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Haswell Core i5

Intel Core i5-4670 testing with a MSI B85M-P33 (MS-7817) v1.0 (V4.9 BIOS) and MSI Intel HD 4600 2GB on Ubuntu 20.04 via the Phoronix Test Suite.

Automated Executive Summary

2 had the most wins, coming in first place for 43% of the tests.

Based on the geometric mean of all complete results, the fastest (1) was 1.009x the speed of the slowest (3). 2 was 0.993x the speed of 1 and 3 was 0.998x the speed of 2.

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

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: RaiNyMore2 - Total Frame Time) at 15.432x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap - Total Frame Time) at 3.352x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: Multeasymap - Total Frame Time) at 3.216x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Zoomed out - Demo: Multeasymap - Total Frame Time) at 2.827x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo:

Multeasymap - Total Frame Time) at 2.575x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Zoomed out - Demo: RaiNyMore2 - Total Frame Time) at 2.193x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2 - Total Frame Time) at 2.168x

DDraceNetwork (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: RaiNyMore2 - Total Frame Time) at 2.1x

Redis (Test: LPOP) at 1.599x

Redis (Test: GET) at 1.082x.

Test Systems:

1

2

3

Processor: Intel Core i5-4670 @ 3.80GHz (4 Cores), Motherboard: MSI B85M-P33 (MS-7817) v1.0 (V4.9 BIOS), Chipset: Intel 4th Gen Core DRAM, Memory: 8GB, Disk: 2000GB Samsung SSD 860, Graphics: MSI Intel HD 4600 2GB (1200MHz), Audio: Intel Xeon E3-1200 v3/4th, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 20.04, Kernel: 5.9.0-050900rc7daily20201002-generic (x86_64) 20201001, Desktop: GNOME Shell 3.36.3, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, OpenGL: 4.5 Mesa 20.0.8, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none,hsa --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-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system=zlib=auto --with-tune=generic --without-cuda-driver -v

Processor Notes: Scaling Governor: intel_cpfufreq ondemand - CPU Microcode: 0x28 - ThermalD 1.9.1

Java Notes: OpenJDK Runtime Environment (build 11.0.7+10-post-Ubuntu-3ubuntu1)

Python Notes: Python 2.7.18rc1 + Python 3.8.2

Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Mitigation of Clear buffers; SMT disabled + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: disabled RSB filling + srbs: Mitigation of Microcode + tsx_async_abort: Not affected

	1	2	3
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.0 - Default - RaiNyMore2 (FPS)	52.50	52.82	52.84
Normalized	99.36%	99.96%	100%
Standard Deviation	0.2%	0%	0%

DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.3 - Default - RaiNyMore2 (FPS)	40.14	40.36	40.35
Normalized	99.45%	100%	99.98%
Standard Deviation	0.2%	0%	0.1%
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.0 - Default - Multeasymap (FPS)	106.51	106.67	106.81
Normalized	99.72%	99.87%	100%
Standard Deviation	0.4%	0.2%	0.2%
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.3 - Default - Multeasymap (FPS)	87.57	88.46	87.91
Normalized	98.99%	100%	99.38%
Standard Deviation	0.4%	0.6%	0.2%
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.0 - Zoomed out - RaiNyMore2	62.28	62.61	62.57
Normalized	99.47%	100%	99.94%
Standard Deviation	0.1%	0.1%	0.1%
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.3 - Zoomed out - RaiNyMore2	49.97	50.26	50.34
Normalized	99.26%	99.84%	100%
Standard Deviation	0.2%	0.3%	0%
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.0 - Zoomed out - Multeasymap	102.69	103.51	103.37
Normalized	99.21%	100%	99.86%
Standard Deviation	0.1%	0.5%	0.1%
DDraceNetwork - 1920 x 1080 - Fullscreen - OpenGL 3.3 - Zoomed out - Multeasymap	85.65	85.21	85.03
Normalized	100%	99.49%	99.28%
Standard Deviation	0.4%	0.4%	0.2%
yquake2 - OpenGL 1.x - 1920 x 1080 (FPS)	164.5	164.7	162.1
Normalized	99.88%	100%	98.42%
Standard Deviation	0.5%	0.8%	0.2%
yquake2 - OpenGL 3.x - 1920 x 1080 (FPS)	158.6	158.4	158.4
Normalized	100%	99.87%	99.87%
Standard Deviation	0.2%	0.4%	0.3%
yquake2 - Software CPU - 1920 x 1080 (FPS)	77.2	78.2	77.9
Normalized	98.72%	100%	99.62%
Standard Deviation	0.8%	0.4%	0.5%
Timed HMMer Search - P.D.S (sec)	140.374	140.276	140.066
Normalized	99.78%	99.85%	100%
Standard Deviation	0.3%	0.1%	0.1%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)	2.643	2.652	2.646
Normalized	99.66%	100%	99.77%
Standard Deviation	0.9%	1.3%	1%
LZ4 Compression - 1 - Compression Speed (MB/s)	5168	5188	5175
Normalized	99.62%	100%	99.75%
Standard Deviation	0.1%	0.5%	0.2%
LZ4 Compression - 1 - D.S (MB/s)	5938	5934	5930
Normalized	100%	99.92%	99.85%
Standard Deviation	0.2%	0.4%	0.1%

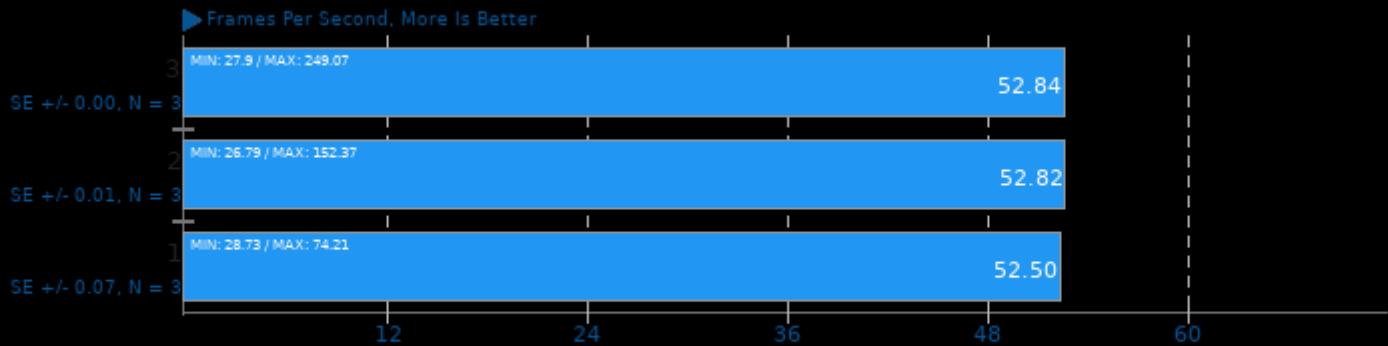
LZ4 Compression - 3 - Compression Speed (MB/s)	46.05	46.03	45.91
Normalized	100%	99.96%	99.7%
Standard Deviation	0%	0%	0.2%
LZ4 Compression - 3 - D.S (MB/s)	5884	5879	5869
Normalized	100%	99.91%	99.74%
Standard Deviation	0.1%	0.1%	0.1%
LZ4 Compression - 9 - Compression Speed (MB/s)	44.98	45.04	45.00
Normalized	99.87%	100%	99.91%
Standard Deviation	0.2%	0%	0.2%
LZ4 Compression - 9 - D.S (MB/s)	5882	5881	5885
Normalized	99.94%	99.93%	100%
Standard Deviation	0.2%	0.2%	0.1%
Crafty - Elapsed Time (Nodes/s)	6920082	6972916	6917977
Normalized	99.24%	100%	99.21%
Standard Deviation	0%	1.1%	0.3%
Kvazaar - Bosphorus 4K - Slow (FPS)	1.67	1.67	1.68
Normalized	99.4%	99.4%	100%
Standard Deviation	0.3%	0.3%	0.3%
Kvazaar - Bosphorus 4K - Medium (FPS)	1.72	1.72	1.72
Standard Deviation	0%	0%	0%
Kvazaar - Bosphorus 1080p - Slow (FPS)	7.47	7.46	7.46
Normalized	100%	99.87%	99.87%
Standard Deviation	0.3%	0.1%	0.2%
Kvazaar - Bosphorus 1080p - Medium (FPS)	7.68	7.67	7.68
Normalized	100%	99.87%	100%
Standard Deviation	0.3%	0%	0.4%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	4.56	4.58	4.56
Normalized	99.56%	100%	99.56%
Standard Deviation	0.4%	0.1%	0.3%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	8.07	8.07	8.07
Standard Deviation	0.1%	0.3%	0.5%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	18.98	19.02	19.05
Normalized	99.63%	99.84%	100%
Standard Deviation	0.6%	0.5%	0.4%
Kvazaar - Bosphorus 1080p - Ultra Fast	33.19	33.31	33.49
Normalized	99.1%	99.46%	100%
Standard Deviation	0.6%	0.3%	0.7%
rav1e - 1 (FPS)	0.294	0.293	0.292
Normalized	100%	99.66%	99.32%
Standard Deviation	0.2%	0.4%	0.4%
rav1e - 5 (FPS)	0.884	0.885	0.883
Normalized	99.89%	100%	99.77%
Standard Deviation	0.6%	0.6%	0.2%
rav1e - 6 (FPS)	1.184	1.184	1.184
Standard Deviation	0.2%	0.2%	0.1%
rav1e - 10 (FPS)	2.680	2.688	2.670
Normalized	99.7%	100%	99.33%
Standard Deviation	0.3%	0.3%	0.8%
x265 - Bosphorus 4K (FPS)	5.77	5.76	5.76
Normalized	100%	99.83%	99.83%
Standard Deviation	0.3%	0.4%	0.9%
x265 - Bosphorus 1080p (FPS)	25.16	25.16	25.31
Normalized	99.41%	99.41%	100%

	Standard Deviation	0.7%	0.5%	0.9%
Stockfish - Total Time (Nodes/s)	Normalized	5875954	6014673	5910545
	Standard Deviation	1.7%	1.9%	2.6%
asmFish - 1.H.M.2.D (Nodes/s)	Normalized	8587560	8664235	8419184
	Standard Deviation	0.9%	1.2%	2.1%
Numpy Benchmark (Score)	Normalized	258.05	257.96	258.24
	Standard Deviation	0.4%	0.1%	0.5%
eSpeak-NG Speech Engine - T.T.S.S (sec)	Normalized	36.619	35.869	36.027
	Standard Deviation	2.9%	0.9%	0.8%
GROMACS - Water Benchmark (Ns/Day)	Normalized	0.353	0.354	0.354
	Standard Deviation	1.4%	0.9%	2.9%
ASTC Encoder - Fast (sec)	Normalized	9.70	9.72	9.70
	Standard Deviation	0.8%	0.7%	0.3%
ASTC Encoder - Medium (sec)	Normalized	14.93	14.93	14.92
	Standard Deviation	0.1%	0.2%	0.4%
ASTC Encoder - Thorough (sec)	Normalized	99.94	99.91	100.16
	Standard Deviation	0.1%	0.1%	0.9%
ASTC Encoder - Exhaustive (sec)	Normalized	797.64	797.49	798.71
	Standard Deviation	0.1%	0%	0.1%
Basis Universal - ETC1S (sec)	Normalized	90.031	90.248	89.978
	Standard Deviation	0.1%	0.3%	0.1%
Basis Universal - UASTC Level 0 (sec)	Normalized	12.408	12.401	12.423
	Standard Deviation	0.2%	0.2%	0.1%
Basis Universal - UASTC Level 2 (sec)	Normalized	89.120	89.063	89.101
	Standard Deviation	0%	0%	0.1%
Basis Universal - UASTC Level 3 (sec)	Normalized	180.659	180.445	180.567
	Standard Deviation	0.1%	0.1%	0.1%
Basis Universal - U.L.2.R.P.P (sec)	Normalized	972.013	971.706	971.961
	Standard Deviation	0%	0%	0%
Redis - LPOP (Req/sec)	Normalized	2293425	1434327	1436520
	Standard Deviation	2.8%	1.1%	0.9%
Redis - SADD (Req/sec)	Normalized	1846456	1844432	1843710
	Standard Deviation	1.1%	1.5%	2.3%
Redis - LPUSH (Req/sec)	Normalized	1426779	1404306	1408595
	Standard Deviation	0.1%	2.7%	0.5%
Redis - GET (Req/sec)	Normalized	2179226	2041494	2013411
	Standard Deviation	1.4%	0.7%	2.7%

Redis - SET (Reqs/sec)	1648746	1653394	1640575
Normalized	99.72%	100%	99.22%
Standard Deviation	1.4%	1.5%	0.9%
IndigoBench - CPU - Bedroom (M samples/s)	0.461	0.463	0.463
Normalized	99.57%	100%	100%
Standard Deviation	0.6%	0.5%	0.2%
IndigoBench - CPU - Supercar (M samples/s)	1.143	1.144	1.149
Normalized	99.48%	99.56%	100%
Standard Deviation	0.2%	0.4%	0.3%
Sunflow Rendering System - G.I.I.S (sec)	2.915	2.941	2.948
Normalized	100%	99.12%	98.88%
Standard Deviation	2.4%	2.7%	1.6%
BRL-CAD - V.P.M (VGR Performance Metric)	36197	36253	36267
Normalized	99.81%	99.96%	100%

DDrakeNetwork 15.2.3

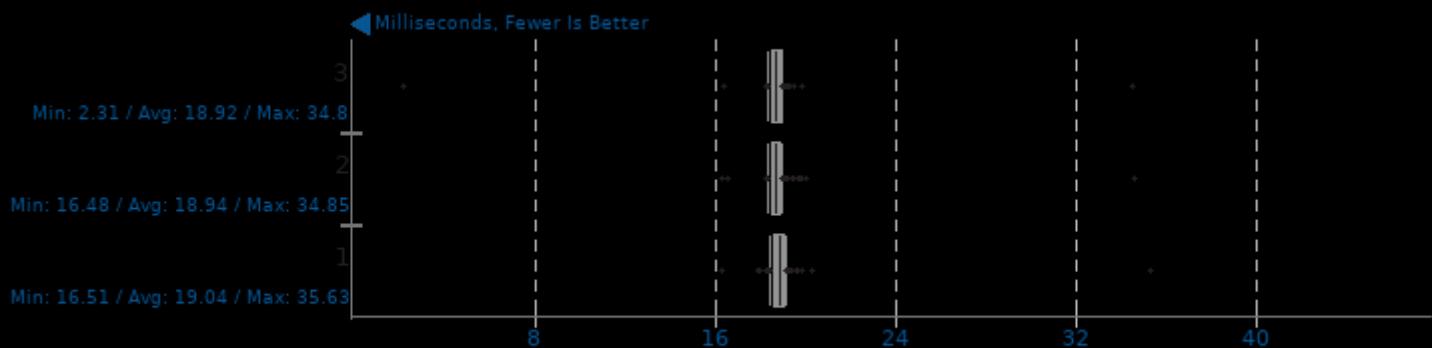
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -rdynamic -lcrypto -lz -lrt -lpthread -curl -freetype -SDL2 -wavpack -opusfile -opus -logg -GL -X11 -notify -gdk_pixbuf-2.0 -

DDrakeNetwork 15.2.3

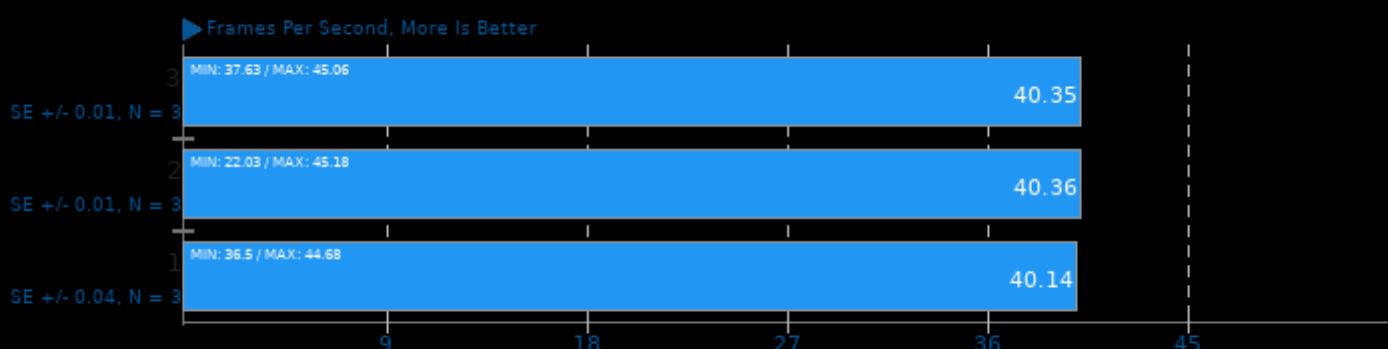
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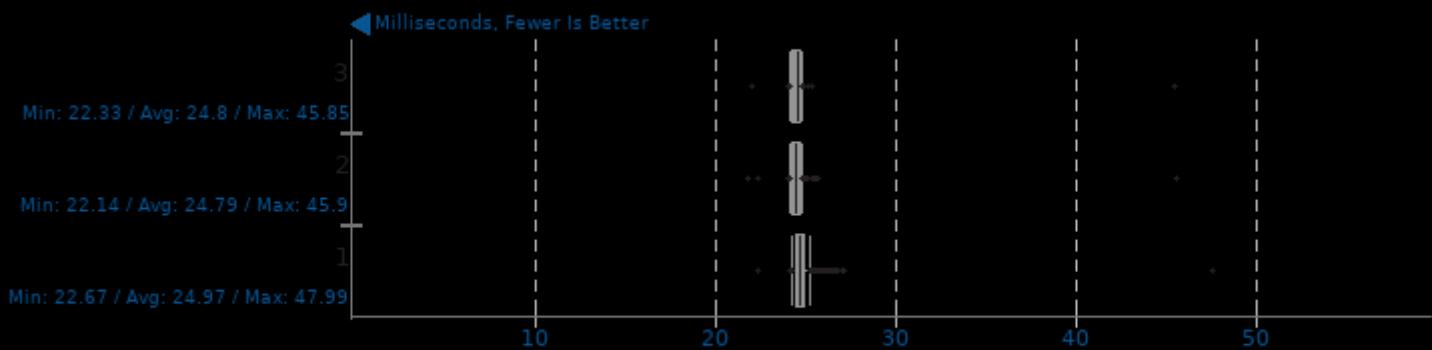
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DDrakeNetwork 15.2.3

