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kvazaar uvg266

AMD Ryzen 9 5900HX testing with a ASUS G513QY v1.0 (G513QY.318 BIOS) and ASUS AMD Cezanne 512MB on Ubuntu 22.10 via the Phoronix Test Suite.

Automated Executive Summary

b had the most wins, coming in first place for 45% of the tests.

Based on the geometric mean of all complete results, the fastest (c) was 1x the speed of the slowest (a). b was 1x the speed of c and a was 1x the speed of b.

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

uvg266 (Video Input: Bosphorus 4K - Video Preset: Medium) at 1.012x
Kvazaar (Video Input: Bosphorus 4K - Video Preset: Slow) at 1.009x
Kvazaar (Video Input: Bosphorus 4K - Video Preset: Ultra Fast) at 1.007x
uvg266 (Video Input: Bosphorus 4K - Video Preset: Super Fast) at 1.007x
uvg266 (Video Input: Bosphorus 1080p - Video Preset: Slow) at 1.006x
Kvazaar (Video Input: Bosphorus 4K - Video Preset: Medium) at 1.006x
uvg266 (Video Input: Bosphorus 4K - Video Preset: Ultra Fast) at 1.006x
uvg266 (Video Input: Bosphorus 4K - Video Preset: Very Fast) at 1.005x
Kvazaar (Video Input: Bosphorus 4K - Video Preset: Super Fast) at 1.005x

Kvazaar (Video Input: Bosphorus 1080p - Video Preset: Ultra Fast) at 1.004x.

Test Systems:

a

Processor: AMD Ryzen 9 5900HX @ 4.89GHz (8 Cores / 16 Threads), Motherboard: ASUS G513QY v1.0 (G513QY.318 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 16GB, Disk: 512GB SAMSUNG MZVLQ512HBLU-00B00, Graphics: ASUS AMD Cezanne 512MB (2500/1000MHz), Audio: AMD Navi 21/23, Monitor: LQ156M1JW25, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

OS: Ubuntu 22.10, Kernel: 5.19.0-26-generic (x86_64), Desktop: GNOME Shell 43.0, Display Server: X Server 1.21.1.4 + Wayland, OpenGL: 4.6 Mesa 22.2.1 (LLVM 15.0.2 DRM 3.47), Vulkan: 1.3.224, Compiler: GCC 12.2.0, 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-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,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-defaulted --enable-offload-targets=nvptx-none=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-gcn/usr --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: amd-pstate schedutil (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Retpolines IBPB: conditional IBRS_FW STIBP: always-on RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

b

Processor: AMD Ryzen 9 5900HX @ 4.89GHz (8 Cores / 16 Threads), Motherboard: ASUS G513QY v1.0 (G513QY.318 BIOS), Chipset: AMD Renoir/Cezanne, Memory: 16GB, Disk: 512GB SAMSUNG MZVLQ512HBLU-00B00, Graphics: ASUS AMD Cezanne 512MB, Audio: AMD Navi 21/23, Monitor: LQ156M1JW25, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

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Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,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-defaulted --enable-offload-targets=nvptx-none=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-gcn/usr --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
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c

Processor: AMD Ryzen 9 5900HX @ 4.89GHz (8 Cores / 16 Threads), Motherboard: ASUS G513QY v1.0 (G513QY.318

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BIOS), Chipset: AMD Renoir/Cezanne, Memory: 16GB, Disk: 512GB SAMSUNG MZVLQ512HBLU-00B00, Graphics: ASUS AMD Cezanne 512MB (2500/1000MHz), Audio: AMD Navi 21/23, Monitor: LQ156M1JW25, Network: Realtek RTL8111/8168/8411 + MEDIATEK MT7921 802.11ax PCI

