



5800X march

AMD Ryzen 7 5800X 8-Core testing with a ASRock X570 Pro4 (P3.40 BIOS) and llvmpipe on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 42% of the tests.

Based on the geometric mean of all complete results, the fastest (2) was 1.003x the speed of the slowest (1). 3 was 0.999x the speed of 2 and 1 was 0.998x the speed of 3.

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

*JPEG XL Decoding (CPU Threads: All) at 1.105x
dav1d (Video Input: Summer Nature 4K) at 1.057x
ASKAP (Test: tConvolve MPI - Gridding) at 1.052x
dav1d (Video Input: Chimera 1080p) at 1.052x
ASKAP (Test: tConvolve OpenMP - Gridding) at 1.052x
JPEG XL (Input: JPEG - Encode Speed: 7) at 1.05x
JPEG XL Decoding (CPU Threads: 1) at 1.048x
JPEG XL (Input: JPEG - Encode Speed: 5) at 1.048x
ASKAP (Test: tConvolve MPI - Degriding) at 1.045x*

Timed Linux Kernel Compilation (Time To Compile) at 1.027x.

Test Systems:

1

2

3

Processor: AMD Ryzen 7 5800X 8-Core @ 3.80GHz (8 Cores / 16 Threads), Motherboard: ASRock X570 Pro4 (P3.40 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 1TB + 32GB Flash Disk, Graphics: llvmpipe, Audio: AMD Tahiti HDMI Audio, Network: Intel I211

OS: Ubuntu 20.10, Kernel: 5.11.0-051100rc3daily20210116-generic (x86_64) 20210115, Desktop: GNOME Shell 3.38.1, Display Server: X Server 1.20.9, OpenGL: 4.5 Mesa 20.2.6 (LLVM 11.0.0 256 bits), Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1024x768

Kernel Notes: Transparent Huge Pages: madvise

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++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgc-n-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-gcn/usr,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: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0xa201009

Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + 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 AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	1	2	3
JPEG XL Decoding - All (MP/s)	184.13	196.40	203.44
Normalized	90.51%	96.54%	100%
Standard Deviation	0.1%	0.1%	0.4%
dav1d - Summer Nature 4K (FPS)	198.59	209.94	209.67
Normalized	94.59%	100%	99.87%
Standard Deviation	0.4%	0.3%	0.2%
ASKAP - tConvolve MPI - Gridding	4524	4564	4337
Normalized	99.13%	100%	95.04%
Standard Deviation		1.2%	1.2%
dav1d - Chimera 1080p (FPS)	755.20	794.53	762.30
Normalized	95.05%	100%	95.94%
Standard Deviation	1%	2.9%	1.2%

ASKAP - tConvolve OpenMP - Gridding (Million Grid Points/sec)	1647	1566	1611
Normalized	100%	95.1%	97.78%
Standard Deviation	1.6%	1.5%	1.3%
JPEG XL - JPEG - 7 (MP/s)	67.10	69.75	70.46
Normalized	95.23%	98.99%	100%
Standard Deviation	1.2%	2.2%	2.1%
JPEG XL Decoding - 1 (MP/s)	47.74	49.24	50.05
Normalized	95.38%	98.38%	100%
Standard Deviation	0.4%	0.1%	0.5%
JPEG XL - JPEG - 5 (MP/s)	66.95	70.17	70.15
Normalized	95.41%	100%	99.97%
Standard Deviation	1.5%	1.8%	1.4%
ASKAP - tConvolve MPI - Degridding	4447	4423	4257
Normalized	100%	99.44%	95.72%
Standard Deviation	0%	1%	2.5%
Timed Linux Kernel Compilation - Time To Compile (sec)	81.162	83.313	82.658
Normalized	100%	97.42%	98.19%
Standard Deviation	0.3%	0.3%	0.4%
Pennant - sedovbig (Hydro Cycle Time - sec)	81.67660	79.80837	79.73775
Normalized	97.63%	99.91%	100%
Standard Deviation	0.7%	0.4%	0.2%
JPEG XL - JPEG - 8 (MP/s)	31.67	32.34	32.40
Normalized	97.75%	99.81%	100%
Standard Deviation	0.9%	1.5%	0.7%
Ngspice - C2670 (sec)	116.623	114.665	114.003
Normalized	97.75%	99.42%	100%
Standard Deviation	0.7%	0.3%	1.3%
toyBrot Fractal Generator - TBB (ms)	35958	35219	35913
Normalized	97.94%	100%	98.07%
Standard Deviation	1.3%	0.5%	1.8%
Zstd Compression - 8 - Compression Speed (MB/s)	611.9	605.0	600.4
Normalized	100%	98.87%	98.12%
Standard Deviation	0.7%	0.6%	0.7%
Ngspice - C7552 (sec)	88.636	89.522	87.859
Normalized	99.12%	98.14%	100%
Standard Deviation	1.1%	0.7%	0.5%
JPEG XL - PNG - 7 (MP/s)	10.50	10.67	10.59
Normalized	98.41%	100%	99.25%
Standard Deviation	0.4%	0.5%	0.2%
WebP2 Image Encode - Q.1.L.C (sec)	703.682	706.267	712.450
Normalized	100%	99.63%	98.77%
Standard Deviation	0.2%	0.1%	1.2%
QuantLib (MFLOPS)	3182	3143	3151
Normalized	100%	98.79%	99.04%
Standard Deviation	0.6%	2.5%	2.4%
JPEG XL - PNG - 5 (MP/s)	48.05	48.26	47.68
Normalized	99.56%	100%	98.8%
Standard Deviation	2.5%	0.3%	1.2%
Etcpak - DXT1 (Mpx/s)	1544	1533	1526
Normalized	100%	99.3%	98.83%
Standard Deviation	0.2%	0.7%	0.4%

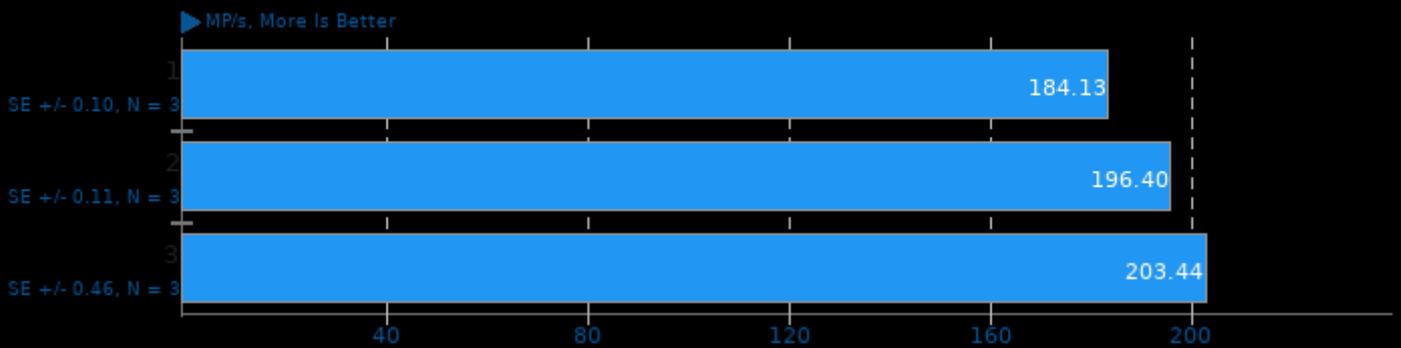
GROMACS - water_GMX50_bare (Ns/Day)	0.955	0.951	0.944
Normalized	100%	99.58%	98.85%
Standard Deviation	0.2%	0.4%	1%
ASKAP - H.C.O (Iterations/sec)	210.677	209.209	208.334
Normalized	100%	99.3%	98.89%
Standard Deviation	0.4%	0.6%	0.2%
Zstd Compression - 19 - Compression Speed (MB/s)	35.6	35.9	36.0
Normalized	98.89%	99.72%	100%
Standard Deviation	0.4%	0%	1.1%
libavif avifenc - 2 (sec)	30.919	31.210	30.864
Normalized	99.82%	98.89%	100%
Standard Deviation	1.2%	0.9%	0.5%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	910.5	916.9	906.9
Normalized	99.3%	100%	98.91%
Standard Deviation	0.3%	2.4%	0.5%
Zstd Compression - 19, Long Mode - D.S (MB/s)	4220	4261	4216
Normalized	99.04%	100%	98.93%
Standard Deviation	1.2%	1.1%	1.4%
Zstd Compression - 8 - D.S (MB/s)	4568	4521	4524
Normalized	100%	98.97%	99.05%
Standard Deviation	1.2%	0.5%	0.3%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	29.7	29.4	29.5
Normalized	100%	98.99%	99.33%
Standard Deviation	1.9%	0.5%	0.9%
WebP2 Image Encode - Q.9.C.E.7 (sec)	358.343	361.828	361.566
Normalized	100%	99.04%	99.11%
Standard Deviation	0.5%	0.3%	0.5%
libavif avifenc - 6, Lossless (sec)	49.076	49.251	49.542
Normalized	100%	99.64%	99.06%
Standard Deviation	0.8%	1.2%	1.5%
Zstd Compression - 19 - D.S (MB/s)	4231	4198	4237
Normalized	99.84%	99.07%	100%
Standard Deviation	0.1%	0.2%	1.4%
JPEG XL - PNG - 8 (MP/s)	1.08	1.08	1.09
Normalized	99.08%	99.08%	100%
Standard Deviation	1.1%	0.5%	0.5%
libavif avifenc - 10, Lossless (sec)	5.230	5.235	5.188
Normalized	99.2%	99.1%	100%
Standard Deviation	0.5%	0.5%	0.3%
Chaos Group V-RAY - CPU (vsamples)	12048	11940	12013
Normalized	100%	99.1%	99.71%
Standard Deviation	0.8%	0.9%	0.7%
dav1d - S.N.1 (FPS)	760.74	764.48	757.90
Normalized	99.51%	100%	99.14%
Standard Deviation	0.7%	0.8%	1%
Zstd Compression - 3 - D.S (MB/s)	4404	4366	4396
Normalized	100%	99.14%	99.81%
Standard Deviation	1.8%	1.3%	1.5%
Zstd Compression - 8, Long Mode - D.S	4812	4831	4854
Normalized	99.15%	99.53%	100%
Standard Deviation	0.4%	0.4%	1.2%

ASKAP - tConvolve OpenMP - Degriding	3371	3356	3342
(Million Grid Points/sec)			
Normalized	100%	99.57%	99.16%
Standard Deviation	1.3%	0.7%	0.7%
Zstd Compression - 3 - Compression Speed	3426	3417	3442
(MB/s)			
Normalized	99.53%	99.27%	100%
Standard Deviation	0.6%	1.8%	0.4%
libavif avifenc - 10 (sec)	3.084	3.078	3.064
Normalized	99.35%	99.55%	100%
Standard Deviation	0.5%	0.7%	0.5%
Etcpak - ETC1 (Mpx/s)	382.483	384.919	384.838
Normalized	99.37%	100%	99.98%
Standard Deviation	0.1%	0.5%	0.1%
Pennant - leblancbig (Hydro Cycle Time -	59.14204	58.8086	58.84336
Normalized	99.44%	100%	99.94%
Standard Deviation	1.5%	0.2%	0.1%
WebP2 Image Encode - Q.7.C.E.7 (sec)	195.106	195.501	195.978
Normalized	100%	99.8%	99.56%
Standard Deviation	0.2%	1.1%	1%
Zstd Compression - 3, Long Mode - D.S	4628	4619	4639
Normalized	99.75%	99.57%	100%
Standard Deviation	1.5%	1.1%	0.7%
WebP2 Image Encode - Default (sec)	3.338	3.346	3.352
Normalized	100%	99.76%	99.58%
Standard Deviation	1%	0.4%	0.4%
Blender - Pabellon Barcelona - CPU-Only	459.68	459.64	461.50
Normalized	99.99%	100%	99.6%
Standard Deviation	0.2%	0.1%	0.1%
libavif avifenc - 6 (sec)	11.060	11.089	11.045
Normalized	99.86%	99.6%	100%
Standard Deviation	0.4%	0.5%	1%
FinanceBench - Repo OpenMP (ms)	27947	27935	28042
Normalized	99.96%	100%	99.62%
Standard Deviation	0.2%	0.5%	0.8%
Blender - Fishy Cat - CPU-Only (sec)	187.63	188.11	188.30
Normalized	100%	99.74%	99.64%
Standard Deviation	0.2%	0.2%	0.1%
libavif avifenc - 0 (sec)	59.139	59.174	59.332
Normalized	100%	99.94%	99.67%
Standard Deviation	0.5%	1%	0.5%
WebP2 Image Encode - Q.1.C.E.5 (sec)	11.308	11.344	11.318
Normalized	100%	99.68%	99.91%
Standard Deviation	0%	0.2%	0.2%
Blender - Barbershop - CPU-Only (sec)	542.67	543.78	542.25
Normalized	99.92%	99.72%	100%
Standard Deviation	0.1%	0.2%	0%
toyBrot Fractal Generator - C++ Threads	35599	35696	35656
Normalized	100%	99.73%	99.84%
Standard Deviation	0.1%	0.1%	0.2%
Timed Erlang/OTP Compilation - Time To	94.016	94.235	94.070
Compile (sec)			
Normalized	100%	99.77%	99.94%
Standard Deviation	0.3%	0.1%	0.2%

ASKAP - tConvolve MT - Degriding (Million Grid Points/sec)	1472	1473	1470
Normalized	99.93%	100%	99.78%
Standard Deviation	0.2%	0.2%	0.1%
Blender - Classroom - CPU-Only (sec)	422.02	422.06	422.88
Normalized	100%	99.99%	99.8%
Standard Deviation	0.2%	0.1%	0.2%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	654.8	654.3	655.6
Normalized	99.88%	99.8%	100%
Standard Deviation	1.2%	1.5%	1.9%
Blender - BMW27 - CPU-Only (sec)	143.63	143.86	143.72
Normalized	100%	99.84%	99.94%
Standard Deviation	0.4%	0.5%	0.2%
FinanceBench - Bonds OpenMP (ms)	40553	40506	40567
Normalized	99.88%	100%	99.85%
Standard Deviation	0.1%	0.1%	0.1%
dav1d - C.1.1.b (FPS)	126.82	127.01	126.96
Normalized	99.85%	100%	99.96%
Standard Deviation	1.6%	1.2%	0.9%
toyBrot Fractal Generator - C++ Tasks (ms)	35831	35860	35873
Normalized	100%	99.92%	99.88%
Standard Deviation	0.4%	0.3%	0.2%
Etcpak - ETC2 (Mpx/s)	237.327	237.233	237.085
Normalized	100%	99.96%	99.9%
Standard Deviation	0.4%	0.6%	0.6%
toyBrot Fractal Generator - OpenMP (ms)	35720	35706	35686
Normalized	99.9%	99.94%	100%
Standard Deviation	0.5%	0.5%	0.3%
ASKAP - tConvolve MT - Gridding (Million Grid Points/sec)	855.213	854.869	854.813
Normalized	100%	99.96%	99.95%
Standard Deviation	0.1%	0.1%	0.2%
Etcpak - ETC1 + Dithering (Mpx/s)	347.805	350.291	342.127
Normalized	99.29%	100%	97.67%
Standard Deviation	0.5%	0.2%	6.7%