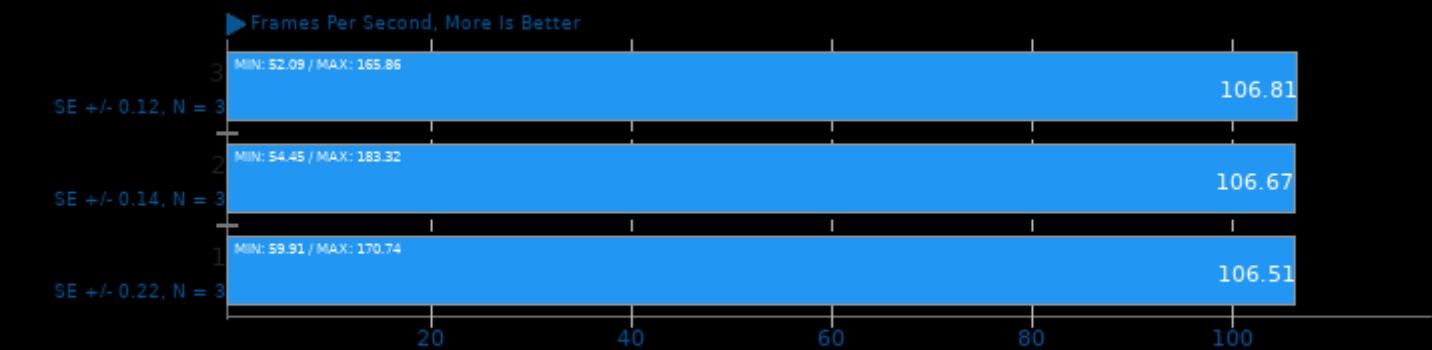
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DDrakeNetwork 15.2.3

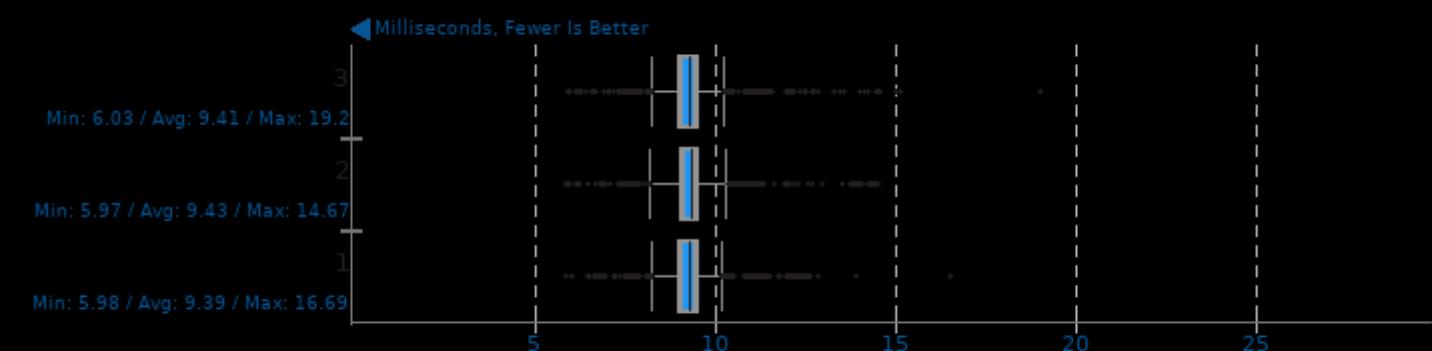
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: Multeasymap



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DDrakeNetwork 15.2.3

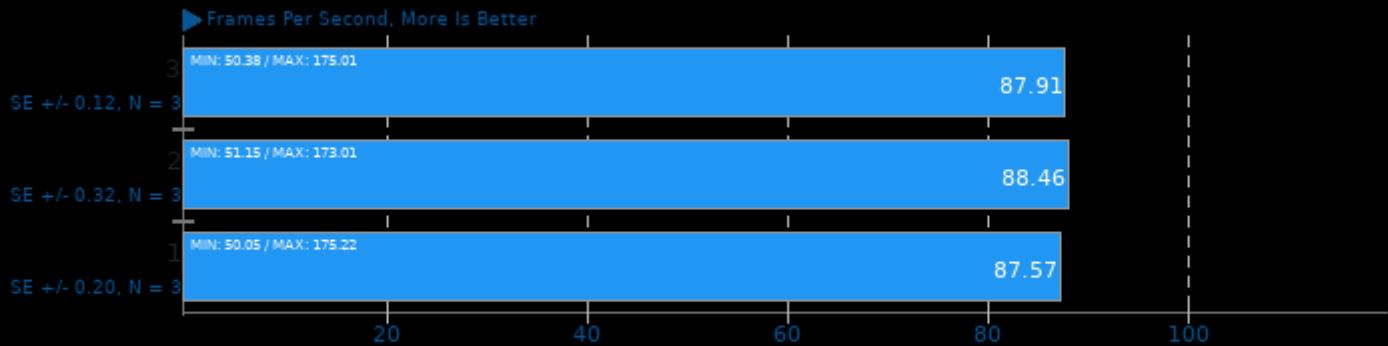
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: Multeasymap - Total Frame Time



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DDrakeNetwork 15.2.3

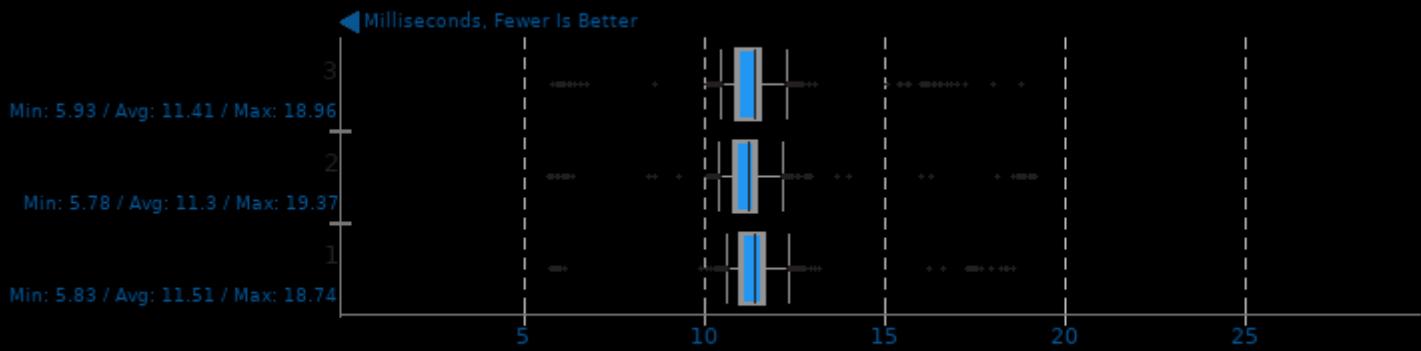
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap



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DDrakeNetwork 15.2.3

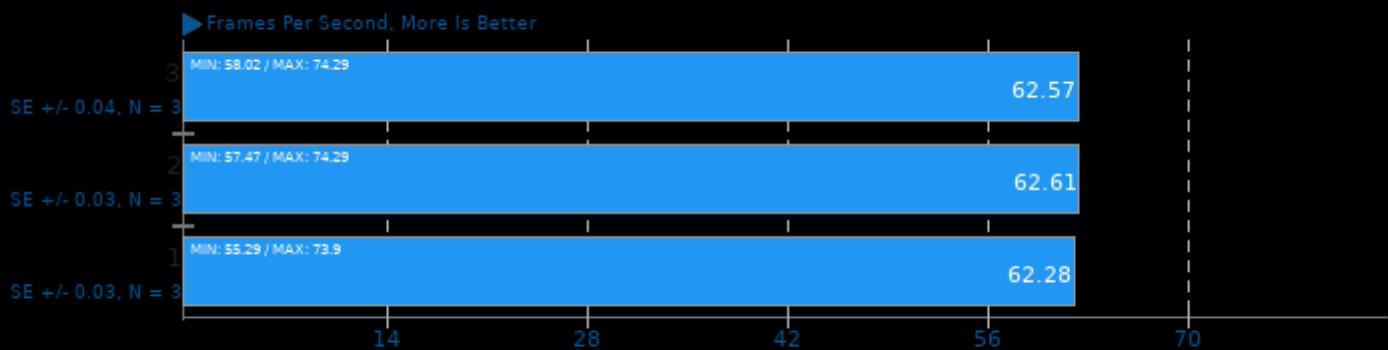
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap - Total Frame Time



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DDrakeNetwork 15.2.3

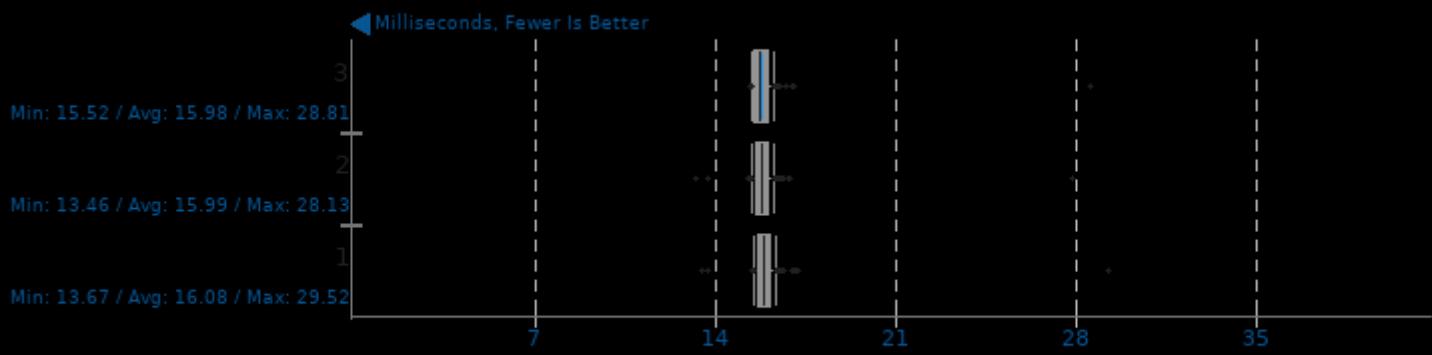
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Zoomed out - Demo: RaiNyMore2



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DDrakeNetwork 15.2.3

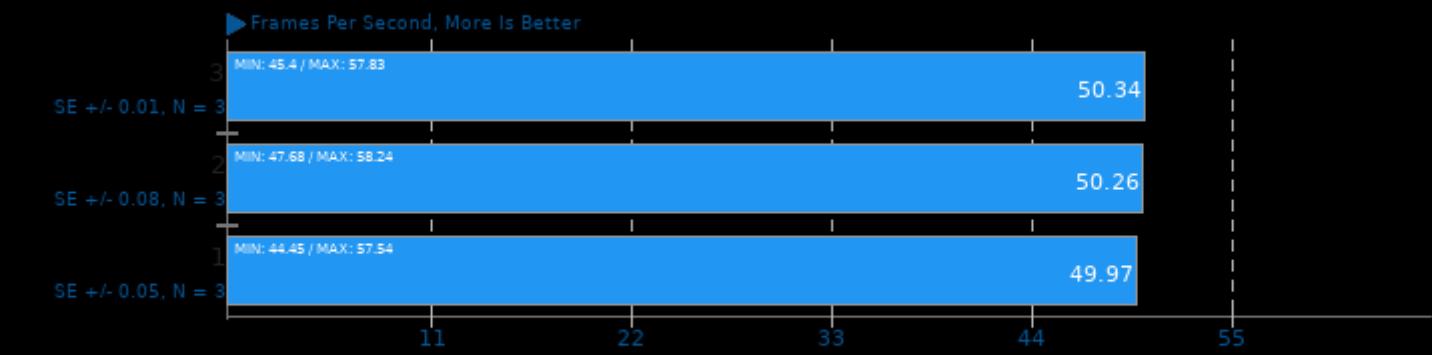
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Zoomed out - Demo: RaiNyMore2 - Total Frame Time



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DDrakeNetwork 15.2.3

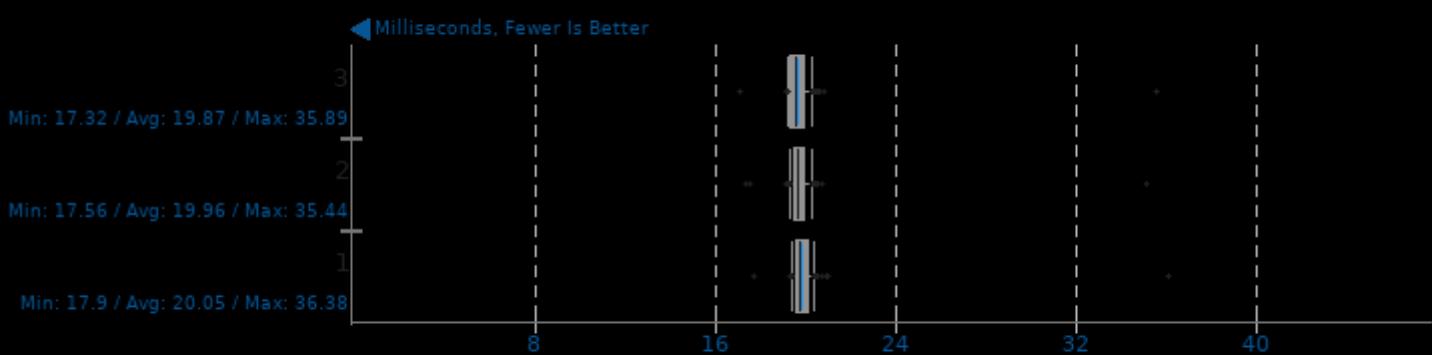
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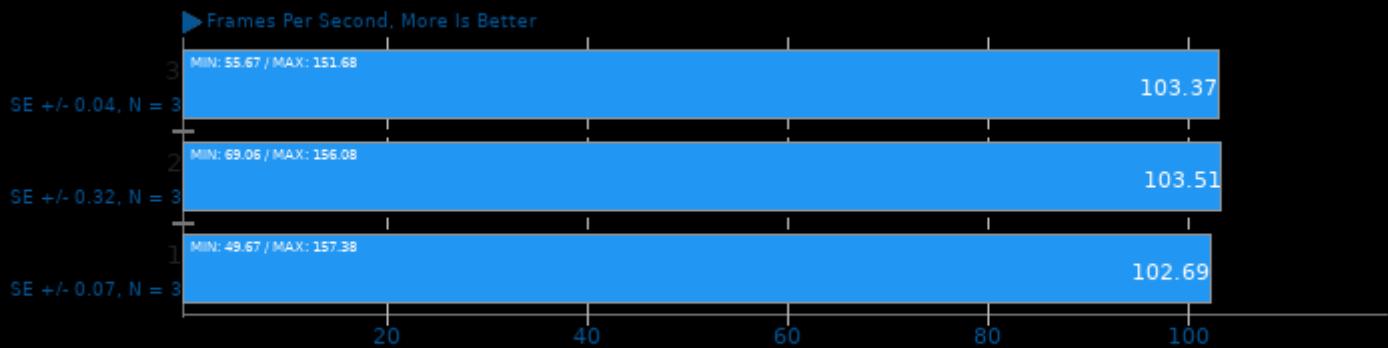
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DDrakeNetwork 15.2.3

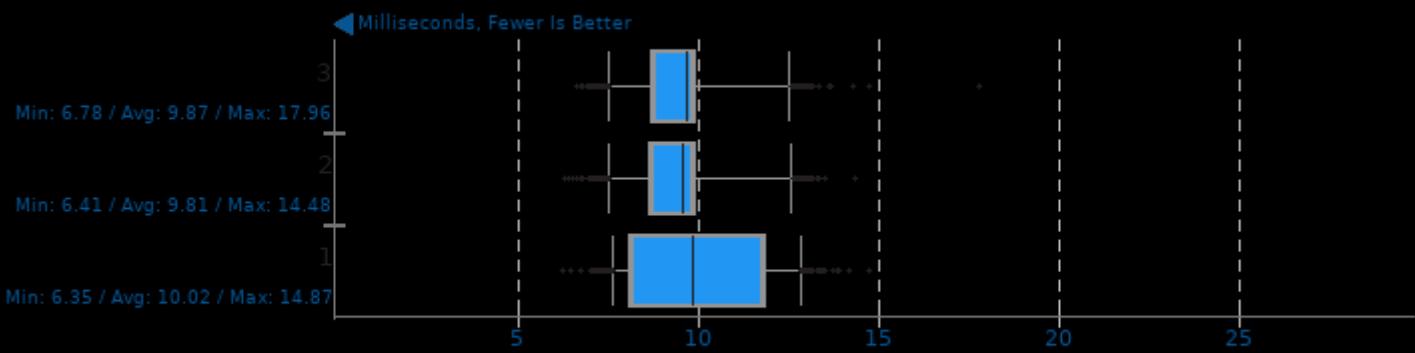
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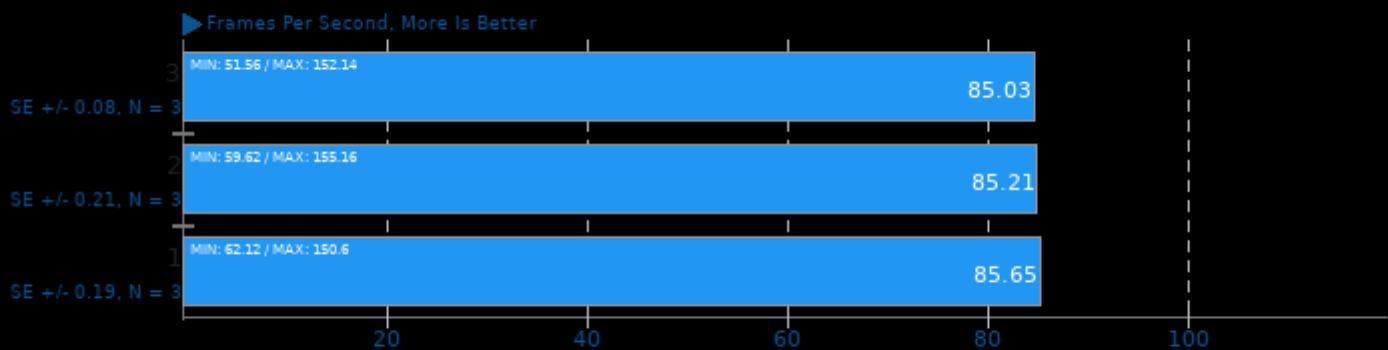
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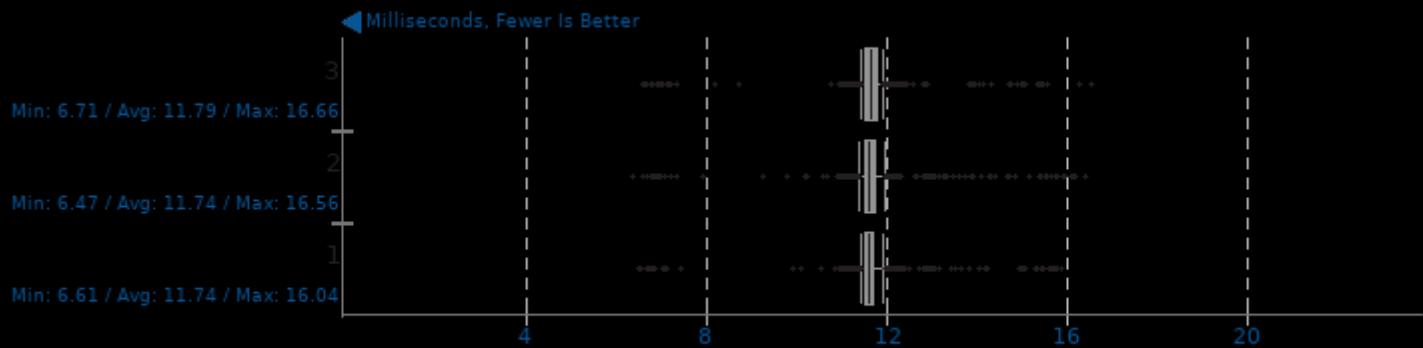
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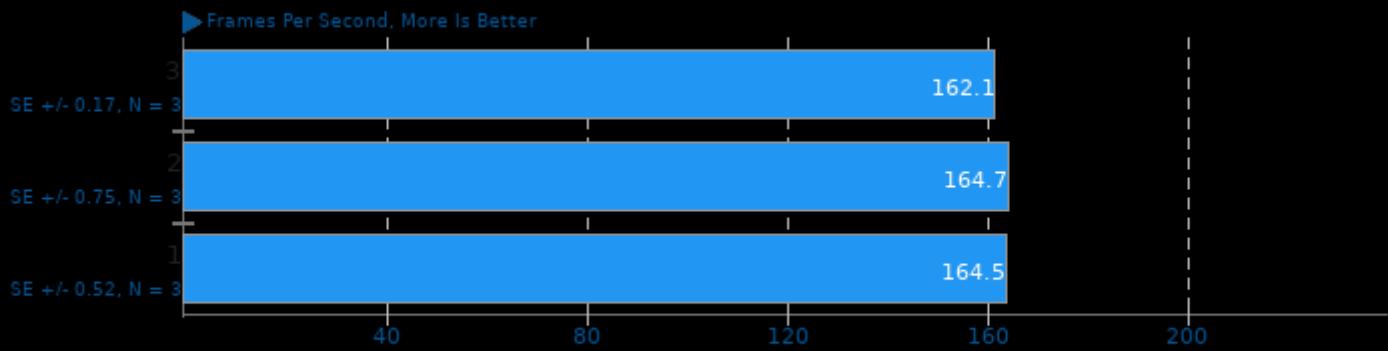
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Zoomed out - Demo: Multiesymap - Total Frame Time