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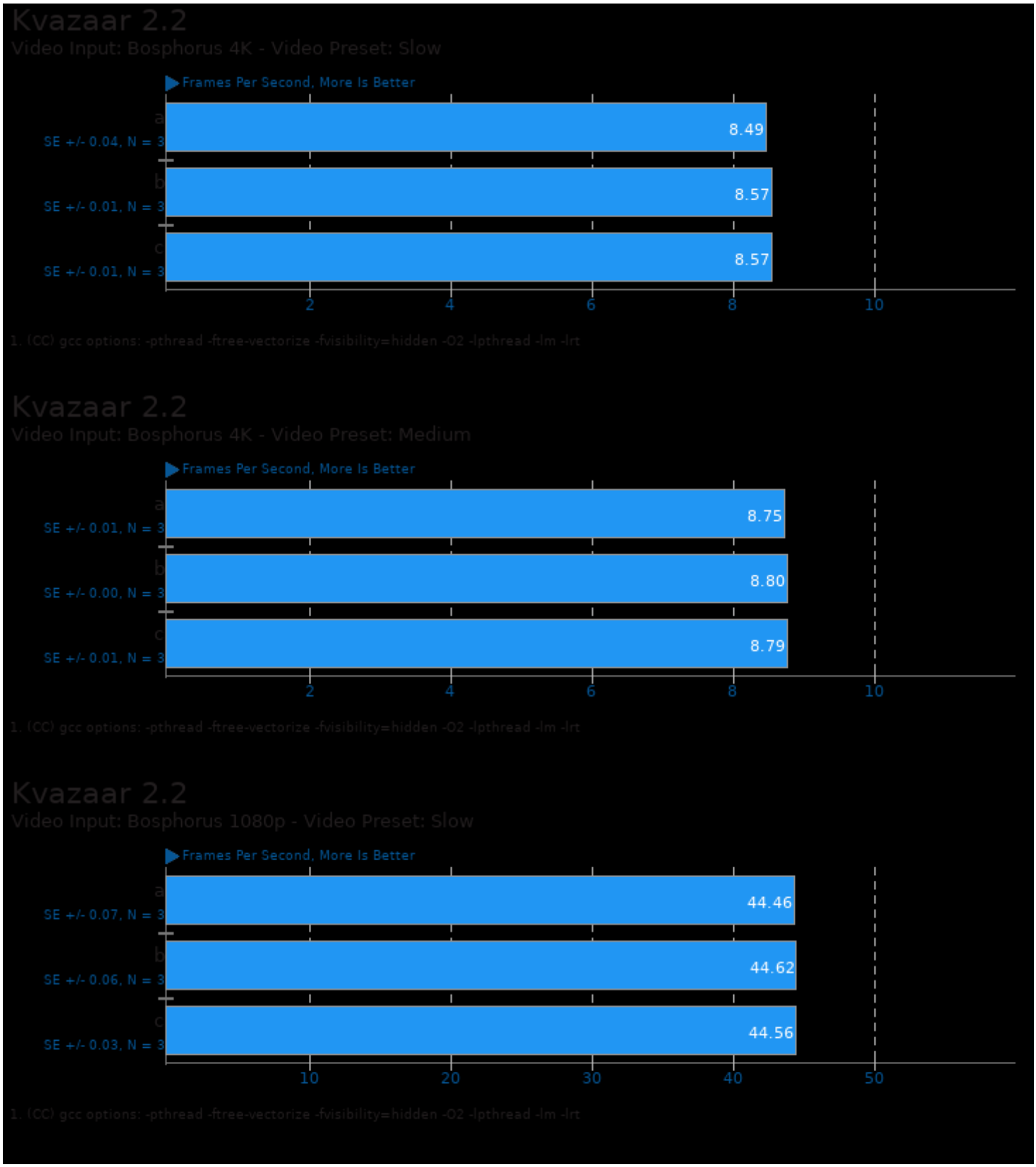
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-defaulted --enable-offload-targets=nvptx-none=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-12-U8K4Qv/gcc-12-12.2.0/debian/tmp-gcn/usr --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: amd-pstate schedutil (Boost: Enabled) - Platform Profile: balanced - CPU Microcode: 0xa50000c - ACPI Profile: balanced
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	a	b	c
Kvazaar - Bosphorus 4K - Slow (FPS)	**8.49**	**8.57**	**8.57**
Normalized	99.07%	100%	100%
Standard Deviation	0.8%	0.1%	0.2%
Kvazaar - Bosphorus 4K - Medium (FPS)	**8.75**	**8.80**	8.79
Normalized	99.43%	100%	99.89%
Standard Deviation	0.1%	0.1%	0.2%
Kvazaar - Bosphorus 1080p - Slow (FPS)	**44.46**	**44.62**	44.56
Normalized	99.64%	100%	99.87%
Standard Deviation	0.3%	0.2%	0.1%
Kvazaar - Bosphorus 1080p - Medium (FPS)	**45.99**	**46.10**	46.09
Normalized	99.76%	100%	99.98%
Standard Deviation	0.3%	0.5%	0.2%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	**21.44**	21.46	**21.48**
Normalized	99.81%	99.91%	100%
Standard Deviation	0.1%	0.1%	0.1%
Kvazaar - Bosphorus 4K - Super Fast (FPS)	**26.27**	**26.40**	26.39
Normalized	99.51%	100%	99.96%
Standard Deviation	0.2%	0.3%	0.3%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	34.30	**34.28**	**34.52**
Normalized	99.36%	99.3%	100%
Standard Deviation	0.5%	0.2%	0.2%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	**91.65**	**91.37**	91.63
Normalized	100%	99.69%	99.98%
Standard Deviation	0.2%	0.1%	0.6%
Kvazaar - Bosphorus 1080p - Super Fast	115.99	**116.16**	**115.98**
Normalized	99.85%	100%	99.85%
Standard Deviation	0.4%	0.1%	0.4%
Kvazaar - Bosphorus 1080p - Ultra Fast	153.23	**153.10**	**153.72**
Normalized	99.68%	99.6%	100%
Standard Deviation	0.2%	0.4%	0.4%
uvg266 - Bosphorus 4K - Slow (FPS)	**5.22**	**5.20**	5.21

