www.phoronix-test-suite.com

Framework Laptop Linux Distros

Intel Core i7-1165G7 testing with a Framework FRANBMCP06 (03.03 BIOS) and Intel Xe TGL GT2 3GB on Clear Linux OS 35160 via the Phoronix Test Suite.

Automated Executive Summary

Ubuntu 21.10 had the most wins, coming in first place for 51% of the tests.

Based on the geometric mean of all complete results, the fastest (Ubuntu 21.10) was 1.005x the speed of the slowest (Clear Linux 35160).

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

yquake2 (Renderer: Vulkan - Resolution: 1920 x 1080) at 7.199x
DDraceNetwork (Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap - Total Frame Time) at 5.162x
DDraceNetwork (Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: Multeasymap - Total Frame Time) at 5.075x
DDraceNetwork (Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2 - Total Frame Time) at 2.655x
Zstd Compression (Compression Level: 3, Long Mode - Compression Speed) at 2.616x
DDraceNetwork (Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo:

RaiNyMore2 - Total Frame Time) at 2.602x
GnuPG (Linux 4.3 Package File Encryption) at 1.705x
GEGL (Operation: Crop) at 1.582x
librsvg (Operation: SVG Files To PNG) at 1.518x
GEGL (Operation: Scale) at 1.512x.

Test Systems:

Ubuntu 21.10

Processor: Intel Core i7-1165G7 @ 4.70GHz (4 Cores / 8 Threads), Motherboard: Framework FRANBMCP06 (03.03 BIOS), Chipset: Intel Tiger Lake-LP, Memory: 32GB, Disk: 1000GB Western Digital WDS100T1X0E-00AFY0, Graphics: Intel Xe TGL GT2 3GB (1300MHz), Audio: Realtek ALC295, Network: Intel Wi-Fi 6 AX210/AX211/AX411

OS: Ubuntu 21.10, Kernel: 5.13.0-20-generic (x86_64), Desktop: GNOME Shell 40.5, Display Server: X Server + Wayland, OpenGL: 4.6 Mesa 21.2.2, Vulkan: 1.2.182, Compiler: GCC 11.2.0, File-System: ext4, Screen Resolution: 2256x1504

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-cet --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-serialization=2 --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-11-ZPT0kp/gcc-11-11.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-11-ZPT0kp/gcc-11-11.2.0/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-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: intel_pstate powersave - CPU Microcode: 0x88 - Thermald 2.4.6
Python Notes: Python 3.9.7
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 Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

Clear Linux 35160

Processor: Intel Core i7-1165G7 @ 4.70GHz (4 Cores / 8 Threads), Motherboard: Framework FRANBMCP06 (03.03 BIOS), Chipset: Intel Tiger Lake-LP, Memory: 32GB, Disk: 1000GB Western Digital WDS100T1X0E-00AFY0 + 15GB Ultra USB 3.0, Graphics: Intel Xe TGL GT2 3GB (1300MHz), Audio: Realtek ALC295, Network: Intel Device 2725

OS: Clear Linux OS 35160, Kernel: 5.14.14-1084.native (x86_64), Desktop: GNOME Shell 41.0, Display Server: X Server 1.20.11, OpenGL: 4.6 Mesa 21.2.4, Vulkan: 1.2.182, Compiler: GCC 11.2.1 20211020 releases/gcc-11.2.0-375-g40b209e340 + Clang 11.1.0 + LLVM 11.1.0, File-System: ext4, Screen Resolution: 2256x1504

Kernel Notes: Transparent Huge Pages: always
Environment Notes: FFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,--enable-new-dtags" CXXFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=skylake -fvisibility-inlines-hidden -Wl,--enable-new-dtags" MESA_GLSL_CACHE_DISABLE=0 FCFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,-sort-common -Wl,--enable-new-dtags" CFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=skylake" THEANO_FLAGS="floatX=float32,openmp=true,gcc.cxxflags="-ftree-vectorize -mavx""
Compiler Notes: --build=x86_64-generic-linux --disable-libmpx --disable-libunwind-exceptions --disable-multiarch --disable-vtable-verify --disable-werror

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--enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-clocale=gnu --enable-default-pie --enable-gnu-indirect-function --enable-languages=c,c++,fortran,go --enable-ld=default --enable-libstdcxx-pch --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=x86-64-v3 --with-gcc-major-version-only --with-glibc-version=2.19 --with-gnu-ld --with-isl --with-ppl=yes --with-tune=skylake-avx512
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x88 - Thermald 2.4.6
Python Notes: Python 3.9.7
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 Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	Ubuntu 21.10	Clear Linux 35160
DDraceNetwork - 2256 x 1504 - Fullscreen - OpenGL 3.0 - Default - RaiNyMore2 (FPS)	155.85	
Standard Deviation	1.3%	
DDraceNetwork - 2256 x 1504 - Fullscreen - OpenGL 3.3 - Default - RaiNyMore2 (FPS)	152.51	
Standard Deviation	0.3%	
DDraceNetwork - 2256 x 1504 - Fullscreen - OpenGL 3.0 - Default - Multeasymap (FPS)	263.77	
Standard Deviation	1.4%	
DDraceNetwork - 2256 x 1504 - Fullscreen - OpenGL 3.3 - Default - Multeasymap (FPS)	269.88	
Standard Deviation	0.3%	
Tesseract - 2256 x 1504 (FPS)	**112.3777**	**102.34694**
Normalized	100%	91.07%
Standard Deviation	0.5%	6.5%
Unvanquished - 2256 x 1504 - High (FPS)	**183.0**	**145.2**
Normalized	100%	79.34%
Standard Deviation	0.3%	0.1%
Unvanquished - 2256 x 1504 - Ultra (FPS)	**126.4**	**95.5**
Normalized	100%	75.55%
Standard Deviation	0.6%	0.1%
Unvanquished - 2256 x 1504 - Medium (FPS)	**205.3**	**166.6**
Normalized	100%	81.15%
Standard Deviation	0.5%	0.5%
Xonotic - 2256 x 1504 - Low (FPS)	**313.2272377**	**314.3256267**
Normalized	99.65%	100%
Standard Deviation	1.4%	1.1%
Xonotic - 2256 x 1504 - High (FPS)	**166.4914017**	**160.6672856**
Normalized	100%	96.5%
Standard Deviation	0.2%	0.2%
Xonotic - 2256 x 1504 - Ultra (FPS)	**136.3893370**	**126.5430102**
Normalized	100%	92.78%
Standard Deviation	0.5%	0.4%
Xonotic - 2256 x 1504 - Ultimate (FPS)	**104.4392534**	**93.0999894**
Normalized	100%	89.14%
Standard Deviation	0.1%	0.2%
yquake2 - Vulkan - 1920 x 1080 (FPS)	**906.4**	**125.9**
Normalized	100%	13.89%
Standard Deviation	0.7%	0.2%
yquake2 - OpenGL 1.x - 1920 x 1080 (FPS)	**314.9**	**286.6**
Normalized	100%	91.01%
Standard Deviation	0.4%	9.4%

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yquake2 - OpenGL 3.x - 1920 x 1080 (FPS)	**385.4**	**371.5**
Normalized	100%	96.39%
Standard Deviation	0.8%	1.9%
GLmark2 - 2256 x 1504 (Score)	**651**	**642**
Normalized	100%	98.62%
ParaView - Many Spheres - 2256 x 1504 (Frames / Sec)	**9.3**	**8.92**
Normalized	100%	95.91%
Standard Deviation	0.6%	0.6%
ParaView - Many Spheres - 2256 x 1504 (MiPolys /	**935.804**	**894.310**
Normalized	100%	95.57%
Standard Deviation	0.6%	0.6%
ParaView - Wavelet Volume - 2256 x 1504 (Frames /	**70.38**	**78.39**
Normalized	89.78%	100%
Standard Deviation	1.4%	2.5%
ParaView - Wavelet Volume - 2256 x 1504 (MiVoxels / Sec)	**1126**	**1254**
Normalized	89.78%	100%
Standard Deviation	1.4%	2.5%
ParaView - Wavelet Contour - 2256 x 1504 (Frames / Sec)	**57.31**	**49.40**
Normalized	100%	86.2%
Standard Deviation	1.5%	2.4%
ParaView - Wavelet Contour - 2256 x 1504 (MiPolys / Sec)	**597.230**	**514.860**
Normalized	100%	86.21%
Standard Deviation	1.5%	2.4%
Zstd Compression - 3 - Compression Speed (MB/s)	**2275**	**2190**
Normalized	100%	96.26%
Standard Deviation	0.6%	3.1%
Zstd Compression - 8 - Compression Speed (MB/s)	**349.5**	**347.8**
Normalized	100%	99.51%
Standard Deviation	1.5%	1.1%
Zstd Compression - 8 - D.S (MB/s)	**3988**	**4173**
Normalized	95.59%	100%
Standard Deviation	1.8%	3.5%
Zstd Compression - 19 - Compression Speed (MB/s)	**17.7**	**21.0**
Normalized	84.29%	100%
Standard Deviation	0%	1.1%
Zstd Compression - 19 - D.S (MB/s)	**3451**	**3519**
Normalized	98.07%	100%
Standard Deviation	1.4%	0.2%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	**387.5**	**1014**
Normalized	38.22%	100%
Standard Deviation	1.9%	0.7%
Zstd Compression - 3, Long Mode - D.S (MB/s)	**4177**	**4593**
Normalized	90.94%	100%
Standard Deviation	0.5%	1.5%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	**310.7**	**385.5**
Normalized	80.6%	100%
Standard Deviation	0.4%	0.4%
Zstd Compression - 8, Long Mode - D.S (MB/s)	**4250**	**4567**
Normalized	93.07%	100%

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Standard Deviation	0.8%	2.1%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	14.5	17.6
Normalized	82.39%	100%
Standard Deviation	2.5%	1.4%
Zstd Compression - 19, Long Mode - D.S (MB/s)	3494	3596
Normalized	97.17%	100%
Standard Deviation	1.1%	0.4%
SVT-AV1 - Preset 4 - Bosphorus 4K (FPS)	0.671	0.698
Normalized	96.13%	100%
Standard Deviation	0.1%	0.2%
SVT-AV1 - Preset 8 - Bosphorus 4K (FPS)	7.398	7.766
Normalized	95.26%	100%
Standard Deviation	0.2%	0.1%
SVT-HEVC - 7 - Bosphorus 1080p (FPS)	45.98	46.59
Normalized	98.69%	100%
Standard Deviation	0.6%	0.3%
SVT-HEVC - 10 - Bosphorus 1080p (FPS)	105.28	99.82
Normalized	100%	94.81%
Standard Deviation	3.6%	0.3%
SVT-VP9 - VMAF Optimized - Bosphorus 1080p (FPS)	96.48	91.34
Normalized	100%	94.67%
Standard Deviation	2.3%	2.4%
SVT-VP9 - P.S.O - Bosphorus 1080p (FPS)	96.87	90.65
Normalized	100%	93.58%
Standard Deviation	2.1%	2.2%
x265 - Bosphorus 4K (FPS)	5.95	6.22
Normalized	95.66%	100%
Standard Deviation	0.5%	0.6%
Timed GDB GNU Debugger Compilation - Time To Compile (sec)	127.072	
Standard Deviation	0.2%	
Timed Godot Game Engine Compilation - Time To Compile (sec)	302.027	311.847
Normalized	100%	96.85%
Standard Deviation	0.1%	0.4%
Timed Mesa Compilation - Time To Compile (sec)	117.204	145.517
Normalized	100%	80.54%
Standard Deviation	0.2%	0.2%
Timed MPlayer Compilation - Time To Compile (sec)	93.853	115.029
Normalized	100%	81.59%
Standard Deviation	0.5%	0.5%
GnuPG - L.4.3.P.F.E (sec)	10.871	6.375
Normalized	58.64%	100%
Standard Deviation	4.7%	1.6%
OpenSSL (sign/s)	945.7	868.8
Normalized	100%	91.87%
Standard Deviation	5.5%	2.3%
OpenSSL (verify/s)	55007	55809
Normalized	98.56%	100%
Standard Deviation	4.6%	0.3%
Darktable - Boat - CPU-only (sec)	10.948	
Standard Deviation	2.1%	
Darktable - Masskrug - CPU-only (sec)	8.539	
Standard Deviation	2.8%	

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Darktable - Server Rack - CPU-only (sec)	0.542	
Standard Deviation	8.2%	
Darktable - Server Room - CPU-only (sec)	5.525	
Standard Deviation	1.4%	
GEGL - Crop (sec)	**8.129**	**5.140**
Normalized	63.23%	100%
Standard Deviation	2.3%	0.6%
GEGL - Scale (sec)	**6.355**	**4.204**
Normalized	66.15%	100%
Standard Deviation	0.8%	0.6%
GEGL - Reflect (sec)	**25.501**	**20.854**
Normalized	81.78%	100%
Standard Deviation	0.4%	2%
GEGL - Color Enhance (sec)	**48.072**	**34.455**
Normalized	71.67%	100%
Standard Deviation	1.4%	0.8%
GEGL - Rotate 90 Degrees (sec)	**40.764**	**34.901**
Normalized	85.62%	100%
Standard Deviation	0.7%	2.3%
GNU Octave Benchmark (sec)	5.999	
Standard Deviation	0.9%	
RawTherapee - T.B.T (sec)	**100.424**	**92.641**
Normalized	92.25%	100%
Standard Deviation	2.4%	0.6%
librsvg - SVG Files To PNG (sec)	**20.009**	**30.372**
Normalized	100%	65.88%
Standard Deviation	0.5%	0.6%
NCNN - CPU - mobilenet (ms)	**23.75**	**23.90**
Normalized	100%	99.37%
Standard Deviation	0.4%	1.4%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)	**5.74**	**6.06**
Normalized	100%	94.72%
Standard Deviation	12.6%	9.5%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)	**4.91**	**5.29**
Normalized	100%	92.82%
Standard Deviation	13.5%	1.5%
NCNN - CPU - shufflenet-v2 (ms)	**5.42**	**5.87**
Normalized	100%	92.33%
Standard Deviation	17.6%	0.8%
NCNN - CPU - efficientnet-b0 (ms)	**8.82**	**9.08**
Normalized	100%	97.14%
Standard Deviation	2.8%	2.1%
NCNN - CPU - blazeface (ms)	**2.16**	**2.14**
Normalized	99.07%	100%
Standard Deviation	0.5%	3.5%
NCNN - CPU - googlenet (ms)	**18.10**	**17.91**
Normalized	98.95%	100%
Standard Deviation	0.2%	1.3%
NCNN - CPU - vgg16 (ms)	**65.76**	**64.66**
Normalized	98.33%	100%
Standard Deviation	0.3%	0.5%
NCNN - CPU - alexnet (ms)	**15.87**	**15.75**
Normalized	99.24%	100%
Standard Deviation	0.2%	0.5%
NCNN - CPU - resnet50 (ms)	**35.26**	**35.71**

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Normalized	100%	98.74%
Standard Deviation	0%	0%
NCNN - CPU - yolov4-tiny (ms)	**33.22**	**31.19**
Normalized	93.89%	100%
Standard Deviation	0.4%	1.1%
NCNN - CPU - squeezenet_ssd (ms)	**31.14**	**30.39**
Normalized	97.59%	100%
Standard Deviation	0%	0.6%
NCNN - CPU - regnety_400m (ms)	**11.86**	**11.85**
Normalized	99.92%	100%
Standard Deviation	0.4%	0.1%
NCNN - CPU - mnasnet (ms)	**5.66**	**5.75**
Normalized	100%	98.43%
Standard Deviation	0.4%	1.8%
NCNN - CPU - resnet18 (ms)	**18.06**	**16.99**
Normalized	94.08%	100%
Standard Deviation	0.2%	0.1%
IndigoBench - CPU - Bedroom (M samples/s)	**0.618**	**0.717**
Normalized	86.19%	100%
Standard Deviation	0.7%	0.3%
IndigoBench - CPU - Supercar (M samples/s)	**1.425**	**1.464**
Normalized	97.34%	100%
Standard Deviation	0.1%	0.1%
Blender - BMW27 - CPU-Only (sec)	**451.42**	**448.52**
Normalized	99.36%	100%
Standard Deviation	0.1%	0.3%
Selenium - ARES-6 - Firefox (ms)	35.84	
Standard Deviation	0.5%	
Selenium - Kraken - Firefox (ms)	887.4	
Standard Deviation	0.6%	
Selenium - StyleBench - Firefox (Runs / Minute)	110	
Standard Deviation	2.4%	
Selenium - Jetstream 2 - Firefox (Score)	98.563	
Standard Deviation	1%	
Selenium - Speedometer - Firefox (Runs/min)	157	
Standard Deviation	1.6%	
Selenium - ARES-6 - Google Chrome (ms)	16.03	
Standard Deviation	0.8%	
Selenium - Kraken - Google Chrome (ms)	601.2	
Standard Deviation	0.3%	
Selenium - PSPDFKit WASM - Firefox (Score)	3069	
Standard Deviation	0.1%	
Selenium - StyleBench - Google Chrome (Runs /	44.7	
Standard Deviation	1.8%	
Selenium - Jetstream 2 - Google Chrome (Score)	160.832	
Standard Deviation	0.4%	
Selenium - Speedometer - Google Chrome (Runs/min)	201	
Standard Deviation	0.9%	
Selenium - PSPDFKit WASM - Google Chrome (Score)	3112	
Standard Deviation	2.4%	
Selenium - W.i - Firefox (ms)	28.4	
Standard Deviation	3.2%	
Selenium - W.c - Firefox (ms)	341.6	
Standard Deviation	1%	

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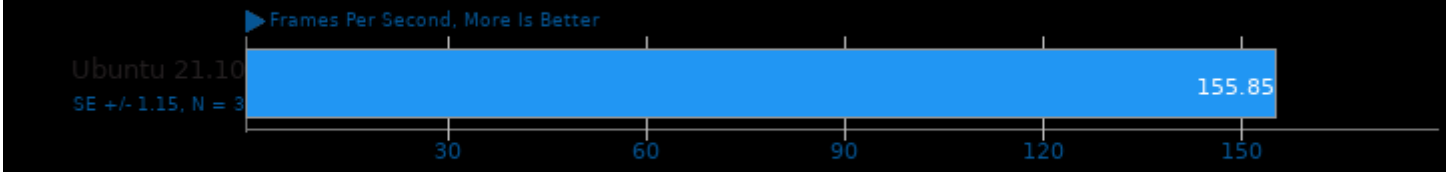
Selenium - W.i - Google Chrome (ms)	27.53	
Standard Deviation	1.5%	
Selenium - W.c - Google Chrome (ms)	274.89	
Standard Deviation	0.1%	
Chaos Group V-RAY - CPU (vsamples)	**3700**	**3745**
Normalized	98.8%	100%
Standard Deviation	2.4%	0.2%
Node.js Express HTTP Load Test (Reqs/sec)	**8382**	**8346**
Normalized	100%	99.57%
Standard Deviation	2.5%	0.8%
Node.js V8 Web Tooling Benchmark (runs/s)	**12.32**	**13.43**
Normalized	91.73%	100%
Standard Deviation	2.4%	1%
SQLite Speedtest - Timed Time - Size 1,000 (sec)	**54.119**	**53.663**
Normalized	99.16%	100%
Standard Deviation	2.3%	1.2%
PyBench - T.F.A.T.T (Milliseconds)	**907**	**820**
Normalized	90.41%	100%
Standard Deviation	21.6%	0.9%
PyPerformance - pathlib (Milliseconds)	**13.9**	**13.6**
Normalized	97.84%	100%
Standard Deviation	0.7%	1.9%
PyPerformance - json_loads (Milliseconds)	**19.0**	**20.4**
Normalized	100%	93.14%
Standard Deviation	0.9%	1%
PyPerformance - crypto_pyaes (Milliseconds)	**83.9**	**87.9**
Normalized	100%	95.45%
Standard Deviation	2%	1.3%
PyPerformance - regex_compile (Milliseconds)	**137**	**143**
Normalized	100%	95.8%
Standard Deviation	2.2%	1.1%
PyPerformance - python_startup (Milliseconds)	**6.55**	**7.73**
Normalized	100%	84.73%
Standard Deviation	0.5%	0.5%
Zstd Compression - 3 - D.S (MB/s)		4202
Standard Deviation		1.1%
Darktable - Boat - CPU-only (sec)		11.556
Standard Deviation		2.5%
Darktable - Masskrug - CPU-only (sec)		8.663
Standard Deviation		1.2%
Darktable - Server Rack - CPU-only (sec)		0.365
Standard Deviation		2.3%
Darktable - Server Room - CPU-only (sec)		6.011
Standard Deviation		4.1%
GNU Octave Benchmark (sec)		4.338
Standard Deviation		0.6%

DDraceNetwork 15.3.1

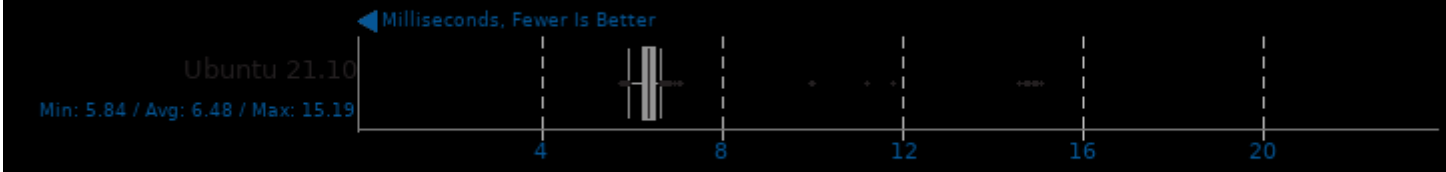
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0

