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cascade lake refresh

2 x Intel Xeon Gold 5220R testing with a TYAN S7106 (V2.01.B40 BIOS) and ASPEED on Ubuntu 20.04 via the Phoronix Test Suite.

Automated Executive Summary

a had the most wins, coming in first place for 66% of the tests.

Based on the geometric mean of all complete results, the fastest (a) was 1.018x the speed of the slowest (b).

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

PostgreSQL (Scaling Factor: 100 - Clients: 1 - Mode: Read Write) at 2.058x
PostgreSQL (Scaling Factor: 100 - Clients: 1 - Mode: Read Write - Average Latency) at 2.056x
PostgreSQL (Scaling Factor: 1 - Clients: 250 - Mode: Read Write - Average Latency) at 1.742x
PostgreSQL (Scaling Factor: 1 - Clients: 250 - Mode: Read Write) at 1.74x
Apache Spark (Row Count: 1000000 - Partitions: 100 - Broadcast Inner Join Test Time) at 1.623x
Apache Spark (Row Count: 1000000 - Partitions: 100 - Repartition Test Time) at 1.555x
PostgreSQL (Scaling Factor: 1 - Clients: 500 - Mode: Read Write) at 1.478x
PostgreSQL (Scaling Factor: 1 - Clients: 500 - Mode: Read Write - Average Latency) at 1.475x
Apache Spark (Row Count: 1000000 - Partitions: 2000 - Broadcast Inner Join Test Time) at 1.46x
PostgreSQL (Scaling Factor: 1 - Clients: 100 - Mode: Read Write) at 1.445x.

Test Systems:

a

b

Processor: 2 x Intel Xeon Gold 5220R @ 3.90GHz (36 Cores / 72 Threads), Motherboard: TYAN S7106 (V2.01.B40 BIOS), Chipset: Intel Sky Lake-E DMI3 Registers, Memory: 94GB, Disk: 500GB Samsung SSD 860, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel I210 + 2 x QLogic cLOM8214 1/10GbE

OS: Ubuntu 20.04, Kernel: 5.9.0-050900rc6-generic (x86_64) 20200920, Desktop: GNOME Shell 3.36.4, Display Server: X Server 1.20.13, Compiler: GCC 9.4.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-Av3uEd/gcc-9-9.4.0/debian/tmp-nvptx/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
Disk Notes: MQ-DEADLINE / errors=remount-ro,relatime,rw / Block Size: 4096
Processor Notes: Scaling Governor: intel_pstate powersave (EPP: balance_performance) - CPU Microcode: 0x5003102
Java Notes: OpenJDK Runtime Environment (build 11.0.17+8-post-Ubuntu-1ubuntu220.04)
Python Notes: Python 2.7.18 + Python 3.8.10
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/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Mitigation of TSX disabled

	a	b
7-Zip Compression - Compression Rating (MIPS)	**171677**	**169842**
Normalized	100%	98.93%
7-Zip Compression - D.R (MIPS)	**158350**	**157899**
Normalized	100%	99.72%
Aircrack-ng (k/s)	**99754**	**98830**
Normalized	100%	99.07%
AOM AV1 - Speed 0 Two-Pass - Bosphorus 4K (FPS)	0.27	0.27
AOM AV1 - Speed 4 Two-Pass - Bosphorus 4K (FPS)	**5.62**	**5.94**
Normalized	94.61%	100%
AOM AV1 - Speed 6 Realtime - Bosphorus 4K (FPS)	**13.58**	**13.24**
Normalized	100%	97.5%
AOM AV1 - Speed 6 Two-Pass - Bosphorus 4K (FPS)	**9.12**	**9.08**
Normalized	100%	99.56%
AOM AV1 - Speed 8 Realtime - Bosphorus 4K (FPS)	**16.04**	**16.23**
Normalized	98.83%	100%
AOM AV1 - Speed 9 Realtime - Bosphorus 4K (FPS)	**22.76**	**22.59**
Normalized	100%	99.25%
AOM AV1 - Speed 10 Realtime - Bosphorus 4K (FPS)	**22.89**	**22.75**
Normalized	100%	99.39%
AOM AV1 - Speed 0 Two-Pass - Bosphorus 1080p	**0.72**	**0.73**
Normalized	98.63%	100%
AOM AV1 - Speed 4 Two-Pass - Bosphorus 1080p	10.53	10.53
AOM AV1 - Speed 6 Realtime - Bosphorus 1080p	**23.87**	**26.43**
Normalized	90.31%	100%

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AOM AV1 - Speed 6 Two-Pass - Bosphorus 1080p	19.6	20.13
Normalized	97.37%	100%
AOM AV1 - Speed 8 Realtime - Bosphorus 1080p	38.05	37.75
Normalized	100%	99.21%
AOM AV1 - Speed 9 Realtime - Bosphorus 1080p	46.5	46.38
Normalized	100%	99.74%
AOM AV1 - Speed 10 Realtime - Bosphorus 1080p	48.3	46.73
Normalized	100%	96.75%
Apache Spark - 1000000 - 100 - S.S.B.T (sec)	5.07	5.07
Apache Spark - 1000000 - 100 - C.P.B (sec)	66.06	65.95
Normalized	99.83%	100%
Apache Spark - 1000000 - 100 - C.P.B.U.D (sec)	4.69	4.71
Normalized	100%	99.58%
Apache Spark - 1000000 - 100 - Group By Test Time (sec)	6.47	6.24
Normalized	96.45%	100%
Apache Spark - 1000000 - 100 - R.T.T (sec)	2.63	4.09
Normalized	100%	64.3%
Apache Spark - 1000000 - 100 - I.J.T.T (sec)	3.23	2.84
Normalized	87.93%	100%
Apache Spark - 1000000 - 100 - B.I.J.T.T (sec)	2.50	1.54
Normalized	61.6%	100%
Apache Spark - 1000000 - 2000 - S.S.B.T (sec)	5.48	5.71
Normalized	100%	95.97%
Apache Spark - 1000000 - 2000 - C.P.B (sec)	64.825399416	65.80
Normalized	100%	98.52%
Apache Spark - 1000000 - 2000 - C.P.B.U.D (sec)	4.78	4.85
Normalized	100%	98.56%
Apache Spark - 1000000 - 2000 - Group By Test Time (sec)	8.24	7.68
Normalized	93.2%	100%
Apache Spark - 1000000 - 2000 - R.T.T (sec)	5.61	5.16
Normalized	91.98%	100%
Apache Spark - 1000000 - 2000 - I.J.T.T (sec)	4.67	5.81
Normalized	100%	80.38%
Apache Spark - 1000000 - 2000 - B.I.J.T.T (sec)	4.26	6.22
Normalized	100%	68.49%
ASTC Encoder - Fast (MT/s)	364.5543	364.3485
Normalized	100%	99.94%
ASTC Encoder - Medium (MT/s)	138.0913	136.6876
Normalized	100%	98.98%
ASTC Encoder - Thorough (MT/s)	18.0603	18.0936
Normalized	99.82%	100%
ASTC Encoder - Exhaustive (MT/s)	1.8422	1.8432
Normalized	99.95%	100%
Blender - BMW27 - CPU-Only (sec)	55.54	55.56
Normalized	100%	99.96%
Blender - Classroom - CPU-Only (sec)	164.77	162.95
Normalized	98.9%	100%
Blender - Fishy Cat - CPU-Only (sec)	75.8	75.59
Normalized	99.72%	100%
Blender - Barbershop - CPU-Only (sec)	592.36	591.97
Normalized	99.93%	100%

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Blender - Pabellon Barcelona - CPU-Only (sec)	**192.12**	**191.19**
Normalized	99.52%	100%
BRL-CAD - V.P.M (VGR Performance Metric)	**257085**	**251911**
Normalized	100%	97.99%
ClickHouse - 1.R.W.A.D.F.R.C.C (Queries/min, Geo Mean)	**142.18**	**205.30**
Normalized	69.25%	100%
ClickHouse - 1.R.W.A.D.S.R (Queries/min, Geo Mean)	**205.73**	**213.89**
Normalized	96.18%	100%
ClickHouse - 1.R.W.A.D.T.R (Queries/min, Geo Mean)	**198.59**	**220.22**
Normalized	90.18%	100%
CockroachDB - MoVR - 128 (ops/s)	**226.3**	**226.4**
Normalized	99.96%	100%
CockroachDB - MoVR - 256 (ops/s)	**202.9**	**228.8**
Normalized	88.68%	100%
CockroachDB - MoVR - 512 (ops/s)	**111.5**	**108.1**
Normalized	100%	96.95%
CockroachDB - MoVR - 1024 (ops/s)	**111.1**	**109.2**
Normalized	100%	98.29%
CockroachDB - KV, 10% Reads - 128 (ops/s)	**6941**	**6717**
Normalized	100%	96.78%
CockroachDB - KV, 10% Reads - 256 (ops/s)	**13760**	**17243**
Normalized	79.8%	100%
CockroachDB - KV, 10% Reads - 512 (ops/s)	**29267**	**34086**
Normalized	85.86%	100%
CockroachDB - KV, 50% Reads - 128 (ops/s)	**12434**	**10946**
Normalized	100%	88.03%
CockroachDB - KV, 50% Reads - 256 (ops/s)	**24395**	**23024**
Normalized	100%	94.38%
CockroachDB - KV, 50% Reads - 512 (ops/s)	**49425**	**46805**
Normalized	100%	94.7%
CockroachDB - KV, 60% Reads - 128 (ops/s)	**15412**	**14192**
Normalized	100%	92.08%
CockroachDB - KV, 60% Reads - 256 (ops/s)	**30111**	**27413**
Normalized	100%	91.04%
CockroachDB - KV, 60% Reads - 512 (ops/s)	**58375**	**66869**
Normalized	87.3%	100%
CockroachDB - KV, 95% Reads - 128 (ops/s)	**89867**	**86633**
Normalized	100%	96.4%
CockroachDB - KV, 95% Reads - 256 (ops/s)	**98924**	**99986**
Normalized	98.94%	100%
CockroachDB - KV, 95% Reads - 512 (ops/s)	**96570**	**96578**
Normalized	99.99%	100%
CockroachDB - KV, 10% Reads - 1024 (ops/s)	**38341**	**39591**
Normalized	96.84%	100%
CockroachDB - KV, 50% Reads - 1024 (ops/s)	**61797**	**63999**
Normalized	96.56%	100%
CockroachDB - KV, 60% Reads - 1024 (ops/s)	**67899**	**70300**
Normalized	96.59%	100%
CockroachDB - KV, 95% Reads - 1024 (ops/s)	**94379**	**92939**
Normalized	100%	98.47%
Cpuminer-Opt - Magi (kH/s)	**701.91**	**703.92**
Normalized	99.71%	100%

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Cpuminer-Opt - x25x (kH/s)	**1252**	**1253**
Normalized	99.92%	100%
Cpuminer-Opt - scrypt (kH/s)	**951.15**	**946.1**
Normalized	100%	99.47%
Cpuminer-Opt - Deepcoin (kH/s)	**28150**	**28140**
Normalized	100%	99.96%
Cpuminer-Opt - Ringcoin (kH/s)	**3293**	**3326**
Normalized	99.01%	100%
Cpuminer-Opt - Blake-2 S (kH/s)	**2216930**	**2239380**
Normalized	99%	100%
Cpuminer-Opt - Garlicoin (kH/s)	**12910**	**12940**
Normalized	99.77%	100%
Cpuminer-Opt - Skeincoin (kH/s)	**253670**	**253330**
Normalized	100%	99.87%
Cpuminer-Opt - Myriad-Groestl (kH/s)	**11570**	**12000**
Normalized	96.42%	100%
Cpuminer-Opt - LBC, LBRY Credits (kH/s)	**182930**	**183720**
Normalized	99.57%	100%
Cpuminer-Opt - Q.S.2.P (kH/s)	**401450**	**403630**
Normalized	99.46%	100%
Cpuminer-Opt - T.S.2.O (kH/s)	**598720**	**598300**
Normalized	100%	99.93%
Dragonflydb - 50 - 1:1 (Ops/sec)	**707625**	**930058**
Normalized	76.08%	100%
Dragonflydb - 50 - 1:5 (Ops/sec)	**989119**	**1038762**
Normalized	95.22%	100%
Dragonflydb - 50 - 5:1 (Ops/sec)	**959934**	**962501**
Normalized	99.73%	100%
Dragonflydb - 200 - 1:1 (Ops/sec)	**994294**	**890721**
Normalized	100%	89.58%
Dragonflydb - 200 - 1:5 (Ops/sec)	**1044459**	**937647**
Normalized	100%	89.77%
Dragonflydb - 200 - 5:1 (Ops/sec)	**942135**	**839631**
Normalized	100%	89.12%
EnCodec - 3 kbps (sec)	**40.408**	**35.115**
Normalized	86.9%	100%
EnCodec - 6 kbps (sec)	**40.508**	**39.852**
Normalized	98.38%	100%
EnCodec - 24 kbps (sec)	**48.814**	**53.474**
Normalized	100%	91.29%
EnCodec - 1.5 kbps (sec)	**41.892**	**44.754**
Normalized	100%	93.61%
Facebook RocksDB - Rand Read (Op/s)	**107719684**	**120010661**
Normalized	89.76%	100%
Facebook RocksDB - Update Rand (Op/s)	**174193**	**172766**
Normalized	100%	99.18%
Facebook RocksDB - Read While Writing (Op/s)	**5155074**	**5254605**
Normalized	98.11%	100%
Facebook RocksDB - R.R.W.R (Op/s)	**2545133**	**2534266**
Normalized	100%	99.57%
FLAC Audio Encoding - WAV To FLAC (sec)	**22.41**	**22.58**
Normalized	100%	99.25%
GraphicsMagick - Swirl (Iterations/min)	**816**	**798**

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Normalized	100%	97.79%
GraphicsMagick - Rotate (Iterations/min)	594	575
Normalized	100%	96.8%
GraphicsMagick - Sharpen (Iterations/min)	220	218
Normalized	100%	99.09%
GraphicsMagick - Enhanced (Iterations/min)	506	502
Normalized	100%	99.21%
GraphicsMagick - Resizing (Iterations/min)	1092	1098
Normalized	99.45%	100%
GraphicsMagick - Noise-Gaussian (Iterations/min)	392	391
Normalized	100%	99.74%
GraphicsMagick - HWB Color Space (Iterations/min)	735	719
Normalized	100%	97.82%
JPEG XL Decoding libjxl - 1 (MP/s)	33.54	32.92
Normalized	100%	98.15%
JPEG XL Decoding libjxl - All (MP/s)	80.94	80.26
Normalized	100%	99.16%
JPEG XL libjxl - PNG - 80 (MP/s)	8.15	7.93
Normalized	100%	97.3%
JPEG XL libjxl - PNG - 90 (MP/s)	8.03	7.89
Normalized	100%	98.26%
JPEG XL libjxl - JPEG - 80 (MP/s)	7.78	7.68
Normalized	100%	98.71%
JPEG XL libjxl - JPEG - 90 (MP/s)	7.69	7.56
Normalized	100%	98.31%
JPEG XL libjxl - PNG - 100 (MP/s)	0.49	0.48
Normalized	100%	97.96%
JPEG XL libjxl - JPEG - 100 (MP/s)	0.49	0.46
Normalized	100%	93.88%
LAMMPS Molecular Dynamics Simulator - 20k Atoms (ns/day)	15.746	15.683
Normalized	100%	99.6%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)	17.951	13.085
Normalized	100%	72.89%
libavif avifenc - 0 (sec)	115.421	111.684
Normalized	96.76%	100%
libavif avifenc - 2 (sec)	59.901	58.227
Normalized	97.21%	100%
libavif avifenc - 6 (sec)	5.298	5.28
Normalized	99.66%	100%
libavif avifenc - 6, Lossless (sec)	10.043	9.978
Normalized	99.35%	100%
libavif avifenc - 10, Lossless (sec)	7.053	7.052
Normalized	99.99%	100%
memtier_benchmark - Redis - 50 - 10:1 (Ops/sec)	1501801	1504676
Normalized	99.81%	100%
miniBUDE - OpenMP - BM1 (GFInst/s)	735.749	756.807
Normalized	97.22%	100%
miniBUDE - OpenMP - BM1 (Billion Interactions/s)	29.43	30.272
Normalized	97.22%	100%
miniBUDE - OpenMP - BM2 (GFInst/s)	776.346	787.503
Normalized	98.58%	100%

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miniBUDE - OpenMP - BM2 (Billion Interactions/s)	**31.054**	**31.5**
Normalized	98.58%	100%
Mobile Neural Network - nasnet (ms)	**22.53**	**22.37**
Normalized	99.29%	100%
Mobile Neural Network - mobilenetV3 (ms)	**3.386**	**3.334**
Normalized	98.46%	100%
Mobile Neural Network - squeezenetv1.1 (ms)	**4.677**	**4.686**
Normalized	100%	99.81%
Mobile Neural Network - resnet-v2-50 (ms)	**15.236**	**14.662**
Normalized	96.23%	100%
Mobile Neural Network - SqueezeNetV1.0 (ms)	**7.533**	**7.588**
Normalized	100%	99.28%
Mobile Neural Network - MobileNetV2_224 (ms)	**5.143**	**5.221**
Normalized	100%	98.51%
Mobile Neural Network - mobilenet-v1-1.0 (ms)	**3.695**	**3.487**
Normalized	94.37%	100%
Mobile Neural Network - inception-v3 (ms)	**36.76**	**36.166**
Normalized	98.38%	100%
Natron - Spaceship (FPS)	3.7	3.7
NCNN - CPU - mobilenet (ms)	**23.38**	**22.93**
Normalized	98.08%	100%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)	**11.44**	**12.46**
Normalized	100%	91.81%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)	**10.44**	**11.24**
Normalized	100%	92.88%
NCNN - CPU - shufflenet-v2 (ms)	**11.83**	**12.81**
Normalized	100%	92.35%
NCNN - CPU - mnasnet (ms)	**10.43**	**11.03**
Normalized	100%	94.56%
NCNN - CPU - efficientnet-b0 (ms)	**15**	**16.3**
Normalized	100%	92.02%
NCNN - CPU - blazeface (ms)	**5.7**	**5.94**
Normalized	100%	95.96%
NCNN - CPU - googlenet (ms)	**21.6**	**23.01**
Normalized	100%	93.87%
NCNN - CPU - vgg16 (ms)	**35.89**	**39.21**
Normalized	100%	91.53%
NCNN - CPU - resnet18 (ms)	**13.35**	**13.82**
Normalized	100%	96.6%
NCNN - CPU - alexnet (ms)	**8.45**	**9.25**
Normalized	100%	91.35%
NCNN - CPU - resnet50 (ms)	**26.1**	**26.12**
Normalized	100%	99.92%
NCNN - CPU - yolov4-tiny (ms)	**31.71**	**32.91**
Normalized	100%	96.35%
NCNN - CPU - squeezenet_ssd (ms)	**29.15**	**27.75**
Normalized	95.2%	100%
NCNN - CPU - regnety_400m (ms)	**48.89**	**51.14**
Normalized	100%	95.6%
NCNN - CPU - vision_transformer (ms)	**173.64**	**172.93**
Normalized	99.59%	100%
NCNN - CPU - FastestDet (ms)	**15.69**	**14.43**
Normalized	91.97%	100%

nekRS - TurboPipe Periodic (FLOP/s)	124608000000	124198000000
Normalized	100%	99.67%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - A.M.S (items/sec)	18.6511	18.3638
Normalized	100%	98.46%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - A.M.S (ms/batch)	963.8114	966.403
Normalized	100%	99.73%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - S.S.S (items/sec)	8.7441	8.6568
Normalized	100%	99%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - S.S.S (ms/batch)	114.3502	115.5038
Normalized	100%	99%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - A.M.S (items/sec)	99.481	98.7664
Normalized	100%	99.28%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - A.M.S (ms/batch)	180.5419	181.7991
Normalized	100%	99.31%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - S.S.S (items/sec)	41.8085	41.7245
Normalized	100%	99.8%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - S.S.S (ms/batch)	23.9046	23.9542
Normalized	100%	99.79%
Neural Magic DeepSparse - C.D.Y.C - A.M.S	132.4405	131.593
Normalized	100%	99.36%
Neural Magic DeepSparse - C.D.Y.C - A.M.S	135.7515	136.6781
Normalized	100%	99.32%
Neural Magic DeepSparse - C.D.Y.C - S.S.S (items/sec)	54.2553	54.452
Normalized	99.64%	100%
Neural Magic DeepSparse - C.D.Y.C - S.S.S (ms/batch)	18.4136	18.3466
Normalized	99.64%	100%
Neural Magic DeepSparse - C.C.R.5.I - A.M.S	352.856	352.6274
Normalized	100%	99.94%
Neural Magic DeepSparse - C.C.R.5.I - A.M.S	50.9512	51.0098
Normalized	100%	99.89%
Neural Magic DeepSparse - C.C.R.5.I - S.S.S	113.7454	113.8925
Normalized	99.87%	100%
Neural Magic DeepSparse - C.C.R.5.I - S.S.S	8.7764	8.7659
Normalized	99.88%	100%
Neural Magic DeepSparse - N.T.C.D.m - A.M.S (items/sec)	180.9023	180.1226
Normalized	100%	99.57%
Neural Magic DeepSparse - N.T.C.D.m - A.M.S (ms/batch)	99.329	99.8308
Normalized	100%	99.5%
Neural Magic DeepSparse - N.T.C.D.m - S.S.S (items/sec)	67.0883	66.9674
Normalized	100%	99.82%
Neural Magic DeepSparse - N.T.C.D.m - S.S.S (ms/batch)	14.8943	14.9224

	Normalized	100%	99.81%
Neural Magic DeepSparse - N.T.C.B.b.u.S - A.M.S (items/sec)		91.1877	91.2096
	Normalized	99.98%	100%
Neural Magic DeepSparse - N.T.C.B.b.u.S - A.M.S (ms/batch)		197.132	196.7007
	Normalized	99.78%	100%
Neural Magic DeepSparse - N.T.C.B.b.u.S - S.S.S (items/sec)		33.8154	34.9917
	Normalized	96.64%	100%
Neural Magic DeepSparse - N.T.C.B.b.u.S - S.S.S (ms/batch)		29.5607	28.5675
	Normalized	96.64%	100%
Neural Magic DeepSparse - N.T.C.B.b.u.c - A.M.S (items/sec)		18.6156	18.6722
	Normalized	99.7%	100%
Neural Magic DeepSparse - N.T.C.B.b.u.c - A.M.S (ms/batch)		963.5663	963.9121
	Normalized	100%	99.96%
Neural Magic DeepSparse - N.T.C.B.b.u.c - S.S.S (items/sec)		8.7499	8.6682
	Normalized	100%	99.07%
Neural Magic DeepSparse - N.T.C.B.b.u.c - S.S.S (ms/batch)		114.2741	115.3522
	Normalized	100%	99.07%
Node.js V8 Web Tooling Benchmark (runs/s)		9.93	10.14
	Normalized	97.93%	100%
Numenta Anomaly Benchmark - KNN CAD (sec)		135.463	147.747
	Normalized	100%	91.69%
Numenta Anomaly Benchmark - Relative Entropy		13.363	13.364
	Normalized	100%	99.99%
Numenta Anomaly Benchmark - Windowed Gaussian (sec)		7.529	7.476
	Normalized	99.3%	100%
Numenta Anomaly Benchmark - Earthgecko Skyline		99.192	95.428
	Normalized	96.21%	100%
Numenta Anomaly Benchmark - B.C (sec)		34.988	35.734
	Normalized	100%	97.91%
Numenta Anomaly Benchmark - C.A.D.O (sec)		50.619	50.914
	Normalized	100%	99.42%
oneDNN - IP Shapes 1D - f32 - CPU (ms)		1.72077	1.71954
	Normalized	99.93%	100%
oneDNN - IP Shapes 3D - f32 - CPU (ms)		3.79612	3.80003
	Normalized	100%	99.9%
oneDNN - IP Shapes 1D - u8s8f32 - CPU (ms)		1.37489	1.38109
	Normalized	100%	99.55%
oneDNN - IP Shapes 3D - u8s8f32 - CPU (ms)		1.25783	1.25446
	Normalized	99.73%	100%
oneDNN - IP Shapes 1D - bf16bf16bf16 - CPU (ms)		5.70137	5.71409
	Normalized	100%	99.78%
oneDNN - IP Shapes 3D - bf16bf16bf16 - CPU (ms)		3.40068	3.31851
	Normalized	97.58%	100%

oneDNN - C.B.S.A - f32 - CPU (ms)	**7.47846**	**7.48562**
Normalized	100%	99.9%
oneDNN - D.B.s - f32 - CPU (ms)	**11.4783**	**11.5556**
Normalized	100%	99.33%
oneDNN - D.B.s - f32 - CPU (ms)	**2.80983**	**2.81784**
Normalized	100%	99.72%
oneDNN - C.B.S.A - u8s8f32 - CPU (ms)	**6.94903**	**6.94611**
Normalized	99.96%	100%
oneDNN - D.B.s - u8s8f32 - CPU (ms)	**0.568809**	**0.567734**
Normalized	99.81%	100%
oneDNN - D.B.s - u8s8f32 - CPU (ms)	**0.693146**	**0.694553**
Normalized	100%	99.8%
oneDNN - R.N.N.T - f32 - CPU (ms)	**1381**	**1380**
Normalized	99.93%	100%
oneDNN - R.N.N.I - f32 - CPU (ms)	**784.125**	**892.232**
Normalized	100%	87.88%
oneDNN - R.N.N.T - u8s8f32 - CPU (ms)	**1380**	**1380**
Normalized	100%	99.97%
oneDNN - C.B.S.A - bf16bf16bf16 - CPU (ms)	**6.35819**	**6.4127**
Normalized	100%	99.15%
oneDNN - D.B.s - bf16bf16bf16 - CPU (ms)	**9.8543**	**9.81832**
Normalized	99.63%	100%
oneDNN - D.B.s - bf16bf16bf16 - CPU (ms)	**9.61455**	**9.6345**
Normalized	100%	99.79%
oneDNN - R.N.N.I - u8s8f32 - CPU (ms)	**781.001**	**789.364**
Normalized	100%	98.94%
oneDNN - M.M.B.S.T - f32 - CPU (ms)	**0.477096**	**0.481461**
Normalized	100%	99.09%
oneDNN - R.N.N.T - bf16bf16bf16 - CPU (ms)	**1409**	**1382**
Normalized	98.04%	100%
oneDNN - R.N.N.I - bf16bf16bf16 - CPU (ms)	**786.583**	**801.797**
Normalized	100%	98.1%
oneDNN - M.M.B.S.T - u8s8f32 - CPU (ms)	**0.235557**	**0.235658**
Normalized	100%	99.96%
oneDNN - M.M.B.S.T - bf16bf16bf16 - CPU (ms)	**2.55381**	**2.59337**
Normalized	100%	98.47%
OpenFOAM - d.S.M.S - Mesh Time (sec)	**34.008239**	**33.881804**
Normalized	99.63%	100%
OpenFOAM - d.S.M.S - Execution Time (sec)	**96.025607**	**95.549133**
Normalized	99.5%	100%
OpenFOAM - d.M.M.S - Mesh Time (sec)	**187.21756**	**187.19525**
Normalized	99.99%	100%
OpenFOAM - d.M.M.S - Execution Time (sec)	**899.70168**	**898.33703**
Normalized	99.85%	100%
OpenRadioss - Bumper Beam (sec)	**125.04**	**124.78**
Normalized	99.79%	100%
OpenRadioss - C.P.D.T (sec)	**57.28**	**57.26**
Normalized	99.97%	100%
OpenRadioss - B.S.o.W (sec)	**205.44**	**201.72**
Normalized	98.19%	100%
OpenRadioss - R.O.R.S.I (sec)	**114.39**	**114.9**
Normalized	100%	99.56%
OpenRadioss - I.a.F.S.I.D.C (sec)	**275.47**	**275.88**

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Normalized	100%	99.85%
OpenVINO - F.D.F - CPU (FPS)	6.94	6.94
OpenVINO - F.D.F - CPU (ms)	1283	1284
Normalized	100%	99.96%
OpenVINO - P.D.F - CPU (FPS)	4.04	4.03
Normalized	100%	99.75%
OpenVINO - P.D.F - CPU (ms)	2193	2194
Normalized	100%	99.97%
OpenVINO - P.D.F - CPU (FPS)	4.03	4.01
Normalized	100%	99.5%
OpenVINO - P.D.F - CPU (ms)	2200	2206
Normalized	100%	99.72%
OpenVINO - V.D.F - CPU (FPS)	421.71	412.75
Normalized	100%	97.88%
OpenVINO - V.D.F - CPU (ms)	21.3	21.76
Normalized	100%	97.89%
OpenVINO - F.D.F.I - CPU (FPS)	25.83	25.82
Normalized	100%	99.96%
OpenVINO - F.D.F.I - CPU (ms)	347.32	347.82
Normalized	100%	99.86%
OpenVINO - V.D.F.I - CPU (FPS)	1396	1389
Normalized	100%	99.52%
OpenVINO - V.D.F.I - CPU (ms)	6.42	6.45
Normalized	100%	99.53%
OpenVINO - W.P.D.F - CPU (FPS)	704.6	706.42
Normalized	99.74%	100%
OpenVINO - W.P.D.F - CPU (ms)	51	50.86
Normalized	99.73%	100%
OpenVINO - M.T.E.T.D.F - CPU (FPS)	78.04	77.53
Normalized	100%	99.35%
OpenVINO - M.T.E.T.D.F - CPU (ms)	115.2	115.95
Normalized	100%	99.35%
OpenVINO - W.P.D.F.I - CPU (FPS)	2717	2715
Normalized	100%	99.9%
OpenVINO - W.P.D.F.I - CPU (ms)	13.17	13.19
Normalized	100%	99.85%
OpenVINO - P.V.B.D.F - CPU (FPS)	687.33	674.84
Normalized	100%	98.18%
OpenVINO - P.V.B.D.F - CPU (ms)	13.06	13.3
Normalized	100%	98.2%
OpenVINO - A.G.R.R.0.F - CPU (FPS)	21846	21783
Normalized	100%	99.71%
OpenVINO - A.G.R.R.0.F - CPU (ms)	1.64	1.64
OpenVINO - A.G.R.R.0.F.I - CPU (FPS)	36342	30254
Normalized	100%	83.25%
OpenVINO - A.G.R.R.0.F.I - CPU (ms)	0.98	1.18
Normalized	100%	83.05%
OpenVKL - vklBenchmark ISPC (Items / Sec)	362	353
Normalized	100%	97.51%
OpenVKL - v.S (Items / Sec)	176	171
Normalized	100%	97.16%
OSPRay Studio - 1 - 4K - 1 - Path Tracer (ms)	3528	3529
Normalized	100%	99.97%

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OSPRay Studio - 2 - 4K - 1 - Path Tracer (ms)	3617	3624
Normalized	100%	99.81%
OSPRay Studio - 3 - 4K - 1 - Path Tracer (ms)	4309	4311
Normalized	100%	99.95%
OSPRay Studio - 1 - 4K - 16 - Path Tracer (ms)	65864	66209
Normalized	100%	99.48%
OSPRay Studio - 1 - 4K - 32 - Path Tracer (ms)	122216	122843
Normalized	100%	99.49%
OSPRay Studio - 2 - 4K - 16 - Path Tracer (ms)	67352	67325
Normalized	99.96%	100%
OSPRay Studio - 2 - 4K - 32 - Path Tracer (ms)	125037	125174
Normalized	100%	99.89%
OSPRay Studio - 3 - 4K - 16 - Path Tracer (ms)	78464	78883
Normalized	100%	99.47%
OSPRay Studio - 3 - 4K - 32 - Path Tracer (ms)	146883	147053
Normalized	100%	99.88%
OSPRay Studio - 1 - 1080p - 1 - Path Tracer (ms)	888	890
Normalized	100%	99.78%
OSPRay Studio - 2 - 1080p - 1 - Path Tracer (ms)	914	915
Normalized	100%	99.89%
OSPRay Studio - 3 - 1080p - 1 - Path Tracer (ms)	1085	1085
OSPRay Studio - 1 - 1080p - 16 - Path Tracer (ms)	14186	14166
Normalized	99.86%	100%
OSPRay Studio - 1 - 1080p - 32 - Path Tracer (ms)	28318	28332
Normalized	100%	99.95%
OSPRay Studio - 2 - 1080p - 16 - Path Tracer (ms)	14608	14535
Normalized	99.5%	100%
OSPRay Studio - 2 - 1080p - 32 - Path Tracer (ms)	29041	29061
Normalized	100%	99.93%
OSPRay Studio - 3 - 1080p - 16 - Path Tracer (ms)	17367	17342
Normalized	99.86%	100%
OSPRay Studio - 3 - 1080p - 32 - Path Tracer (ms)	34647	34637
Normalized	99.97%	100%
PostgreSQL - 1 - 1 - Read Only (TPS)	23407	22579
Normalized	100%	96.46%
PostgreSQL - 1 - 1 - Read Only - Average Latency (ms)	0.043	0.044
Normalized	100%	97.73%
PostgreSQL - 1 - 1 - Read Write (TPS)	812	718
Normalized	100%	88.42%
PostgreSQL - 1 - 1 - Read Write - Average Latency	1.231	1.392
Normalized	100%	88.43%
PostgreSQL - 1 - 50 - Read Only (TPS)	675675	672851
Normalized	100%	99.58%
PostgreSQL - 1 - 50 - Read Only - Average Latency	0.074	0.074
PostgreSQL - 1 - 100 - Read Only (TPS)	968554	971447
Normalized	99.7%	100%
PostgreSQL - 1 - 100 - Read Only - Average Latency	0.103	0.103
PostgreSQL - 1 - 250 - Read Only (TPS)	979407	976093
Normalized	100%	99.66%
PostgreSQL - 1 - 250 - Read Only - Average Latency	0.255	0.256
Normalized	100%	99.61%
PostgreSQL - 1 - 50 - Read Write (TPS)	716	709
Normalized	100%	99.02%

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PostgreSQL - 1 - 50 - Read Write - Average Latency	69.874	70.482
Normalized	100%	99.14%
PostgreSQL - 1 - 500 - Read Only (TPS)	930850	925569
Normalized	100%	99.43%
PostgreSQL - 1 - 500 - Read Only - Average Latency	0.537	0.54
Normalized	100%	99.44%
PostgreSQL - 100 - 1 - Read Only (TPS)	21981	21860
Normalized	100%	99.45%
PostgreSQL - 100 - 1 - Read Only - Average Latency	0.045	0.046
Normalized	100%	97.83%
PostgreSQL - 1 - 100 - Read Write (TPS)	623	431
Normalized	100%	69.18%
PostgreSQL - 1 - 100 - Read Write - Average Latency (ms)	160.474	231.892
Normalized	100%	69.2%
PostgreSQL - 1 - 250 - Read Write (TPS)	442	254
Normalized	100%	57.47%
PostgreSQL - 1 - 250 - Read Write - Average Latency (ms)	565.864	985.483
Normalized	100%	57.42%
PostgreSQL - 1 - 500 - Read Write (TPS)	297	201
Normalized	100%	67.68%
PostgreSQL - 1 - 500 - Read Write - Average Latency (ms)	1683	2482
Normalized	100%	67.8%
PostgreSQL - 100 - 1 - Read Write (TPS)	671	326
Normalized	100%	48.58%
PostgreSQL - 100 - 1 - Read Write - Average Latency (ms)	1.491	3.065
Normalized	100%	48.65%
PostgreSQL - 100 - 50 - Read Only (TPS)	652544	652647
Normalized	99.98%	100%
PostgreSQL - 100 - 50 - Read Only - Average Latency (ms)	0.077	0.077
PostgreSQL - 100 - 100 - Read Only (TPS)	882773	899014
Normalized	98.19%	100%
PostgreSQL - 100 - 100 - Read Only - Average Latency (ms)	0.113	0.111
Normalized	98.23%	100%
PostgreSQL - 100 - 250 - Read Only (TPS)	922066	915519
Normalized	100%	99.29%
PostgreSQL - 100 - 250 - Read Only - Average Latency (ms)	0.271	0.273
Normalized	100%	99.27%
PostgreSQL - 100 - 50 - Read Write (TPS)	5131	4415
Normalized	100%	86.05%
PostgreSQL - 100 - 50 - Read Write - Average Latency (ms)	9.744	11.326
Normalized	100%	86.03%
PostgreSQL - 100 - 500 - Read Only (TPS)	869450	866030
Normalized	100%	99.61%

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PostgreSQL - 100 - 500 - Read Only - Average Latency (ms)	0.575	0.577
Normalized	100%	99.65%
PostgreSQL - 100 - 100 - Read Write (TPS)	6045	5890
Normalized	100%	97.44%
PostgreSQL - 100 - 100 - Read Write - Average Latency (ms)	16.541	16.977
Normalized	100%	97.43%
PostgreSQL - 100 - 250 - Read Write (TPS)	7170	7046
Normalized	100%	98.27%
PostgreSQL - 100 - 250 - Read Write - Average Latency (ms)	34.869	35.484
Normalized	100%	98.27%
PostgreSQL - 100 - 500 - Read Write (TPS)	7613	7475
Normalized	100%	98.19%
PostgreSQL - 100 - 500 - Read Write - Average Latency (ms)	65.68	66.891
Normalized	100%	98.19%
Redis - GET - 50 (Reqs/sec)	2617818	2404467
Normalized	100%	91.85%
Redis - SET - 50 (Reqs/sec)	2242796	2244609
Normalized	99.92%	100%
Redis - GET - 500 (Reqs/sec)	2908382	2700562
Normalized	100%	92.85%
Redis - SET - 500 (Reqs/sec)	2217236	2232582
Normalized	99.31%	100%
Redis - GET - 1000 (Reqs/sec)	2852956	2805581
Normalized	100%	98.34%
Redis - SET - 1000 (Reqs/sec)	2202581	2204248
Normalized	99.92%	100%
spaCy - en_core_web_lg (tokens/sec)	10874	10838
Normalized	100%	99.67%
spaCy - en_core_web_trf (tokens/sec)	2007	1950
Normalized	100%	97.16%
srsRAN - OFDM_Test (Samples / Second)	119900000	120000000
Normalized	99.92%	100%
srsRAN - 4.P.1.P.M.6.Q (eNb Mb/s)	294	291.4
Normalized	100%	99.12%
srsRAN - 4.P.1.P.M.6.Q (UE Mb/s)	118.9	117.9
Normalized	100%	99.16%
srsRAN - 4.P.1.P.S.6.Q (eNb Mb/s)	293.3	289.2
Normalized	100%	98.6%
srsRAN - 4.P.1.P.S.6.Q (UE Mb/s)	126.1	124.8
Normalized	100%	98.97%
srsRAN - 4.P.1.P.M.2.Q (eNb Mb/s)	324.2	321.2
Normalized	100%	99.07%
srsRAN - 4.P.1.P.M.2.Q (UE Mb/s)	130.9	129.2
Normalized	100%	98.7%
srsRAN - 4.P.1.P.S.2.Q (eNb Mb/s)	320.8	318.8
Normalized	100%	99.38%
srsRAN - 4.P.1.P.S.2.Q (UE Mb/s)	136.3	134.7
Normalized	100%	98.83%

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srsRAN - 5.P.T.5.P.S.6.Q (eNb Mb/s)	100.3	99.9
Normalized	100%	99.6%
srsRAN - 5.P.T.5.P.S.6.Q (UE Mb/s)	65.7	65.5
Normalized	100%	99.7%
Stargate Digital Audio Workstation - 44100 - 512 (Render Ratio)	3.281164	2.979784
Normalized	100%	90.81%
Stargate Digital Audio Workstation - 96000 - 512 (Render Ratio)	1.840618	1.765949
Normalized	100%	95.94%
Stargate Digital Audio Workstation - 192000 - 512 (Render Ratio)	1.044224	1.093912
Normalized	95.46%	100%
Stargate Digital Audio Workstation - 44100 - 1024 (Render Ratio)	3.634671	3.584121
Normalized	100%	98.61%
Stargate Digital Audio Workstation - 480000 - 512 (Render Ratio)	3.394244	2.559217
Normalized	100%	75.4%
Stargate Digital Audio Workstation - 96000 - 1024 (Render Ratio)	2.61702	2.019155
Normalized	100%	77.15%
Stargate Digital Audio Workstation - 192000 - 1024 (Render Ratio)	1.601382	1.650224
Normalized	97.04%	100%
Stargate Digital Audio Workstation - 480000 - 1024 (Render Ratio)	2.90554	3.23369
Normalized	89.85%	100%
Stress-NG - MMAP (Bogo Ops/s)	564.44	561.69
Normalized	100%	99.51%
Stress-NG - NUMA (Bogo Ops/s)	577.5	572.28
Normalized	100%	99.1%
Stress-NG - Futex (Bogo Ops/s)	1051826	1152674
Normalized	91.25%	100%
Stress-NG - MEMFD (Bogo Ops/s)	1021	1017
Normalized	100%	99.57%
Stress-NG - Mutex (Bogo Ops/s)	17168754	17219956
Normalized	99.7%	100%
Stress-NG - Atomic (Bogo Ops/s)	126894	116358
Normalized	100%	91.7%
Stress-NG - Crypto (Bogo Ops/s)	34685	34690
Normalized	99.99%	100%
Stress-NG - Malloc (Bogo Ops/s)	109293721	109184164
Normalized	100%	99.9%
Stress-NG - Forking (Bogo Ops/s)	41988	42163
Normalized	99.58%	100%
Stress-NG - SENDFILE (Bogo Ops/s)	437832	444590
Normalized	98.48%	100%
Stress-NG - CPU Cache (Bogo Ops/s)	89.3	76.5
Normalized	100%	85.67%
Stress-NG - CPU Stress (Bogo Ops/s)	59048	58316
Normalized	100%	98.76%

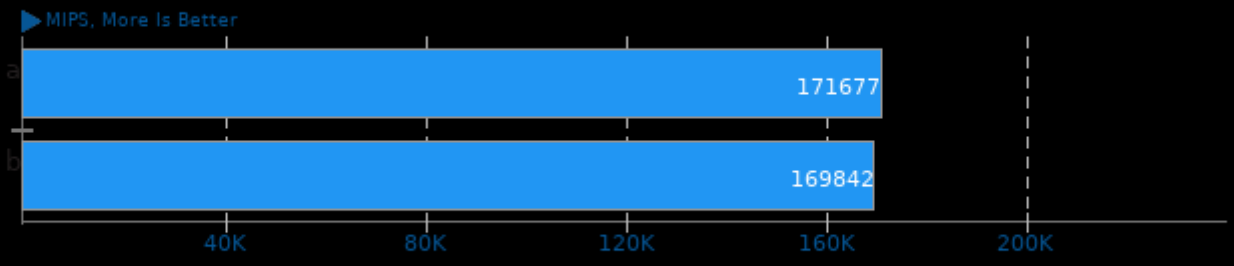
Stress-NG - Semaphores (Bogo Ops/s)	4585187	4572788
Normalized	100%	99.73%
Stress-NG - Matrix Math (Bogo Ops/s)	124052	123275
Normalized	100%	99.37%
Stress-NG - Vector Math (Bogo Ops/s)	103157	103020
Normalized	100%	99.87%
Stress-NG - x86_64 RdRand (Bogo Ops/s)	503508	503603
Normalized	99.98%	100%
Stress-NG - Memory Copying (Bogo Ops/s)	4644	4691
Normalized	98.99%	100%
Stress-NG - Socket Activity (Bogo Ops/s)	26883	20197
Normalized	100%	75.13%
Stress-NG - Context Switching (Bogo Ops/s)	6260590	7049324
Normalized	88.81%	100%
Stress-NG - G.C.S.F (Bogo Ops/s)	1715303	1703194
Normalized	100%	99.29%
Stress-NG - G.Q.D.S (Bogo Ops/s)	417	424.2
Normalized	98.3%	100%
Stress-NG - S.V.M.P (Bogo Ops/s)	3795442	3677321
Normalized	100%	96.89%
SVT-AV1 - Preset 4 - Bosphorus 4K (FPS)	2.631	2.524
Normalized	100%	95.93%
SVT-AV1 - Preset 8 - Bosphorus 4K (FPS)	36.589	36.387
Normalized	100%	99.45%
SVT-AV1 - Preset 12 - Bosphorus 4K (FPS)	120.584	118.267
Normalized	100%	98.08%
SVT-AV1 - Preset 13 - Bosphorus 4K (FPS)	106.678	110.562
Normalized	96.49%	100%
SVT-AV1 - Preset 4 - Bosphorus 1080p (FPS)	6.245	6.385
Normalized	97.81%	100%
SVT-AV1 - Preset 8 - Bosphorus 1080p (FPS)	85.018	86.178
Normalized	98.65%	100%
SVT-AV1 - Preset 12 - Bosphorus 1080p (FPS)	227.23	227.064
Normalized	100%	99.93%
SVT-AV1 - Preset 13 - Bosphorus 1080p (FPS)	201.865	199.966
Normalized	100%	99.06%
TensorFlow - CPU - 16 - VGG-16 (images/sec)	9.16	9.15
Normalized	100%	99.89%
TensorFlow - CPU - 32 - VGG-16 (images/sec)	10.22	10.18
Normalized	100%	99.61%
TensorFlow - CPU - 64 - VGG-16 (images/sec)	10.85	10.96
Normalized	99%	100%
TensorFlow - CPU - 16 - AlexNet (images/sec)	79.17	79.09
Normalized	100%	99.9%
TensorFlow - CPU - 32 - AlexNet (images/sec)	106.64	105.78
Normalized	100%	99.19%
TensorFlow - CPU - 64 - AlexNet (images/sec)	143.41	142.07
Normalized	100%	99.07%
TensorFlow - CPU - 16 - GoogLeNet (images/sec)	46.37	46.18
Normalized	100%	99.59%
TensorFlow - CPU - 16 - ResNet-50 (images/sec)	14.77	14.74
Normalized	100%	99.8%
TensorFlow - CPU - 32 - GoogLeNet (images/sec)	61.69	61.82

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Normalized	99.79%	100%
TensorFlow - CPU - 32 - ResNet-50 (images/sec)	17.9	17.97
Normalized	99.61%	100%
TensorFlow - CPU - 64 - GoogLeNet (images/sec)	77.03	76.16
Normalized	100%	98.87%
TensorFlow - CPU - 64 - ResNet-50 (images/sec)	19.21	22.42
Normalized	85.68%	100%
Timed CPython Compilation - Default (sec)	19.743	19.835
Normalized	100%	99.54%
Timed CPython Compilation - R.B.P.L.O (sec)	382.188	382.303
Normalized	100%	99.97%
Timed Erlang/OTP Compilation - Time To Compile	121.466	122.707
Normalized	100%	98.99%
Timed Linux Kernel Compilation - defconfig (sec)	52.645	52.687
Normalized	100%	99.92%
Timed Linux Kernel Compilation - allmodconfig (sec)	543.75	545.447
Normalized	100%	99.69%
Timed Node.js Compilation - Time To Compile (sec)	275.436	276.403
Normalized	100%	99.65%
Timed PHP Compilation - Time To Compile (sec)	57.282	59.274
Normalized	100%	96.64%
Unpacking The Linux Kernel - linux-5.19.tar.xz (sec)	8.579	8.584
Normalized	100%	99.94%
WebP Image Encode - Default (MP/s)	13.83	13.92
Normalized	99.35%	100%
WebP Image Encode - Quality 100 (MP/s)	8.92	8.91
Normalized	100%	99.89%
WebP Image Encode - Q.1.L (MP/s)	1.25	1.24
Normalized	100%	99.2%
WebP Image Encode - Q.1.H.C (MP/s)	3.03	3.03
WebP Image Encode - Q.1.L.H.C (MP/s)	0.44	0.44
WebP2 Image Encode - Default (MP/s)	6.59	6.76
Normalized	97.49%	100%
WebP2 Image Encode - Q.7.C.E.7 (MP/s)	0.28	0.27
Normalized	100%	96.43%
WebP2 Image Encode - Q.9.C.E.7 (MP/s)	0.13	0.13
WebP2 Image Encode - Q.1.C.E.5 (MP/s)	7.27	7.45
Normalized	97.58%	100%
WebP2 Image Encode - Q.1.L.C (MP/s)	0.03	0.03
Xmrig - Monero - 1M (H/s)	9938	10412
Normalized	95.45%	100%
Xmrig - Wownero - 1M (H/s)	16897	16579
Normalized	100%	98.12%
Y-Cruncher - 1B (sec)	22.389	22.426
Normalized	100%	99.84%
Y-Cruncher - 500M (sec)	11.12	11.319
Normalized	100%	98.24%

7-Zip Compression 22.01

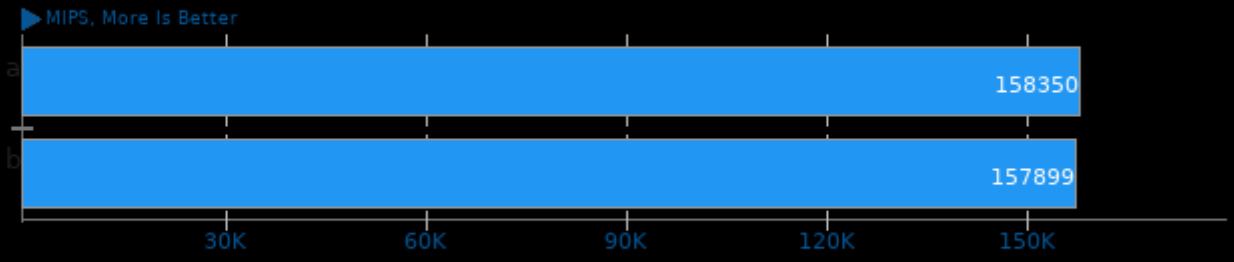
Test: Compression Rating



1. (CXX) g++ options: -lpthread -ldl -O2 -fPIC

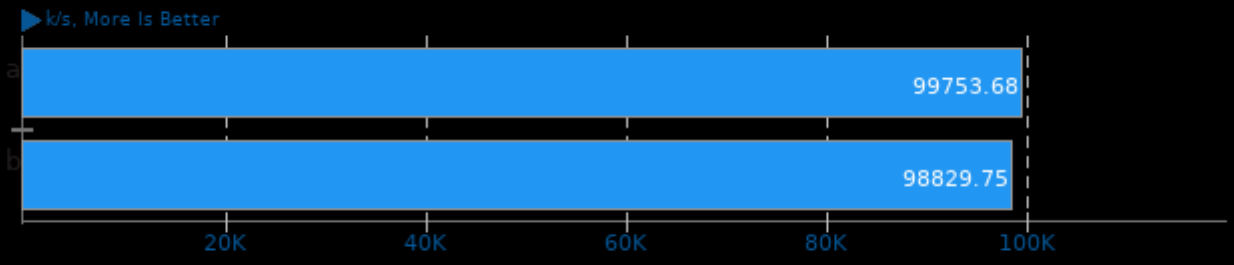
7-Zip Compression 22.01

Test: Decompression Rating



1. (CXX) g++ options: -lpthread -ldl -O2 -fPIC

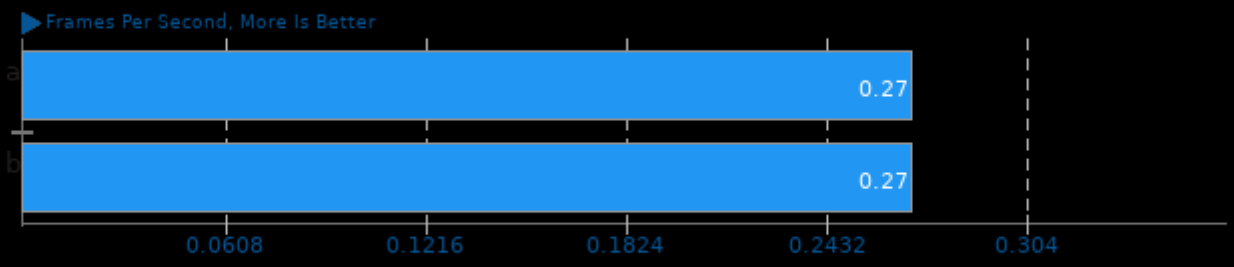
Aircrack-ng 1.7



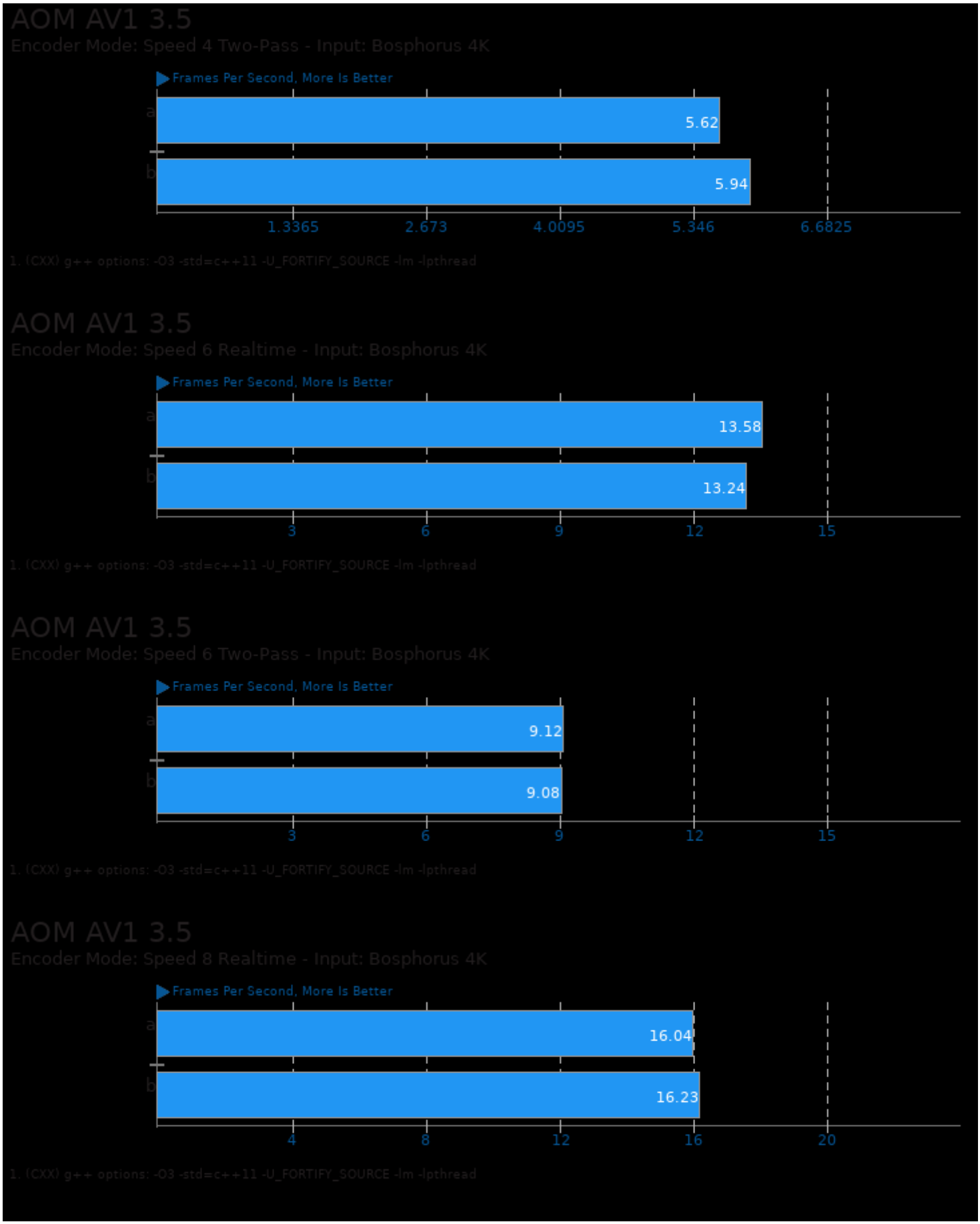
1. (CXX) g++ options: -std=gnu++17 -O3 -fvisibility=hidden -fcommon -rdynamic -lnl-3 -lnl-genl-3 -lpcre -lpthread -lz -lssl -lcrypto -lhwloc -ldl -lm -lbsd -

AOM AV1 3.5

Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 4K

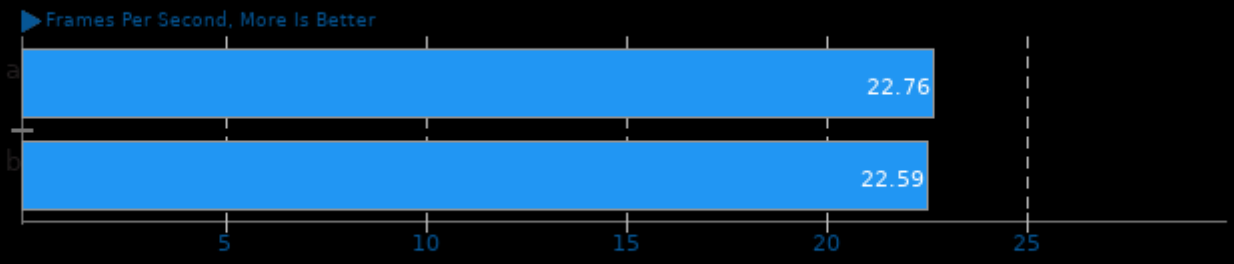


1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread


AOM AV1 3.5
Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
5.62
b
5.94
1.3365
2.673
4.0095
5.346
6.6825
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.5
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
13.58
b
13.24
3
6
9
12
15
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.5
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
9.12
b
9.08
3
6
9
12
15
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.5
Encoder Mode: Speed 8 Realtime - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
16.04
b
16.23
4
8
12
16
20
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

AOM AV1 3.5

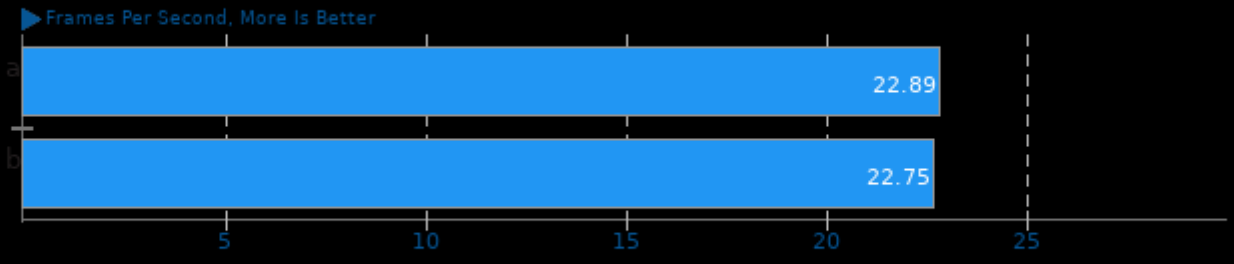
Encoder Mode: Speed 9 Realtime - Input: Bosphorus 4K



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

AOM AV1 3.5

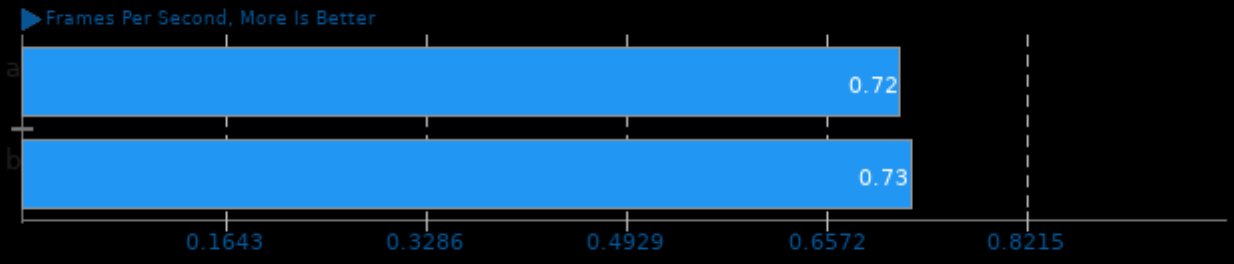
Encoder Mode: Speed 10 Realtime - Input: Bosphorus 4K