1. (CXX) g++ options: -O3 -rdynamic -lcrypto -lz -lrt -lpthread -curl -freetype -SDL2 -wavpack -opusfile -opus -log -GL -X11 -notify -lgdk_pixbuf-2.0 -

yquake2 7.45

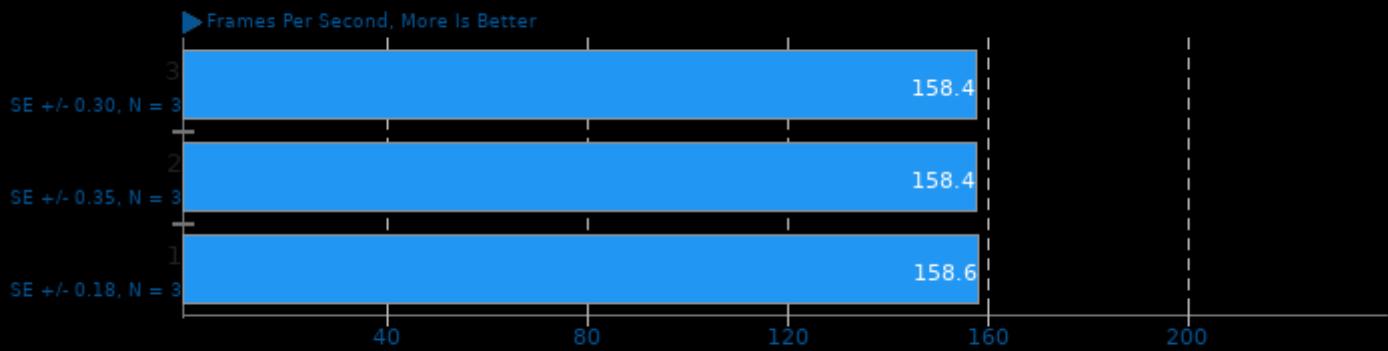
Renderer: OpenGL 1.x - Resolution: 1920 x 1080



1. (CC) gcc options: -lm -ldl -rdynamic -shared -SDL2 -O2 -pipe -fomit-frame-pointer -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -mfpm

yquake2 7.45

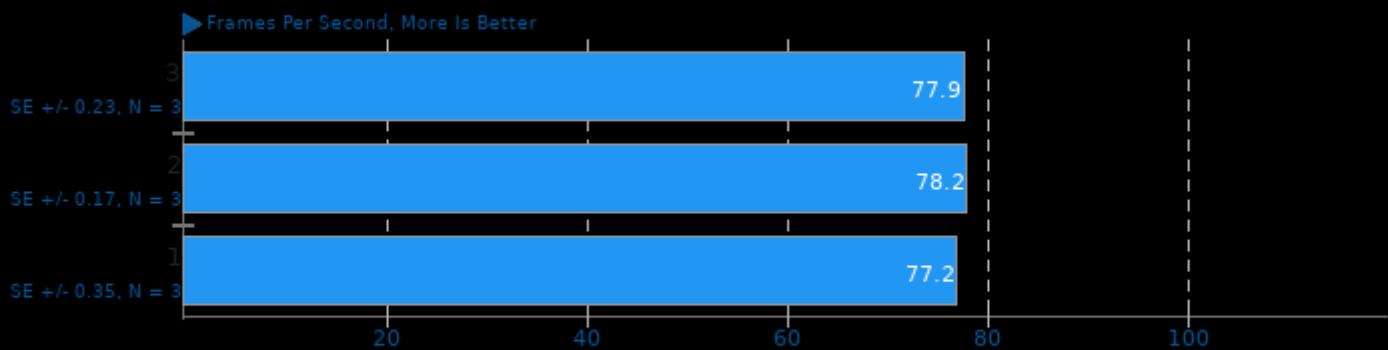
Renderer: OpenGL 3.x - Resolution: 1920 x 1080



1. (CC) gcc options: -lm -ldl -rdynamic -shared -SDL2 -O2 -pipe -fomit-frame-pointer -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -mfpm

yquake2 7.45

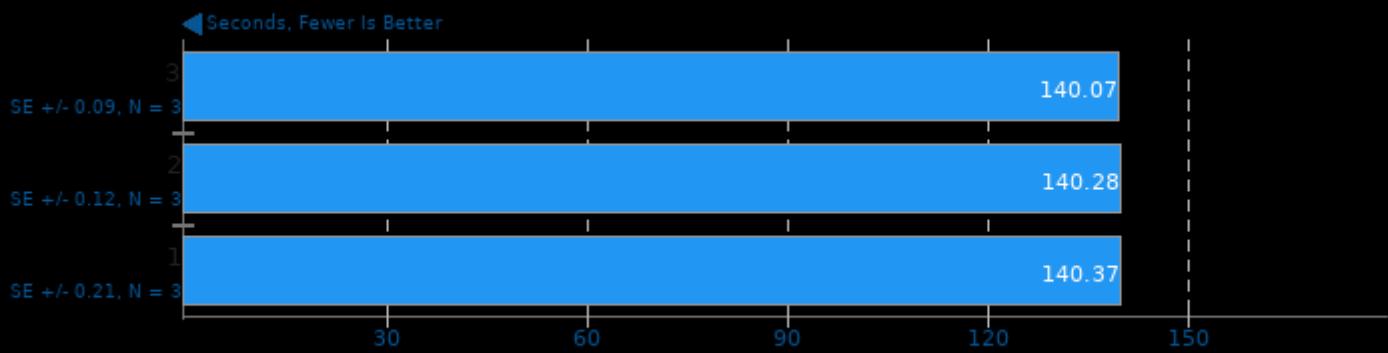
Renderer: Software CPU - Resolution: 1920 x 1080



1. (CC) gcc options: -lm -ldl -rdynamic -shared -ISDL2 -O2 -pipe -fomit-frame-pointer -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -mfpmath=sse

Timed HMMer Search 3.3.1

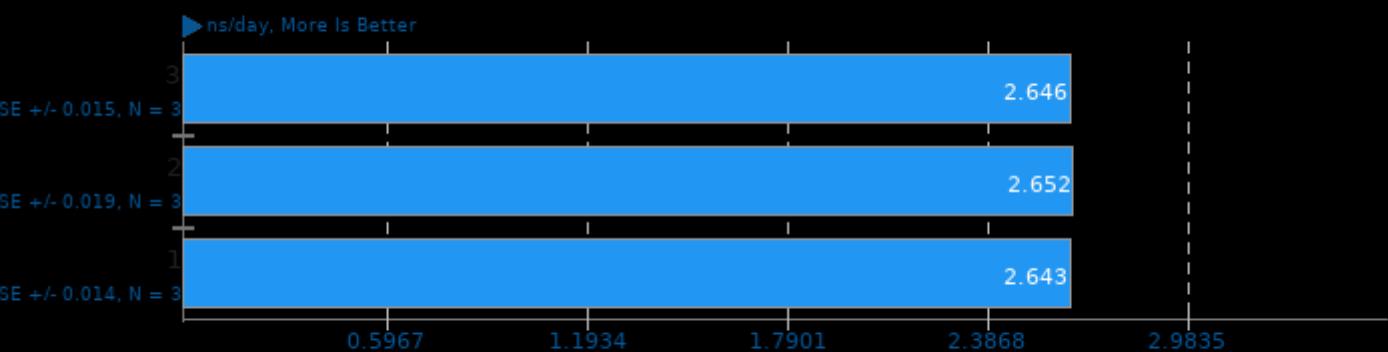
Pfam Database Search



1. (CC) gcc options: -O3 -pthread -lhmmmer -leasel -lm

LAMMPS Molecular Dynamics Simulator 29Oct2020

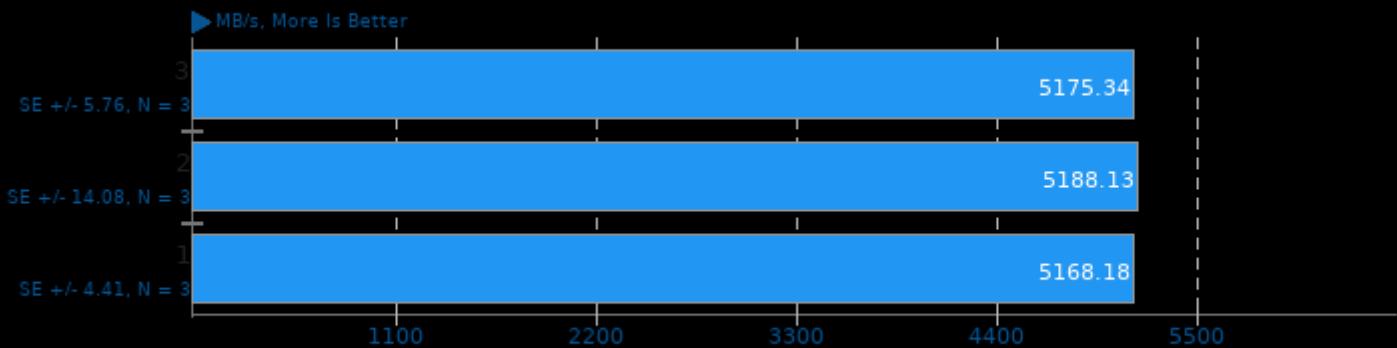
Model: Rhodopsin Protein



1. (CXX) g++ options: -O3 -pthread -lm

LZ4 Compression 1.9.3

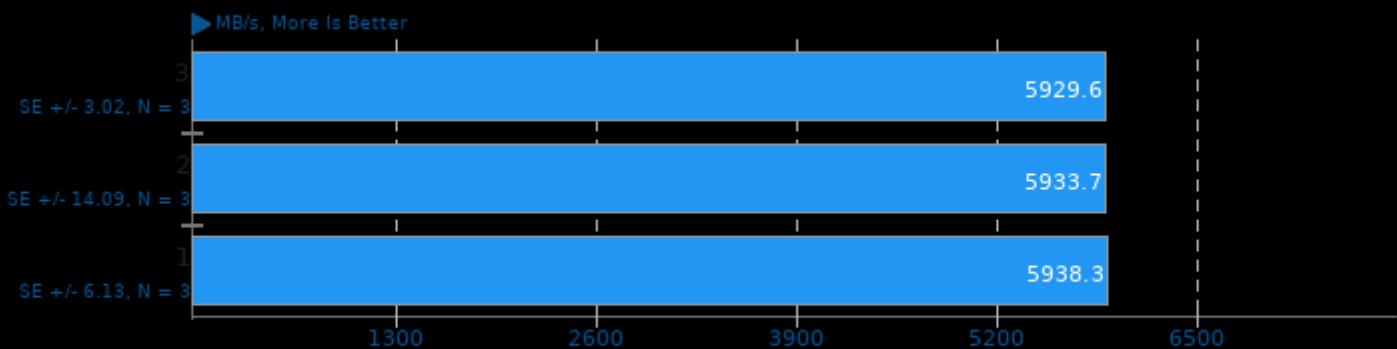
Compression Level: 1 - Compression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

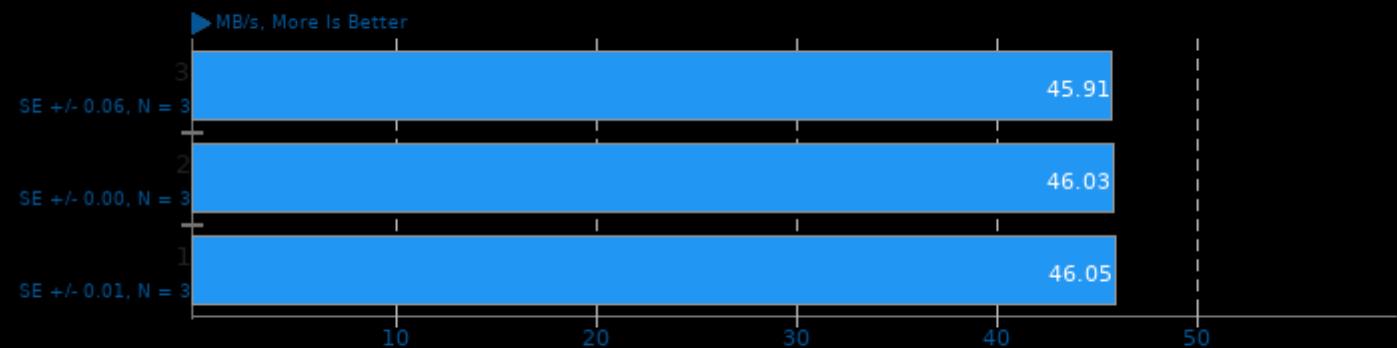
Compression Level: 1 - Decompression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

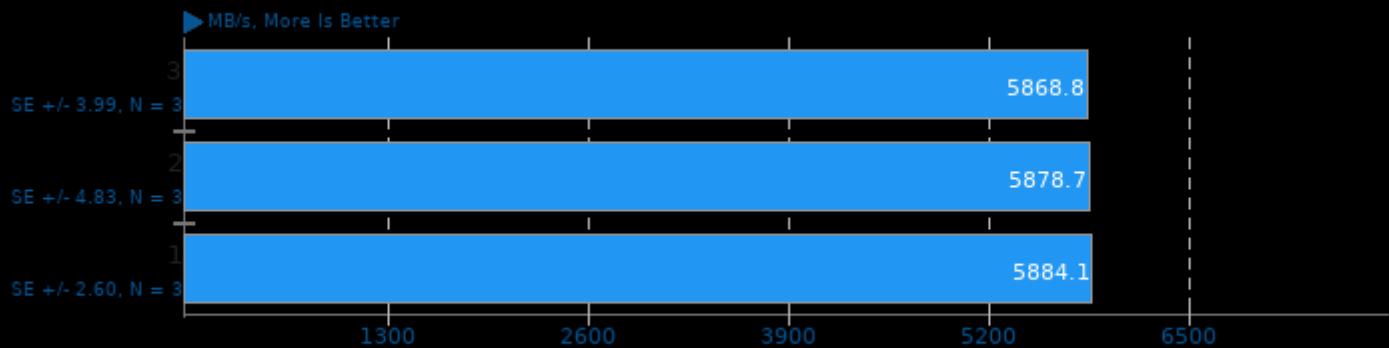
Compression Level: 3 - Compression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

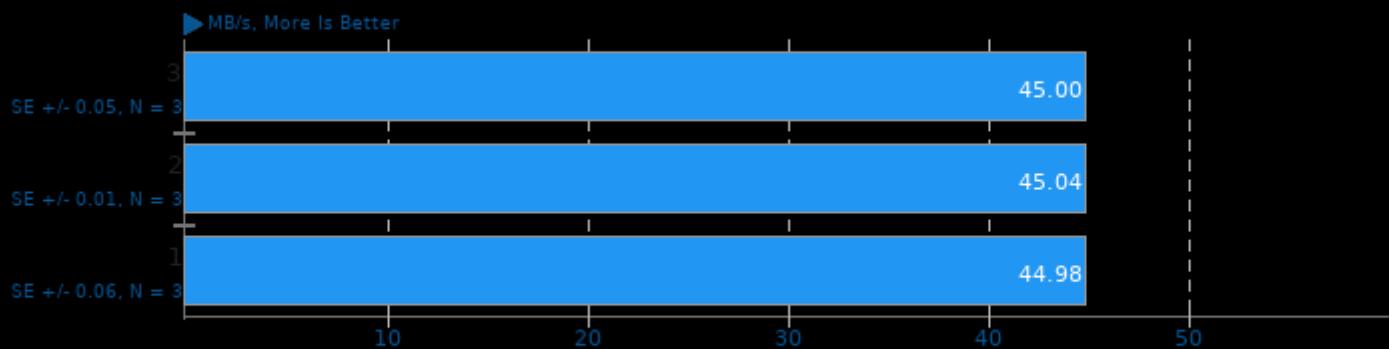
Compression Level: 3 - Decompression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

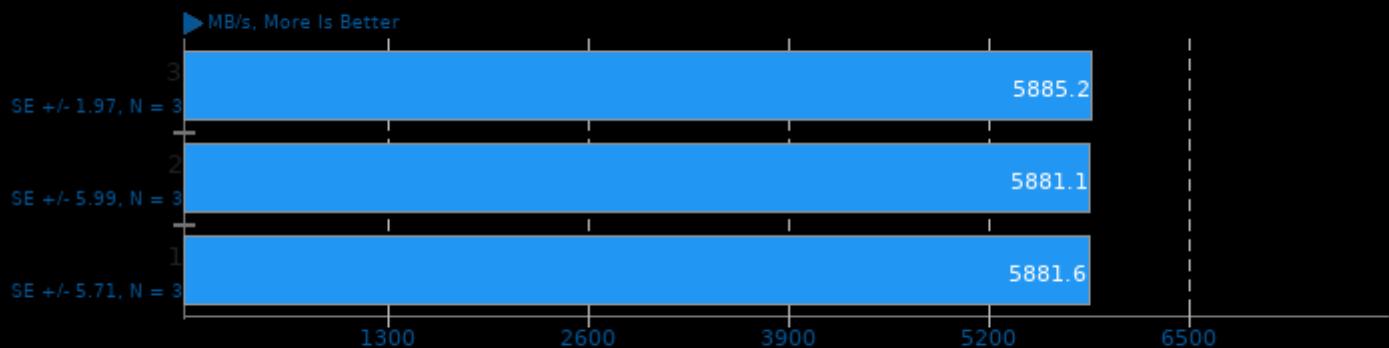
Compression Level: 9 - Compression Speed