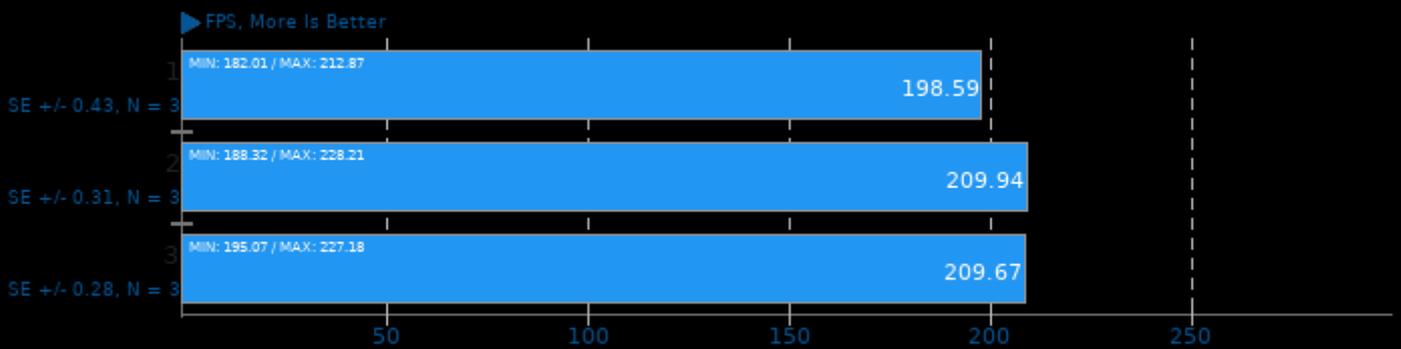
JPEG XL Decoding 0.3.1

CPU Threads: All



dav1d 0.8.2

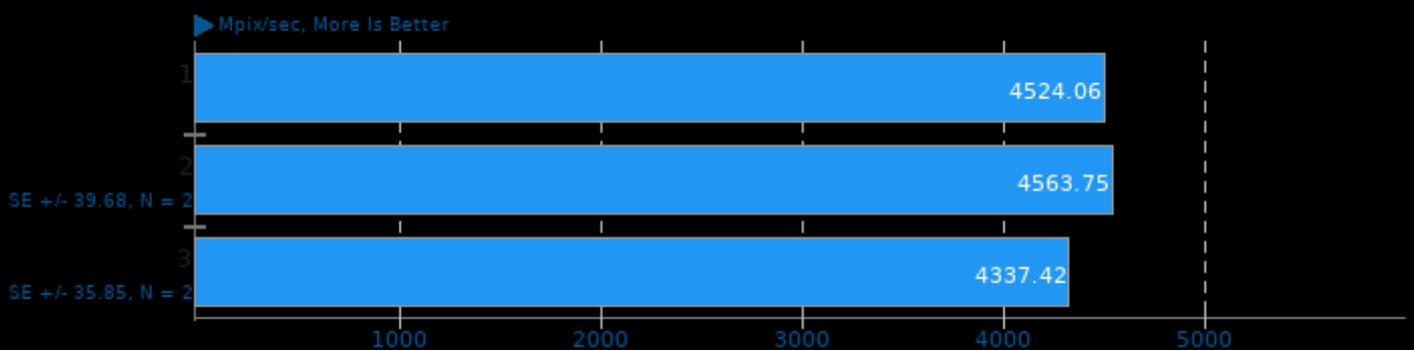
Video Input: Summer Nature 4K



1. (CC) gcc options: -pthread

ASKAP 1.0

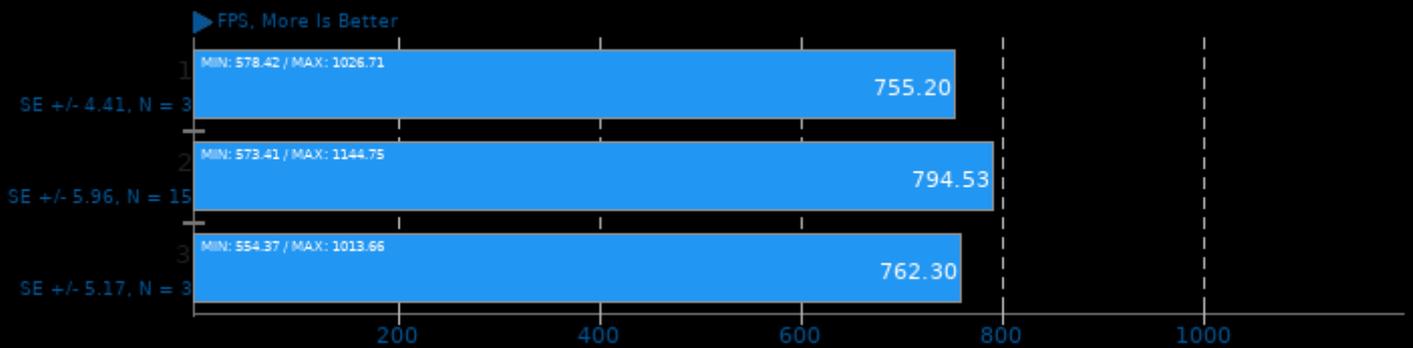
Test: tConvolve MPI - Gridding



1. (CXX) g++ options: -O3 -fstrict-aliasing -fopenmp

dav1d 0.8.2

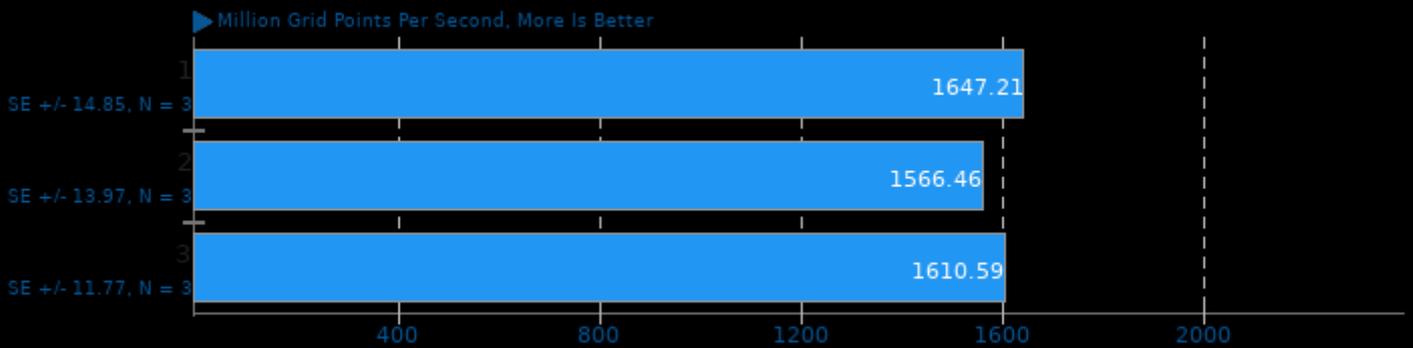
Video Input: Chimera 1080p



1. (GCC) gcc options: -pthread

ASKAP 1.0

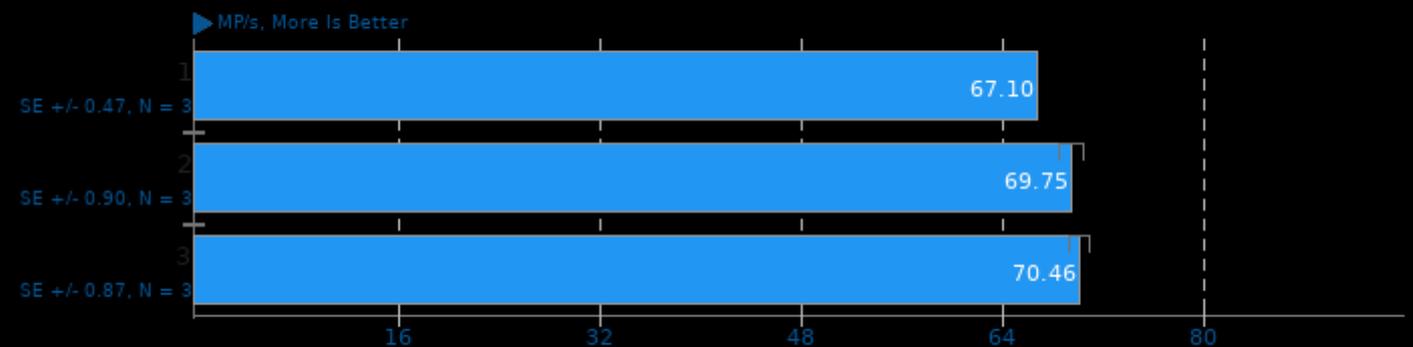
Test: tConvolve OpenMP - Gridding



1. (GXX) g++ options: -O3 -fstrict-aliasing -fopenmp

JPEG XL 0.3.1

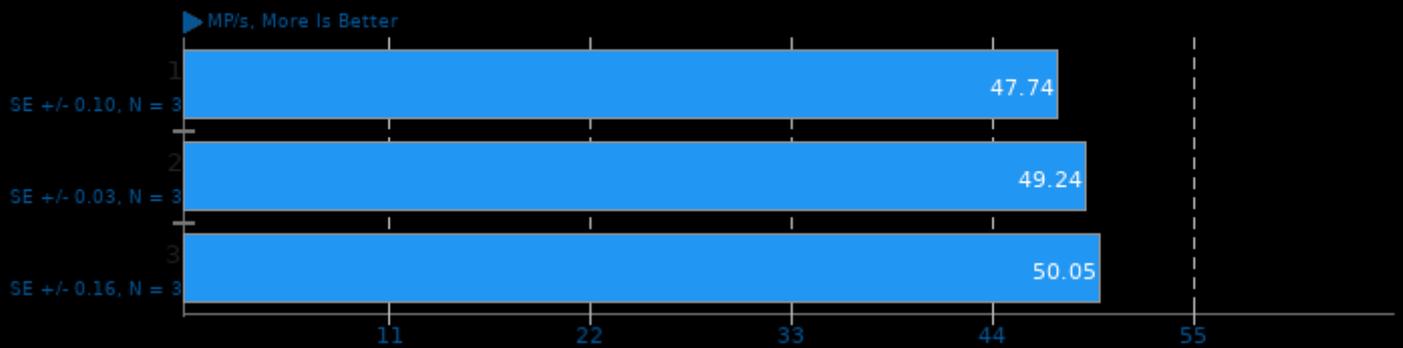
Input: JPEG - Encode Speed: 7



1. (GXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ld

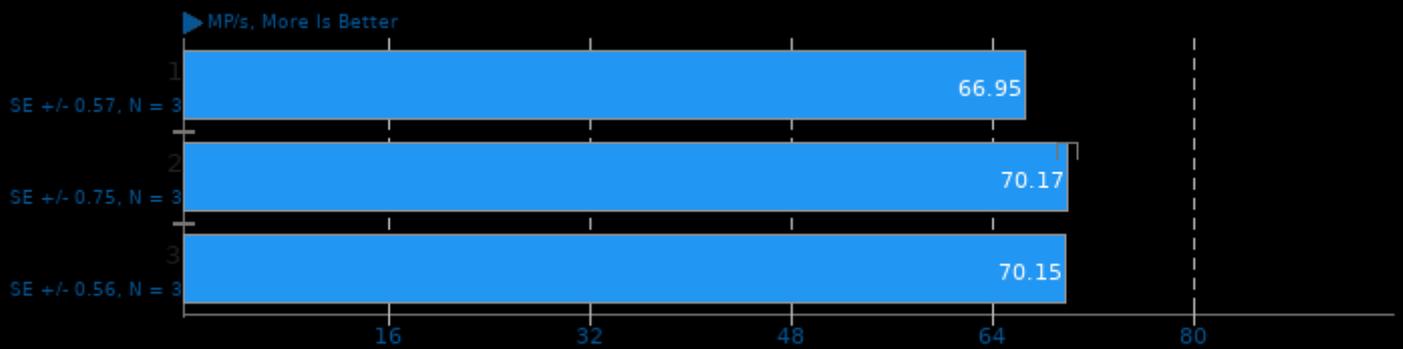
JPEG XL Decoding 0.3.1

CPU Threads: 1



JPEG XL 0.3.1

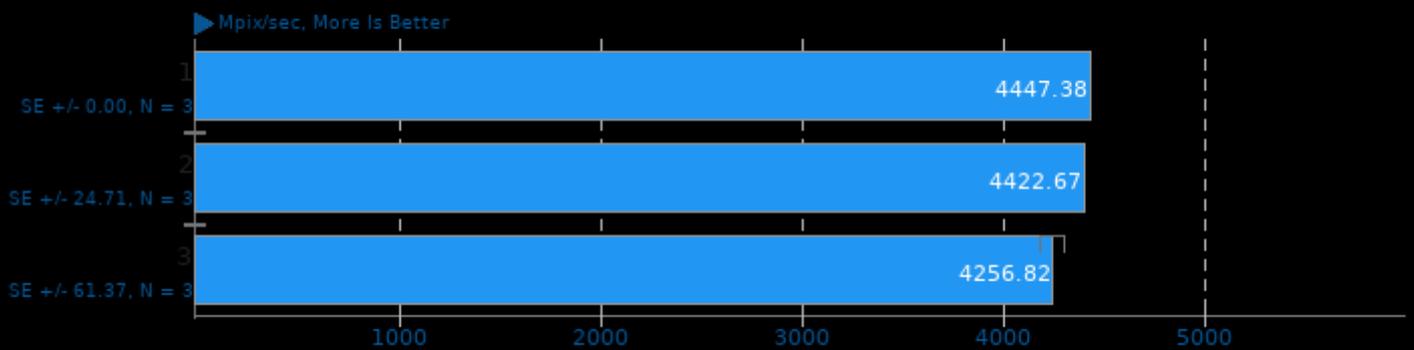
Input: JPEG - Encode Speed: 5



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

ASKAP 1.0

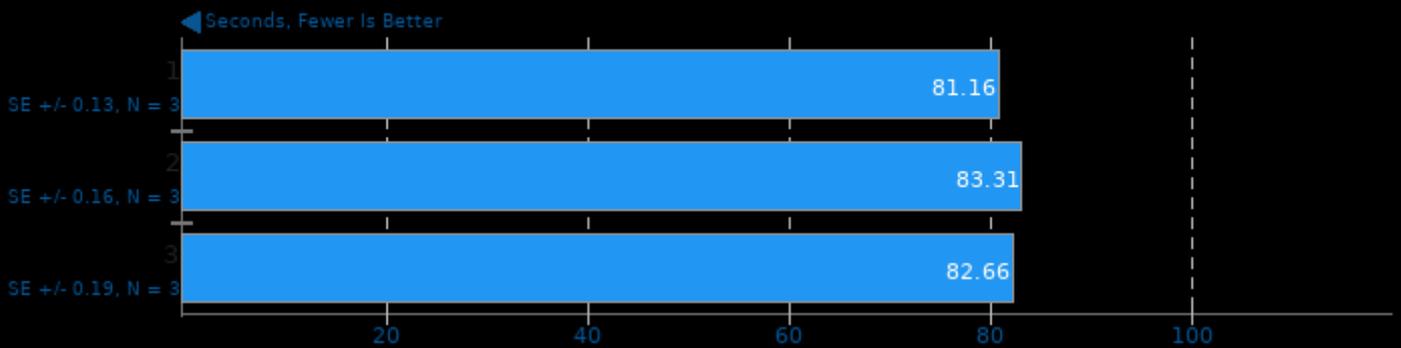
Test: tConvolve MPI - Degriding



1. (CXX) g++ options: -O3 -fstrict-aliasing -fopenmp

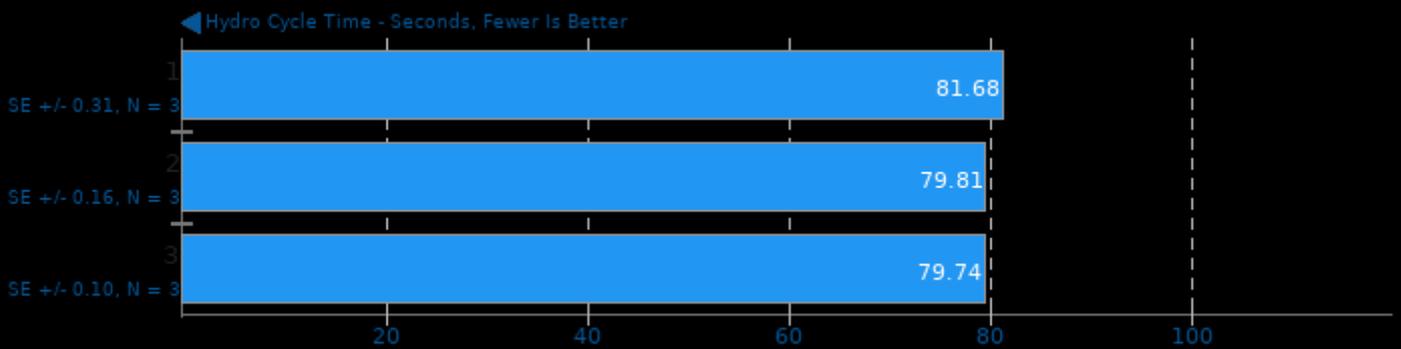
Timed Linux Kernel Compilation 5.10.20

Time To Compile



Pennant 1.0.1

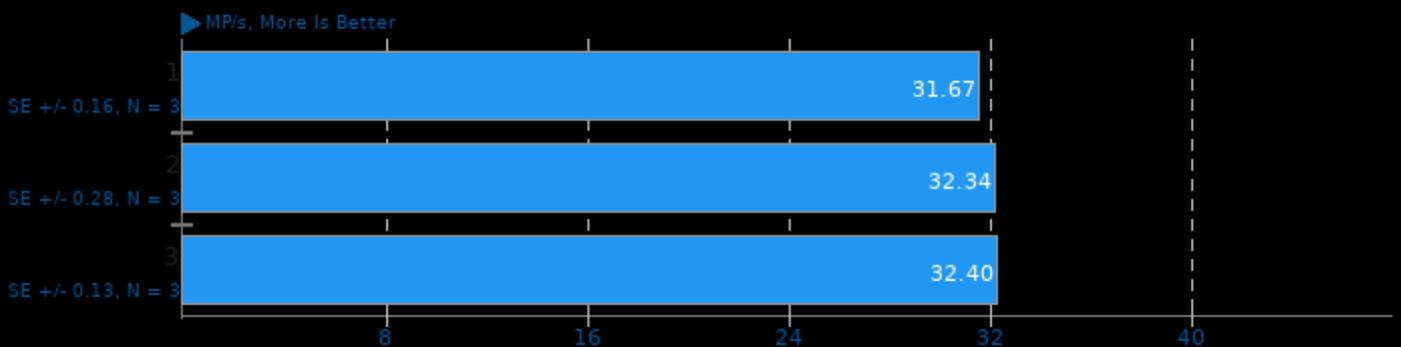
Test: sedovbig



1. (CXX) g++ options: -fopenmp -pthread -lmpi_cxx -lmpi

JPEG XL 0.3.1

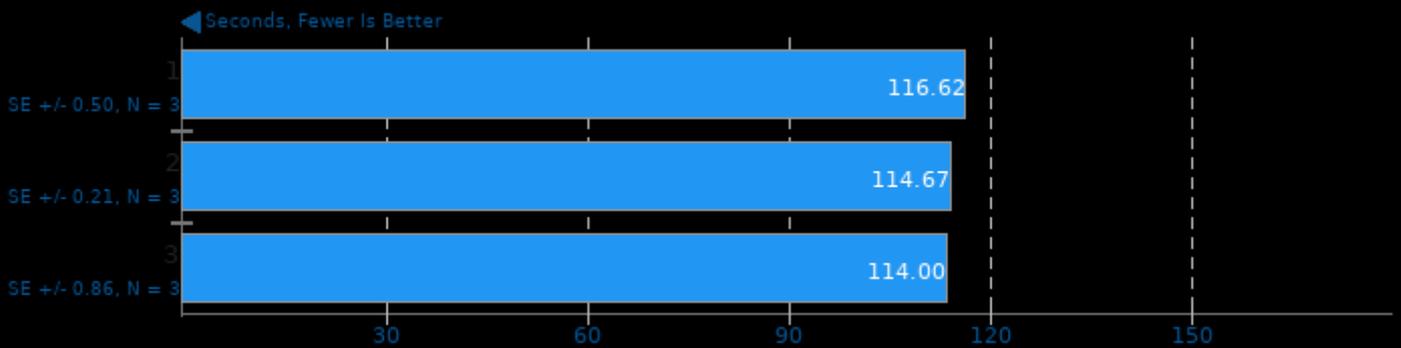
Input: JPEG - Encode Speed: 8



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

Ngspice 34

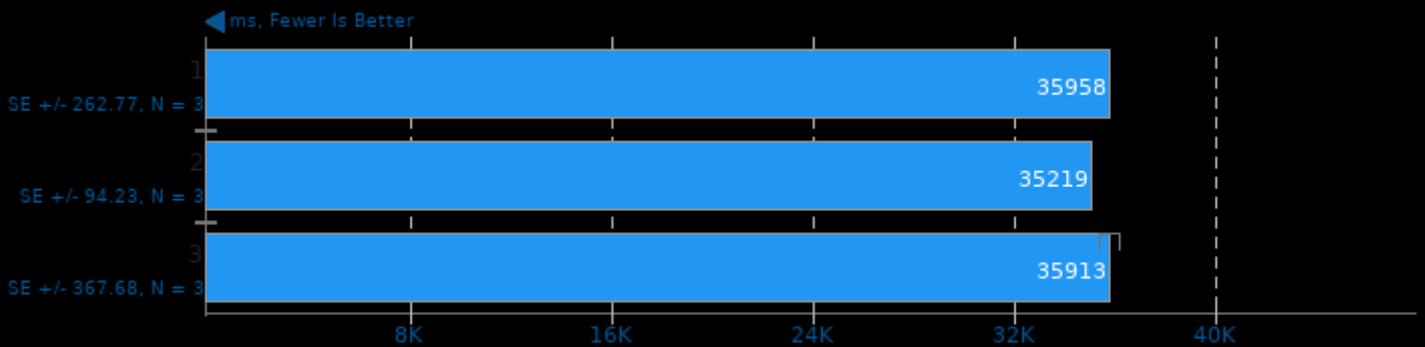
Circuit: C2670



1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -lfftw3 -lXaw -lXmu -lXt -lXext -lX11 -lSM -lICE

toyBrot Fractal Generator 2020-11-18

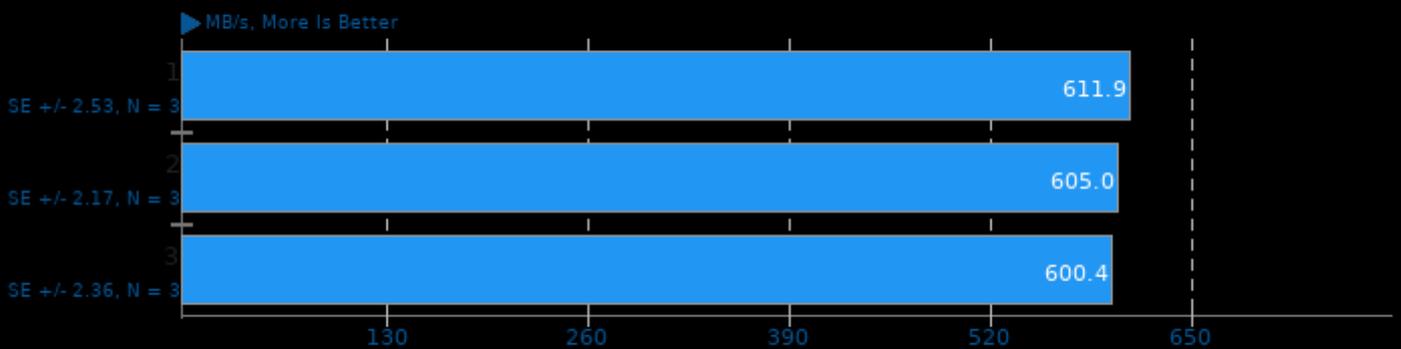
Implementation: TBB



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

Zstd Compression 1.4.9

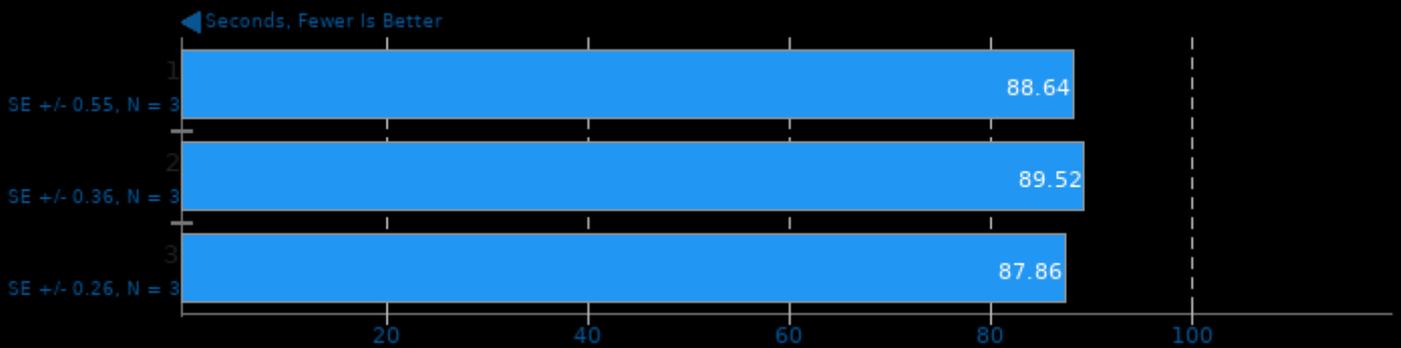
Compression Level: 8 - Compression Speed



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

Ngspice 34

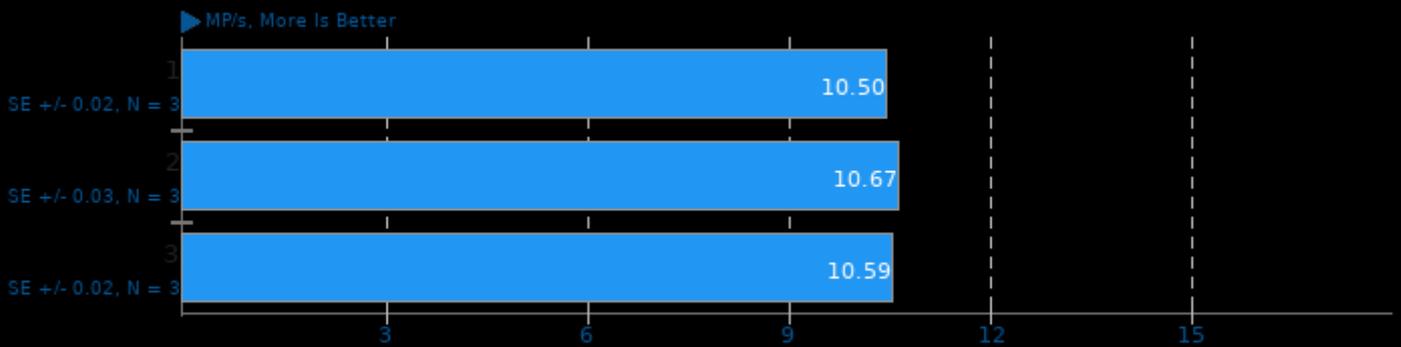
Circuit: C7552



1. (GCC) gcc options: -O0 -fopenmp -lm -lstdc++ -lfftw3 -lXaw -lXmu -lXt -lXext -lX11 -lSM -lICE

