



www.phoronix-test-suite.com

Core i7 10700T Garage

Intel Core i7-10700T testing on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

2 had the most wins, coming in first place for 44% of the tests.

Based on the geometric mean of all complete results, the fastest (2) was 1.005x the speed of the slowest (1). 3 was 0.998x the speed of 2 and 1 was 0.997x the speed of 3.

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

NAS Parallel Benchmarks (Test / Class: EP.D) at 1.042x

Cpuminer-Opt (Algorithm: Ringcoin) at 1.025x

OpenFOAM (Input: Motorbike 30M) at 1.021x

Quantum ESPRESSO (Input: AUSURF112) at 1.021x

NCNN (Target: CPU - Model: resnet50) at 1.019x

Mobile Neural Network (Model: inception-v3) at 1.019x

Cpuminer-Opt (Algorithm: Blake-2 S) at 1.019x

EtcPak (Configuration: DXT1) at 1.018x

HPC Challenge (Test / Class: Random Ring Latency) at 1.018x

HPC Challenge (Test / Class: Max Ping Pong Bandwidth) at 1.016x.

Test Systems:

1

2

3

Processor: Intel Core i7-10700T @ 4.50GHz (8 Cores / 16 Threads), Motherboard: Logic Supply RXM-181 (Z01-0002A026 BIOS), Chipset: Intel Comet Lake PCH, Memory: 2 x 16384 MB DDR4-2667MT/s M4S0-AGS1O5IK, Disk: 256GB TS256GMTS800, Graphics: (1200MHz), Audio: Realtek ALC233, Network: Intel I219-LM + Intel I210

OS: Ubuntu 20.10, Kernel: 5.8.0-43-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Vulkan: 1.2.145, Compiler: GCC 10.2.0, File-System: ext4

Kernel Notes: Transparent Huge Pages: madvise
 Compiler Notes: --build=x86_64-linux-gnu --enable-vtable-verify --enable-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,amdgnr-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-gcn/us r,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: intel_pstate powersave - CPU Microcode: 0xe0 - ThermalD 2.3

Python Notes: Python 3.8.6

Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + 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 Enhanced IBRS IBPB: conditional RSB filling + srbs: Not affected + tsx_async_abort: Not affected

	1	2	3
HPC Challenge - G-Ptrans (GB/s)	2.38656	2.40233	2.40251
Normalized	99.34%	99.99%	100%
Standard Deviation	0.2%	0.3%	0.3%
HPC Challenge - EP-STREAM Triad (GB/s)	3.13248	3.13059	3.12889
Normalized	100%	99.94%	99.89%
Standard Deviation	0.1%	0.1%	0.2%
HPC Challenge - R.R.B (GB/s)	1.82500	1.81229	1.83458
Normalized	99.48%	98.79%	100%
Standard Deviation	0.6%	1%	0.7%
High Performance Conjugate Gradient (GFLOP/s)	4.13935	4.15078	4.15057
Normalized	99.72%	100%	99.99%
Standard Deviation	0.1%	0.1%	0%
HPC Challenge - G-HPL (GFLOPS)	41.09657	41.32983	41.24543
Normalized	99.44%	100%	99.8%
Standard Deviation	0.6%	0.5%	0.6%
HPC Challenge - G-Ffte (GFLOPS)	4.18057	4.19489	4.17646
Normalized	99.66%	100%	99.56%
Standard Deviation	0.4%	0.4%	0.4%
HPC Challenge - EP-DGEMM (GFLOPS)	6.67608	6.73621	6.73862
Normalized	99.07%	99.96%	100%
Standard Deviation	0.7%	0.8%	0.6%

Core i7 10700T Garage

HPC Challenge - G-Rand Access (GUP/s)	0.02931	0.02945	0.02942
Normalized	99.52%	100%	99.9%
Standard Deviation	3.8%	0.7%	0.9%
ONNX Runtime - yolov4 - OpenMP CPU	273	273	272
(Inferences/min)			
Normalized	100%	100%	99.63%
Standard Deviation	1.3%	1.1%	1.4%
ONNX Runtime - bertsquad-10 - OpenMP	388	390	386
CPU (Inferences/min)			
Normalized	99.49%	100%	98.97%
Standard Deviation	0.6%	0.8%	0.5%
ONNX Runtime - fcn-resnet101-11 - OpenMP	43	43	43
CPU (Inferences/min)			
Standard Deviation	0.7%	1.2%	1.2%
ONNX Runtime - shufflenet-v2-10 - OpenMP	12519	12530	12336
CPU (Inferences/min)			
Normalized	99.91%	100%	98.45%
Standard Deviation	0.6%	0.8%	0.4%
ONNX Runtime - super-resolution-10 -	2894	2903	2884
OpenMP CPU (Inferences/min)			
Normalized	99.69%	100%	99.35%
Standard Deviation	0.6%	0.2%	0.3%
ASKAP - H.C.O (Iterations/sec)	194.175	194.427	194.177
Normalized	99.87%	100%	99.87%
Standard Deviation	0.2%	0.1%	0.3%
Cpuminer-Opt - Magi (kH/s)	140.66	140.95	138.89
Normalized	99.79%	100%	98.54%
Standard Deviation	0.7%	0.6%	1.2%
Cpuminer-Opt - x25x (kH/s)	159.02	158.66	159.00
Normalized	100%	99.77%	99.99%
Standard Deviation	0.8%	1%	0.4%
Cpuminer-Opt - Deepcoin (kH/s)	7604	7554	7646
Normalized	99.45%	98.8%	100%
Standard Deviation	0.5%	0.1%	3%
Cpuminer-Opt - Ringcoin (kH/s)	1013	1013	988.10
Normalized	100%	99.95%	97.54%
Standard Deviation	1.8%	0.8%	2.3%
Cpuminer-Opt - Blake-2 S (kH/s)	428473	431310	423407
Normalized	99.34%	100%	98.17%
Standard Deviation	3.4%	1.4%	5.4%
Cpuminer-Opt - Garlicoin (kH/s)	1257	1212	1215
Normalized	100%	96.43%	96.7%
Standard Deviation	13.6%	2.6%	2.2%
Cpuminer-Opt - Skeincoin (kH/s)	33400	33380	33187
Normalized	100%	99.94%	99.36%
Standard Deviation	0.3%	0.3%	25.6%
Cpuminer-Opt - Myriad-Groestl (kH/s)	10840	10840	10847
Normalized	99.94%	99.94%	100%
Standard Deviation	0.6%	1.5%	0.8%
Cpuminer-Opt - LBC, LBRY Credits (kH/s)	23503	23540	24530
Normalized	95.81%	95.96%	100%
Standard Deviation	0.2%	0.4%	9.9%
Cpuminer-Opt - Q.S.2.P (kH/s)	47283	46807	48327
Normalized	97.84%	96.85%	100%

Standard Deviation	0.9%	0.5%	10.5%
Cpuminer-Opt - T.S.2.O (kH/s)	63713	69831	63090
Normalized	91.24%	100%	90.35%
Standard Deviation	0.9%	18.4%	1.5%
Stream-Dynamic - - Copy (MB/s)	23494	23515	23532
Normalized	99.84%	99.93%	100%
Standard Deviation	0.1%	0.2%	0.2%
Stream-Dynamic - - Scale (MB/s)	23515	23521	23570
Normalized	99.77%	99.79%	100%
Standard Deviation	0.1%	0.1%	0.2%
Stream-Dynamic - - Add (MB/s)	26717	26664	26665
Normalized	100%	99.8%	99.81%
Standard Deviation	0.3%	0%	0%
Stream-Dynamic - - Triad (MB/s)	26677	26628	26632
Normalized	100%	99.82%	99.83%
Standard Deviation	0.3%	0%	0%
HPC Challenge - M.P.P.B (MB/s)	13427	13643	13546
Normalized	98.42%	100%	99.29%
Standard Deviation	3.1%	0.8%	0.5%
Izbench - XZ 0 - Compression (MB/s)	37	37	37
Izbench - XZ 0 - Decompression (MB/s)	102	102	102
Izbench - Zstd 1 - Compression (MB/s)	458	458	457
Normalized	100%	100%	99.78%
Standard Deviation		0.1%	0.3%
Izbench - Zstd 1 - Decompression (MB/s)	1568	1566	1567
Normalized	100%	99.87%	99.94%
Standard Deviation	0%	0.1%	0.1%
Izbench - Zstd 8 - Compression (MB/s)	80	80	80
Izbench - Zstd 8 - Decompression (MB/s)	1688	1688	1688
Standard Deviation		0.1%	0.2%
Izbench - Crush 0 - Compression (MB/s)	99	99	99
Standard Deviation	1.2%		1.2%
Izbench - Crush 0 - Decompression (MB/s)	456	456	456
Izbench - Brotli 0 - Compression (MB/s)	421	421	420
Normalized	100%	100%	99.76%
Izbench - Brotli 0 - Decompression (MB/s)	576	577	577
Normalized	99.83%	100%	100%
Standard Deviation			0.2%
Izbench - Brotli 2 - Compression (MB/s)	169	169	169
Izbench - Brotli 2 - Decompression (MB/s)	671	669	670
Normalized	100%	99.7%	99.85%
Standard Deviation	0.1%		0.2%
Izbench - Libdeflate 1 - Compression (MB/s)	218	217	217
Normalized	100%	99.54%	99.54%
Standard Deviation	0.3%		
QuantLib (MFLOPS)	2093	2087	2082
Normalized	100%	99.72%	99.49%
Standard Deviation	2.2%	2.4%	2.2%
ASKAP - tConvolve MT - Gridding (Million Grid Points/sec)	1199	1198	1198
Normalized	100%	99.99%	99.99%
Standard Deviation	0.1%	0%	0%

Core i7 10700T Garage

ASKAP - tConvolve MT - Degridding (Million Grid Points/sec)	1777	1776	1777
Normalized	99.97%	99.96%	100%
Standard Deviation	0.1%	0.2%	0.1%
ASKAP - tConvolve OpenMP - Gridding (Million Grid Points/sec)	1361	1342	1361
Normalized	100%	98.66%	100%
Standard Deviation	0.3%	0.3%	0.3%
ASKAP - tConvolve OpenMP - Degridding (Million Grid Points/sec)	2119	2124	2124
Normalized	99.73%	100%	100%
Standard Deviation	0.5%	0.5%	0.5%
JPEG XL - PNG - 5 (MP/s)	54.15	54.52	54.49
Normalized	99.32%	100%	99.94%
Standard Deviation	2%	2%	1.9%
JPEG XL - PNG - 7 (MP/s)	7.51	7.52	7.52
Normalized	99.87%	100%	100%
Standard Deviation	0%	0.1%	0.2%
JPEG XL - PNG - 8 (MP/s)	0.68	0.68	0.68
Standard Deviation	0%	0%	0%
JPEG XL - JPEG - 5 (MP/s)	54.17	53.81	53.79
Normalized	100%	99.34%	99.3%
Standard Deviation	1.2%	0.1%	0.6%
JPEG XL - JPEG - 7 (MP/s)	53.13	53.70	53.70
Normalized	98.94%	100%	100%
Standard Deviation	1.5%	0.1%	0.3%
JPEG XL - JPEG - 8 (MP/s)	23.27	23.27	23.30
Normalized	99.87%	99.87%	100%
Standard Deviation	0%	0.2%	0.2%
JPEG XL Decoding - 1 (MP/s)	36.22	36.28	36.33
Normalized	99.7%	99.86%	100%
Standard Deviation	0.1%	0.2%	0.1%
JPEG XL Decoding - All (MP/s)	155.96	156.71	156.67
Normalized	99.52%	100%	99.97%
Standard Deviation	2.2%	2.4%	2.1%
ASKAP - tConvolve MPI - Degridding	1777	1781	1773
Normalized	99.77%	100%	99.55%
Standard Deviation	0.4%	0.8%	0.7%
ASKAP - tConvolve MPI - Gridding	1929	1944	1934
Normalized	99.26%	100%	99.51%
Standard Deviation	0%	0.7%	0.8%
EtcPak - DXT1 (Mpx/s)	1147	1129	1149
Normalized	99.87%	98.27%	100%
Standard Deviation	0.2%	2.4%	0.1%
EtcPak - ETC1 (Mpx/s)	285.588	286.157	286.181
Normalized	99.79%	99.99%	100%
Standard Deviation	0.5%	0.4%	0.4%
EtcPak - ETC2 (Mpx/s)	158.500	158.517	158.446
Normalized	99.99%	100%	99.96%
Standard Deviation	0%	0%	0.1%
EtcPak - ETC1 + Dithering (Mpx/s)	266.470	263.014	267.313
Normalized	99.68%	98.39%	100%
Standard Deviation	0.8%	6.1%	0.3%
NAS Parallel Benchmarks - CG.C (Mop/s)	4801	4789	4803
Normalized	99.95%	99.71%	100%

Core i7 10700T Garage

	Standard Deviation	1.7%	0.5%	0.5%
NAS Parallel Benchmarks - EP.C (Mop/s)	901.18	926.89	929.91	
Normalized	96.91%	99.68%	100%	
Standard Deviation	6.8%	3.9%	4.2%	
NAS Parallel Benchmarks - EP.D (Mop/s)	825.86	831.34	797.77	
Normalized	99.34%	100%	95.96%	
Standard Deviation	0.5%	0.7%	0.4%	
NAS Parallel Benchmarks - FT.C (Mop/s)	11014	11070	11119	
Normalized	99.05%	99.56%	100%	
Standard Deviation	1%	1%	1.2%	
NAS Parallel Benchmarks - IS.D (Mop/s)	774.42	779.75	780.60	
Normalized	99.21%	99.89%	100%	
Standard Deviation	1%	1.3%	1%	
NAS Parallel Benchmarks - LU.C (Mop/s)	21580	21622	21676	
Normalized	99.55%	99.75%	100%	
Standard Deviation	0.4%	0.5%	0.4%	
NAS Parallel Benchmarks - MG.C (Mop/s)	10209	10272	10288	
Normalized	99.23%	99.84%	100%	
Standard Deviation	0.6%	0.2%	0.4%	
Google SynthMark - VoiceMark_100 (Voices)	587.112	589.389	588.960	
Normalized	99.61%	100%	99.93%	
Standard Deviation	0.1%	0.3%	0.4%	
TensorFlow Lite - SqueezeNet (us)	347977	347577	347804	
Normalized	99.89%	100%	99.93%	
Standard Deviation	2%	2%	2%	
TensorFlow Lite - Inception V4 (us)	5140843	5107473	5124043	
Normalized	99.35%	100%	99.68%	
Standard Deviation	0.9%	0.5%	0.4%	
TensorFlow Lite - NASNet Mobile (us)	296004	294322	298494	
Normalized	99.43%	100%	98.6%	
Standard Deviation	1.1%	1.5%	2.1%	
TensorFlow Lite - Mobilenet Float (us)	233956	233898	234901	
Normalized	99.98%	100%	99.57%	
Standard Deviation	1.5%	1.1%	1.2%	
TensorFlow Lite - Mobilenet Quant (us)	233087	232730	233384	
Normalized	99.85%	100%	99.72%	
Standard Deviation	1.3%	1.2%	1.3%	
TensorFlow Lite - I.R.V (us)	4616837	4607500	4607170	
Normalized	99.79%	99.99%	100%	
Standard Deviation	0.5%	0.4%	0.4%	
toyBrot Fractal Generator - TBB (ms)	71646	71108	71824	
Normalized	99.25%	100%	99%	
Standard Deviation	1.5%	2.1%	2.3%	
toyBrot Fractal Generator - OpenMP (ms)	72458	71700	72247	
Normalized	98.95%	100%	99.24%	
Standard Deviation	1.2%	1%	1.3%	
toyBrot Fractal Generator - C++ Tasks (ms)	72124	71793	72225	
Normalized	99.54%	100%	99.4%	
Standard Deviation	1%	1.2%	0.8%	
toyBrot Fractal Generator - C++ Threads	72348	71971	72269	
Normalized	99.48%	100%	99.59%	
Standard Deviation	1.1%	1.3%	1.1%	
Mobile Neural Network - SqueezeNetV1.0	8.393	8.288	8.328	
Normalized	98.75%	100%	99.52%	
Standard Deviation	0.7%	0.3%	0.6%	

Core i7 10700T Garage

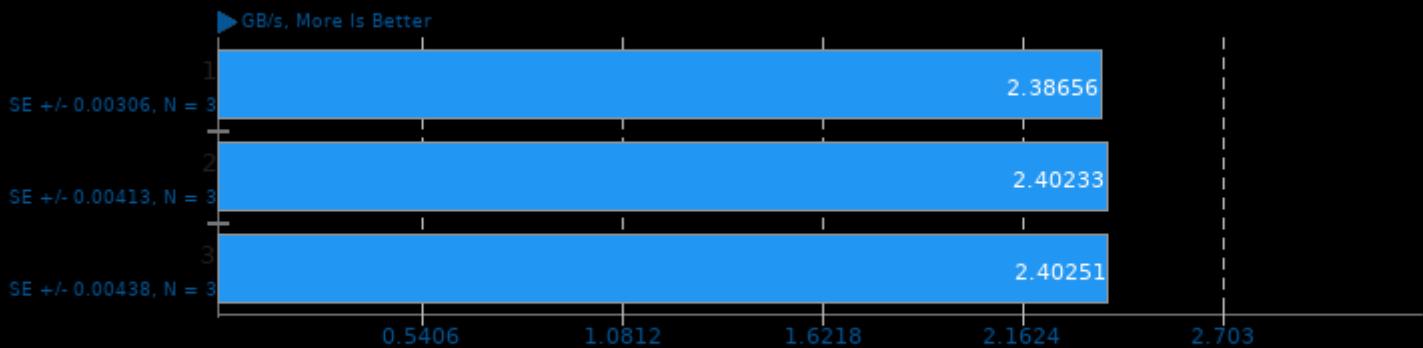
Mobile Neural Network - resnet-v2-50 (ms)	44.755	44.688	44.472
Normalized	99.37%	99.52%	100%
Standard Deviation	0.3%	0.3%	0.3%
Mobile Neural Network - MobileNetV2_224 (ms)	4.267	4.263	4.253
Normalized	99.67%	99.77%	100%
Standard Deviation	9.2%	7.1%	9.6%
Mobile Neural Network - mobilenet-v1-1.0 (ms)	2.903	2.873	2.874
Normalized	98.97%	100%	99.97%
Standard Deviation	6.5%	6.3%	6.2%
Mobile Neural Network - inception-v3 (ms)	52.376	51.409	51.638
Normalized	98.15%	100%	99.56%
Standard Deviation	0.8%	0.4%	0.5%
NCNN - CPU - mobilenet (ms)	25.49	25.31	25.56
Normalized	99.29%	100%	99.02%
Standard Deviation	0.3%	0.4%	0.4%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)	6.21	6.19	6.15
Normalized	99.03%	99.35%	100%
Standard Deviation	0.1%	1.4%	1%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)	5.56	5.51	5.57
Normalized	99.1%	100%	98.92%
Standard Deviation	7.9%	9%	9.9%
NCNN - CPU - shufflenet-v2 (ms)	7.36	7.29	7.37
Normalized	99.05%	100%	98.91%
Standard Deviation	15.2%	14.9%	15.5%
NCNN - CPU - mnasnet (ms)	5.61	5.86	5.78
Normalized	100%	95.73%	97.06%
Standard Deviation	15.5%	13.9%	13.2%
NCNN - CPU - efficientnet-b0 (ms)	9.40	8.96	8.87
Normalized	94.36%	99%	100%
Standard Deviation	3.6%	12.4%	11.5%
NCNN - CPU - blazeface (ms)	2.58	2.41	2.43
Normalized	93.41%	100%	99.18%
Standard Deviation	0.4%	12.6%	11.5%
NCNN - CPU - googlenet (ms)	19.22	18.20	18.34
Normalized	94.69%	100%	99.24%
Standard Deviation	0.5%	6.3%	7.7%
NCNN - CPU - vgg16 (ms)	66.40	66.30	66.57
Normalized	99.85%	100%	99.59%
Standard Deviation	0%	0.1%	0.4%
NCNN - CPU - resnet18 (ms)	17.89	17.76	17.88
Normalized	99.27%	100%	99.33%
Standard Deviation	0.1%	0.1%	0.2%
NCNN - CPU - alexnet (ms)	15.03	14.95	14.99
Normalized	99.47%	100%	99.73%
Standard Deviation	0%	0.1%	0.1%
NCNN - CPU - resnet50 (ms)	35.70	35.47	36.16
Normalized	99.36%	100%	98.09%
Standard Deviation	0.2%	0.3%	1.9%
NCNN - CPU - yolov4-tiny (ms)	33.93	33.86	34.37
Normalized	99.79%	100%	98.52%
Standard Deviation	0.2%	0.3%	1.7%
NCNN - CPU - squeezenet_ssd (ms)	26.63	26.42	26.60
Normalized	99.21%	100%	99.32%
Standard Deviation	0.5%	0.7%	0.4%
NCNN - CPU - regnety_400m (ms)	18.36	17.50	17.59

Core i7 10700T Garage

	Normalized	95.32%	100%	99.49%
	Standard Deviation	1%	9.8%	8.7%
TNN - CPU - MobileNet v2 (ms)	367.084		366.804	365.723
	Normalized	99.63%	99.71%	100%
	Standard Deviation	0.3%	0%	0%
TNN - CPU - SqueezeNet v1.1 (ms)	359.546		359.443	359.345
	Normalized	99.94%	99.97%	100%
	Standard Deviation	0%	0.1%	0%
OpenFOAM - Motorbike 30M (sec)	255.81		250.68	250.45
	Normalized	97.9%	99.91%	100%
	Standard Deviation	2.1%	0.6%	0.6%
OpenFOAM - Motorbike 60M (sec)	1314		1310	1310
	Normalized	99.73%	100%	100%
	Standard Deviation	0.2%	0.5%	0.5%
Quantum ESPRESSO - AUSURF112 (sec)	3980		3900	3940
	Normalized	97.99%	100%	98.98%
	Standard Deviation	0.9%		0.9%
Ngspice - C2670 (sec)	138.563		138.449	138.365
	Normalized	99.86%	99.94%	100%
	Standard Deviation	0.3%	0.2%	0.2%
Ngspice - C7552 (sec)	115.049		114.971	114.543
	Normalized	99.56%	99.63%	100%
	Standard Deviation	0%	0.5%	0.1%
HPC Challenge - R.R.L (usecs)	0.39282		0.38956	0.38605
	Normalized	98.28%	99.1%	100%
	Standard Deviation	0.2%	0.2%	1.7%

HPC Challenge 1.5.0

Test / Class: G-Ptrans

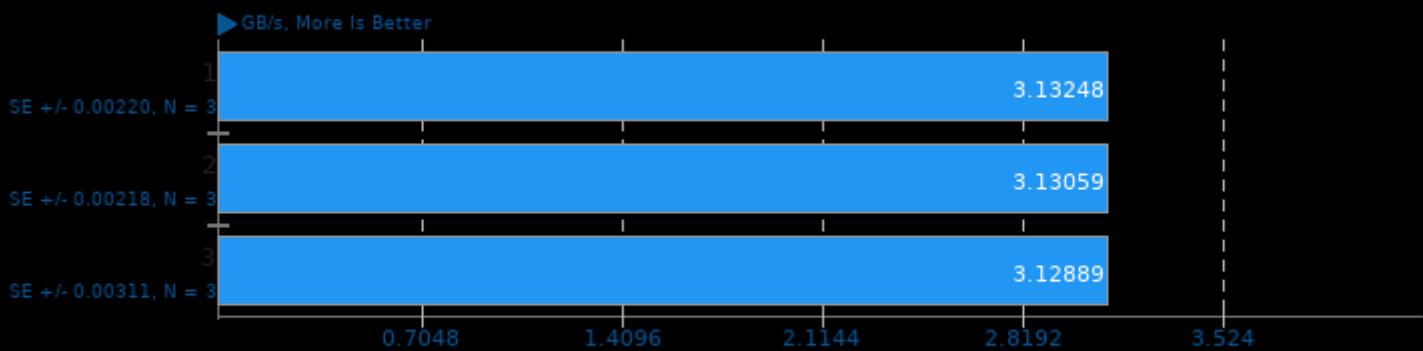


1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

HPC Challenge 1.5.0

Test / Class: EP-STREAM Triad

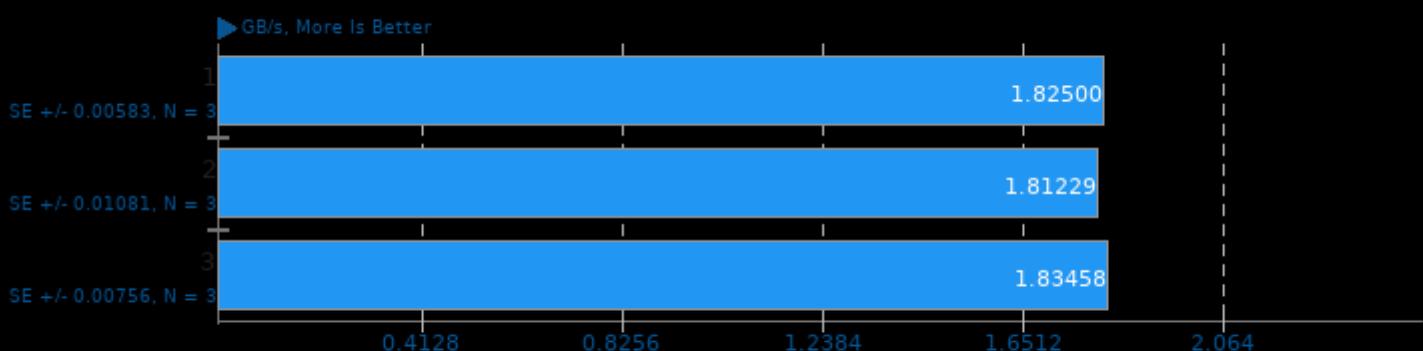


1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

HPC Challenge 1.5.0

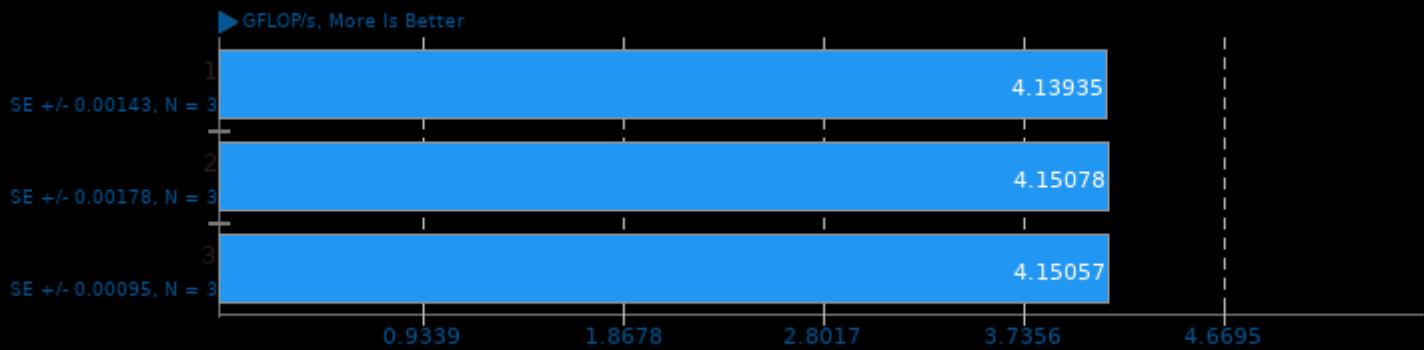
Test / Class: Random Ring Bandwidth



1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

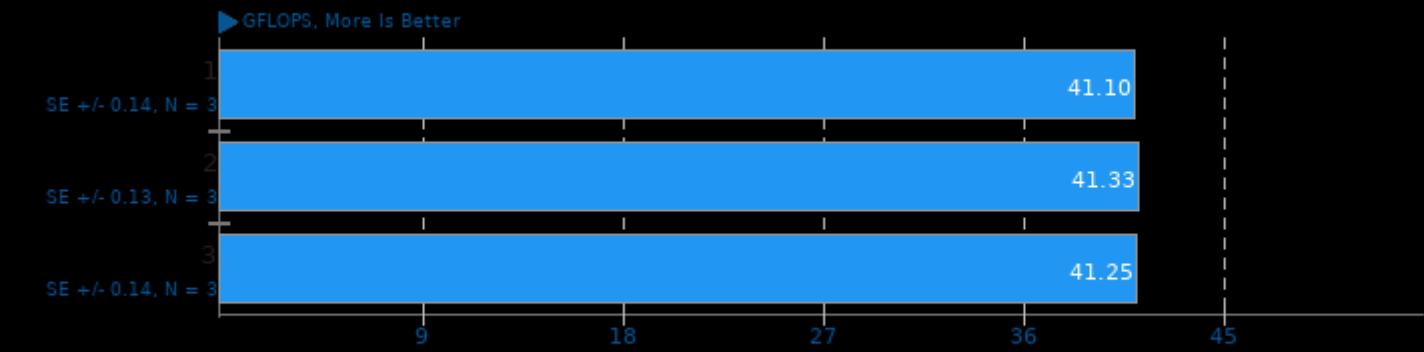
High Performance Conjugate Gradient 3.1



1. (CXX) g++ options: -O3 -ffast-math -fvectorize -fthread -lmpi_cxx -lmpi

HPC Challenge 1.5.0

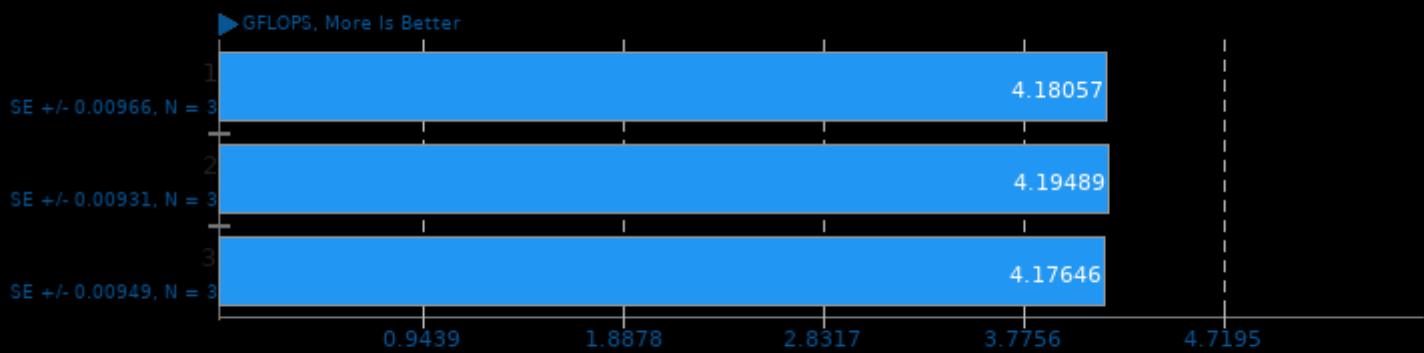
Test / Class: G-HPL



1. (CC) gcc options: -lblas -lm -fthread -lmpi -fomit-frame-pointer -funroll-loops
2. ATLAS + Open MPI 4.0.3