1. (CC) gcc options: -O3

LZ4 Compression 1.9.3

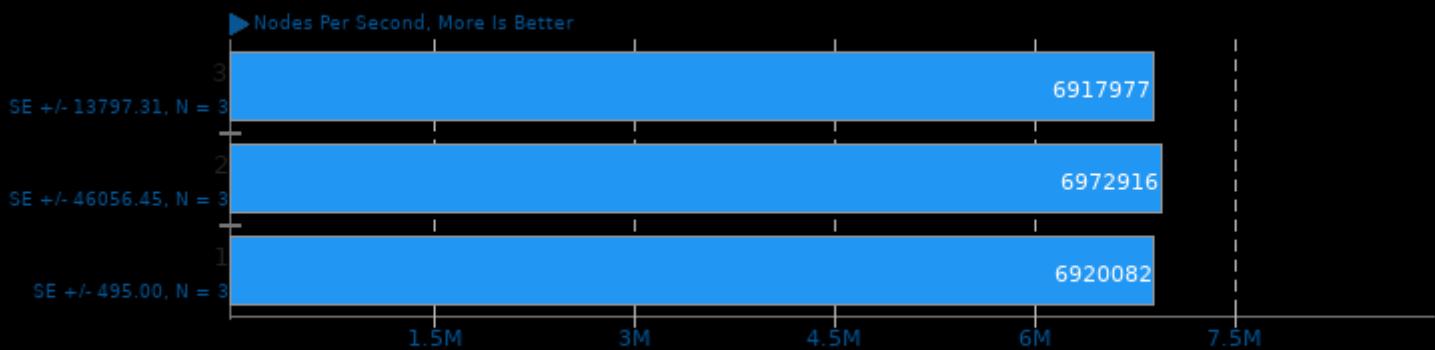
Compression Level: 9 - Decompression Speed



1. (CC) gcc options: -O3

Crafty 25.2

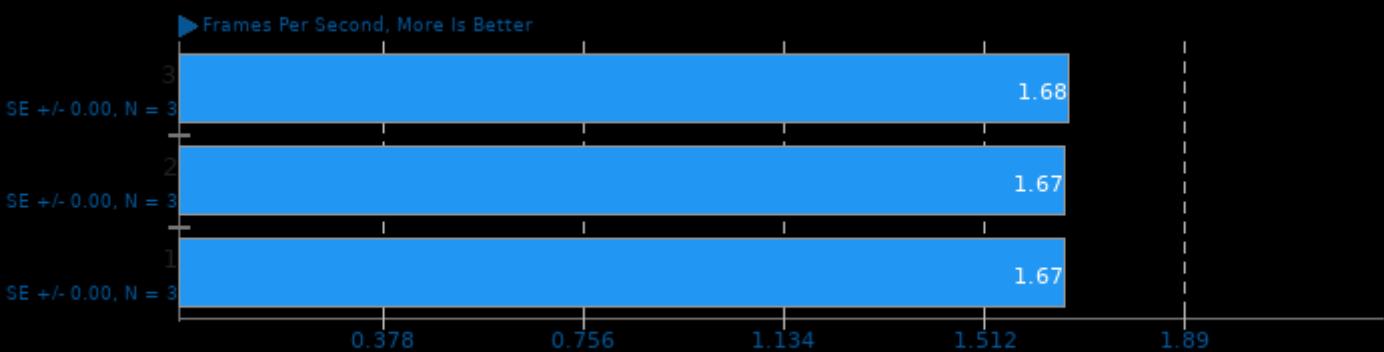
Elapsed Time



1. (CC) gcc options: -pthread -stdc++ -fprofile-use -lm

Kvazaar 2.0

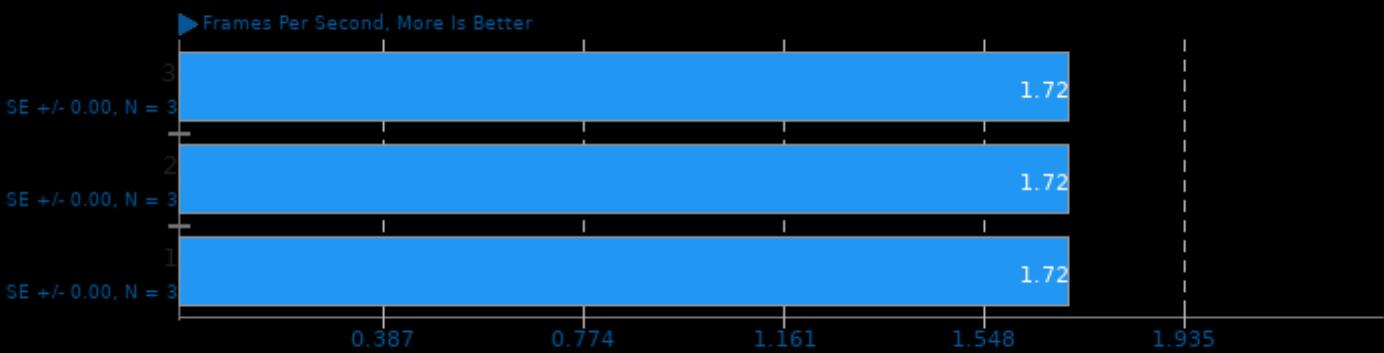
Video Input: Bosphorus 4K - Video Preset: Slow



1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

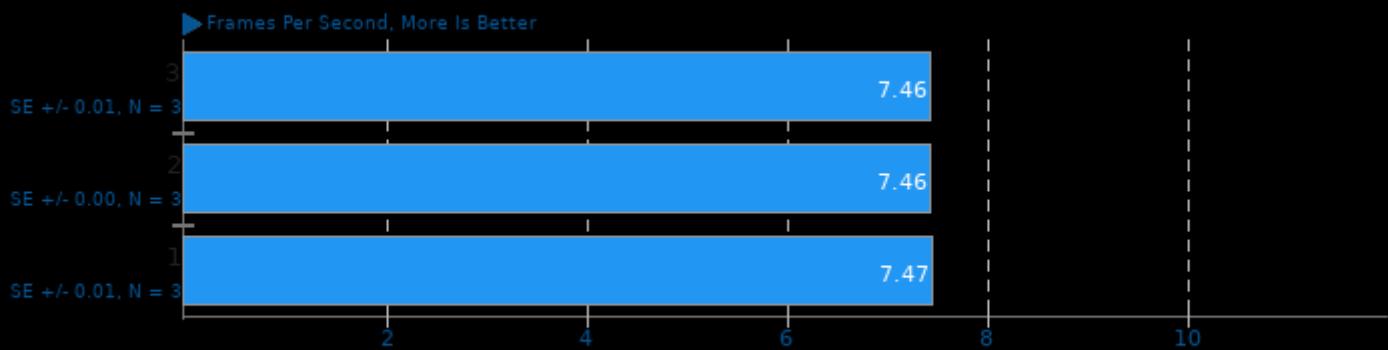
Video Input: Bosphorus 4K - Video Preset: Medium



1. (CC) gcc options: -pthread -fno-tree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

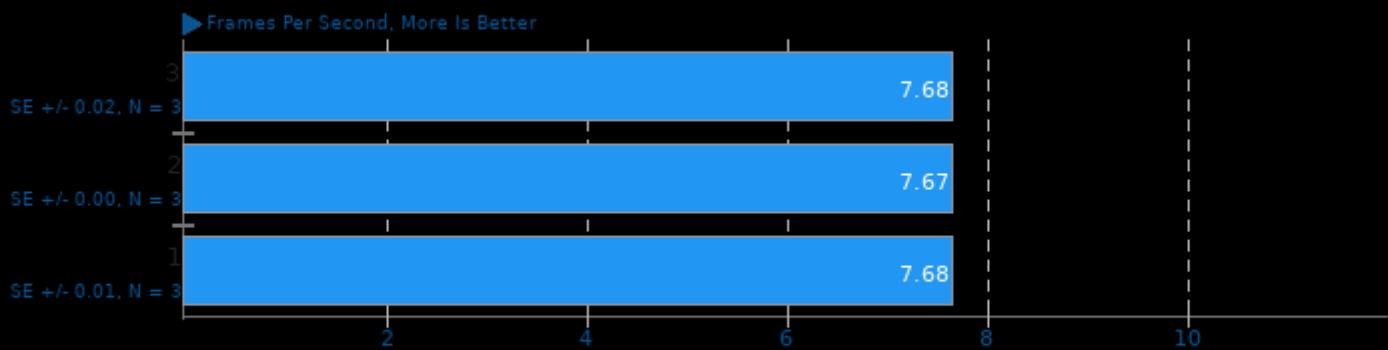
Video Input: Bosphorus 1080p - Video Preset: Slow



1. (CC) gcc options: -pthread -fthread-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

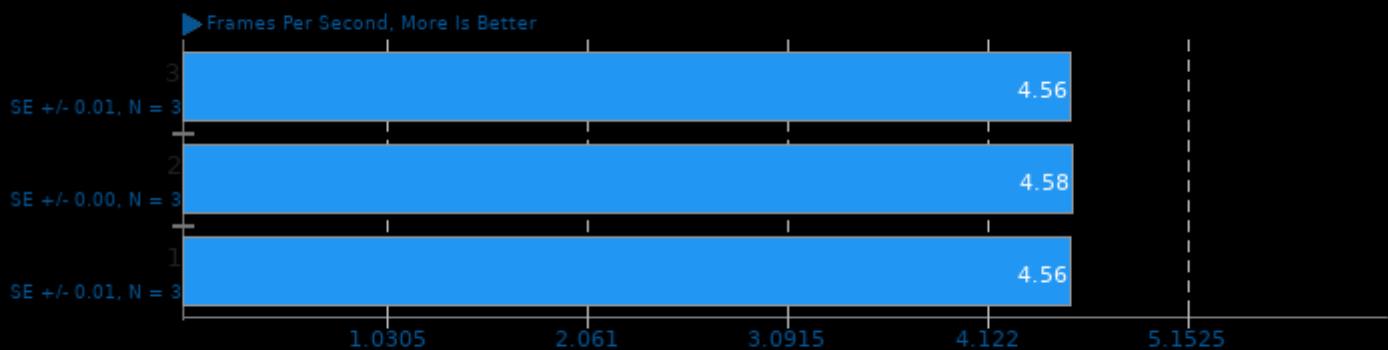
Video Input: Bosphorus 1080p - Video Preset: Medium



1. (CC) gcc options: -pthread -fthread-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

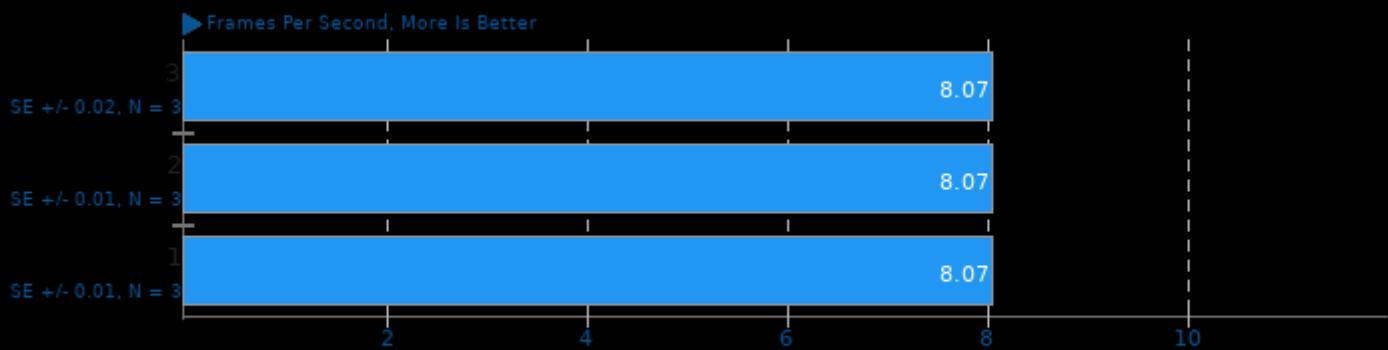
Video Input: Bosphorus 4K - Video Preset: Very Fast



1. (CC) gcc options: -pthread -fthread-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

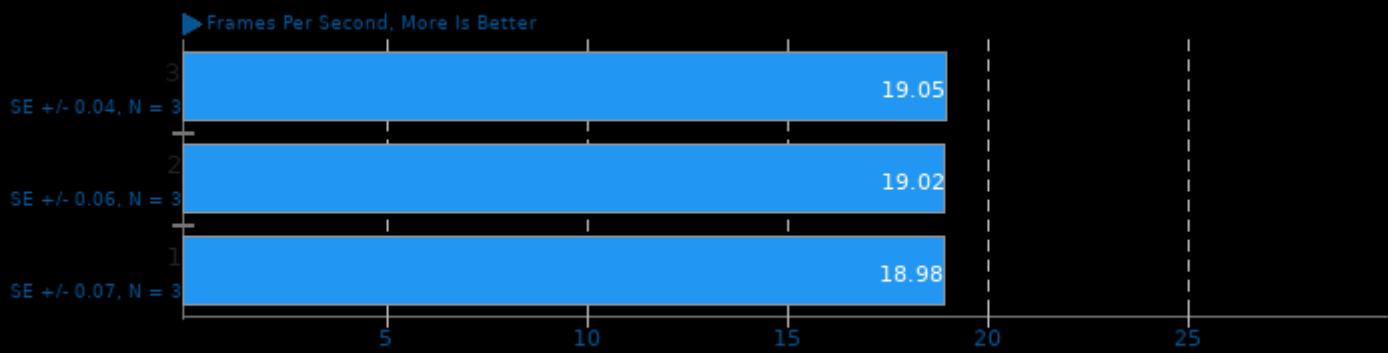
Video Input: Bosphorus 4K - Video Preset: Ultra Fast



1. (CC) gcc options: -pthread -fthread-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

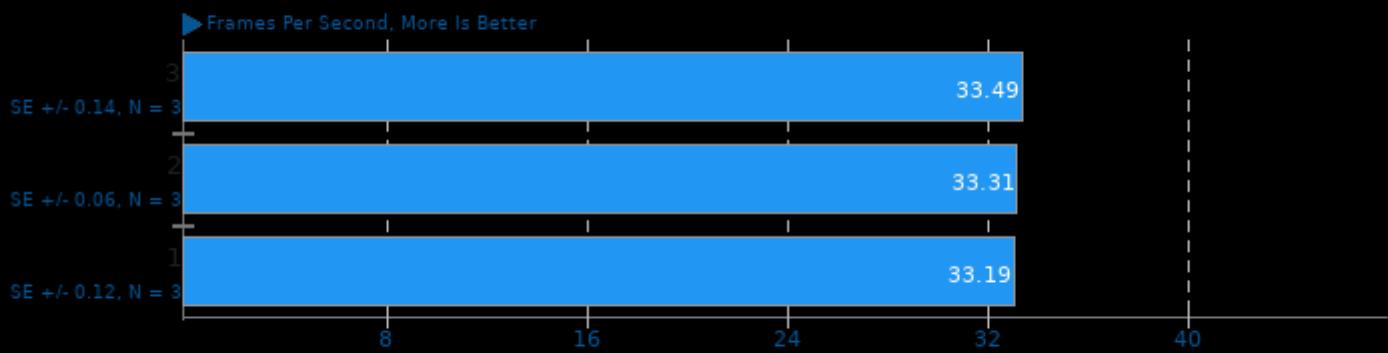
Video Input: Bosphorus 1080p - Video Preset: Very Fast



1. (CC) gcc options: -pthread -fthread-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

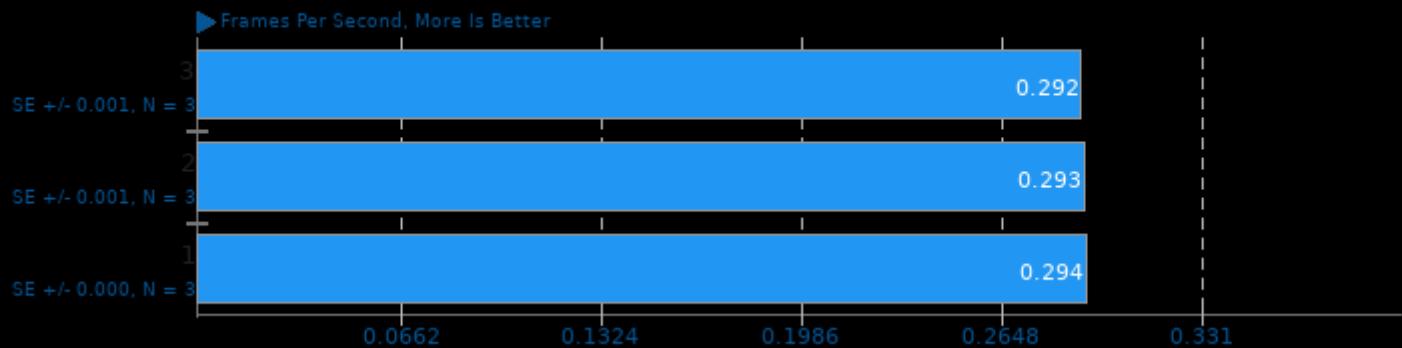
Video Input: Bosphorus 1080p - Video Preset: Ultra Fast



