe -lm

LZMA Compression
256MB File Compression



1. (CXX) g++ options: -O2

Mencoder 1.1
AVI To LAVC

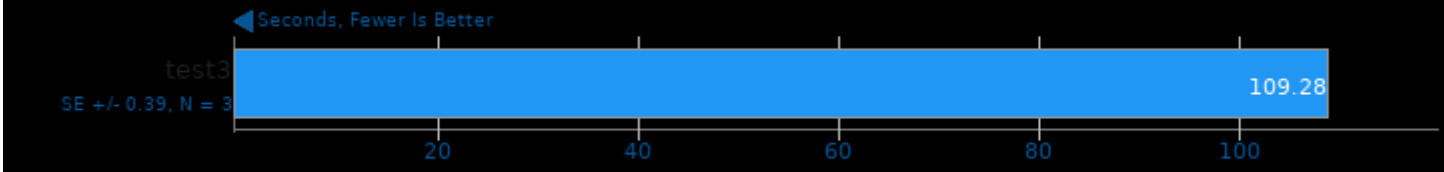


1. (CC) gcc options: -lm -ffast-math -lpng -lz -ljpeg -lbz2 -lpthread -ldl -rdynamic -lXext -lX11 -lXxf86vm -lGL

test

Minion 1.8

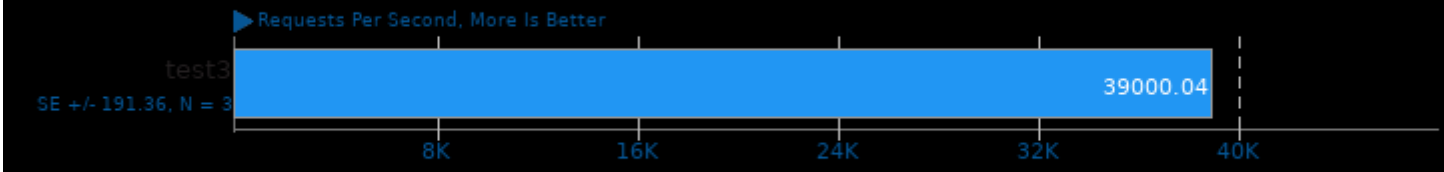
Solitaire



1. (CXX) g++ options: -std=gnu++11 -O3 -fomit-frame-pointer -rdynamic

NGINX Benchmark 1.0.11

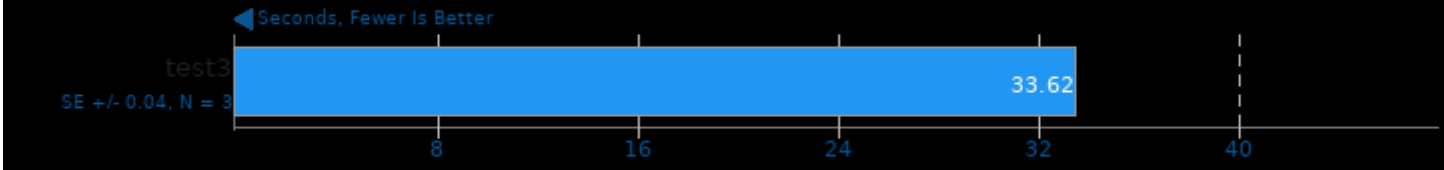
Static Web Page Serving



1. (CC) gcc options: -lpthread -lcrypt -lcrypto -lz -pipe