DDraceNetwork 15.3.1

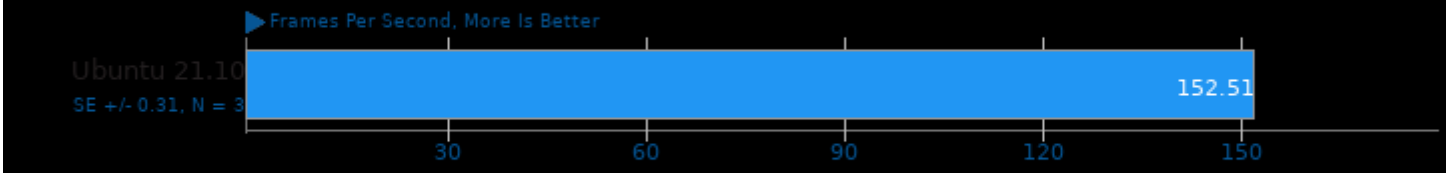
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: RaiNyMore2 - Total Frame Time



1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0

DDraceNetwork 15.3.1

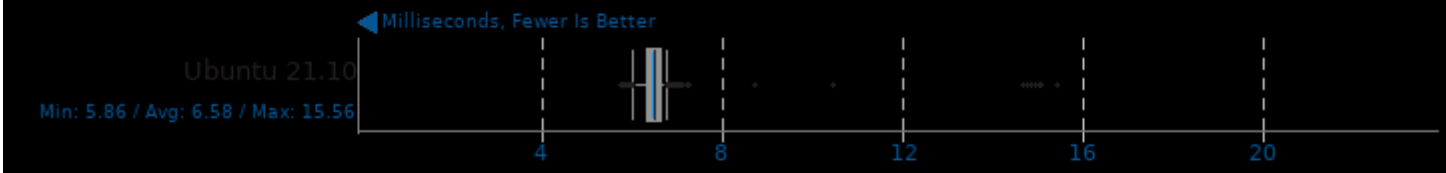
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2



1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0

DDraceNetwork 15.3.1

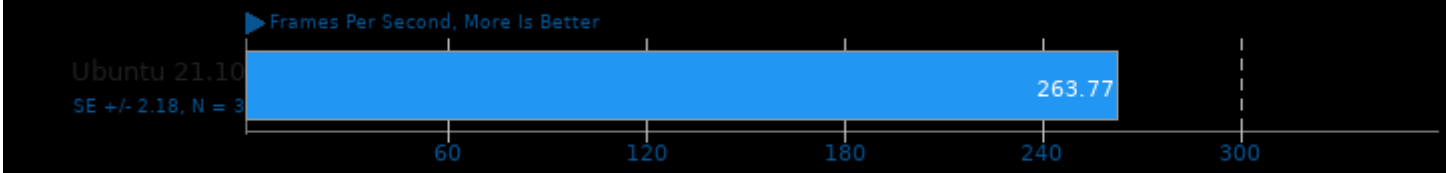
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: RaiNyMore2 - Total Frame Time



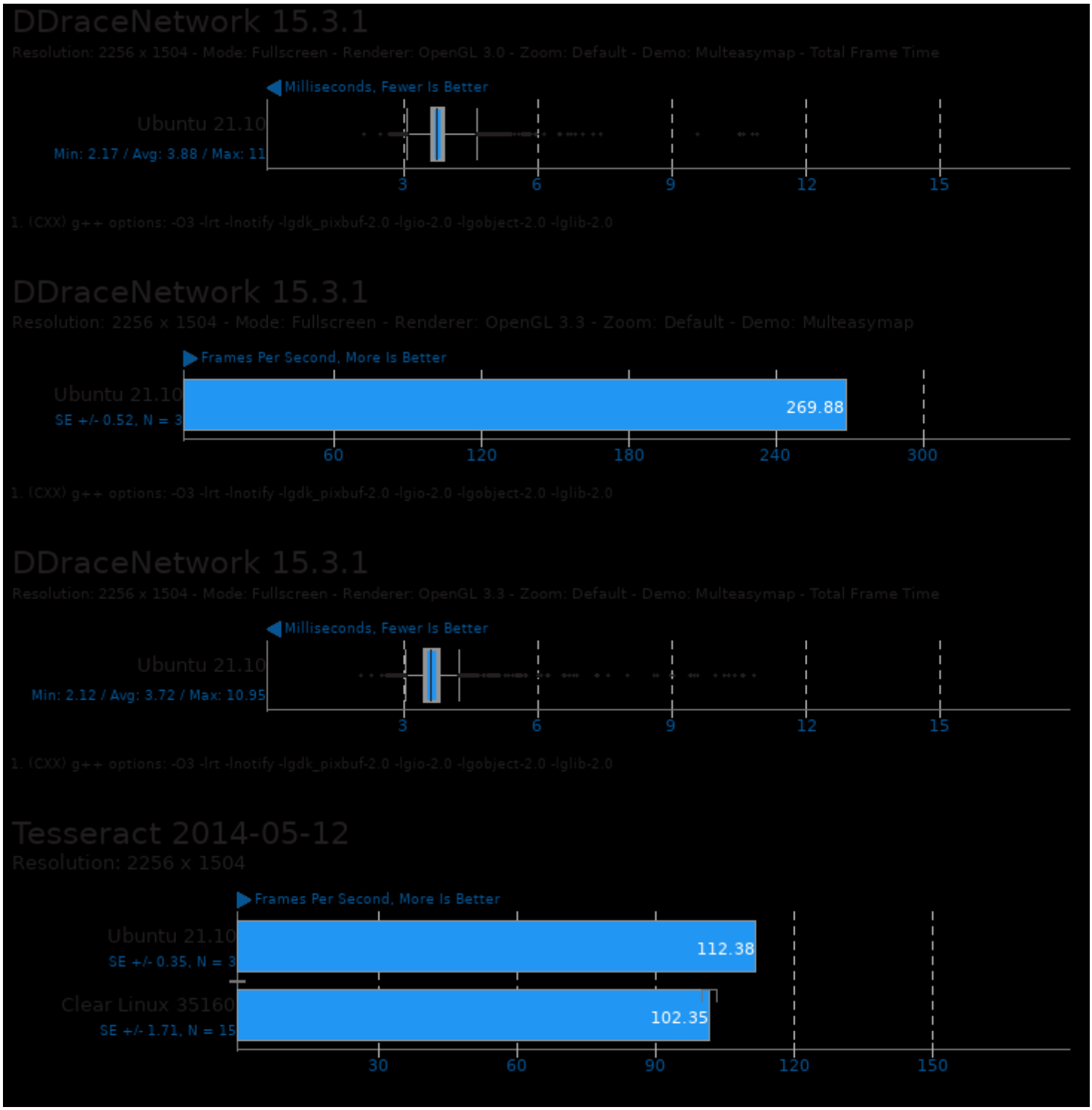
1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0

DDraceNetwork 15.3.1

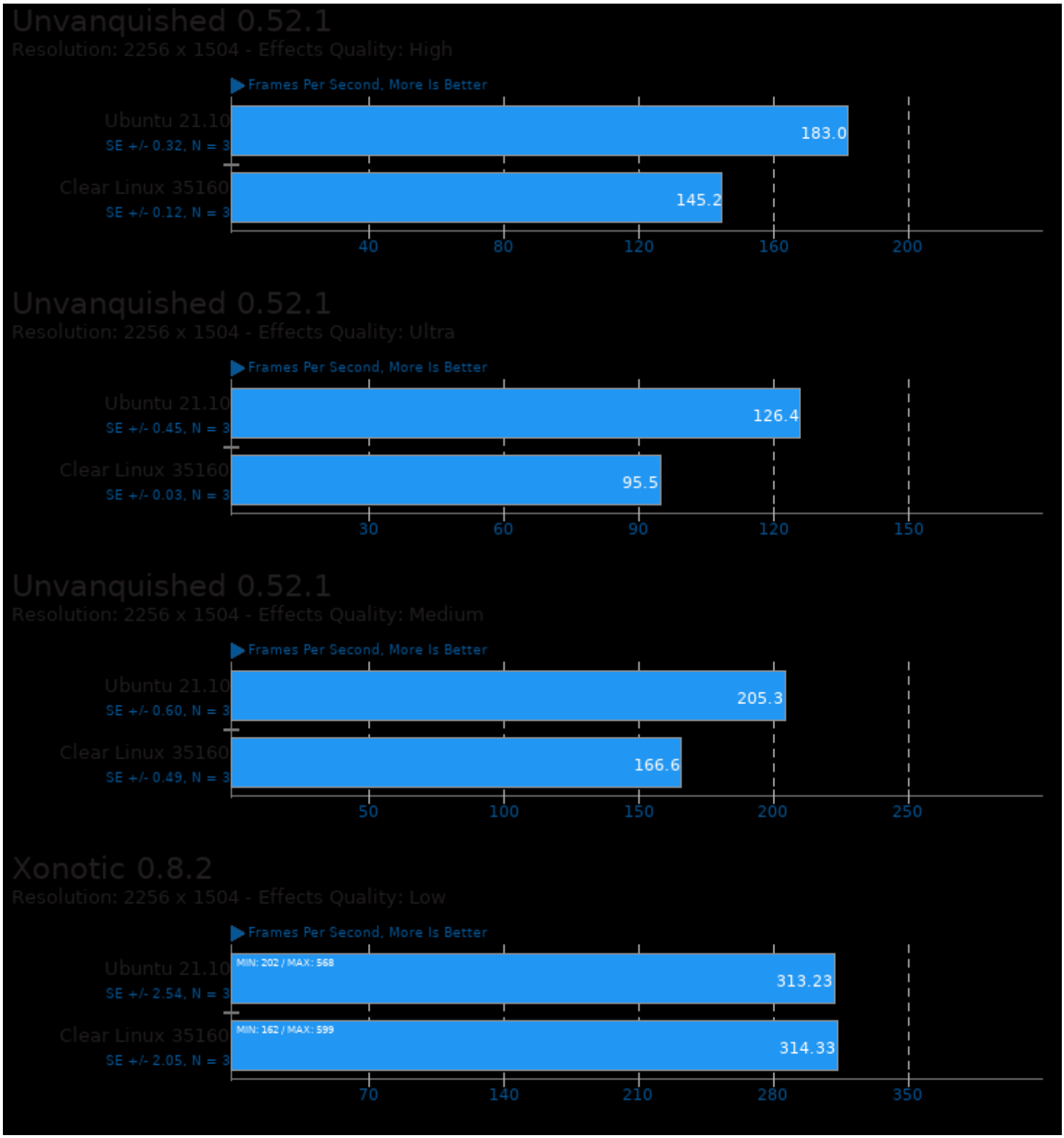
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: Multeasymap

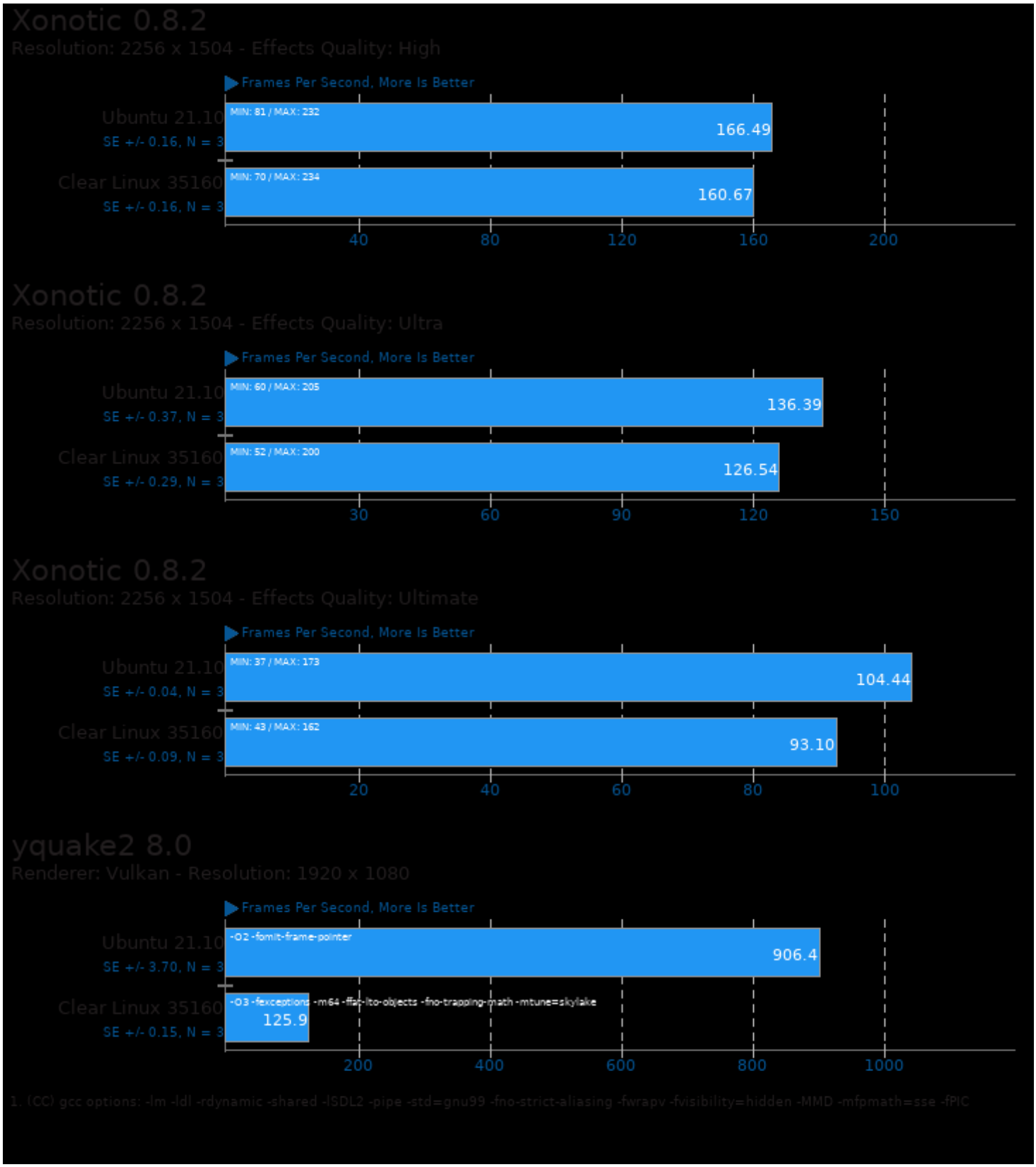


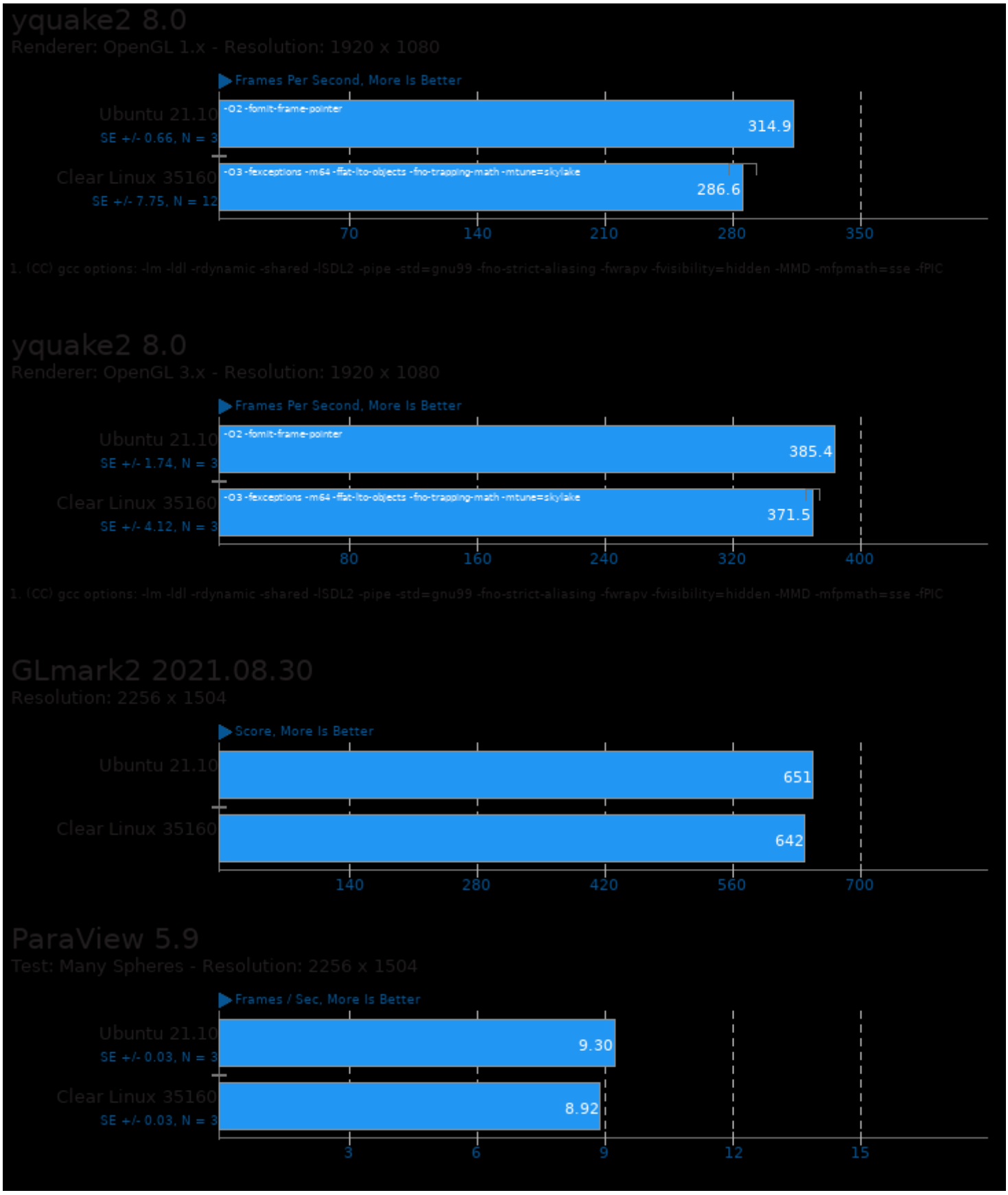
1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0

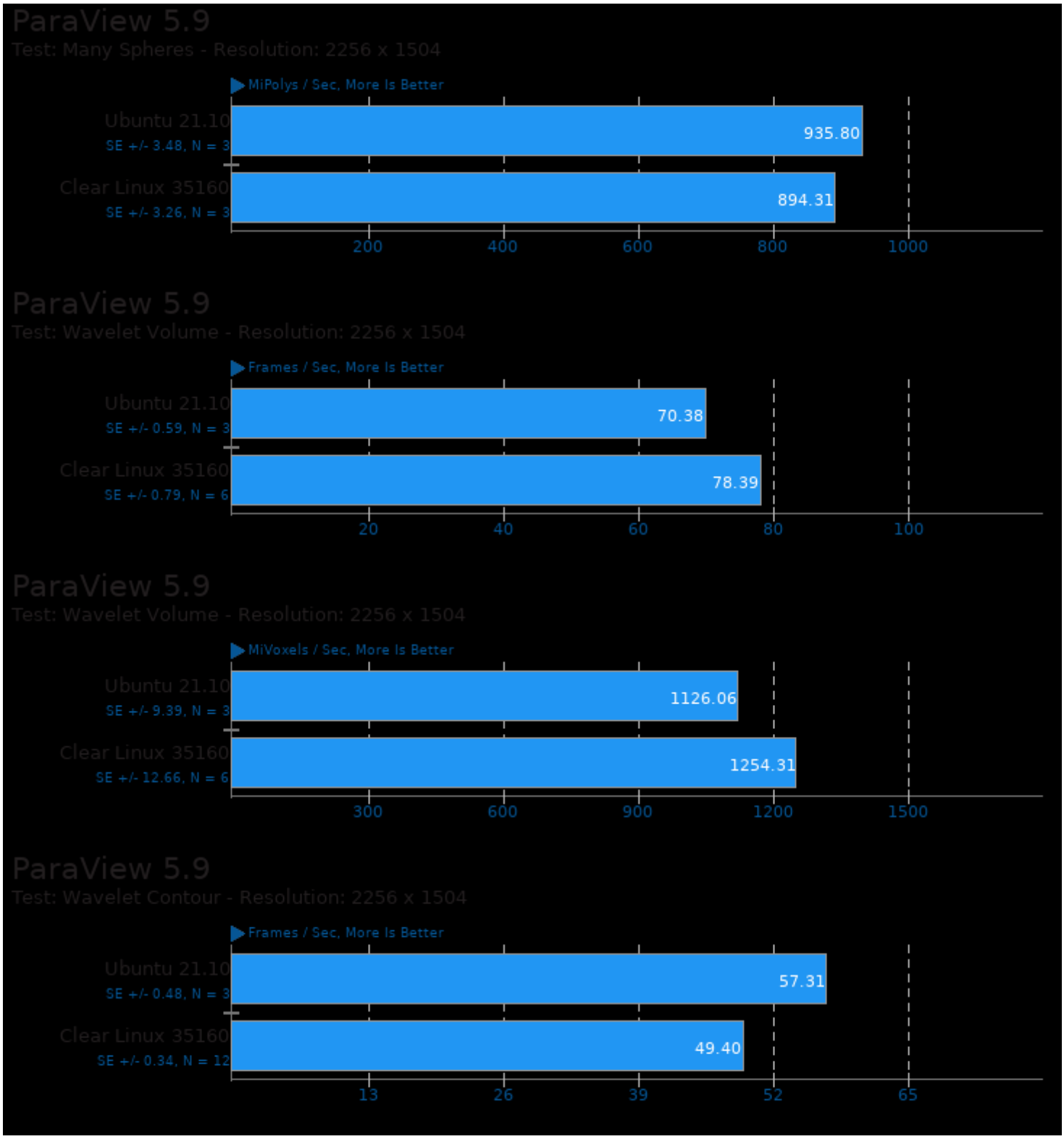

DDraceNetwork 15.3.1
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.0 - Zoom: Default - Demo: Multeasymap - Total Frame Time
Milliseconds, Fewer Is Better
Ubuntu 21.10
Min: 2.17 / Avg: 3.88 / Max: 11
3
6
9
12
15
1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0
DDraceNetwork 15.3.1
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.52, N = 3
269.88
60
120
180
240
300
1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0
DDraceNetwork 15.3.1
Resolution: 2256 x 1504 - Mode: Fullscreen - Renderer: OpenGL 3.3 - Zoom: Default - Demo: Multeasymap - Total Frame Time
Milliseconds, Fewer Is Better
Ubuntu 21.10
Min: 2.12 / Avg: 3.72 / Max: 10.95
3
6
9
12
15
1. (CXX) g++ options: -O3 -lrt -lnotify -lgdk_pixbuf-2.0 -lgio-2.0 -lgobject-2.0 -lglib-2.0
Tesseract 2014-05-12
Resolution: 2256 x 1504
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.35, N = 3
112.38
Clear Linux 35160
SE +/- 1.71, N = 15
102.35
30
60
90
120
150