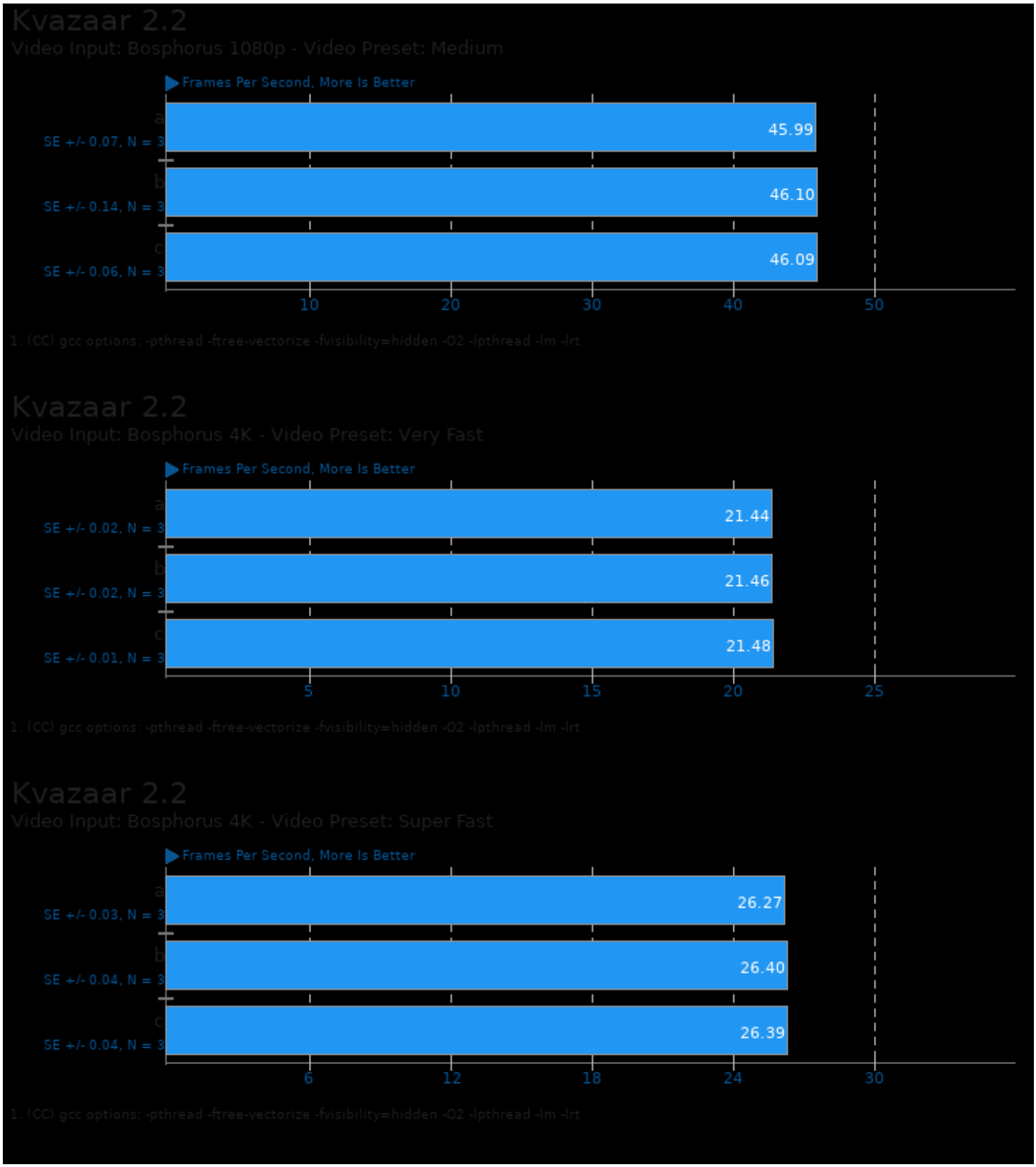
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Normalized	100%	99.62%	99.81%
Standard Deviation	0.3%	0.2%	0.2%
uvg266 - Bosphorus 4K - Medium (FPS)	**5.88**	**5.81**	5.86
Normalized	100%	98.81%	99.66%
Standard Deviation	0%	0.5%	0.1%
uvg266 - Bosphorus 1080p - Slow (FPS)	**28.41**	**28.23**	28.26
Normalized	100%	99.37%	99.47%
Standard Deviation	0.1%	0.4%	0.2%
uvg266 - Bosphorus 1080p - Medium (FPS)	**31.76**	31.66	**31.64**
Normalized	100%	99.69%	99.62%
Standard Deviation	0.2%	0.4%	0.2%
uvg266 - Bosphorus 4K - Very Fast (FPS)	**17.47**	17.44	**17.38**
Normalized	100%	99.83%	99.48%
Standard Deviation	0.3%	0.1%	0%
uvg266 - Bosphorus 4K - Super Fast (FPS)	18.08	**18.09**	**17.97**
Normalized	99.94%	100%	99.34%
Standard Deviation	0.5%	0.3%	0.1%
uvg266 - Bosphorus 4K - Ultra Fast (FPS)	21.42	**21.48**	**21.36**
Normalized	99.72%	100%	99.44%
Standard Deviation	0.3%	0.1%	0.3%
uvg266 - Bosphorus 1080p - Very Fast (FPS)	**79.37**	79.33	**79.19**
Normalized	100%	99.95%	99.77%
Standard Deviation	0.5%	0.7%	0.1%
uvg266 - Bosphorus 1080p - Super Fast	**82.04**	**82.35**	82.10
Normalized	99.62%	100%	99.7%
Standard Deviation	0.7%	0.2%	0.1%
uvg266 - Bosphorus 1080p - Ultra Fast (FPS)	**99.10**	**99.10**	**99.27**
Normalized	99.83%	99.83%	100%
Standard Deviation	0.5%	0.3%	0.5%

