



Ryzen 3 2200G 2021

AMD Ryzen 3 2200G testing with a ASUS PRIME B350M-E (5220 BIOS) and ASUS AMD Radeon Vega / Mobile 2GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

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

Based on the geometric mean of all complete results, the fastest (1) was 1.006x the speed of the slowest (2). 3 was 0.995x the speed of 1 and 2 was 0.999x the speed of 3.

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

Redis (Test: LPOP) at 1.797x

Kripke at 1.543x

LeelaChessZero (Backend: BLAS) at 1.224x

LeelaChessZero (Backend: Eigen) at 1.188x

Redis (Test: GET) at 1.07x

oneDNN (Harness: Matrix Multiply Batch Shapes Transformer - Data Type: u8s8f32 - Engine: CPU) at 1.05x

Sunflow Rendering System (Global Illumination + Image Synthesis) at 1.049x

Node.js V8 Web Tooling Benchmark at 1.049x

OSBench (Test: Memory Allocations) at 1.048x

oneDNN (Harness: IP Shapes 1D - Data Type: u8s8f32 - Engine: CPU) at 1.039x.

Test Systems:

1

2

3

Processor: AMD Ryzen 3 2200G @ 3.50GHz (4 Cores), Motherboard: ASUS PRIME B350M-E (5220 BIOS), Chipset: AMD Raven/Raven2, Memory: 6GB, Disk: Samsung SSD 970 EVO 250GB, Graphics: ASUS AMD Radeon Vega / Mobile 2GB (1100/1600MHz), Audio: AMD Raven/Raven2/Fenghuang, Monitor: G237HL, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 20.10, Kernel: 5.8.0-38-generic (x86_64), Desktop: GNOME Shell 3.38.1, Display Server: X Server 1.20.9, Display Driver: modesetting 1.20.9, OpenGL: 4.6 Mesa 20.2.6 (LLVM 11.0.0), Vulkan: 1.2.131, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --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-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgc-nvptx=/build/gcc-10-JvwpWM/gcc-10-10.2.0/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-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 ondemand (Boost: Enabled) - CPU Microcode: 0x8101016

Graphics Notes: GLAMOR

Java Notes: OpenJDK Runtime Environment (build 11.0.9.1+1-Ubuntu-0ubuntu1.20.10)

Python Notes: Python 3.8.6

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/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	1	2	3
Algebraic Multi-Grid Benchmark (Figure Of Merit)	213491533	214232233	214072633
Normalized	99.65%	100%	99.93%
Standard Deviation	0.3%	0.4%	0.4%
dav1d - Chimera 1080p (FPS)	184.25	184.17	183.88
Normalized	100%	99.96%	99.8%
Standard Deviation	0%	1.7%	1.8%
dav1d - Summer Nature 4K (FPS)	51.92	52.00	52.09
Normalized	99.67%	99.83%	100%
Standard Deviation	1.2%	1.2%	1.5%
dav1d - S.N.1 (FPS)	182.89	183.50	184.81
Normalized	98.96%	99.29%	100%

	Standard Deviation	0.8%	0.3%	0.3%
dav1d - C.1.1.b (FPS)	52.55	52.39	53.51	
	Normalized	98.21%	97.91%	100%
	Standard Deviation	0.5%	0.7%	1%
Warsow - 1920 x 1080 (FPS)	158.1	159.4	159.4	
	Normalized	99.18%	100%	100%
	Standard Deviation	1.4%	0.1%	0.1%
yquake2 - OpenGL 3.x - 1920 x 1080 (FPS)	814.1	807.2	807.9	
	Normalized	100%	99.15%	99.24%
	Standard Deviation	0.9%	0.7%	1%
yquake2 - Software CPU - 1920 x 1080 (FPS)	92.9	93.3	93.3	
	Normalized	99.57%	100%	100%
	Standard Deviation	0.7%	0.1%	0.1%
AOM AV1 - Speed 4 Two-Pass (FPS)	1.38	1.38	1.40	
	Normalized	98.57%	98.57%	100%
	Standard Deviation	0.7%	0%	0.7%
AOM AV1 - Speed 6 Realtime (FPS)	10.13	10.12	10.25	
	Normalized	98.83%	98.73%	100%
	Standard Deviation	0.7%	1.4%	2.1%
AOM AV1 - Speed 6 Two-Pass (FPS)	2.22	2.22	2.24	
	Normalized	99.11%	99.11%	100%
	Standard Deviation	0.3%	0%	0.7%
AOM AV1 - Speed 8 Realtime (FPS)	27.20	27.18	27.29	
	Normalized	99.67%	99.6%	100%
	Standard Deviation	0.1%	0.2%	0.1%
Embree - Pathtracer - Crown (FPS)	2.7601	2.7659	2.7779	
	Normalized	99.36%	99.57%	100%
	Standard Deviation	0.9%	0.3%	0.5%
Embree - Pathtracer ISPC - Crown (FPS)	2.5819	2.5670	2.5828	
	Normalized	99.97%	99.39%	100%
	Standard Deviation	0.3%	0.7%	1.1%
Embree - Pathtracer - Asian Dragon (FPS)	3.3140	3.3113	3.3432	
	Normalized	99.13%	99.05%	100%
	Standard Deviation	1%	0.8%	1.5%
Embree - Pathtracer - Asian Dragon Obj	2.9903	2.9682	2.9782	
	Normalized	100%	99.26%	99.6%
	Standard Deviation	1.4%	0.8%	1.3%
Embree - Pathtracer ISPC - Asian Dragon (FPS)	3.2431	3.2504	3.2482	
	Normalized	99.78%	100%	99.93%
	Standard Deviation	0.7%	0.7%	0.1%
Embree - Pathtracer ISPC - Asian Dragon Obj (FPS)	2.8199	2.8371	2.8151	
	Normalized	99.39%	100%	99.22%
	Standard Deviation	0.7%	1%	0.9%
Kvazaar - Bosphorus 4K - Medium (FPS)	1.49	1.49	1.50	
	Normalized	99.33%	99.33%	100%
	Standard Deviation	0%	0%	0.4%
Kvazaar - Bosphorus 1080p - Medium (FPS)	6.51	6.51	6.50	
	Normalized	100%	100%	99.85%
	Standard Deviation	0.3%	0.3%	0.5%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	3.94	3.94	3.95	
	Normalized	99.75%	99.75%	100%
	Standard Deviation	0.1%	0.1%	0.4%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	6.84	6.85	6.83	

	Normalized	99.85%	100%	99.71%
	Standard Deviation	0.5%	1%	0.5%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)		15.60	15.52	15.62
	Normalized	99.87%	99.36%	100%
	Standard Deviation	0.6%	0.7%	0.4%
Kvazaar - Bosphorus 1080p - Ultra Fast		27.01	27.07	27.05
	Normalized	99.78%	100%	99.93%
	Standard Deviation	1%	0.3%	0.2%
rav1e - 5 (FPS)		0.848	0.844	0.839
	Normalized	100%	99.53%	98.94%
	Standard Deviation	0.2%	0.2%	0%
rav1e - 6 (FPS)		1.082	1.083	1.089
	Normalized	99.36%	99.45%	100%
	Standard Deviation	0.8%	0.1%	0.4%
rav1e - 10 (FPS)		2.573	2.566	2.639
	Normalized	97.5%	97.23%	100%
	Standard Deviation	1%	0.5%	0.5%
x265 - Bosphorus 4K (FPS)		4.81	4.83	4.83
	Normalized	99.59%	100%	100%
	Standard Deviation	0.5%	0.4%	0.8%
x265 - Bosphorus 1080p (FPS)		19.49	19.60	19.71
	Normalized	98.88%	99.44%	100%
	Standard Deviation	1.4%	0.7%	1%
simdjson - Kostya (GB/s)		0.38	0.38	0.38
	Standard Deviation	0%	0%	0%
simdjson - LargeRand (GB/s)		0.35	0.35	0.35
	Standard Deviation	0%	0%	1.7%
simdjson - PartialTweets (GB/s)		0.45	0.45	0.45
	Standard Deviation	1.3%	0%	0%
simdjson - DistinctUserID (GB/s)		0.46	0.46	0.46
	Standard Deviation	0%	0%	0%
Coremark - CoreMark Size 666 - I.P.S (Iterations/Sec)		102524	101766	102339
	Normalized	100%	99.26%	99.82%
	Standard Deviation	1.4%	0.5%	0.6%
BYTE Unix Benchmark - Dhrystone 2 (LPS)		35499453	35791749	35427649
	Normalized	99.18%	100%	98.98%
	Standard Deviation	1.4%	1%	2.5%
IndigoBench - CPU - Bedroom (M samples/s)		0.494	0.494	0.498
	Normalized	99.2%	99.2%	100%
	Standard Deviation	0.4%	0.1%	0.6%
IndigoBench - CPU - Supercar (M samples/s)		1.107	1.098	1.106
	Normalized	100%	99.19%	99.91%
	Standard Deviation	0.6%	1.4%	0.2%
LZ4 Compression - 1 - Compression Speed (MB/s)		7994	8015	8022
	Normalized	99.65%	99.91%	100%
	Standard Deviation	1.1%	0.9%	2%
LZ4 Compression - 1 - D.S (MB/s)		8722	8646	8690
	Normalized	100%	99.13%	99.63%
	Standard Deviation	0.1%	0.2%	1.1%
LZ4 Compression - 3 - Compression Speed (MB/s)		42.77	42.34	41.81
	Normalized	100%	98.99%	97.76%
	Standard Deviation	2.3%	3.9%	6%

LZ4 Compression - 3 - D.S (MB/s)	8554	8548	8547
Normalized	100%	99.92%	99.92%
Standard Deviation	0.5%	0.4%	0.3%
LZ4 Compression - 9 - Compression Speed (MB/s)	42.22	41.02	41.23
Normalized	100%	97.16%	97.66%
Standard Deviation	6.2%	5.2%	4.4%
LZ4 Compression - 9 - D.S (MB/s)	8565	8552	8563
Normalized	100%	99.85%	99.97%
Standard Deviation	0.3%	0.3%	0.2%
Zstd Compression - 3 (MB/s)	2346	2358	2324
Normalized	99.49%	100%	98.57%
Standard Deviation	2.1%	1.2%	0.6%
Zstd Compression - 19 (MB/s)	14.0	14.2	14.2
Normalized	98.59%	100%	100%
Standard Deviation	2.9%	0.4%	0.7%
Sockperf - Throughput (Messages/sec)	555055	559663	557665
Normalized	99.18%	100%	99.64%
Standard Deviation	2.7%	1.4%	1.3%
FFTE - N.2.3.C.F.R (MFLOPS)	15393	15756	15437
Normalized	97.7%	100%	97.98%
Standard Deviation	1.4%	1.2%	1.8%
LibRaw - P.P.B (Mpix/sec)	19.36	19.66	19.79
Normalized	97.83%	99.34%	100%
Standard Deviation	0.5%	0.9%	1.1%
LeelaChessZero - BLAS (Nodes/s)	432	374	353
Normalized	100%	86.57%	81.71%
Standard Deviation	3%	4.8%	1.2%
LeelaChessZero - Eigen (Nodes/s)	448	380	377
Normalized	100%	84.82%	84.15%
Standard Deviation	1.9%		4.1%
Crafty - Elapsed Time (Nodes/s)	6274275	6255015	6322069
Normalized	99.24%	98.94%	100%
Standard Deviation	0.1%	0.6%	0.6%
Stockfish - Total Time (Nodes/s)	5718169	5628220	5648589
Normalized	100%	98.43%	98.78%
Standard Deviation	1.5%	2.3%	1.2%
asmFish - 1.H.M.2.D (Nodes/s)	7748047	7802828	7669043
Normalized	99.3%	100%	98.29%
Standard Deviation	0.6%	1.1%	0.7%
GROMACS - Water Benchmark (Ns/Day)	0.333	0.330	0.326
Normalized	100%	99.1%	97.9%
Standard Deviation	1%	1.1%	2.7%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)	2.603	2.586	2.613
Normalized	99.62%	98.97%	100%
Standard Deviation	1%	2%	2%
KeyDB (Ops/sec)	265074	267213	269044
Normalized	98.52%	99.32%	100%
Standard Deviation	2.1%	1.3%	1.2%
Hierarchical INTegration - FLOAT (QUIPs)	301333350	301687480	301185317
Normalized	99.88%	100%	99.83%
Standard Deviation	0.1%	0.1%	0.4%
Redis - LPOP (Reqs/sec)	2261211	1258381	1275489
Normalized	100%	55.65%	56.41%

	Standard Deviation	1.3%	1.6%	1.2%
Redis - SADD (Reqs/sec)		1735687	1758201	1734496
	Normalized	98.72%	100%	98.65%
	Standard Deviation	1.2%	2.1%	0.4%
Redis - LPUSH (Reqs/sec)		1216336	1213155	1223284
	Normalized	99.43%	99.17%	100%
	Standard Deviation	2.3%	0.4%	0.6%
Redis - GET (Reqs/sec)		2064795	1931045	1930168
	Normalized	100%	93.52%	93.48%
	Standard Deviation	2.9%	2.7%	2%
Redis - SET (Reqs/sec)		1489969	1486412	1472540
	Normalized	100%	99.76%	98.83%
Node.js V8 Web Tooling Benchmark (runs/s)		7.38	7.74	7.38
	Normalized	95.35%	100%	95.35%
	Standard Deviation	1.8%	0.7%	2.5%
GLmark2 - 1920 x 1080 (Score)		1849	1851	1852
	Normalized	99.84%	99.95%	100%
Numpy Benchmark (Score)		242.34	241.36	243.26
	Normalized	99.62%	99.22%	100%
	Standard Deviation	0.2%	0.2%	0.4%
PHPBench - P.B.S (Score)		508106	506055	504159
	Normalized	100%	99.6%	99.22%
	Standard Deviation	0.1%	0.7%	0.8%
CLOMP - Static OMP Speedup (Speedup)		2	2.0	2
	Standard Deviation		2.9%	
Kripke (Throughput FoM)		4811563	3117717	
	Normalized	100%	64.8%	
	Standard Deviation	1.1%	2%	
InfluxDB - 4 - 10000 - 2,5000,1 - 10000		706036	696010	700555
	Normalized	100%	98.58%	99.22%
	Standard Deviation	2.1%	1.6%	1.4%
InfluxDB - 64 - 10000 - 2,5000,1 - 10000		721428	725224	723222
	(val/sec)			
	Normalized	99.48%	100%	99.72%
	Standard Deviation	0.5%	0.4%	0.8%
VKMark - 1920 x 1080 (VKMark Score)		1199	1199	1196
	Normalized	100%	100%	99.75%
Google SynthMark - VoiceMark_100 (Voices)		596.254	596.615	593.909
	Normalized	99.94%	100%	99.55%
	Standard Deviation	0.5%	0.3%	0.3%
LULESH (z/s)		1180	1208	1208
	Normalized	97.66%	100%	99.97%
	Standard Deviation	0.1%	0.1%	0.3%
NAMD - ATPase Simulation - 327,506 Atoms		6.75407	6.79902	6.83284
	(days/ns)			
	Normalized	100%	99.34%	98.85%
	Standard Deviation	0.4%	1%	2.9%
WebP Image Encode - Default (Encode Time - sec)		1.648	1.662	1.657
	Normalized	100%	99.16%	99.46%
	Standard Deviation	0.2%	0.3%	1%

WebP Image Encode - Quality 100 (Encode Time - sec)	2.595	2.601	2.590
Normalized	99.81%	99.58%	100%
Standard Deviation	0.6%	0.5%	0.2%
WebP Image Encode - Q.1.L (Encode Time - sec)	24.894	24.957	24.900
Normalized	100%	99.75%	99.98%
Standard Deviation	0.2%	0.7%	1.5%
WebP Image Encode - Q.1.H.C (Encode Time - sec)	8.872	8.871	8.869
Normalized	99.97%	99.98%	100%
Standard Deviation	0%	0.2%	0.3%
WebP Image Encode - Q.1.L.H.C (Encode Time - sec)	57.670	57.216	57.452
Normalized	99.21%	100%	99.59%
Standard Deviation	0.8%	0.1%	0.3%
TensorFlow Lite - SqueezeNet (us)	467745	461955	467404
Normalized	98.76%	100%	98.83%
Standard Deviation	0.1%	0.5%	0.2%
TensorFlow Lite - Inception V4 (us)	6441017	6389943	6468567
Normalized	99.21%	100%	98.78%
Standard Deviation	0.7%	0.2%	0.1%
TensorFlow Lite - NASNet Mobile (us)	316112	317213	315790
Normalized	99.9%	99.55%	100%
Standard Deviation	0.5%	0.2%	0.3%
TensorFlow Lite - Mobilenet Float (us)	309946	306270	313216
Normalized	98.81%	100%	97.78%
Standard Deviation	0.1%	1%	1.3%
TensorFlow Lite - Mobilenet Quant (us)	328733	318685	327187
Normalized	96.94%	100%	97.4%
Standard Deviation	0.6%	0.6%	1%
TensorFlow Lite - I.R.V (us)	5691310	5697083	5689070
Normalized	99.96%	99.86%	100%
Standard Deviation	0.1%	0.1%	0.2%
Caffe - AlexNet - CPU - 100 (ms)	41877	41672	41573
Normalized	99.27%	99.76%	100%
Standard Deviation	0.8%	0.4%	0.6%
Caffe - GoogleNet - CPU - 100 (ms)	110084	110320	110157
Normalized	100%	99.79%	99.93%
Standard Deviation	0.2%	0.1%	0.4%
oneDNN - IP Shapes 1D - f32 - CPU (ms)	16.5429	16.5558	16.6108
Normalized	100%	99.92%	99.59%
Standard Deviation	1.8%	1.9%	2.5%
oneDNN - IP Shapes 3D - f32 - CPU (ms)	13.0736	13.1685	13.3661
Normalized	100%	99.28%	97.81%
Standard Deviation	5.4%	5%	0.7%
oneDNN - IP Shapes 1D - u8s8f32 - CPU (ms)	14.6322	14.8700	15.1975
Normalized	100%	98.4%	96.28%
Standard Deviation	1.3%	1.5%	1.3%
oneDNN - IP Shapes 3D - u8s8f32 - CPU (ms)	5.81417	5.84129	5.79119
Normalized	99.6%	99.14%	100%
Standard Deviation	0.6%	0.4%	0.4%
oneDNN - C.B.S.A - f32 - CPU (ms)	23.0213	23.6791	23.6697
Normalized	100%	97.22%	97.26%
Standard Deviation	2.5%	1.5%	1.1%

oneDNN - D.B.s - f32 - CPU (ms)	22.5413	22.3144	22.6619
Normalized	98.99%	100%	98.47%
Standard Deviation	2%	3.1%	1.1%
oneDNN - D.B.s - f32 - CPU (ms)	30.8073	31.4147	30.8208
Normalized	100%	98.07%	99.96%
Standard Deviation	0.8%	1.6%	0.8%
oneDNN - C.B.S.A - u8s8f32 - CPU (ms)	38.8392	38.9728	38.5055
Normalized	99.14%	98.8%	100%
Standard Deviation	0.8%	1%	2.3%
oneDNN - D.B.s - u8s8f32 - CPU (ms)	36.5596	35.8461	33.0587
Normalized	90.42%	92.22%	100%
Standard Deviation	16.8%	19.1%	15.1%
oneDNN - D.B.s - u8s8f32 - CPU (ms)	29.7098	29.8889	29.1210
Normalized	98.02%	97.43%	100%
Standard Deviation	0.5%	0.8%	1.7%
oneDNN - R.N.N.T - f32 - CPU (ms)	8437	8278	8343
Normalized	98.11%	100%	99.22%
Standard Deviation	2.7%	1.8%	1.3%
oneDNN - R.N.N.I - f32 - CPU (ms)	7721	7794	7838
Normalized	100%	99.06%	98.51%
Standard Deviation	0.3%	1.9%	0.7%
oneDNN - R.N.N.T - u8s8f32 - CPU (ms)	8194	8356	8420
Normalized	100%	98.05%	97.31%
Standard Deviation	2.7%	3%	0.6%
oneDNN - R.N.N.I - u8s8f32 - CPU (ms)	7747	7726	7702
Normalized	99.42%	99.69%	100%
Standard Deviation	0.9%	0.6%	0.4%
oneDNN - M.M.B.S.T - f32 - CPU (ms)	7.35744	7.36061	7.31351
Normalized	99.4%	99.36%	100%
Standard Deviation	0.6%	0.2%	0.2%
oneDNN - R.N.N.T - bf16bf16bf16 - CPU (ms)	8195	8439	8427
Normalized	100%	97.12%	97.25%
Standard Deviation	2.7%	3%	1%
oneDNN - R.N.N.I - bf16bf16bf16 - CPU (ms)	7914	7668	7750
Normalized	96.9%	100%	98.93%
Standard Deviation	2.2%	0.5%	0.3%
oneDNN - M.M.B.S.T - u8s8f32 - CPU (ms)	14.8215	15.0825	15.5619
Normalized	100%	98.27%	95.24%
Standard Deviation	5.6%	4.6%	1%
Mobile Neural Network - SqueezeNetV1.0	9.732	9.613	9.867
Normalized	98.78%	100%	97.43%
Standard Deviation	2.3%	0.7%	1.2%
Mobile Neural Network - resnet-v2-50 (ms)	50.216	50.269	50.489
Normalized	100%	99.89%	99.46%
Standard Deviation	1.8%	1.1%	0.9%
Mobile Neural Network - MobileNetV2_224	5.424	5.419	5.398
Normalized	99.52%	99.61%	100%
Standard Deviation	0.6%	1.2%	1.2%
Mobile Neural Network - mobilenet-v1-1.0	7.395	7.526	7.313
Normalized	98.89%	97.17%	100%
Standard Deviation	0.5%	1.5%	0.7%
Mobile Neural Network - inception-v3 (ms)	63.415	63.997	63.269
Normalized	99.77%	98.86%	100%
Standard Deviation	0.5%	0.9%	0.5%
NCNN - CPU - mobilenet (ms)	46.83	46.49	46.32

	Normalized	98.91%	99.63%	100%
	Standard Deviation	1.7%	0.2%	0.2%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)		11.20	10.91	11.04
	Normalized	97.41%	100%	98.82%
	Standard Deviation	2.1%	1.3%	0.9%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)		9.67	9.49	9.59
	Normalized	98.14%	100%	98.96%
	Standard Deviation	1.2%	0.9%	0.6%
NCNN - CPU - shufflenet-v2 (ms)		12.65	12.89	12.70
	Normalized	100%	98.14%	99.61%
	Standard Deviation	1.6%	1.9%	1.9%
NCNN - CPU - mnasnet (ms)		10.50	10.34	10.25
	Normalized	97.62%	99.13%	100%
	Standard Deviation	0.8%	1.7%	1%
NCNN - CPU - efficientnet-b0 (ms)		17.07	16.76	16.89
	Normalized	98.18%	100%	99.23%
	Standard Deviation	1.5%	0.3%	1.3%
NCNN - CPU - blazeface (ms)		3.31	3.33	3.29
	Normalized	99.4%	98.8%	100%
	Standard Deviation	0.6%	1.7%	1.8%
NCNN - CPU - googlenet (ms)		32.59	32.79	32.43
	Normalized	99.51%	98.9%	100%
	Standard Deviation	0.9%	0.3%	0.9%
NCNN - CPU - vgg16 (ms)		117.19	119.38	117.45
	Normalized	100%	98.17%	99.78%
	Standard Deviation	0.3%	0.3%	0.2%
NCNN - CPU - resnet18 (ms)		29.04	29.04	29.18
	Normalized	100%	100%	99.52%
	Standard Deviation	1%	0.7%	2%
NCNN - CPU - alexnet (ms)		23.30	23.42	23.51
	Normalized	100%	99.49%	99.11%
	Standard Deviation	0.8%	0.5%	0.5%
NCNN - CPU - resnet50 (ms)		72.55	73.14	71.82
	Normalized	98.99%	98.2%	100%
	Standard Deviation	2%	0.9%	0.5%
NCNN - CPU - yolov4-tiny (ms)		59.28	59.42	59.28
	Normalized	100%	99.76%	100%
	Standard Deviation	0.2%	0.2%	0.2%
NCNN - CPU - squeezenet_ssd (ms)		59.39	59.71	59.34
	Normalized	99.92%	99.38%	100%
	Standard Deviation	0.1%	0.6%	0.8%
NCNN - CPU - regnety_400m (ms)		19.11	18.87	18.75
	Normalized	98.12%	99.36%	100%
	Standard Deviation	0.7%	0.9%	1.7%
NCNN - Vulkan GPU - mobilenet (ms)		46.40	47.01	46.32
	Normalized	99.83%	98.53%	100%
	Standard Deviation	0.1%	2.8%	0.3%
NCNN - Vulkan GPU-v2-v2 - mobilenet-v2		10.88	11.30	10.68
	Normalized	98.16%	94.51%	100%
	Standard Deviation	0.2%	3.8%	6.2%
NCNN - Vulkan GPU-v3-v3 - mobilenet-v3		9.59	9.69	9.60
	Normalized	100%	98.97%	99.9%
	Standard Deviation	2.3%	2.9%	1.7%
NCNN - Vulkan GPU - shufflenet-v2 (ms)		12.63	12.98	12.75
	Normalized	100%	97.3%	99.06%

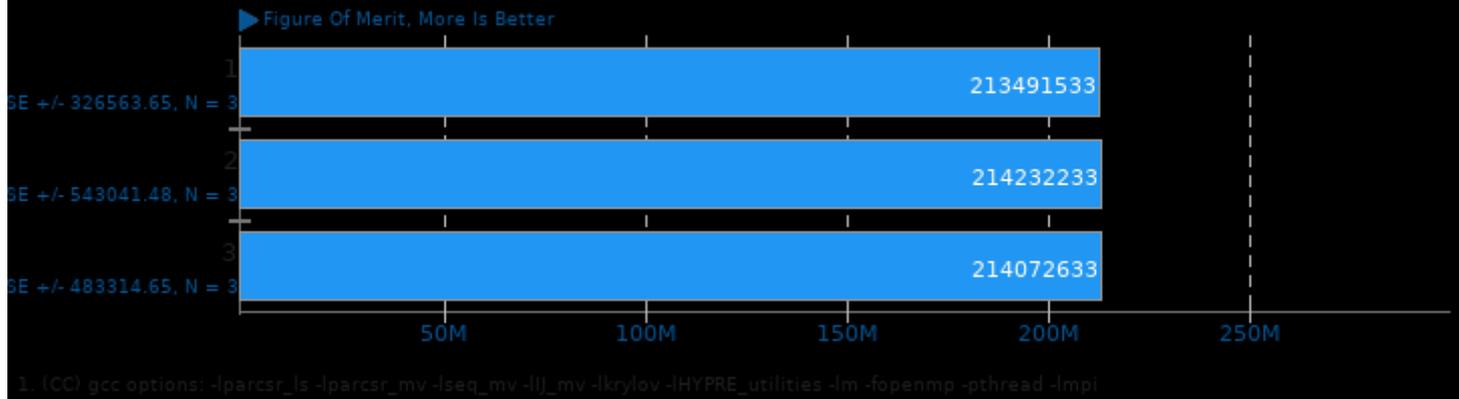
	Standard Deviation	1.3%	2.5%	2.8%
NCNN - Vulkan GPU - mnasnet (ms)		10.38	10.44	10.43
	Normalized	100%	99.43%	99.52%
	Standard Deviation	1.4%	3.8%	1.2%
NCNN - Vulkan GPU - efficientnet-b0 (ms)		16.98	16.95	16.90
	Normalized	99.53%	99.71%	100%
	Standard Deviation	0.7%	3.1%	1.5%
NCNN - Vulkan GPU - blazeface (ms)		3.25	3.31	3.33
	Normalized	100%	98.19%	97.6%
	Standard Deviation	0.8%	1.4%	1.6%
NCNN - Vulkan GPU - googlenet (ms)		32.56	32.64	32.59
	Normalized	100%	99.75%	99.91%
	Standard Deviation	1.1%	0.7%	0.7%
NCNN - Vulkan GPU - vgg16 (ms)		117.46	118.91	118.04
	Normalized	100%	98.78%	99.51%
	Standard Deviation	0.5%	0.4%	0.2%
NCNN - Vulkan GPU - resnet18 (ms)		29.17	29.08	29.28
	Normalized	99.69%	100%	99.32%
	Standard Deviation	1.5%	0.9%	0.1%
NCNN - Vulkan GPU - alexnet (ms)		23.46	23.24	23.48
	Normalized	99.06%	100%	98.98%
	Standard Deviation	0.6%	0.3%	0.2%
NCNN - Vulkan GPU - resnet50 (ms)		71.68	74.10	71.69
	Normalized	100%	96.73%	99.99%
	Standard Deviation	0.5%	1.7%	0.7%
NCNN - Vulkan GPU - yolov4-tiny (ms)		59.00	59.40	59.28
	Normalized	100%	99.33%	99.53%
	Standard Deviation	0.1%	0.2%	0.5%
NCNN - Vulkan GPU - squeezenet_ssd (ms)		59.28	59.16	59.50
	Normalized	99.8%	100%	99.43%
	Standard Deviation	0.2%	0.5%	0.5%
NCNN - Vulkan GPU - regnety_400m (ms)		18.88	19.06	19.07
	Normalized	100%	99.06%	99%
	Standard Deviation	0.8%	1.6%	0.1%
TNN - CPU - MobileNet v2 (ms)		279.339	279.626	279.278
	Normalized	99.98%	99.88%	100%
	Standard Deviation	0%	0.3%	0.2%
TNN - CPU - SqueezeNet v1.1 (ms)		287.255	287.063	286.140
	Normalized	99.61%	99.68%	100%
	Standard Deviation	0.1%	0.2%	0%
OSBench - Memory Allocations (Ns/Event)		81.742684	81.999382	85.632006
	Normalized	100%	99.69%	95.46%
	Standard Deviation	0%	0.2%	2.9%
RealSR-NCNN - 4x - No (sec)		63.028	63.023	63.002
	Normalized	99.96%	99.97%	100%
	Standard Deviation	0.1%	0.1%	0.1%
RealSR-NCNN - 4x - Yes (sec)		482.609	482.839	482.551
	Normalized	99.99%	99.94%	100%
	Standard Deviation	0%	0%	0%
Waifu2x-NCNN Vulkan - 2x - 3 - No (sec)		4.115	4.110	4.097
	Normalized	99.56%	99.68%	100%
	Standard Deviation	1%	0.2%	0.2%
Waifu2x-NCNN Vulkan - 2x - 3 - Yes (sec)		26.675	26.685	26.673
	Normalized	99.99%	99.96%	100%
	Standard Deviation	0%	0%	0%

CloverLeaf - L.E.H (sec)	191.41	191.45	191.01
Normalized	99.79%	99.77%	100%
Standard Deviation	0.2%	0.1%	0.1%
CP2K Molecular Dynamics - Fayalite-FIST	1449	1462	1452
Data (sec)			
Normalized	100%	99.09%	99.73%
Dolfyn - C.F.D (sec)	21.069	21.139	20.988
Normalized	99.62%	99.29%	100%
Standard Deviation	0.6%	0.4%	0.3%
Timed HMMer Search - P.D.S (sec)	127.149	127.645	127.385
Normalized	100%	99.61%	99.81%
Standard Deviation	0%	0.3%	0.1%
Incompact3D - Cylinder (sec)	810.954712	821.055725	820.322815
Normalized	100%	98.77%	98.86%
Standard Deviation	0.8%	2.1%	0.5%
Timed MAFFT Alignment - M.S.A - LSU RNA	15.042	15.000	15.035
(sec)			
Normalized	99.72%	100%	99.77%
Standard Deviation	2.5%	0.7%	1.2%
Monte Carlo Simulations of Ionised Nebulae	342	340	341
- Dust 2D tau100.0 (sec)			
Normalized	99.42%	100%	99.71%
Standard Deviation		0.9%	0.3%
OpenFOAM - Motorbike 30M (sec)	342.98	339.54	338.27
Normalized	98.63%	99.63%	100%
Standard Deviation	0.8%	0.1%	1.1%
Timed FFmpeg Compilation - Time To	182.189	183.024	182.601
Compile (sec)			
Normalized	100%	99.54%	99.77%
Standard Deviation	0.3%	0.2%	0.7%
Timed Godot Game Engine Compilation -	501.200	503.977	502.608
Time To Compile (sec)			
Normalized	100%	99.45%	99.72%
Standard Deviation	0.1%	0.1%	0.1%
Build2 - Time To Compile (sec)	514.482	516.516	514.799
Normalized	100%	99.61%	99.94%
Standard Deviation	0.1%	0.7%	0.4%
Timed Eigen Compilation - Time To Compile	113.520	113.654	112.964
(sec)			
Normalized	99.51%	99.39%	100%
Standard Deviation	0.8%	0.3%	0.3%
Monkey Audio Encoding - WAV To APE (sec)	15.955	15.994	15.995
Normalized	100%	99.76%	99.75%
Standard Deviation	0.7%	1.1%	0.7%
Opus Codec Encoding - WAV To Opus	8.936	8.923	8.915
Encode (sec)			
Normalized	99.76%	99.91%	100%
Standard Deviation	0.8%	0.8%	0.5%
eSpeak-NG Speech Engine - T.T.S.S (sec)	35.134	35.319	35.312
Normalized	100%	99.48%	99.5%
Standard Deviation	0.6%	0.7%	0.6%
RNNoise (sec)	22.238	22.693	22.580
Normalized	100%	97.99%	98.49%
Standard Deviation	0.2%	2.9%	2.7%

ASTC Encoder - Fast (sec)	9.75	9.74	9.80
Normalized	99.9%	100%	99.39%
Standard Deviation	1.2%	0.8%	1.1%
ASTC Encoder - Medium (sec)	12.77	12.83	12.75
Normalized	99.84%	99.38%	100%
Standard Deviation	0.4%	0.5%	0.4%
ASTC Encoder - Thorough (sec)	84.33	84.61	84.49
Normalized	100%	99.67%	99.81%
Standard Deviation	0.4%	0.4%	0.1%
ASTC Encoder - Exhaustive (sec)	696.05	697.50	695.24
Normalized	99.88%	99.68%	100%
Standard Deviation	0.3%	0.1%	0.1%
Basis Universal - ETC1S (sec)	82.060	82.178	82.076
Normalized	100%	99.86%	99.98%
Standard Deviation	0.1%	0.3%	0.1%
Basis Universal - UASTC Level 0 (sec)	11.898	12.054	11.863
Normalized	99.71%	98.42%	100%
Standard Deviation	0.3%	1.4%	0%
Basis Universal - UASTC Level 2 (sec)	86.479	86.540	86.340
Normalized	99.84%	99.77%	100%
Standard Deviation	0.5%	0.4%	0.3%
SQLite Speedtest - Timed Time - Size 1,000 (sec)	81.222	81.423	81.933
Normalized	100%	99.75%	99.13%
Standard Deviation	0.3%	1.6%	1.5%
Darktable - Boat - CPU-only (sec)	25.206	25.901	25.451
Normalized	100%	97.32%	99.04%
Standard Deviation	0.6%	3.5%	0.6%
Darktable - Masskrug - CPU-only (sec)	24.172	24.518	24.194
Normalized	100%	98.59%	99.91%
Standard Deviation	0.2%	0.3%	0.6%
Darktable - Server Rack - CPU-only (sec)	0.339	0.342	0.344
Normalized	100%	99.12%	98.55%
Standard Deviation	0.7%	0.6%	2%
Darktable - Server Room - CPU-only (sec)	20.695	21.008	20.739
Normalized	100%	98.51%	99.79%
Standard Deviation	1.7%	1%	1.6%
GIMP - resize (sec)	12.855	12.866	12.826
Normalized	99.77%	99.69%	100%
Standard Deviation	1.2%	0.9%	1.4%
GIMP - rotate (sec)	14.487	14.470	14.424
Normalized	99.57%	99.68%	100%
Standard Deviation	0.1%	0.5%	0.4%
GIMP - auto-levels (sec)	15.924	15.853	15.894
Normalized	99.55%	100%	99.74%
Standard Deviation	0.1%	1.2%	0.7%
GIMP - unsharp-mask (sec)	17.332	17.317	17.328
Normalized	99.91%	100%	99.94%
Standard Deviation	0.2%	0.4%	0.2%
Hugin - P.P.A.S.T (sec)	82.006	83.581	82.188
Normalized	100%	98.12%	99.78%
Standard Deviation	1.2%	0.5%	0.3%
OCRMyPDF - P.6.P.P.D (sec)	52.675	52.741	52.986
Normalized	100%	99.87%	99.41%
Standard Deviation	0.4%	0.3%	0.3%

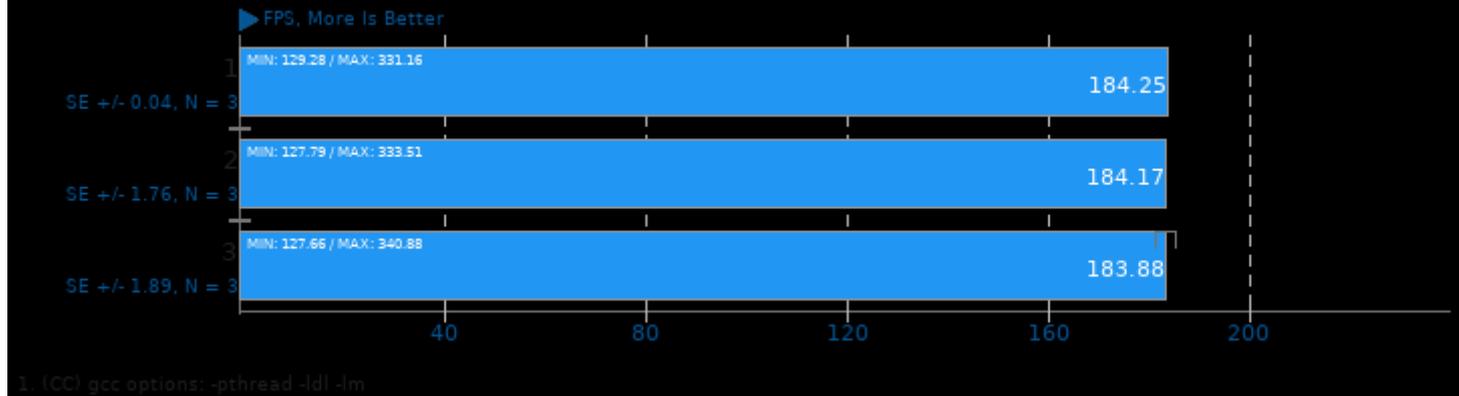
RawTherapee - T.B.T (sec)	123.684	123.405	123.339
Normalized	99.72%	99.95%	100%
Standard Deviation	0.1%	0.3%	0.2%
WavPack Audio Encoding - WAV To WavPack (sec)	15.082	15.077	15.174
Normalized	99.97%	100%	99.36%
Standard Deviation	0.1%	0.2%	2.6%
Sunflow Rendering System - G.I.I.S (sec)	3.206	3.148	3.302
Normalized	98.19%	100%	95.34%
Standard Deviation	2.2%	1.8%	3.3%
Unpacking Firefox - firefox-84.0.source.tar.xz (sec)	23.847	23.799	23.806
Normalized	99.8%	100%	99.97%
Standard Deviation	0.2%	0.3%	0.7%
OSBench - Create Files (us/Event)	18.245888	18.315846	18.441862
Normalized	100%	99.62%	98.94%
Standard Deviation	2.2%	2%	1.2%
OSBench - Create Threads (us/Event)	14.920235	14.823278	14.909108
Normalized	99.35%	100%	99.42%
Standard Deviation	0.3%	1.1%	1.7%
OSBench - Launch Programs (us/Event)	81.523260	81.967513	82.073212
Normalized	100%	99.46%	99.33%
Standard Deviation	0.6%	0.1%	0.2%
OSBench - Create Processes (us/Event)	26.190281	26.479562	26.857058
Normalized	100%	98.91%	97.52%
Standard Deviation	0.6%	0.2%	1.3%
Sockperf - Latency Ping Pong (usec)	6.927	6.751	6.790
Normalized	97.46%	100%	99.43%
Standard Deviation	2.1%	1.6%	2.4%
Sockperf - Latency Under Load (usec)	53.775	52.758	50.699
Normalized	94.28%	96.1%	100%
Standard Deviation	18.7%	17.8%	19.1%

Algebraic Multi-Grid Benchmark 1.2



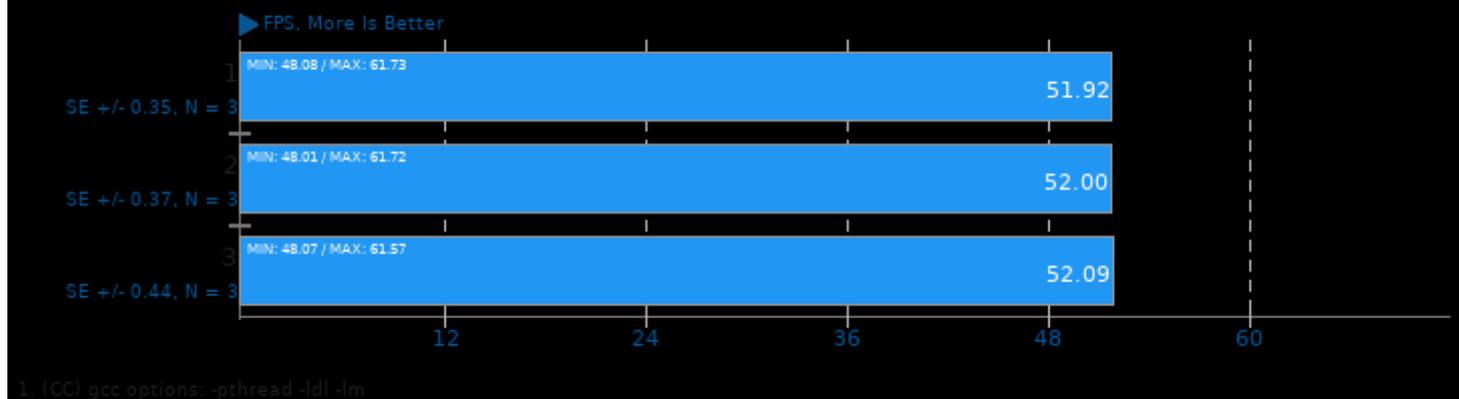
dav1d 0.8.1

Video Input: Chimera 1080p



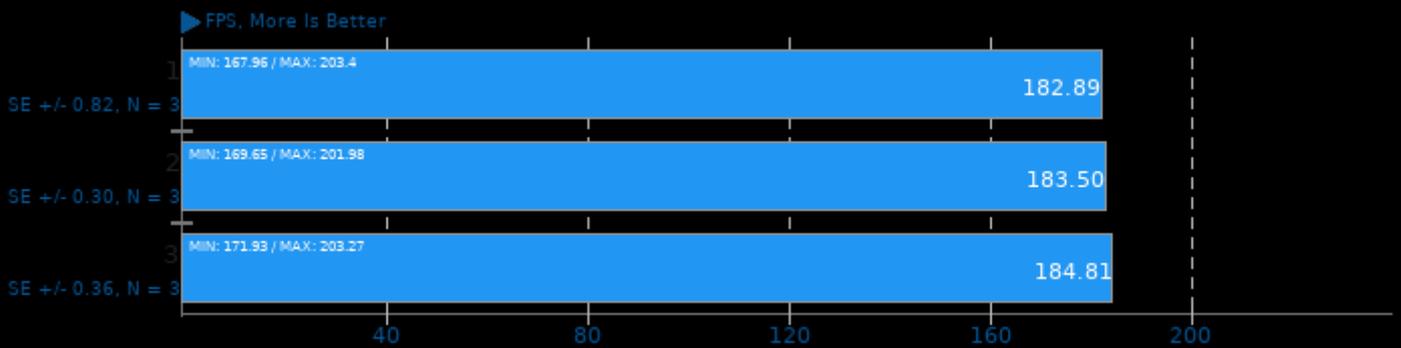
dav1d 0.8.1

Video Input: Summer Nature 4K



dav1d 0.8.1

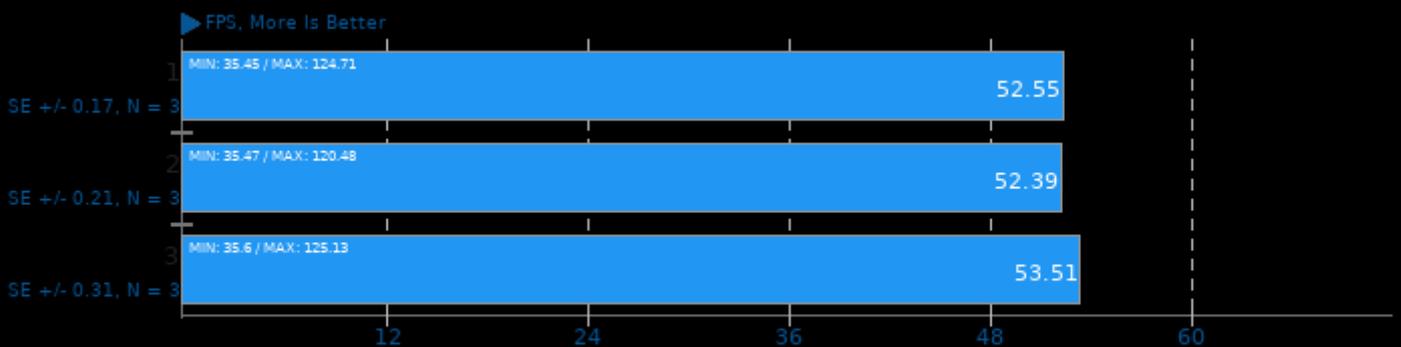
Video Input: Summer Nature 1080p



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

dav1d 0.8.1

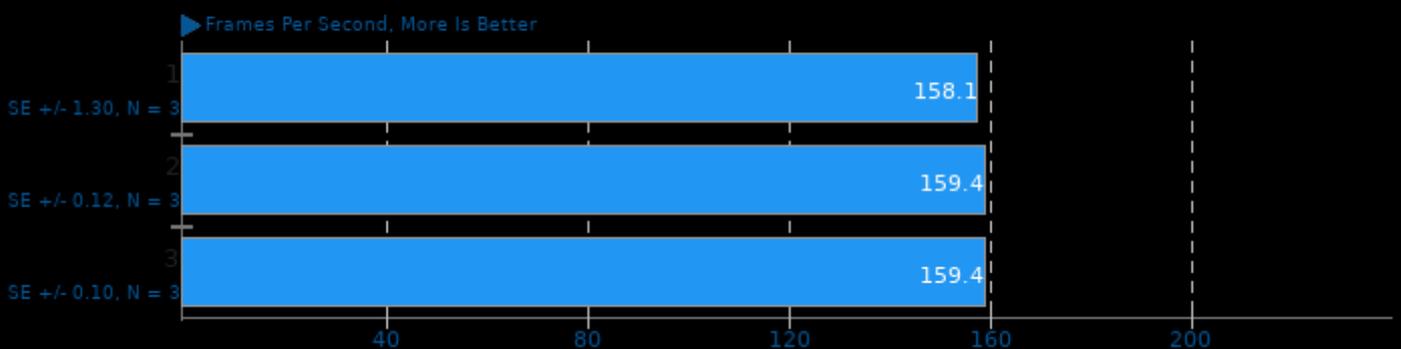
Video Input: Chimera 1080p 10-bit



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

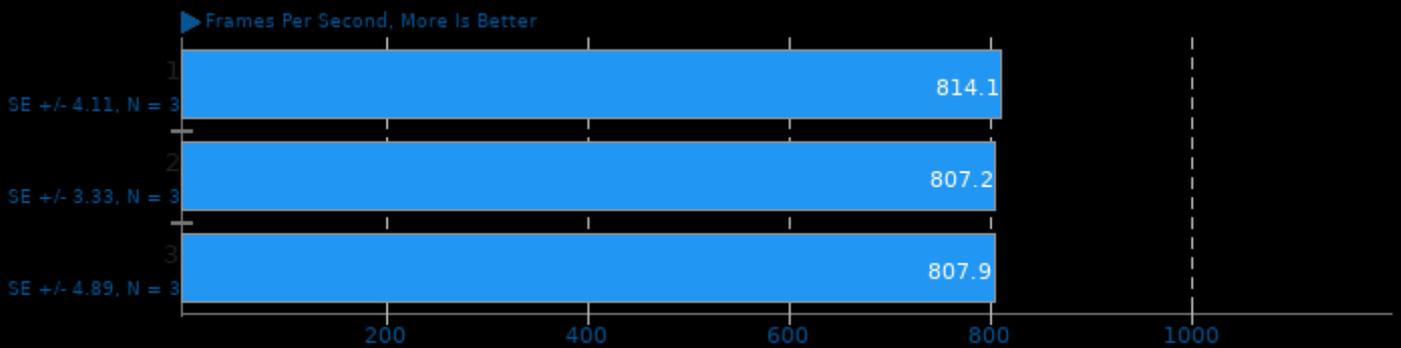
Warsow 2.5 Beta

Resolution: 1920 x 1080



yquake2 7.45

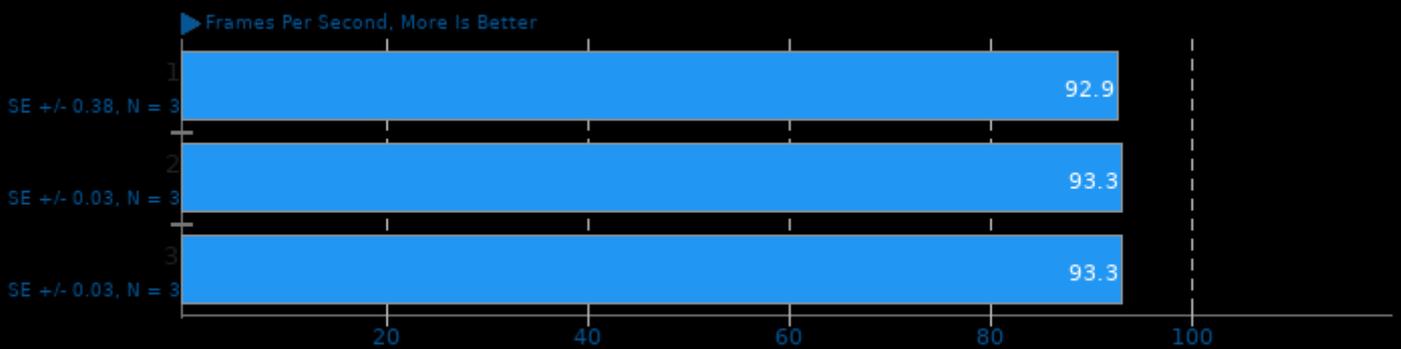
Renderer: OpenGL 3.x - Resolution: 1920 x 1080



1. (CC) gcc options: -lm -ldl -rdynamic -shared -fstack-protector-strong -fstack-protector -fPIE -pie -fomit-frame-pointer -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -m

yquake2 7.45

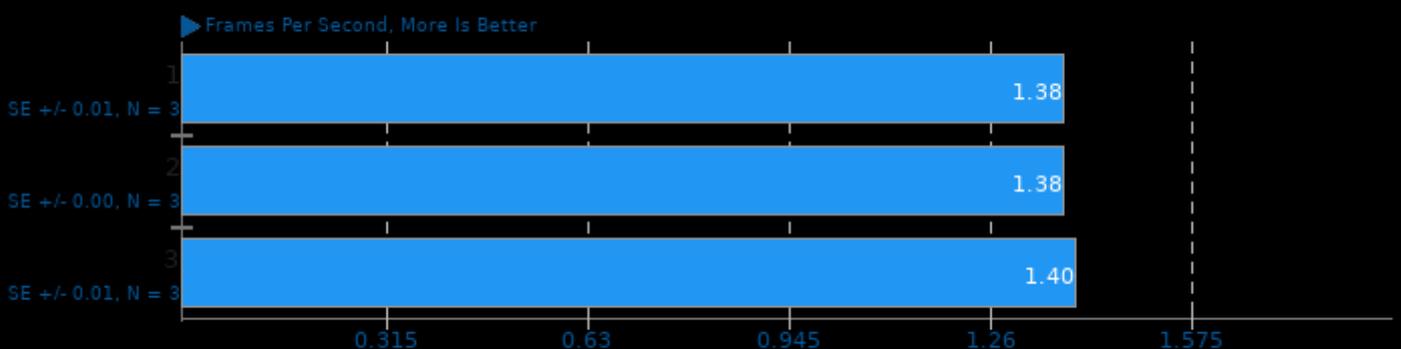
Renderer: Software CPU - Resolution: 1920 x 1080



1. (CC) gcc options: -lm -ldl -rdynamic -shared -fstack-protector-strong -fstack-protector -fPIE -pie -fomit-frame-pointer -std=gnu99 -fno-strict-aliasing -fwrapv -fvisibility=hidden -MMD -m