HPC Challenge 1.5.0

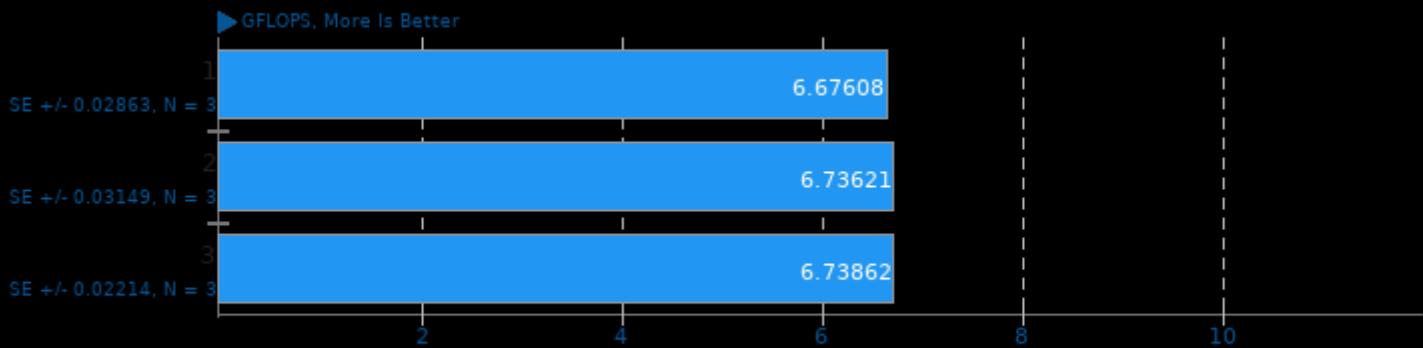
Test / Class: G-Fft



1. (CC) gcc options: -lblas -lm -fthread -lmpi -fomit-frame-pointer -funroll-loops
2. ATLAS + Open MPI 4.0.3

HPC Challenge 1.5.0

Test / Class: EP-DGEMM

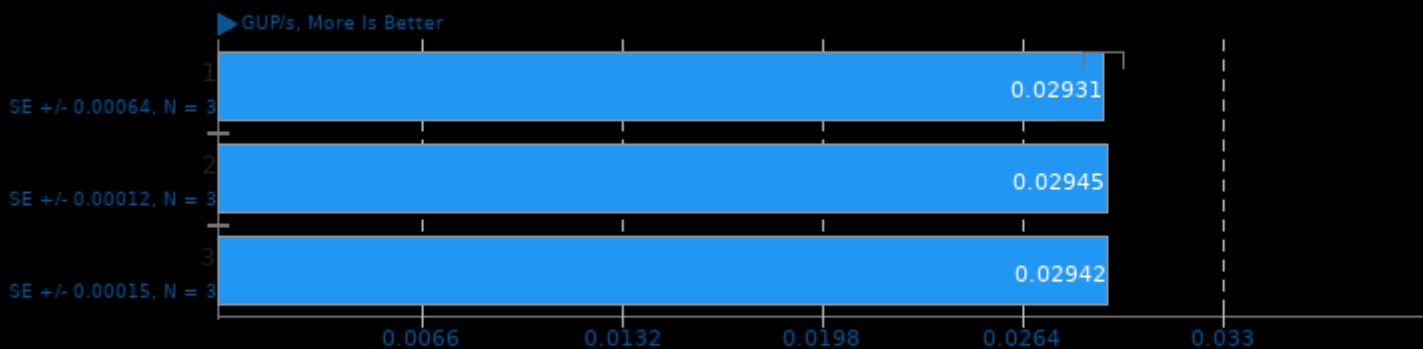


1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

HPC Challenge 1.5.0

Test / Class: G-Random Access

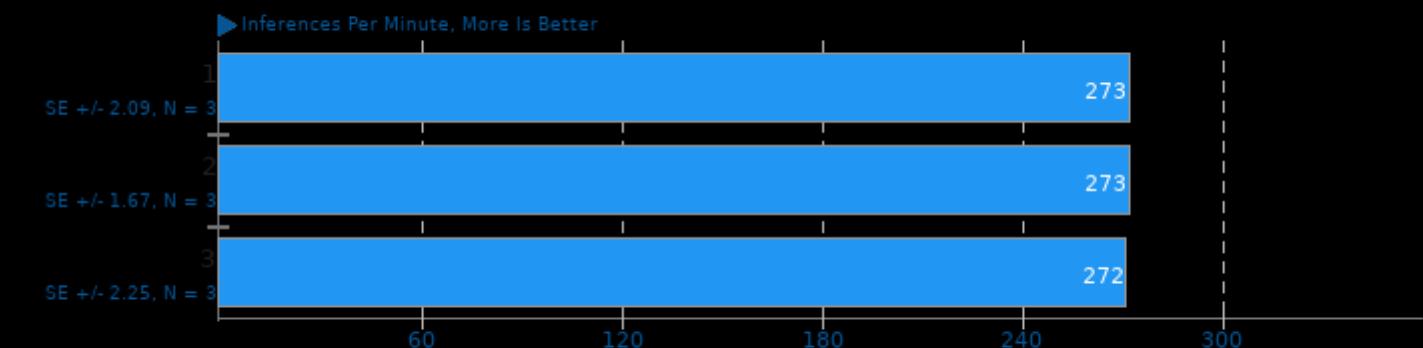


1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

ONNX Runtime 1.6

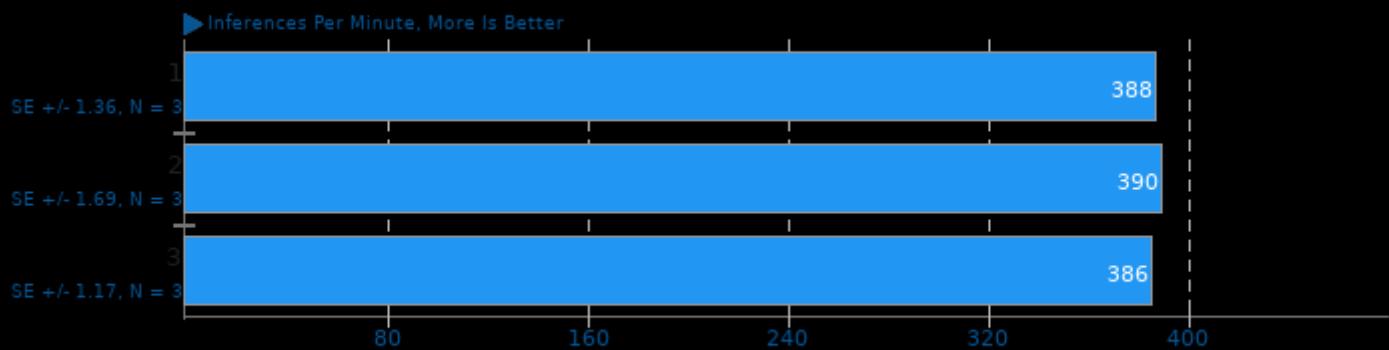
Model: yolov4 - Device: OpenMP CPU



1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt

ONNX Runtime 1.6

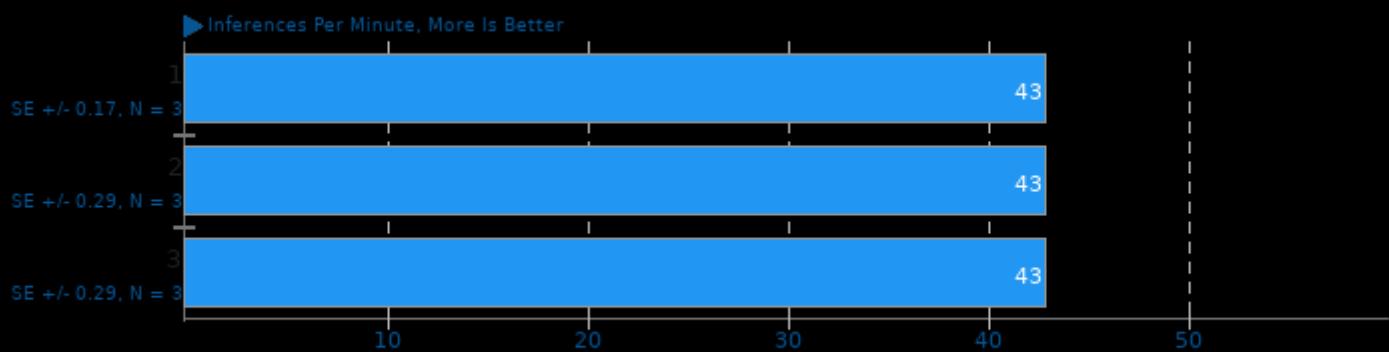
Model: bertsquad-10 - Device: OpenMP CPU



1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt

ONNX Runtime 1.6

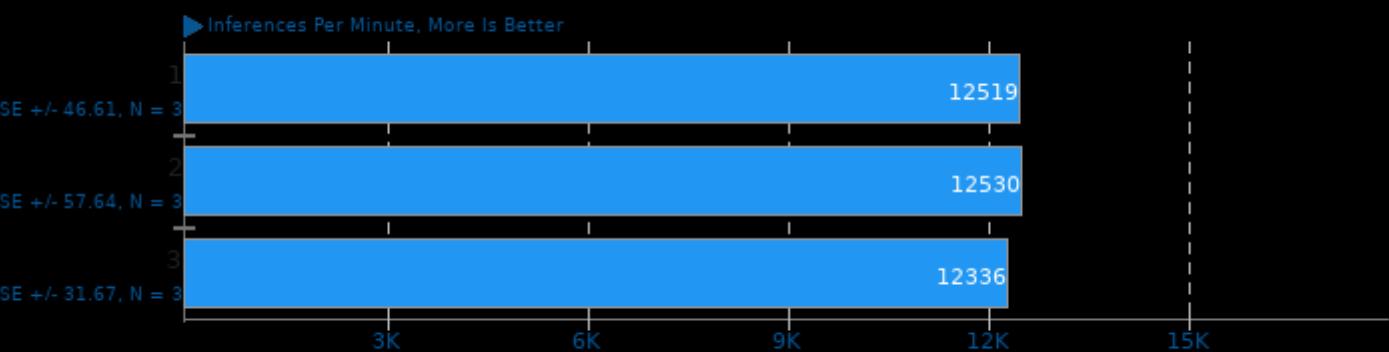
Model: fcn-resnet101-11 - Device: OpenMP CPU



1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt

ONNX Runtime 1.6

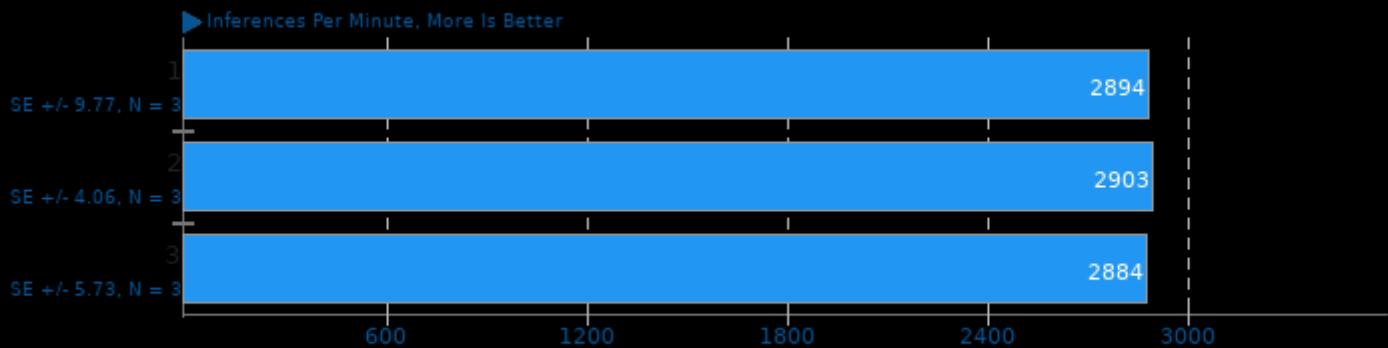
Model: shufflenet-v2-10 - Device: OpenMP CPU



1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt

ONNX Runtime 1.6

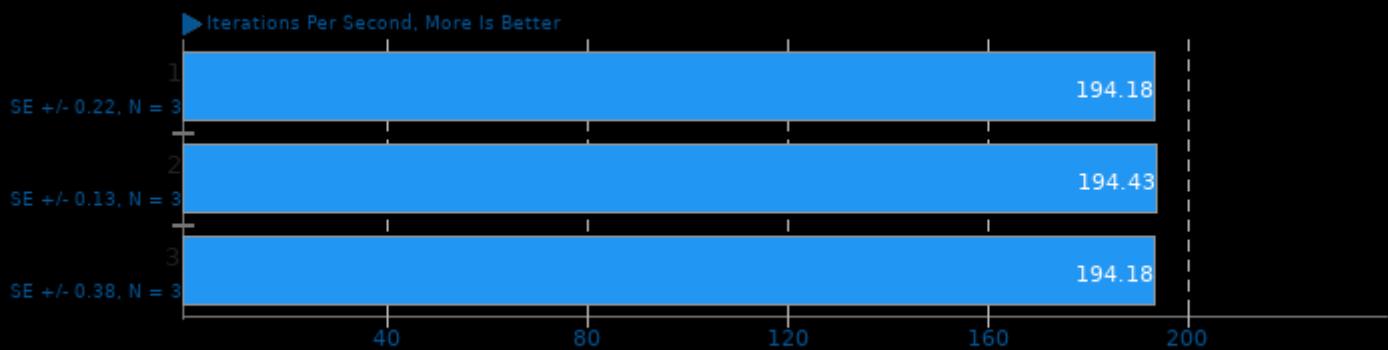
Model: super-resolution-10 - Device: OpenMP CPU



1. (CXX) g++ options: -fopenmp -ffunction-sections -fdata-sections -O3 -ldl -lrt

ASKAP 1.0

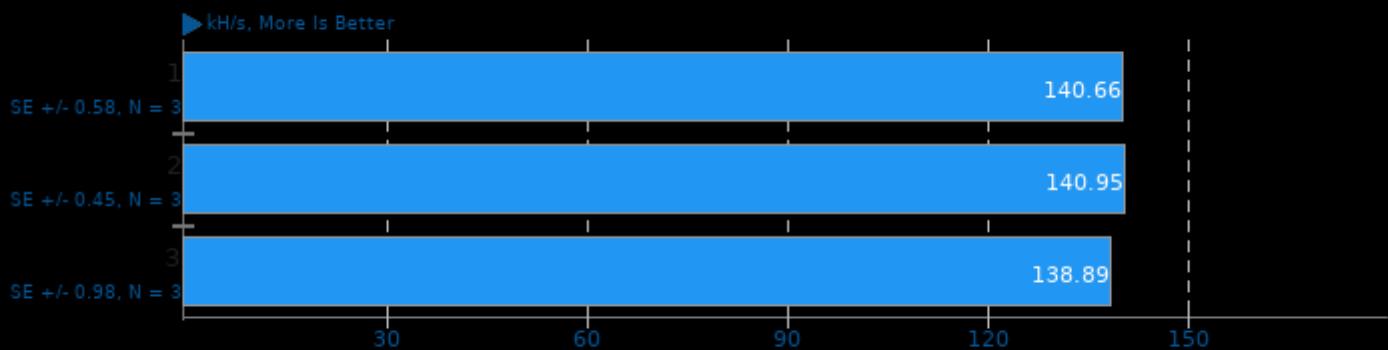
Test: Hogbom Clean OpenMP



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

Cpuminer-Opt 3.15.5

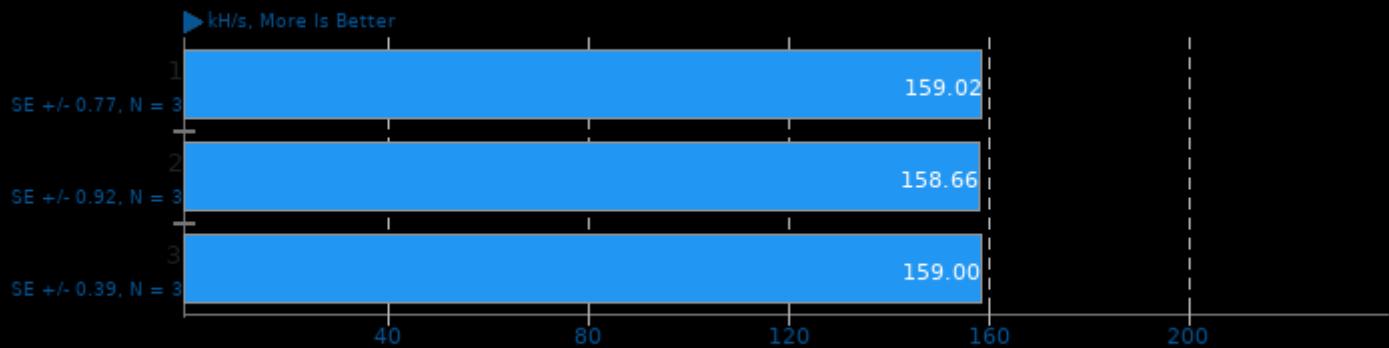
Algorithm: Magi



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

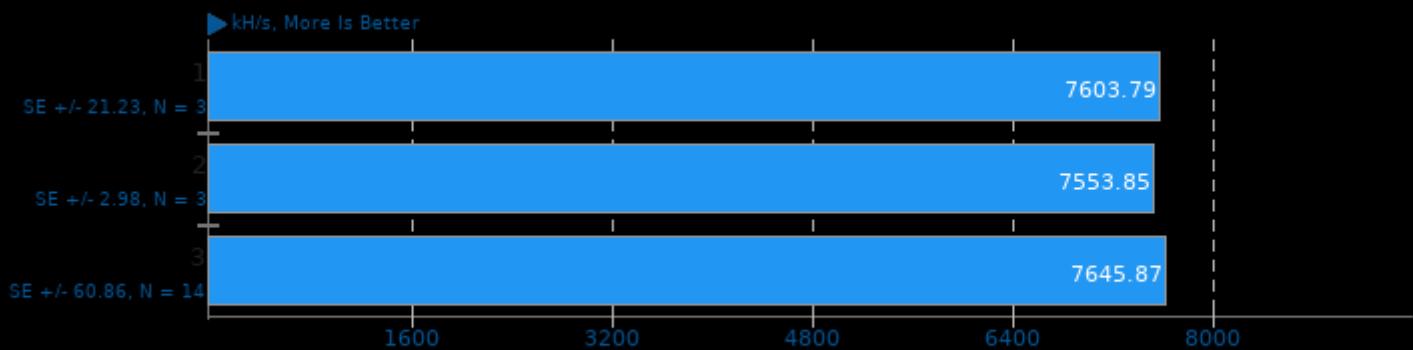
Algorithm: x25x



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

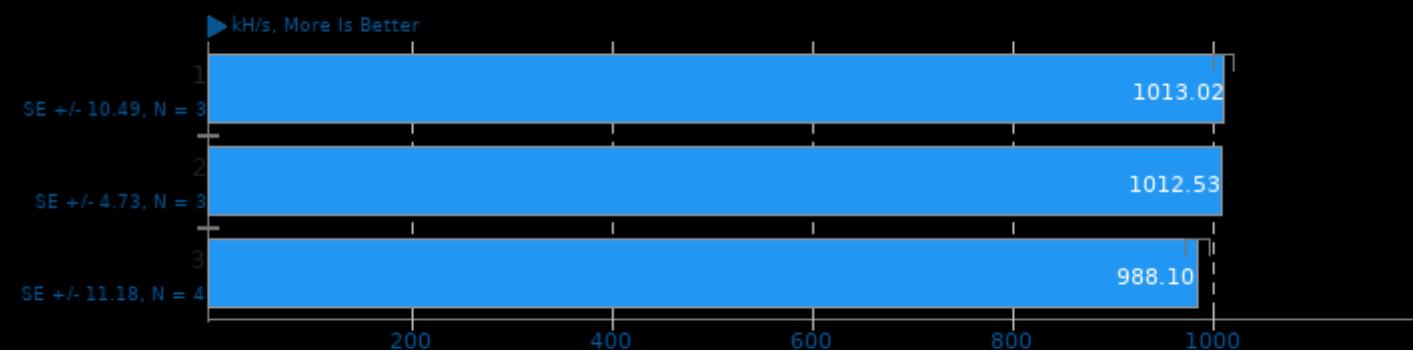
Algorithm: Deepcoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

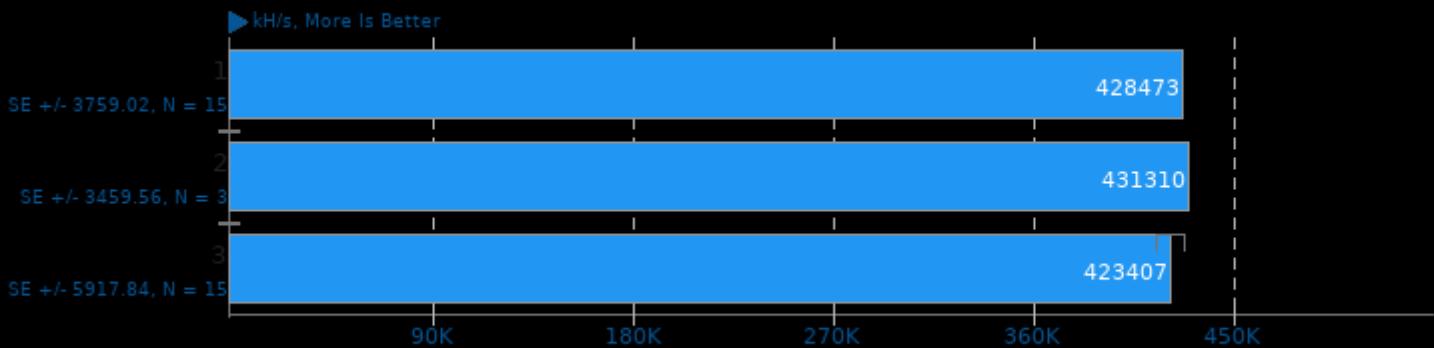
Algorithm: Ringcoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

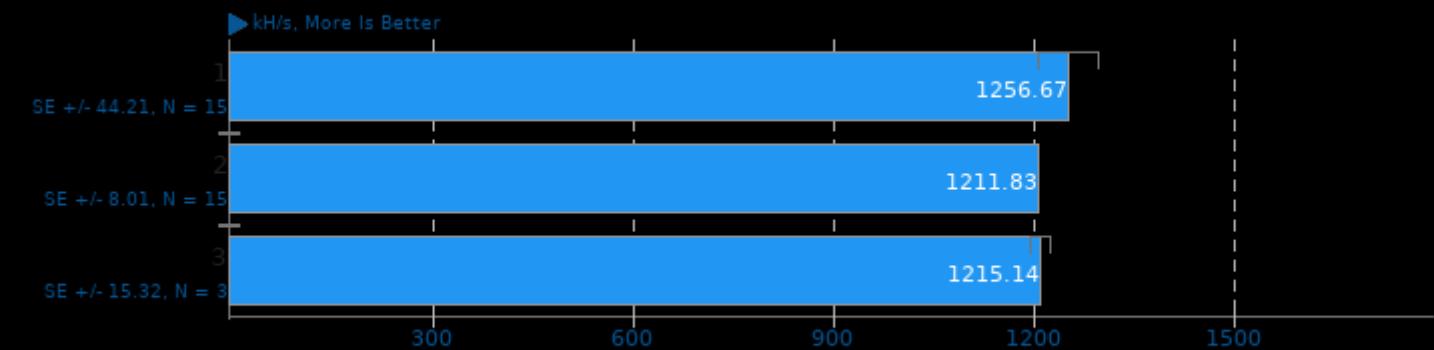
Algorithm: Blake-2 S



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

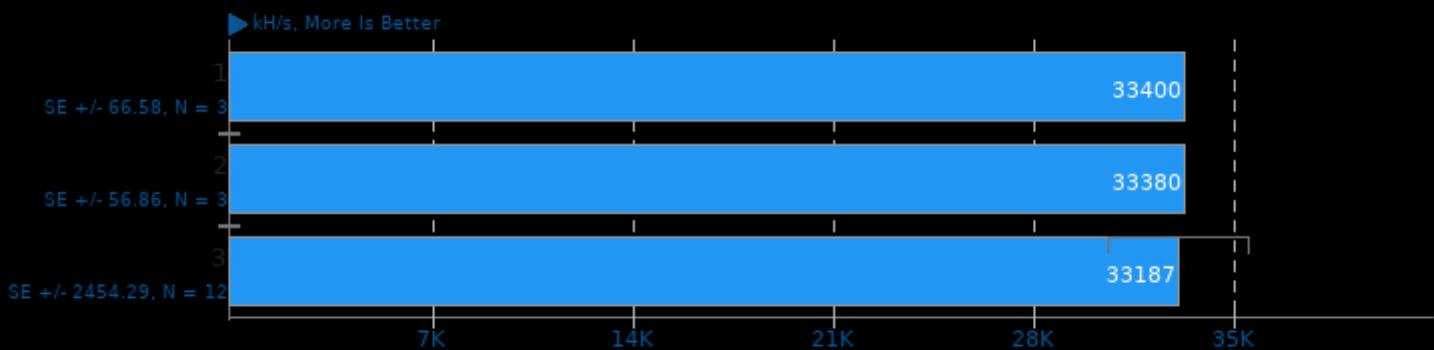
Algorithm: Garlicoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