JPEG XL 0.3.1

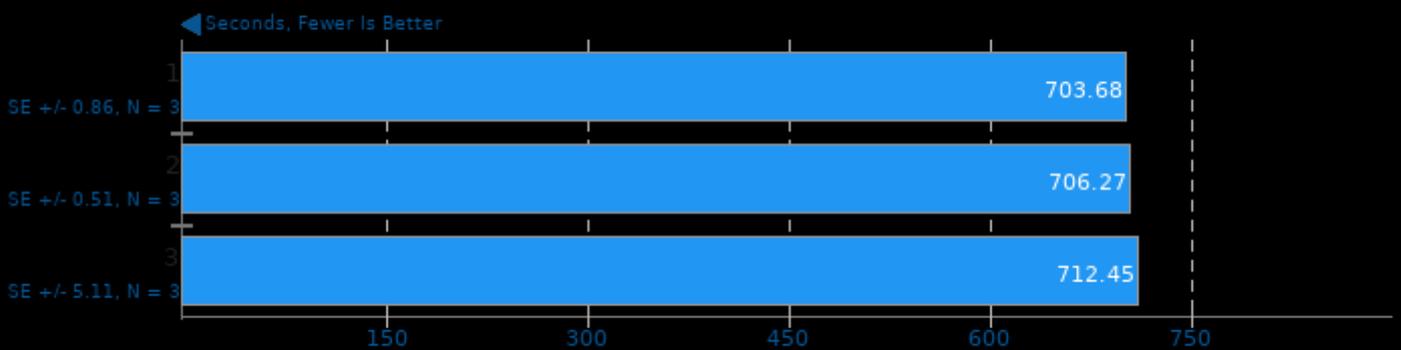
Input: PNG - Encode Speed: 7



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ldl

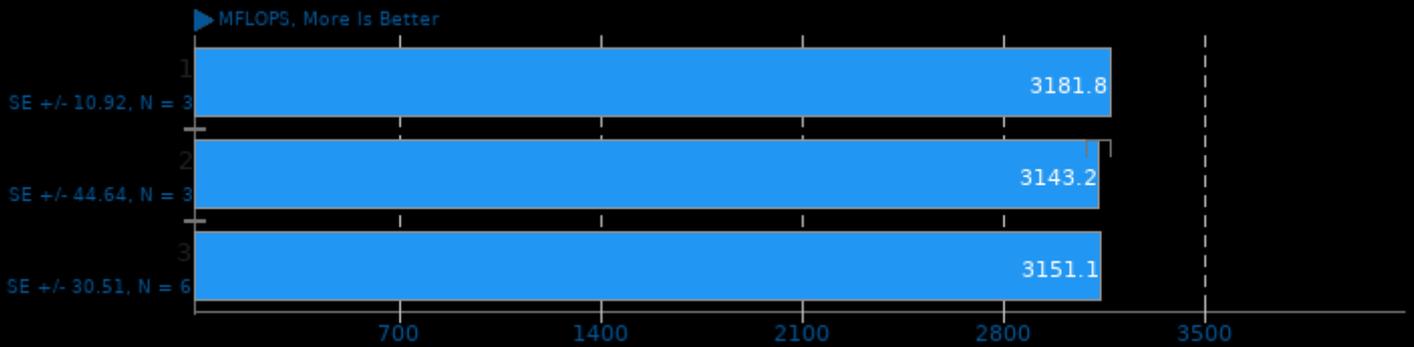
WebP2 Image Encode 20210126

Encode Settings: Quality 100, Lossless Compression



1. (CXX) g++ options: -mssse4.2 -fno-rtti -O3 -rdynamic -pthread -ljpeg -lgif -lwebp -lwebpdemux

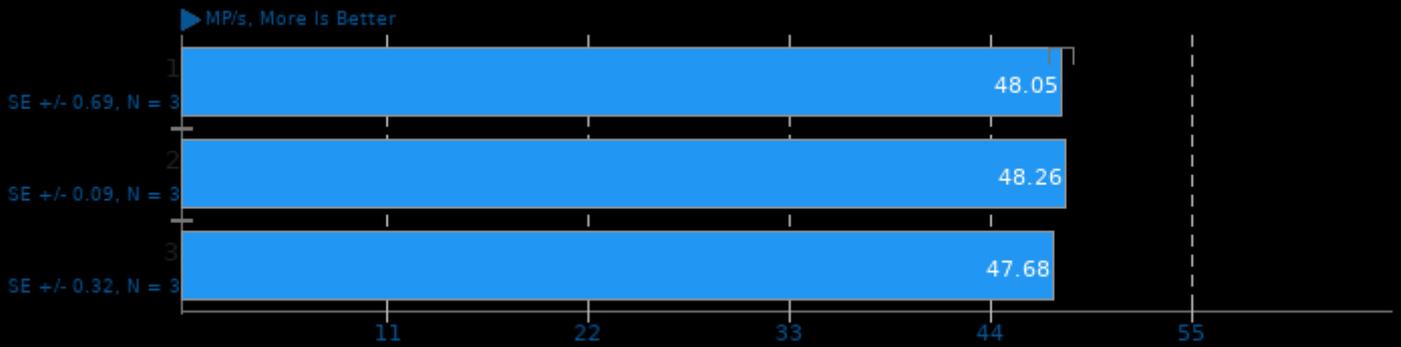
QuantLib 1.21



1. (CXX) g++ options: -O3 -march=native -rdynamic

JPEG XL 0.3.1

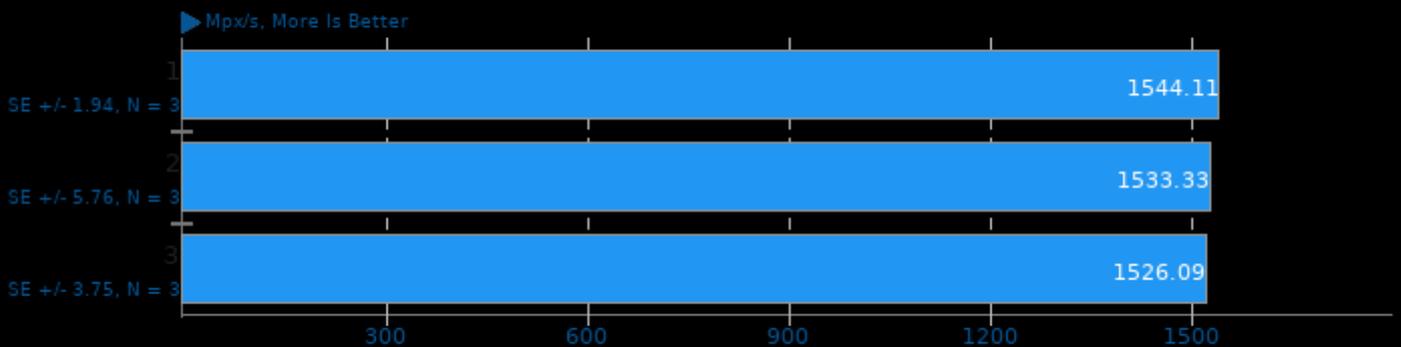
Input: PNG - Encode Speed: 5



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ld

Etcpak 0.7

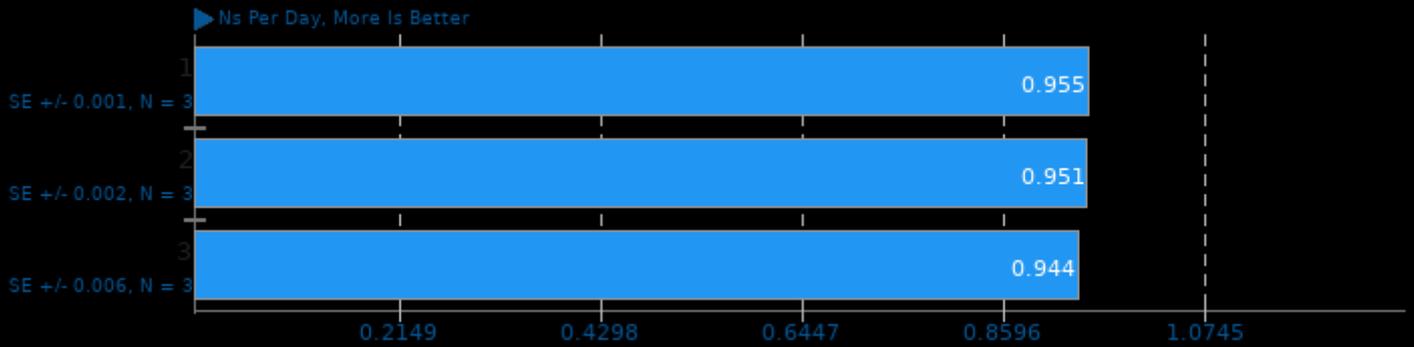
Configuration: DXT1



1. (CXX) g++ options: -O3 -march=native -std=c++11 -pthread

GROMACS 2021

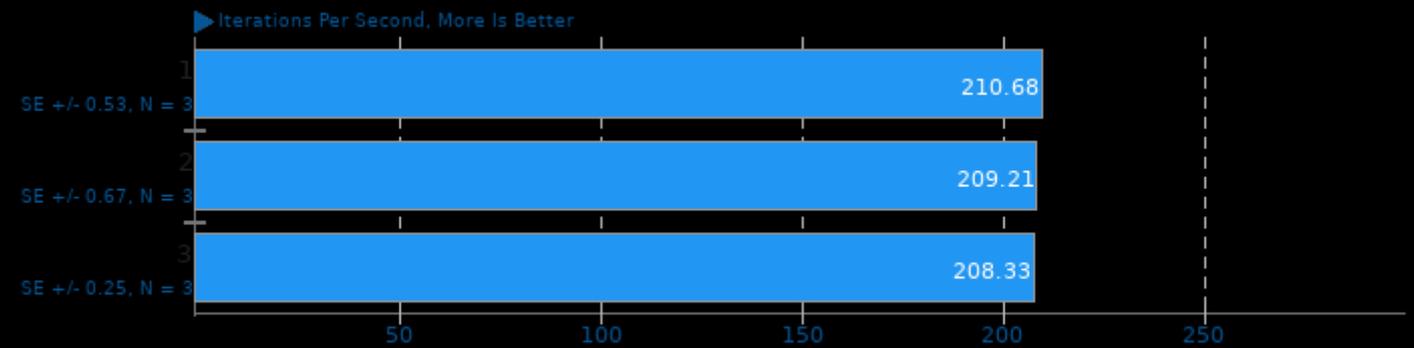
Input: water_GMX50_bare



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

ASKAP 1.0

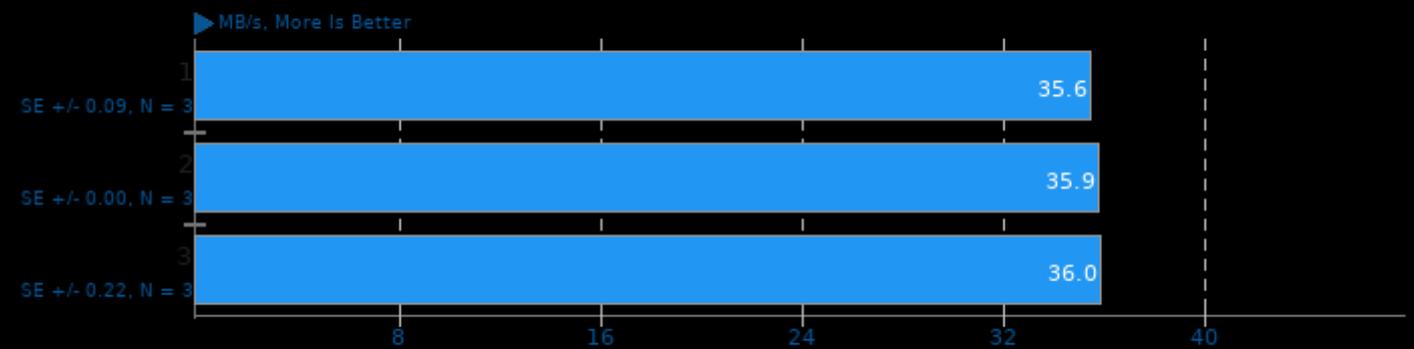
Test: Hogbom Clean OpenMP



1. (CXX) g++ options: -O3 -fstrict-aliasing -fopenmp

Zstd Compression 1.4.9

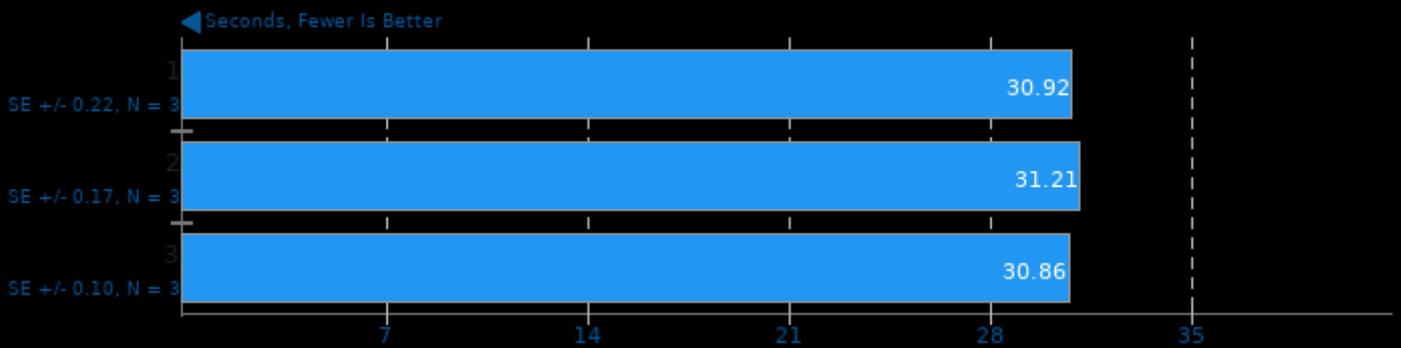
Compression Level: 19 - Compression Speed



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

libavif avifenc 0.9.0

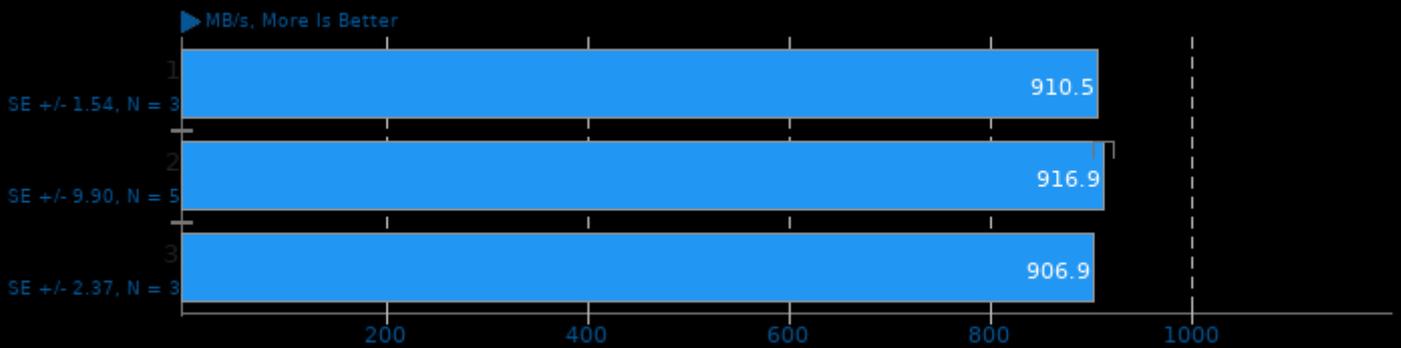
Encoder Speed: 2



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

Zstd Compression 1.4.9

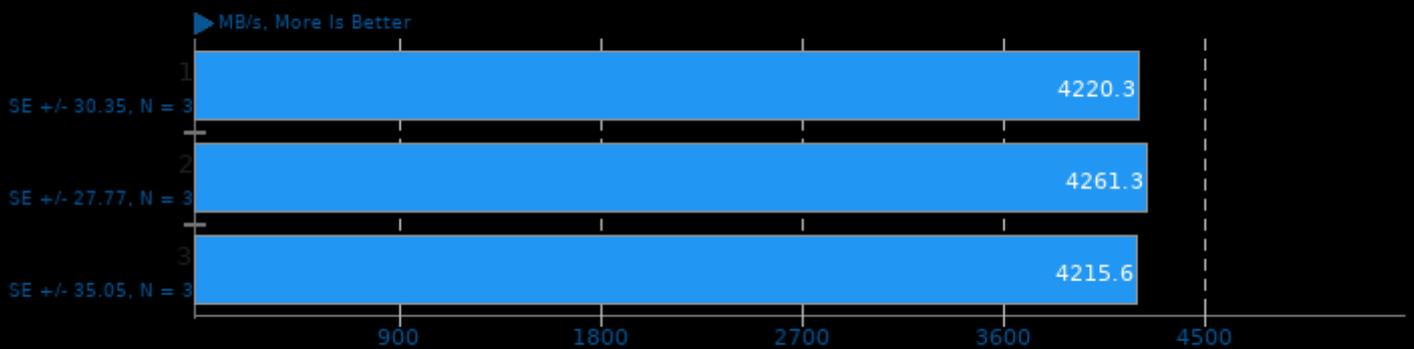
Compression Level: 3, Long Mode - Compression Speed



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

Zstd Compression 1.4.9

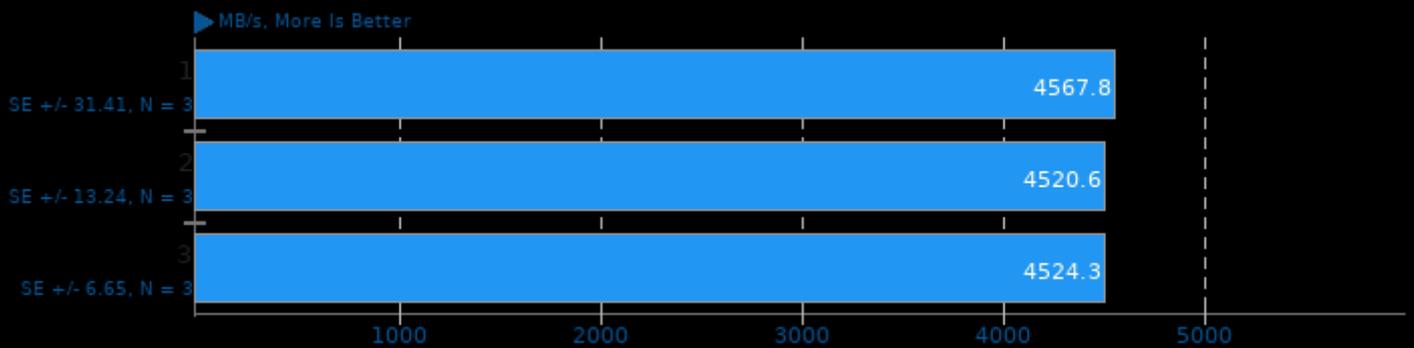
Compression Level: 19, Long Mode - Decompression Speed



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

Zstd Compression 1.4.9

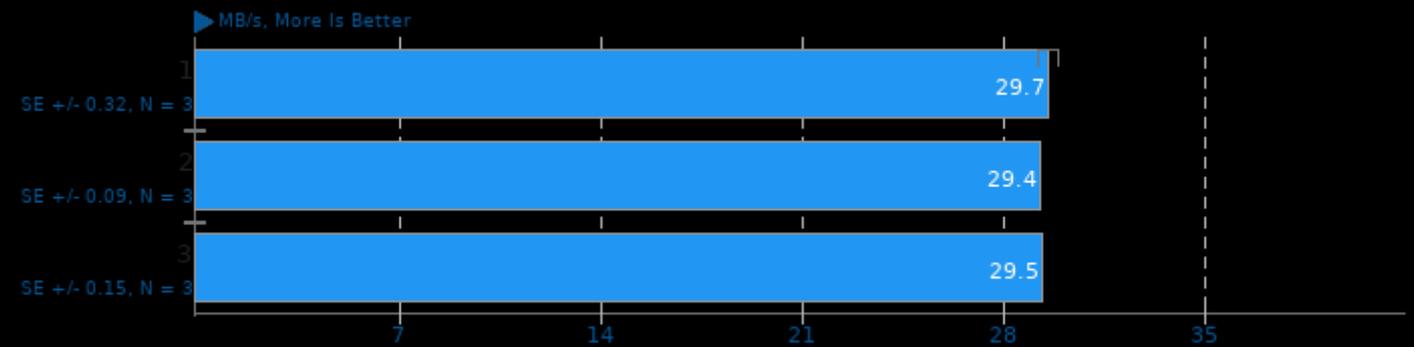
Compression Level: 8 - Decompression Speed



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

Zstd Compression 1.4.9

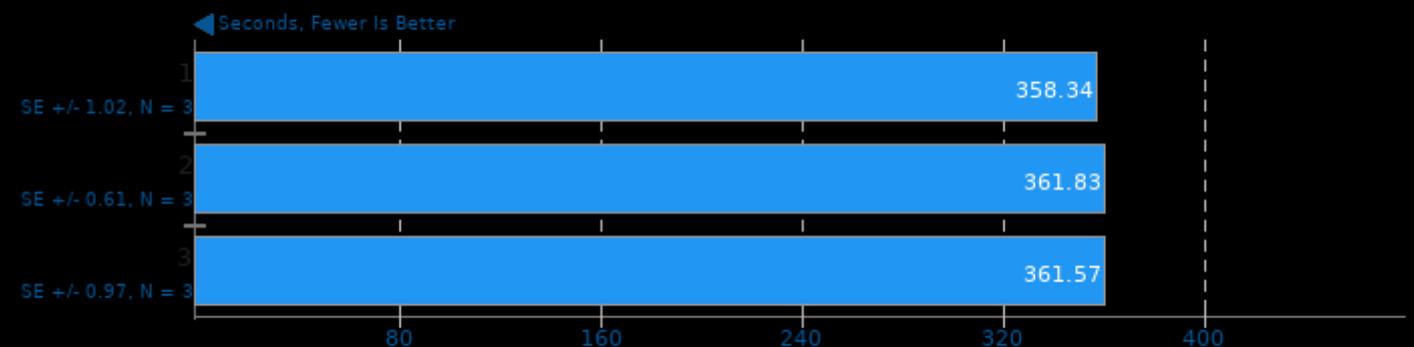
Compression Level: 19, Long Mode - Compression Speed