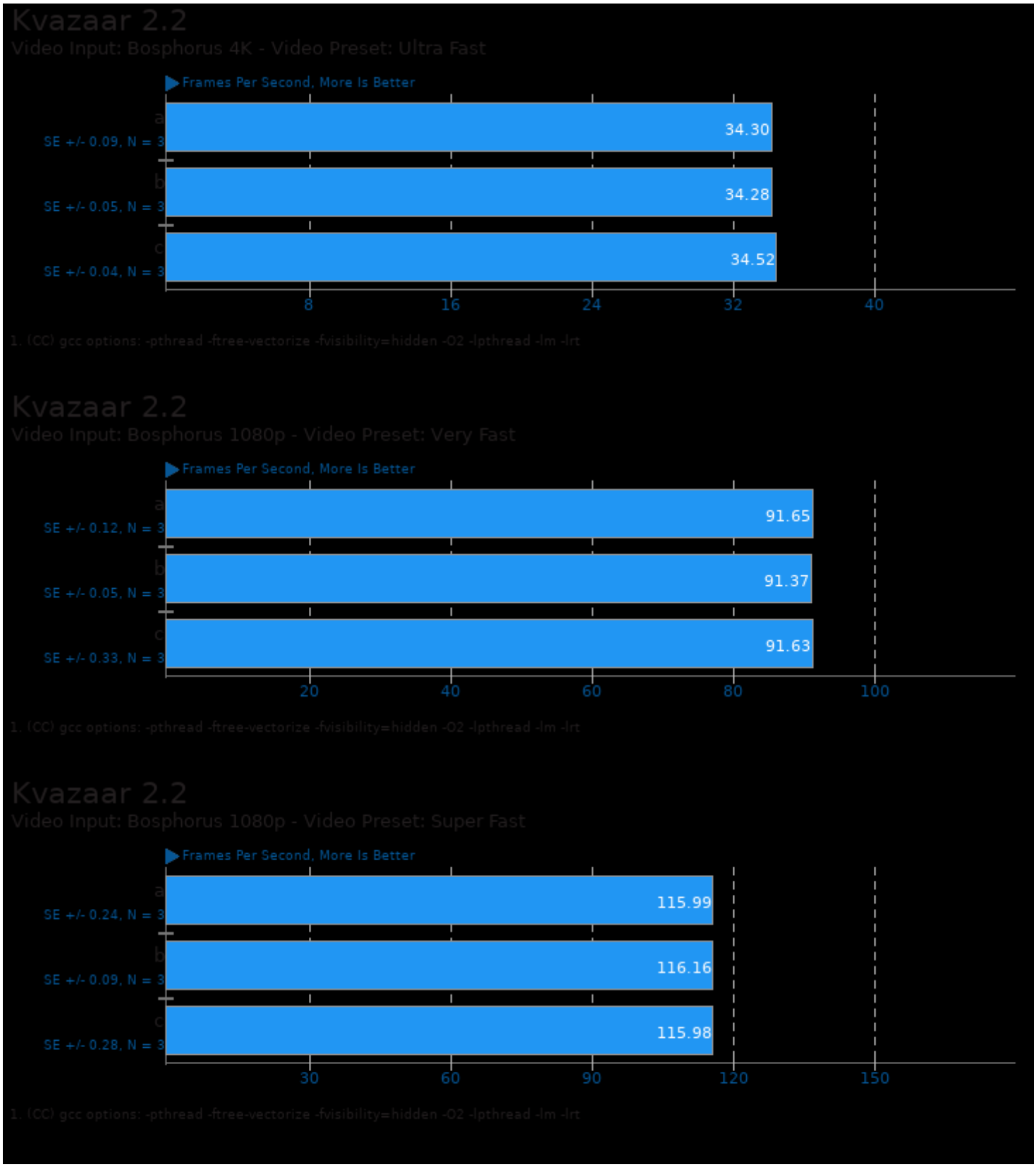
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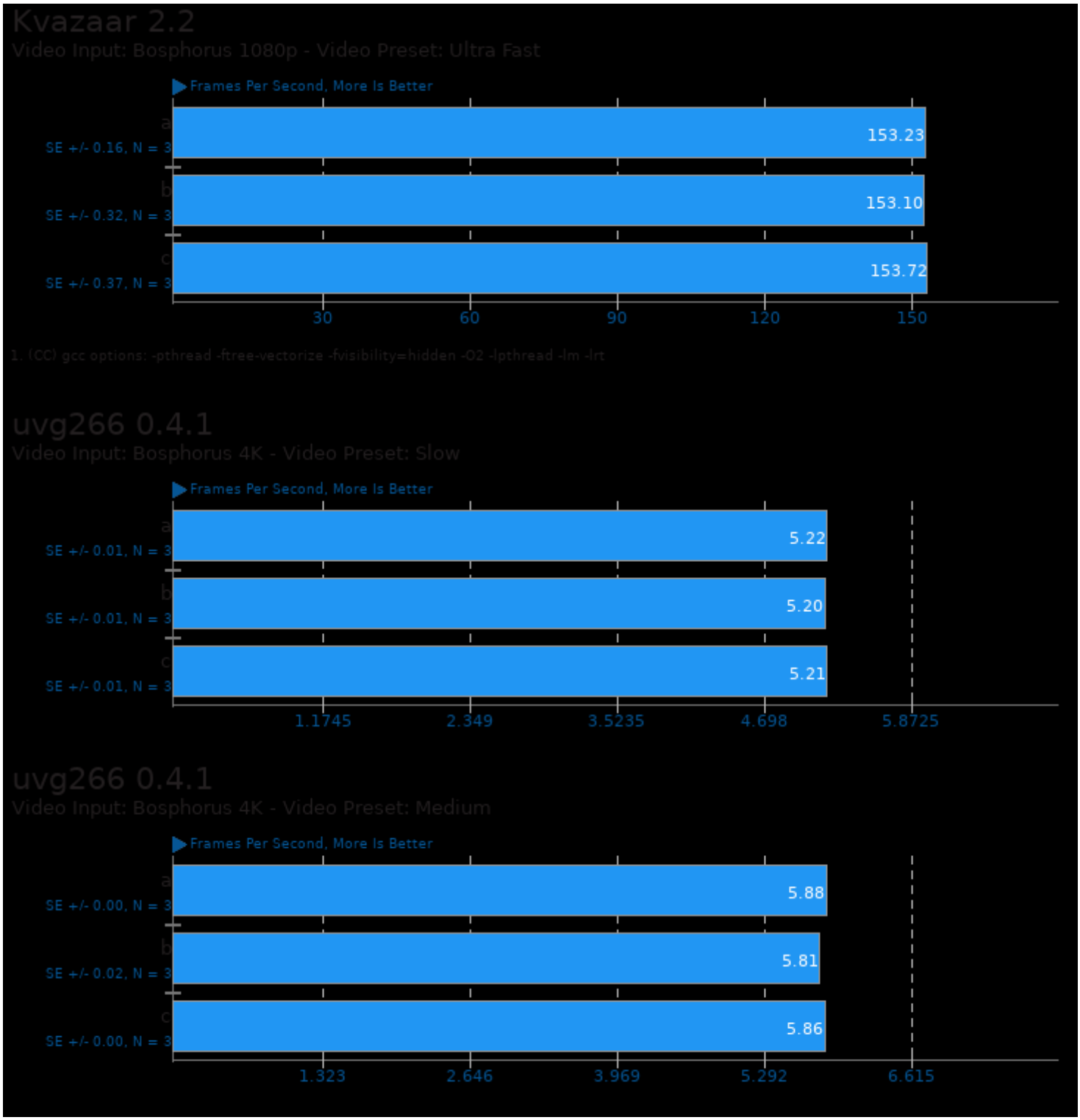