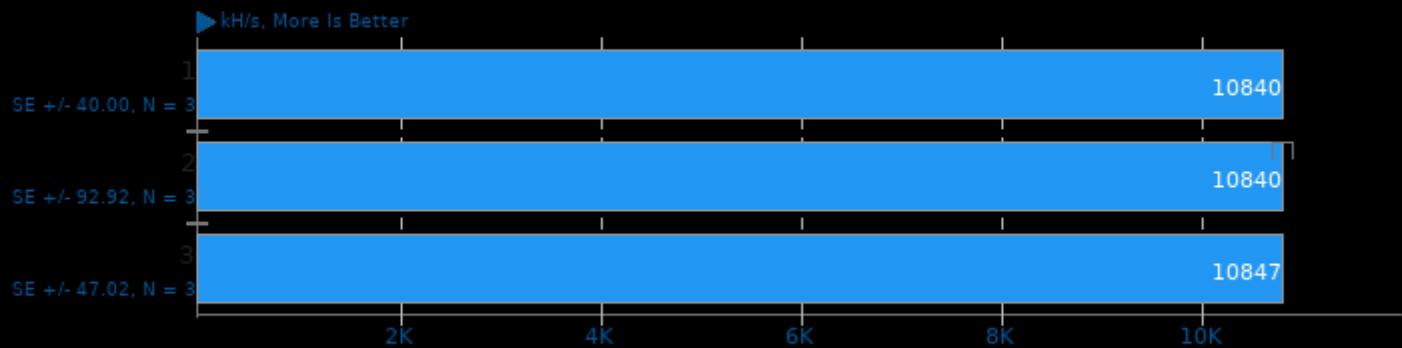
Algorithm: Skeincoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

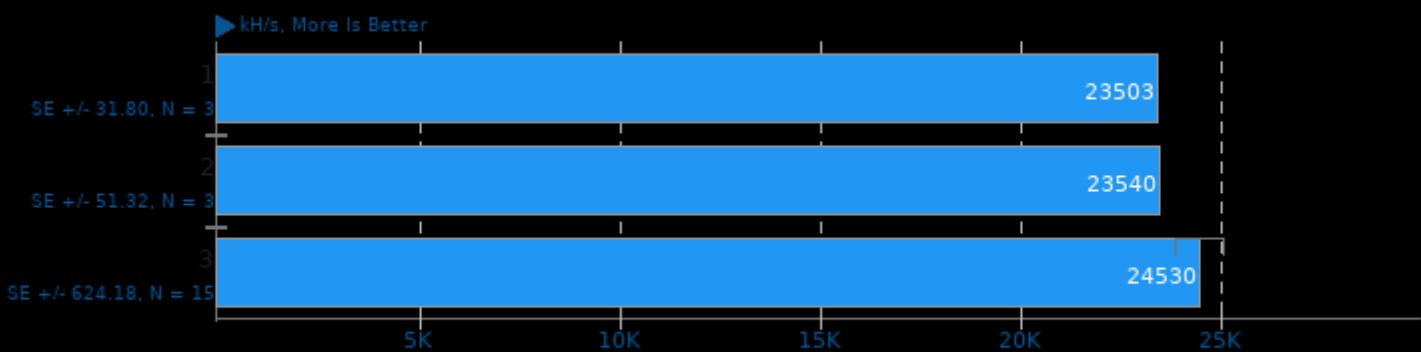
Algorithm: Myriad-Groestl



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

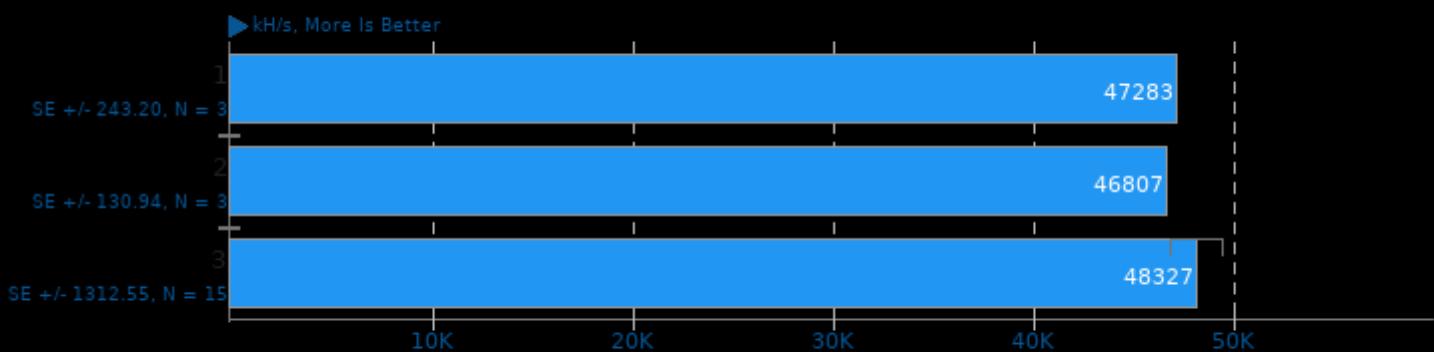
Algorithm: LBC, LBRY Credits



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

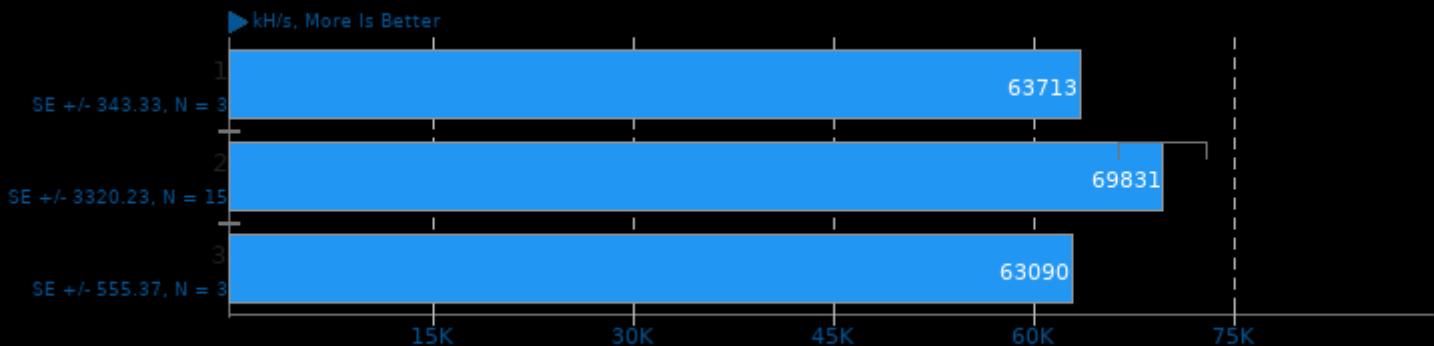
Algorithm: Quad SHA-256, Pyrite



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.15.5

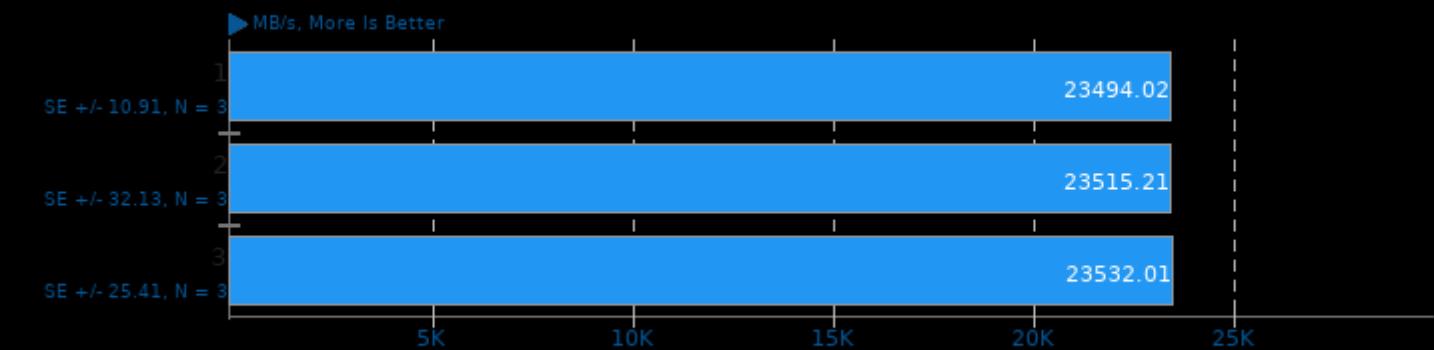
Algorithm: Triple SHA-256, Onecoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Stream-Dynamic 1.0

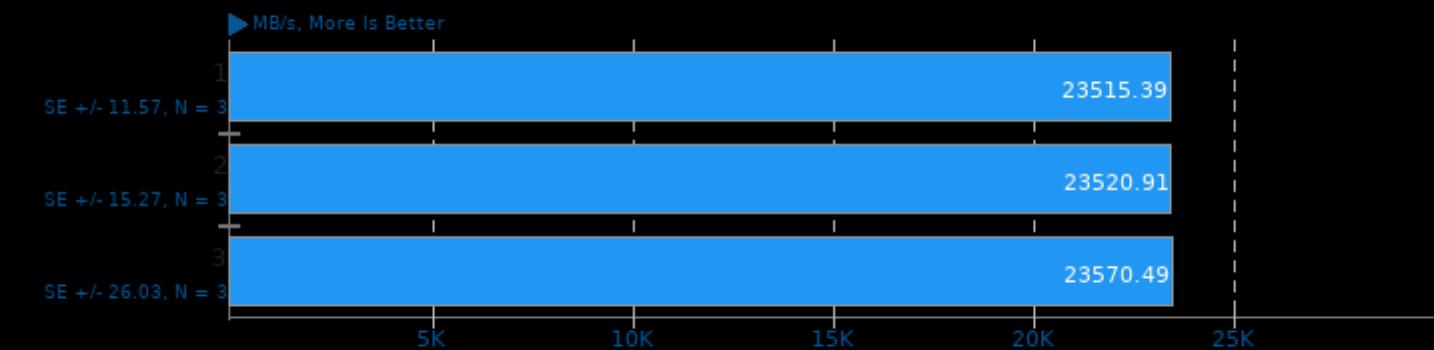
- Copy



1. (CXX) g++ options: -Ofast -mcmodel=large -mavx2 -fpp-contract=fast -march=native -fopenmp

Stream-Dynamic 1.0

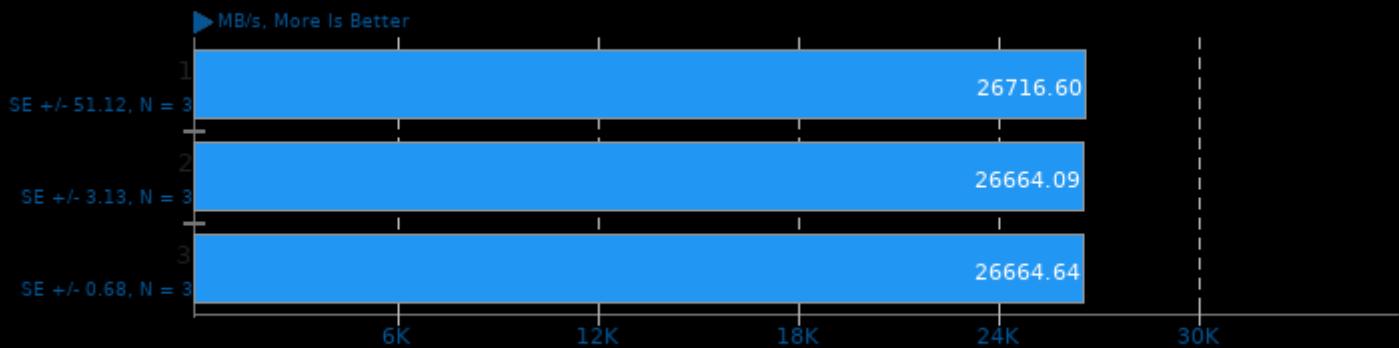
- Scale



1. (CXX) g++ options: -Ofast -mcmodel=large -mavx2 -fpp-contract=fast -march=native -fopenmp

Stream-Dynamic 1.0

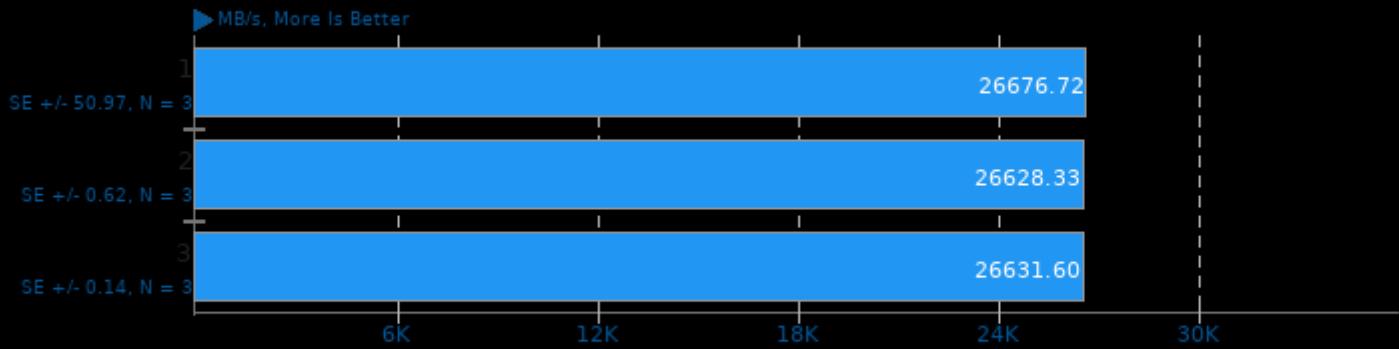
- Add



1. (CXX) g++ options: -Ofast -mcmodel=large -mavx2 -ffp-contract=fast -march=native -fopenmp

Stream-Dynamic 1.0

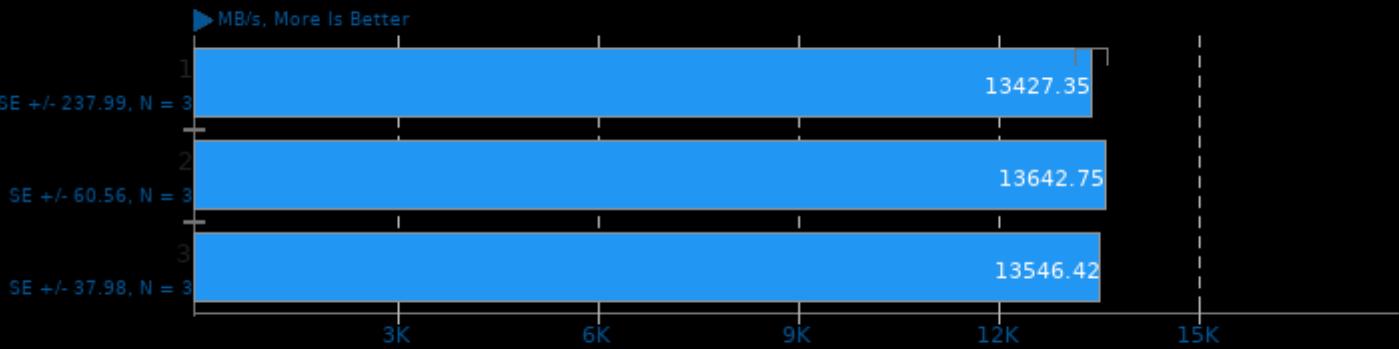
- Triad



1. (CXX) g++ options: -Ofast -mcmodel=large -mavx2 -ffp-contract=fast -march=native -fopenmp

HPC Challenge 1.5.0

Test / Class: Max Ping Pong Bandwidth

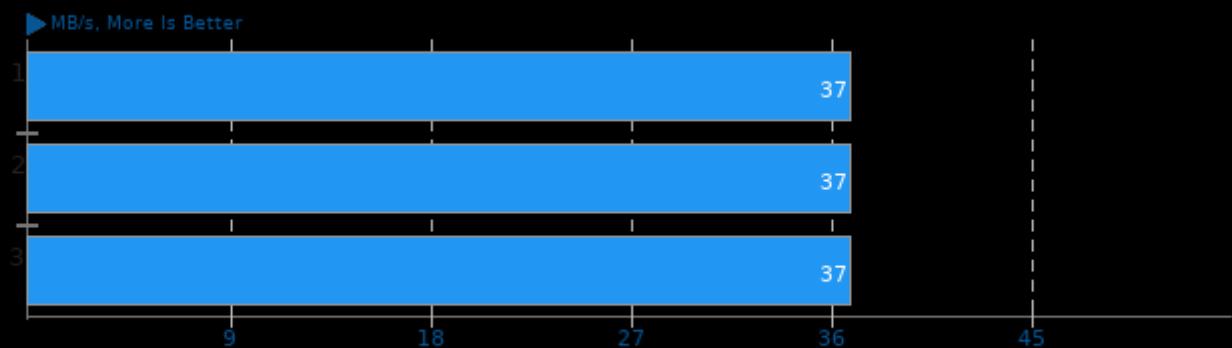


1. (CC) gcc options: -Iblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

Izbench 1.8

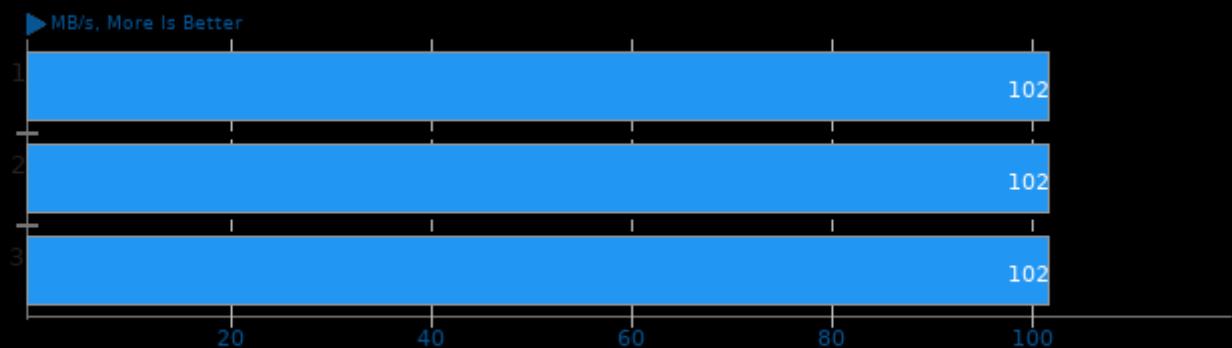
Test: XZ 0 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

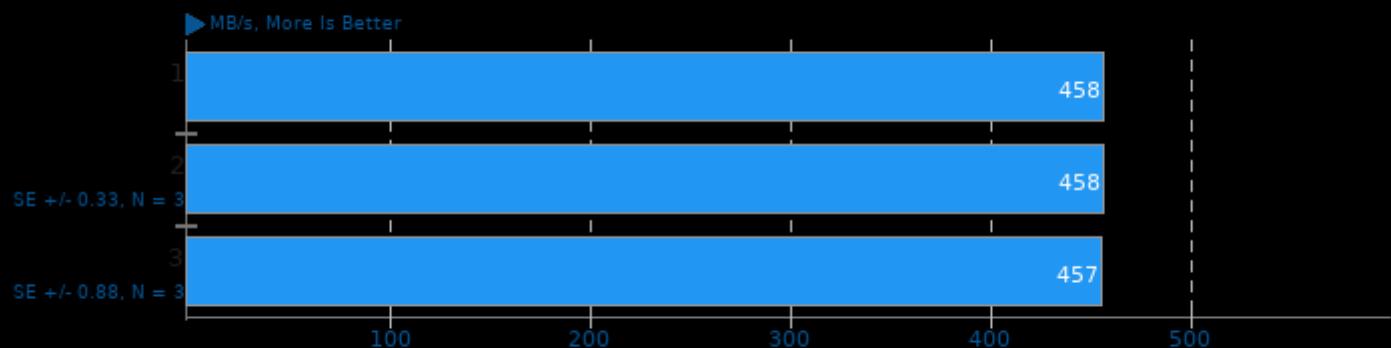
Test: XZ 0 - Process: Decompression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

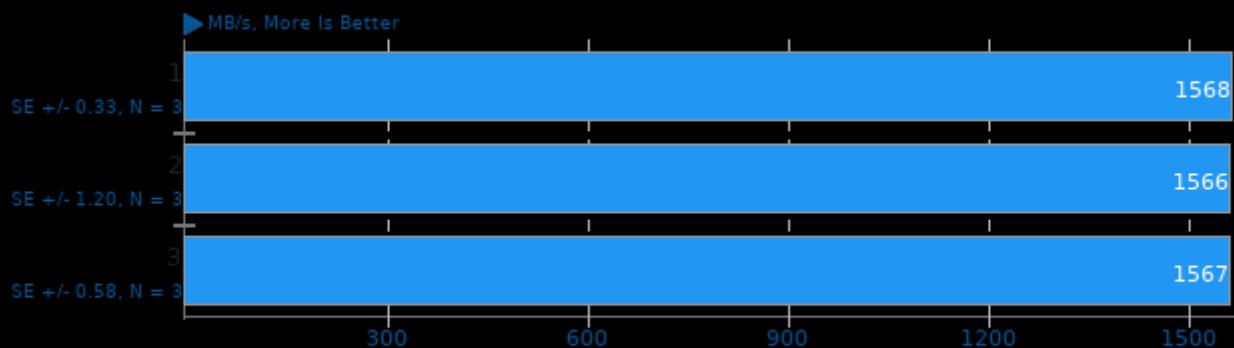
Test: Zstd 1 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

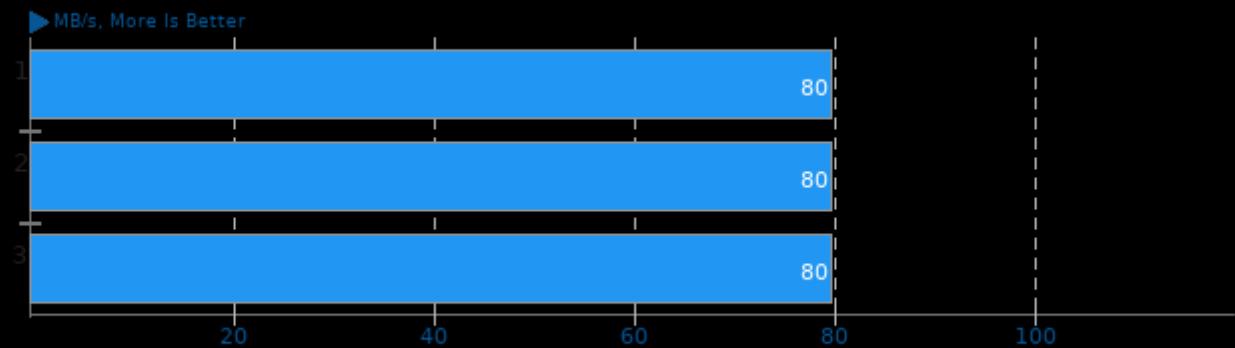
Test: Zstd 1 - Process: Decompression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

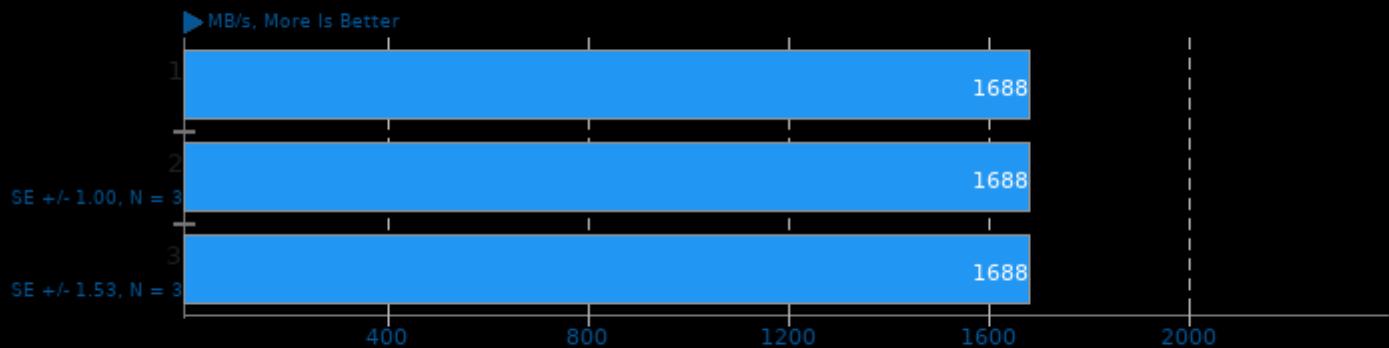
Test: Zstd 8 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

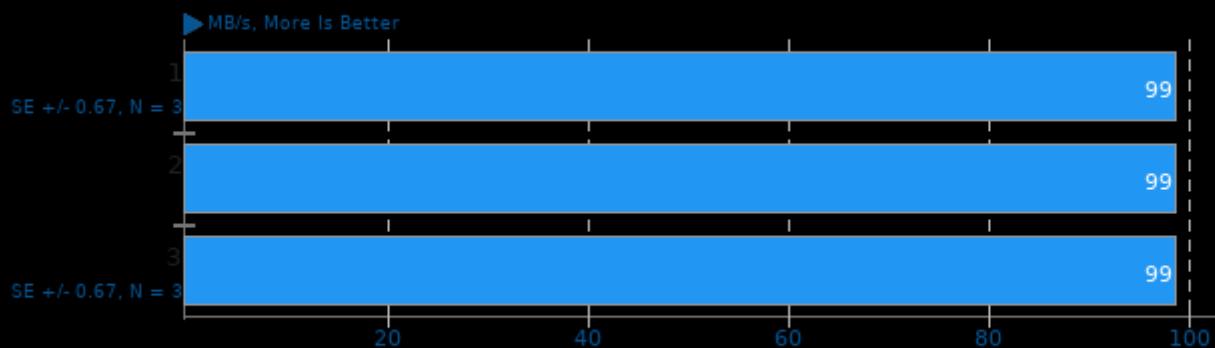
Test: Zstd 8 - Process: Decompression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

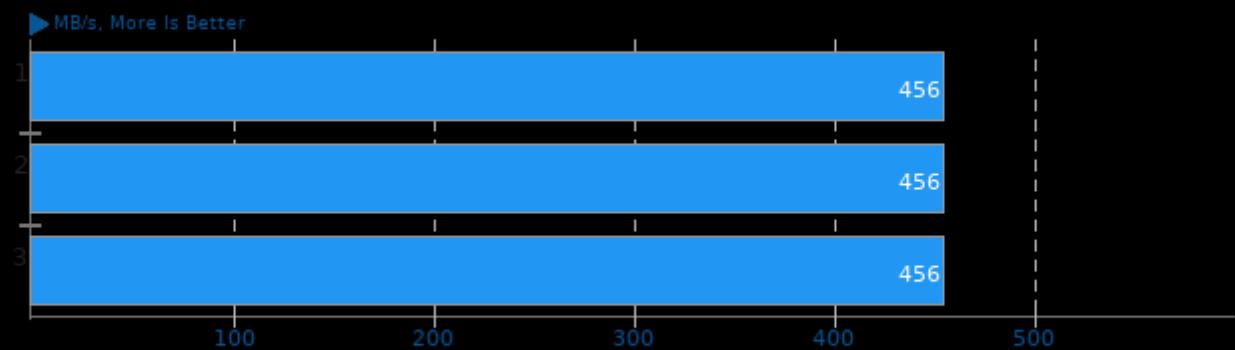
Test: Crush 0 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

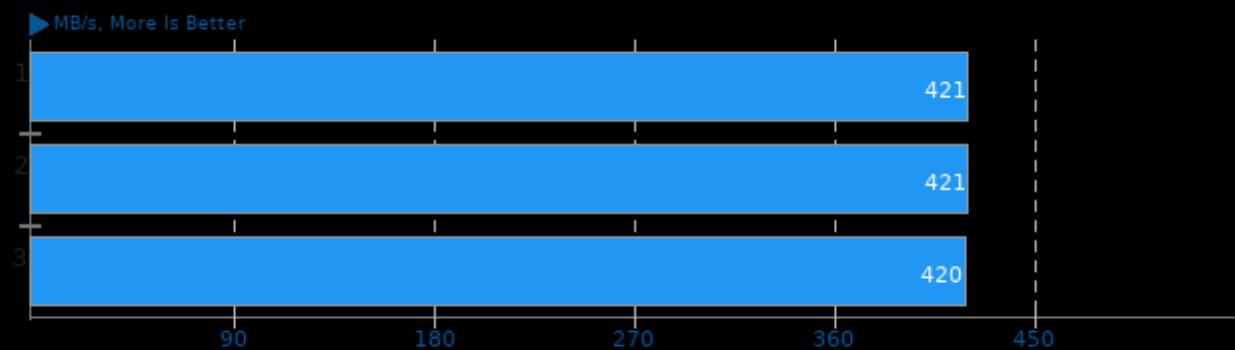
Test: Crush 0 - Process: Decompression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