AOM AV1 2.0

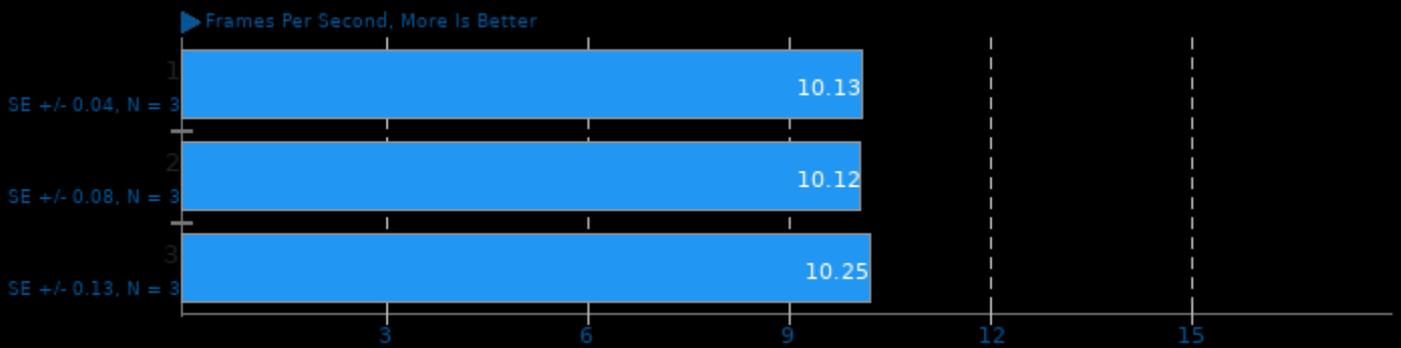
Encoder Mode: Speed 4 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -pthread

AOM AV1 2.0

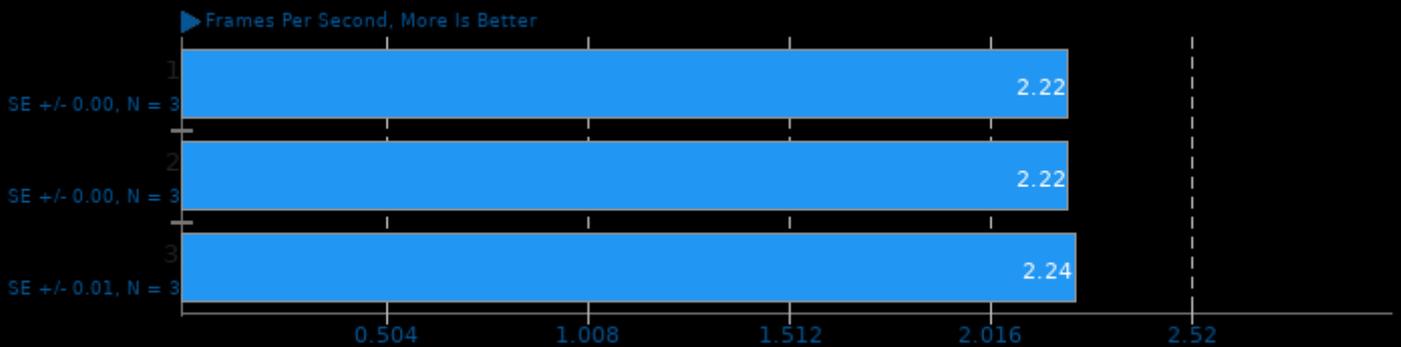
Encoder Mode: Speed 6 Realtime



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -pthread

AOM AV1 2.0

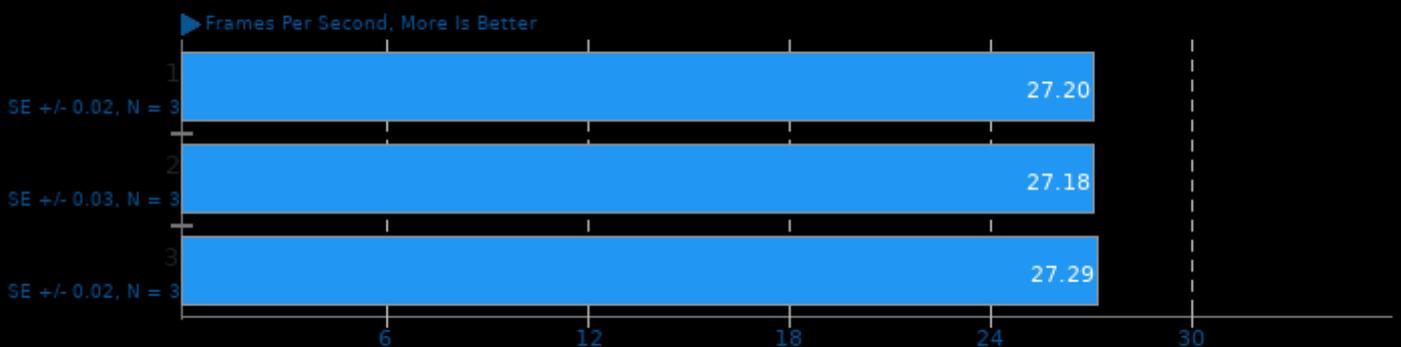
Encoder Mode: Speed 6 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -pthread

AOM AV1 2.0

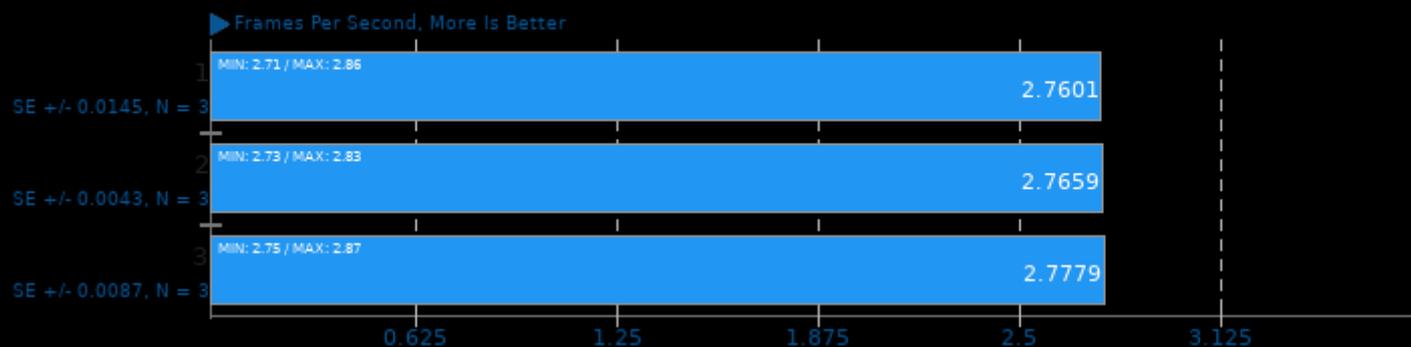
Encoder Mode: Speed 8 Realtime



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -pthread

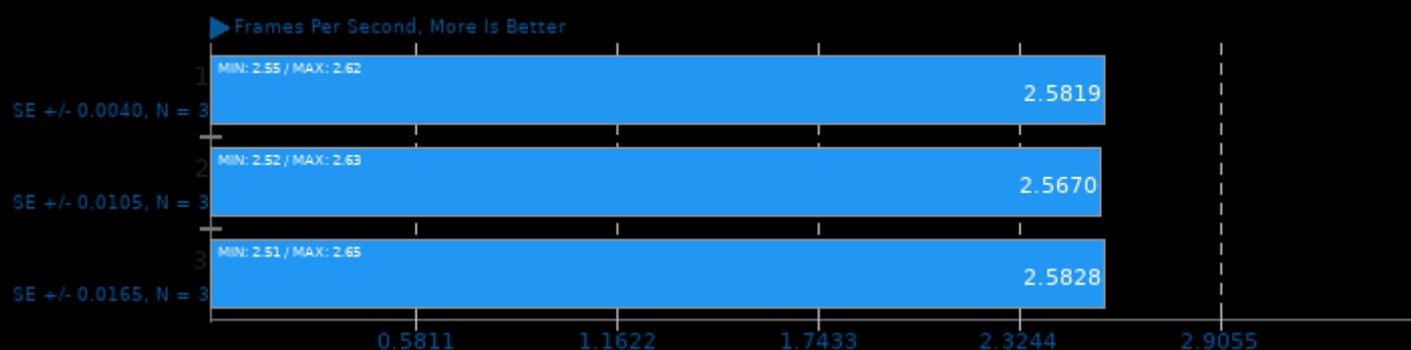
Embree 3.9.0

Binary: Pathtracer - Model: Crown



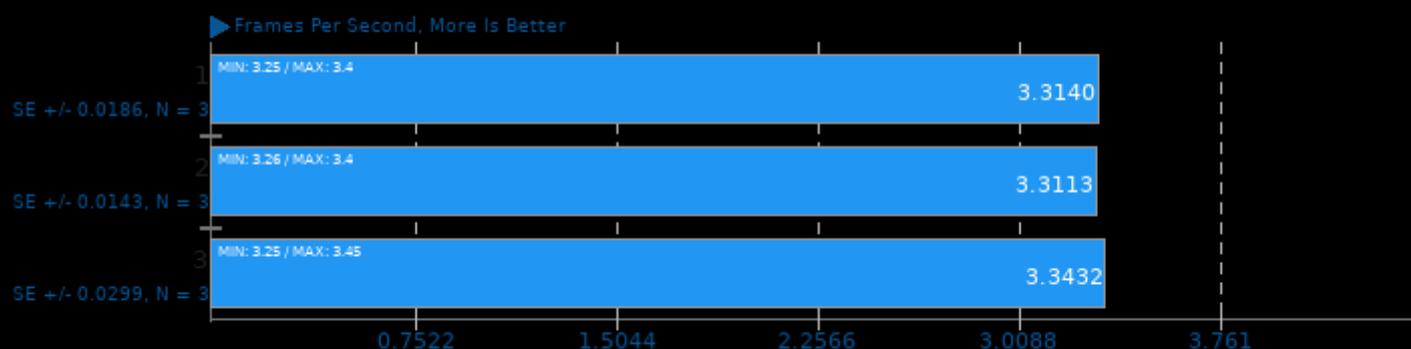
Embree 3.9.0

Binary: Pathtracer ISPC - Model: Crown



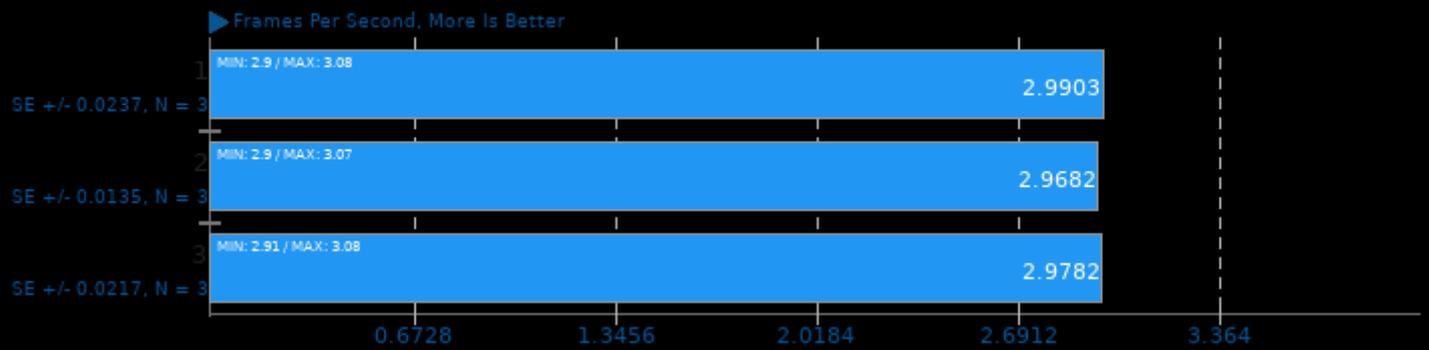
Embree 3.9.0

Binary: Pathtracer - Model: Asian Dragon



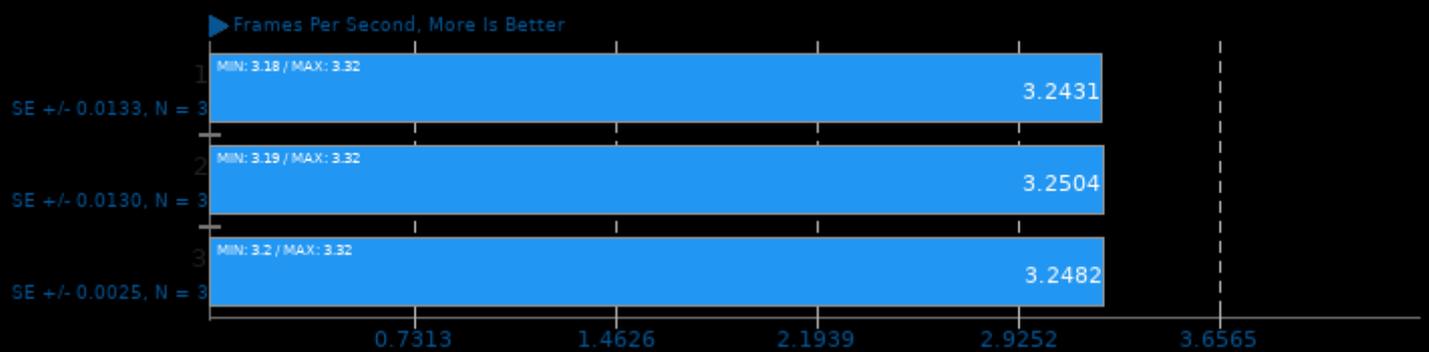
Embree 3.9.0

Binary: Pathtracer - Model: Asian Dragon Obj



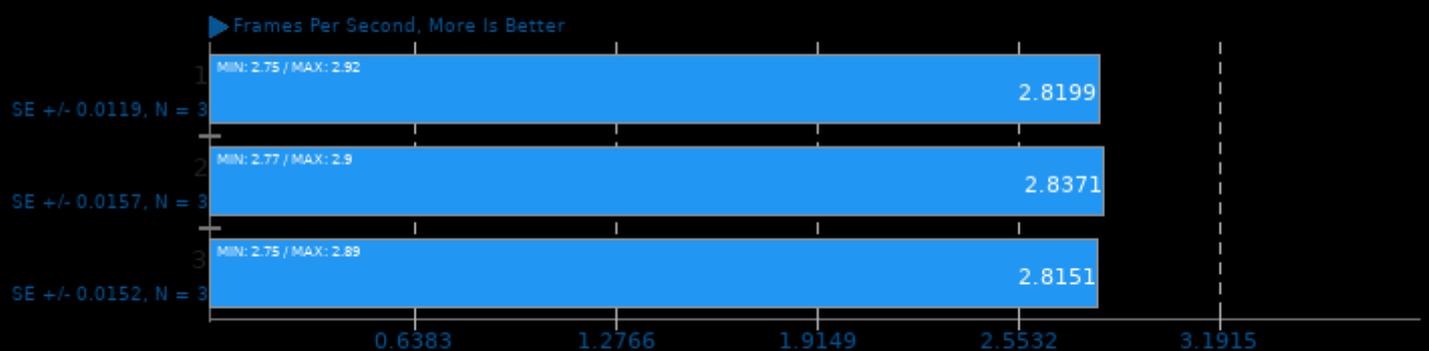
Embree 3.9.0

Binary: Pathtracer ISPC - Model: Asian Dragon



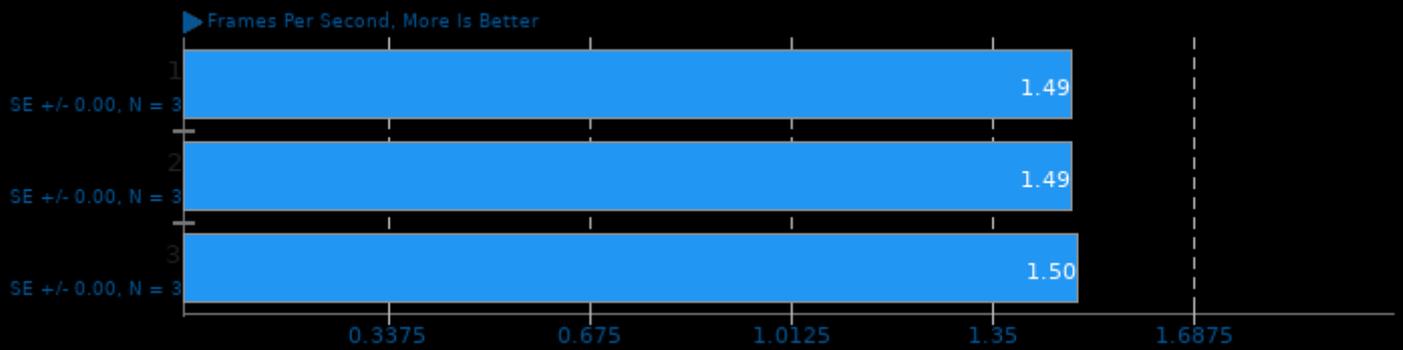
Embree 3.9.0

Binary: Pathtracer ISPC - Model: Asian Dragon Obj



Kvazaar 2.0

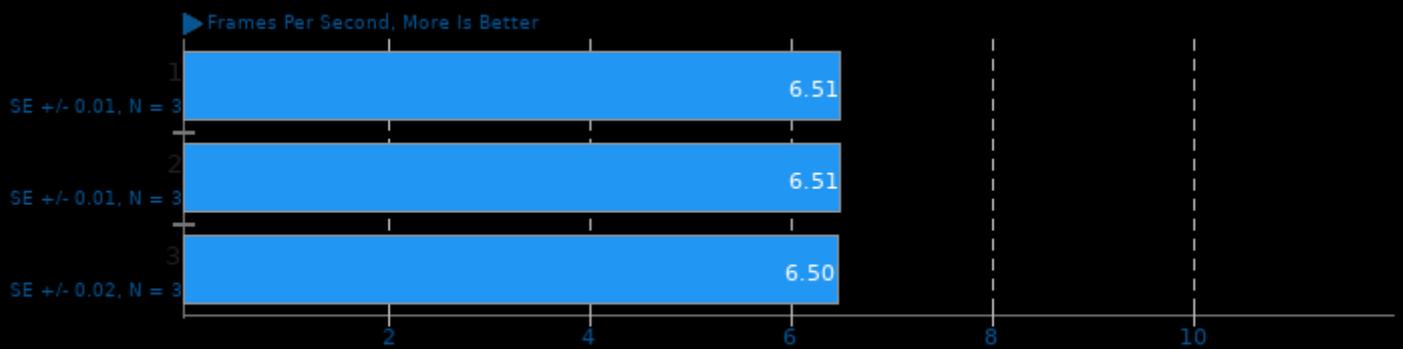
Video Input: Bosphorus 4K - Video Preset: Medium



1. (CC) gcc options: -pthread -free-vectorize -fvisibility=hidden -O2 -lthread -lm -lrt

Kvazaar 2.0

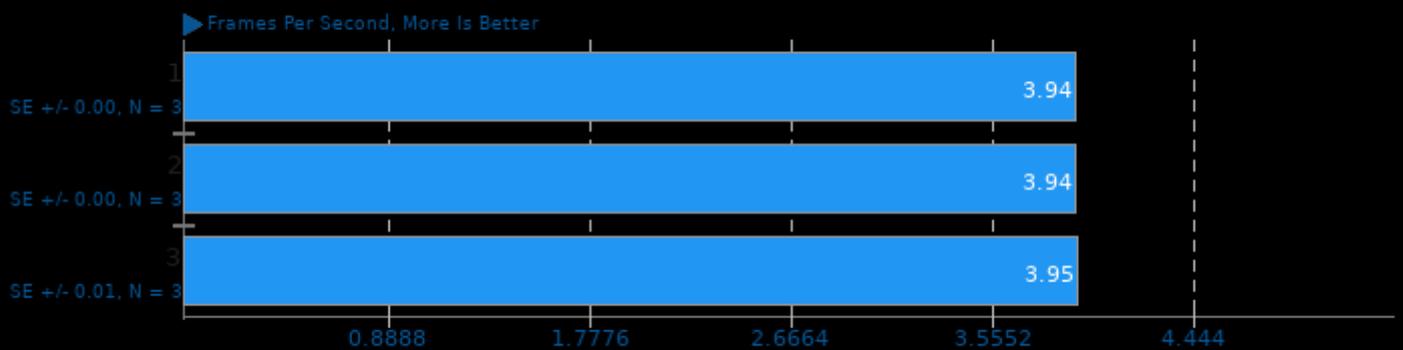
Video Input: Bosphorus 1080p - Video Preset: Medium



1. (CC) gcc options: -pthread -free-vectorize -fvisibility=hidden -O2 -lthread -lm -lrt

Kvazaar 2.0

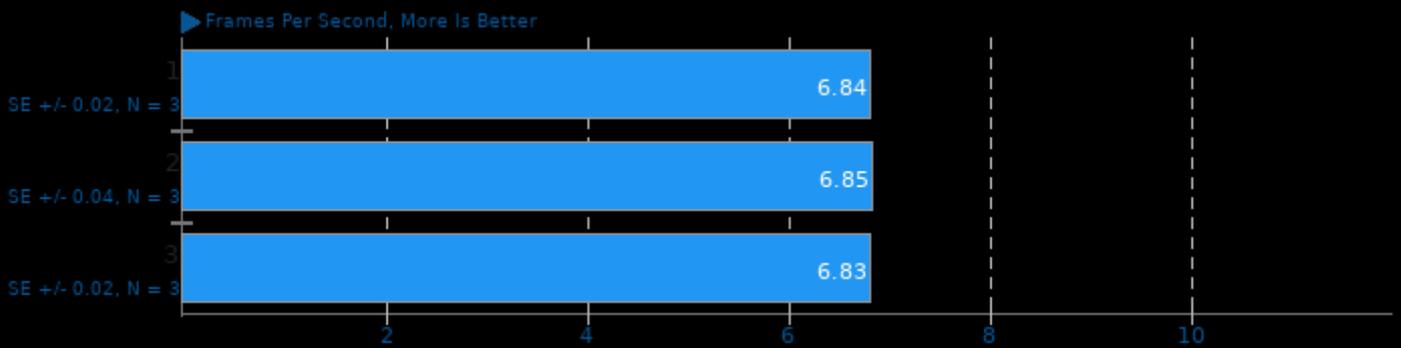
Video Input: Bosphorus 4K - Video Preset: Very Fast



1. (CC) gcc options: -pthread -free-vectorize -fvisibility=hidden -O2 -lthread -lm -lrt

Kvazaar 2.0

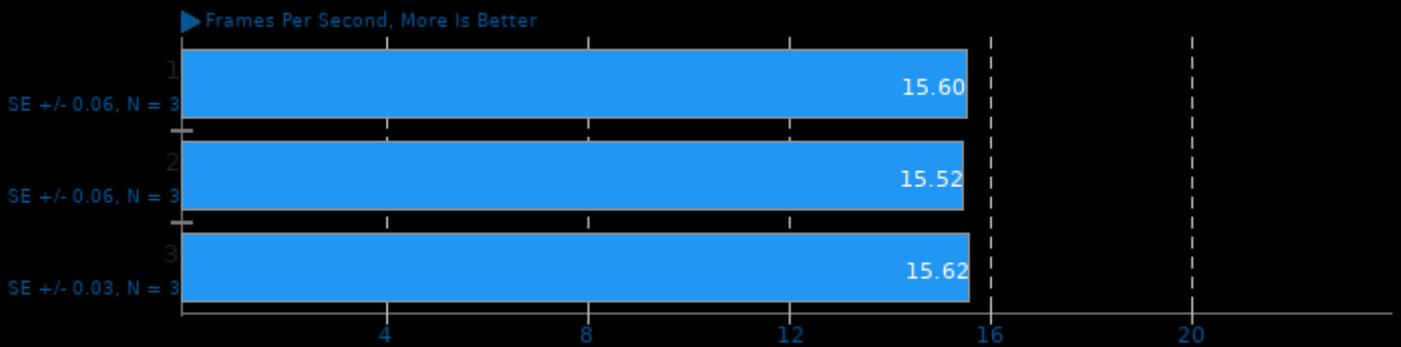
Video Input: Bosphorus 4K - Video Preset: Ultra Fast



1. (CC) gcc options: -pthread -free-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

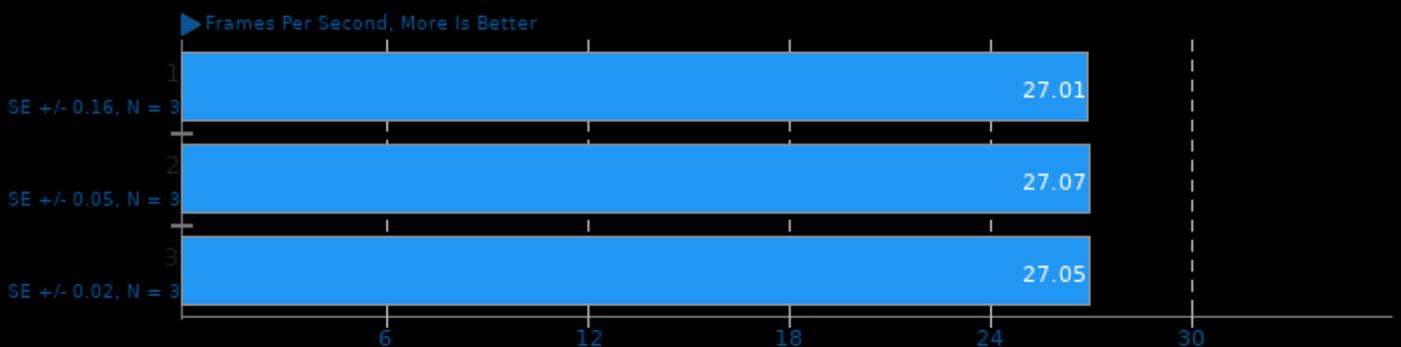
Video Input: Bosphorus 1080p - Video Preset: Very Fast



1. (CC) gcc options: -pthread -free-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

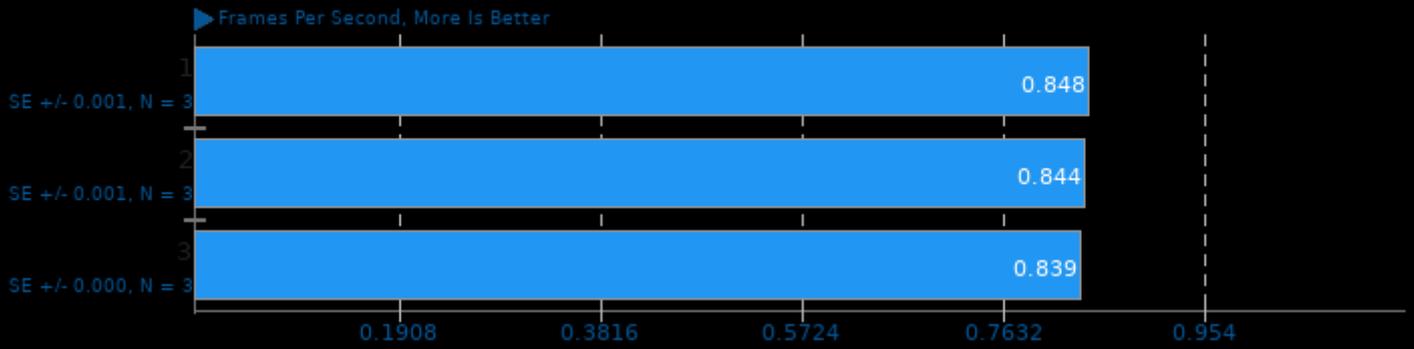
Video Input: Bosphorus 1080p - Video Preset: Ultra Fast



1. (CC) gcc options: -pthread -free-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

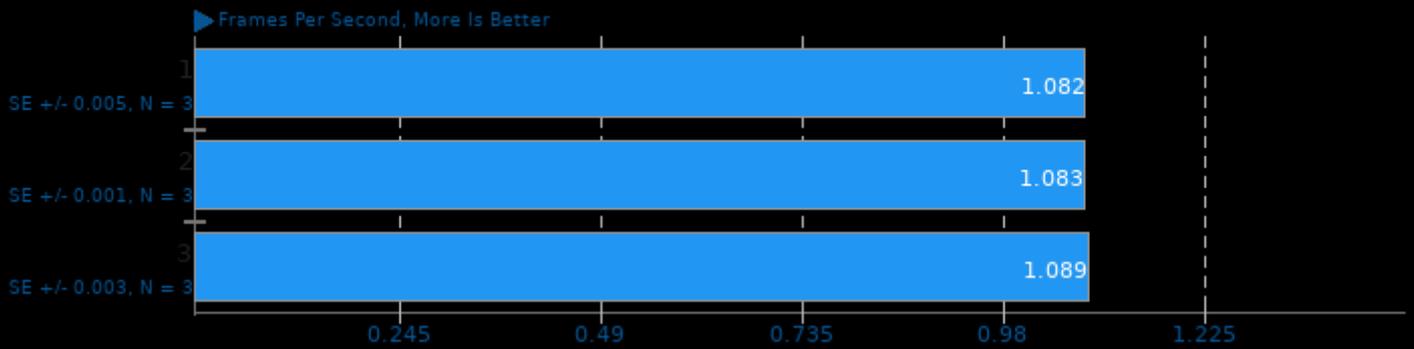
rav1e 0.4

Speed: 5



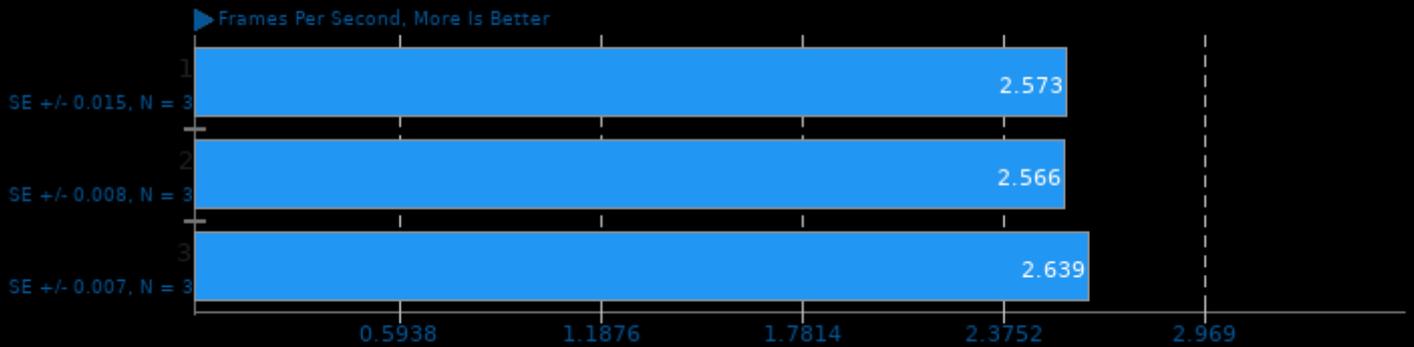
rav1e 0.4

Speed: 6



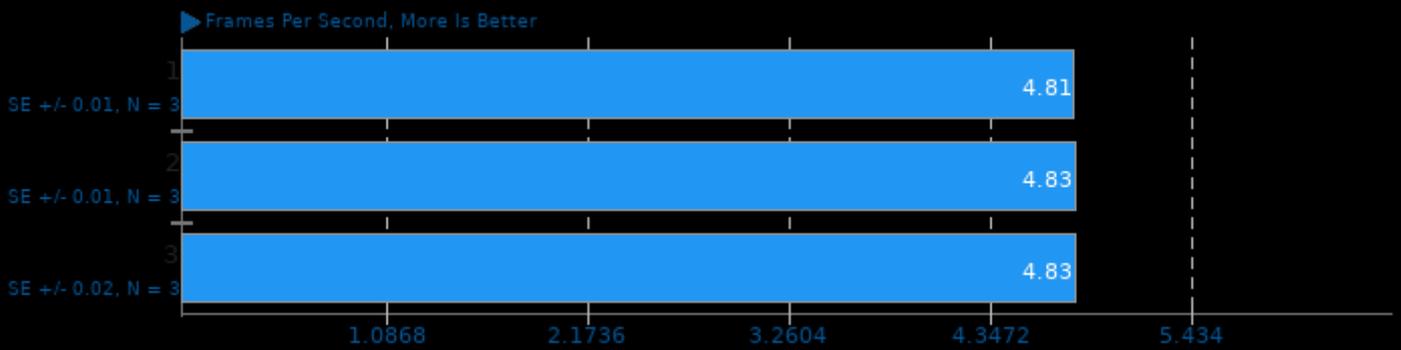
rav1e 0.4

Speed: 10



x265 3.4

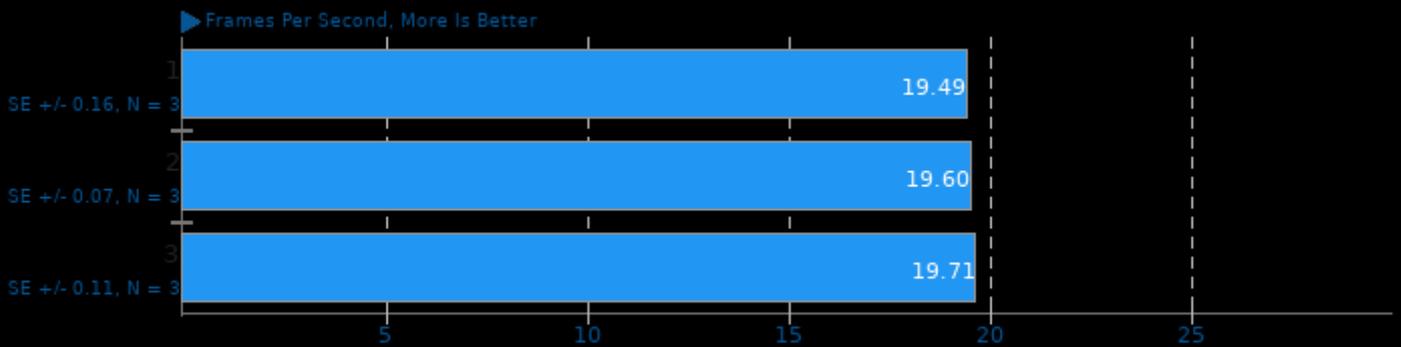
Video Input: Bosphorus 4K



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

x265 3.4

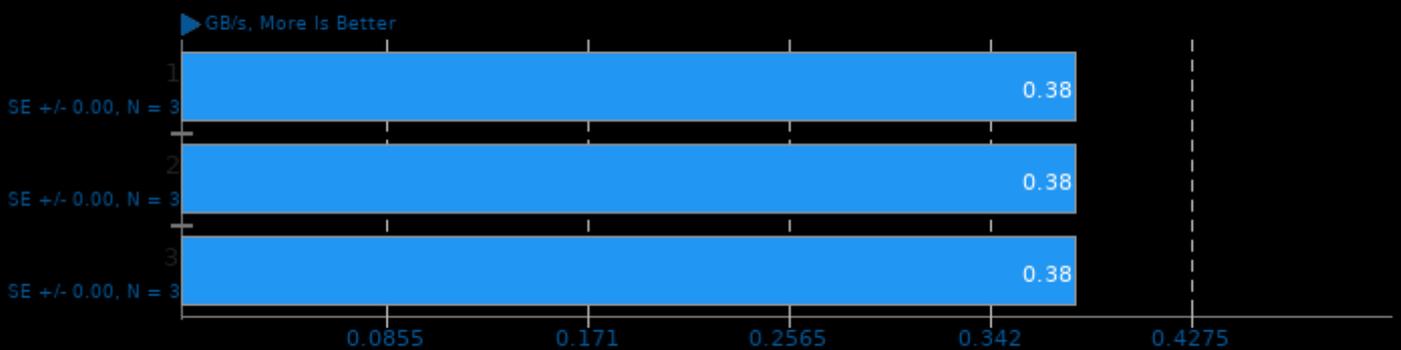
Video Input: Bosphorus 1080p



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

simdjson 0.7.1

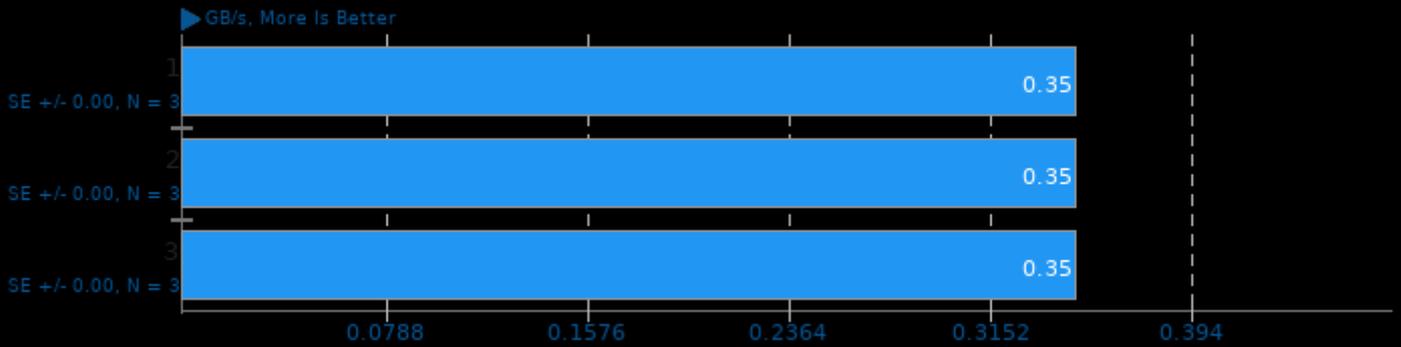
Throughput Test: Kostya



1. (CXX) g++ options: -O3 -pthread

simdjson 0.7.1

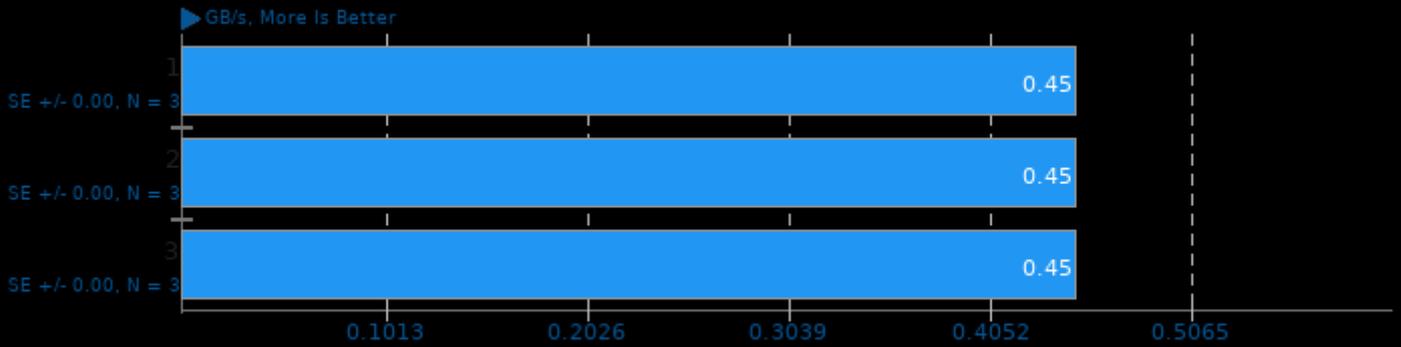
Throughput Test: LargeRandom



1. (CXX) g++ options: -O3 -pthread

simdjson 0.7.1

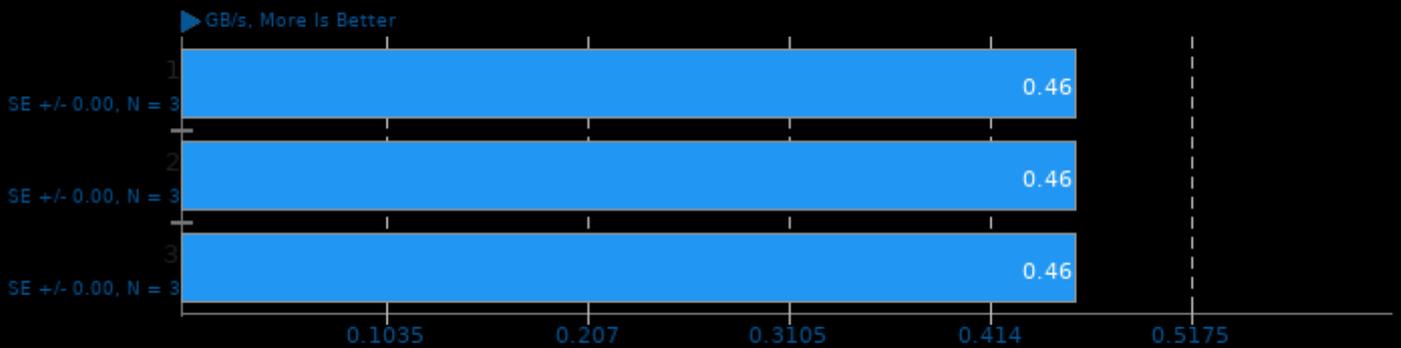
Throughput Test: PartialTweets



1. (CXX) g++ options: -O3 -pthread

simdjson 0.7.1

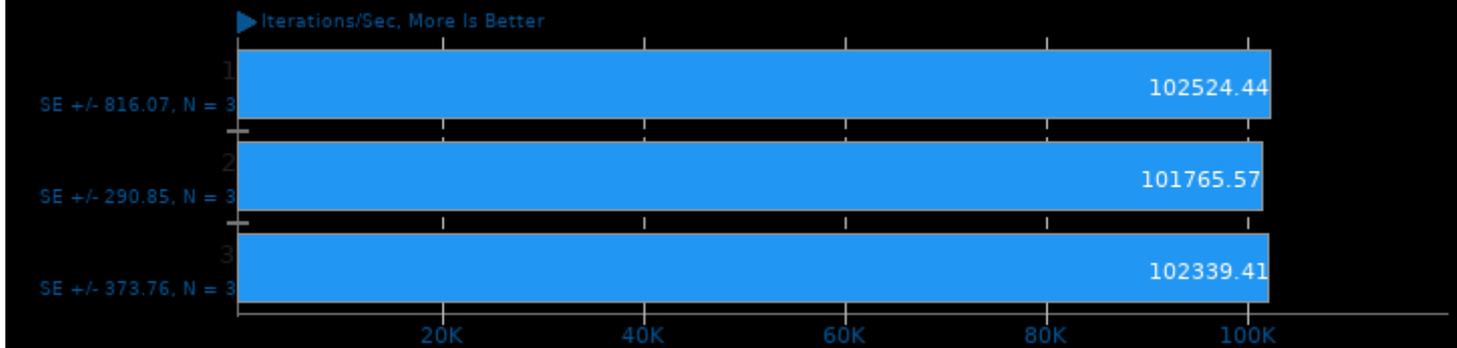
Throughput Test: DistinctUserID



1. (CXX) g++ options: -O3 -pthread

Coremark 1.0

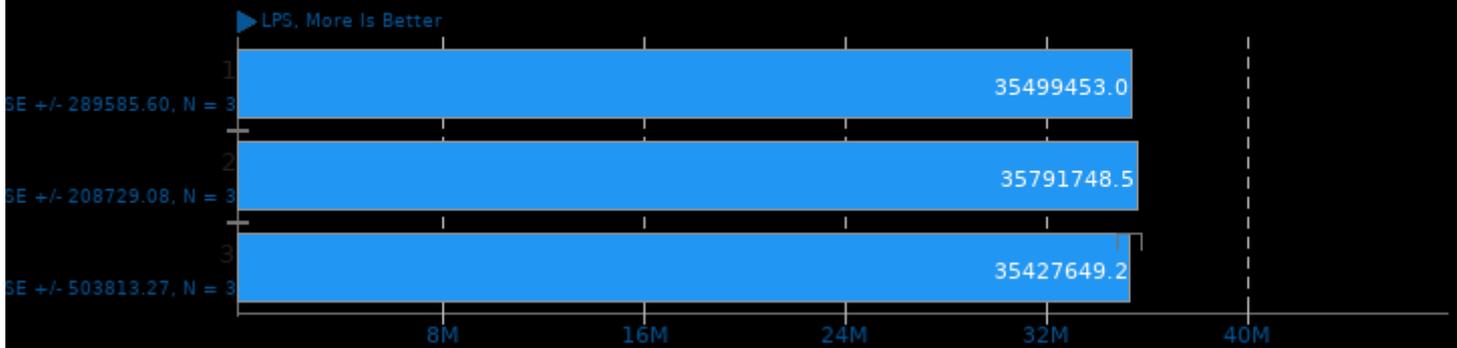
CoreMark Size 666 - Iterations Per Second



1. (CC) gcc options: -O2 -lrt -lrt

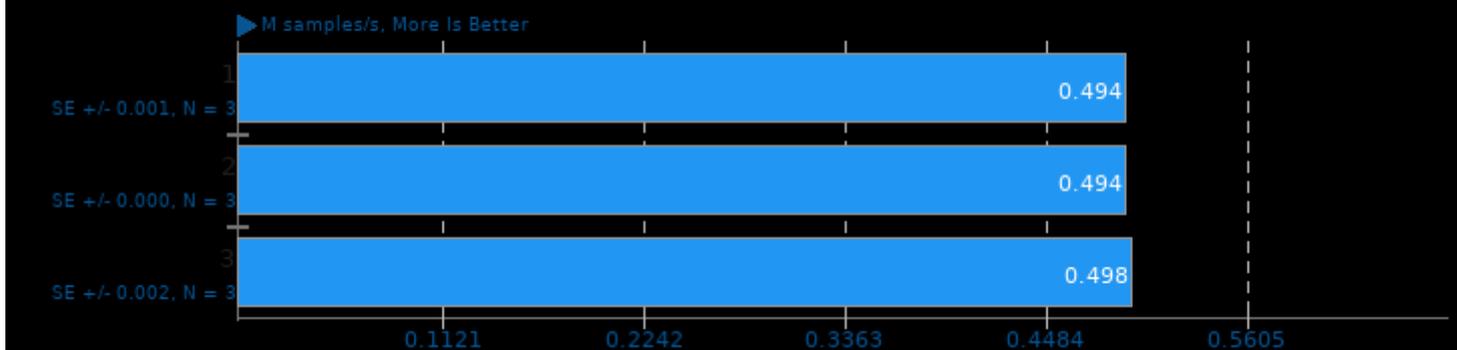
BYTE Unix Benchmark 3.6

Computational Test: Dhrystone 2



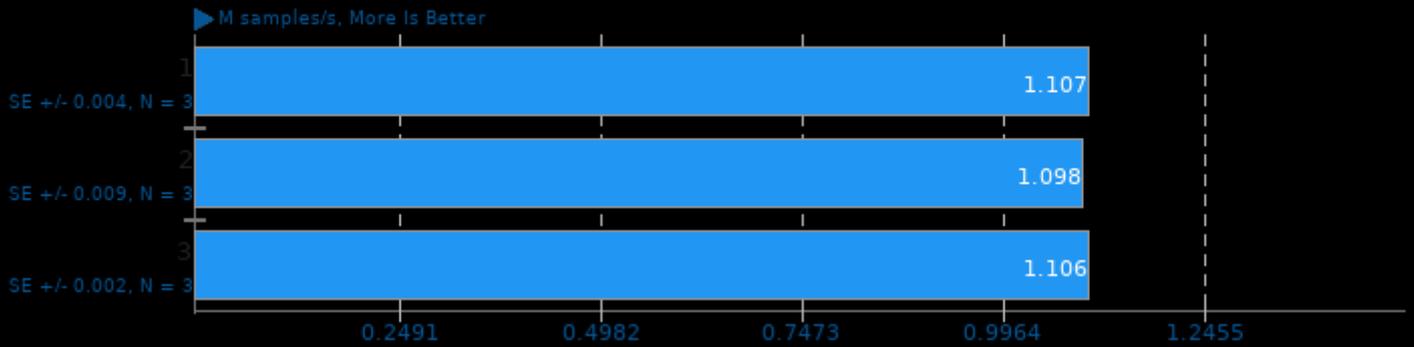
IndigoBench 4.4

Acceleration: CPU - Scene: Bedroom



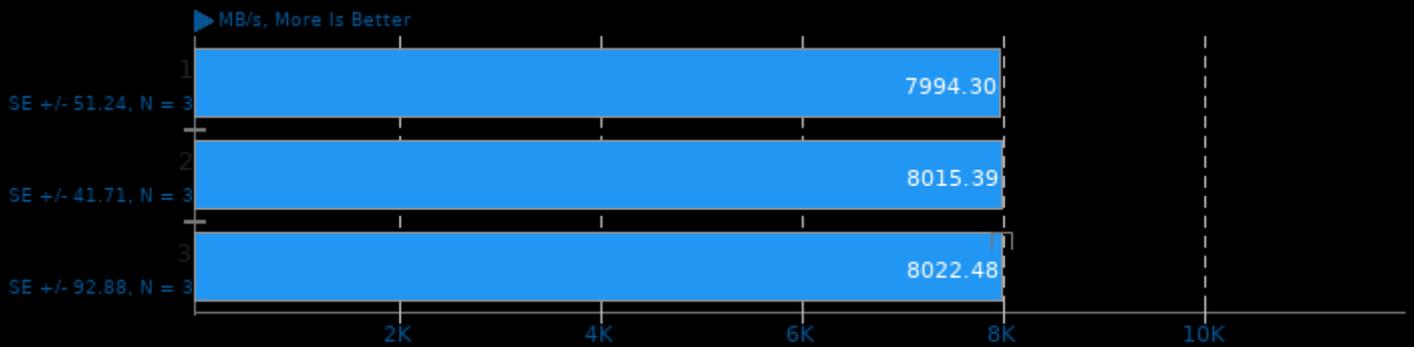
IndigoBench 4.4

Acceleration: CPU - Scene: Supercar



LZ4 Compression 1.9.3

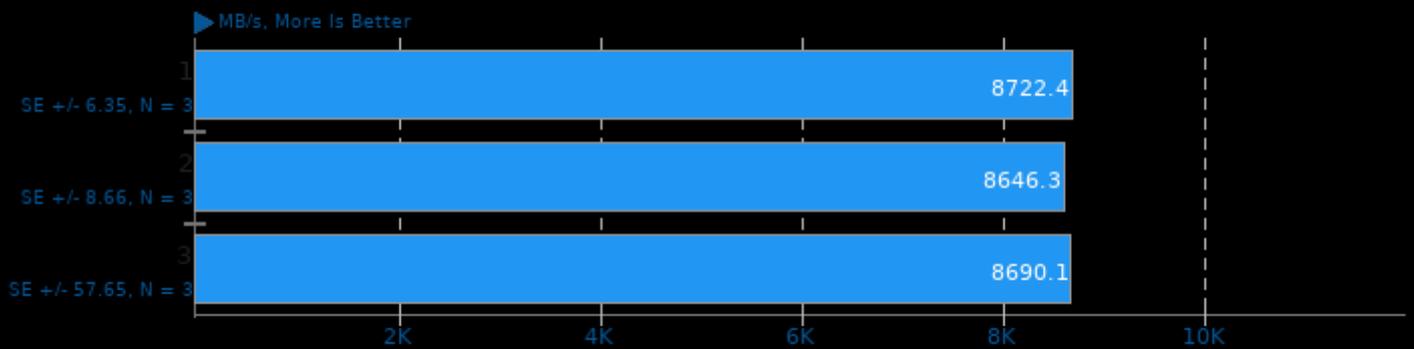
Compression Level: 1 - Compression Speed



1, (CC) gcc options: -O3

LZ4 Compression 1.9.3

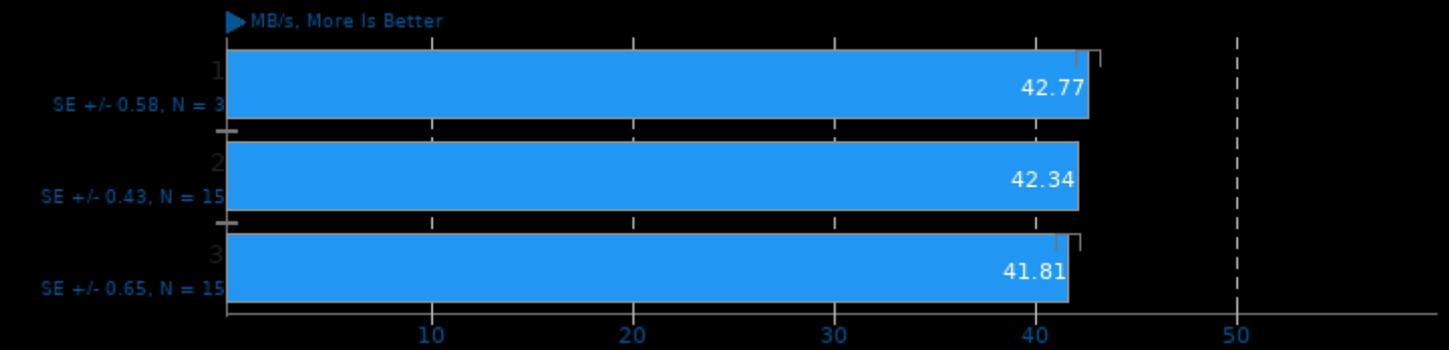
Compression Level: 1 - Decompression Speed