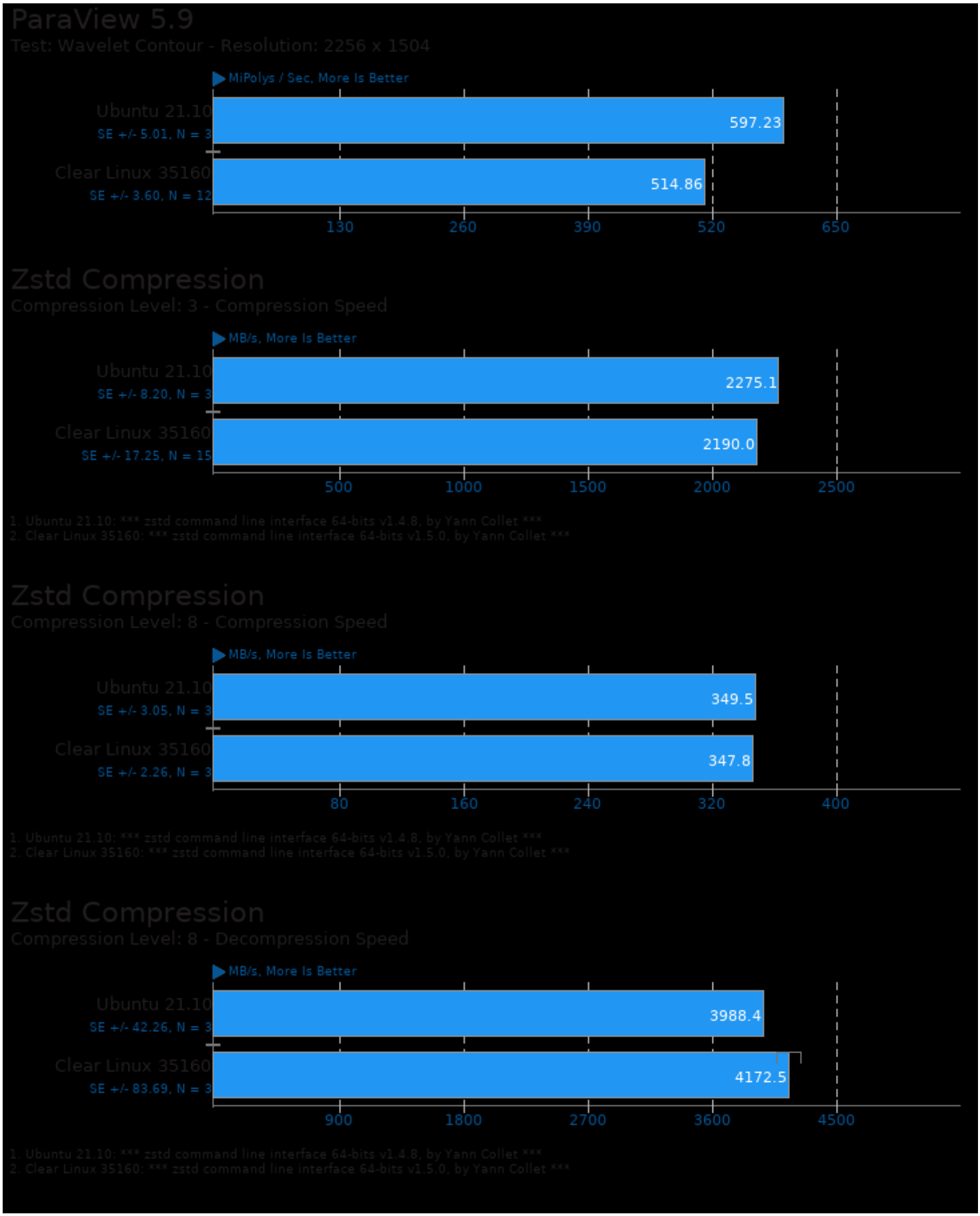
Framework Laptop Linux Distros

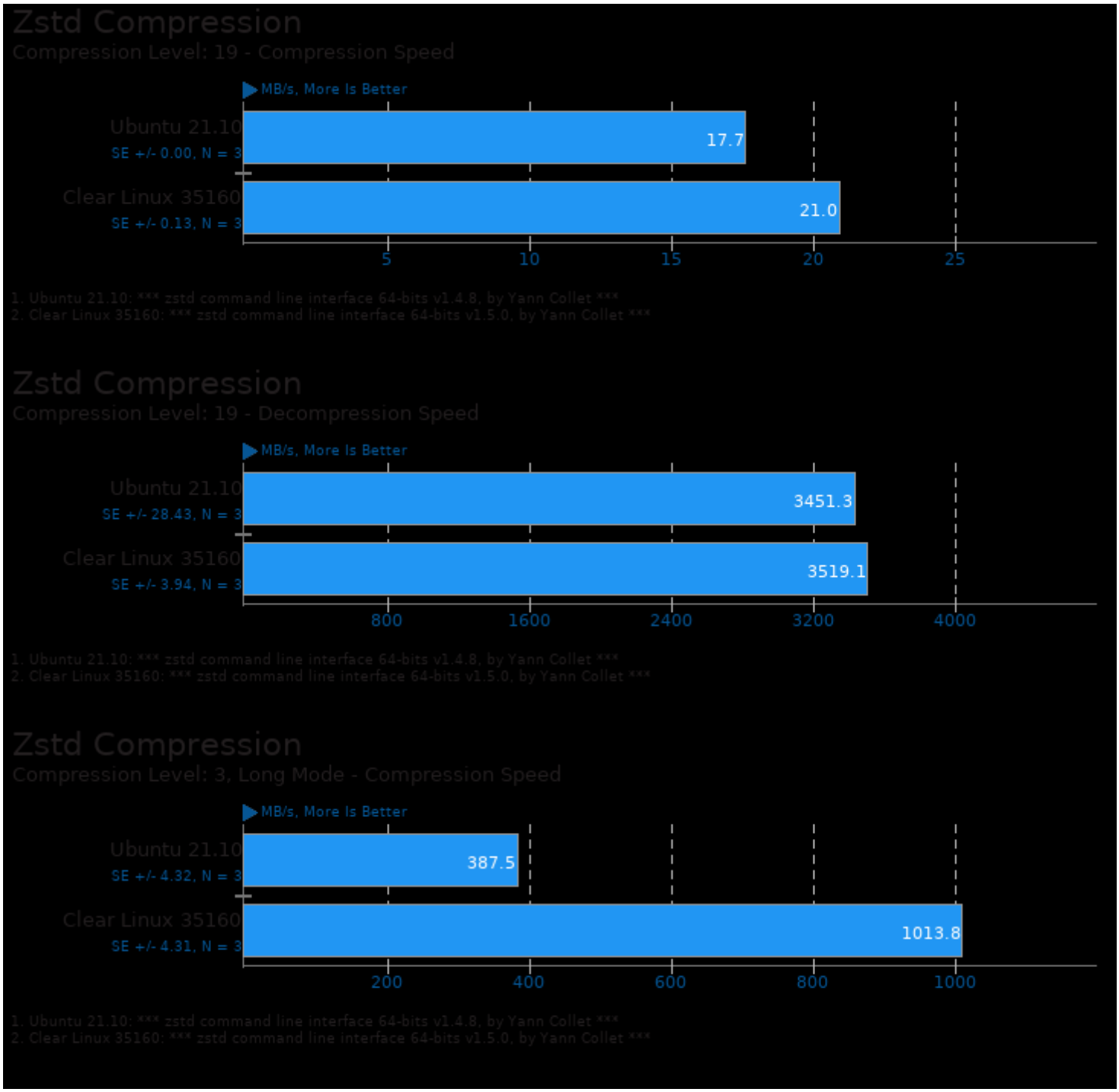


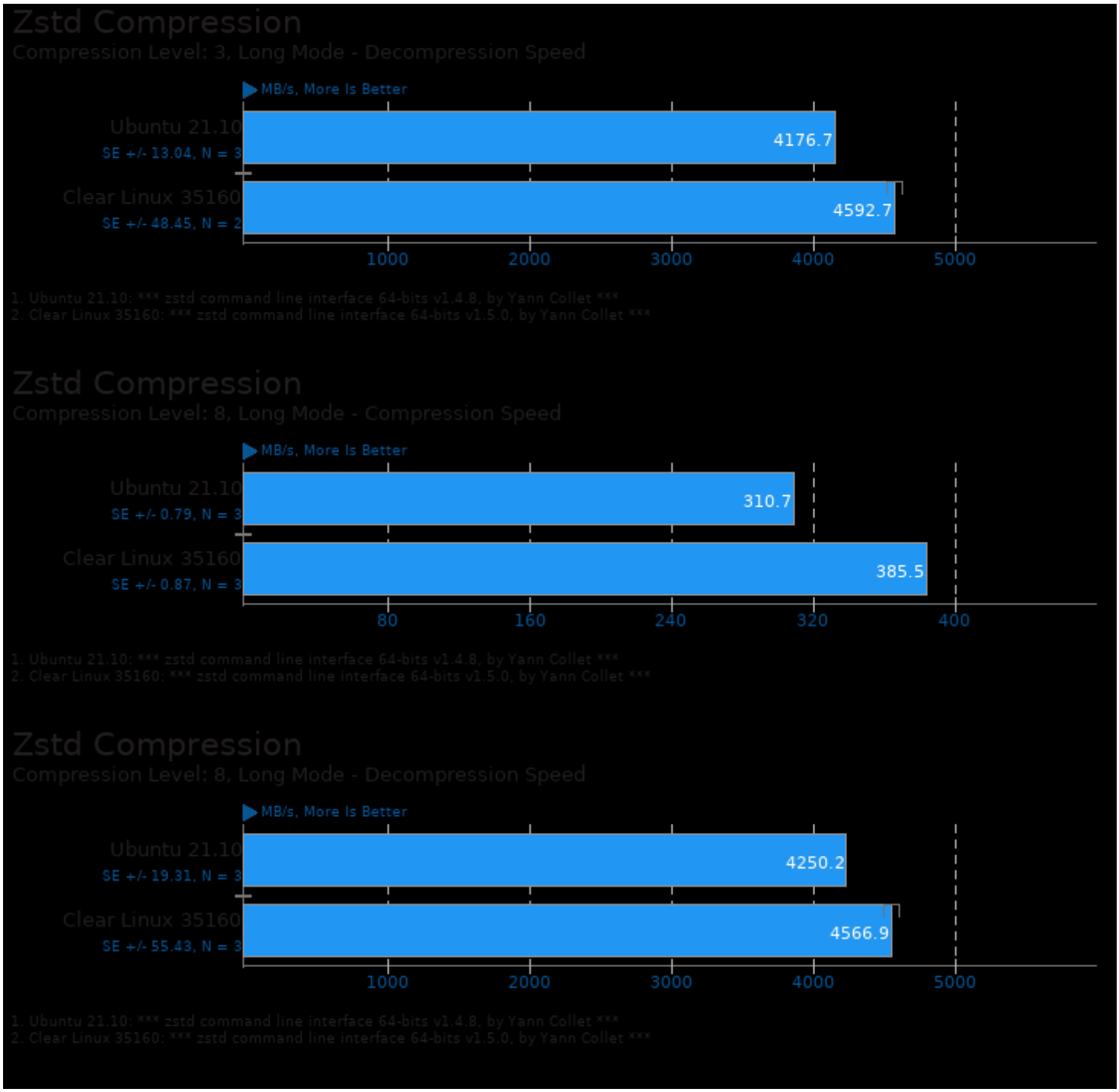

Xonotic 0.8.2
Resolution: 2256 x 1504 - Effects Quality: High
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.16, N = 3
MIN: 81 / MAX: 232
166.49
Clear Linux 35160
SE +/- 0.16, N = 3
MIN: 70 / MAX: 234
160.67
40
80
120
160
200
Xonotic 0.8.2
Resolution: 2256 x 1504 - Effects Quality: Ultra
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.37, N = 3
MIN: 60 / MAX: 205
136.39
Clear Linux 35160
SE +/- 0.29, N = 3
MIN: 52 / MAX: 200
126.54
30
60
90
120
150
Xonotic 0.8.2
Resolution: 2256 x 1504 - Effects Quality: Ultimate
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.04, N = 3
MIN: 37 / MAX: 173
104.44
Clear Linux 35160
SE +/- 0.09, N = 3
MIN: 43 / MAX: 162
93.10
20
40
60
80
100
yquake2 8.0
Renderer: Vulkan - Resolution: 1920 x 1080
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 3.70, N = 3
-O2 -fomit-frame-pointer
906.4
Clear Linux 35160
SE +/- 0.15, N = 3
-O3 -fexceptions -m64 -flto=4 -flto-objects -fno-trapping-math -mtune=skylake
125.9
200
400
600
800
1000
1. (CC) gcc options: -lm -ldl -rdynamic -shared -lSDL2 -pipe -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -mfpmath=sse -fPIC

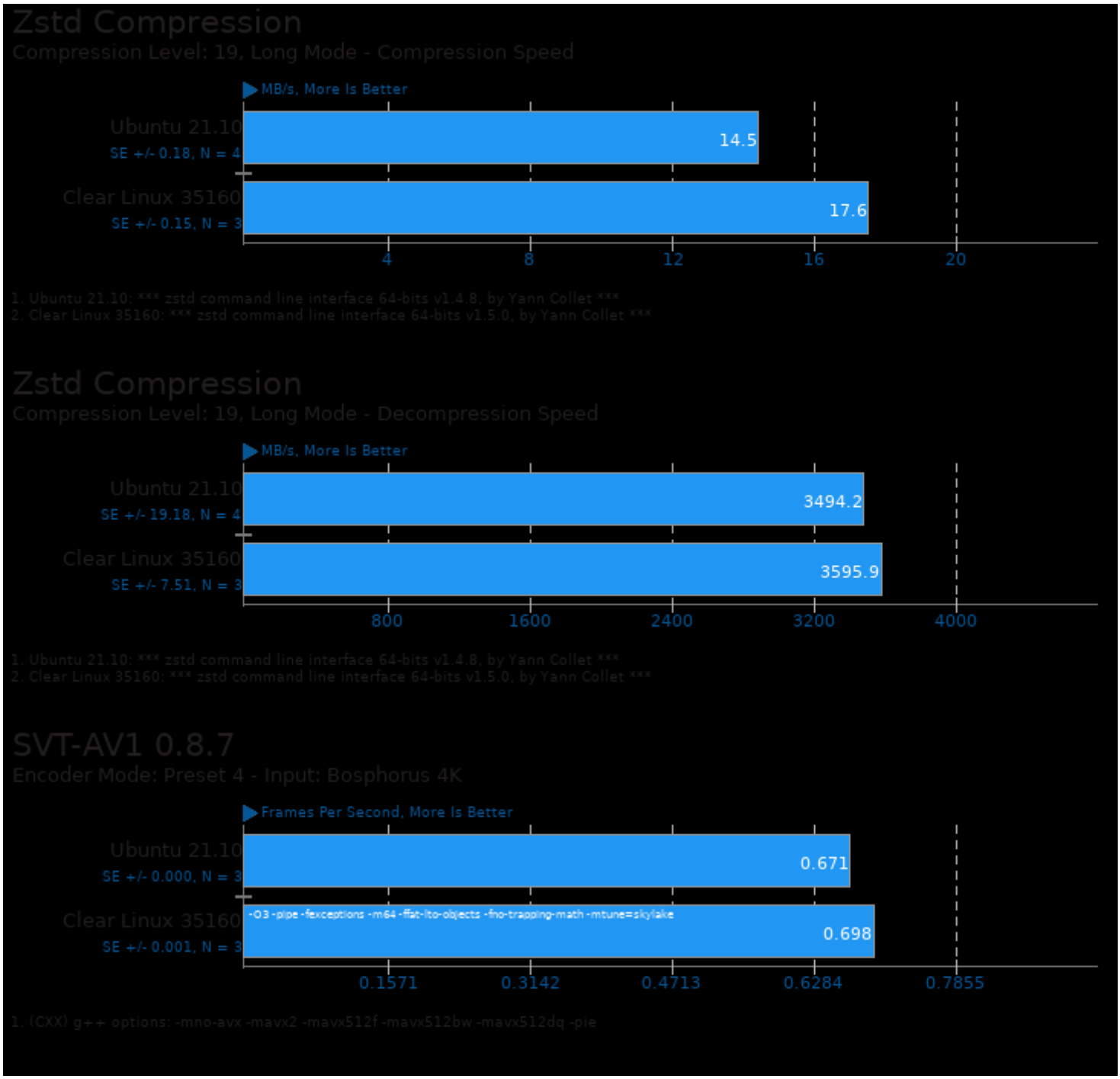

yquake2 8.0
Renderer: OpenGL 1.x - Resolution: 1920 x 1080
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.66, N = 3
-O2 -fomit-frame-pointer
314.9
Clear Linux 35160
SE +/- 7.75, N = 12
-O3 -fexceptions -m64 -flat-lto-objects -fno-trapping-math -mtune=skylake
286.6
70
140
210
280
350
1. (CC) gcc options: -lm -ldl -rdynamic -shared -lSDL2 -pipe -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -mfpmath=sse -fPIC
yquake2 8.0
Renderer: OpenGL 3.x - Resolution: 1920 x 1080
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 1.74, N = 3
-O2 -fomit-frame-pointer
385.4
Clear Linux 35160
SE +/- 4.12, N = 3
-O3 -fexceptions -m64 -flat-lto-objects -fno-trapping-math -mtune=skylake
371.5
80
160
240
320
400
1. (CC) gcc options: -lm -ldl -rdynamic -shared -lSDL2 -pipe -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -mfpmath=sse -fPIC
GLmark2 2021.08.30
Resolution: 2256 x 1504
Score, More Is Better
Ubuntu 21.10
651
Clear Linux 35160
642
140
280
420
560
700
ParaView 5.9
Test: Many Spheres - Resolution: 2256 x 1504
Frames / Sec, More Is Better
Ubuntu 21.10
SE +/- 0.03, N = 3
9.30
Clear Linux 35160
SE +/- 0.03, N = 3
8.92
3
6
9
12
15


ParaView 5.9
Test: Many Spheres - Resolution: 2256 x 1504
MiPolys / Sec, More Is Better
Ubuntu 21.10
SE +/- 3.48, N = 3
935.80
Clear Linux 35160
SE +/- 3.26, N = 3
894.31
200
400
600
800
1000
ParaView 5.9
Test: Wavelet Volume - Resolution: 2256 x 1504
Frames / Sec, More Is Better
Ubuntu 21.10
SE +/- 0.59, N = 3
70.38
Clear Linux 35160
SE +/- 0.79, N = 6
78.39
20
40
60
80
100
ParaView 5.9
Test: Wavelet Volume - Resolution: 2256 x 1504
MiVoxels / Sec, More Is Better
Ubuntu 21.10
SE +/- 9.39, N = 3
1126.06
Clear Linux 35160
SE +/- 12.66, N = 6
1254.31
300
600
900
1200
1500
ParaView 5.9
Test: Wavelet Contour - Resolution: 2256 x 1504
Frames / Sec, More Is Better
Ubuntu 21.10
SE +/- 0.48, N = 3
57.31
Clear Linux 35160
SE +/- 0.34, N = 12
49.40
13
26
39
52
65


ParaView 5.9
Test: Wavelet Contour - Resolution: 2256 x 1504
MiPolys / Sec, More Is Better
Ubuntu 21.10
SE +/- 5.01, N = 3
597.23
Clear Linux 35160
SE +/- 3.60, N = 12
514.86
130
260
390
520
650
Zstd Compression
Compression Level: 3 - Compression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 8.20, N = 3
2275.1
Clear Linux 35160
SE +/- 17.25, N = 15
2190.0
500
1000
1500
2000
2500
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 8 - Compression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 3.05, N = 3
349.5
Clear Linux 35160
SE +/- 2.26, N = 3
347.8
80
160
240
320
400
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 8 - Decompression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 42.26, N = 3
3988.4
Clear Linux 35160
SE +/- 83.69, N = 3
4172.5
900
1800
2700
3600
4500
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***