Parallel BZIP2 Compression 1.1.12

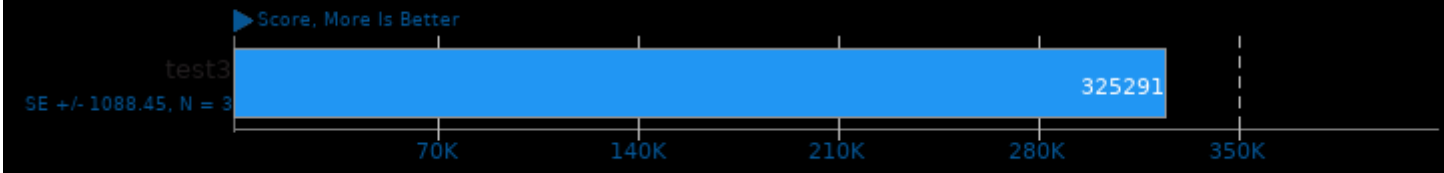
256MB File Compression



1. (CXX) g++ options: -O2 -pthread -lbz2 -lpthread

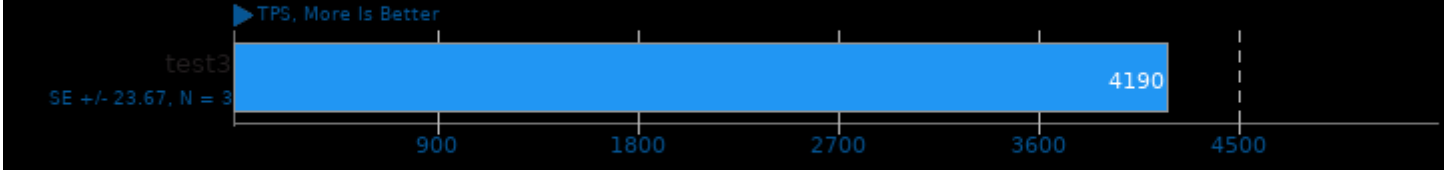
PHPBench 0.8.1

PHP Benchmark Suite



PostMark 1.51

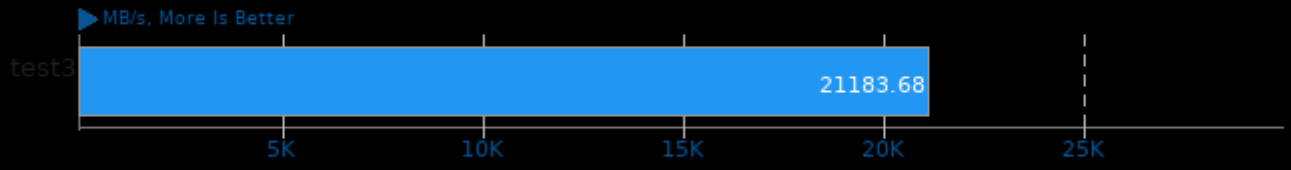
Disk Transaction Performance



1. (CC) gcc options: -O3

RAMspeed SMP 3.5.0

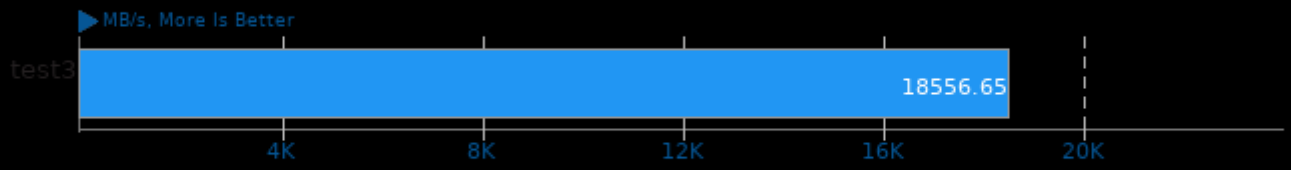
Integer Add



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

