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av1 5500u

AMD Ryzen 5 5500U testing with a LENOVO LNVNB161216 (GLCN22WW BIOS) and AMD Lucienne 2GB on Ubuntu 21.04 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 71% of the tests.

Test Systems:

1

2

2a

3

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Processor: AMD Ryzen 5 5500U @ 2.10GHz (6 Cores / 12 Threads), Motherboard: LENOVO LNVNB161216 (GLCN22WW BIOS), Chipset: AMD Renoir Root Complex, Memory: 6GB, Disk: 256GB SAMSUNG MZALQ256HBJD-00BL2, Graphics: AMD Lucienne 2GB (1800/400MHz), Audio: AMD Renoir Radeon HD Audio, Network: Qualcomm Atheros QCA6174 802.11ac

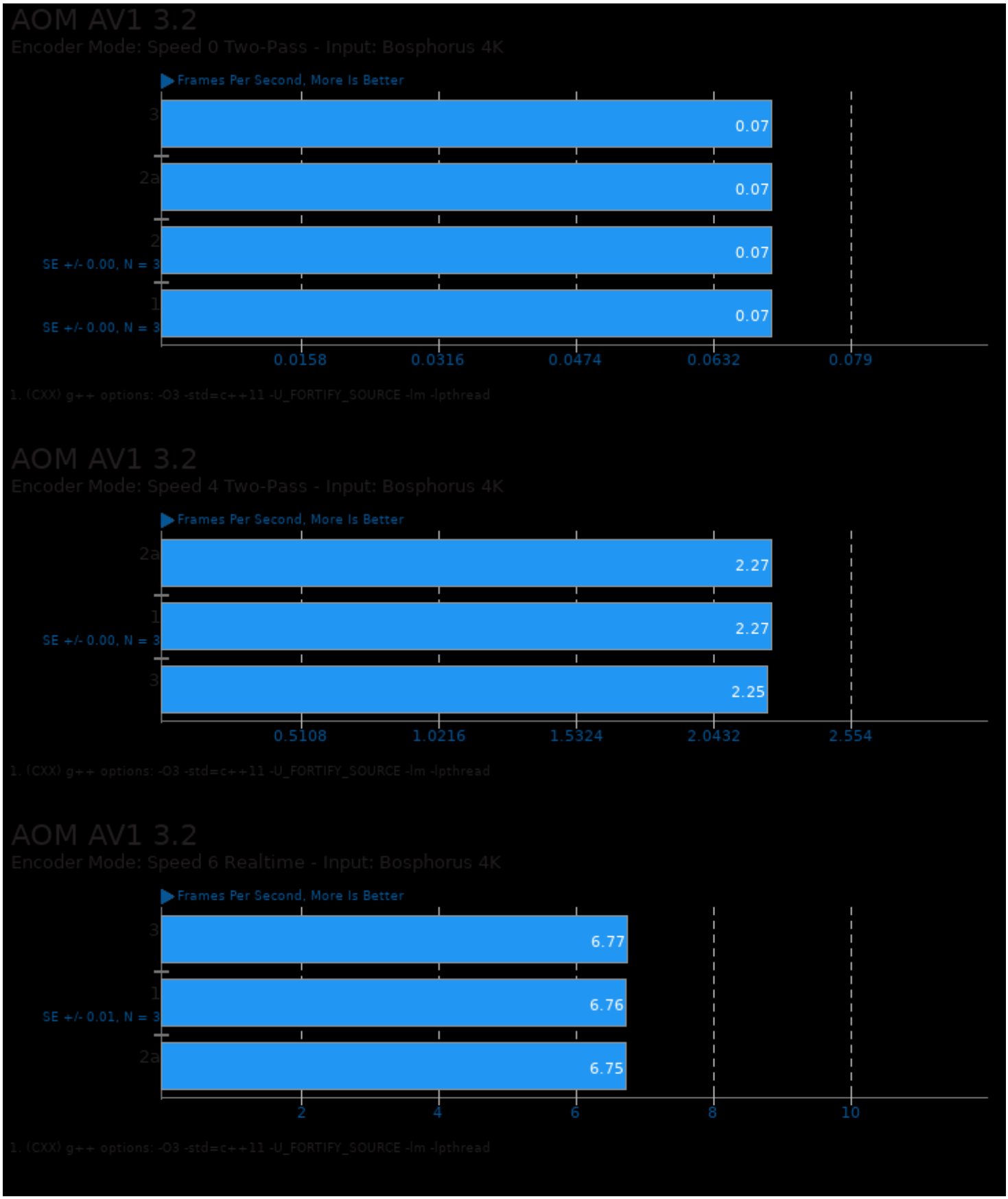
OS: Ubuntu 21.04, Kernel: 5.14.0-051400rc5daily20210811-generic (x86_64) 20210810, Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11 + Wayland, OpenGL: 4.6 Mesa 21.2.0-devel (git-4698755 2021-07-03 hirsute-oibaf-ppa) (LLVM 12.0.0), Vulkan: 1.2.182, Compiler: GCC 10.3.0, File-System: ext4, Screen Resolution: 1920x1080