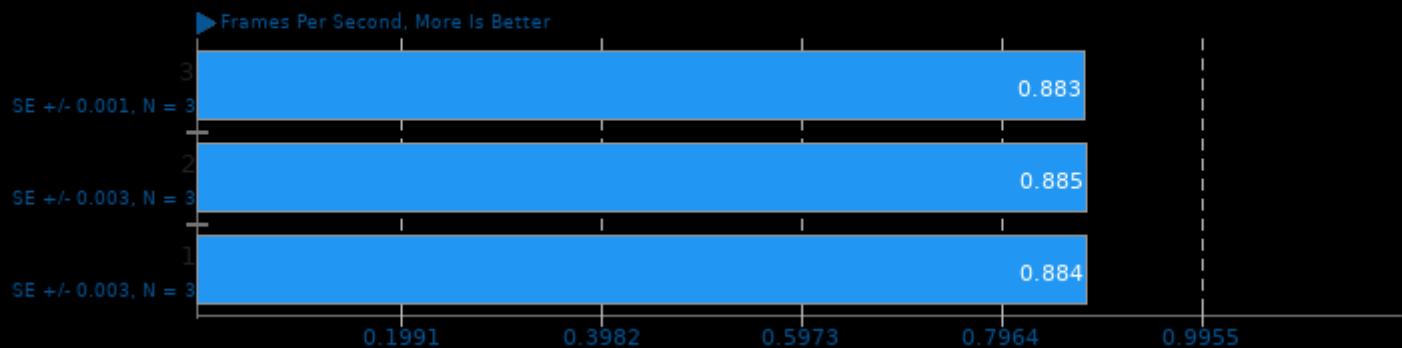
1. (CC) gcc options: -pthread -fthread-vectorize -visibility=hidden -O2 -lpthread -lm -lrt

rav1e 0.4 Alpha

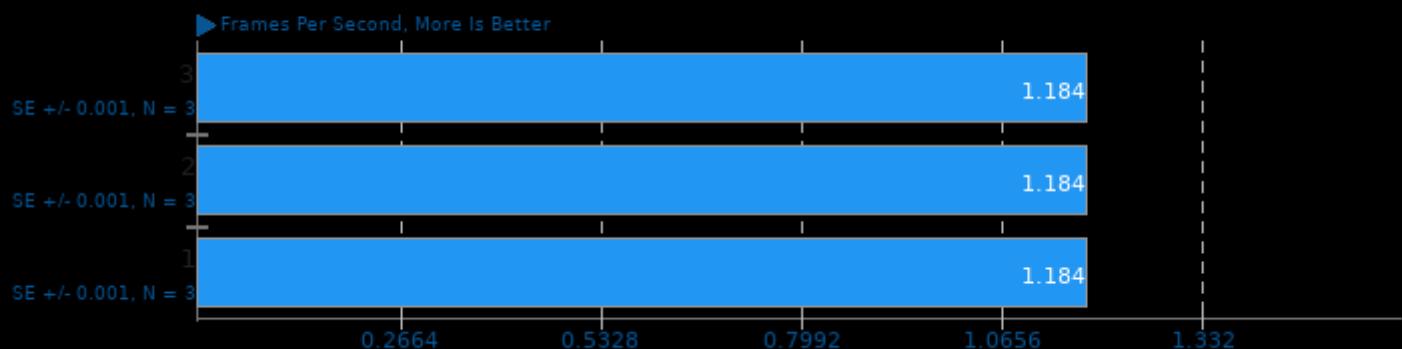
Speed: 1

**rav1e 0.4 Alpha**

Speed: 5

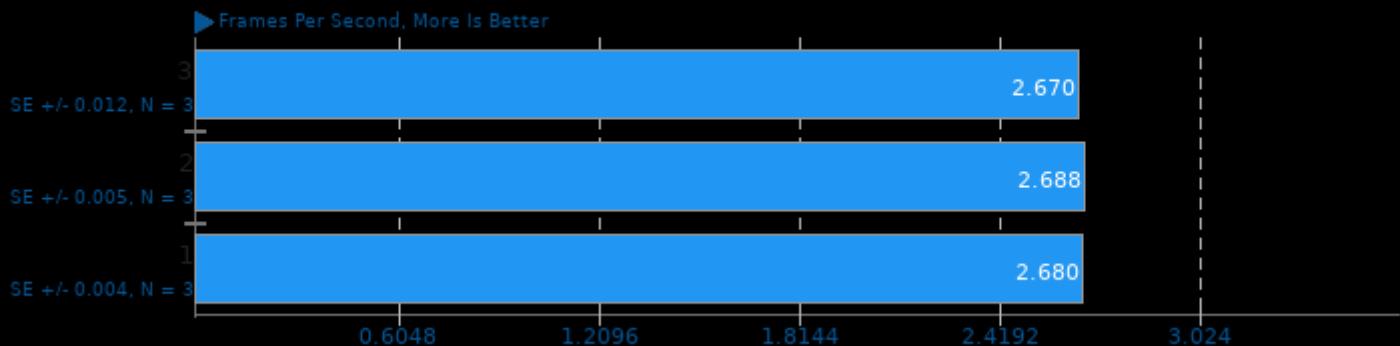
**rav1e 0.4 Alpha**

Speed: 6

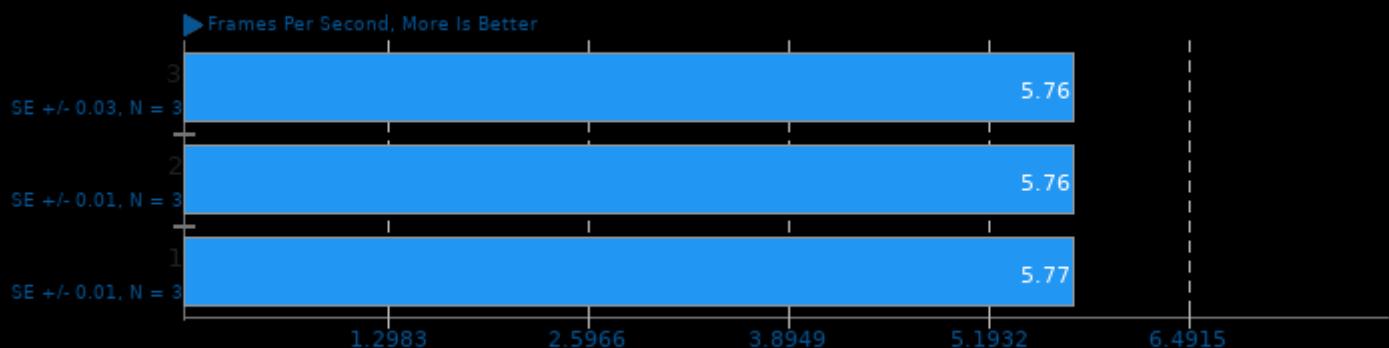


rav1e 0.4 Alpha

Speed: 10

**x265 3.4**

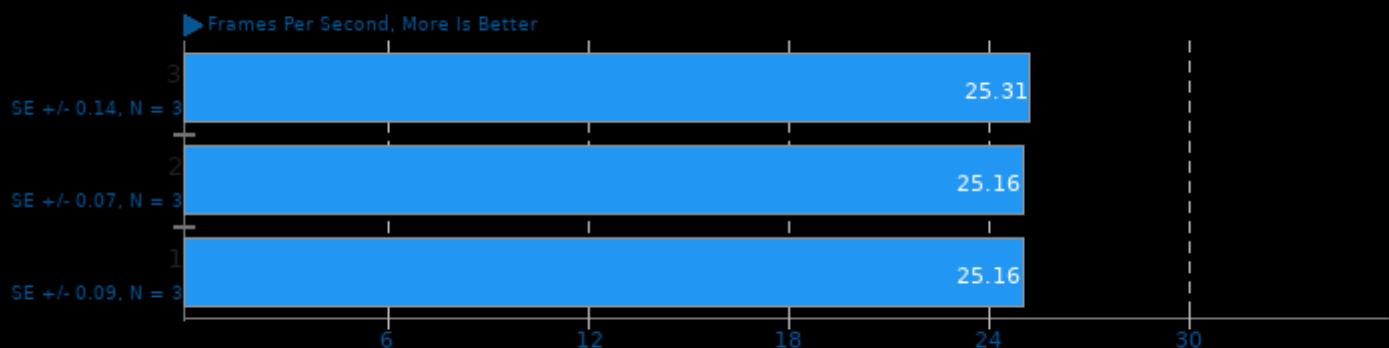
Video Input: Bosphorus 4K



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

x265 3.4

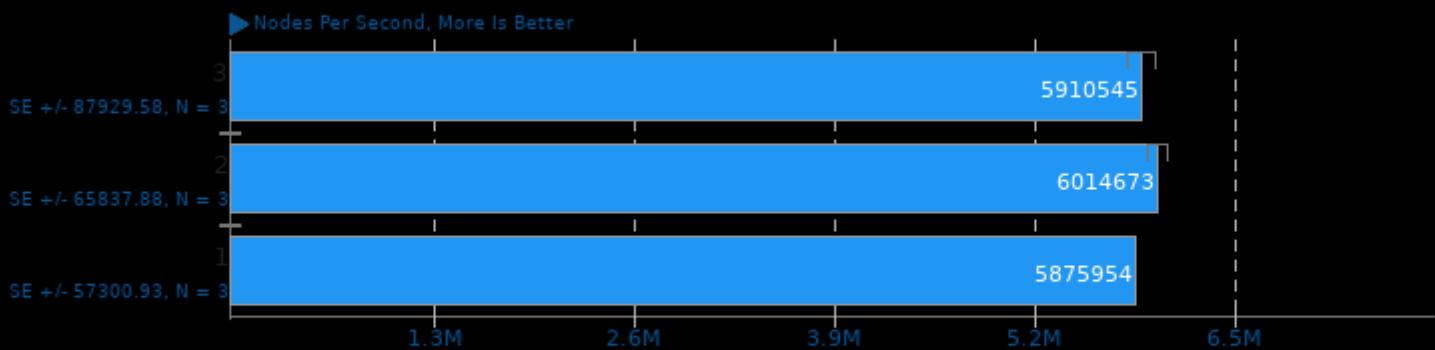
Video Input: Bosphorus 1080p



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

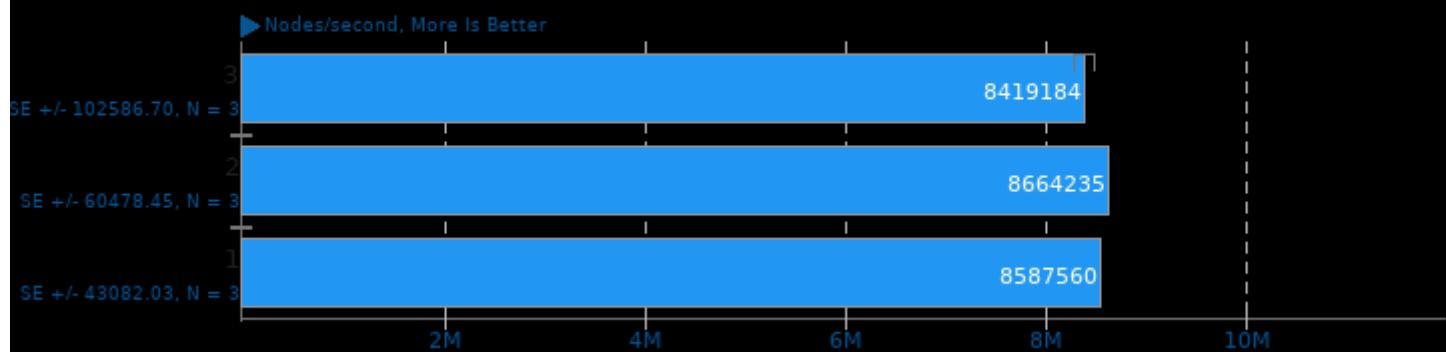
Stockfish 12

Total Time

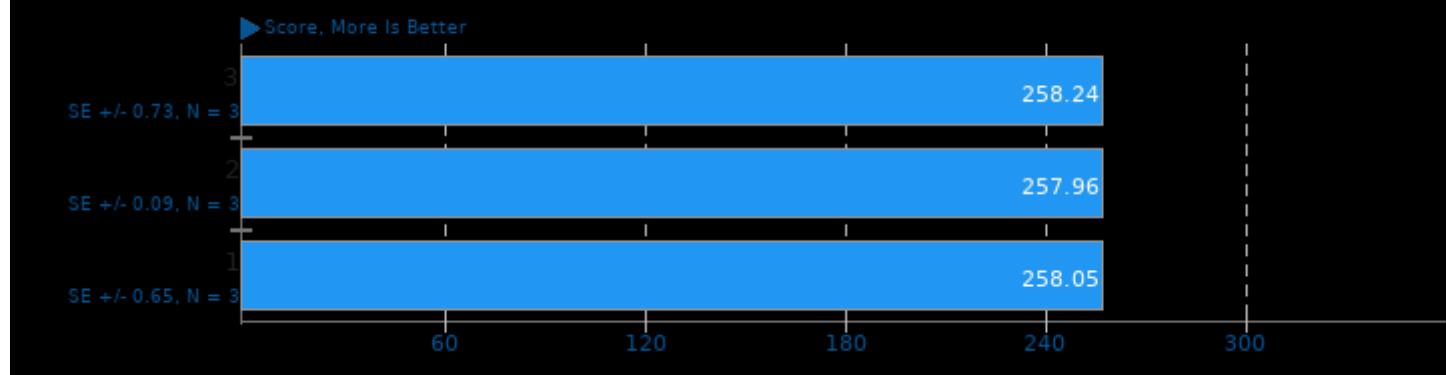


asmFish 2018-07-23

1024 Hash Memory, 26 Depth

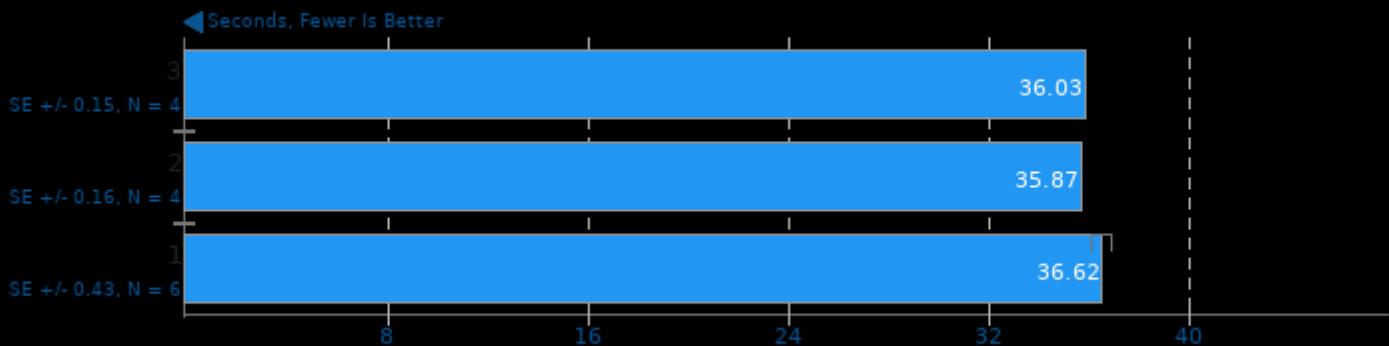


Numpy Benchmark



eSpeak-NG Speech Engine 20200907

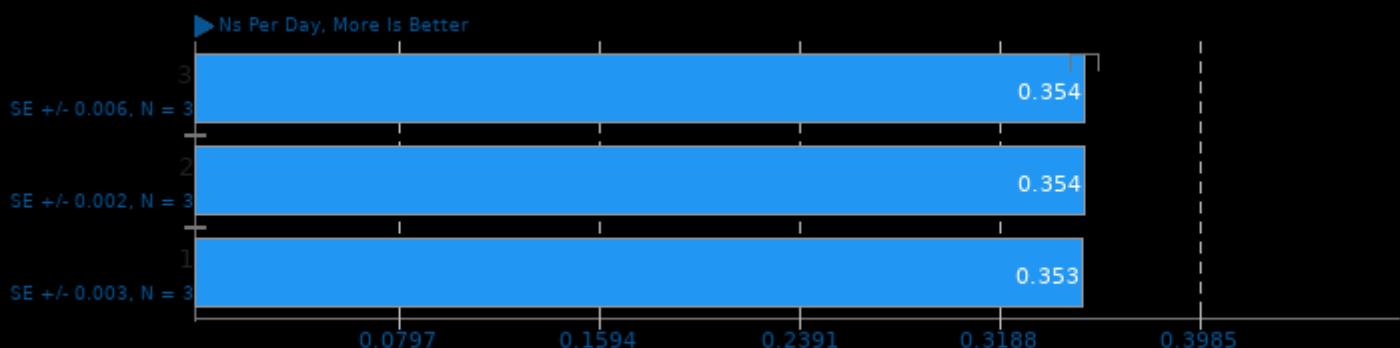
Text-To-Speech Synthesis



1. (CC) gcc options: -O2 -std=c99

GROMACS 2020.3

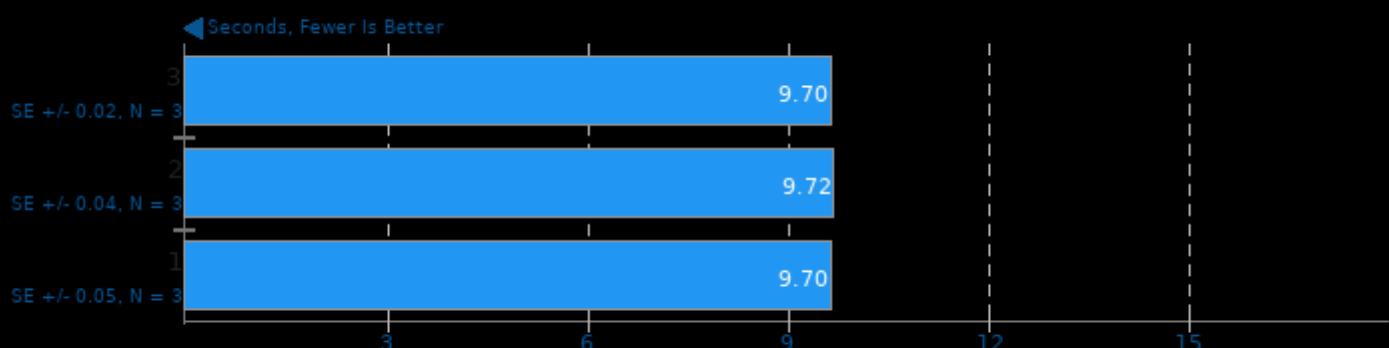
Water Benchmark



1. (CXX) g++ options: -O3 -pthread -lrt -lpthread -lm

ASTC Encoder 2.0

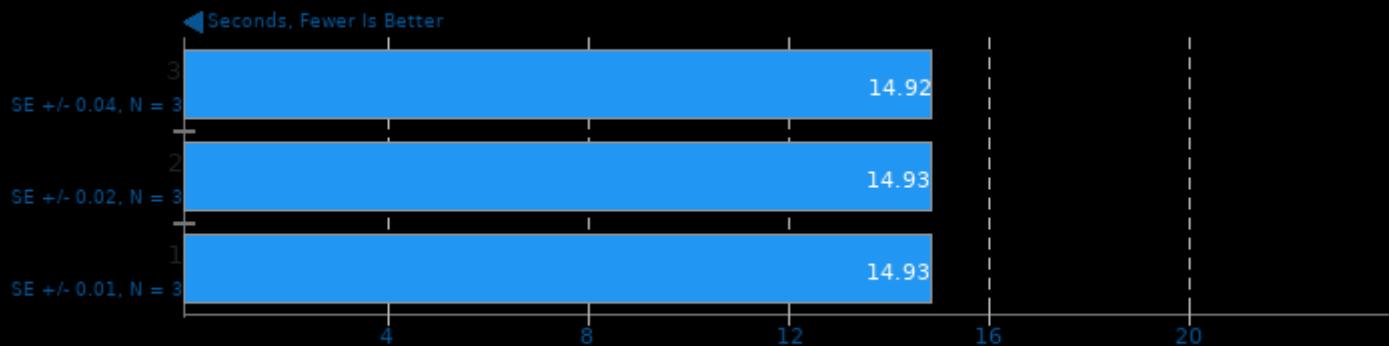
Preset: Fast



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-math-errno -mavx2 -mpopcnt -lpthread