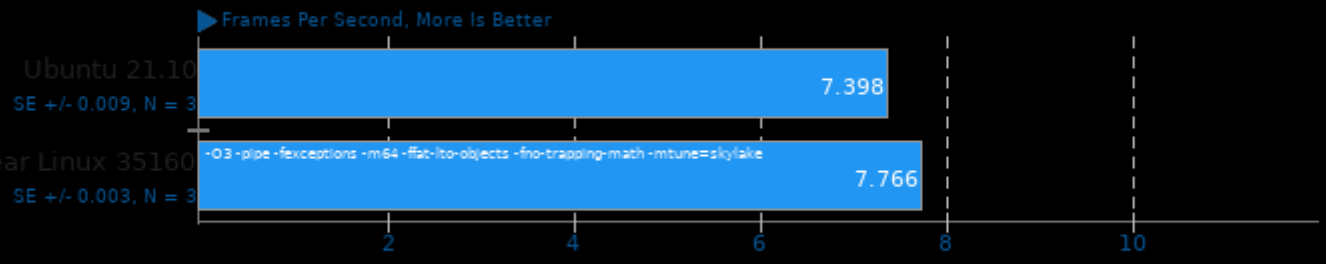

Zstd Compression
Compression Level: 19 - Compression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 0.00, N = 3
17.7
Clear Linux 35160
SE +/- 0.13, N = 3
21.0
5
10
15
20
25
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 19 - Decompression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 28.43, N = 3
3451.3
Clear Linux 35160
SE +/- 3.94, N = 3
3519.1
800
1600
2400
3200
4000
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 3, Long Mode - Compression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 4.32, N = 3
387.5
Clear Linux 35160
SE +/- 4.31, N = 3
1013.8
200
400
600
800
1000
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***


Zstd Compression
Compression Level: 3, Long Mode - Decompression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 13.04, N = 3
4176.7
Clear Linux 35160
SE +/- 48.45, N = 2
4592.7
1000
2000
3000
4000
5000
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 8, Long Mode - Compression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 0.79, N = 3
310.7
Clear Linux 35160
SE +/- 0.87, N = 3
385.5
80
160
240
320
400
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 8, Long Mode - Decompression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 19.31, N = 3
4250.2
Clear Linux 35160
SE +/- 55.43, N = 3
4566.9
1000
2000
3000
4000
5000
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***


Zstd Compression
Compression Level: 19, Long Mode - Compression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 0.18, N = 4
14.5
Clear Linux 35160
SE +/- 0.15, N = 3
17.6
4
8
12
16
20
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Zstd Compression
Compression Level: 19, Long Mode - Decompression Speed
MB/s, More Is Better
Ubuntu 21.10
SE +/- 19.18, N = 4
3494.2
Clear Linux 35160
SE +/- 7.51, N = 3
3595.9
800
1600
2400
3200
4000
1. Ubuntu 21.10: *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***
2. Clear Linux 35160: *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
SVT-AV1 0.8.7
Encoder Mode: Preset 4 - Input: Bosphorus 4K
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.000, N = 3
0.671
Clear Linux 35160
SE +/- 0.001, N = 3
-O3 -pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake
0.698
0.1571
0.3142
0.4713
0.6284
0.7855
1. (CXX) g++ options: -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq -pie

SVT-AV1 0.8.7

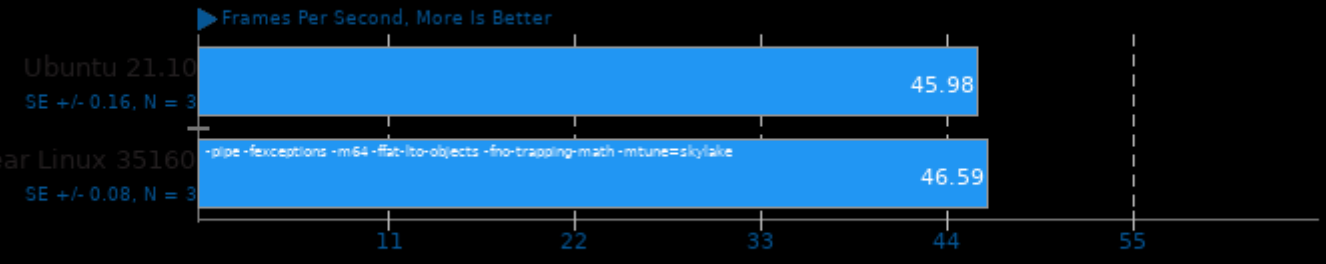
Encoder Mode: Preset 8 - Input: Bosphorus 4K



1. (CXX) g++ options: -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq -pie

SVT-HEVC 1.5.0

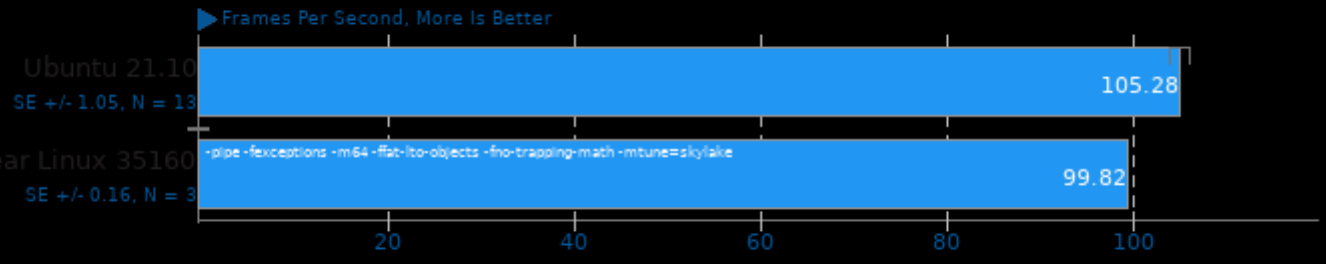
Tuning: 7 - Input: Bosphorus 1080p



1. (CC) gcc options: -fPIE -fPIC -O3 -O2 -pie -rdynamic -lpthread -lrt

SVT-HEVC 1.5.0

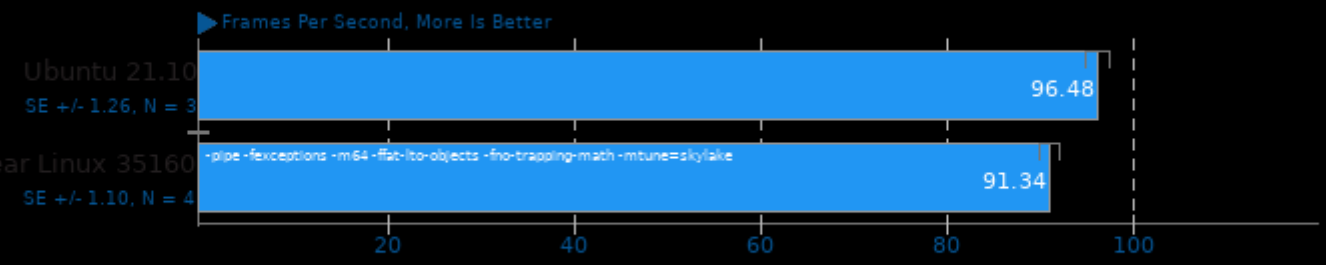
Tuning: 10 - Input: Bosphorus 1080p



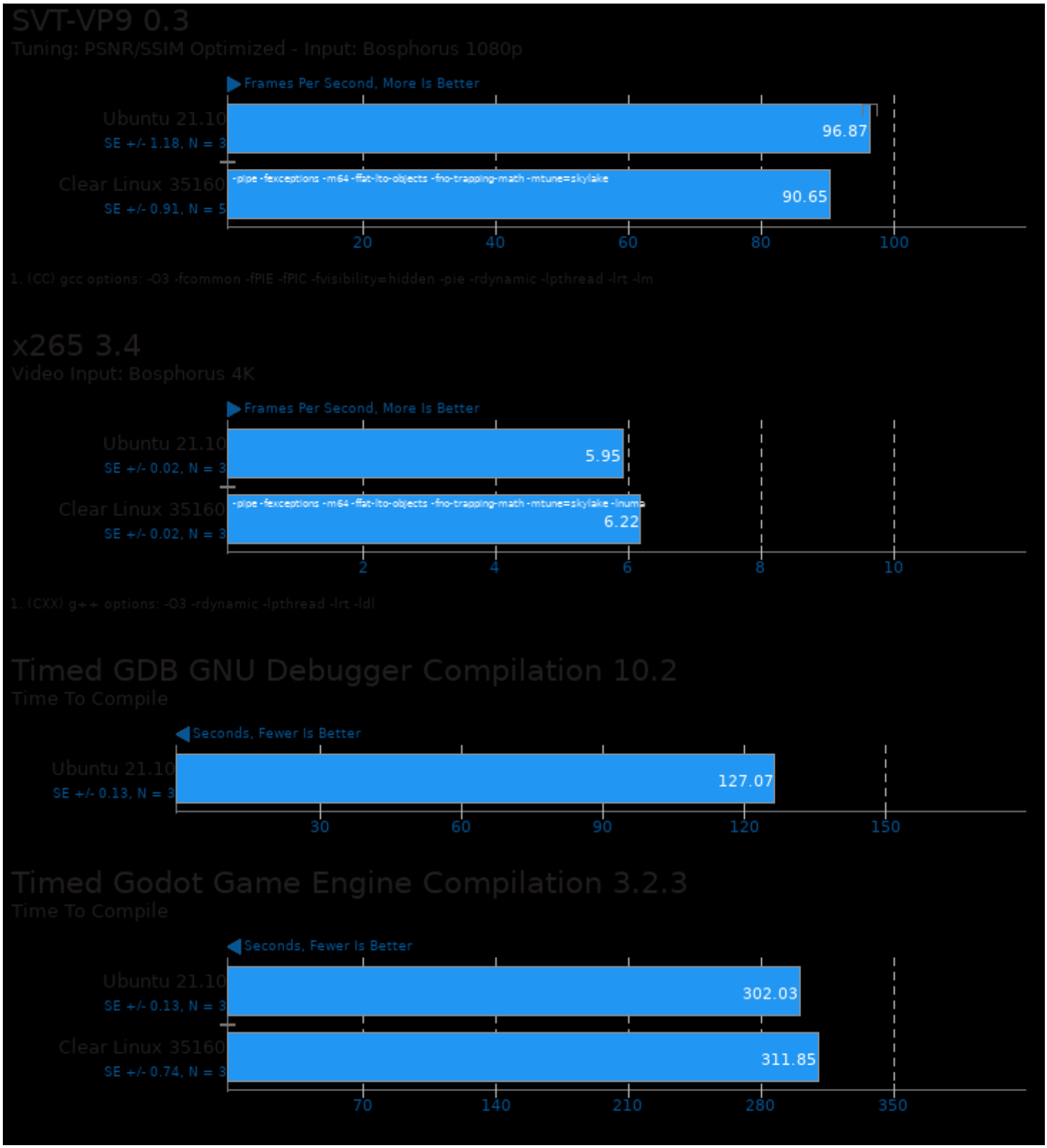
1. (CC) gcc options: -fPIE -fPIC -O3 -O2 -pie -rdynamic -lpthread -lrt

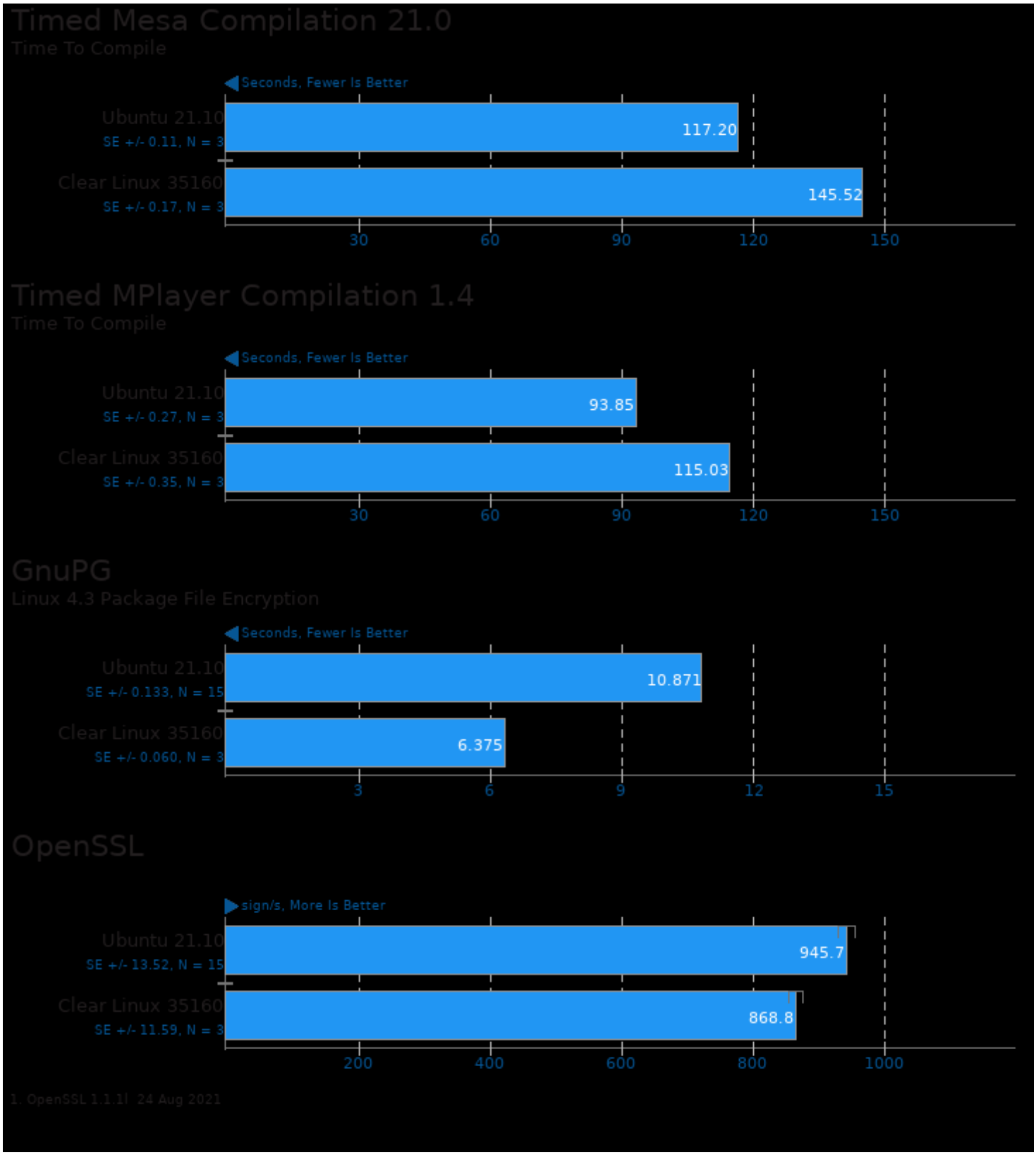
SVT-VP9 0.3

Tuning: VMAF Optimized - Input: Bosphorus 1080p

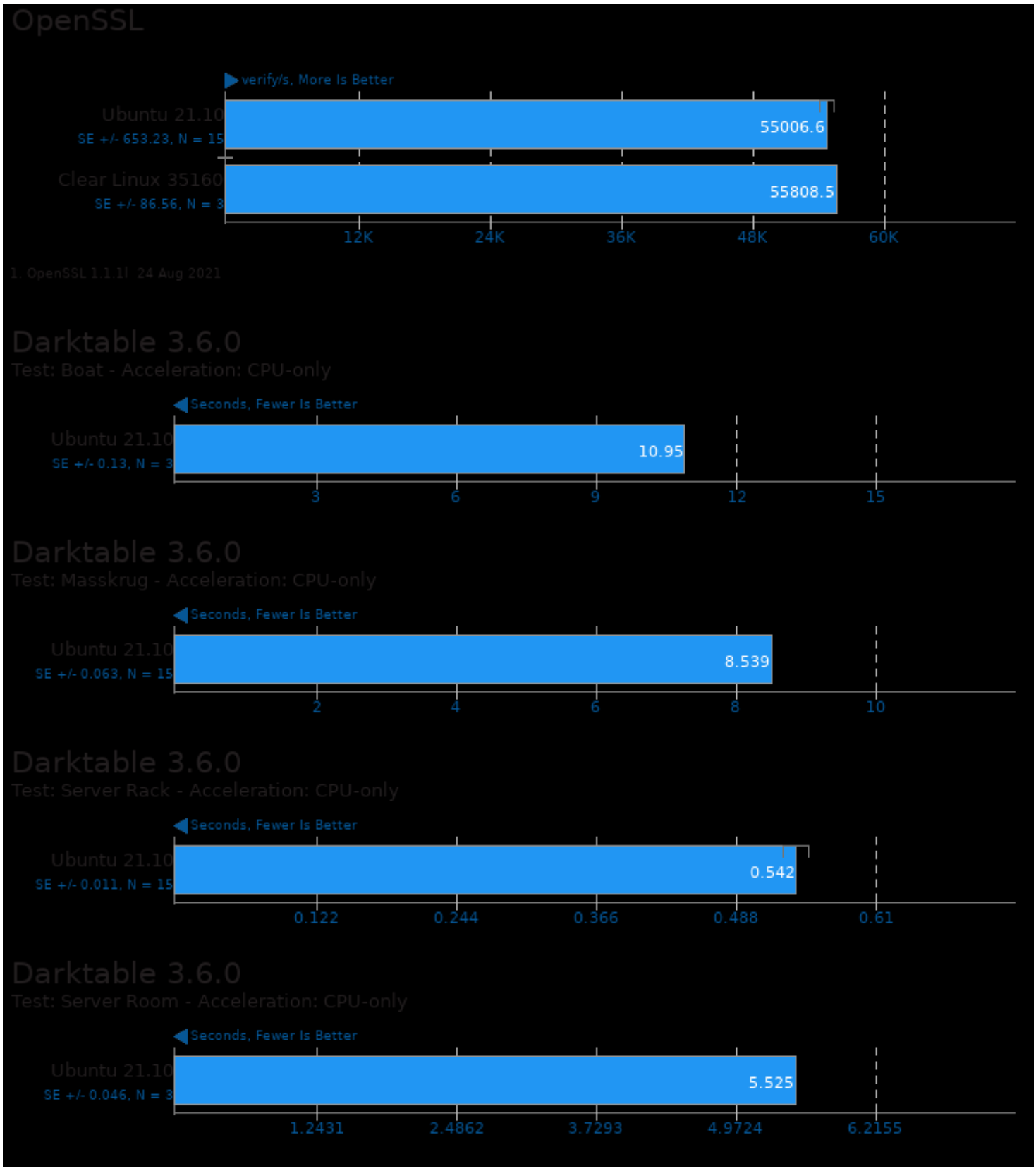


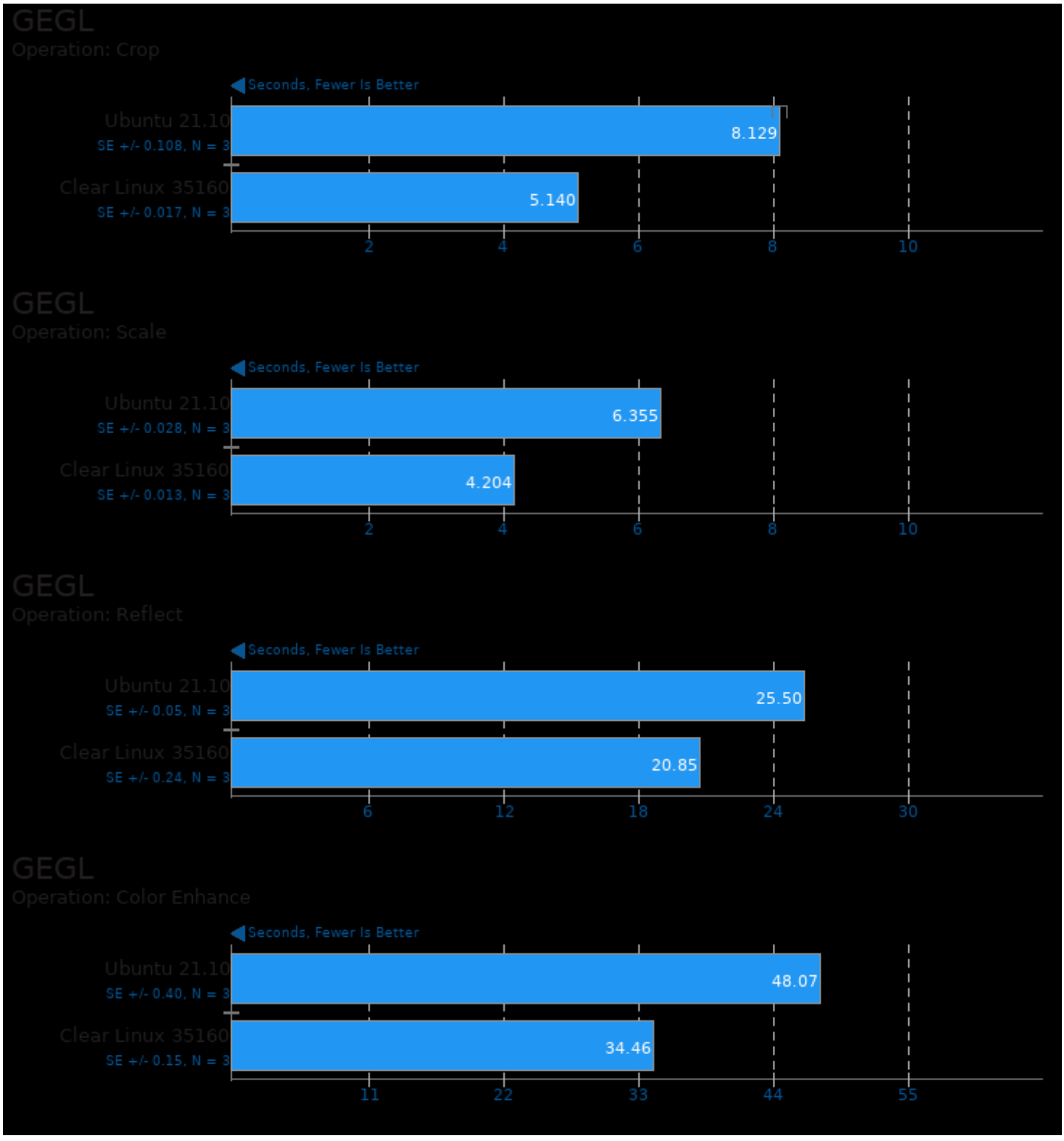
1. (CC) gcc options: -O3 -fcommon -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm