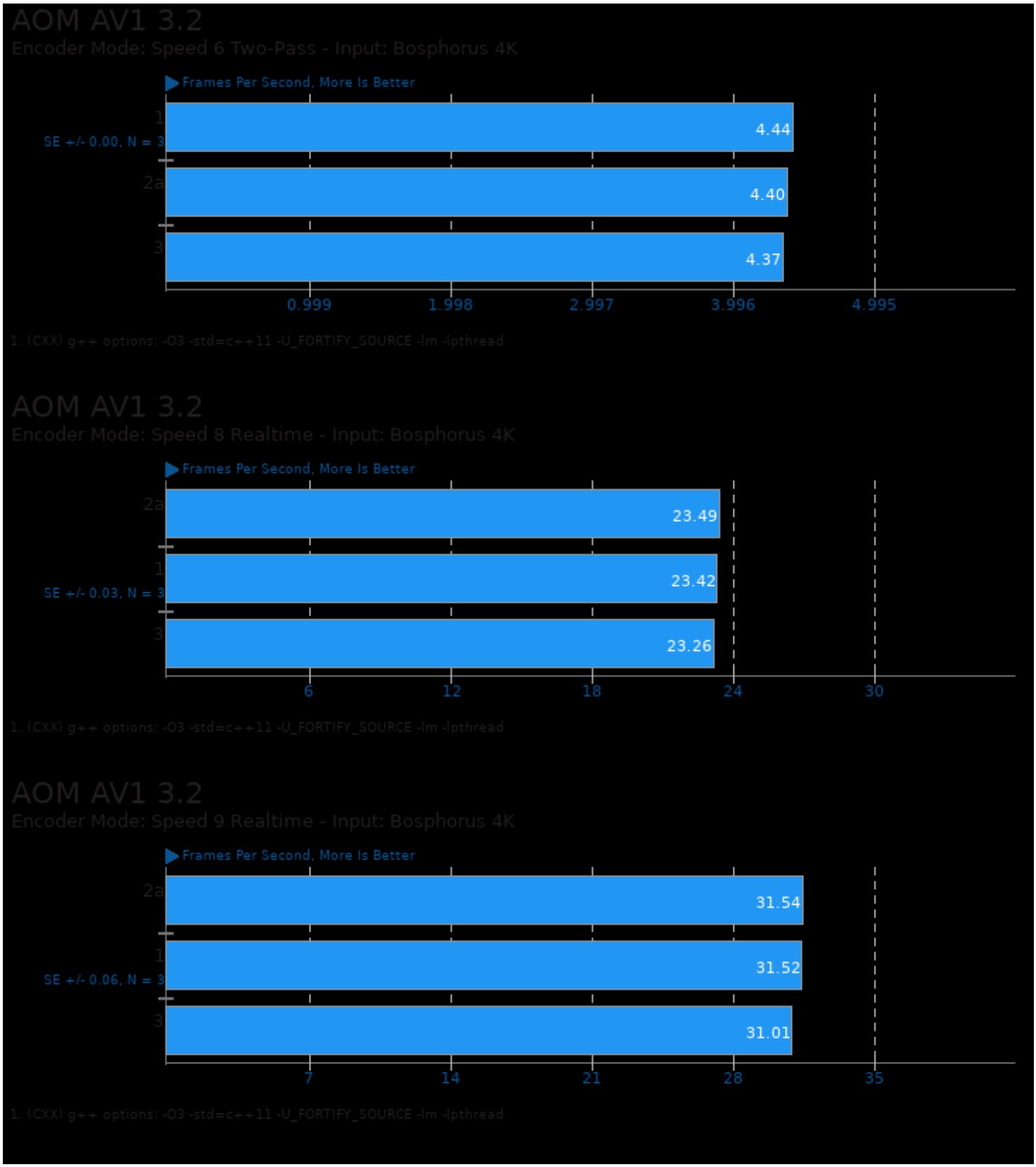
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/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-build-config=bootstrap-lto-lean --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: 0x8608102
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/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