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

AOM AV1 3.5

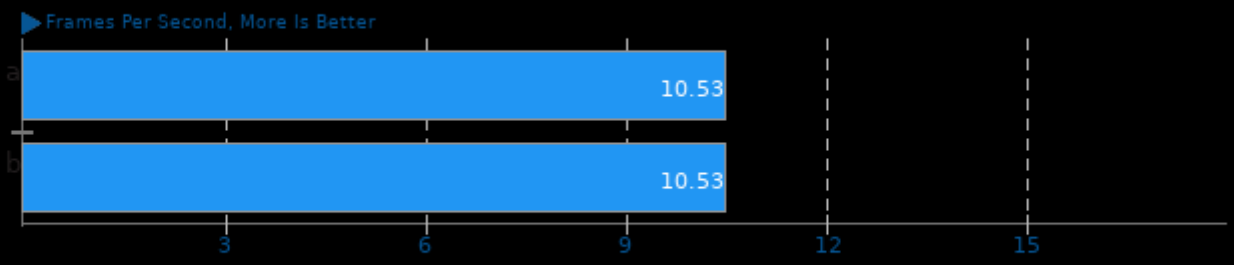
Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 1080p



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

AOM AV1 3.5

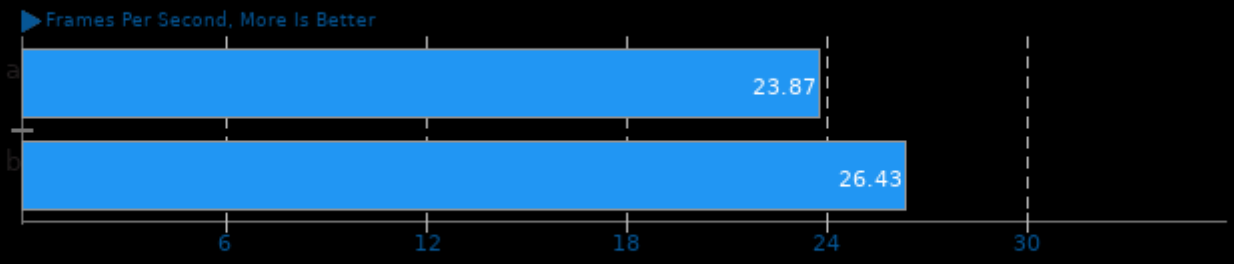
Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 1080p



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

AOM AV1 3.5

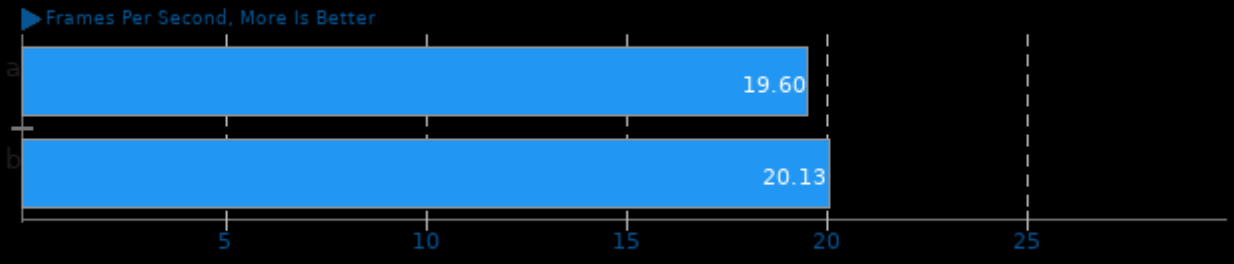
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 1080p



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

AOM AV1 3.5

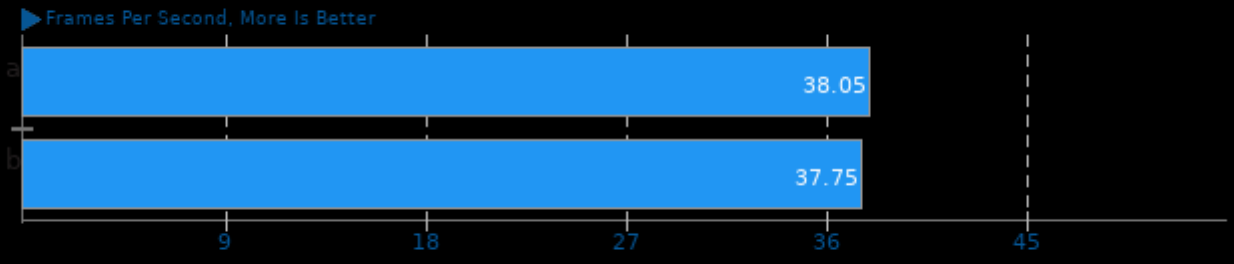
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 1080p



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

AOM AV1 3.5

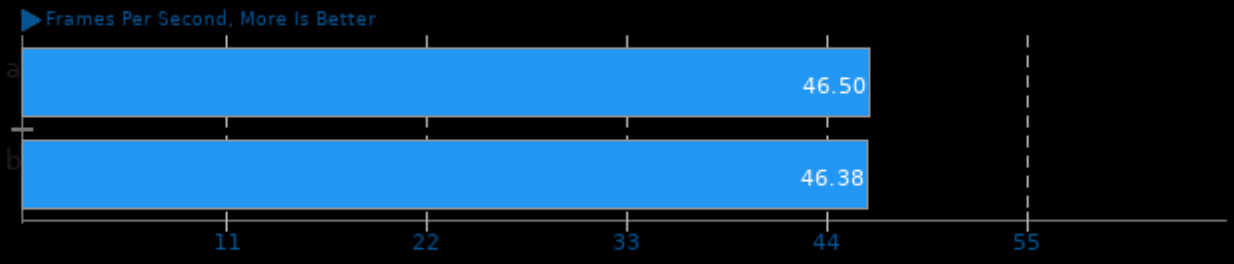
Encoder Mode: Speed 8 Realtime - Input: Bosphorus 1080p



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

AOM AV1 3.5

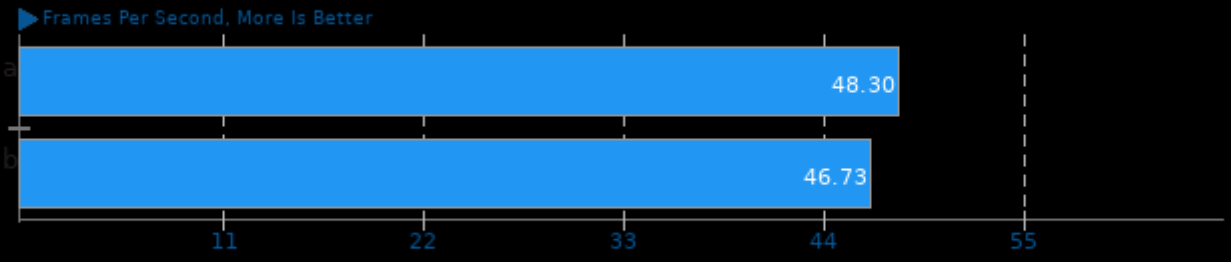
Encoder Mode: Speed 9 Realtime - Input: Bosphorus 1080p



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

AOM AV1 3.5

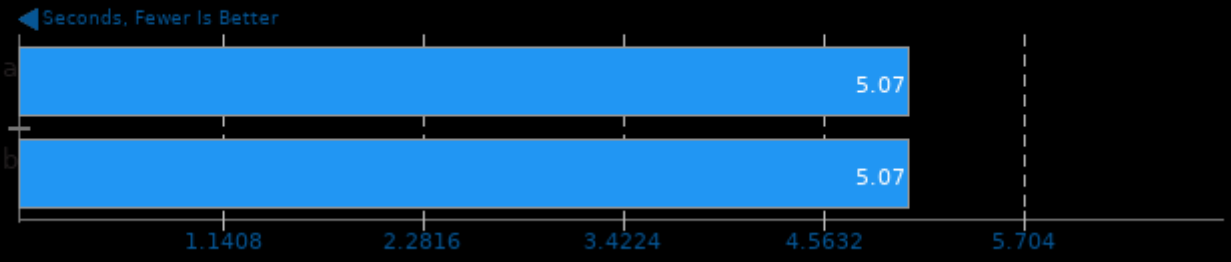
Encoder Mode: Speed 10 Realtime - Input: Bosphorus 1080p



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

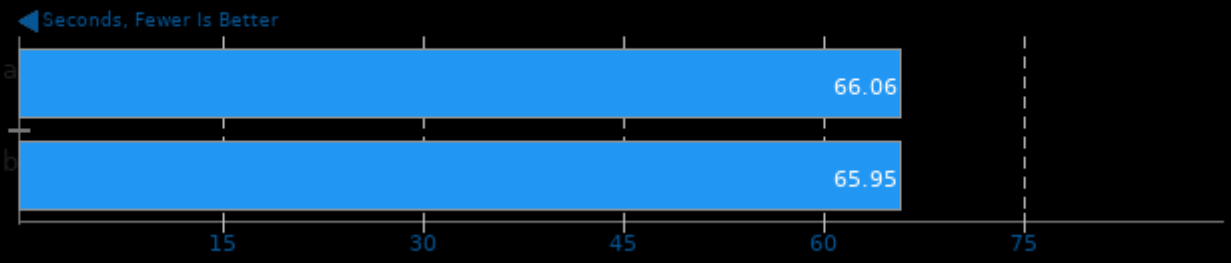
Apache Spark 3.3

Row Count: 1000000 - Partitions: 100 - SHA-512 Benchmark Time



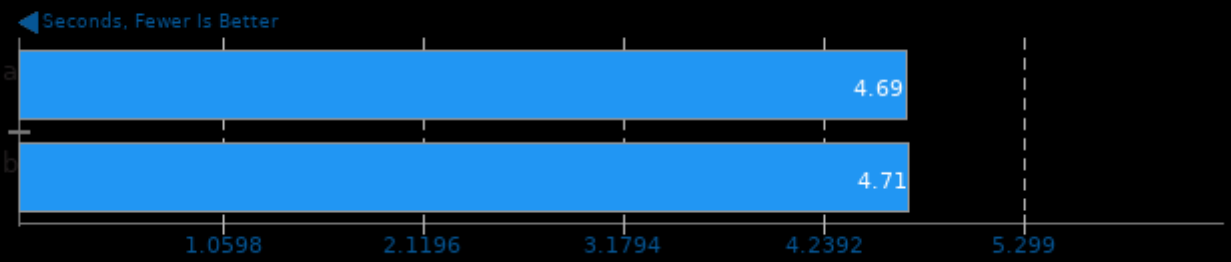
Apache Spark 3.3

Row Count: 1000000 - Partitions: 100 - Calculate Pi Benchmark

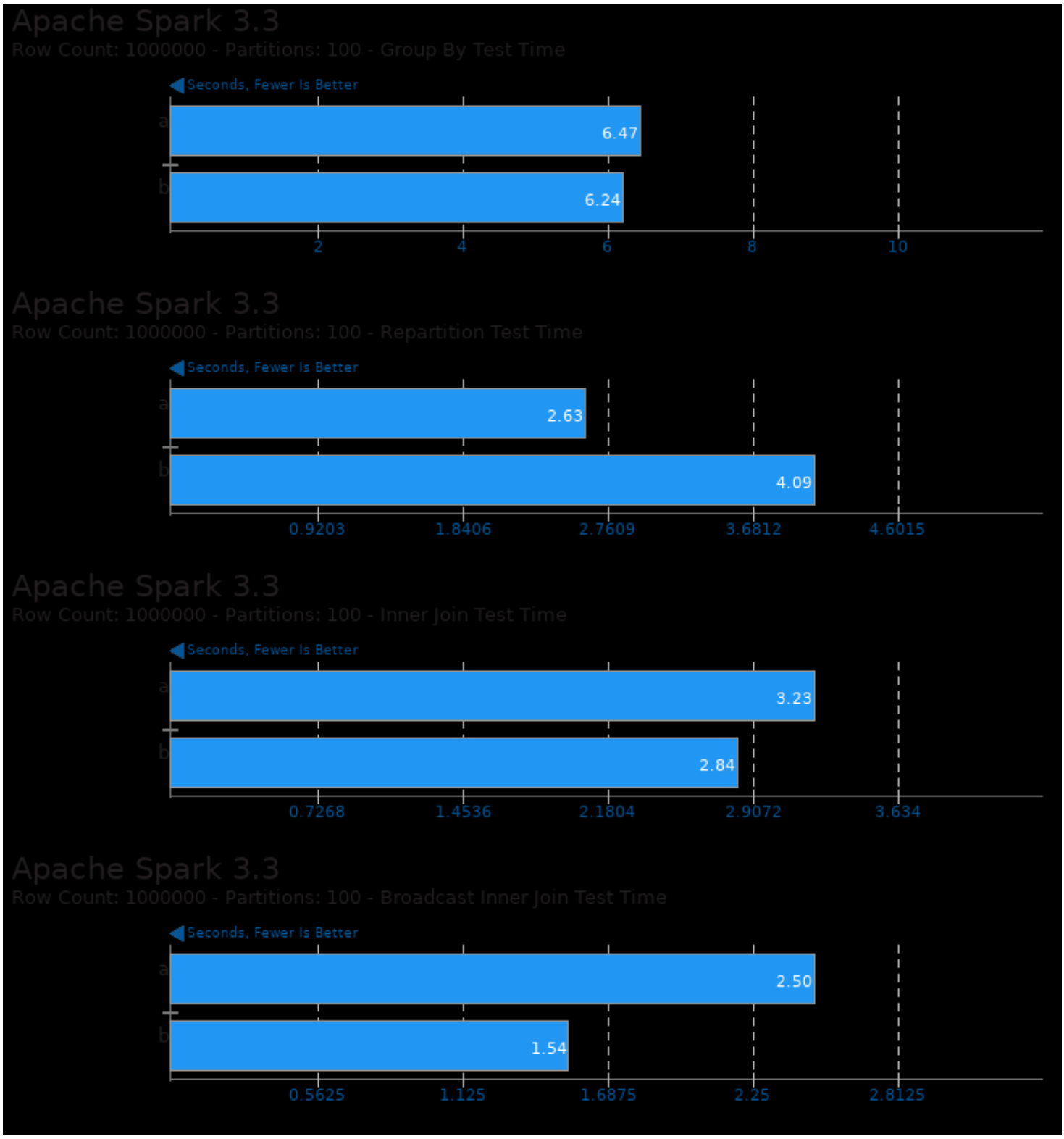


Apache Spark 3.3

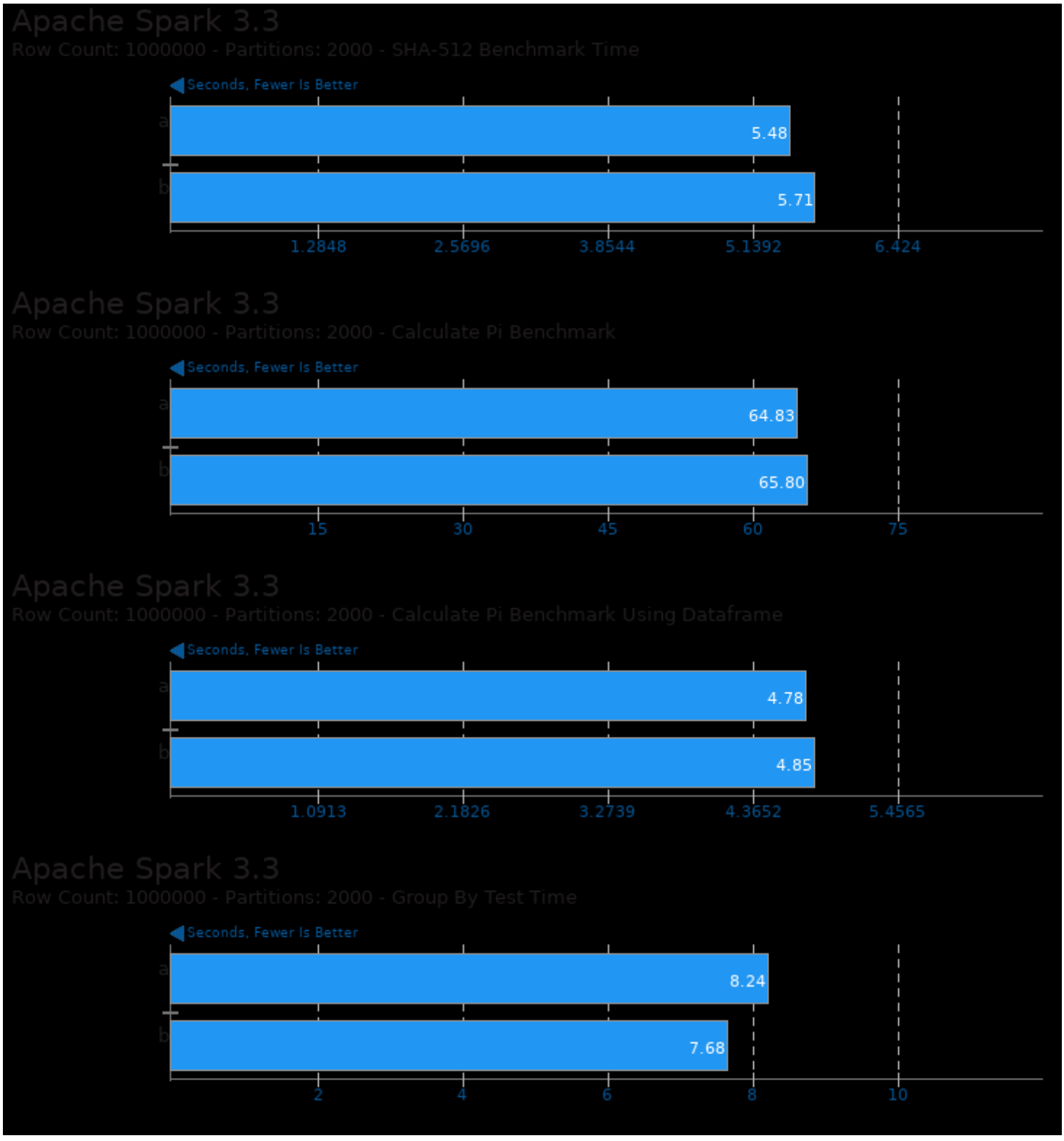
Row Count: 1000000 - Partitions: 100 - Calculate Pi Benchmark Using Dataframe

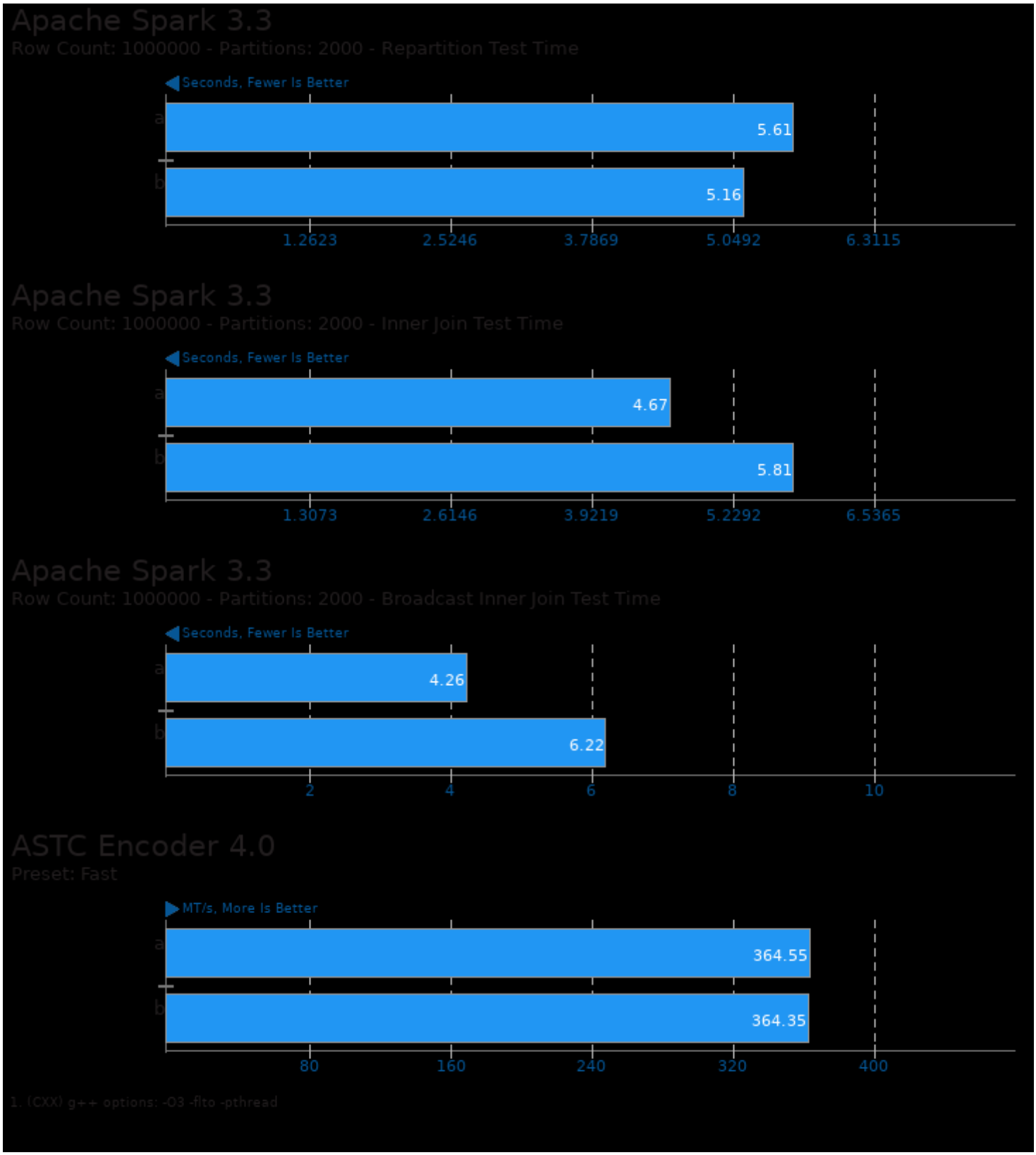


cascade lake refresh



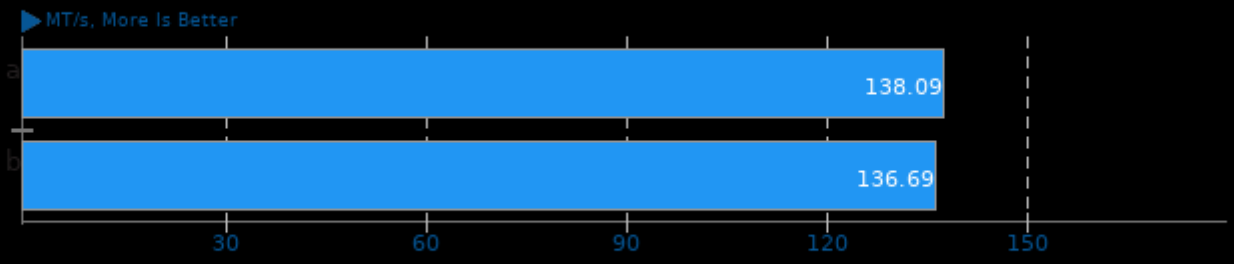
cascade lake refresh




Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - Repartition Test Time
Seconds, Fewer Is Better
a
5.61
b
5.16
1.2623
2.5246
3.7869
5.0492
6.3115
Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - Inner Join Test Time
Seconds, Fewer Is Better
a
4.67
b
5.81
1.3073
2.6146
3.9219
5.2292
6.5365
Apache Spark 3.3
Row Count: 1000000 - Partitions: 2000 - Broadcast Inner Join Test Time
Seconds, Fewer Is Better
a
4.26
b
6.22
2
4
6
8
10
ASTC Encoder 4.0
Preset: Fast
MT/s, More Is Better
a
364.55
b
364.35
80
160
240
320
400
1. (CXX) g++ options: -O3 -flto -pthread

ASTC Encoder 4.0

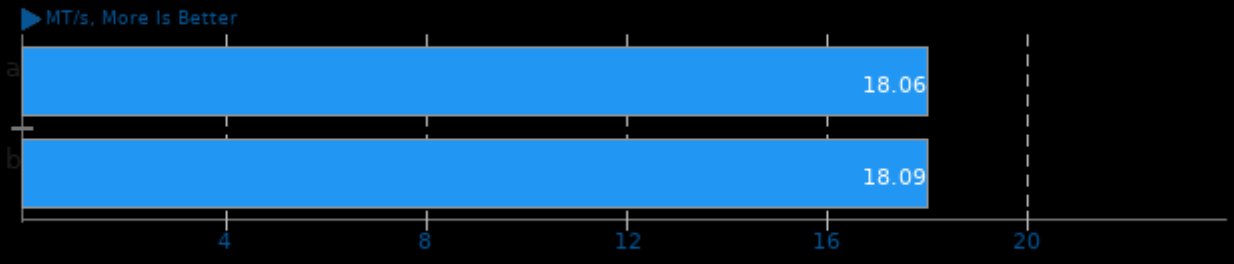
Preset: Medium



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

ASTC Encoder 4.0

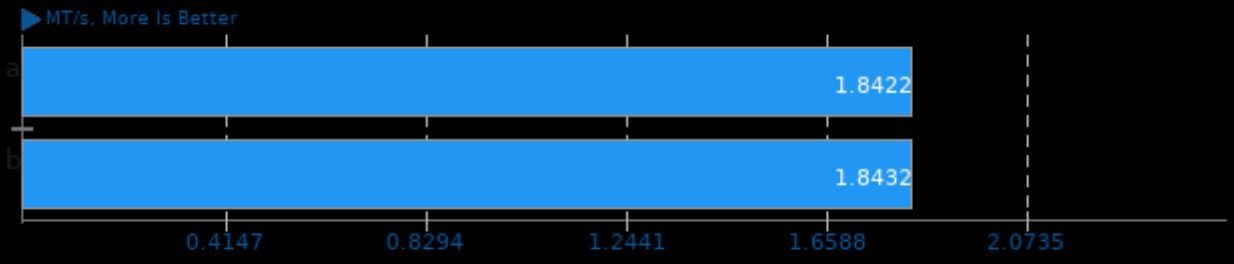
Preset: Thorough



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

ASTC Encoder 4.0

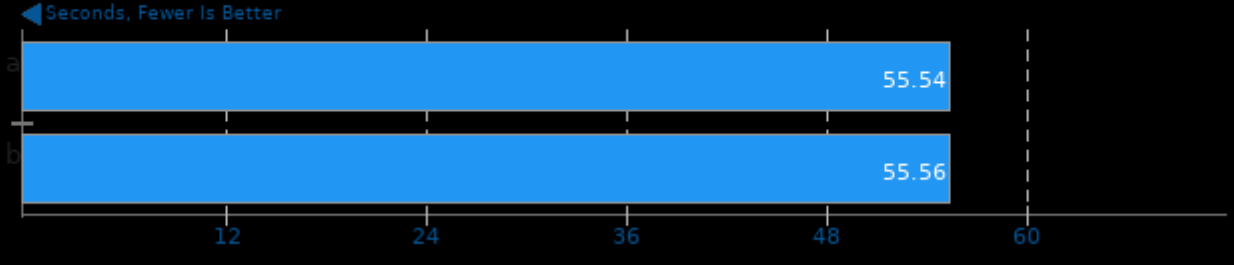
Preset: Exhaustive

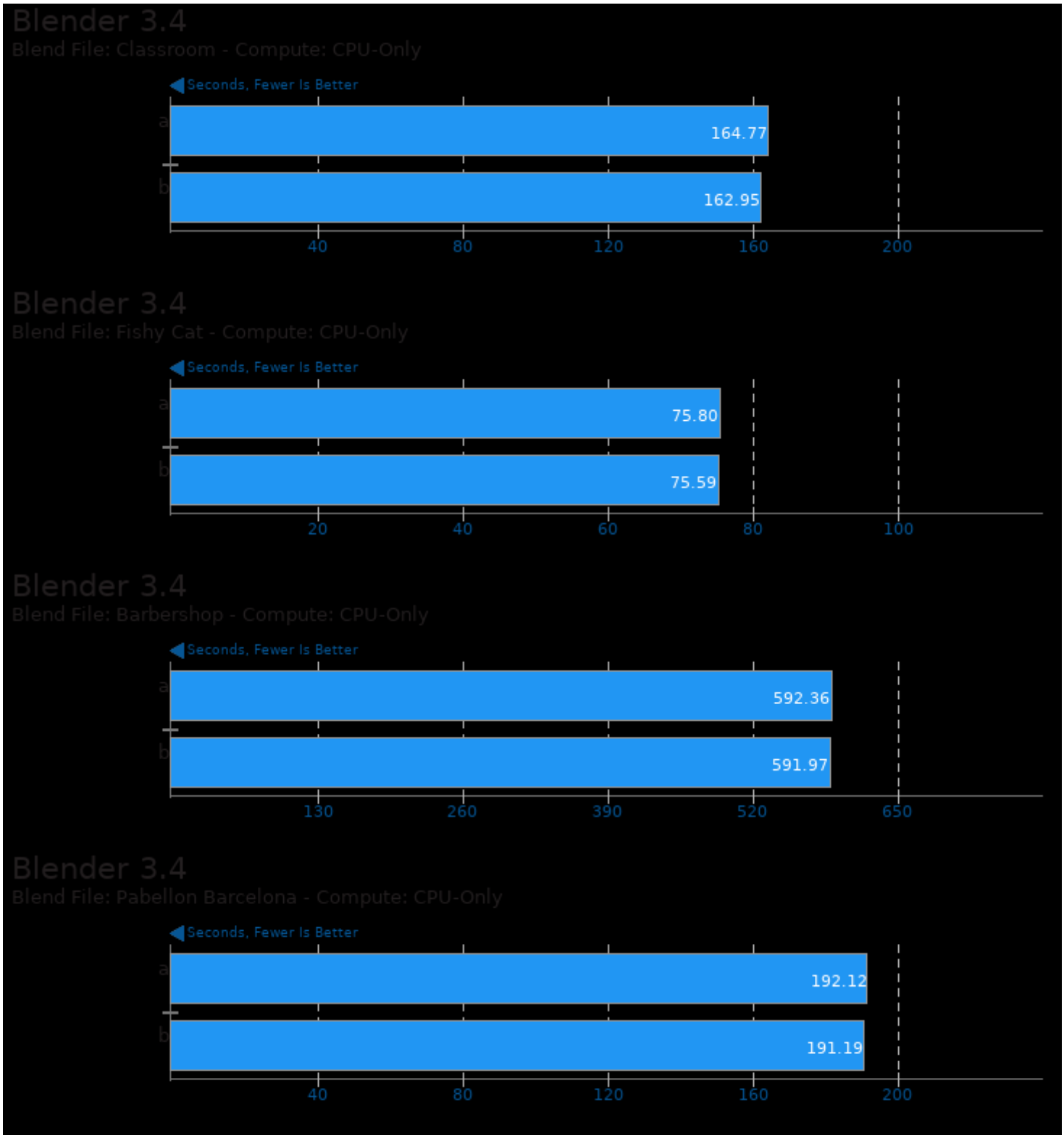


1. (CXX) g++ options: -O3 -flto -pthread

Blender 3.4

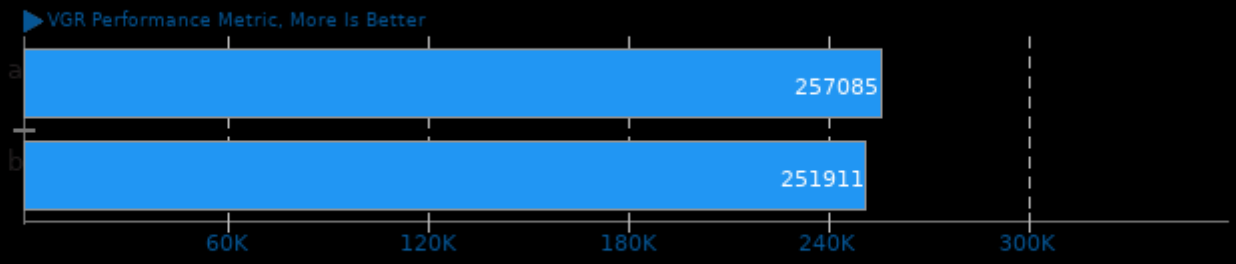
Blend File: BMW27 - Compute: CPU-Only




Blender 3.4
Blend File: Classroom - Compute: CPU-Only
Seconds, Fewer Is Better
a
164.77
b
162.95
40
80
120
160
200
Blender 3.4
Blend File: Fishy Cat - Compute: CPU-Only
Seconds, Fewer Is Better
a
75.80
b
75.59
20
40
60
80
100
Blender 3.4
Blend File: Barbershop - Compute: CPU-Only
Seconds, Fewer Is Better
a
592.36
b
591.97
130
260
390
520
650
Blender 3.4
Blend File: Pabellon Barcelona - Compute: CPU-Only
Seconds, Fewer Is Better
a
192.12
b
191.19
40
80
120
160
200

BRL-CAD 7.32.6

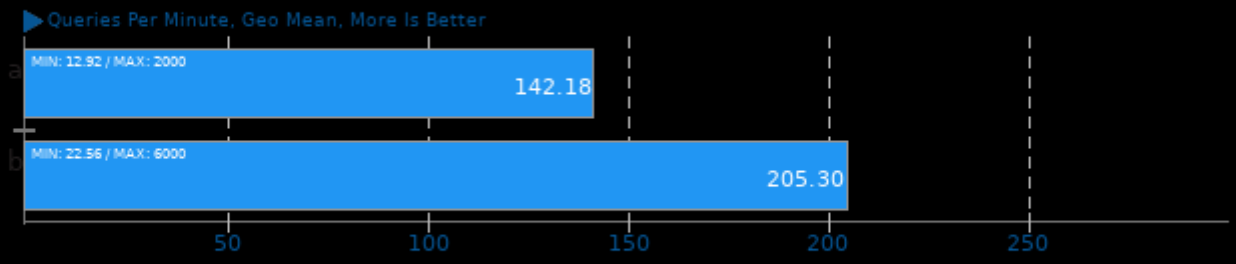
VGR Performance Metric



1. (CXX) g++ options: -std=c++11 -pipe -fvisibility=hidden -fno-strict-aliasing -fno-common -fexceptions -ftemplate-depth-128 -m64 -ggdb3 -O3 -fipa-pt

ClickHouse 22.5.4.19

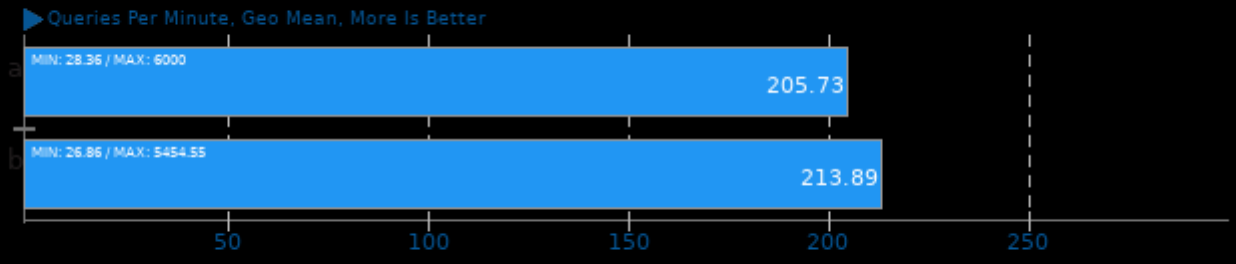
100M Rows Web Analytics Dataset, First Run / Cold Cache



1. ClickHouse server version 22.5.4.19 (official build).

ClickHouse 22.5.4.19

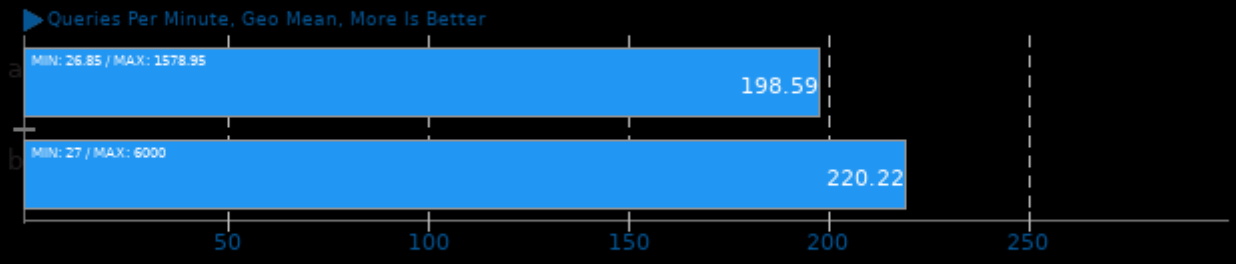
100M Rows Web Analytics Dataset, Second Run



1. ClickHouse server version 22.5.4.19 (official build).

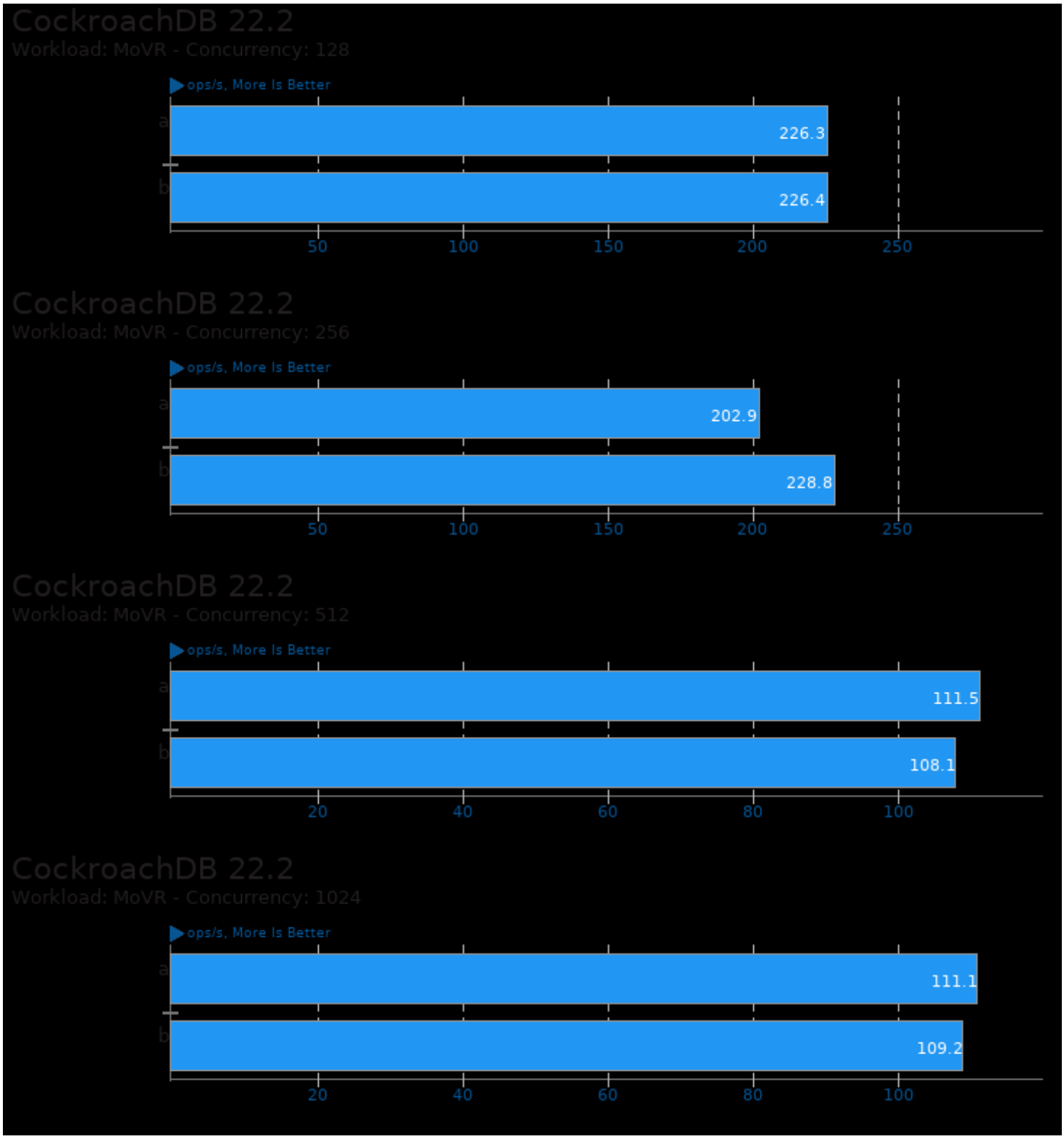
ClickHouse 22.5.4.19

100M Rows Web Analytics Dataset, Third Run

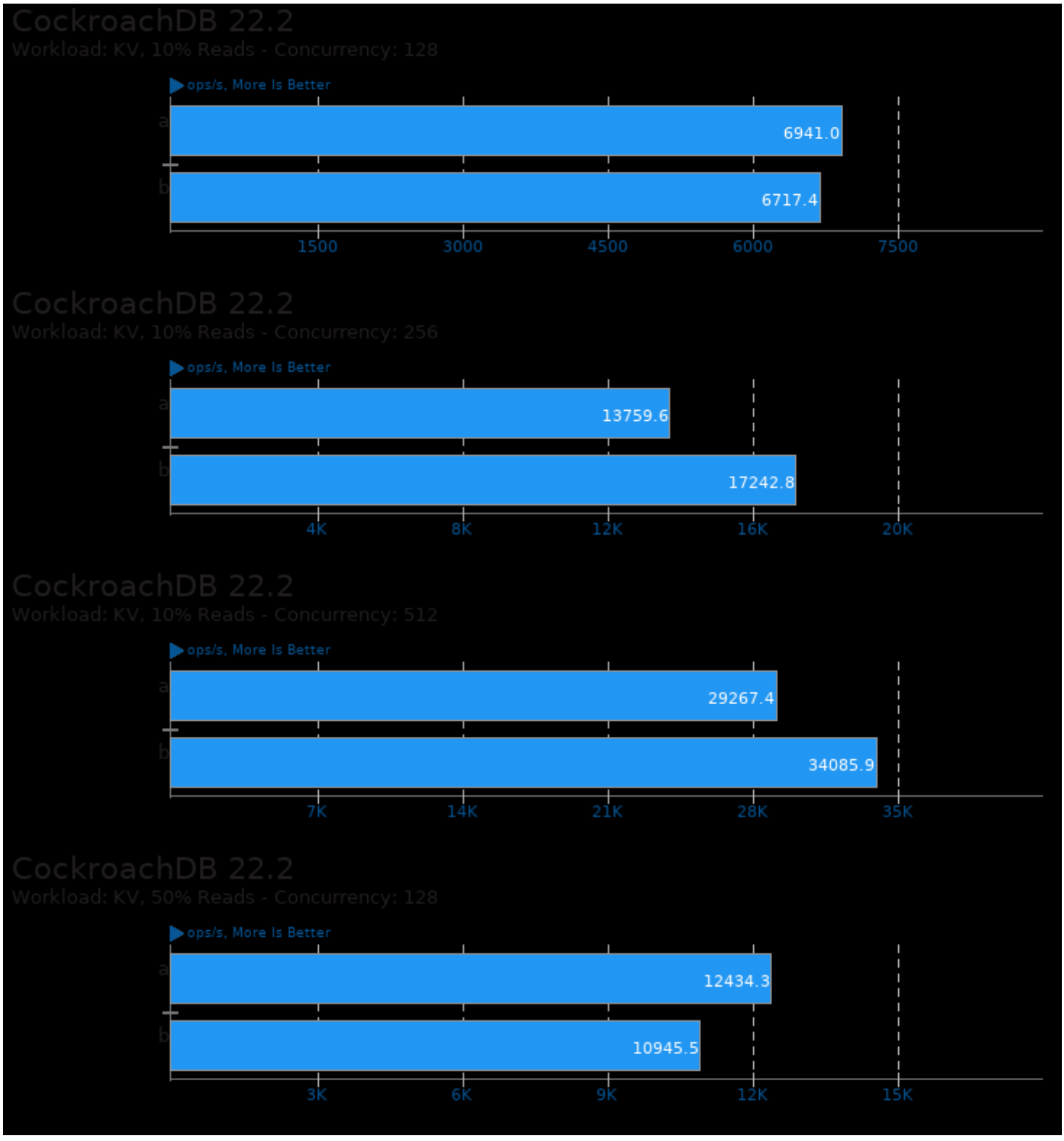


1. ClickHouse server version 22.5.4.19 (official build).

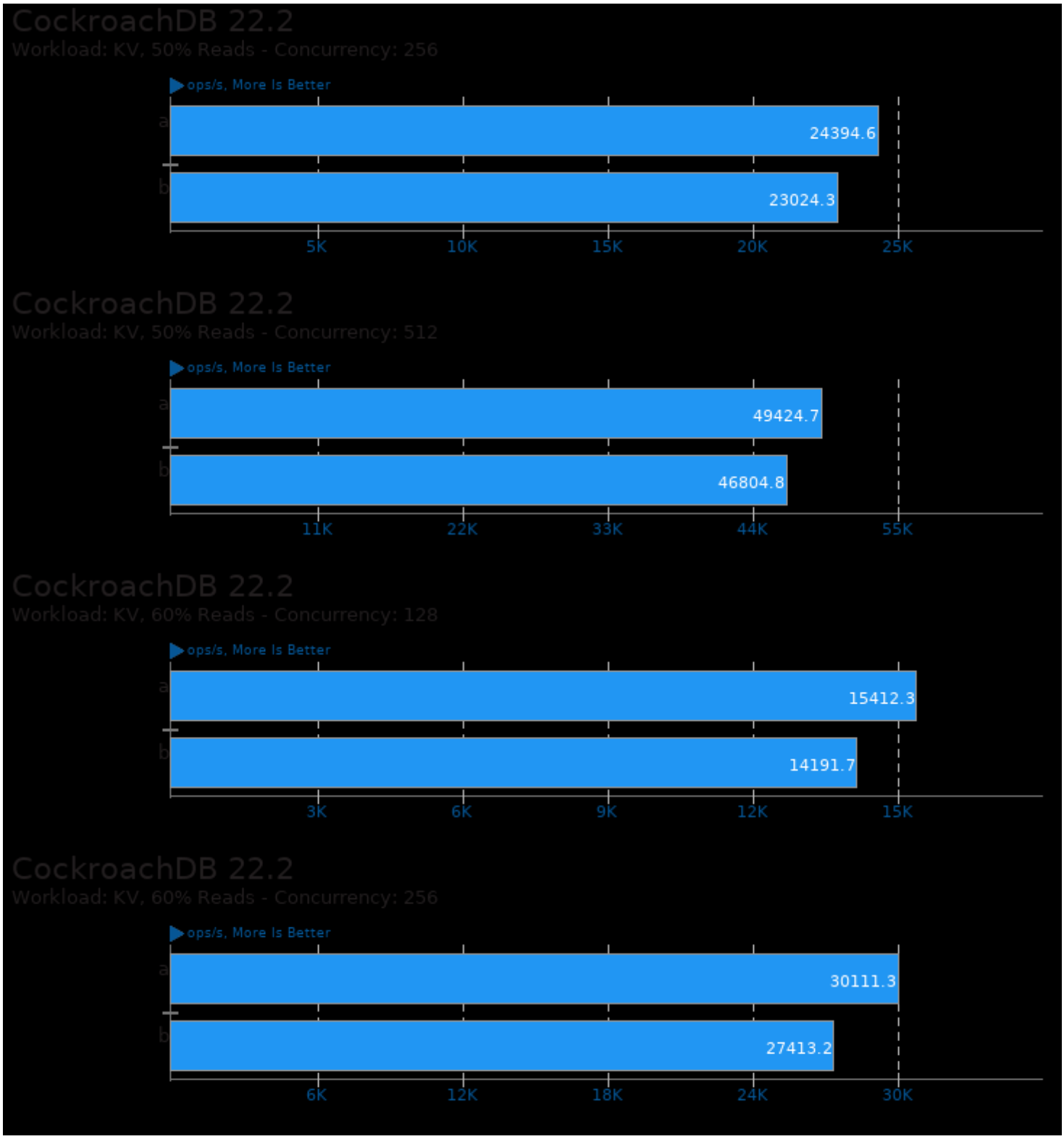
cascade lake refresh



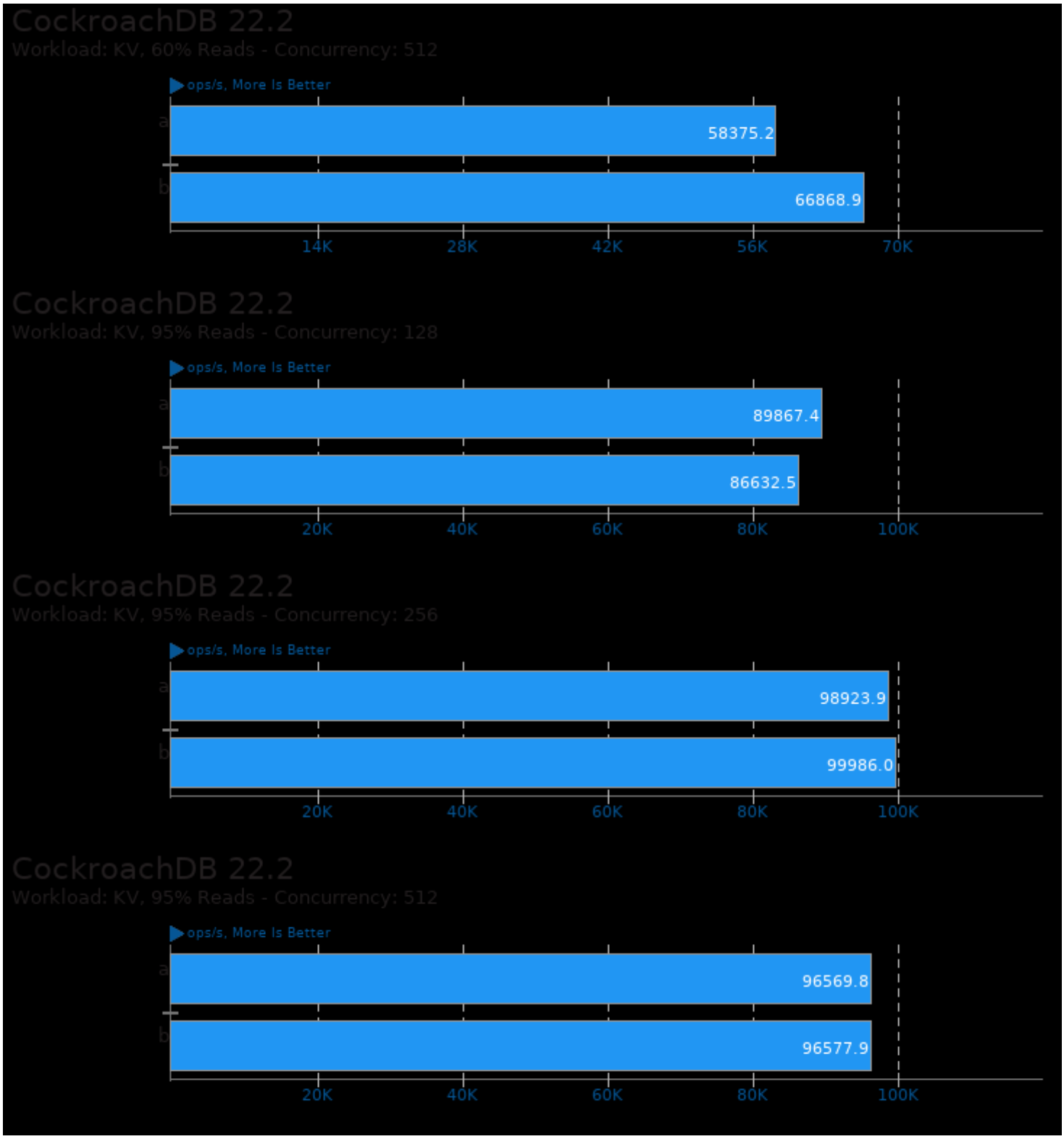
cascade lake refresh



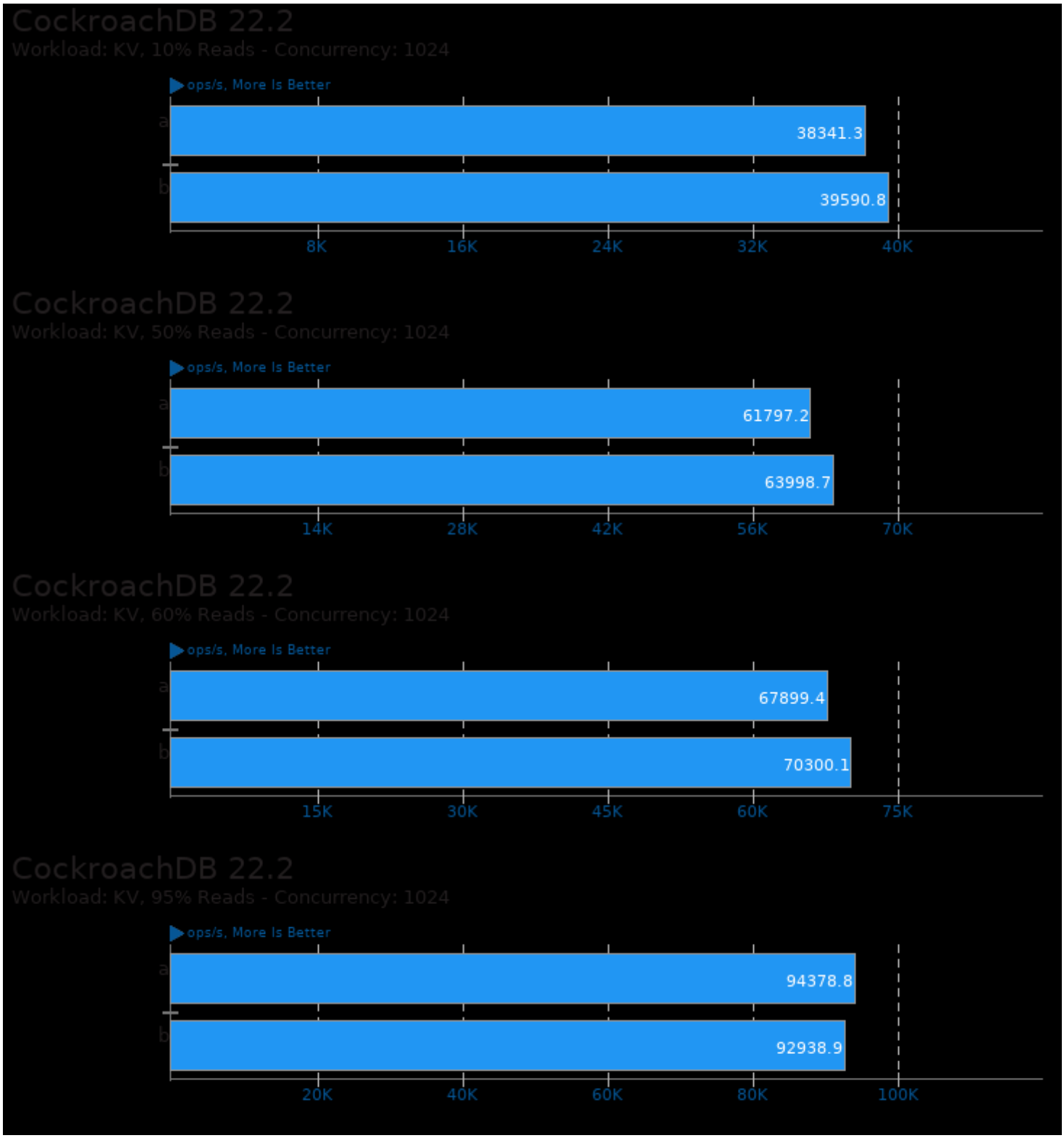
cascade lake refresh



cascade lake refresh

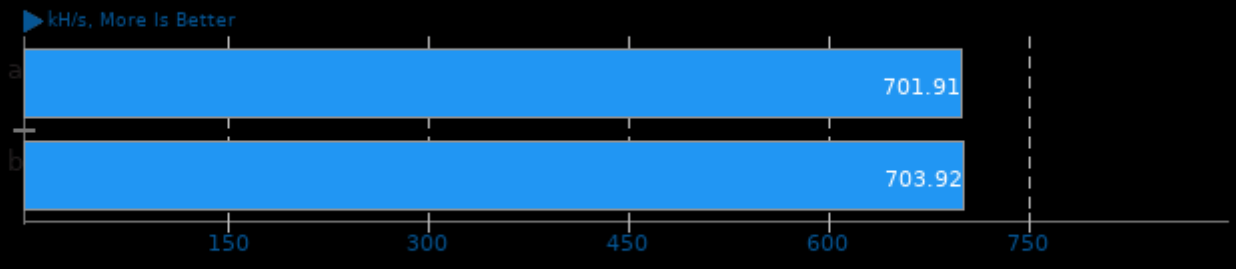


cascade lake refresh



Cpuminer-Opt 3.20.3

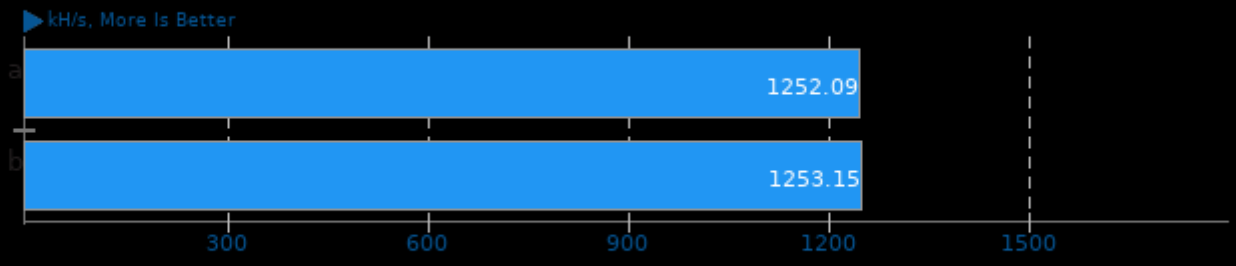
Algorithm: Magi



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

Cpuminer-Opt 3.20.3

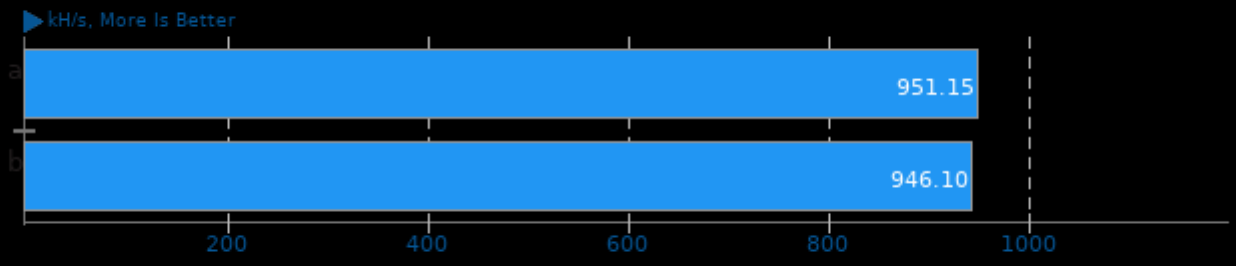
Algorithm: x25x



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

Cpuminer-Opt 3.20.3

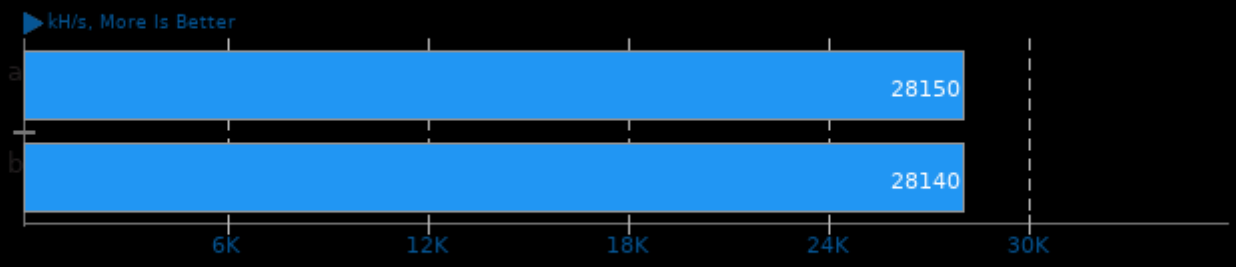
Algorithm: scrypt



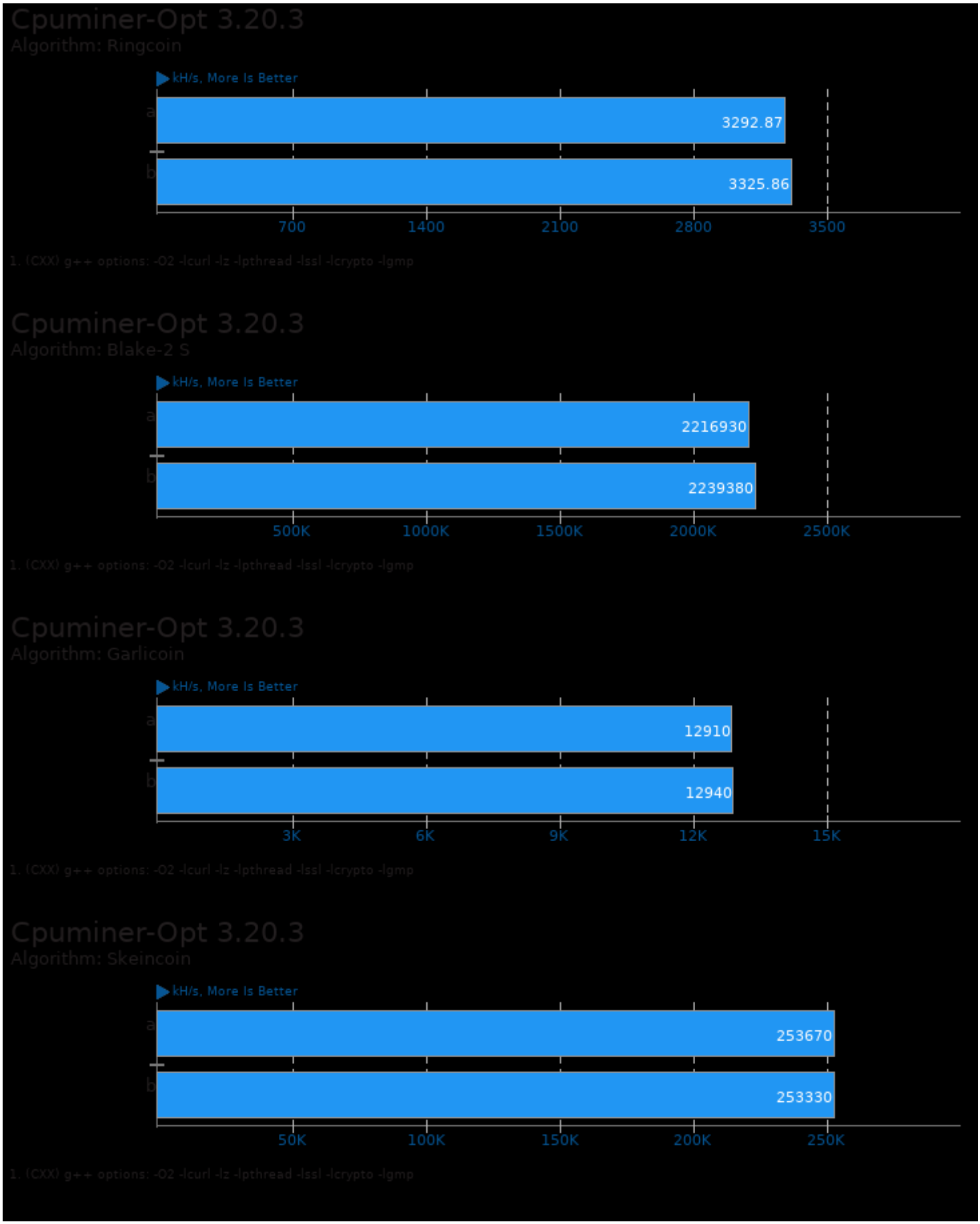
1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.20.3

