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silver march

Intel Xeon Silver 4216 testing with a TYAN S7100AG2NR (V4.02 BIOS) and ASPEED on Debian 10 via the Phoronix Test Suite.

Automated Executive Summary

2 had the most wins, coming in first place for 40% of the tests.

Based on the geometric mean of all complete results, the fastest (2) was 1.002x the speed of the slowest (1). 3 was 0.999x the speed of 2 and 1 was 0.999x the speed of 3.

Test Systems:

1

2

3

Processor: Intel Xeon Silver 4216 @ 3.20GHz (16 Cores / 32 Threads), Motherboard: TYAN S7100AG2NR (V4.02 BIOS), Chipset: Intel Sky Lake-E DMI3 Registers, Memory: 24GB, Disk: 240GB Corsair Force MP500, Graphics: ASPEED, Audio: Realtek ALC892, Network: 2 x Intel I350

OS: Debian 10, Kernel: 4.19.0-9-amd64 (x86_64), Desktop: GNOME Shell 3.30.2, Display Server: X Server, Compiler: GCC 8.3.0, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v

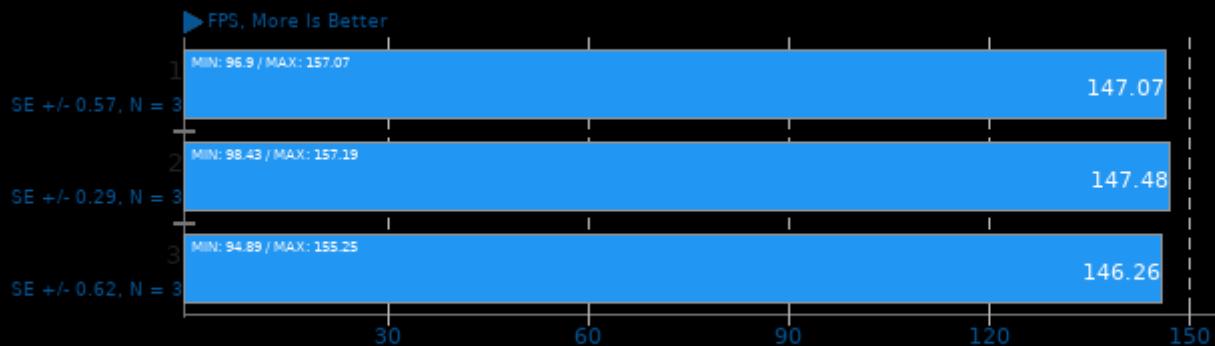
Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0x5000002c

Security Notes: itlb_multihit: KVM: Mitigation of Split huge pages + 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/swappgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Enhanced IBRS IPB: conditional RSB filling + srbs: Not affected + tsx_async_abort: Mitigation of TSX disabled

	1	2	3
dav1d - Summer Nature 4K (FPS)	147.07	147.48	146.26
Normalized	99.72%	100%	99.17%
Standard Deviation	0.7%	0.3%	0.7%
dav1d - S.N.1 (FPS)	257.75	258.23	255.75
Normalized	99.81%	100%	99.04%
Standard Deviation	0.8%	1%	0.1%
libavif avifenc - 0 (sec)	83.738	83.688	83.390
Normalized	99.58%	99.64%	100%
Standard Deviation	1.1%	0.9%	0.4%
libavif avifenc - 2 (sec)	43.932	44.041	43.961
Normalized	100%	99.75%	99.93%
Standard Deviation	0.3%	0.4%	0.3%
libavif avifenc - 6 (sec)	15.427	15.368	15.377
Normalized	99.62%	100%	99.94%
Standard Deviation	0.4%	0.5%	0.1%
libavif avifenc - 10 (sec)	3.504	3.508	3.515
Normalized	100%	99.89%	99.69%
Standard Deviation	0.7%	0.6%	0.3%
libavif avifenc - 6, Lossless (sec)	53.001	53.096	52.674
Normalized	99.38%	99.21%	100%
Standard Deviation	0.2%	0.9%	0.4%
libavif avifenc - 10, Lossless (sec)	6.981	6.901	6.909
Normalized	98.85%	100%	99.88%
Standard Deviation	0.5%	0.7%	0.5%
Timed Erlang/OTP Compilation - Time To Compile (sec)	155.926	156.022	156.022
Normalized	100%	99.94%	99.94%
Standard Deviation	0.4%	0.2%	0%
Blender - BMW27 - CPU-Only (sec)	147.91	148.32	
Normalized	100%	99.72%	
Standard Deviation	0.4%	0.1%	