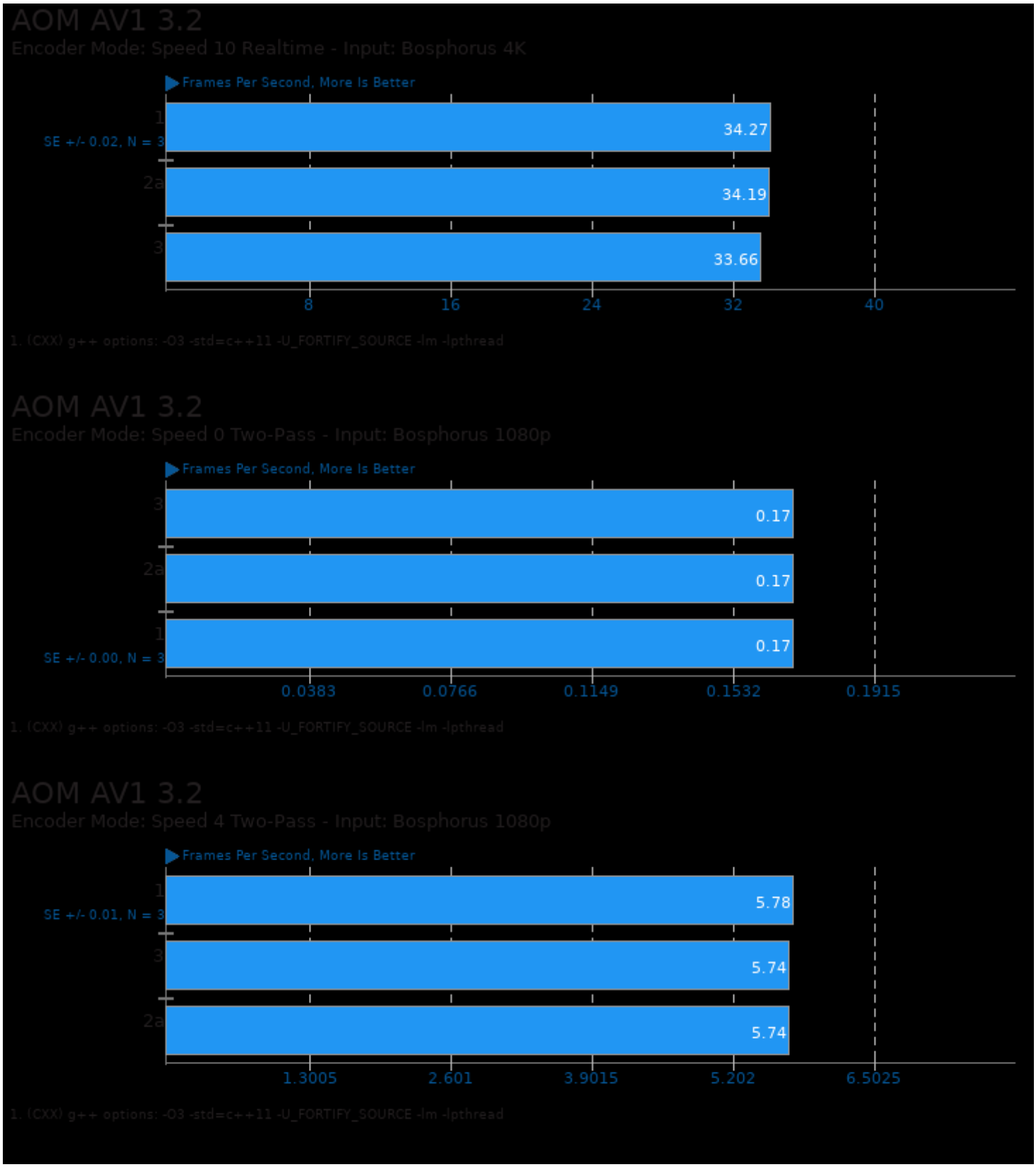
	1	2	2a	3
AOM AV1 - Speed 0 Two-Pass - Bosphorus 4K (FPS)	0.07	0.07	0.07	0.07
Standard Deviation	0%	0%		
AOM AV1 - Speed 4 Two-Pass - Bosphorus 4K (FPS)	**2.27**		**2.27**	**2.25**
Normalized	100%		100%	99.12%
Standard Deviation	0.3%			
AOM AV1 - Speed 6 Realtime - Bosphorus 4K (FPS)	6.76		**6.75**	**6.77**
Normalized	99.85%		99.7%	100%
Standard Deviation	0.3%			
AOM AV1 - Speed 6 Two-Pass - Bosphorus 4K (FPS)	**4.44**		4.4	**4.37**
Normalized	100%		99.1%	98.42%
Standard Deviation	0.1%			
AOM AV1 - Speed 8 Realtime - Bosphorus 4K (FPS)	23.42		**23.49**	**23.26**
Normalized	99.7%		100%	99.02%
Standard Deviation	0.2%			
AOM AV1 - Speed 9 Realtime - Bosphorus 4K (FPS)	31.52		**31.54**	**31.01**
Normalized	99.94%		100%	98.32%
Standard Deviation	0.4%			
AOM AV1 - Speed 10 Realtime - Bosphorus 4K (FPS)	**34.27**		34.19	**33.66**
Normalized	100%		99.77%	98.22%
Standard Deviation	0.1%			