Algorithm: Deepcoin

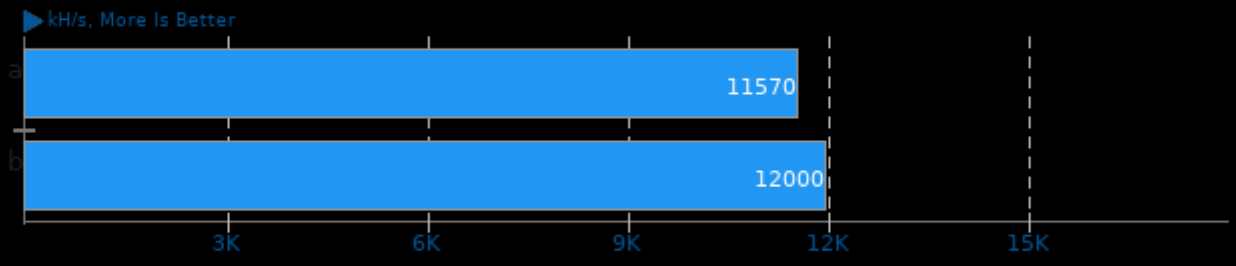


1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp


Cpuminer-Opt 3.20.3
Algorithm: Ringcoin
kH/s, More Is Better
a
3292.87
b
3325.86
700
1400
2100
2800
3500
1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp
Cpuminer-Opt 3.20.3
Algorithm: Blake-2 S
kH/s, More Is Better
a
2216930
b
2239380
500K
1000K
1500K
2000K
2500K
1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp
Cpuminer-Opt 3.20.3
Algorithm: Garlicoin
kH/s, More Is Better
a
12910
b
12940
3K
6K
9K
12K
15K
1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp
Cpuminer-Opt 3.20.3
Algorithm: Skeincoin
kH/s, More Is Better
a
253670
b
253330
50K
100K
150K
200K
250K
1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.20.3

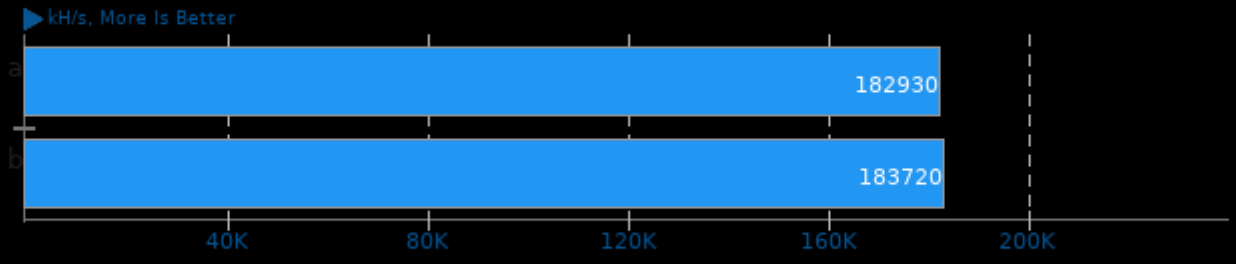
Algorithm: Myriad-Groestl



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

Cpuminer-Opt 3.20.3

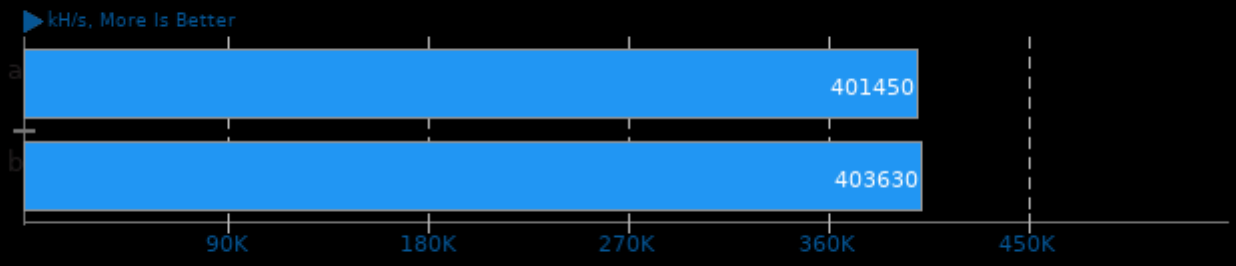
Algorithm: LBC, LBRY Credits



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

Cpuminer-Opt 3.20.3

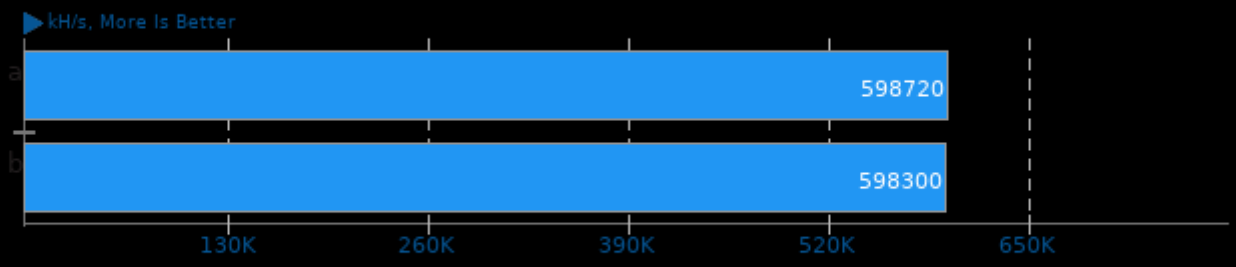
Algorithm: Quad SHA-256, Pyrite



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

Cpuminer-Opt 3.20.3

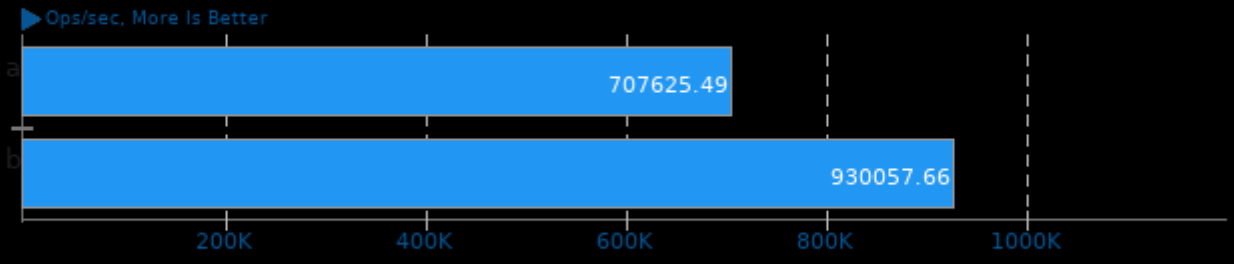
Algorithm: Triple SHA-256, Onecoin



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

Dragonflydb 0.6

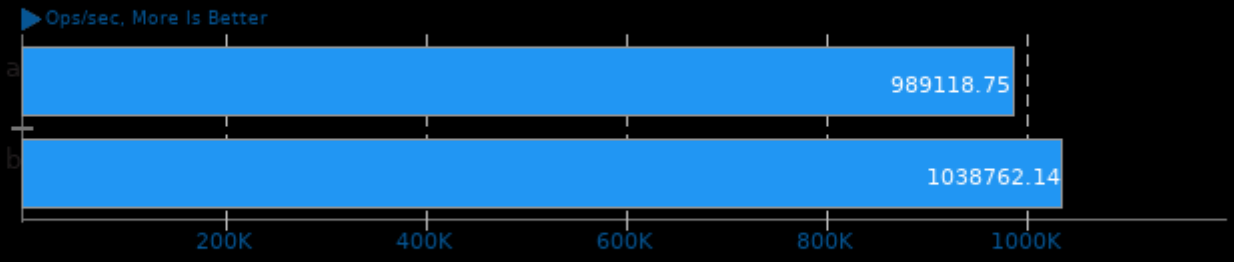
Clients: 50 - Set To Get Ratio: 1:1



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

Dragonflydb 0.6

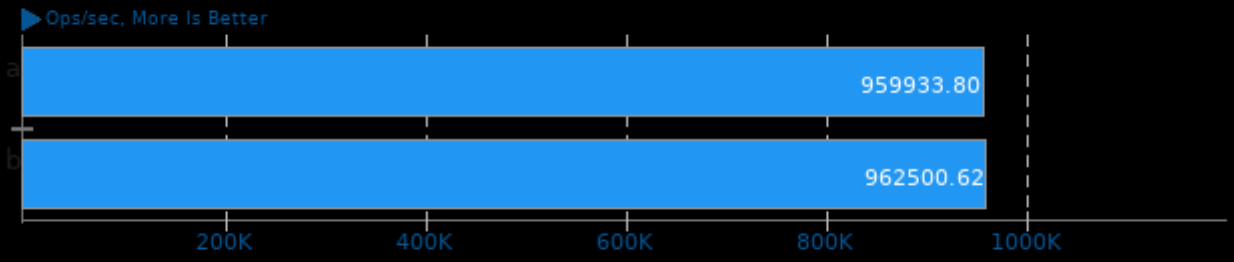
Clients: 50 - Set To Get Ratio: 1:5



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

Dragonflydb 0.6

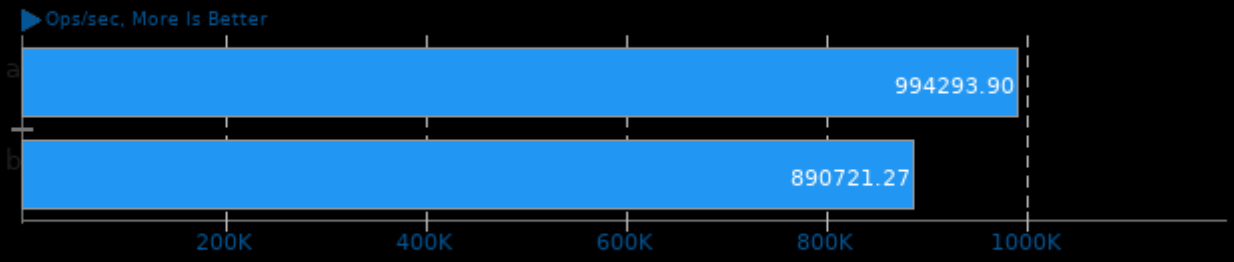
Clients: 50 - Set To Get Ratio: 5:1



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

Dragonflydb 0.6

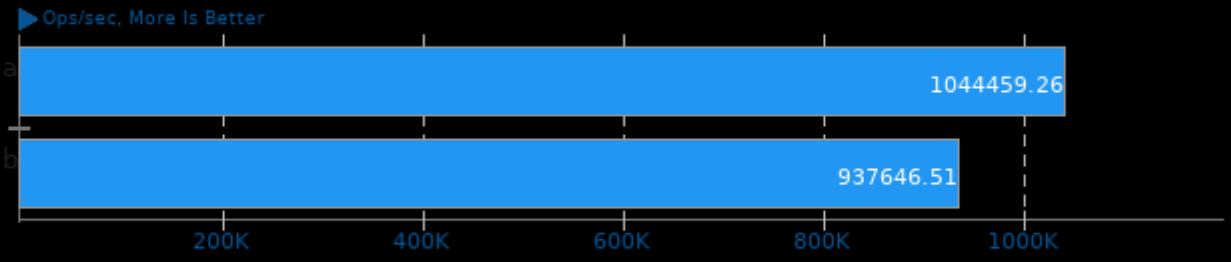
Clients: 200 - Set To Get Ratio: 1:1



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

Dragonflydb 0.6

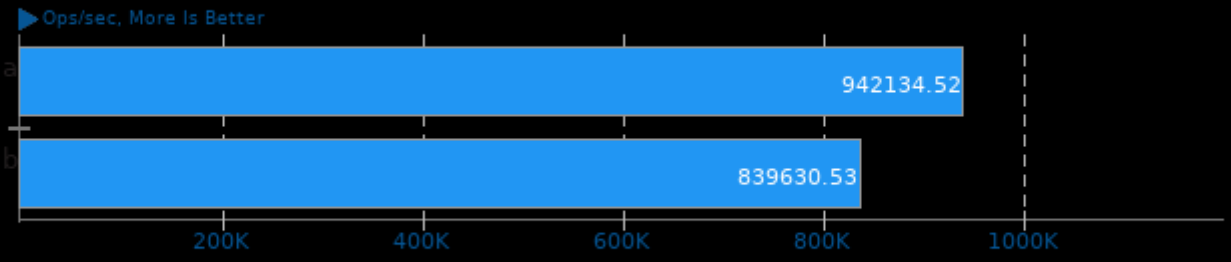
Clients: 200 - Set To Get Ratio: 1:5



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

Dragonflydb 0.6

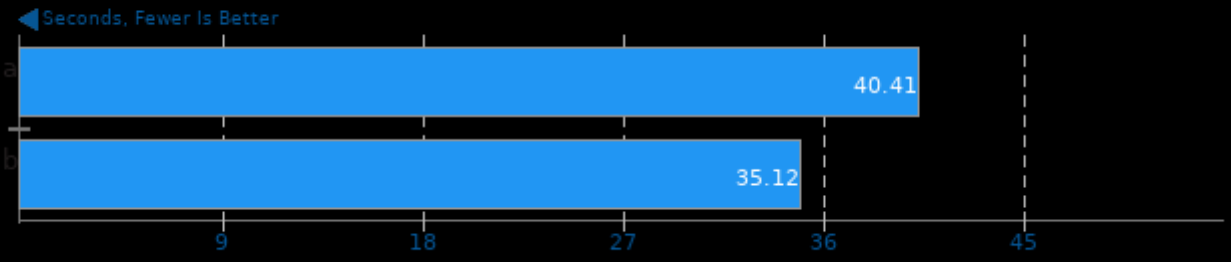
Clients: 200 - Set To Get Ratio: 5:1



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

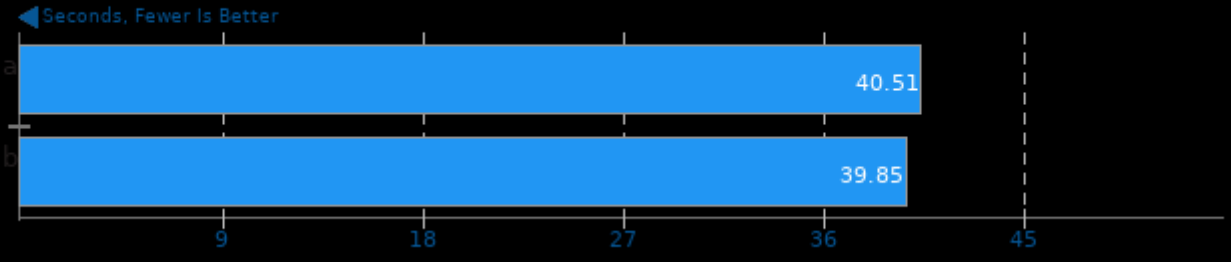
EnCodec 0.1.1

Target Bandwidth: 3 kbps



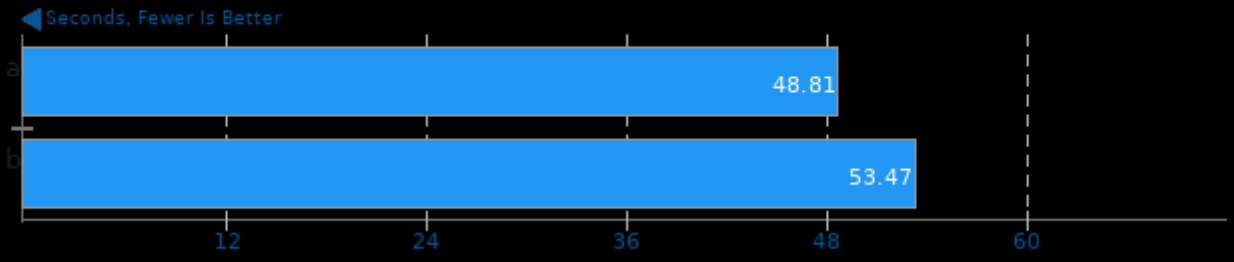
EnCodec 0.1.1

Target Bandwidth: 6 kbps



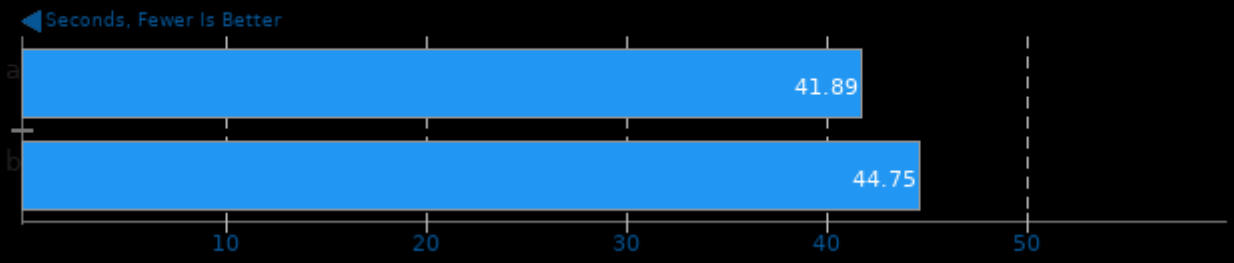
EnCodec 0.1.1

Target Bandwidth: 24 kbps



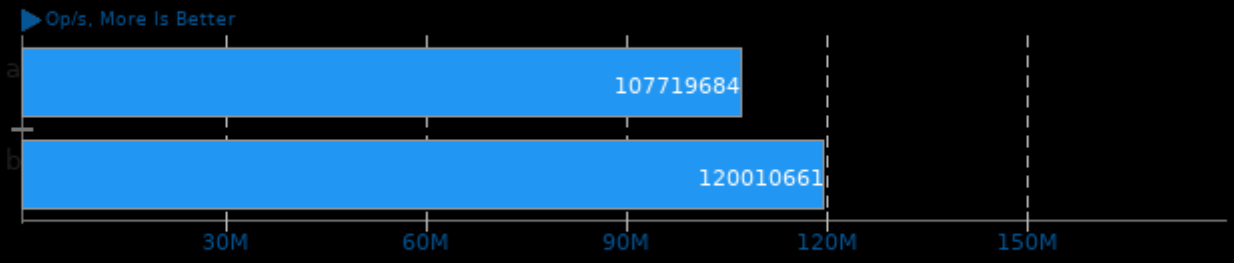
EnCodec 0.1.1

Target Bandwidth: 1.5 kbps



Facebook RocksDB 7.5.3

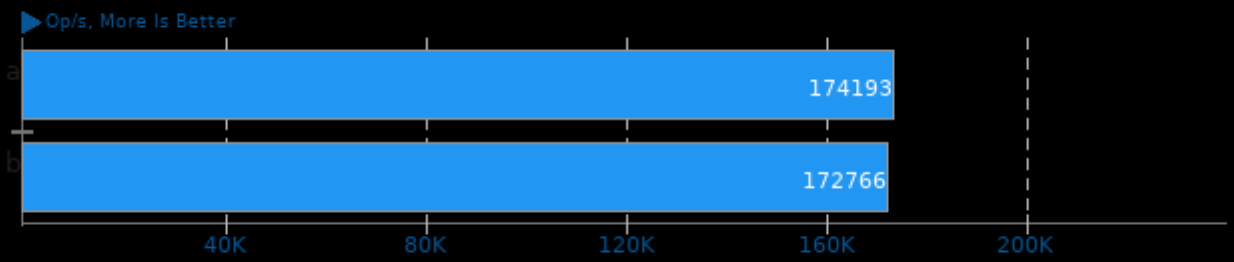
Test: Random Read



1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread

Facebook RocksDB 7.5.3

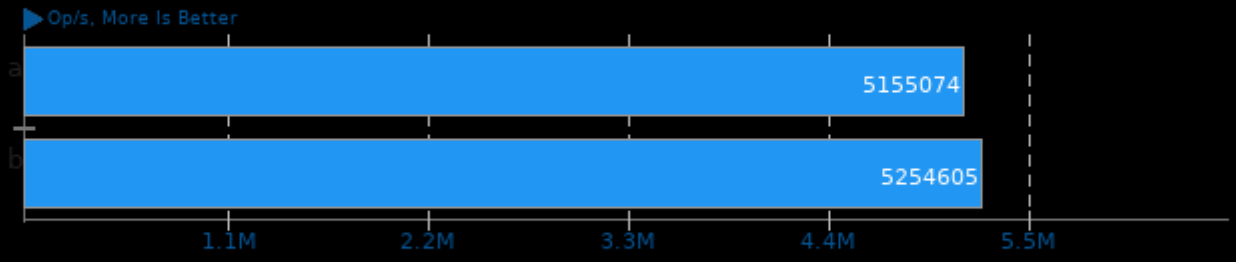
Test: Update Random



1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread

Facebook RocksDB 7.5.3

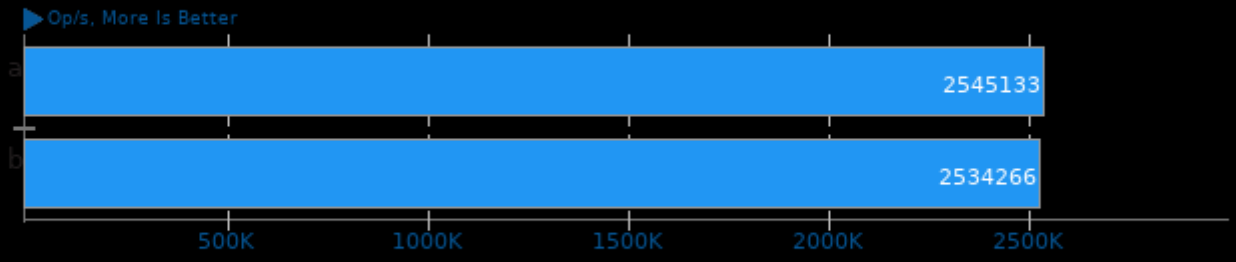
Test: Read While Writing



1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread

Facebook RocksDB 7.5.3

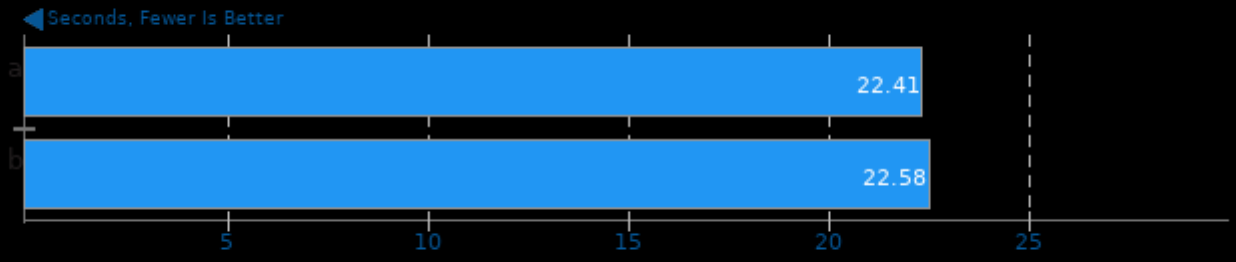
Test: Read Random Write Random



1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread

FLAC Audio Encoding 1.4

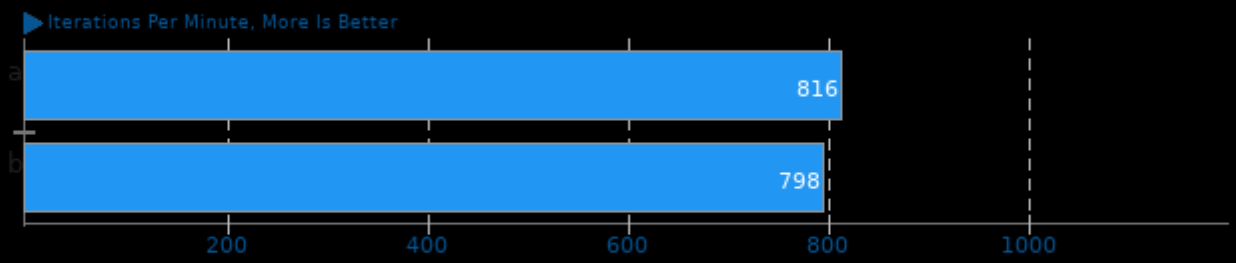
WAV To FLAC



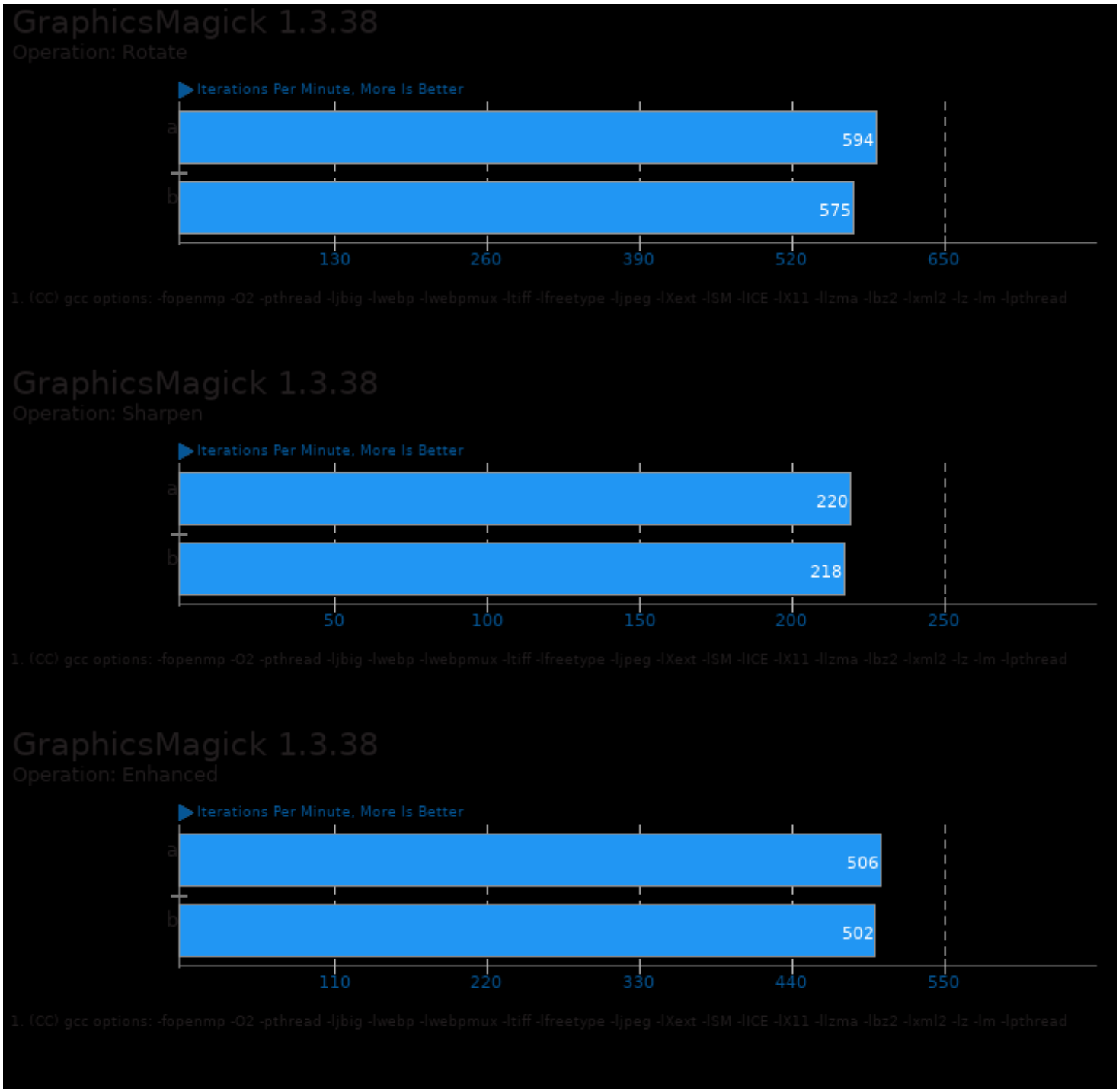
1. (CXX) g++ options: -O3 -fvisibility=hidden -logg -lm

GraphicsMagick 1.3.38

Operation: Swirl

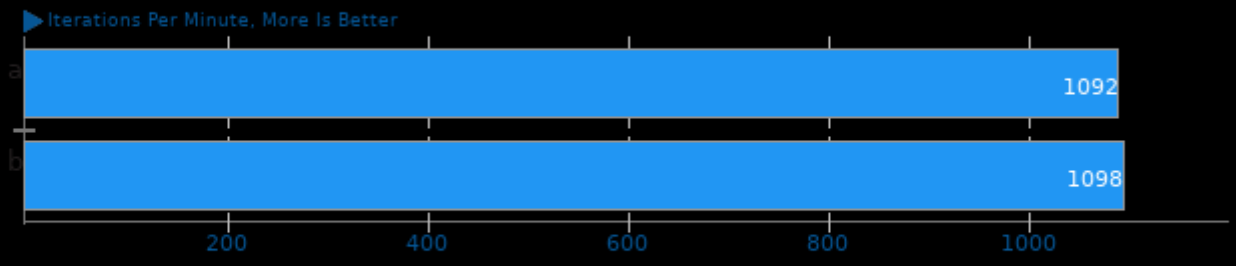


1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread


GraphicsMagick 1.3.38
Operation: Rotate
Iterations Per Minute, More Is Better
a
b
594
575
130
260
390
520
650
1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread
GraphicsMagick 1.3.38
Operation: Sharpen
Iterations Per Minute, More Is Better
a
b
220
218
50
100
150
200
250
1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread
GraphicsMagick 1.3.38
Operation: Enhanced
Iterations Per Minute, More Is Better
a
b
506
502
110
220
330
440
550
1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread

GraphicsMagick 1.3.38

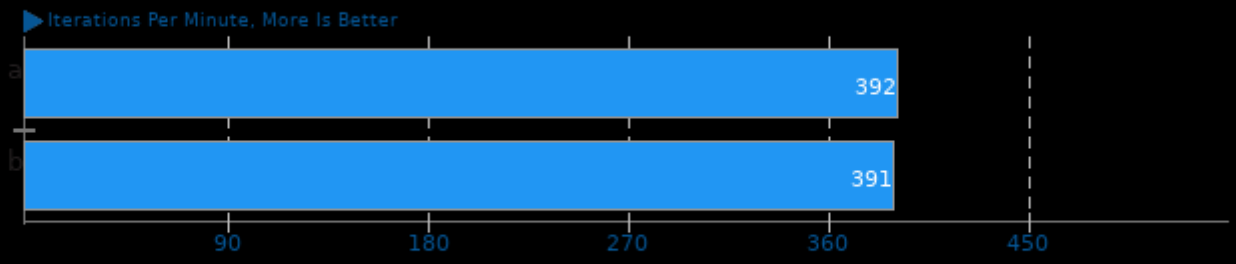
Operation: Resizing



1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread

GraphicsMagick 1.3.38

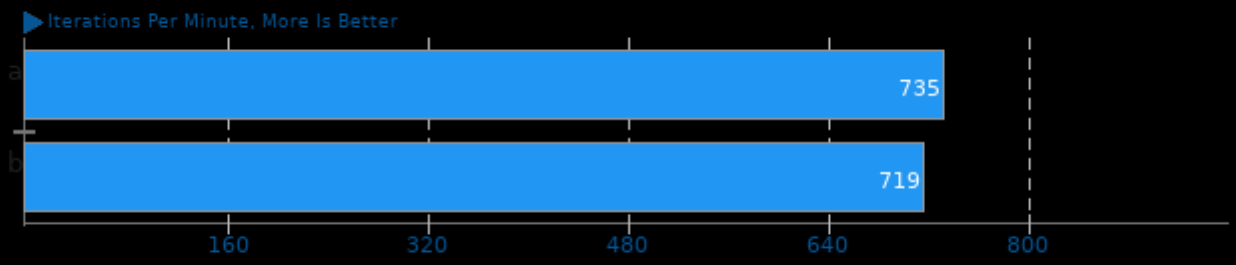
Operation: Noise-Gaussian



1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread

GraphicsMagick 1.3.38

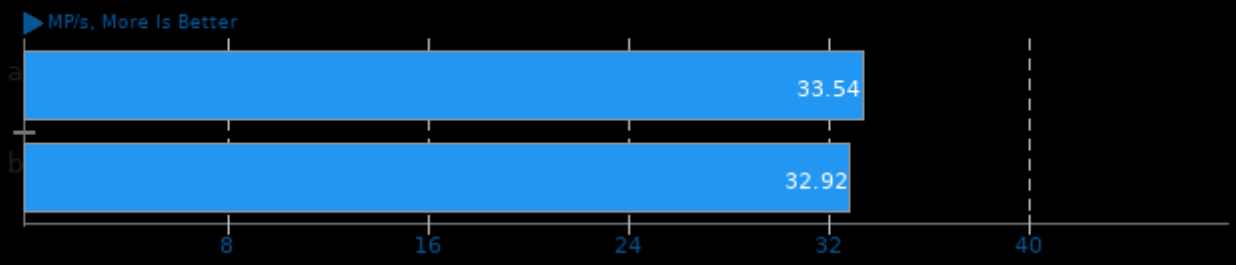
Operation: HWB Color Space

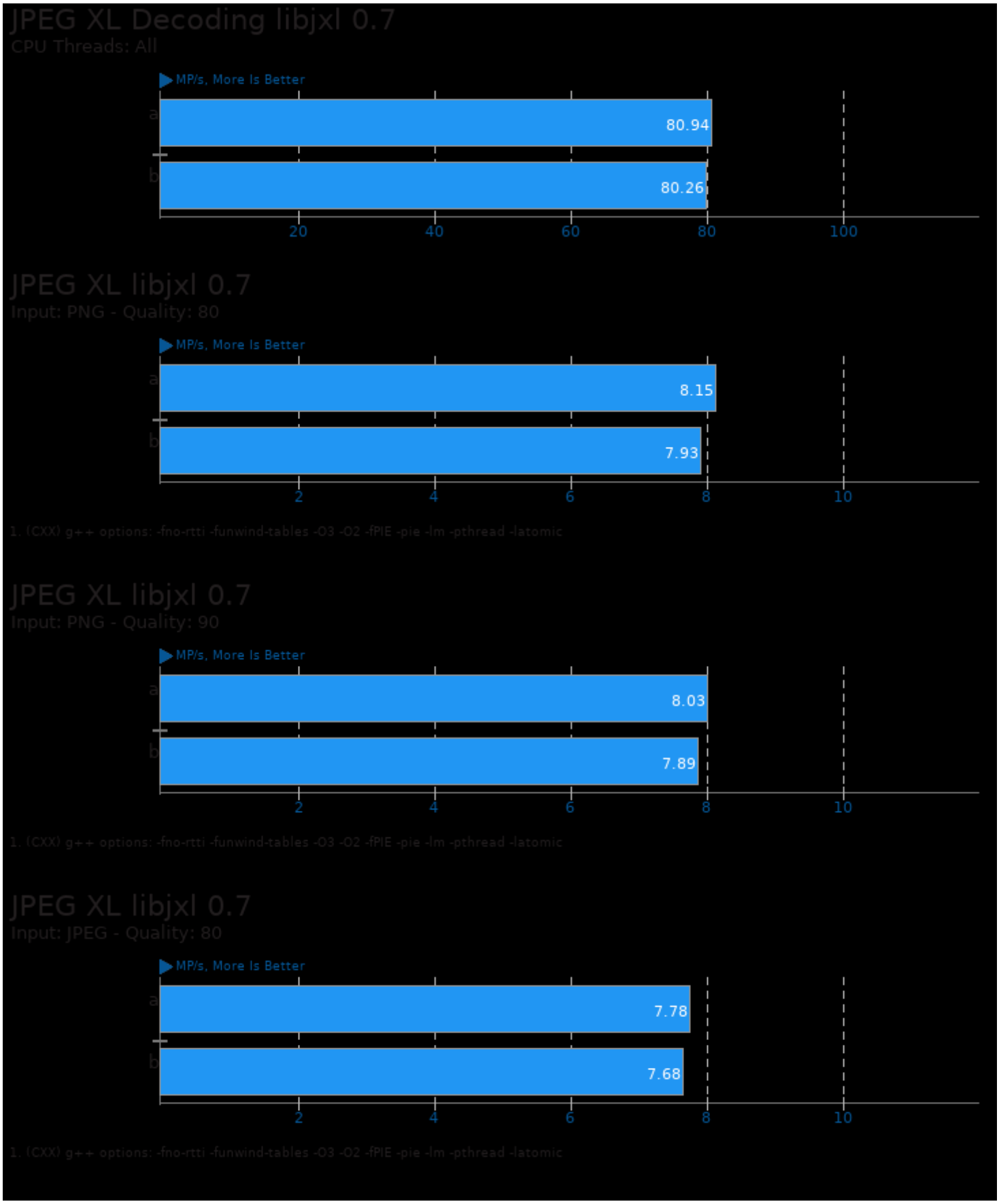


1. (CC) gcc options: -fopenmp -O2 -pthread -ljbig -lwebp -lwebpmux -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -llzma -lbz2 -lxml2 -lz -lm -lpthread

JPEG XL Decoding libjxl 0.7

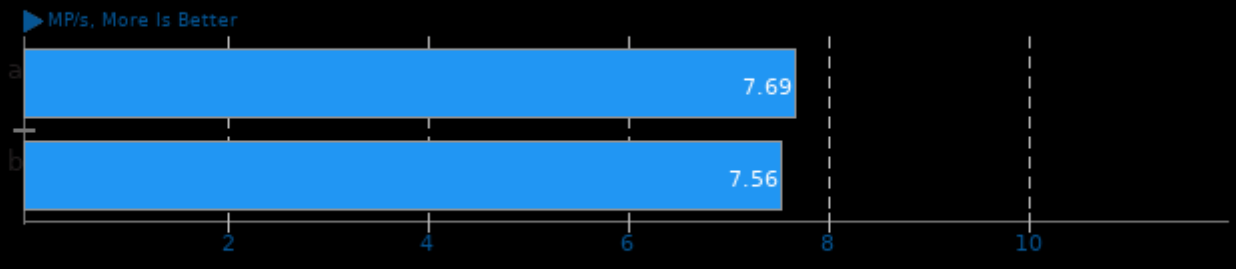
CPU Threads: 1




JPEG XL Decoding libjxl 0.7
CPU Threads: All
MP/s, More Is Better
a
80.94
b
80.26
20
40
60
80
100
JPEG XL libjxl 0.7
Input: PNG - Quality: 80
MP/s, More Is Better
a
8.15
b
7.93
2
4
6
8
10
1. (CXX) g++ options: -fno-rtti -funwind-tables -O3 -O2 -fPIE -pie -lm -pthread -latomic
JPEG XL libjxl 0.7
Input: PNG - Quality: 90
MP/s, More Is Better
a
8.03
b
7.89
2
4
6
8
10
1. (CXX) g++ options: -fno-rtti -funwind-tables -O3 -O2 -fPIE -pie -lm -pthread -latomic
JPEG XL libjxl 0.7
Input: JPEG - Quality: 80
MP/s, More Is Better
a
7.78
b
7.68
2
4
6
8
10
1. (CXX) g++ options: -fno-rtti -funwind-tables -O3 -O2 -fPIE -pie -lm -pthread -latomic

JPEG XL libjxl 0.7

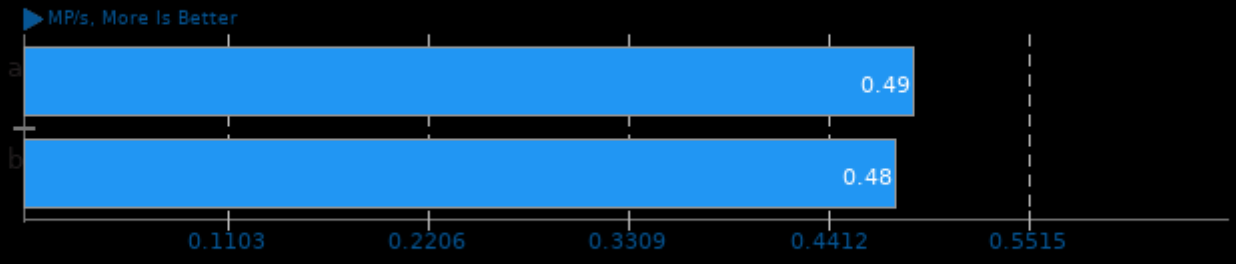
Input: JPEG - Quality: 90



1. (CXX) g++ options: -fno-rtti -funwind-tables -O3 -O2 -fPIE -pie -lm -pthread -latomic

JPEG XL libjxl 0.7

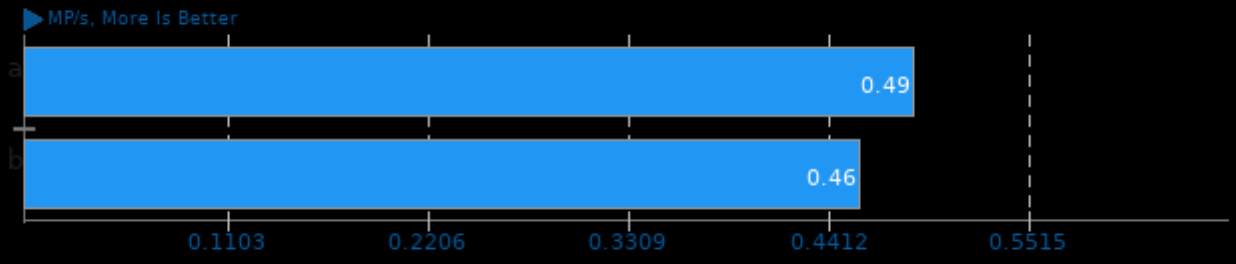
Input: PNG - Quality: 100



1. (CXX) g++ options: -fno-rtti -funwind-tables -O3 -O2 -fPIE -pie -lm -pthread -latomic

JPEG XL libjxl 0.7

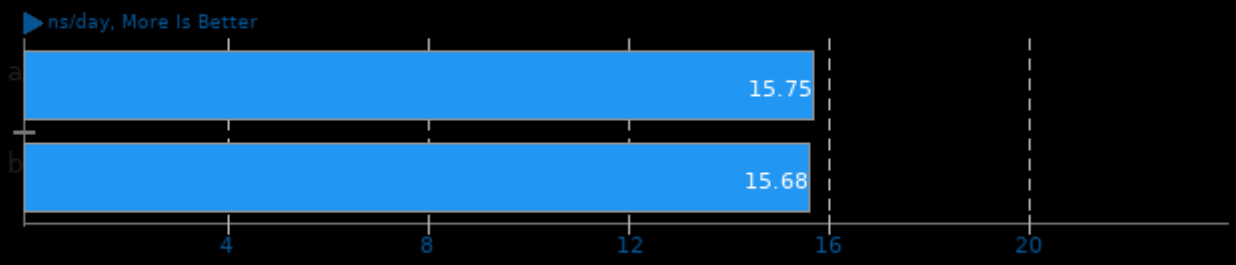
Input: JPEG - Quality: 100



1. (CXX) g++ options: -fno-rtti -funwind-tables -O3 -O2 -fPIE -pie -lm -pthread -latomic

LAMMPS Molecular Dynamics Simulator 23Jun2022

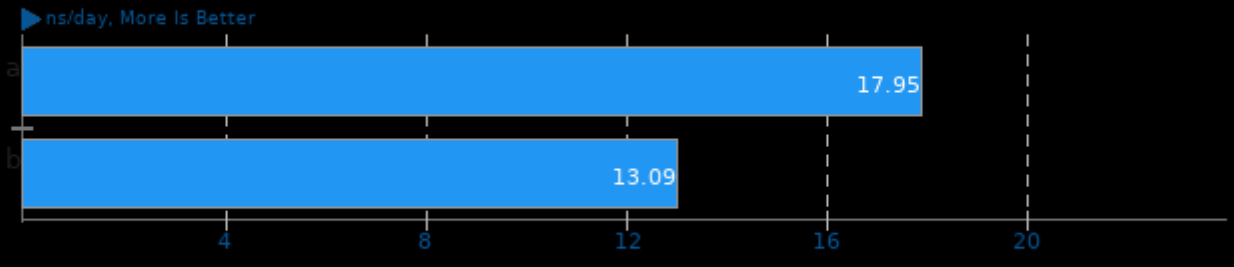
Model: 20k Atoms



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

LAMMPS Molecular Dynamics Simulator 23Jun2022

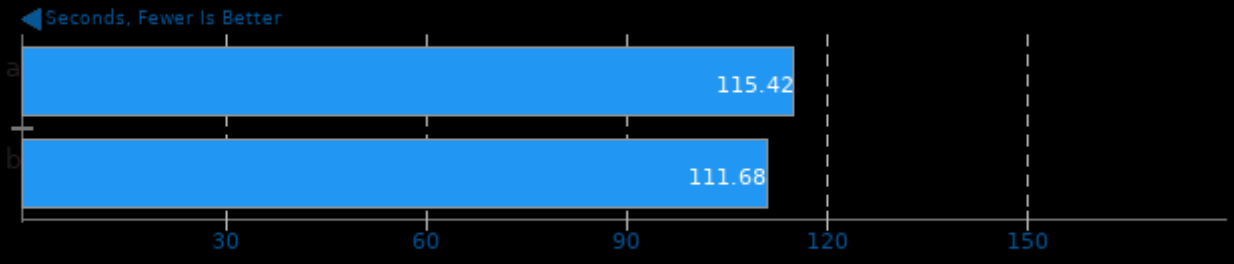
Model: Rhodopsin Protein



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

libavif avifenc 0.11

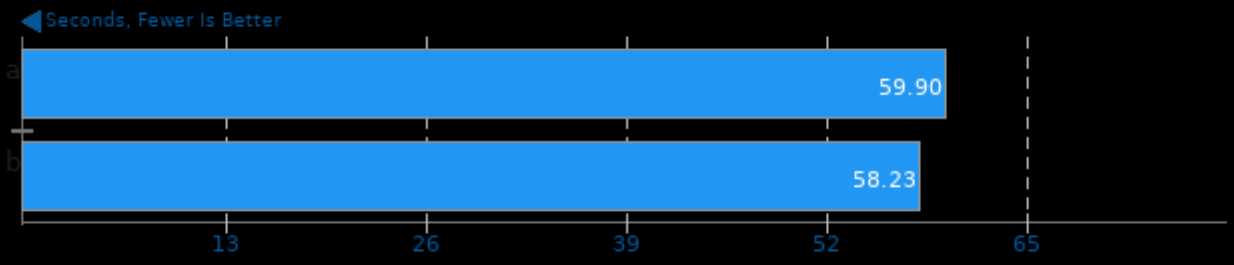
Encoder Speed: 0



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

libavif avifenc 0.11

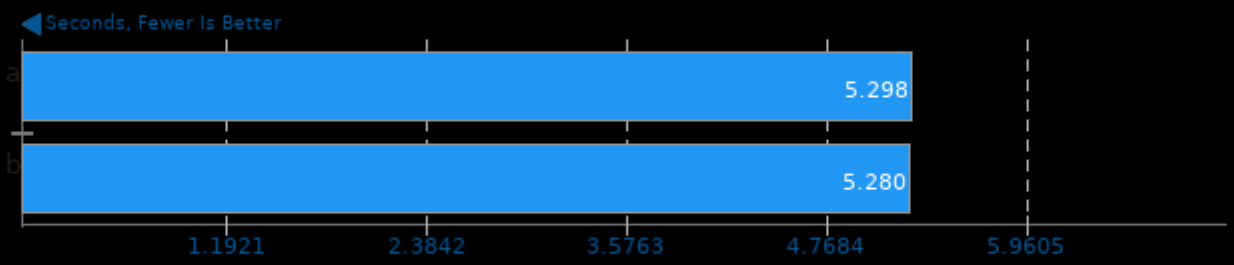
Encoder Speed: 2



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

libavif avifenc 0.11

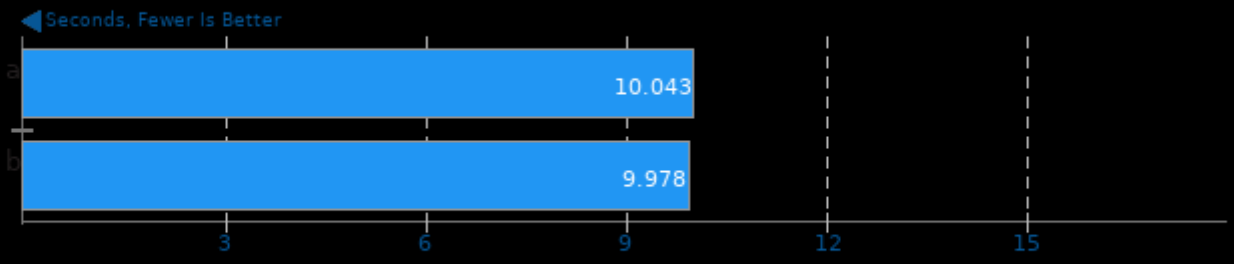
Encoder Speed: 6



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

libavif avifenc 0.11

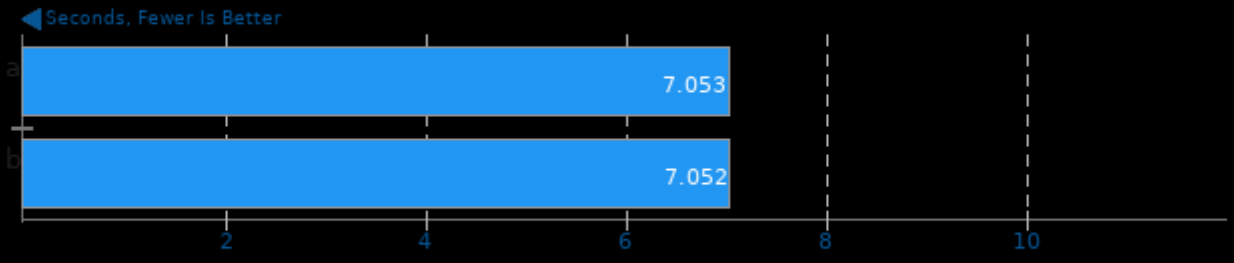
Encoder Speed: 6, Lossless



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

libavif avifenc 0.11

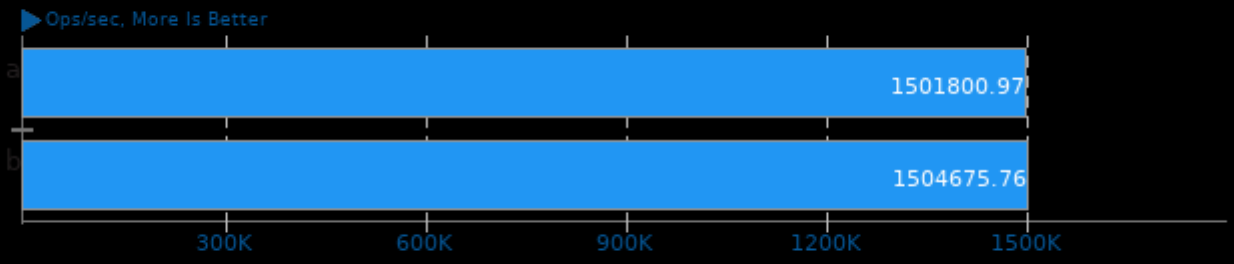
Encoder Speed: 10, Lossless



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

memtier_benchmark 1.4

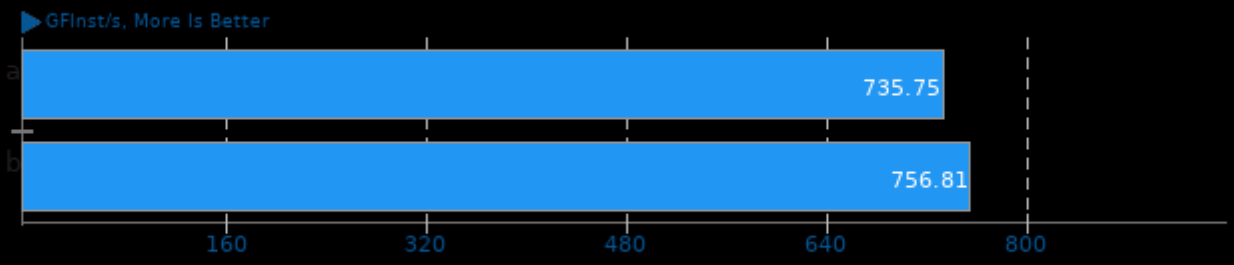
Protocol: Redis - Clients: 50 - Set To Get Ratio: 10:1



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

miniBUDE 20210901

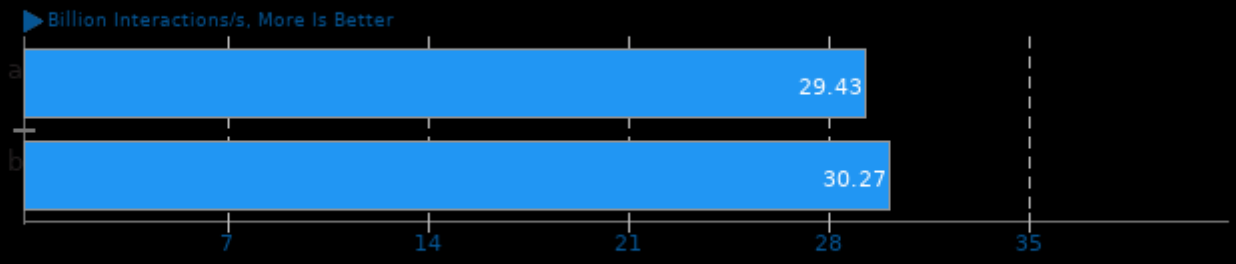
Implementation: OpenMP - Input Deck: BM1



1. (CC) gcc options: -std=c99 -Ofast -ffast-math -fopenmp -march=native -lm

miniBUDE 20210901

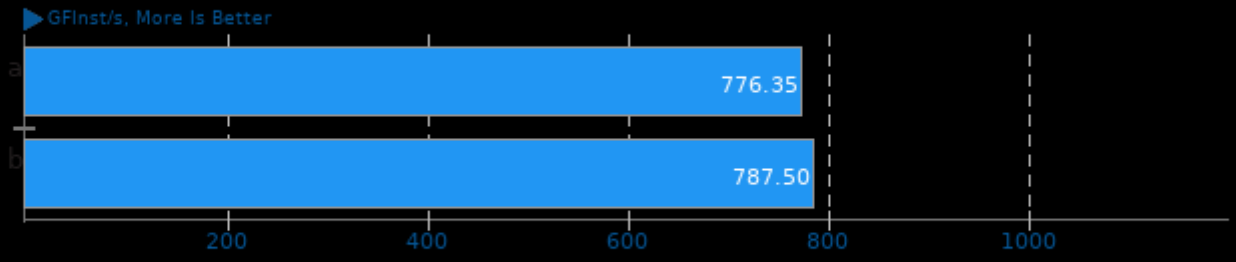
Implementation: OpenMP - Input Deck: BM1