SVT-VP9 0.3
Tuning: PSNR/SSIM Optimized - Input: Bosphorus 1080p
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 1.18, N = 3
96.87
Clear Linux 35160
SE +/- 0.91, N = 5
-pipe -fexceptions -m64 -flto=auto -ffat-lto-objects -fno-trapping-math -mtune=skylake
90.65
20
40
60
80
100
1. (CC) gcc options: -O3 -fcommon -fPIE -fPIC -fvisibility=hidden -pie -rdynamic -lpthread -lrt -lm
x265 3.4
Video Input: Bosphorus 4K
Frames Per Second, More Is Better
Ubuntu 21.10
SE +/- 0.02, N = 3
5.95
Clear Linux 35160
SE +/- 0.02, N = 3
-pipe -fexceptions -m64 -flto=auto -ffat-lto-objects -fno-trapping-math -mtune=skylake -lnuma
6.22
2
4
6
8
10
1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl
Timed GDB GNU Debugger Compilation 10.2
Time To Compile
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.13, N = 3
127.07
30
60
90
120
150
Timed Godot Game Engine Compilation 3.2.3
Time To Compile
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.13, N = 3
302.03
Clear Linux 35160
SE +/- 0.74, N = 3
311.85
70
140
210
280
350


Timed Mesa Compilation 21.0
Time To Compile
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.11, N = 3
117.20
Clear Linux 35160
SE +/- 0.17, N = 3
145.52
30
60
90
120
150
Timed MPlayer Compilation 1.4
Time To Compile
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.27, N = 3
93.85
Clear Linux 35160
SE +/- 0.35, N = 3
115.03
30
60
90
120
150
GnuPG
Linux 4.3 Package File Encryption
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.133, N = 15
10.871
Clear Linux 35160
SE +/- 0.060, N = 3
6.375
3
6
9
12
15
OpenSSL
sign/s, More Is Better
Ubuntu 21.10
SE +/- 13.52, N = 15
945.7
Clear Linux 35160
SE +/- 11.59, N = 3
868.8
200
400
600
800
1000
1. OpenSSL 1.1.1l 24 Aug 2021

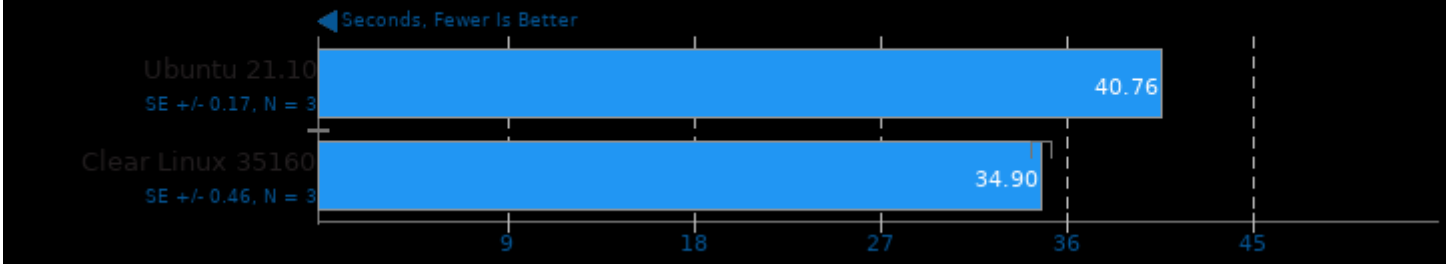
Framework Laptop Linux Distros



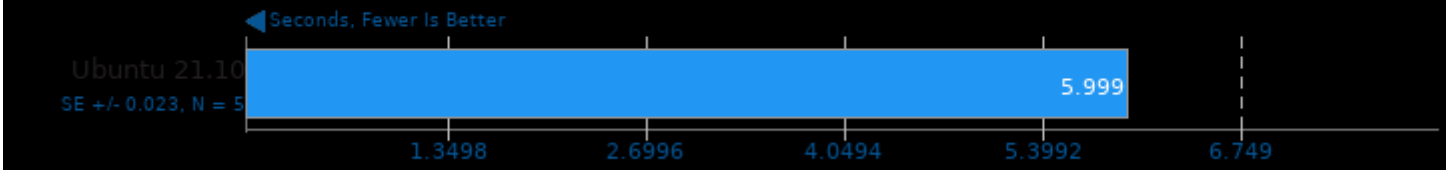

GEGL
Operation: Crop
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.108, N = 3
8.129
Clear Linux 35160
SE +/- 0.017, N = 3
5.140
2
4
6
8
10
GEGL
Operation: Scale
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.028, N = 3
6.355
Clear Linux 35160
SE +/- 0.013, N = 3
4.204
2
4
6
8
10
GEGL
Operation: Reflect
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.05, N = 3
25.50
Clear Linux 35160
SE +/- 0.24, N = 3
20.85
6
12
18
24
30
GEGL
Operation: Color Enhance
Seconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.40, N = 3
48.07
Clear Linux 35160
SE +/- 0.15, N = 3
34.46
11
22
33
44
55

GEGL

Operation: Rotate 90 Degrees

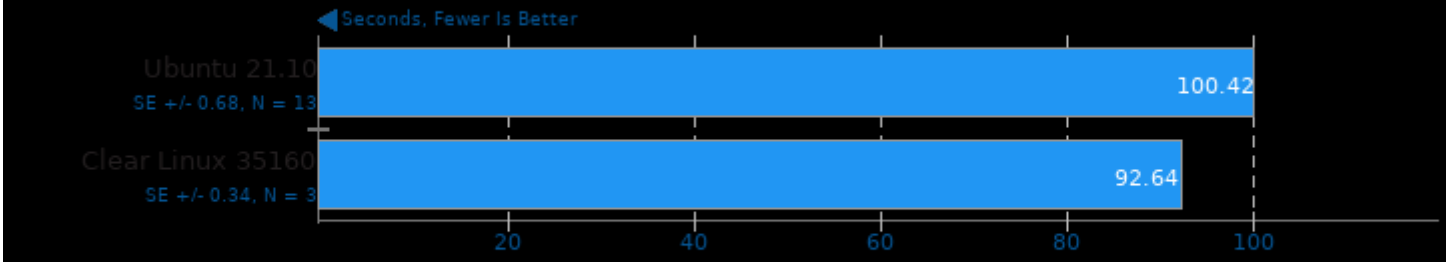


GNU Octave Benchmark 6.2.0



RawTherapee

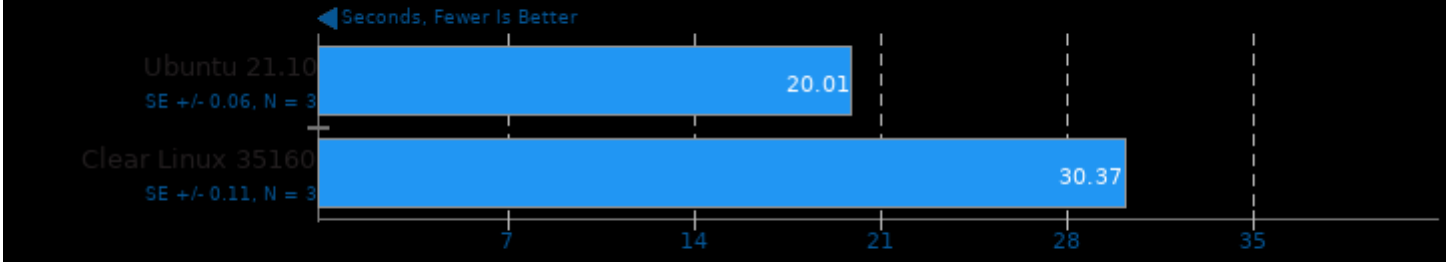
Total Benchmark Time



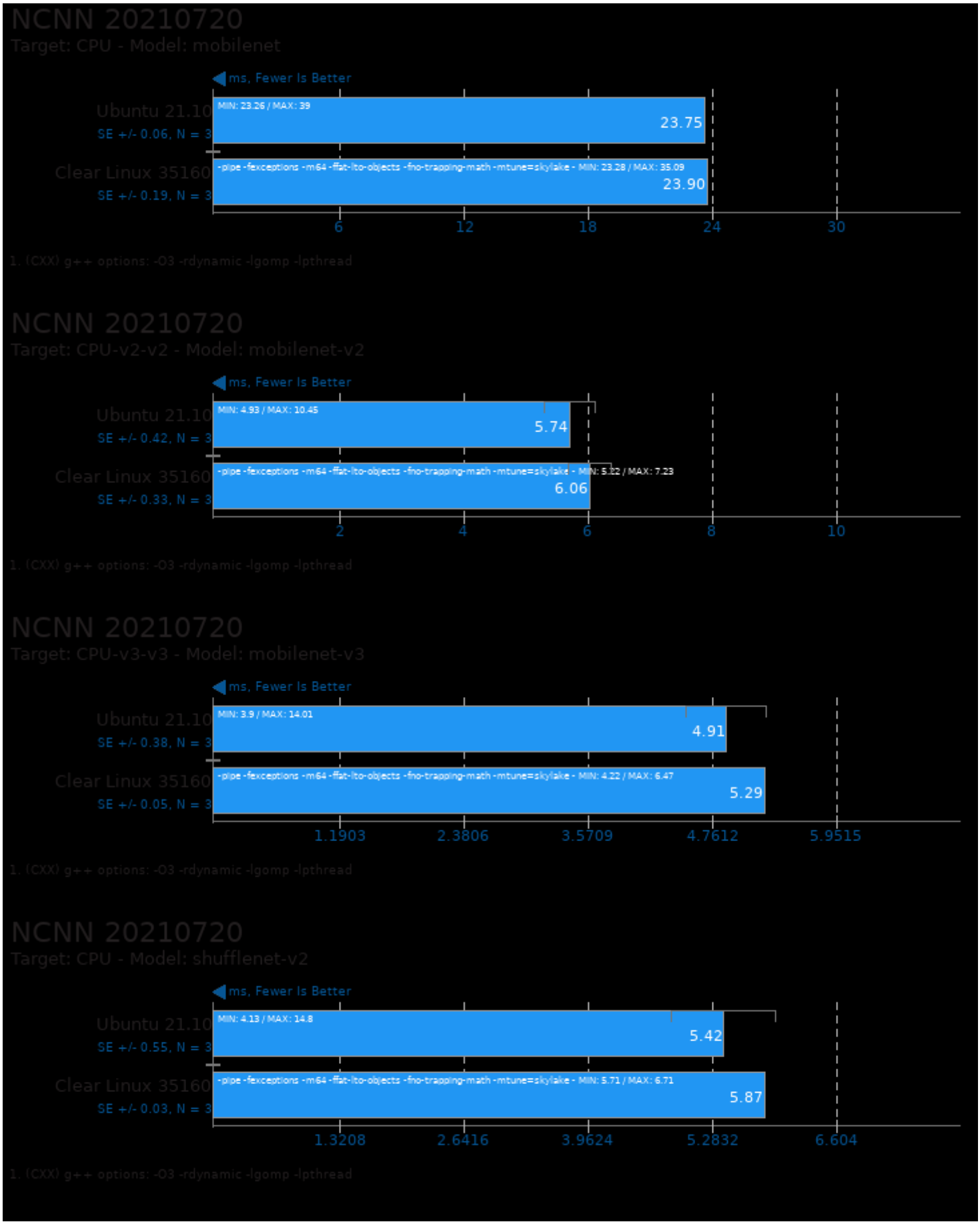
1. Ubuntu 21.10: RawTherapee, version 5.8, command line.
2. Clear Linux 35160: RawTherapee, version , command line.

librsvg

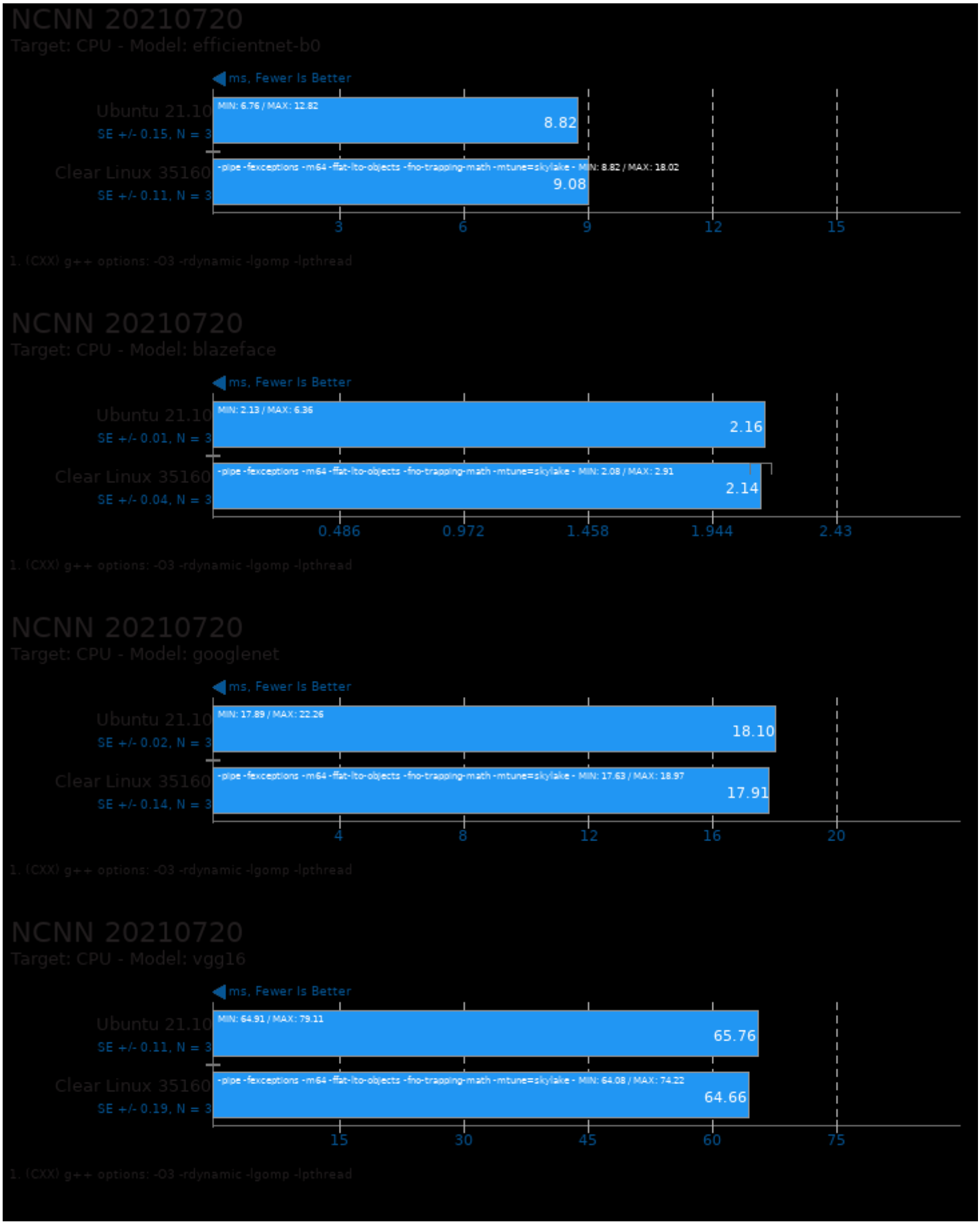
Operation: SVG Files To PNG

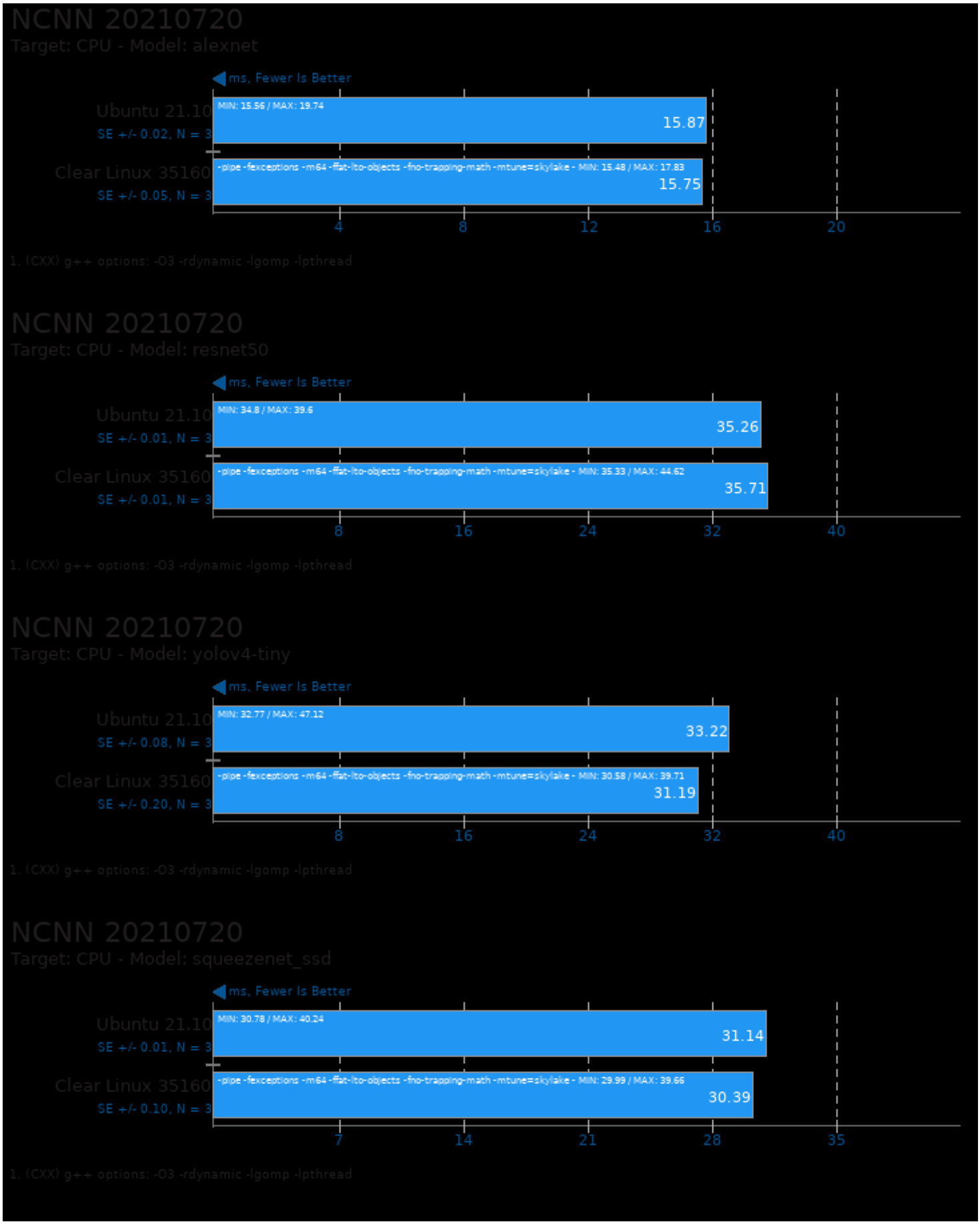


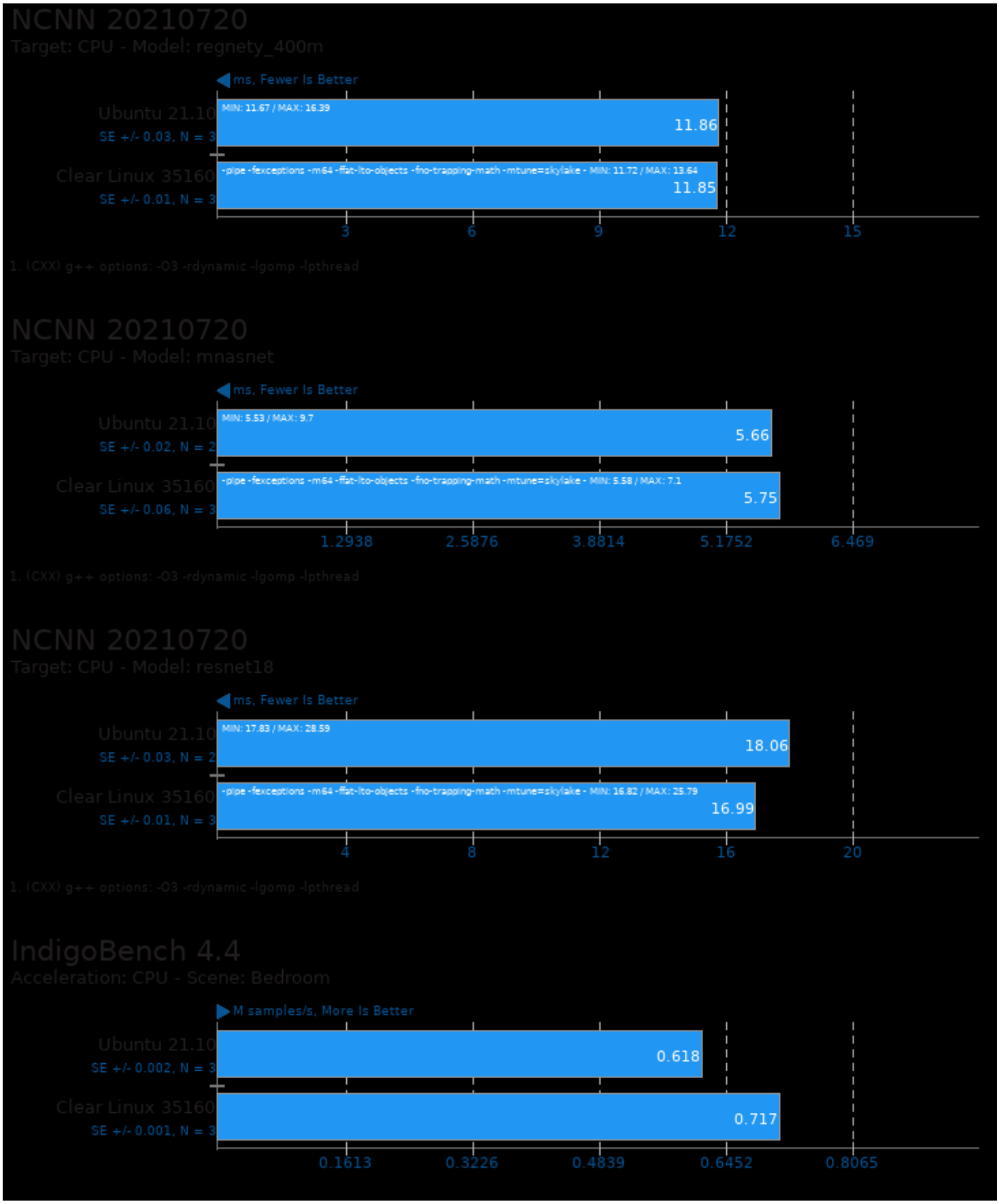
1. Ubuntu 21.10: rsvg-convert version 2.50.7
2. Clear Linux 35160: rsvg-convert version 2.52.2