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

WebP2 Image Encode 20210126

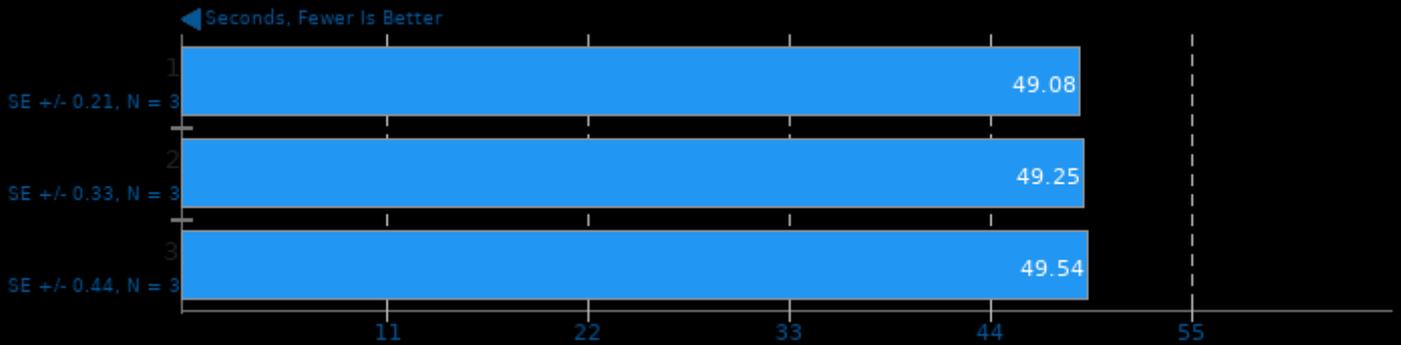
Encode Settings: Quality 95, Compression Effort 7



1. (CXX) g++ options: -mssse4.2 -fno-rtti -O3 -rdynamic -pthread -ljpeg -lgif -lwebp -lwebpdemux

libavif avifenc 0.9.0

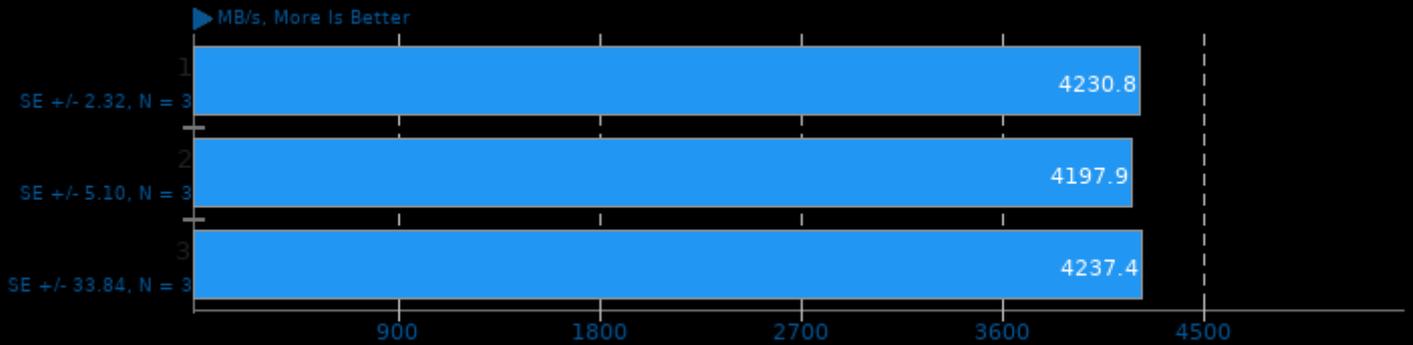
Encoder Speed: 6, Lossless



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

Zstd Compression 1.4.9

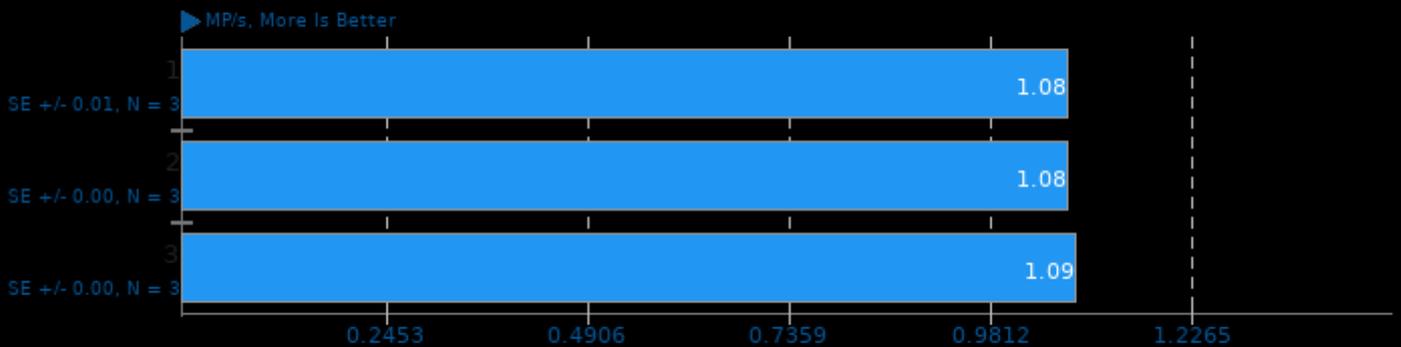
Compression Level: 19 - Decompression Speed



1. (CO) gcc options: -O3 -pthread -lz -lzma

JPEG XL 0.3.1

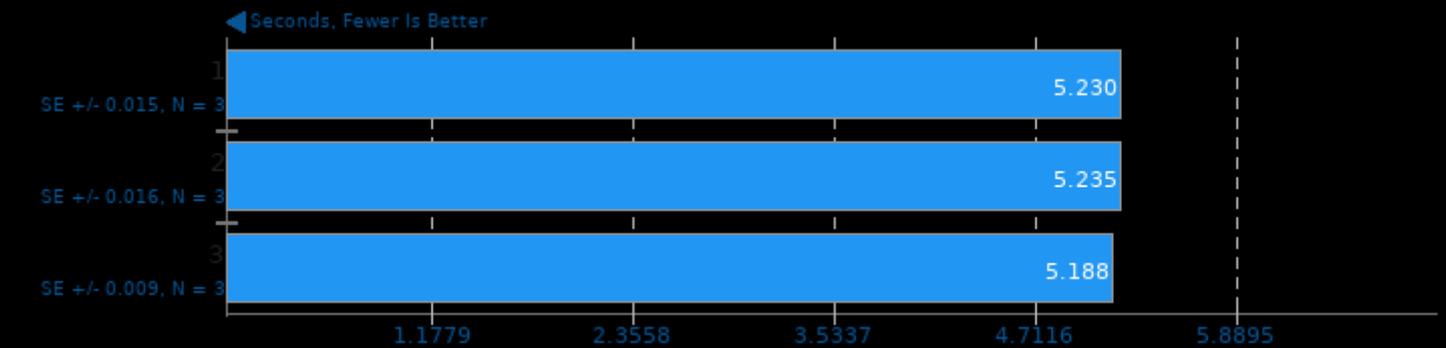
Input: PNG - Encode Speed: 8



1. (CXX) g++ options: -funwind-tables -O3 -O2 -fPIE -pie -pthread -ld

libavif avifenc 0.9.0

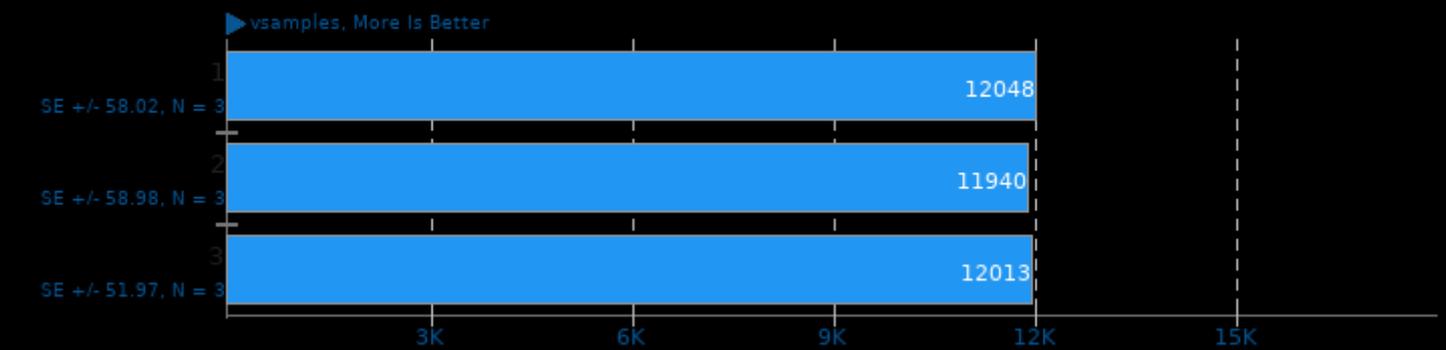
Encoder Speed: 10, Lossless



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

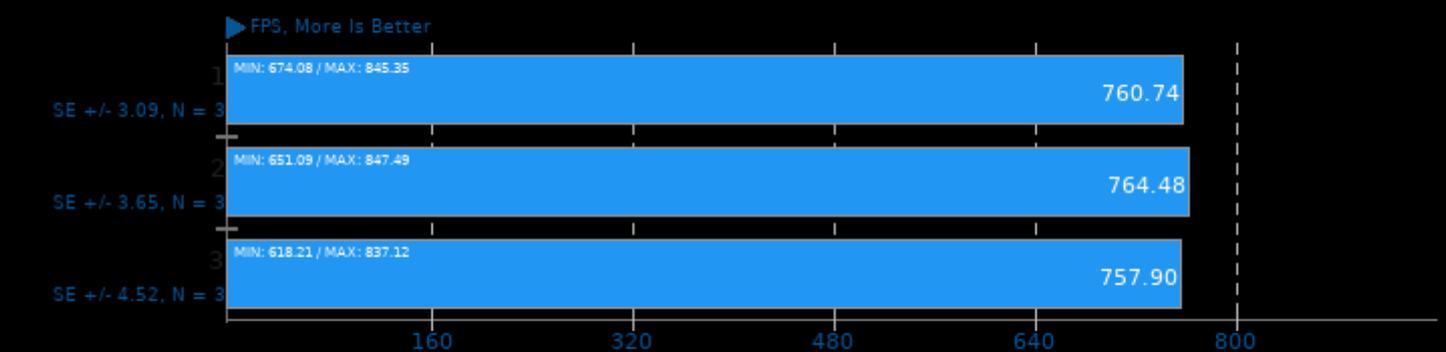
Chaos Group V-RAY 5

Mode: CPU



dav1d 0.8.2

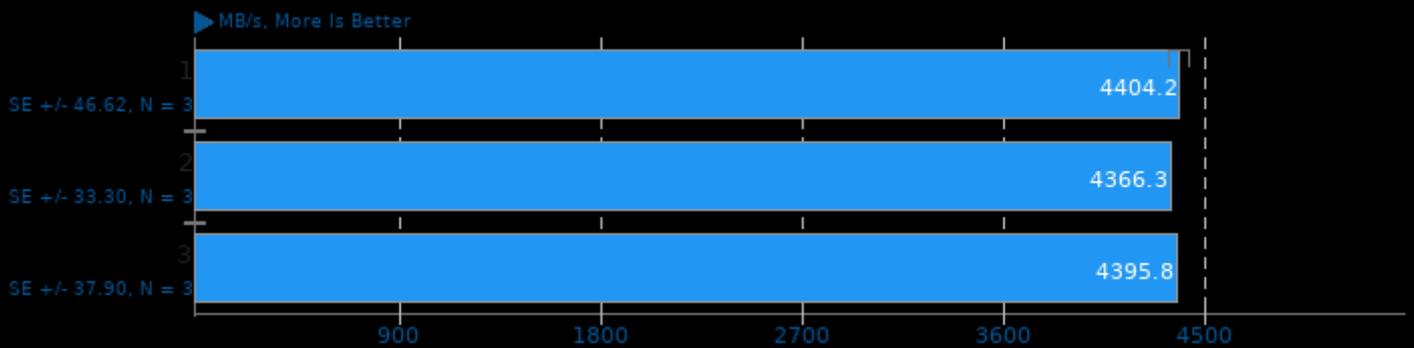
Video Input: Summer Nature 1080p



1. (CC) gcc options: -pthread

Zstd Compression 1.4.9

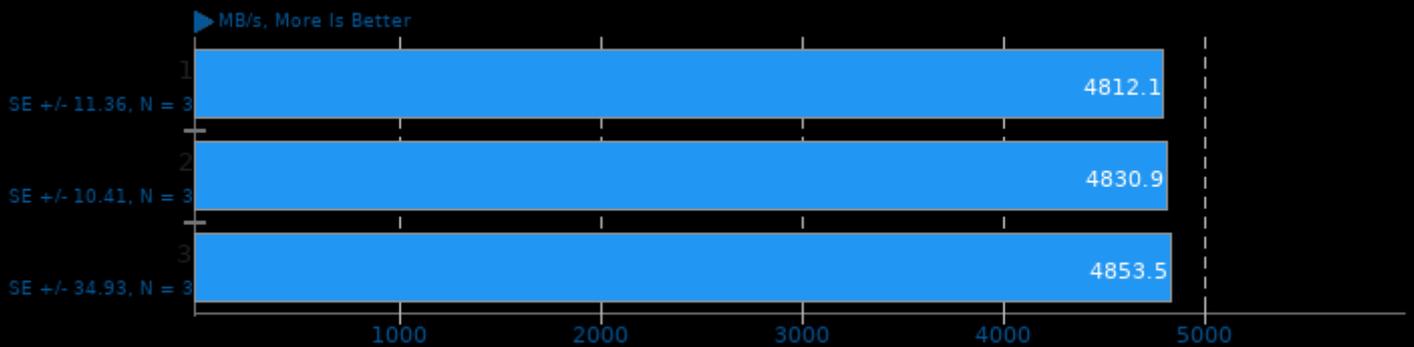
Compression Level: 3 - Decompression Speed



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

Zstd Compression 1.4.9

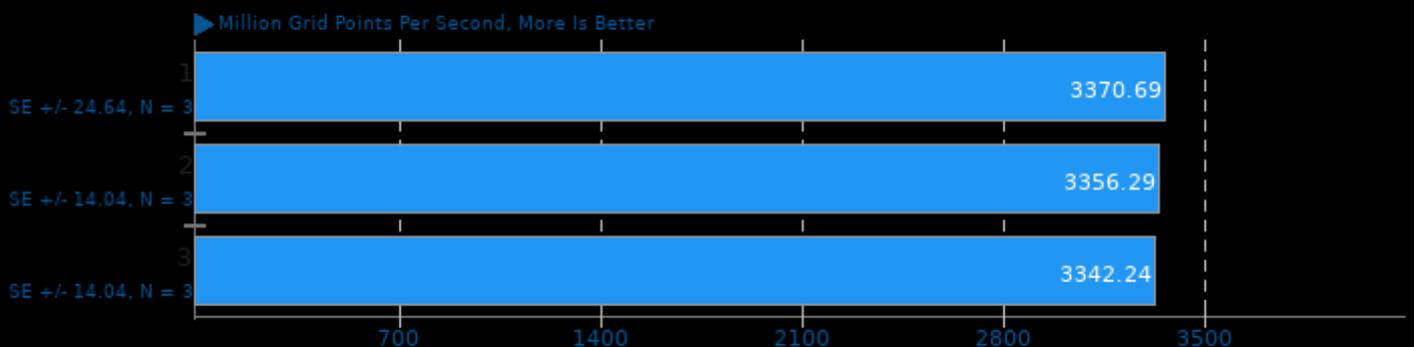
Compression Level: 8, Long Mode - Decompression Speed



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

ASKAP 1.0

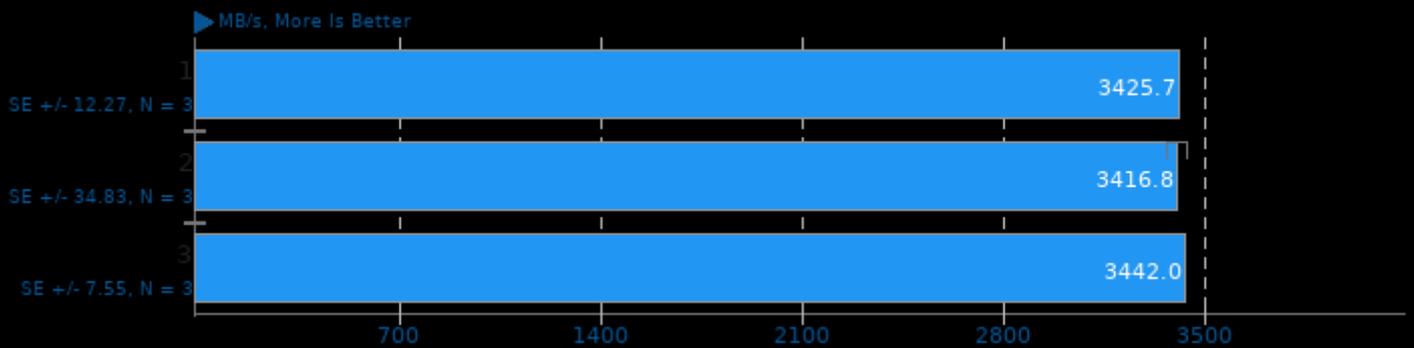
Test: tConvolve OpenMP - Degriding



1. (CXX) g++ options: -O3 -fstrict-aliasing -fopenmp

Zstd Compression 1.4.9

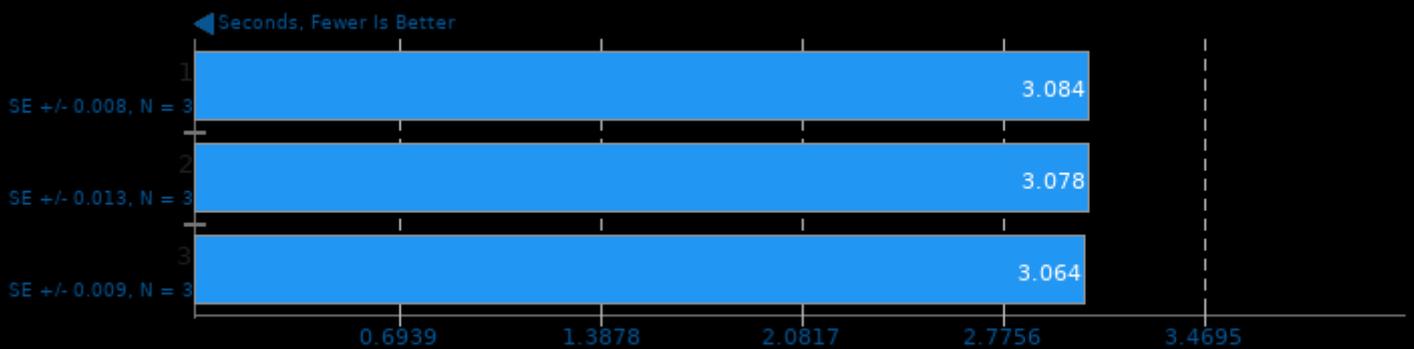
Compression Level: 3 - Compression Speed