1. (CC) gcc options: -std=c99 -Ofast -ffast-math -fopenmp -march=native -lm

miniBUDE 20210901

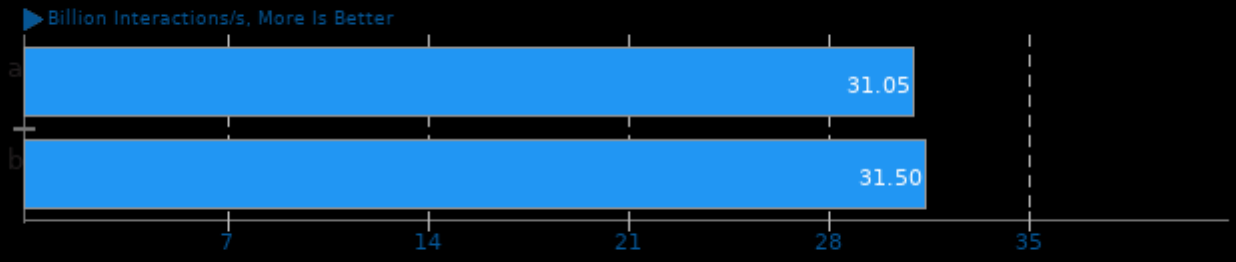
Implementation: OpenMP - Input Deck: BM2



1. (CC) gcc options: -std=c99 -Ofast -ffast-math -fopenmp -march=native -lm

miniBUDE 20210901

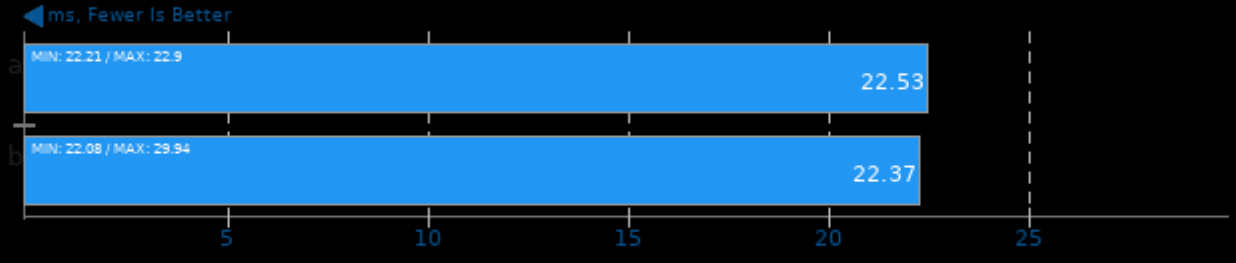
Implementation: OpenMP - Input Deck: BM2



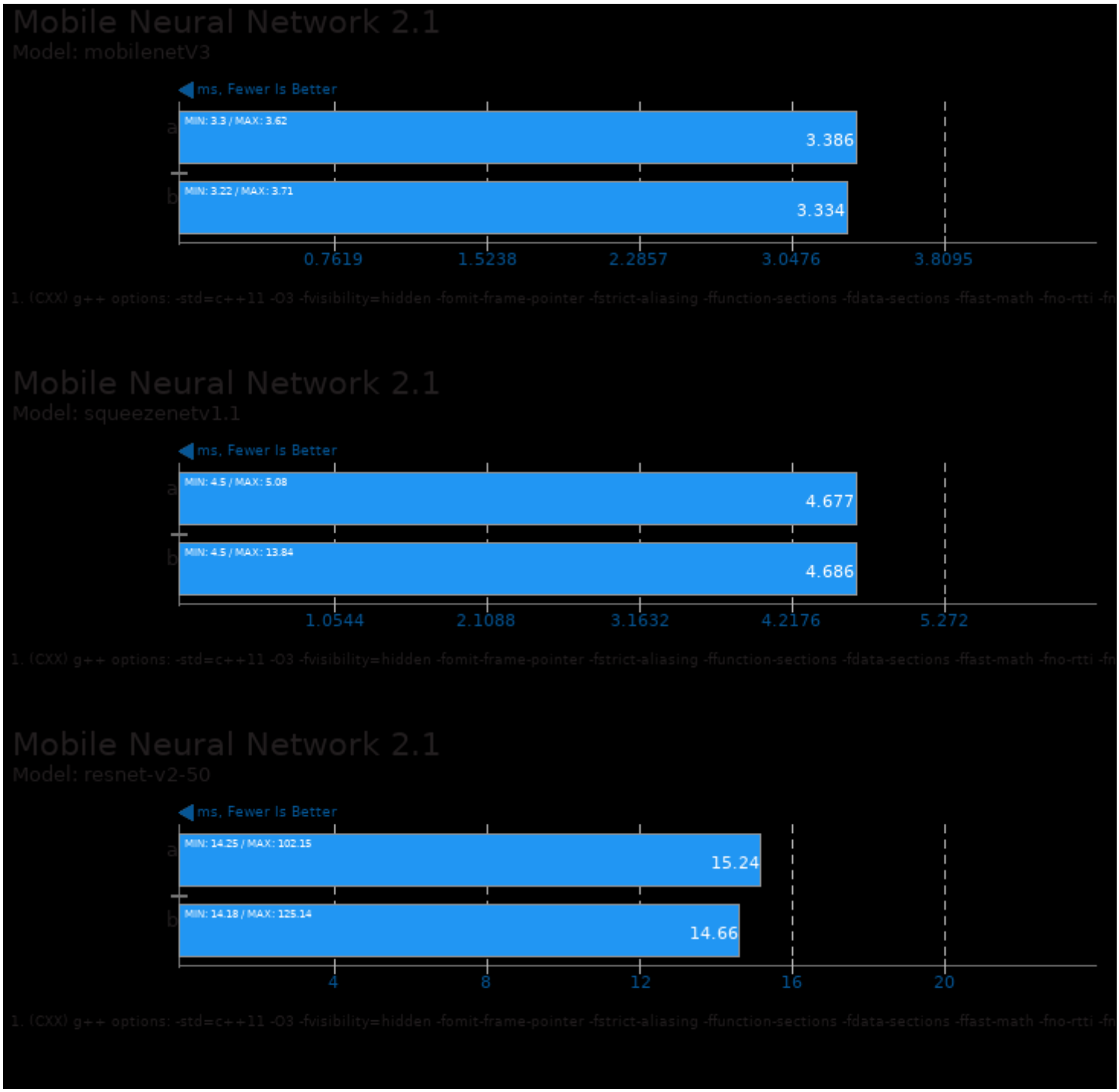
1. (CC) gcc options: -std=c99 -Ofast -ffast-math -fopenmp -march=native -lm

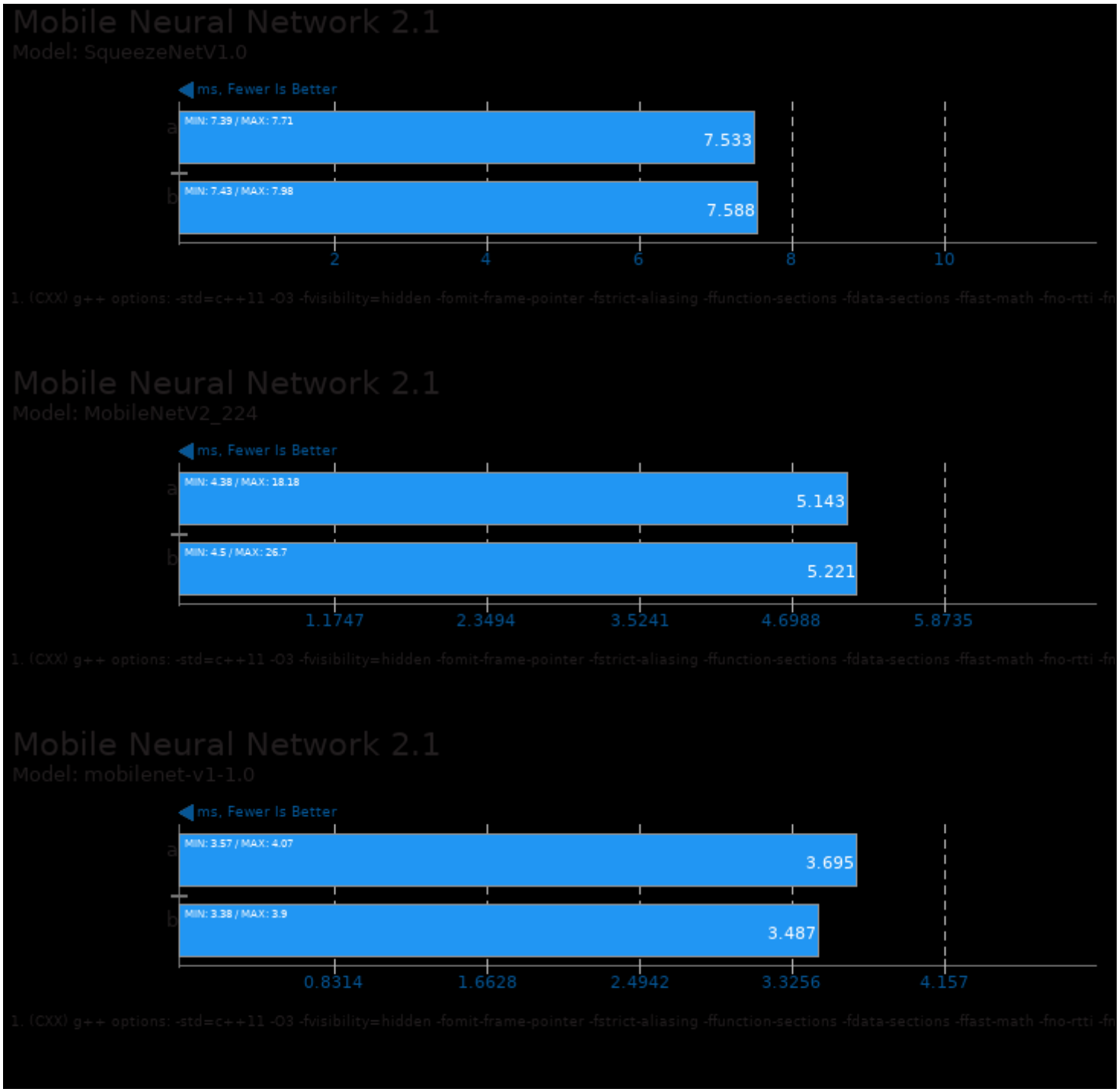
Mobile Neural Network 2.1

Model: nasnet



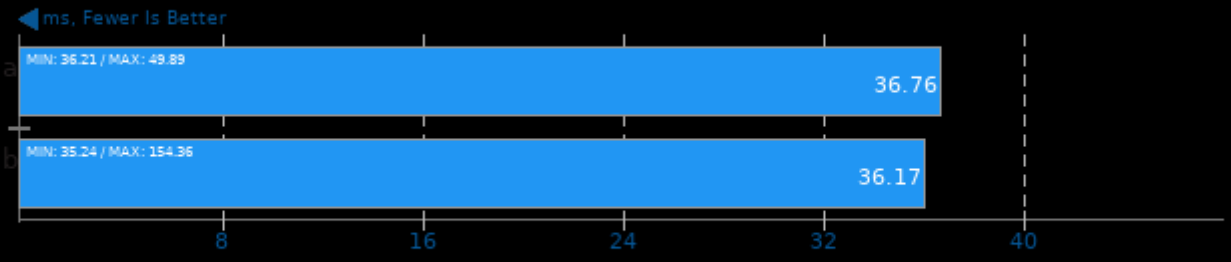
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv


Mobile Neural Network 2.1
Model: mobilenetV3
ms, Fewer Is Better
a
MIN: 3.3 / MAX: 3.62
3.386
b
MIN: 3.22 / MAX: 3.71
3.334
0.7619
1.5238
2.2857
3.0476
3.8095
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fn
Mobile Neural Network 2.1
Model: squeezenetv1.1
ms, Fewer Is Better
a
MIN: 4.5 / MAX: 5.08
4.677
b
MIN: 4.5 / MAX: 13.84
4.686
1.0544
2.1088
3.1632
4.2176
5.272
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fn
Mobile Neural Network 2.1
Model: resnet-v2-50
ms, Fewer Is Better
a
MIN: 14.25 / MAX: 102.15
15.24
b
MIN: 14.18 / MAX: 125.14
14.66
4
8
12
16
20
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fn


Mobile Neural Network 2.1
Model: SqueezeNetV1.0
ms, Fewer Is Better
MIN: 7.39 / MAX: 7.71
7.533
MIN: 7.43 / MAX: 7.98
7.588
2
4
6
8
10
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti
Mobile Neural Network 2.1
Model: MobileNetV2_224
ms, Fewer Is Better
MIN: 4.38 / MAX: 18.18
5.143
MIN: 4.5 / MAX: 26.7
5.221
1.1747
2.3494
3.5241
4.6988
5.8735
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti
Mobile Neural Network 2.1
Model: mobilenet-v1-1.0
ms, Fewer Is Better
MIN: 3.57 / MAX: 4.07
3.695
MIN: 3.38 / MAX: 3.9
3.487
0.8314
1.6628
2.4942
3.3256
4.157
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti

Mobile Neural Network 2.1

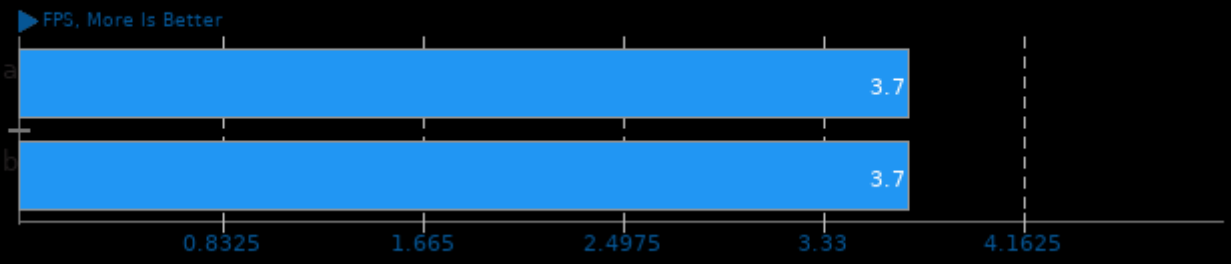
Model: inception-v3



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

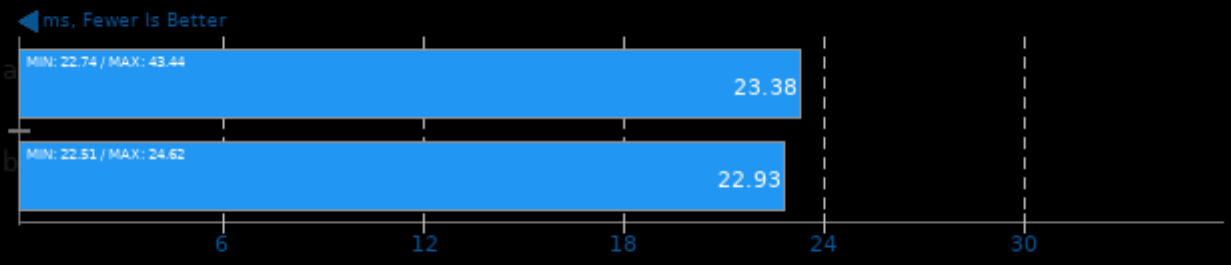
Natron 2.4.3

Input: Spaceship



NCNN 20220729

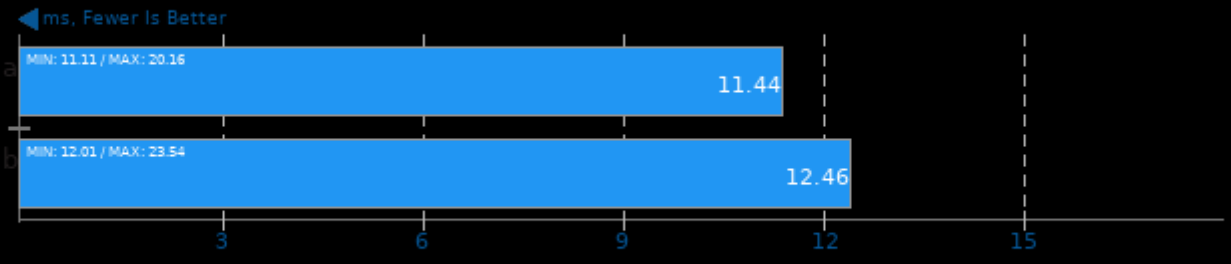
Target: CPU - Model: mobilenet



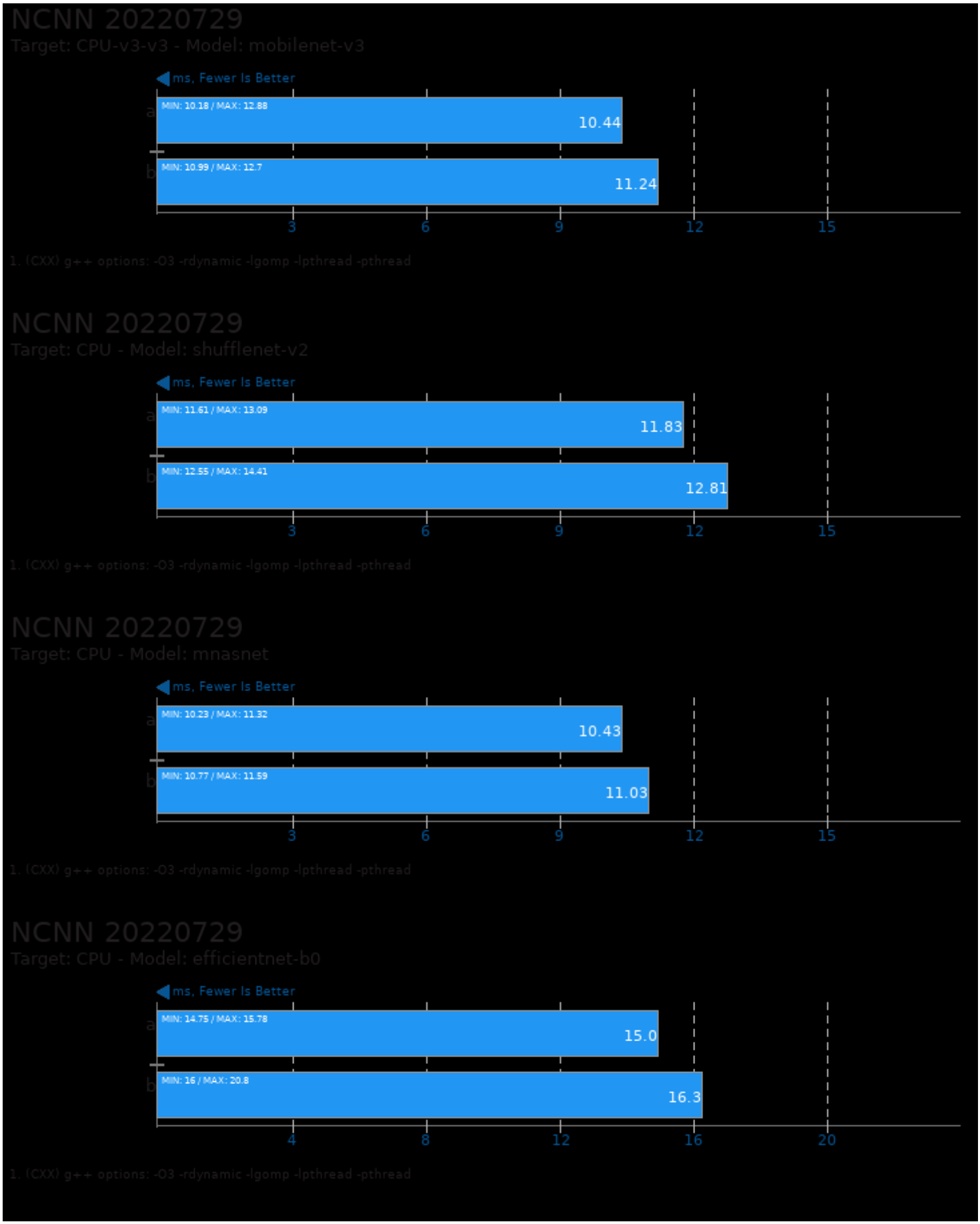
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread

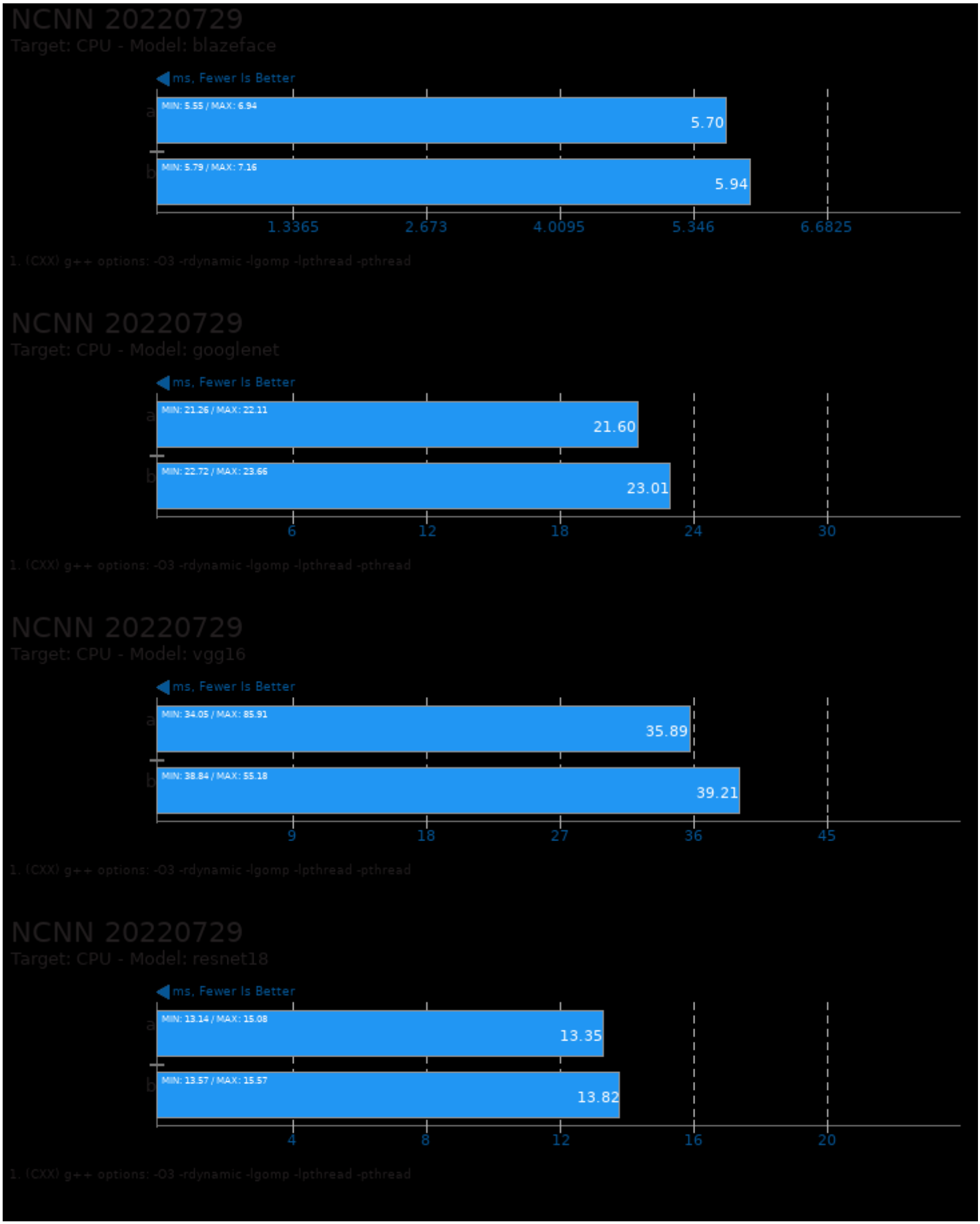
NCNN 20220729

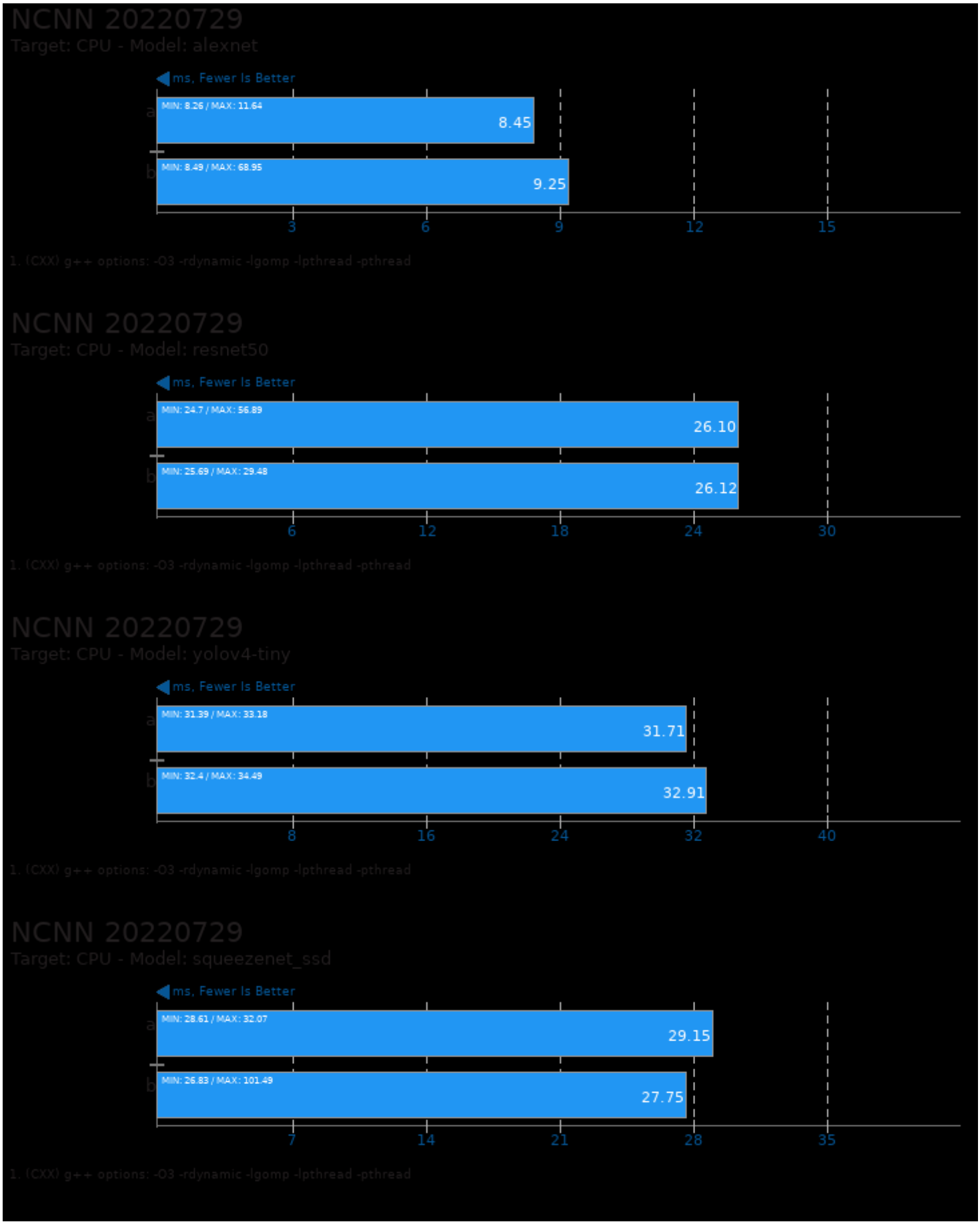
Target: CPU-v2-v2 - Model: mobilenet-v2



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

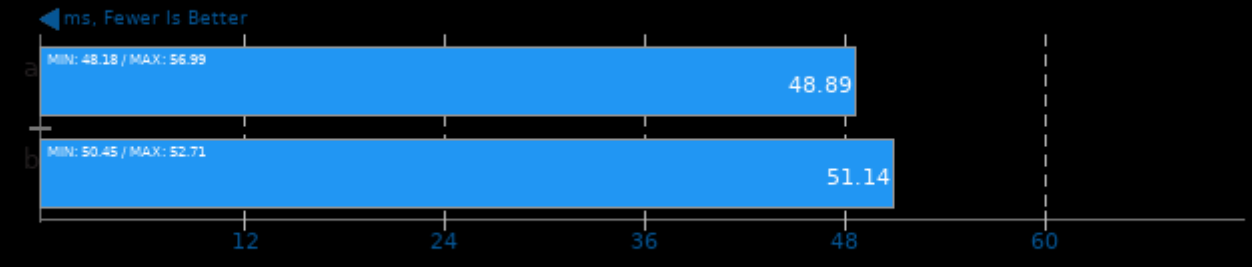

NCNN 20220729
Target: CPU-v3-v3 - Model: mobilenet-v3
ms, Fewer Is Better
MIN: 10.18 / MAX: 12.88
10.44
MIN: 10.99 / MAX: 12.7
11.24
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: shufflenet-v2
ms, Fewer Is Better
MIN: 11.61 / MAX: 13.09
11.83
MIN: 12.55 / MAX: 14.41
12.81
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: mnasnet
ms, Fewer Is Better
MIN: 10.23 / MAX: 11.32
10.43
MIN: 10.77 / MAX: 11.59
11.03
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: efficientnet-b0
ms, Fewer Is Better
MIN: 14.75 / MAX: 15.78
15.0
MIN: 16 / MAX: 20.8
16.3
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread


NCNN 20220729
Target: CPU - Model: blazeface
ms, Fewer Is Better
a
MIN: 5.55 / MAX: 6.94
5.70
b
MIN: 5.79 / MAX: 7.16
5.94
1.3365
2.673
4.0095
5.346
6.6825
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: googlenet
ms, Fewer Is Better
a
MIN: 21.26 / MAX: 22.11
21.60
b
MIN: 22.72 / MAX: 23.66
23.01
6
12
18
24
30
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: vgg16
ms, Fewer Is Better
a
MIN: 34.05 / MAX: 85.91
35.89
b
MIN: 38.84 / MAX: 55.18
39.21
9
18
27
36
45
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: resnet18
ms, Fewer Is Better
a
MIN: 13.14 / MAX: 15.08
13.35
b
MIN: 13.57 / MAX: 15.57
13.82
4
8
12
16
20
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread


NCNN 20220729
Target: CPU - Model: alexnet
ms, Fewer Is Better
a
MIN: 8.26 / MAX: 11.64
8.45
b
MIN: 8.49 / MAX: 68.95
9.25
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: resnet50
ms, Fewer Is Better
a
MIN: 24.7 / MAX: 56.89
26.10
b
MIN: 25.69 / MAX: 29.48
26.12
6
12
18
24
30
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: yolov4-tiny
ms, Fewer Is Better
a
MIN: 31.39 / MAX: 33.18
31.71
b
MIN: 32.4 / MAX: 34.49
32.91
8
16
24
32
40
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20220729
Target: CPU - Model: squeezenet_ssd
ms, Fewer Is Better
a
MIN: 28.61 / MAX: 32.07
29.15
b
MIN: 26.83 / MAX: 101.49
27.75
7
14
21
28
35
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread

NCNN 20220729

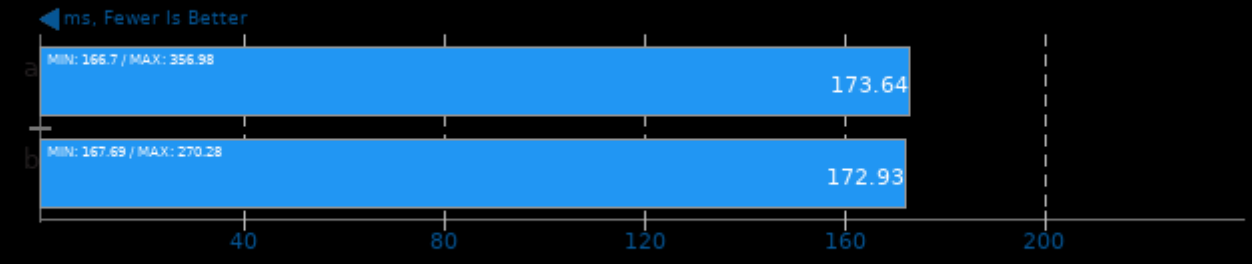
Target: CPU - Model: regnety_400m



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

NCNN 20220729

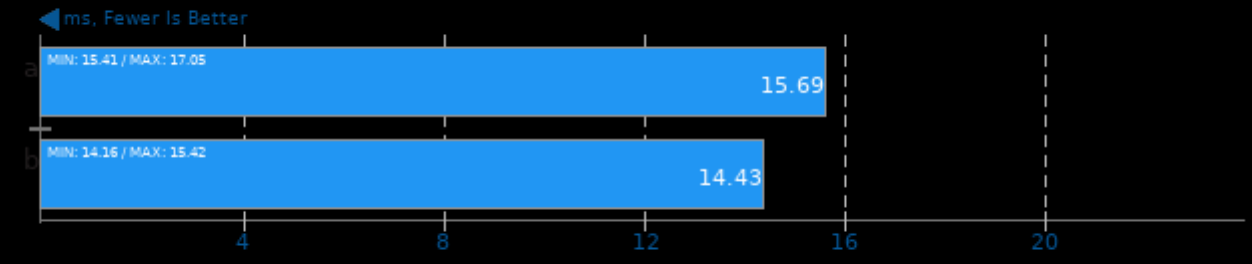
Target: CPU - Model: vision_transformer



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

NCNN 20220729

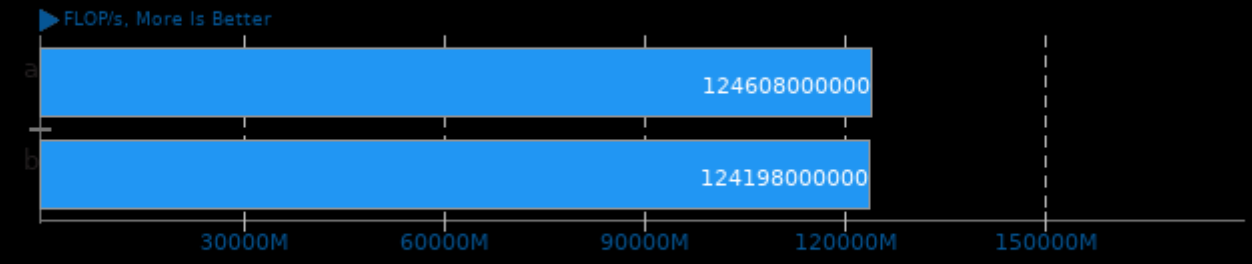
Target: CPU - Model: FastestDet



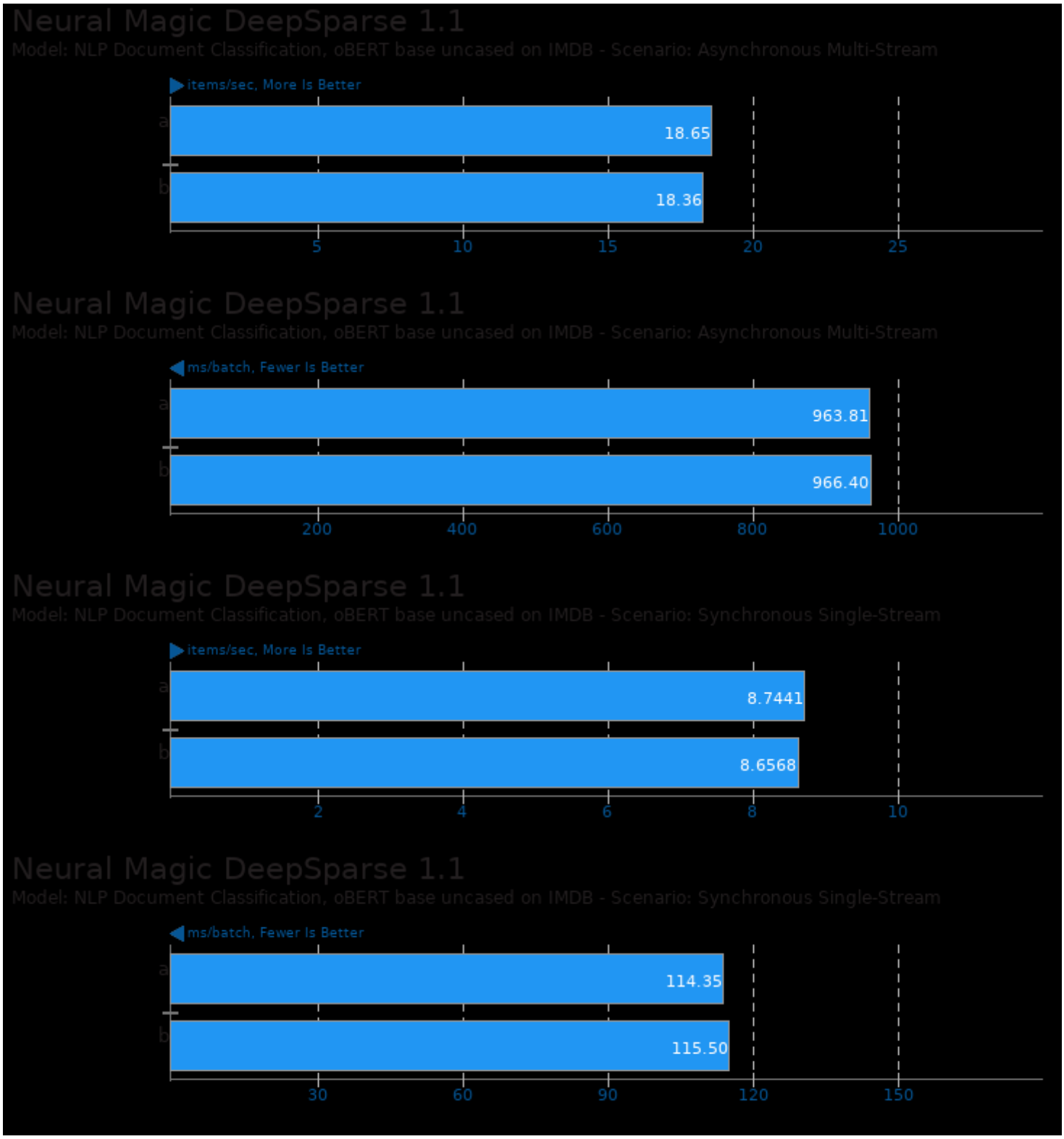
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread

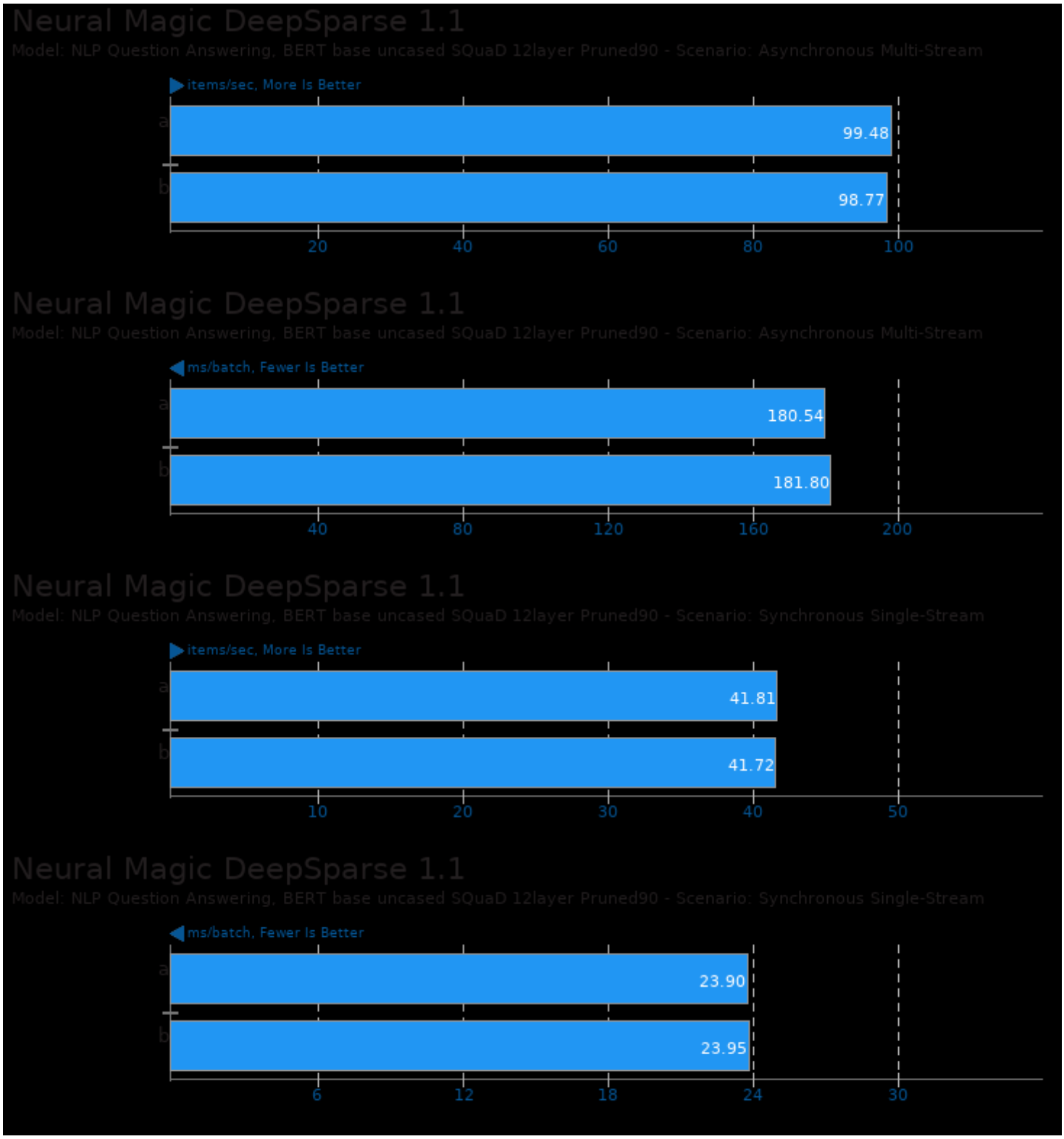
nekRS 22.0

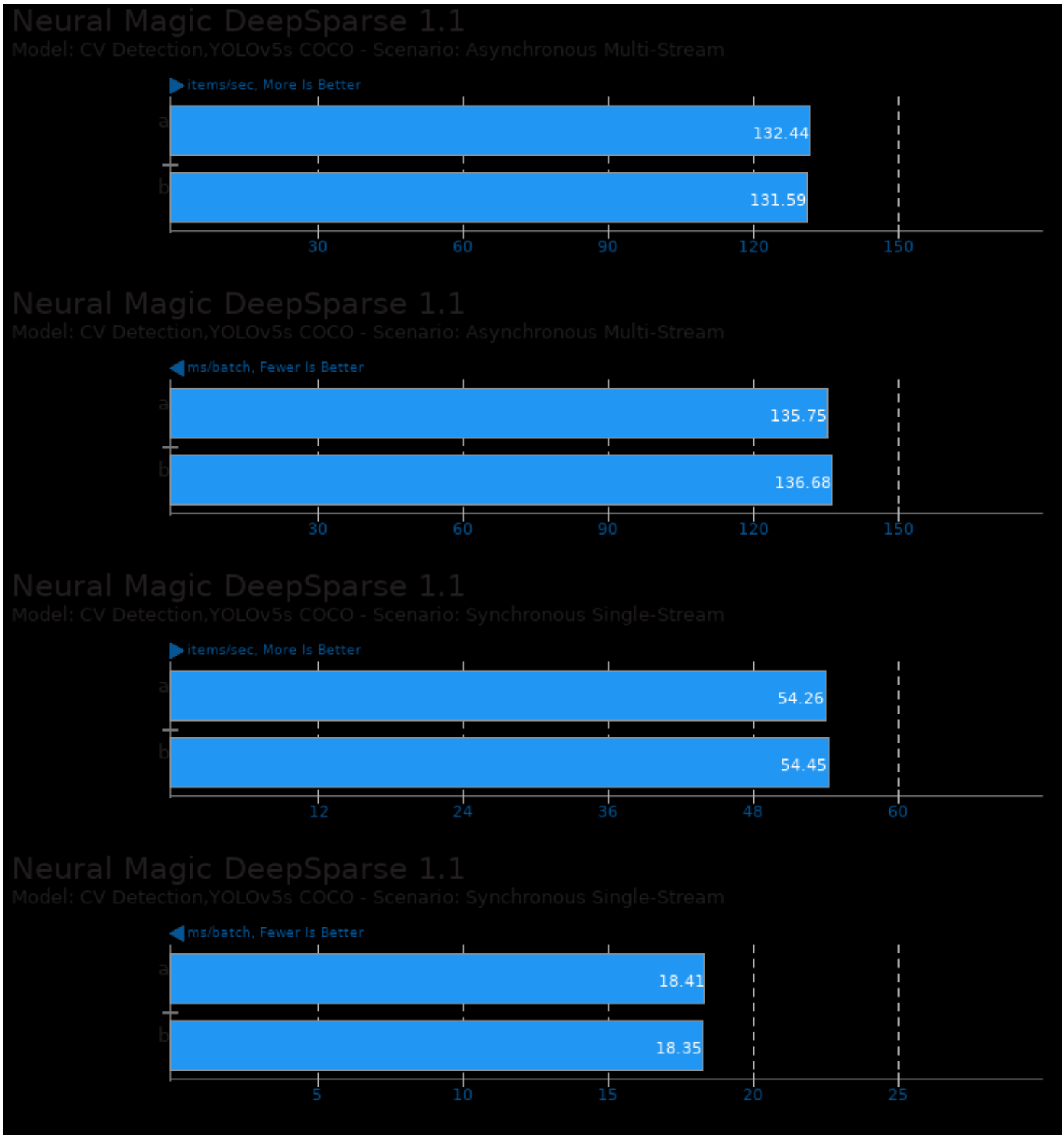
Input: TurboPipe Periodic

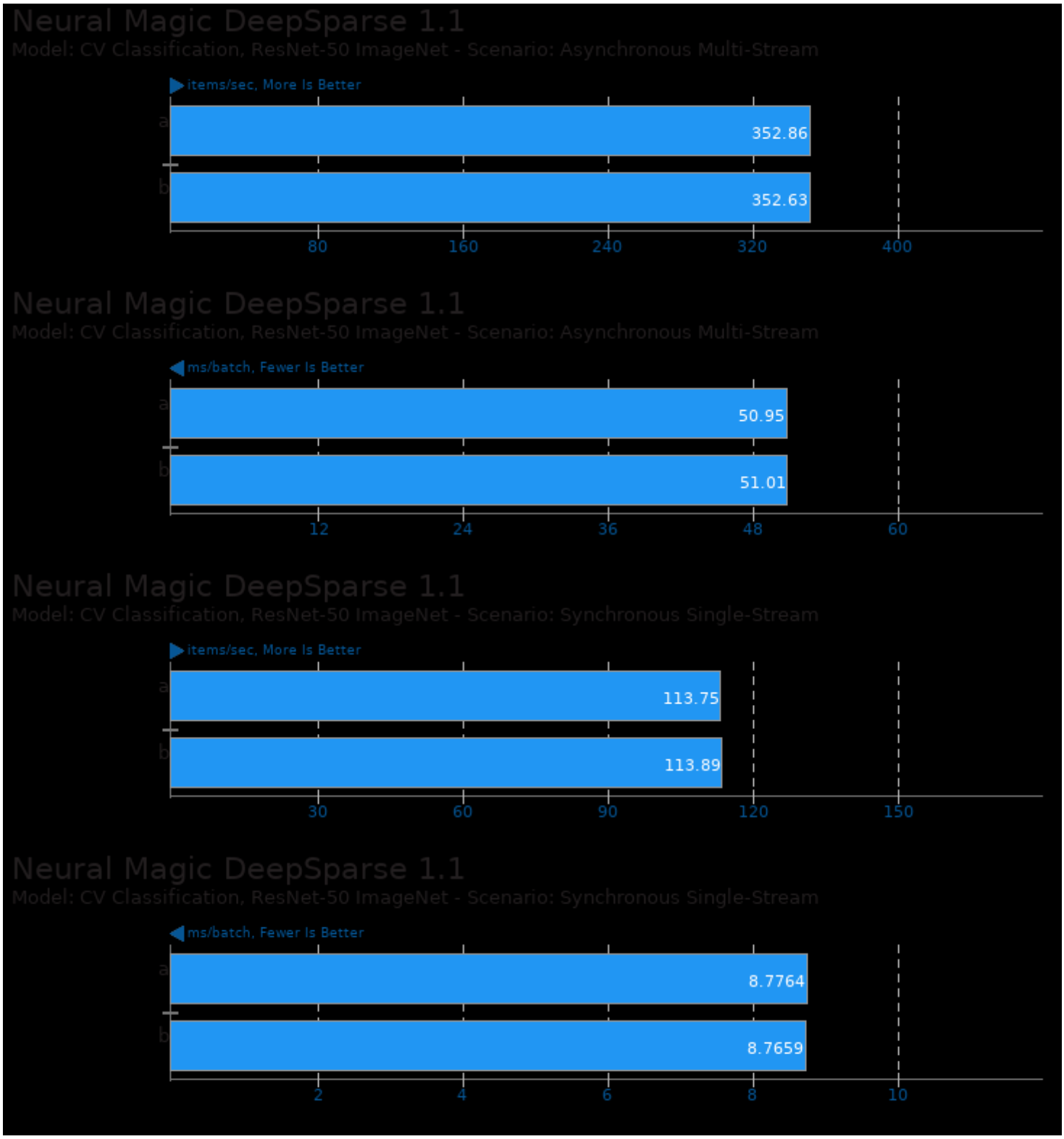


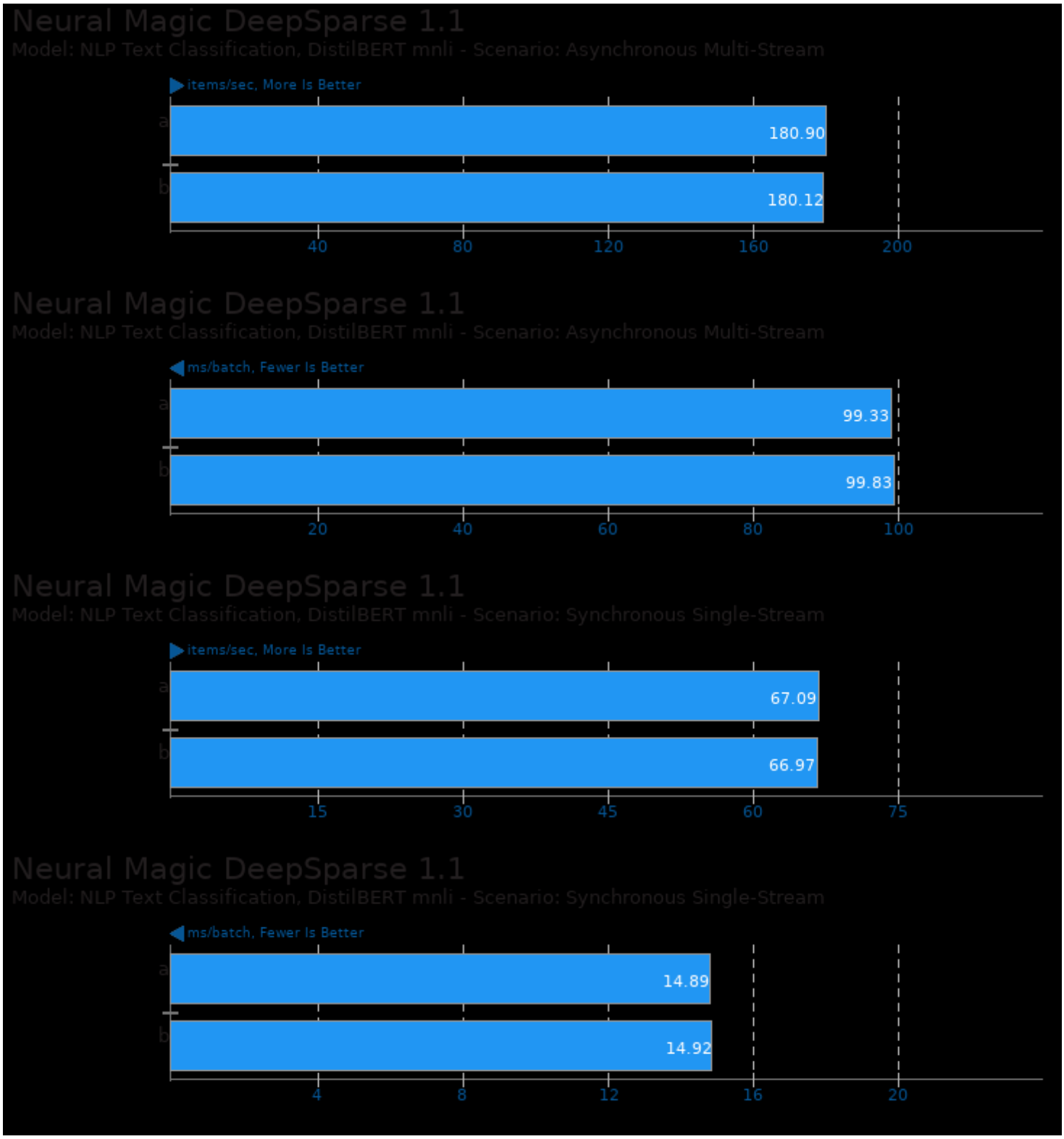
1. (CXX) g++ options: -fopenmp -O2 -march=native -mtune=native -ftree-vectorize -pthread -lmpi_cxx -lmpi

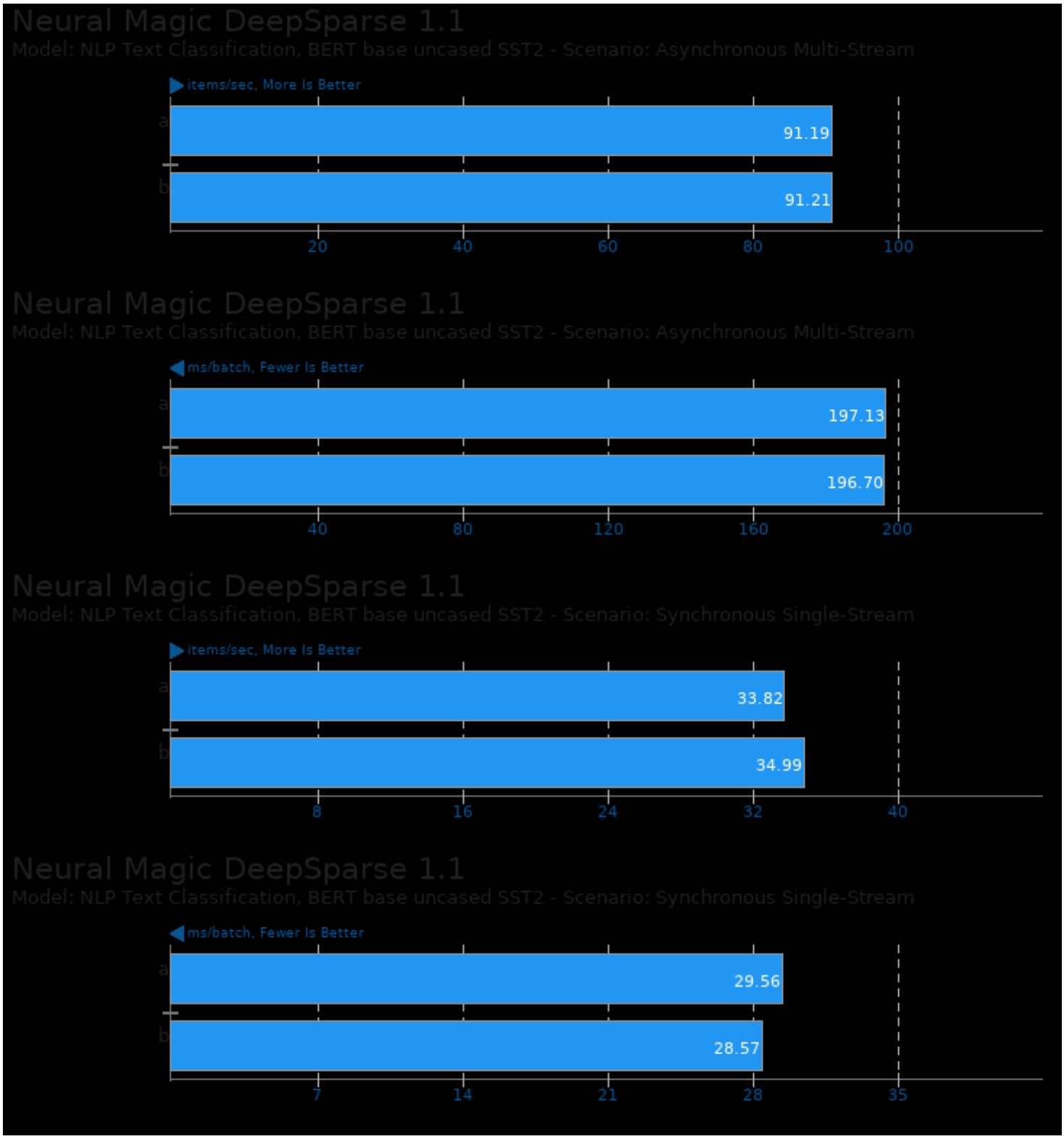

Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
b
18.65
18.36
5
10
15
20
25
Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
b
963.81
966.40
200
400
600
800
1000
Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
b
8.7441
8.6568
2
4
6
8
10
Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
b
114.35
115.50
30
60
90
120
150