NCNN 20210720
Target: CPU - Model: mobilenet
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.06, N = 3
MIN: 23.26 / MAX: 39
23.75
Clear Linux 35160
SE +/- 0.19, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 23.28 / MAX: 35.09
23.90
6
12
18
24
30
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU-v2-v2 - Model: mobilenet-v2
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.42, N = 3
MIN: 4.93 / MAX: 10.45
5.74
Clear Linux 35160
SE +/- 0.33, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 5.22 / MAX: 7.23
6.06
2
4
6
8
10
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU-v3-v3 - Model: mobilenet-v3
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.38, N = 3
MIN: 3.9 / MAX: 14.01
4.91
Clear Linux 35160
SE +/- 0.05, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 4.22 / MAX: 6.47
5.29
1.1903
2.3806
3.5709
4.7612
5.9515
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: shufflenet-v2
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.55, N = 3
MIN: 4.13 / MAX: 14.8
5.42
Clear Linux 35160
SE +/- 0.03, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 5.71 / MAX: 6.71
5.87
1.3208
2.6416
3.9624
5.2832
6.604
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

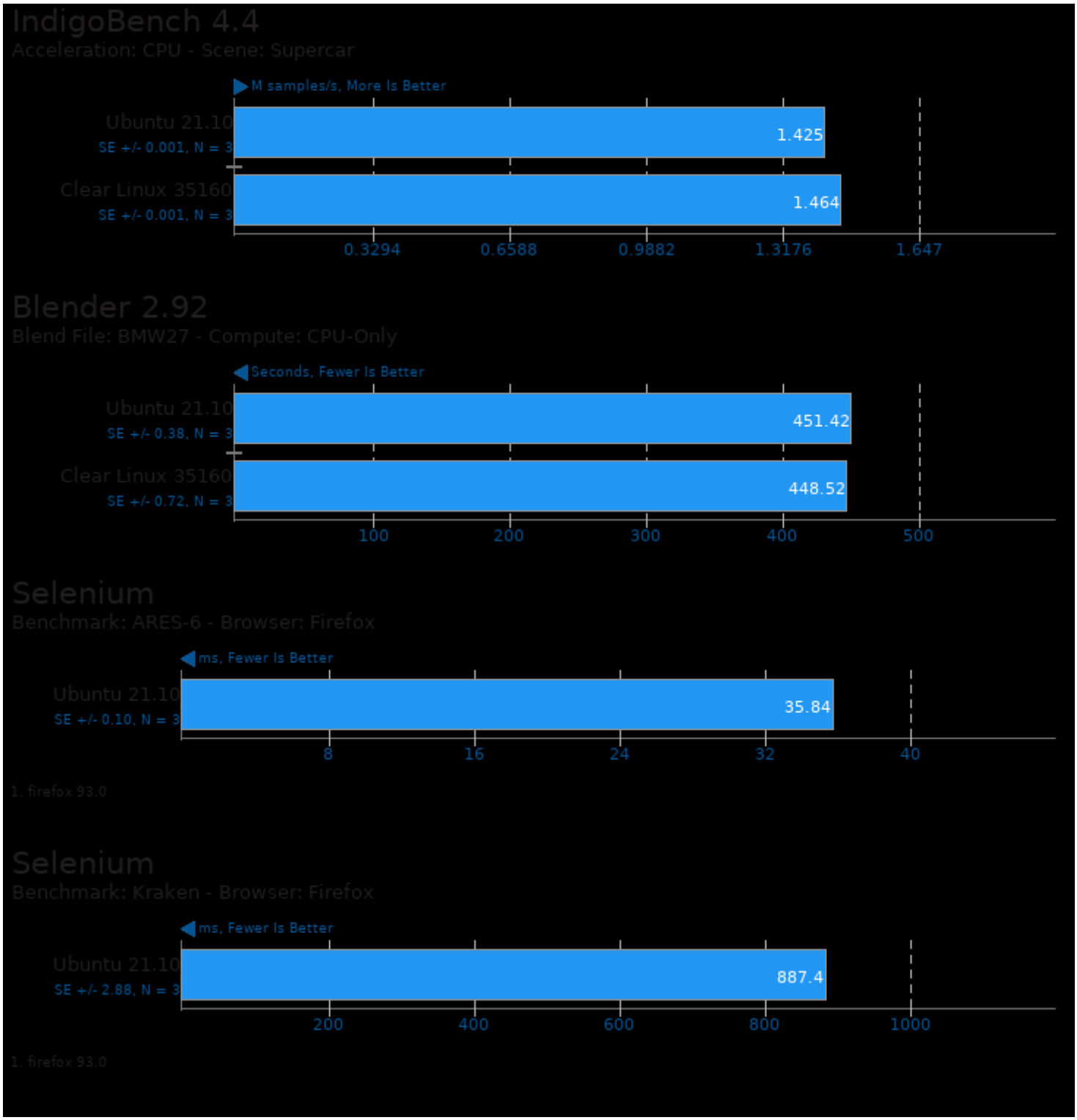
Framework Laptop Linux Distros

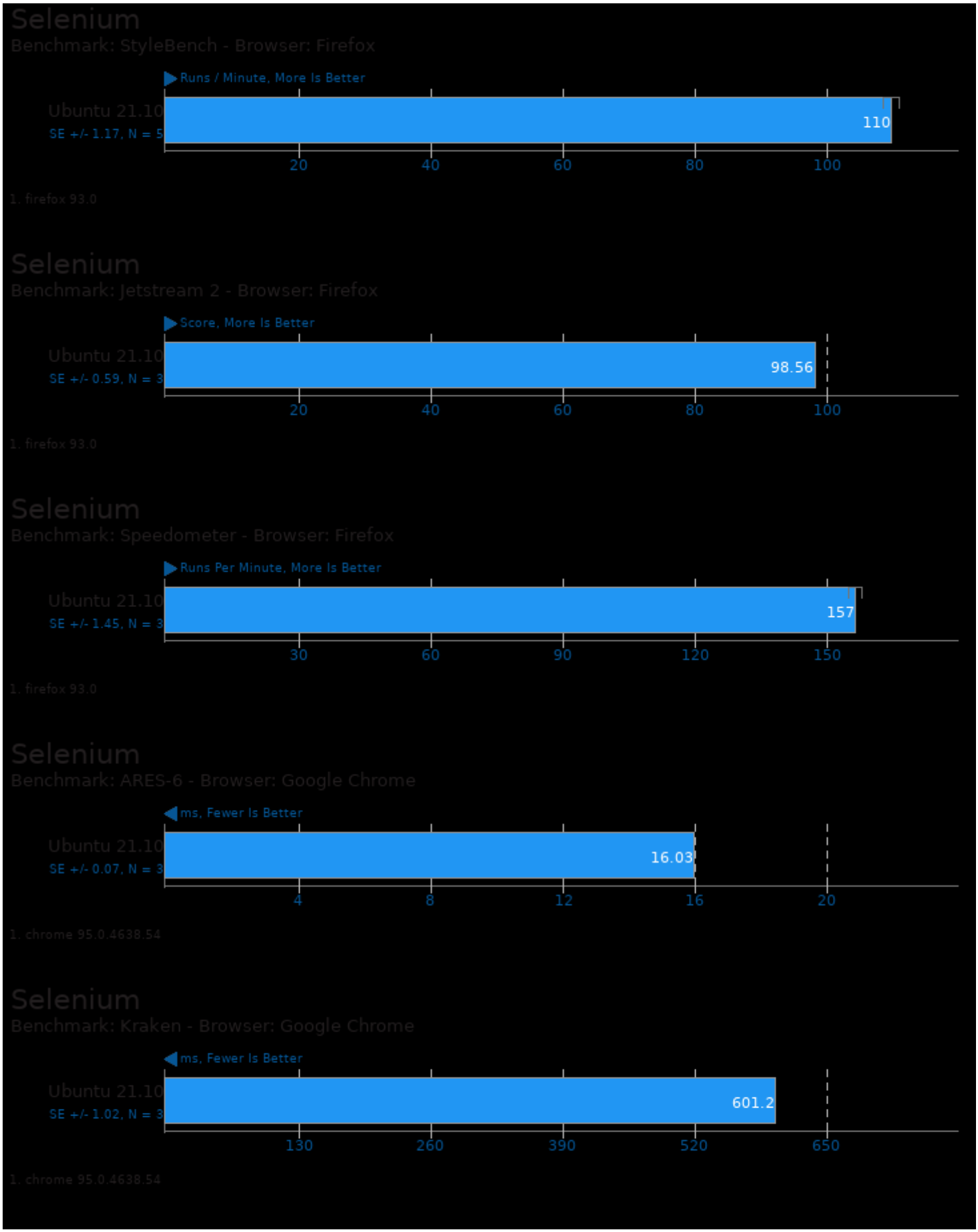



NCNN 20210720
Target: CPU - Model: alexnet
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.02, N = 3
MIN: 15.56 / MAX: 19.74
15.87
Clear Linux 35160
SE +/- 0.05, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 15.48 / MAX: 17.83
15.75
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: resnet50
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.01, N = 3
MIN: 34.8 / MAX: 39.6
35.26
Clear Linux 35160
SE +/- 0.01, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 35.33 / MAX: 44.62
35.71
8
16
24
32
40
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: yolov4-tiny
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.08, N = 3
MIN: 32.77 / MAX: 47.12
33.22
Clear Linux 35160
SE +/- 0.20, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 30.58 / MAX: 39.71
31.19
8
16
24
32
40
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: squeezenet_ssd
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.01, N = 3
MIN: 30.78 / MAX: 40.24
31.14
Clear Linux 35160
SE +/- 0.10, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 29.99 / MAX: 39.66
30.39
7
14
21
28
35
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread


NCNN 20210720
Target: CPU - Model: regnety_400m
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.03, N = 3
MIN: 11.67 / MAX: 16.39
11.86
Clear Linux 35160
SE +/- 0.01, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 11.72 / MAX: 13.64
11.85
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: mnasnet
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.02, N = 2
MIN: 5.53 / MAX: 9.7
5.66
Clear Linux 35160
SE +/- 0.06, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 5.58 / MAX: 7.1
5.75
1.2938
2.5876
3.8814
5.1752
6.469
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20210720
Target: CPU - Model: resnet18
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.03, N = 2
MIN: 17.83 / MAX: 28.59
18.06
Clear Linux 35160
SE +/- 0.01, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake - MIN: 16.82 / MAX: 25.79
16.99
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
IndigoBench 4.4
Acceleration: CPU - Scene: Bedroom
M samples/s, More Is Better
Ubuntu 21.10
SE +/- 0.002, N = 3
0.618
Clear Linux 35160
SE +/- 0.001, N = 3
0.717
0.1613
0.3226
0.4839
0.6452
0.8065

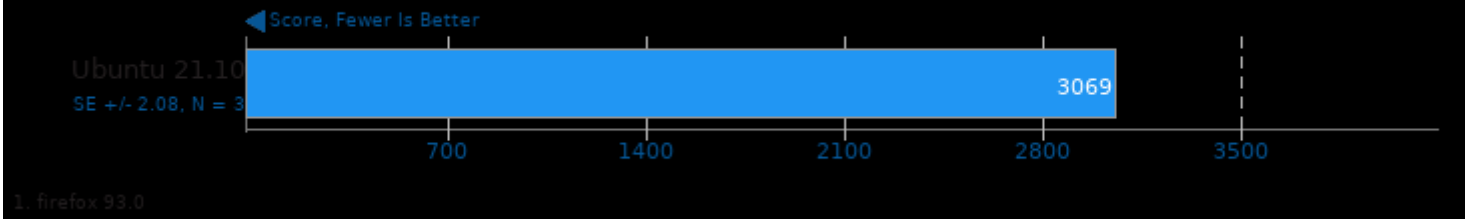
Framework Laptop Linux Distros




Selenium
Benchmark: StyleBench - Browser: Firefox
Runs / Minute, More Is Better
Ubuntu 21.10
SE +/- 1.17, N = 5
110
20
40
60
80
100
1. firefox 93.0
Selenium
Benchmark: Jetstream 2 - Browser: Firefox
Score, More Is Better
Ubuntu 21.10
SE +/- 0.59, N = 3
98.56
20
40
60
80
100
1. firefox 93.0
Selenium
Benchmark: Speedometer - Browser: Firefox
Runs Per Minute, More Is Better
Ubuntu 21.10
SE +/- 1.45, N = 3
157
30
60
90
120
150
1. firefox 93.0
Selenium
Benchmark: ARES-6 - Browser: Google Chrome
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.07, N = 3
16.03
4
8
12
16
20
1. chrome 95.0.4638.54
Selenium
Benchmark: Kraken - Browser: Google Chrome
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 1.02, N = 3
601.2
130
260
390
520
650
1. chrome 95.0.4638.54

Framework Laptop Linux Distros

Selenium
Benchmark: PSPDFKit WASM - Browser: Firefox



1. firefox 93.0

Selenium
Benchmark: StyleBench - Browser: Google Chrome

1. chrome 95.0.4638.54

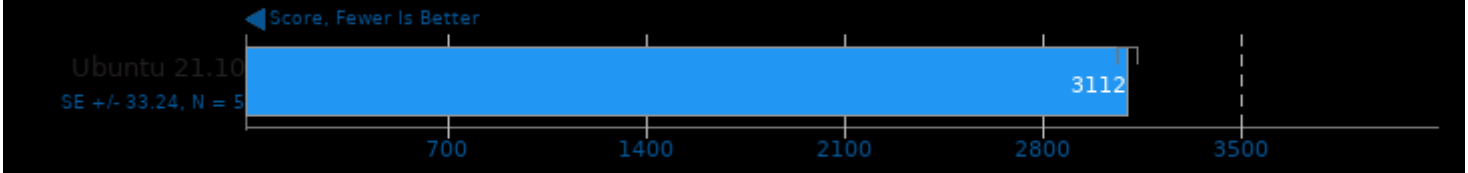
Selenium
Benchmark: Jetstream 2 - Browser: Google Chrome

1. chrome 95.0.4638.54

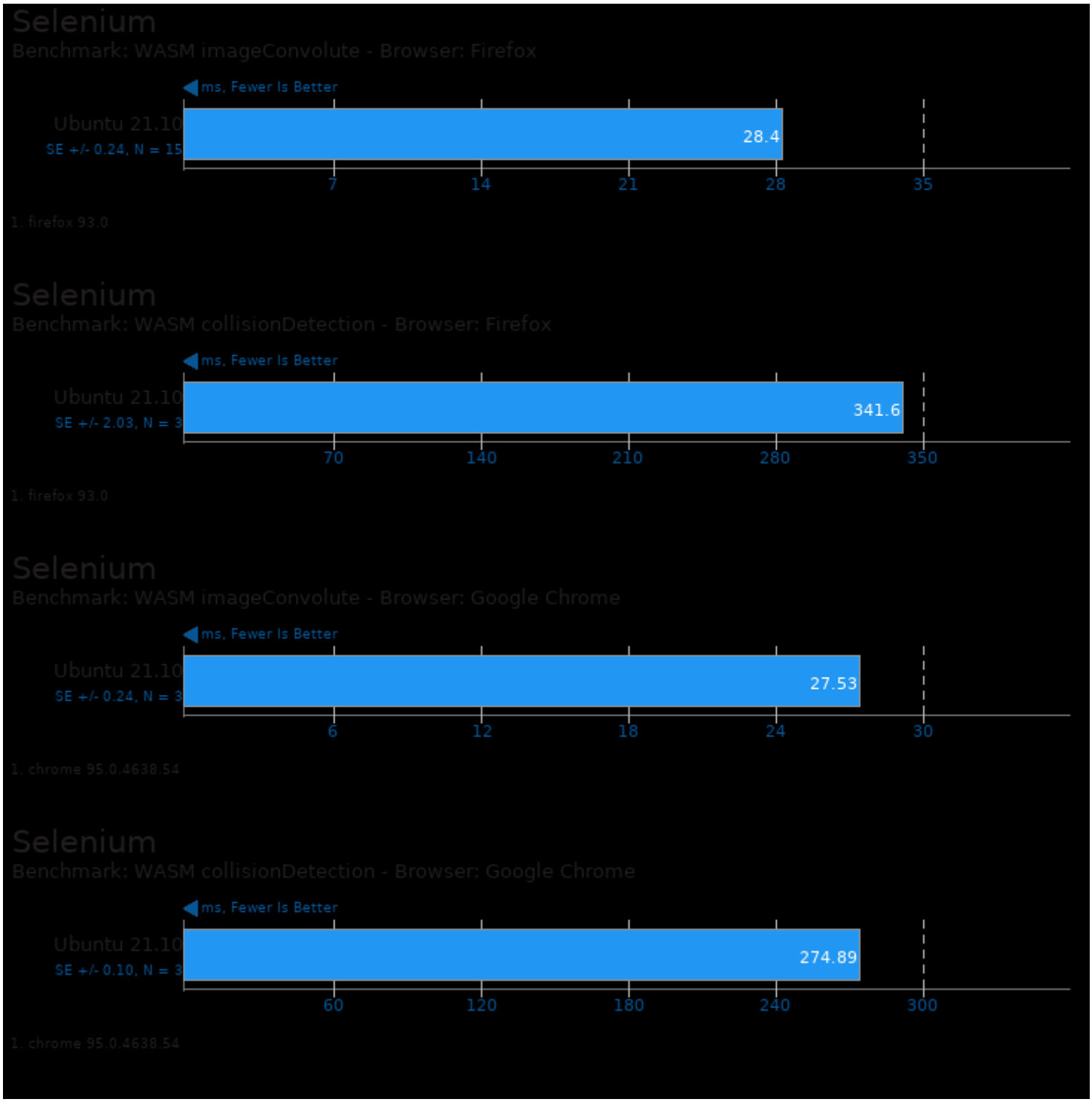
Selenium
Benchmark: Speedometer - Browser: Google Chrome

1. chrome 95.0.4638.54

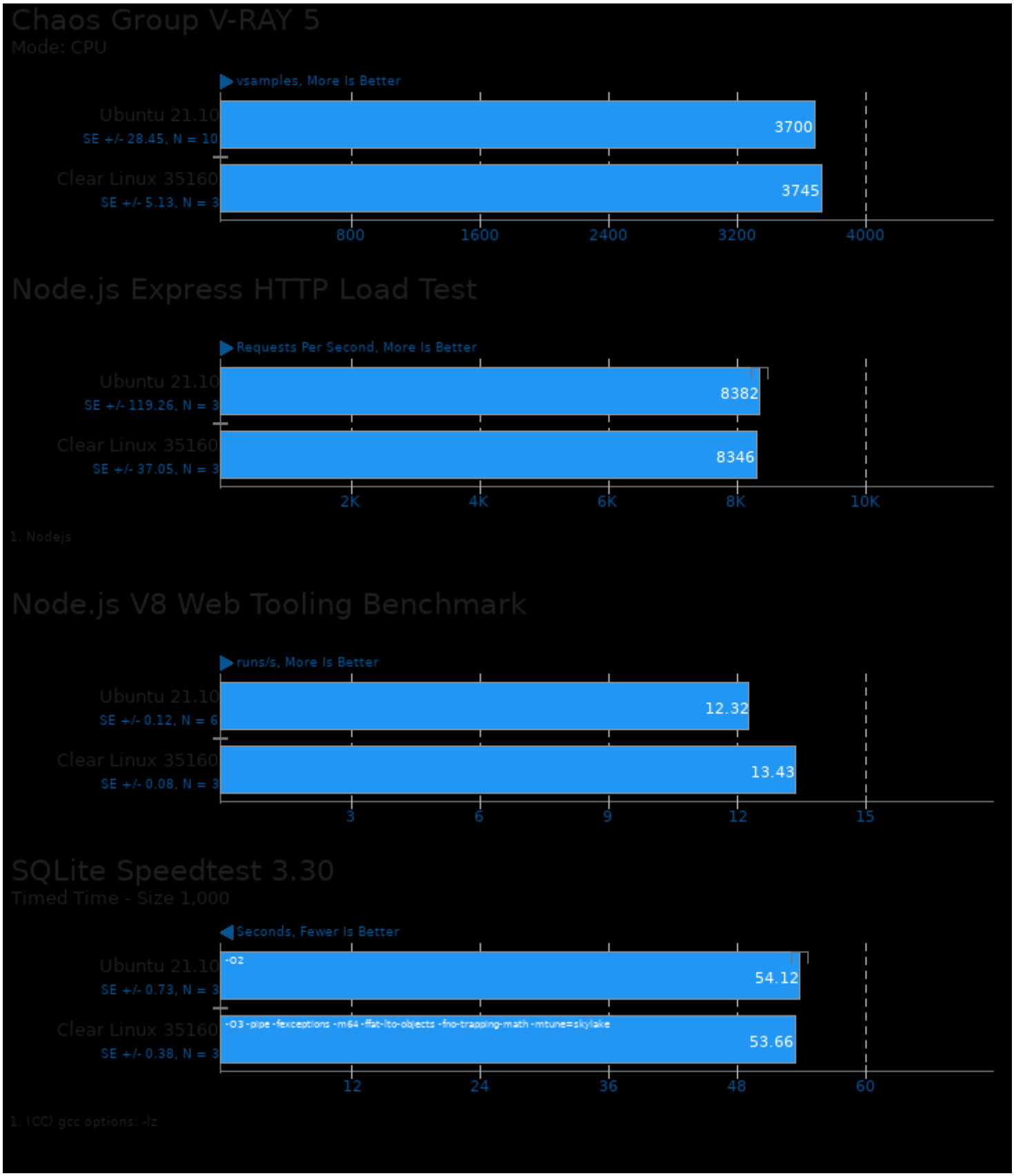
Selenium
Benchmark: PSPDFKit WASM - Browser: Google Chrome