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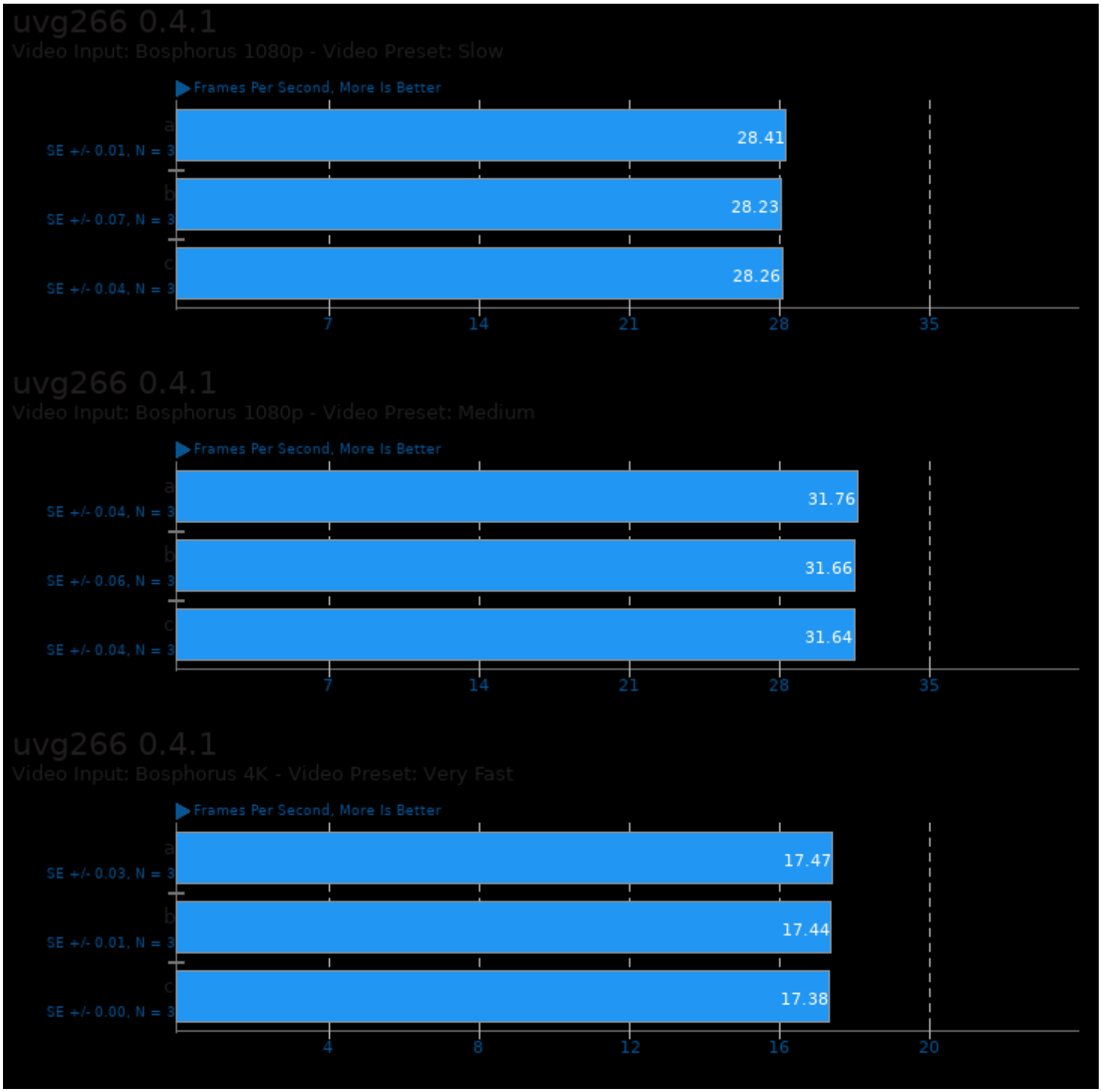
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