dav1d 0.8.2

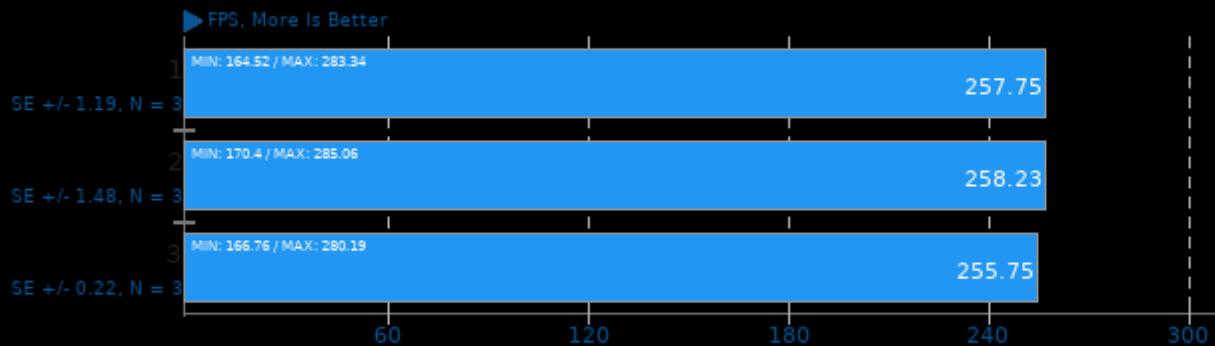
Video Input: Summer Nature 4K



1. (CC) gcc options: -lm -pthread

dav1d 0.8.2

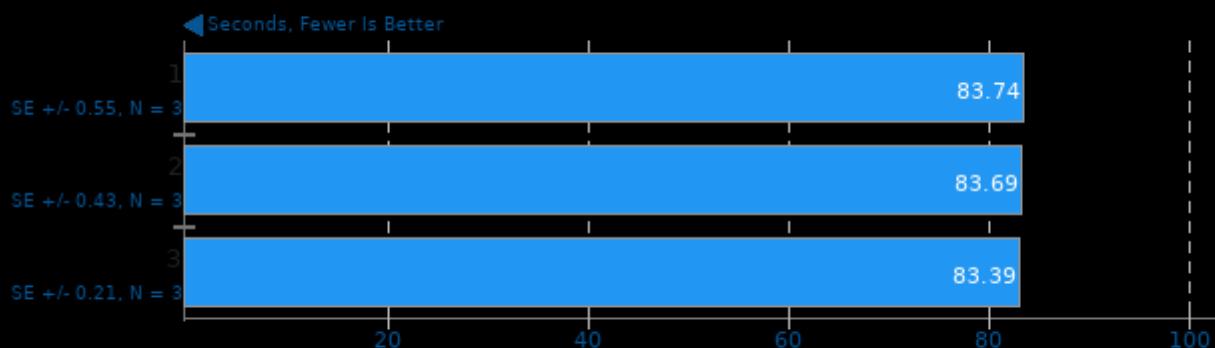
Video Input: Summer Nature 1080p



1. (CC) gcc options: -lm -pthread

libavif avifenc 0.9.0

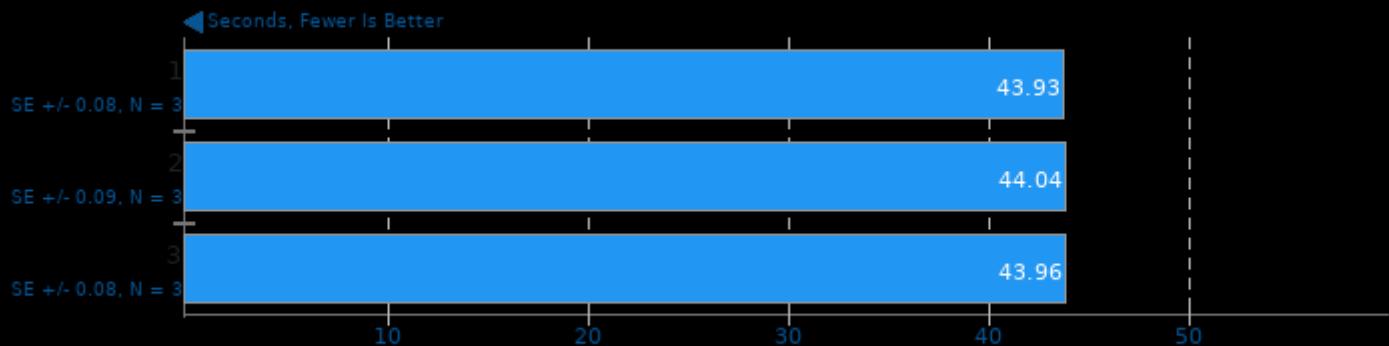
Encoder Speed: 0



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

libavif avifenc 0.9.0