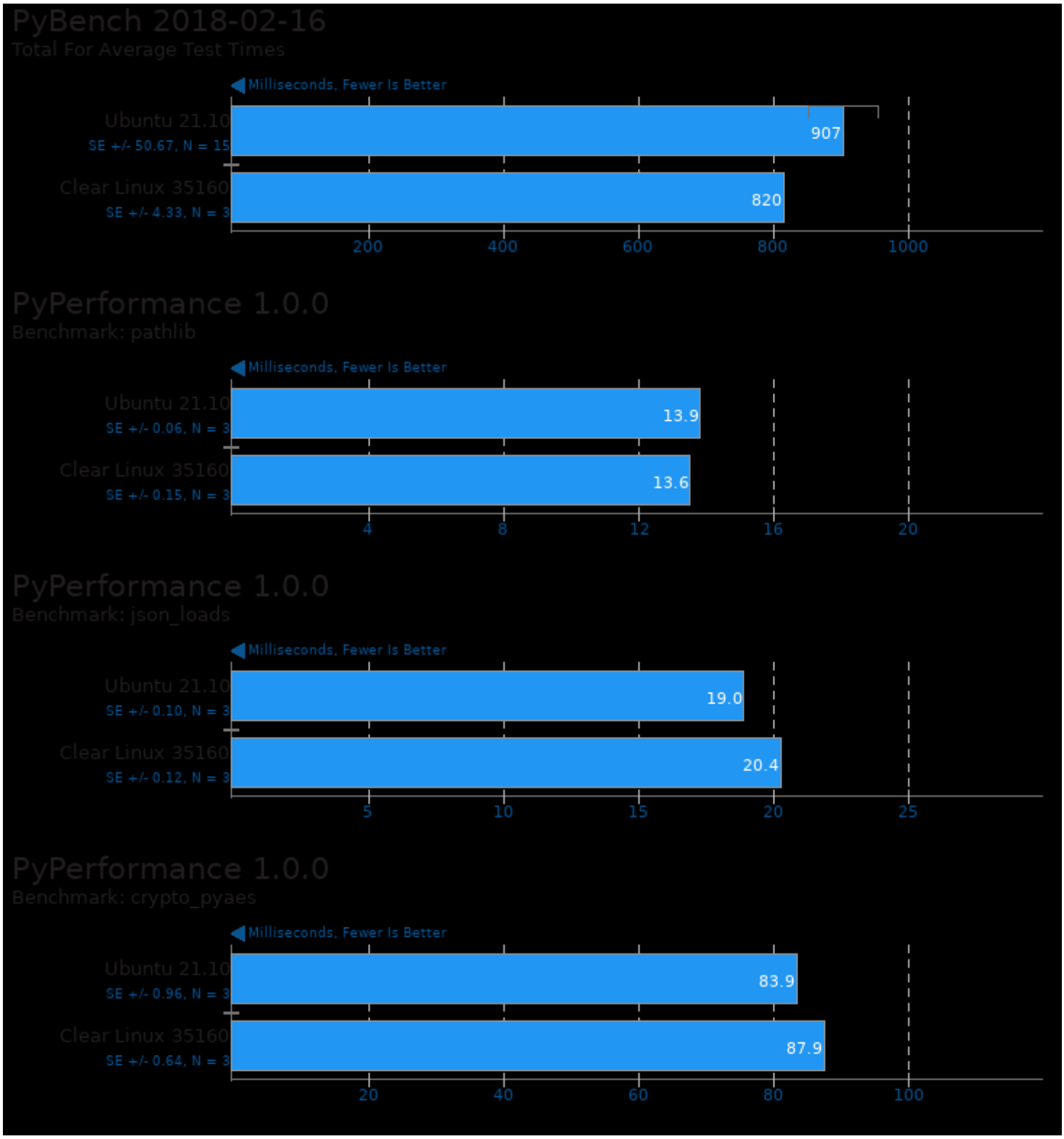


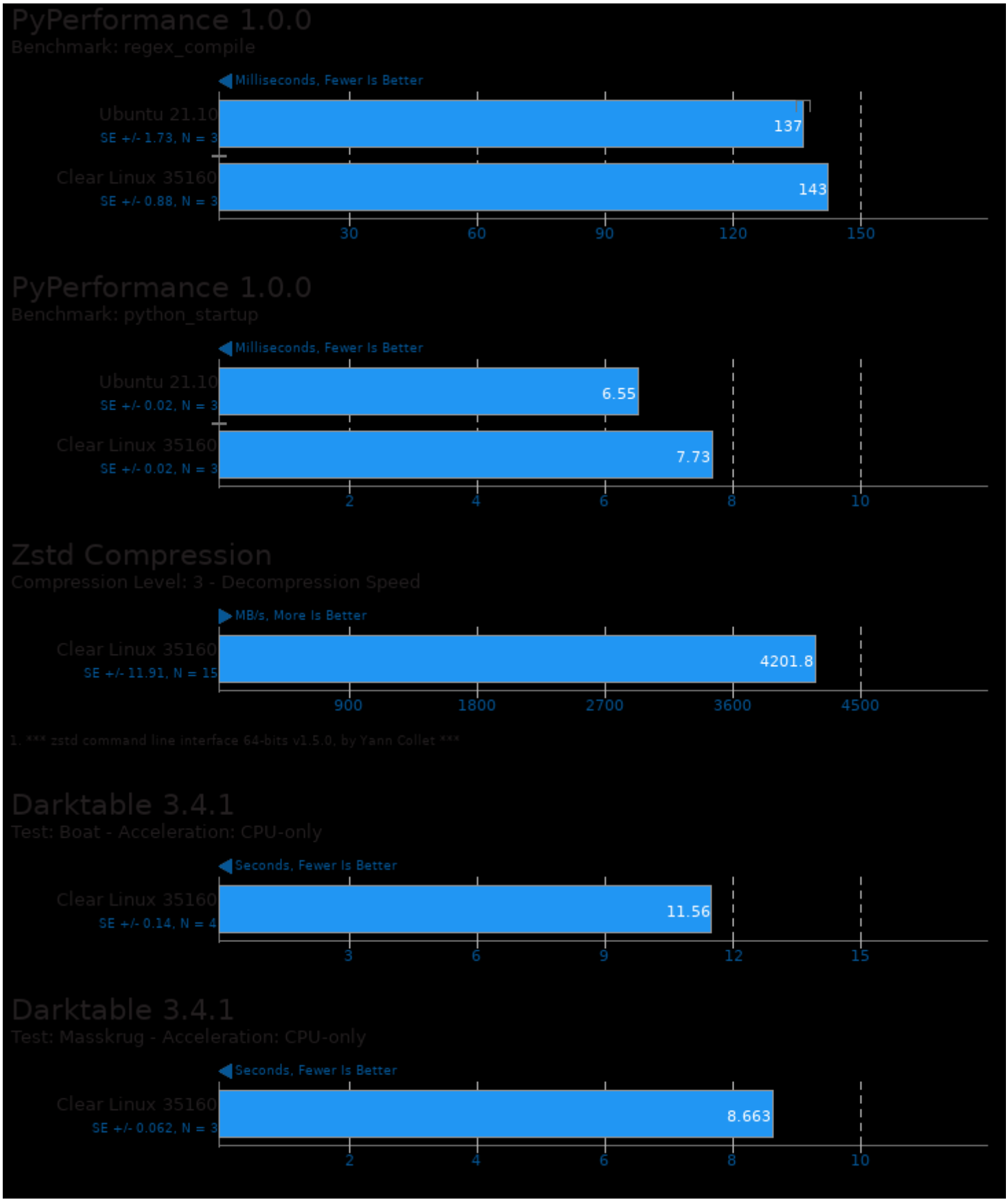
1. chrome 95.0.4638.54

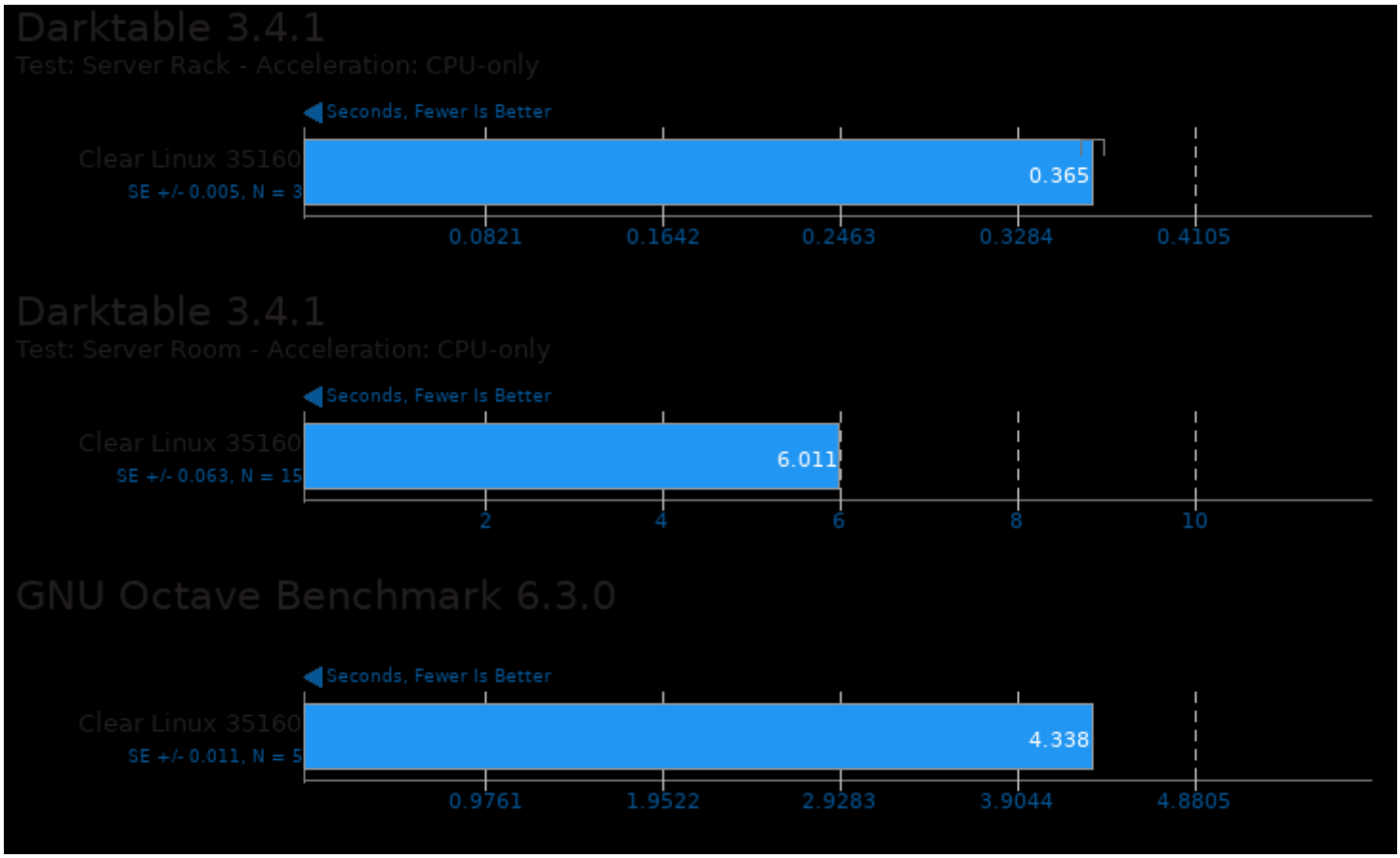

Selenium
Benchmark: WASM imageConvolute - Browser: Firefox
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.24, N = 15
28.4
7
14
21
28
35
1. firefox 93.0
Selenium
Benchmark: WASM collisionDetection - Browser: Firefox
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 2.03, N = 3
341.6
70
140
210
280
350
1. firefox 93.0
Selenium
Benchmark: WASM imageConvolute - Browser: Google Chrome
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.24, N = 3
27.53
6
12
18
24
30
1. chrome 95.0.4638.54
Selenium
Benchmark: WASM collisionDetection - Browser: Google Chrome
ms, Fewer Is Better
Ubuntu 21.10
SE +/- 0.10, N = 3
274.89
60
120
180
240
300
1. chrome 95.0.4638.54

Framework Laptop Linux Distros

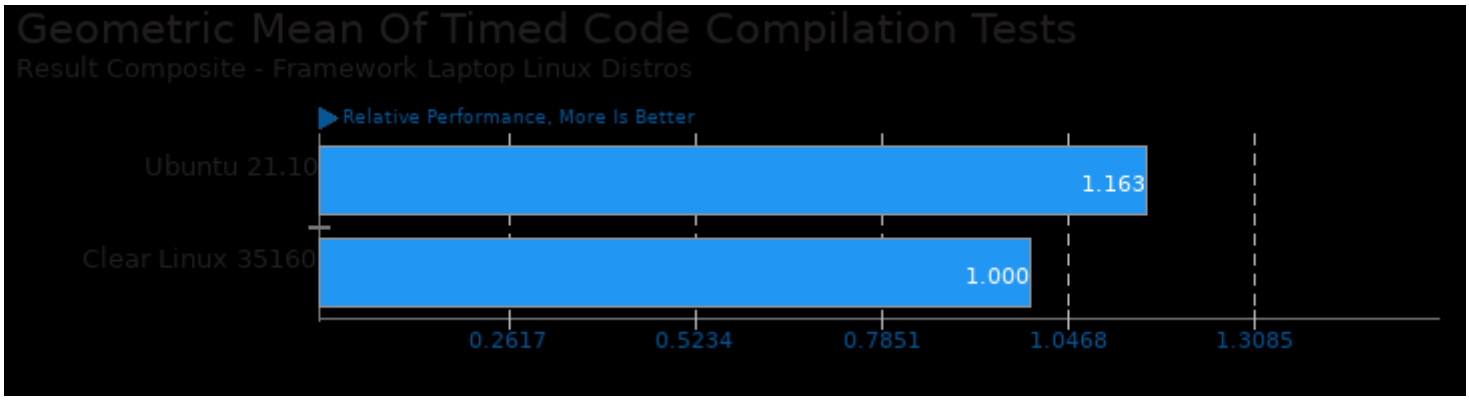



PyBench 2018-02-16
Total For Average Test Times
Milliseconds, Fewer Is Better
Ubuntu 21.10
SE +/- 50.67, N = 15
907
Clear Linux 35160
SE +/- 4.33, N = 3
820
200
400
600
800
1000
PyPerformance 1.0.0
Benchmark: pathlib
Milliseconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.06, N = 3
13.9
Clear Linux 35160
SE +/- 0.15, N = 3
13.6
4
8
12
16
20
PyPerformance 1.0.0
Benchmark: json_loads
Milliseconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.10, N = 3
19.0
Clear Linux 35160
SE +/- 0.12, N = 3
20.4
5
10
15
20
25
PyPerformance 1.0.0
Benchmark: crypto_pyaes
Milliseconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.96, N = 3
83.9
Clear Linux 35160
SE +/- 0.64, N = 3
87.9
20
40
60
80
100

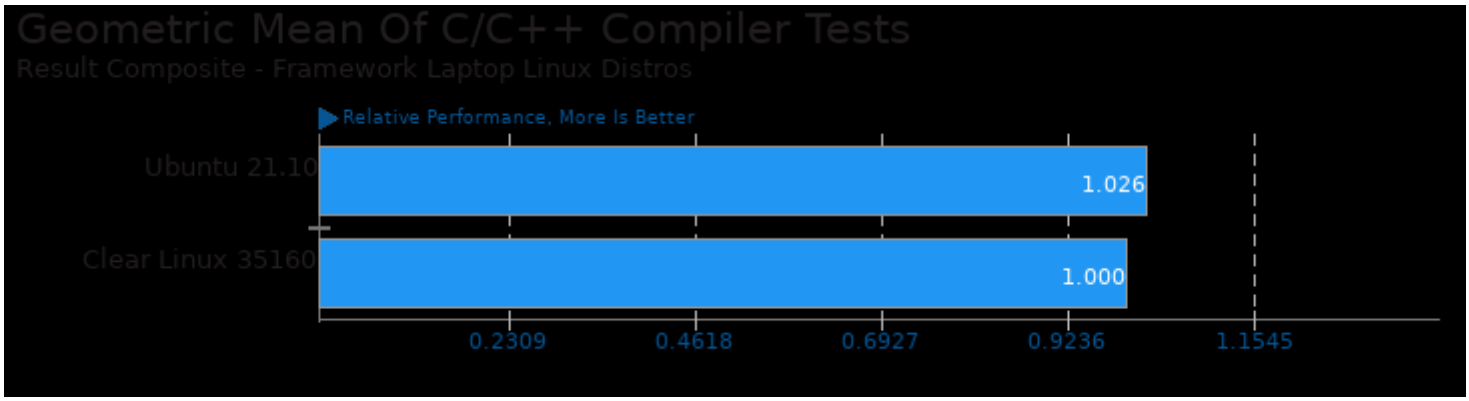

PyPerformance 1.0.0
Benchmark: regex_compile
Milliseconds, Fewer Is Better
Ubuntu 21.10
SE +/- 1.73, N = 3
137
Clear Linux 35160
SE +/- 0.88, N = 3
143
30
60
90
120
150
PyPerformance 1.0.0
Benchmark: python_startup
Milliseconds, Fewer Is Better
Ubuntu 21.10
SE +/- 0.02, N = 3
6.55
Clear Linux 35160
SE +/- 0.02, N = 3
7.73
2
4
6
8
10
Zstd Compression
Compression Level: 3 - Decompression Speed
MB/s, More Is Better
Clear Linux 35160
SE +/- 11.91, N = 15
4201.8
900
1800
2700
3600
4500
1. *** zstd command line interface 64-bits v1.5.0, by Yann Collet ***
Darktable 3.4.1
Test: Boat - Acceleration: CPU-only
Seconds, Fewer Is Better
Clear Linux 35160
SE +/- 0.14, N = 4
11.56
3
6
9
12
15
Darktable 3.4.1
Test: Masskrug - Acceleration: CPU-only
Seconds, Fewer Is Better
Clear Linux 35160
SE +/- 0.062, N = 3
8.663
2
4
6
8
10


Darktable 3.4.1
Test: Server Rack - Acceleration: CPU-only
Seconds, Fewer Is Better
Clear Linux 35160
SE +/- 0.005, N = 3
0.365
0.0821
0.1642
0.2463
0.3284
0.4105
Darktable 3.4.1
Test: Server Room - Acceleration: CPU-only
Seconds, Fewer Is Better
Clear Linux 35160
SE +/- 0.063, N = 15
6.011
2
4
6
8
10
GNU Octave Benchmark 6.3.0
Seconds, Fewer Is Better
Clear Linux 35160
SE +/- 0.011, N = 5
4.338
0.9761
1.9522
2.9283
3.9044
4.8805

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

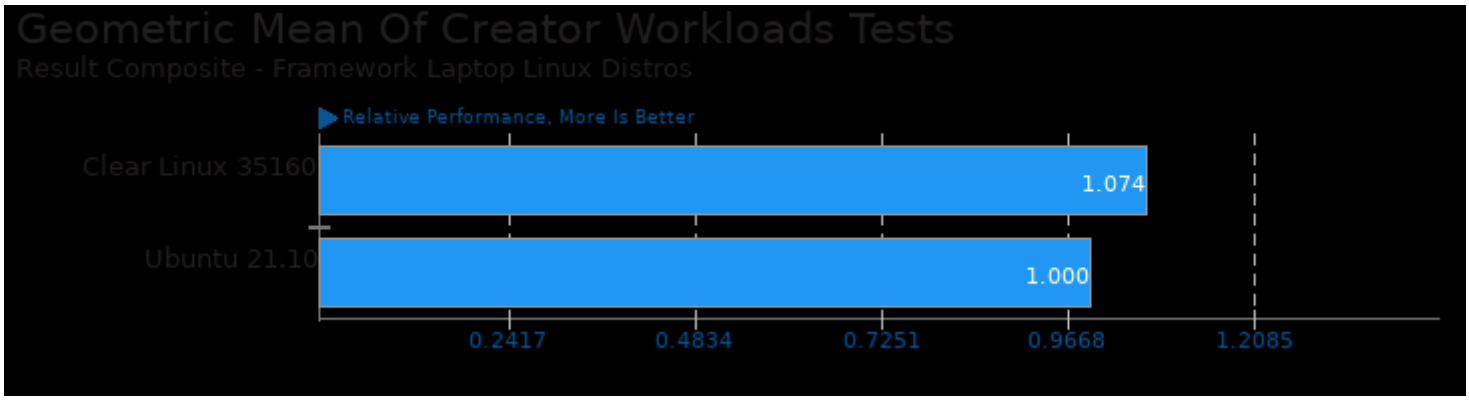


Geometric mean based upon tests: pts/build-gdb, pts/build-mplayer, pts/build-godot and pts/build-mesa