1, (CC) gcc options: -O3

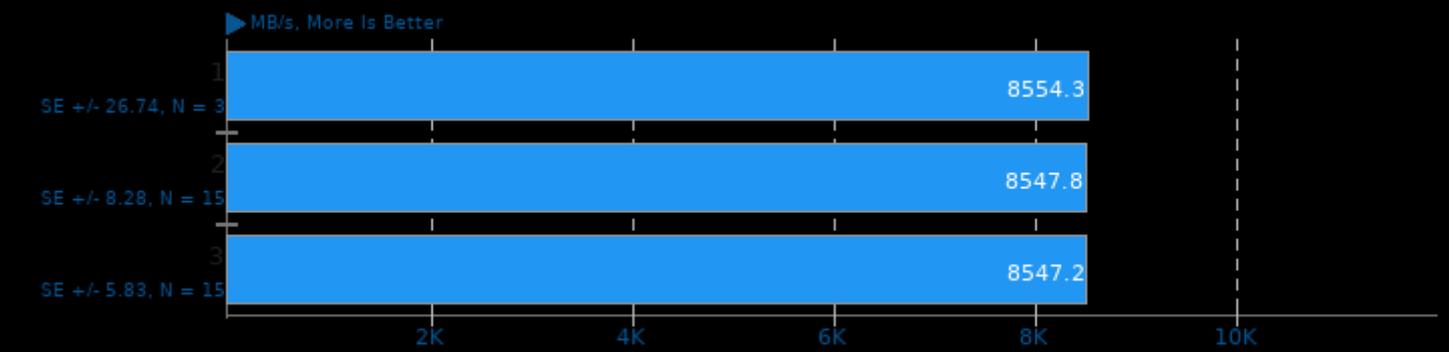
LZ4 Compression 1.9.3

Compression Level: 3 - Compression Speed



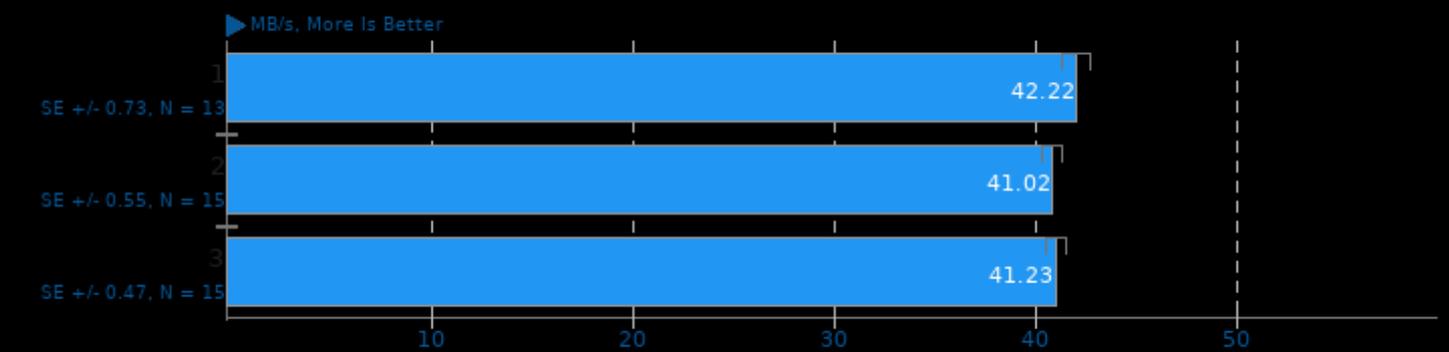
LZ4 Compression 1.9.3

Compression Level: 3 - Decompression Speed



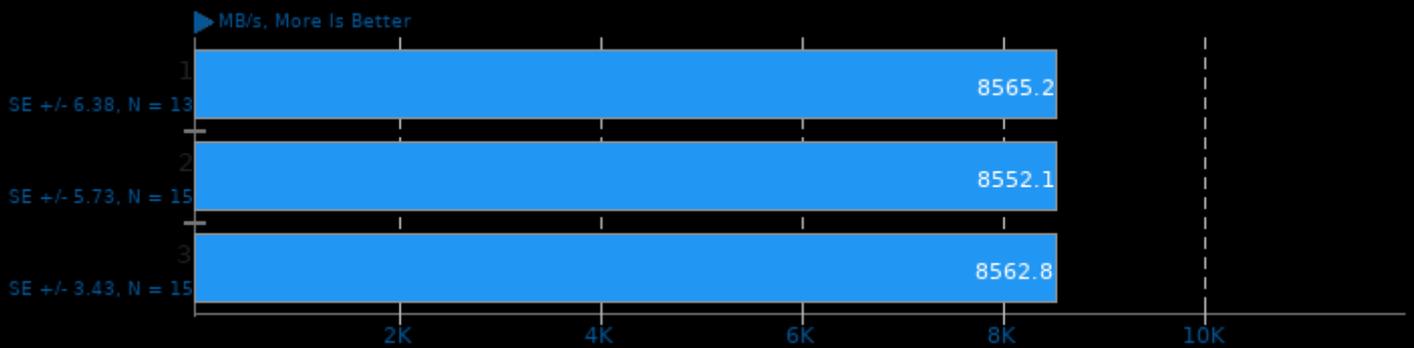
LZ4 Compression 1.9.3

Compression Level: 9 - Compression Speed



LZ4 Compression 1.9.3

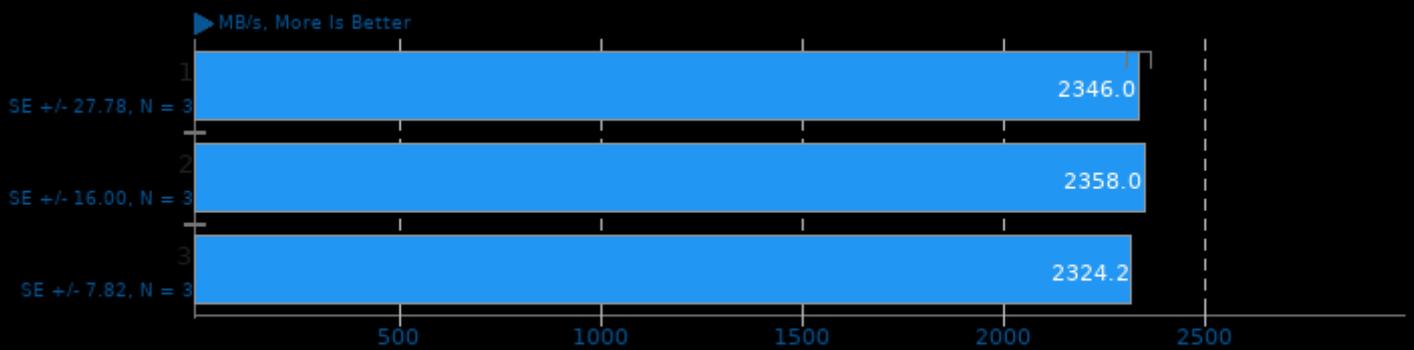
Compression Level: 9 - Decompression Speed



1. (CC) gcc options: -O3

Zstd Compression 1.4.5

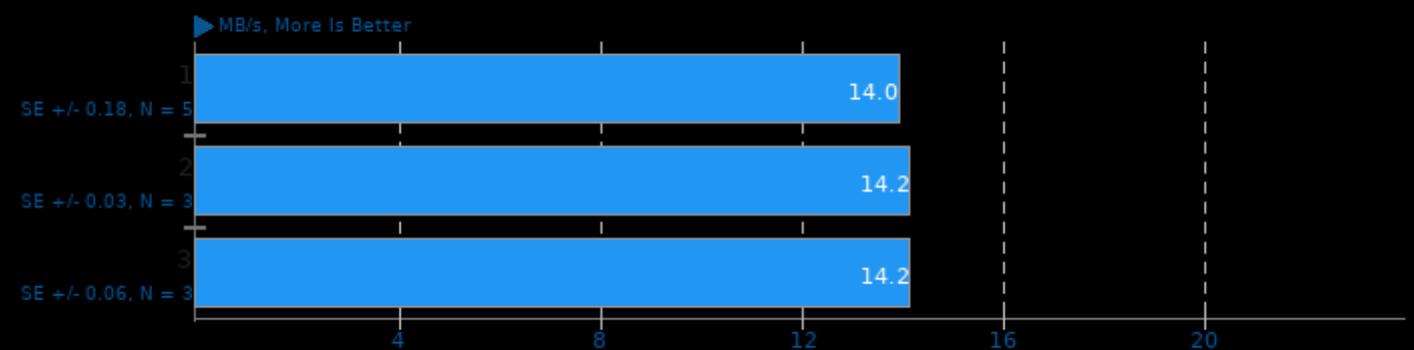
Compression Level: 3



1. (CC) gcc options: -O3 -pthread -lz -lzma

Zstd Compression 1.4.5

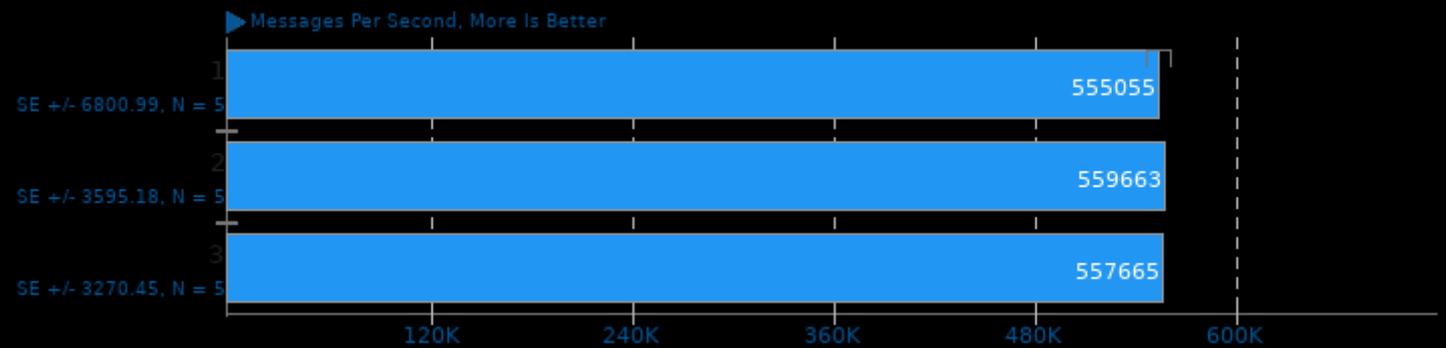
Compression Level: 19



1. (CC) gcc options: -O3 -pthread -lz -lzma

Socketperf 3.4

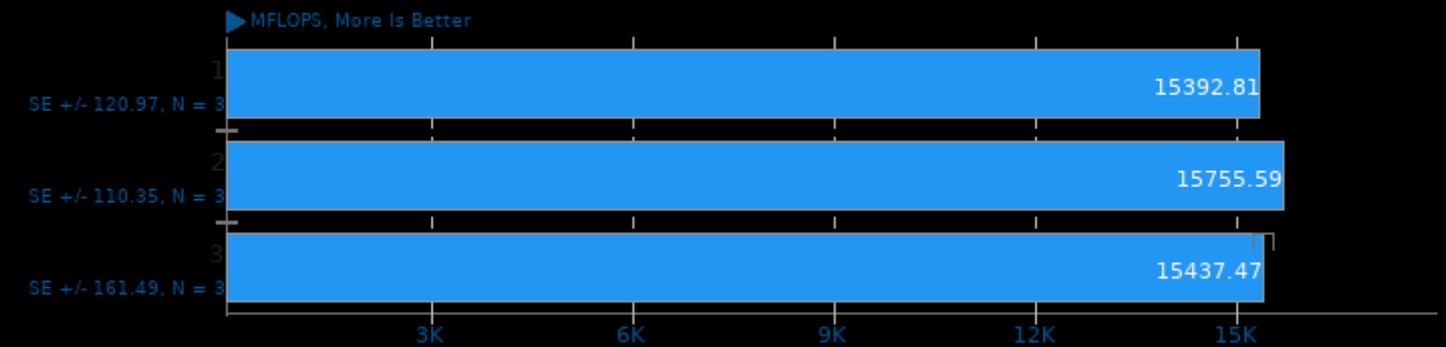
Test: Throughput



1. (CXX) g++ options: -param -O3 -rdynamic -ldl -pthread

FFTE 7.0

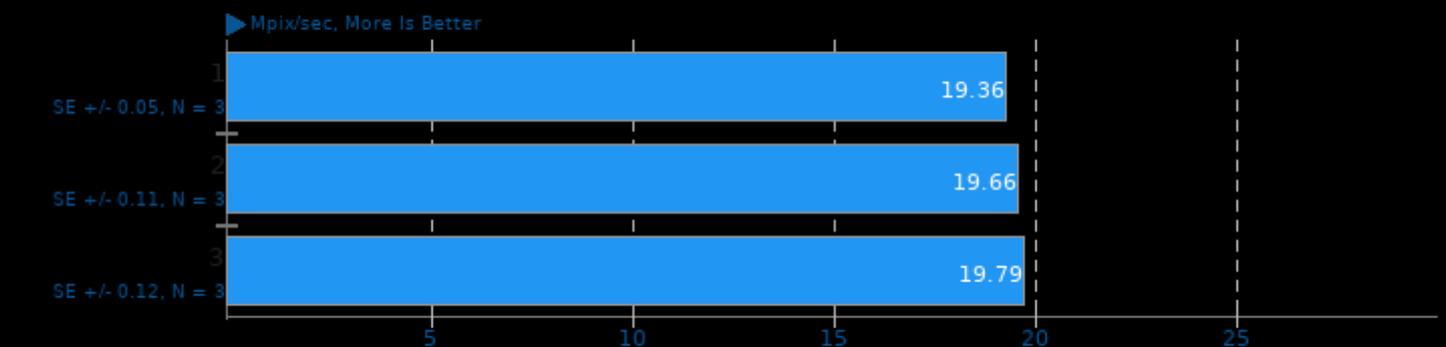
N=256, 3D Complex FFT Routine



1. (F9X) gfortran options: -O3 -fomit-frame-pointer -fopenmp

LibRaw 0.20

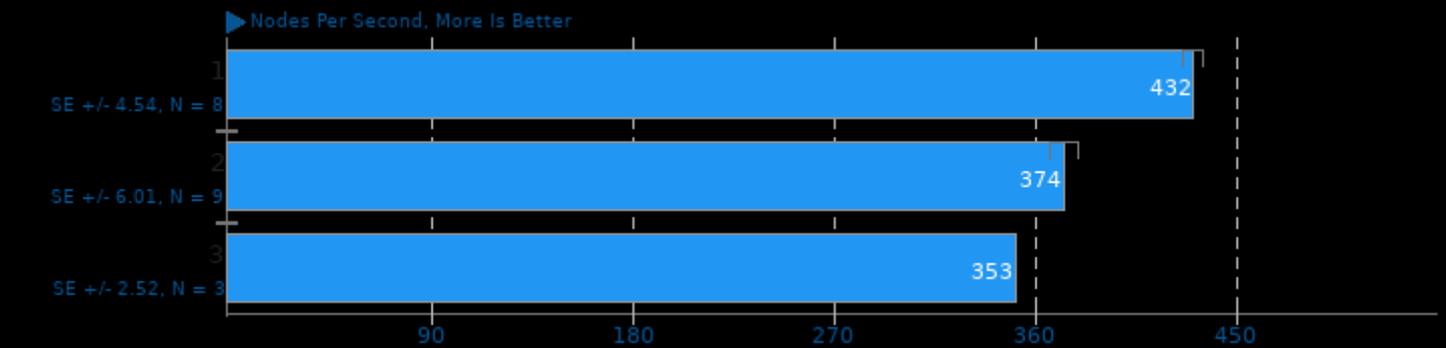
Post-Processing Benchmark



1. (CXX) g++ options: -O2 -fopenmp -ljpeg -lz -lm

LeelaChessZero 0.26

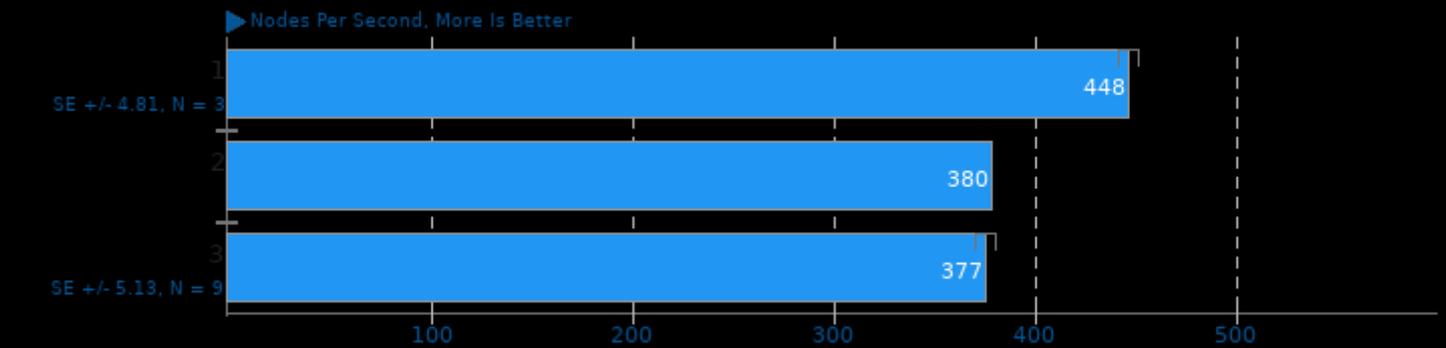
Backend: BLAS



1. (CXX) g++ options: -fno -pthread

LeelaChessZero 0.26

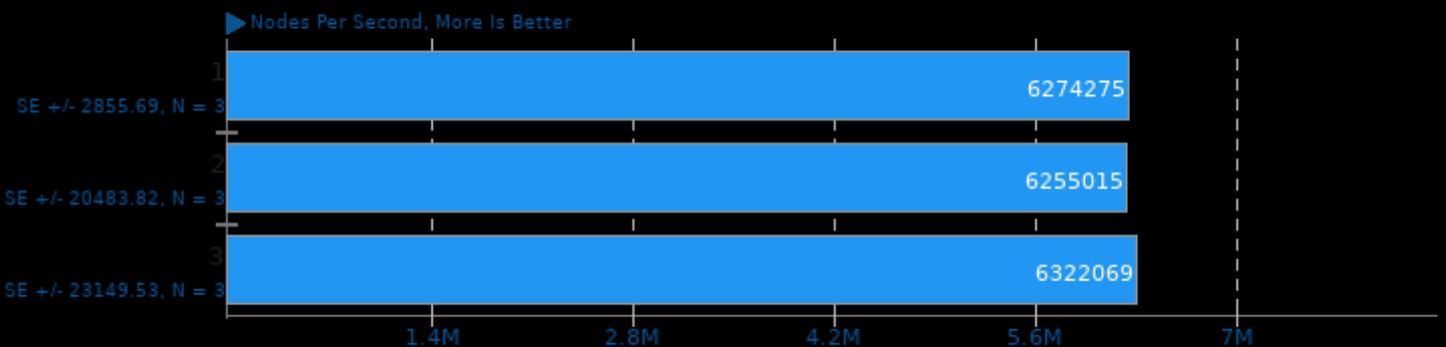
Backend: Eigen



1. (CXX) g++ options: -fno -pthread

Crafty 25.2

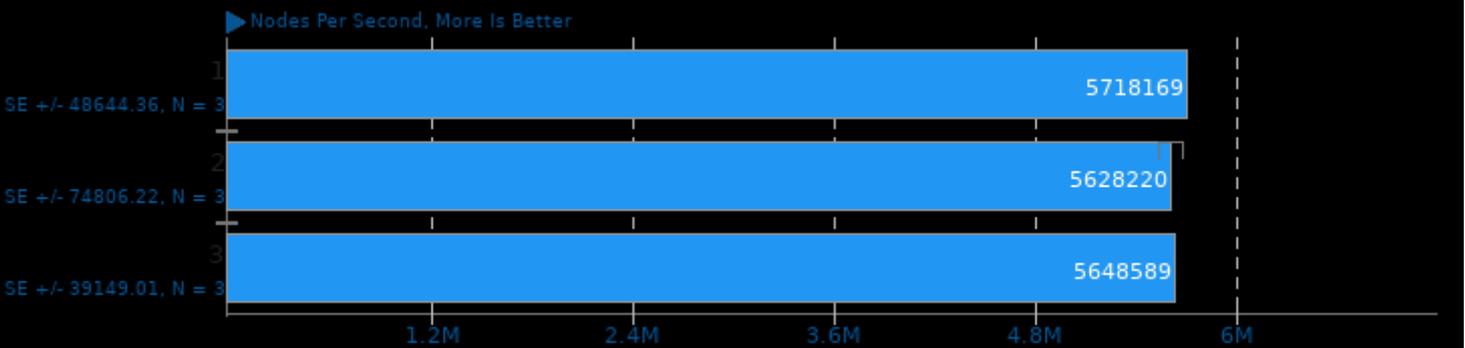
Elapsed Time



1. (C) gcc options: -pthread -lstdc++ -fprofile-use -lm

Stockfish 12

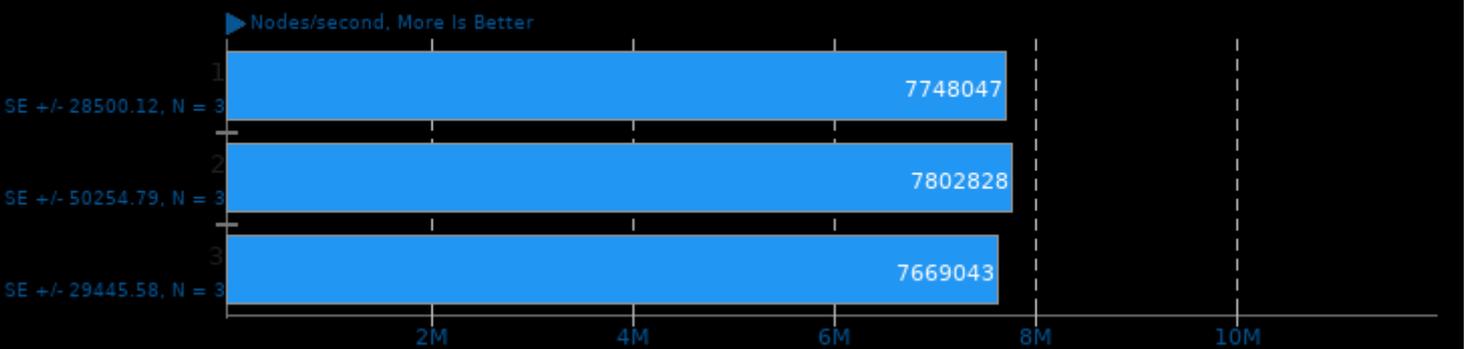
Total Time



1. (CXX) g++ options: -m64 -lthread -fno-exceptions -std=c++17 -pedantic -O3 -msse -msse3 -mpopcnt -msse4.1 -msse3 -msse2 -fito -fito=jobserver

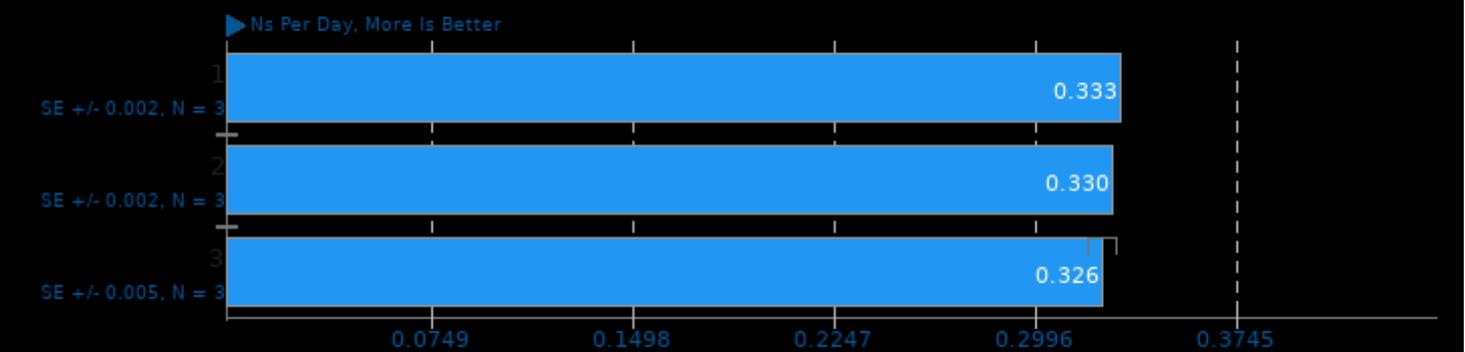
asmFish 2018-07-23

1024 Hash Memory, 26 Depth



GROMACS 2020.3

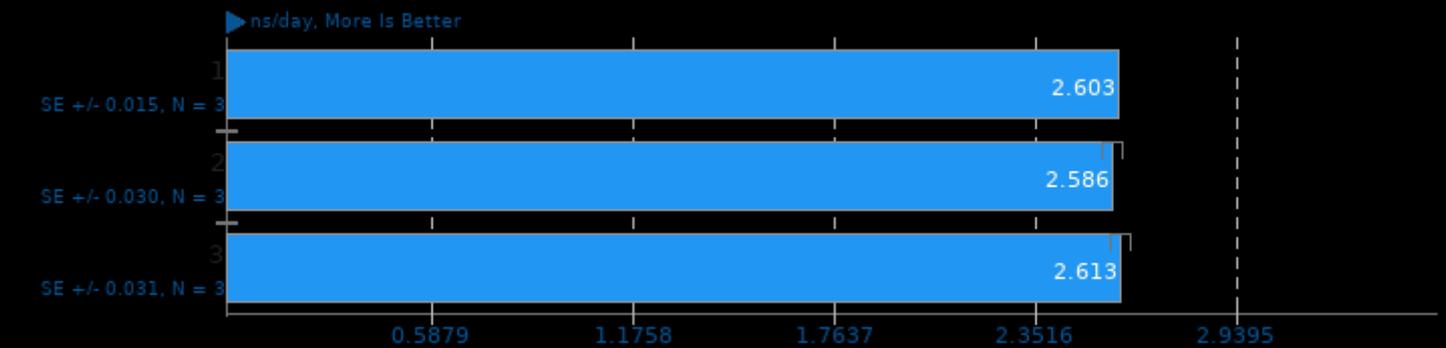
Water Benchmark



1. (CXX) g++ options: -O3 -pthread -lrt -lthread -lm

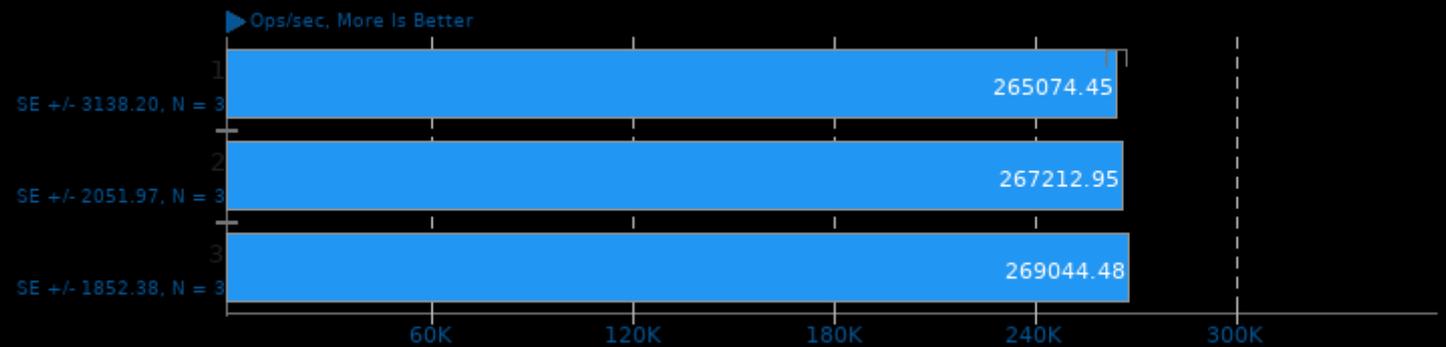
LAMMPS Molecular Dynamics Simulator 29Oct2020

Model: Rhodopsin Protein



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

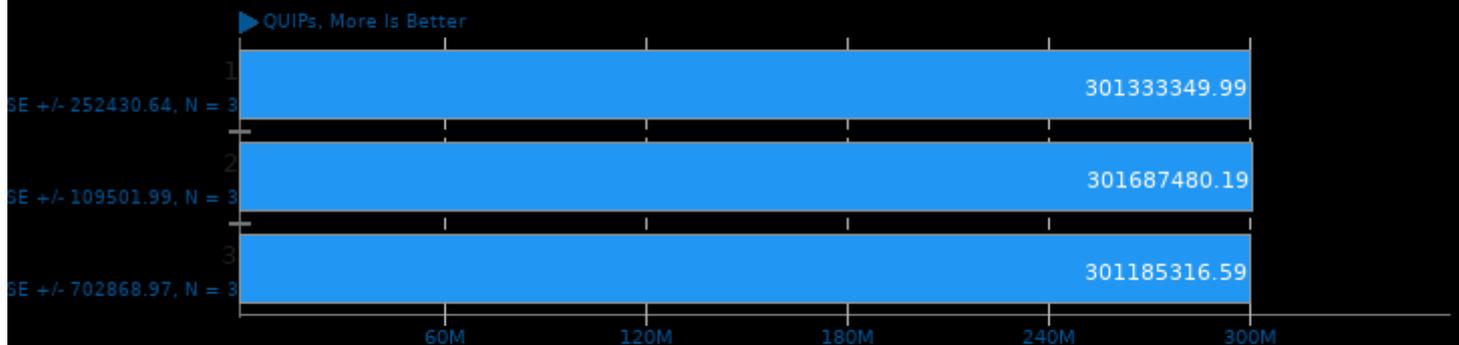
KeyDB 6.0.16



1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcrc

Hierarchical INTegration 1.0

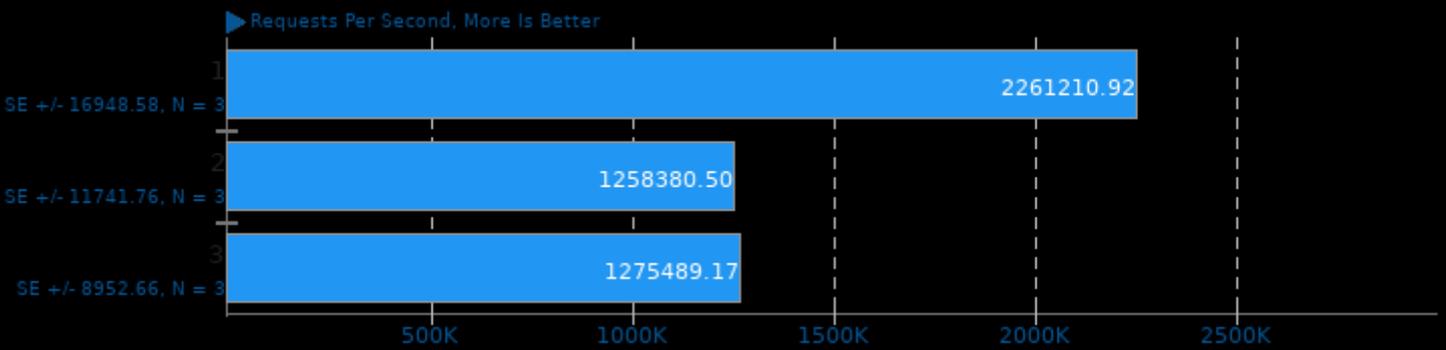
Test: FLOAT



1. (C) gcc options: -O3 -march=native -lm

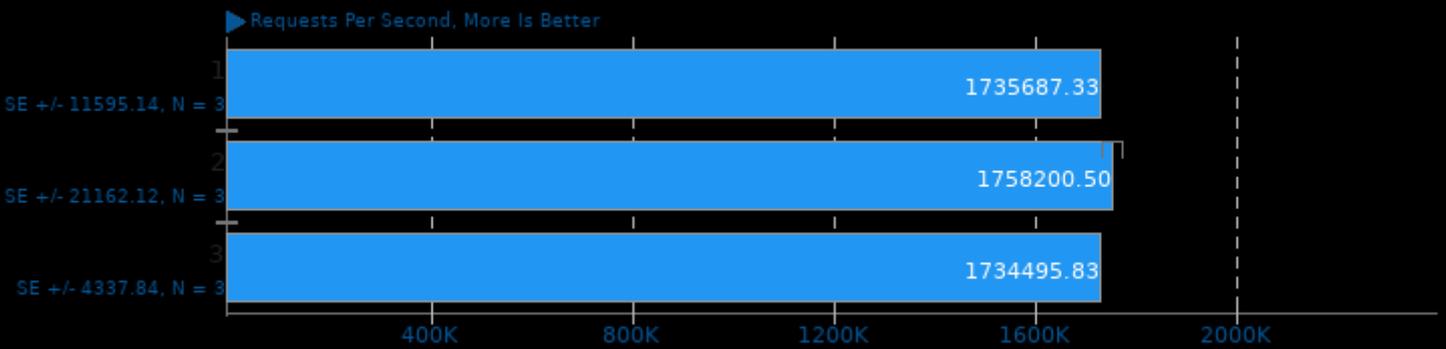
Redis 6.0.9

Test: LPOP



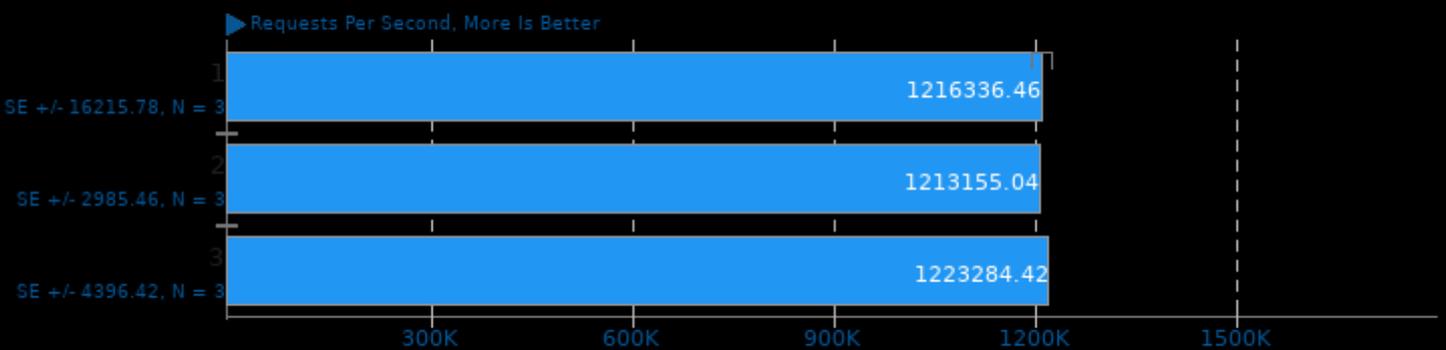
Redis 6.0.9

Test: SADD



Redis 6.0.9

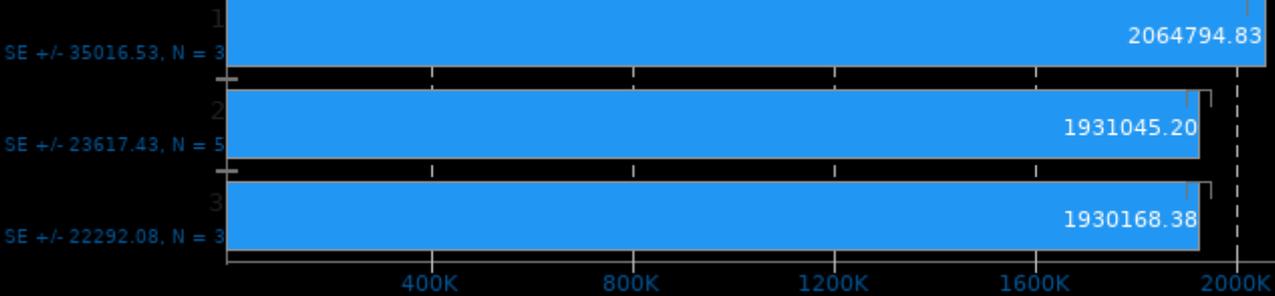
Test: LPUSE



Redis 6.0.9

Test: GET

Requests Per Second, More Is Better

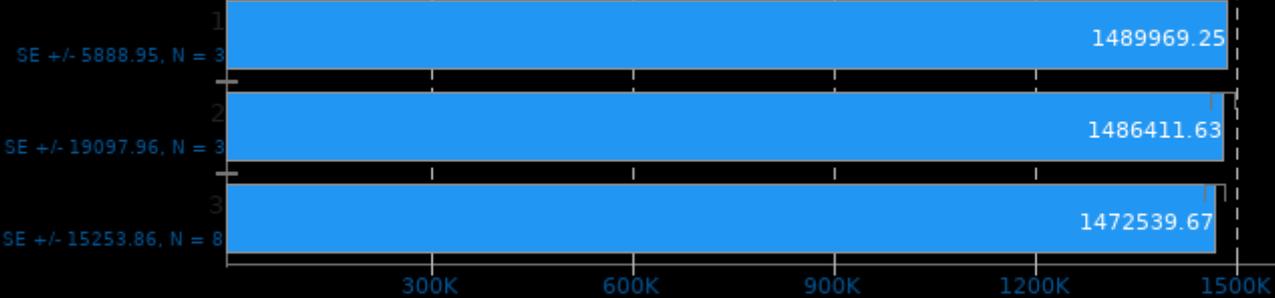


1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 6.0.9

Test: SET

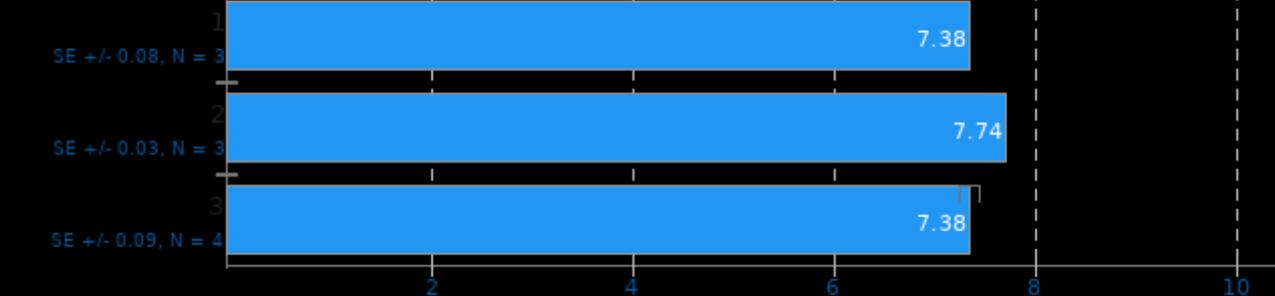
Requests Per Second, More Is Better



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Node.js V8 Web Tooling Benchmark

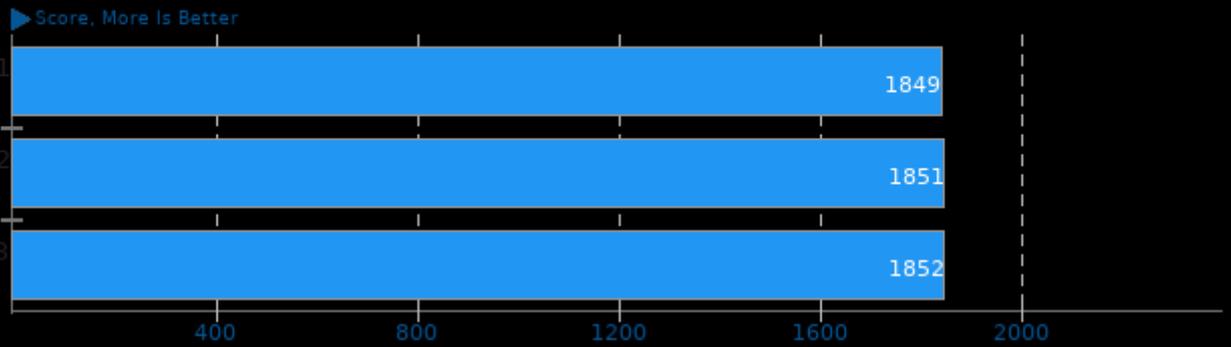
runs/s, More Is Better



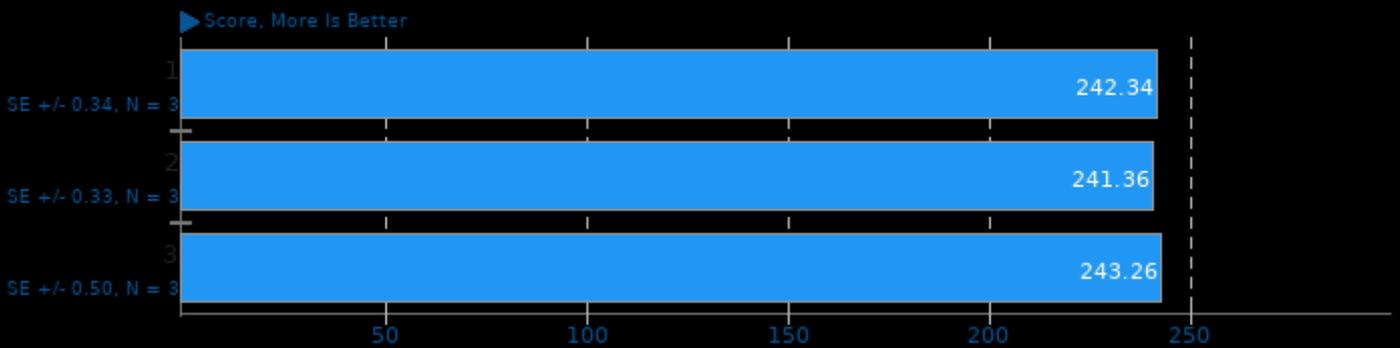
1. Node.js v12.18.2

GLmark2 2020.04

Resolution: 1920 x 1080

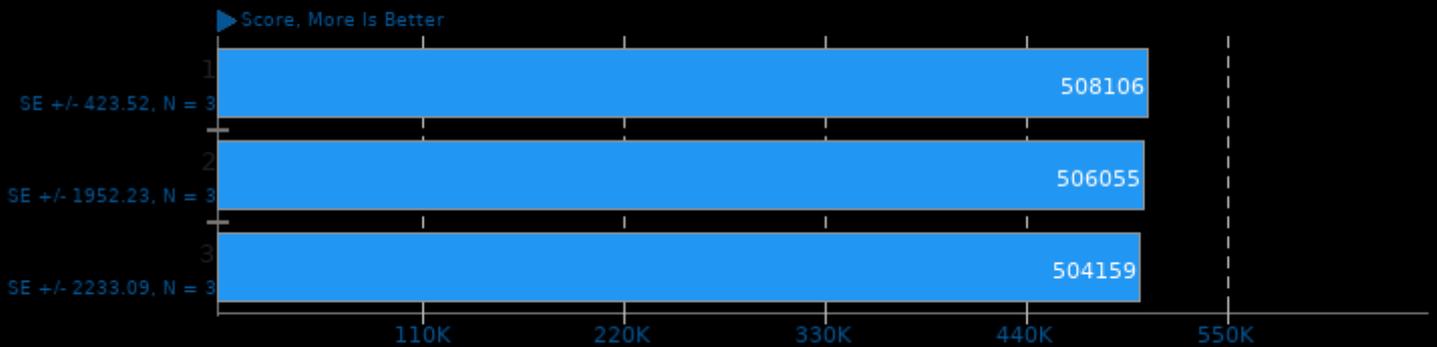


Numpy Benchmark



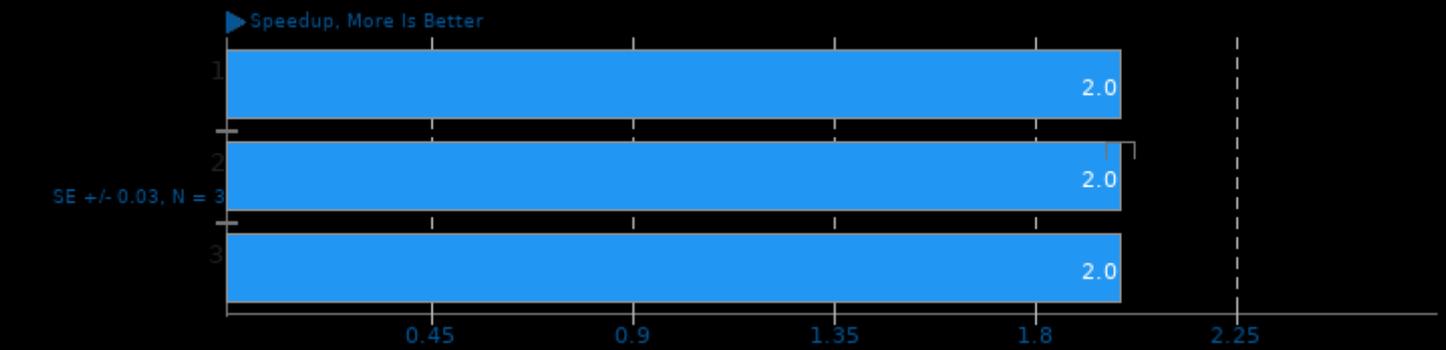
PHPBench 0.8.1

PHP Benchmark Suite



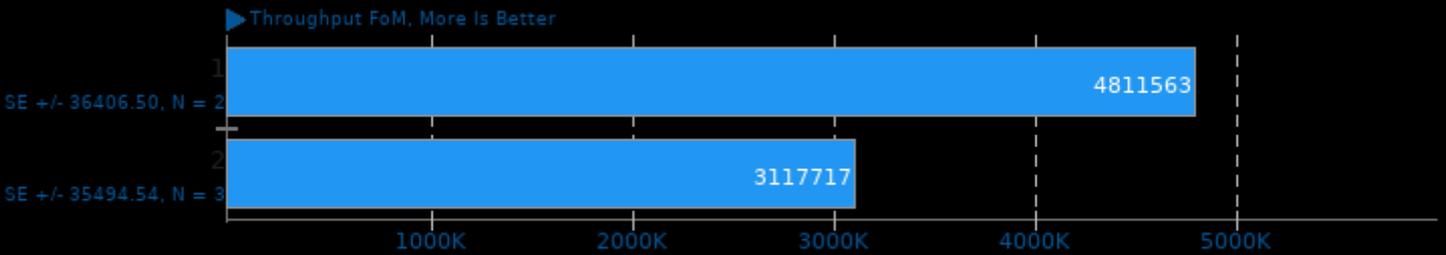
CLOMP 1.2

Static OMP Speedup



1. (CC) gcc options: -fopenmp -O3 -lm

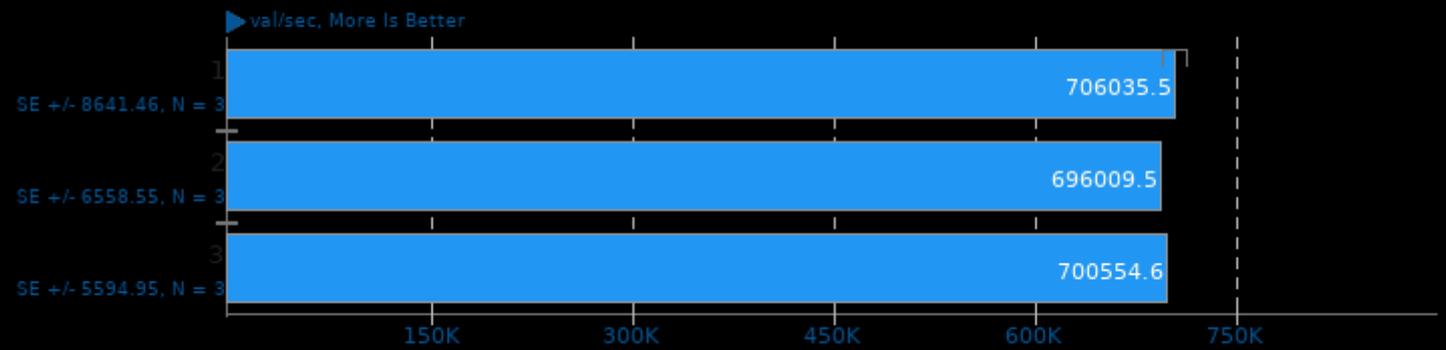
Kripke 1.2.4



1. (CXX) g++ options: -O3 -fopenmp

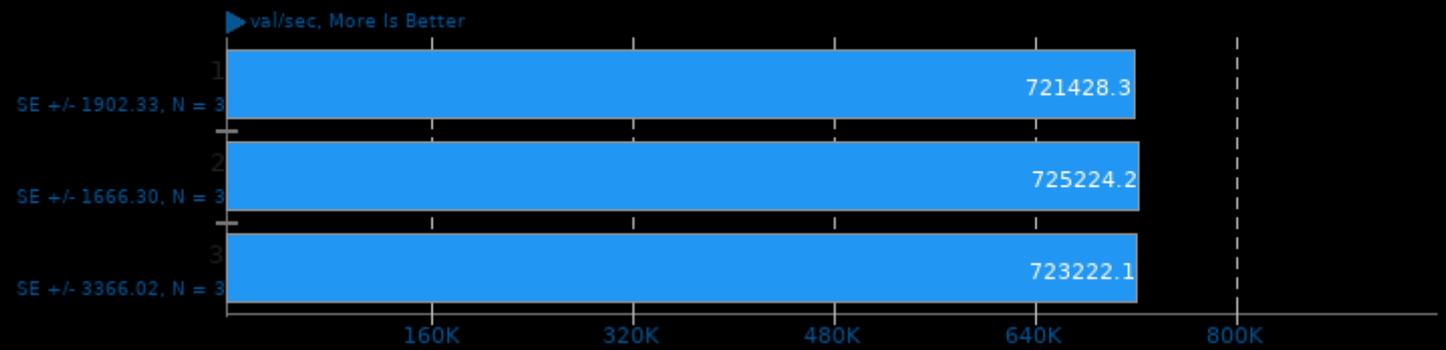
InfluxDB 1.8.2

Concurrent Streams: 4 - Batch Size: 10000 - Tags: 2,5000,1 - Points Per Series: 10000



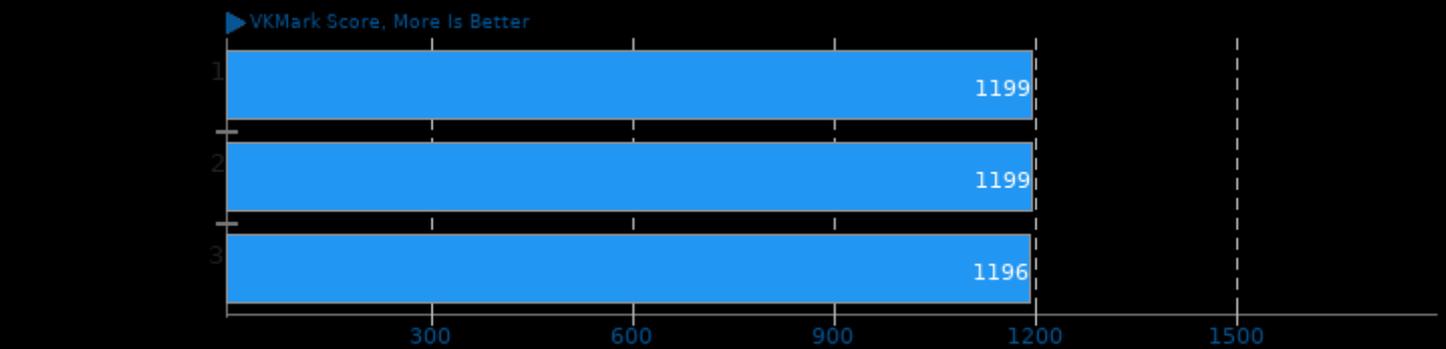
InfluxDB 1.8.2

Concurrent Streams: 64 - Batch Size: 10000 - Tags: 2,5000,1 - Points Per Series: 10000