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

libavif avifenc 0.9.0

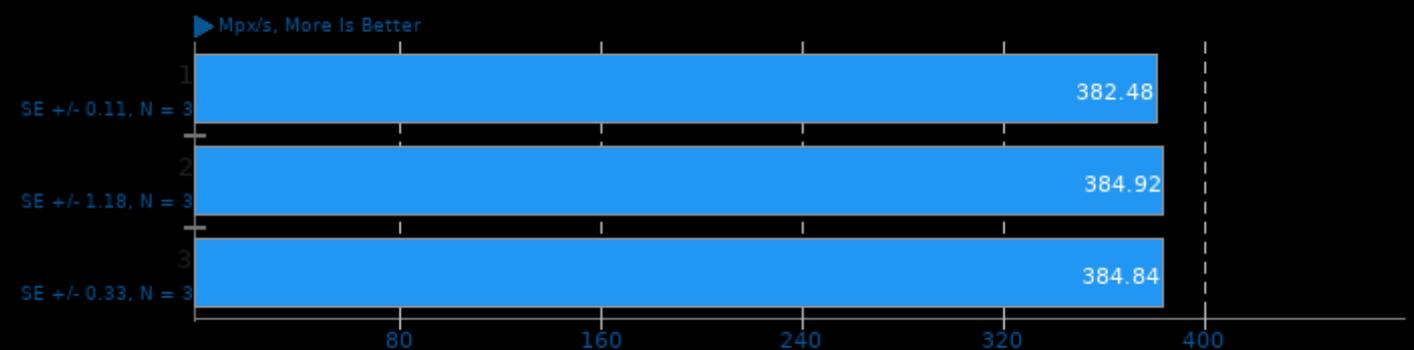
Encoder Speed: 10



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

Etcpak 0.7

Configuration: ETC1

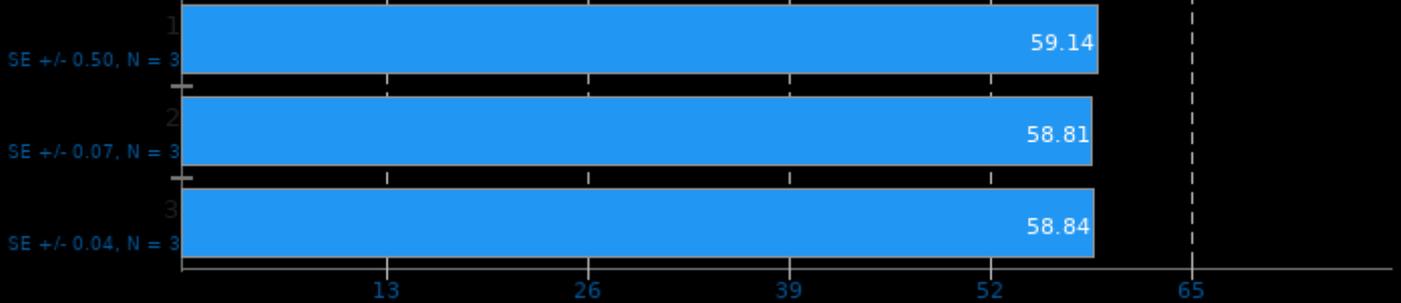


1. (CXX) g++ options: -O3 -march=native -std=c++11 -pthread

Pennant 1.0.1

Test: leblancbig

◀ Hydro Cycle Time - Seconds, Fewer Is Better

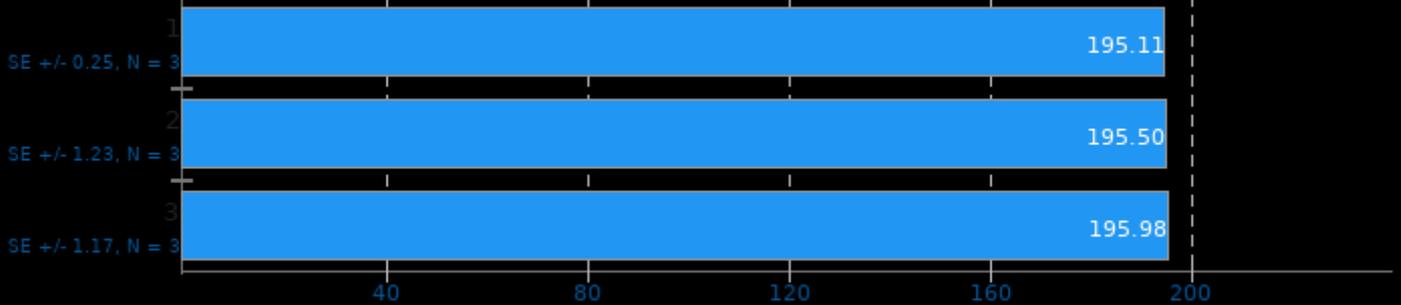


1. (CXX) g++ options: -fopenmp -pthread -lmpi_cxx -lmpi

WebP2 Image Encode 20210126

Encode Settings: Quality 75, Compression Effort 7

◀ Seconds, Fewer Is Better

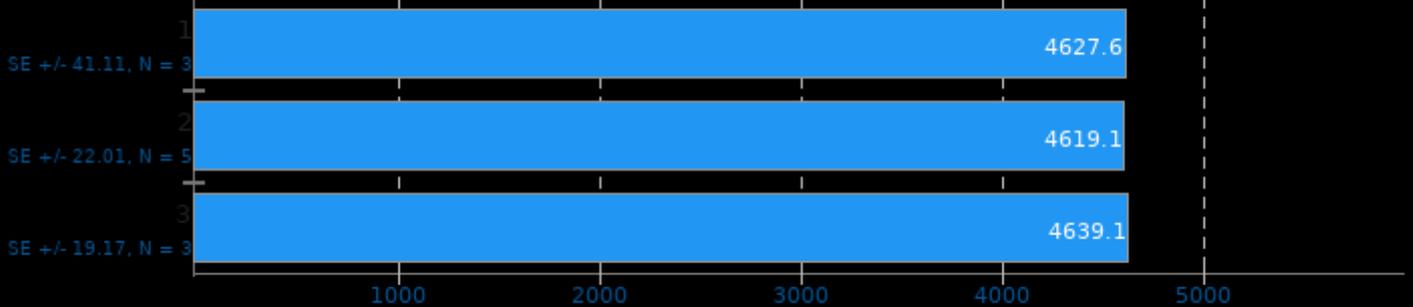


1. (CXX) g++ options: -mssse4.2 -fno-rtti -O3 -rdynamic -lpthread -ljpeg -lgif -lwebp -lwebpdemux

Zstd Compression 1.4.9

Compression Level: 3, Long Mode - Decompression Speed

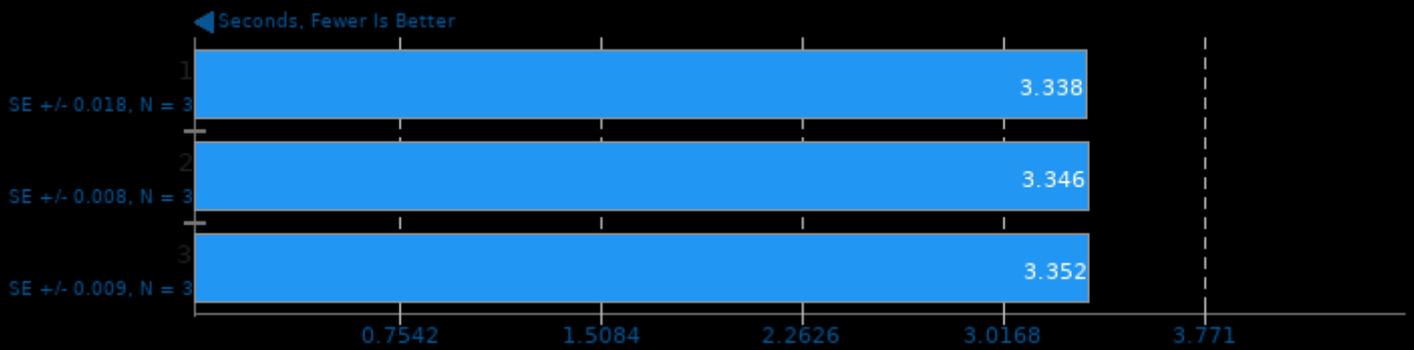
▶ MB/s, More Is Better



1. (C) gcc options: -O3 -pthread -lz -lzma

WebP2 Image Encode 20210126

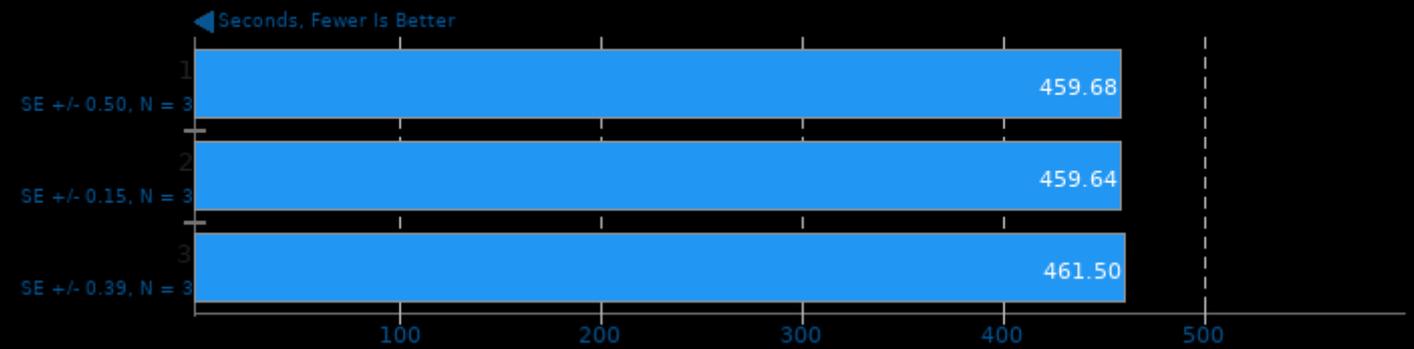
Encode Settings: Default



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -rdynamic -lpthread -ljpeg -lgif -lwebp -lwebpdemux

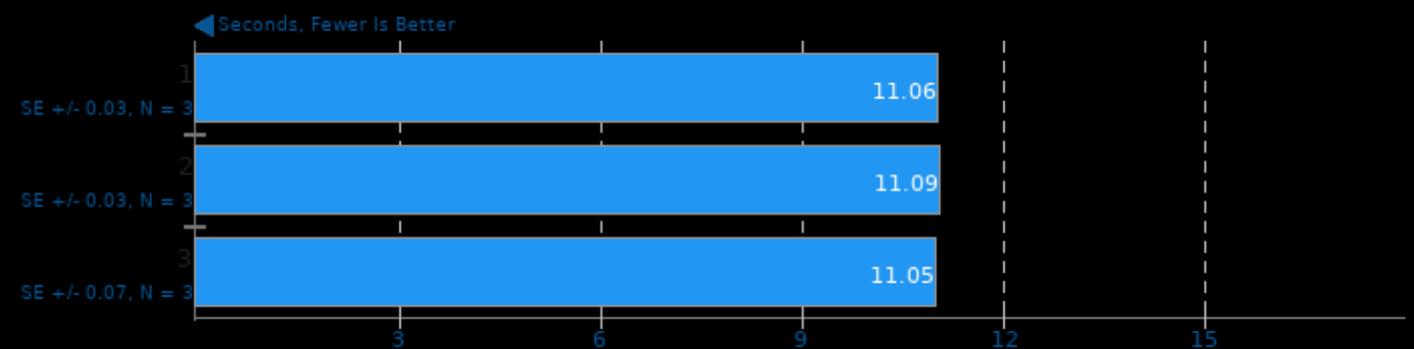
Blender 2.92

Blend File: Pabellon Barcelona - Compute: CPU-Only



libavif avifenc 0.9.0

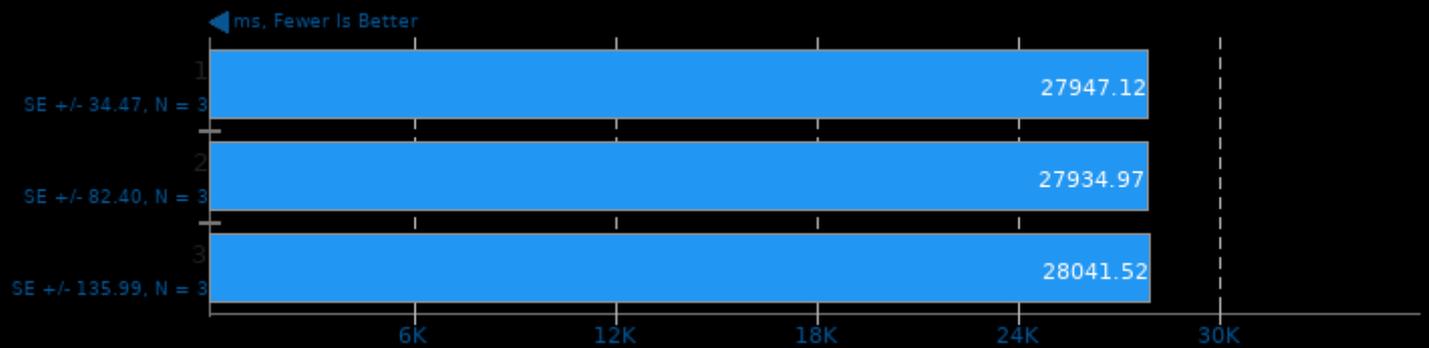
Encoder Speed: 6



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

FinanceBench 2016-07-25

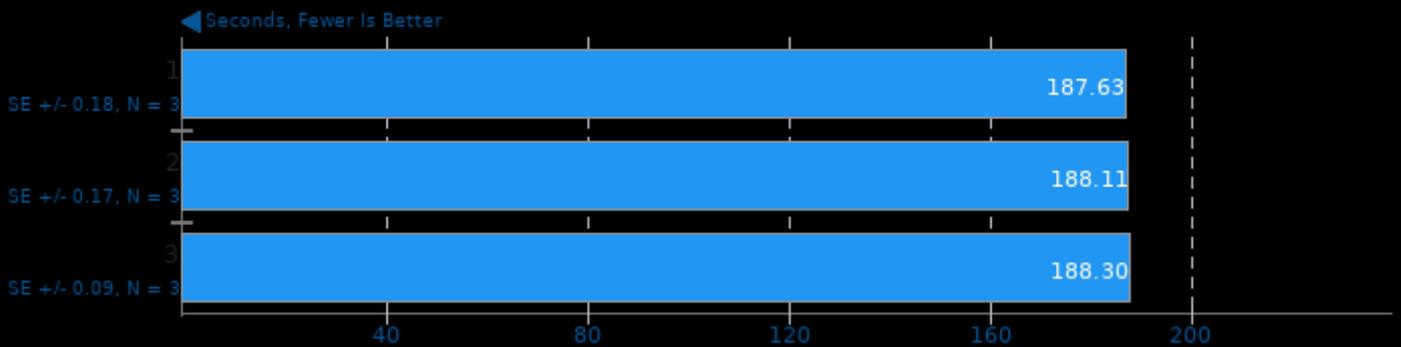
Benchmark: Repo OpenMP



1. (CXX) g++ options: -O3 -march=native -fopenmp

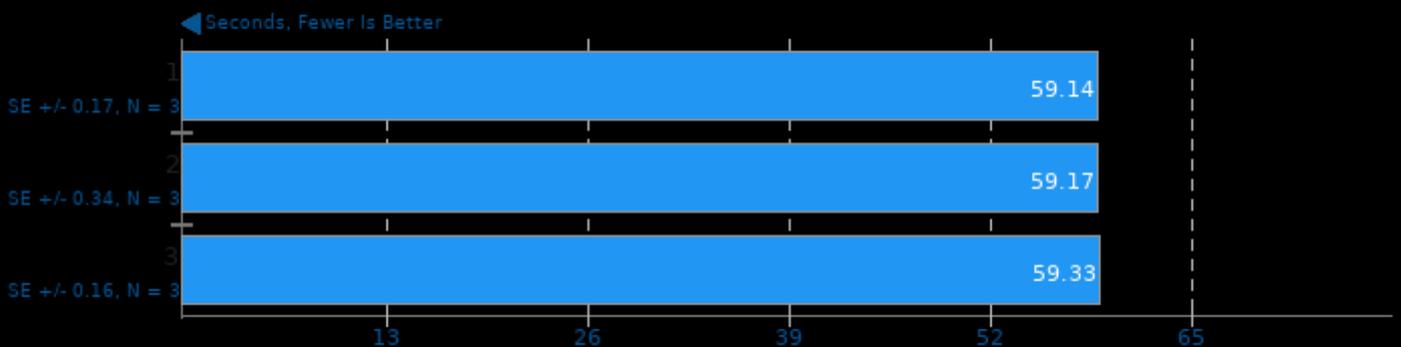
Blender 2.92

Blend File: Fishy Cat - Compute: CPU-Only



libavif avifenc 0.9.0

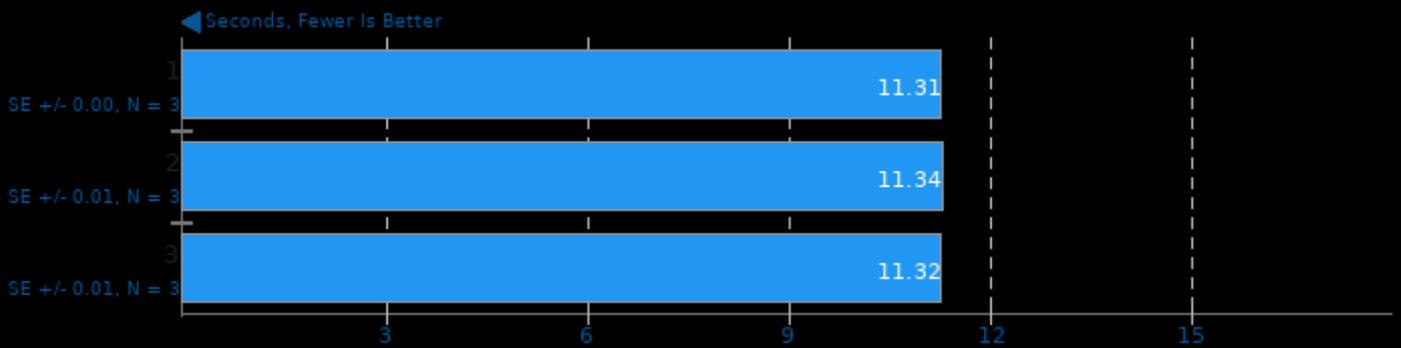
Encoder Speed: 0



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

WebP2 Image Encode 20210126

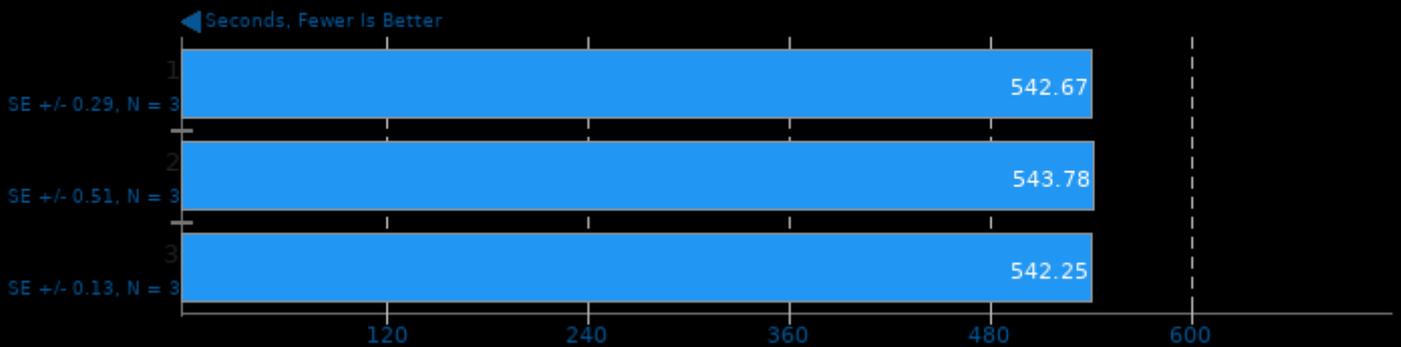
Encode Settings: Quality 100, Compression Effort 5



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -rdynamic -lpthread -ljpeg -lgif -lwebp -lwebpdemux