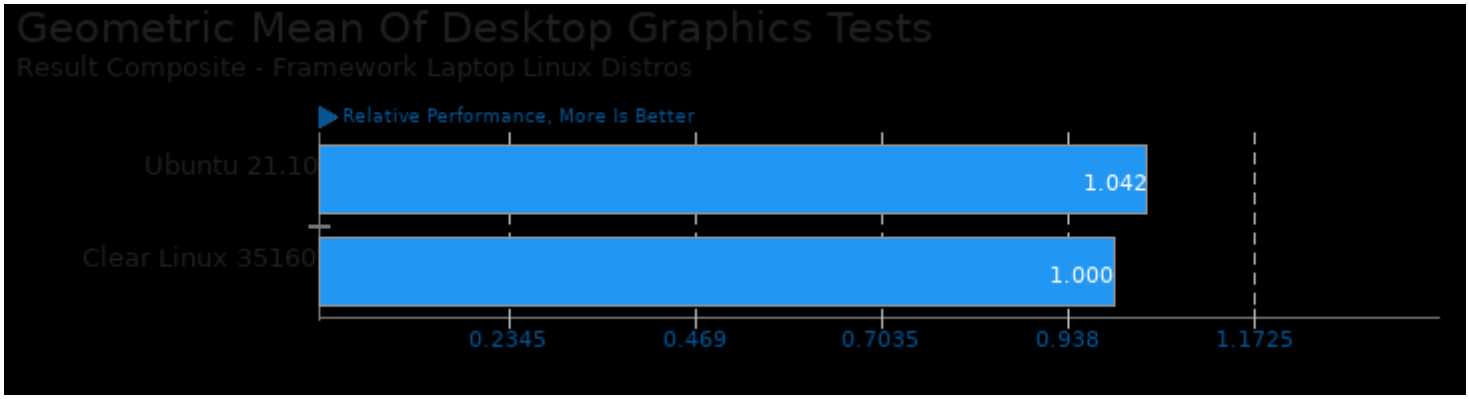


Geometric mean based upon tests: pts/sqlite-speedtest, pts/x265, pts/svt-av1, pts/svt-vp9, pts/build-gdb and pts/build-mplayer

Geometric mean based upon tests: pts/svt-av1, pts/svt-hevc, pts/svt-vp9, pts/x265, pts/node-express-loadtest, pts/v-ray, pts/blender, system/darktable and system/octave-benchmark

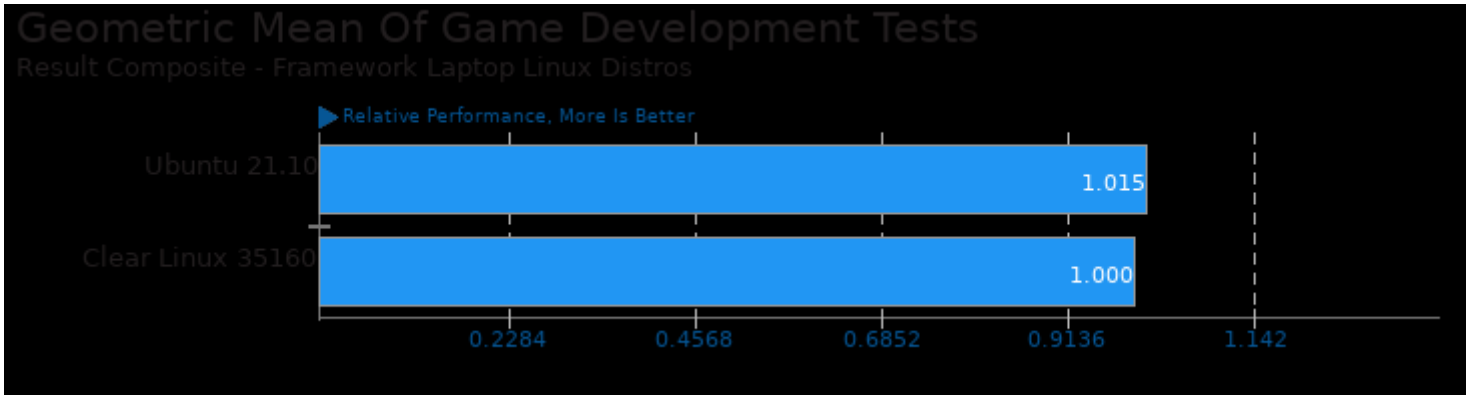


Geometric mean based upon tests: pts/blender, pts/v-ray, pts/indigobench, pts/svt-vp9, pts/svt-hevc, pts/x265, pts/svt-av1, system/rawtherapee, system/darktable, system/rsvg, system/gegl and pts/build-godot

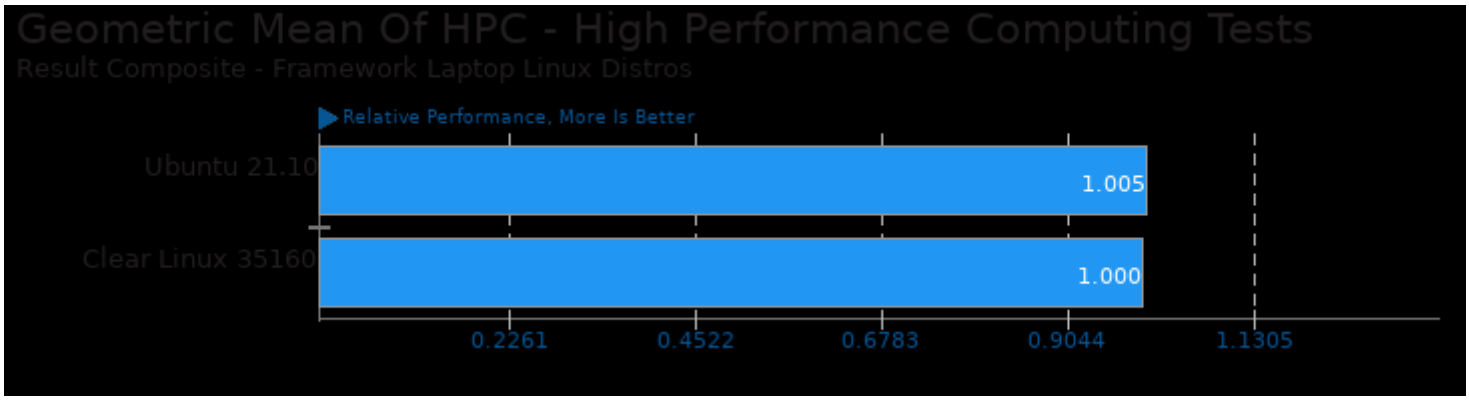


Geometric mean based upon tests: pts/xonotic, pts/tesseract, pts/paraview and pts/glmark2

Geometric mean based upon tests: pts/svt-vp9, pts/svt-hevc, pts/x265 and pts/svt-av1

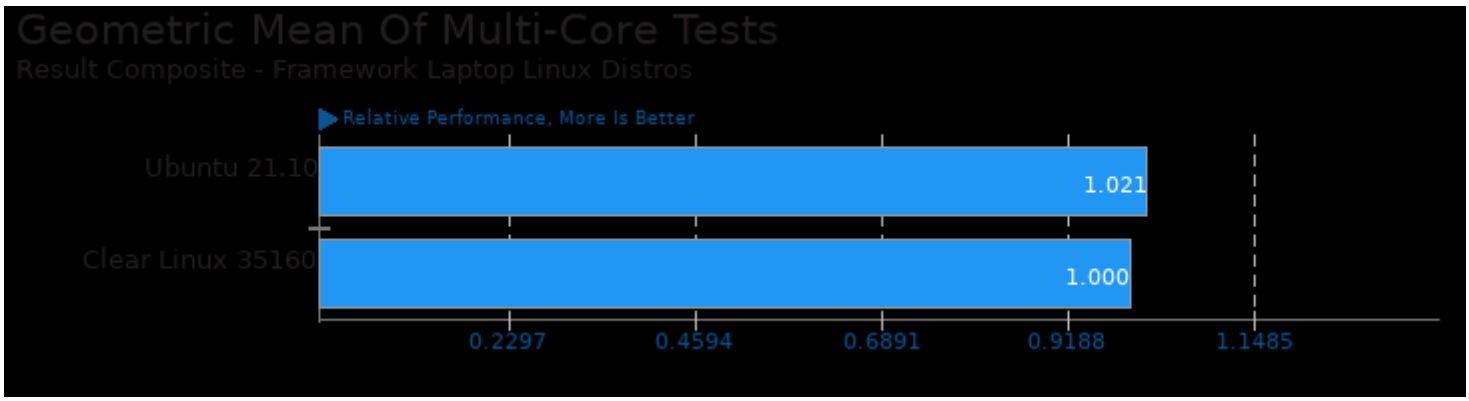


Geometric mean based upon tests: pts/build-godot and pts/blender

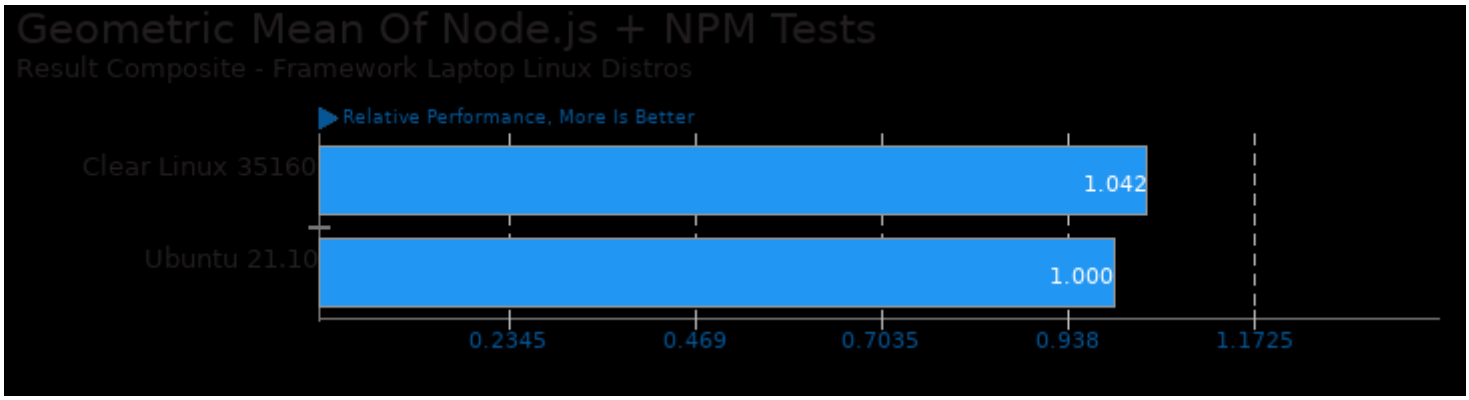


Geometric mean based upon tests: system/octave-benchmark and pts/ncnn

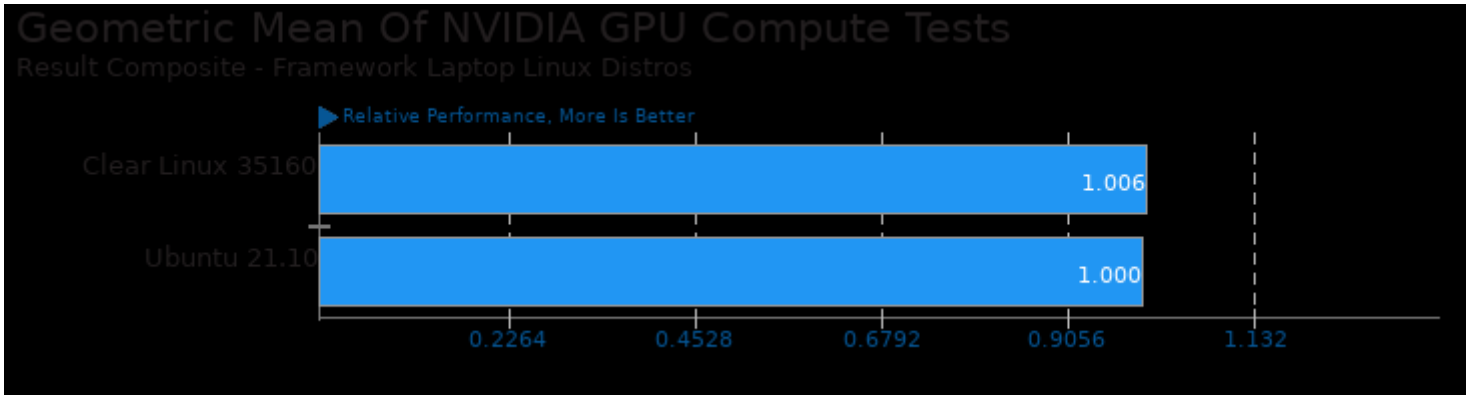
Geometric mean based upon tests: system/rawtherapee, system/darktable, system/rsvg and system/gegl



Geometric mean based upon tests: pts/blender, pts/svt-vp9, pts/svt-hevc, pts/x265, pts/svt-av1, pts/build-gdb, pts/build-mplayer, pts/build-godot, pts/build-mesa, pts/v-ray and pts/indigobench

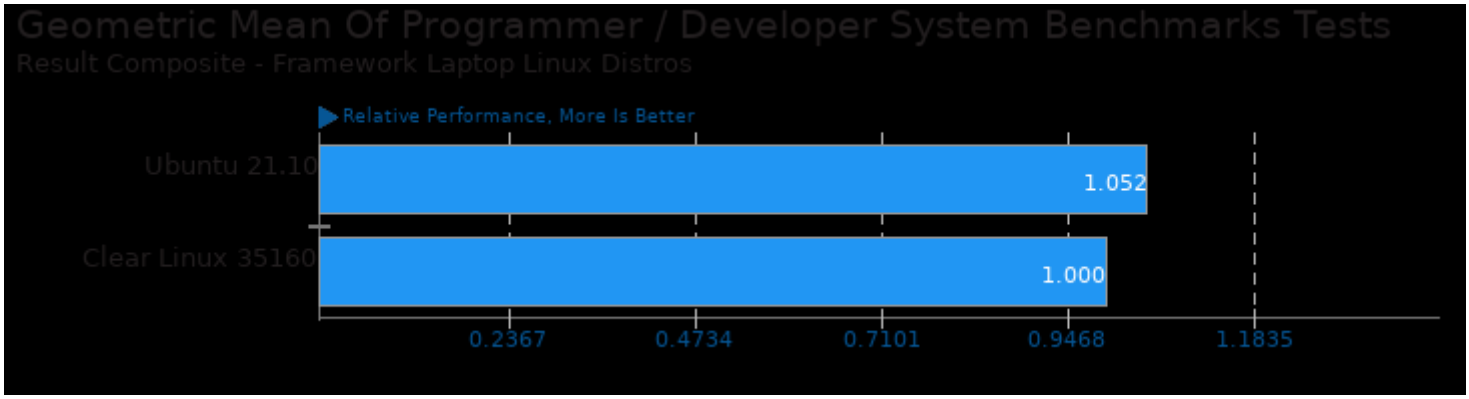


Geometric mean based upon tests: pts/node-express-loadtest and pts/node-web-tooling



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

Geometric mean based upon tests: system/octave-benchmark, system/gegl and system/rsvg



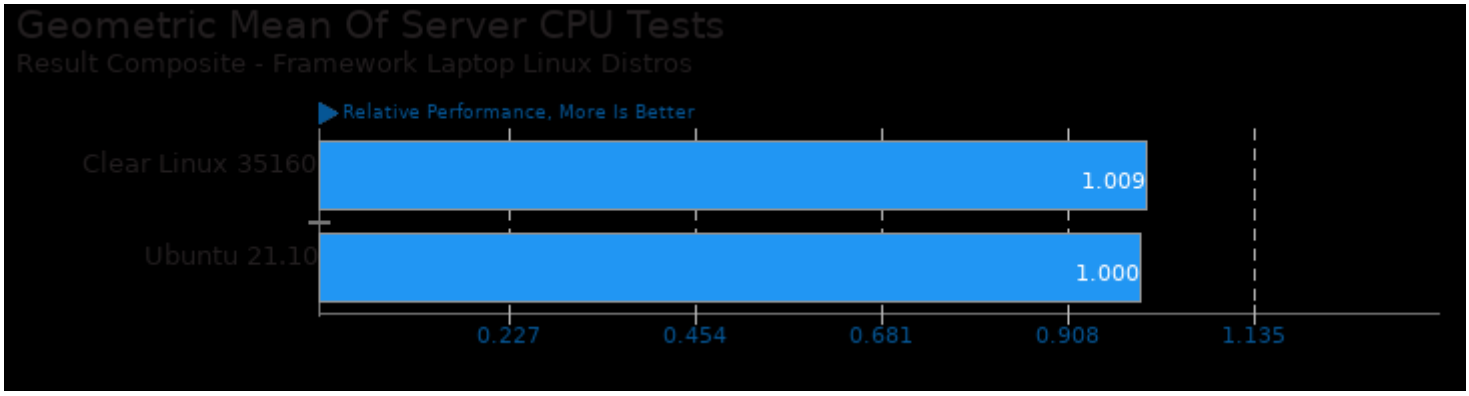
Geometric mean based upon tests: pts/sqlite-speedtest, pts/node-web-tooling, pts/pyperformance, pts/pybench,

pts/build-gdb, pts/build-mplayer, pts/build-godot and pts/build-mesa

Geometric mean based upon tests: pts/pybench and pts/pyperformance

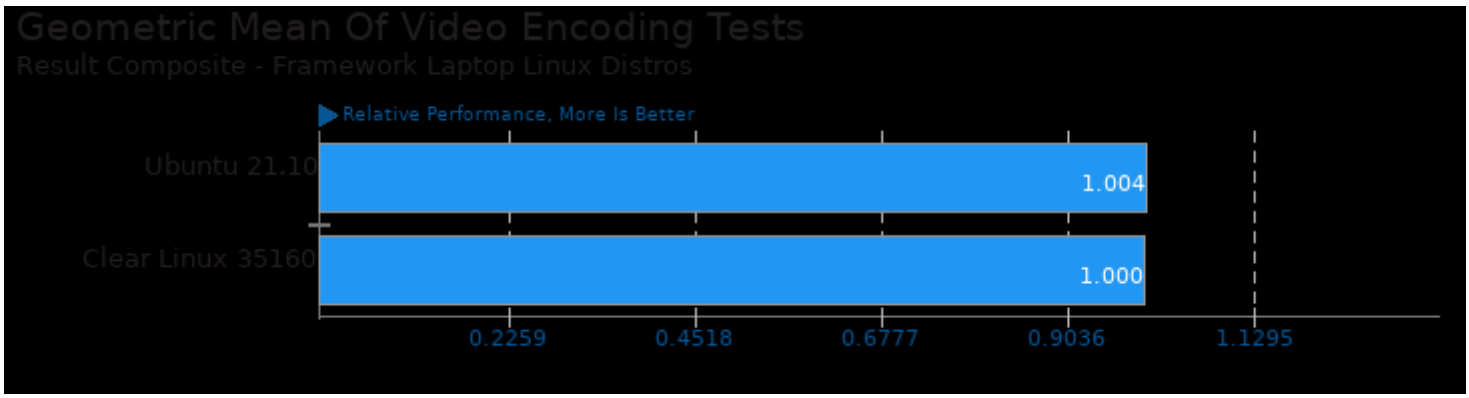
Geometric mean based upon tests: pts/blender, pts/v-ray and pts/indigobench

Geometric mean based upon tests: pts/node-express-loadtest, pts/node-web-tooling and pts/sqlite-speedtest

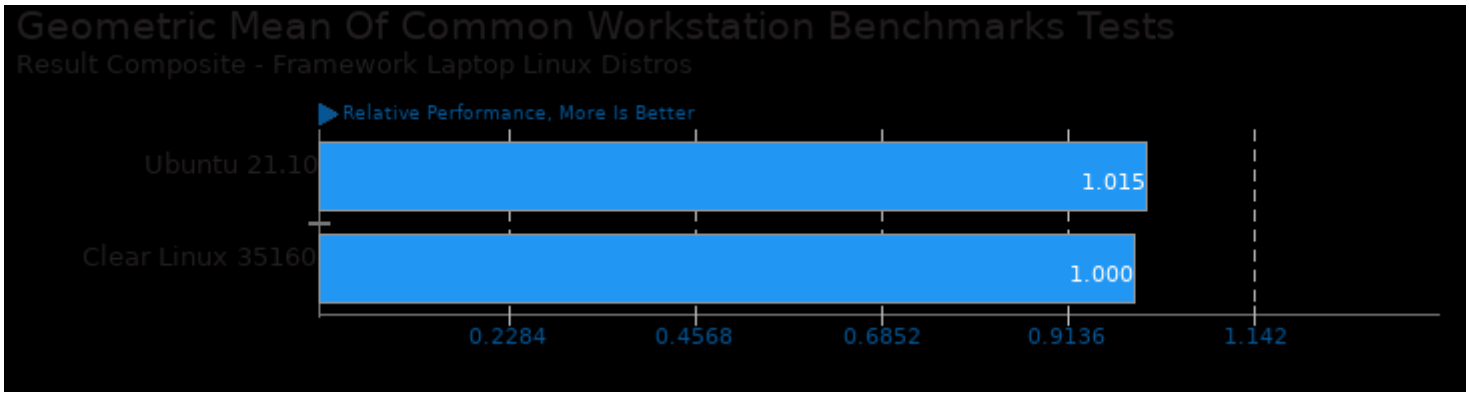


Geometric mean based upon tests: pts/svt-av1, pts/svt-hevc, pts/svt-vp9, pts/x265, pts/blender and pts/pybench

Geometric mean based upon tests: pts/node-express-loadtest and pts/pybench



Geometric mean based upon tests: pts/svt-vp9, pts/svt-hevc, pts/x265 and pts/svt-av1



Geometric mean based upon tests: pts/blender, pts/x265 and pts/paraview

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 09:46.