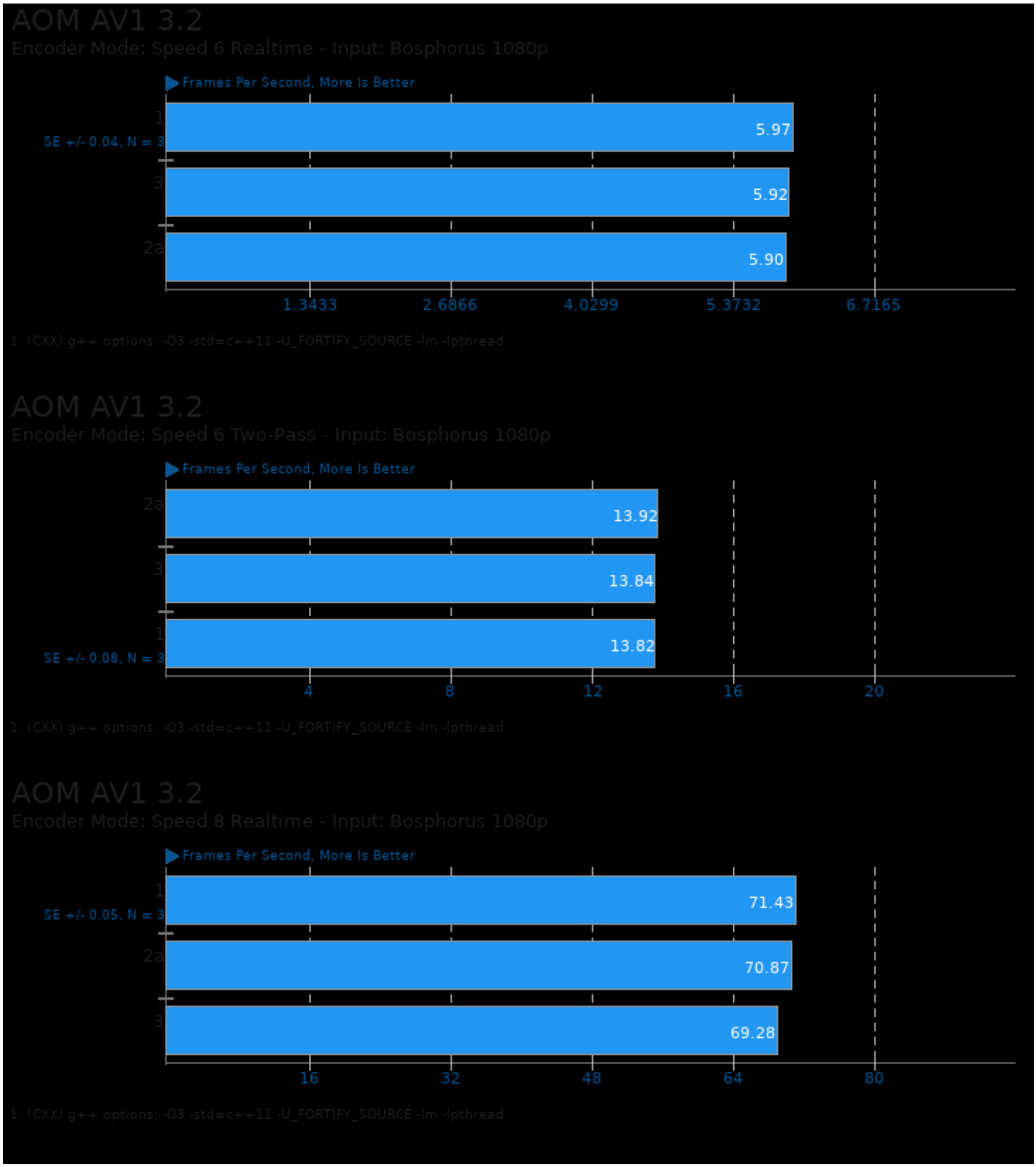
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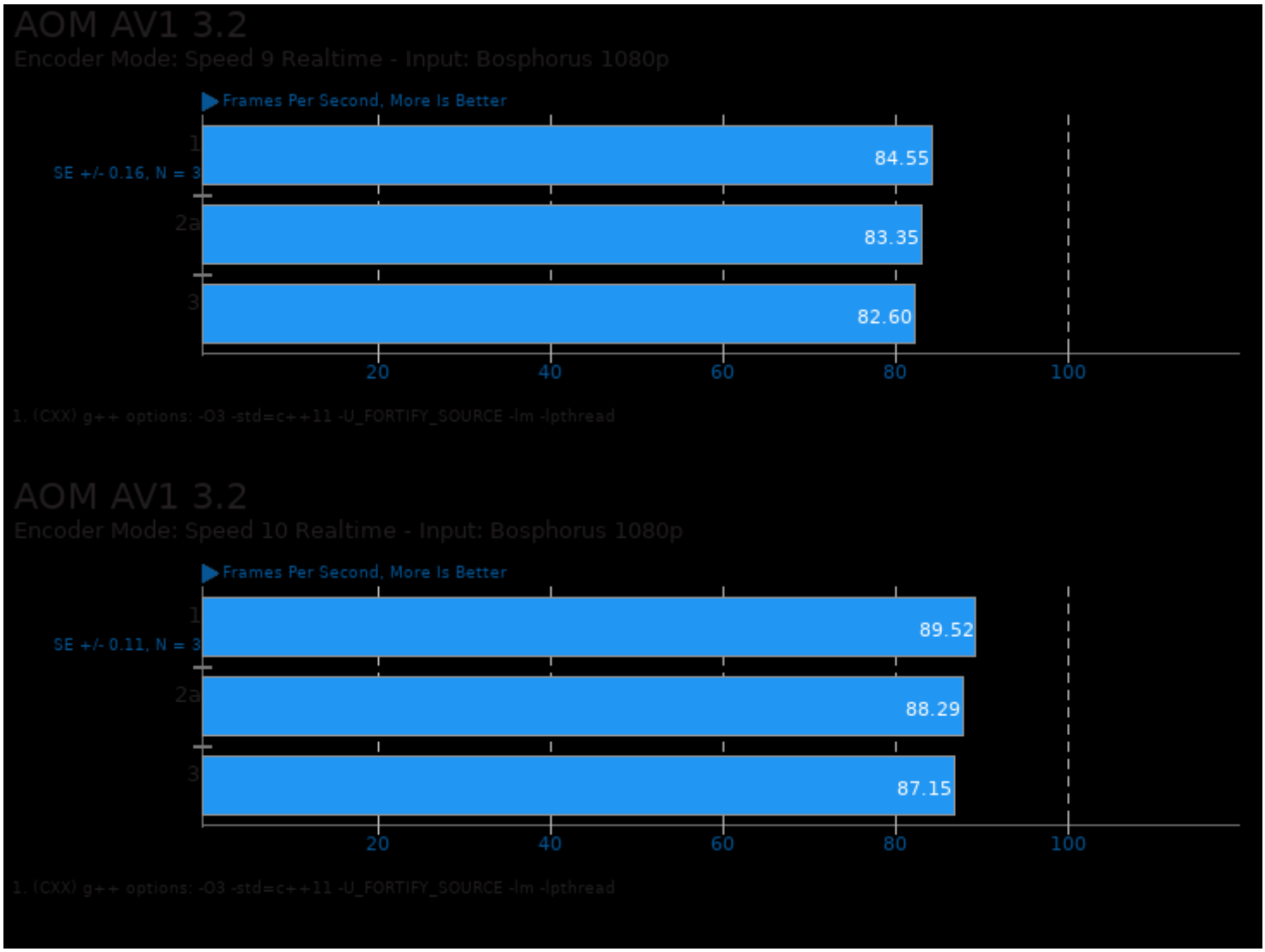
AOM AV1 - Speed 0 Two-Pass - Bosphorus 1080p (FPS)	0.17	0.17	0.17
Standard Deviation	0%		
AOM AV1 - Speed 4 Two-Pass - Bosphorus 1080p (FPS)	**5.78**	**5.74**	**5.74**
Normalized	100%	99.31%	99.31%
Standard Deviation	0.4%		
AOM AV1 - Speed 6 Realtime - Bosphorus 1080p (FPS)	**5.97**	**5.9**	5.92
Normalized	100%	98.83%	99.16%
Standard Deviation	1%		
AOM AV1 - Speed 6 Two-Pass - Bosphorus 1080p (FPS)	**13.82**	**13.92**	13.84
Normalized	99.28%	100%	99.43%
Standard Deviation	1%		
AOM AV1 - Speed 8 Realtime - Bosphorus 1080p (FPS)	**71.43**	70.87	**69.28**
Normalized	100%	99.22%	96.99%
Standard Deviation	0.1%		
AOM AV1 - Speed 9 Realtime - Bosphorus 1080p (FPS)	**84.55**	83.35	**82.6**
Normalized	100%	98.58%	97.69%
Standard Deviation	0.3%		
AOM AV1 - Speed 10 Realtime - Bosphorus 1080p (FPS)	**89.52**	88.29	**87.15**
Normalized	100%	98.63%	97.35%
Standard Deviation	0.2%		