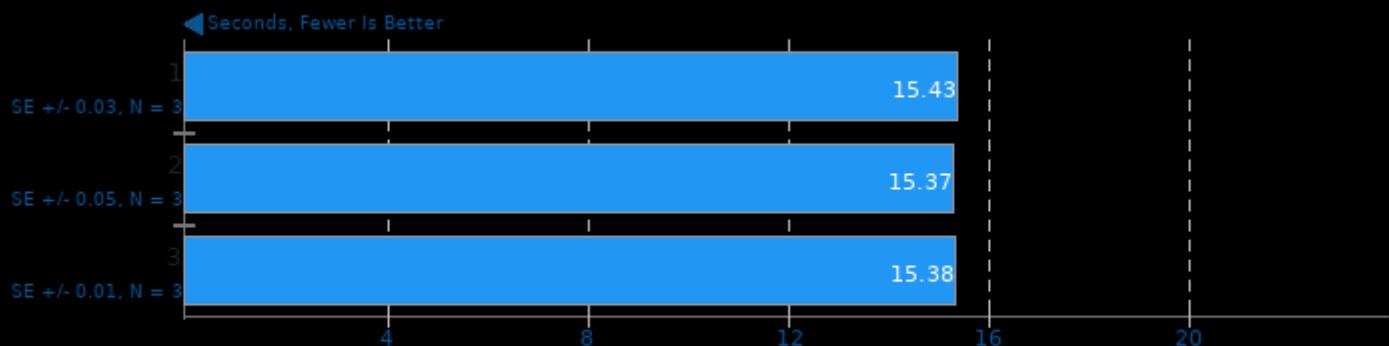
Encoder Speed: 2



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

libavif avifenc 0.9.0

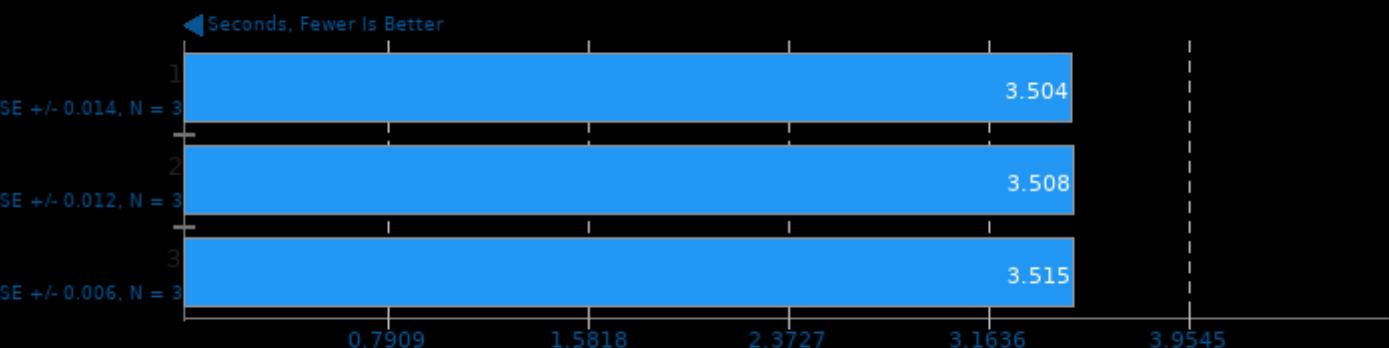
Encoder Speed: 6



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

libavif avifenc 0.9.0

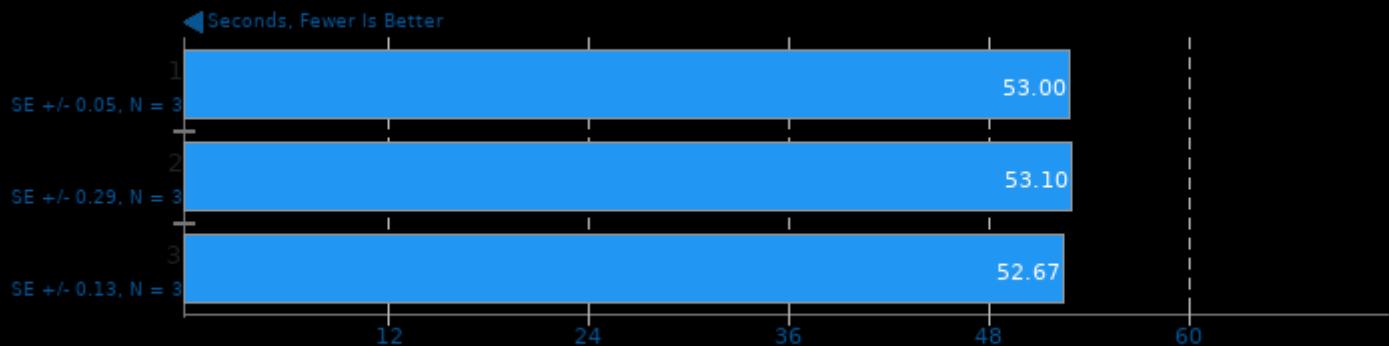
Encoder Speed: 10



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

libavif avifenc 0.9.0

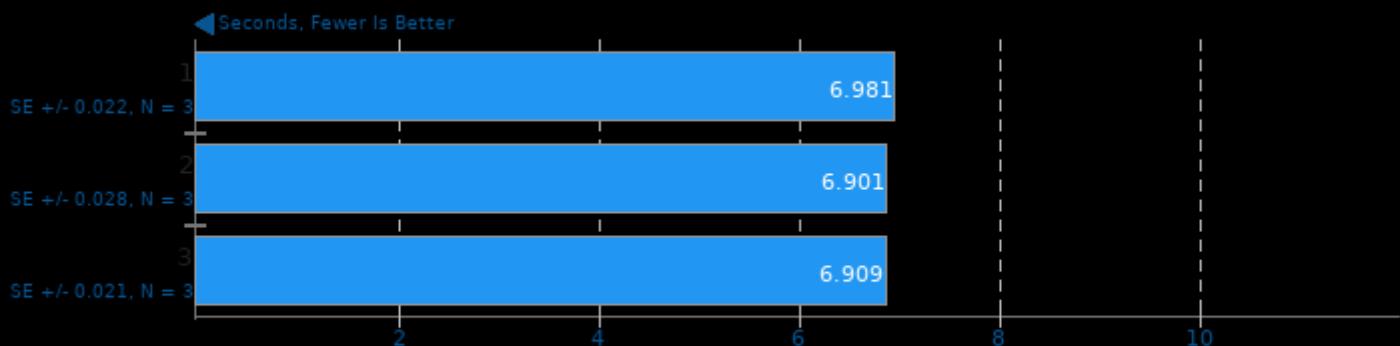