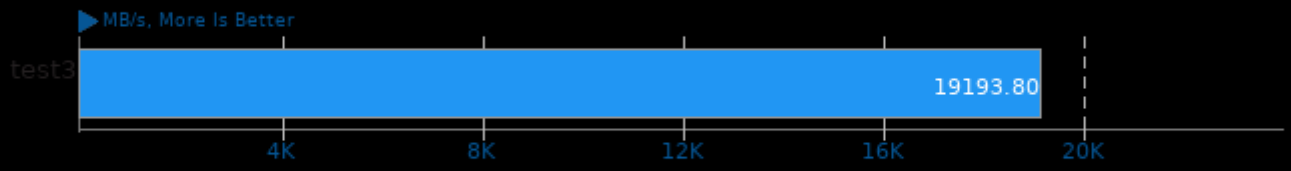
Integer Copy



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

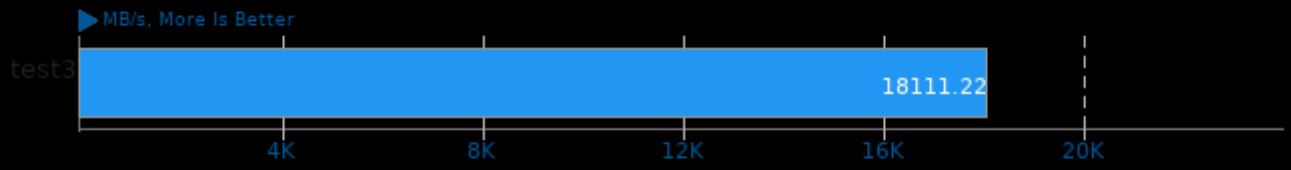
Integer Scale



1. (CC) gcc options: -O3 -march=native

RAMspeed SMP 3.5.0

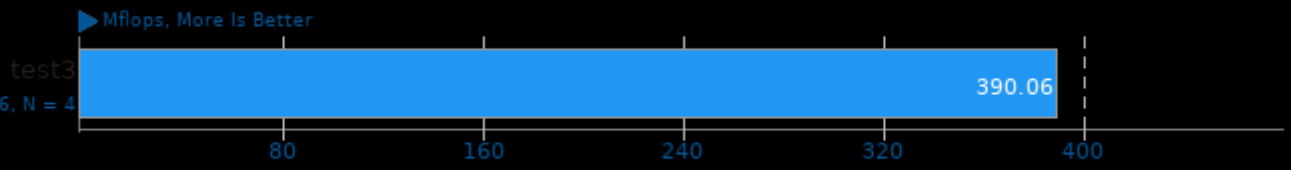
Floating-Point Add



1. (CC) gcc options: -O3 -march=native

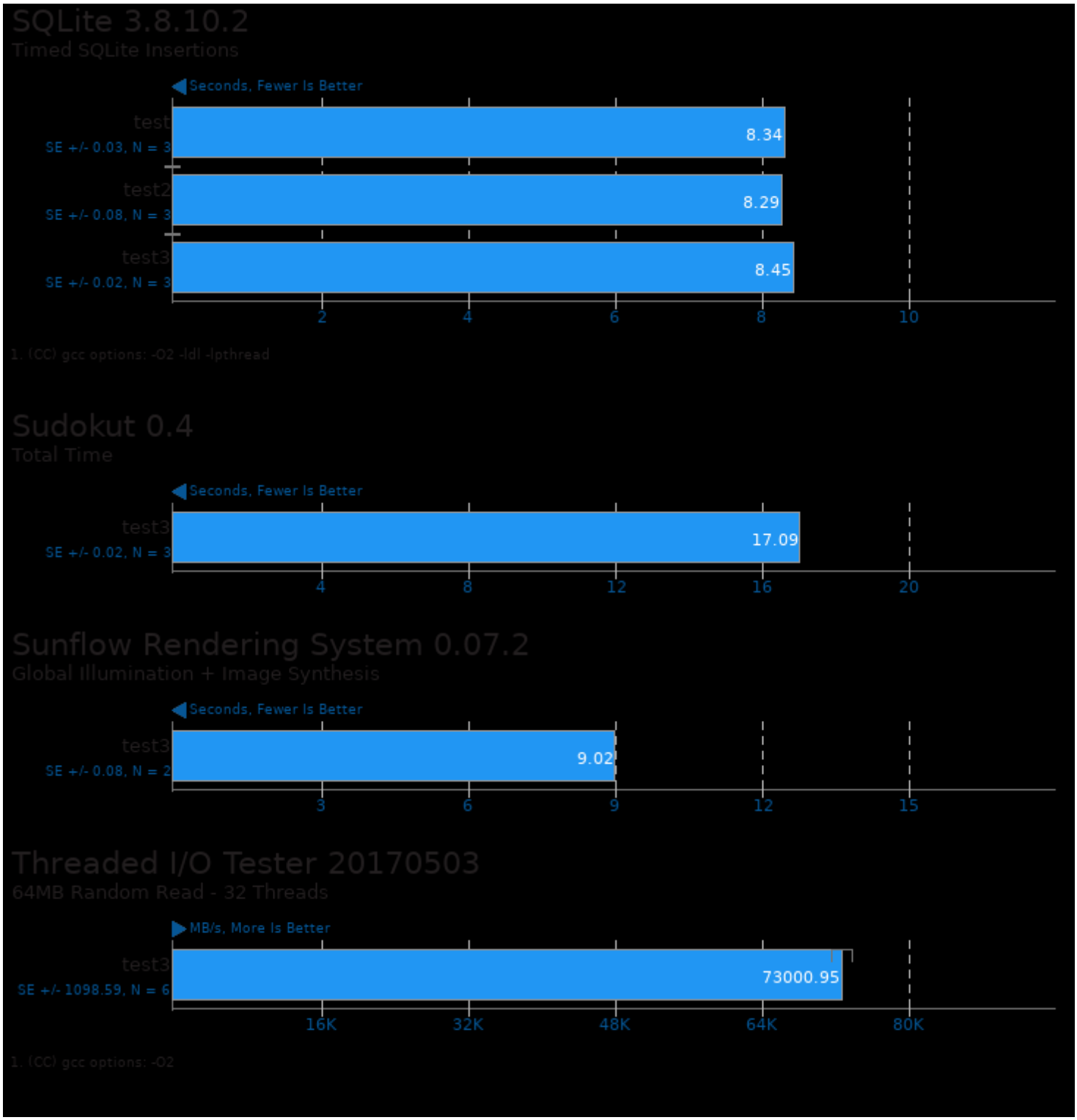
SciMark 2.0

Composite



1. (CC) gcc options: -lm

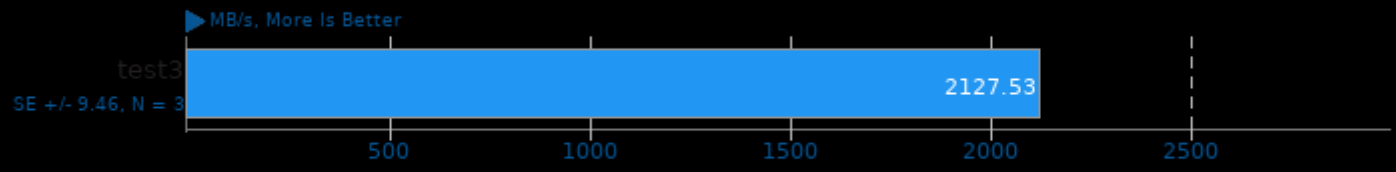
test


SQLite 3.8.10.2
Timed SQLite Insertions
Seconds, Fewer Is Better
test
SE +/- 0.03, N = 3
8.34
test2
SE +/- 0.08, N = 3
8.29
test3
SE +/- 0.02, N = 3
8.45
2
4
6
8
10
1. (CC) gcc options: -O2 -ldl -lpthread
Sudokut 0.4
Total Time
Seconds, Fewer Is Better
test3
SE +/- 0.02, N = 3
17.09
4
8
12
16
20
Sunflow Rendering System 0.07.2
Global Illumination + Image Synthesis
Seconds, Fewer Is Better
test3
SE +/- 0.08, N = 2
9.02
3
6
9
12
15
Threaded I/O Tester 20170503
64MB Random Read - 32 Threads
MB/s, More Is Better
test3
SE +/- 1098.59, N = 6
73000.95
16K
32K
48K
64K
80K
1. (CC) gcc options: -O2