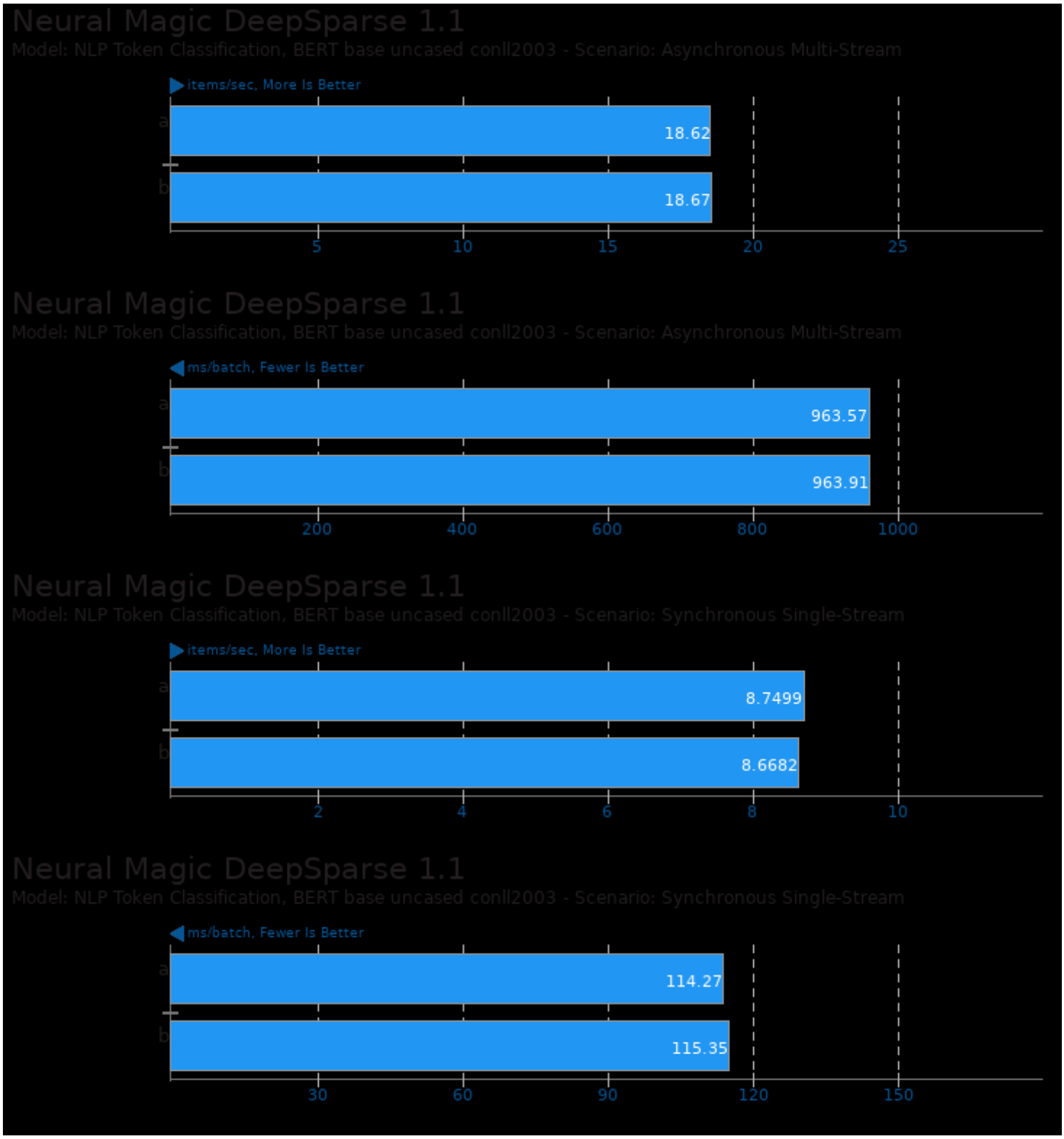

Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
99.48
b
98.77
20
40
60
80
100
Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
180.54
b
181.80
40
80
120
160
200
Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
41.81
b
41.72
10
20
30
40
50
Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
23.90
b
23.95
6
12
18
24
30

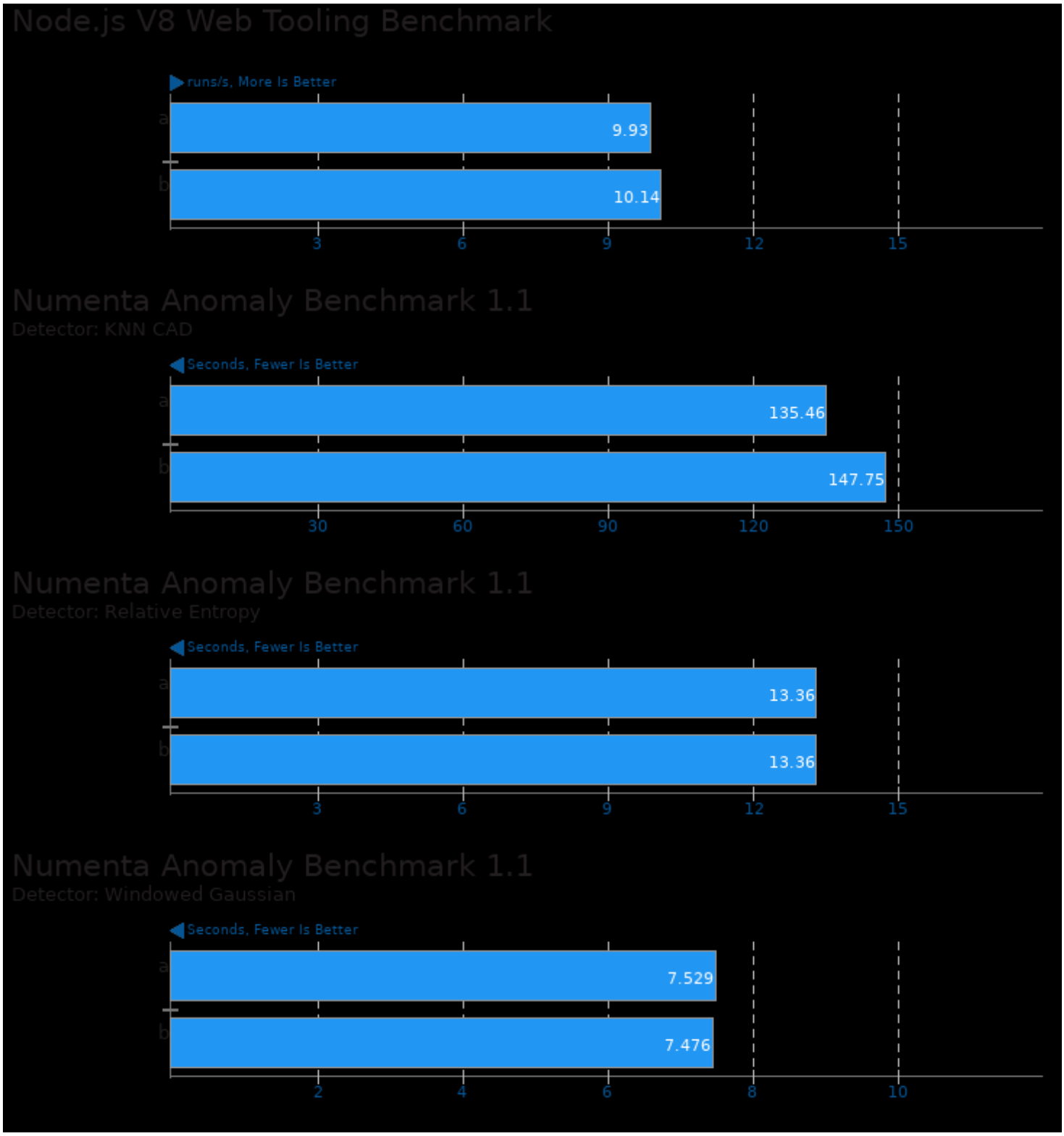

Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
132.44
b
131.59
30
60
90
120
150
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
135.75
b
136.68
30
60
90
120
150
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
54.26
b
54.45
12
24
36
48
60
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
18.41
b
18.35
5
10
15
20
25


Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
352.86
b
352.63
80
160
240
320
400
Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
50.95
b
51.01
12
24
36
48
60
Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
113.75
b
113.89
30
60
90
120
150
Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
8.7764
b
8.7659
2
4
6
8
10


Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
180.90
b
180.12
40
80
120
160
200
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
99.33
b
99.83
20
40
60
80
100
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
67.09
b
66.97
15
30
45
60
75
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
14.89
b
14.92
4
8
12
16
20

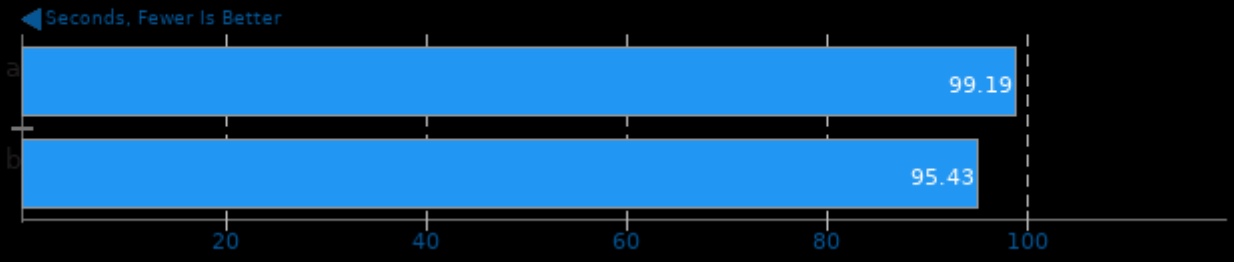

Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
b
91.19
91.21
20
40
60
80
100
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
b
197.13
196.70
40
80
120
160
200
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
b
33.82
34.99
8
16
24
32
40
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
b
29.56
28.57
7
14
21
28
35


Neural Magic DeepSparse 1.1
Model: NLP Token Classification, BERT base uncased conll2003 - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
a
18.62
b
18.67
5
10
15
20
25
Neural Magic DeepSparse 1.1
Model: NLP Token Classification, BERT base uncased conll2003 - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
a
963.57
b
963.91
200
400
600
800
1000
Neural Magic DeepSparse 1.1
Model: NLP Token Classification, BERT base uncased conll2003 - Scenario: Synchronous Single-Stream
items/sec, More Is Better
a
8.7499
b
8.6682
2
4
6
8
10
Neural Magic DeepSparse 1.1
Model: NLP Token Classification, BERT base uncased conll2003 - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
a
114.27
b
115.35
30
60
90
120
150


Node.js V8 Web Tooling Benchmark
runs/s, More Is Better
a
9.93
b
10.14
3
6
9
12
15
Numenta Anomaly Benchmark 1.1
Detector: KNN CAD
Seconds, Fewer Is Better
a
135.46
b
147.75
30
60
90
120
150
Numenta Anomaly Benchmark 1.1
Detector: Relative Entropy
Seconds, Fewer Is Better
a
13.36
b
13.36
3
6
9
12
15
Numenta Anomaly Benchmark 1.1
Detector: Windowed Gaussian
Seconds, Fewer Is Better
a
7.529
b
7.476
2
4
6
8
10

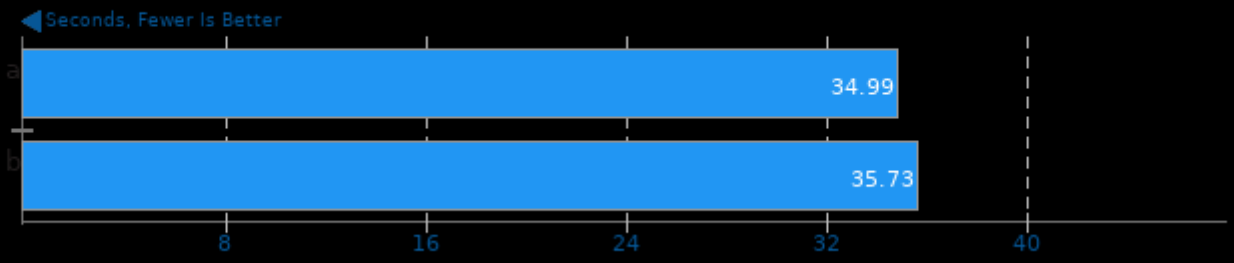
Numenta Anomaly Benchmark 1.1

Detector: Earthgecko Skyline



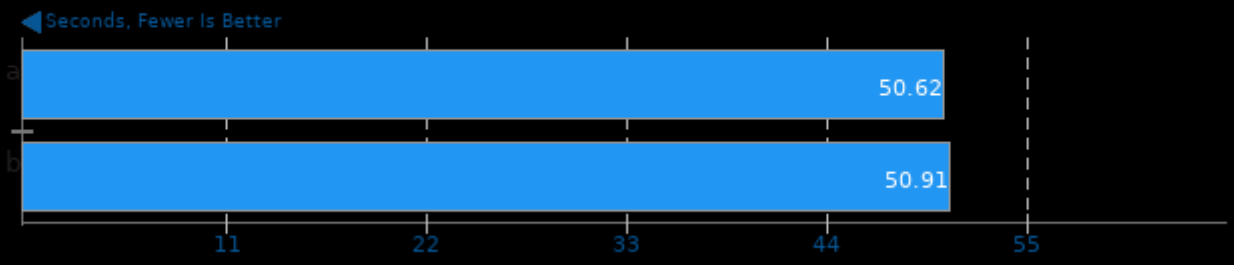
Numenta Anomaly Benchmark 1.1

Detector: Bayesian Changepoint



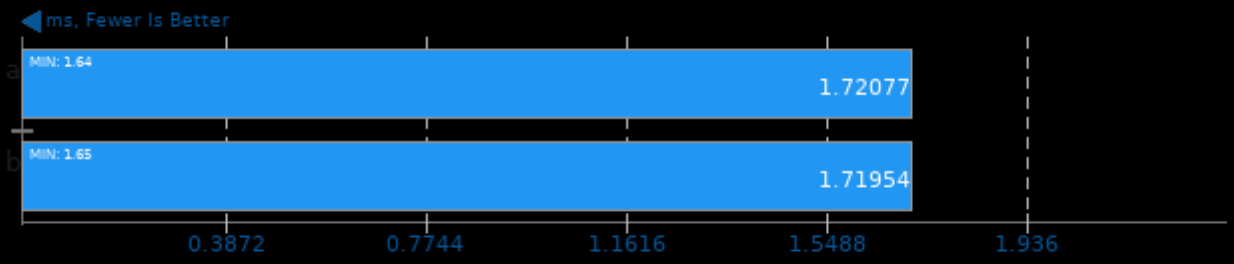
Numenta Anomaly Benchmark 1.1

Detector: Contextual Anomaly Detector OSE

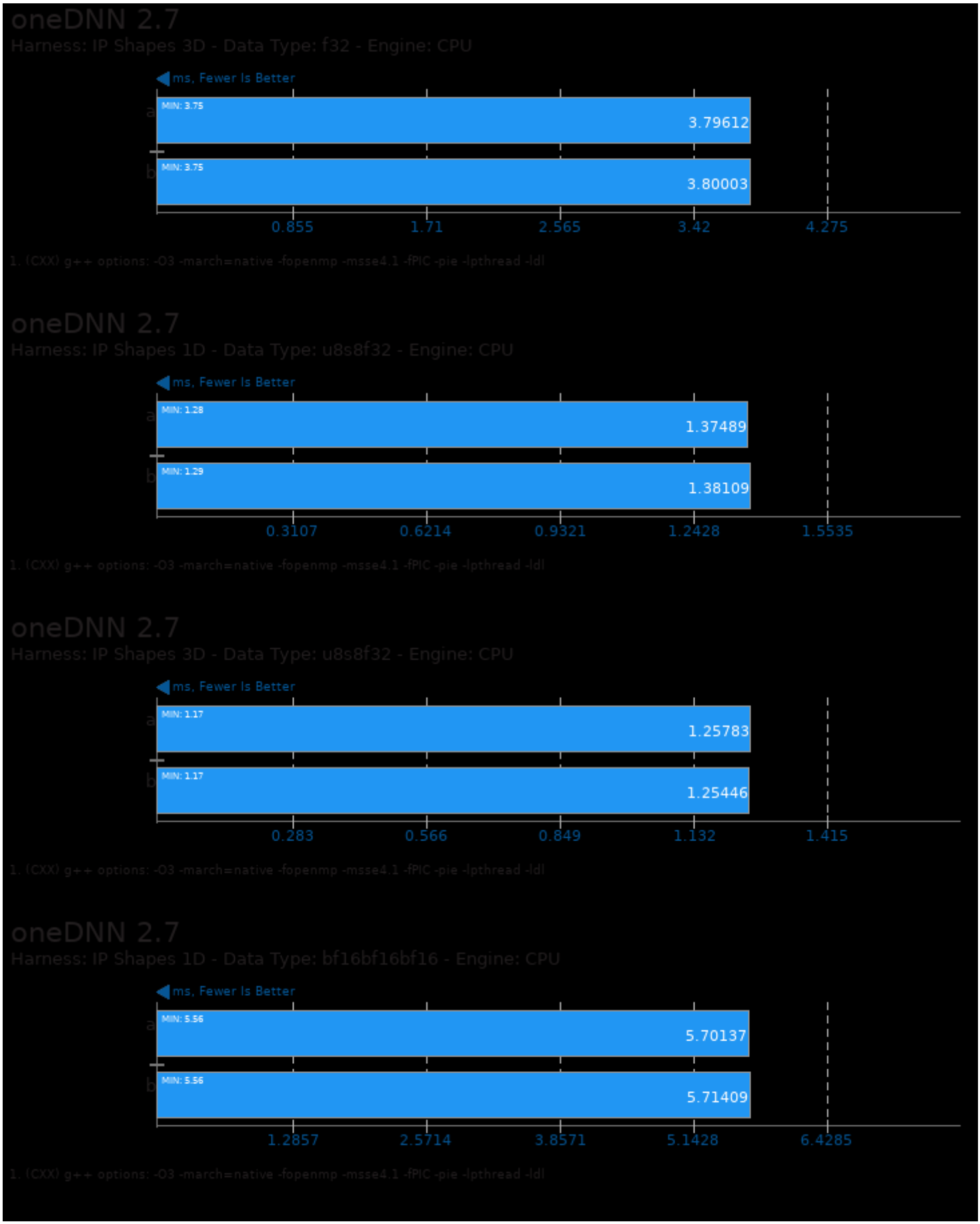


oneDNN 2.7

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

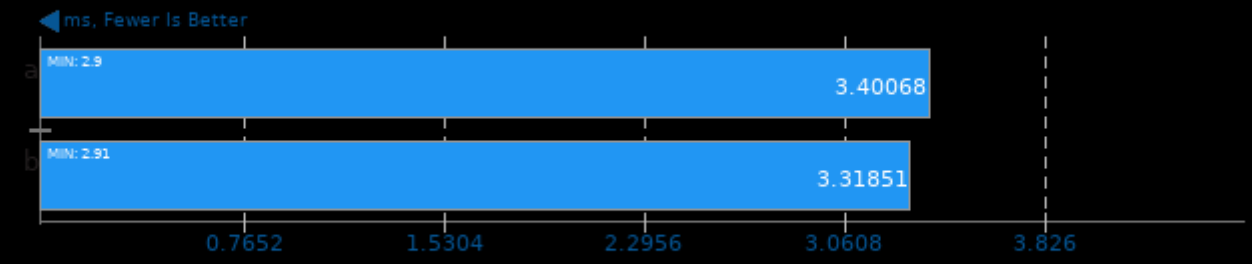


1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl


oneDNN 2.7
Harness: IP Shapes 3D - Data Type: f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 3.75
3.79612
b
MIN: 3.75
3.80003
0.855
1.71
2.565
3.42
4.275
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: IP Shapes 1D - Data Type: u8s8f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 1.28
1.37489
b
MIN: 1.29
1.38109
0.3107
0.6214
0.9321
1.2428
1.5535
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: IP Shapes 3D - Data Type: u8s8f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 1.17
1.25783
b
MIN: 1.17
1.25446
0.283
0.566
0.849
1.132
1.415
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: IP Shapes 1D - Data Type: bf16bf16bf16 - Engine: CPU
ms, Fewer Is Better
a
MIN: 5.56
5.70137
b
MIN: 5.56
5.71409
1.2857
2.5714
3.8571
5.1428
6.4285
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

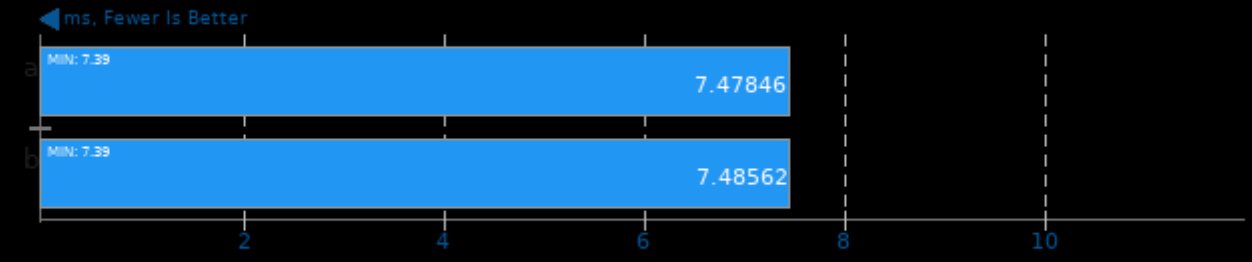
Harness: IP Shapes 3D - Data Type: bf16bf16bf16 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

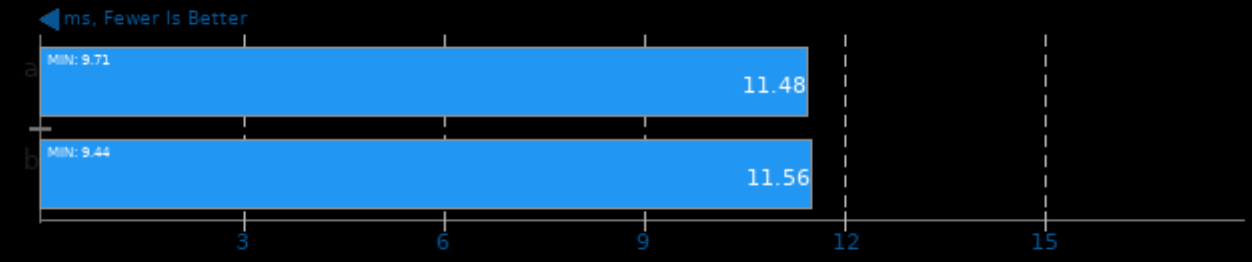
Harness: Convolution Batch Shapes Auto - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

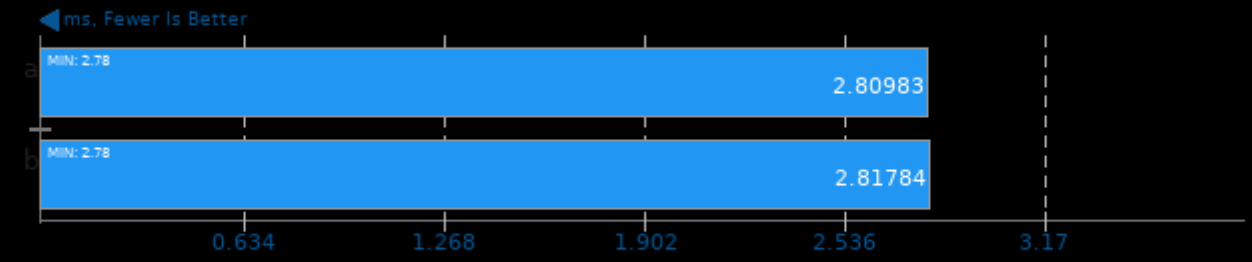
Harness: Deconvolution Batch shapes_1d - Data Type: f32 - Engine: CPU



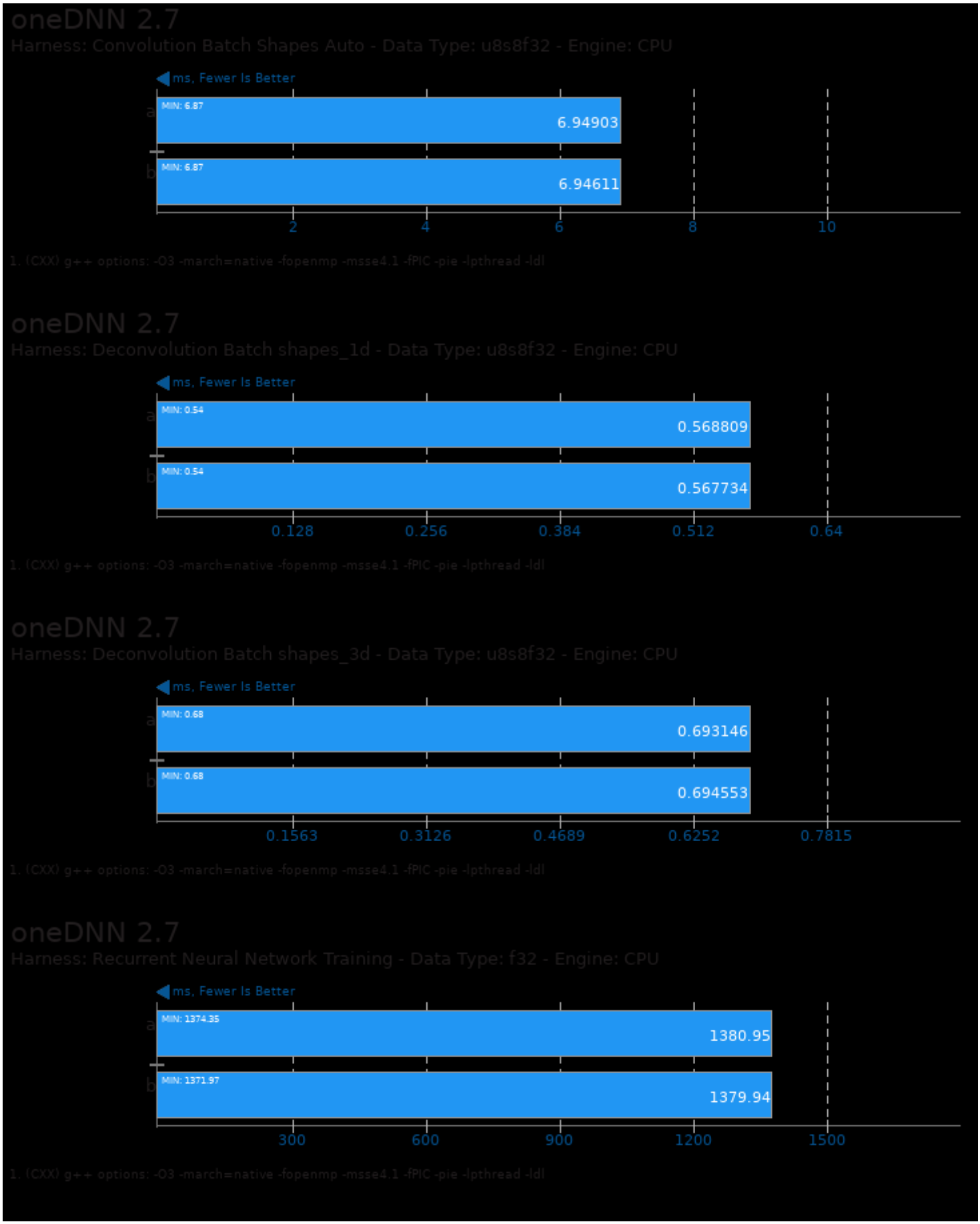
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

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

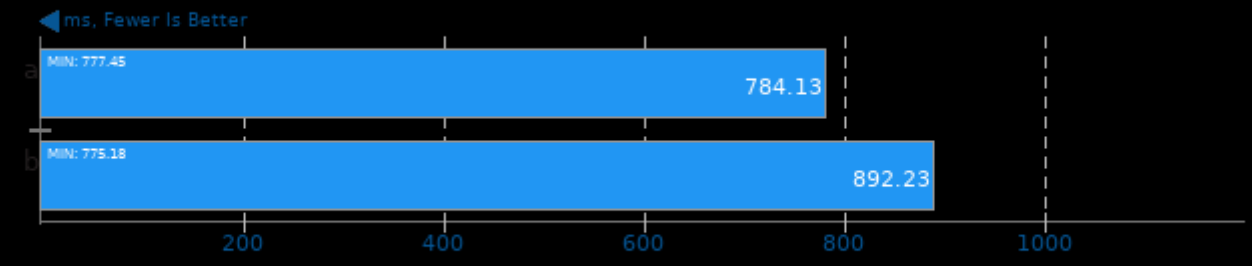


1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl


oneDNN 2.7
Harness: Convolution Batch Shapes Auto - Data Type: u8s8f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 6.87
6.94903
b
MIN: 6.87
6.94611
2
4
6
8
10
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: Deconvolution Batch shapes_1d - Data Type: u8s8f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 0.54
0.568809
b
MIN: 0.54
0.567734
0.128
0.256
0.384
0.512
0.64
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: Deconvolution Batch shapes_3d - Data Type: u8s8f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 0.68
0.693146
b
MIN: 0.68
0.694553
0.1563
0.3126
0.4689
0.6252
0.7815
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: Recurrent Neural Network Training - Data Type: f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 1374.35
1380.95
b
MIN: 1371.97
1379.94
300
600
900
1200
1500
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

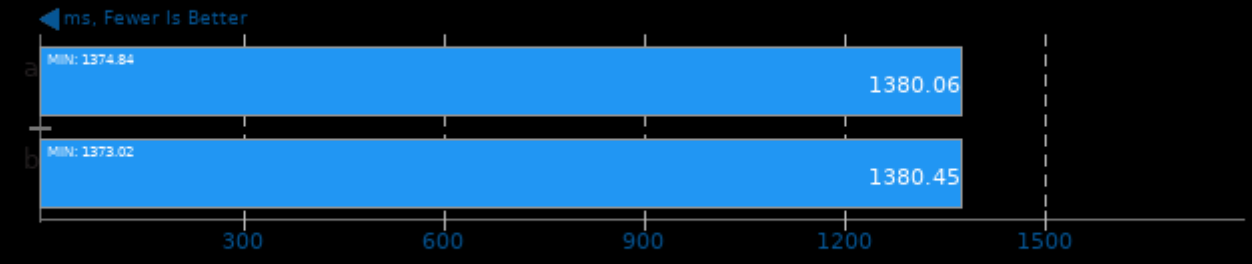
Harness: Recurrent Neural Network Inference - Data Type: f32 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

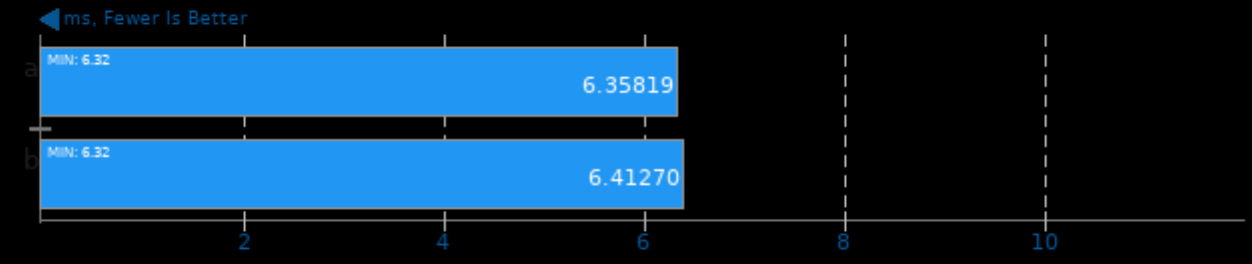
Harness: Recurrent Neural Network Training - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

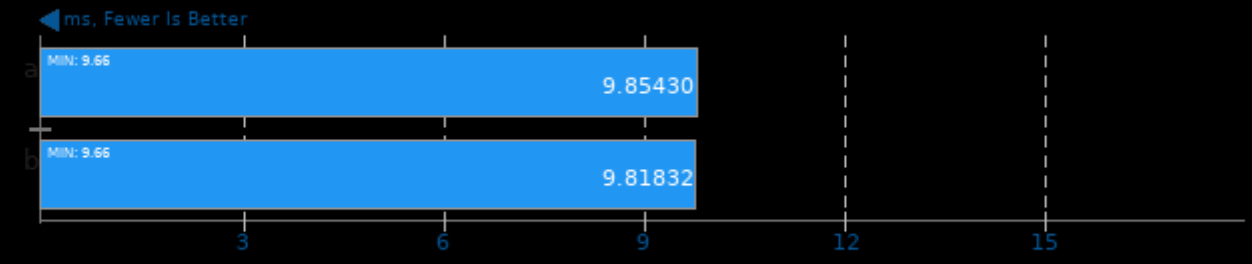
Harness: Convolution Batch Shapes Auto - Data Type: bf16bf16bf16 - Engine: CPU



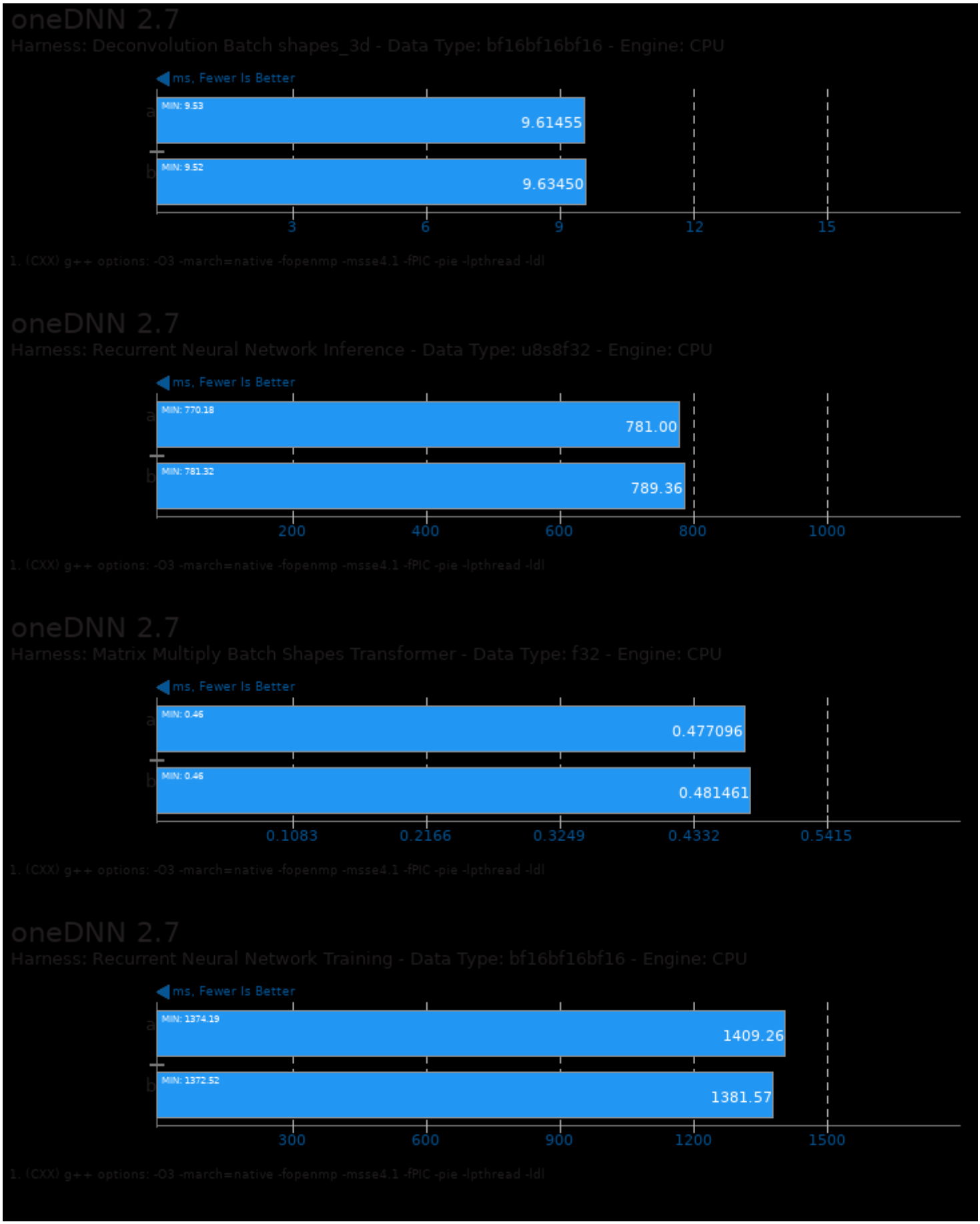
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

Harness: Deconvolution Batch shapes_1d - Data Type: bf16bf16bf16 - Engine: CPU

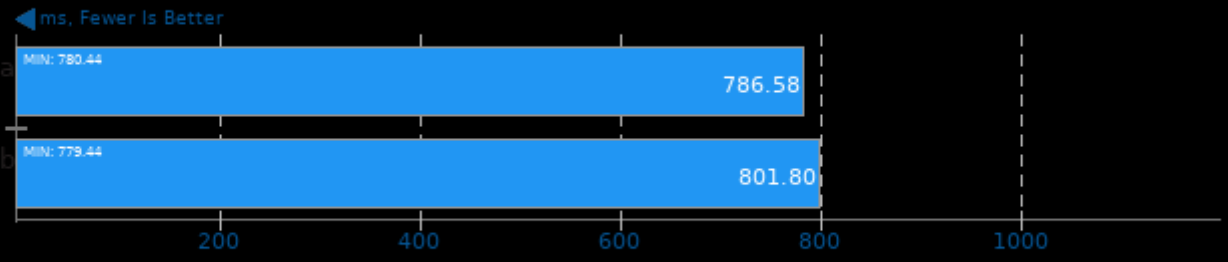


1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl


oneDNN 2.7
Harness: Deconvolution Batch shapes_3d - Data Type: bf16bf16bf16 - Engine: CPU
ms, Fewer Is Better
a
MIN: 9.53
9.61455
b
MIN: 9.52
9.63450
3
6
9
12
15
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: Recurrent Neural Network Inference - Data Type: u8s8f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 770.18
781.00
b
MIN: 781.32
789.36
200
400
600
800
1000
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: Matrix Multiply Batch Shapes Transformer - Data Type: f32 - Engine: CPU
ms, Fewer Is Better
a
MIN: 0.46
0.477096
b
MIN: 0.46
0.481461
0.1083
0.2166
0.3249
0.4332
0.5415
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl
oneDNN 2.7
Harness: Recurrent Neural Network Training - Data Type: bf16bf16bf16 - Engine: CPU
ms, Fewer Is Better
a
MIN: 1374.19
1409.26
b
MIN: 1372.52
1381.57
300
600
900
1200
1500
1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

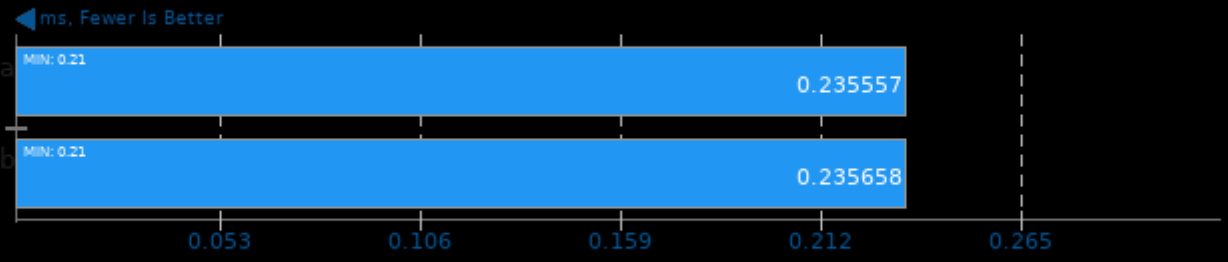
Harness: Recurrent Neural Network Inference - Data Type: bf16bf16bf16 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

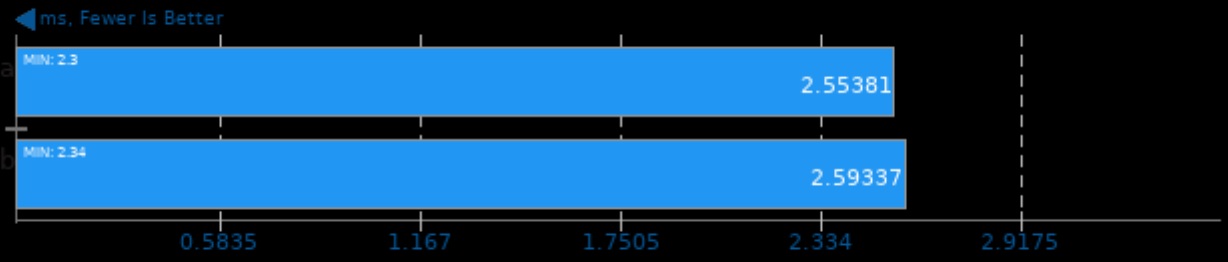
Harness: Matrix Multiply Batch Shapes Transformer - Data Type: u8s8f32 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

oneDNN 2.7

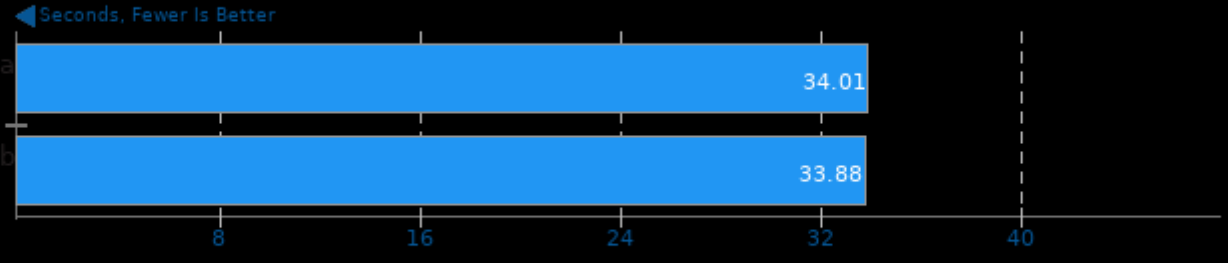
Harness: Matrix Multiply Batch Shapes Transformer - Data Type: bf16bf16bf16 - Engine: CPU



1. (CXX) g++ options: -O3 -march=native -fopenmp -msse4.1 -fPIC -pie -lpthread -ldl

OpenFOAM 10

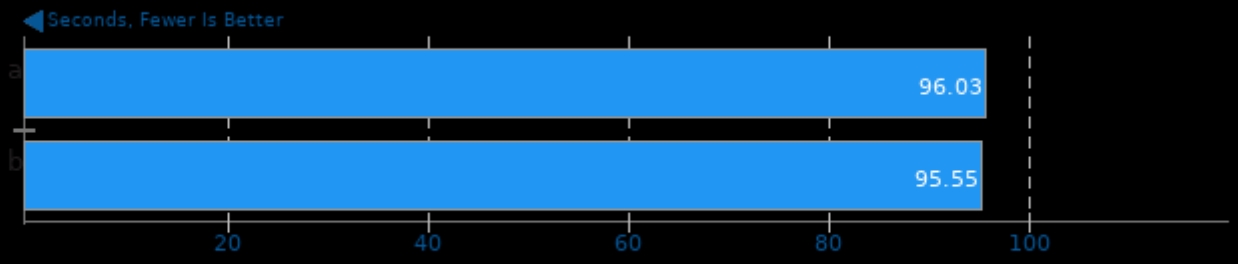
Input: drivaerFastback, Small Mesh Size - Mesh Time



1. (CXX) g++ options: -std=c++14 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -lfoamToVTK -ldynamicMesh -

OpenFOAM 10

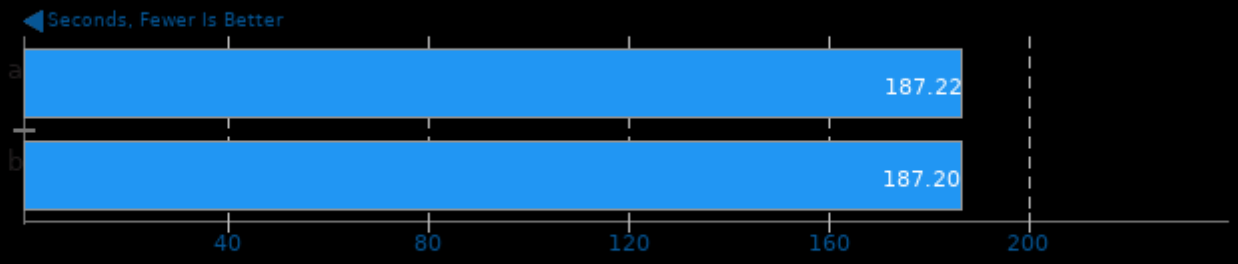
Input: drivaerFastback, Small Mesh Size - Execution Time



1. (CXX) g++ options: -std=c++14 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -lfoamToVTK -ldynamicMesh -

OpenFOAM 10

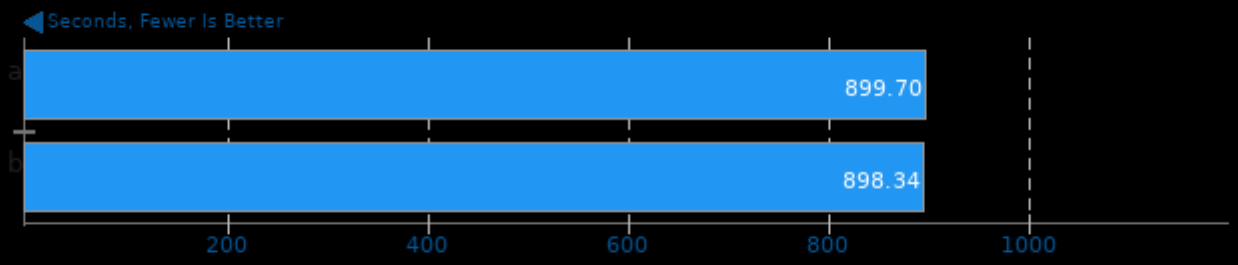
Input: drivaerFastback, Medium Mesh Size - Mesh Time



1. (CXX) g++ options: -std=c++14 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -lfoamToVTK -ldynamicMesh -

OpenFOAM 10

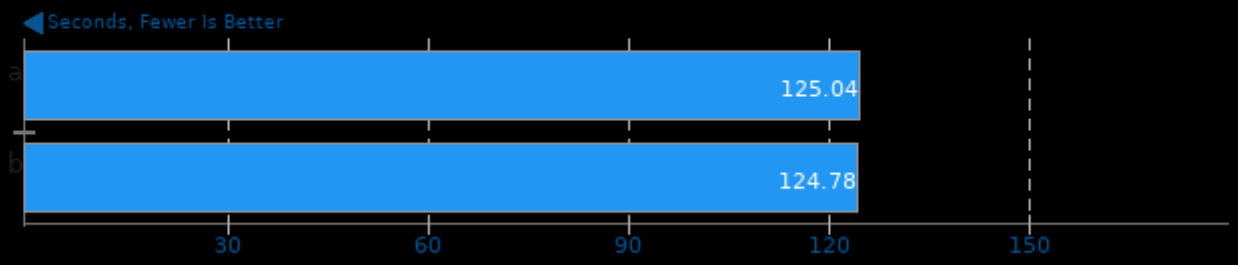
Input: drivaerFastback, Medium Mesh Size - Execution Time

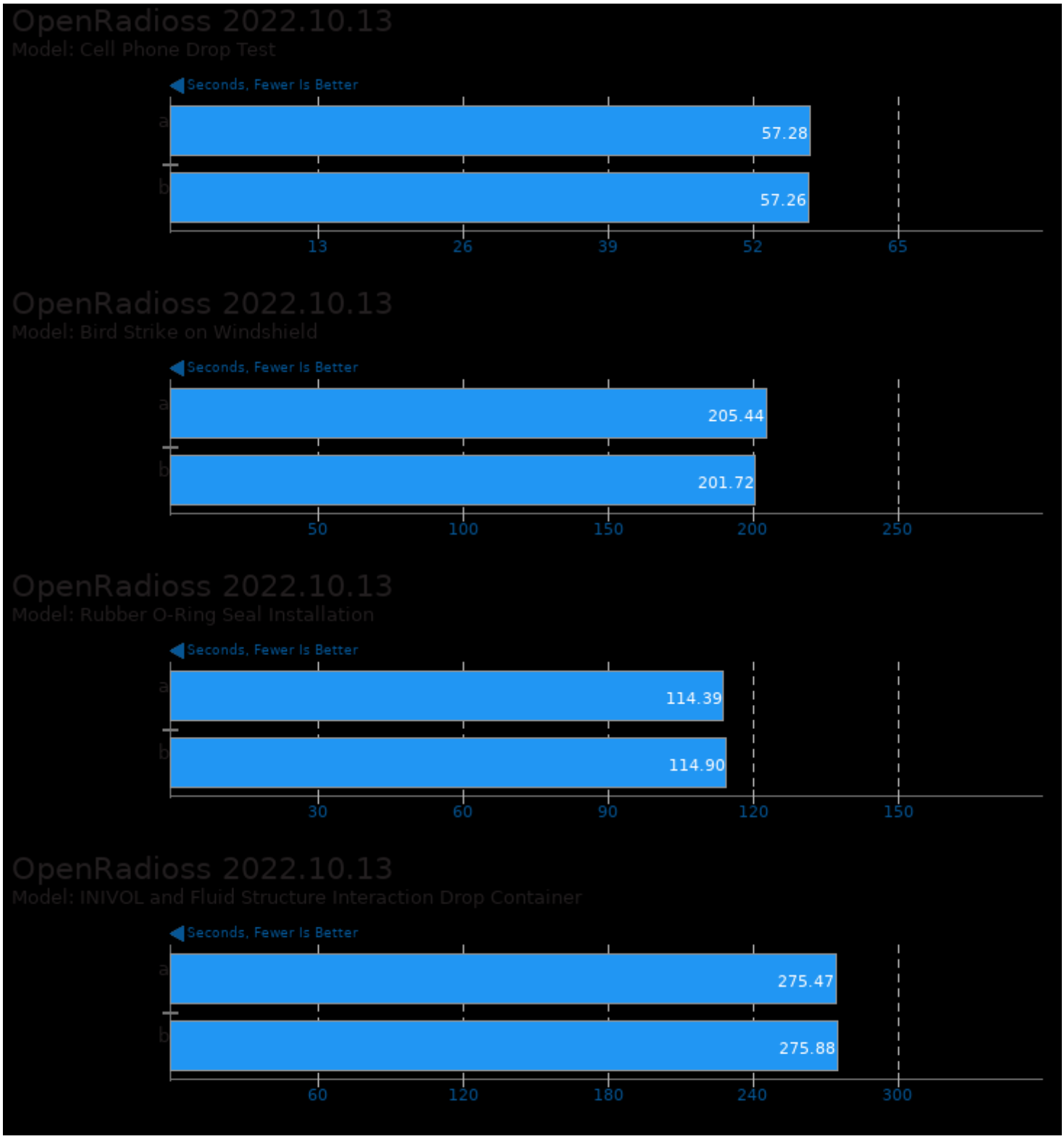


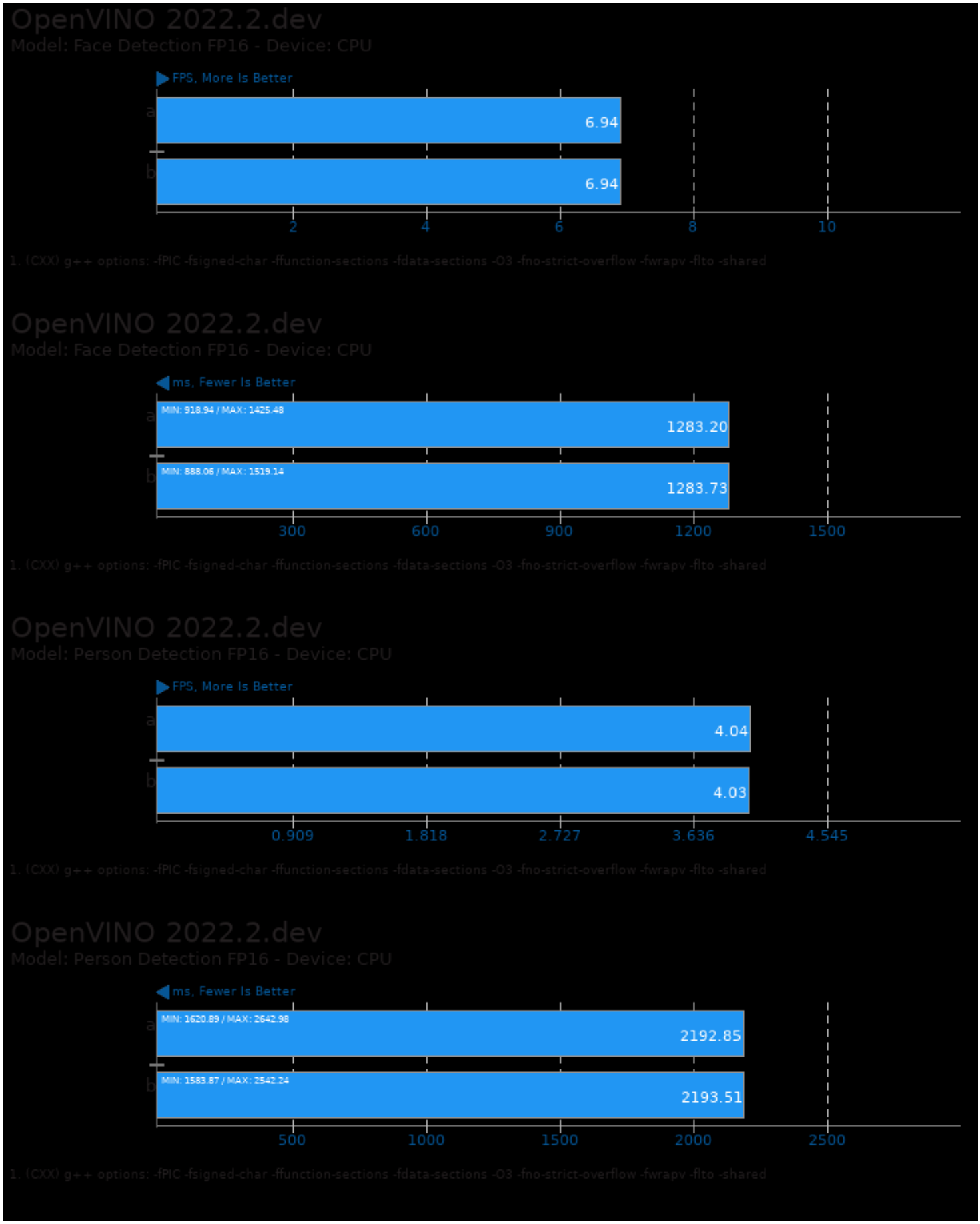
1. (CXX) g++ options: -std=c++14 -m64 -O3 -ftemplate-depth-100 -fPIC -fuse-ld=bfd -Xlinker --add-needed --no-as-needed -lfoamToVTK -ldynamicMesh -

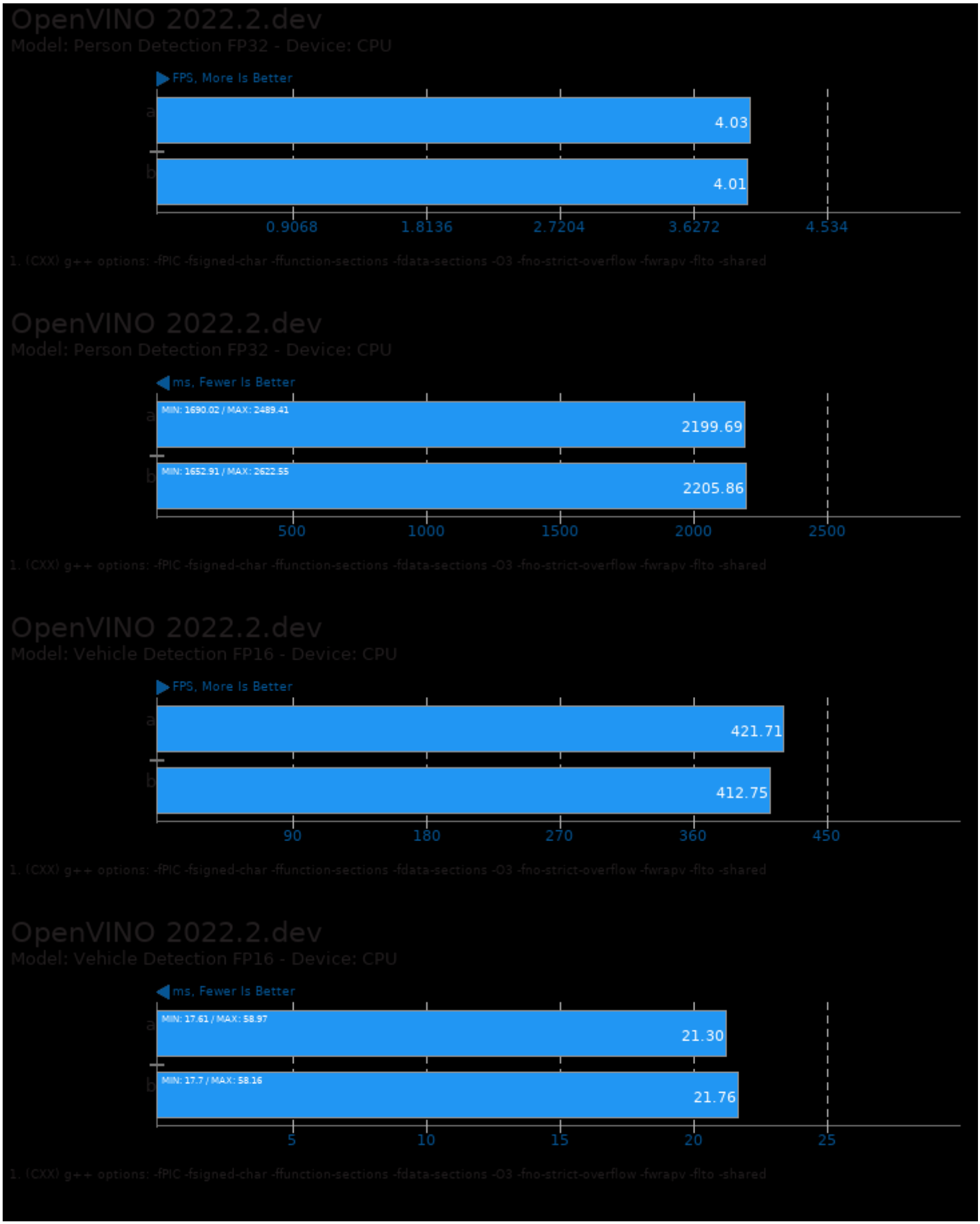
OpenRadioss 2022.10.13

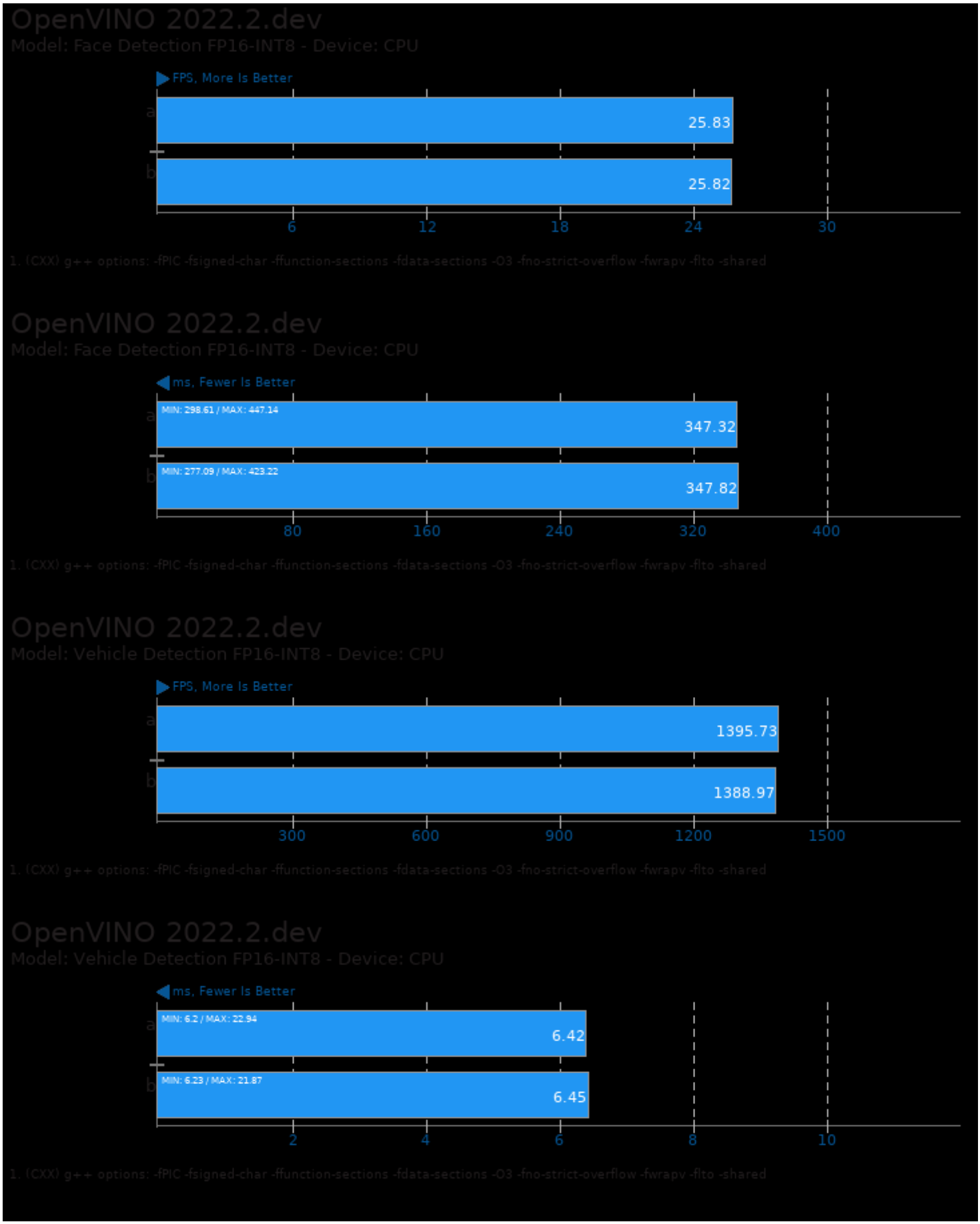
Model: Bumper Beam




OpenRadioss 2022.10.13
Model: Cell Phone Drop Test
Seconds, Fewer Is Better
a
57.28
b
57.26
13
26
39
52
65
OpenRadioss 2022.10.13
Model: Bird Strike on Windshield
Seconds, Fewer Is Better
a
205.44
b
201.72
50
100
150
200
250
OpenRadioss 2022.10.13
Model: Rubber O-Ring Seal Installation
Seconds, Fewer Is Better
a
114.39
b
114.90
30
60
90
120
150
OpenRadioss 2022.10.13
Model: INIVOL and Fluid Structure Interaction Drop Container
Seconds, Fewer Is Better
a
275.47
b
275.88
60
120
180
240
300