ASTC Encoder 2.0

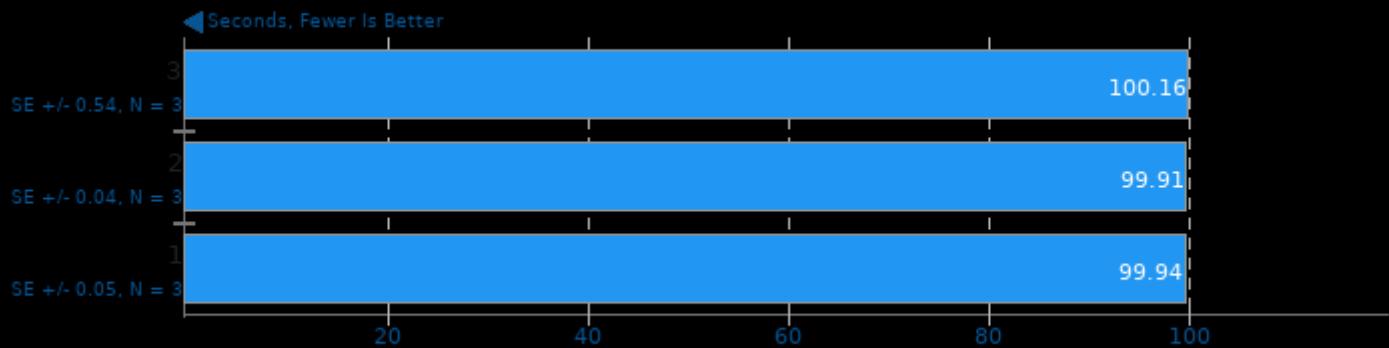
Preset: Medium



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-math-errno -mavx2 -mpopcnt -lpthread

ASTC Encoder 2.0

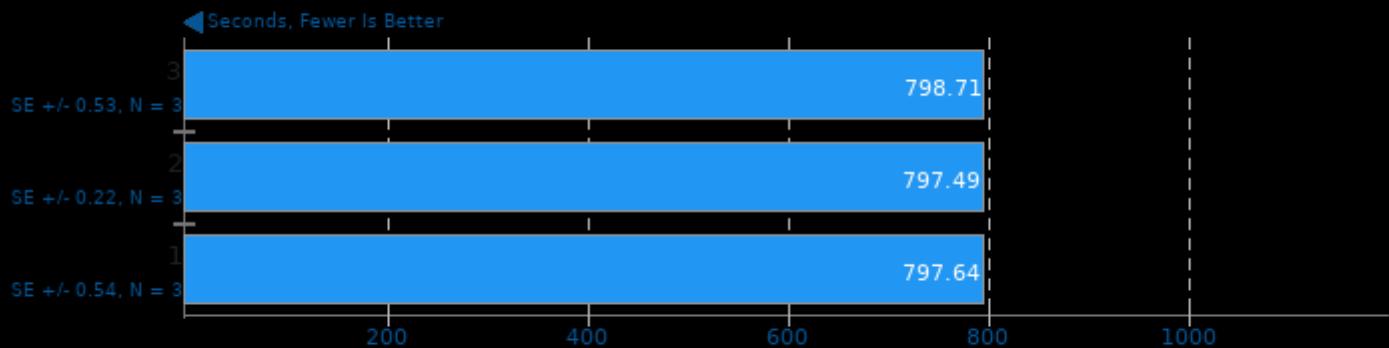
Preset: Thorough



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-math-errno -mavx2 -mpopcnt -lpthread

ASTC Encoder 2.0

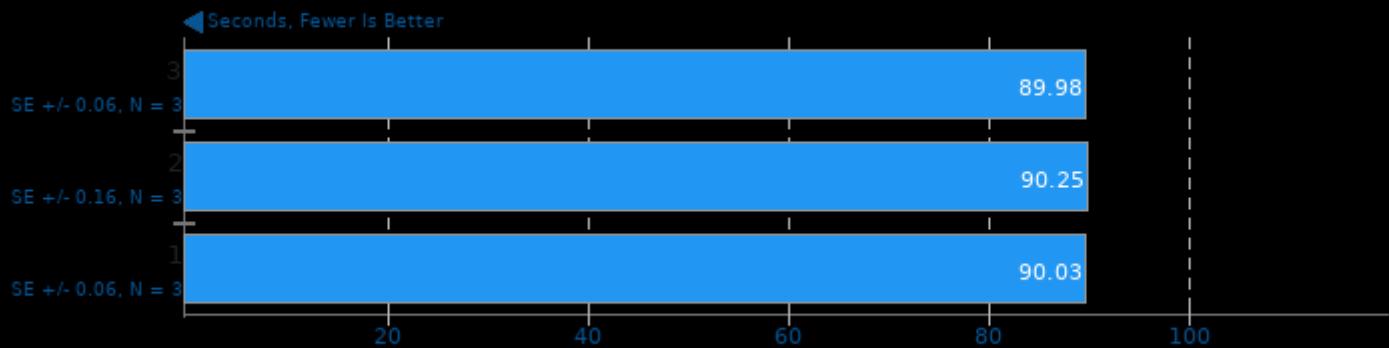
Preset: Exhaustive



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-math-errno -mavx2 -mpopcnt -lpthread

Basis Universal 1.12

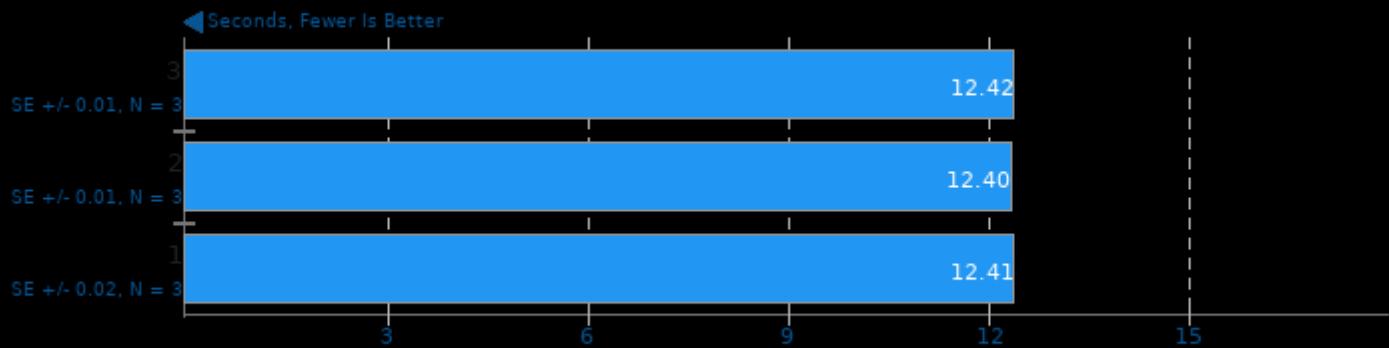
Settings: ETC1S



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.12

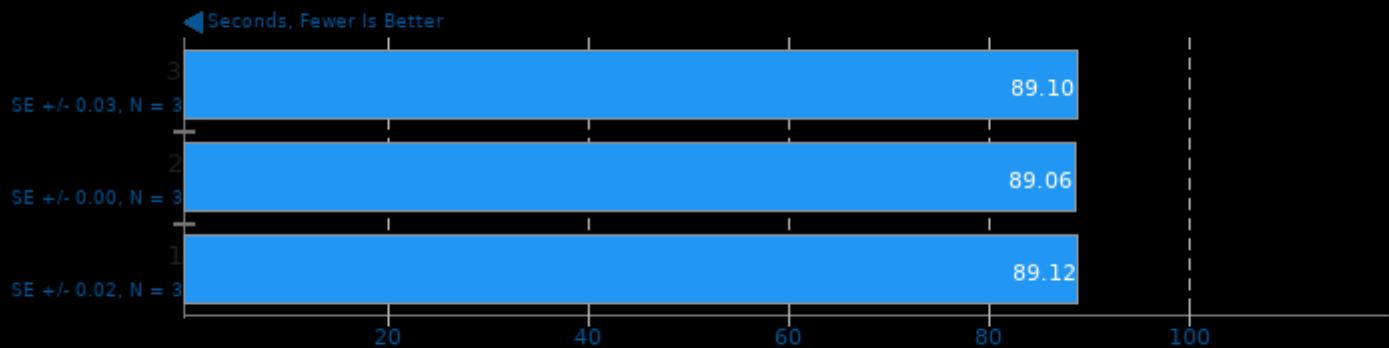
Settings: UASTC Level 0



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.12

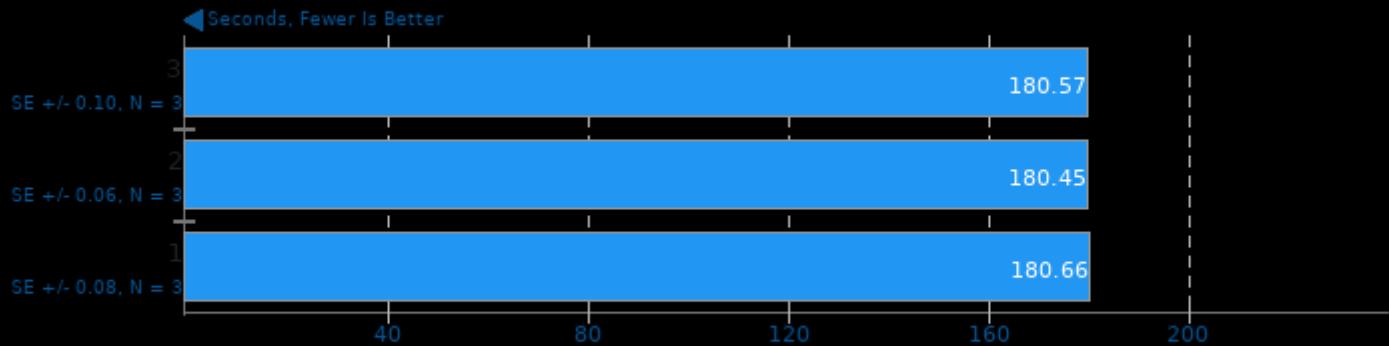
Settings: UASTC Level 2



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.12

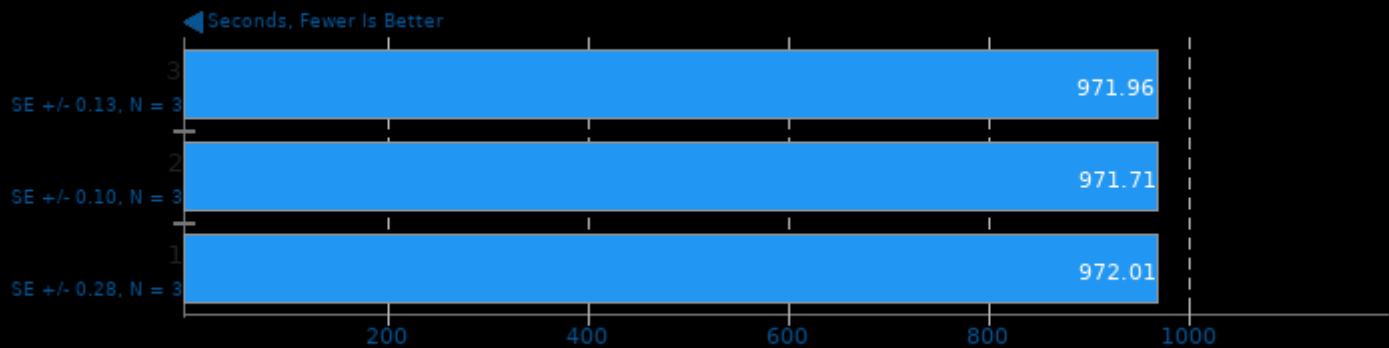
Settings: UASTC Level 3



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.12

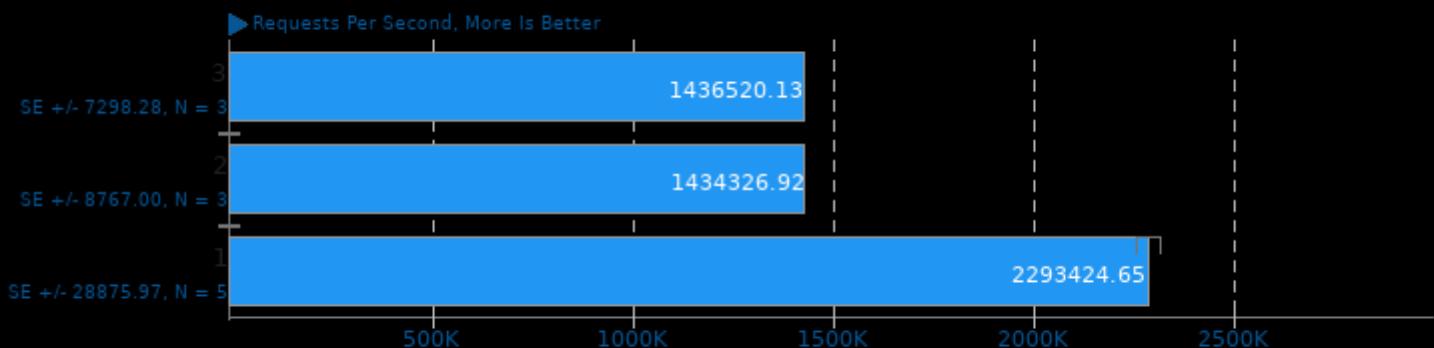
Settings: UASTC Level 2 + RDO Post-Processing



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Redis 6.0.9

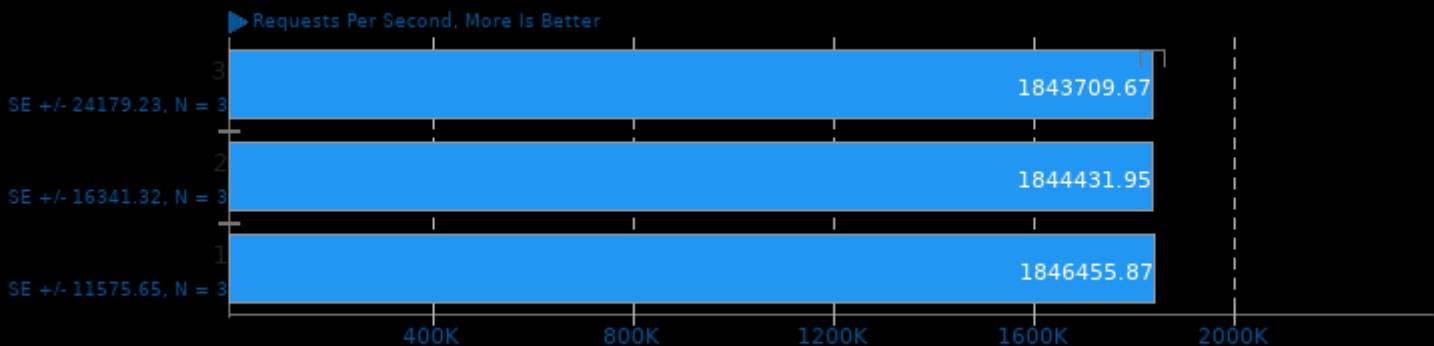
Test: LPOP



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 6.0.9

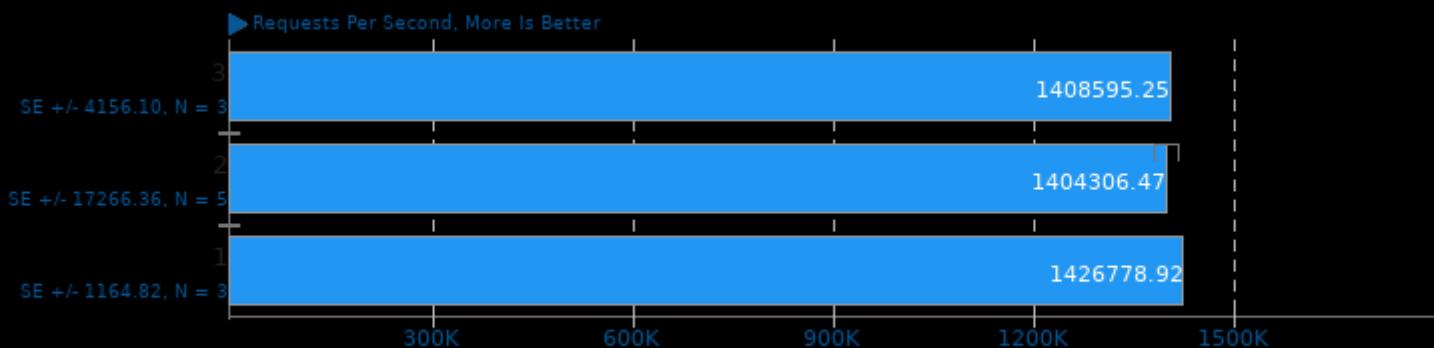
Test: SADD



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 6.0.9

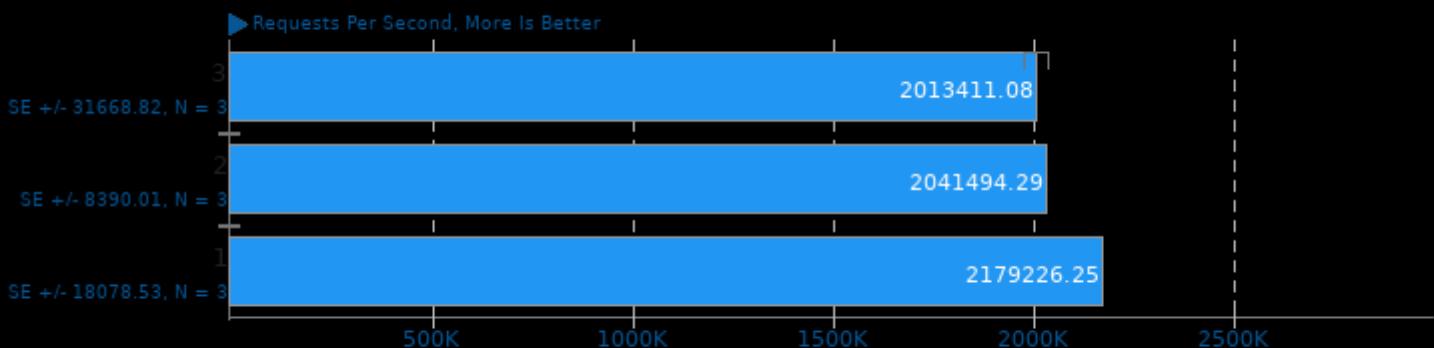
Test: LPUSH



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 6.0.9

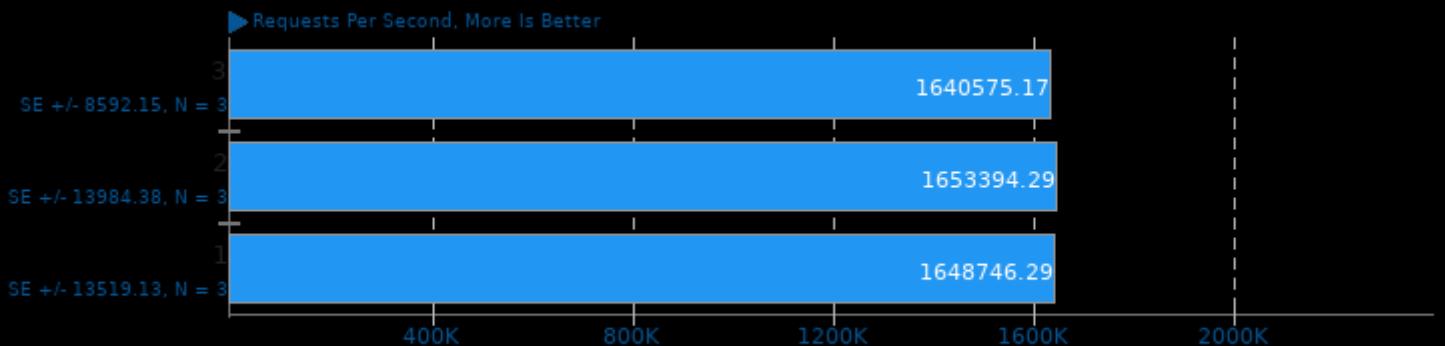
Test: GET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 6.0.9