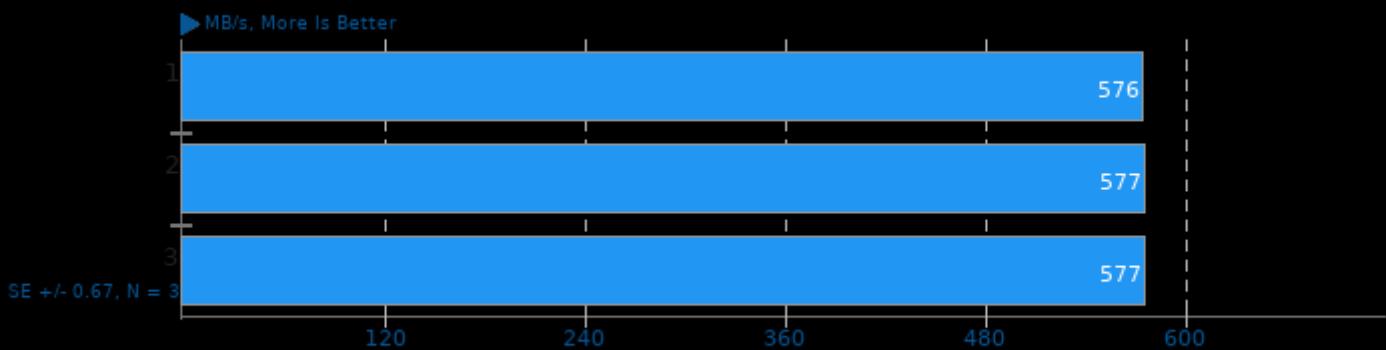
Test: Brotli 0 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

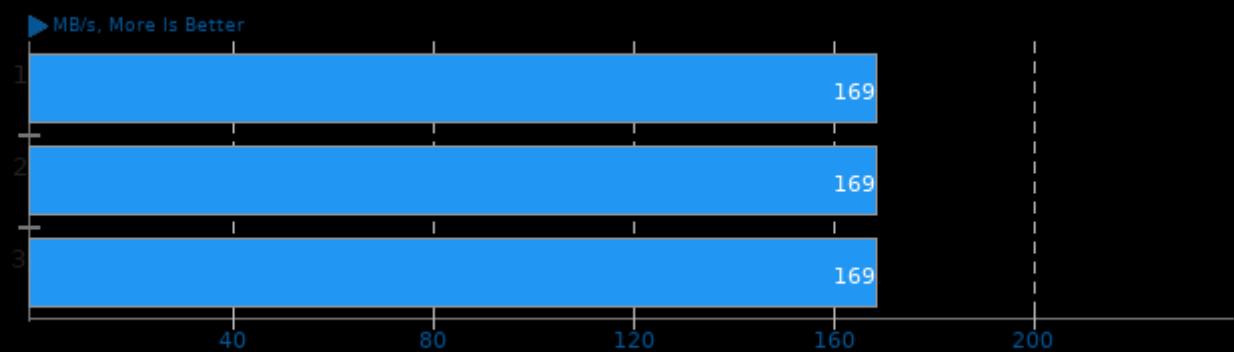
Test: Brotli 0 - Process: Decompression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

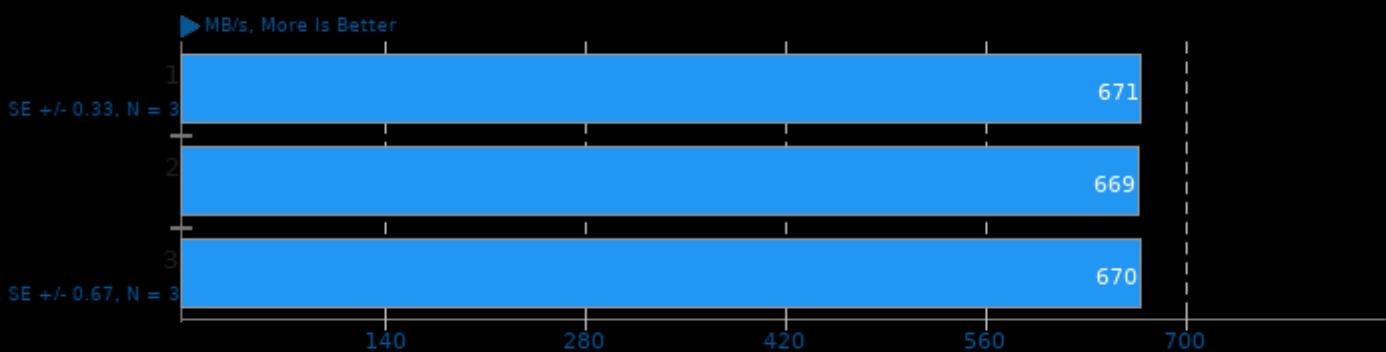
Test: Brotli 2 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

Izbench 1.8

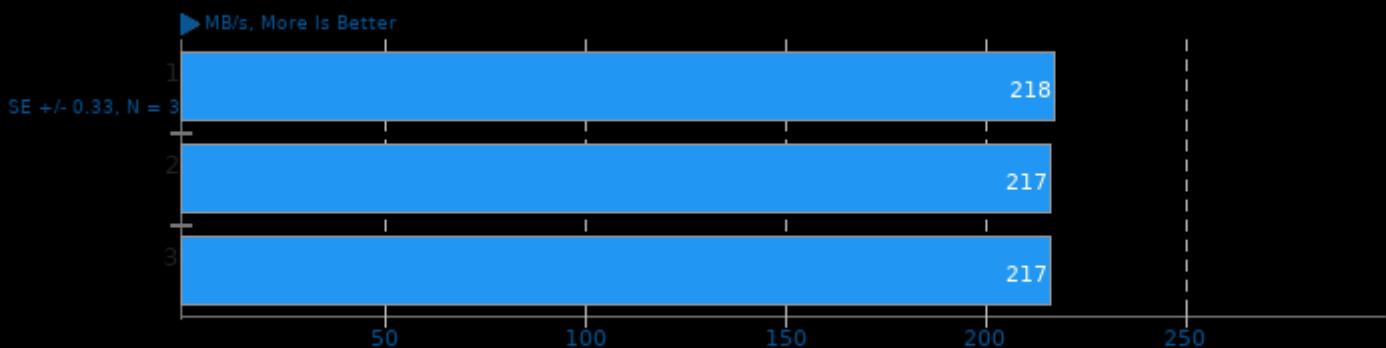
Test: Brotli 2 - Process: Decompression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

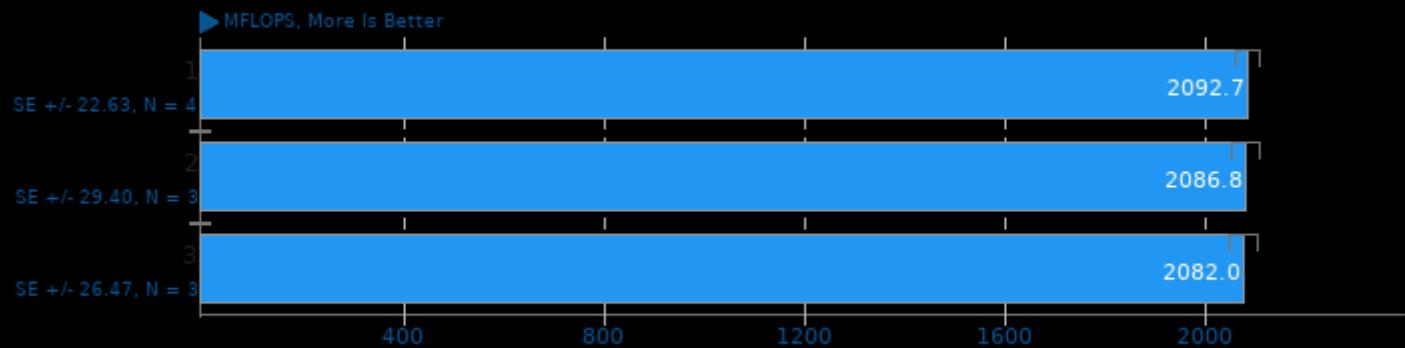
Izbench 1.8

Test: Libdeflate 1 - Process: Compression



1. (CXX) g++ options: -pthread -fomit-frame-pointer -fstrict-aliasing -ffast-math -O3