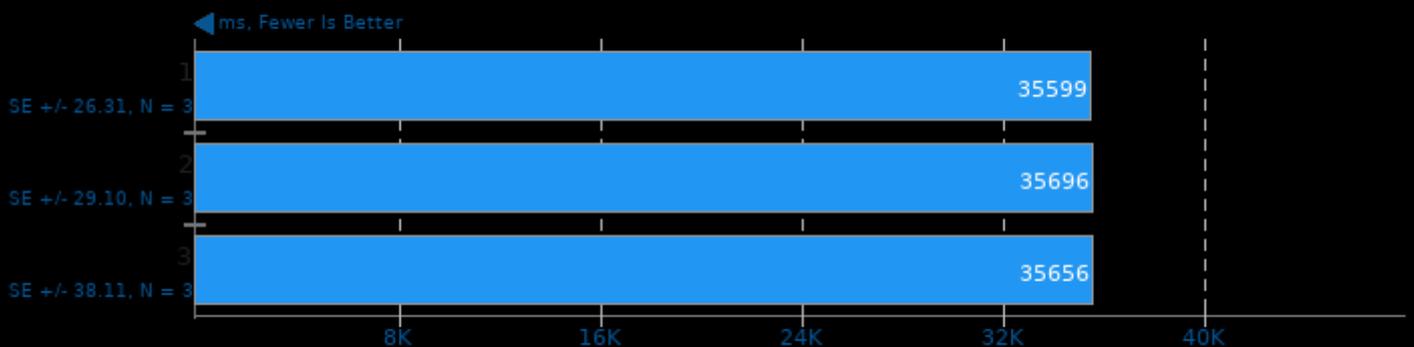
Blender 2.92

Blend File: Barbershop - Compute: CPU-Only



toyBrot Fractal Generator 2020-11-18

Implementation: C++ Threads

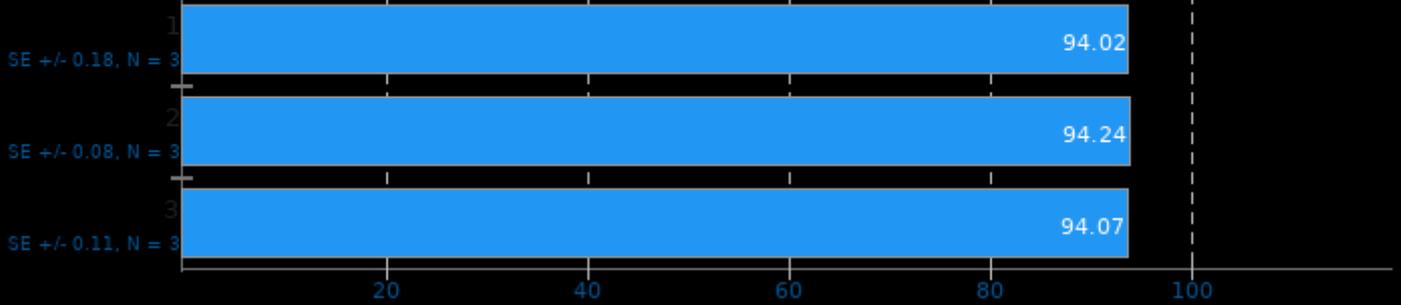


1. (CXX) g++ options: -O3 -lpthread

Timed Erlang/OTP Compilation 23.2

Time To Compile

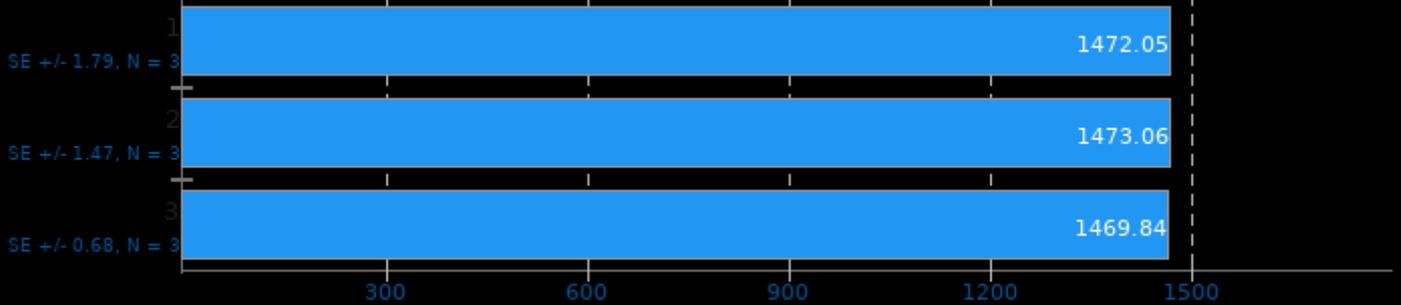
◀ Seconds, Fewer Is Better



ASKAP 1.0

Test: tConvolve MT - Degriding

▶ Million Grid Points Per Second, More Is Better

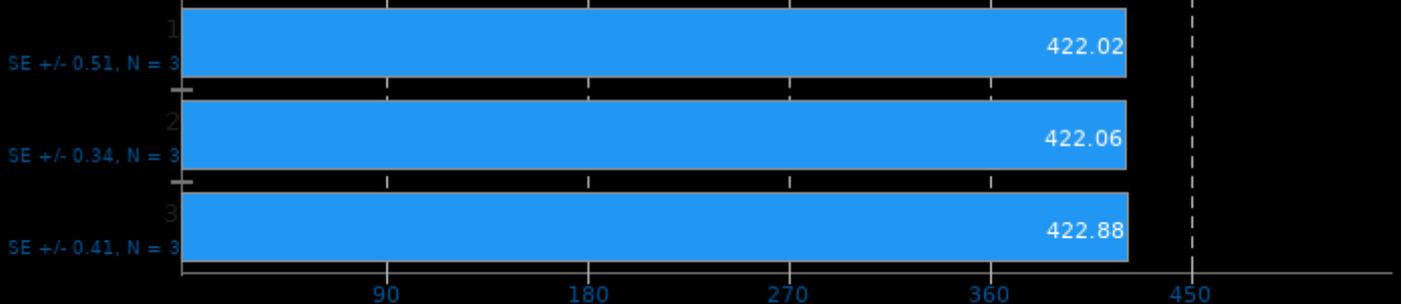


1. (CXX) g++ options: -O3 -fstrict-aliasing -fopenmp

Blender 2.92

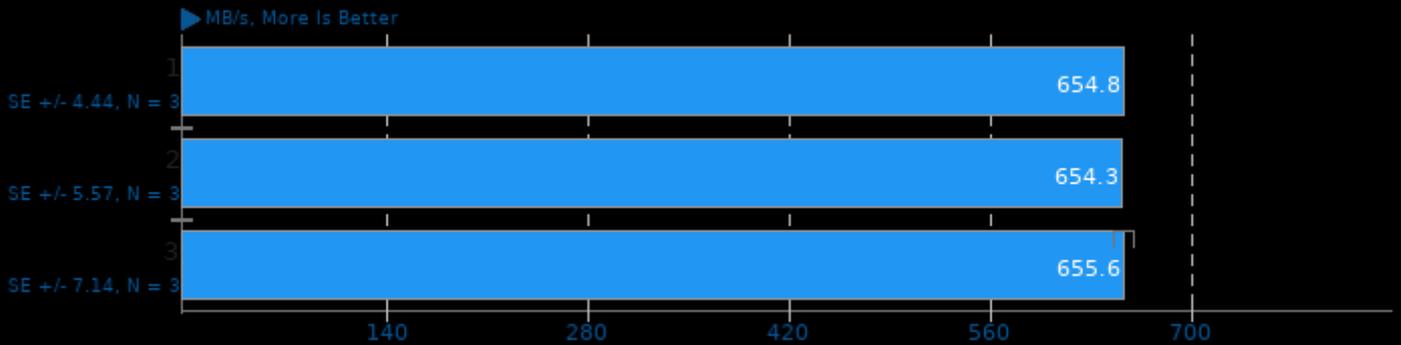
Blend File: Classroom - Compute: CPU-Only

◀ Seconds, Fewer Is Better



Zstd Compression 1.4.9

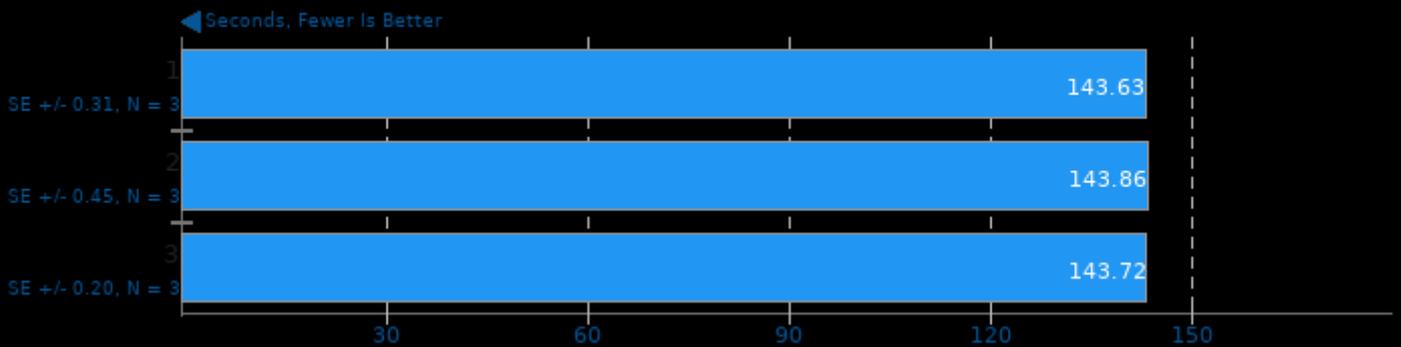
Compression Level: 8, Long Mode - Compression Speed