Encoder Speed: 6, Lossless



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

libavif avifenc 0.9.0

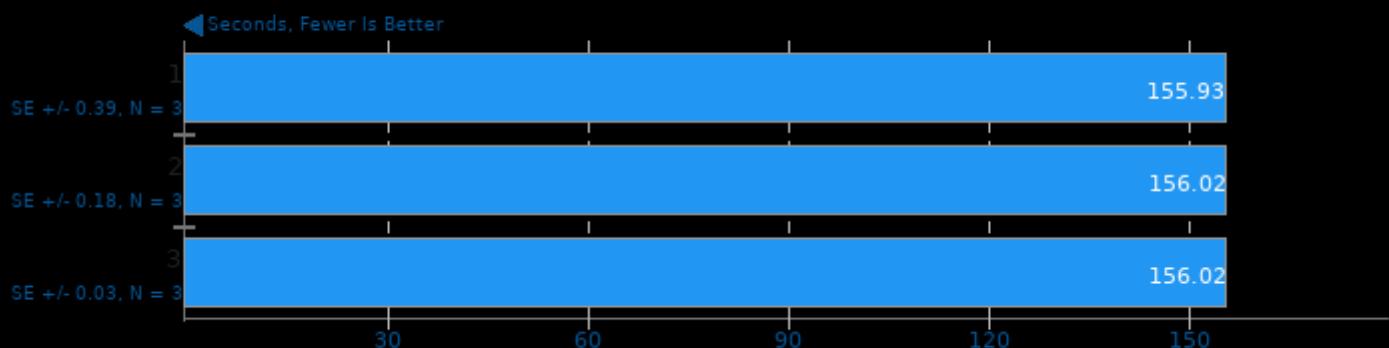
Encoder Speed: 10, Lossless



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

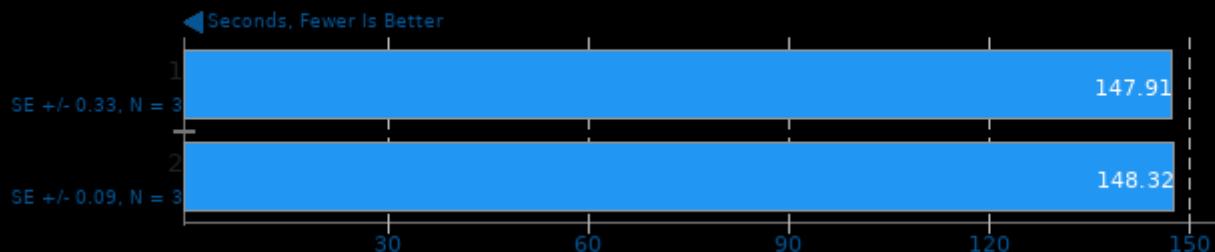
Timed Erlang/OTP Compilation 23.2

Time To Compile



Blender 2.92

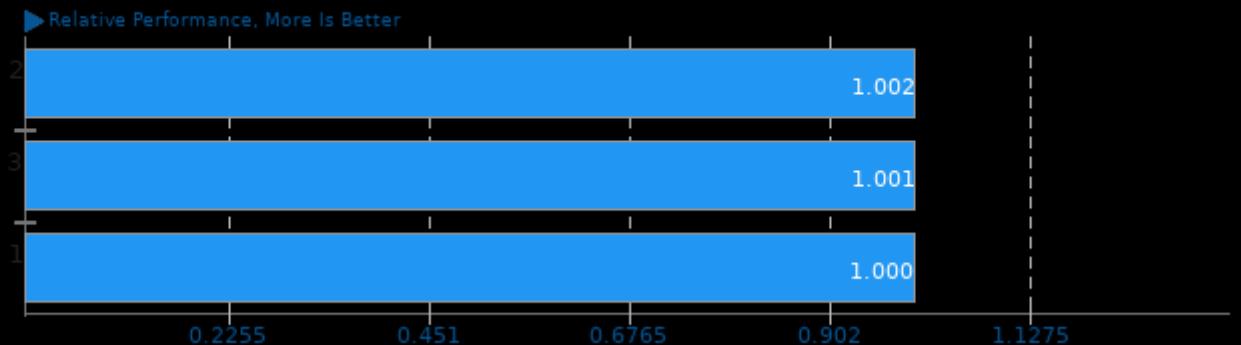
Blend File: BMW27 - Compute: CPU-Only