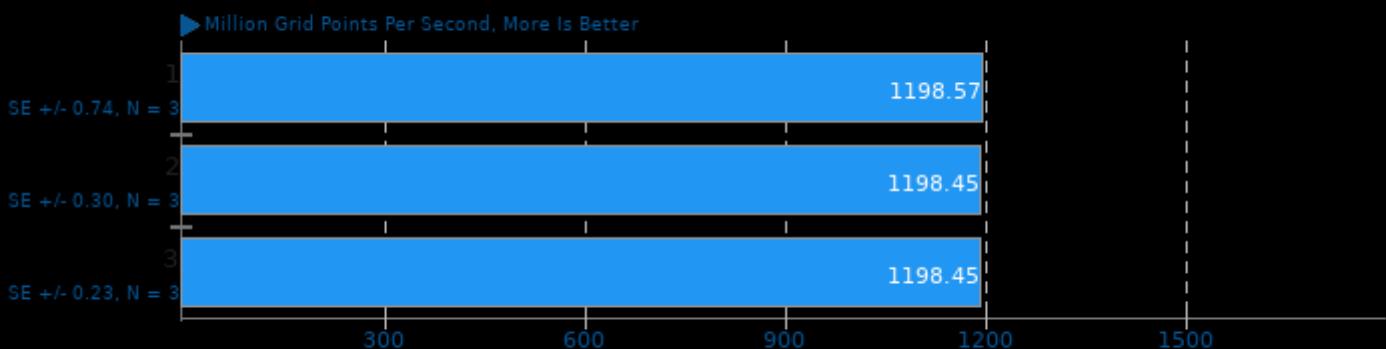
QuantLib 1.21



1. (CXX) g++ options: -O3 -march=native -rdynamic

ASKAP 1.0

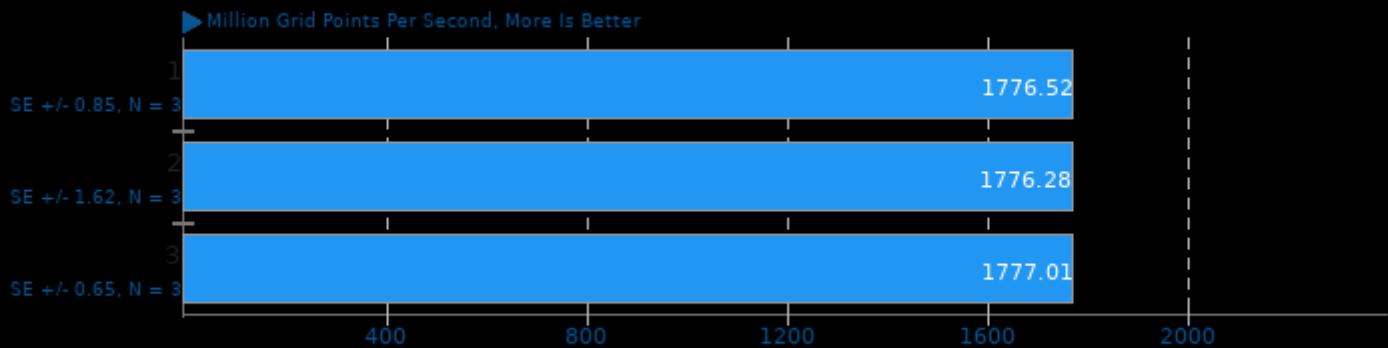
Test: tConvolve MT - Gridding



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

ASKAP 1.0

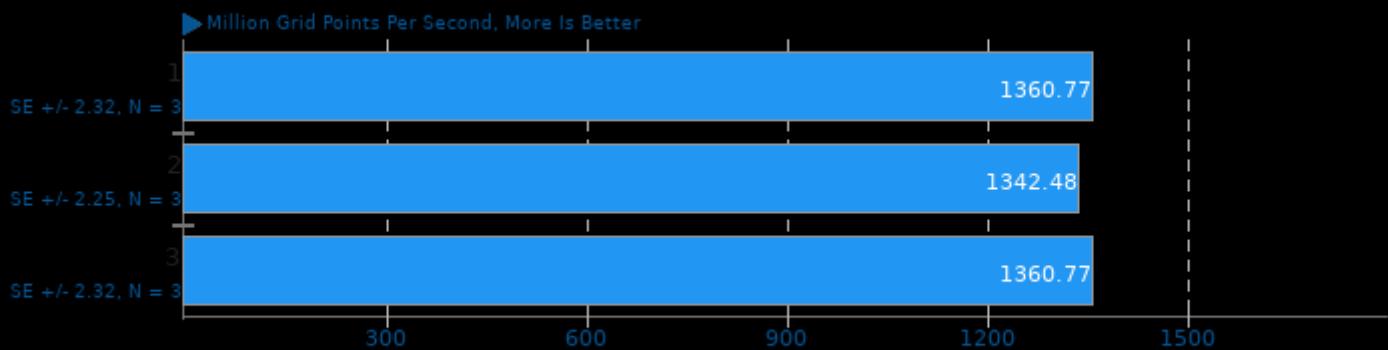
Test: tConvolve MT - Degridding



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

ASKAP 1.0

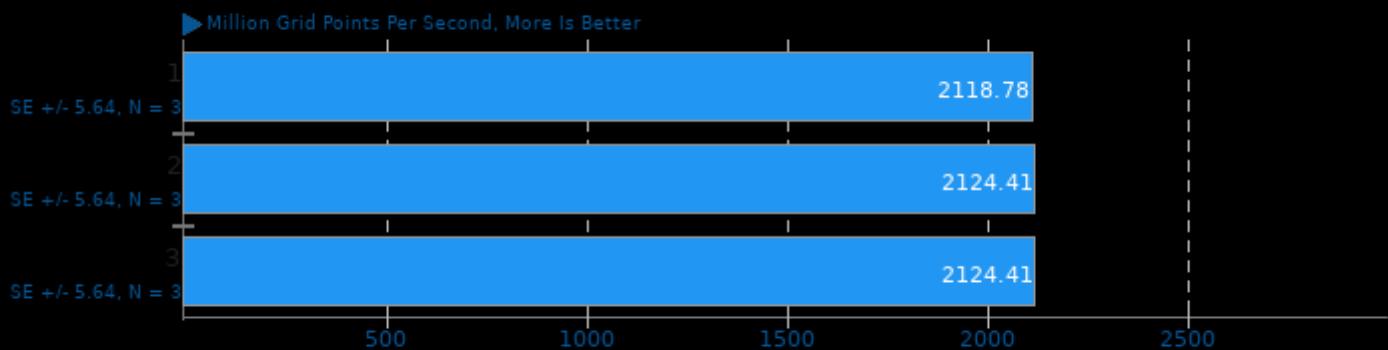
Test: tConvolve OpenMP - Gridding



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

ASKAP 1.0

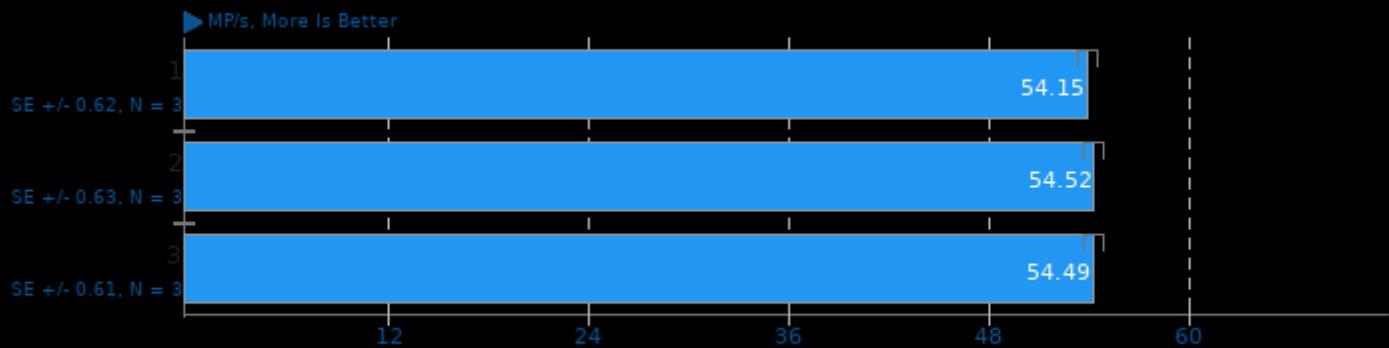
Test: tConvolve OpenMP - Degridding



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

JPEG XL 0.3.1

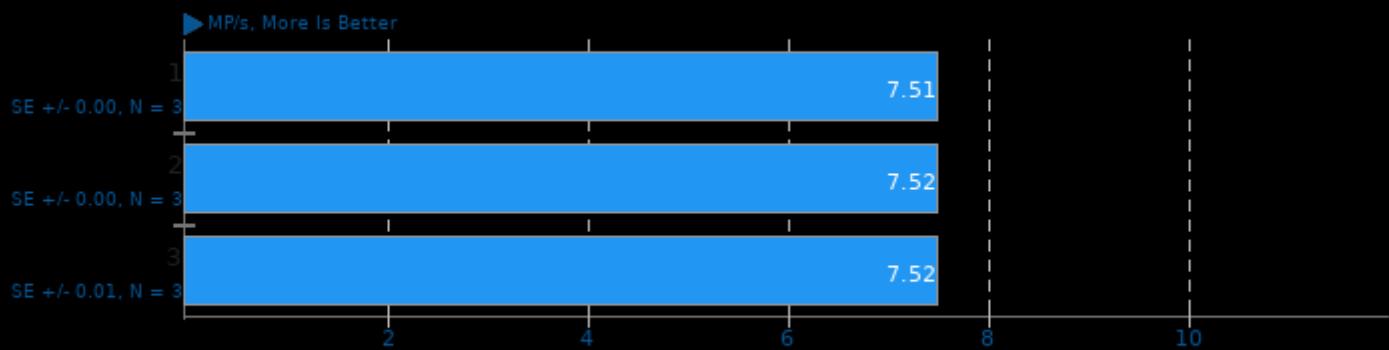
Input: PNG - Encode Speed: 5



1. (CXX) g++ options: -funwind-tables -O3 -O2 -pthread -fPIE -pie -ldl

JPEG XL 0.3.1

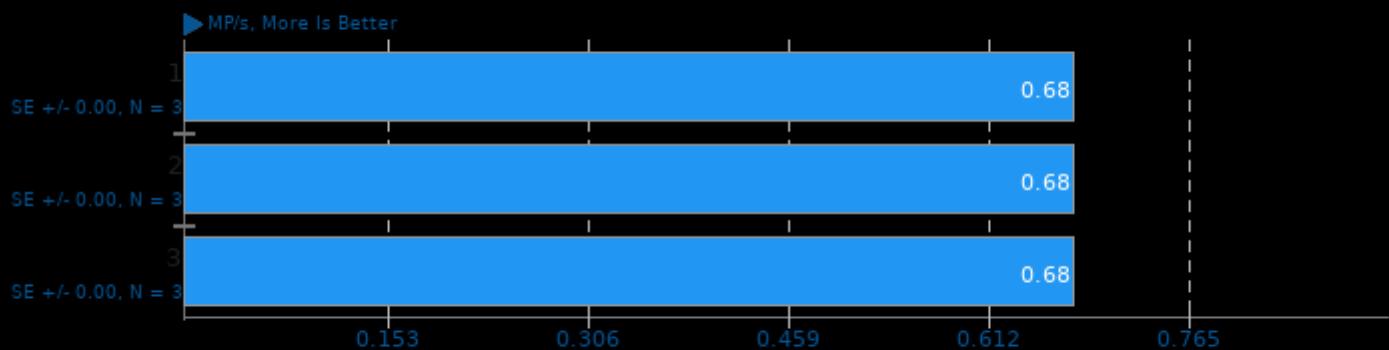
Input: PNG - Encode Speed: 7



1. (CXX) g++ options: -funwind-tables -O3 -O2 -pthread -fPIE -pie -ldl

JPEG XL 0.3.1

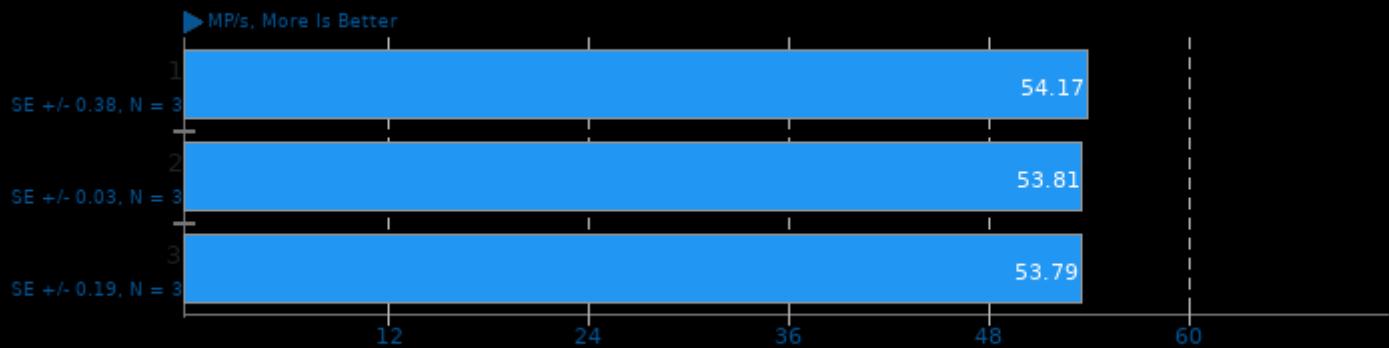
Input: PNG - Encode Speed: 8



1. (CXX) g++ options: -funwind-tables -O3 -O2 -pthread -fPIE -pie -ldl

JPEG XL 0.3.1

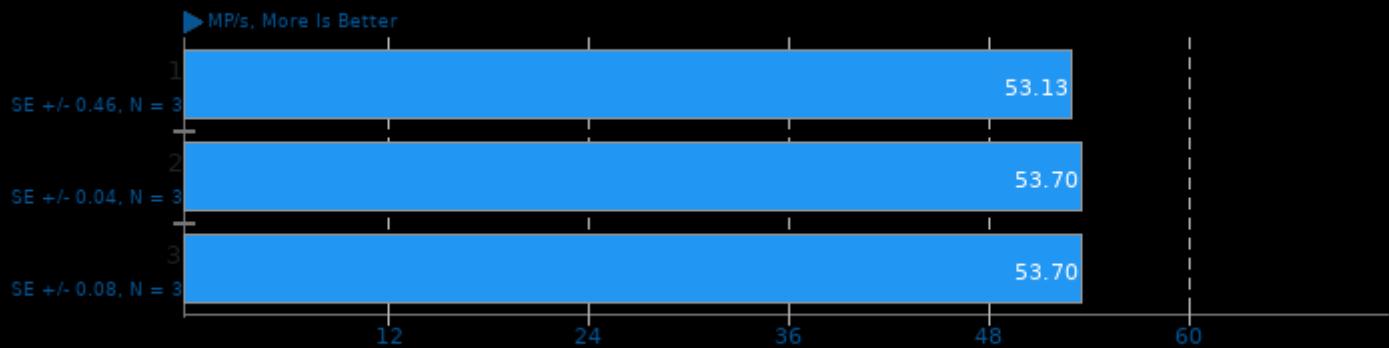
Input: JPEG - Encode Speed: 5



1. (CXX) g++ options: -funwind-tables -O3 -O2 -pthread -fPIE -pie -ldl

JPEG XL 0.3.1

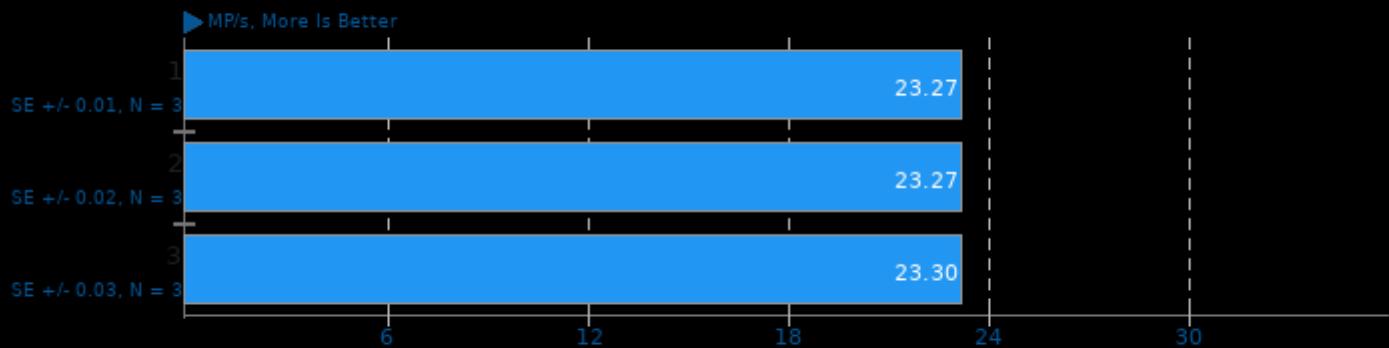
Input: JPEG - Encode Speed: 7



1. (CXX) g++ options: -funwind-tables -O3 -O2 -pthread -fPIE -pie -ldl

JPEG XL 0.3.1

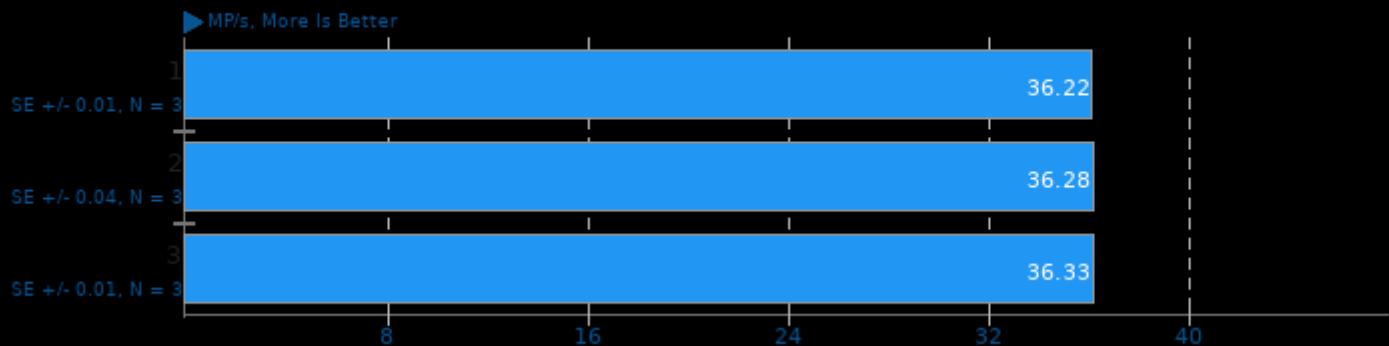
Input: JPEG - Encode Speed: 8



1. (CXX) g++ options: -funwind-tables -O3 -O2 -pthread -fPIE -pie -ldl

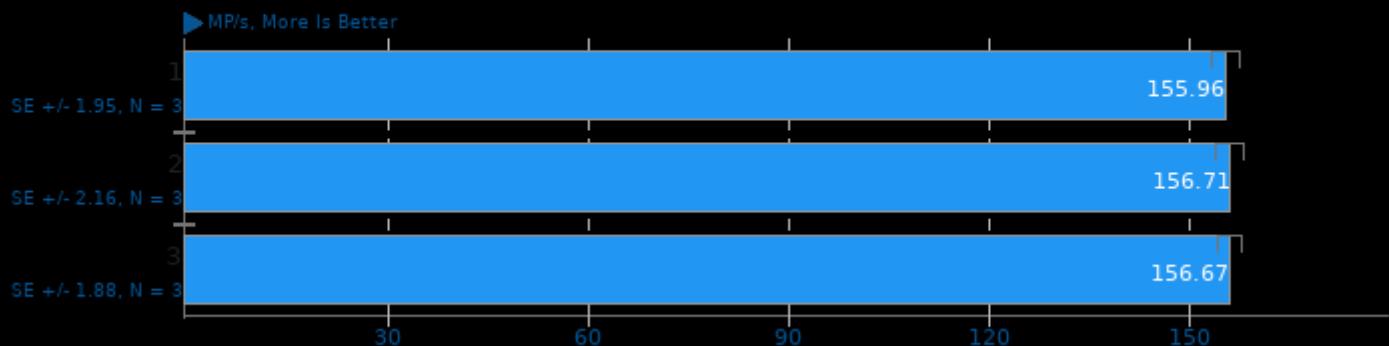
JPEG XL Decoding 0.3.1

CPU Threads: 1



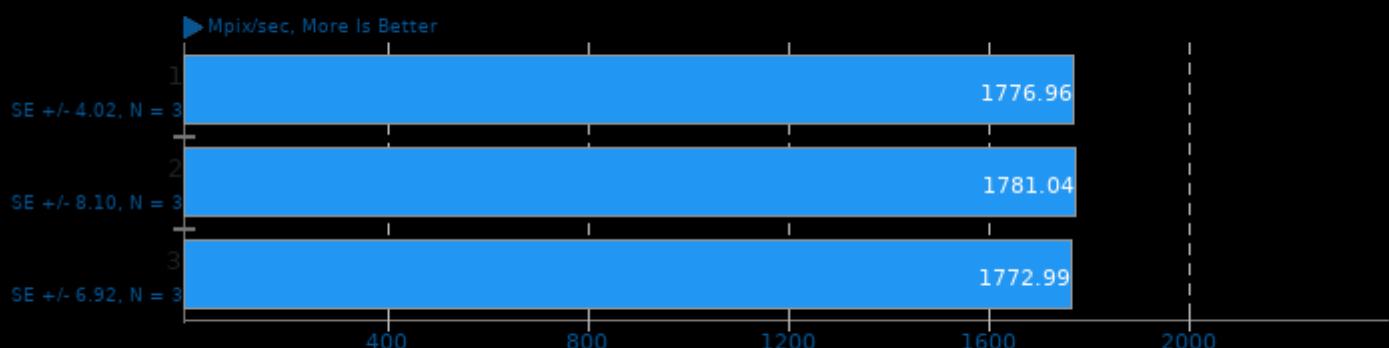
JPEG XL Decoding 0.3.1

CPU Threads: All



ASKAP 1.0

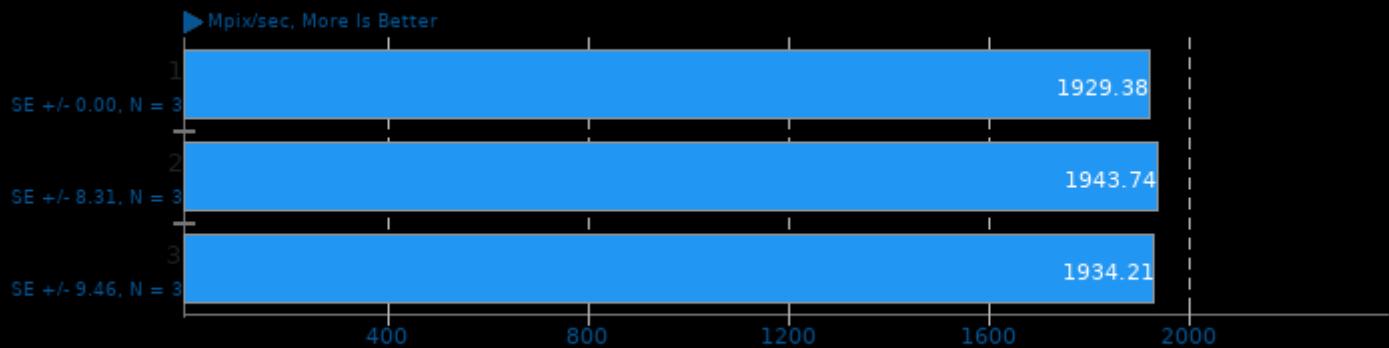
Test: tConvolve MPI - Degridding



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

ASKAP 1.0

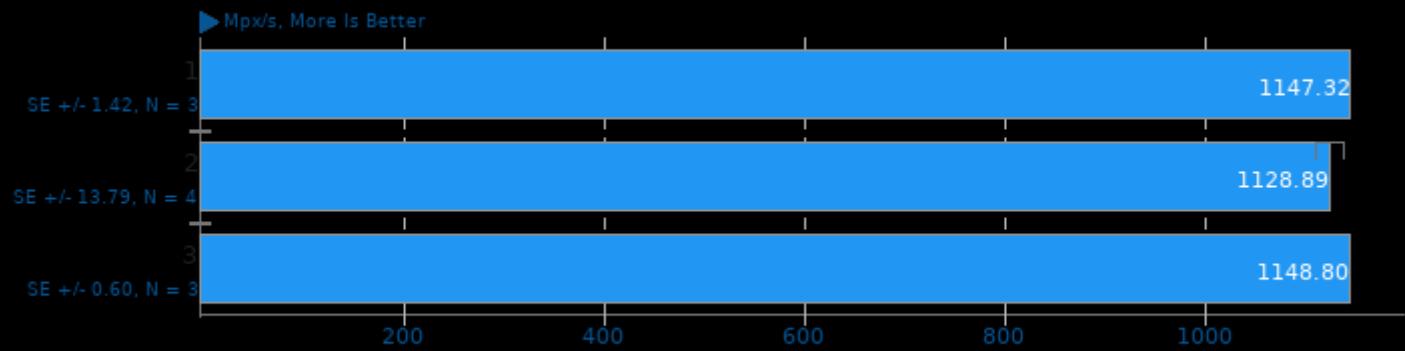
Test: tConvolve MPI - Gridding



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

EtcPak 0.7

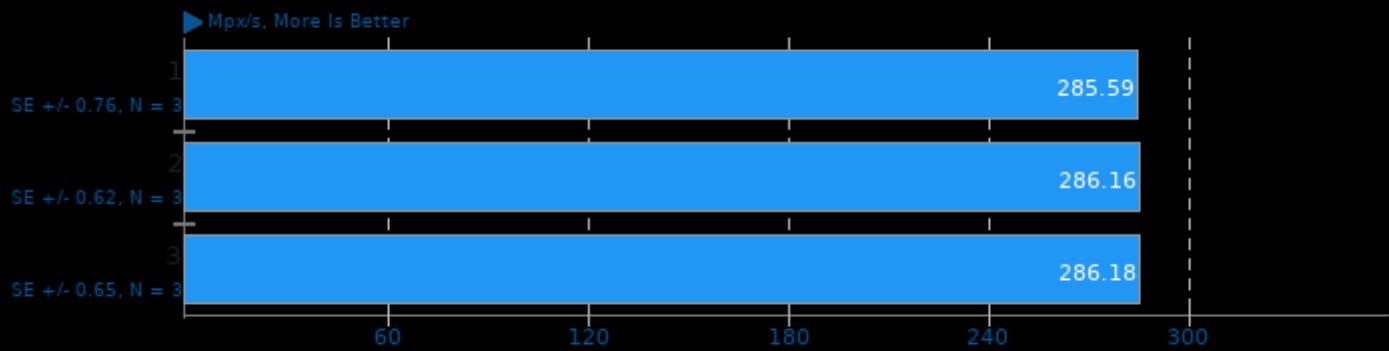
Configuration: DXT1



1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread

EtcPak 0.7

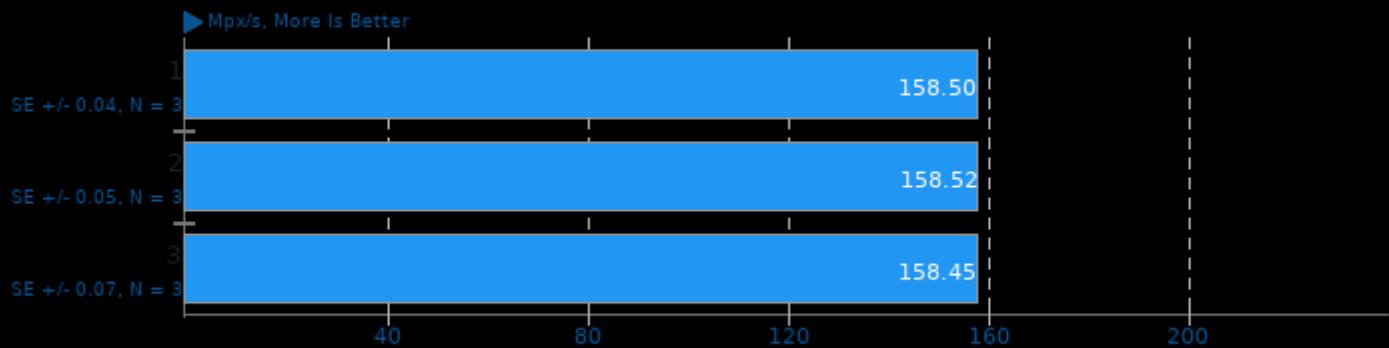
Configuration: ETC1



1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread

EtcPak 0.7

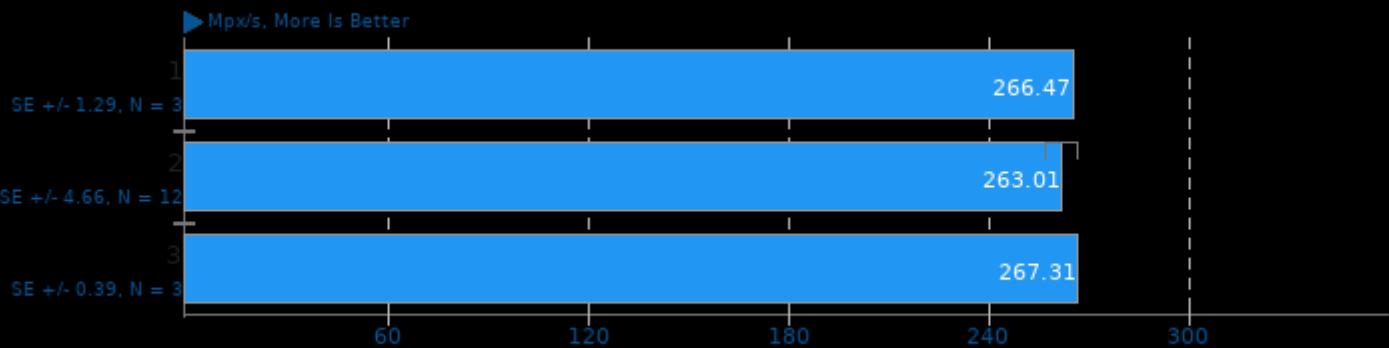
Configuration: ETC2



1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread

EtcPak 0.7

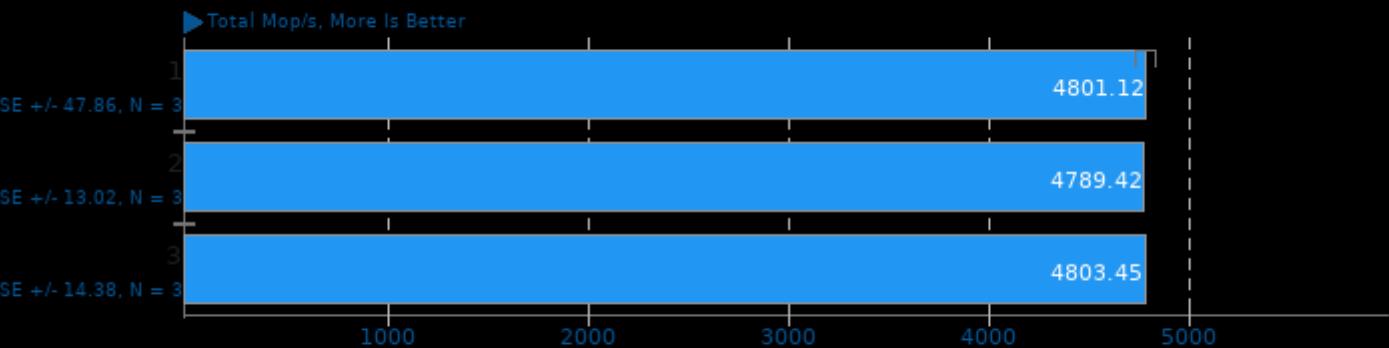
Configuration: ETC1 + Dithering



1. (CXX) g++ options: -O3 -march=native -std=c++11 -lpthread

NAS Parallel Benchmarks 3.4

Test / Class: CG.C

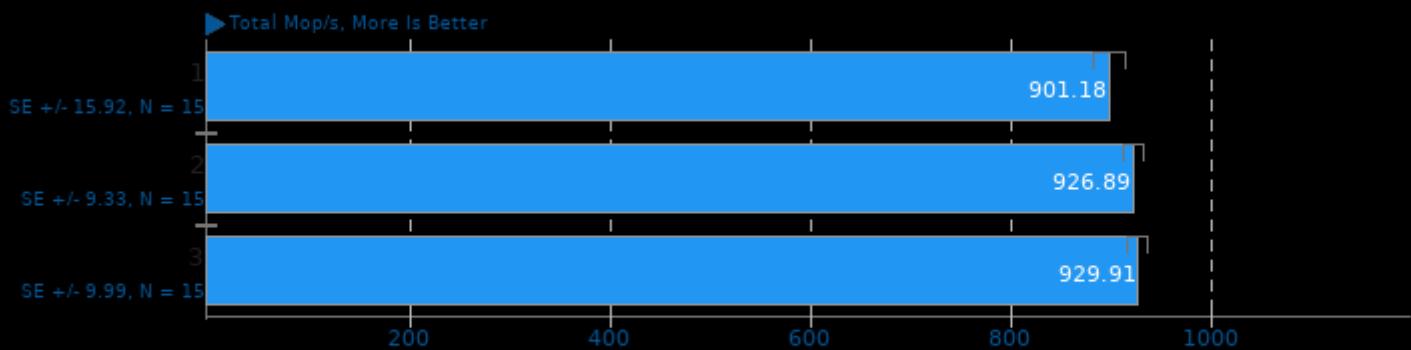


1. (F9X) gfortran options: -O3 -march=native -pthread -Impi_usempif08 -Impi_mpifh -Impi -Iopen-rte -Iopen-pal -Ihwloc -Idd -Ievent -Ievent_pthreads -Iutil

2. Open MPI 4.0.3

NAS Parallel Benchmarks 3.4

Test / Class: EP.C

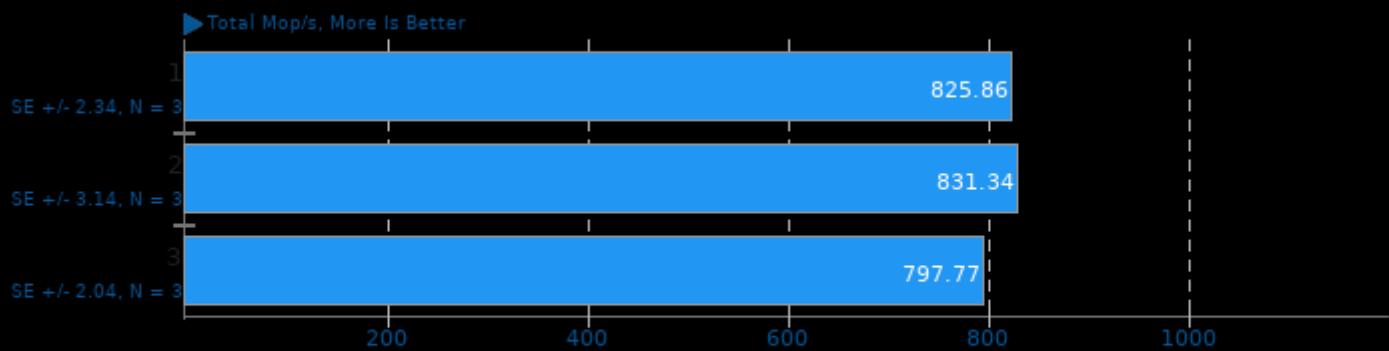


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen rte -lopen pal -lhwloc -ldl -levent -levent_pthreads -lutil

2. Open MPI 4.0.3

NAS Parallel Benchmarks 3.4

Test / Class: EP.D

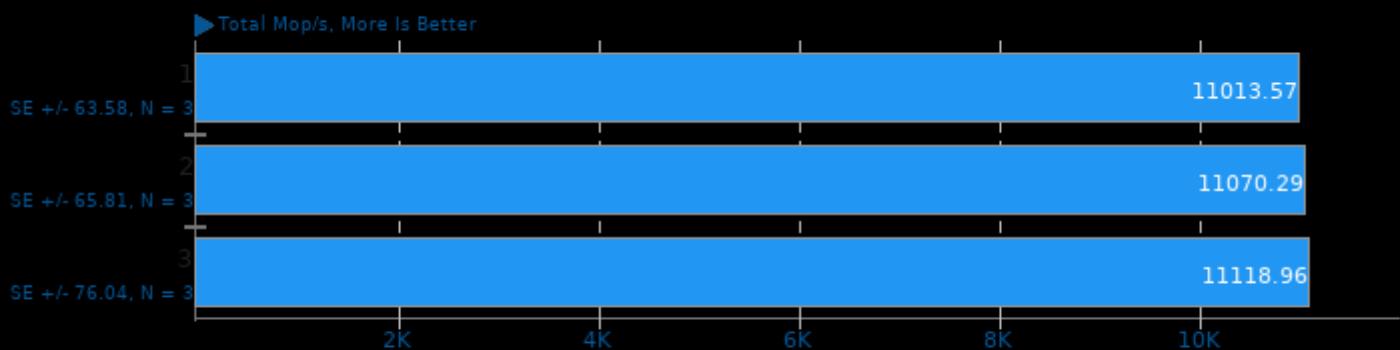


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen rte -lopen pal -lhwloc -ldl -levent -levent_pthreads -lutil

2. Open MPI 4.0.3

NAS Parallel Benchmarks 3.4

Test / Class: FT.C

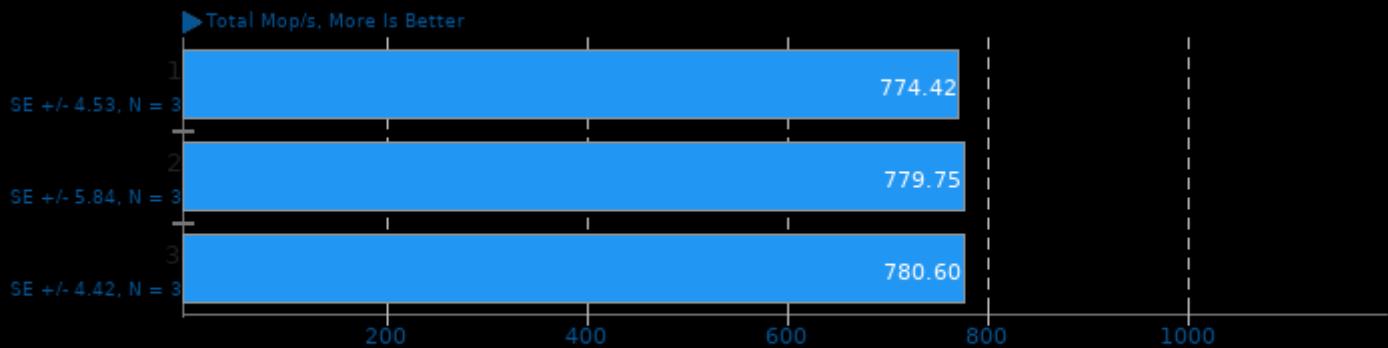


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen rte -lopen pal -lhwloc -ldl -levent -levent_pthreads -lutil

2. Open MPI 4.0.3

NAS Parallel Benchmarks 3.4

Test / Class: IS.D

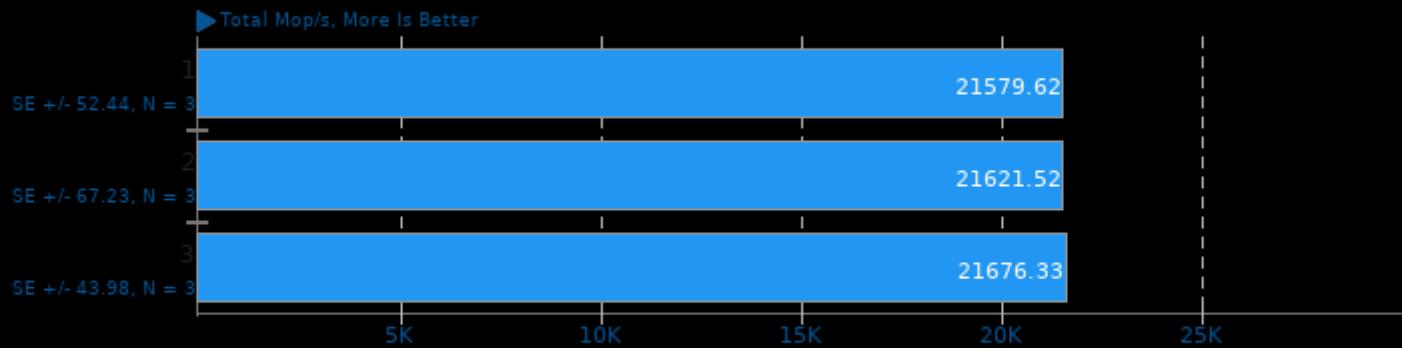


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen rte -lopen pal -lhwloc -ldl -levent -levent_pthreads -lutil

2. Open MPI 4.0.3

NAS Parallel Benchmarks 3.4

Test / Class: LU.C

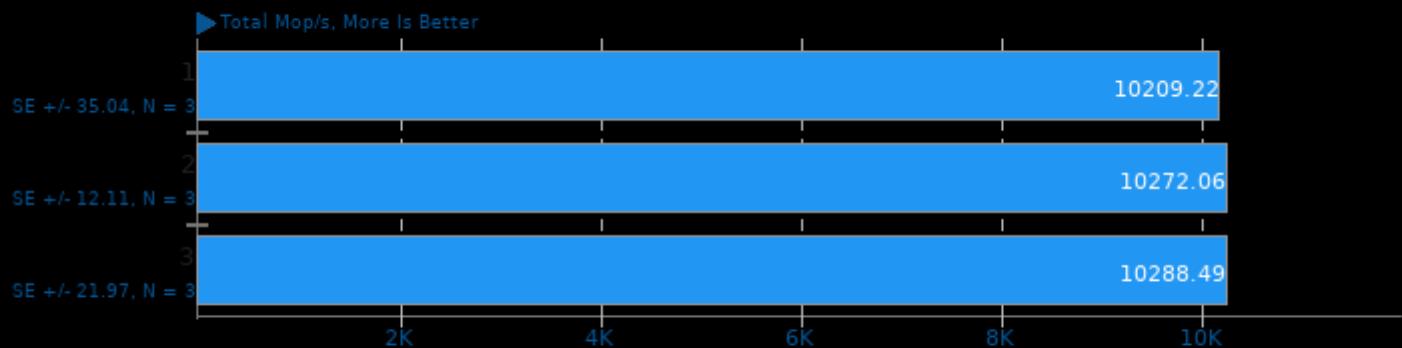


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen rte -lopen pal -lhwloc -ldl -levent -levent_pthreads -lutil

2. Open MPI 4.0.3

NAS Parallel Benchmarks 3.4

Test / Class: MG.C

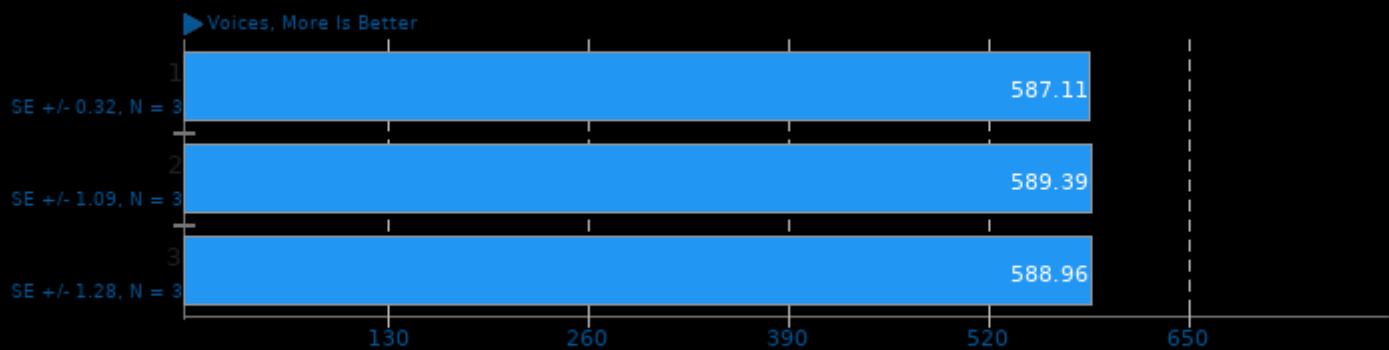


1. (F9X) gfortran options: -O3 -march=native -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen rte -lopen pal -lhwloc -ldl -levent -levent_pthreads -lutil