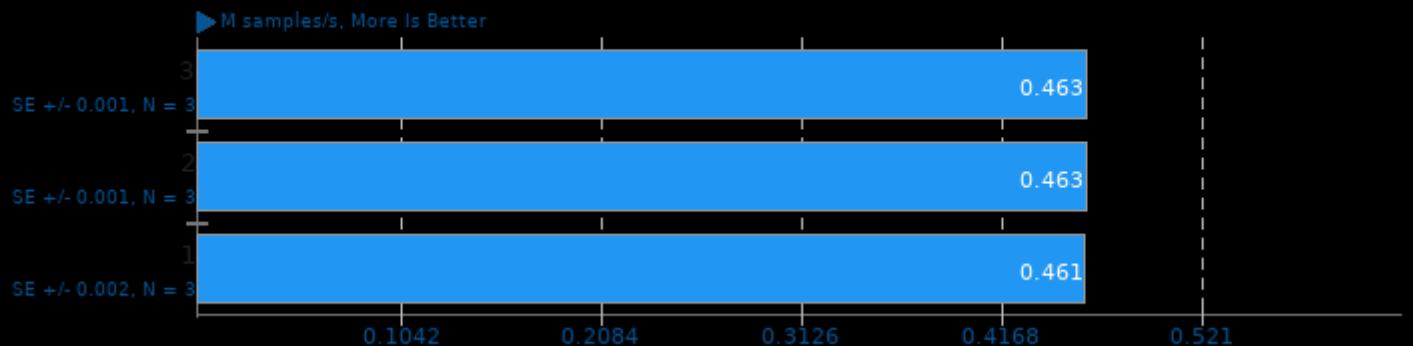
Test: SET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

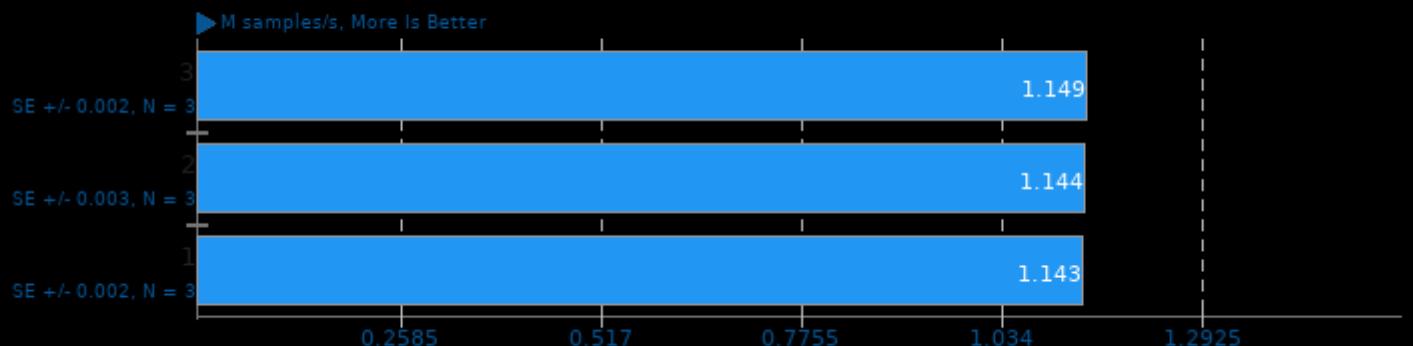
IndigoBench 4.4

Acceleration: CPU - Scene: Bedroom



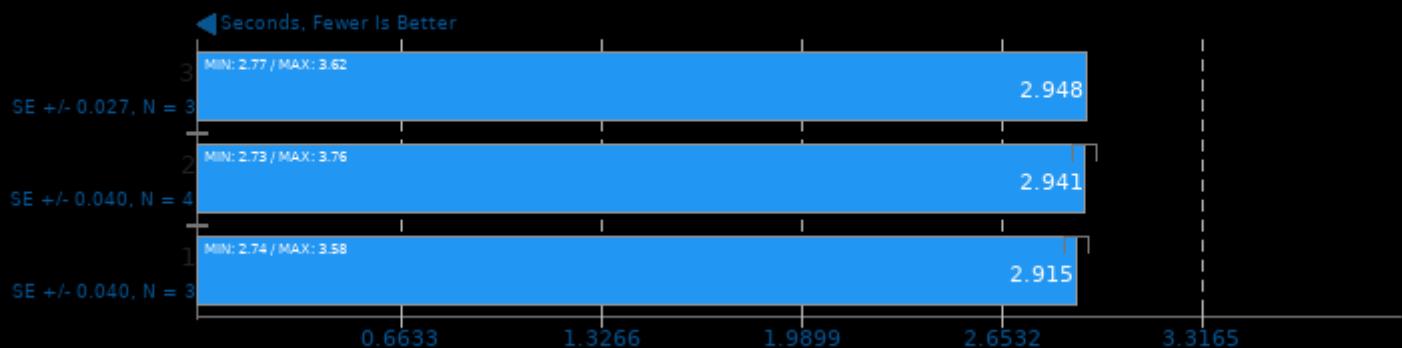
IndigoBench 4.4

Acceleration: CPU - Scene: Supercar



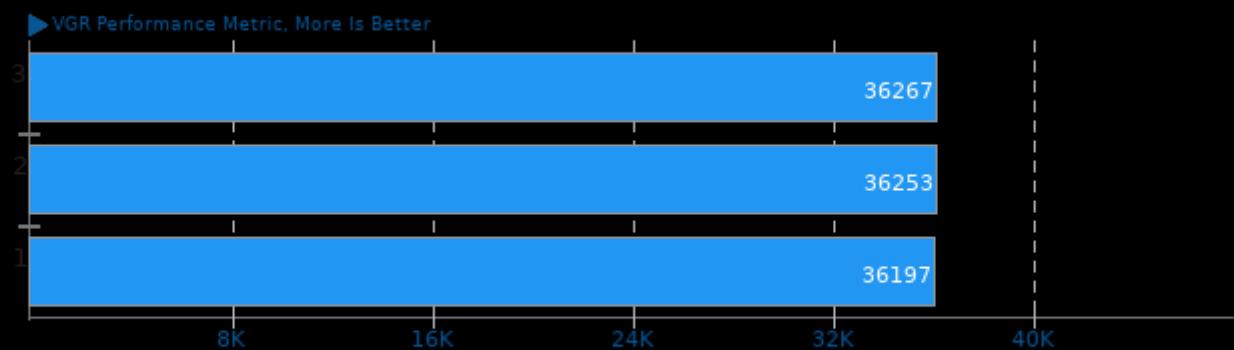
Sunflow Rendering System 0.07.2

Global Illumination + Image Synthesis



BRL-CAD 7.30.8

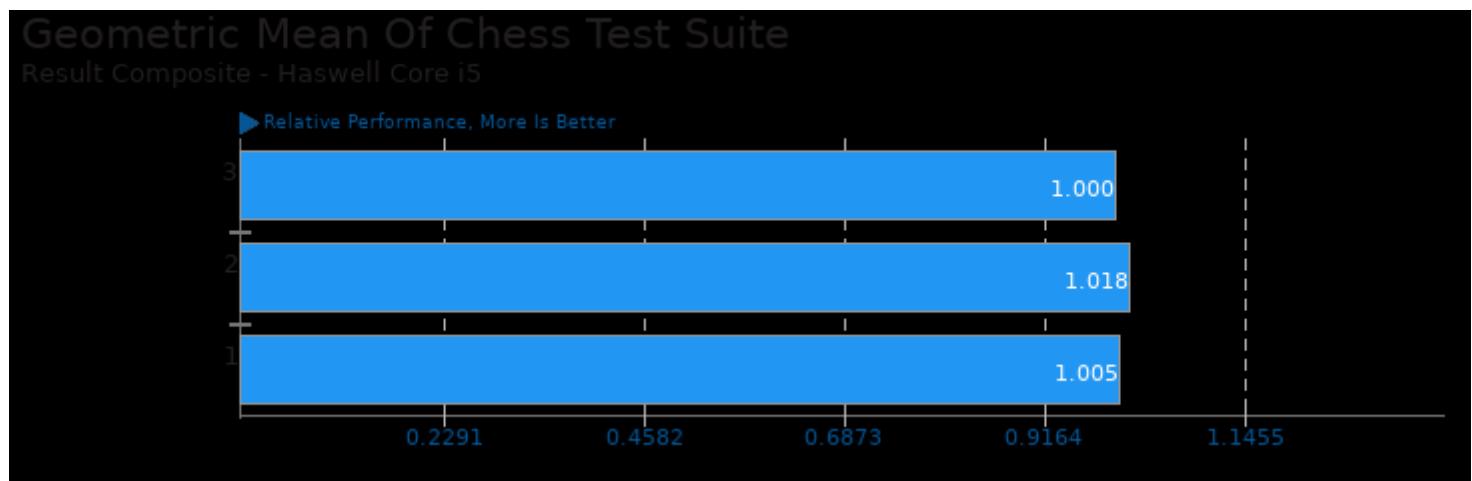
VGR Performance Metric



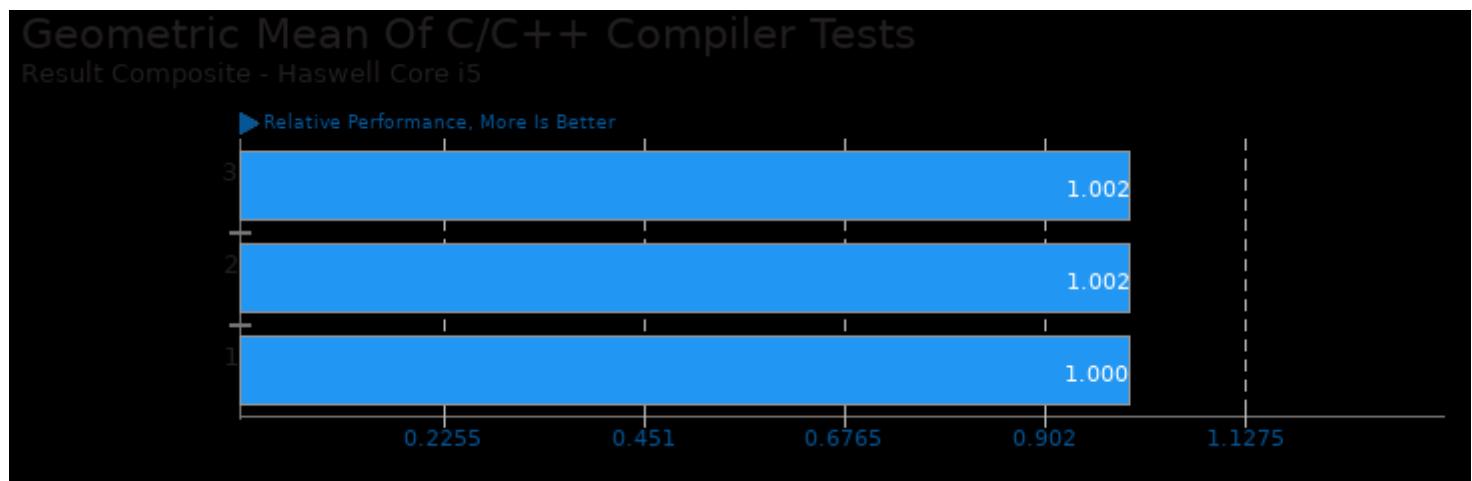
1. (CXX) g++ options: -std=c++11 -pipe -fno-strict-aliasing -fno-common -fexceptions -ftemplate-depth=128 -m64 -ggdb3 -O3 -fipa-pta -fstrength-reduce

Haswell Core i5

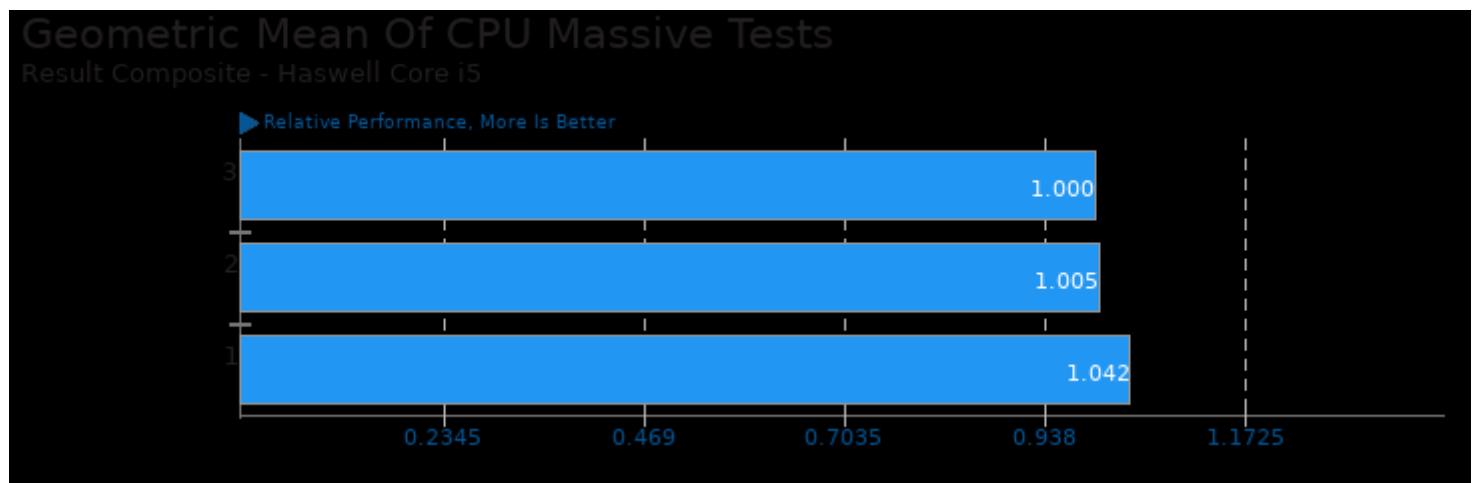
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/crafty, pts/stockfish and pts/asmfish



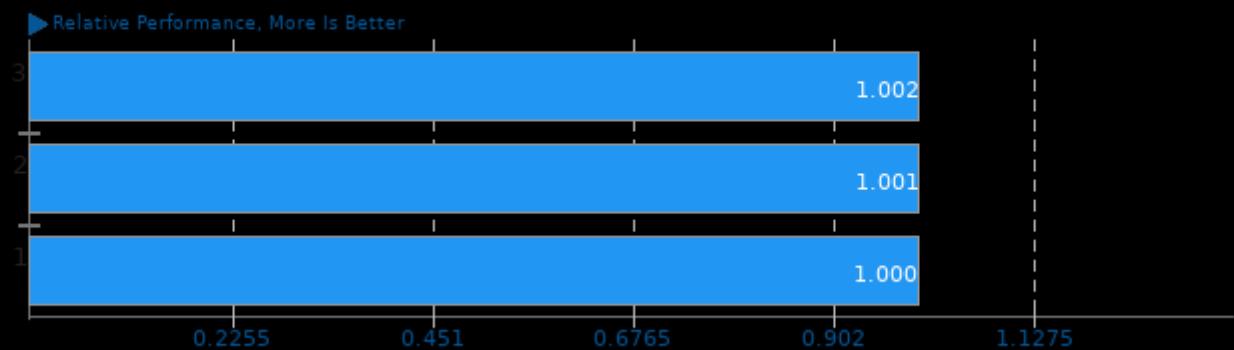
Geometric mean based upon tests: pts/stockfish, pts/hmmer, pts/x265, pts/kvazaar, pts/lammps, pts/gromacs and pts/basis



Geometric mean based upon tests: pts/asmfish, pts/brl-cad, pts/crafty, pts/x265, pts/hmmer, pts/lammps, pts(numpy, pts/redis and pts/stockfish

Geometric Mean Of Creator Workloads Tests

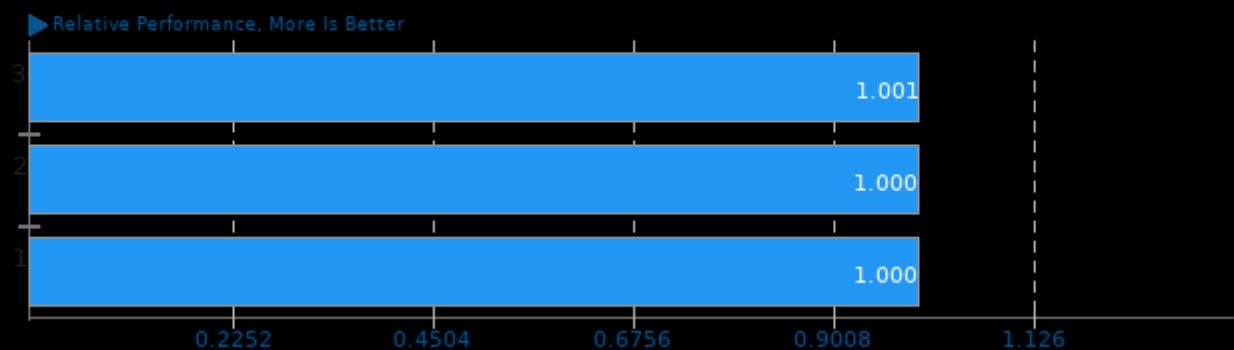
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/indigobench, pts/x265, pts/kvazaar, pts/rav1e, pts/basis, pts/astcenc, pts/espeak and pts/brl-cad

Geometric Mean Of Encoding Tests

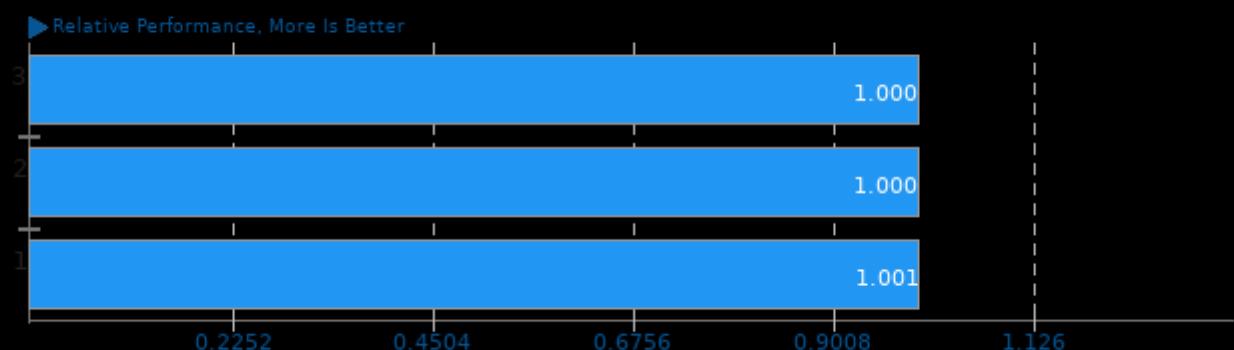
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/x265, pts/kvazaar and pts/rav1e