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

Geometric Mean Of AV1 Tests

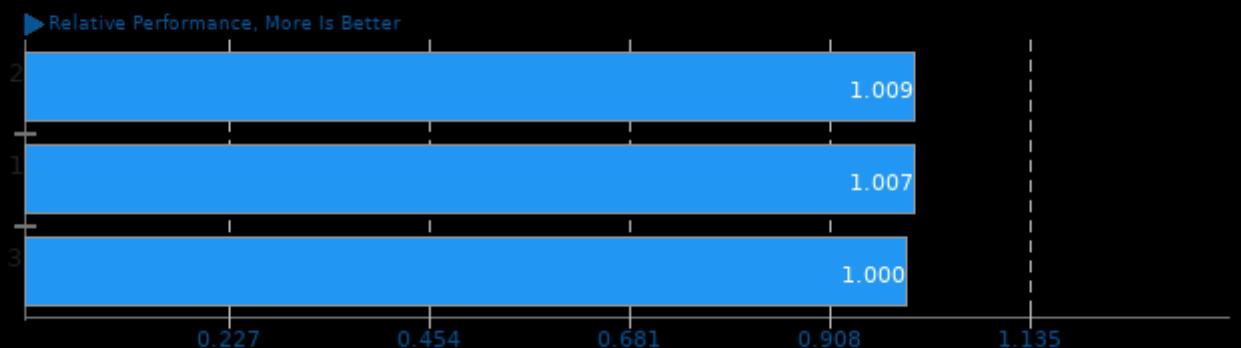
Result Composite - silver march



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

Geometric Mean Of CPU Massive Tests

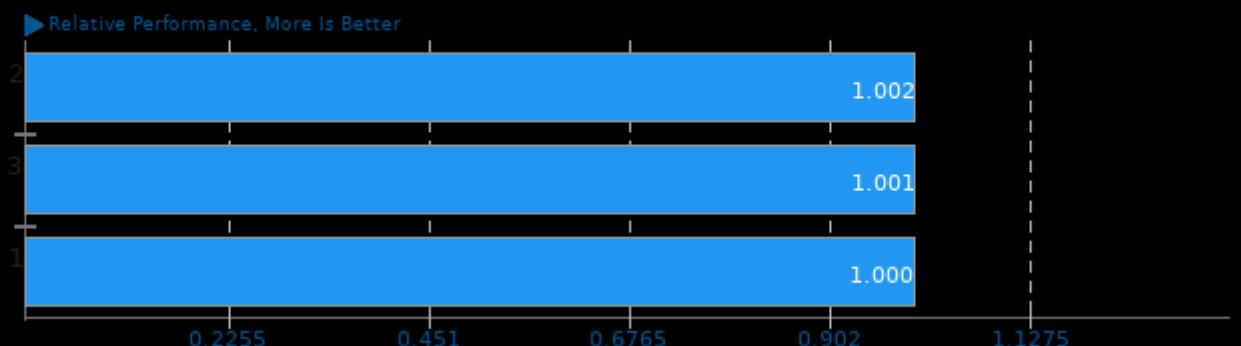
Result Composite - silver march



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

Geometric Mean Of Creator Workloads Tests