2. Open MPI 4.0.3

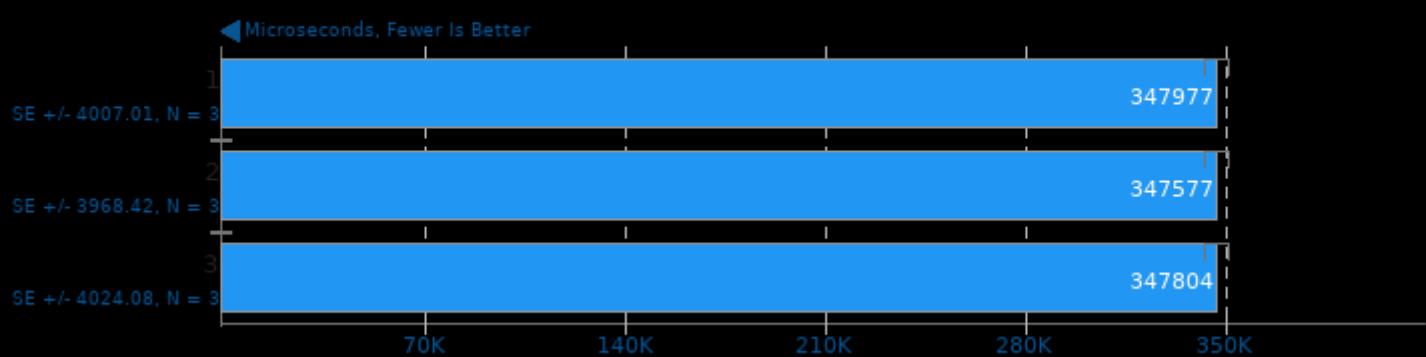
Google SynthMark 20201109

Test: VoiceMark_100



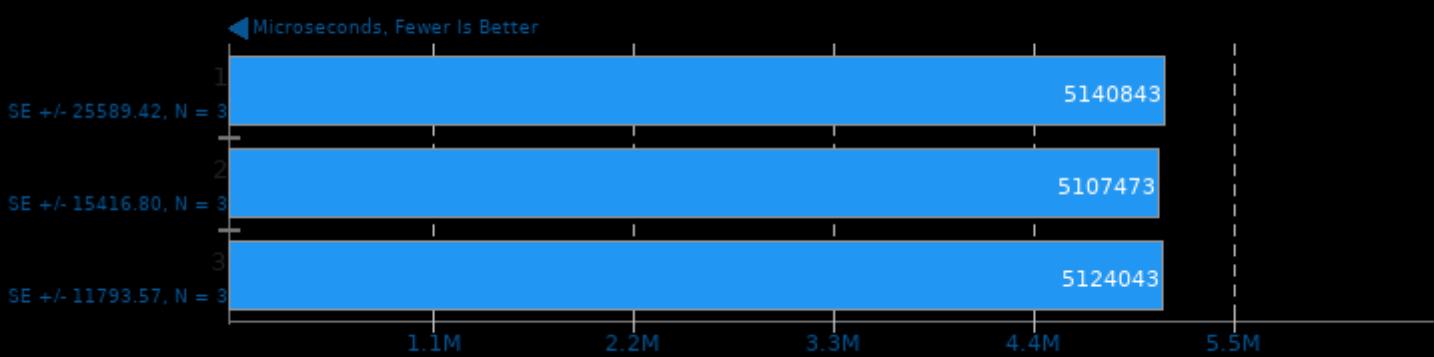
TensorFlow Lite 2020-08-23

Model: SqueezeNet



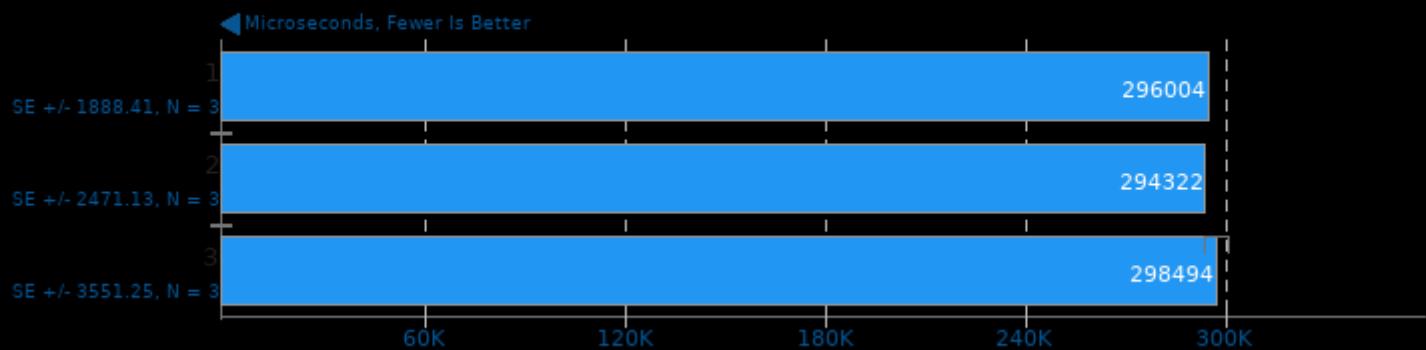
TensorFlow Lite 2020-08-23

Model: Inception V4



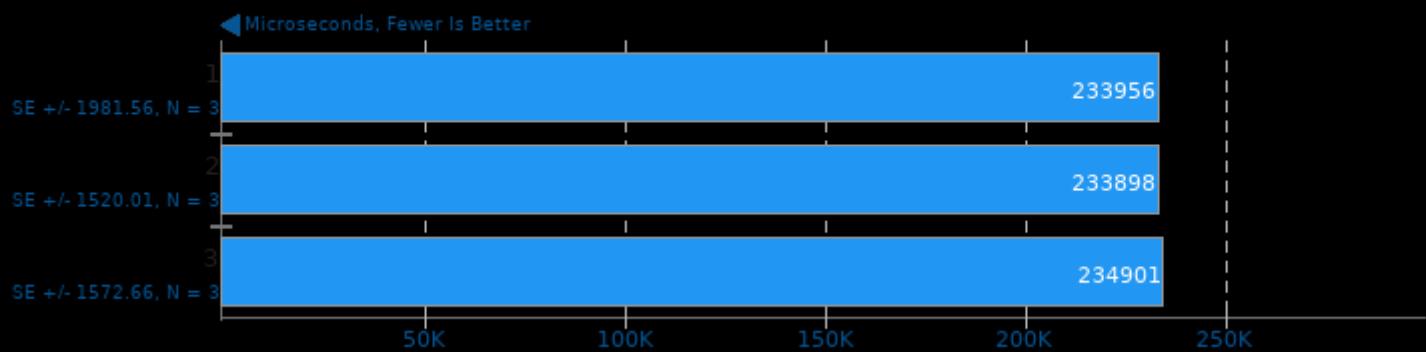
TensorFlow Lite 2020-08-23

Model: NASNet Mobile



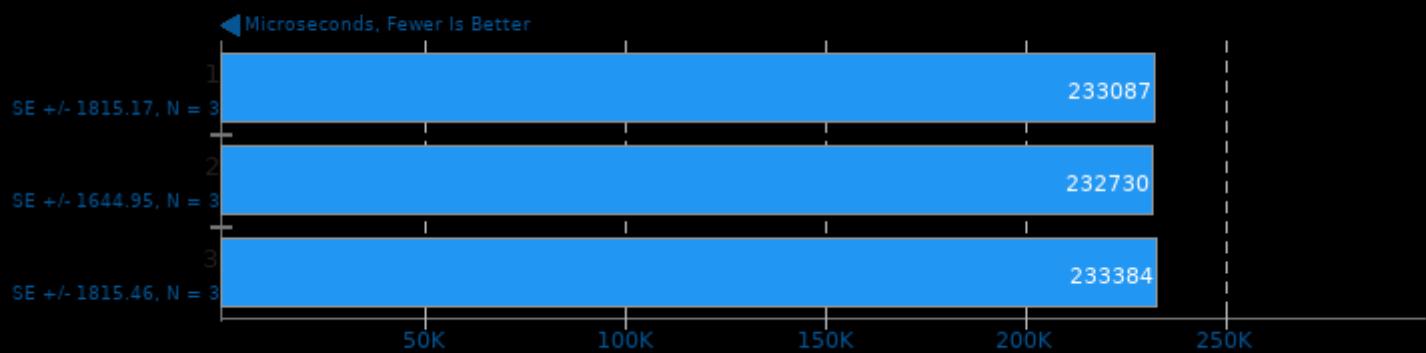
TensorFlow Lite 2020-08-23

Model: Mobilenet Float



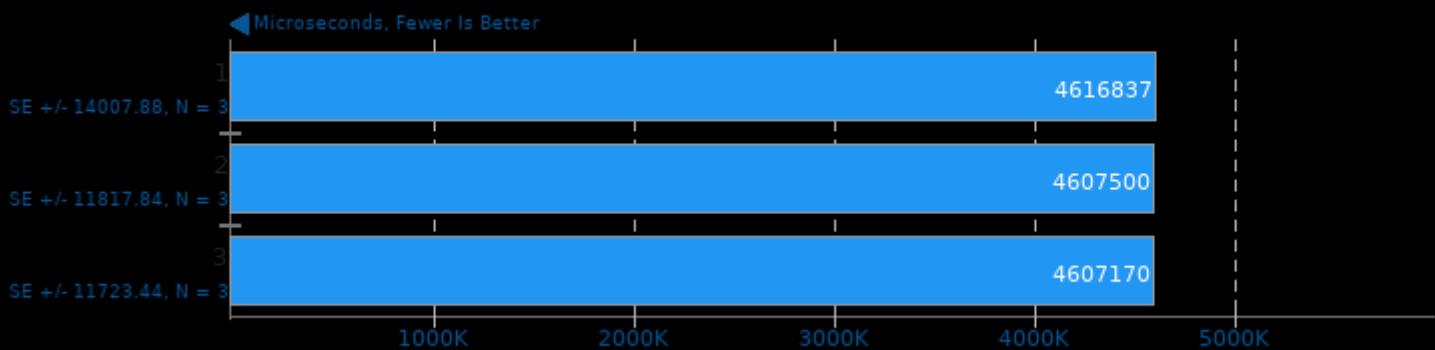
TensorFlow Lite 2020-08-23

Model: Mobilenet Quant



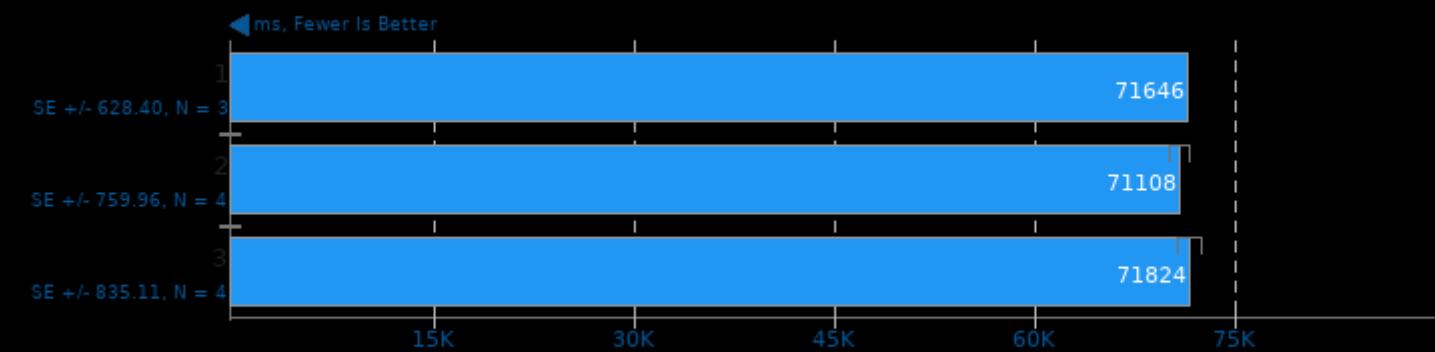
TensorFlow Lite 2020-08-23

Model: Inception ResNet V2



toyBrot Fractal Generator 2020-11-18

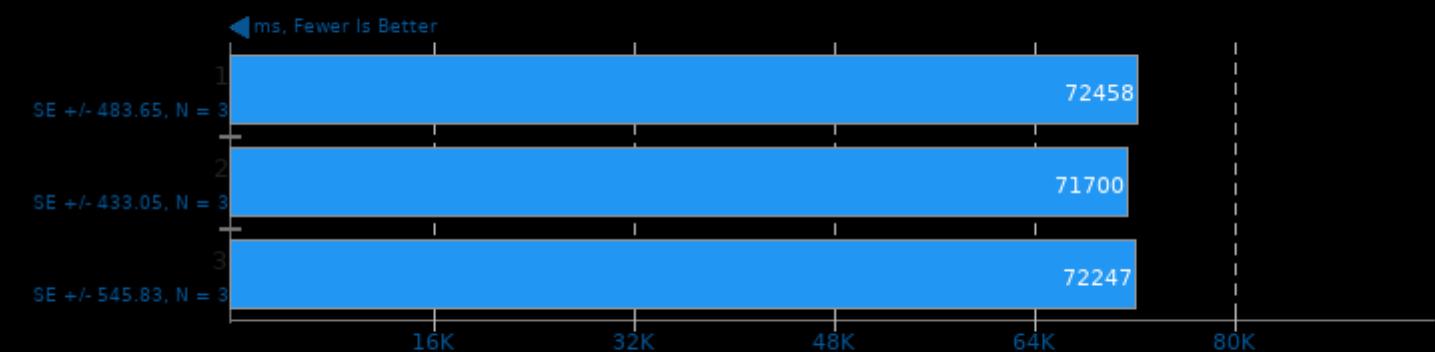
Implementation: TBB



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

toyBrot Fractal Generator 2020-11-18

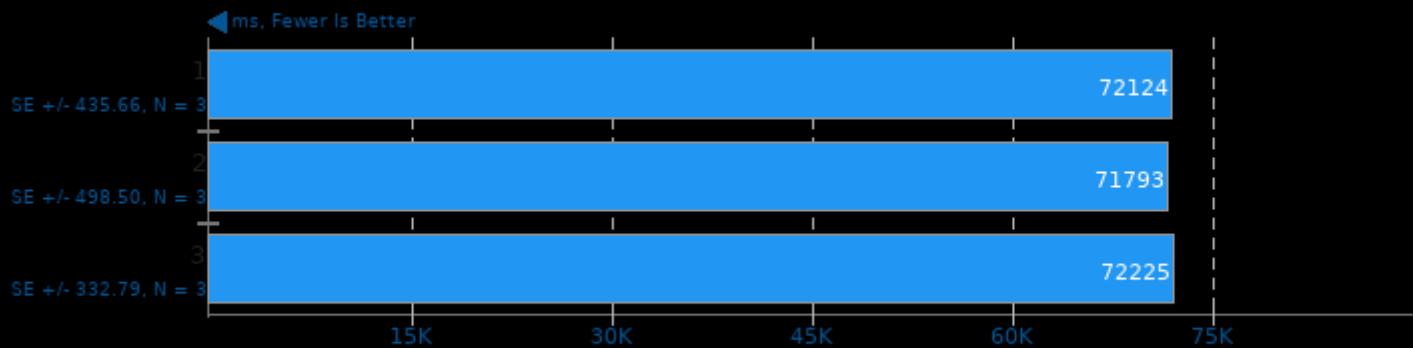
Implementation: OpenMP



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

toyBrot Fractal Generator 2020-11-18

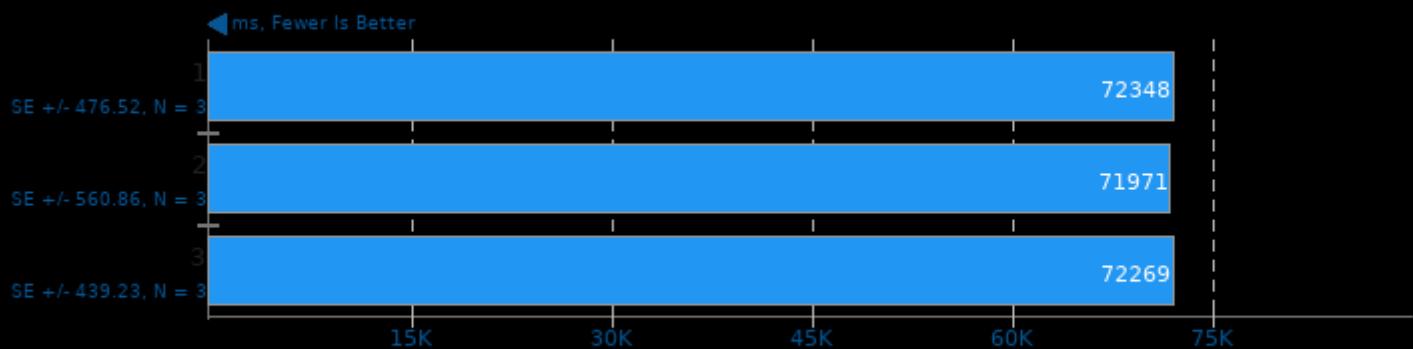
Implementation: C++ Tasks



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

toyBrot Fractal Generator 2020-11-18

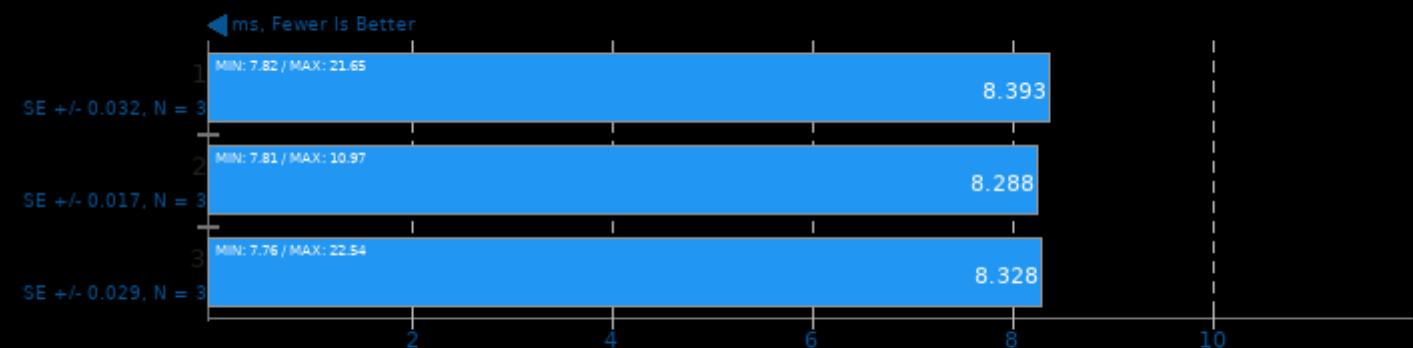
Implementation: C++ Threads



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

Mobile Neural Network 1.1.1

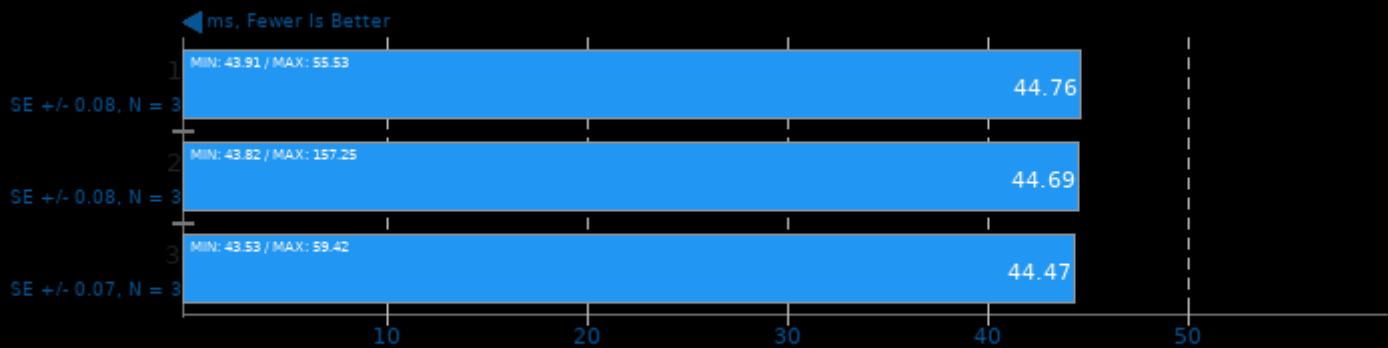
Model: SqueezeNetV1.0



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

Mobile Neural Network 1.1.1

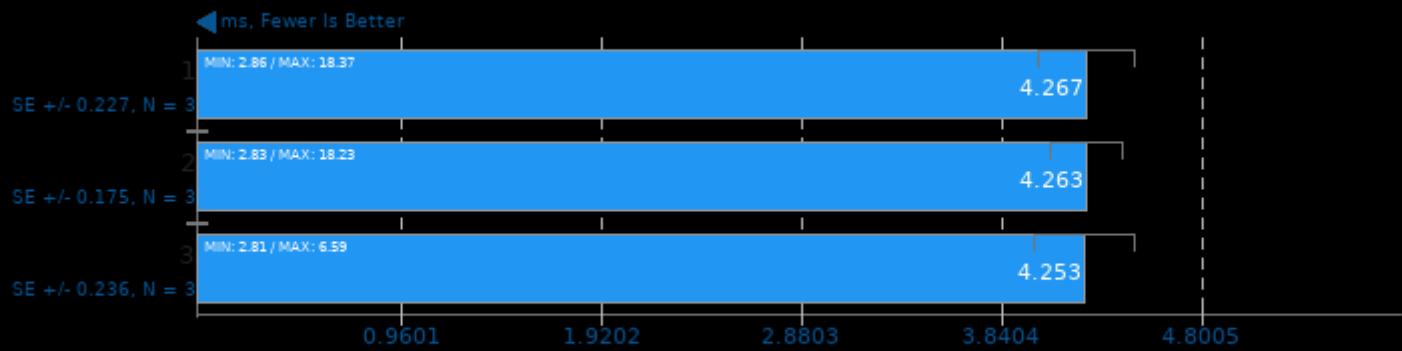
Model: resnet-v2-50



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

Mobile Neural Network 1.1.1

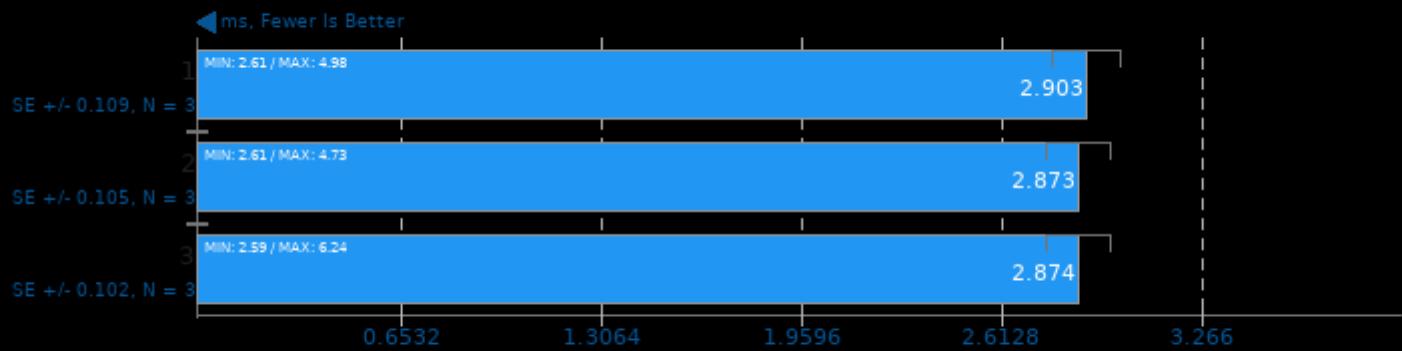
Model: MobileNetV2_224



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

Mobile Neural Network 1.1.1

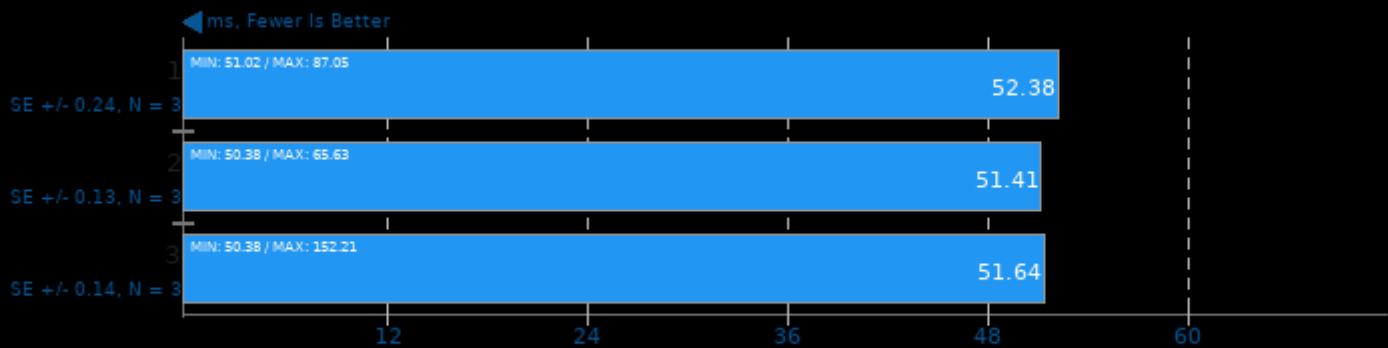
Model: mobilenet-v1-1.0



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

Mobile Neural Network 1.1.1

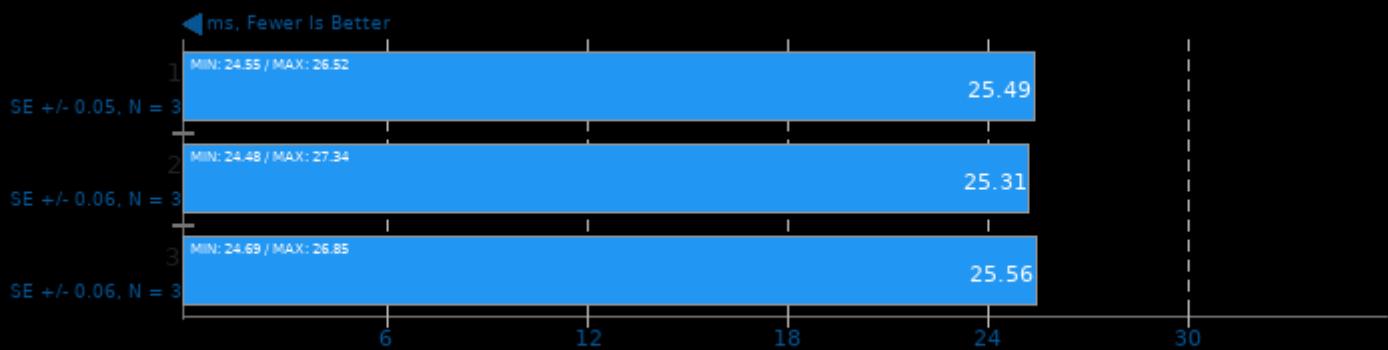
Model: inception-v3



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

NCNN 20201218

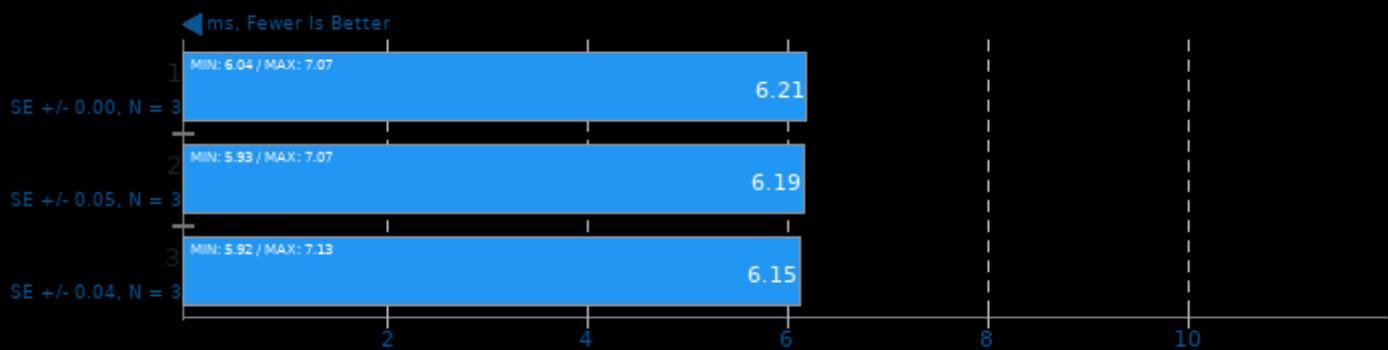
Target: CPU - Model: mobilenet



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

NCNN 20201218

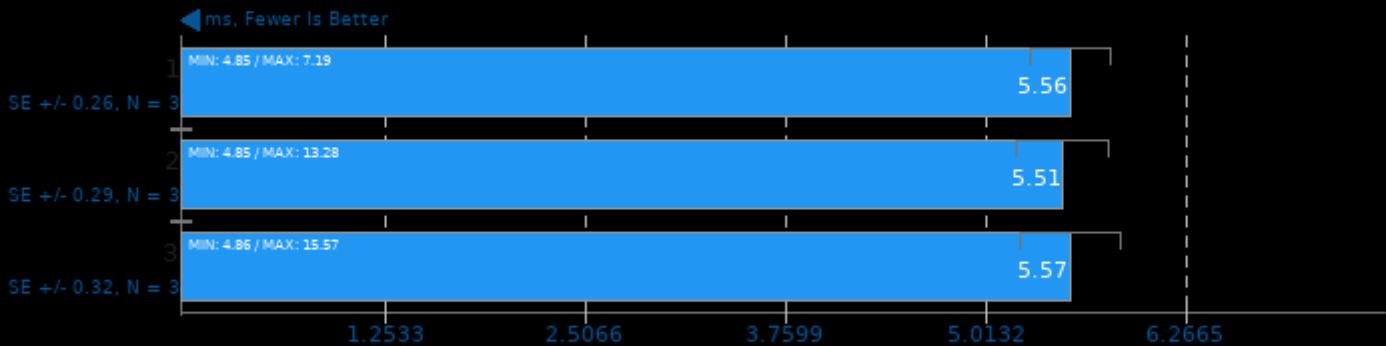
Target: CPU-v2-v2 - Model: mobilenet-v2



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

NCNN 20201218

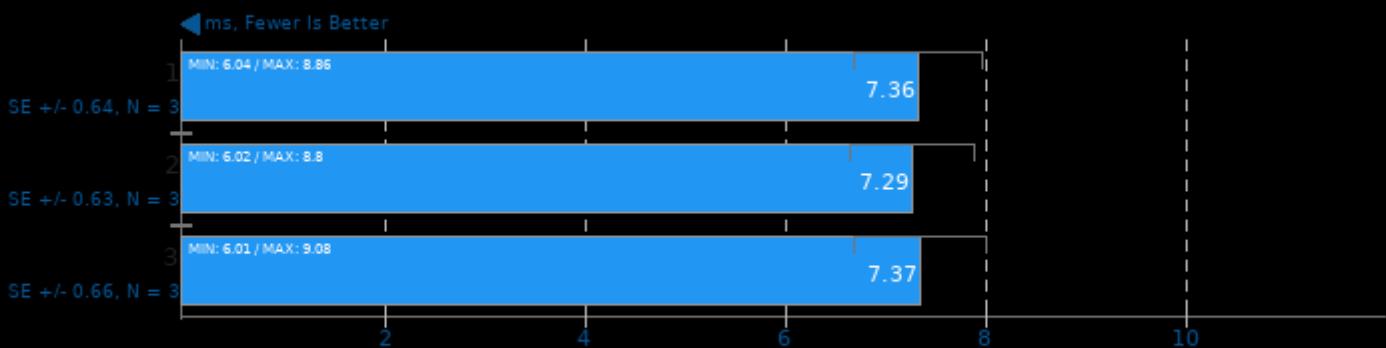
Target: CPU-v3-v3 - Model: mobilenet-v3



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

NCNN 20201218

