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3970X kvazaar

AMD Ryzen Threadripper 3970X 32-Core testing with a ASUS ROG ZENITH II EXTREME (1201 BIOS) and AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

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

Test Systems:

1

2

2a

3

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Processor: AMD Ryzen Threadripper 3970X 32-Core @ 4.55GHz (32 Cores / 64 Threads), Motherboard: ASUS ROG ZENITH II EXTREME (1201 BIOS), Chipset: AMD Starship/Matisse, Memory: 64GB, Disk: Samsung SSD 980 PRO 500GB, Graphics: AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB (1750/875MHz), Audio: AMD Navi 10 HDMI Audio, Monitor: ASUS VP28U, Network: Aquantia AQC107 NBase-T/IEEE + Intel I211 + Intel Wi-Fi 6 AX200

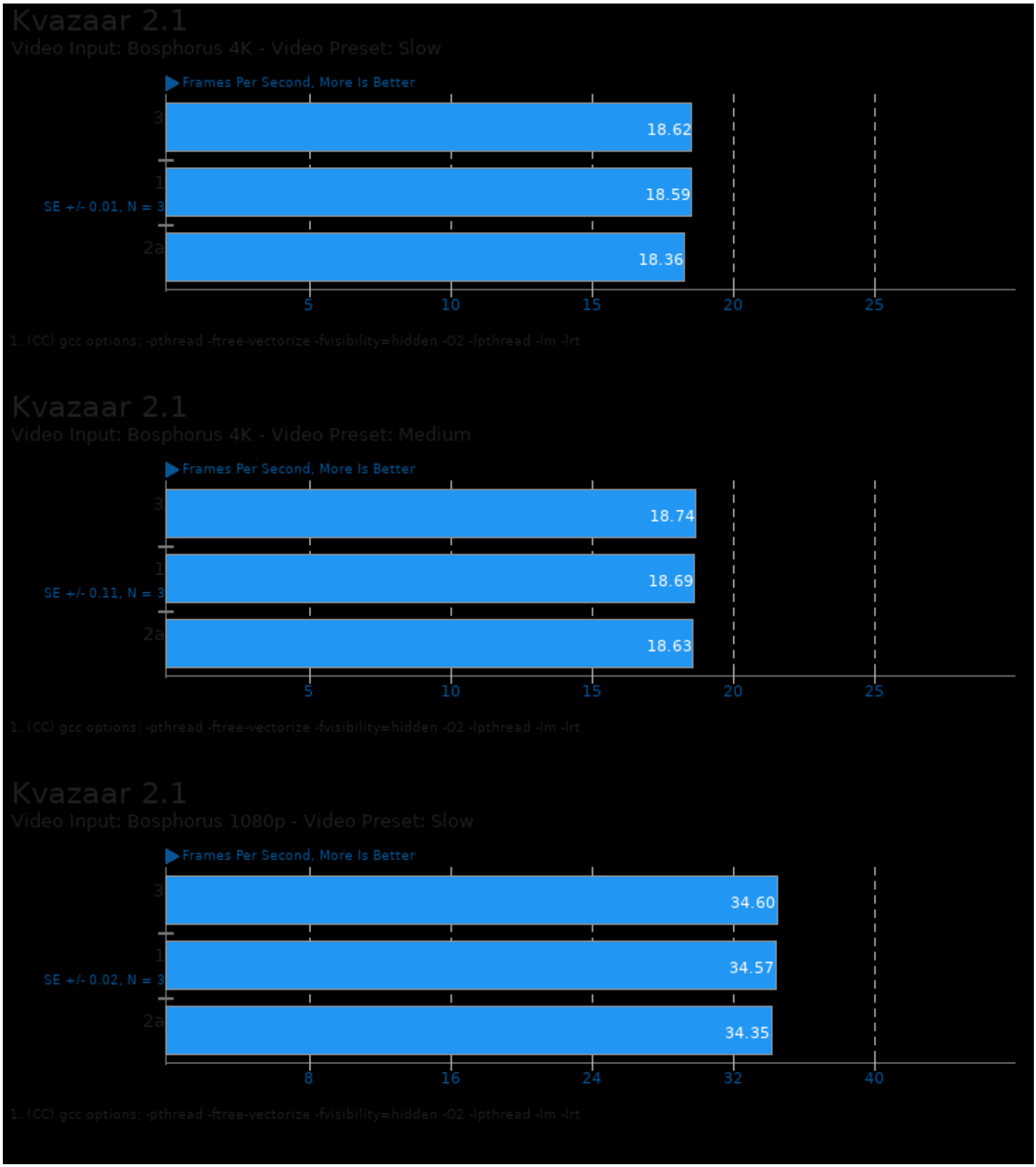
OS: Ubuntu 20.10, Kernel: 5.11.0-rc6-phx (x86_64) 20210203, Desktop: GNOME Shell 3.38.1, Display Server: X Server 1.20.9, OpenGL: 4.6 Mesa 20.2.1 (LLVM 11.0.0), Vulkan: 1.2.131, Compiler: GCC 10.3.0, File-System: ext4, Screen Resolution: 3840x2160