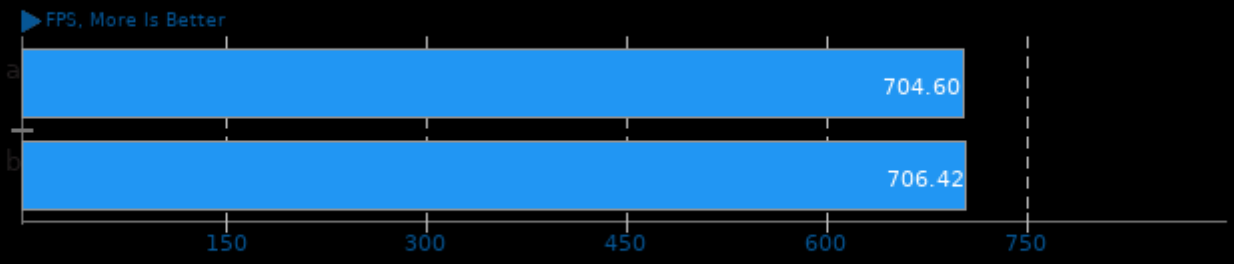

OpenVINO 2022.2.dev
Model: Face Detection FP16 - Device: CPU
FPS, More Is Better
a
6.94
b
6.94
2
4
6
8
10
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Face Detection FP16 - Device: CPU
ms, Fewer Is Better
a
MIN: 918.94 / MAX: 1425.48
1283.20
b
MIN: 888.06 / MAX: 1519.14
1283.73
300
600
900
1200
1500
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Person Detection FP16 - Device: CPU
FPS, More Is Better
a
4.04
b
4.03
0.909
1.818
2.727
3.636
4.545
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Person Detection FP16 - Device: CPU
ms, Fewer Is Better
a
MIN: 1620.89 / MAX: 2642.98
2192.85
b
MIN: 1583.87 / MAX: 2542.24
2193.51
500
1000
1500
2000
2500
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared


OpenVINO 2022.2.dev
Model: Person Detection FP32 - Device: CPU
FPS, More Is Better
a
4.03
b
4.01
0.9068
1.8136
2.7204
3.6272
4.534
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Person Detection FP32 - Device: CPU
ms, Fewer Is Better
a
MIN: 1690.02 / MAX: 2489.41
2199.69
b
MIN: 1652.91 / MAX: 2622.55
2205.86
500
1000
1500
2000
2500
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Vehicle Detection FP16 - Device: CPU
FPS, More Is Better
a
421.71
b
412.75
90
180
270
360
450
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Vehicle Detection FP16 - Device: CPU
ms, Fewer Is Better
a
MIN: 17.61 / MAX: 58.97
21.30
b
MIN: 17.7 / MAX: 58.16
21.76
5
10
15
20
25
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared


OpenVINO 2022.2.dev
Model: Face Detection FP16-INT8 - Device: CPU
FPS, More Is Better
a
25.83
b
25.82
6
12
18
24
30
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Face Detection FP16-INT8 - Device: CPU
ms, Fewer Is Better
a
MIN: 298.61 / MAX: 447.14
347.32
b
MIN: 277.09 / MAX: 423.22
347.82
80
160
240
320
400
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Vehicle Detection FP16-INT8 - Device: CPU
FPS, More Is Better
a
1395.73
b
1388.97
300
600
900
1200
1500
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Vehicle Detection FP16-INT8 - Device: CPU
ms, Fewer Is Better
a
MIN: 6.2 / MAX: 22.94
6.42
b
MIN: 6.23 / MAX: 21.87
6.45
2
4
6
8
10
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared

OpenVINO 2022.2.dev

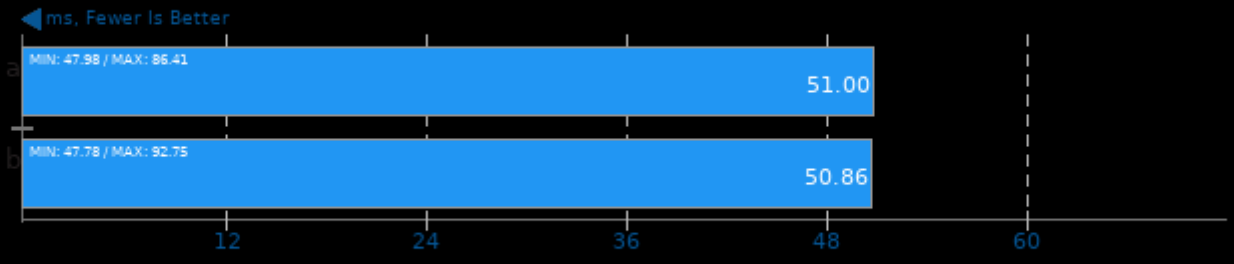
Model: Weld Porosity Detection FP16 - Device: CPU



1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared

OpenVINO 2022.2.dev

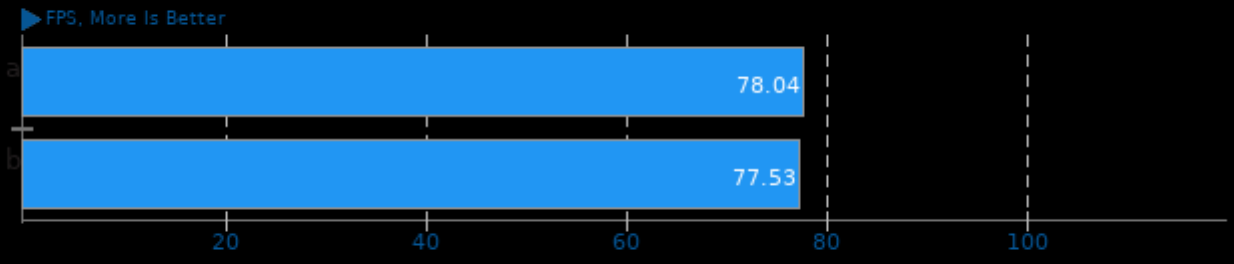
Model: Weld Porosity Detection FP16 - Device: CPU



1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared

OpenVINO 2022.2.dev

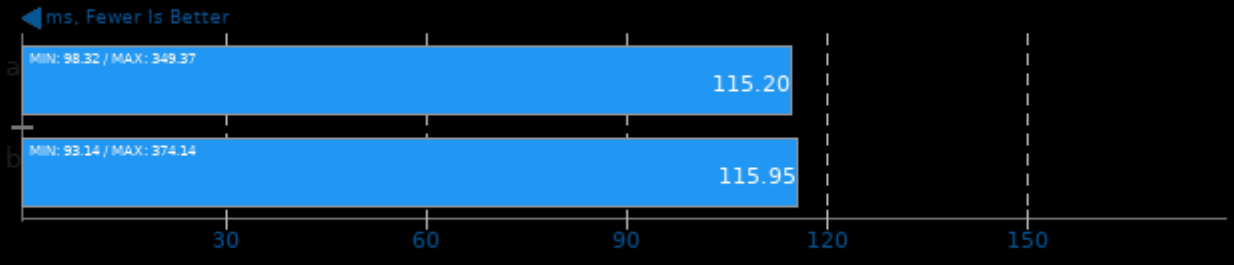
Model: Machine Translation EN To DE FP16 - Device: CPU



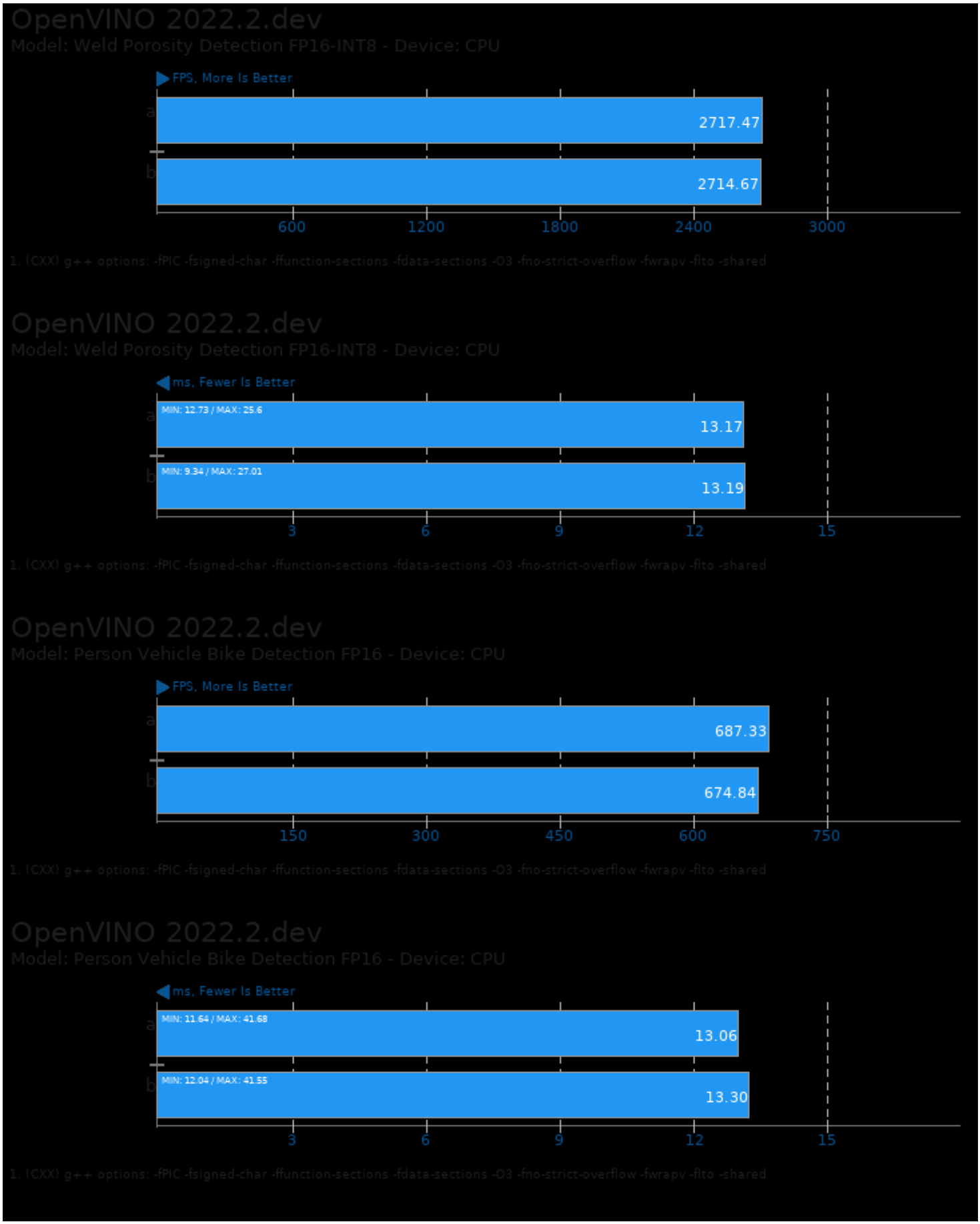
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared

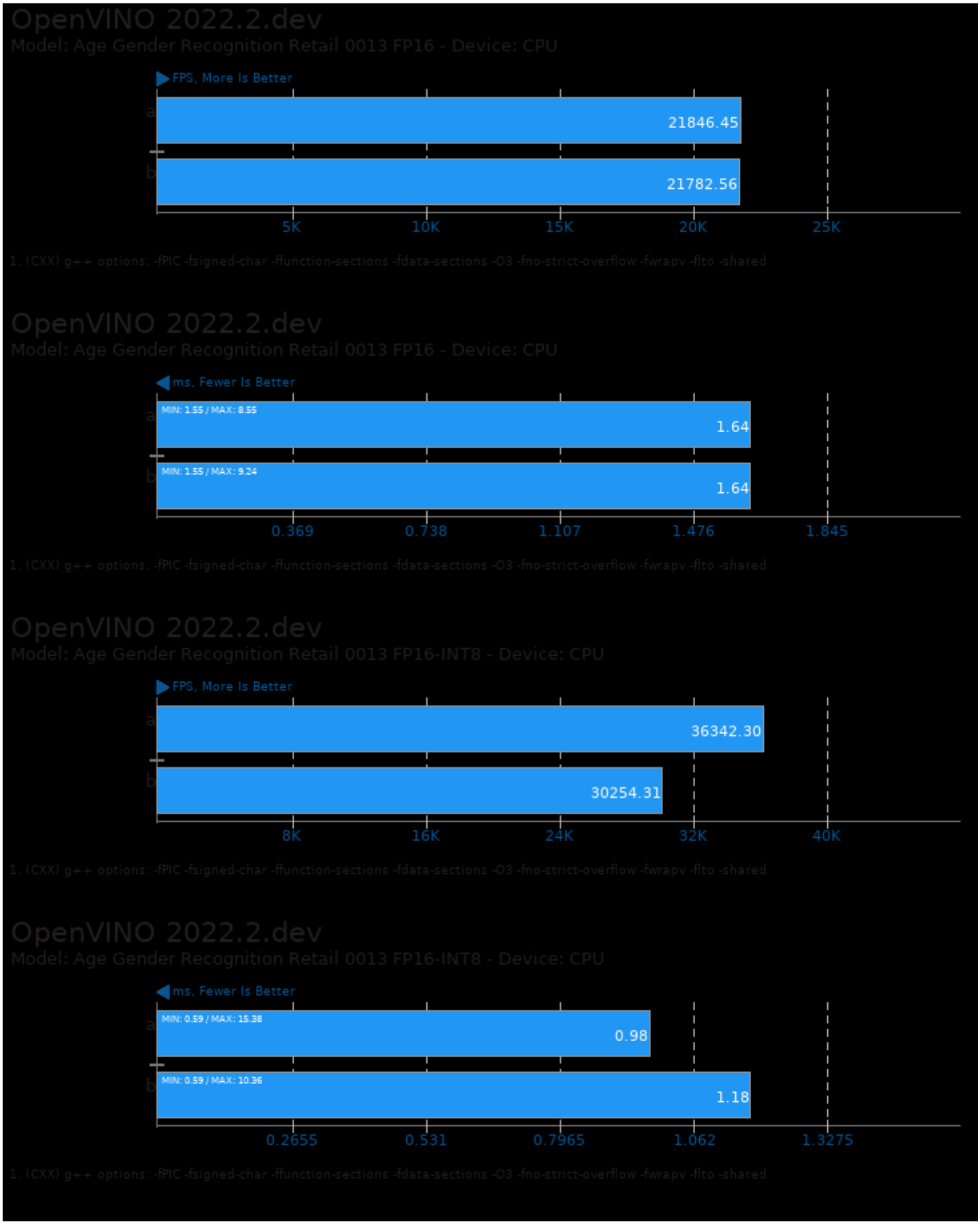
OpenVINO 2022.2.dev

Model: Machine Translation EN To DE FP16 - Device: CPU



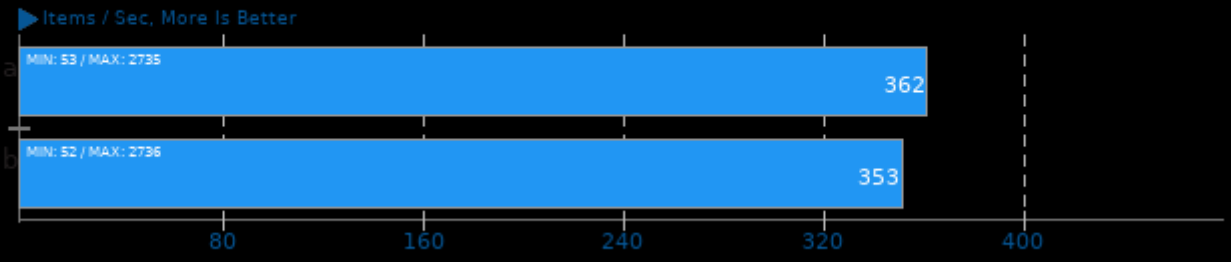
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared


OpenVINO 2022.2.dev
Model: Weld Porosity Detection FP16-INT8 - Device: CPU
FPS, More Is Better
a
2717.47
b
2714.67
600
1200
1800
2400
3000
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Weld Porosity Detection FP16-INT8 - Device: CPU
ms, Fewer Is Better
a
MIN: 12.73 / MAX: 25.6
13.17
b
MIN: 9.34 / MAX: 27.01
13.19
3
6
9
12
15
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Person Vehicle Bike Detection FP16 - Device: CPU
FPS, More Is Better
a
687.33
b
674.84
150
300
450
600
750
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Person Vehicle Bike Detection FP16 - Device: CPU
ms, Fewer Is Better
a
MIN: 11.64 / MAX: 41.68
13.06
b
MIN: 12.04 / MAX: 41.55
13.30
3
6
9
12
15
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared


OpenVINO 2022.2.dev
Model: Age Gender Recognition Retail 0013 FP16 - Device: CPU
FPS, More Is Better
a
21846.45
b
21782.56
5K
10K
15K
20K
25K
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Age Gender Recognition Retail 0013 FP16 - Device: CPU
ms, Fewer Is Better
a
MIN: 1.55 / MAX: 8.55
1.64
b
MIN: 1.55 / MAX: 9.24
1.64
0.369
0.738
1.107
1.476
1.845
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Age Gender Recognition Retail 0013 FP16-INT8 - Device: CPU
FPS, More Is Better
a
36342.30
b
30254.31
8K
16K
24K
32K
40K
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared
OpenVINO 2022.2.dev
Model: Age Gender Recognition Retail 0013 FP16-INT8 - Device: CPU
ms, Fewer Is Better
a
MIN: 0.59 / MAX: 15.38
0.98
b
MIN: 0.59 / MAX: 10.36
1.18
0.2655
0.531
0.7965
1.062
1.3275
1. (CXX) g++ options: -fPIC -fsigned-char -ffunction-sections -fdata-sections -O3 -fno-strict-overflow -fwrapv -flto -shared

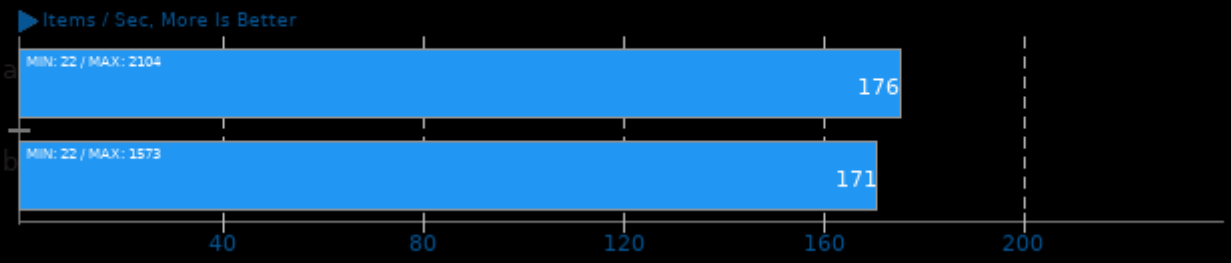
OpenVKL 1.3.1

Benchmark: vklBenchmark ISPC



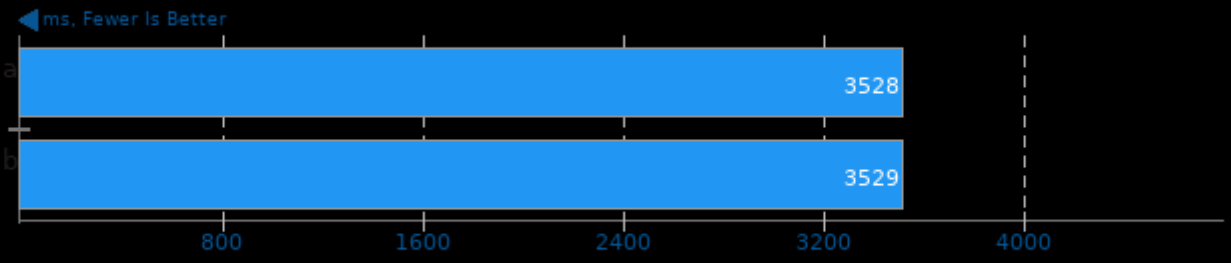
OpenVKL 1.3.1

Benchmark: vklBenchmark Scalar



OSPRay Studio 0.11

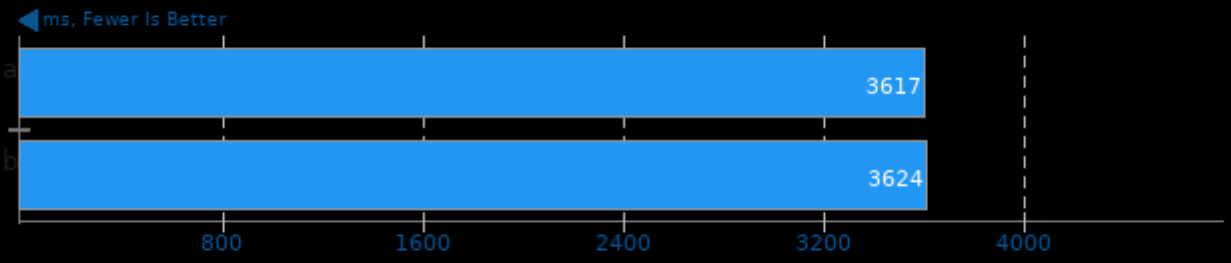
Camera: 1 - Resolution: 4K - Samples Per Pixel: 1 - Renderer: Path Tracer



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

OSPRay Studio 0.11

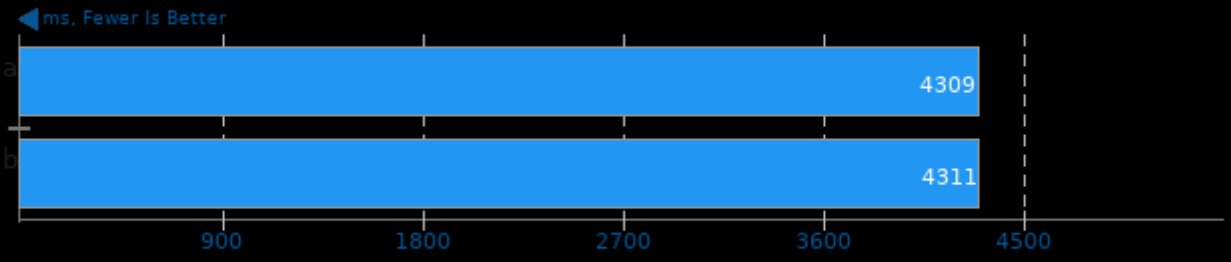
Camera: 2 - Resolution: 4K - Samples Per Pixel: 1 - Renderer: Path Tracer



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

OSPRay Studio 0.11

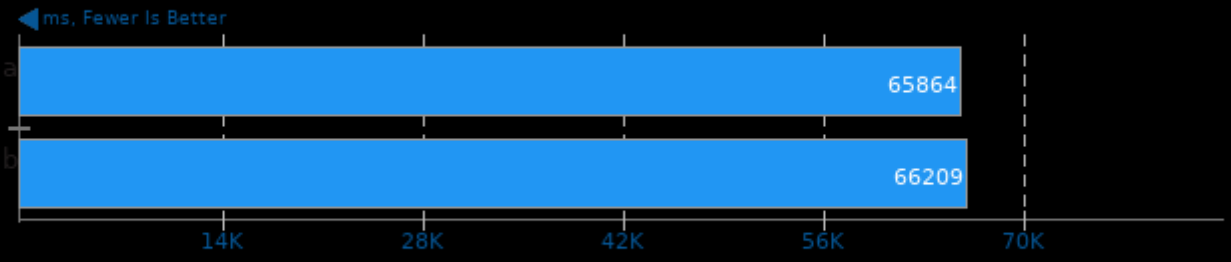
Camera: 3 - Resolution: 4K - Samples Per Pixel: 1 - Renderer: Path Tracer



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

OSPRay Studio 0.11

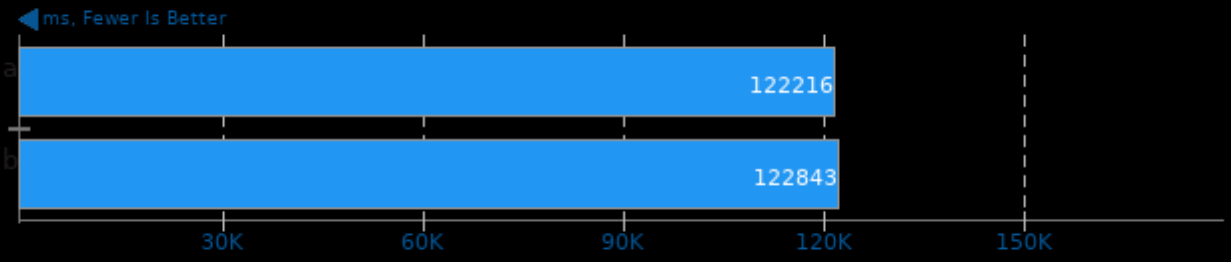
Camera: 1 - Resolution: 4K - Samples Per Pixel: 16 - Renderer: Path Tracer



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

OSPRay Studio 0.11

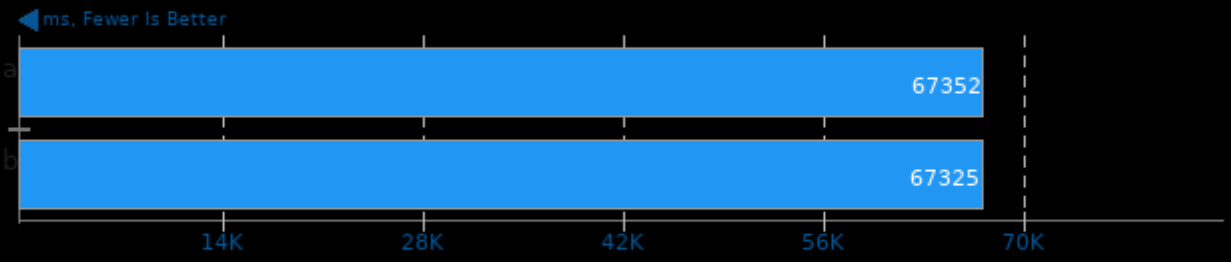
Camera: 1 - Resolution: 4K - Samples Per Pixel: 32 - Renderer: Path Tracer



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

OSPRay Studio 0.11

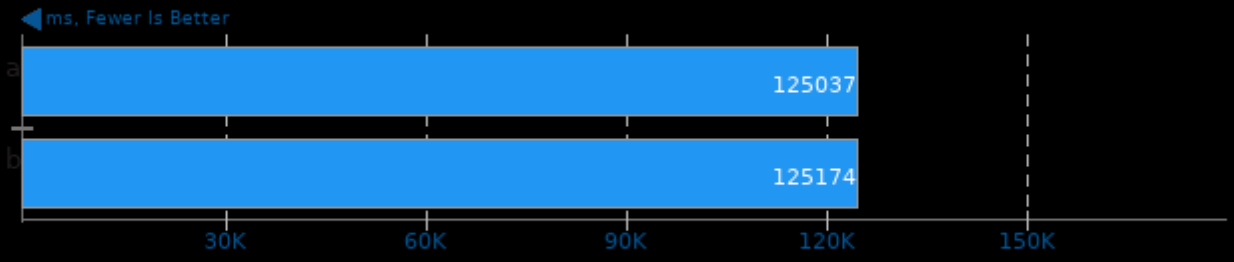
Camera: 2 - Resolution: 4K - Samples Per Pixel: 16 - Renderer: Path Tracer



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

OSPRay Studio 0.11

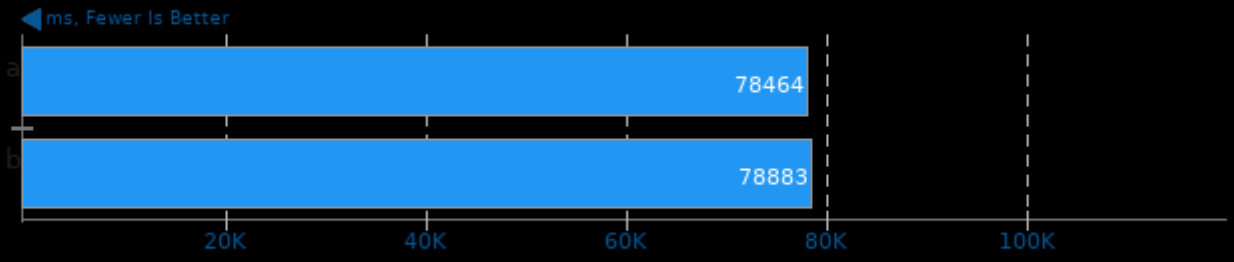
Camera: 2 - Resolution: 4K - Samples Per Pixel: 32 - Renderer: Path Tracer



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

OSPRay Studio 0.11

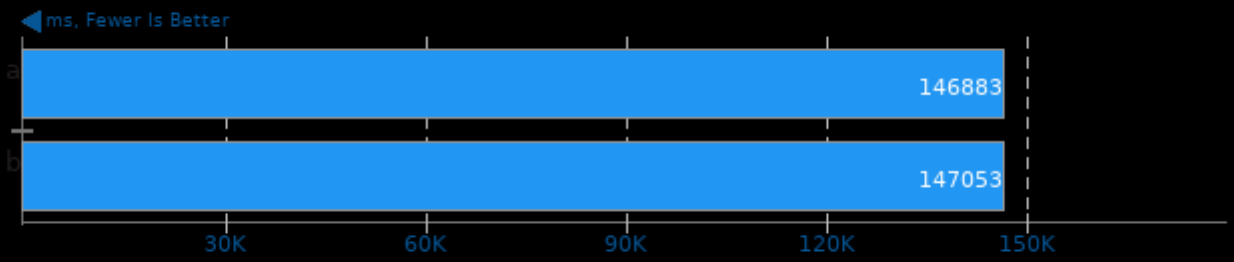
Camera: 3 - Resolution: 4K - Samples Per Pixel: 16 - Renderer: Path Tracer



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

OSPRay Studio 0.11

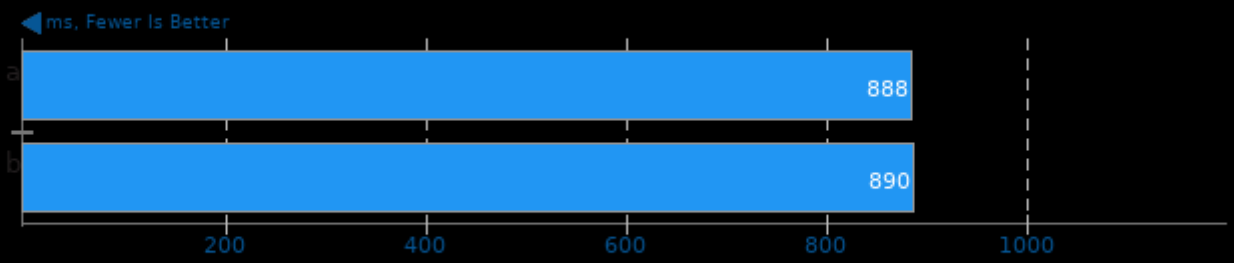
Camera: 3 - Resolution: 4K - Samples Per Pixel: 32 - Renderer: Path Tracer



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

OSPRay Studio 0.11

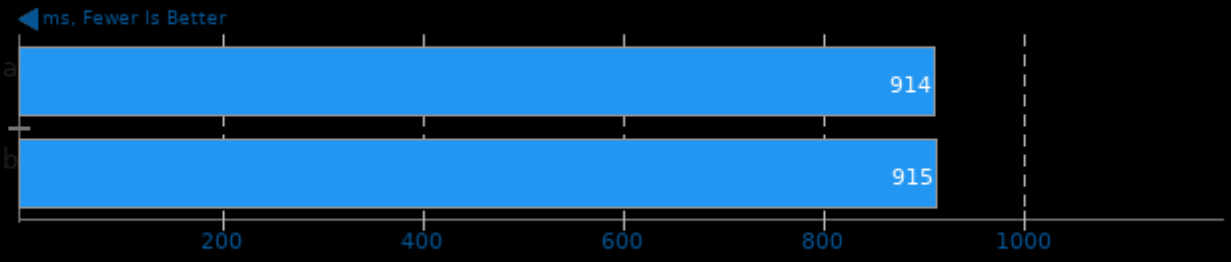
Camera: 1 - Resolution: 1080p - Samples Per Pixel: 1 - Renderer: Path Tracer



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

OSPRay Studio 0.11

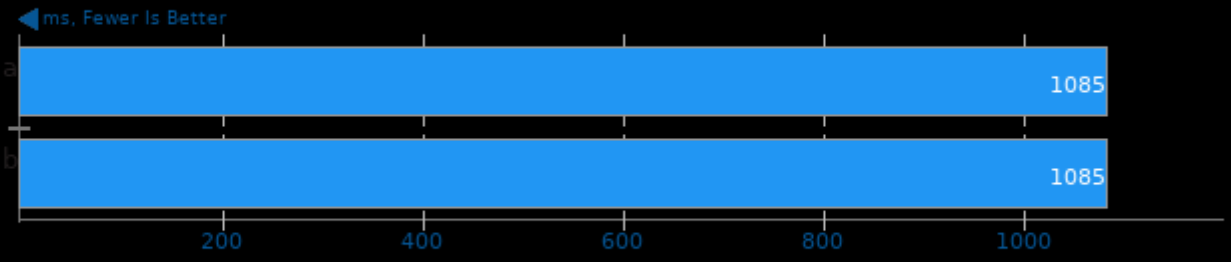
Camera: 2 - Resolution: 1080p - Samples Per Pixel: 1 - Renderer: Path Tracer



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

OSPRay Studio 0.11

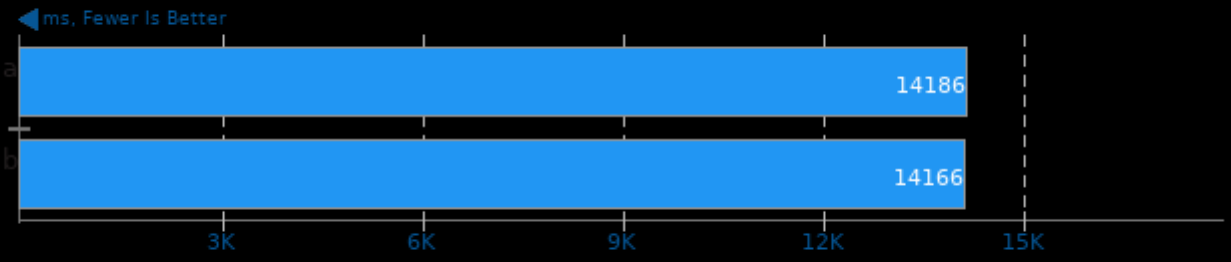
Camera: 3 - Resolution: 1080p - Samples Per Pixel: 1 - Renderer: Path Tracer



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

OSPRay Studio 0.11

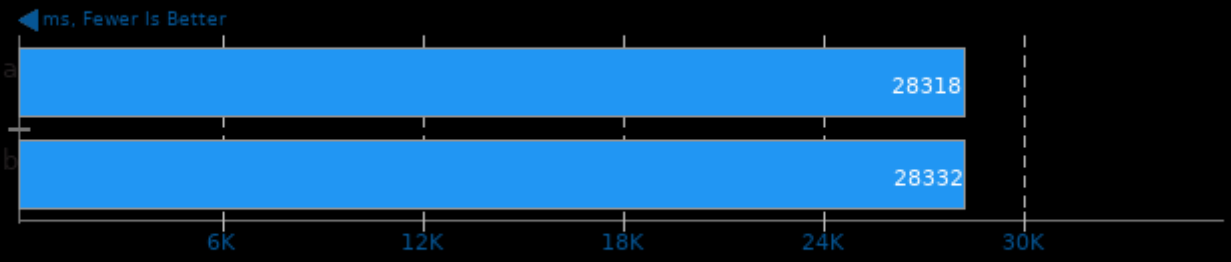
Camera: 1 - Resolution: 1080p - Samples Per Pixel: 16 - Renderer: Path Tracer



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

OSPRay Studio 0.11

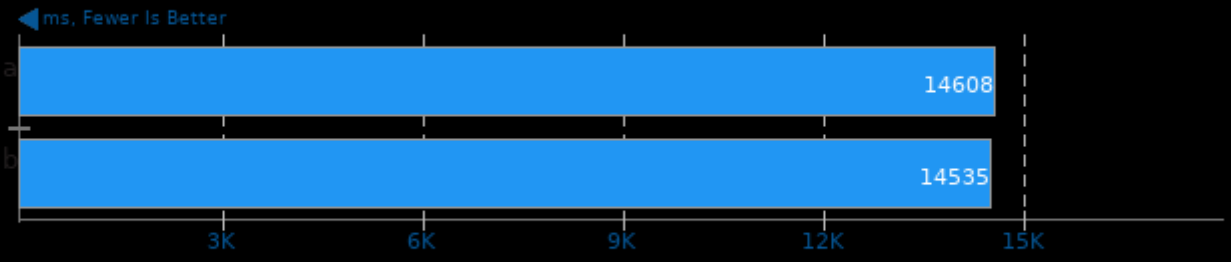
Camera: 1 - Resolution: 1080p - Samples Per Pixel: 32 - Renderer: Path Tracer



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

OSPRay Studio 0.11

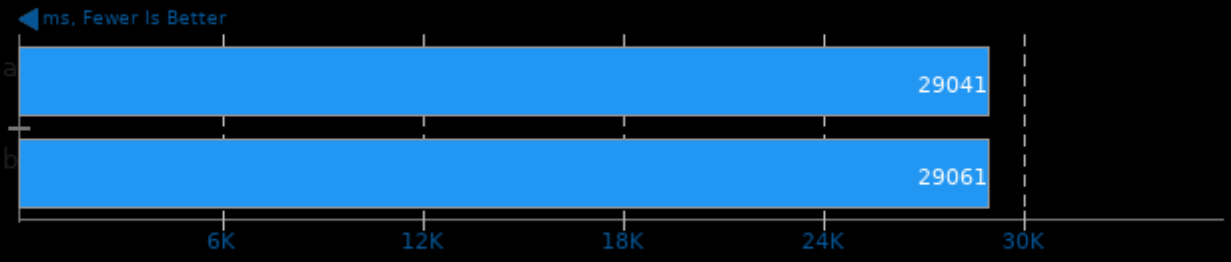
Camera: 2 - Resolution: 1080p - Samples Per Pixel: 16 - Renderer: Path Tracer



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

OSPRay Studio 0.11

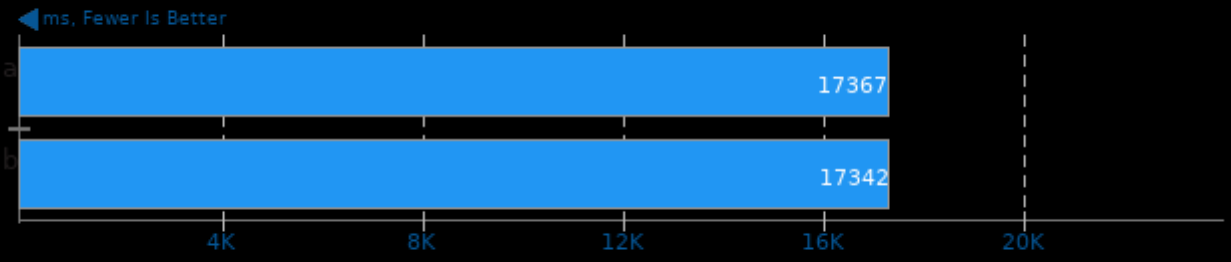
Camera: 2 - Resolution: 1080p - Samples Per Pixel: 32 - Renderer: Path Tracer



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

OSPRay Studio 0.11

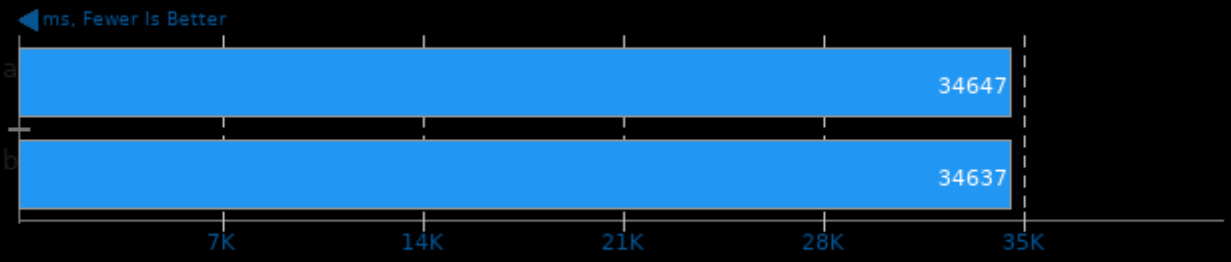
Camera: 3 - Resolution: 1080p - Samples Per Pixel: 16 - Renderer: Path Tracer



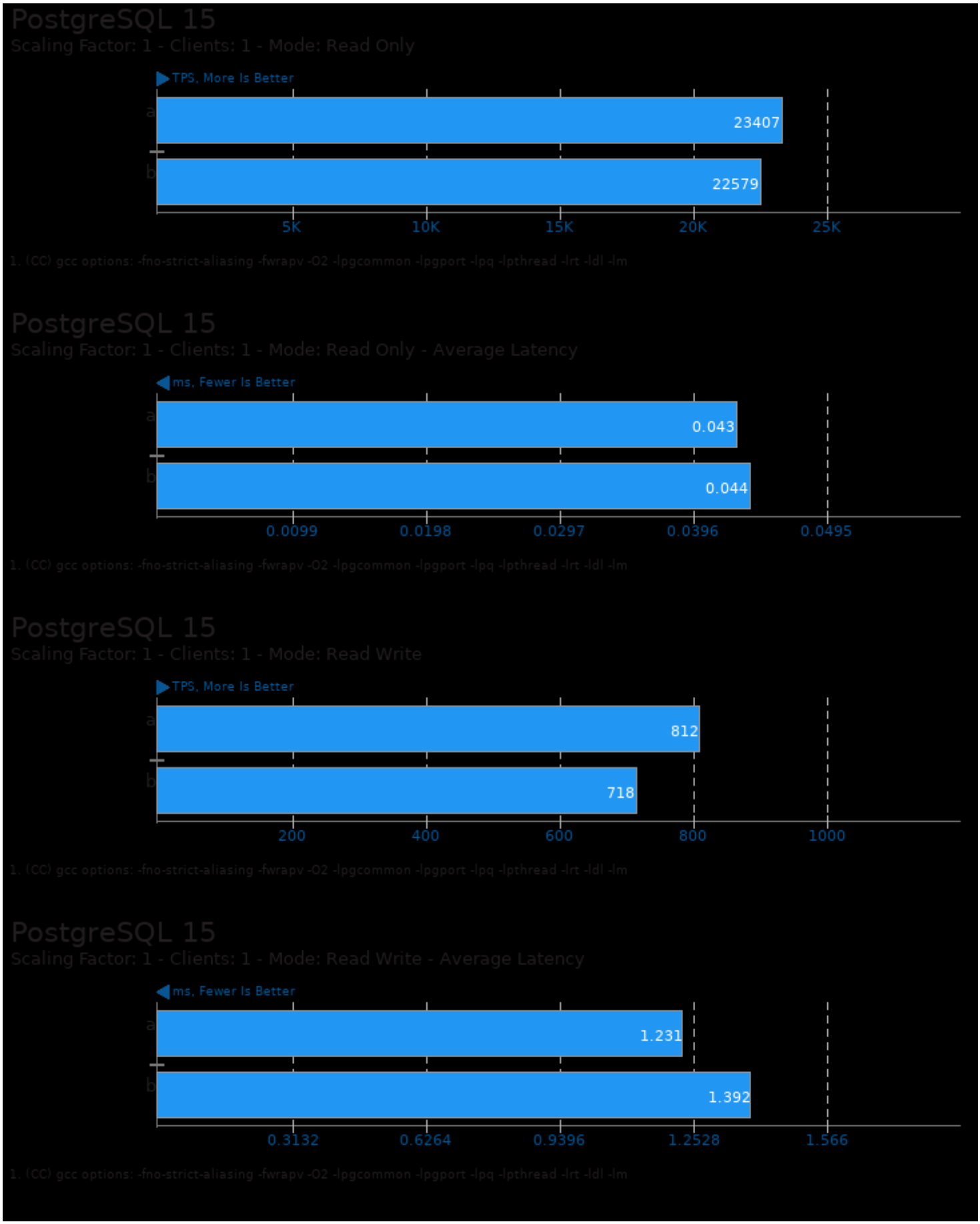
1. (CXX) g++ options: -O3 -lm -ldl -lpthread -pthread

OSPRay Studio 0.11

Camera: 3 - Resolution: 1080p - Samples Per Pixel: 32 - Renderer: Path Tracer

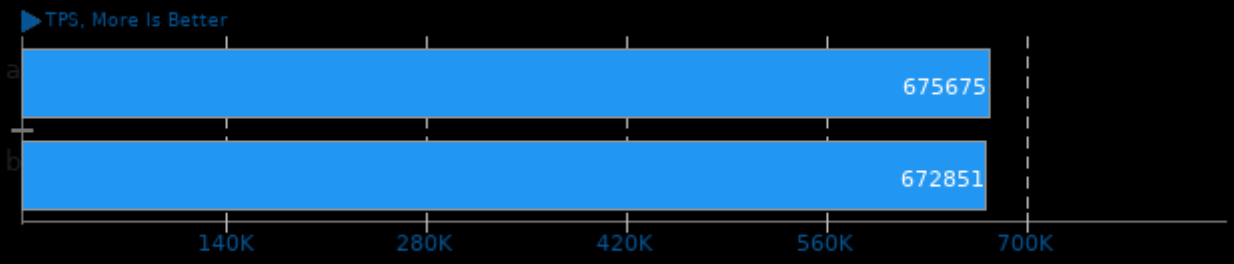


1. (CXX) g++ options: -O3 -lm -ldl -lpthread -pthread


PostgreSQL 15
Scaling Factor: 1 - Clients: 1 - Mode: Read Only
TPS, More Is Better
a
23407
b
22579
5K
10K
15K
20K
25K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL 15
Scaling Factor: 1 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
a
0.043
b
0.044
0.0099
0.0198
0.0297
0.0396
0.0495
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL 15
Scaling Factor: 1 - Clients: 1 - Mode: Read Write
TPS, More Is Better
a
812
b
718
200
400
600
800
1000
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL 15
Scaling Factor: 1 - Clients: 1 - Mode: Read Write - Average Latency
ms, Fewer Is Better
a
1.231
b
1.392
0.3132
0.6264
0.9396
1.2528
1.566
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

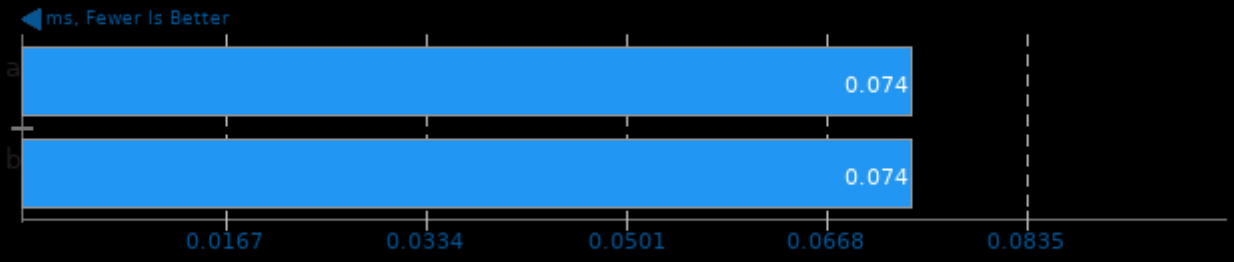
Scaling Factor: 1 - Clients: 50 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

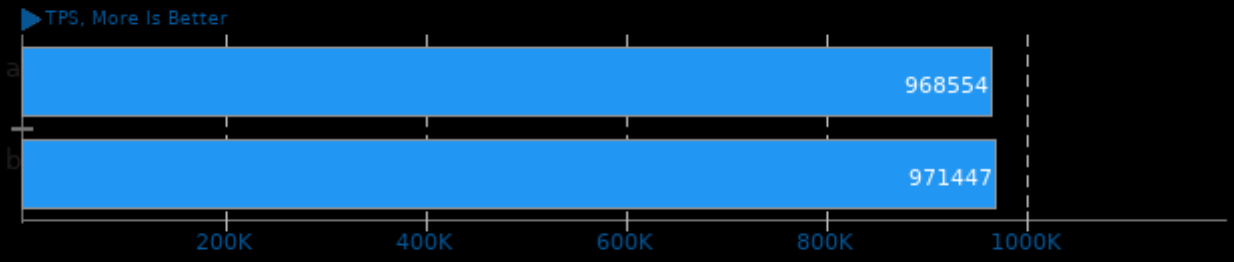
Scaling Factor: 1 - Clients: 50 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

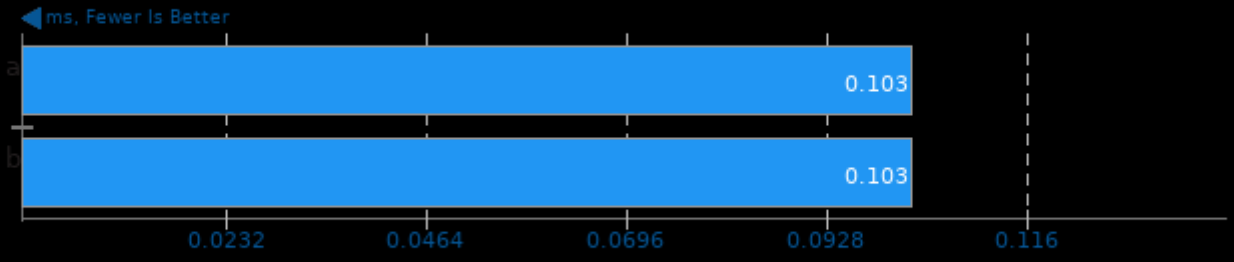
Scaling Factor: 1 - Clients: 100 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

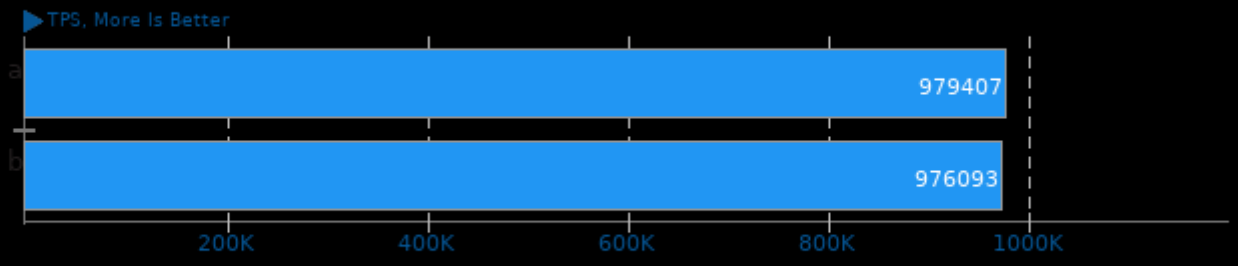
Scaling Factor: 1 - Clients: 100 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

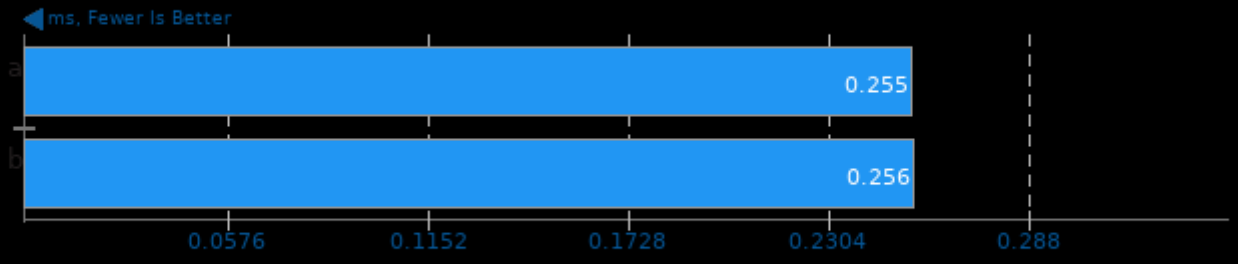
Scaling Factor: 1 - Clients: 250 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

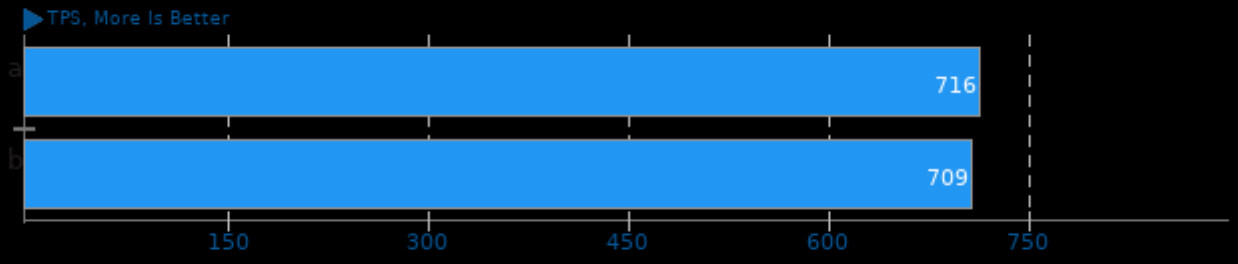
Scaling Factor: 1 - Clients: 250 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

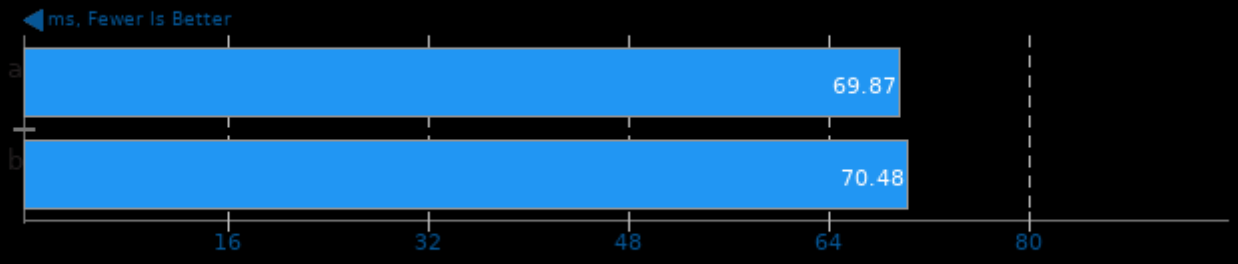
Scaling Factor: 1 - Clients: 50 - Mode: Read Write



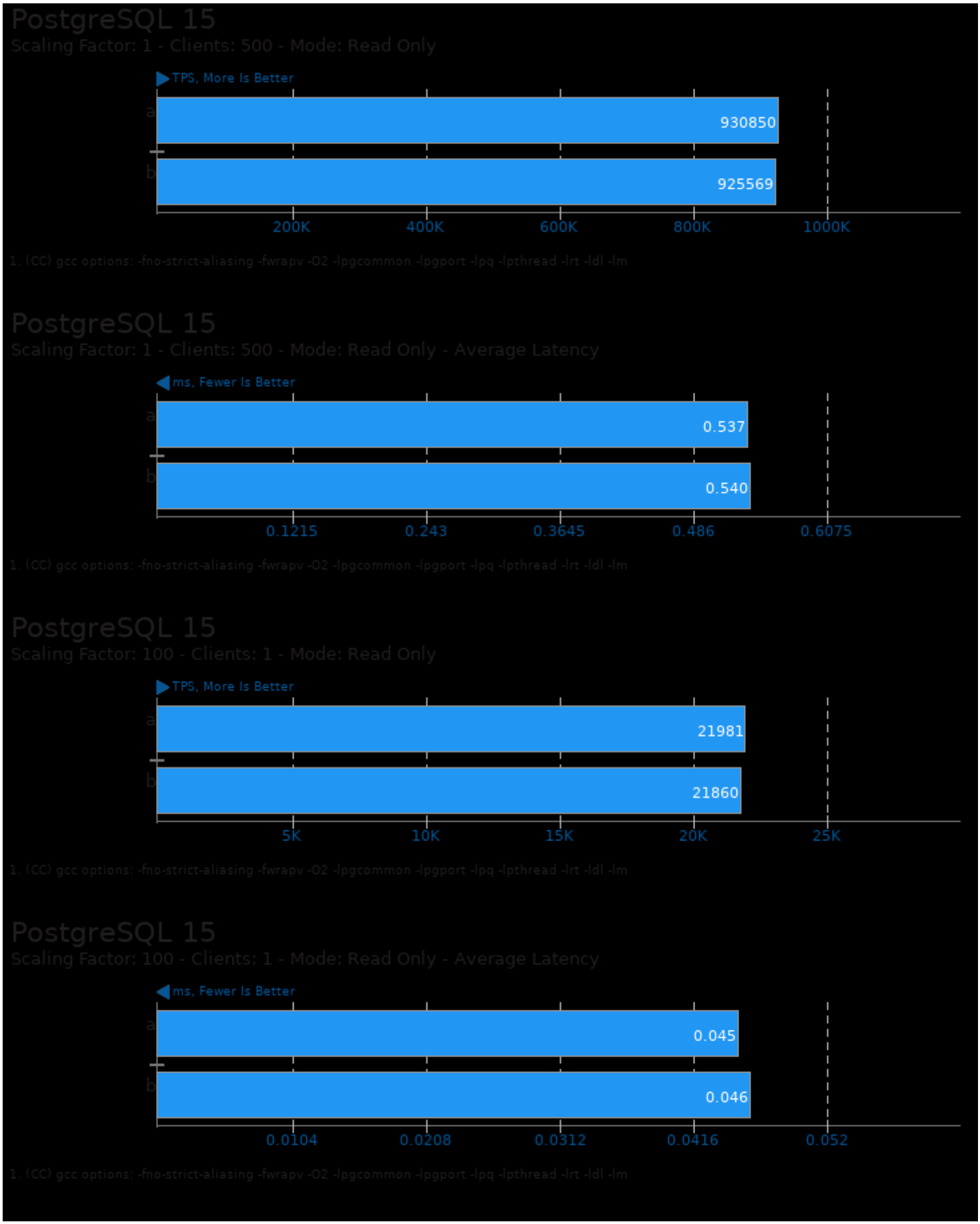
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