Geometric Mean Of Game Development Tests

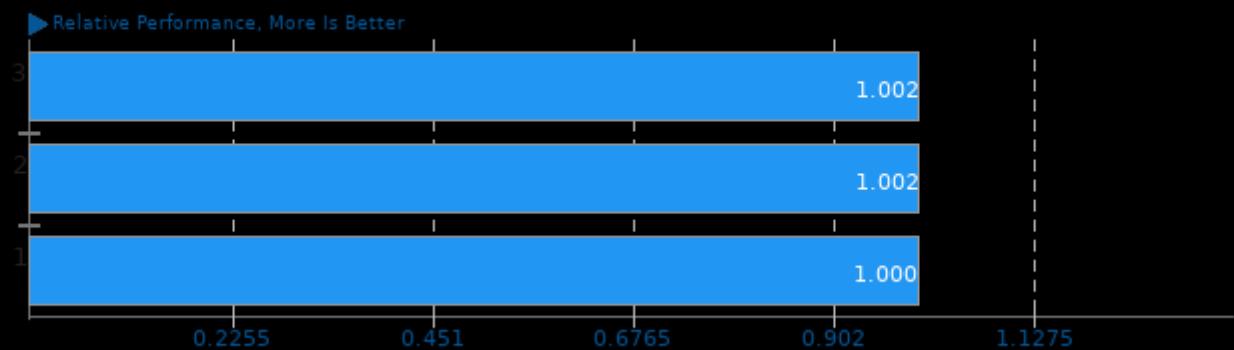
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/basis and pts/astcenc

Geometric Mean Of HPC - High Performance Computing Tests

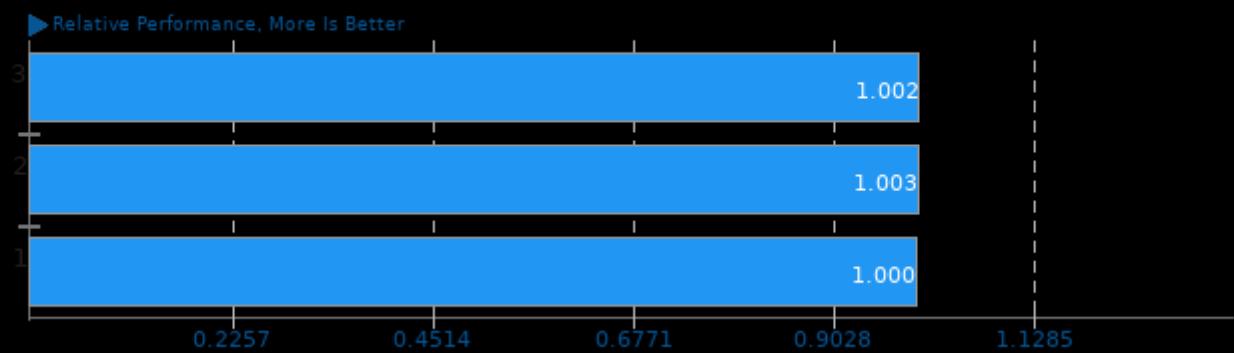
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/gromacs, pts/lammps, pts/hmmer and pts/numpy

Geometric Mean Of Molecular Dynamics Tests

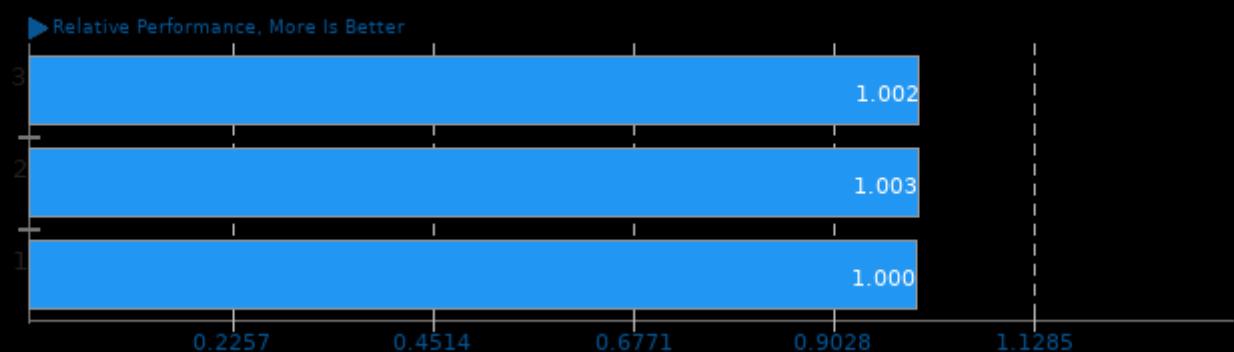
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/gromacs and pts/lammps

Geometric Mean Of MPI Benchmarks Tests

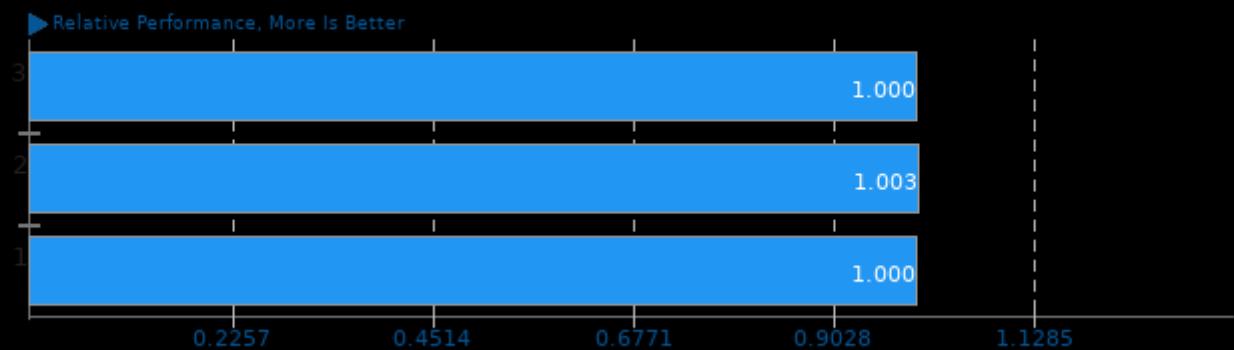
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/lammps and pts/gromacs

Geometric Mean Of Multi-Core Tests

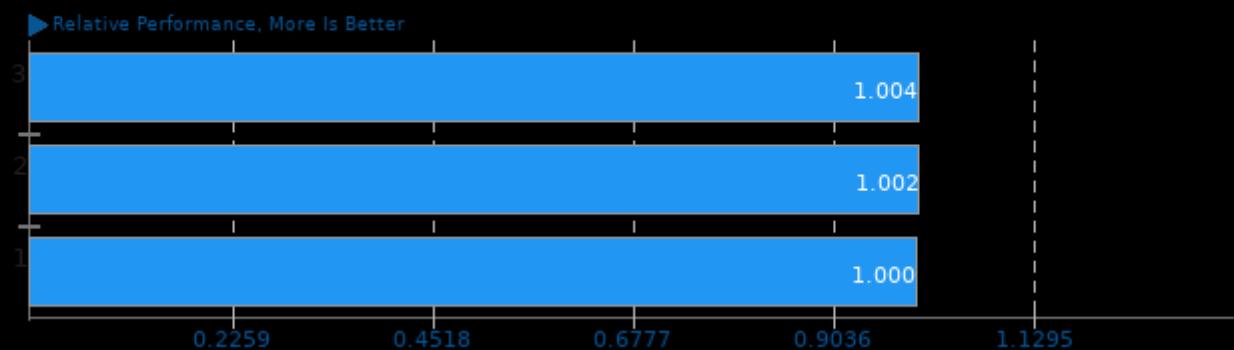
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/stockfish, pts/x265, pts/kvazaar, pts/rav1e, pts/asmfish, pts/lammps, pts/gromacs and pts/indigobench

Geometric Mean Of NVIDIA GPU Compute Tests

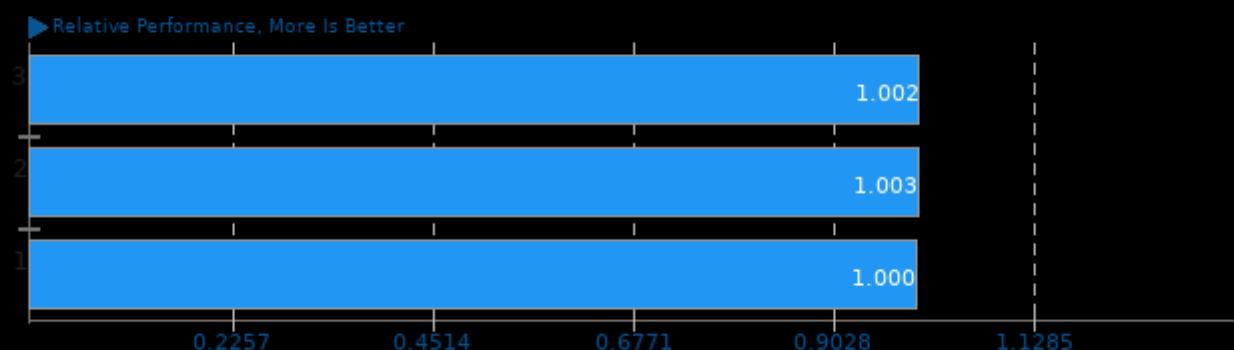
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/gromacs and pts/indigobench

Geometric Mean Of OpenMPI Tests

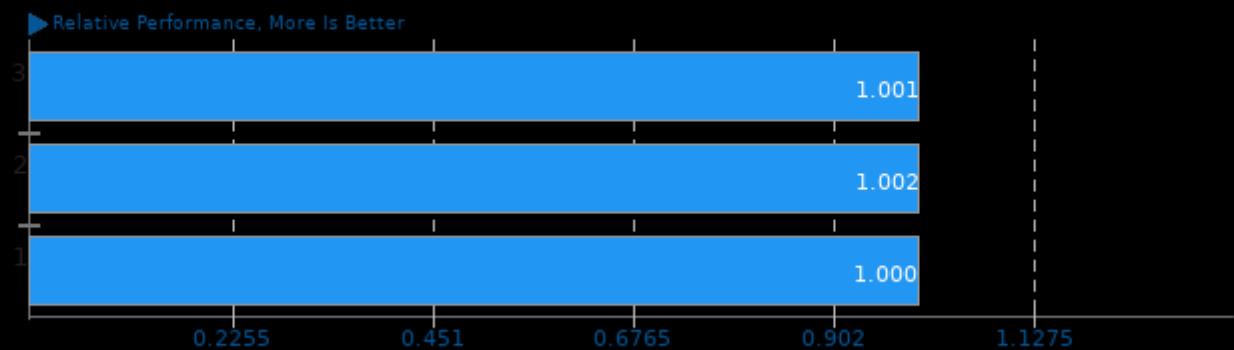
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/lammps and pts/gromacs

Geometric Mean Of Scientific Computing Tests

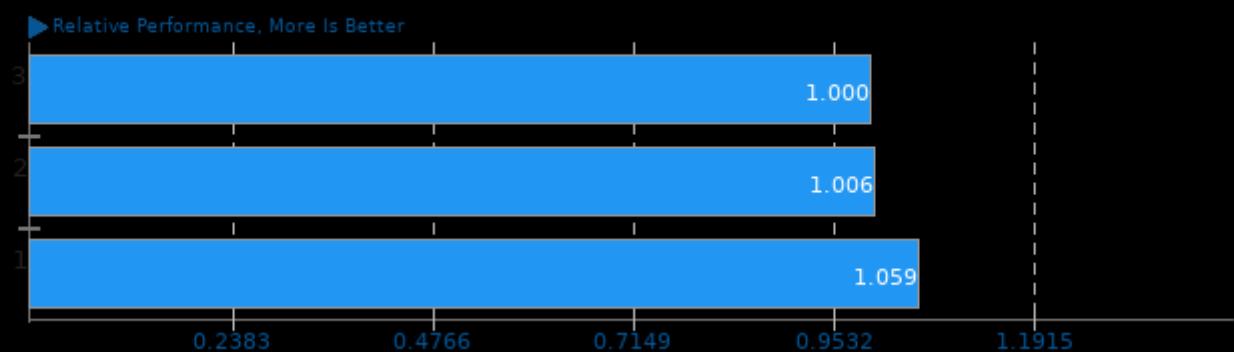
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/gromacs, pts/lammps and pts/hmmer

Geometric Mean Of Server CPU Tests

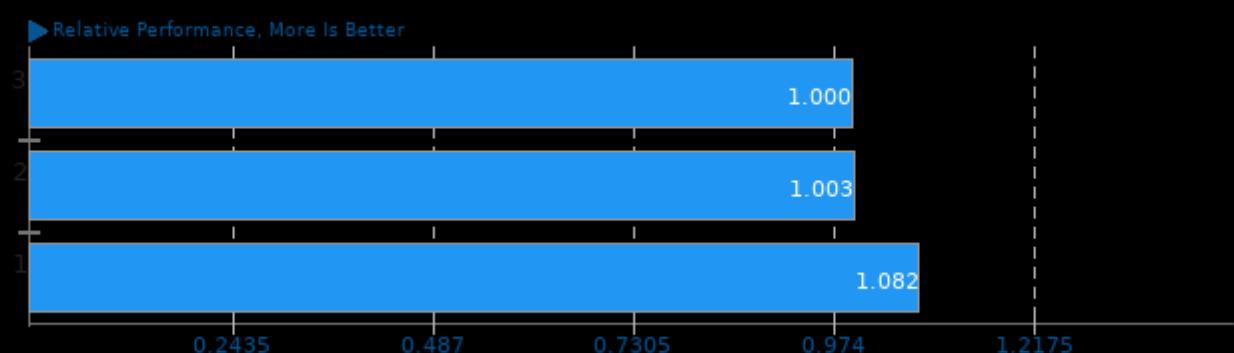
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/x265, pts/stockfish, pts/asmfish, pts/redis and pts/numpy

Geometric Mean Of Single-Threaded Tests

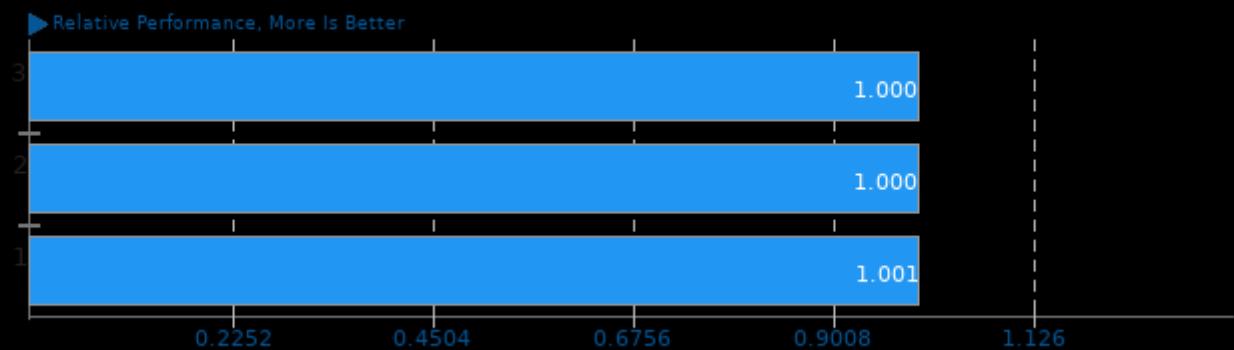
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/numpy, pts/espeak and pts/redis

Geometric Mean Of Texture Compression Tests

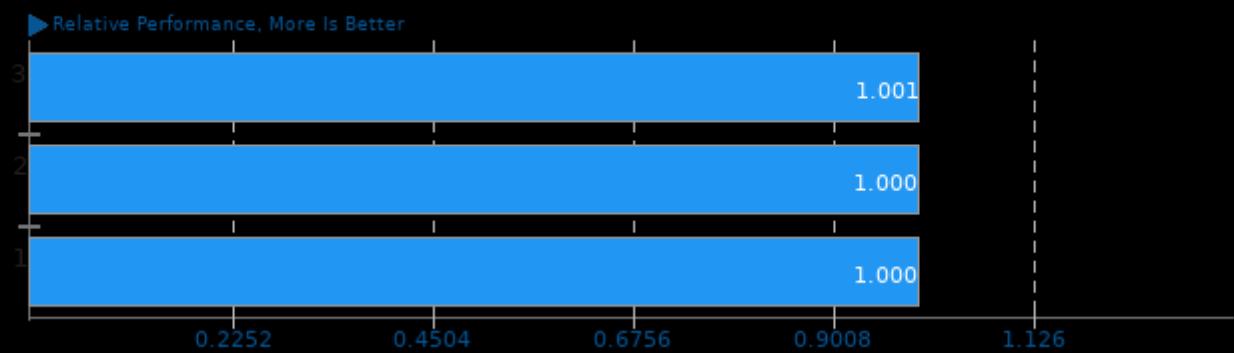
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/basis and pts/astcenc

Geometric Mean Of Video Encoding Tests

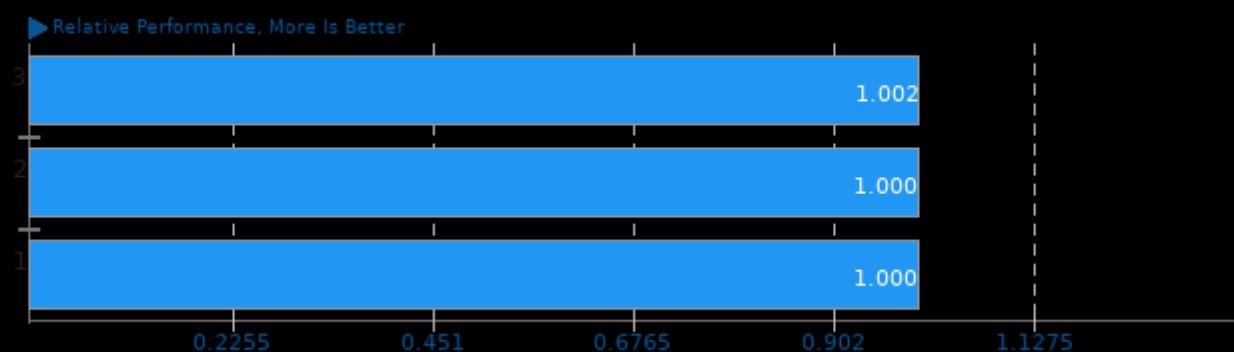
Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/x265, pts/kvazaar and pts/rav1e

Geometric Mean Of Common Workstation Benchmarks Tests

Result Composite - Haswell Core i5



Geometric mean based upon tests: pts/brl-cad and pts/x265

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 07:26.