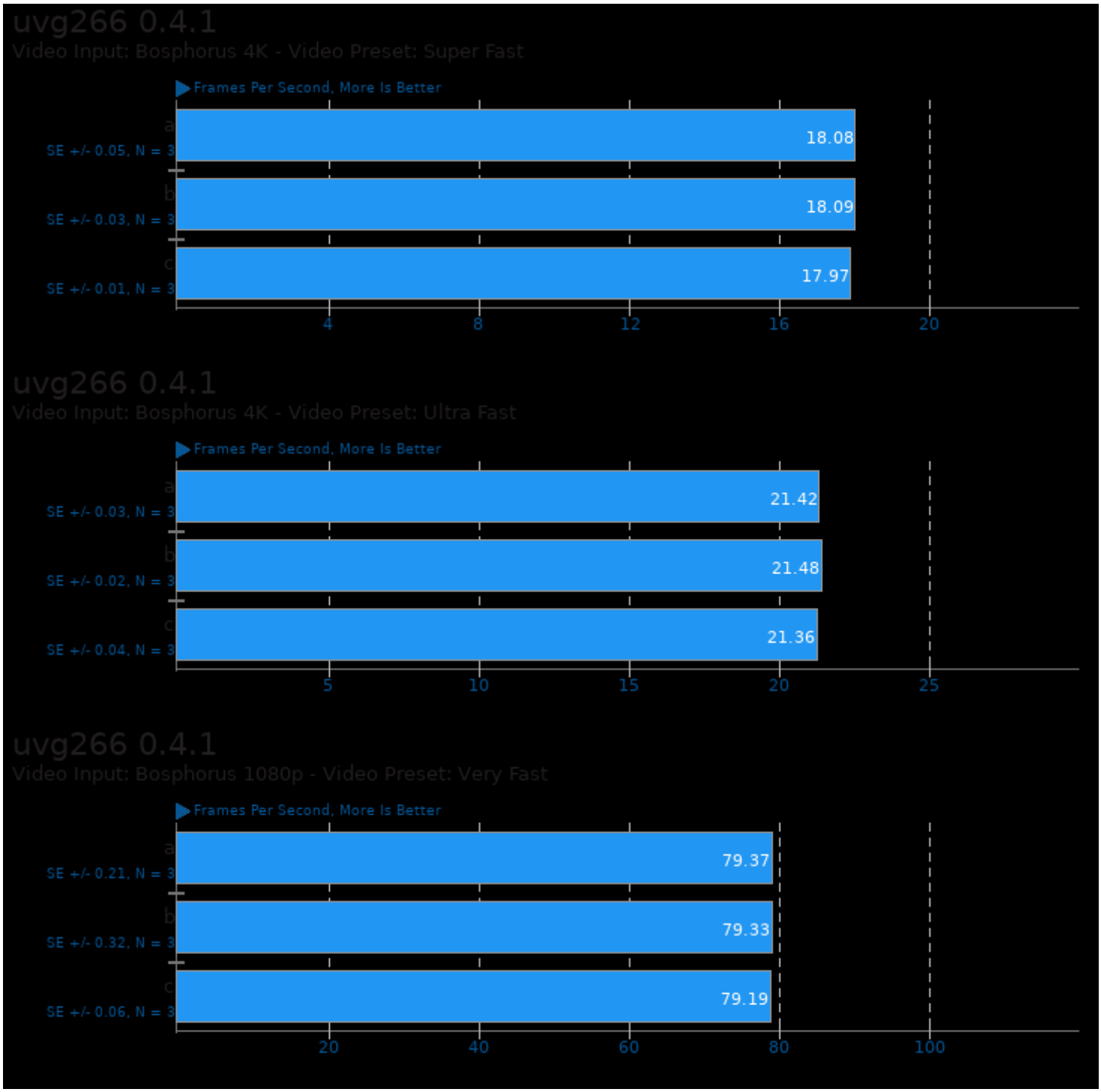
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