AOM AV1 3.2
Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 4K
Frames Per Second, More Is Better
3
0.07
2a
0.07
2
0.07
SE +/- 0.00, N = 3
1
0.07
SE +/- 0.00, N = 3
0.0158
0.0316
0.0474
0.0632
0.079
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 4K
Frames Per Second, More Is Better
2a
2.27
1
2.27
SE +/- 0.00, N = 3
3
2.25
0.5108
1.0216
1.5324
2.0432
2.554
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 4K
Frames Per Second, More Is Better
3
6.77
1
6.76
SE +/- 0.01, N = 3
2a
6.75
2
4
6
8
10
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread


AOM AV1 3.2
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 4K
Frames Per Second, More Is Better
1
2a
3
SE +/- 0.00, N = 3
4.44
4.40
4.37
0.999
1.998
2.997
3.996
4.995
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 8 Realtime - Input: Bosphorus 4K
Frames Per Second, More Is Better
2a
1
3
SE +/- 0.03, N = 3
23.49
23.42
23.26
6
12
18
24
30
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 9 Realtime - Input: Bosphorus 4K
Frames Per Second, More Is Better
2a
1
3
SE +/- 0.06, N = 3
31.54
31.52
31.01
7
14
21
28
35
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread


AOM AV1 3.2
Encoder Mode: Speed 10 Realtime - Input: Bosphorus 4K
Frames Per Second, More Is Better
1
2a
3
34.27
34.19
33.66
SE +/- 0.02, N = 3
8
16
24
32
40
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 1080p
Frames Per Second, More Is Better
3
2a
1
0.17
0.17
0.17
SE +/- 0.00, N = 3
0.0383
0.0766
0.1149
0.1532
0.1915
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 1080p
Frames Per Second, More Is Better
1
3
2a
5.78
5.74
5.74
SE +/- 0.01, N = 3
1.3005
2.601
3.9015
5.202
6.5025
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread


AOM AV1 3.2
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 1080p
Frames Per Second, More Is Better
1
SE +/- 0.04, N = 3
3
2a
5.97
5.92
5.90
1.3433
2.6866
4.0299
5.3732
6.7165
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 1080p
Frames Per Second, More Is Better
2a
3
1
SE +/- 0.08, N = 3
13.92
13.84
13.82
4
8
12
16
20
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 8 Realtime - Input: Bosphorus 1080p
Frames Per Second, More Is Better
1
SE +/- 0.05, N = 3
2a
3
71.43
70.87
69.28
16
32
48
64
80
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 06:26.