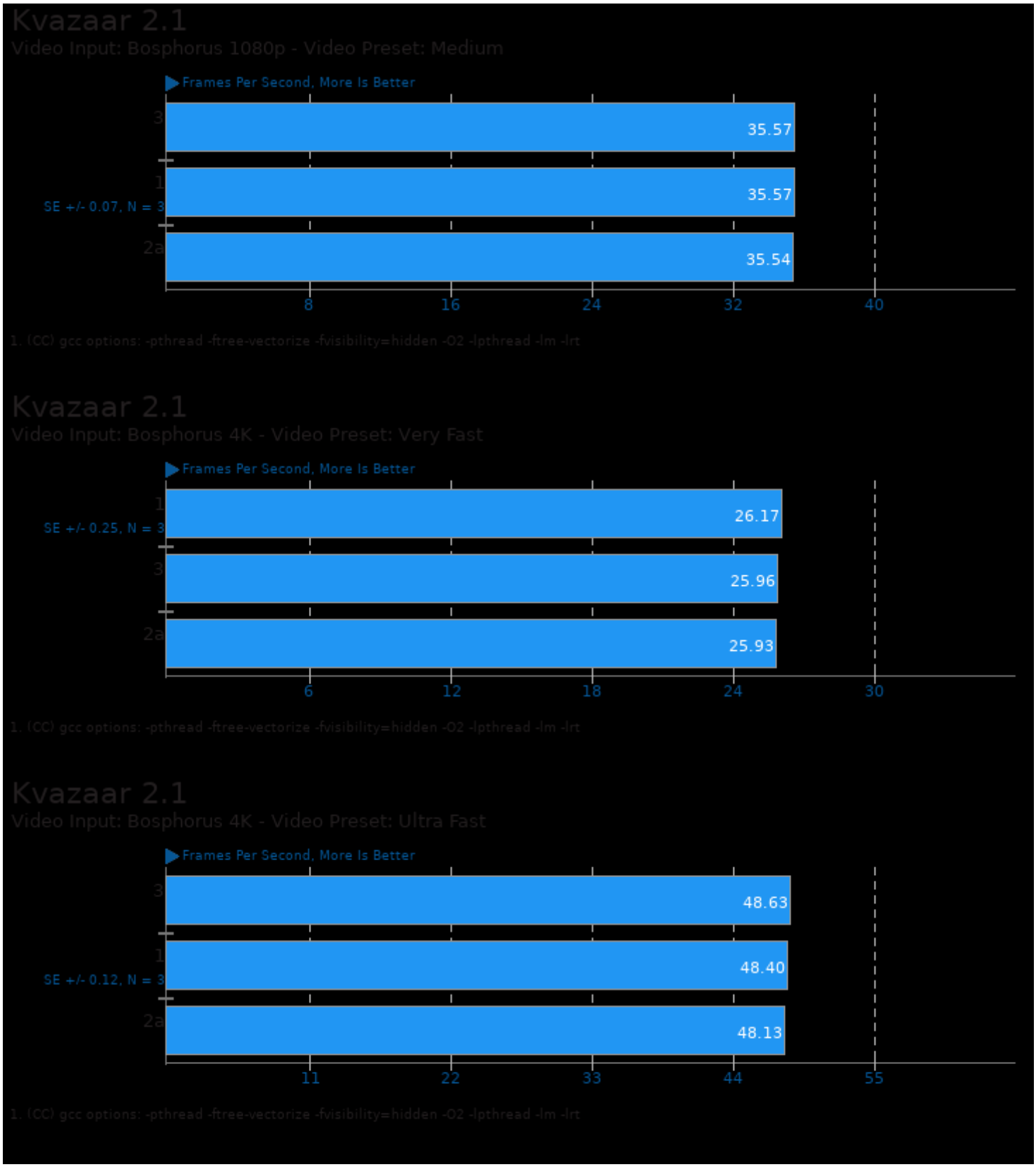
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --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-poYruo/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-poYruo/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: 0x8301039
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 STIBP: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	1	2	2a	3
Kvazaar - Bosphorus 4K - Slow (FPS)	18.59		**18.36**	**18.62**
Normalized	99.84%		98.6%	100%
Standard Deviation	0.1%			
Kvazaar - Bosphorus 4K - Medium	18.69		**18.63**	**18.74**
Normalized	99.73%		99.41%	100%
Standard Deviation	1.1%			
Kvazaar - Bosphorus 1080p - Slow (FPS)	34.57		**34.35**	**34.6**
Normalized	99.91%		99.28%	100%
Standard Deviation	0.1%			
Kvazaar - Bosphorus 1080p - Medium (FPS)	**35.57**		**35.54**	**35.57**
Normalized	100%		99.92%	100%
Standard Deviation	0.3%			
Kvazaar - Bosphorus 4K - Very Fast (FPS)	**26.17**		**25.93**	25.96
Normalized	100%		99.08%	99.2%
Standard Deviation	1.6%			
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	48.40		**48.13**	**48.63**
Normalized	99.53%		98.97%	100%
Standard Deviation	0.4%			
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	**74.14**		**73.95**	74.08
Normalized	100%		99.74%	99.92%
Standard Deviation	0.2%			
Kvazaar - Bosphorus 1080p - Ultra Fast (FPS)	155.64		**156.48**	**155.63**
Normalized	99.46%		100%	99.46%