Scaling Factor: 1 - Clients: 50 - Mode: Read Write - Average Latency

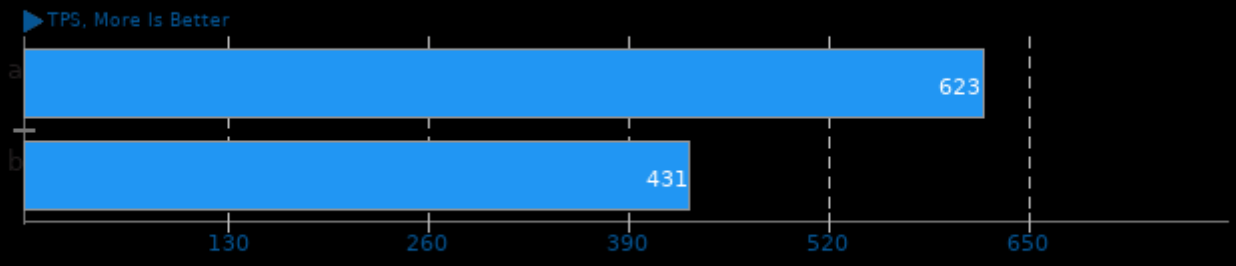


1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


PostgreSQL 15
Scaling Factor: 1 - Clients: 500 - Mode: Read Only
TPS, More Is Better
a
930850
b
925569
200K
400K
600K
800K
1000K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL 15
Scaling Factor: 1 - Clients: 500 - Mode: Read Only - Average Latency
ms, Fewer Is Better
a
0.537
b
0.540
0.1215
0.243
0.3645
0.486
0.6075
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL 15
Scaling Factor: 100 - Clients: 1 - Mode: Read Only
TPS, More Is Better
a
21981
b
21860
5K
10K
15K
20K
25K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL 15
Scaling Factor: 100 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
a
0.045
b
0.046
0.0104
0.0208
0.0312
0.0416
0.052
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

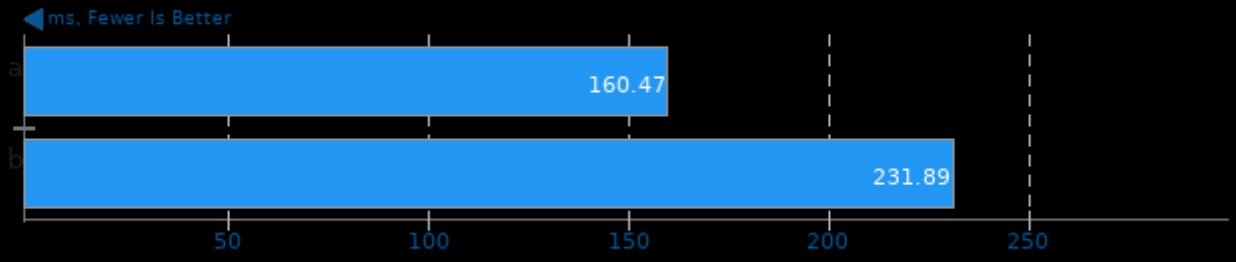
Scaling Factor: 1 - Clients: 100 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

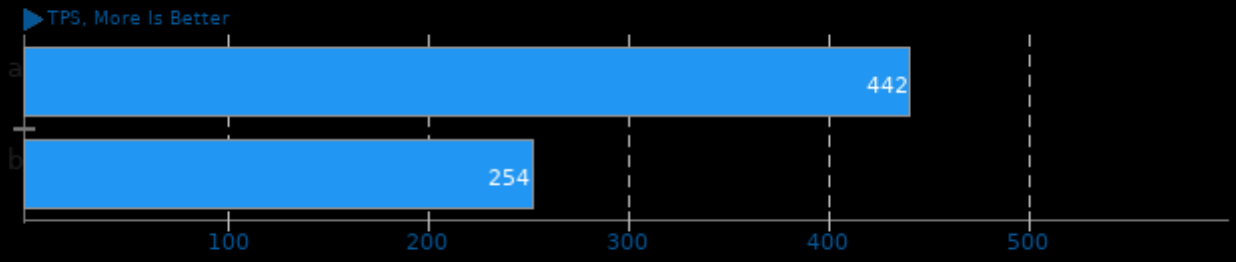
Scaling Factor: 1 - Clients: 100 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

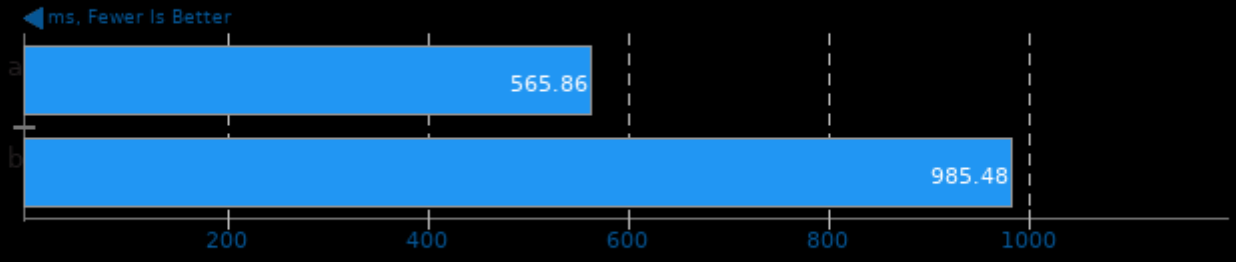
Scaling Factor: 1 - Clients: 250 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

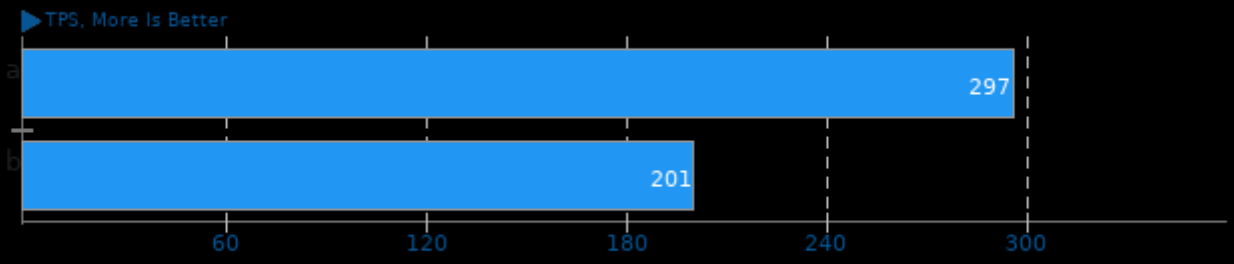
Scaling Factor: 1 - Clients: 250 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

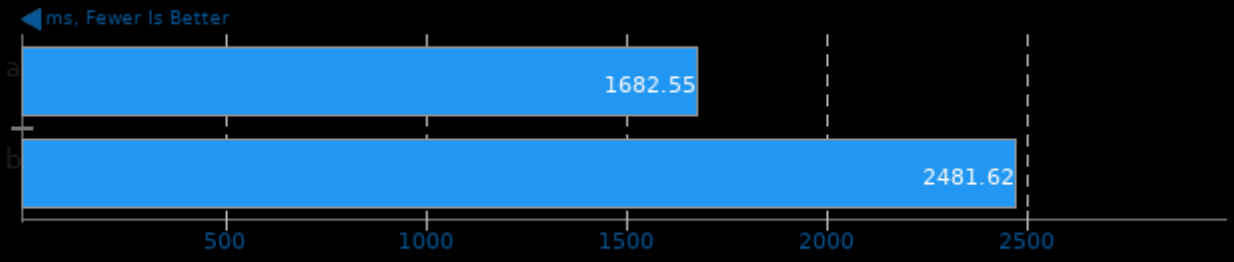
Scaling Factor: 1 - Clients: 500 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

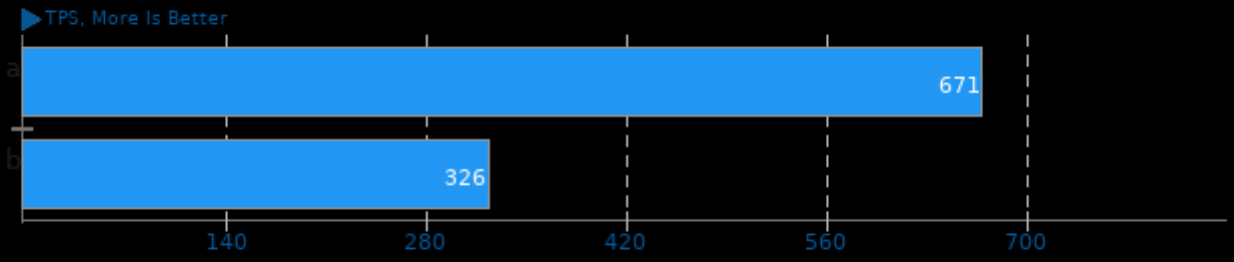
Scaling Factor: 1 - Clients: 500 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

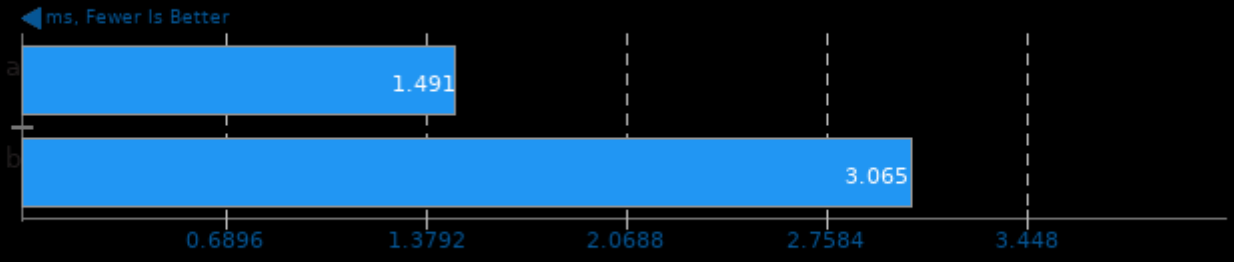
Scaling Factor: 100 - Clients: 1 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

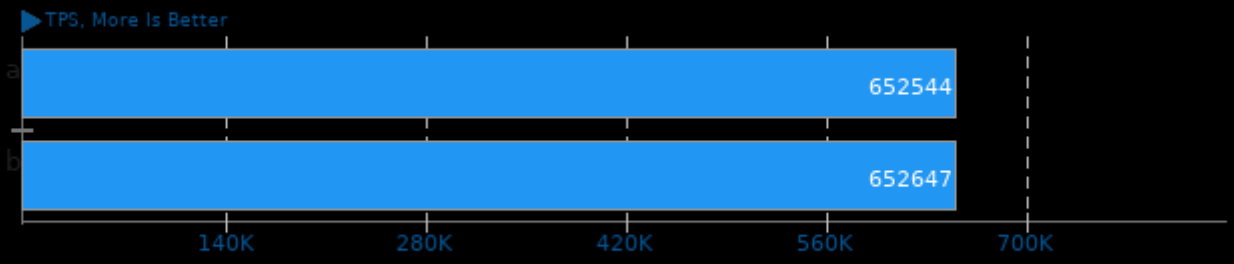
Scaling Factor: 100 - Clients: 1 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

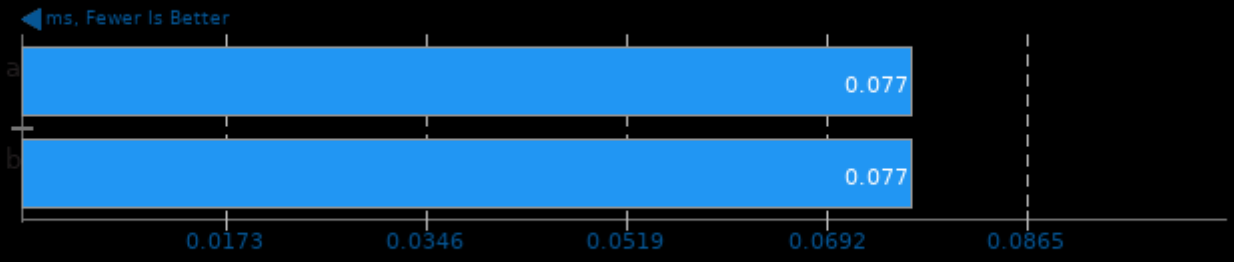
Scaling Factor: 100 - Clients: 50 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

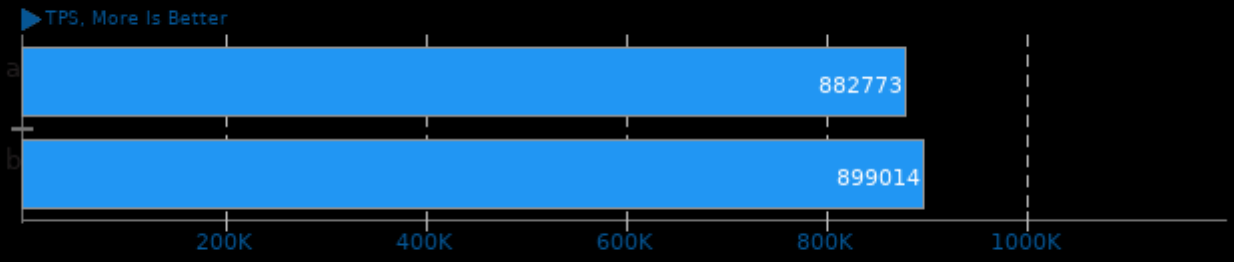
Scaling Factor: 100 - Clients: 50 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

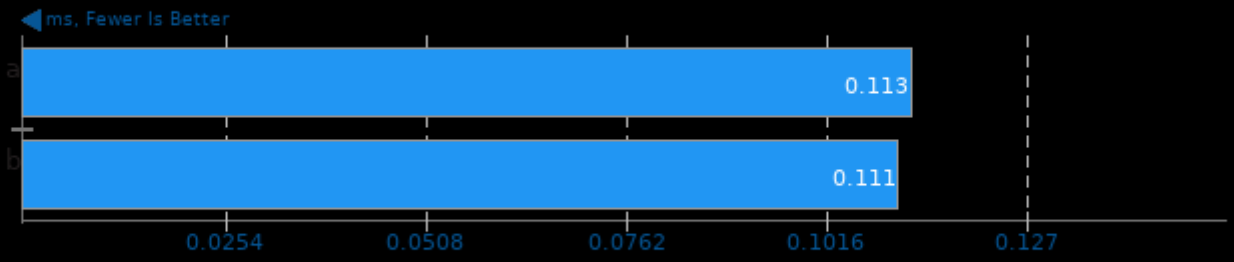
Scaling Factor: 100 - Clients: 100 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

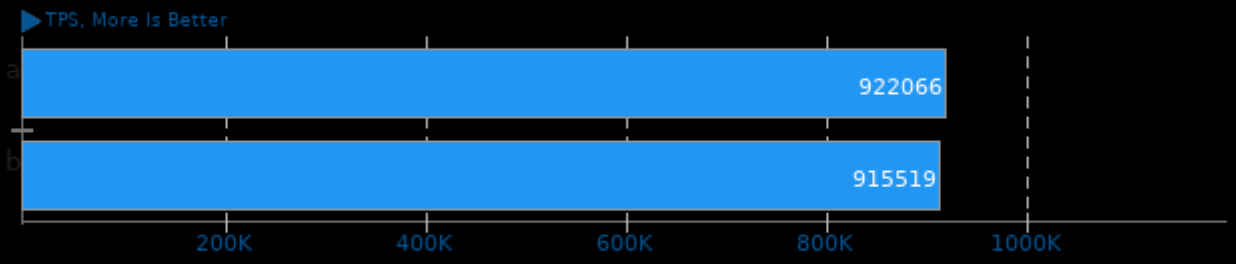
Scaling Factor: 100 - Clients: 100 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

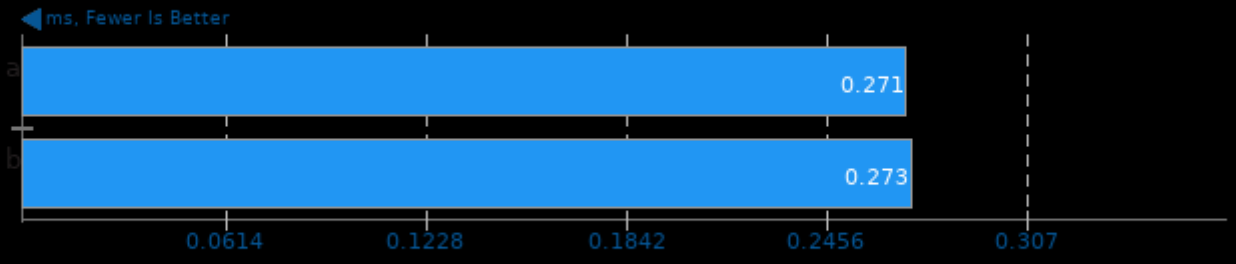
Scaling Factor: 100 - Clients: 250 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

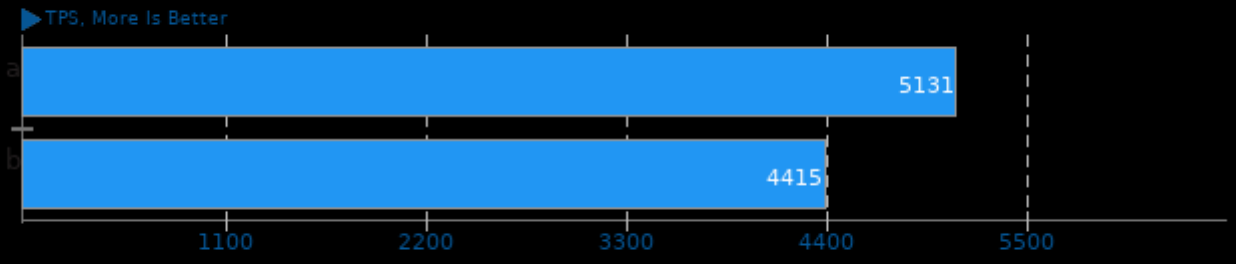
Scaling Factor: 100 - Clients: 250 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

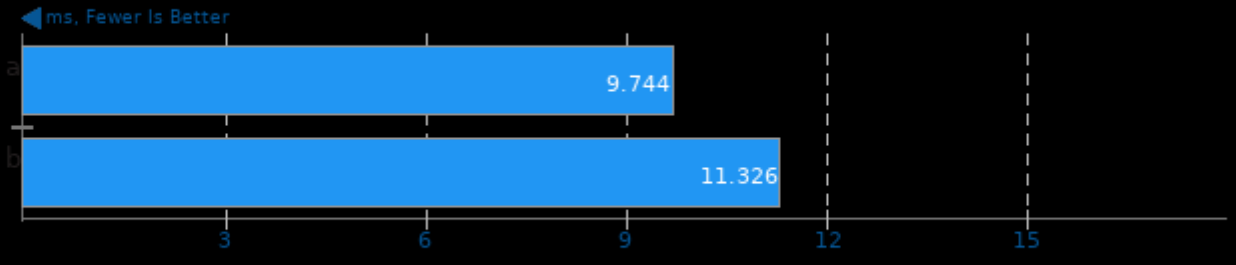
Scaling Factor: 100 - Clients: 50 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

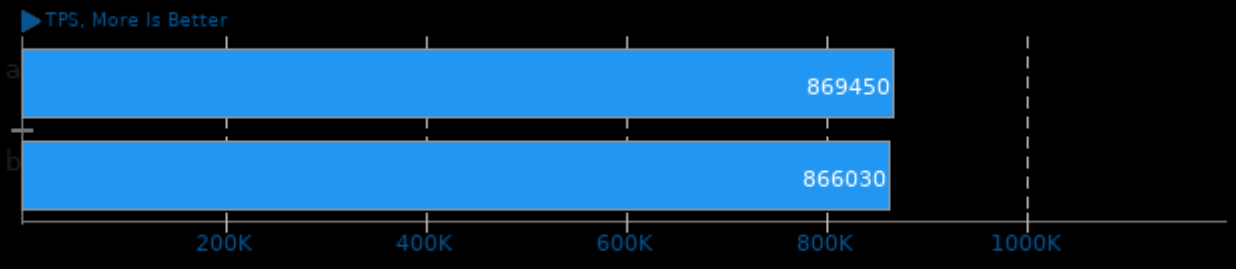
Scaling Factor: 100 - Clients: 50 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

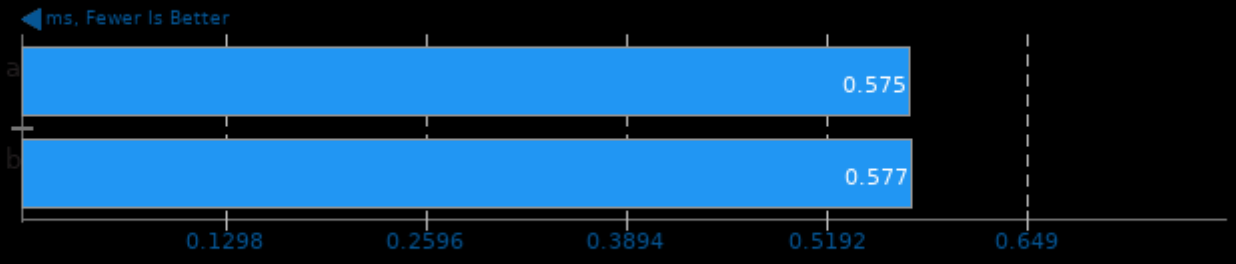
Scaling Factor: 100 - Clients: 500 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

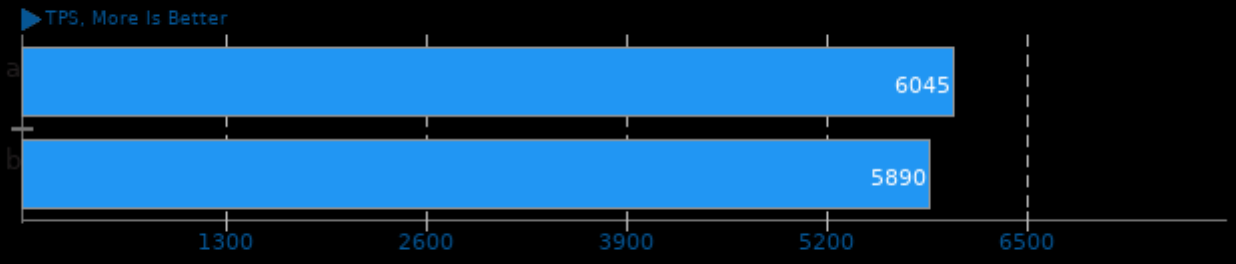
Scaling Factor: 100 - Clients: 500 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

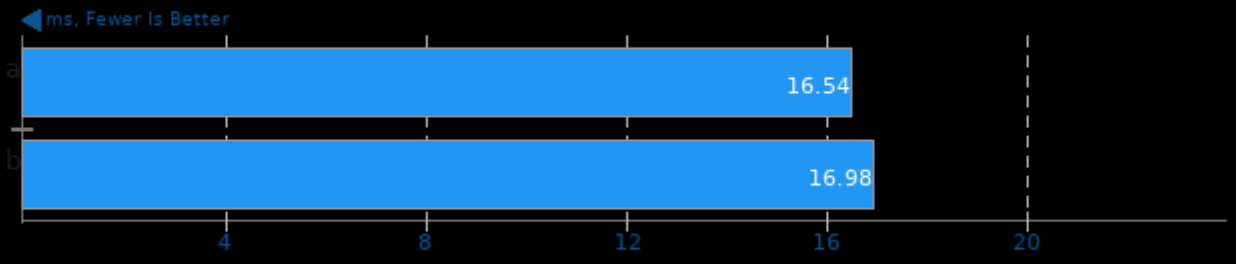
Scaling Factor: 100 - Clients: 100 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

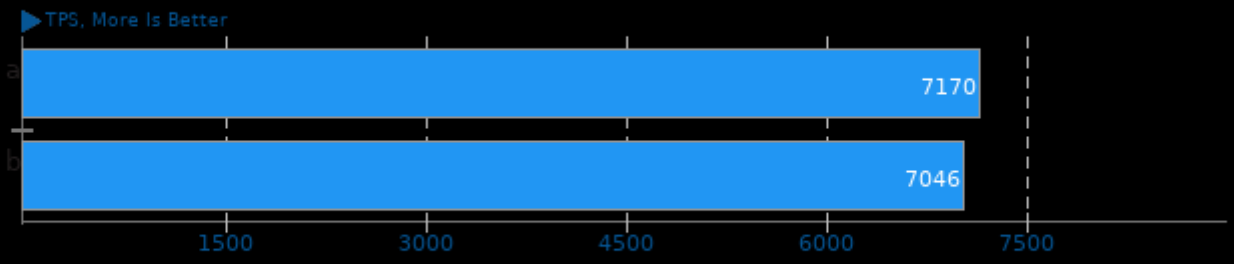
Scaling Factor: 100 - Clients: 100 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

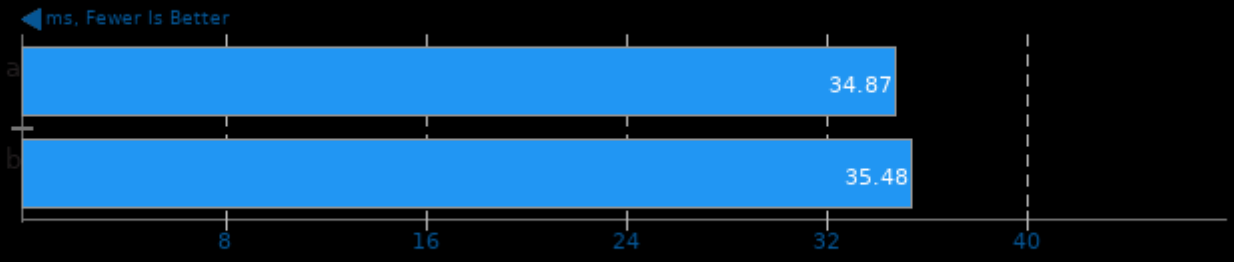
Scaling Factor: 100 - Clients: 250 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

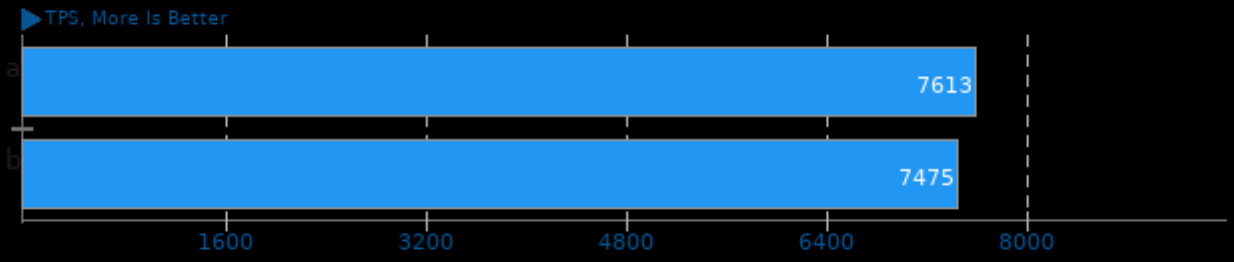
Scaling Factor: 100 - Clients: 250 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

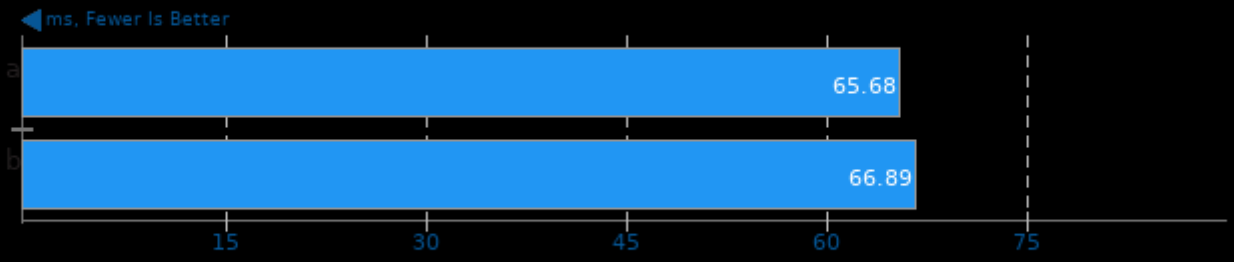
Scaling Factor: 100 - Clients: 500 - Mode: Read Write



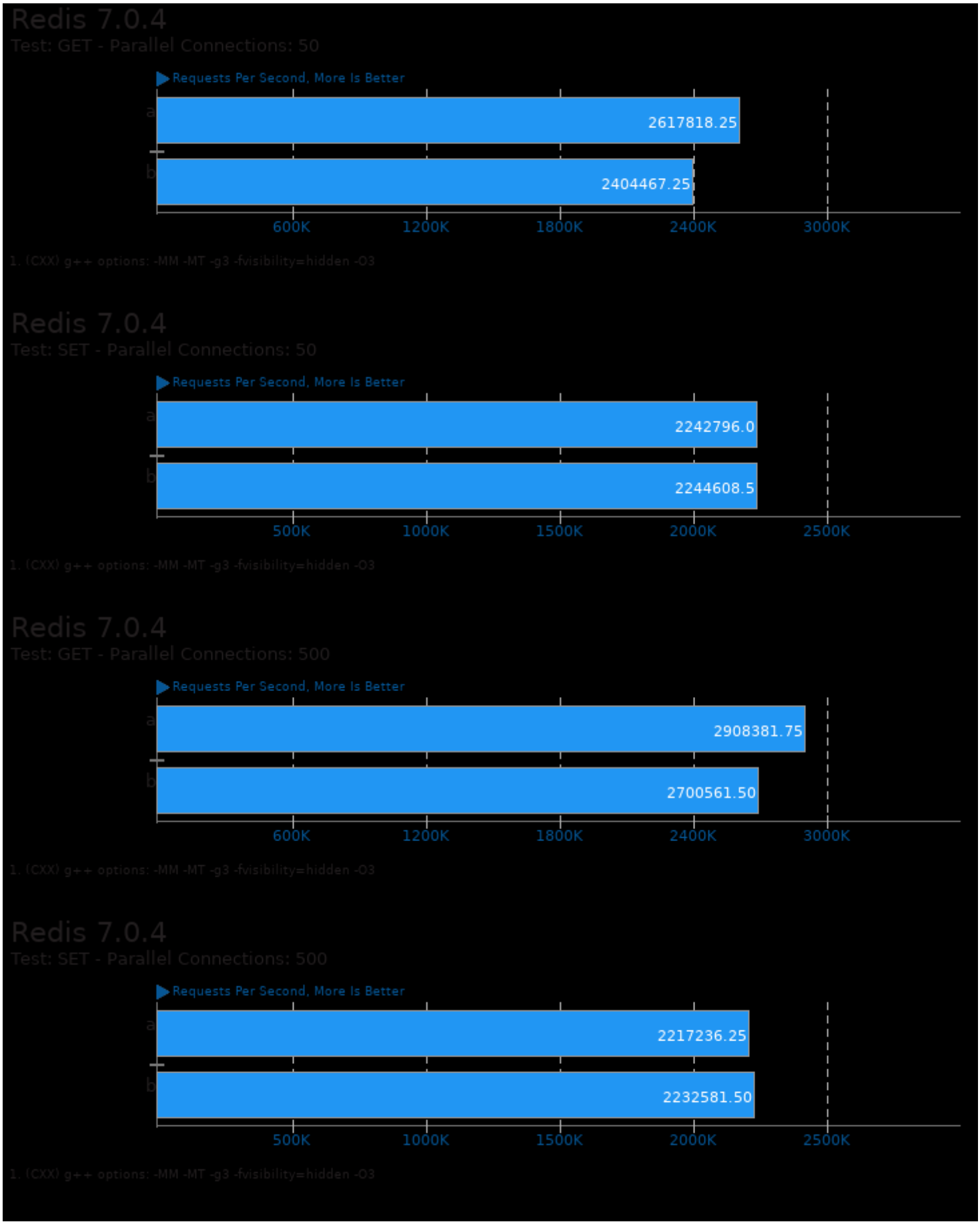
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL 15

Scaling Factor: 100 - Clients: 500 - Mode: Read Write - Average Latency

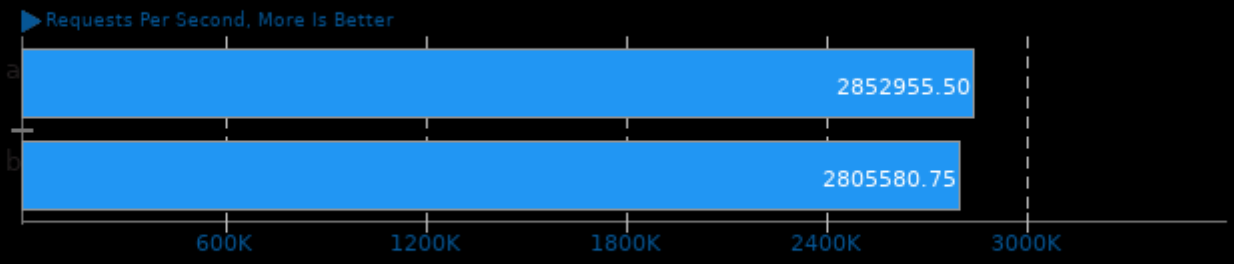


1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


Redis 7.0.4
Test: GET - Parallel Connections: 50
Requests Per Second, More Is Better
a
2617818.25
b
2404467.25
600K
1200K
1800K
2400K
3000K
1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3
Redis 7.0.4
Test: SET - Parallel Connections: 50
Requests Per Second, More Is Better
a
2242796.0
b
2244608.5
500K
1000K
1500K
2000K
2500K
1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3
Redis 7.0.4
Test: GET - Parallel Connections: 500
Requests Per Second, More Is Better
a
2908381.75
b
2700561.50
600K
1200K
1800K
2400K
3000K
1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3
Redis 7.0.4
Test: SET - Parallel Connections: 500
Requests Per Second, More Is Better
a
2217236.25
b
2232581.50
500K
1000K
1500K
2000K
2500K
1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 7.0.4

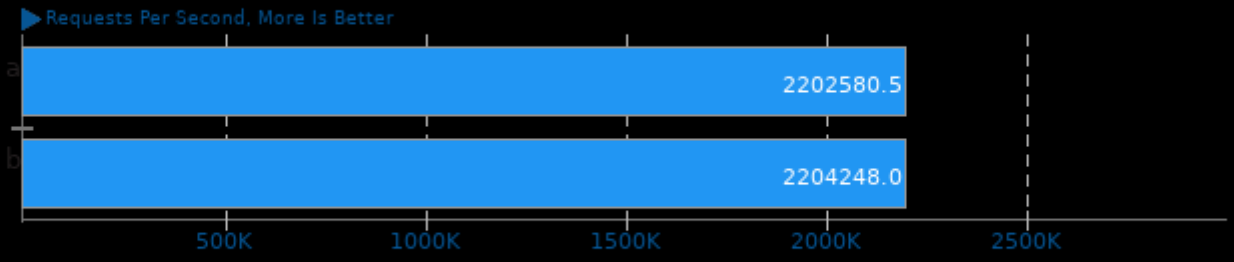
Test: GET - Parallel Connections: 1000



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

Redis 7.0.4

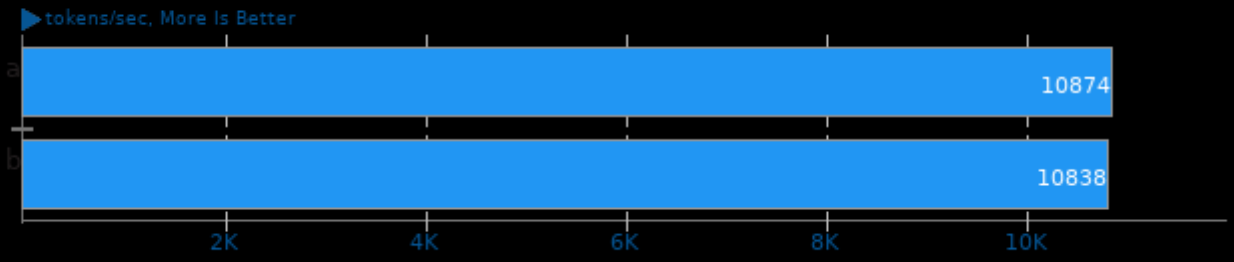
Test: SET - Parallel Connections: 1000



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

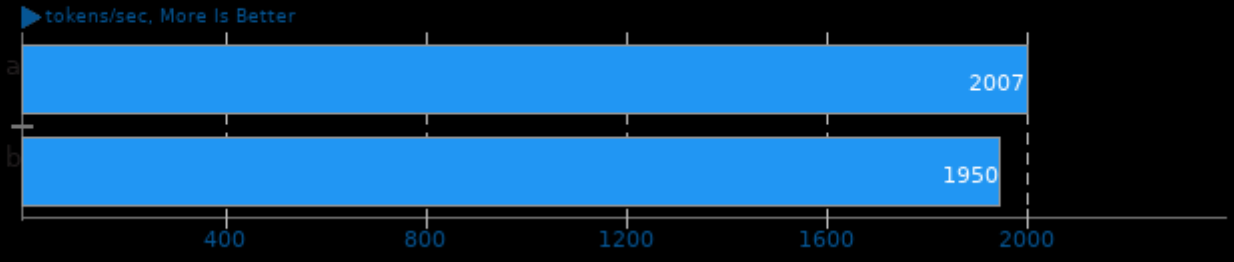
spaCy 3.4.1

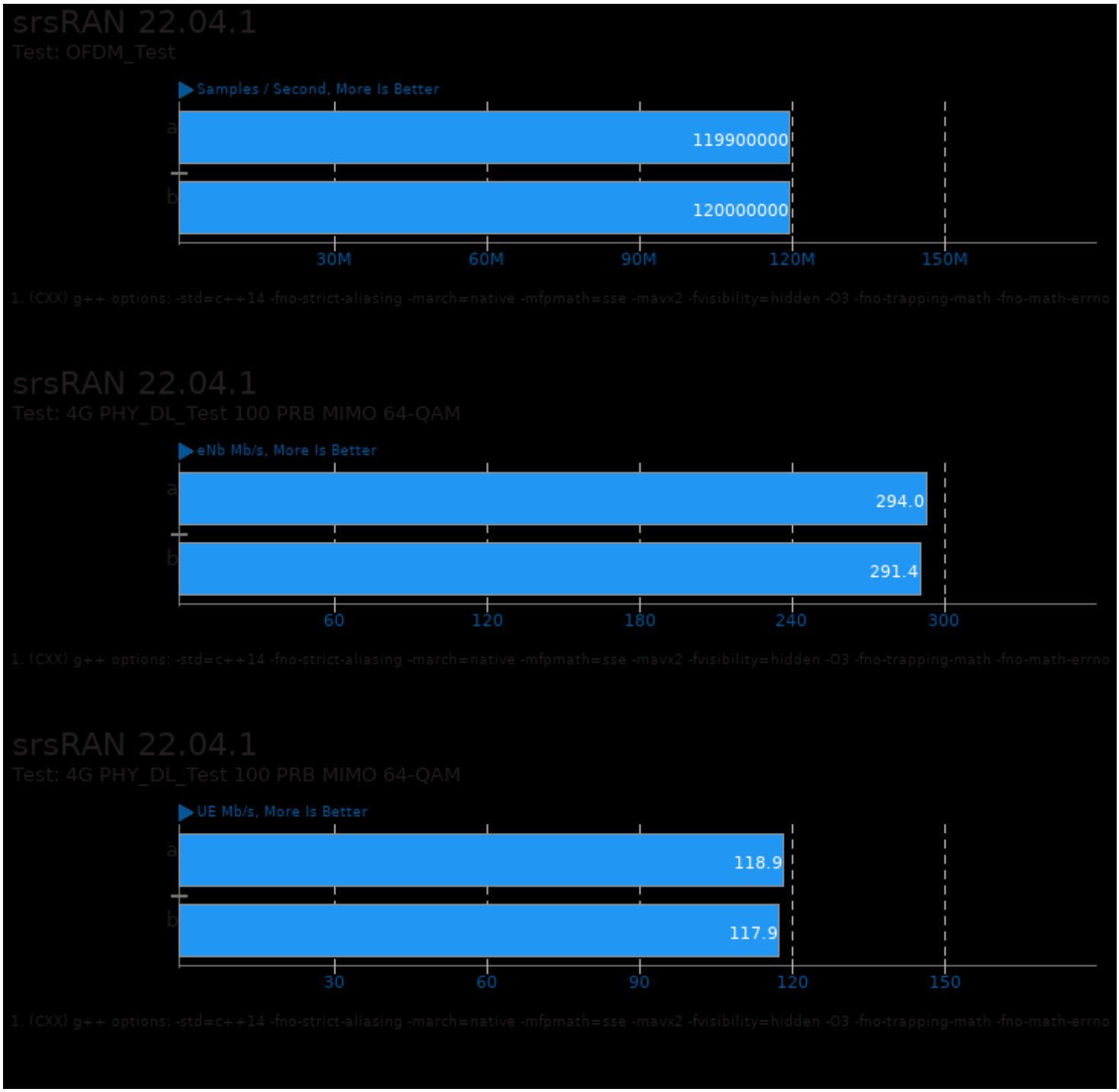
Model: en_core_web_lg

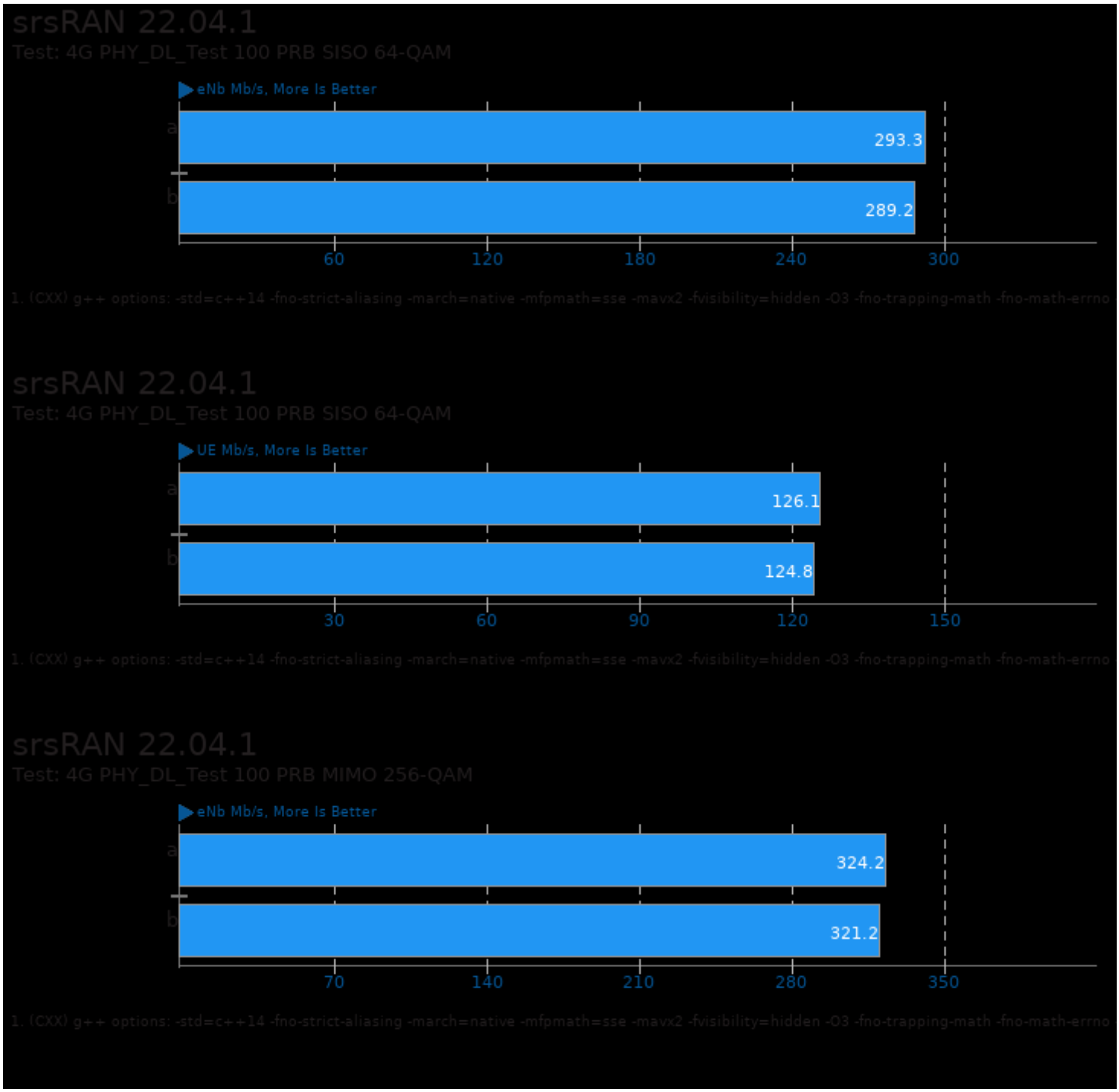


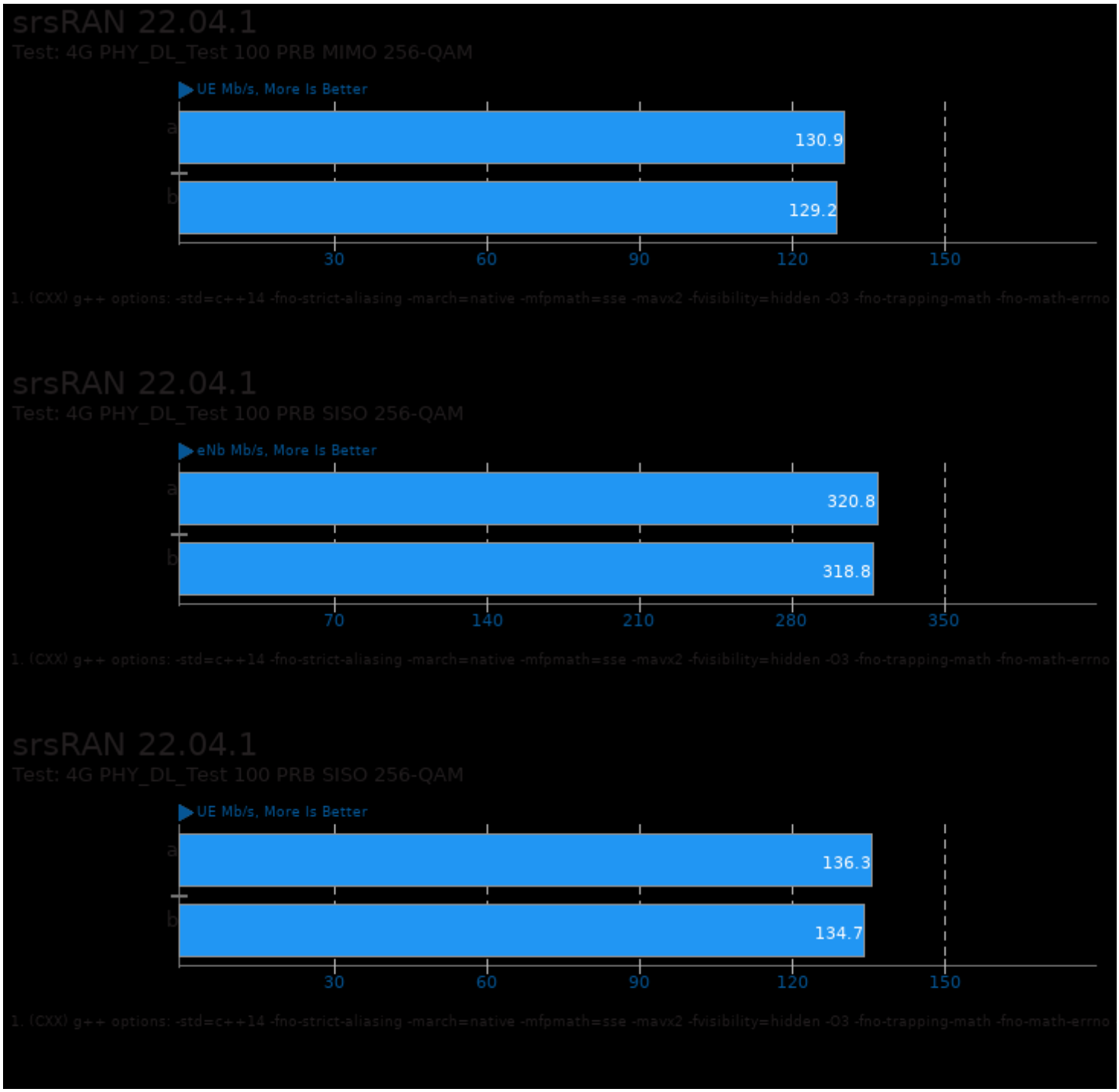
spaCy 3.4.1

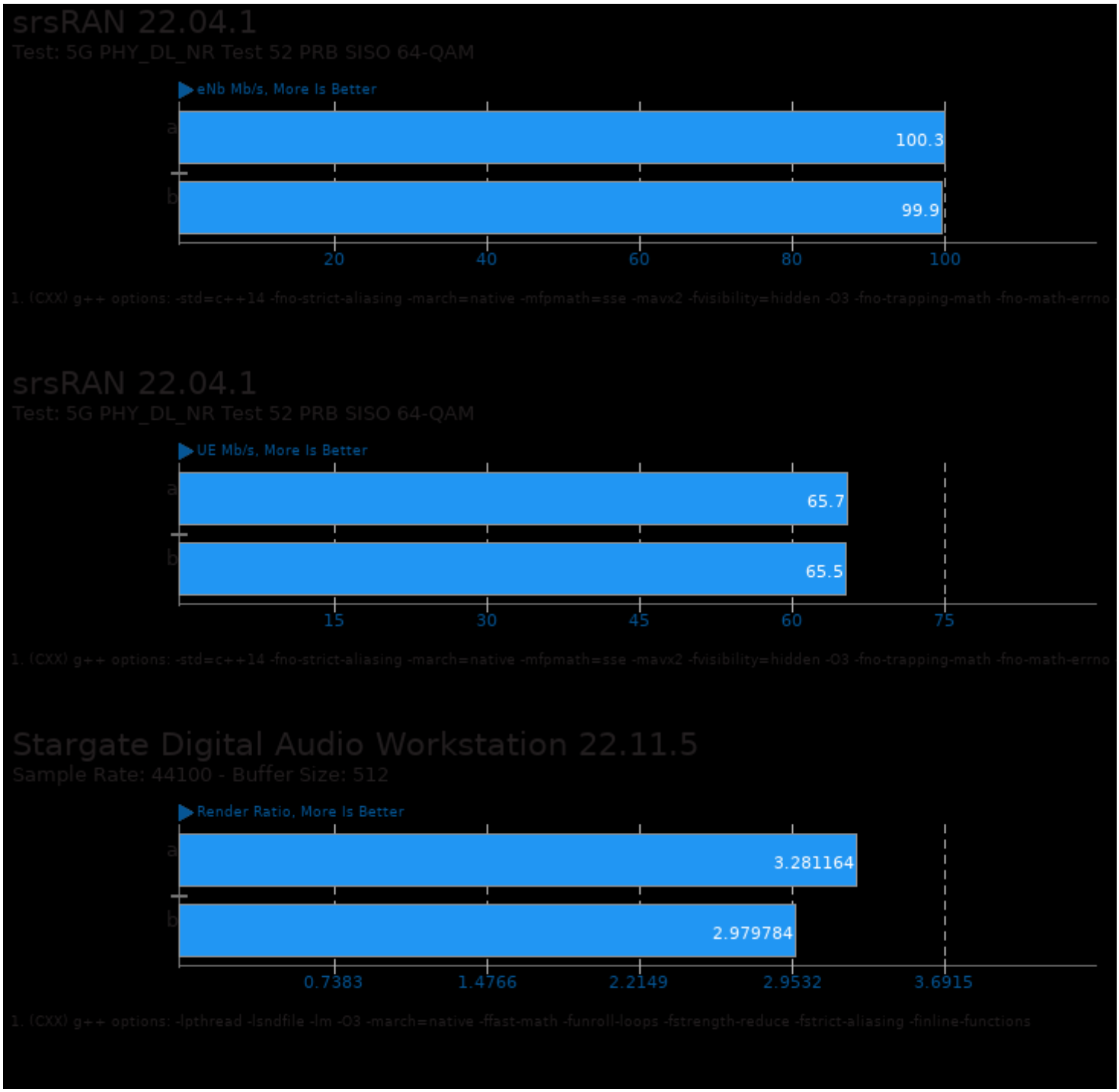
Model: en_core_web_trf



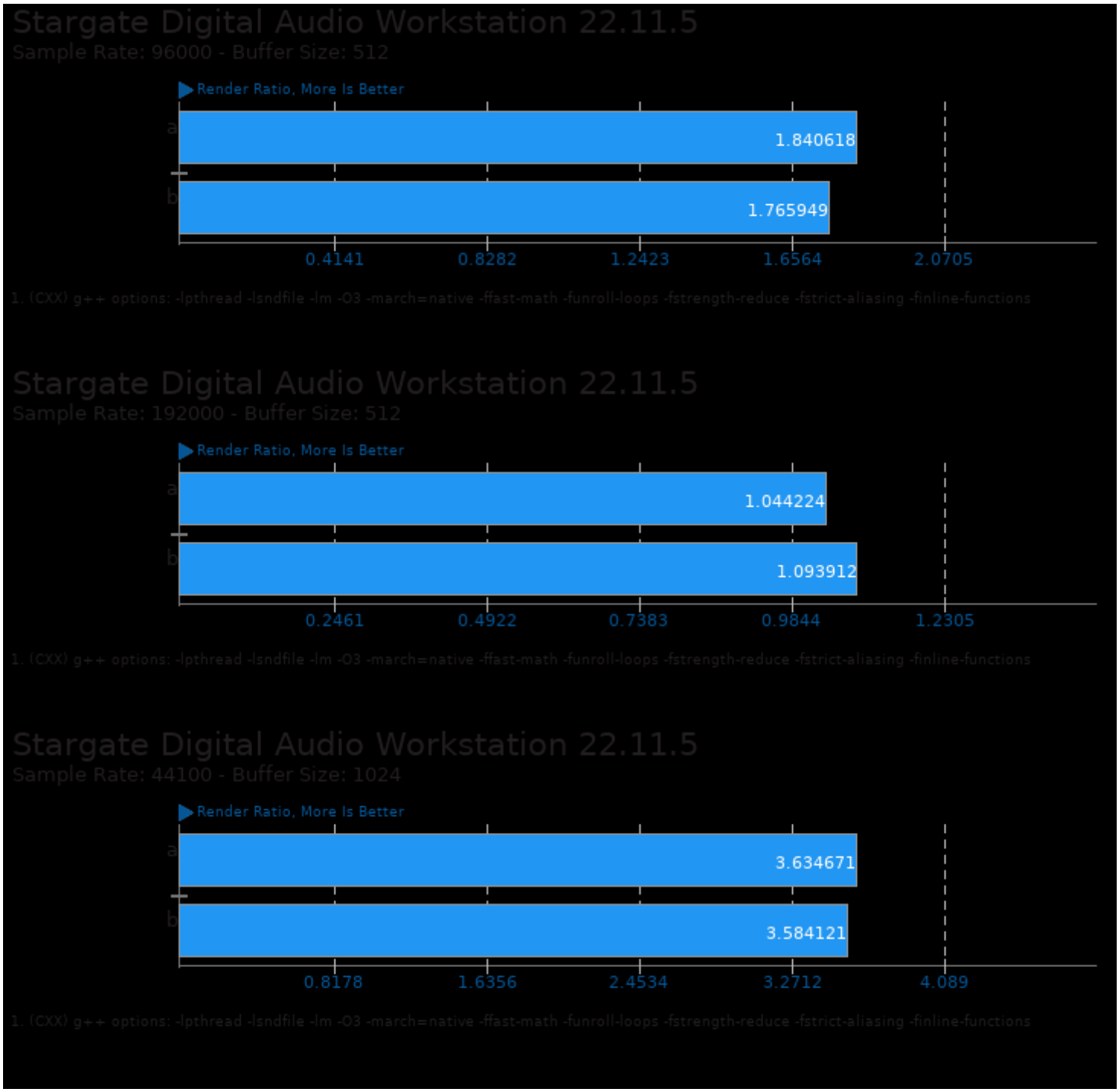

srsRAN 22.04.1
Test: OFDM_Test
Samples / Second, More Is Better
a
119900000
b
120000000
30M
60M
90M
120M
150M
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB MIMO 64-QAM
eNb Mb/s, More Is Better
a
294.0
b
291.4
60
120
180
240
300
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB MIMO 64-QAM
UE Mb/s, More Is Better
a
118.9
b
117.9
30
60
90
120
150
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno


srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB SISO 64-QAM
eNb Mb/s, More Is Better
a
293.3
b
289.2
60
120
180
240
300
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB SISO 64-QAM
UE Mb/s, More Is Better
a
126.1
b
124.8
30
60
90
120
150
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB MIMO 256-QAM
eNb Mb/s, More Is Better
a
324.2
b
321.2
70
140
210
280
350
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