VKMark 2020-05-21

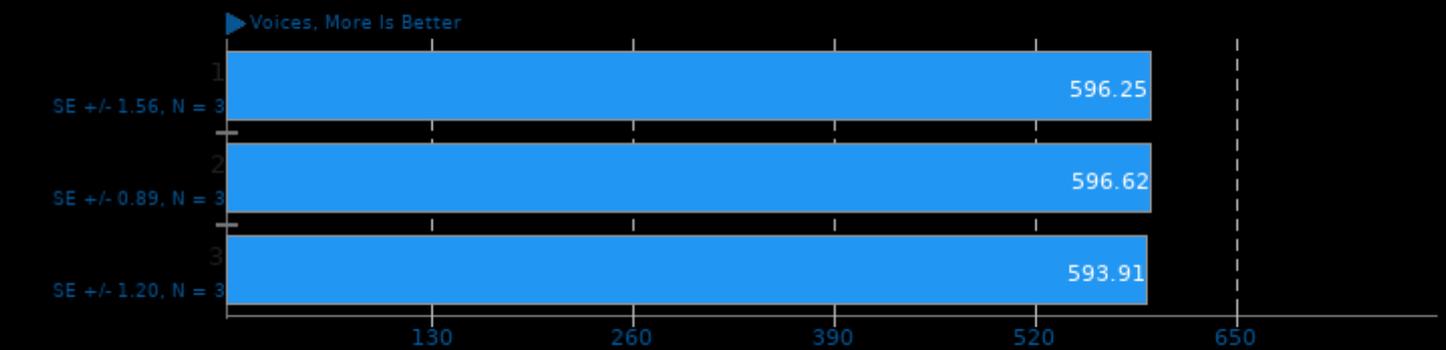
Resolution: 1920 x 1080



1. (CXX) g++ options: -pthread -ldl -pipe -std=c++14 -MD -MQ -MF

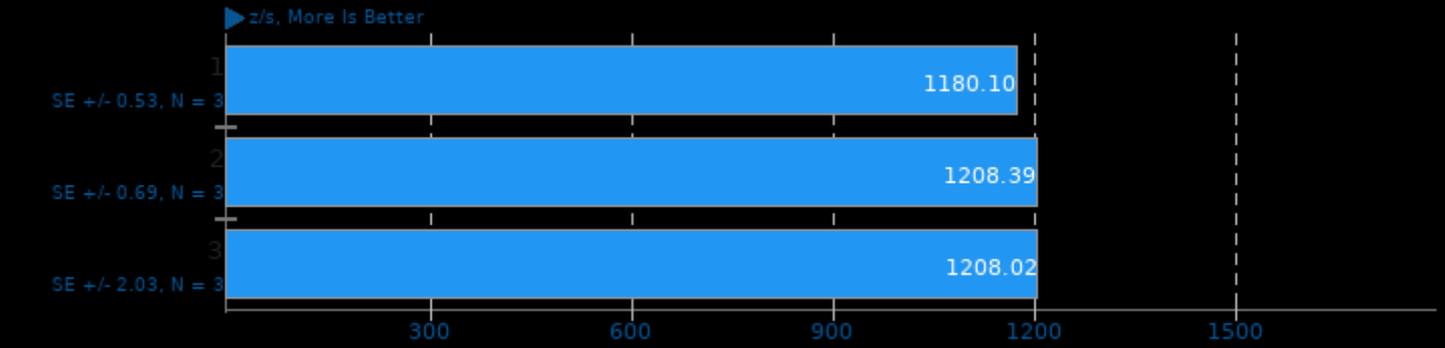
Google SynthMark 20201109

Test: VoiceMark_100



1. (CXX) g++ options: -lm -lpthread -std=c++11 -Ofast

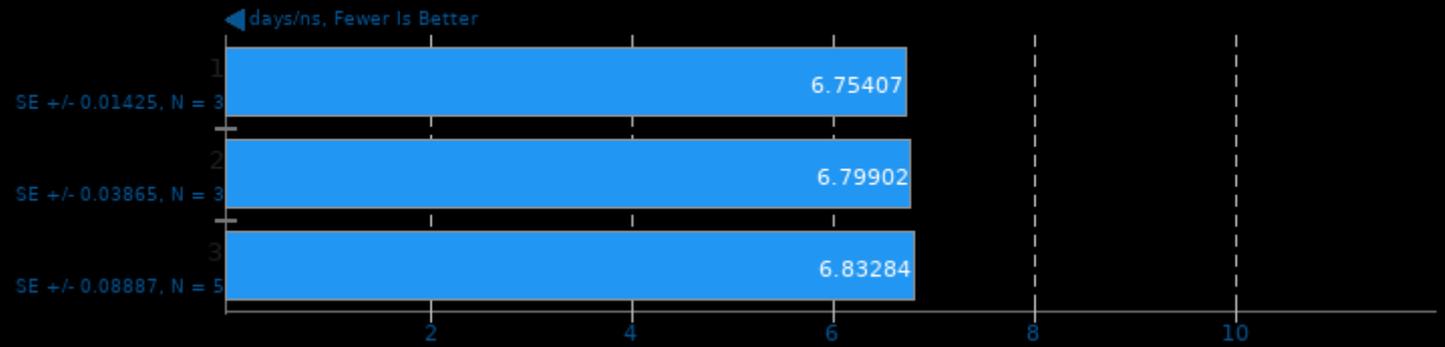
LULESH 2.0.3



1. (CXX) g++ options: -O3 -fopenmp -lm -pthread -lmpi_cxx -lmpi

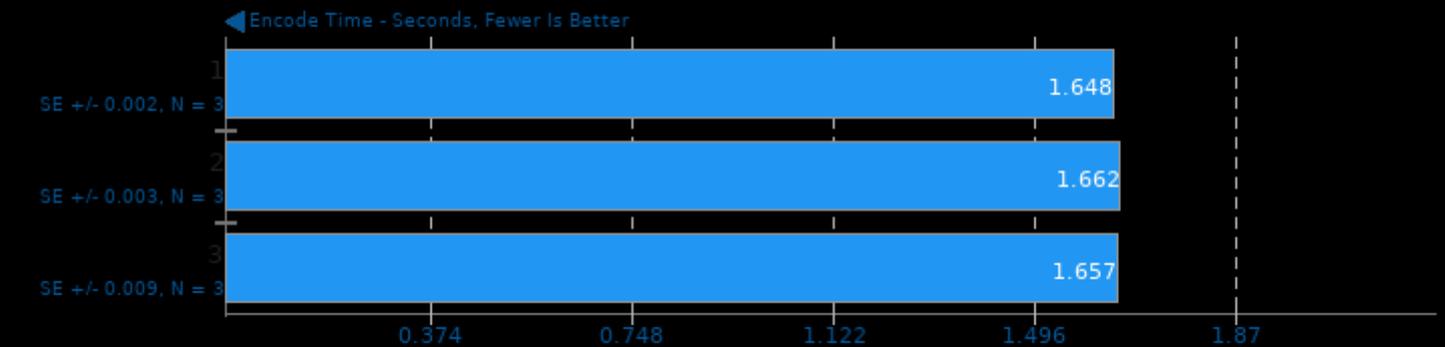
NAMD 2.14

ATPase Simulation - 327,506 Atoms



WebP Image Encode 1.1

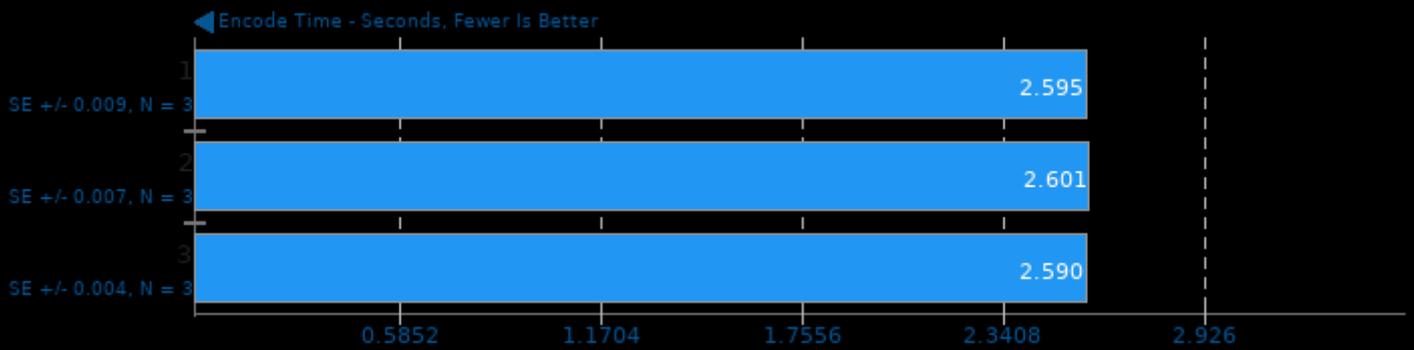
Encode Settings: Default



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

WebP Image Encode 1.1

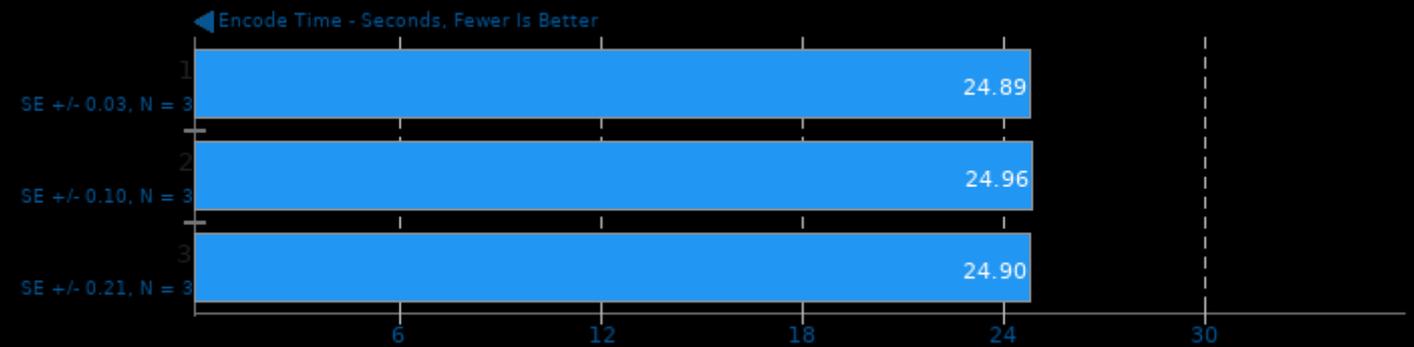
Encode Settings: Quality 100



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

WebP Image Encode 1.1

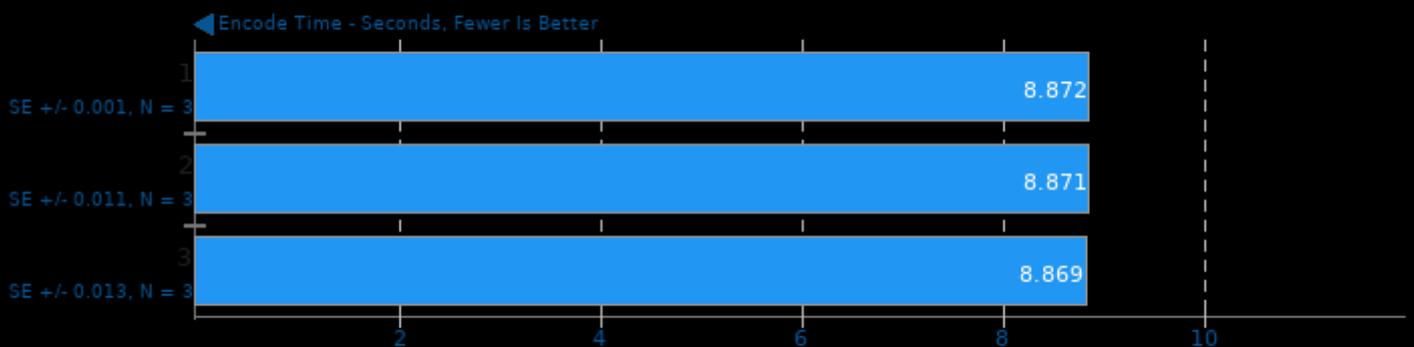
Encode Settings: Quality 100, Lossless



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

WebP Image Encode 1.1

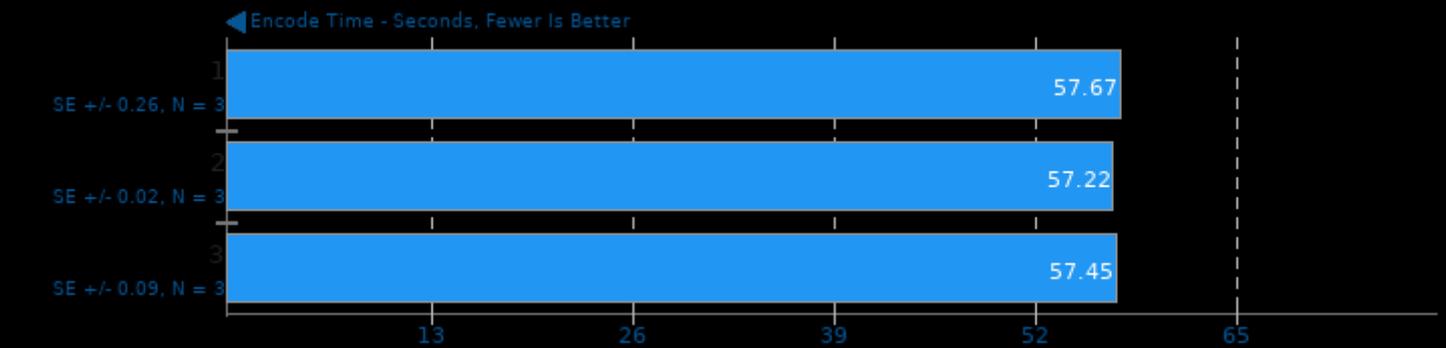
Encode Settings: Quality 100, Highest Compression



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

WebP Image Encode 1.1

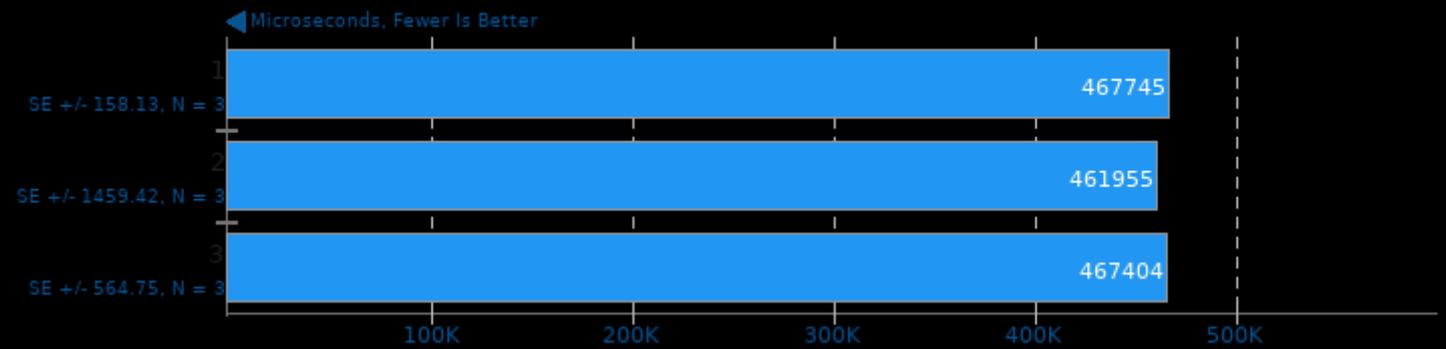
Encode Settings: Quality 100, Lossless, Highest Compression



1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff

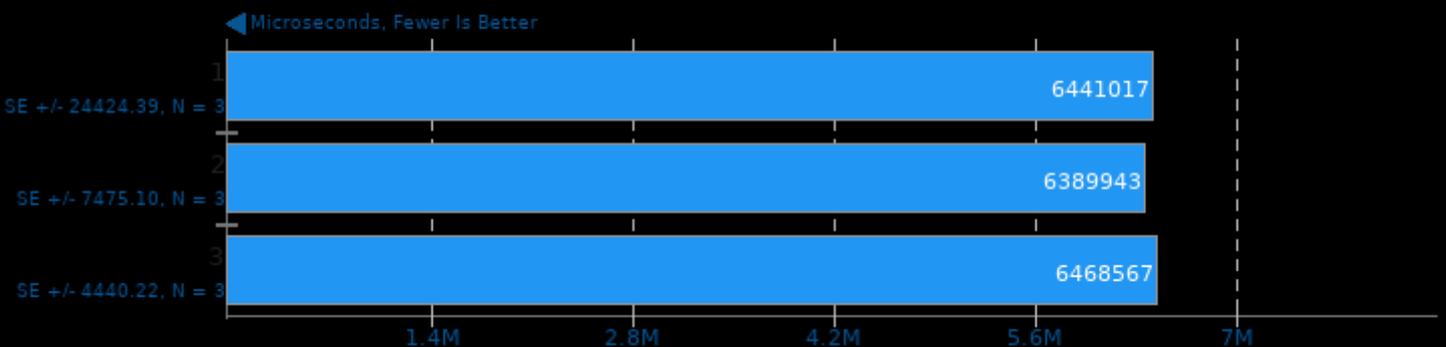
TensorFlow Lite 2020-08-23

Model: SqueezeNet



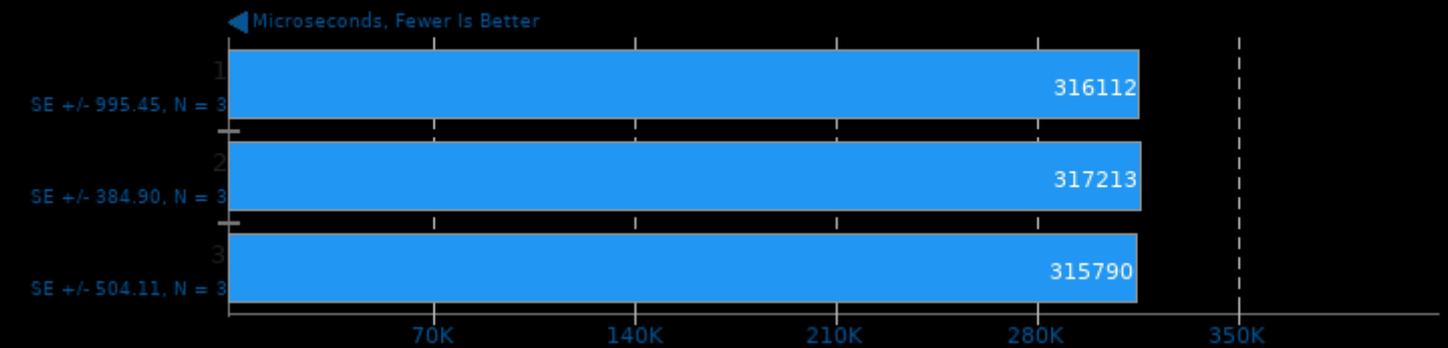
TensorFlow Lite 2020-08-23

Model: Inception V4



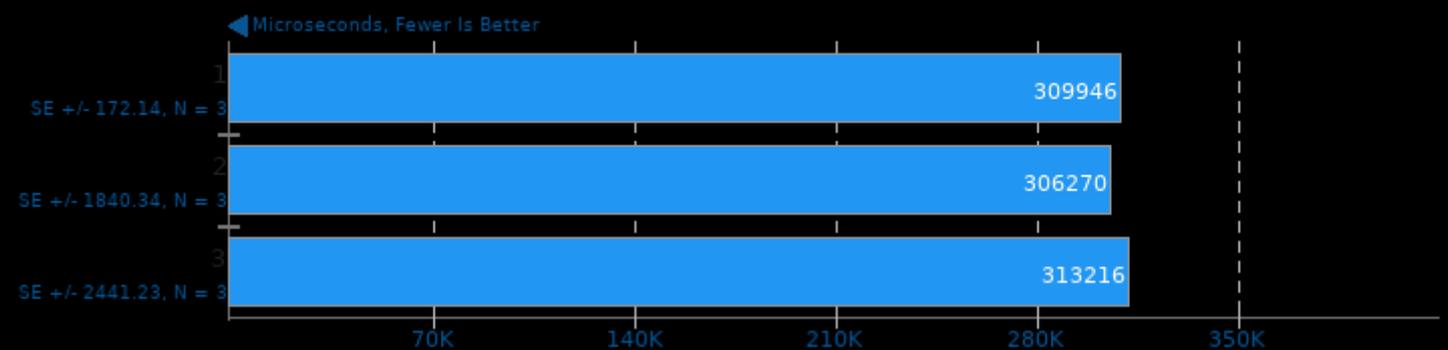
TensorFlow Lite 2020-08-23

Model: NASNet Mobile



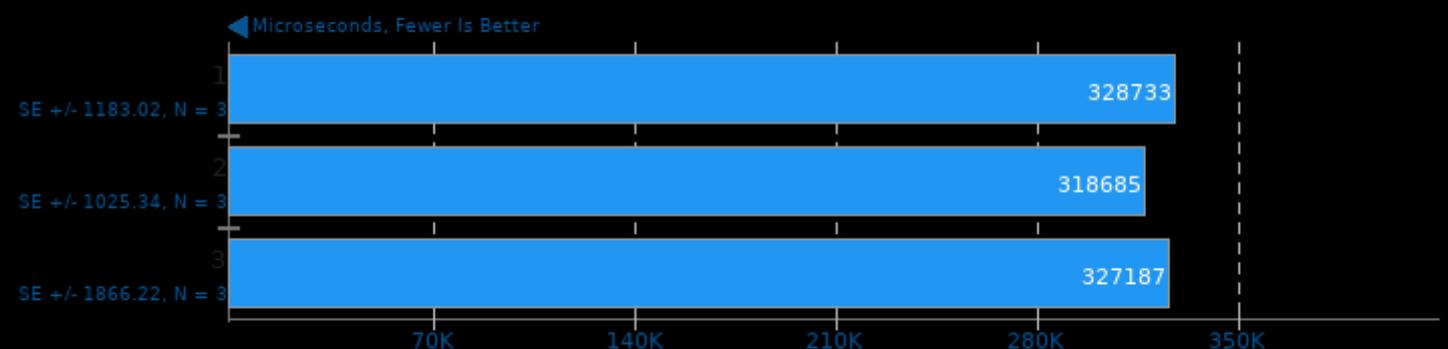
TensorFlow Lite 2020-08-23

Model: Mobilenet Float



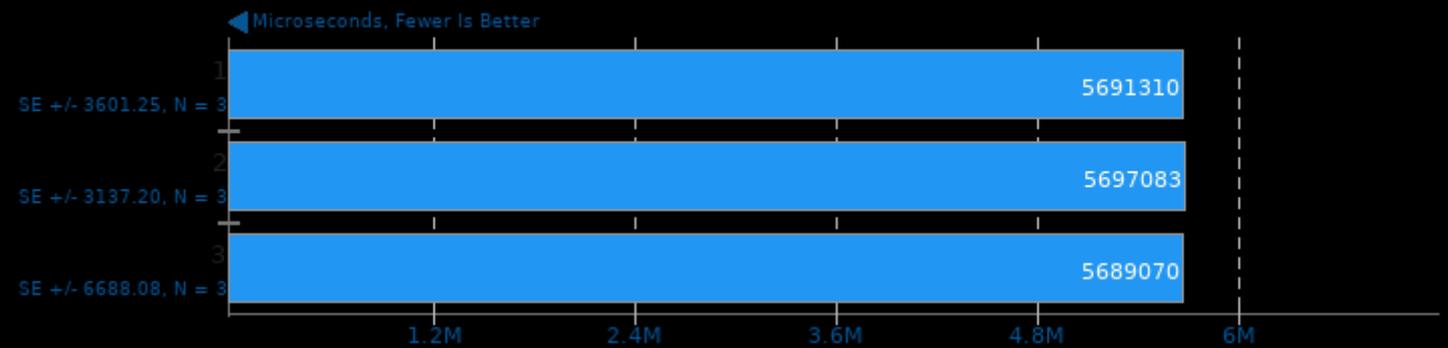
TensorFlow Lite 2020-08-23

Model: Mobilenet Quant



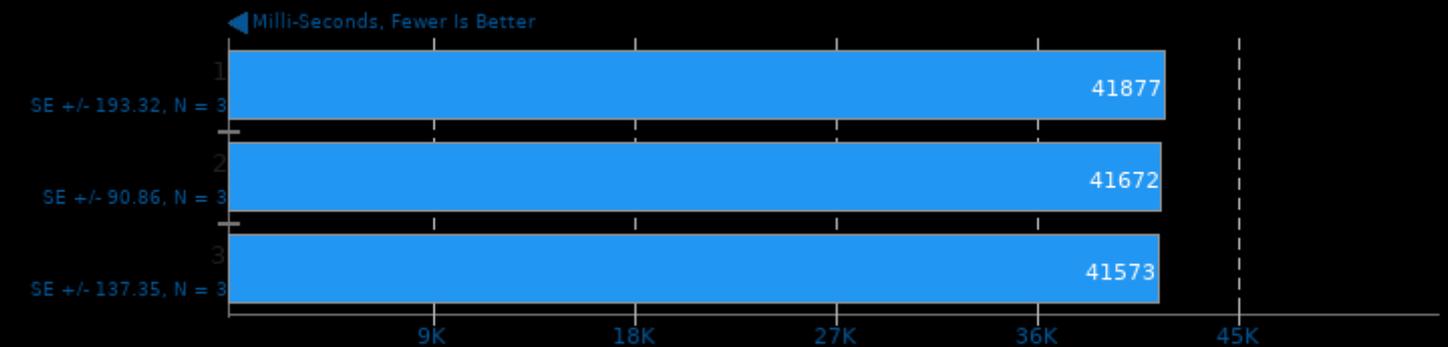
TensorFlow Lite 2020-08-23

Model: Inception ResNet V2



Caffe 2020-02-13

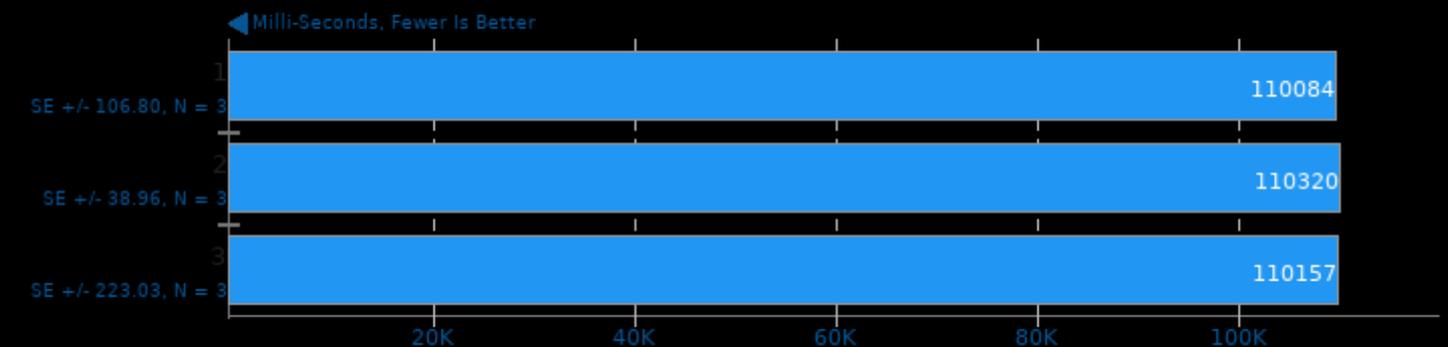
Model: AlexNet - Acceleration: CPU - Iterations: 100



1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas

Caffe 2020-02-13

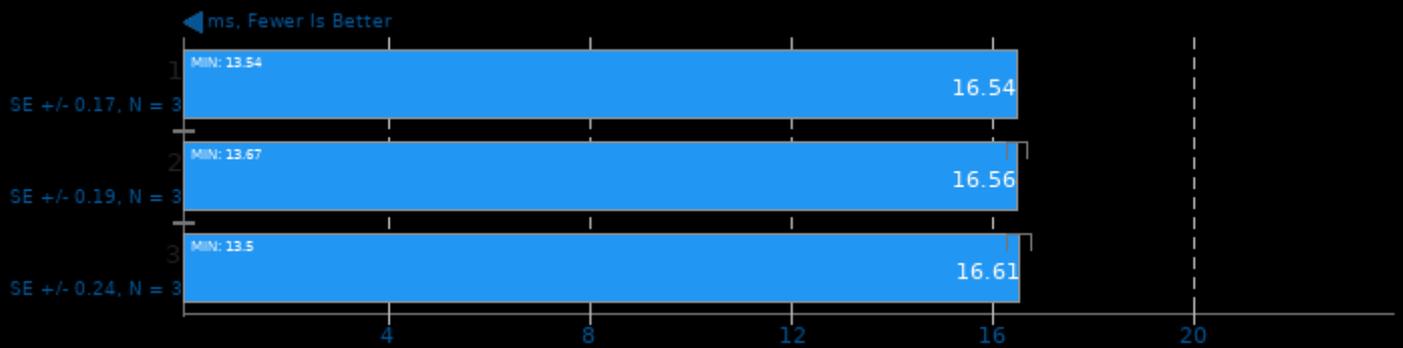
Model: GoogleNet - Acceleration: CPU - Iterations: 100



1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas

oneDNN 2.0

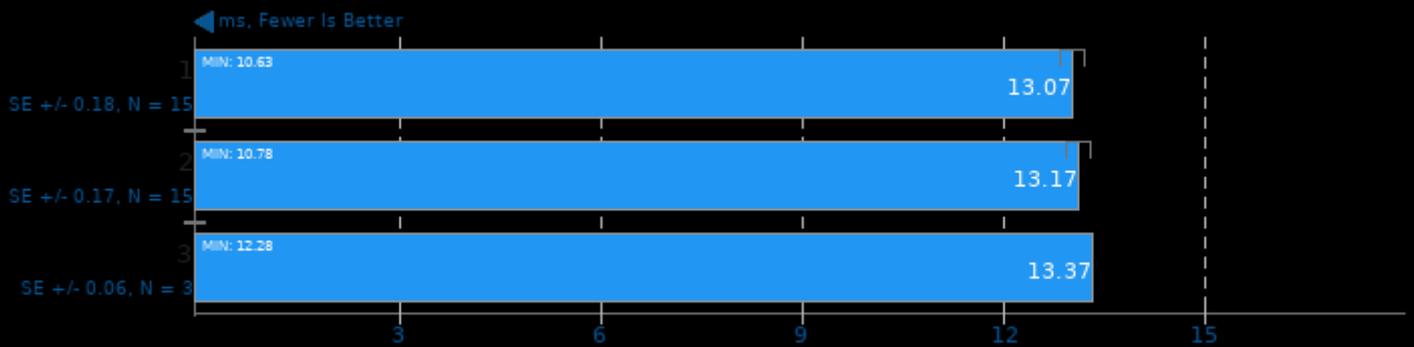
Harness: IP Shapes 1D - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -mssse4.1 -fpic -pie -pthread

oneDNN 2.0

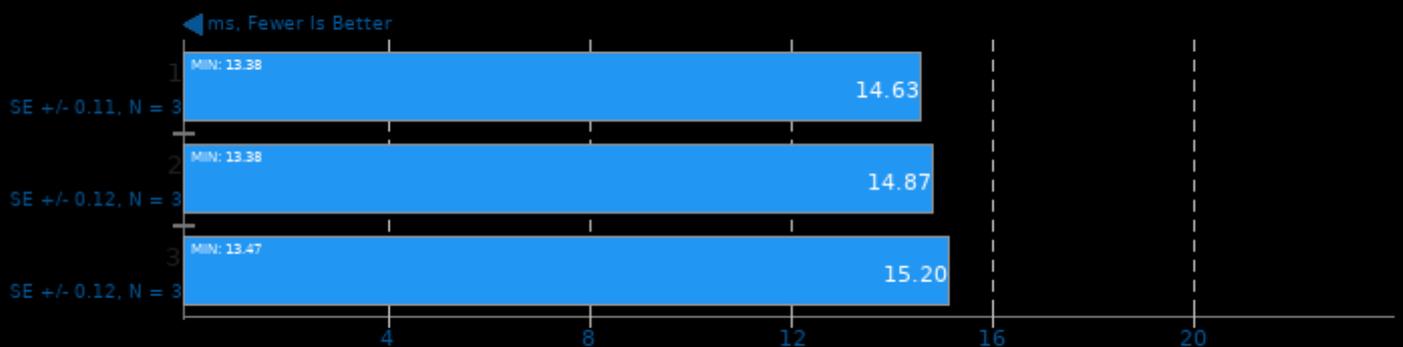
Harness: IP Shapes 3D - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -mssse4.1 -fpic -pie -pthread

oneDNN 2.0

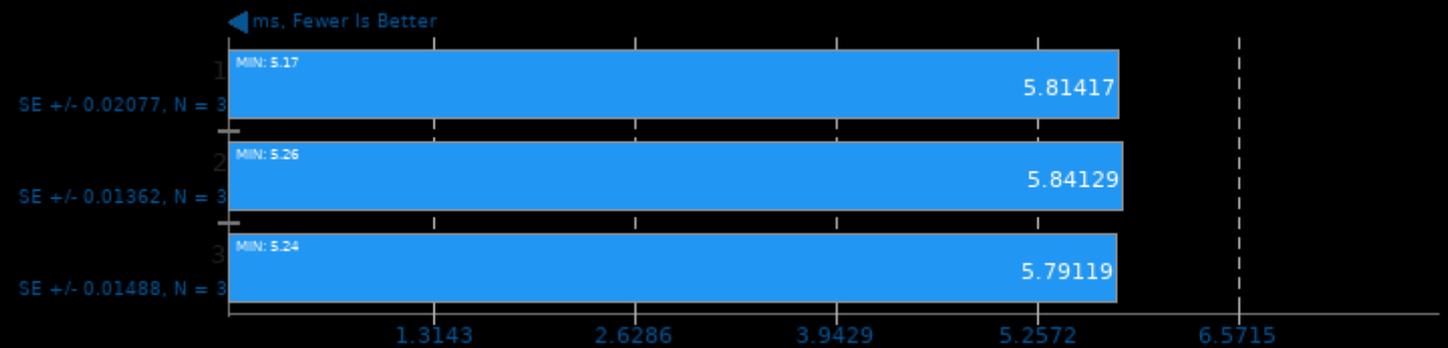
Harness: IP Shapes 1D - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -mssse4.1 -fpic -pie -pthread

oneDNN 2.0

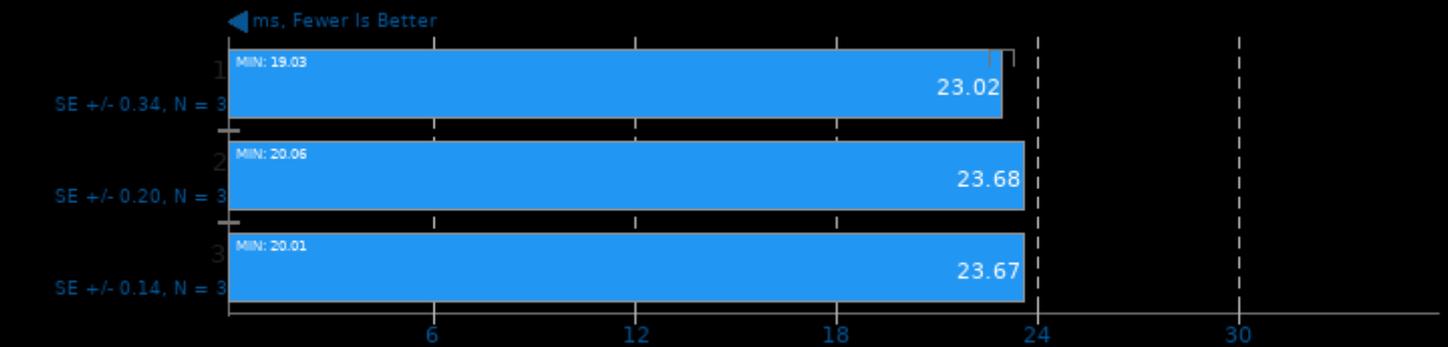
Harness: IP Shapes 3D - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

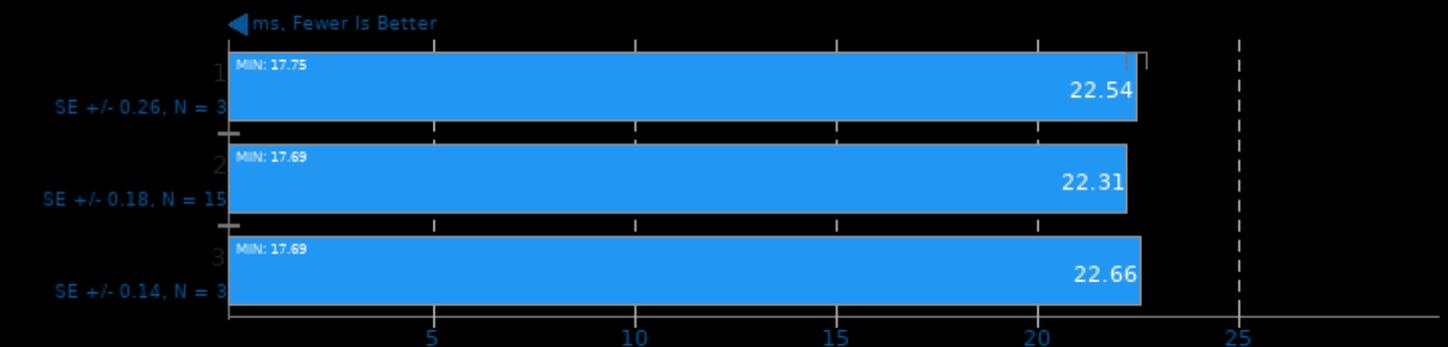
Harness: Convolution Batch Shapes Auto - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

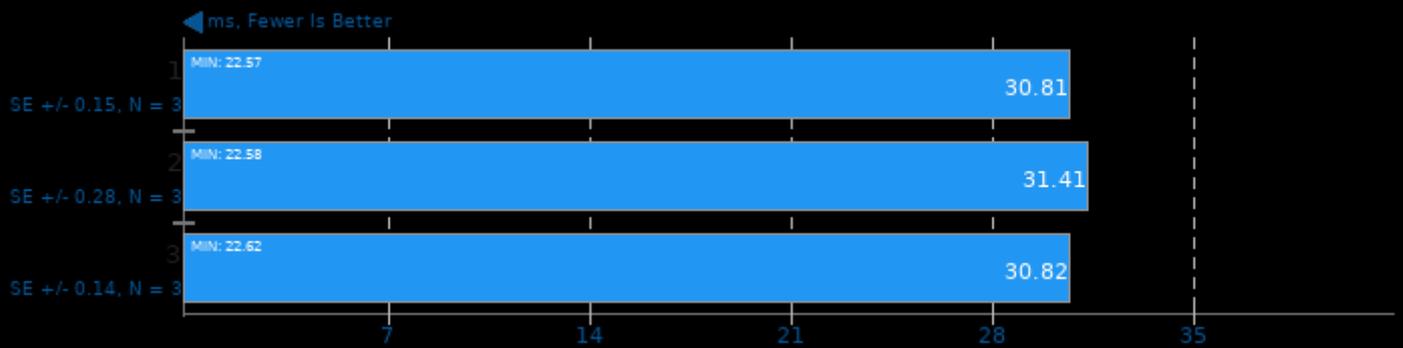
Harness: Deconvolution Batch shapes_1d - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

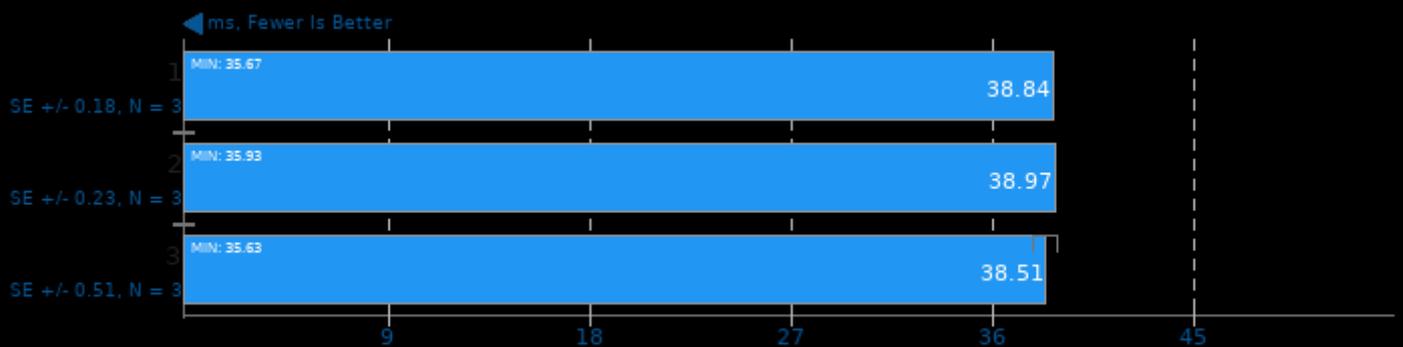
Harness: Deconvolution Batch shapes_3d - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -pthread

oneDNN 2.0

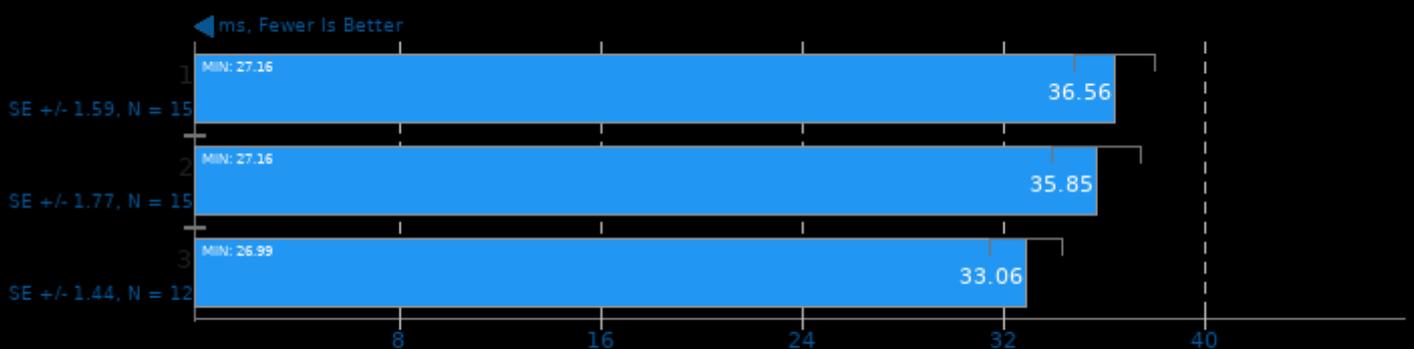
Harness: Convolution Batch Shapes Auto - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -pthread

oneDNN 2.0

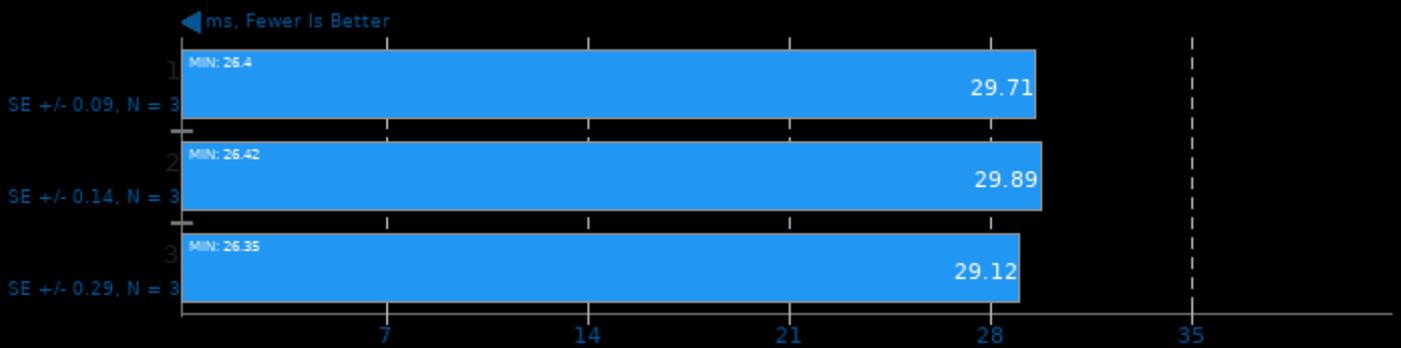
Harness: Deconvolution Batch shapes_1d - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -pthread

oneDNN 2.0

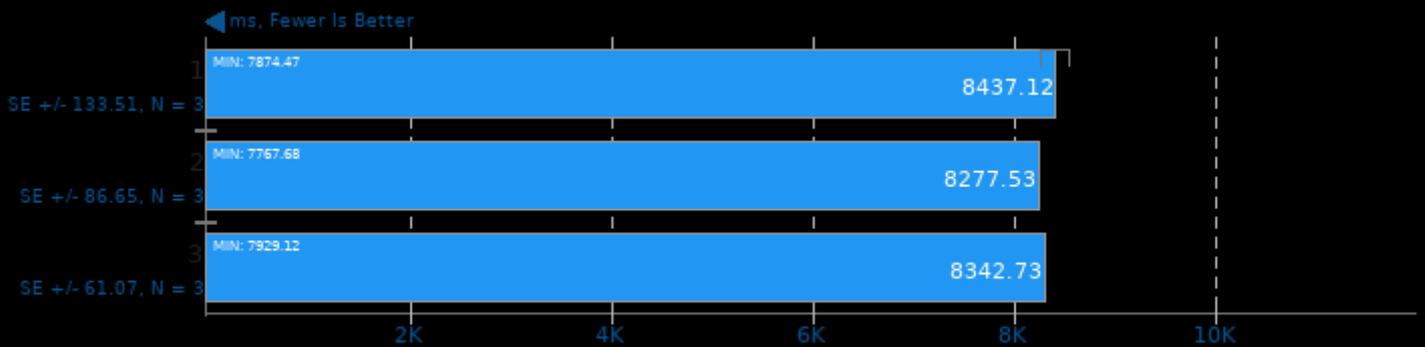
Harness: Deconvolution Batch shapes_3d - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

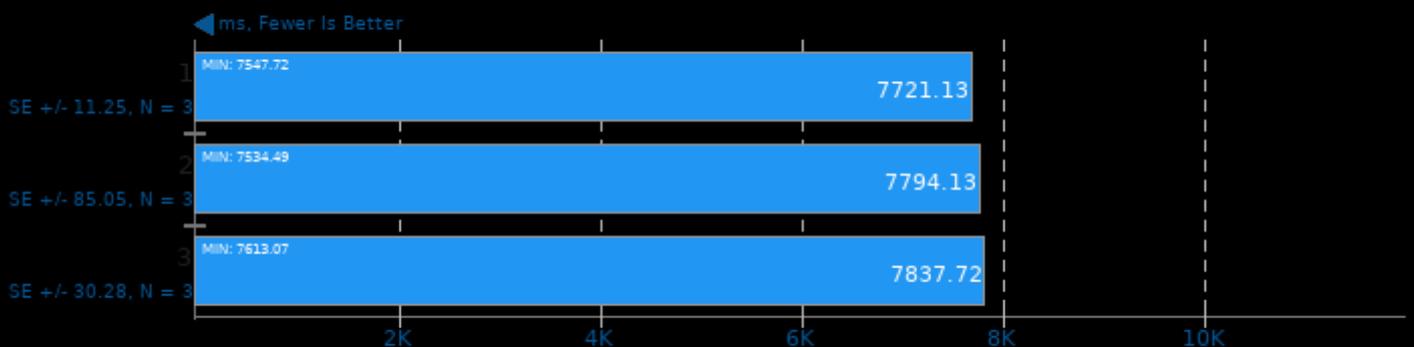
Harness: Recurrent Neural Network Training - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

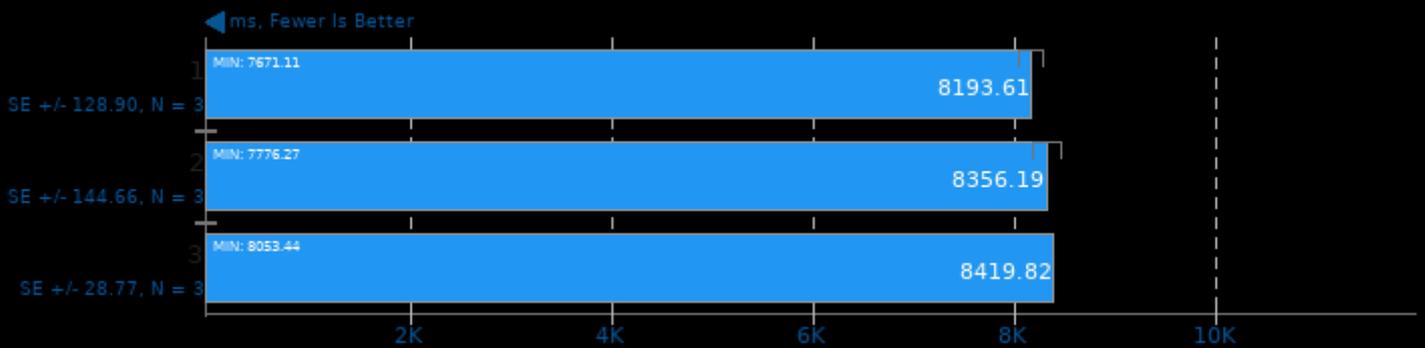
Harness: Recurrent Neural Network Inference - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

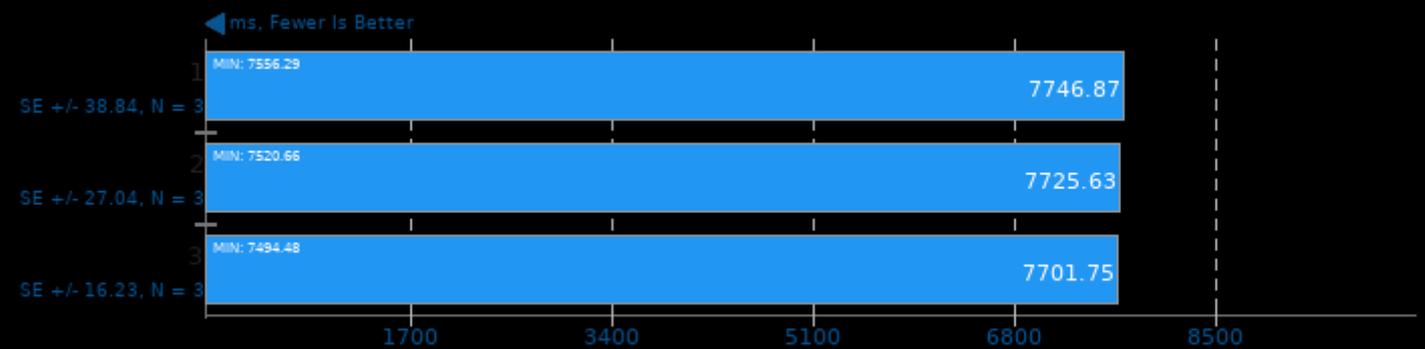
Harness: Recurrent Neural Network Training - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

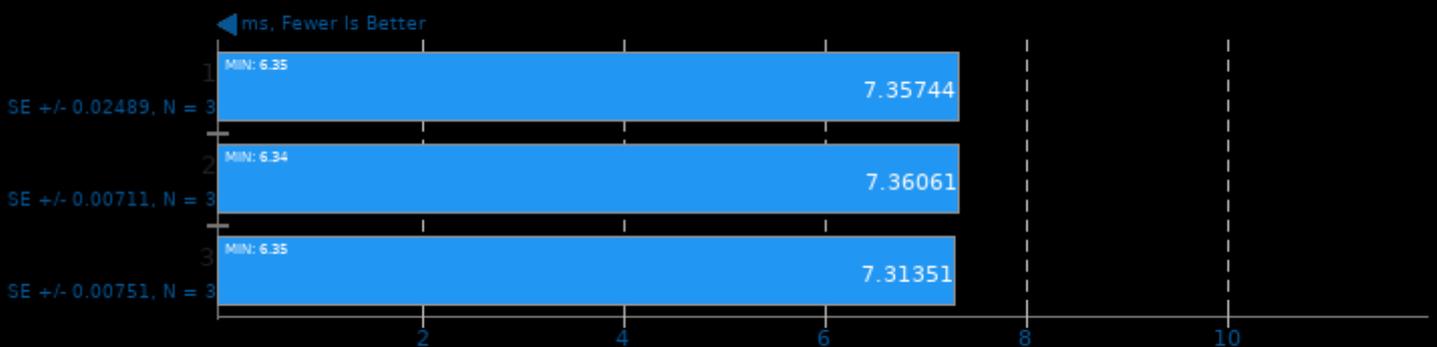
Harness: Recurrent Neural Network Inference - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