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

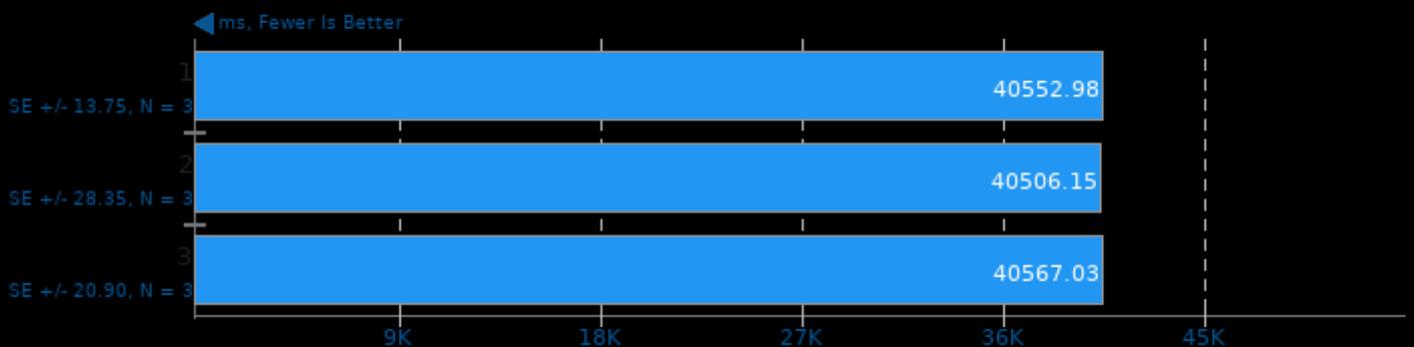
Blender 2.92

Blend File: BMW27 - Compute: CPU-Only



FinanceBench 2016-07-25

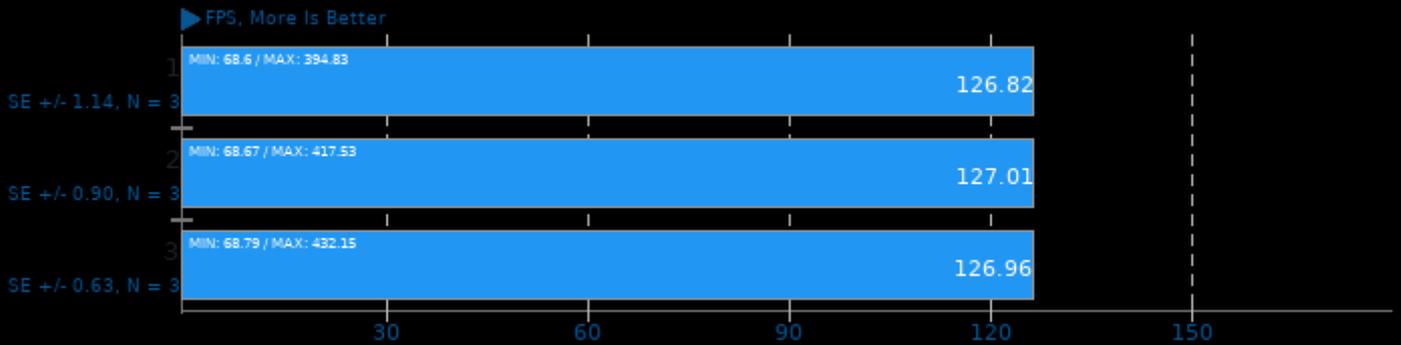
Benchmark: Bonds OpenMP



1. (CXX) g++ options: -O3 -march=native -fopenmp

dav1d 0.8.2

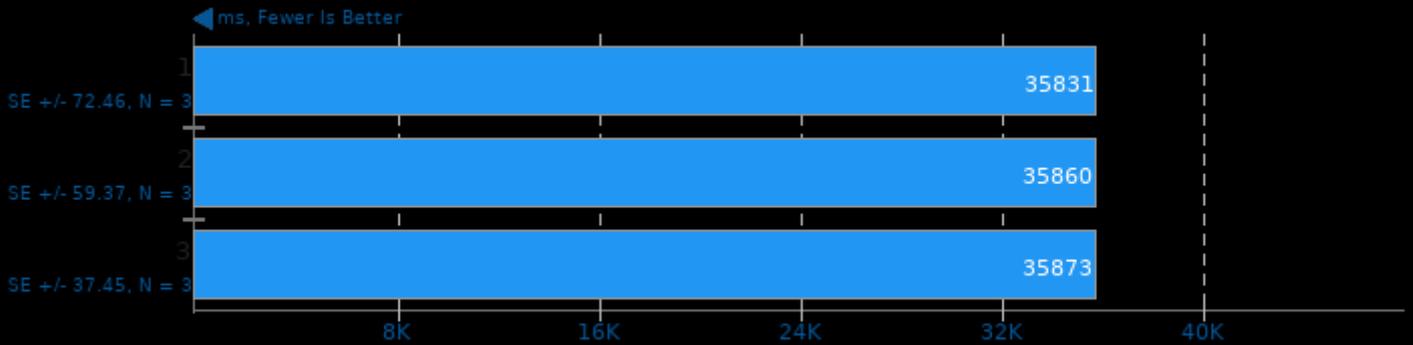
Video Input: Chimera 1080p 10-bit



1. (CC) gcc options: -pthread

toyBrot Fractal Generator 2020-11-18

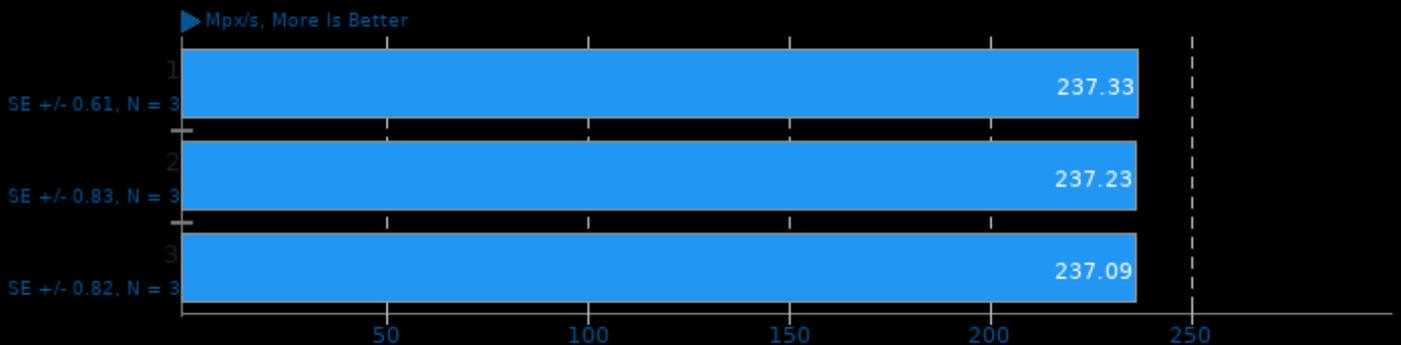
Implementation: C++ Tasks



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

Etcpak 0.7

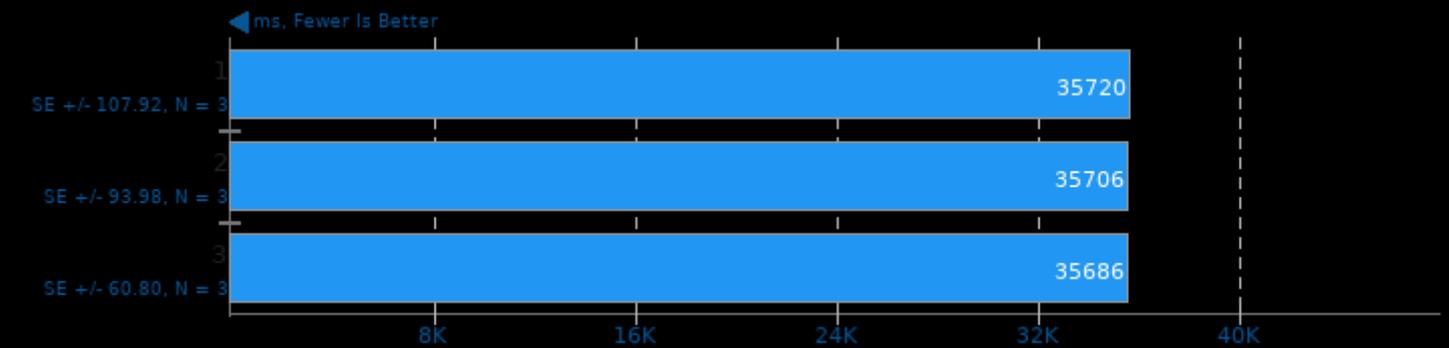
Configuration: ETC2



1. (CXX) g++ options: -O3 -march=native -std=c++11 -pthread

toyBrot Fractal Generator 2020-11-18

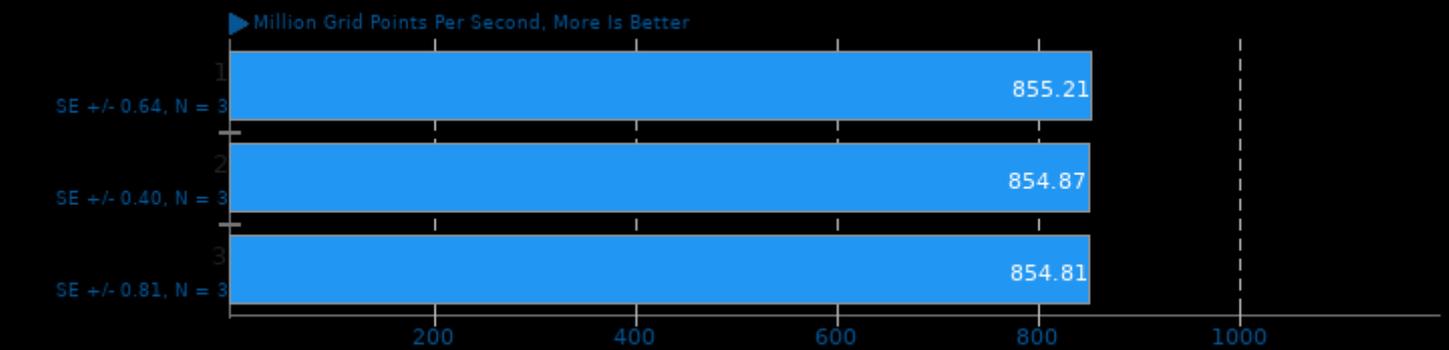
Implementation: OpenMP



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

ASKAP 1.0

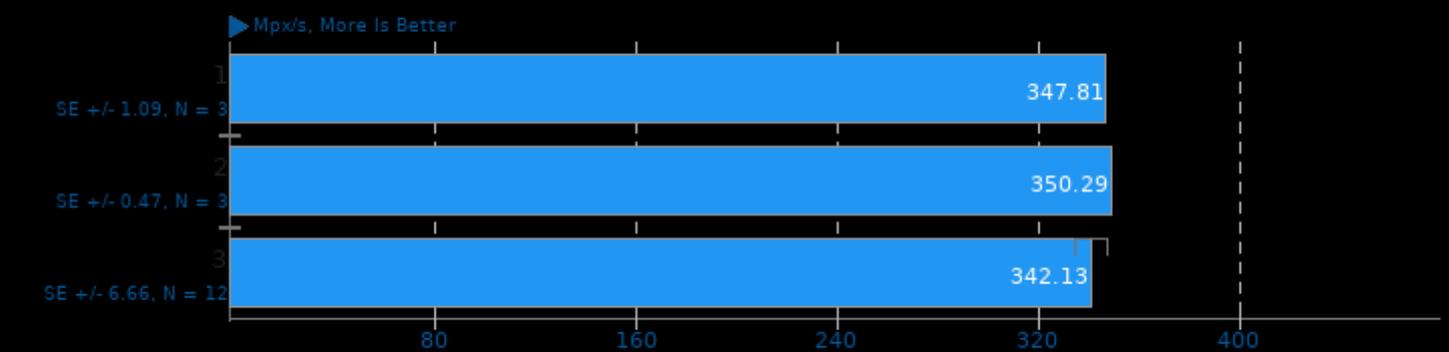
Test: tConvolve MT - Gridding



1. (CXX) g++ options: -O3 -fstrict-aliasing -fopenmp

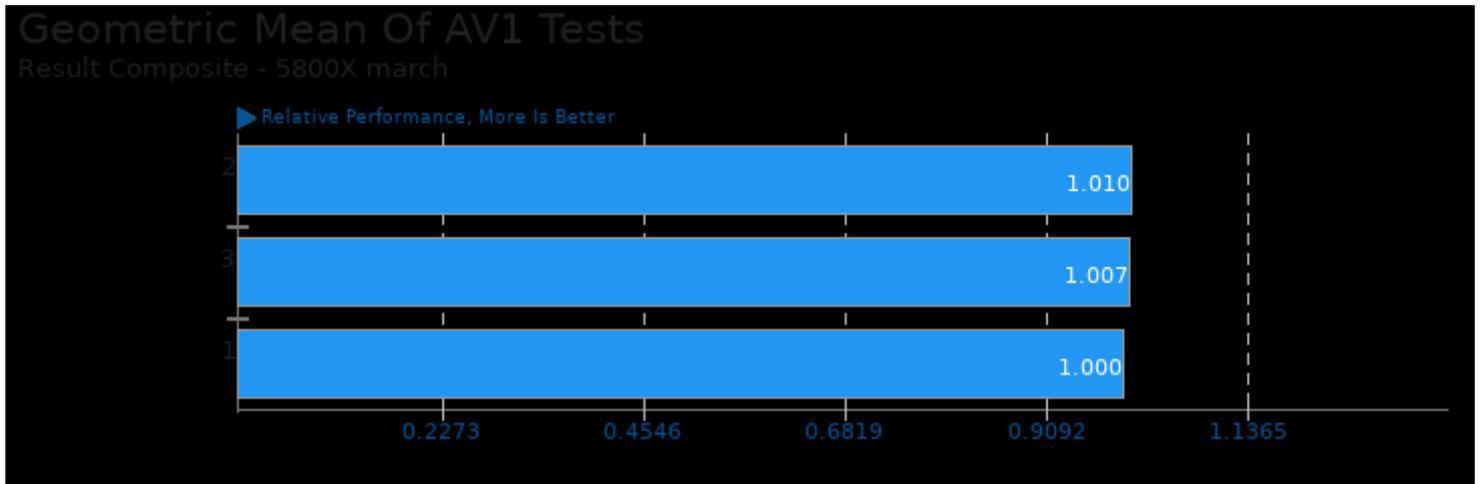
Etcpak 0.7

Configuration: ETC1 + Dithering

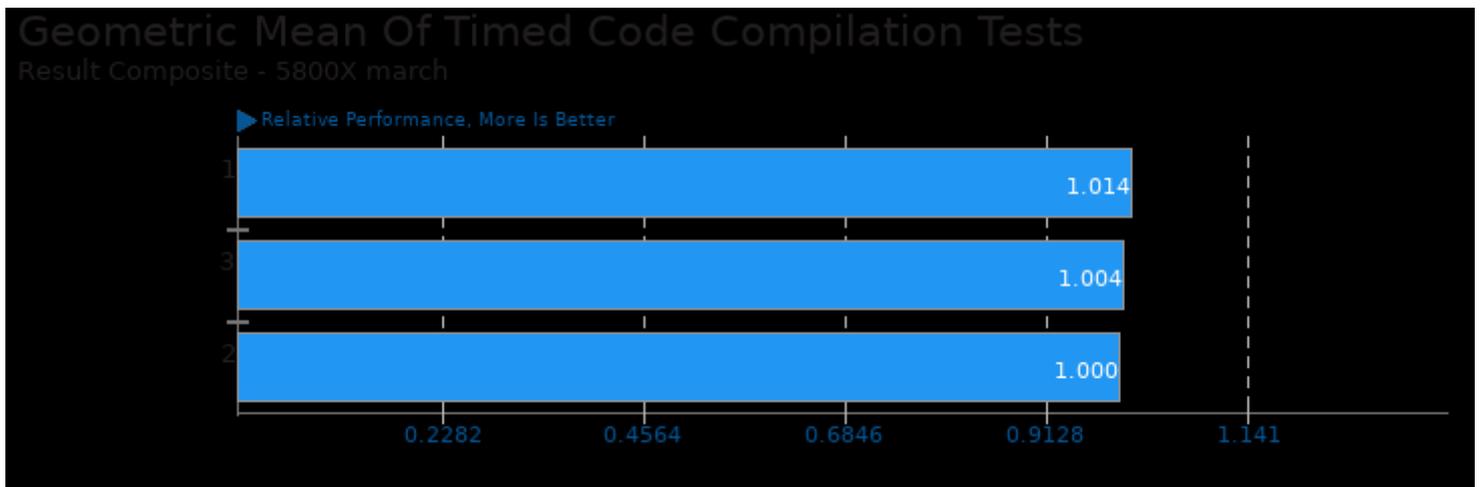


1. (CXX) g++ options: -O3 -march=native -std=c++11 -lthread

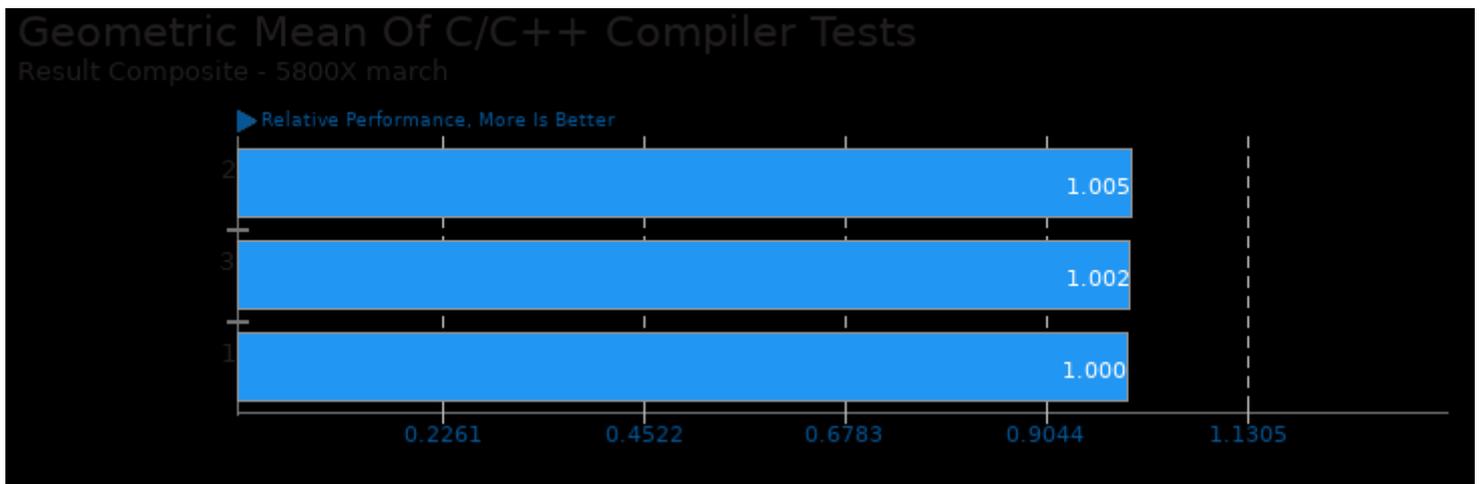
These geometric means are based upon test groupings / test suites for this result file.



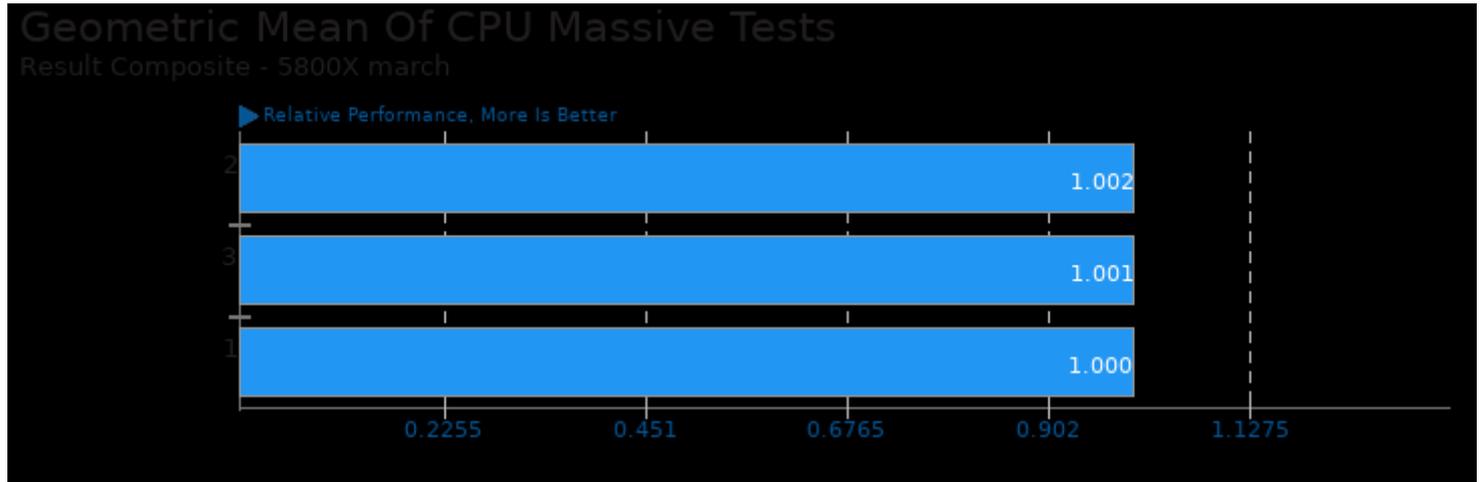
Geometric mean based upon tests: pts/dav1d and pts/avifenc



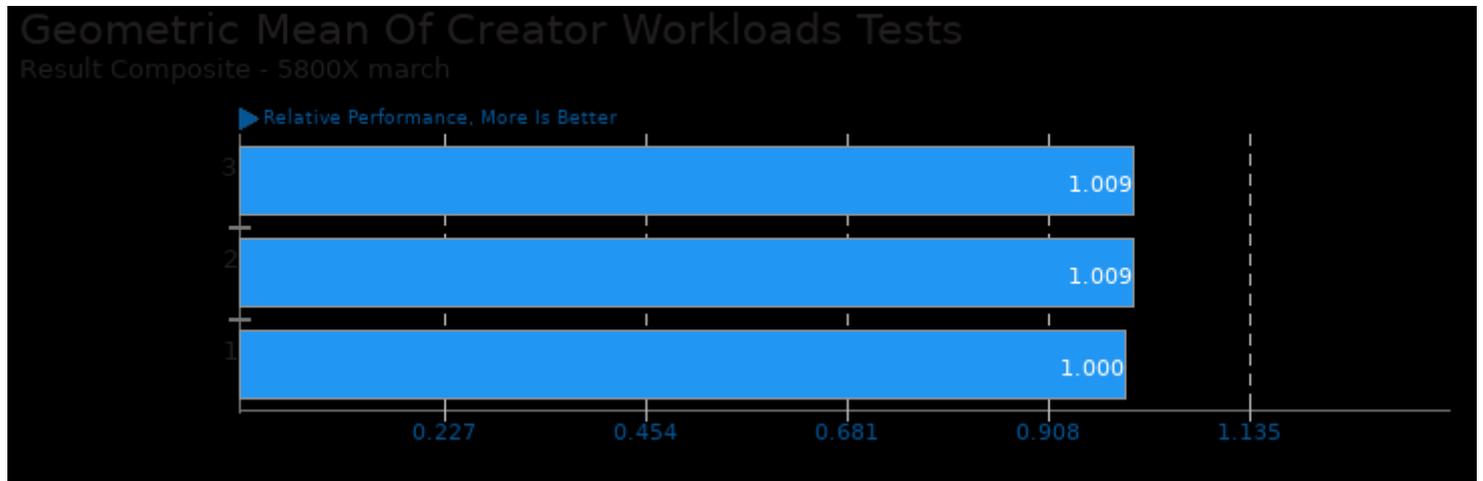
Geometric mean based upon tests: pts/build-linux-kernel and pts/build-erlang



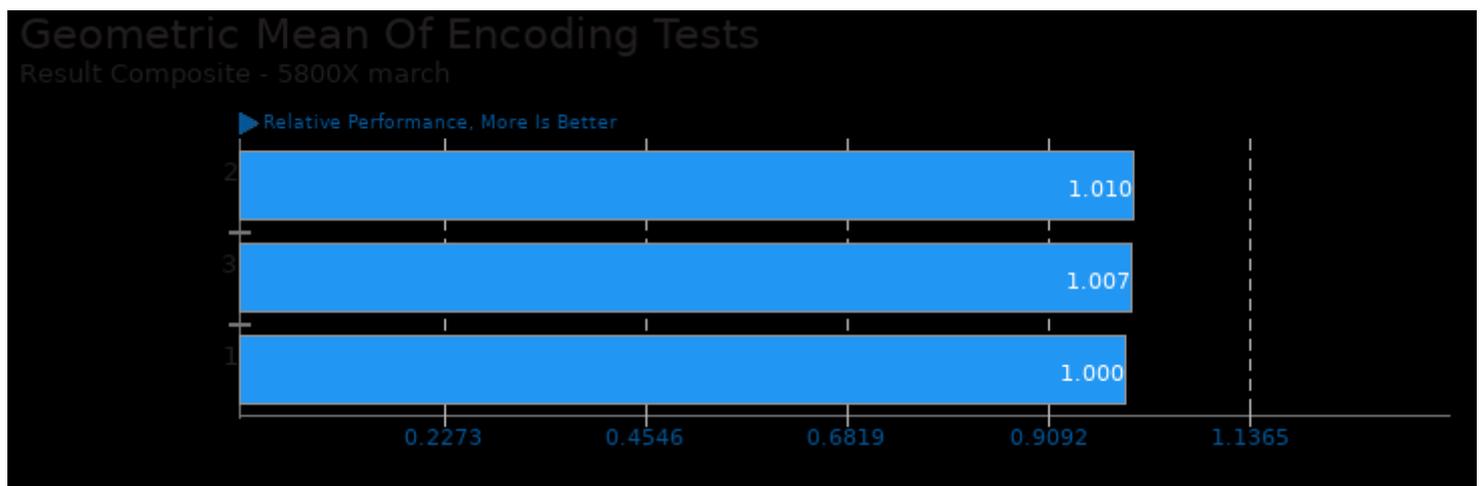
Geometric mean based upon tests: pts/dav1d, pts/compress-zstd, pts/gromacs and pts/toybot



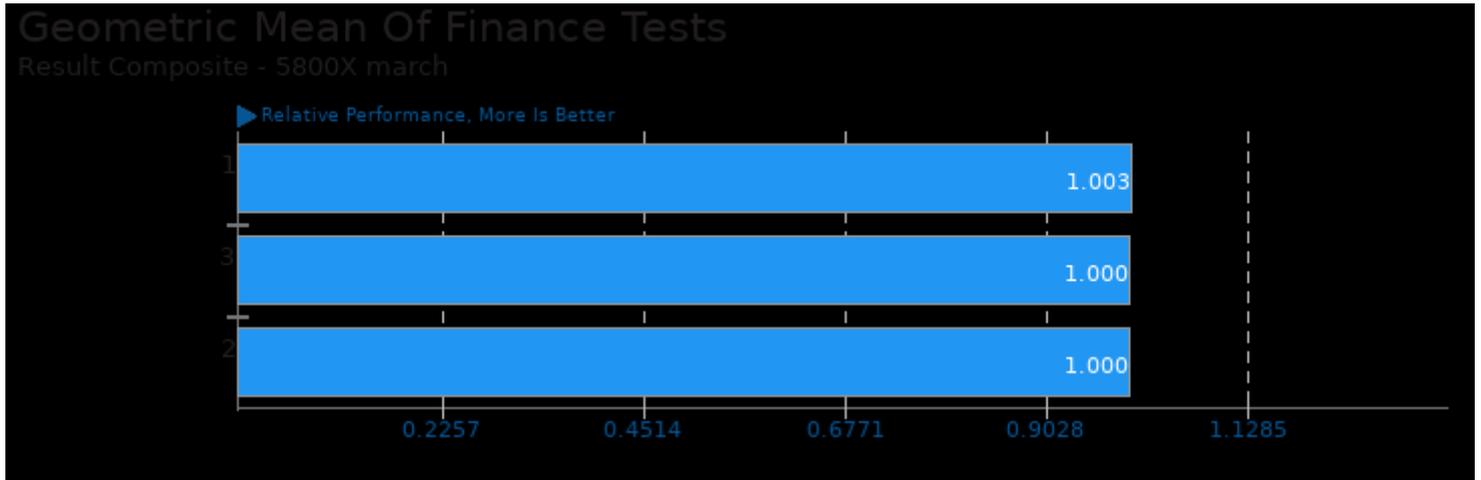
Geometric mean based upon tests: pts/build-linux-kernel, pts/compress-zstd, pts/dav1d, pts/v-ray and pts/blender



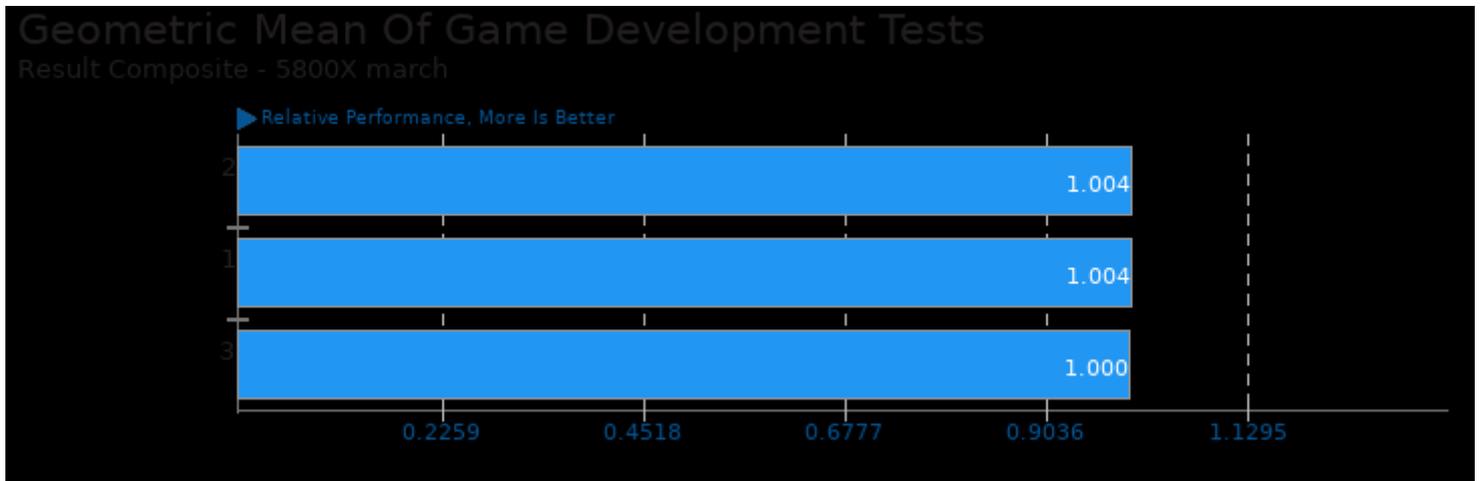
Geometric mean based upon tests: pts/blender, pts/v-ray, pts/dav1d, pts/avifenc, pts/webp2, pts/jpegxl, pts/jpegxl-decode, pts/etcpak and pts/ngspice



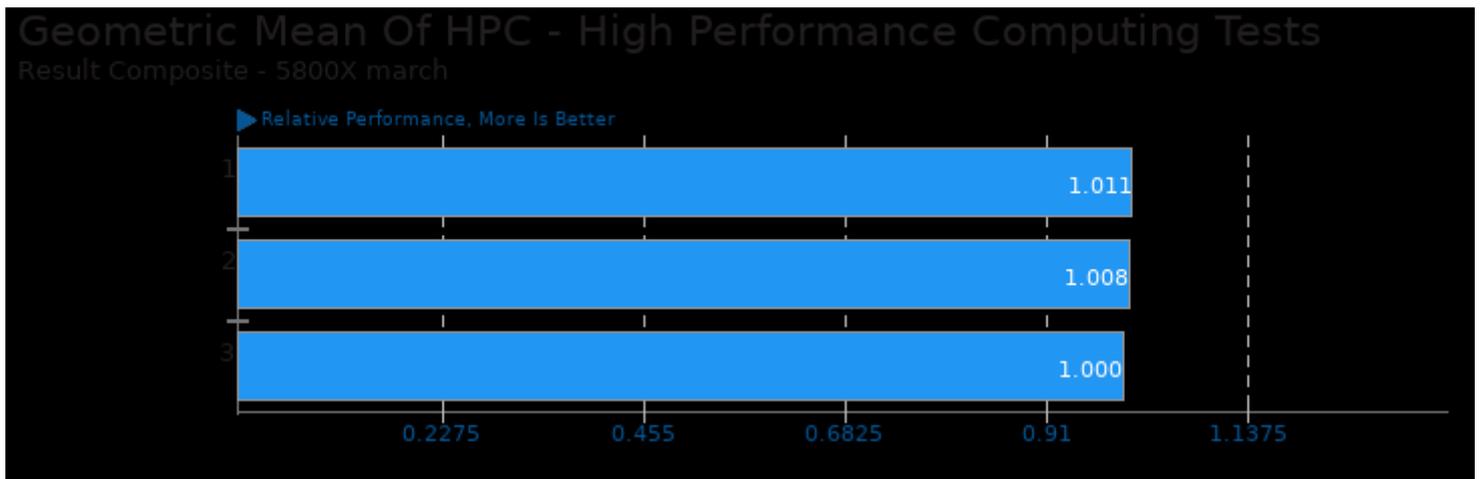
Geometric mean based upon tests: pts/dav1d and pts/avifenc



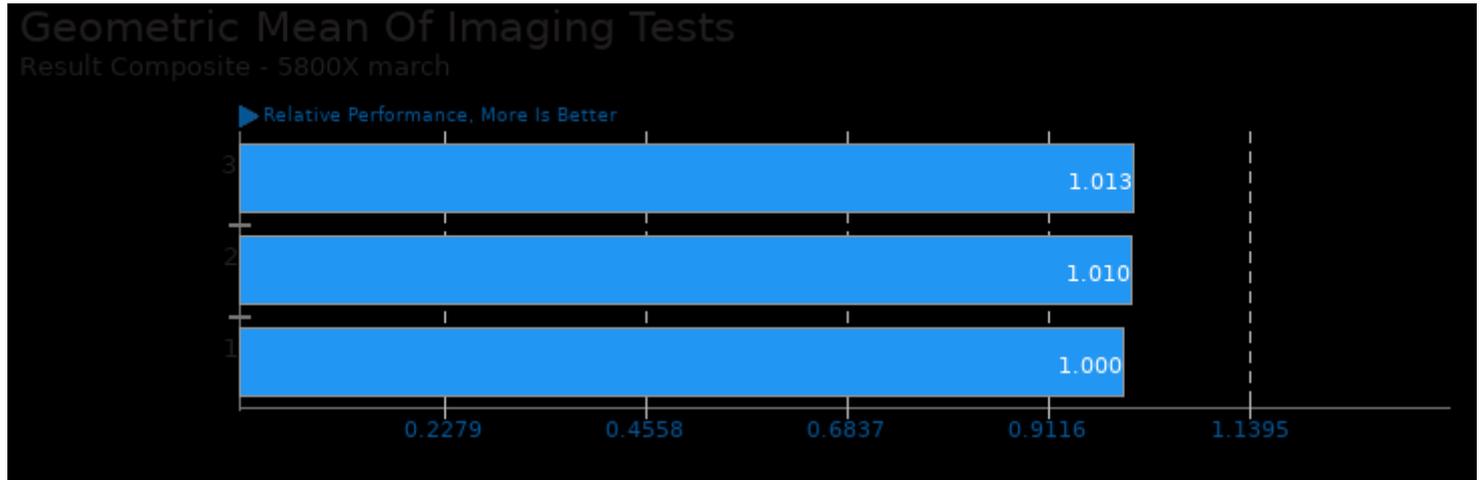
Geometric mean based upon tests: pts/financebench and pts/quantlib