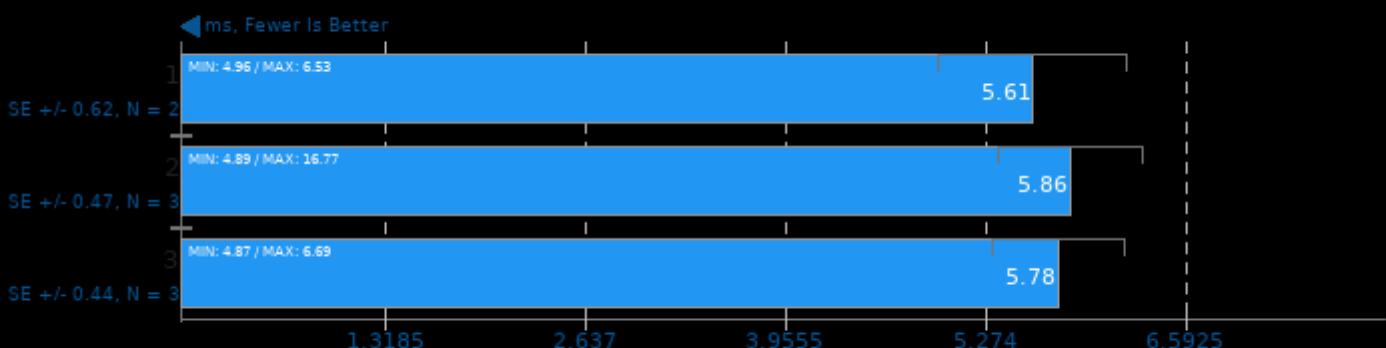
Target: CPU - Model: shufflenet-v2



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

NCNN 20201218

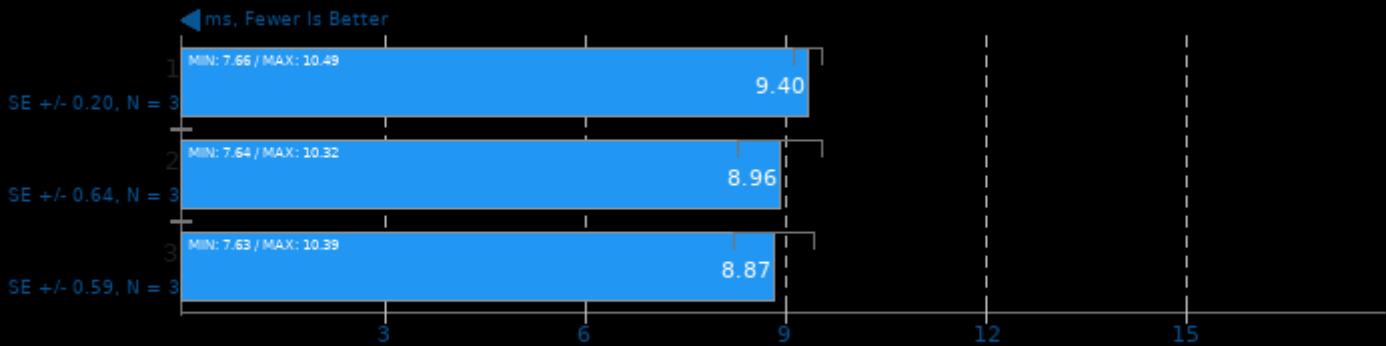
Target: CPU - Model: mnasnet



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

NCNN 20201218

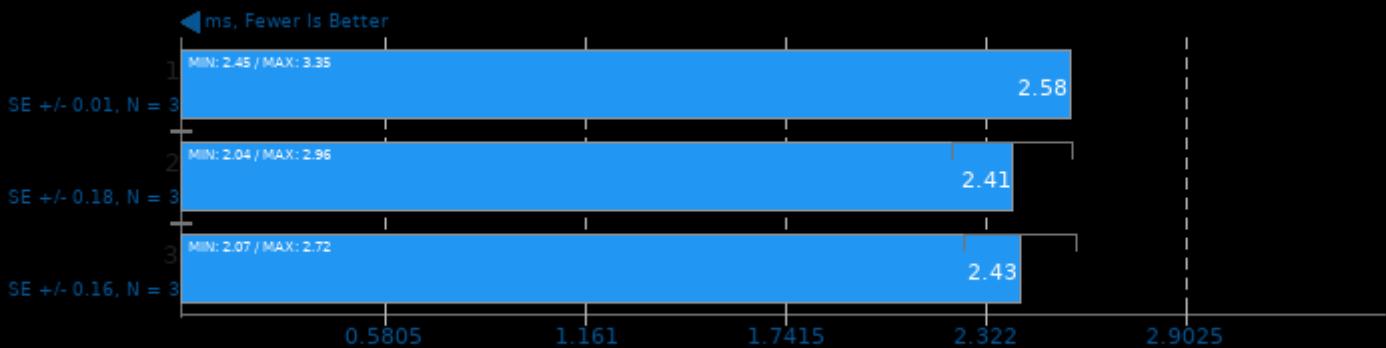
Target: CPU - Model: efficientnet-b0



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

NCNN 20201218

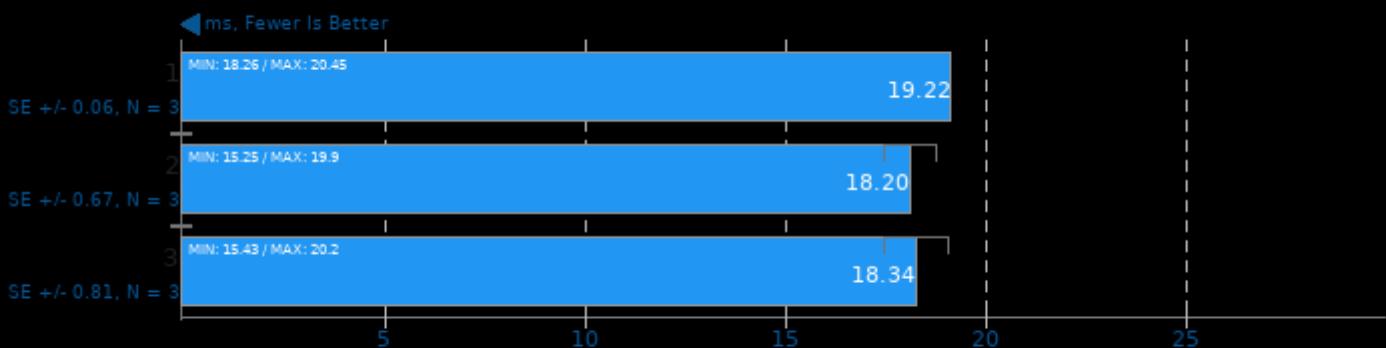
Target: CPU - Model: blazeface



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

NCNN 20201218

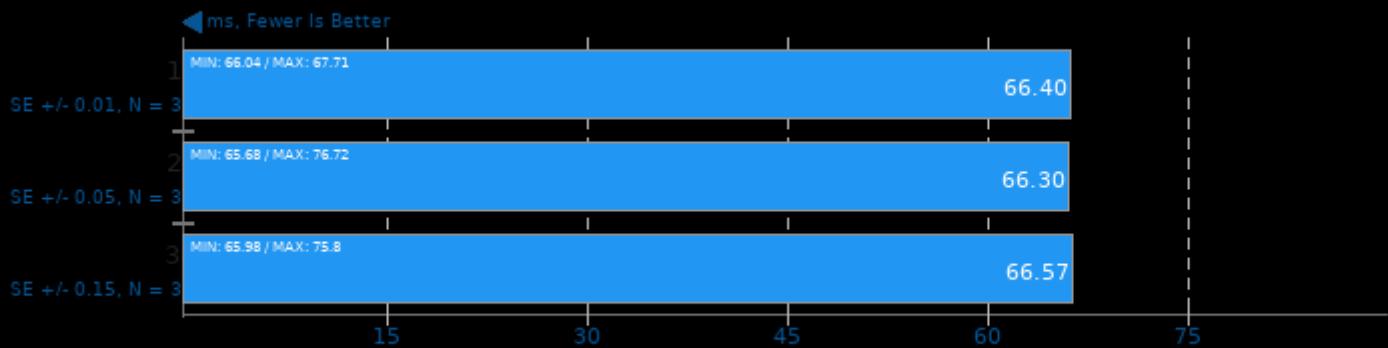
Target: CPU - Model: googlenet



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

NCNN 20201218

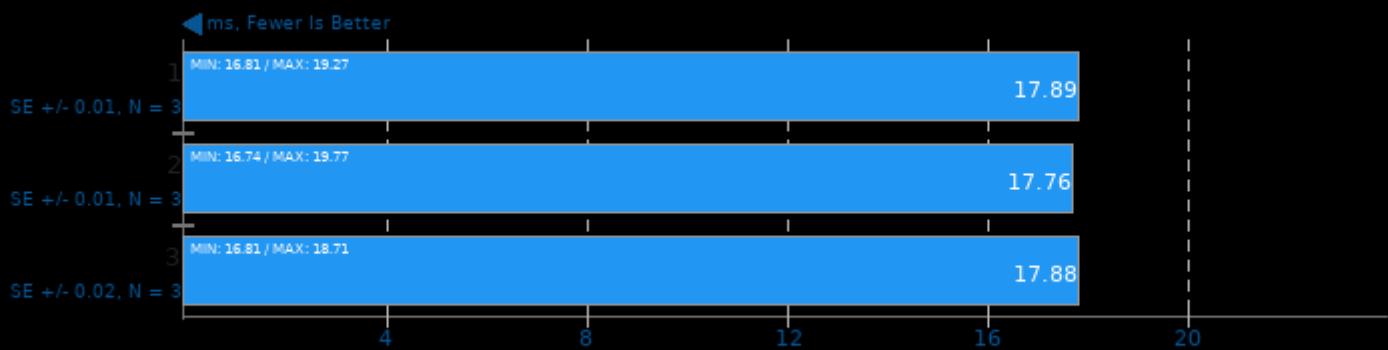
Target: CPU - Model: vgg16



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

NCNN 20201218

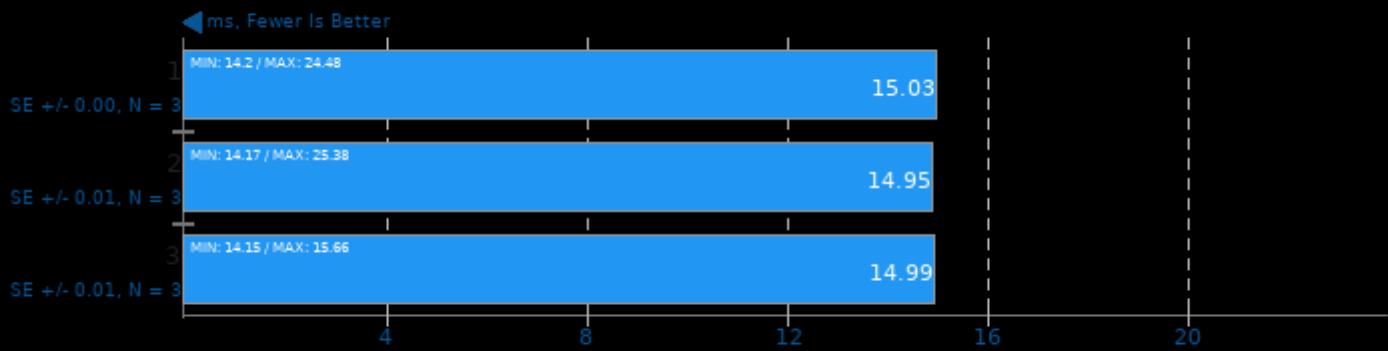
Target: CPU - Model: resnet18



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

NCNN 20201218

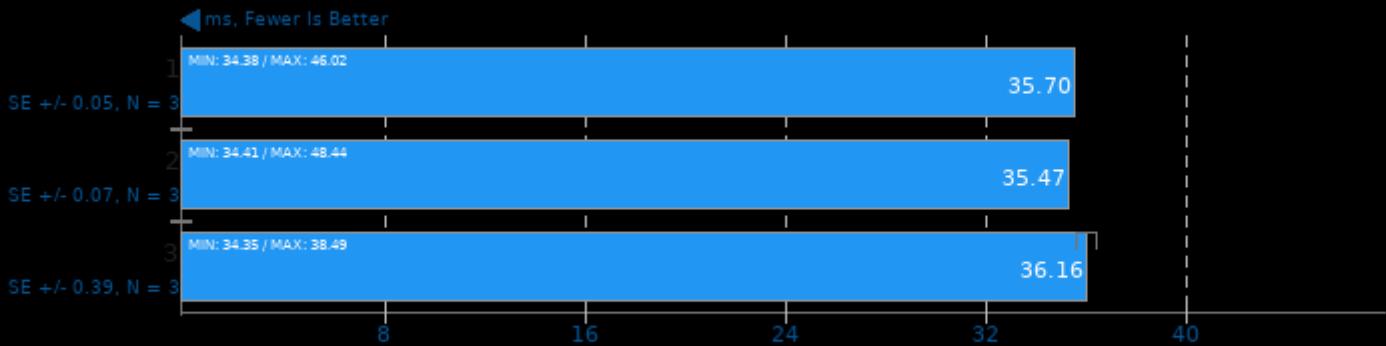
Target: CPU - Model: alexnet



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

NCNN 20201218

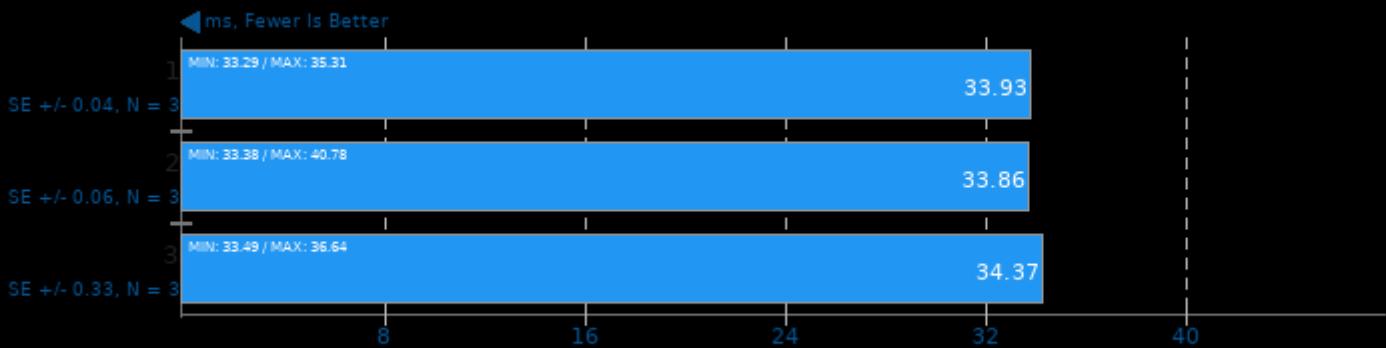
Target: CPU - Model: resnet50



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

NCNN 20201218

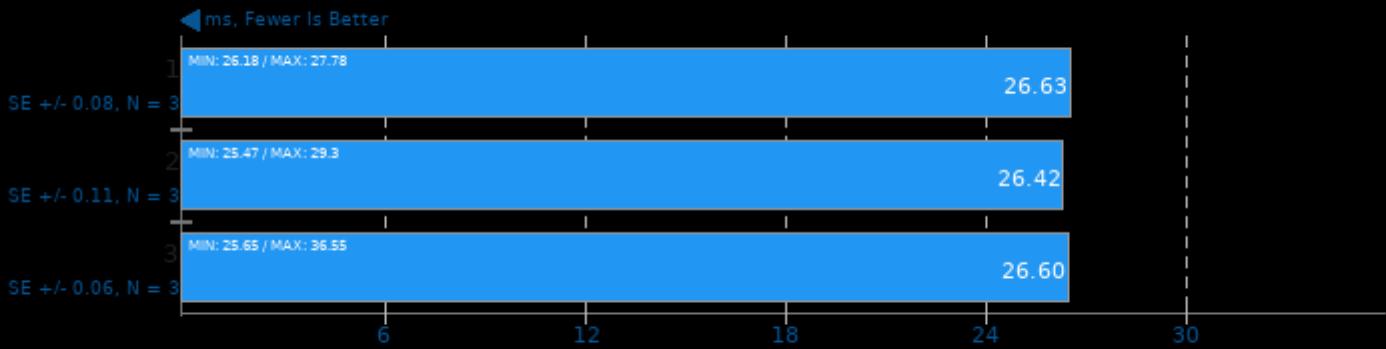
Target: CPU - Model: yolov4-tiny



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

NCNN 20201218

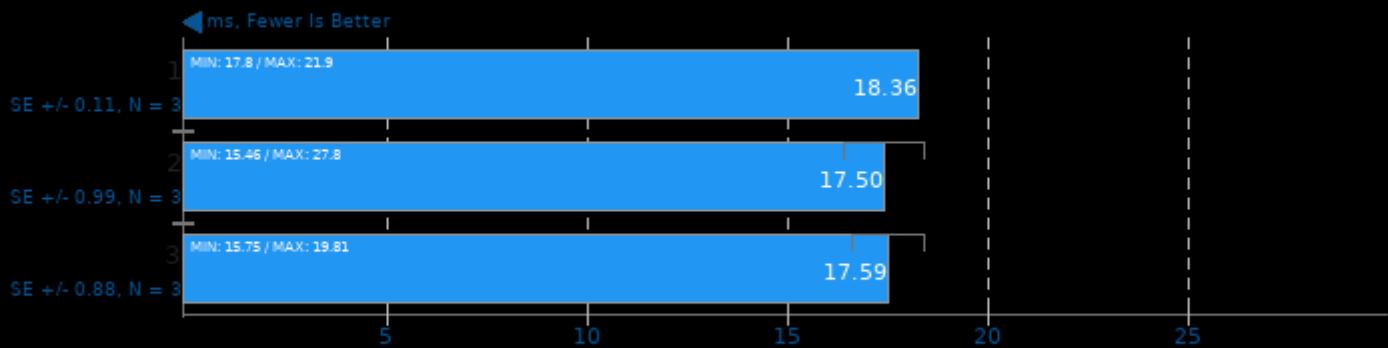
Target: CPU - Model: squeezezenet_ssd



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

NCNN 20201218

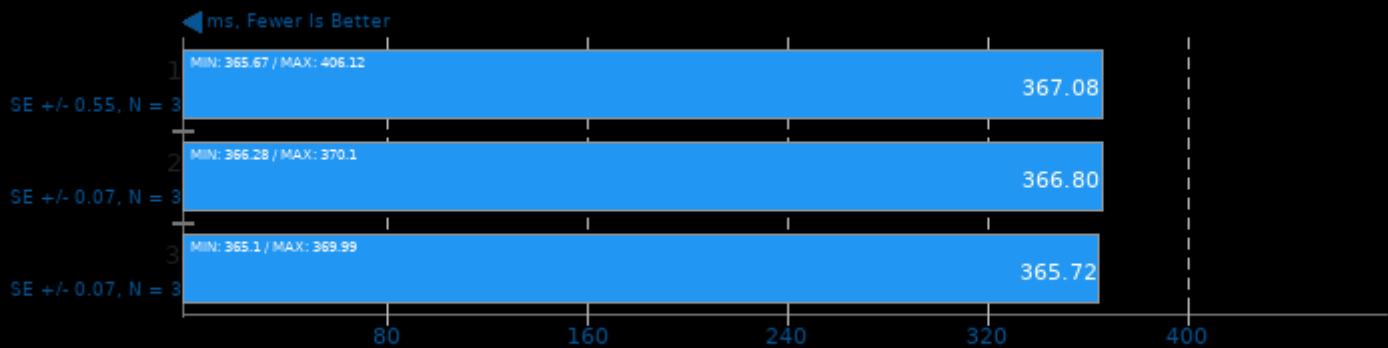
Target: CPU - Model: regnety_400m



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

TNN 0.2.3

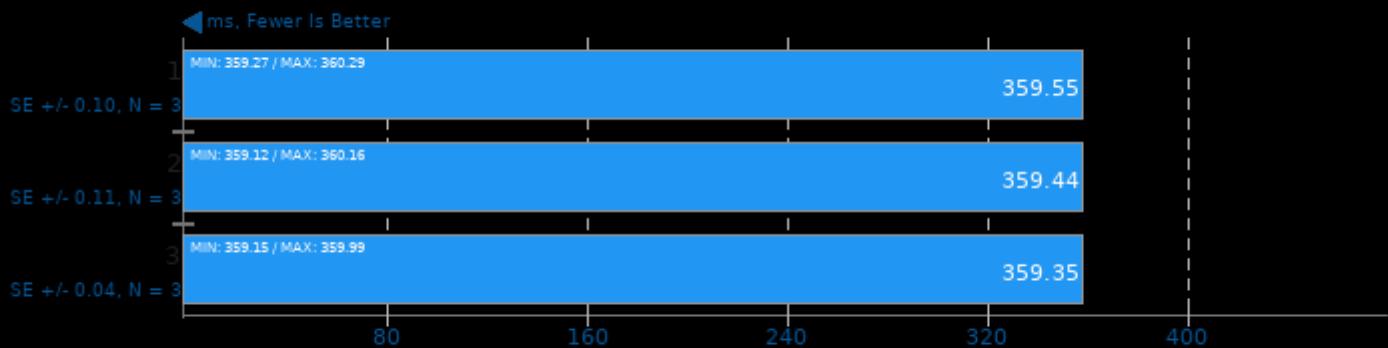
Target: CPU - Model: MobileNet v2



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

TNN 0.2.3

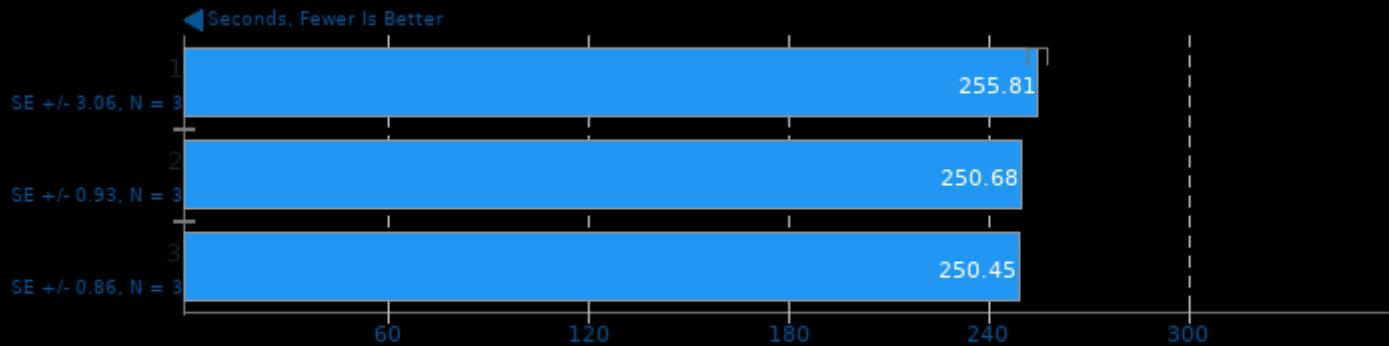
Target: CPU - Model: SqueezeNet v1.1



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

OpenFOAM 8

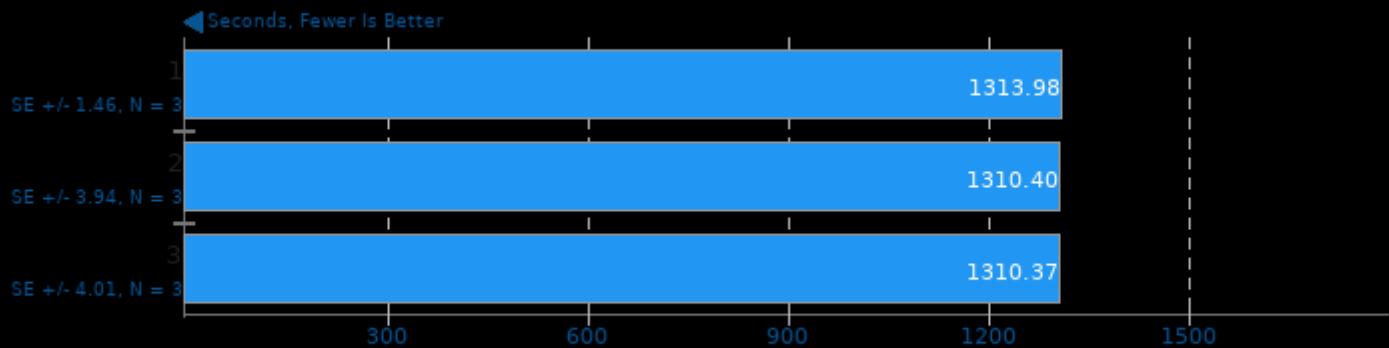
Input: Motorbike 30M



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

OpenFOAM 8

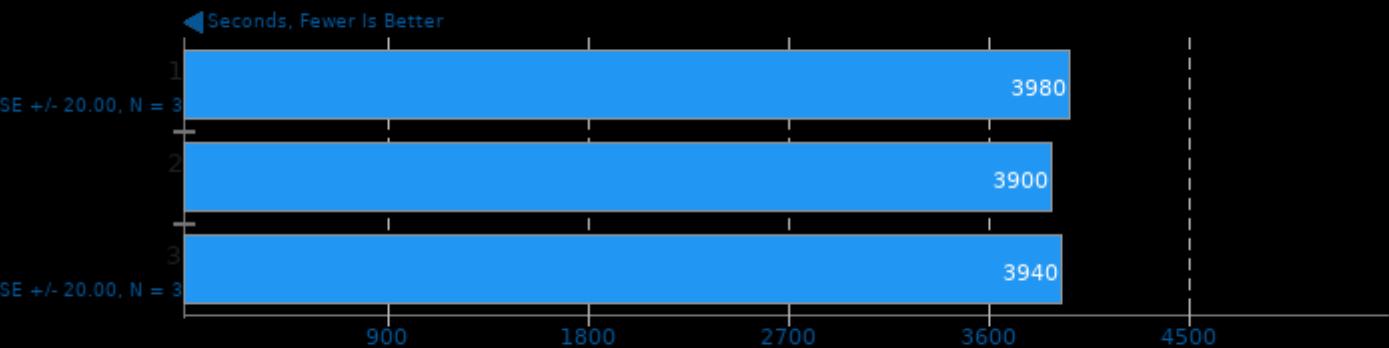
Input: Motorbike 60M



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

Quantum ESPRESSO 6.7

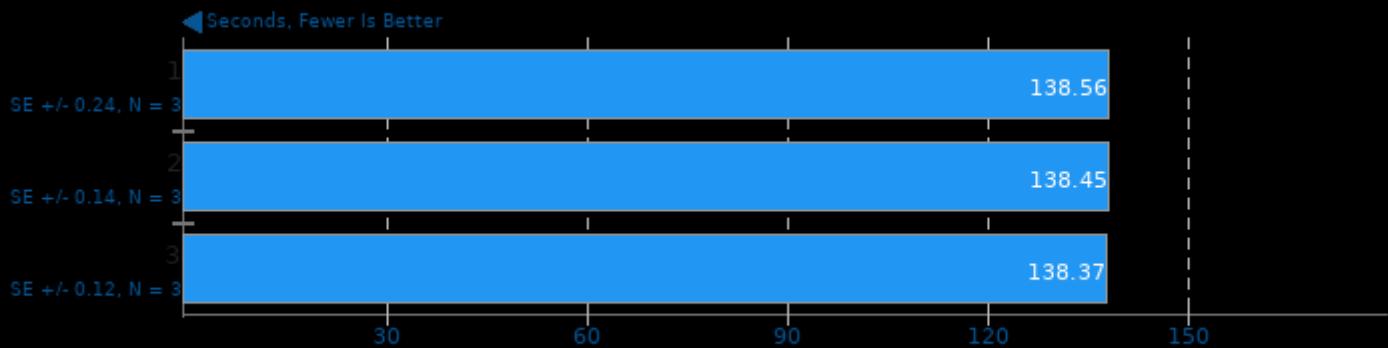
Input: AUSURF112



1. (F9X) gfortran options: -lopenblas -lFoX_dom -lFoX_sax -lFoX_wxml -lFoX_common -lFoX_utils -lFoX_fsys -lfftw3 -pthread -lmpi_usempif08 -lmpi_mpifh -