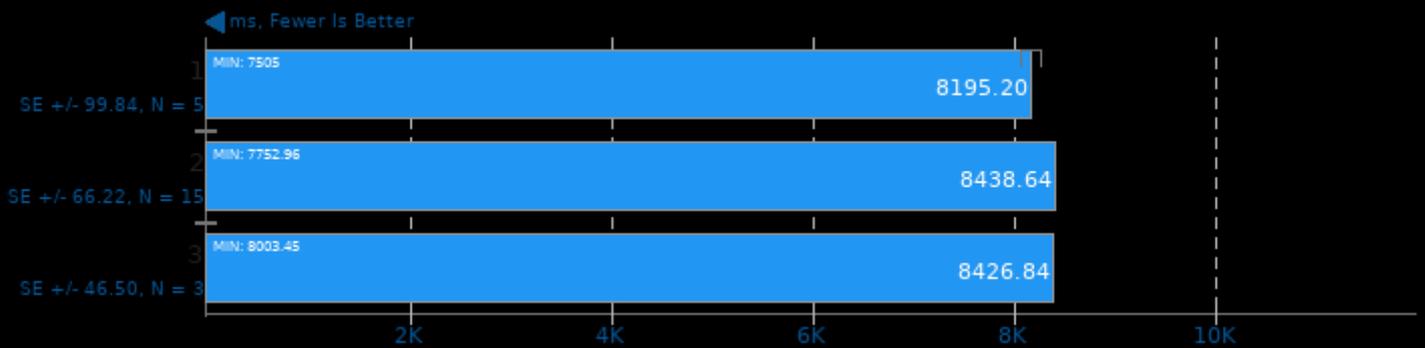
Harness: Matrix Multiply Batch Shapes Transformer - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -lpthread

oneDNN 2.0

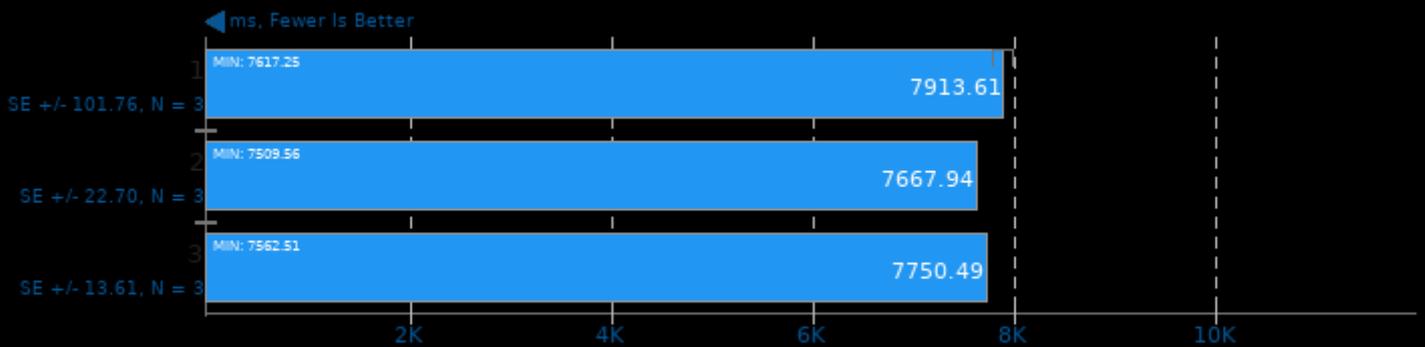
Harness: Recurrent Neural Network Training - Data Type: bf16bf16bf16 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -pthread

oneDNN 2.0

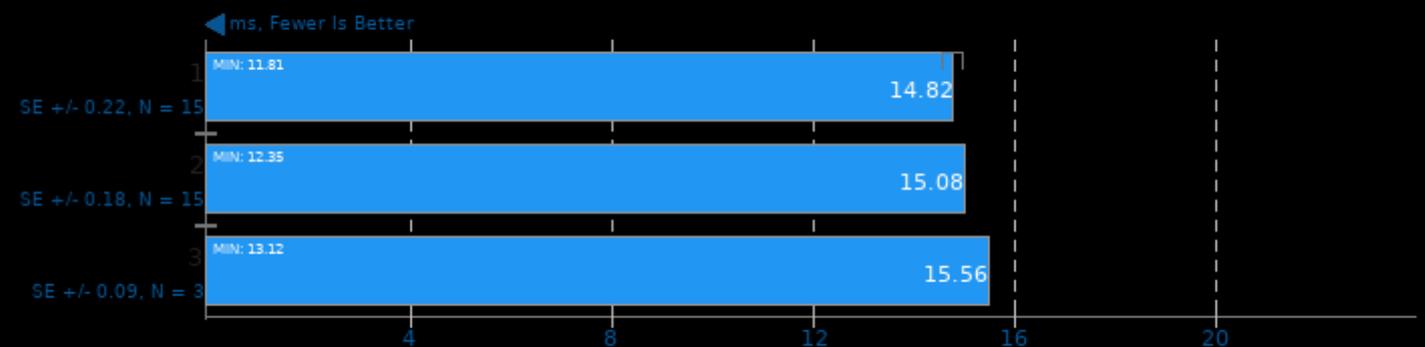
Harness: Recurrent Neural Network Inference - Data Type: bf16bf16bf16 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -pthread

oneDNN 2.0

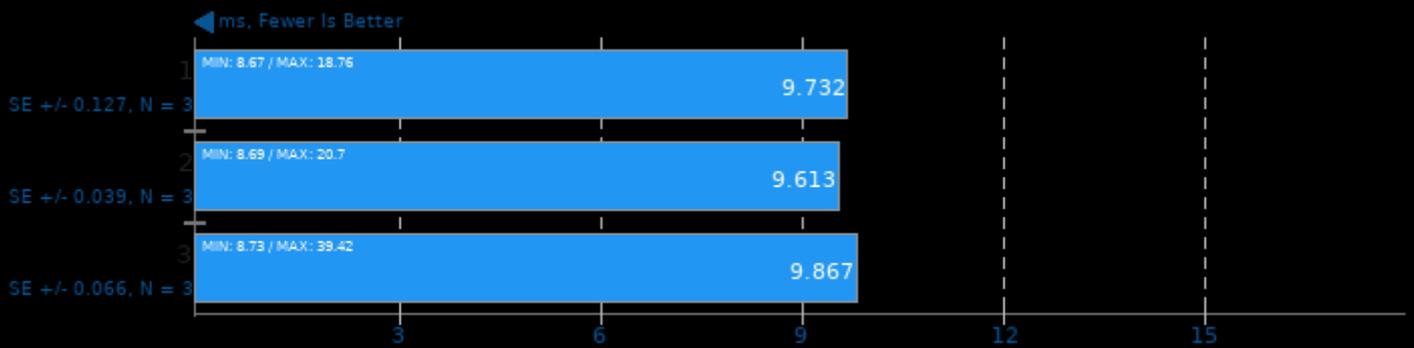
Harness: Matrix Multiply Batch Shapes Transformer - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -std=c++11 -fopenmp -msse4.1 -fpic -pie -pthread

Mobile Neural Network 1.1.1

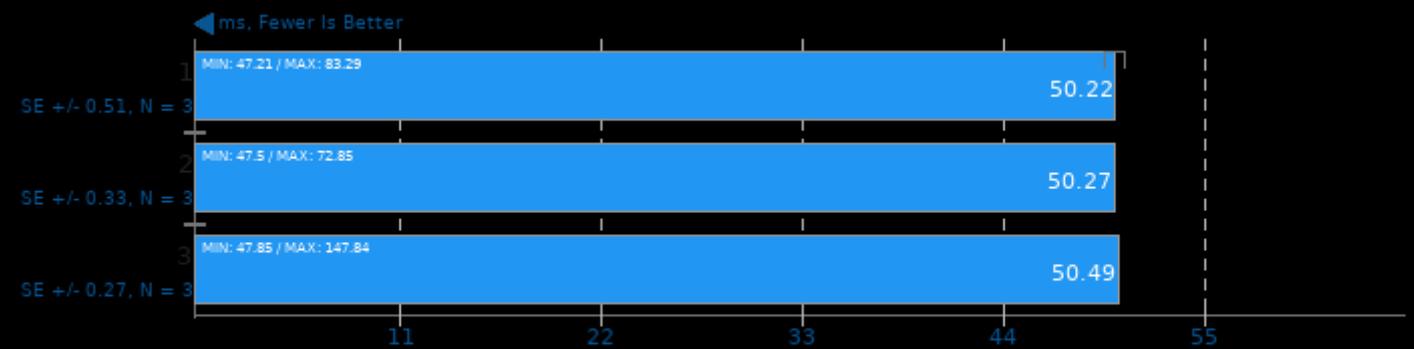
Model: SqueezeNetV1.0



1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fno-

Mobile Neural Network 1.1.1

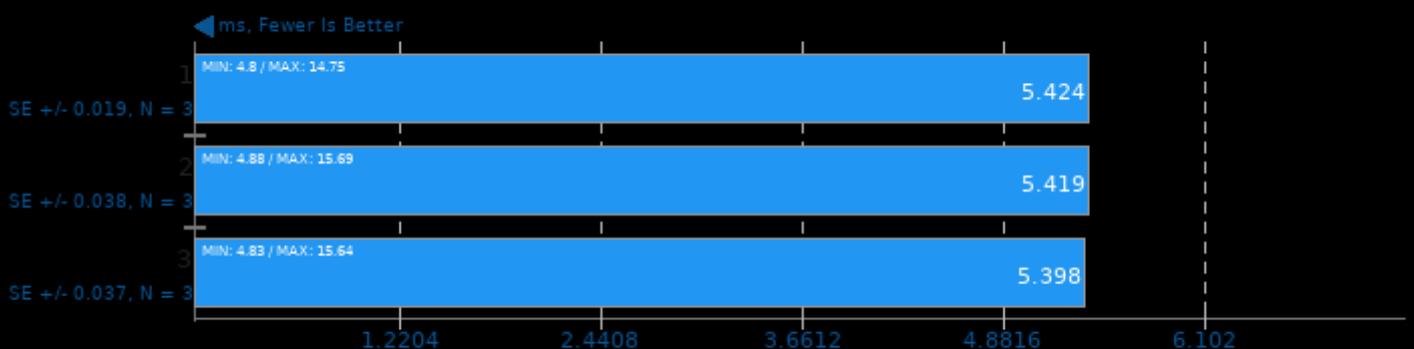
Model: resnet-v2-50



1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fno-

Mobile Neural Network 1.1.1

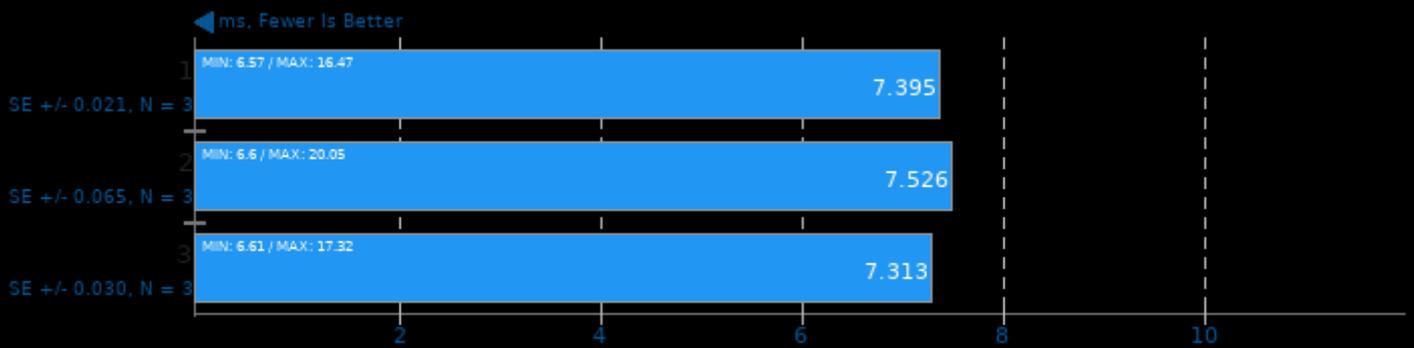
Model: MobileNetV2_224



1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fno-

Mobile Neural Network 1.1.1

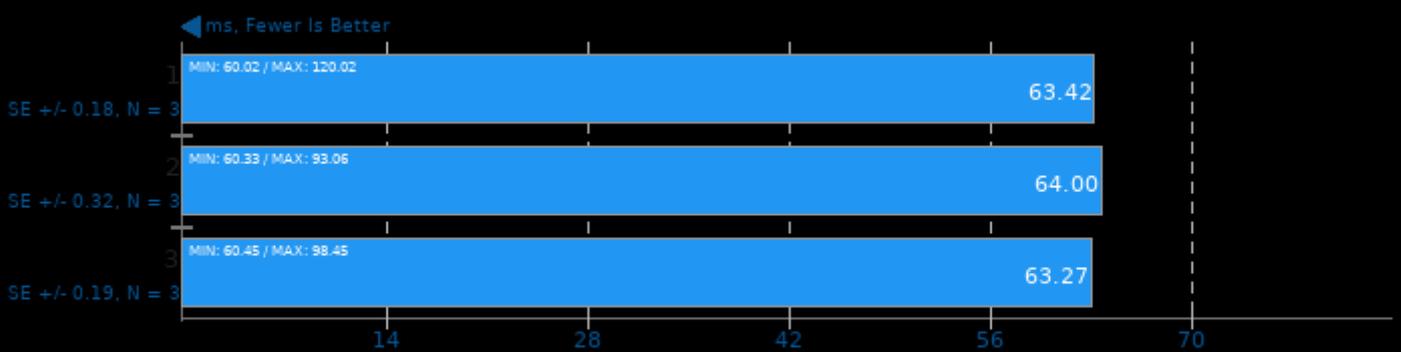
Model: mobilenet-v1-1.0



1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fno-

Mobile Neural Network 1.1.1

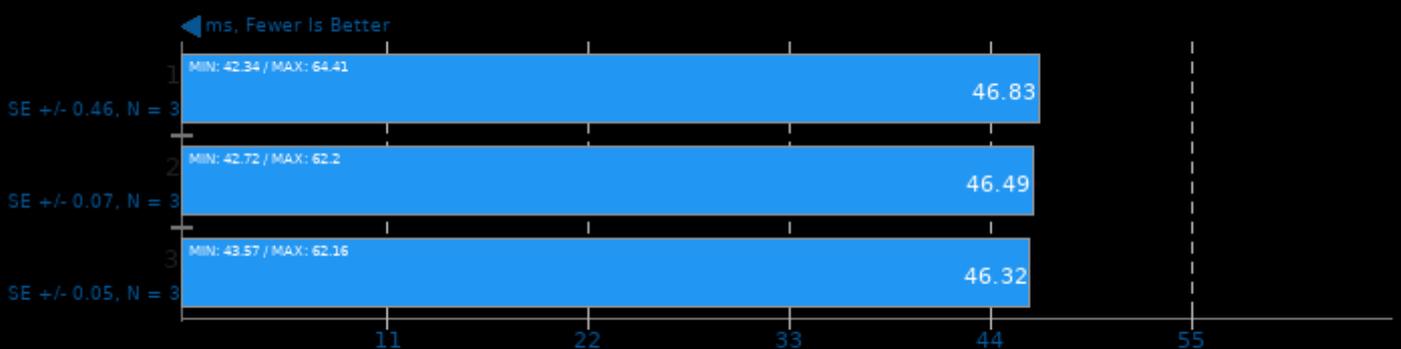
Model: inception-v3



1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fno-

NCNN 20201218

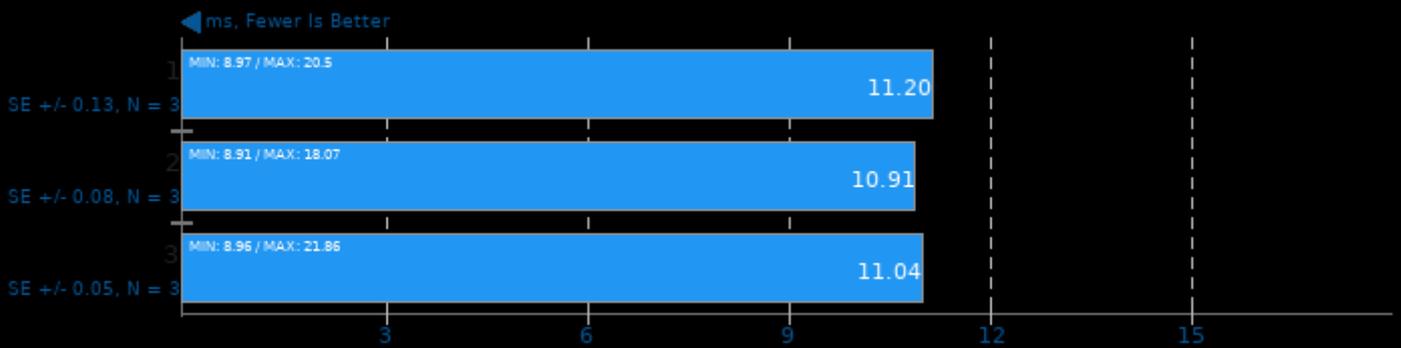
Target: CPU - Model: mobilenet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

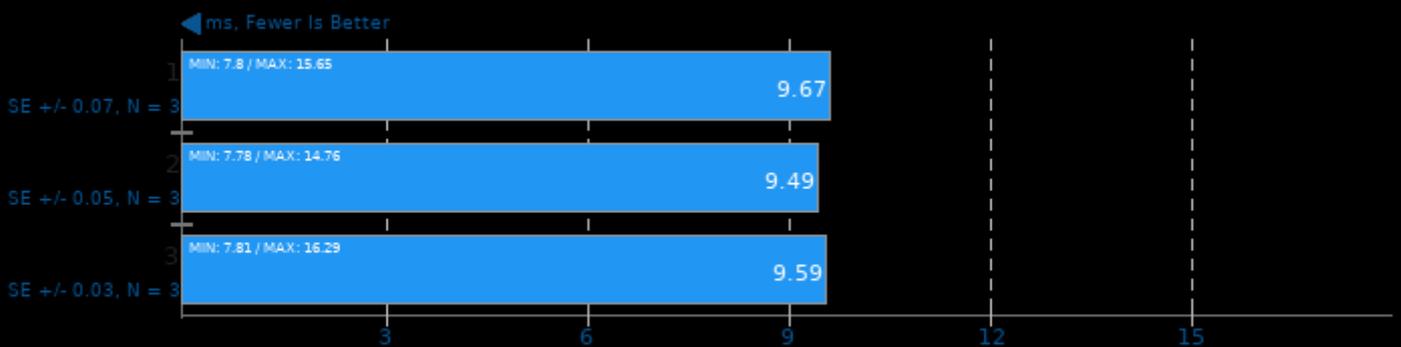
Target: CPU-v2-v2 - Model: mobilenet-v2



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

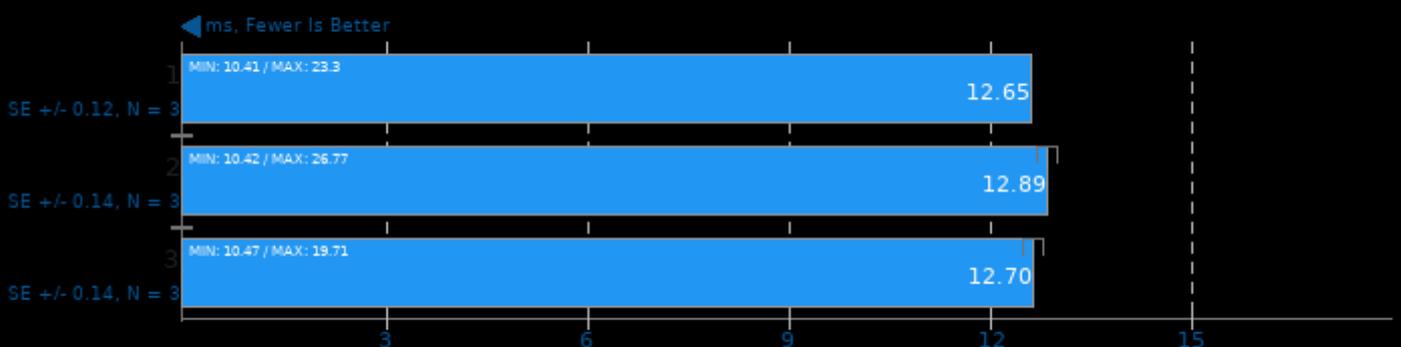
Target: CPU-v3-v3 - Model: mobilenet-v3



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

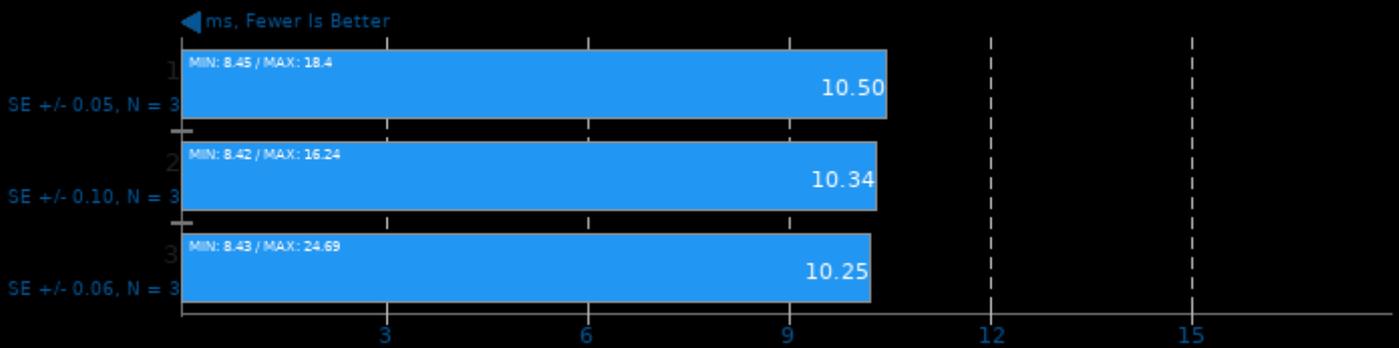
Target: CPU - Model: shufflenet-v2



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

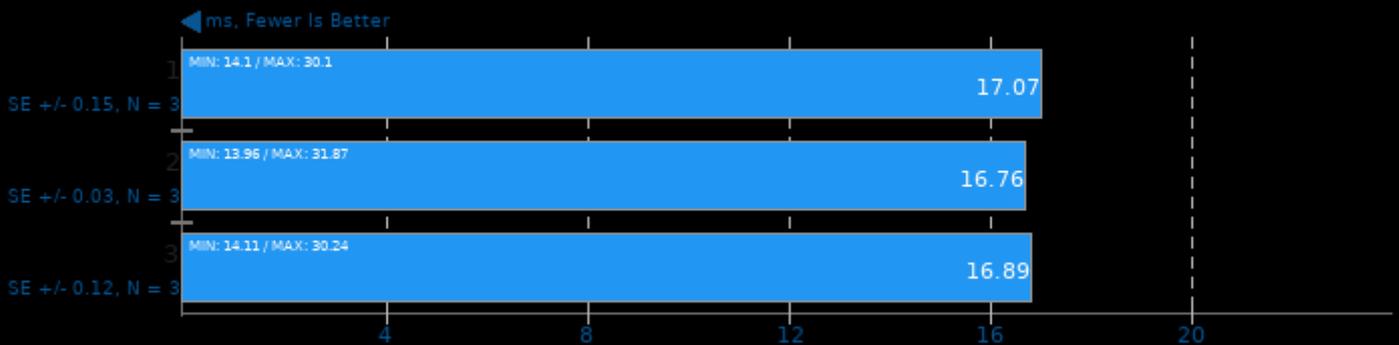
Target: CPU - Model: mnasnet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

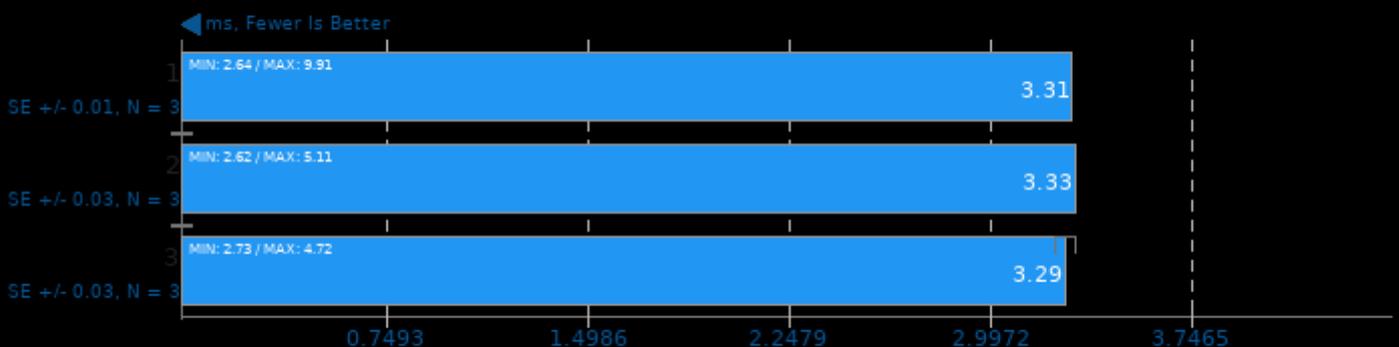
Target: CPU - Model: efficientnet-b0



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

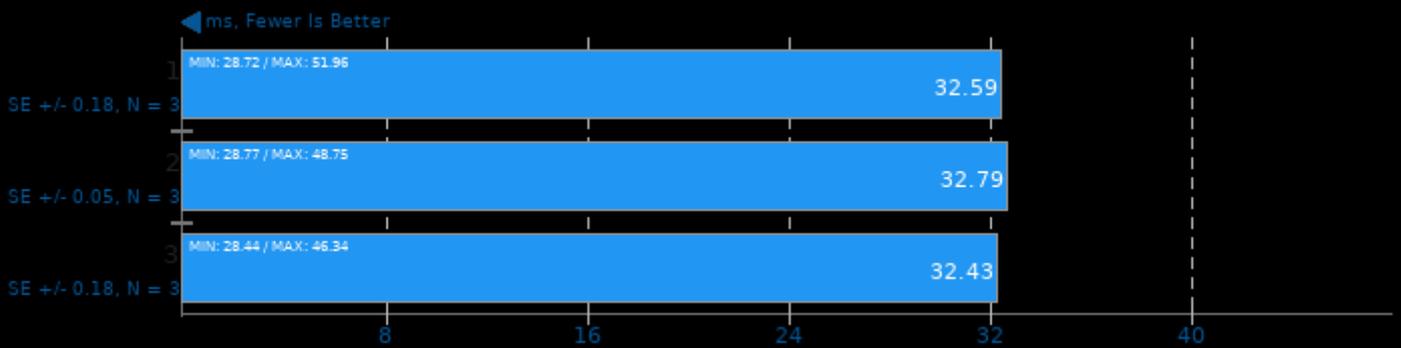
Target: CPU - Model: blazeface



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

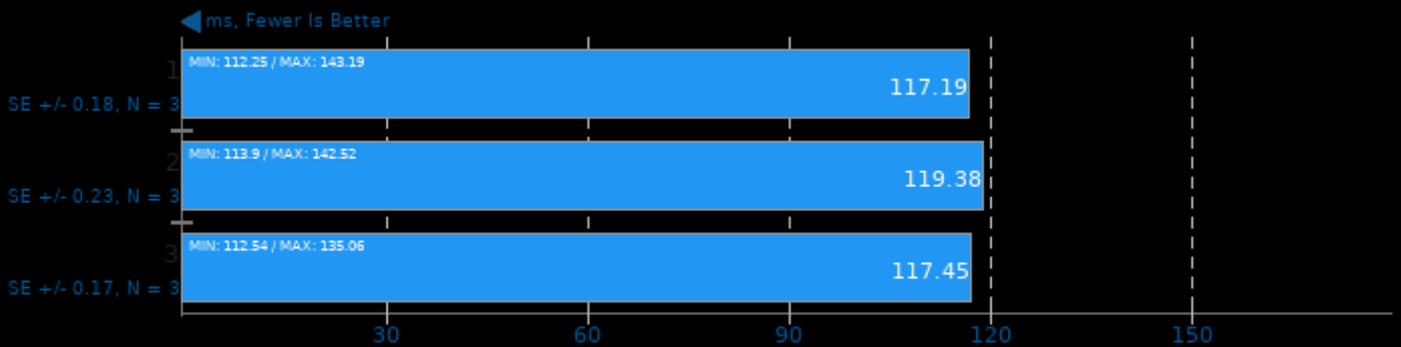
Target: CPU - Model: googlenet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

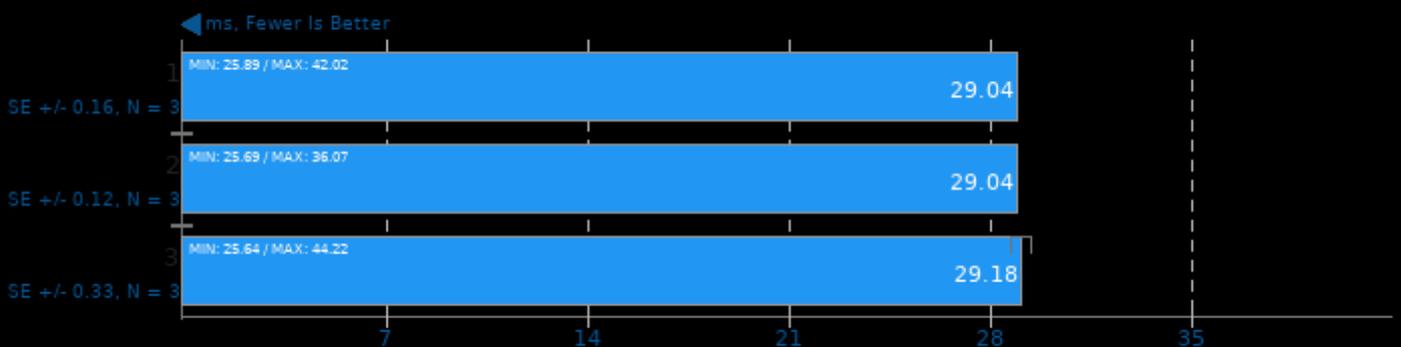
Target: CPU - Model: vgg16



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

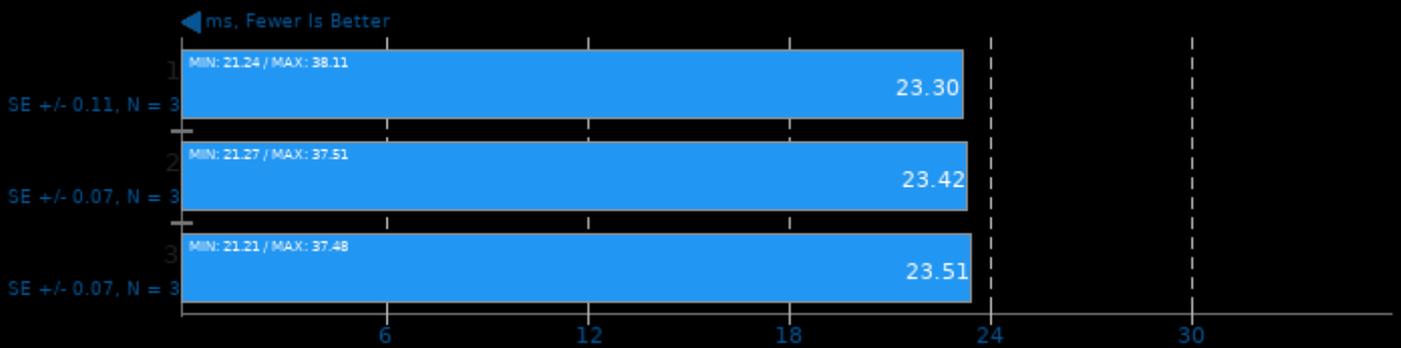
Target: CPU - Model: resnet18



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

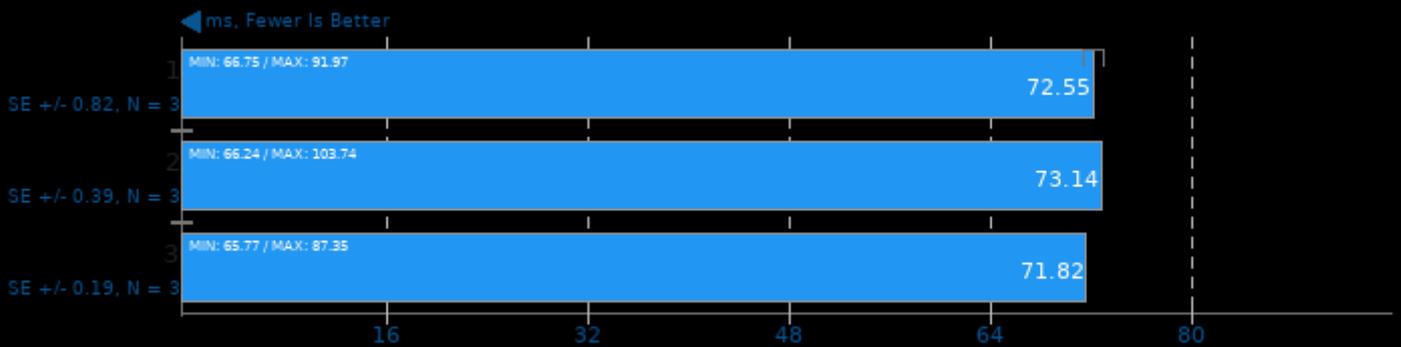
Target: CPU - Model: alexnet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

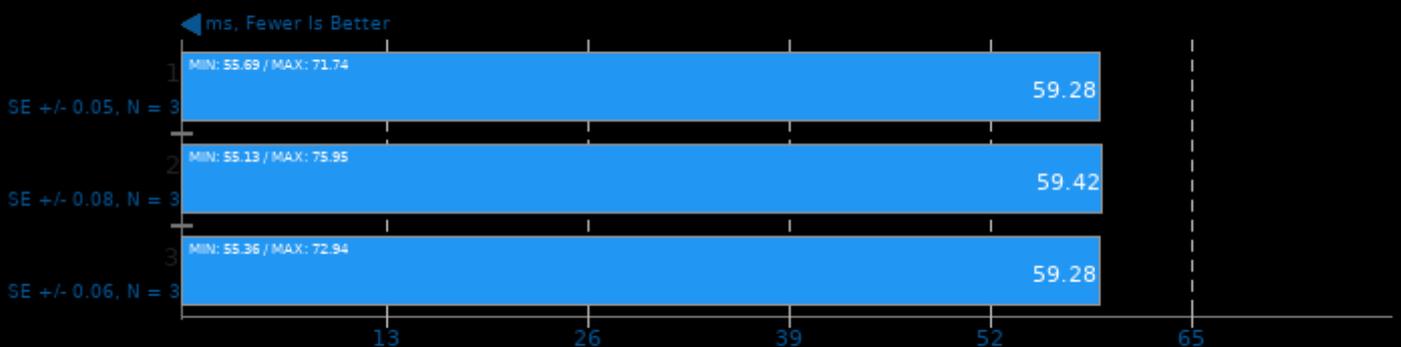
Target: CPU - Model: resnet50



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

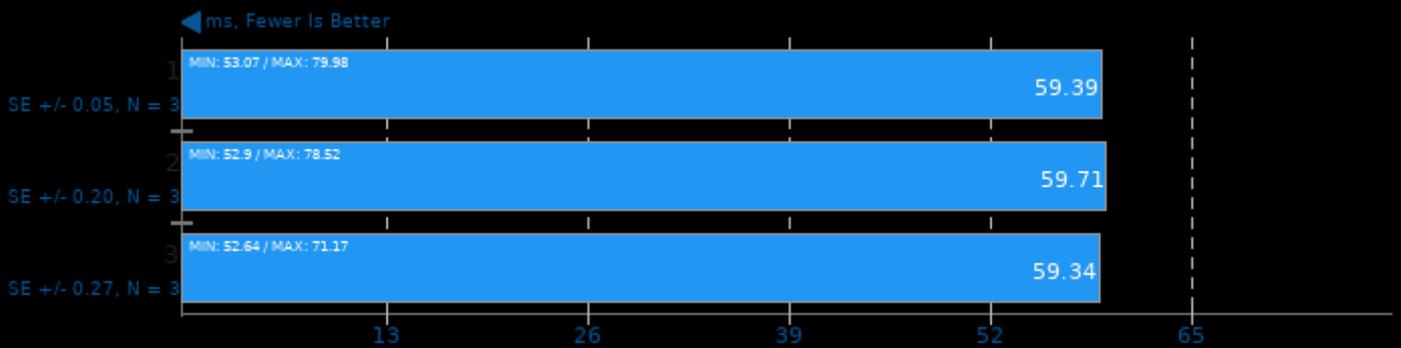
Target: CPU - Model: yolov4-tiny



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

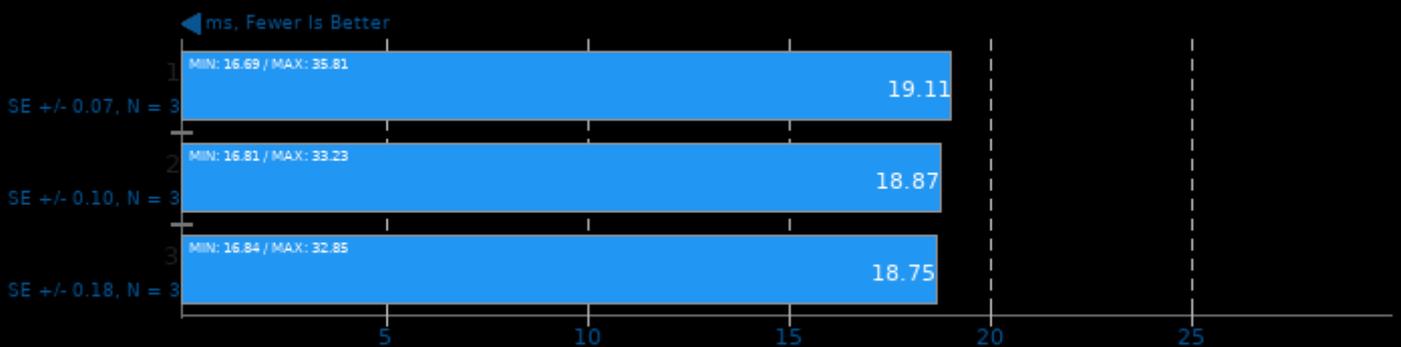
Target: CPU - Model: squeezenet_ssd



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

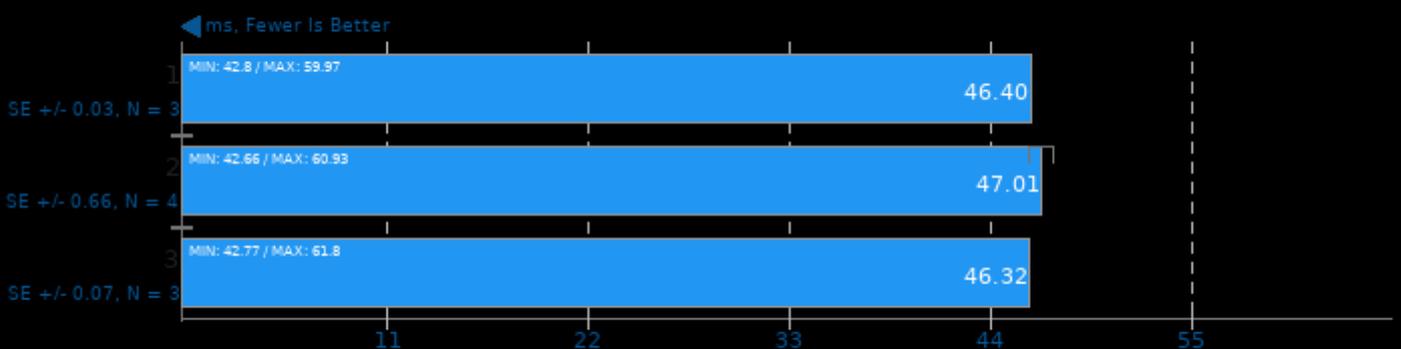
Target: CPU - Model: regnety_400m



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

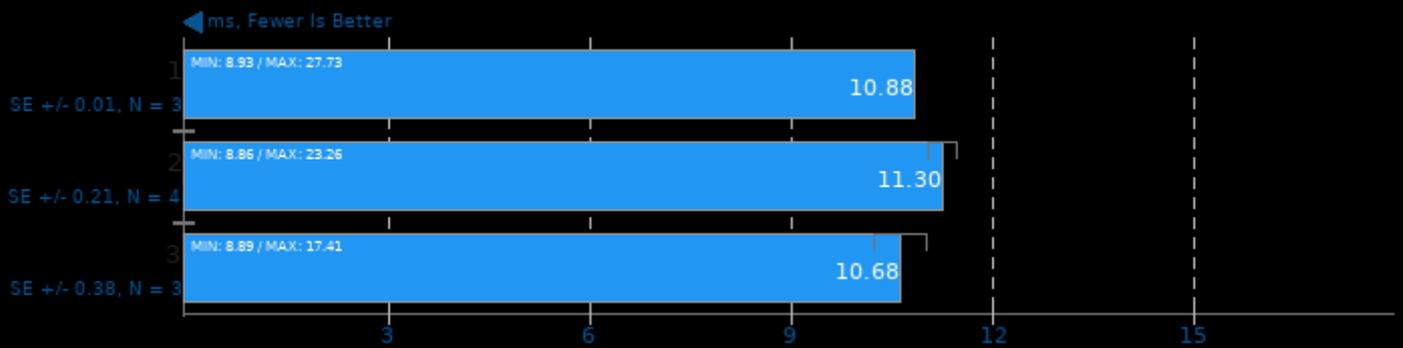
Target: Vulkan GPU - Model: mobilenet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

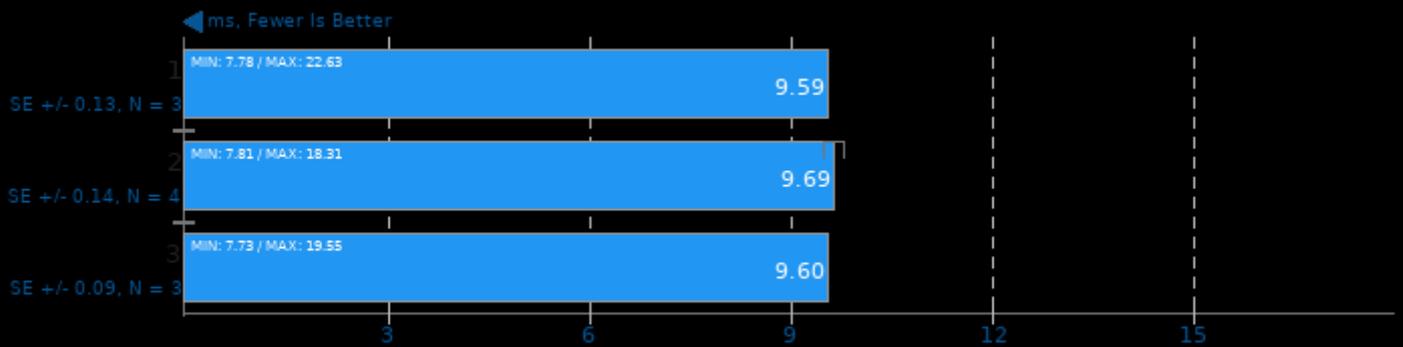
Target: Vulkan GPU-v2-v2 - Model: mobilenet-v2



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

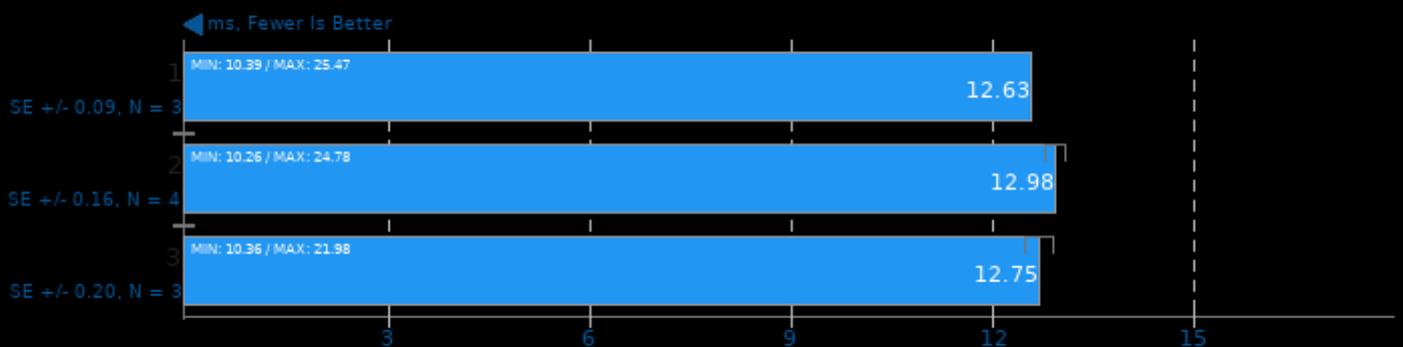
Target: Vulkan GPU-v3-v3 - Model: mobilenet-v3



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

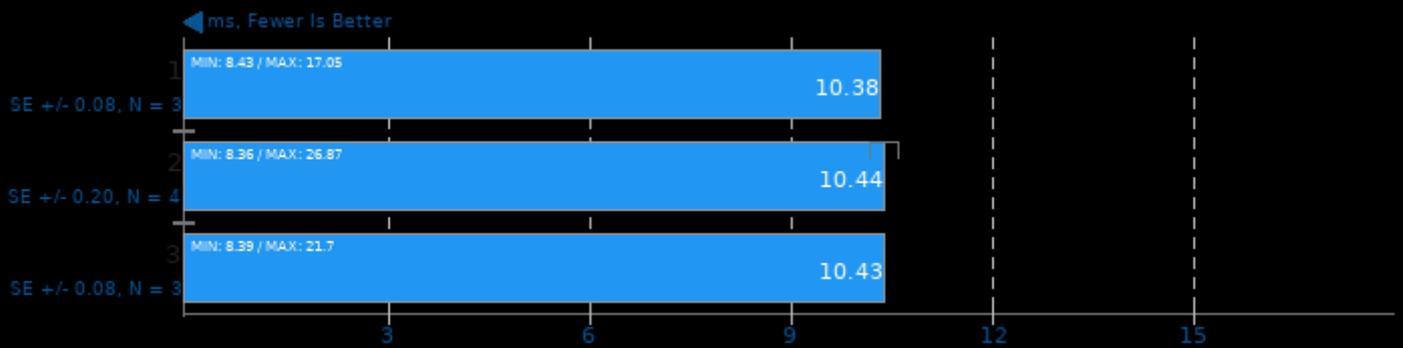
Target: Vulkan GPU - Model: shufflenet-v2



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

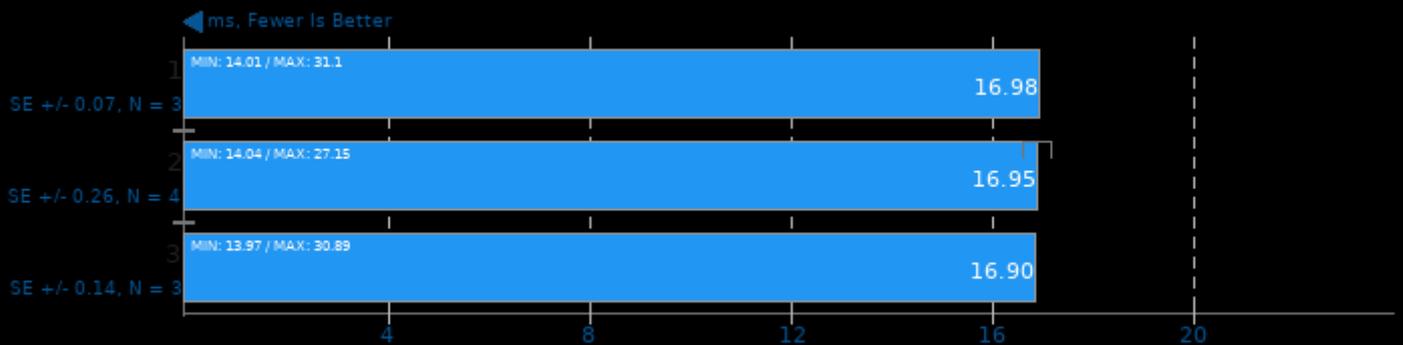
Target: Vulkan GPU - Model: mnasnet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

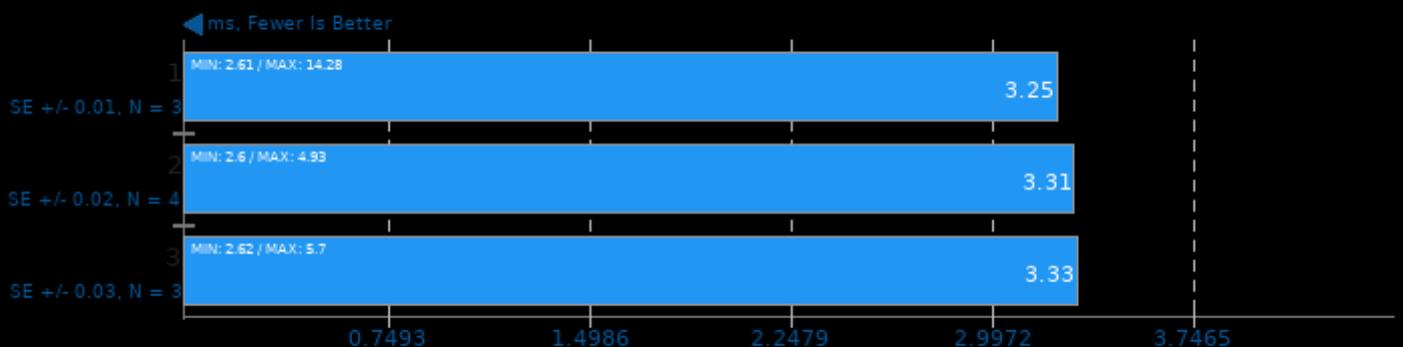
Target: Vulkan GPU - Model: efficientnet-b0



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

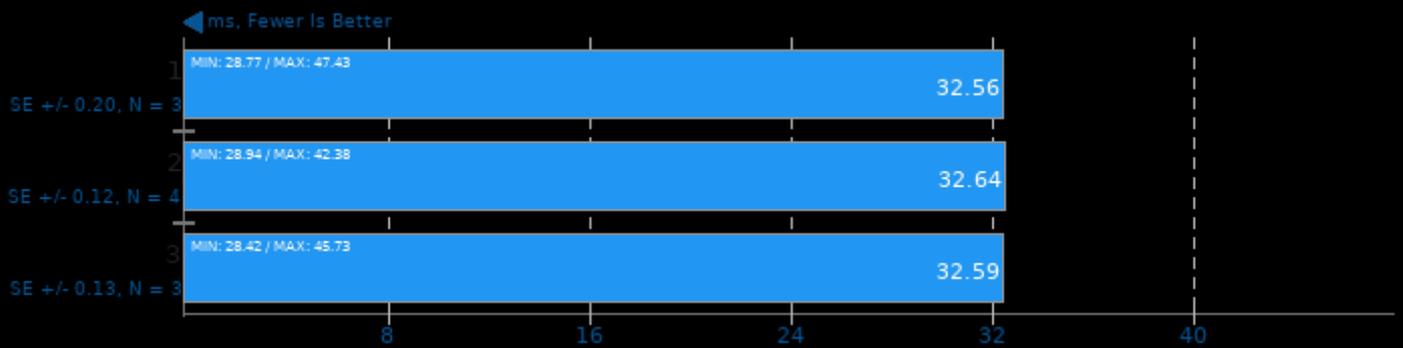
Target: Vulkan GPU - Model: blazeface



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

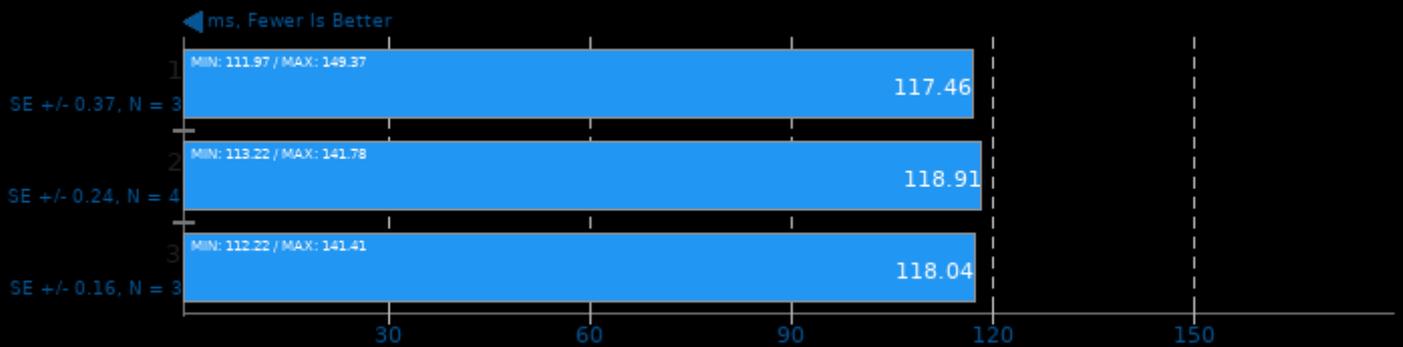
Target: Vulkan GPU - Model: googlenet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