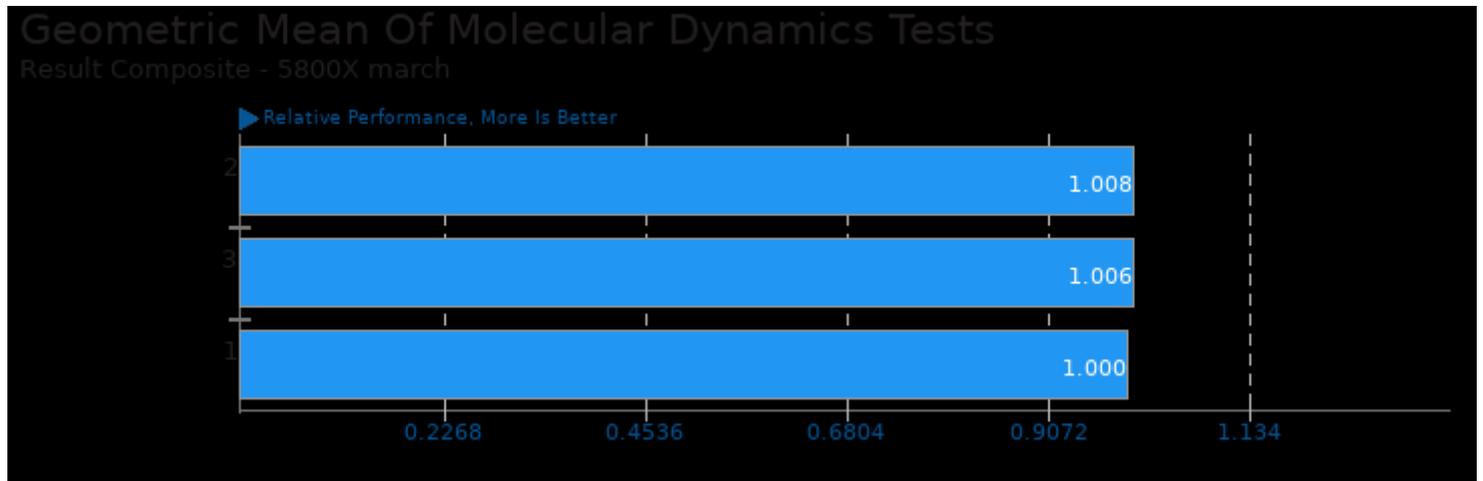
Geometric mean based upon tests: pts/etcpak and pts/blender



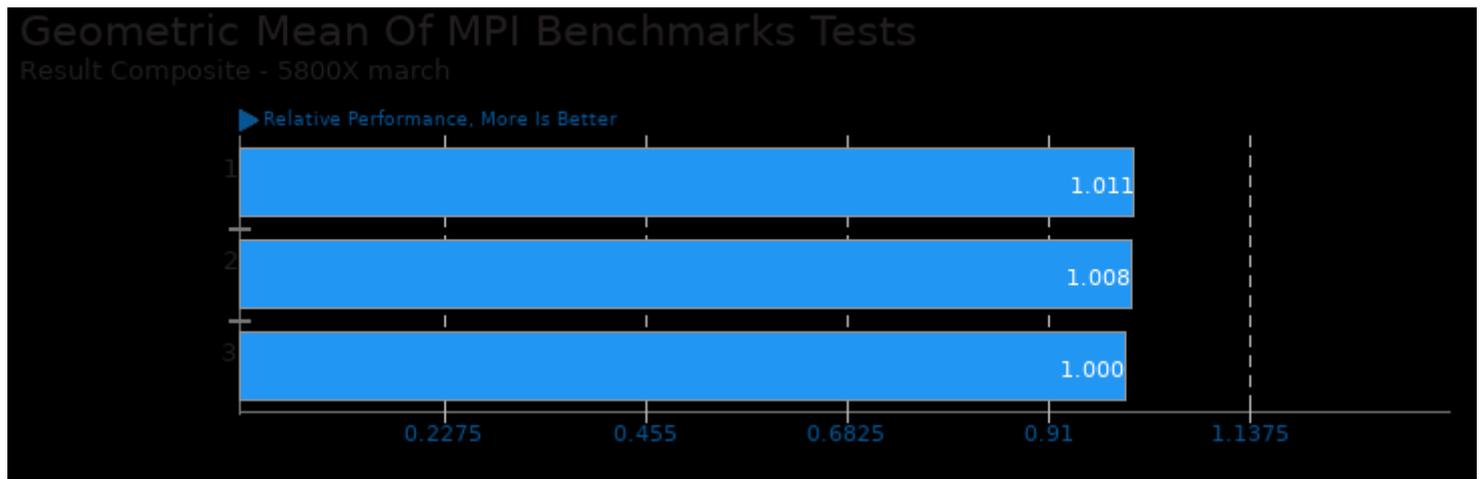
Geometric mean based upon tests: pts/askap, pts/gromacs and pts/pennant



Geometric mean based upon tests: pts/webp2, pts/jpegxl, pts/jpegxl-decode and pts/avifenc



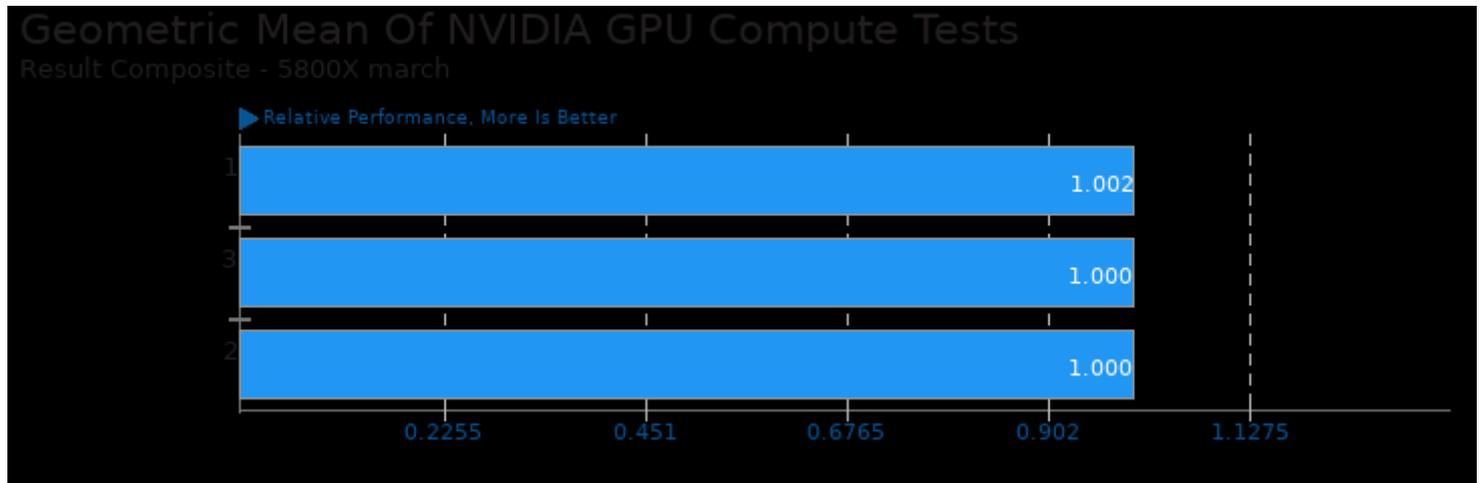
Geometric mean based upon tests: pts/gromacs and pts/pennant



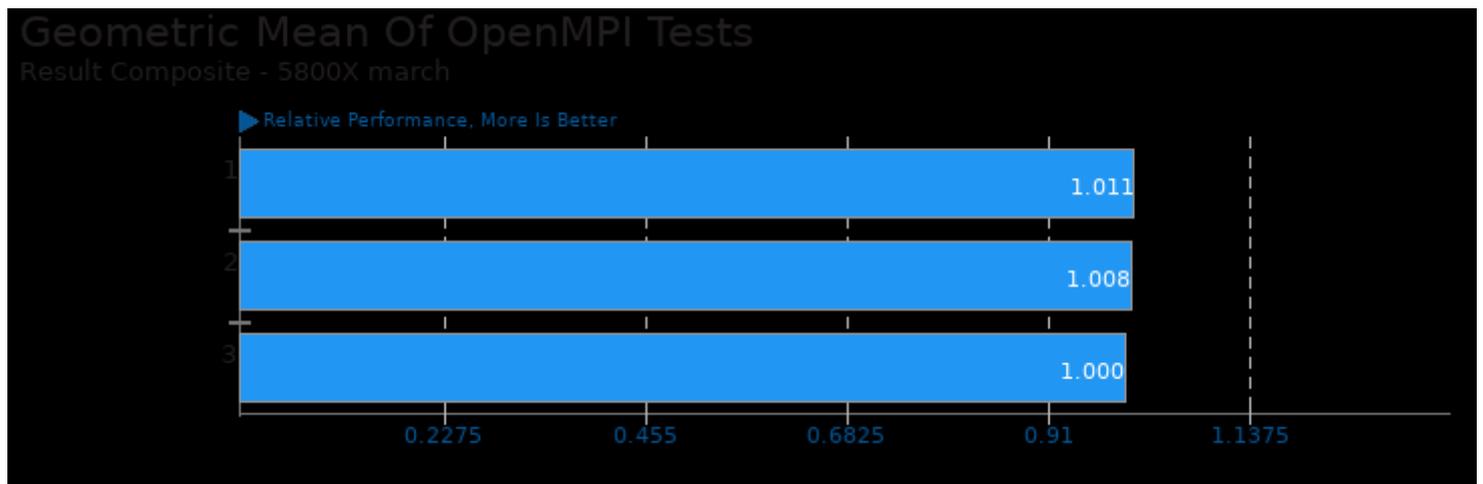
Geometric mean based upon tests: pts/askap, pts/gromacs and pts/pennant



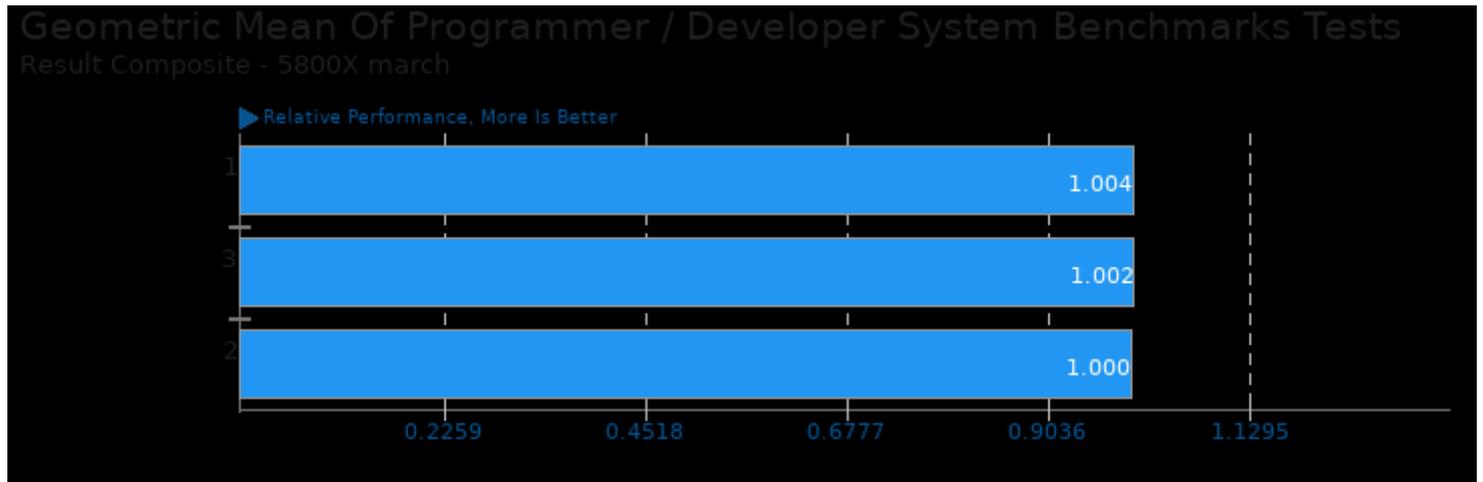
Geometric mean based upon tests: pts/blender, pts/askap, pts/dav1d, pts/avifenc, pts/pennant, pts/gromacs, pts/compress-zstd, pts/build-linux-kernel, pts/build-erlang and pts/v-ray



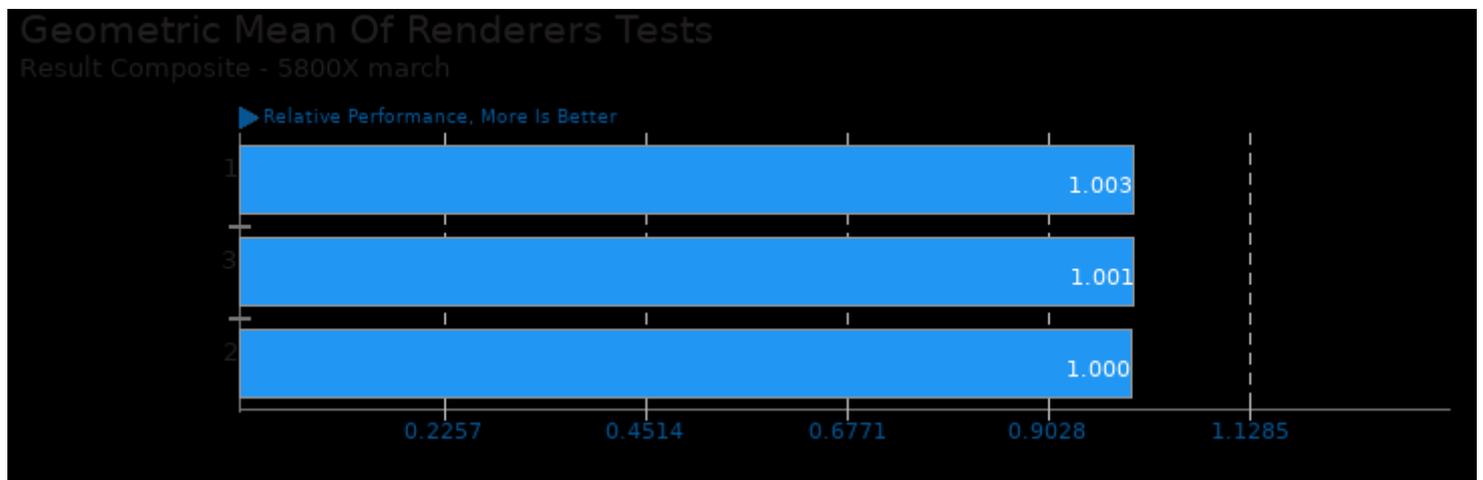
Geometric mean based upon tests: pts/gromacs, pts/financebench, pts/v-ray and pts/blender



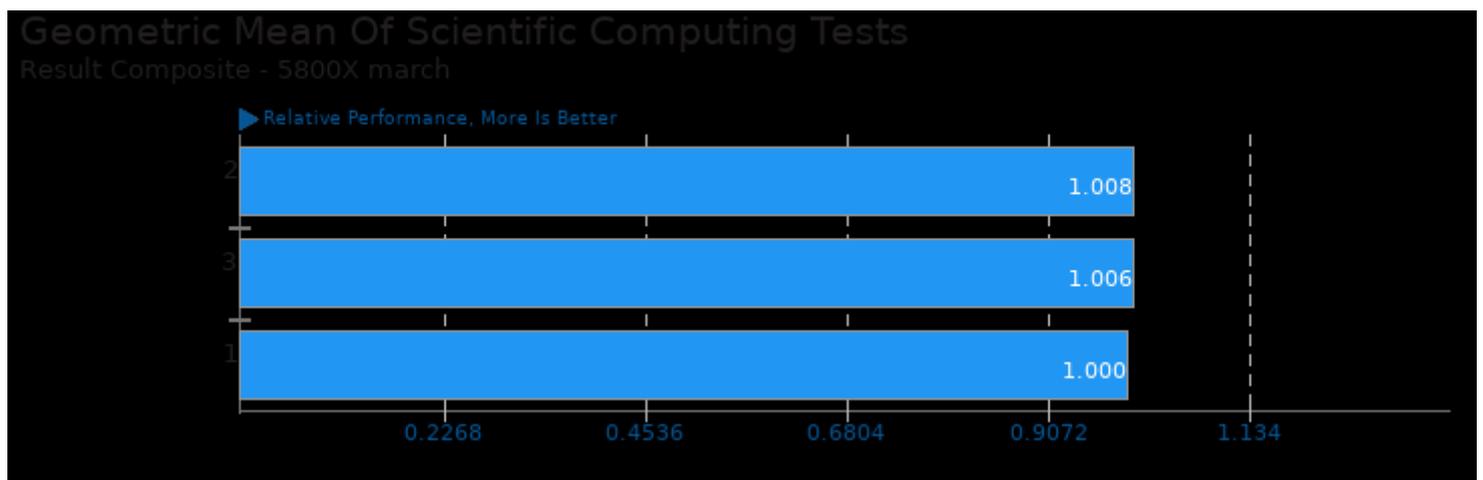
Geometric mean based upon tests: pts/askap, pts/pennant and pts/gromacs



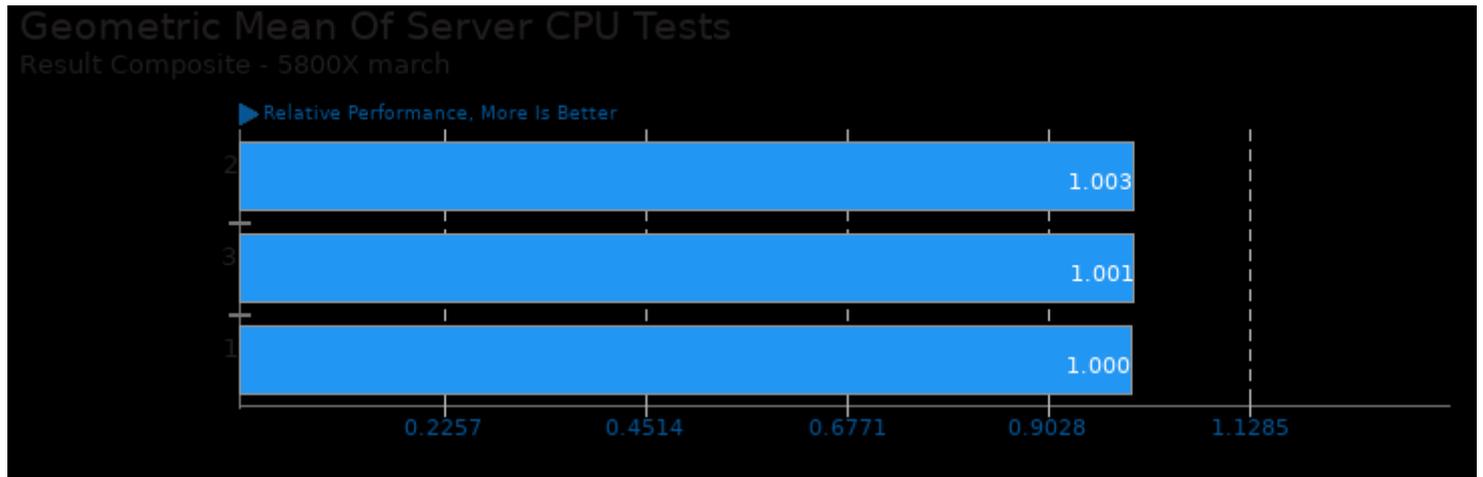
Geometric mean based upon tests: pts/compress-zstd, pts/build-linux-kernel and pts/build-erlang



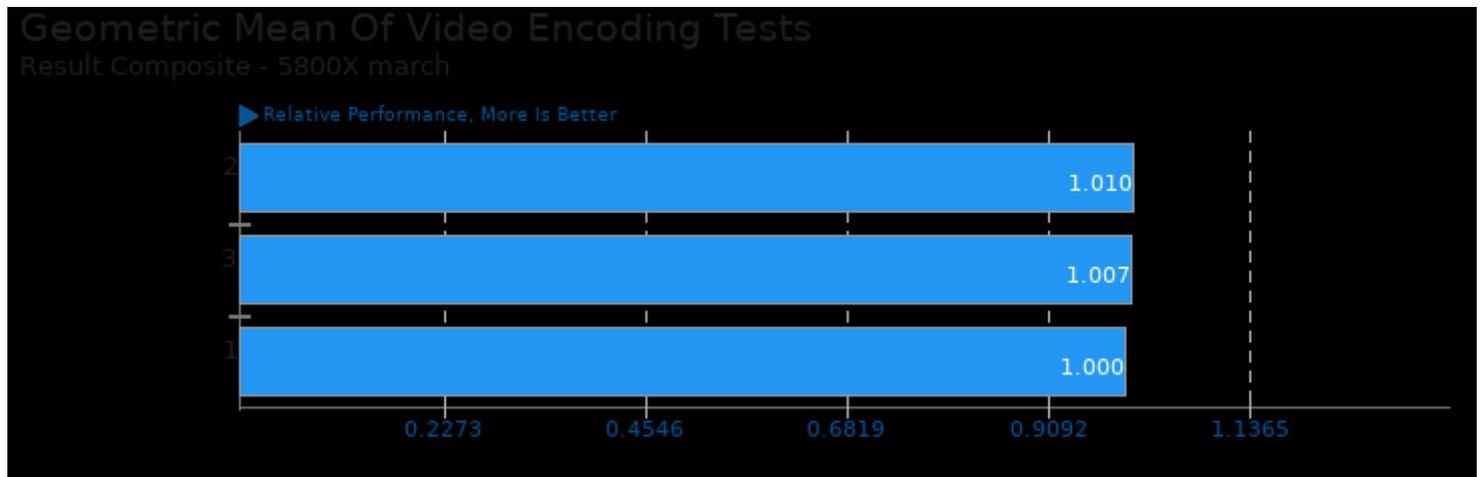
Geometric mean based upon tests: pts/blender and pts/v-ray



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



Geometric mean based upon tests: pts/dav1d, pts/build-linux-kernel, pts/compress-zstd and pts/blender



Geometric mean based upon tests: pts/dav1d and pts/avifenc

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 15:23.