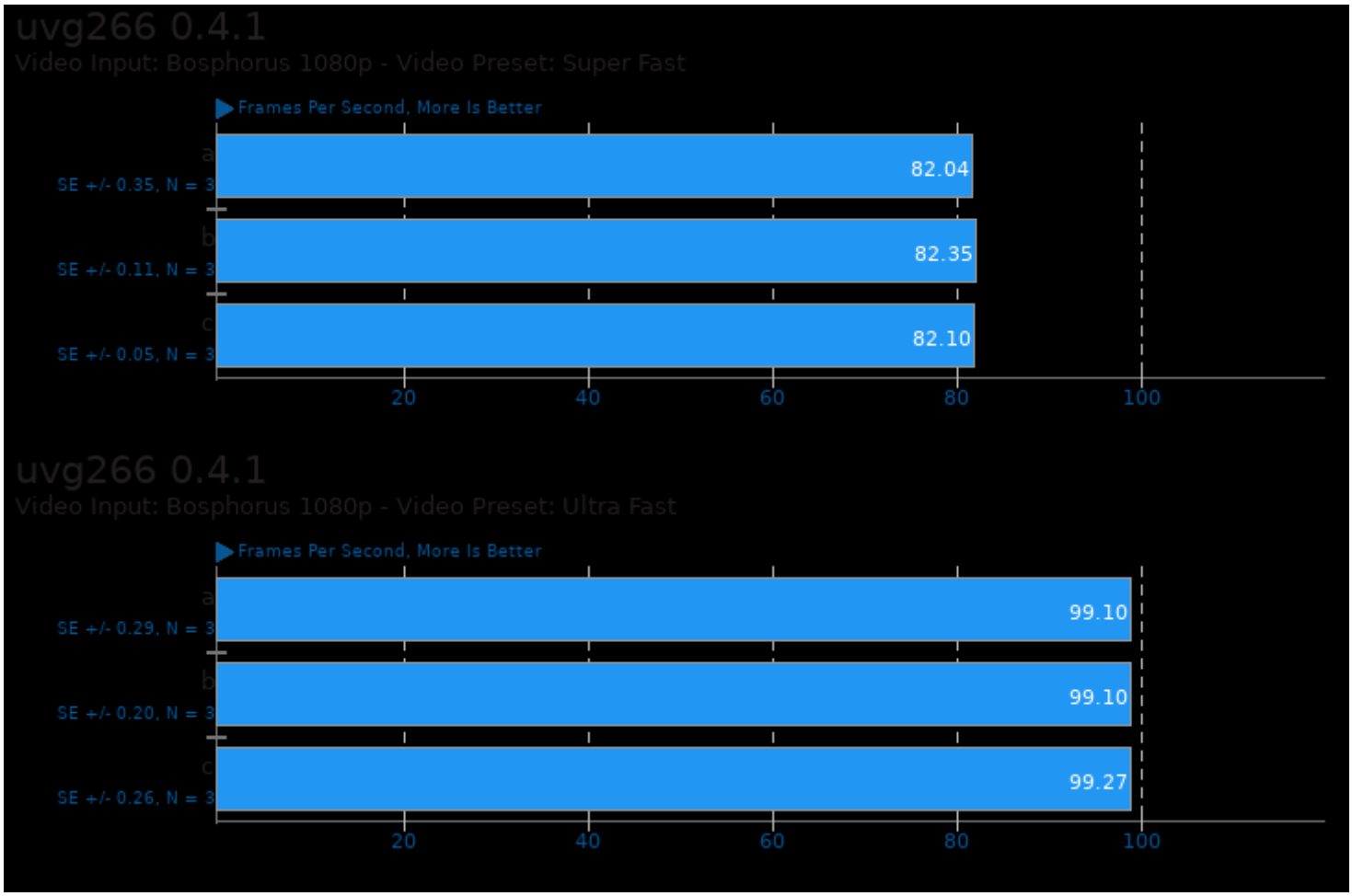
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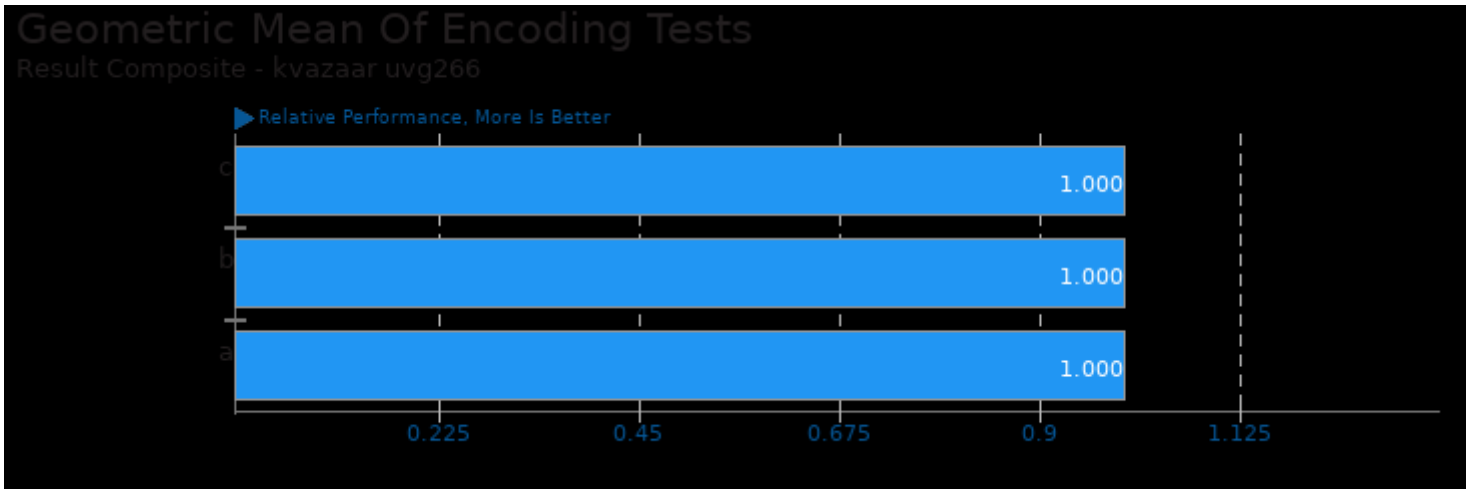