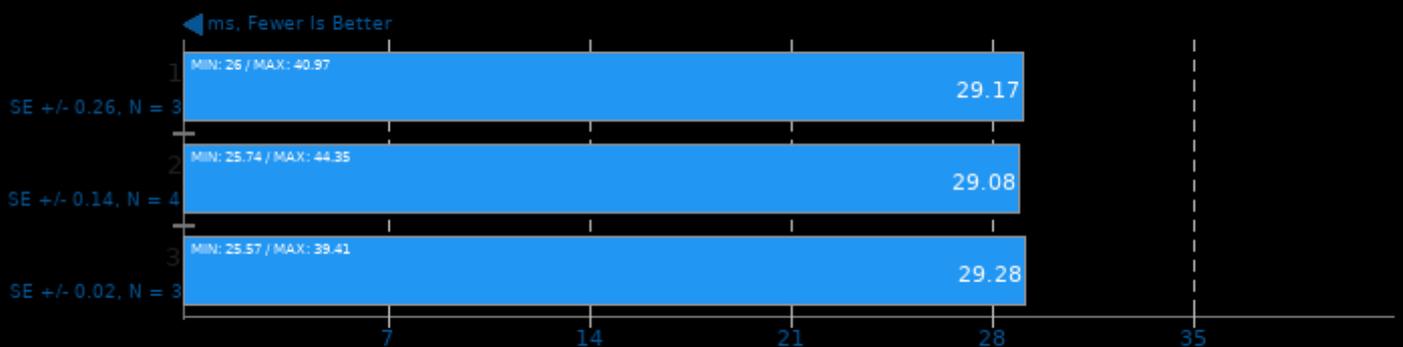
Target: Vulkan GPU - Model: vgg16



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

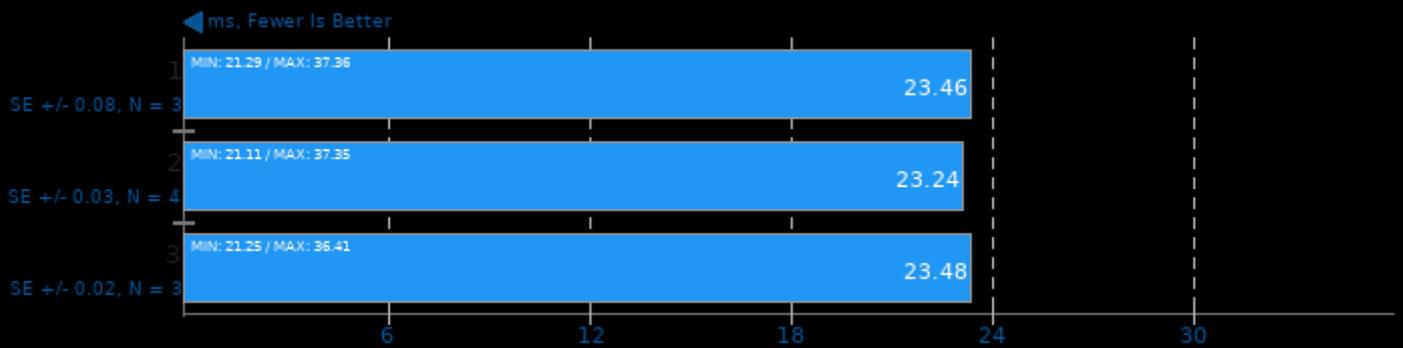
Target: Vulkan GPU - Model: resnet18



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

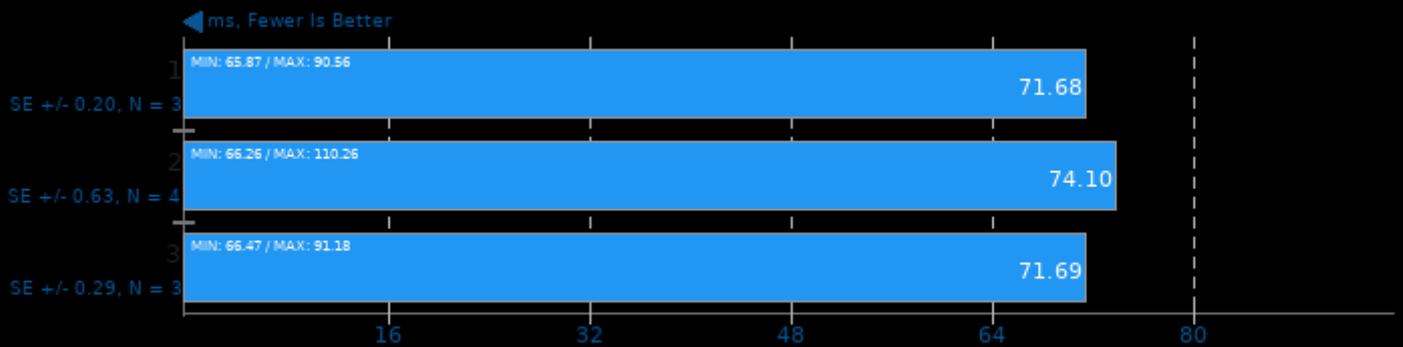
Target: Vulkan GPU - Model: alexnet



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

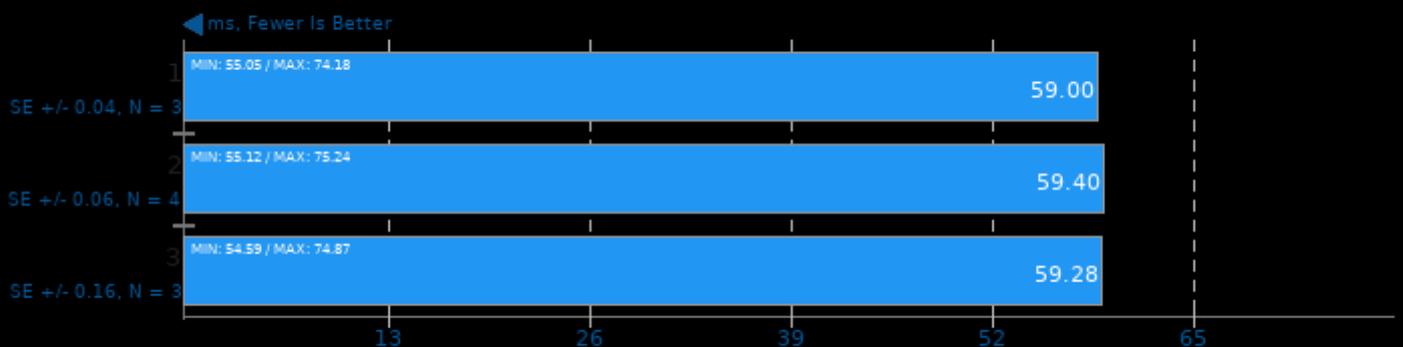
Target: Vulkan GPU - Model: resnet50



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

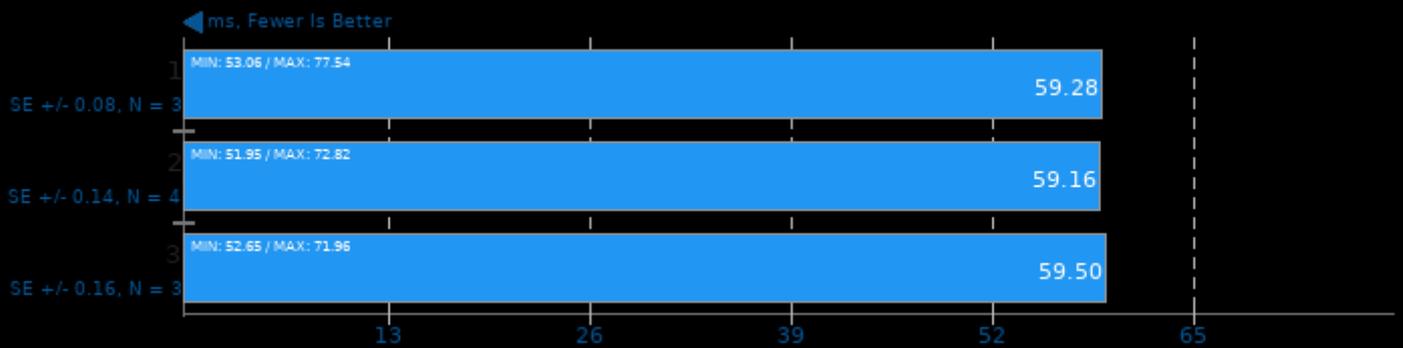
Target: Vulkan GPU - Model: yolov4-tiny



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

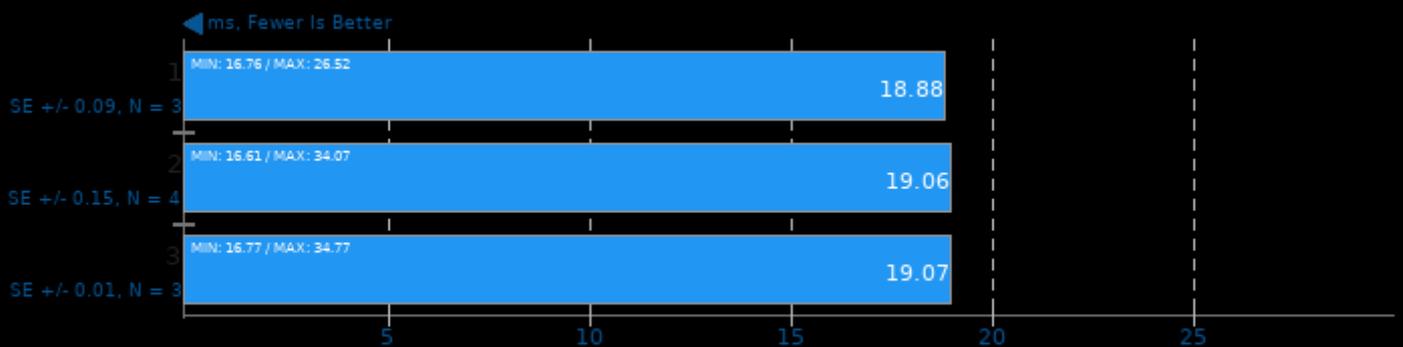
Target: Vulkan GPU - Model: squeezenet_ssd



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

NCNN 20201218

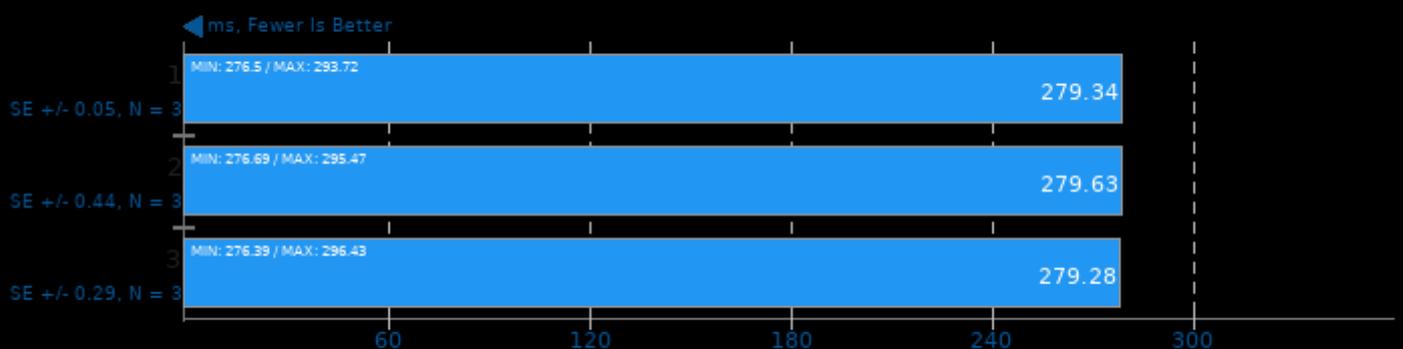
Target: Vulkan GPU - Model: regnety_400m



1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

TNN 0.2.3

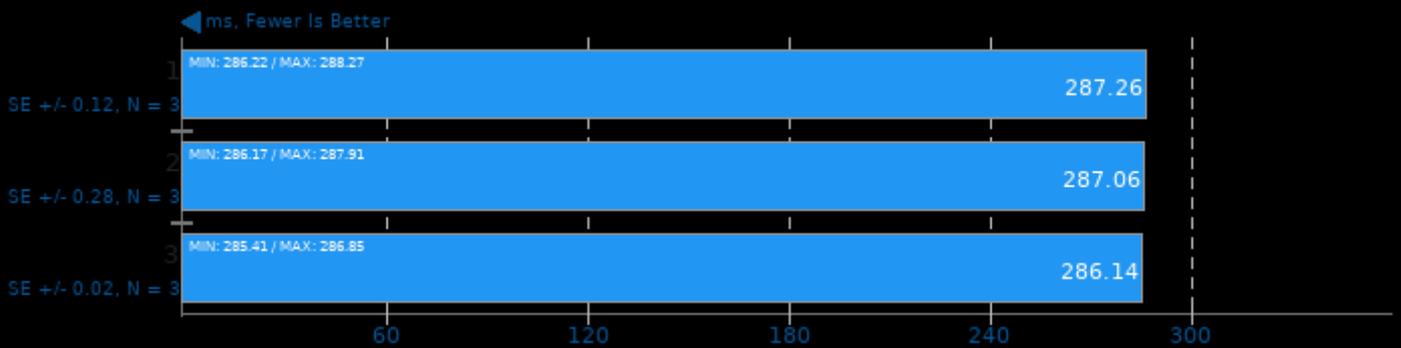
Target: CPU - Model: MobileNet v2



1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -O3 -rdynamic -ldl

TNN 0.2.3

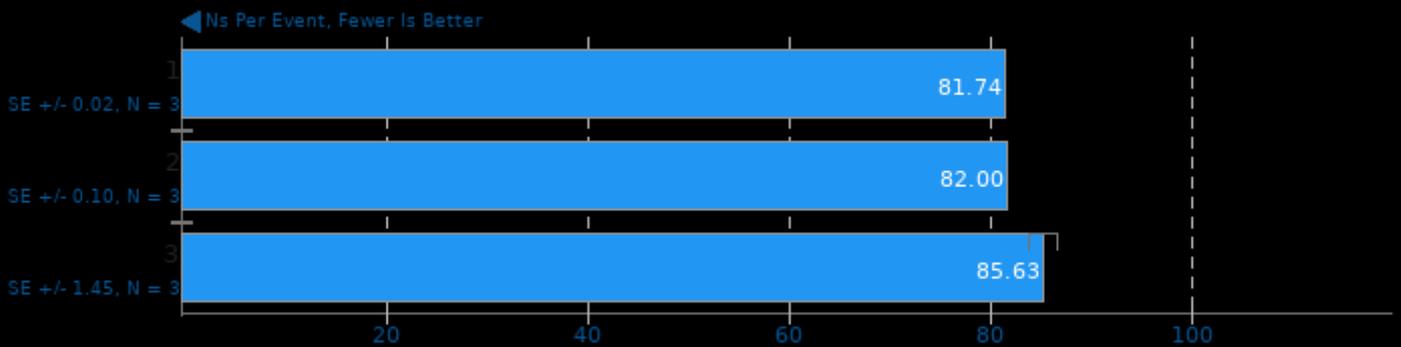
Target: CPU - Model: SqueezeNet v1.1



1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -O3 -rdynamic -ldl

OSBench

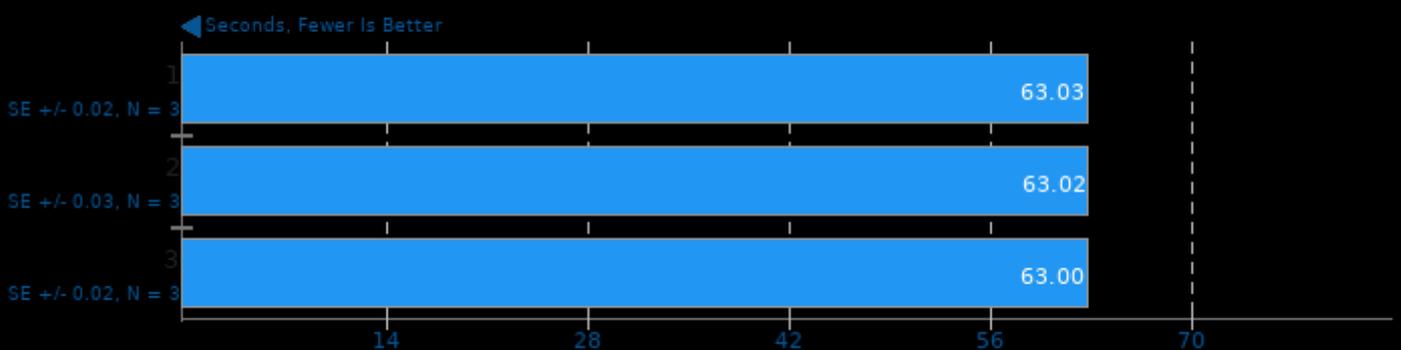
Test: Memory Allocations



1. (CC) gcc options: -lm

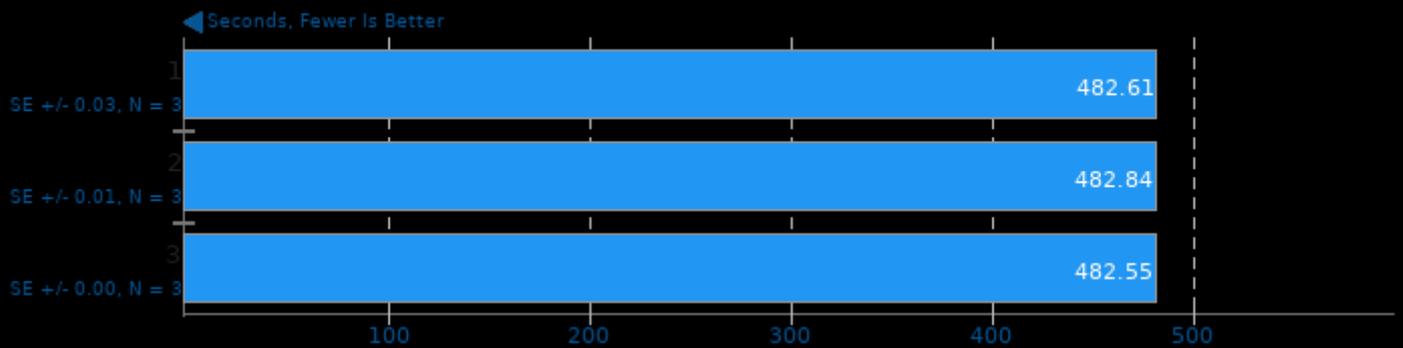
RealSR-NCNN 20200818

Scale: 4x - TAA: No



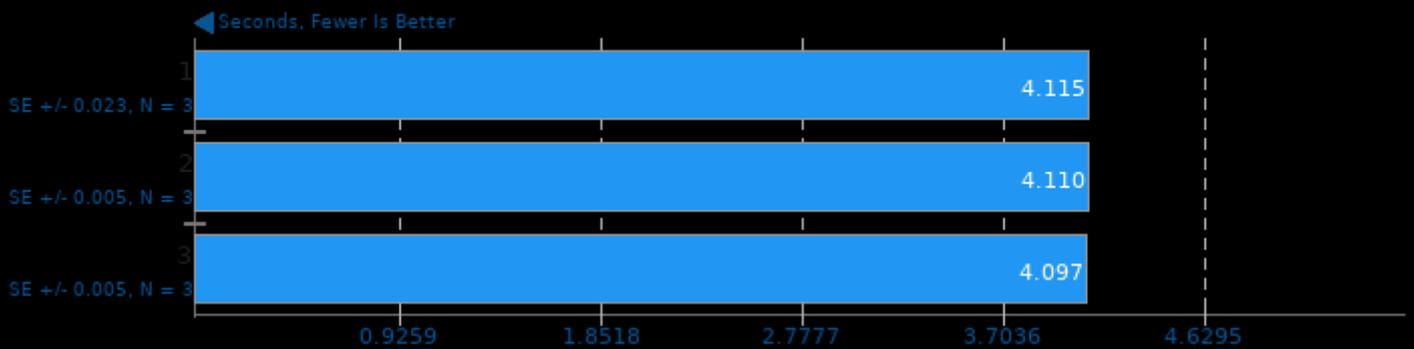
RealSR-NCNN 20200818

Scale: 4x - TAA: Yes



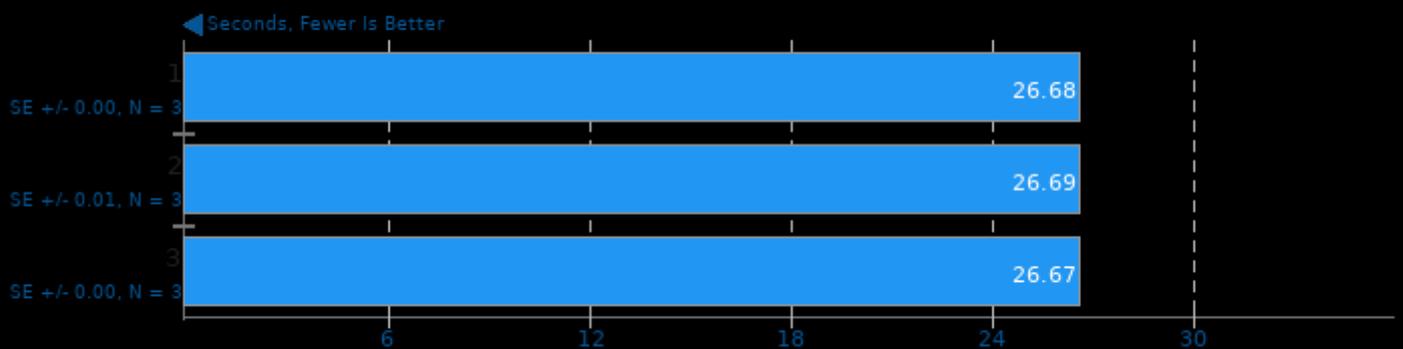
Waifu2x-NCNN Vulkan 20200818

Scale: 2x - Denoise: 3 - TAA: No



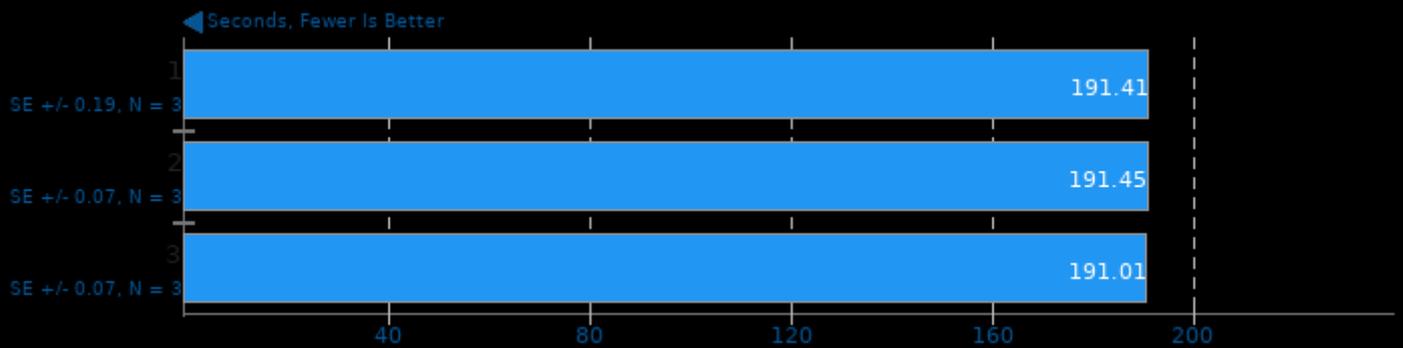
Waifu2x-NCNN Vulkan 20200818

Scale: 2x - Denoise: 3 - TAA: Yes



CloverLeaf

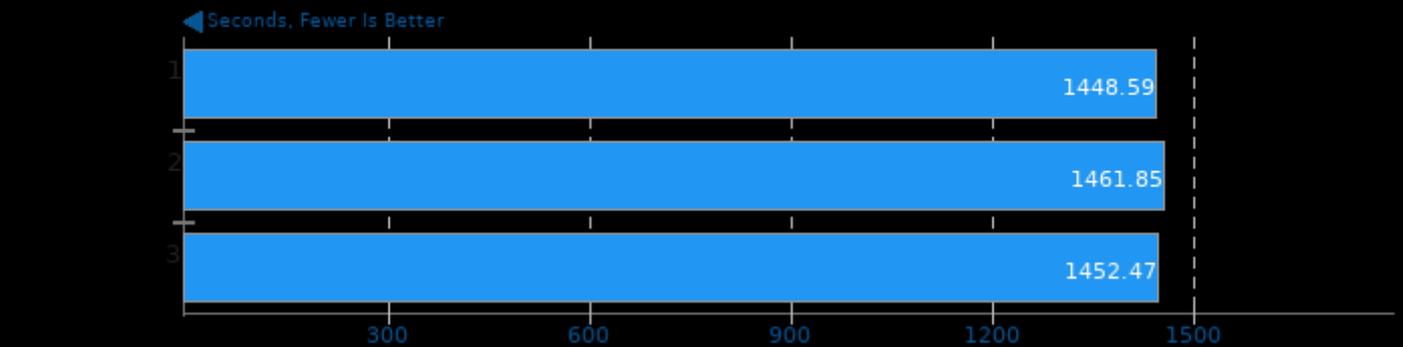
Lagrangian-Eulerian Hydrodynamics



1. (F9X) gfortran options: -O3 -march=native -funroll-loops -fopenmp

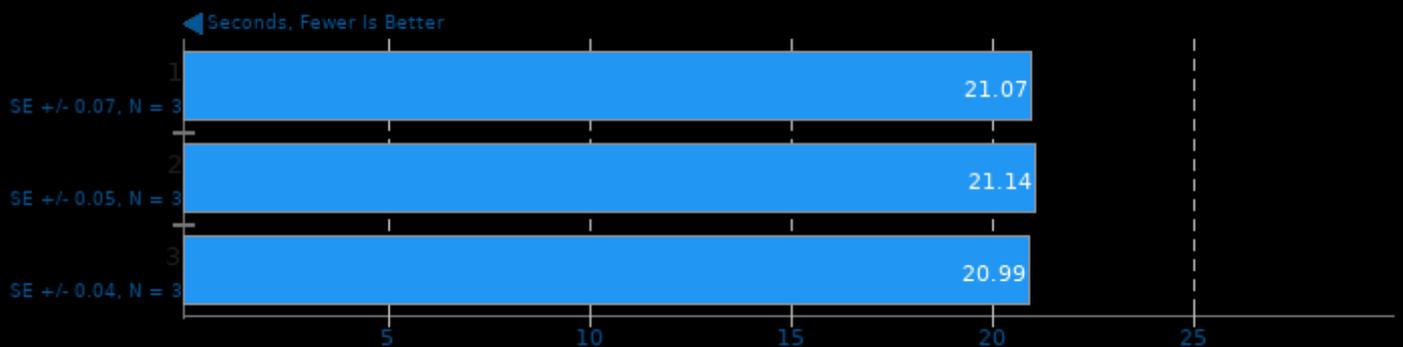
CP2K Molecular Dynamics 8.1

Fayalite-FIST Data



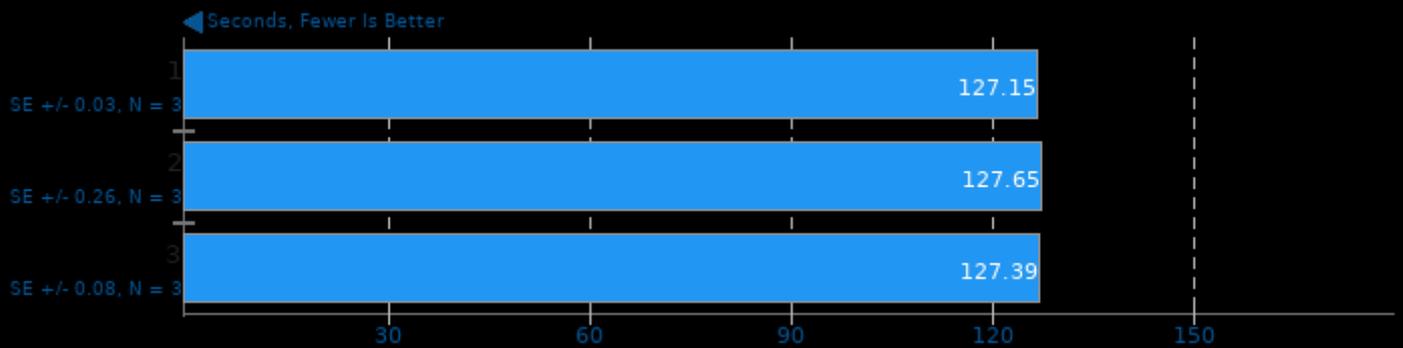
Dolfyn 0.527

Computational Fluid Dynamics



Timed HMMer Search 3.3.1

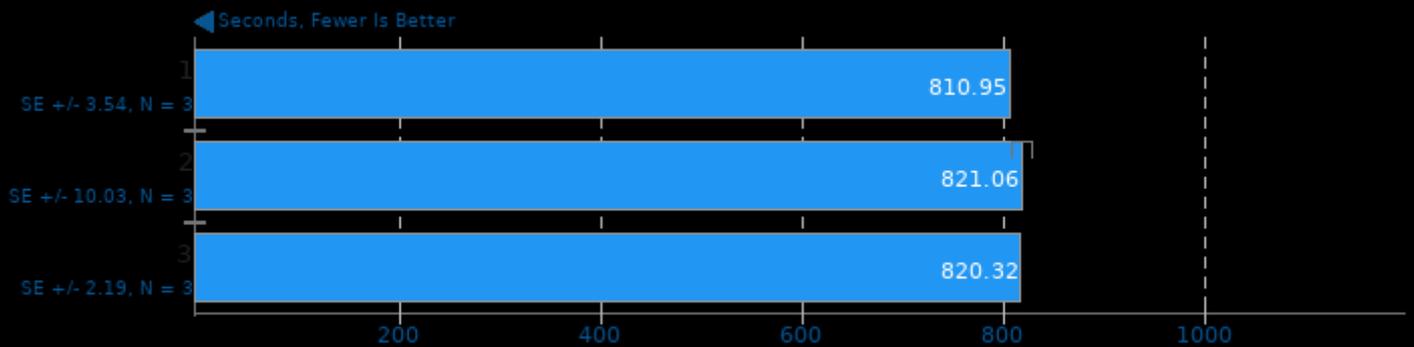
Pfam Database Search



1. (CC) gcc options: -O3 -pthread -lhmmmer -leasel -lm

Incompact3D 2020-09-17

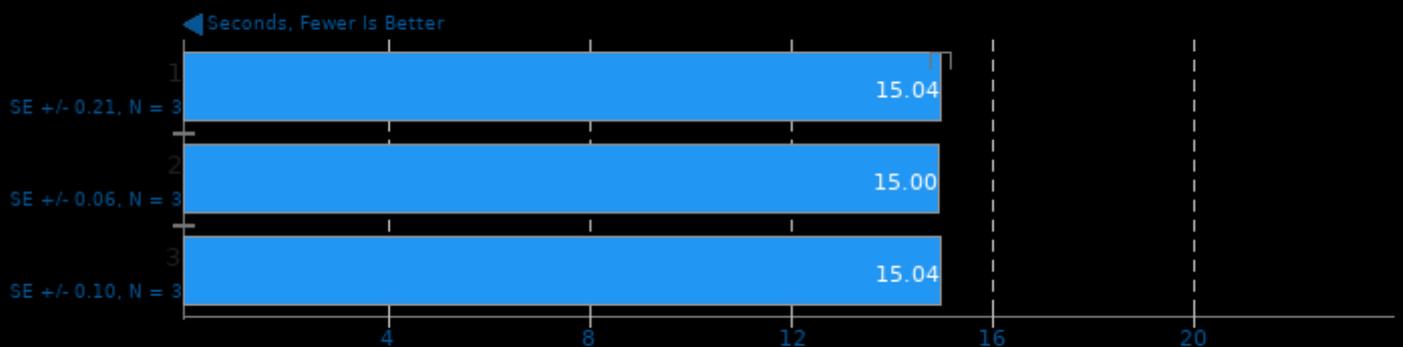
Input: Cylinder



1. (F9X) gfortran options: -cpp -funroll-loops -floop-optimize -fcray-pointer -fbacktrace -pthread -lmpi_usempif08 -lmpi_mpi fh -lmpi -lopen-rte -lopen-pal

Timed MAFFT Alignment 7.471

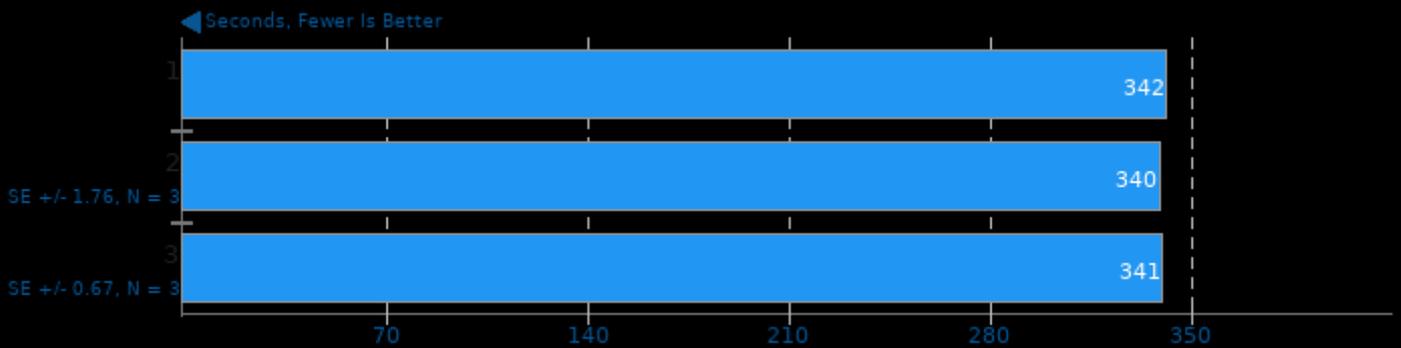
Multiple Sequence Alignment - LSU RNA



1. (CC) gcc options: -std=c99 -O3 -lm -pthread

Monte Carlo Simulations of Ionised Nebulae 2019-03-24

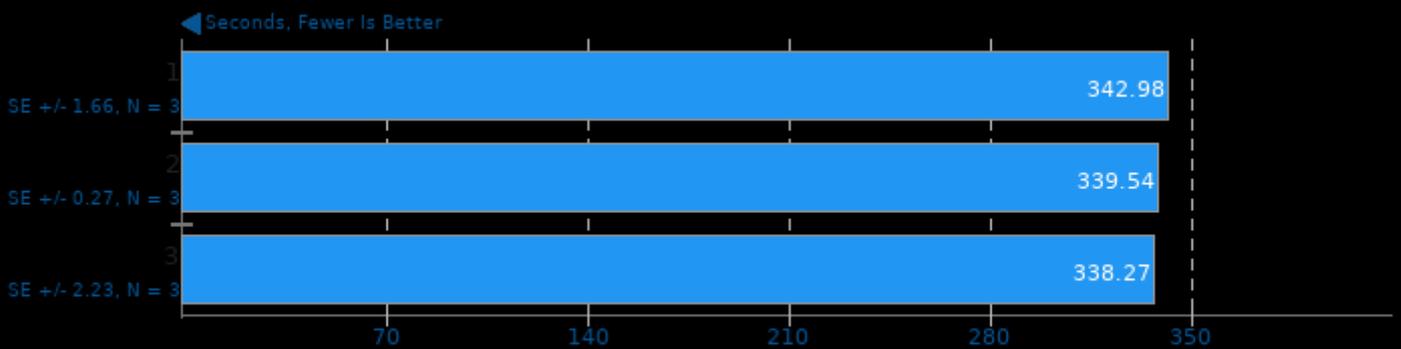
Input: Dust 2D tau100.0



1. (F9X) gfortran options: -cpp -jsource/ -ffree-line-length-0 -lm -std=legacy -O3 -O2 -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen-rte -lopen-pal -l

OpenFOAM 8

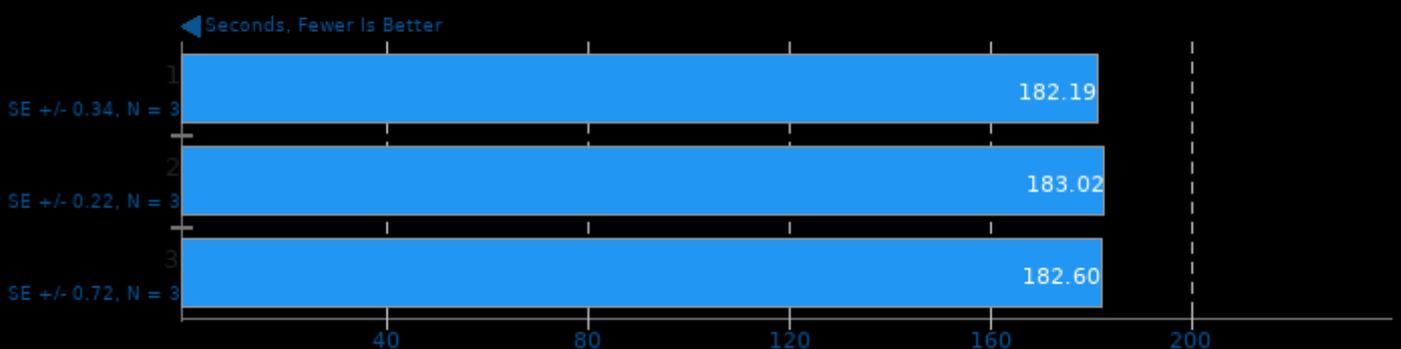
Input: Motorbike 30M



1. (CXX) g++ options: -std=c++11 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -ldynamicMesh -lgenericPatch

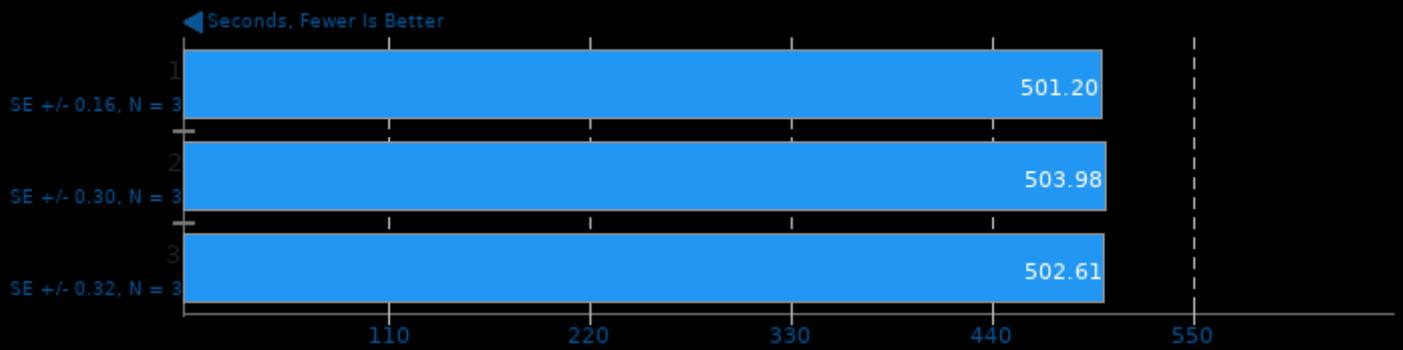
Timed FFmpeg Compilation 4.2.2

Time To Compile



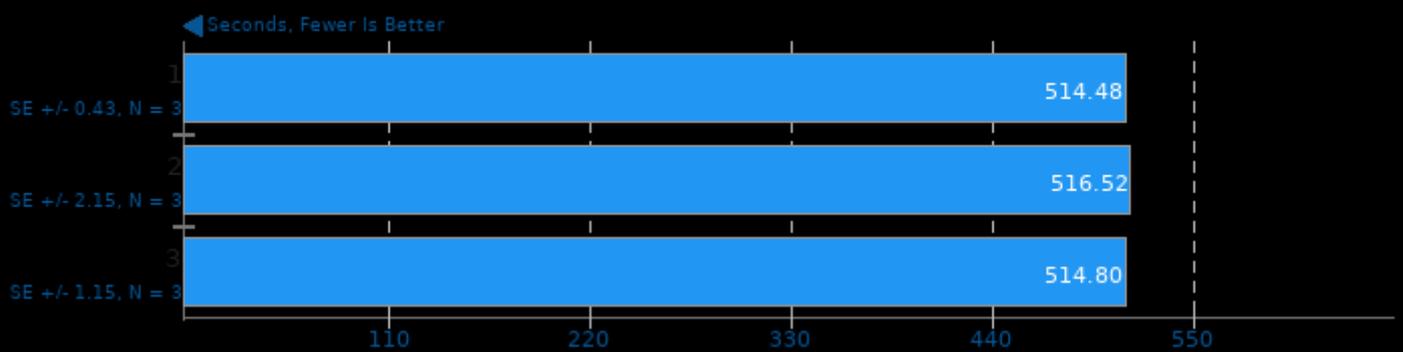
Timed Godot Game Engine Compilation 3.2.3

Time To Compile



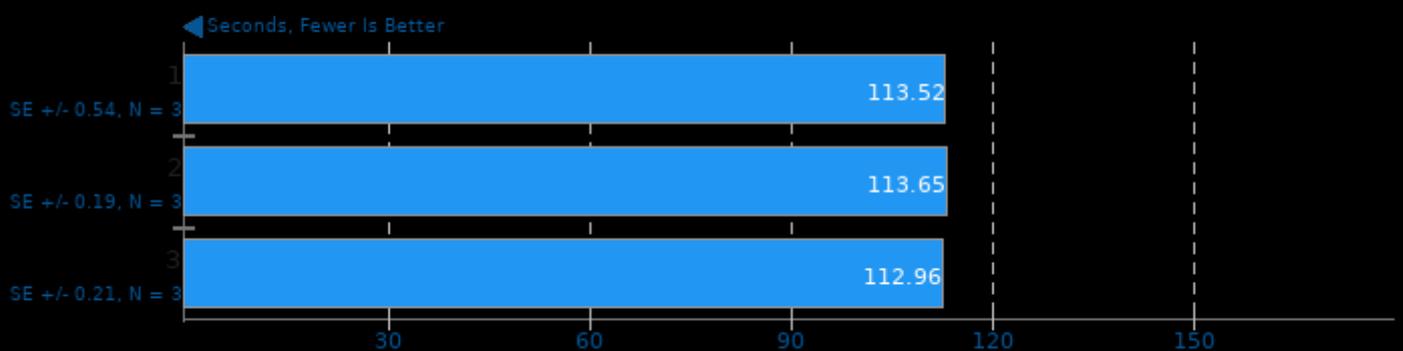
Build2 0.13

Time To Compile



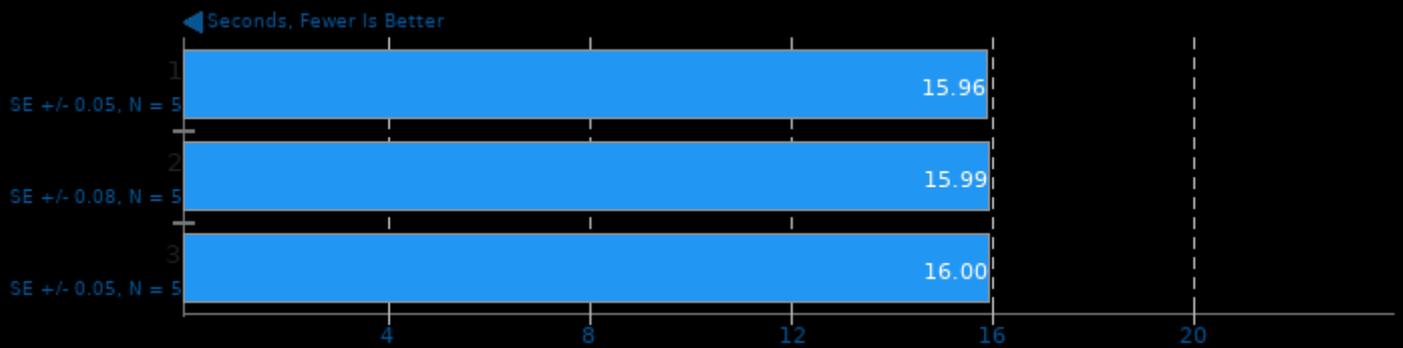
Timed Eigen Compilation 3.3.9

Time To Compile



Monkey Audio Encoding 3.99.6

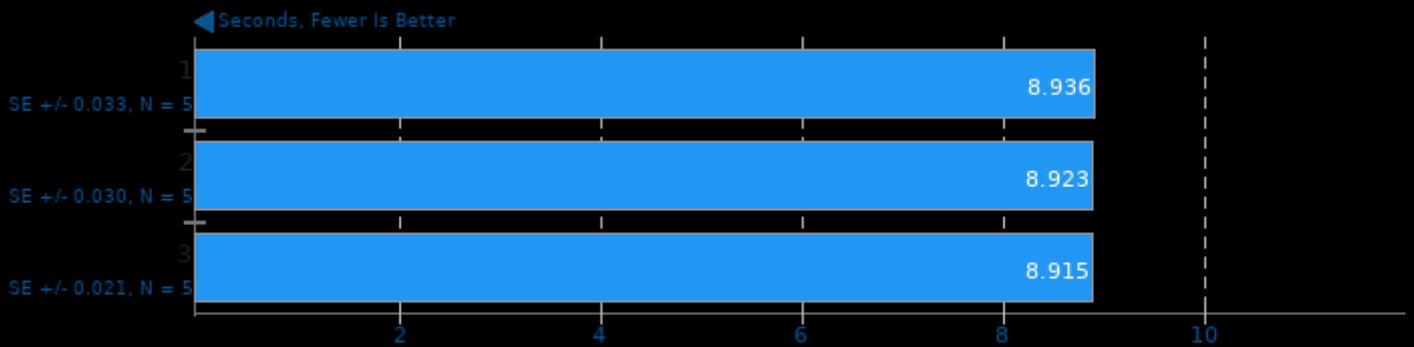
WAV To APE



1. (CXX) g++ options: -O3 -pedantic -rdynamic -lrt

Opus Codec Encoding 1.3.1

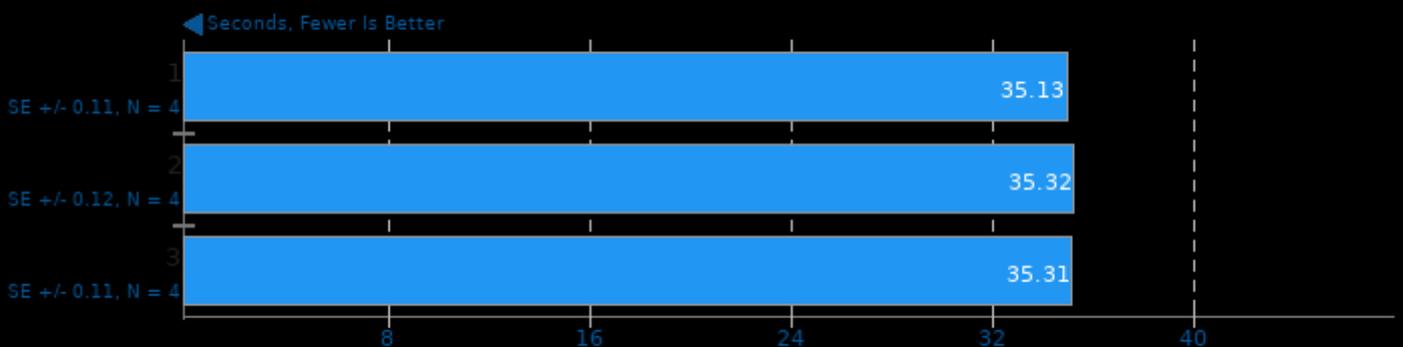
WAV To Opus Encode



1. (CXX) g++ options: -fvisibility=hidden -logg -lm

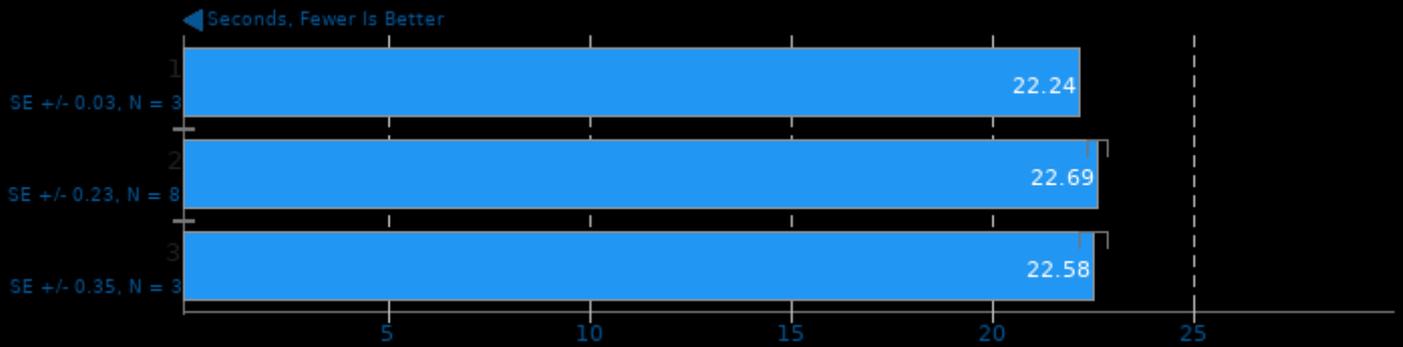
eSpeak-NG Speech Engine 20200907

Text-To-Speech Synthesis



1. (C) gcc options: -O2 -std=c99

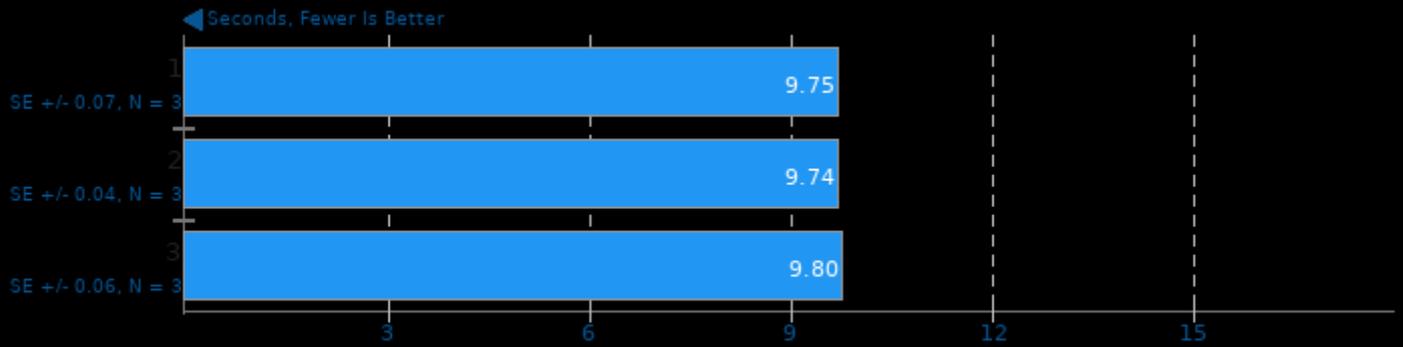
RNNoise 2020-06-28



1. (CC) gcc options: -O2 -pedantic -fvisibility=hidden

ASTC Encoder 2.0

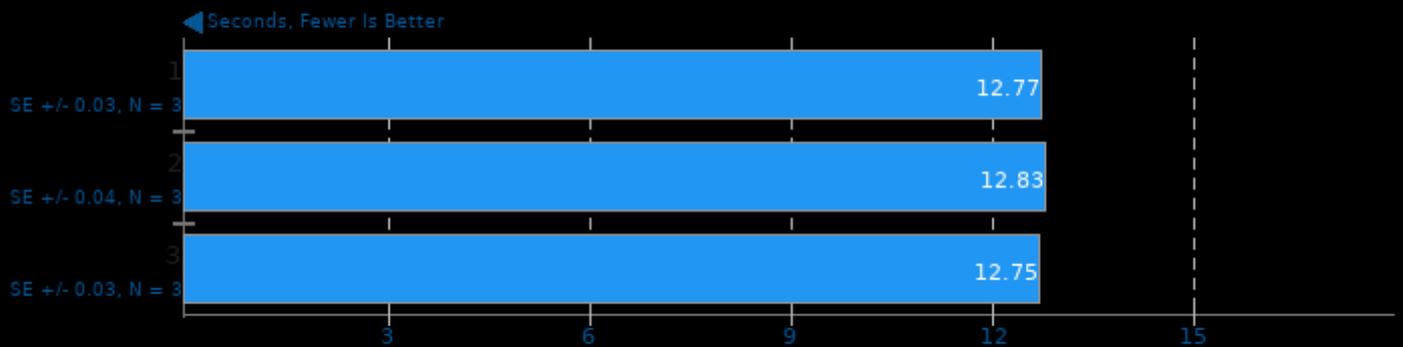
Preset: Fast



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-mfpmath=sse -mavx2 -mpopcnt -lthread

ASTC Encoder 2.0

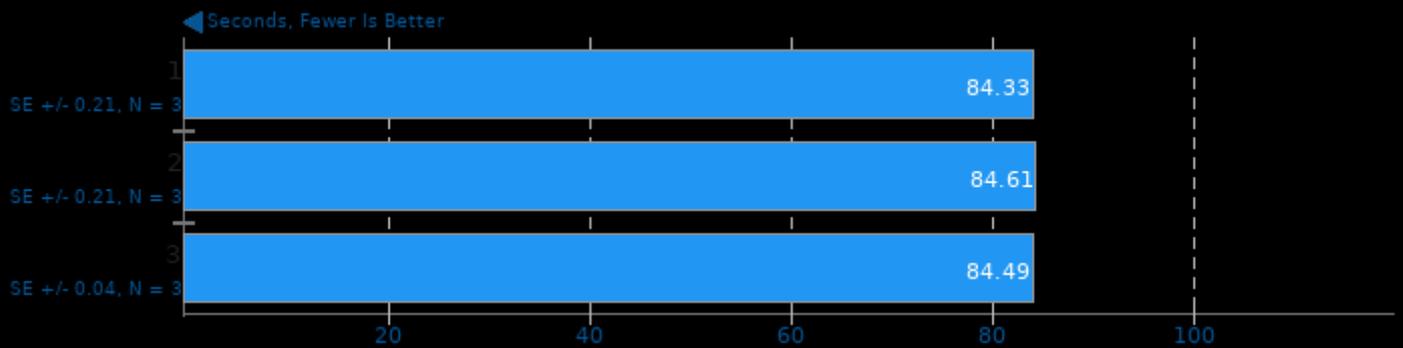
Preset: Medium



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-mfpmath=sse -mavx2 -mpopcnt -lthread