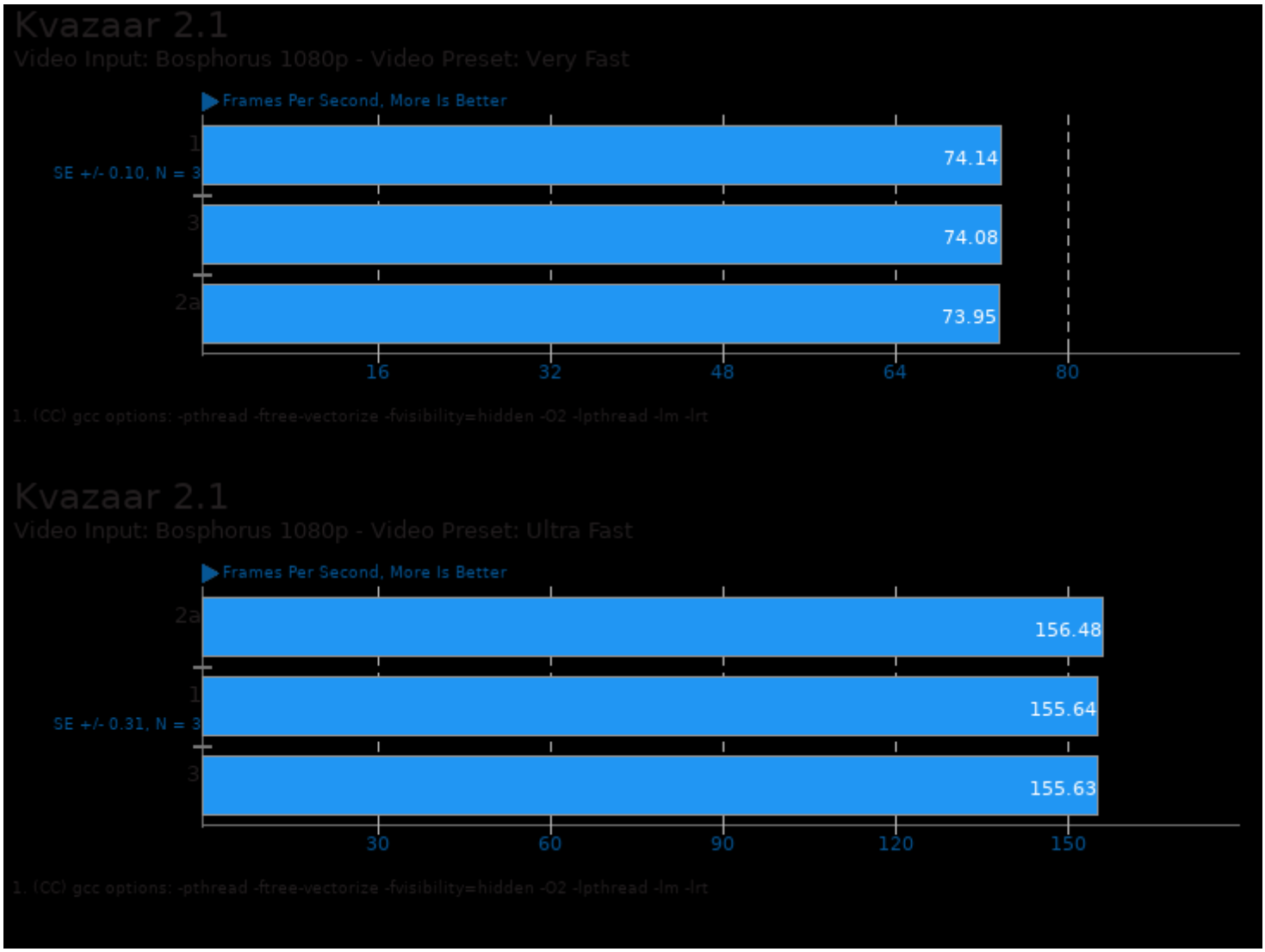
Standard Deviation 0.3%

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Kvazaar 2.1
Video Input: Bosphorus 1080p - Video Preset: Medium
Frames Per Second, More Is Better
3
1
2a
35.57
35.57
35.54
SE +/- 0.07, N = 3
8
16
24
32
40
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt
Kvazaar 2.1
Video Input: Bosphorus 4K - Video Preset: Very Fast
Frames Per Second, More Is Better
1
3
2a
26.17
25.96
25.93
SE +/- 0.25, N = 3
6
12
18
24
30
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt
Kvazaar 2.1
Video Input: Bosphorus 4K - Video Preset: Ultra Fast
Frames Per Second, More Is Better
3
1
2a
48.63
48.40
48.13
SE +/- 0.12, N = 3
11
22
33
44
55
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

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This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 19:14.