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These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/kvazaar and pts/uvg266

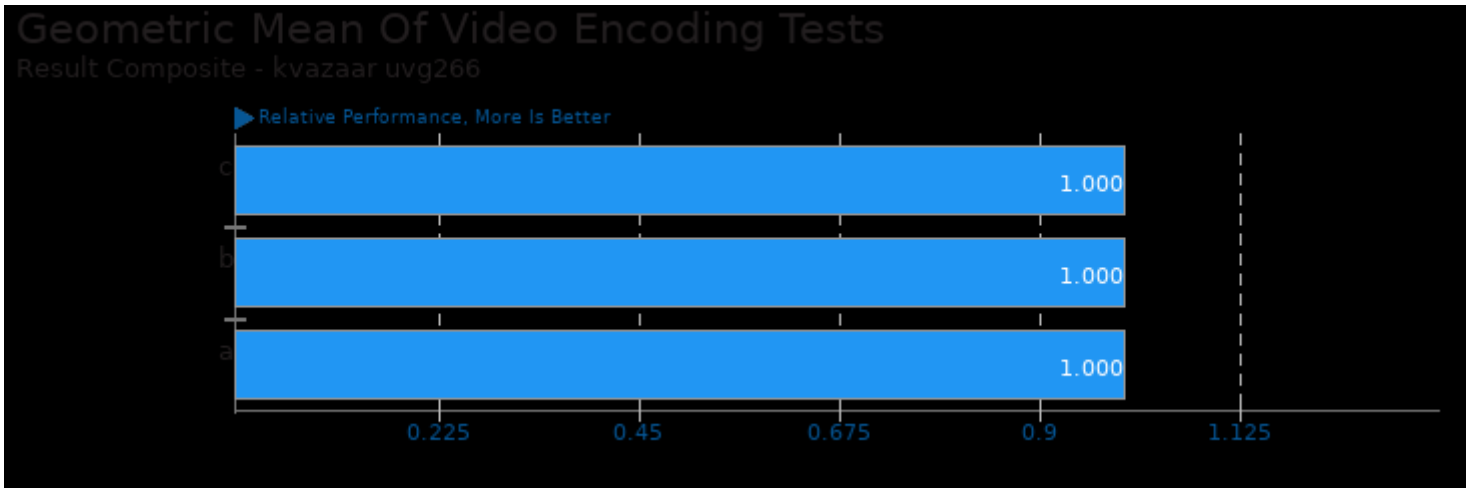


Geometric mean based upon tests: pts/kvazaar and pts/uvg266



Geometric mean based upon tests: pts/kvazaar and pts/uvg266

kvazaar uvg266



Geometric mean based upon tests: pts/kvazaar and pts/uvg266

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 10:20.