ASTC Encoder 2.0

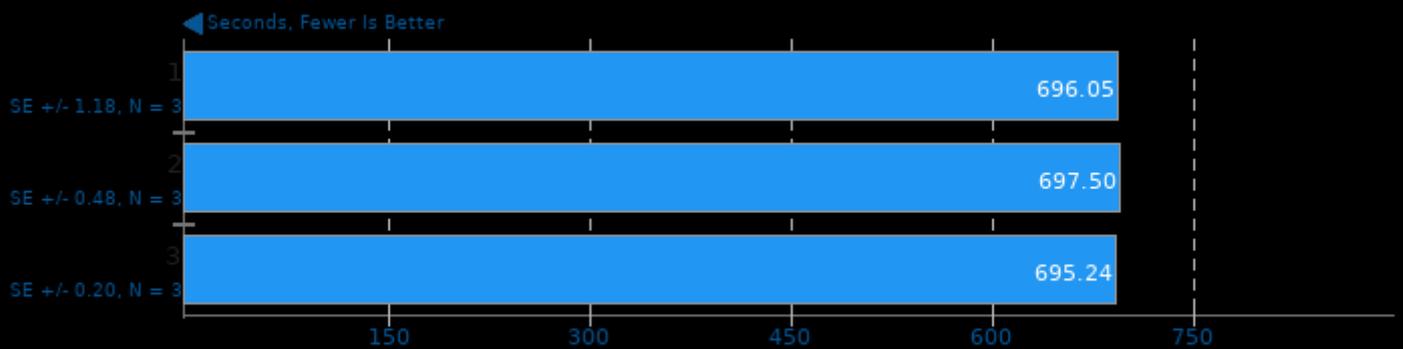
Preset: Thorough



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-math-errno -mavx2 -mpopcnt -lthread

ASTC Encoder 2.0

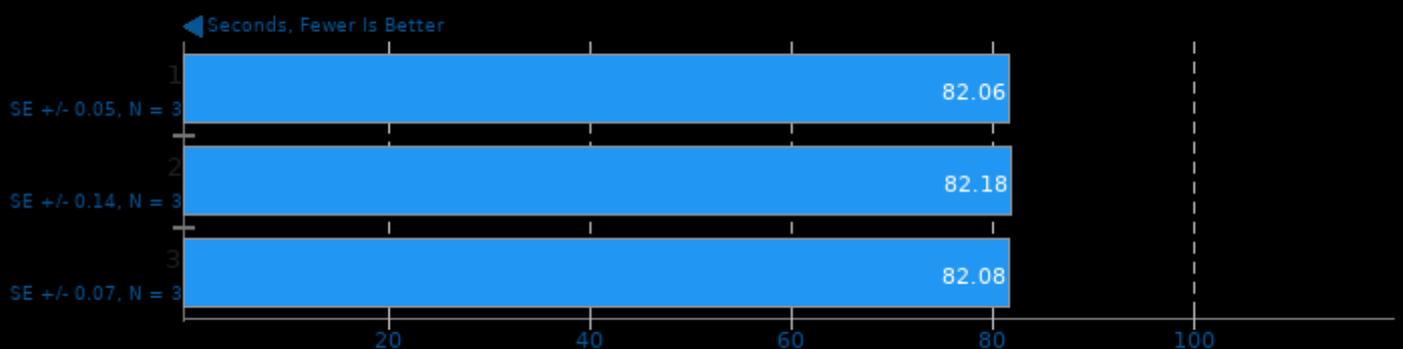
Preset: Exhaustive



1. (CXX) g++ options: -std=c++14 -fvisibility=hidden -O3 -fno-math-errno -mavx2 -mpopcnt -lthread

Basis Universal 1.12

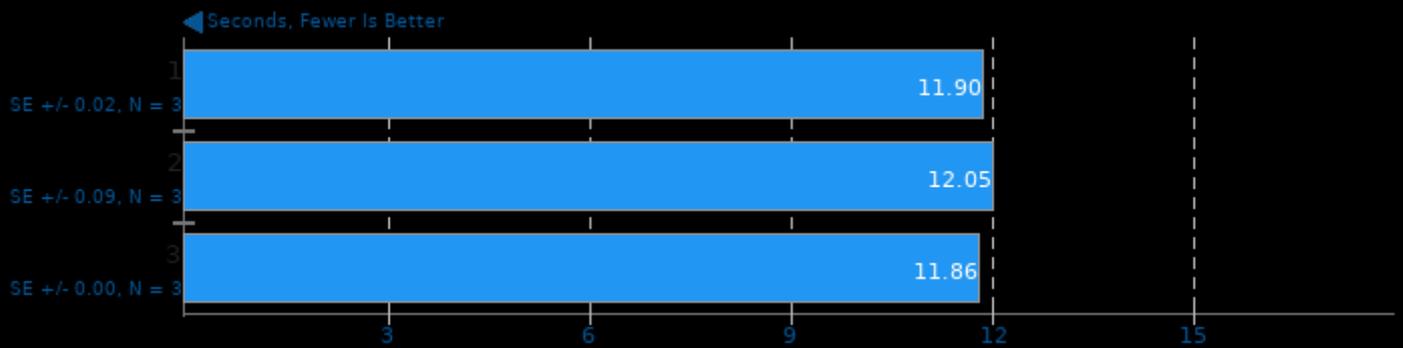
Settings: ETC1S



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lthread

Basis Universal 1.12

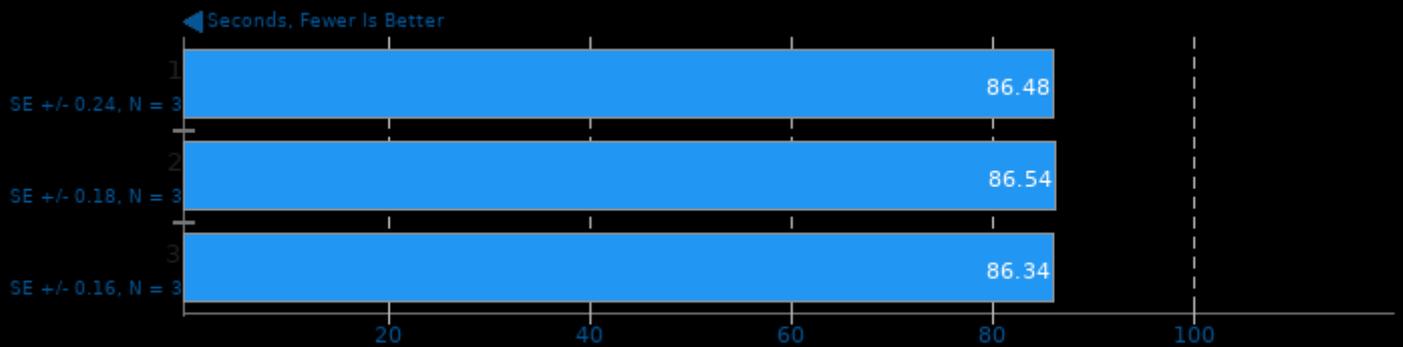
Settings: UASTC Level 0



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

Basis Universal 1.12

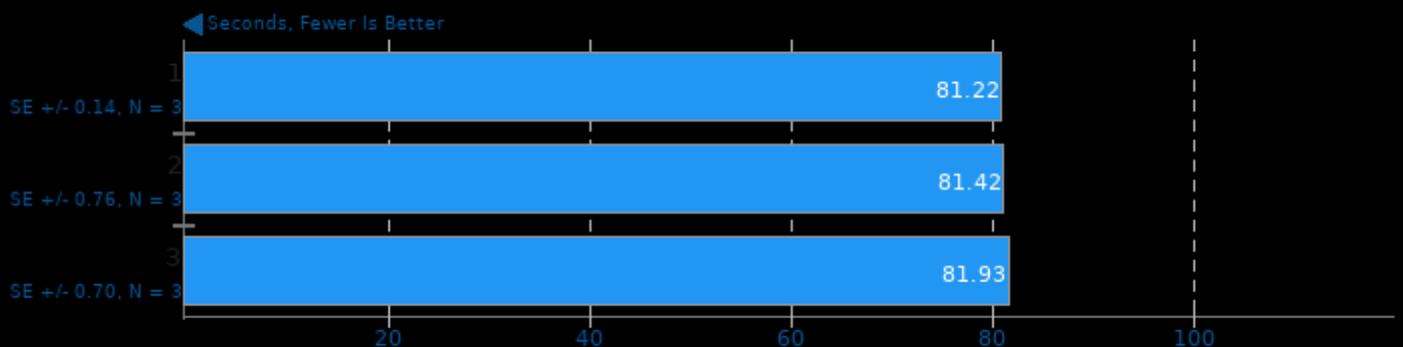
Settings: UASTC Level 2



1. (CXX) g++ options: -std=c++11 -fvisibility=hidden -fPIC -fno-strict-aliasing -O3 -rdynamic -lm -lpthread

SQLite Speedtest 3.30

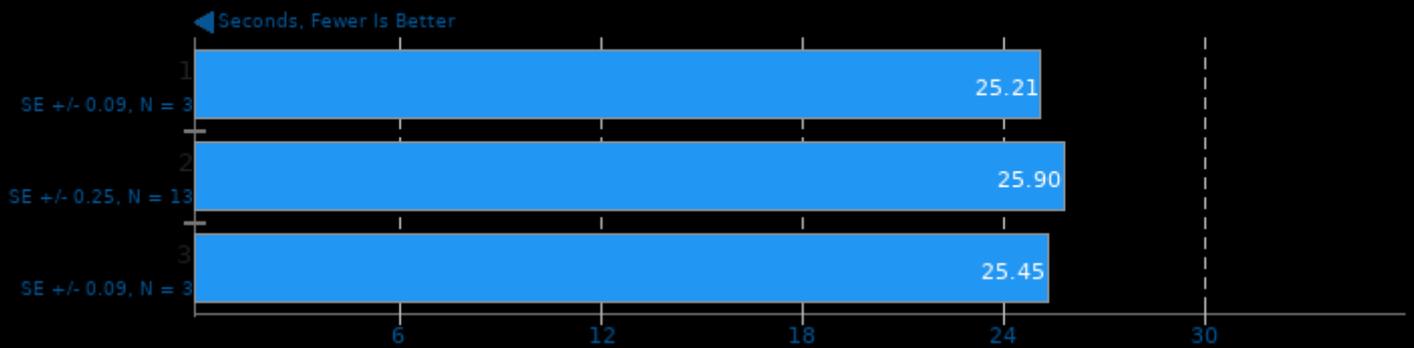
Timed Time - Size 1,000



1. (C) gcc options: -O2 -ldl -lz -lpthread

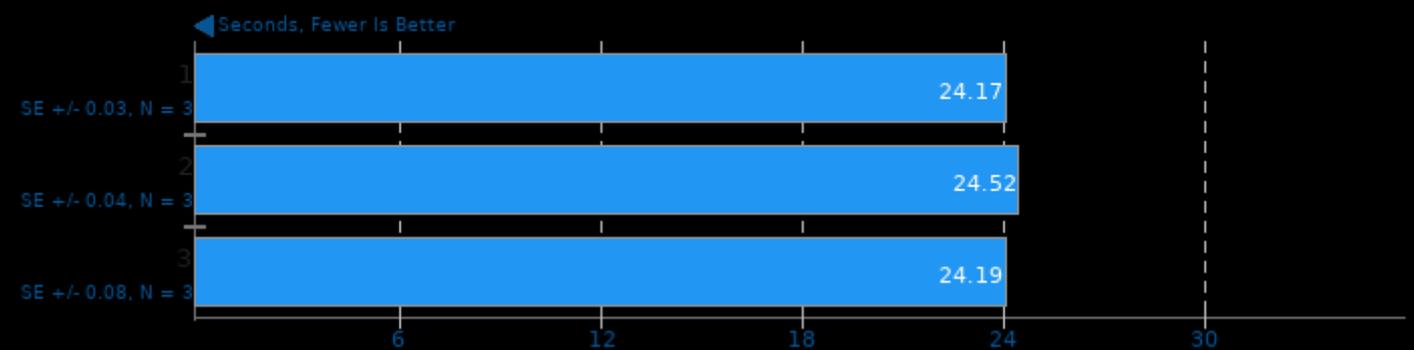
Darktable 3.2.1

Test: Boat - Acceleration: CPU-only



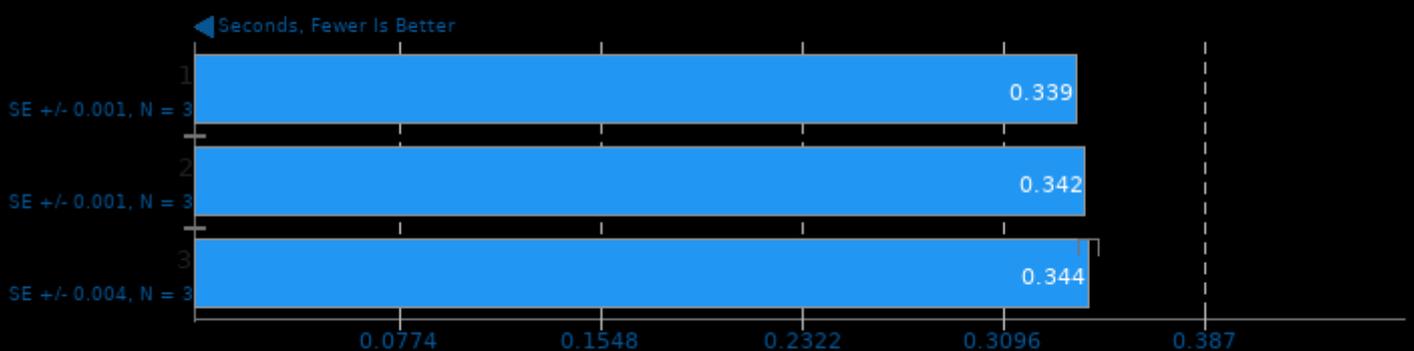
Darktable 3.2.1

Test: Masskrug - Acceleration: CPU-only



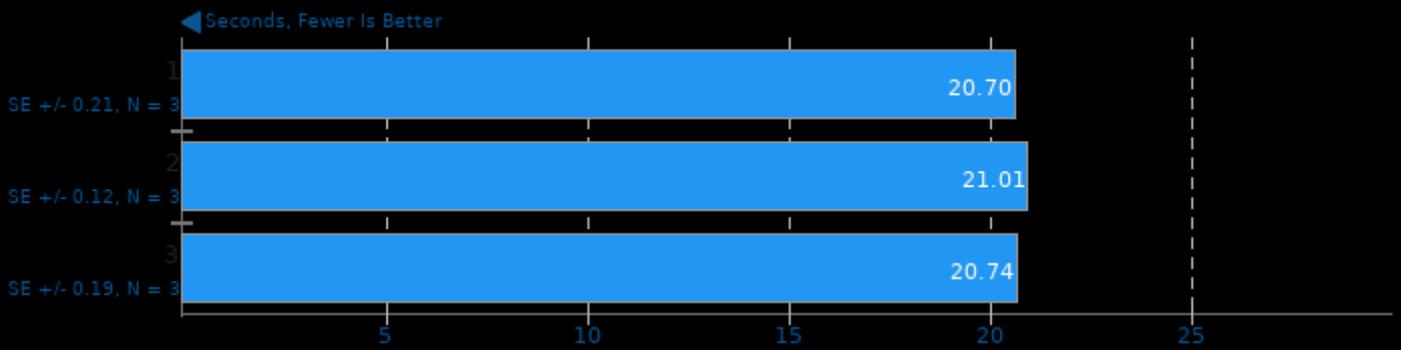
Darktable 3.2.1

Test: Server Rack - Acceleration: CPU-only



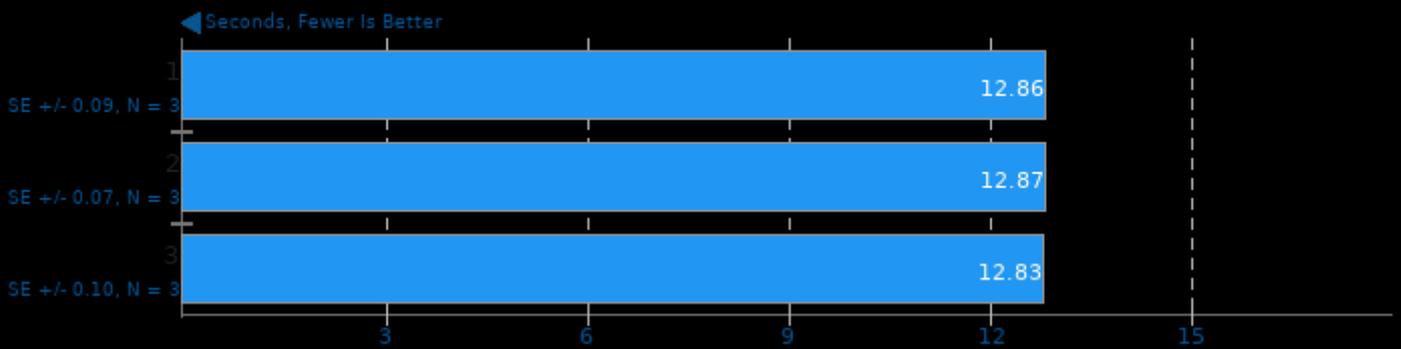
Darktable 3.2.1

Test: Server Room - Acceleration: CPU-only



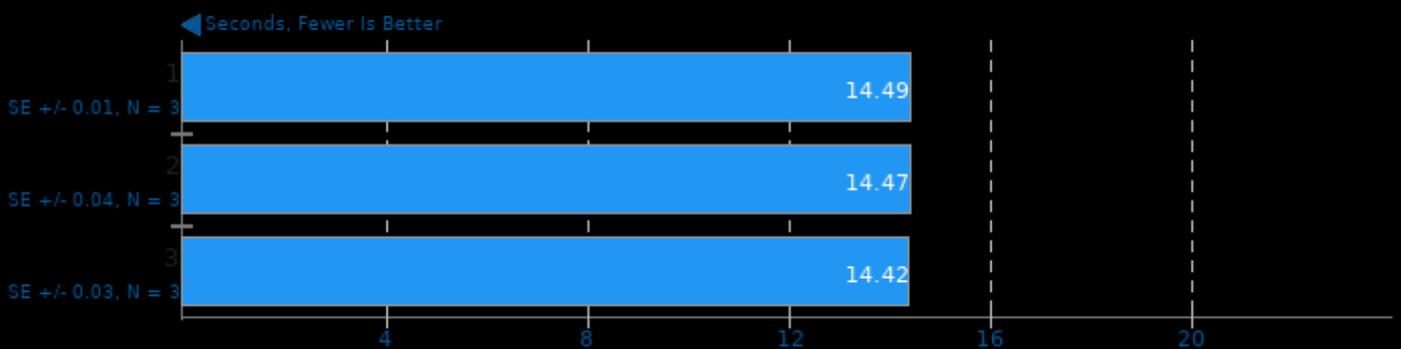
GIMP 2.10.18

Test: resize



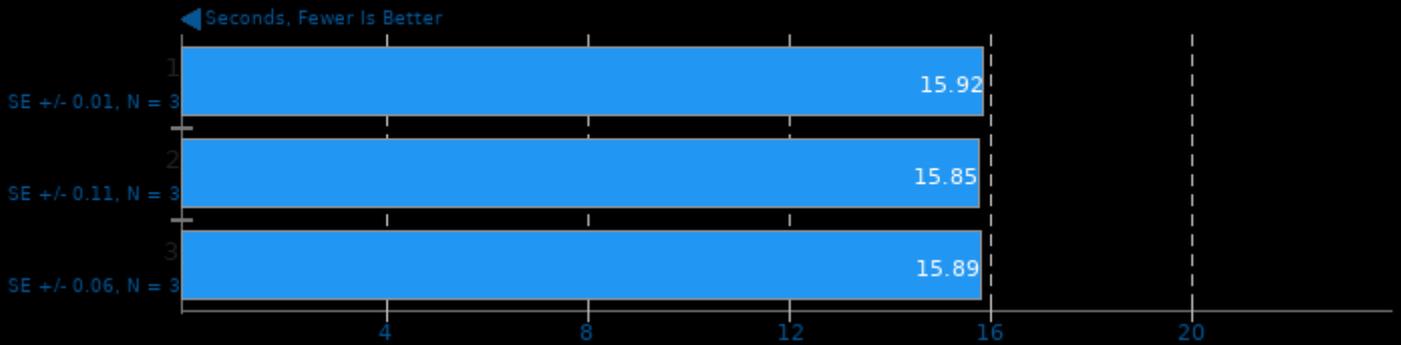
GIMP 2.10.18

Test: rotate



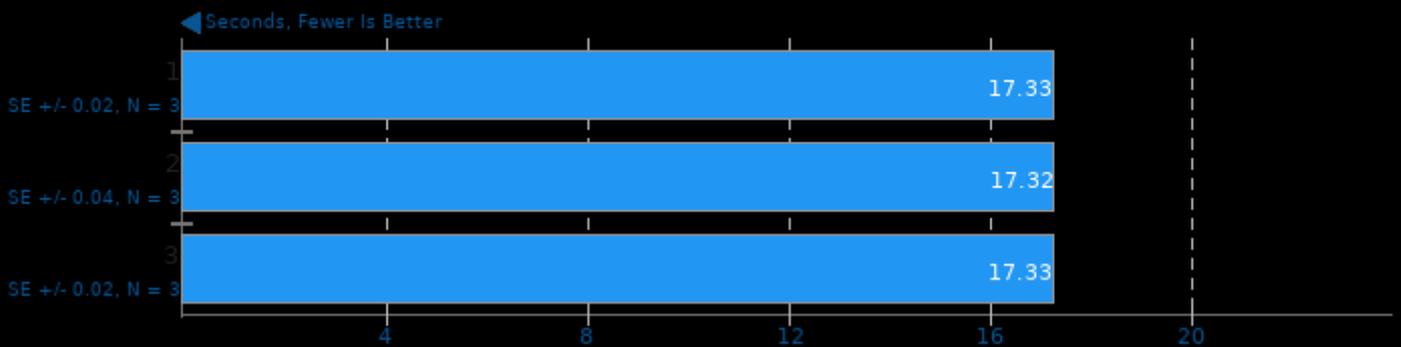
GIMP 2.10.18

Test: auto-levels



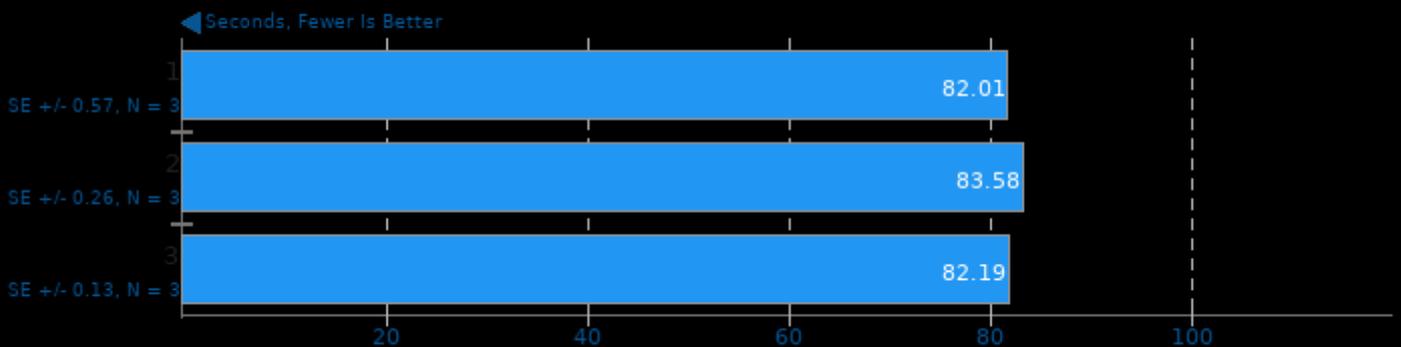
GIMP 2.10.18

Test: unsharp-mask



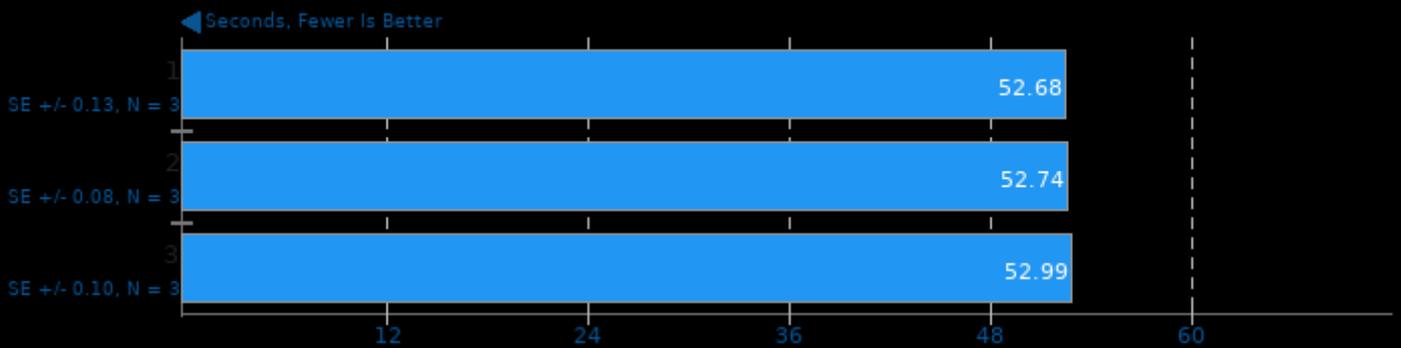
Hugin

Panorama Photo Assistant + Stitching Time



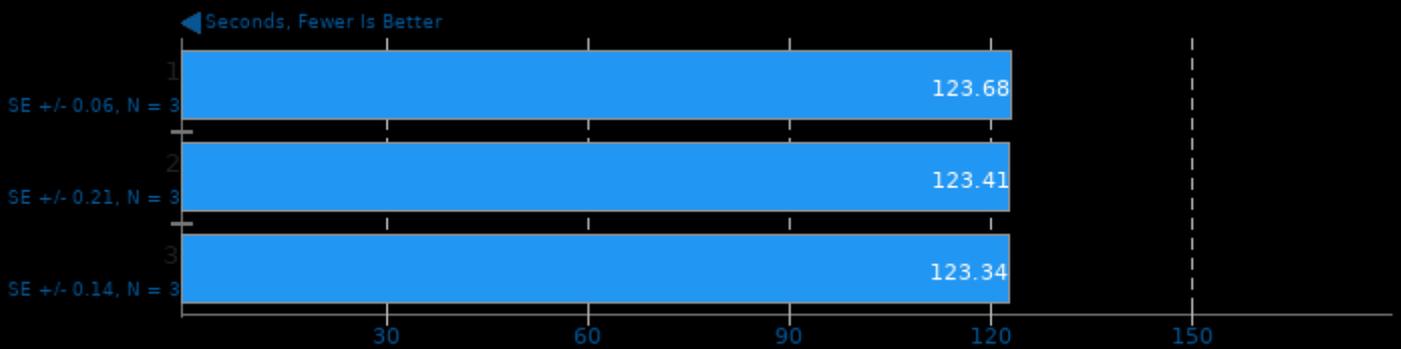
OCRMyPDF 10.3.1+dfsg

Processing 60 Page PDF Document



RawTherapee

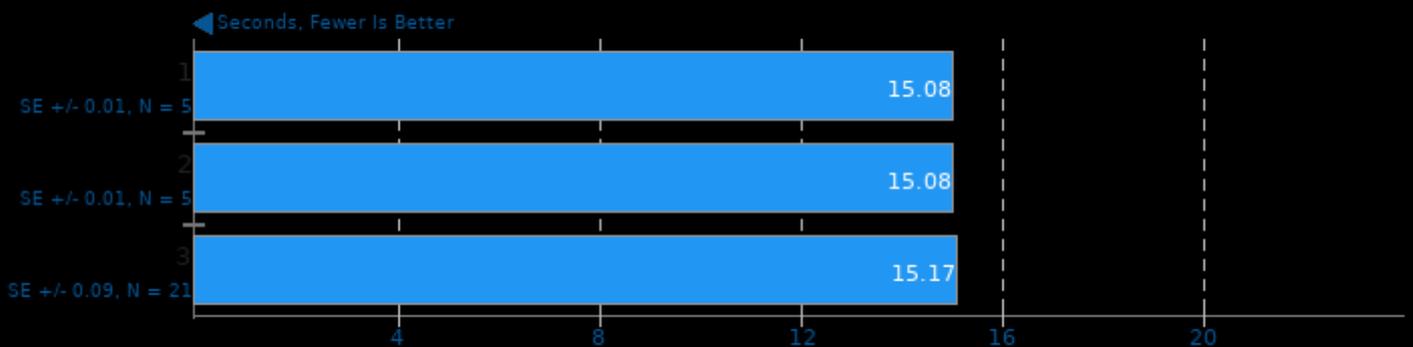
Total Benchmark Time



1. RawTherapee, version 5.8, command line.

WavPack Audio Encoding 5.3

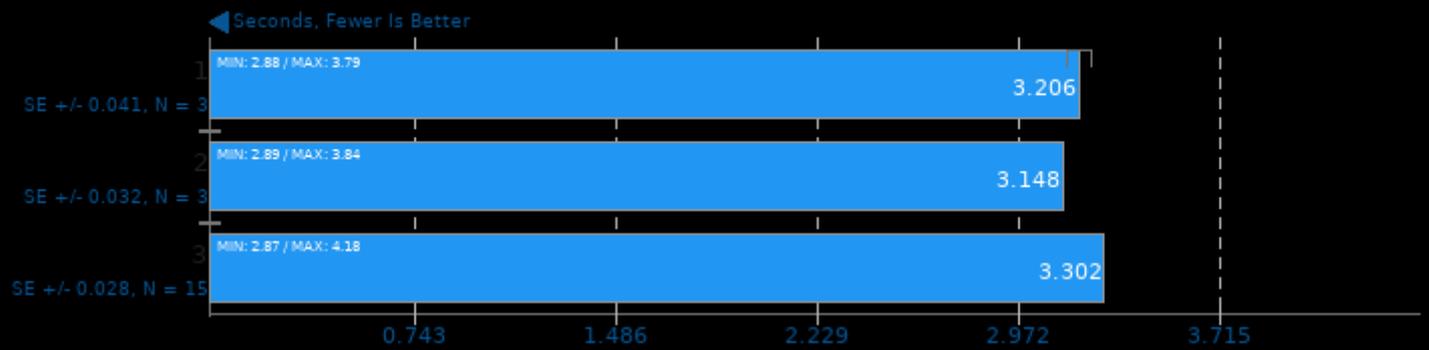
WAV To WavPack



1. (CXX) g++ options: -rdynamic

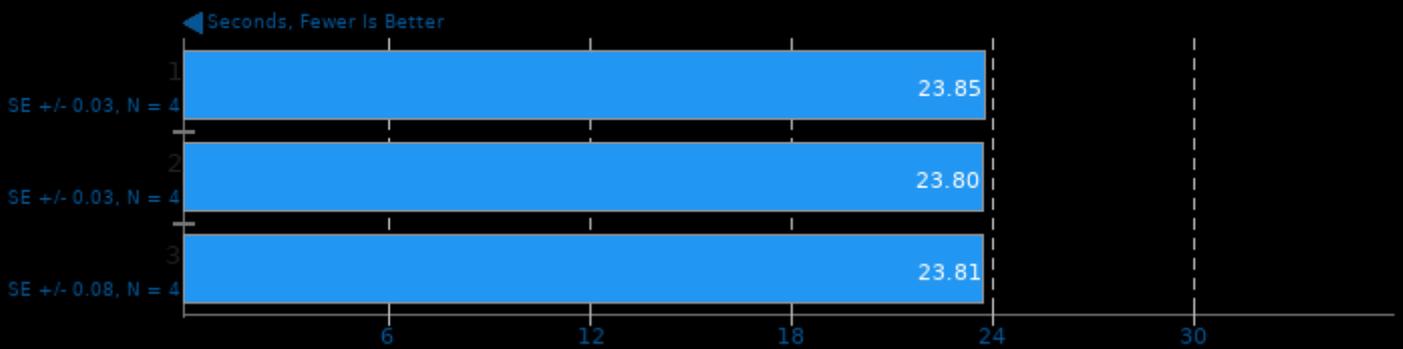
Sunflow Rendering System 0.07.2

Global Illumination + Image Synthesis



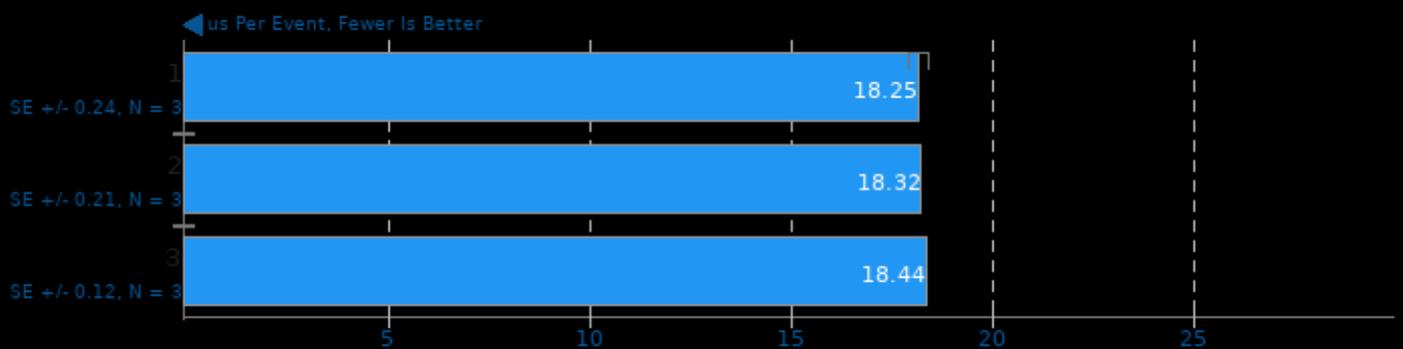
Unpacking Firefox 84.0

Extracting: firefox-84.0.source.tar.xz



OSBench

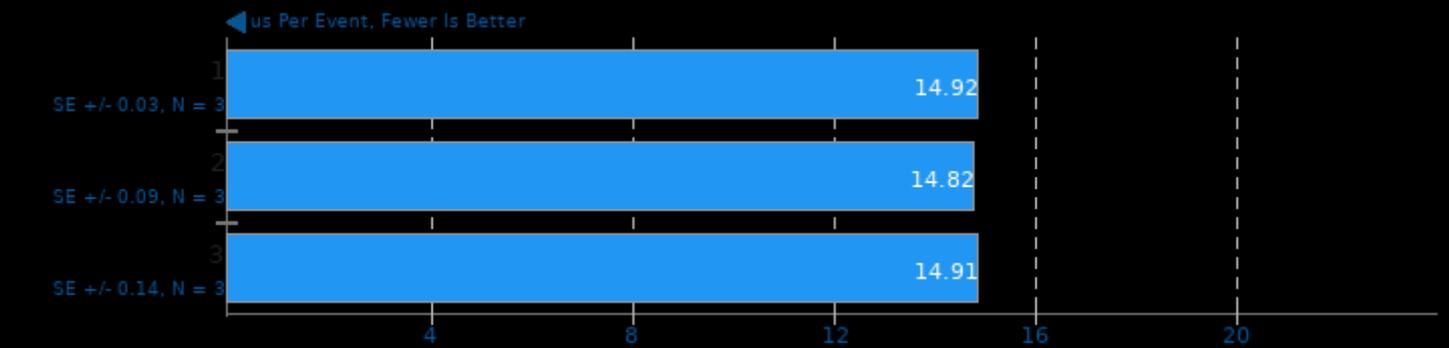
Test: Create Files



1. (CC) gcc options: -lm

OSBench

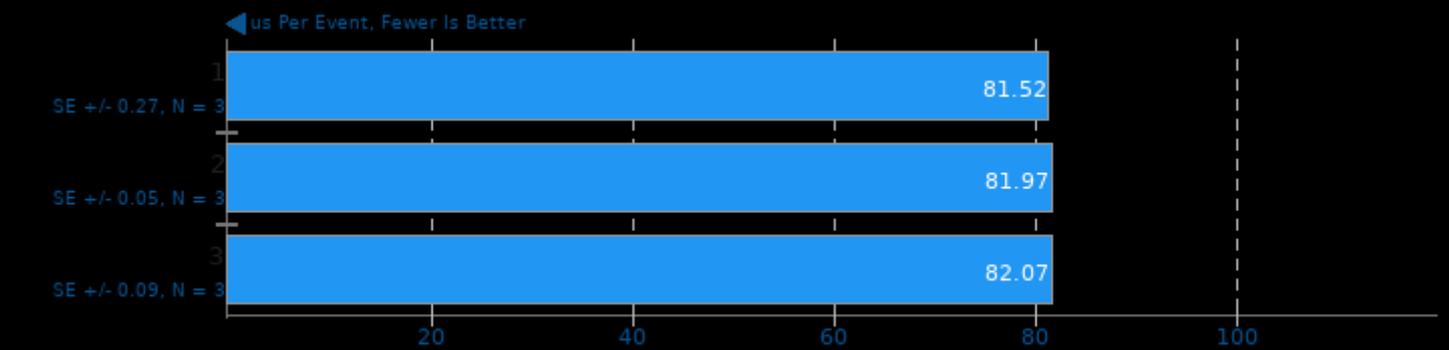
Test: Create Threads



1. (CC) gcc options: -lm

OSBench

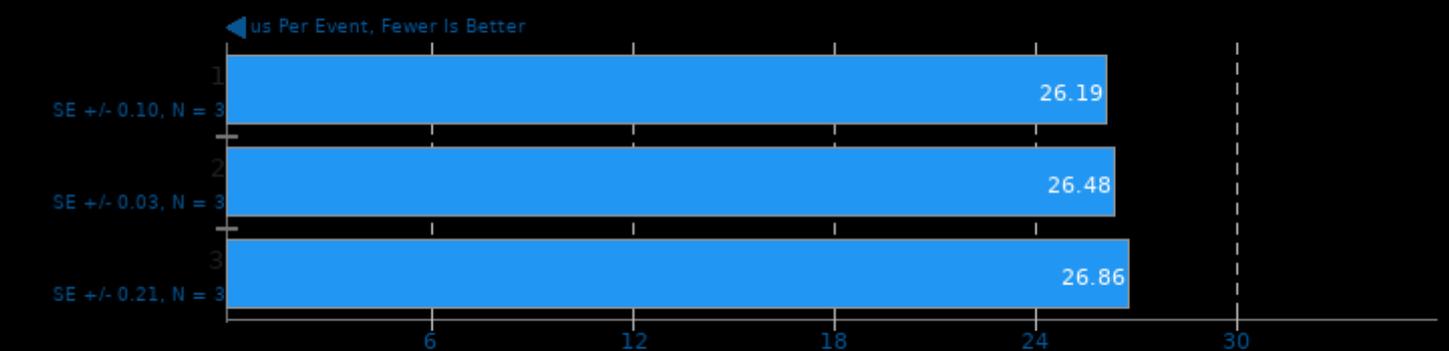
Test: Launch Programs



1. (CC) gcc options: -lm

OSBench

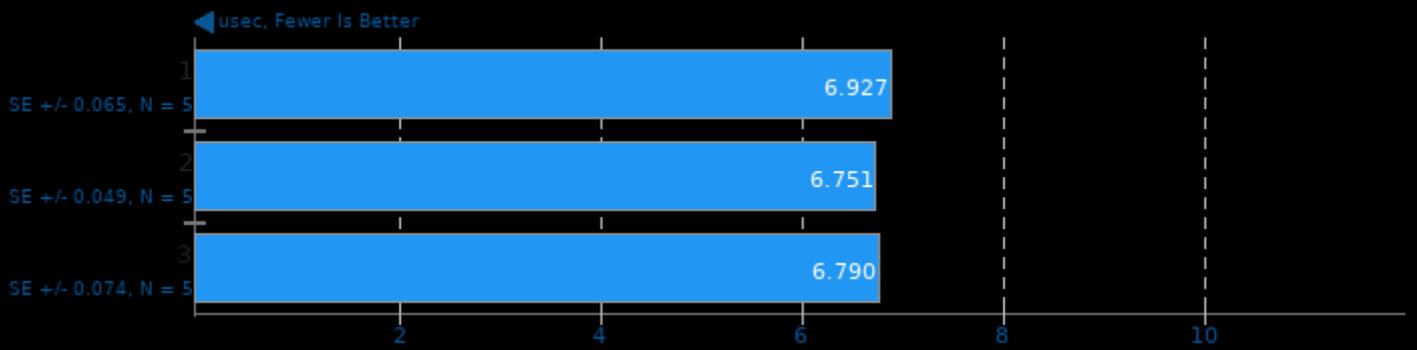
Test: Create Processes



1. (CC) gcc options: -lm

Sockperf 3.4

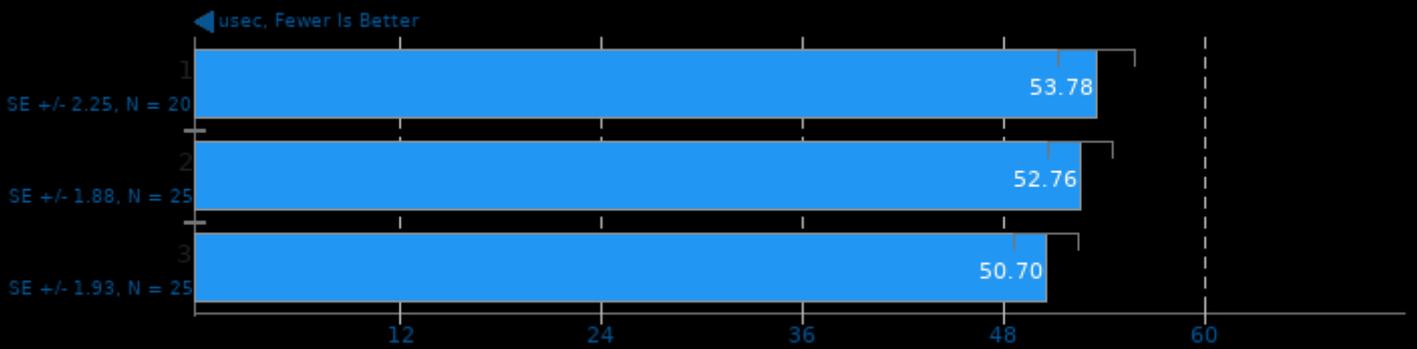
Test: Latency Ping Pong



1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread

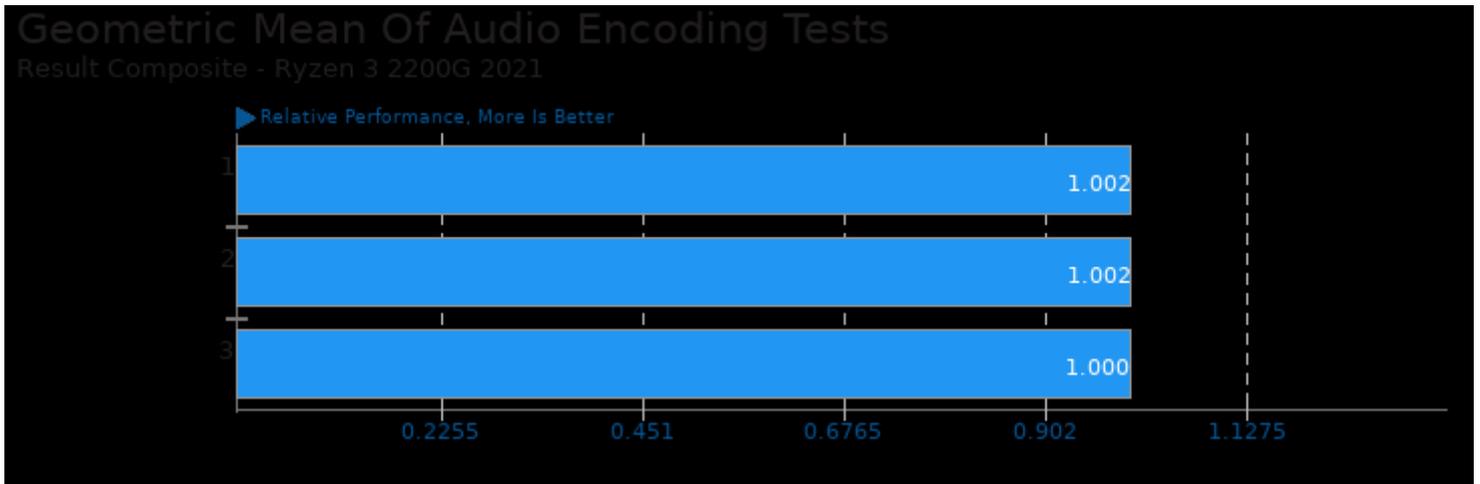
Sockperf 3.4

Test: Latency Under Load

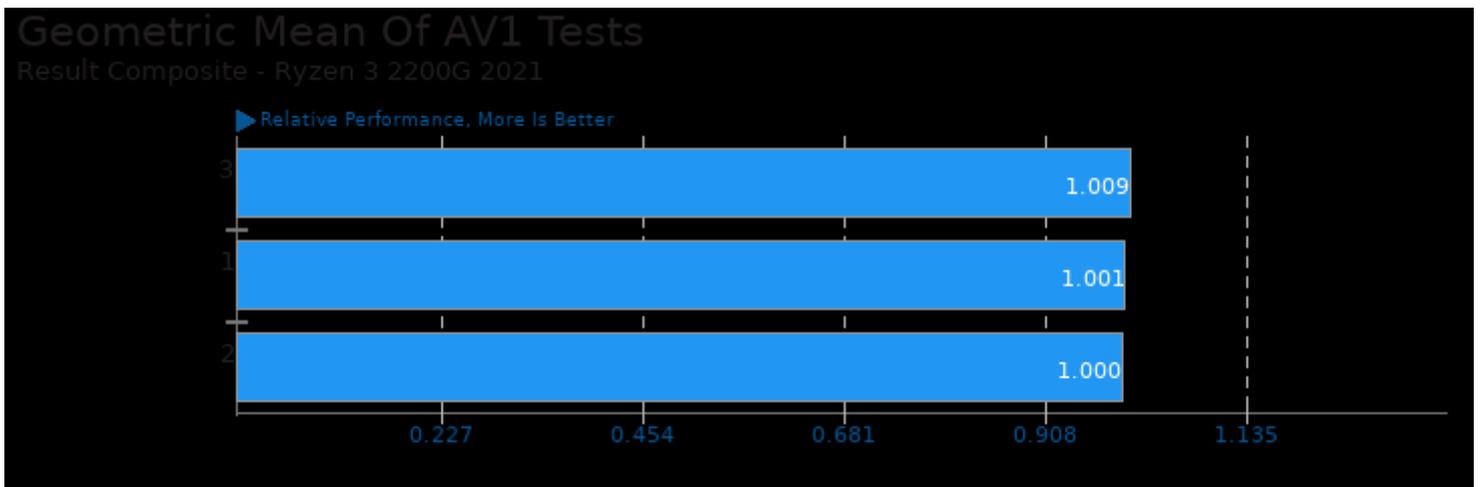


1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread

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



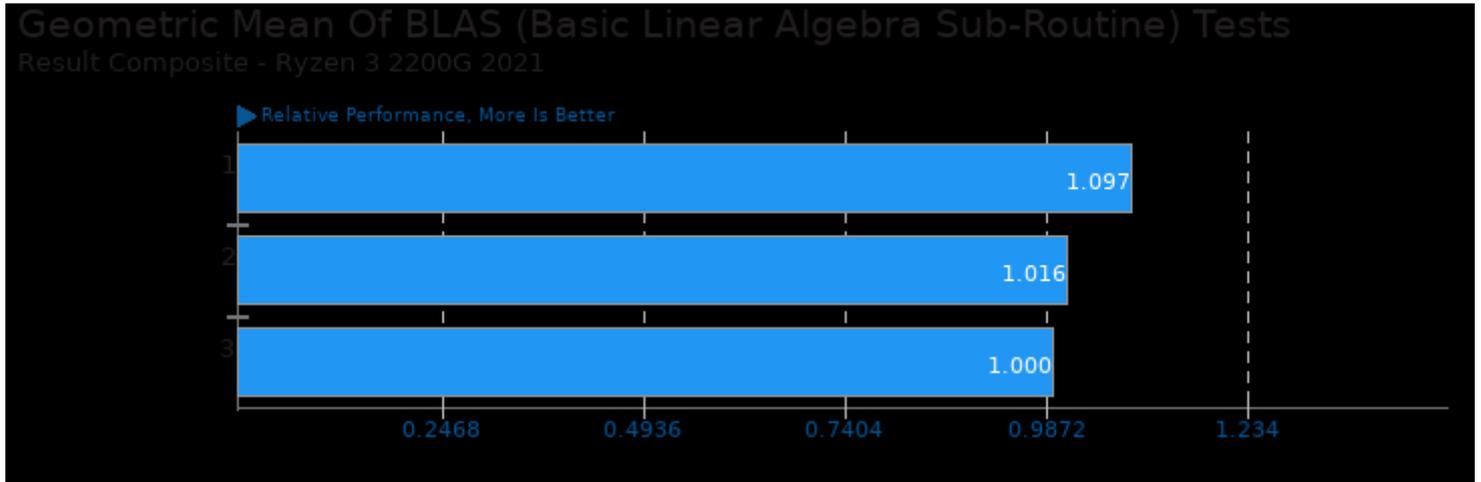
Geometric mean based upon tests: pts/encode-ape, pts/encode-wavpack and pts/encode-opus



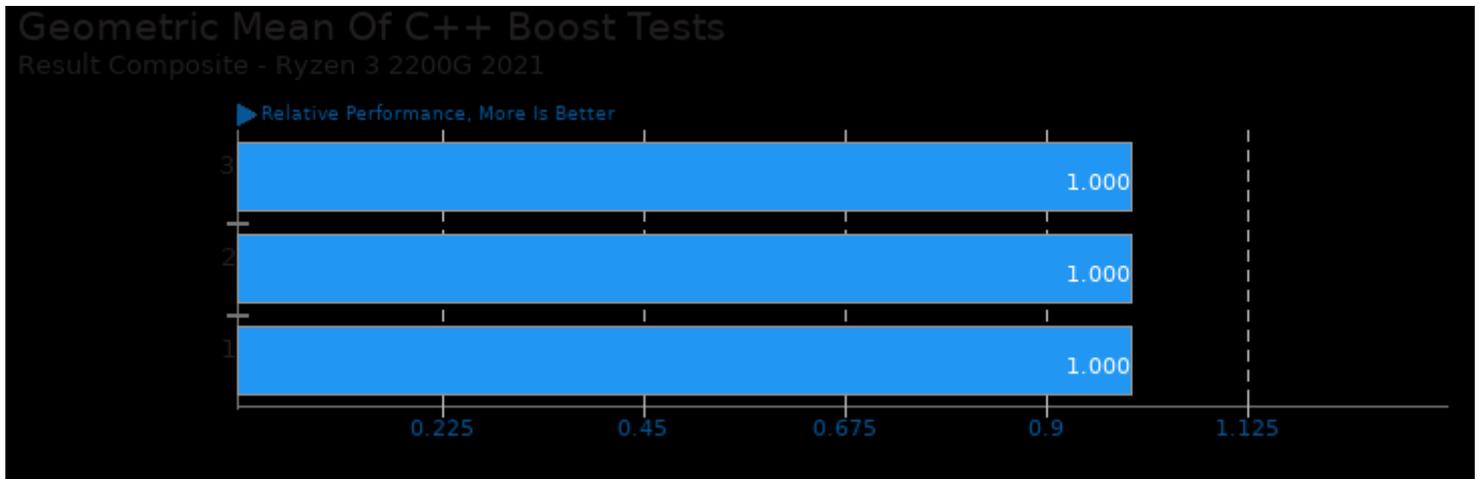
Geometric mean based upon tests: pts/dav1d, pts/aom-av1 and pts/rav1e



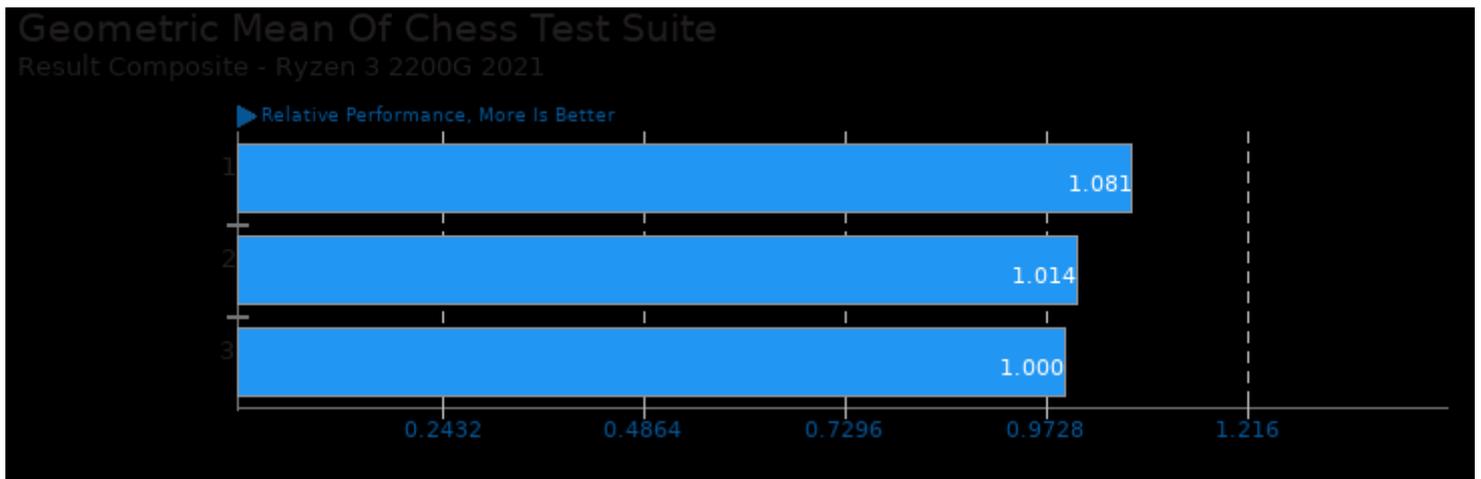
Geometric mean based upon tests: pts/hmmer and pts/mafft