Ngspice 34

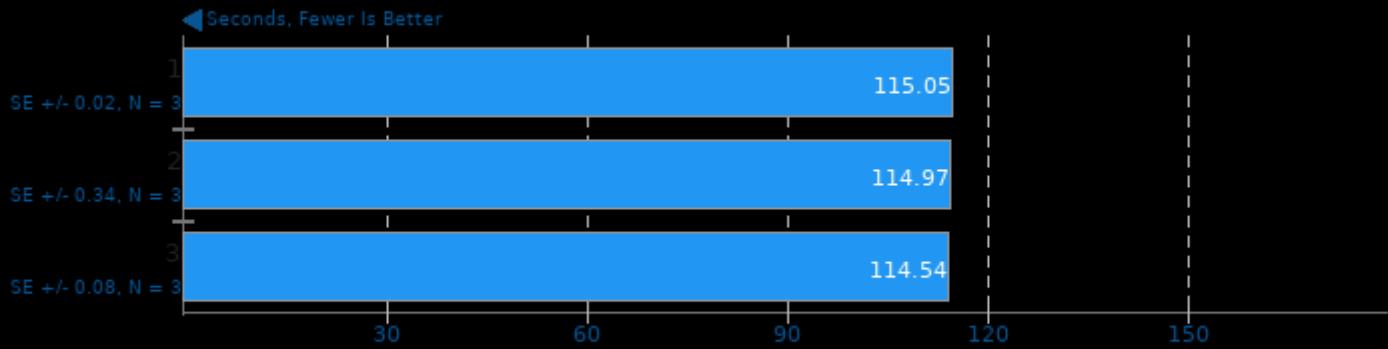
Circuit: C2670



1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -fftw3 -Ixaw -Xmu -Xt -Xext -X11 -lSM -lICE

Ngspice 34

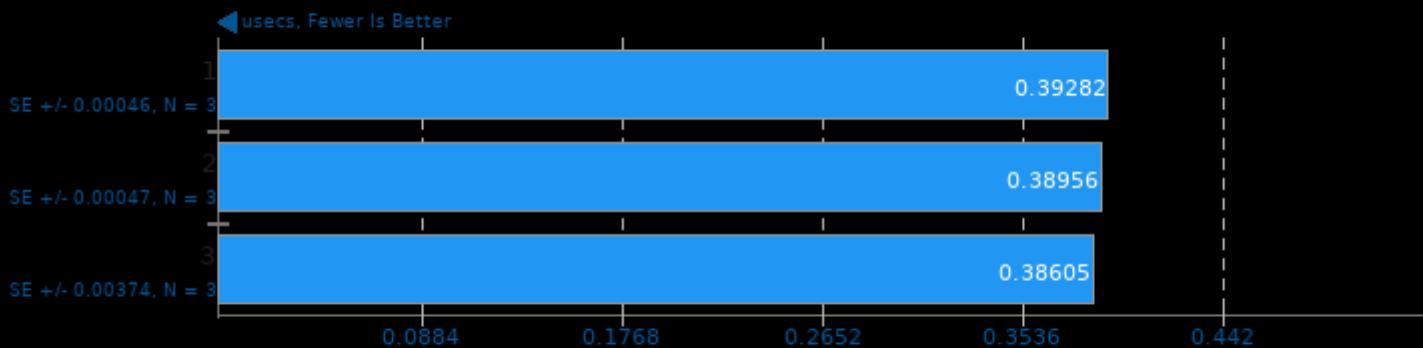
Circuit: C7552



1. (CC) gcc options: -O0 -fopenmp -lm -lstdc++ -fftw3 -Ixaw -Xmu -Xt -Xext -X11 -lSM -lICE

HPC Challenge 1.5.0

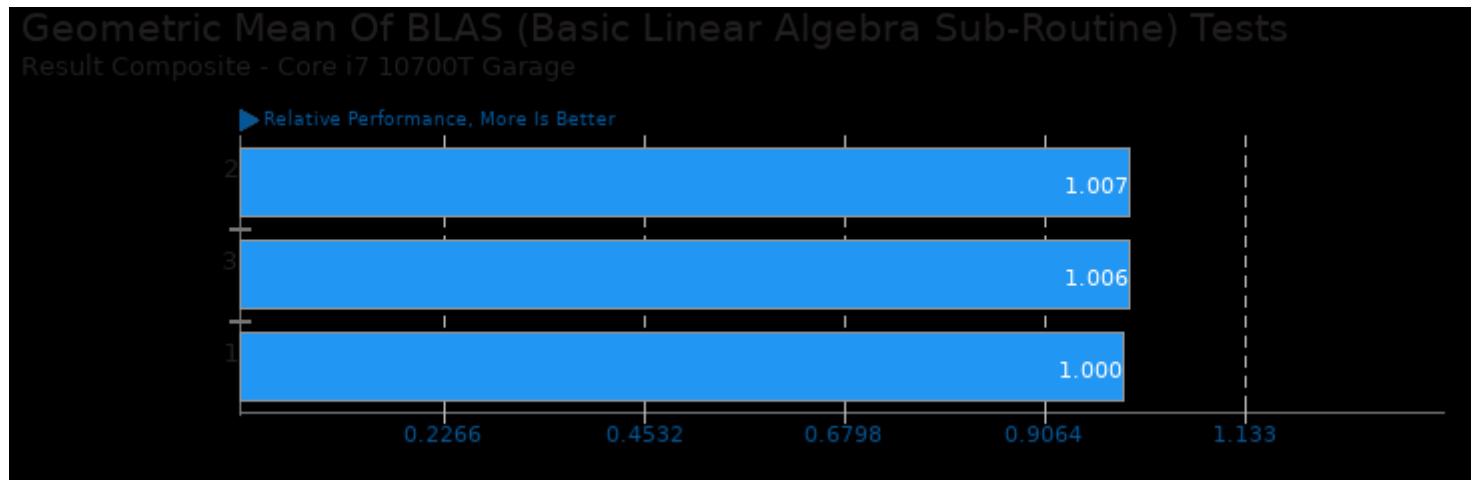
Test / Class: Random Ring Latency



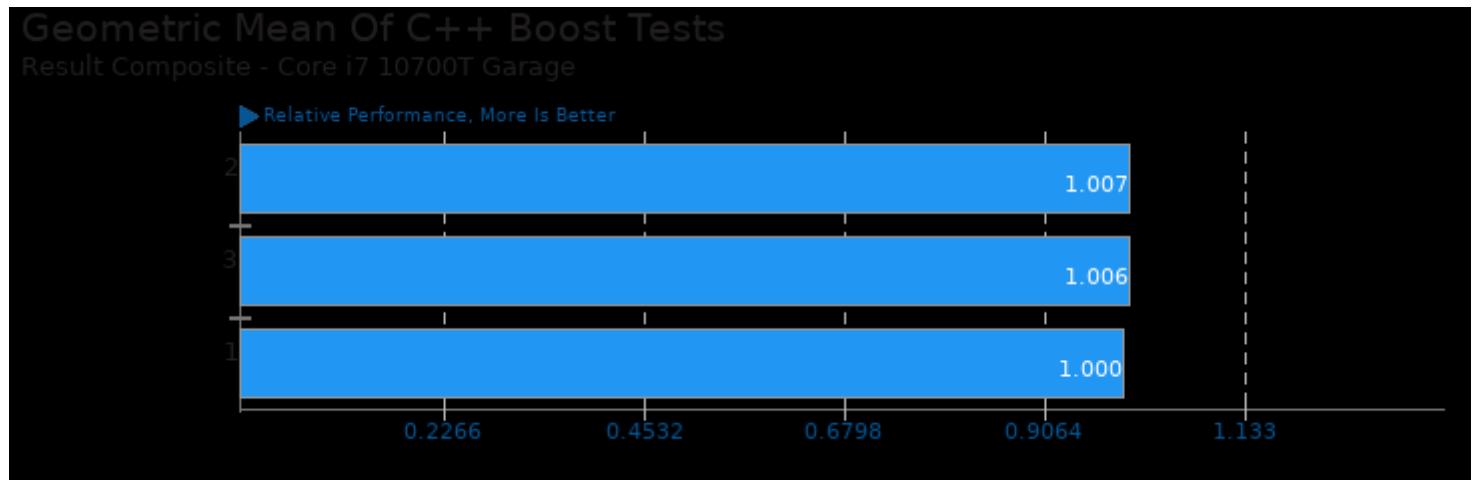
1. (CC) gcc options: -lblas -lm -pthread -lmpi -fomit-frame-pointer -funroll-loops

2. ATLAS + Open MPI 4.0.3

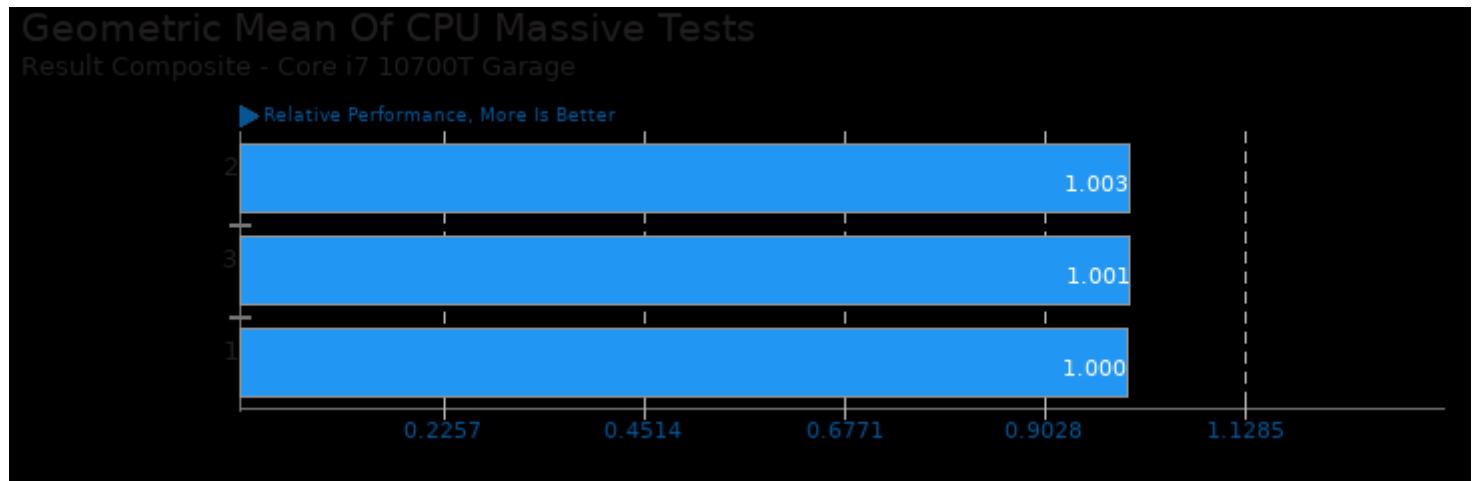
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/hpcc and pts/qe



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

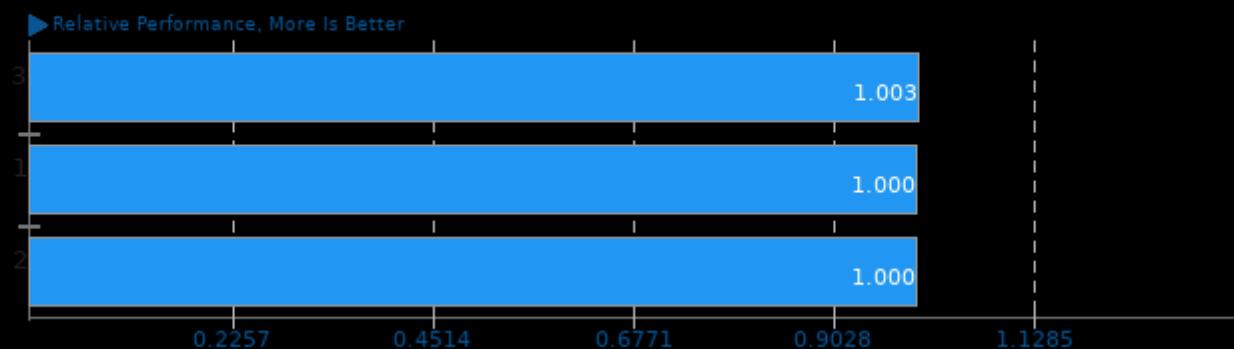


Geometric mean based upon tests: pts/hpcc, pts/hpcg, pts/lzbench, pts/npb and pts/cpuminer-opt

Core i7 10700T Garage

Geometric Mean Of Creator Workloads Tests

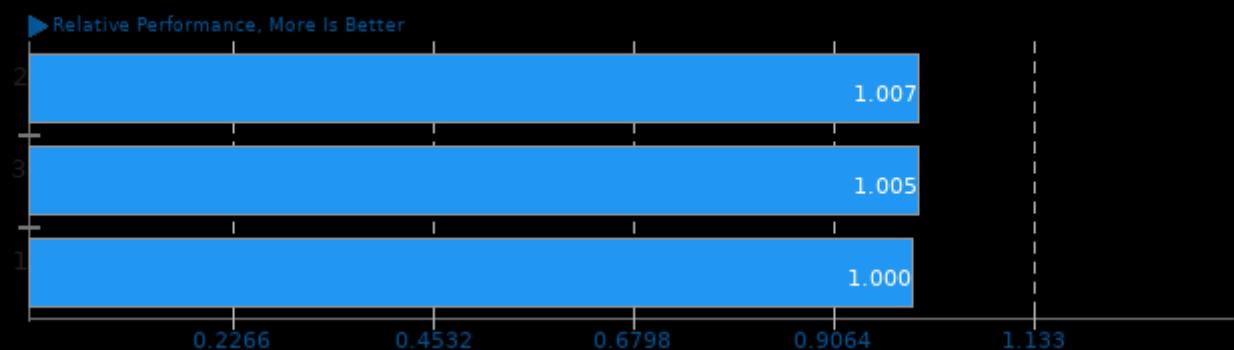
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/jpegxl, pts/jpegxl-decode, pts/etcpak, pts/synthmark and pts/ngspice

Geometric Mean Of Fortran Tests

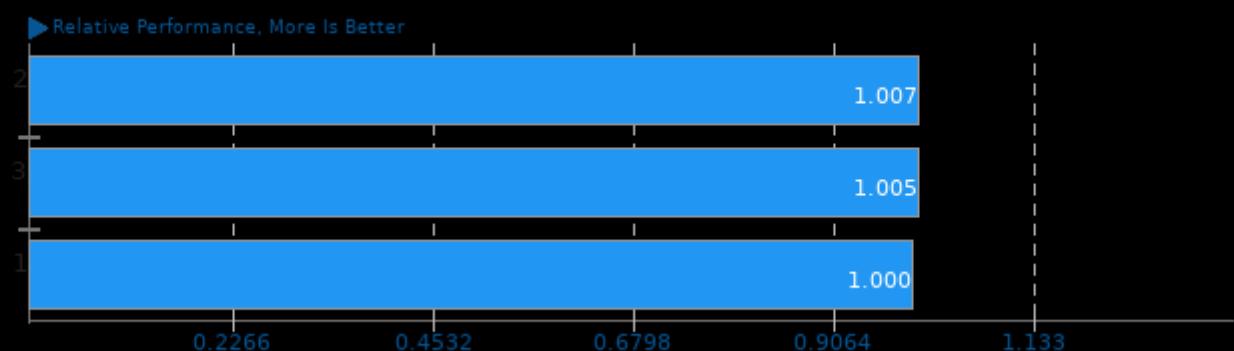
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/hpcc, pts/hpcg, pts/npb and pts/qe

Geometric Mean Of HPC - High Performance Computing Tests

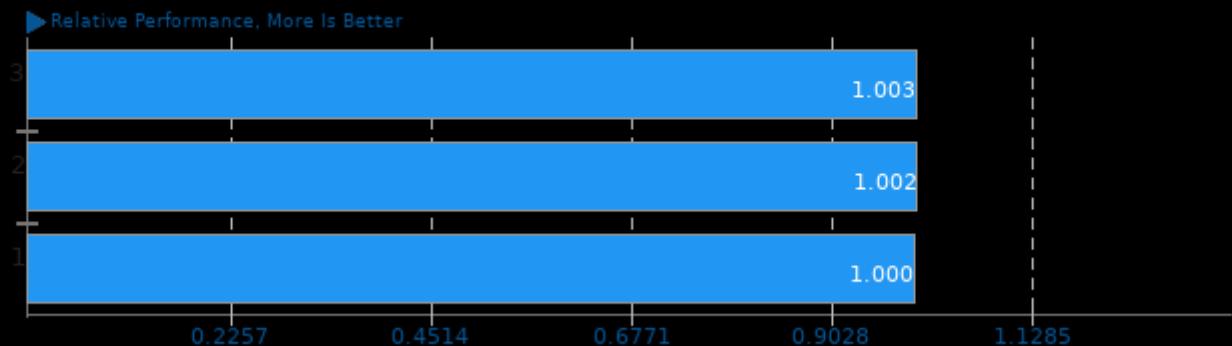
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/npb, pts/hpcc, pts/hpcg, pts/askap, pts/qe, pts/openfoam, pts/mnn, pts/ncnn, pts/tnn, pts/tensorflow-lite and pts/onnx

Geometric Mean Of Imaging Tests

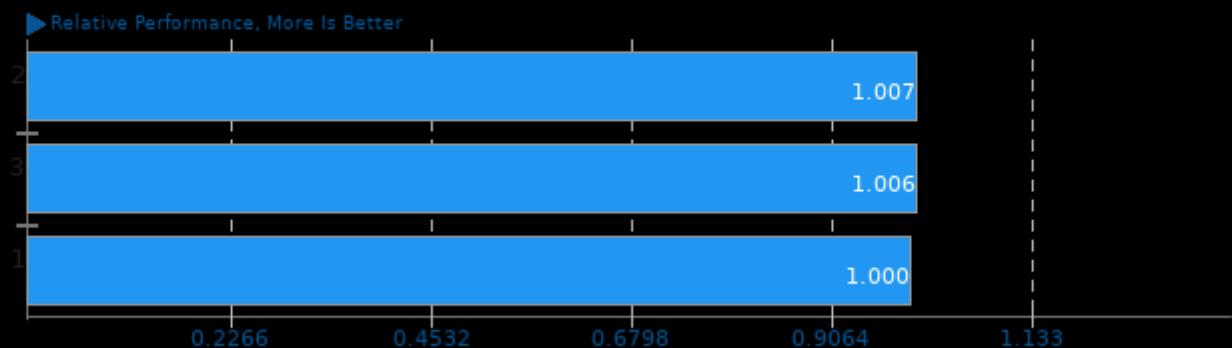
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/jpegxl and pts/jpegxl-decode

Geometric Mean Of LAPACK (Linear Algebra Pack) Tests

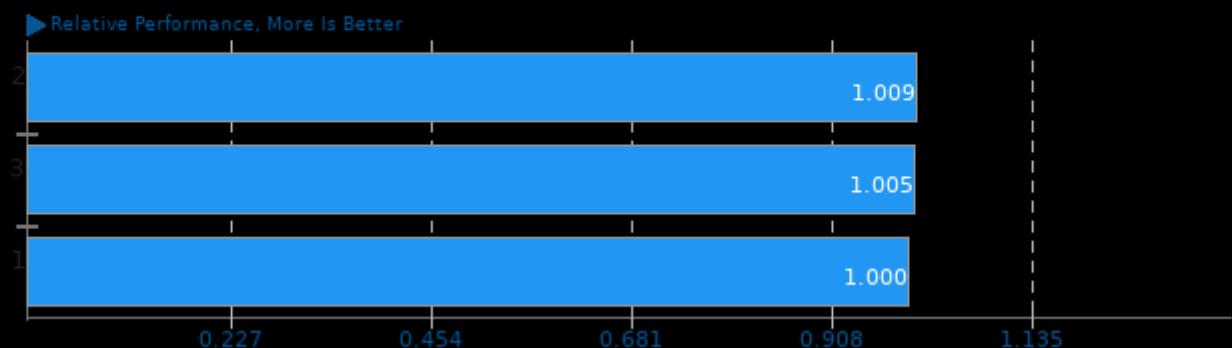
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/hpcc and pts/qe

Geometric Mean Of Machine Learning Tests

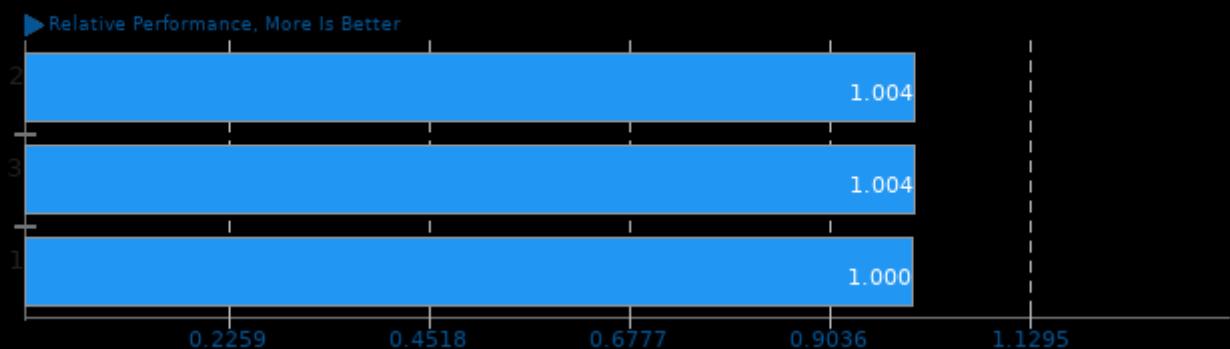
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/mnn, pts/ncnn, pts/tnn, pts/tensorflow-lite and pts/onnxml

Geometric Mean Of MPI Benchmarks Tests

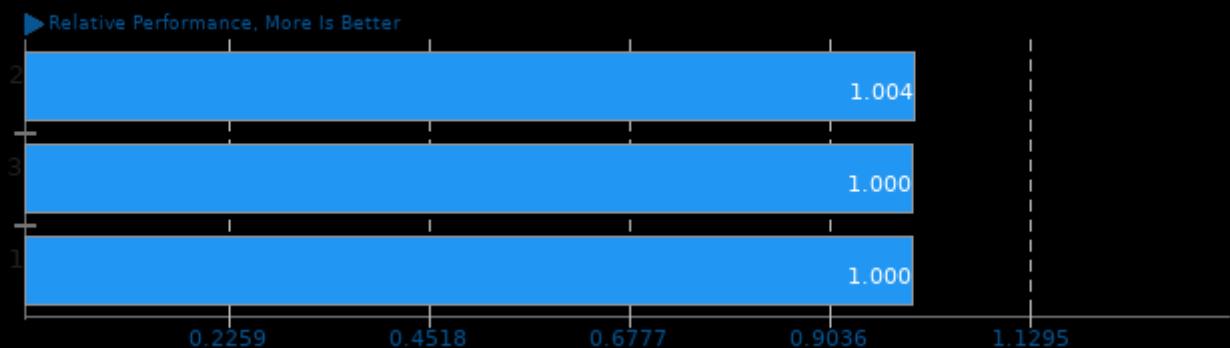
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/askap, pts/hpcc, pts/hpcg and pts/npb

Geometric Mean Of Multi-Core Tests

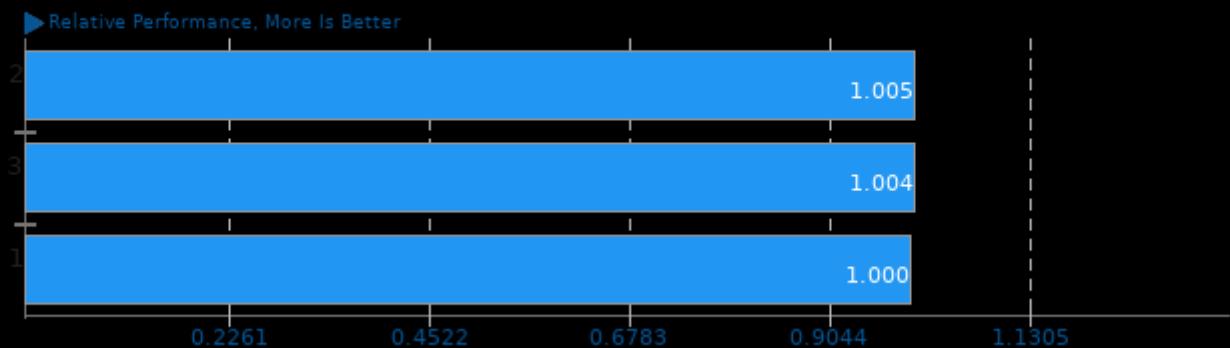
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/cpuminer-opt, pts/askap, pts/npb and pts/hpcg

Geometric Mean Of OpenMPI Tests

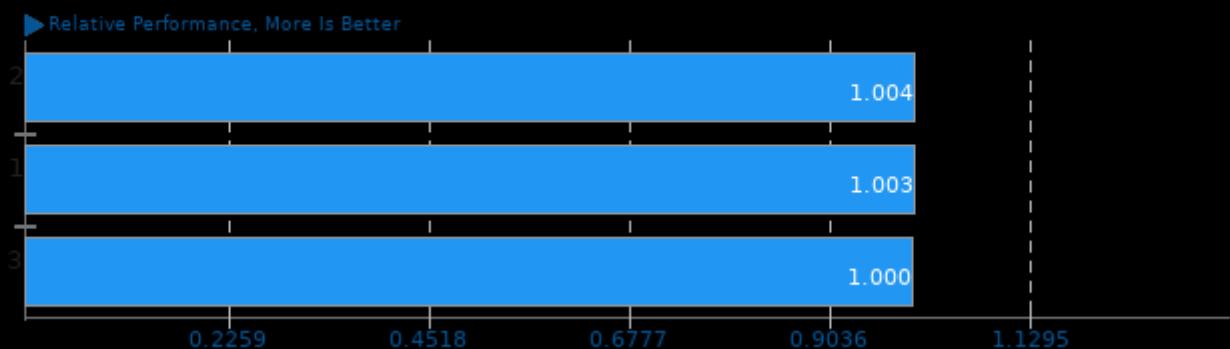
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/hpcc, pts/hpcg, pts/askap, pts/npb, pts/openfoam and pts/qe

Geometric Mean Of Python Tests

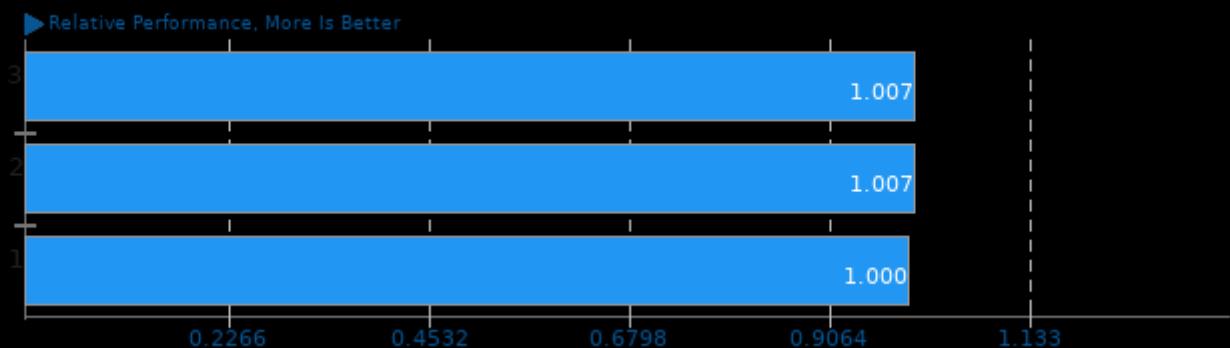
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/onnx and pts/stream-dynamic

Geometric Mean Of Scientific Computing Tests

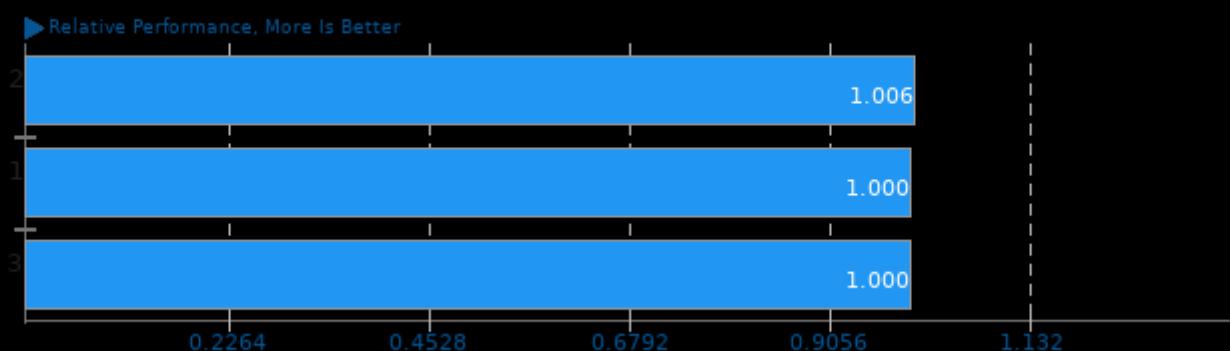
Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/hpcc, pts/openfoam and pts/qe

Geometric Mean Of Server CPU Tests

Result Composite - Core i7 10700T Garage



Geometric mean based upon tests: pts/npb and pts/cpuminer-opt

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 04:18.