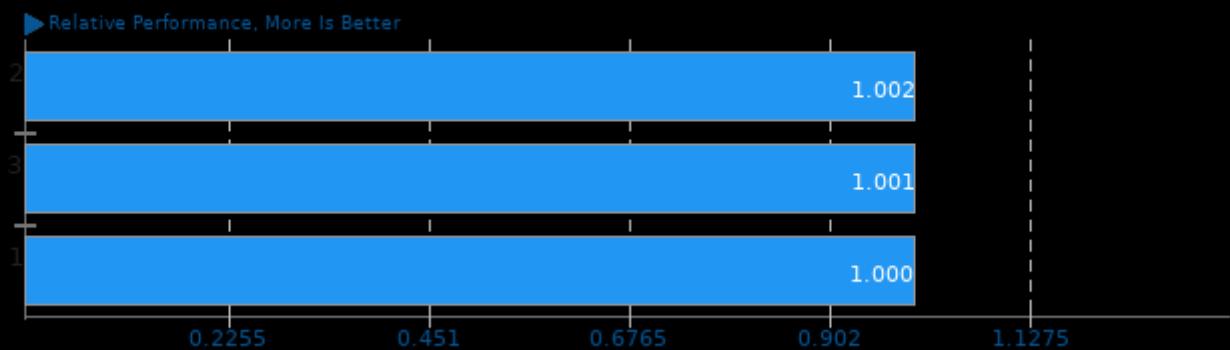
Result Composite - silver march



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

Geometric Mean Of Encoding Tests

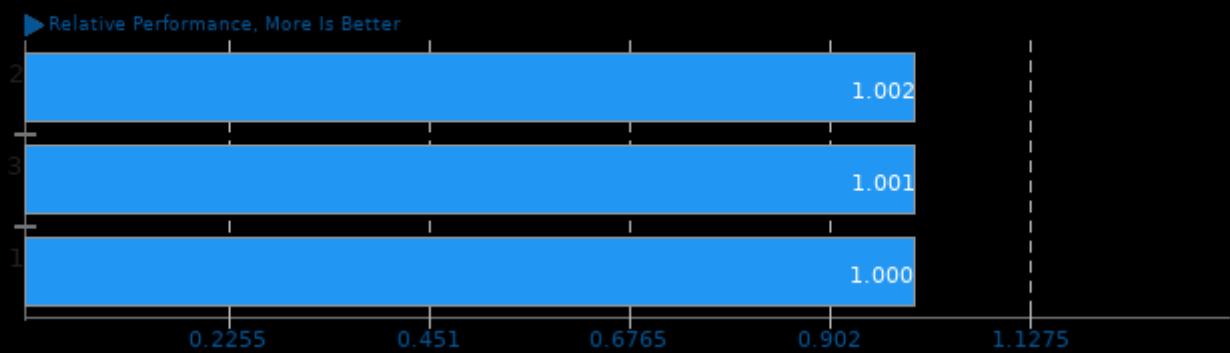
Result Composite - silver march



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

Geometric Mean Of Multi-Core Tests

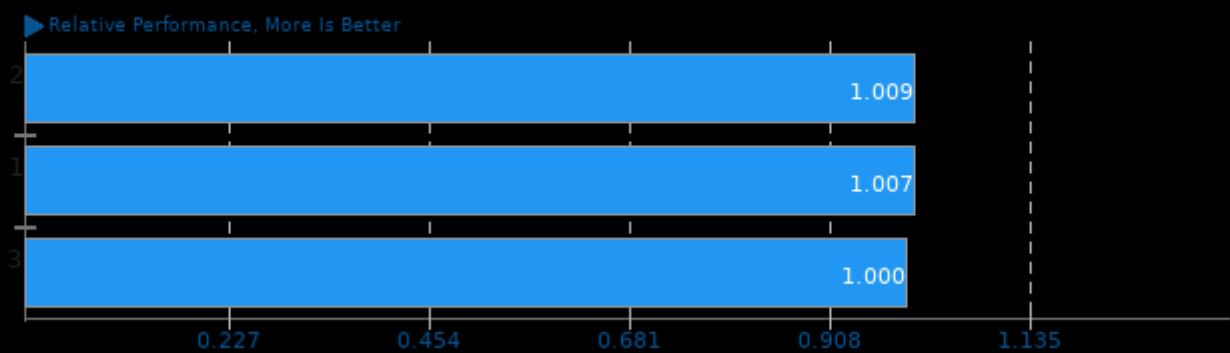
Result Composite - silver march