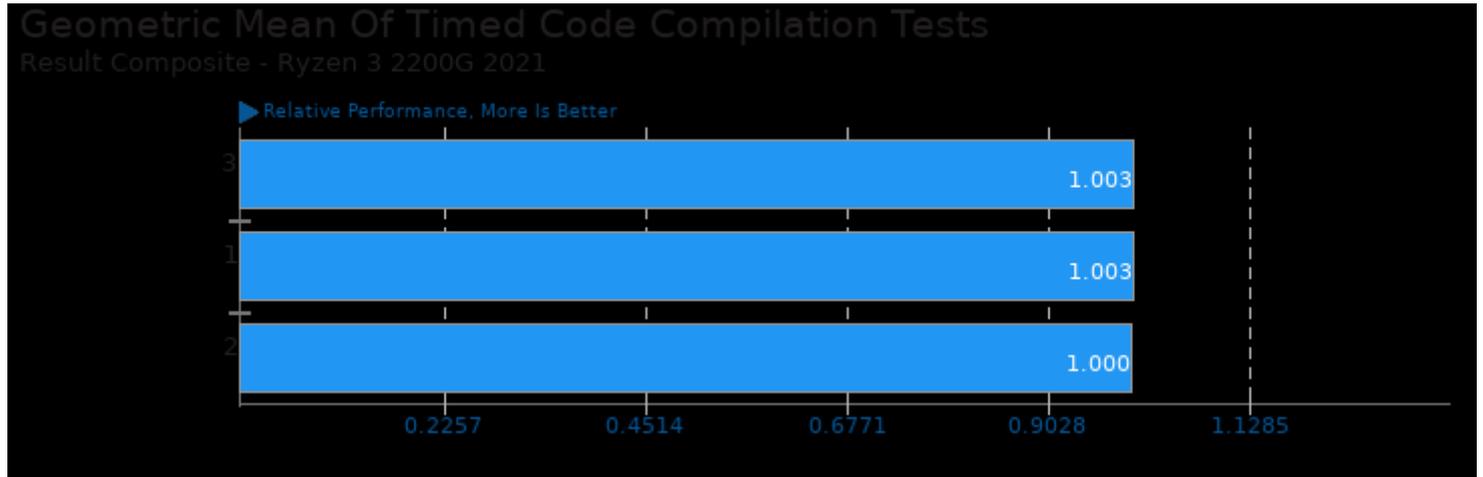
Geometric mean based upon tests: pts/lczero and pts/caffe



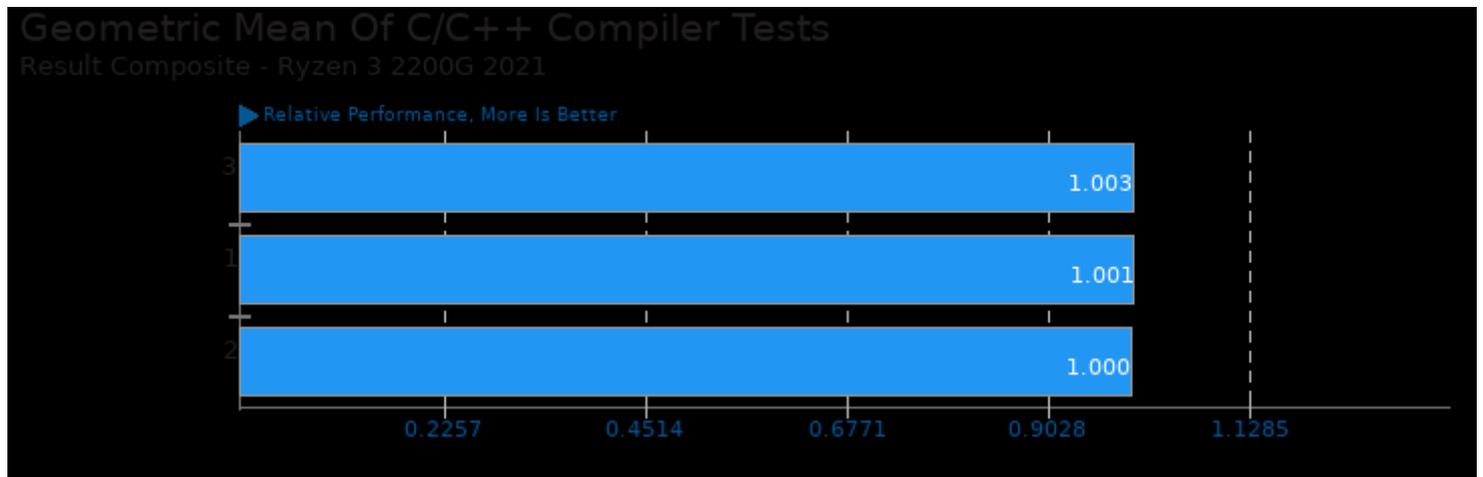
Geometric mean based upon tests: pts/caffe and pts/openfoam



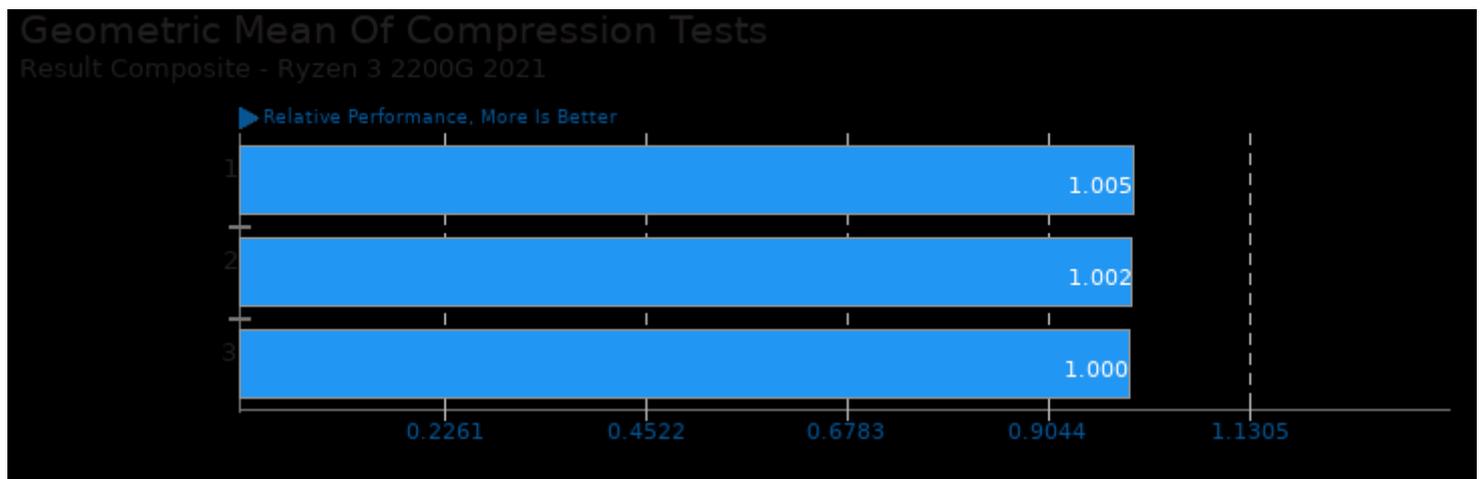
Geometric mean based upon tests: pts/crafty, pts/lczero, pts/stockfish and pts/asmfish



Geometric mean based upon tests: pts/build-eigen, pts/build-ffmpeg, pts/build2 and pts/build-godot



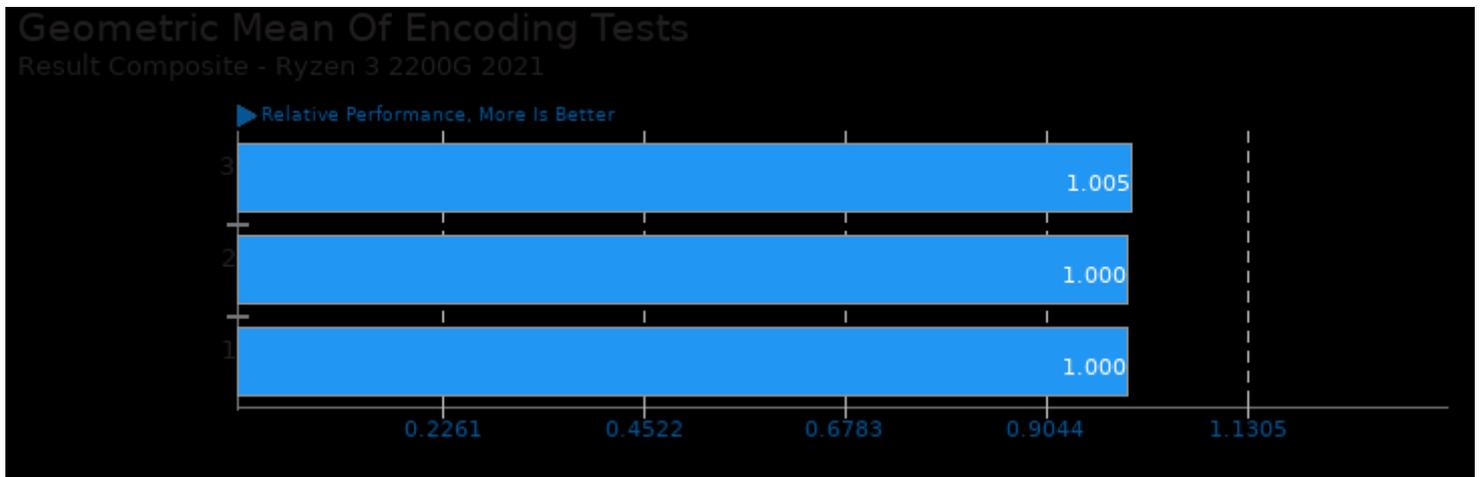
Geometric mean based upon tests: pts/mafft, pts/stockfish, pts/hmmer, pts/sqlite-speedtest, pts/dav1d, pts/x265, pts/kvazaar, pts/clomp, pts/compress-zstd, pts/lammps, pts/aom-av1, pts/gromacs, pts/build-ffmpeg, pts/keydb and pts/basis



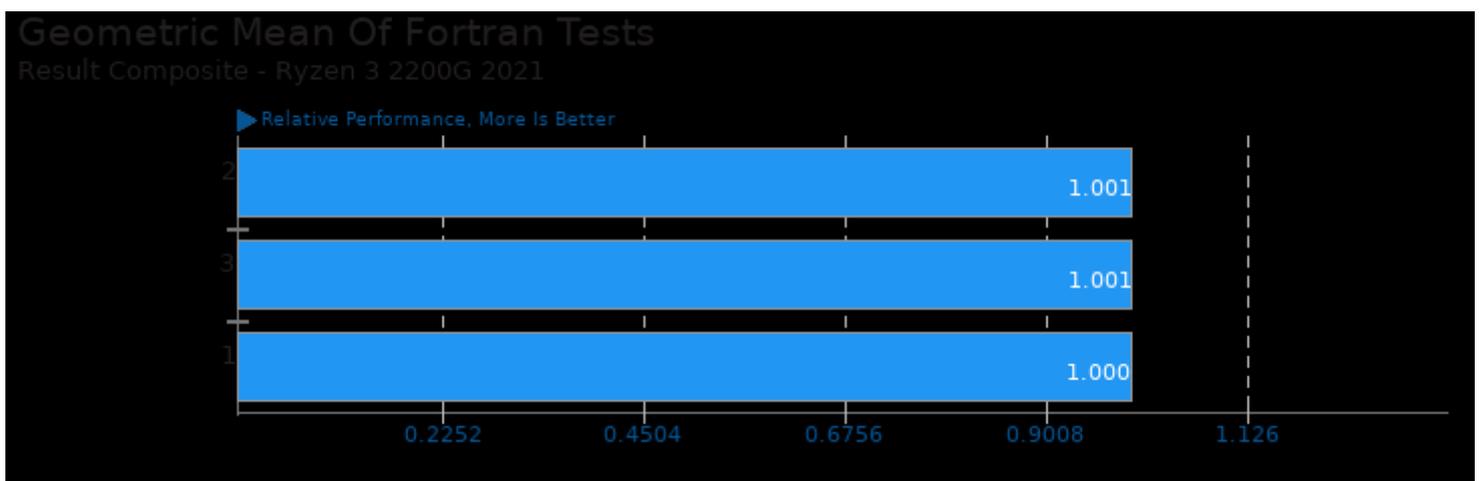
Geometric mean based upon tests: pts/compress-zstd and pts/compress-lz4



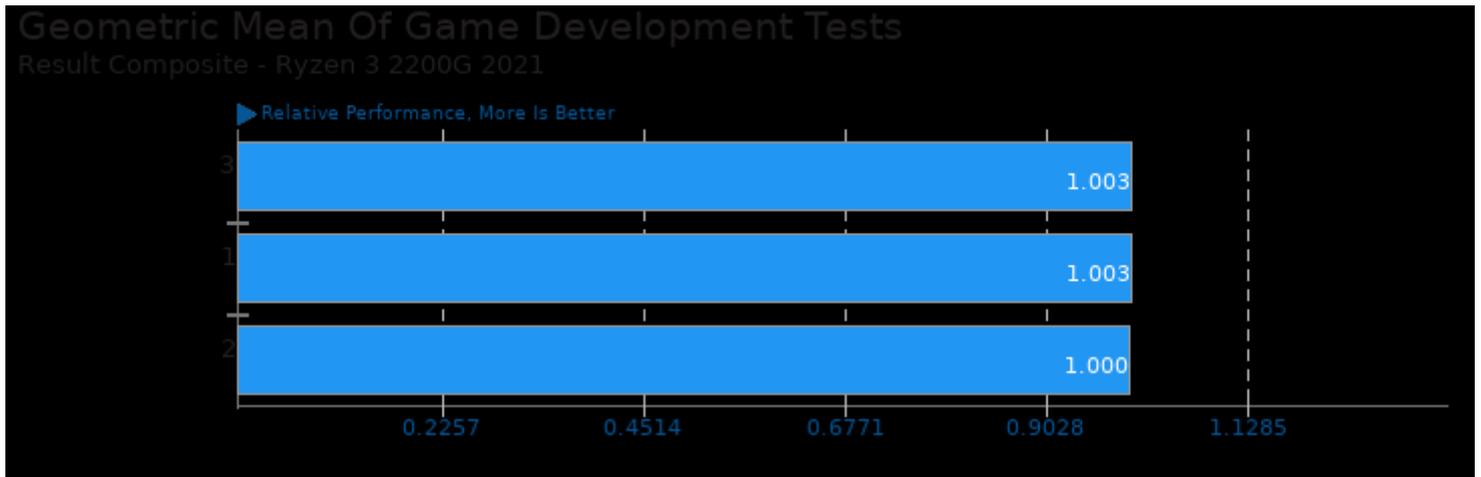
Geometric mean based upon tests: pts/sqlite-speedtest, pts/redis, pts/keydb and pts/influxdb



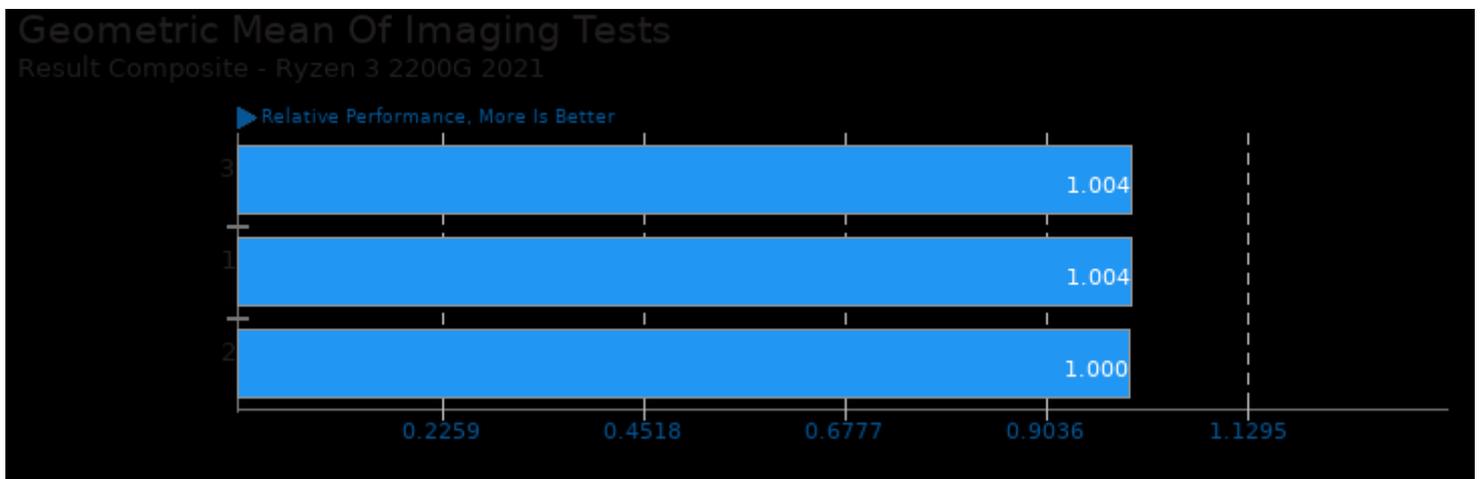
Geometric mean based upon tests: pts/encode-ape, pts/encode-wavpack, pts/encode-opus, pts/x265, pts/kvazaar, pts/dav1d, pts/aom-av1 and pts/rav1e



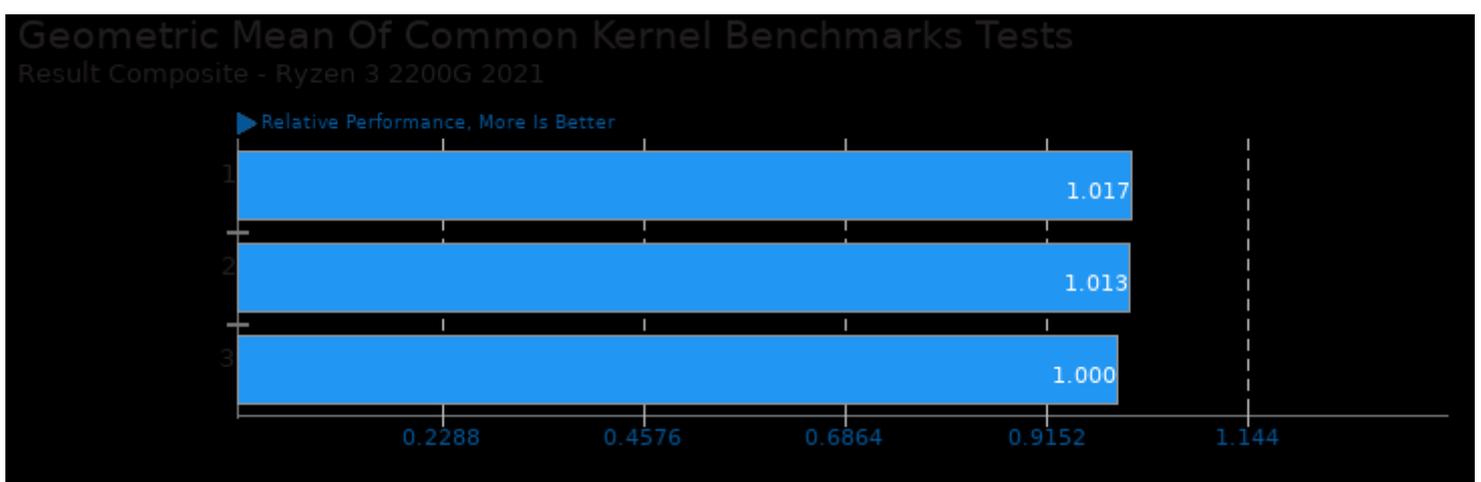
Geometric mean based upon tests: pts/ffte, pts/lammps, pts/cloverleaf, pts/dolfyn, pts/incompact3d and pts/mocassin



Geometric mean based upon tests: pts/basis, pts/astcenc and pts/build-godot



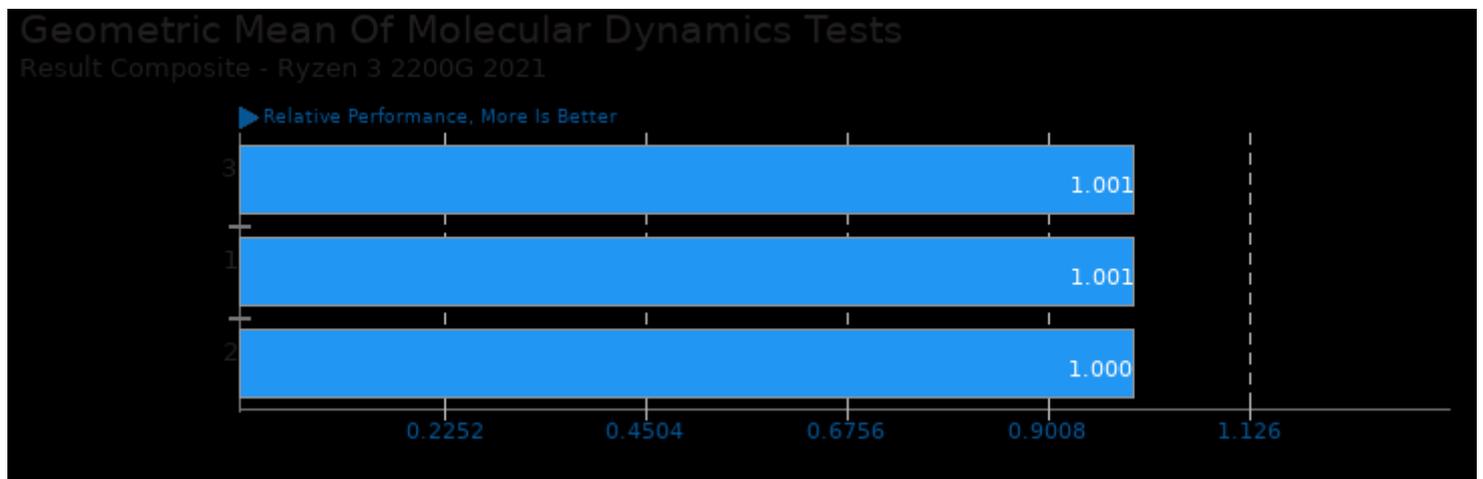
Geometric mean based upon tests: pts/libraw, pts/webp, system/rawtherapee, system/gimp, system/hugin and system/darktable



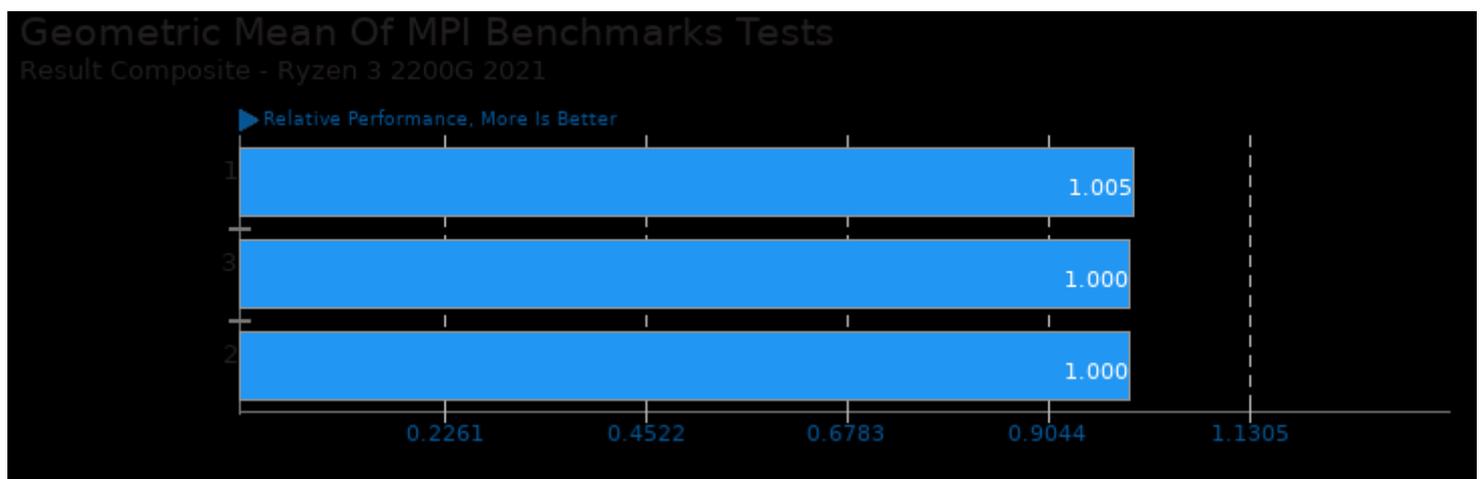
Geometric mean based upon tests: pts/sqlite-speedtest and pts/osbench



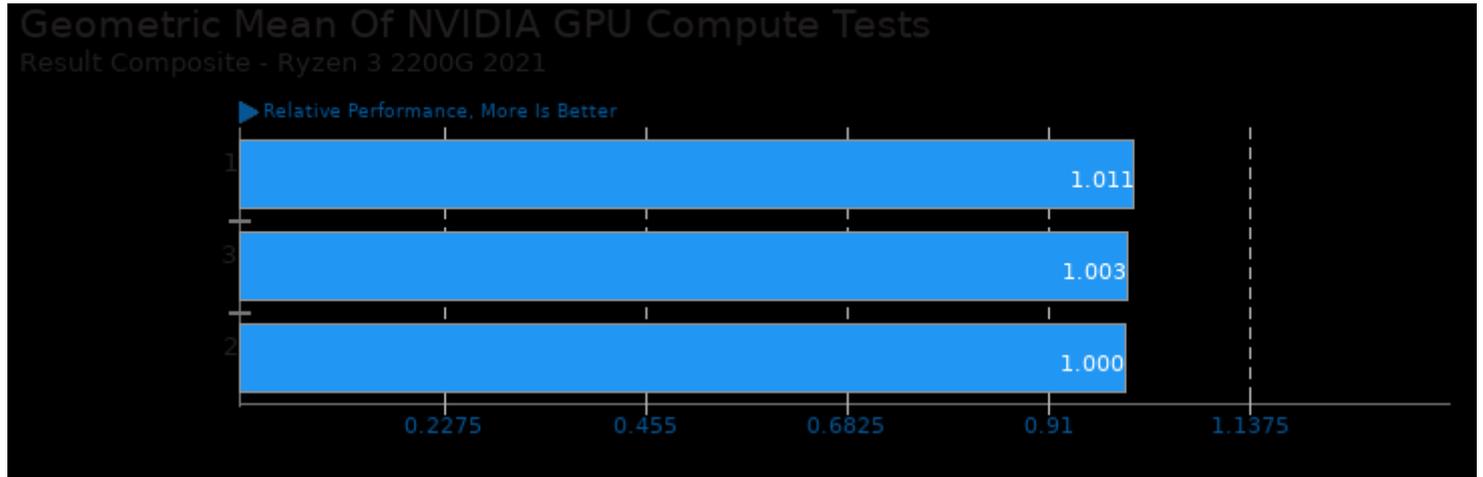
Geometric mean based upon tests: pts/mnn, pts/ncnn, pts/tnn, pts/caffe, pts/numpy, pts/rnnoise, pts/tensorflow-lite, pts/onednn and pts/lczero



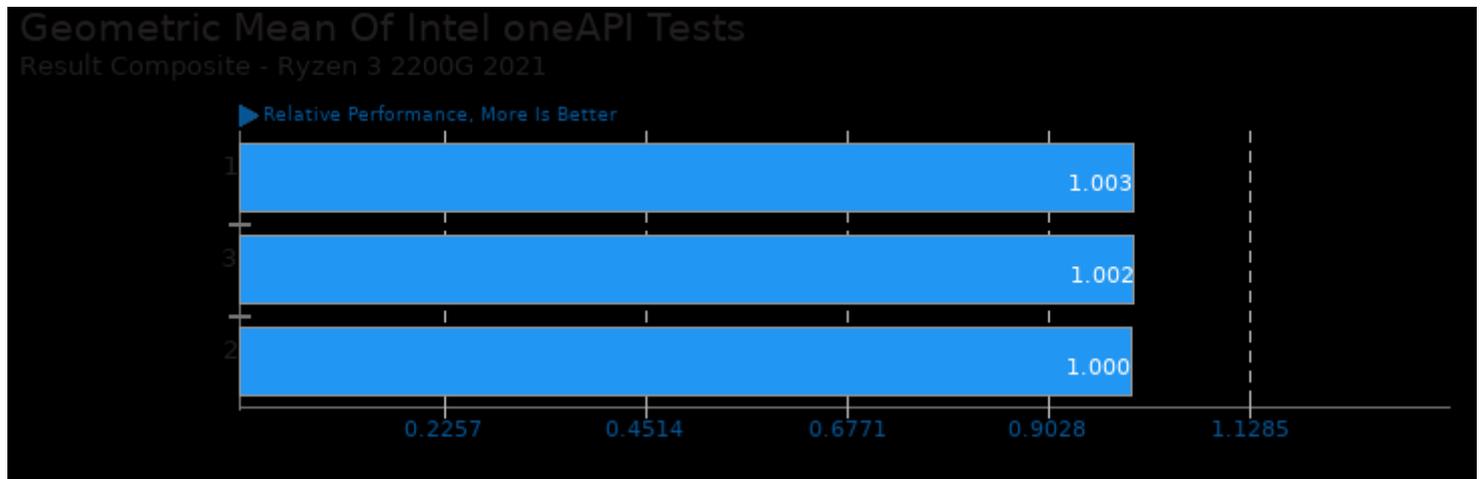
Geometric mean based upon tests: pts/namd, pts/gromacs, pts/cp2k, pts/dolfyn, pts/cloverleaf, pts/lammps, pts/lulesh, pts/incompact3d and pts/openfoam



Geometric mean based upon tests: pts/lammps, pts/incompact3d, pts/mocassin and pts/gromacs



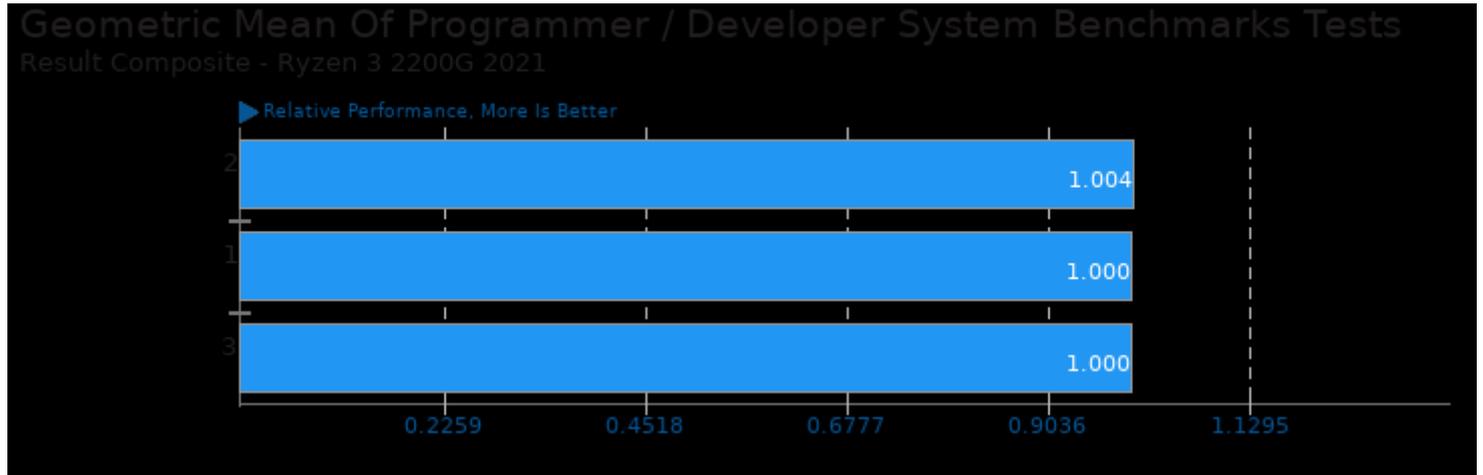
Geometric mean based upon tests: pts/gromacs, pts/lczero, pts/indigobench, pts/caffe, pts/ncnn, pts/realsr-ncnn and pts/waifu2x-ncnn



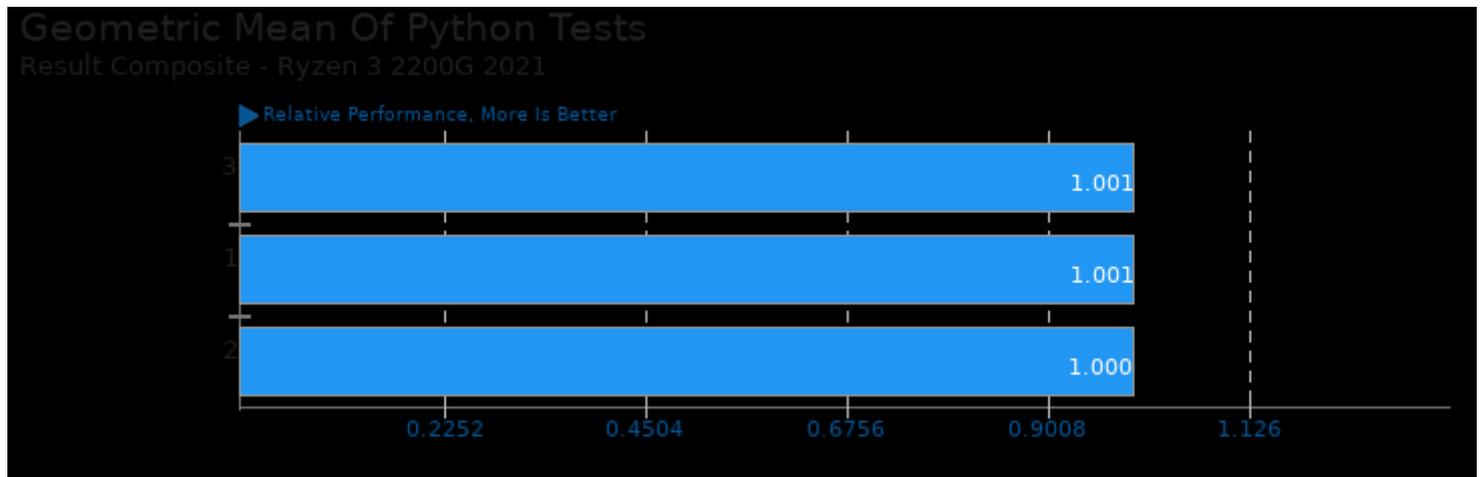
Geometric mean based upon tests: pts/embree and pts/onednn



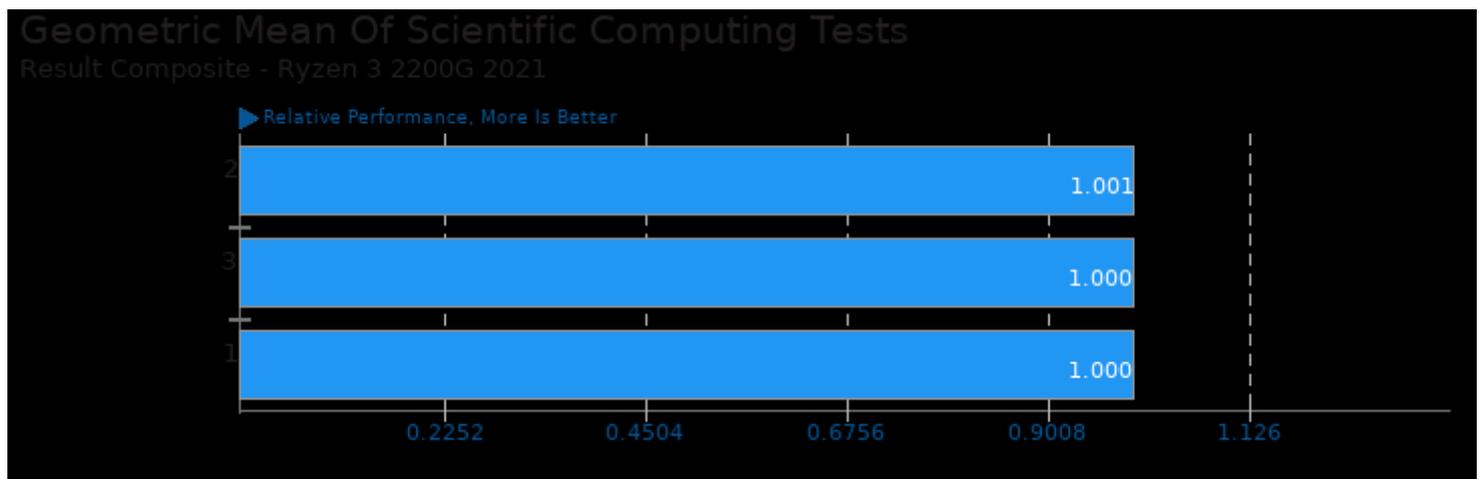
Geometric mean based upon tests: pts/amg, pts/gromacs, pts/lammps, pts/lulesh, pts/cloverleaf, pts/cp2k, pts/incompact3d, pts/mocassin and pts/openfoam



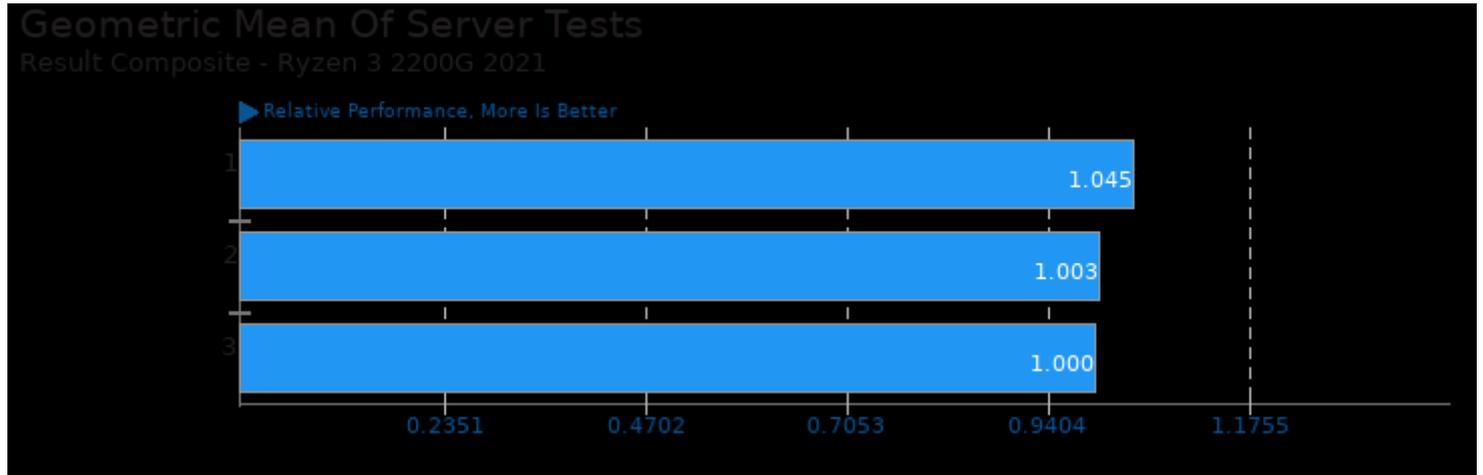
Geometric mean based upon tests: pts/simdjson, pts/sqlite-speedtest, pts/node-web-tooling, pts/compress-zstd, pts/build-eigen, pts/build-ffmpeg, pts/build2, pts/build-godot and pts/amg



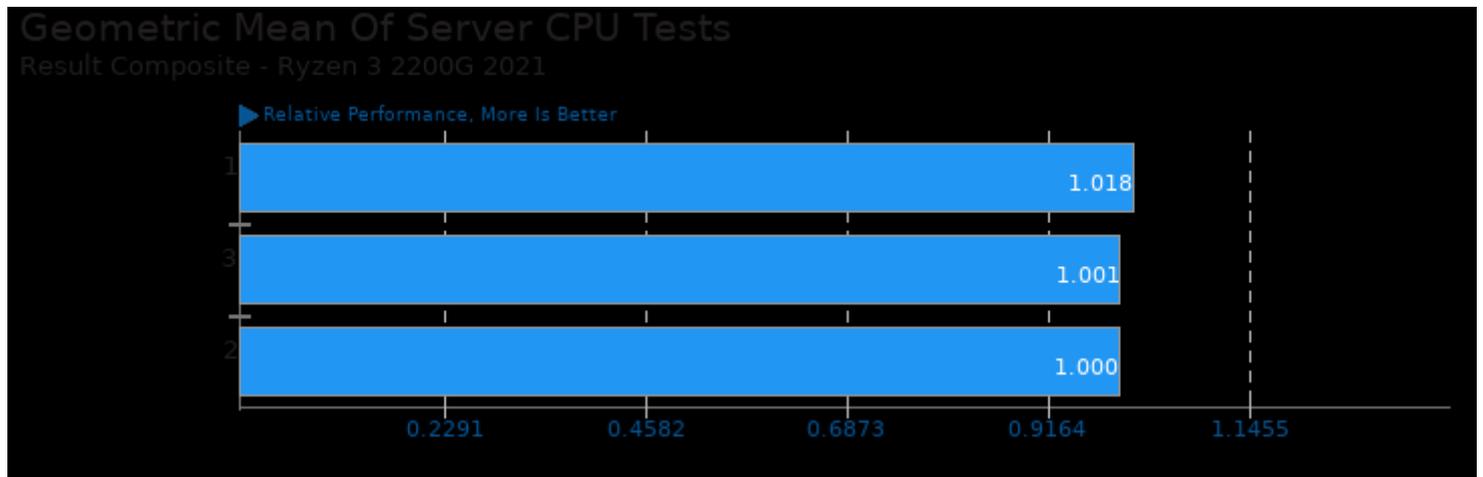
Geometric mean based upon tests: pts/glmark2, pts/numpy, pts/caffe, pts/build-godot and system/ocrmypdf



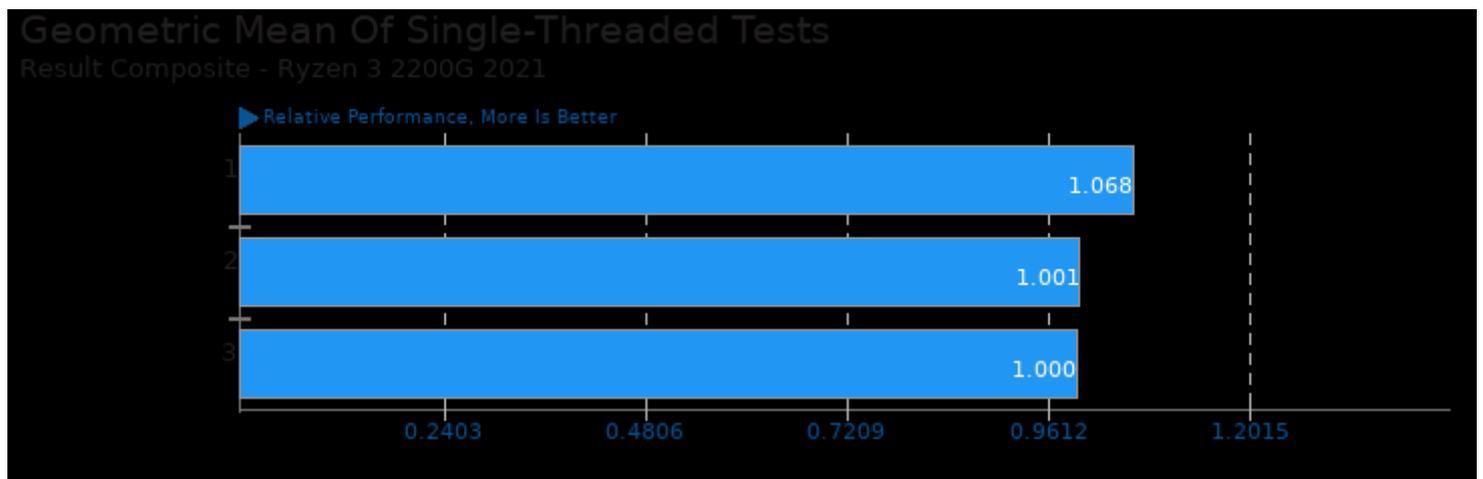
Geometric mean based upon tests: pts/ffte, pts/amg, pts/namd, pts/gromacs, pts/cp2k, pts/dolfyn, pts/cloverleaf, pts/lammps, pts/lulesh, pts/incompact3d, pts/openfoam, pts/hmmer, pts/mafft, pts/mocassin and pts/kripke



Geometric mean based upon tests: pts/redis, pts/keydb, pts/phpbench, pts/simdjson, pts/node-web-tooling, pts/sqlite-speedtest and pts/influxdb



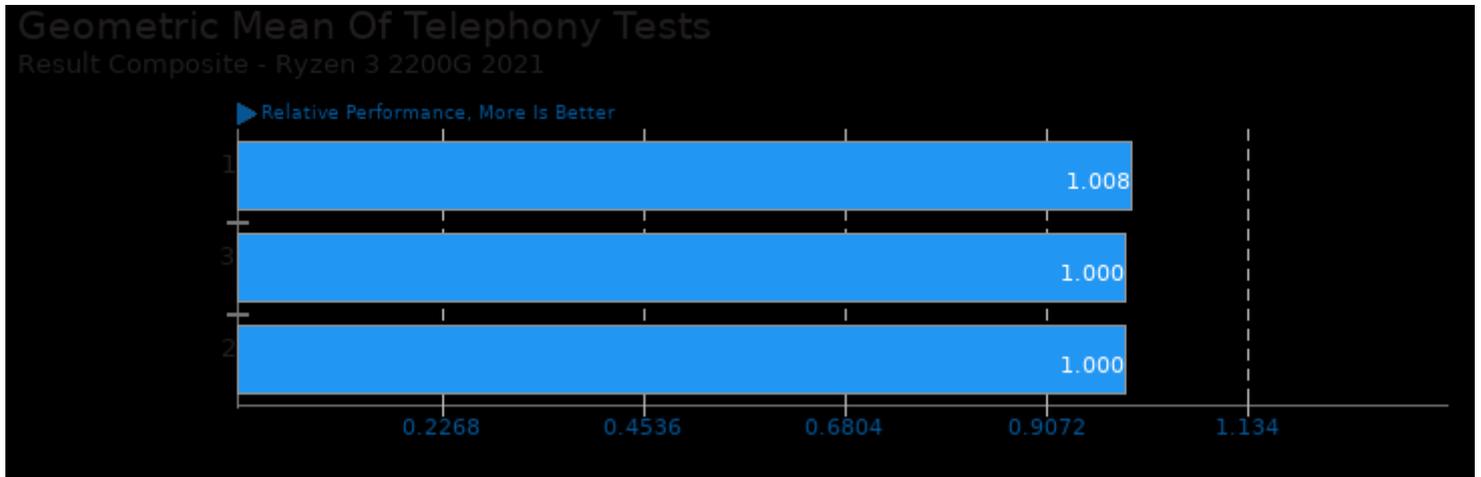
Geometric mean based upon tests: pts/cp2k, pts/namd, pts/onednn, pts/x265, pts/dav1d, pts/stockfish, pts/asmfish, pts/compress-zstd, system/gimp, pts/redis, pts/numpy and pts/phpbench



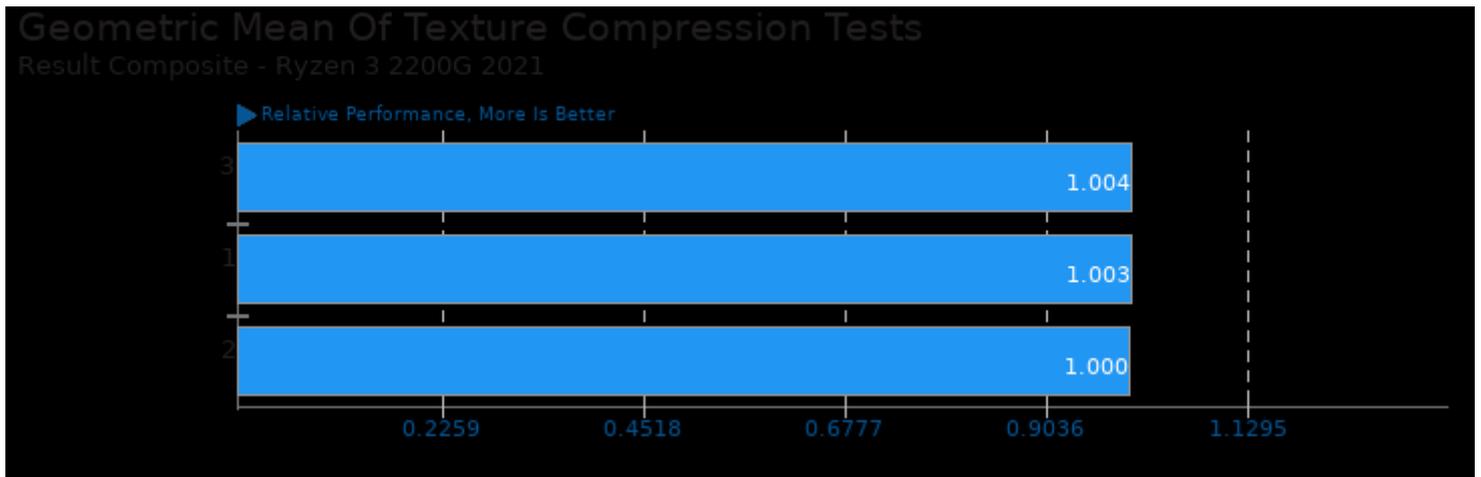
Geometric mean based upon tests: pts/byte, pts/numpy, pts/espeak, pts/redis, pts/phpbench and pts/hint



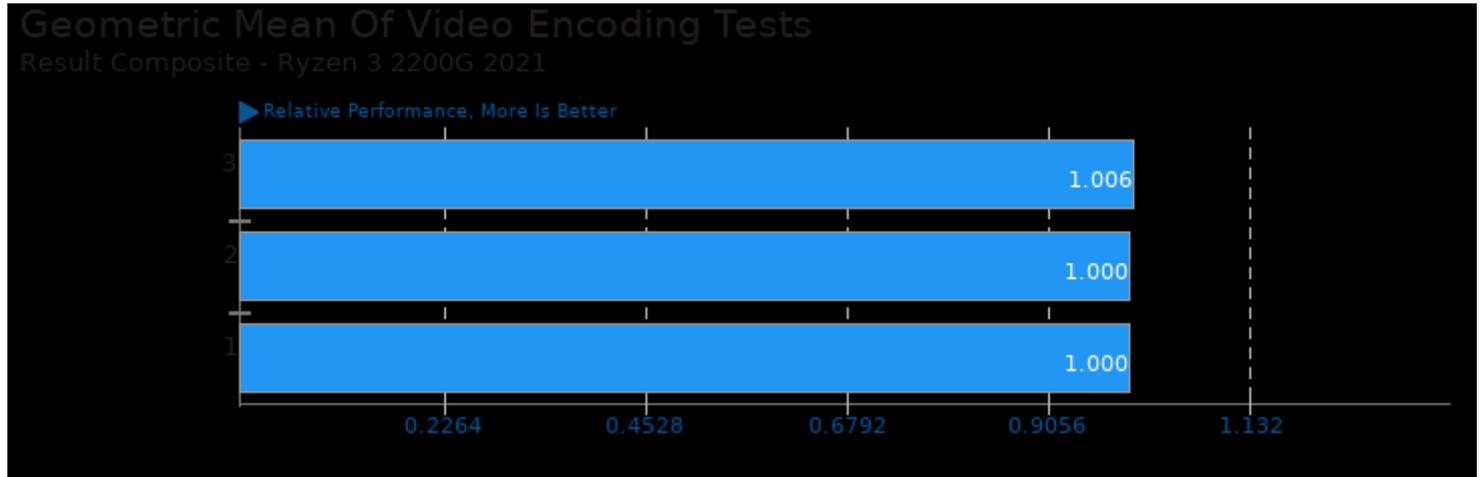
Geometric mean based upon tests: pts/espeak, pts/rnoise and pts/synthmark



Geometric mean based upon tests: pts/espeak, pts/rnoise and pts/synthmark



Geometric mean based upon tests: pts/basis and pts/ascenc



Geometric mean based upon tests: pts/x265, pts/kvazaar, pts/dav1d, pts/aom-av1 and pts/rav1e



Geometric mean based upon tests: pts/ncnn, pts/realsr-ncnn and pts/waifu2x-ncnn

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 10:19.