test

Threaded I/O Tester 20170503

64MB Random Write - 32 Threads



1. (CC) gcc options: -O2

Timed HMMer Search 2.3.2

Pfam Database Search



1. (CC) gcc options: -O2 -pthread -lhmmer -lsquid -lm

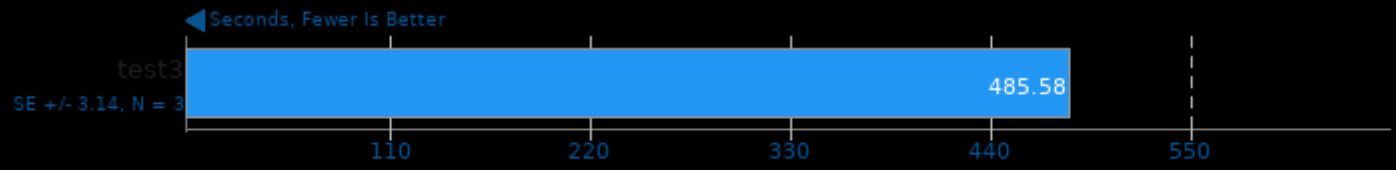
Timed ImageMagick Compilation 6.9.0

Time To Compile



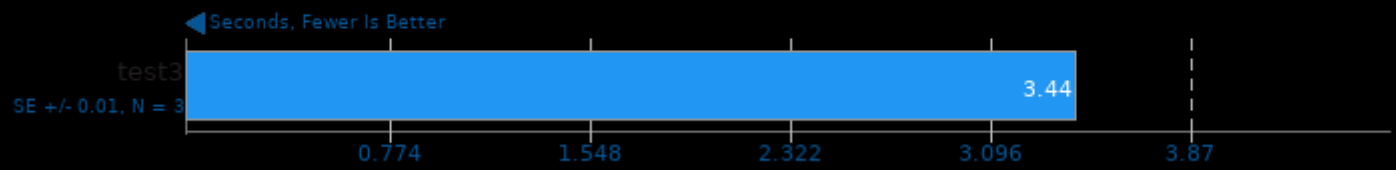
Timed Linux Kernel Compilation 4.13

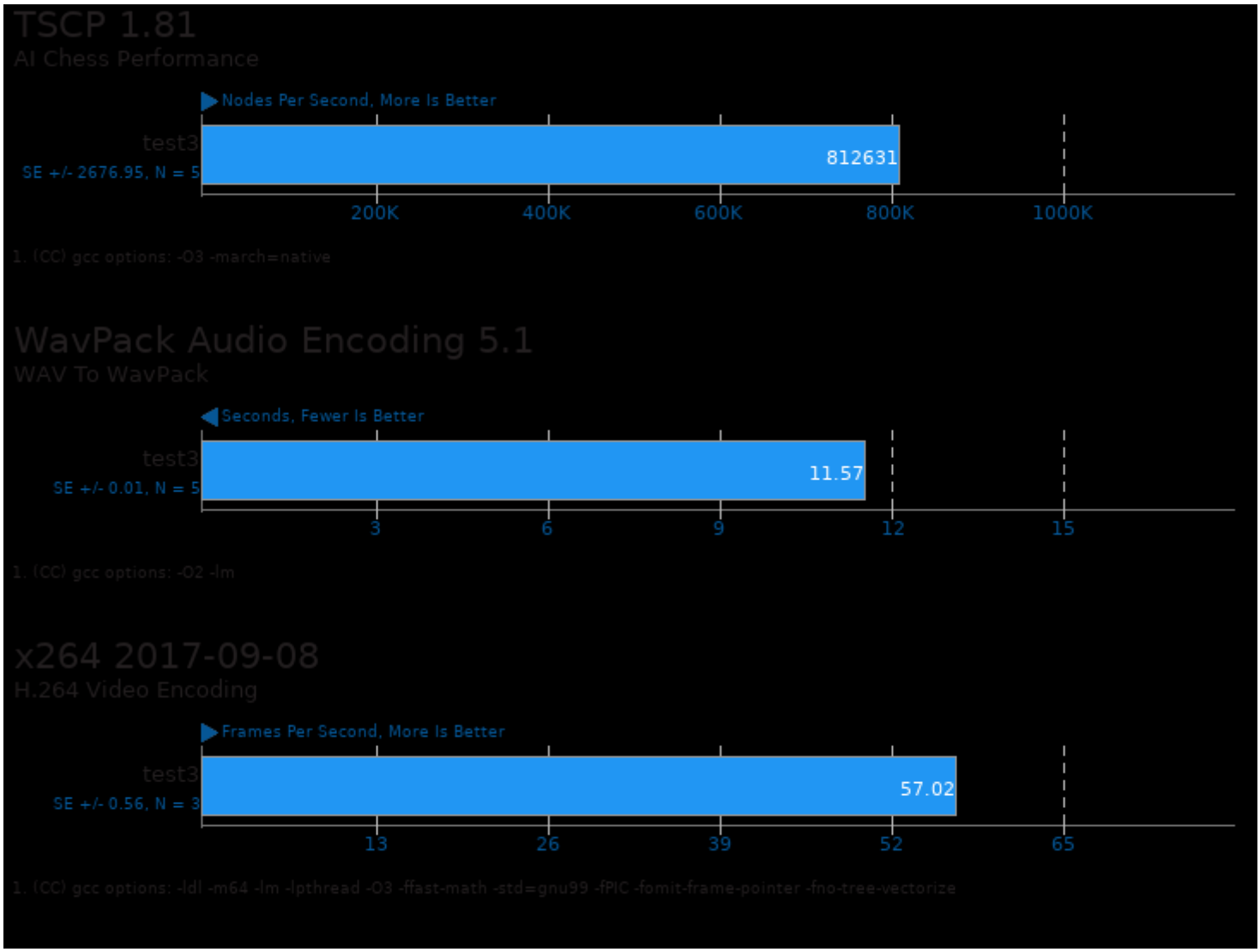
Time To Compile



Timed MPlayer Compilation 1.0-rc3

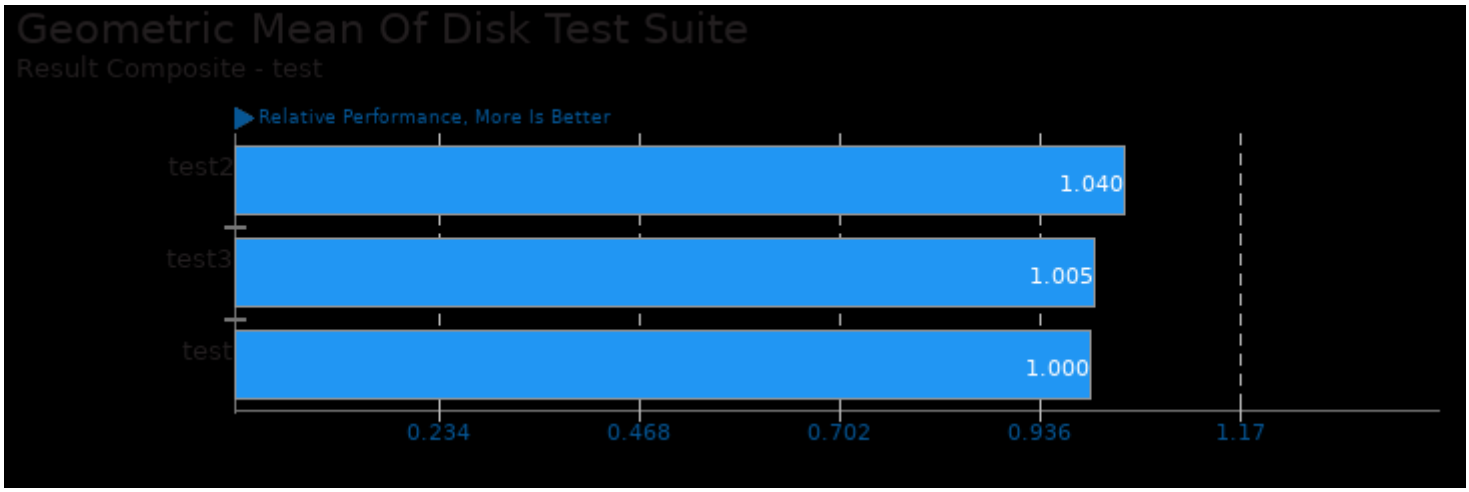
Time To Compile




TSCP 1.81
AI Chess Performance
Nodes Per Second, More Is Better
test3
SE +/- 2676.95, N = 5
812631
200K
400K
600K
800K
1000K
1. (CC) gcc options: -O3 -march=native
WavPack Audio Encoding 5.1
WAV To WavPack
Seconds, Fewer Is Better
test3
SE +/- 0.01, N = 5
11.57
3
6
9
12
15
1. (CC) gcc options: -O2 -lm
x264 2017-09-08
H.264 Video Encoding
Frames Per Second, More Is Better
test3
SE +/- 0.56, N = 3
57.02
13
26
39
52
65
1. (CC) gcc options: -ldl -m64 -lm -lpthread -O3 -ffast-math -std=gnu99 -fPIC -fomit-frame-pointer -fno-tree-vectorize

test

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



Geometric mean based upon tests: pts/sqlite, pts/fs-mark, pts/compilebench, pts/dbench and pts/postmark

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 11:14.