Geometric mean based upon tests: pts/blender, pts/dav1d, pts/avifenc and pts/build-erlang

Geometric Mean Of Server CPU Tests

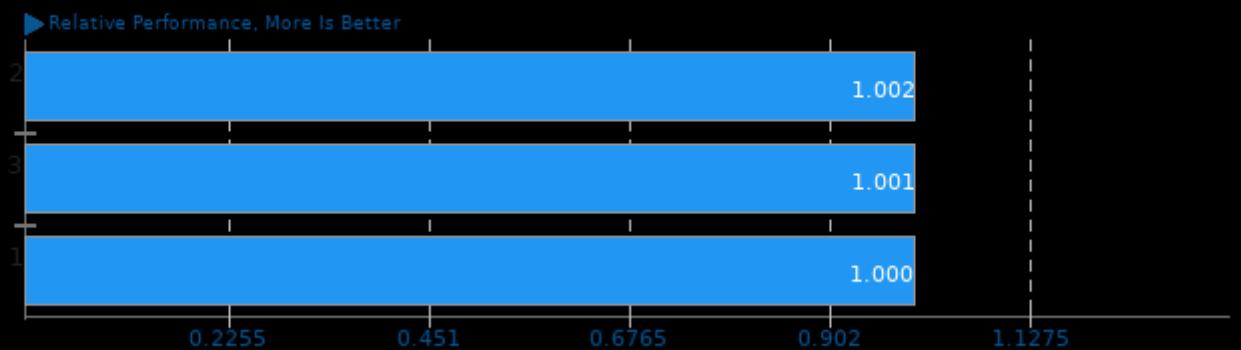
Result Composite - silver march



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

Geometric Mean Of Video Encoding Tests

Result Composite - silver march



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

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 02:47.