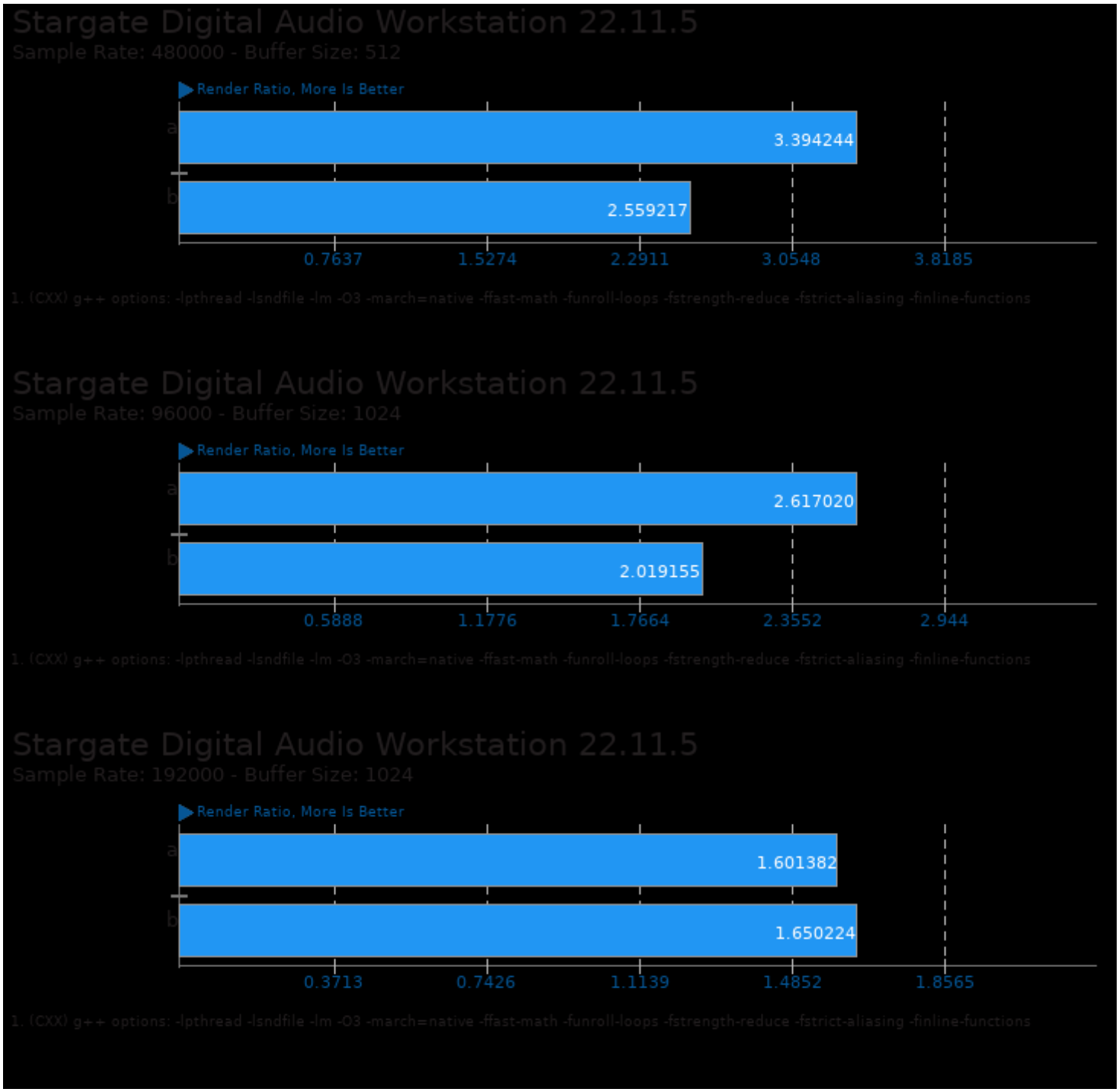

srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB MIMO 256-QAM
UE Mb/s, More Is Better
a
130.9
b
129.2
30
60
90
120
150
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB SISO 256-QAM
eNb Mb/s, More Is Better
a
320.8
b
318.8
70
140
210
280
350
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 4G PHY_DL_Test 100 PRB SISO 256-QAM
UE Mb/s, More Is Better
a
136.3
b
134.7
30
60
90
120
150
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno


srsRAN 22.04.1
Test: 5G PHY_DL_NR Test 52 PRB SISO 64-QAM
eNb Mb/s, More Is Better
a
b
100.3
99.9
20
40
60
80
100
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 22.04.1
Test: 5G PHY_DL_NR Test 52 PRB SISO 64-QAM
UE Mb/s, More Is Better
a
b
65.7
65.5
15
30
45
60
75
1. (CXX) g++ options: -std=c++14 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
Stargate Digital Audio Workstation 22.11.5
Sample Rate: 44100 - Buffer Size: 512
Render Ratio, More Is Better
a
b
3.281164
2.979784
0.7383
1.4766
2.2149
2.9532
3.6915
1. (CXX) g++ options: -lpthread -lsndfile -lm -O3 -march=native -ffast-math -funroll-loops -fstrength-reduce -fstrict-aliasing -finline-functions

cascade lake refresh



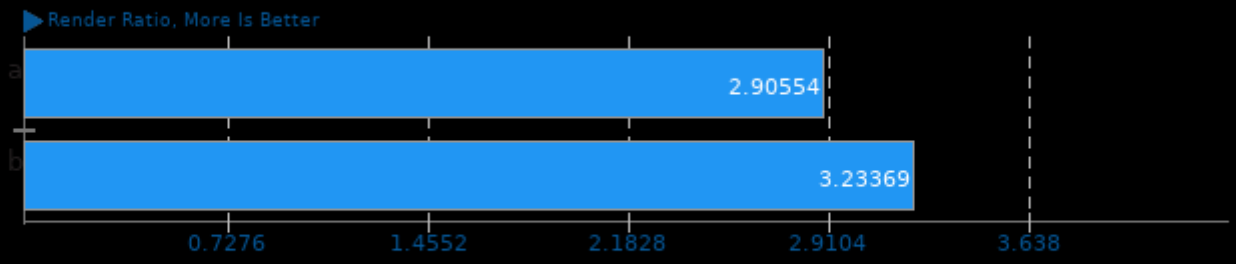
cascade lake refresh



cascade lake refresh

Stargate Digital Audio Workstation 22.11.5

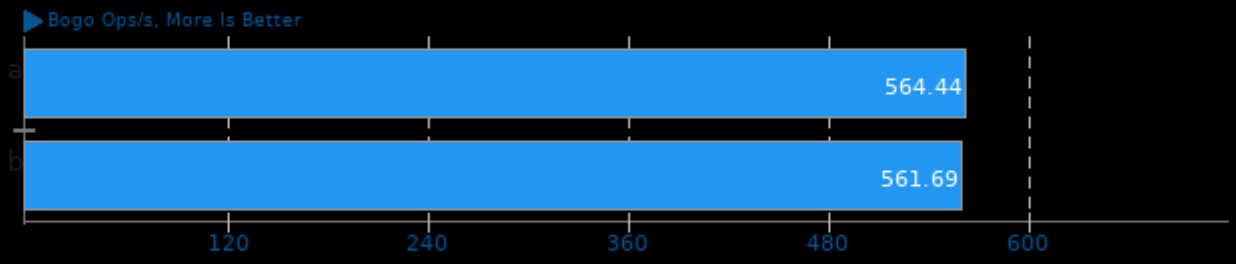
Sample Rate: 480000 - Buffer Size: 1024



1. (CXX) g++ options: -lpthread -lsndfile -lm -O3 -march=native -ffast-math -funroll-loops -fstrength-reduce -fstrict-aliasing -finline-functions

Stress-NG 0.14.06

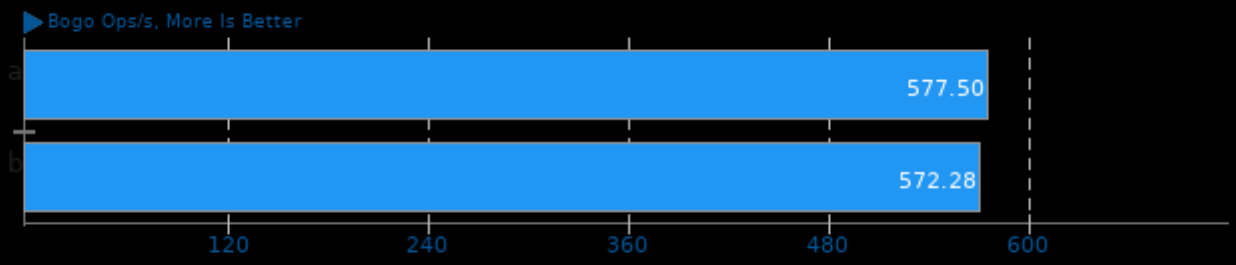
Test: MMAP



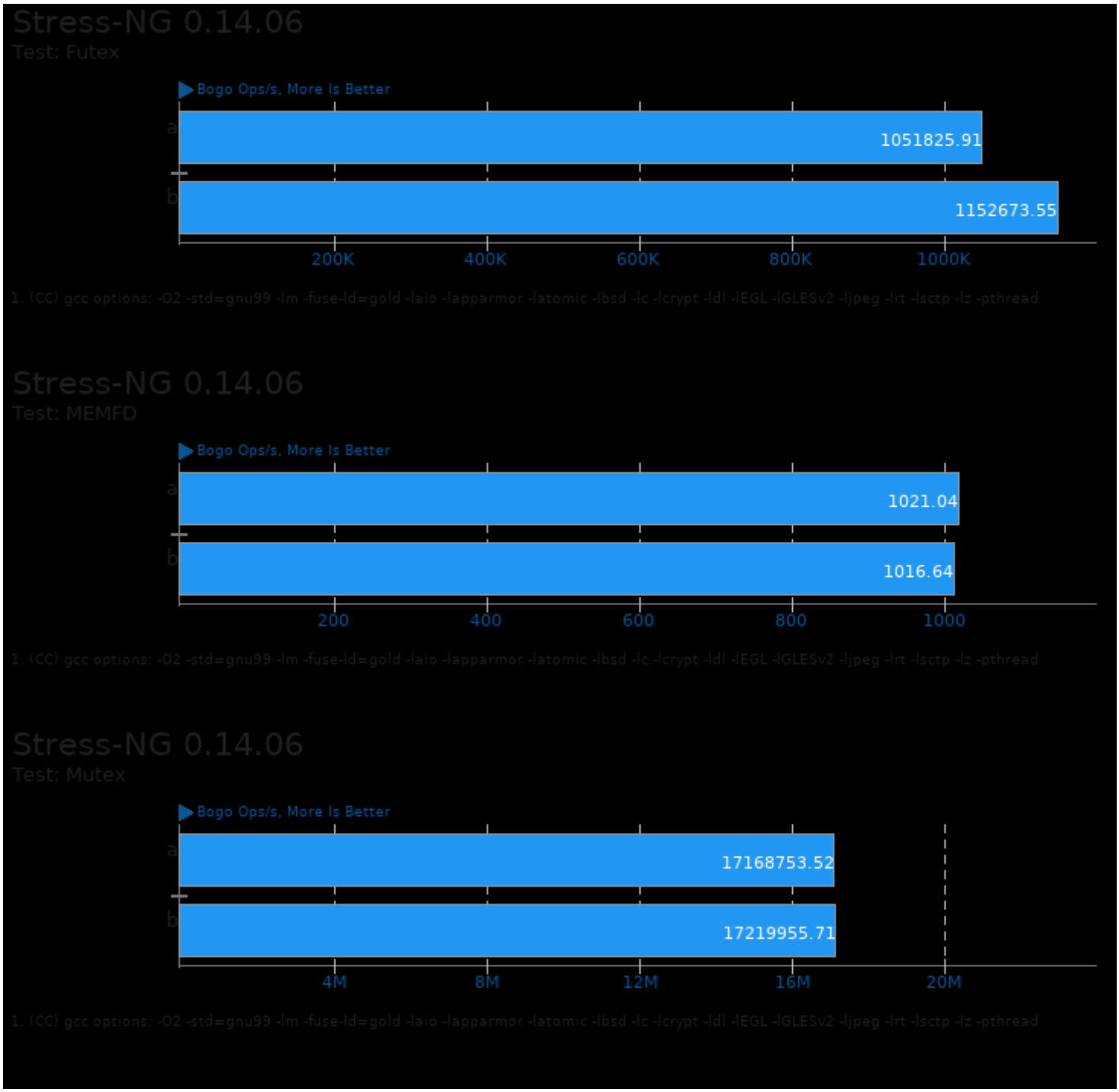
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread

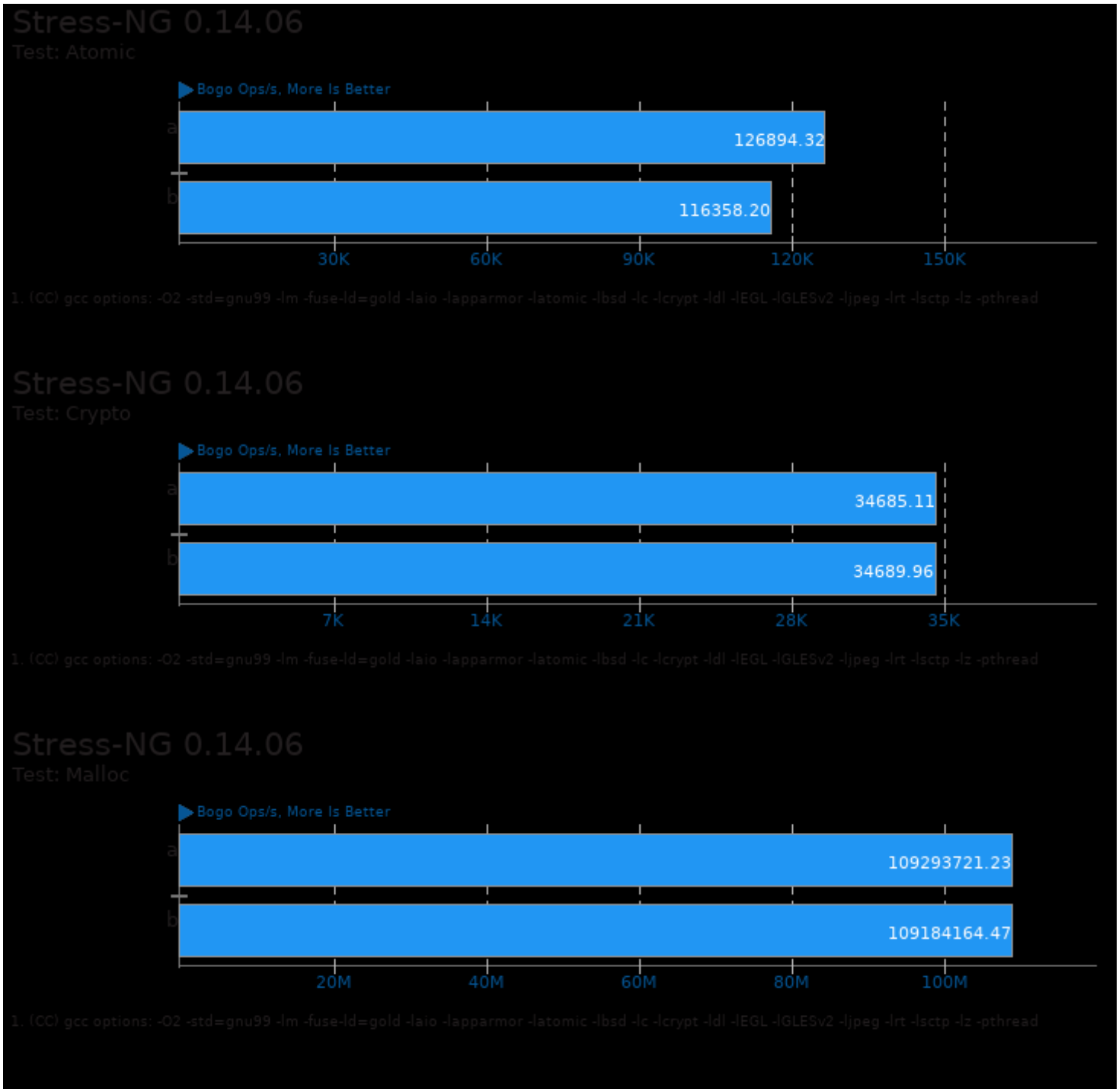
Stress-NG 0.14.06

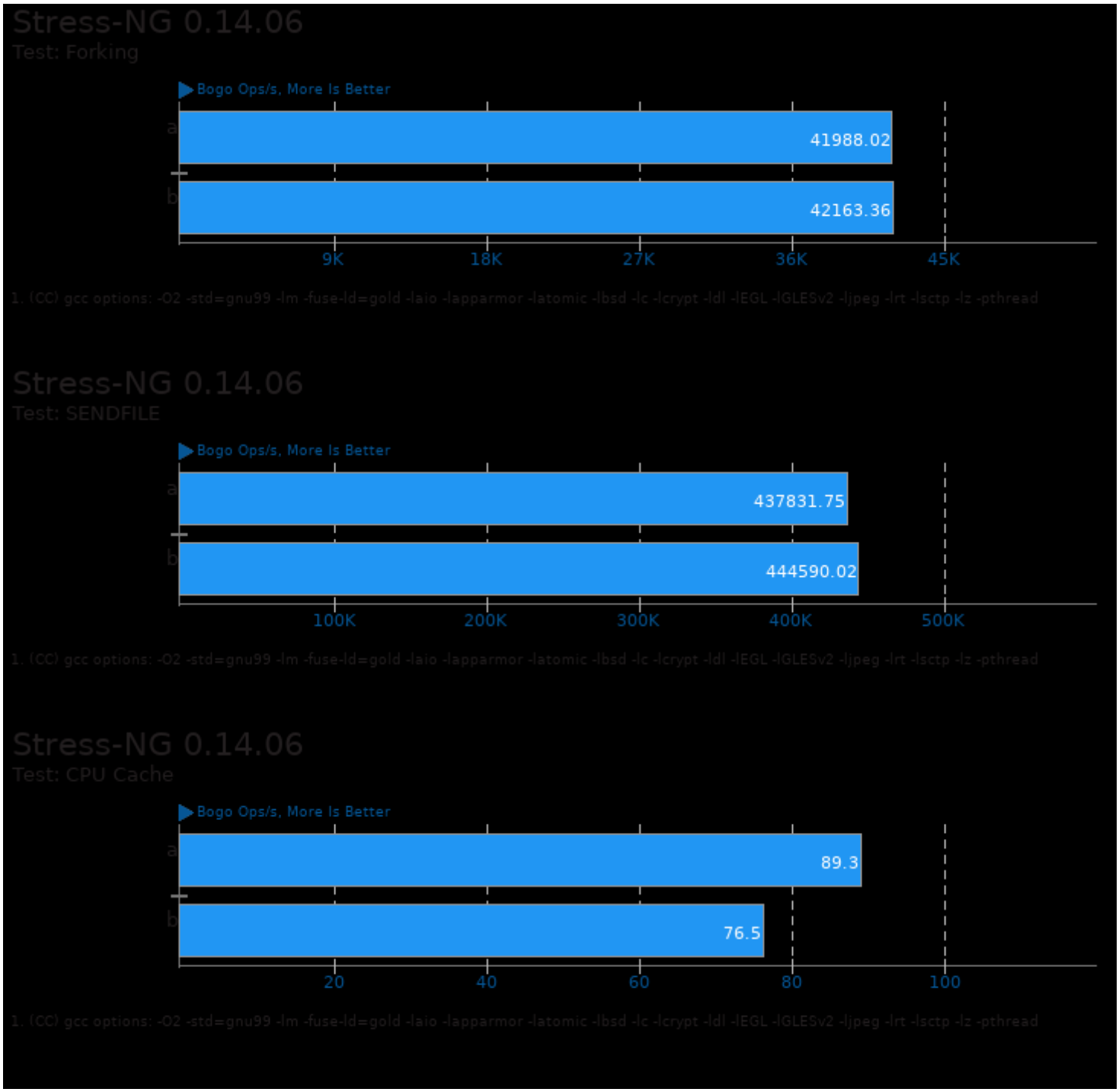
Test: NUMA

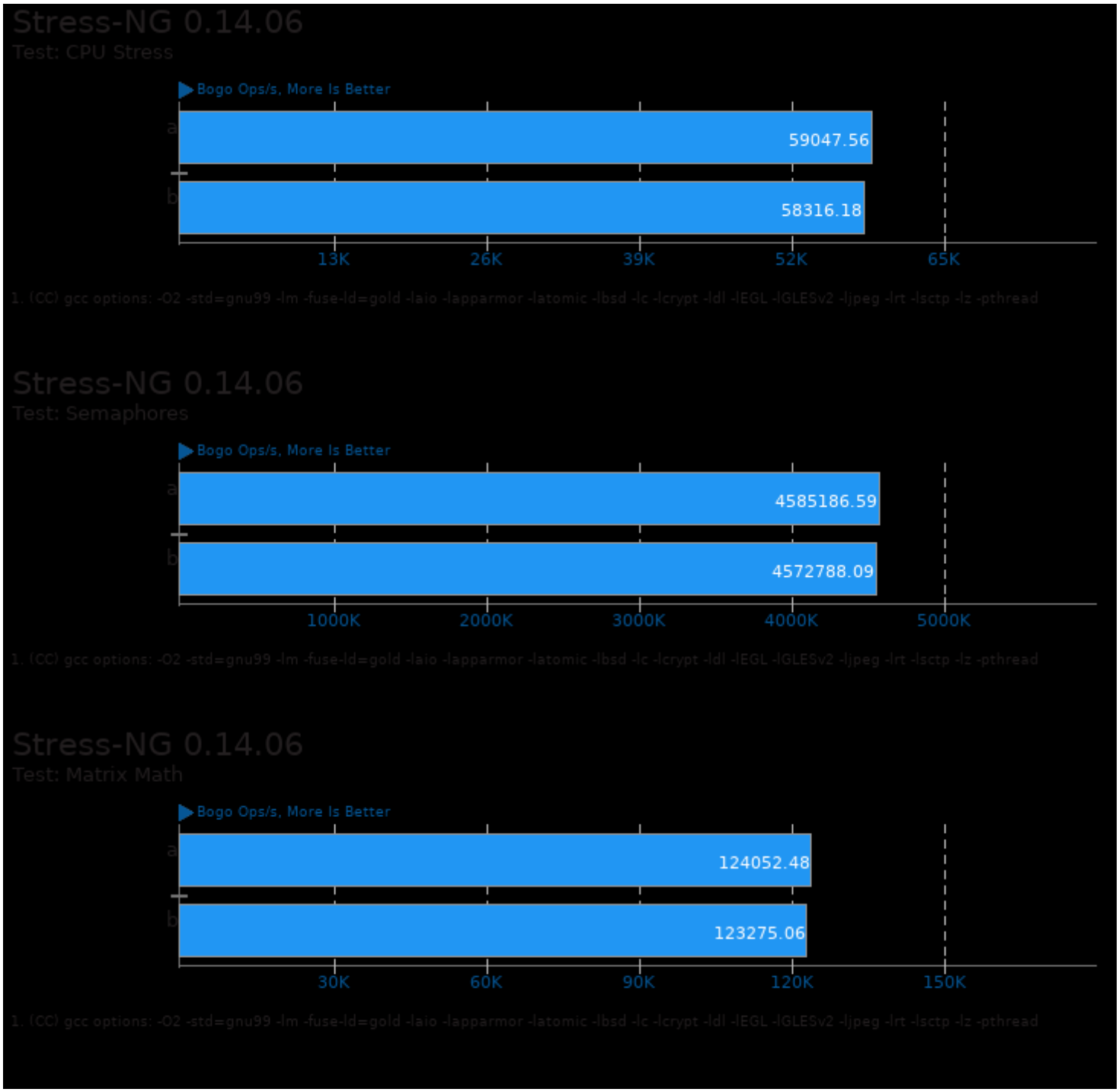


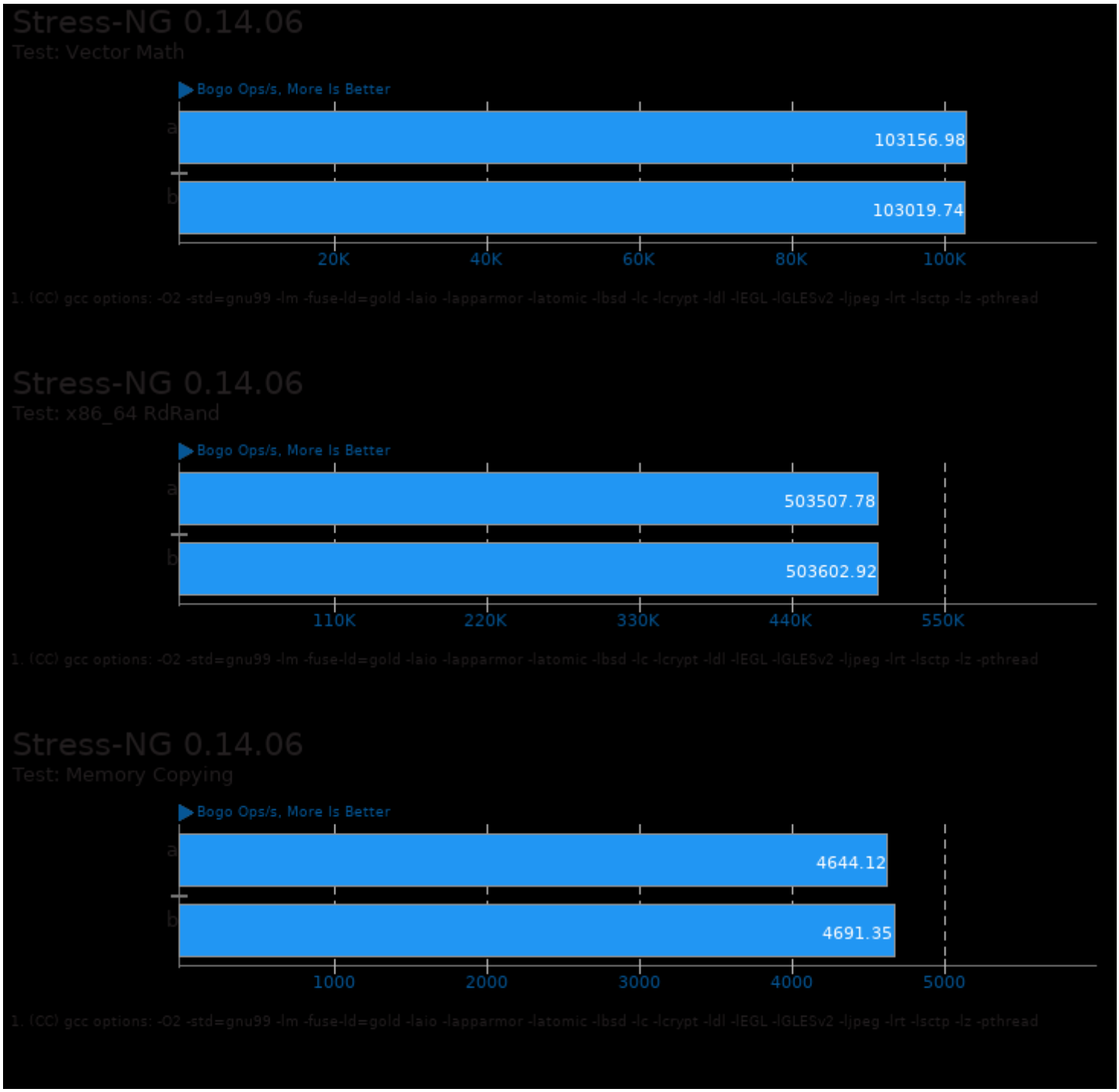
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread

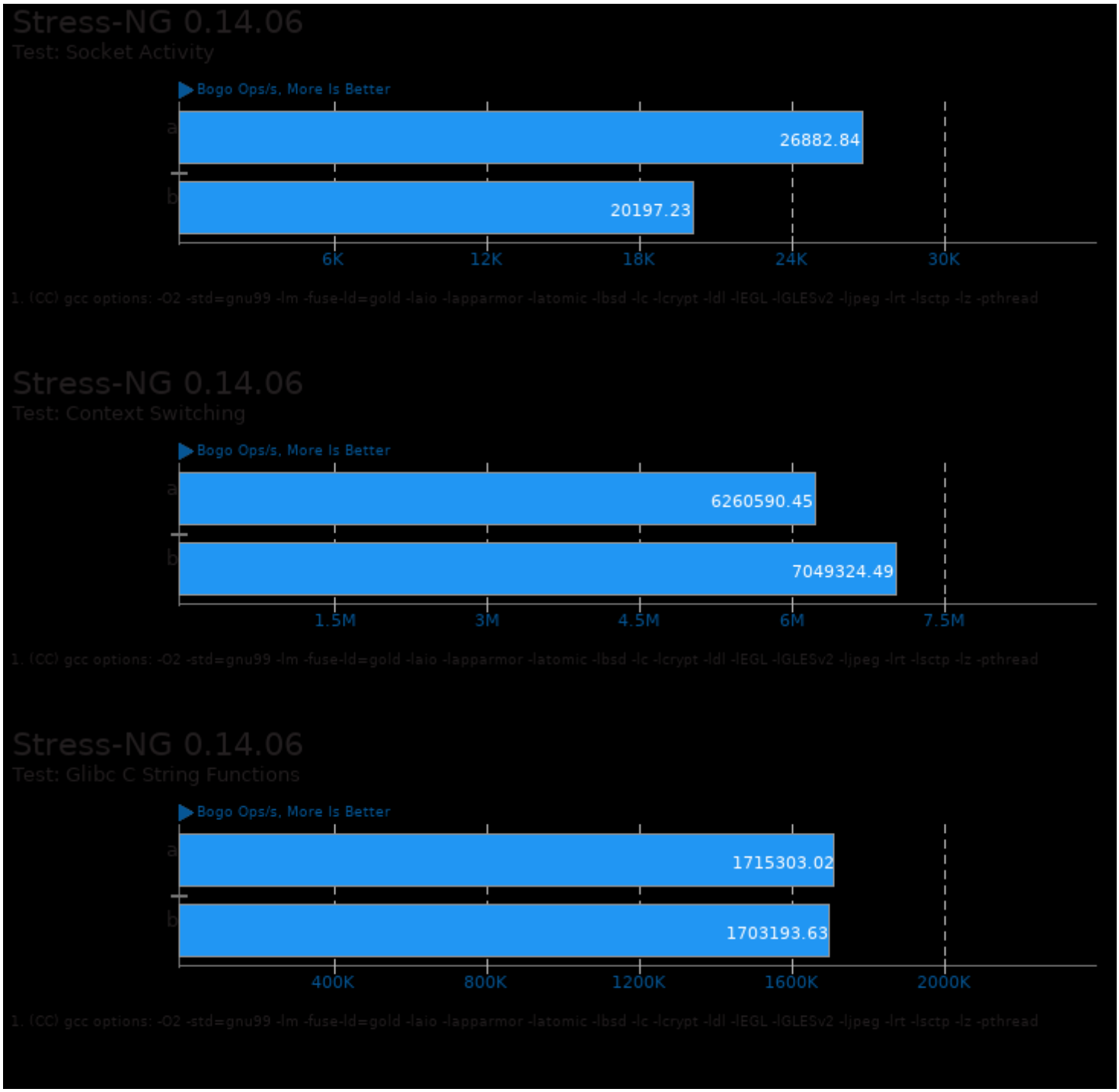

Stress-NG 0.14.06
Test: Futex
Bogo Ops/s, More Is Better
a
1051825.91
b
1152673.55
200K
400K
600K
800K
1000K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: MEMFD
Bogo Ops/s, More Is Better
a
1021.04
b
1016.64
200
400
600
800
1000
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Mutex
Bogo Ops/s, More Is Better
a
17168753.52
b
17219955.71
4M
8M
12M
16M
20M
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread


Stress-NG 0.14.06
Test: Atomic
Bogo Ops/s, More Is Better
a
126894.32
b
116358.20
30K
60K
90K
120K
150K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Crypto
Bogo Ops/s, More Is Better
a
34685.11
b
34689.96
7K
14K
21K
28K
35K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Malloc
Bogo Ops/s, More Is Better
a
109293721.23
b
109184164.47
20M
40M
60M
80M
100M
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread


Stress-NG 0.14.06
Test: Forking
Bogo Ops/s, More Is Better
a
41988.02
b
42163.36
9K
18K
27K
36K
45K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: SENDFILE
Bogo Ops/s, More Is Better
a
437831.75
b
444590.02
100K
200K
300K
400K
500K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: CPU Cache
Bogo Ops/s, More Is Better
a
89.3
b
76.5
20
40
60
80
100
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread

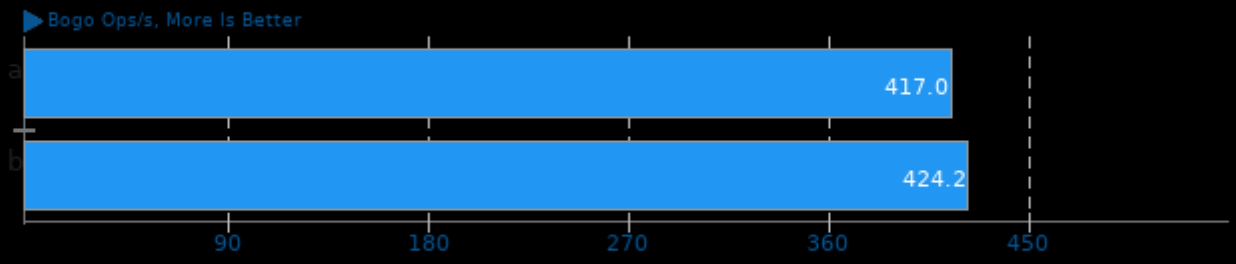

Stress-NG 0.14.06
Test: CPU Stress
Bogo Ops/s, More Is Better
a
59047.56
b
58316.18
13K
26K
39K
52K
65K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Semaphores
Bogo Ops/s, More Is Better
a
4585186.59
b
4572788.09
1000K
2000K
3000K
4000K
5000K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Matrix Math
Bogo Ops/s, More Is Better
a
124052.48
b
123275.06
30K
60K
90K
120K
150K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread


Stress-NG 0.14.06
Test: Vector Math
Bogo Ops/s, More Is Better
a
b
103156.98
103019.74
20K
40K
60K
80K
100K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: x86_64 RdRand
Bogo Ops/s, More Is Better
a
b
503507.78
503602.92
110K
220K
330K
440K
550K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Memory Copying
Bogo Ops/s, More Is Better
a
b
4644.12
4691.35
1000
2000
3000
4000
5000
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread


Stress-NG 0.14.06
Test: Socket Activity
Bogo Ops/s, More Is Better
a
26882.84
b
20197.23
6K
12K
18K
24K
30K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Context Switching
Bogo Ops/s, More Is Better
a
6260590.45
b
7049324.49
1.5M
3M
4.5M
6M
7.5M
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread
Stress-NG 0.14.06
Test: Glibc C String Functions
Bogo Ops/s, More Is Better
a
1715303.02
b
1703193.63
400K
800K
1200K
1600K
2000K
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread

Stress-NG 0.14.06

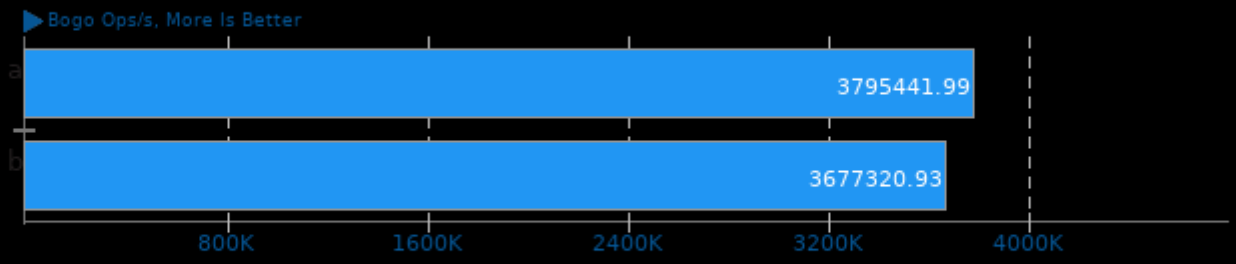
Test: Glibc Qsort Data Sorting



1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread

Stress-NG 0.14.06

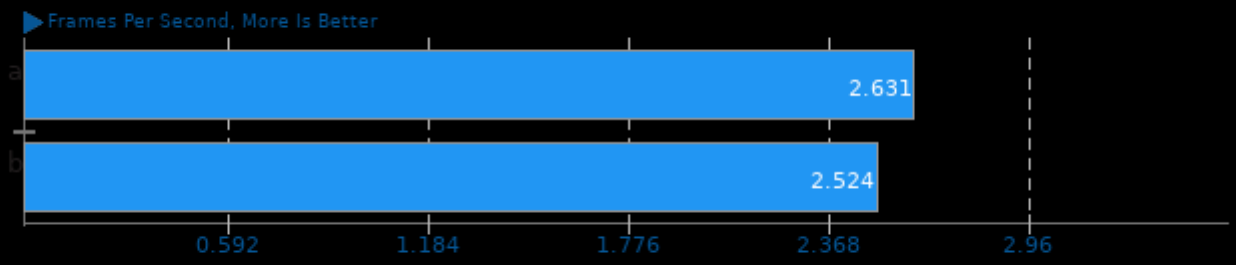
Test: System V Message Passing



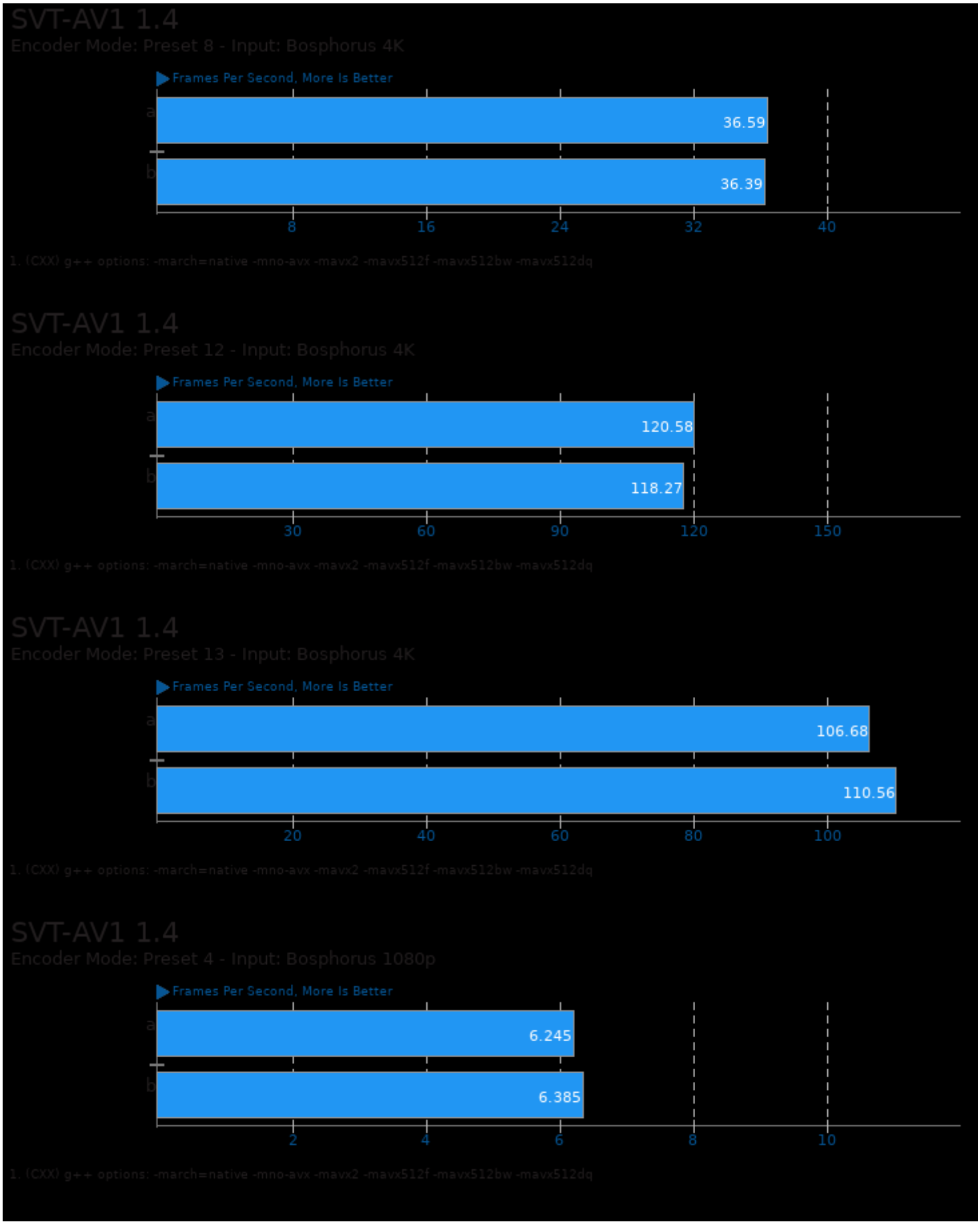
1. (CC) gcc options: -O2 -std=gnu99 -lm -fuse-ld=gold -laio -lapparmor -latomic -lbsd -lc -lcrypt -ldl -lEGL -lGLESv2 -ljpeg -lrt -lsctp -lz -pthread

SVT-AV1 1.4

Encoder Mode: Preset 4 - Input: Bosphorus 4K

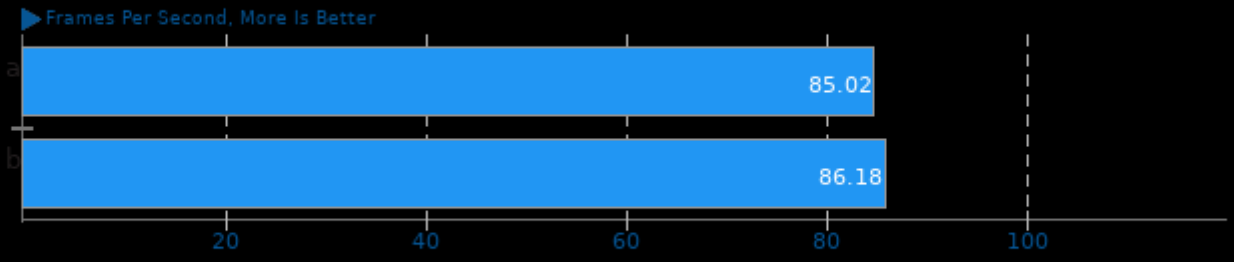


1. (CXX) g++ options: -march=native -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq


SVT-AV1 1.4
Encoder Mode: Preset 8 - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
36.59
b
36.39
8
16
24
32
40
1. (CXX) g++ options: -march=native -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq
SVT-AV1 1.4
Encoder Mode: Preset 12 - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
120.58
b
118.27
30
60
90
120
150
1. (CXX) g++ options: -march=native -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq
SVT-AV1 1.4
Encoder Mode: Preset 13 - Input: Bosphorus 4K
Frames Per Second, More Is Better
a
106.68
b
110.56
20
40
60
80
100
1. (CXX) g++ options: -march=native -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq
SVT-AV1 1.4
Encoder Mode: Preset 4 - Input: Bosphorus 1080p
Frames Per Second, More Is Better
a
6.245
b
6.385
2
4
6
8
10
1. (CXX) g++ options: -march=native -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq

SVT-AV1 1.4

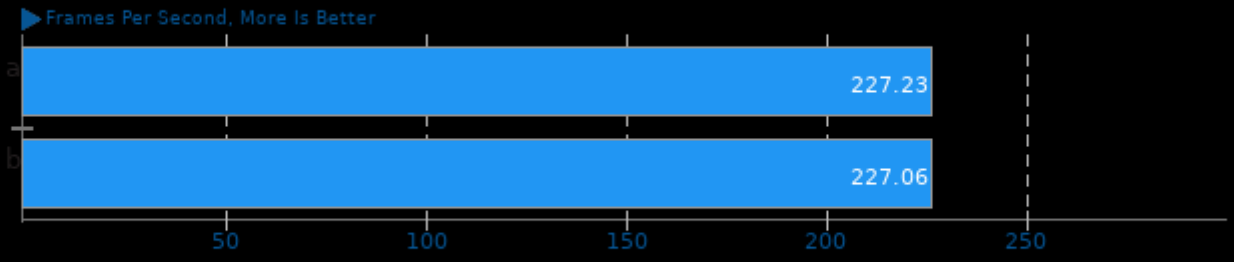
Encoder Mode: Preset 8 - Input: Bosphorus 1080p



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

SVT-AV1 1.4

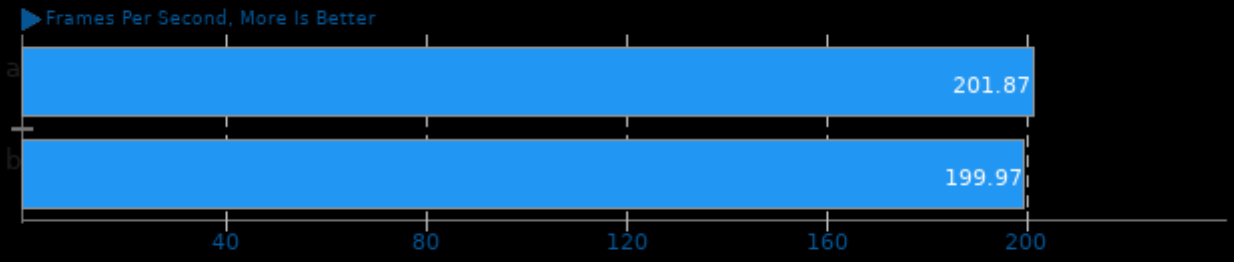
Encoder Mode: Preset 12 - Input: Bosphorus 1080p



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

SVT-AV1 1.4

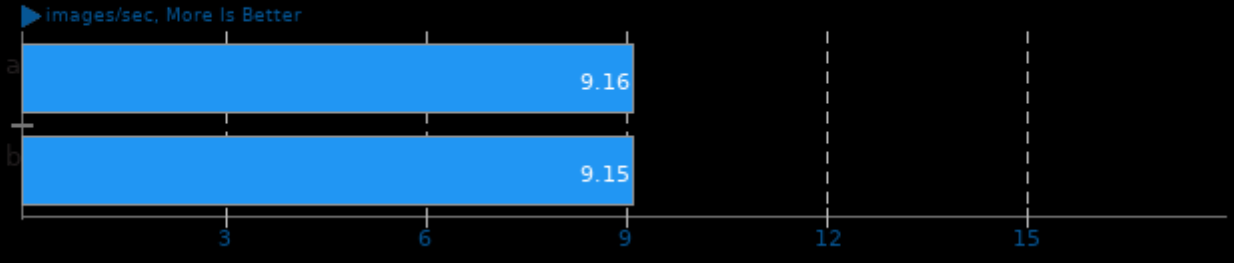
Encoder Mode: Preset 13 - Input: Bosphorus 1080p

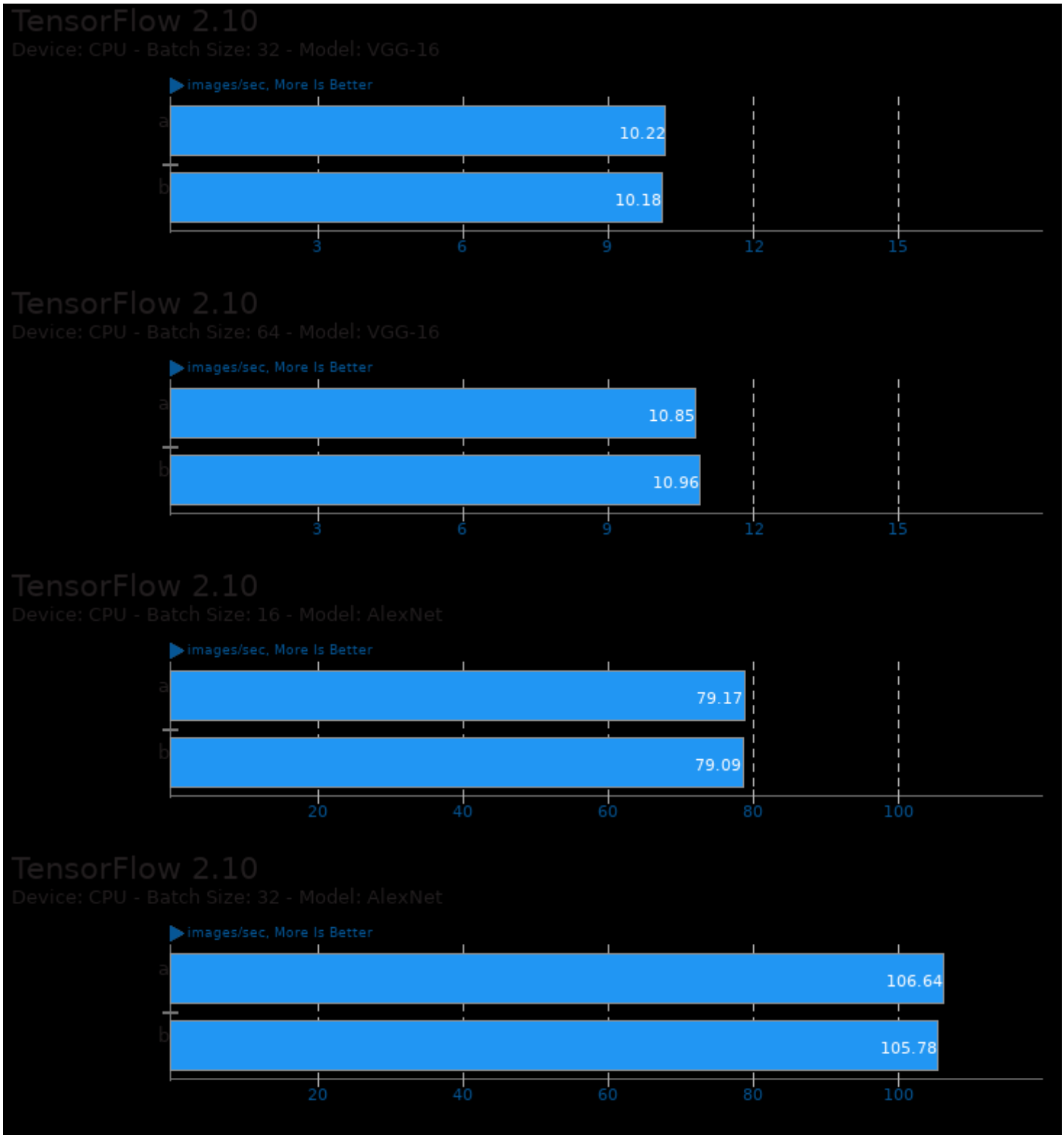


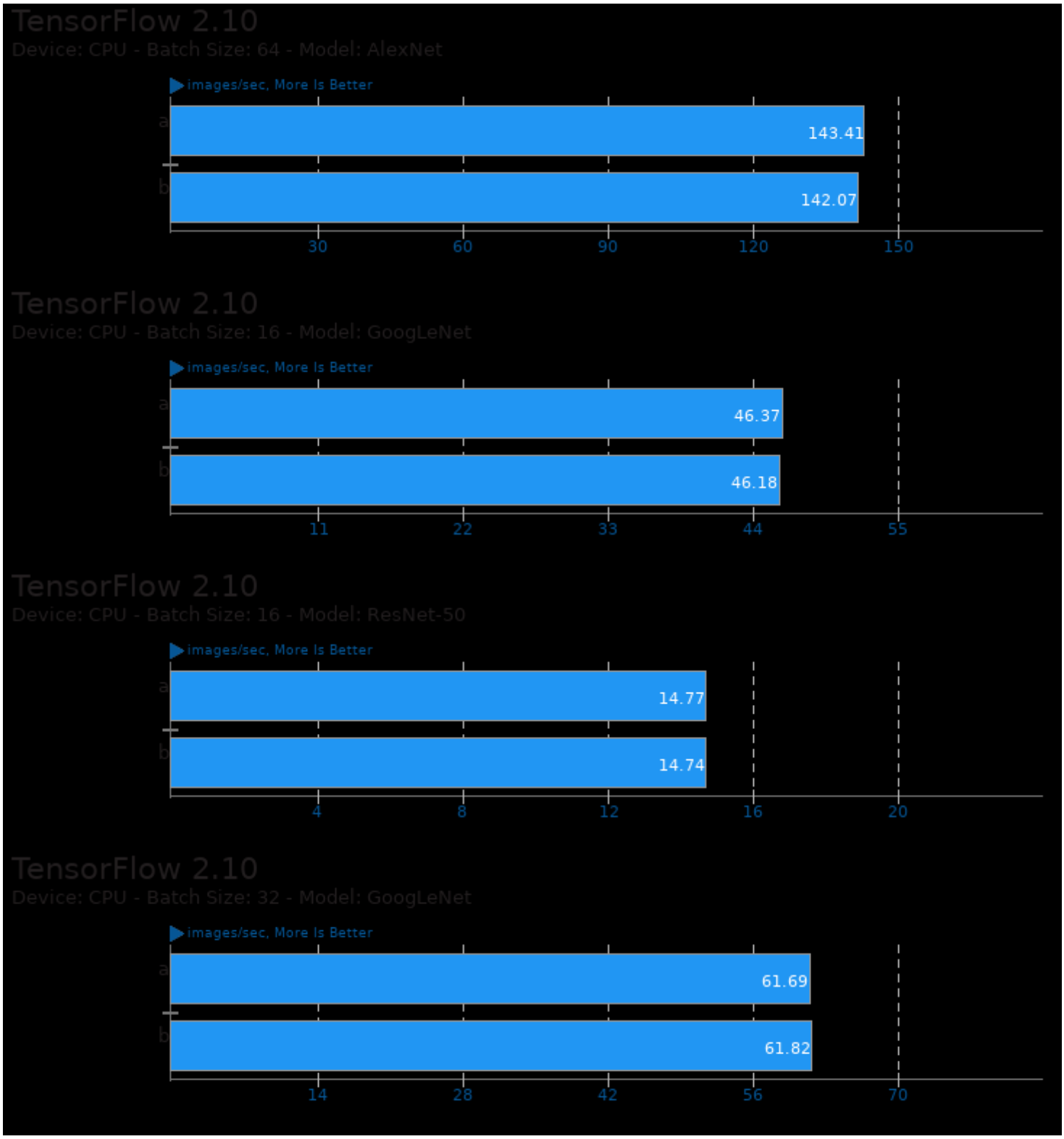
1. (CXX) g++ options: -march=native -mno-avx -mavx2 -mavx512f -mavx512bw -mavx512dq

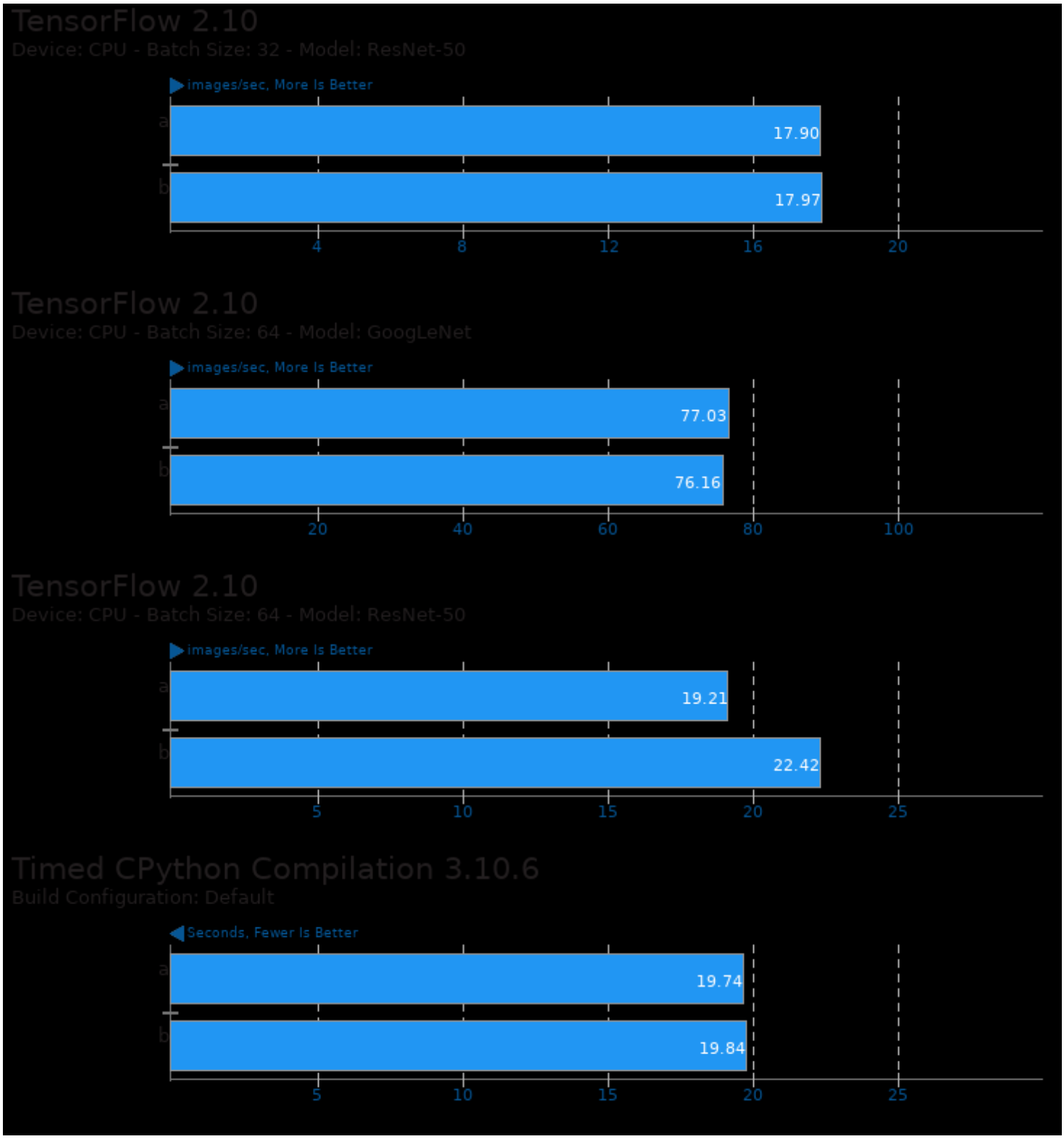
TensorFlow 2.10

Device: CPU - Batch Size: 16 - Model: VGG-16



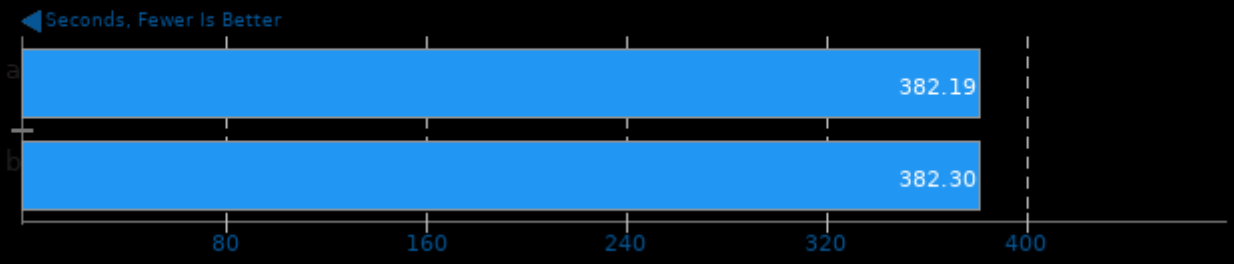

TensorFlow 2.10
Device: CPU - Batch Size: 32 - Model: VGG-16
images/sec, More Is Better
a
10.22
b
10.18
3
6
9
12
15
TensorFlow 2.10
Device: CPU - Batch Size: 64 - Model: VGG-16
images/sec, More Is Better
a
10.85
b
10.96
3
6
9
12
15
TensorFlow 2.10
Device: CPU - Batch Size: 16 - Model: AlexNet
images/sec, More Is Better
a
79.17
b
79.09
20
40
60
80
100
TensorFlow 2.10
Device: CPU - Batch Size: 32 - Model: AlexNet
images/sec, More Is Better
a
106.64
b
105.78
20
40
60
80
100


TensorFlow 2.10
Device: CPU - Batch Size: 64 - Model: AlexNet
images/sec, More Is Better
a
b
143.41
142.07
30
60
90
120
150
TensorFlow 2.10
Device: CPU - Batch Size: 16 - Model: GoogLeNet
images/sec, More Is Better
a
b
46.37
46.18
11
22
33
44
55
TensorFlow 2.10
Device: CPU - Batch Size: 16 - Model: ResNet-50
images/sec, More Is Better
a
b
14.77
14.74
4
8
12
16
20
TensorFlow 2.10
Device: CPU - Batch Size: 32 - Model: GoogLeNet
images/sec, More Is Better
a
b
61.69
61.82
14
28
42
56
70


TensorFlow 2.10
Device: CPU - Batch Size: 32 - Model: ResNet-50
images/sec, More Is Better
a
17.90
b
17.97
4
8
12
16
20
TensorFlow 2.10
Device: CPU - Batch Size: 64 - Model: GoogLeNet
images/sec, More Is Better
a
77.03
b
76.16
20
40
60
80
100
TensorFlow 2.10
Device: CPU - Batch Size: 64 - Model: ResNet-50
images/sec, More Is Better
a
19.21
b
22.42
5
10
15
20
25
Timed CPython Compilation 3.10.6
Build Configuration: Default
Seconds, Fewer Is Better
a
19.74
b
19.84
5
10
15
20
25

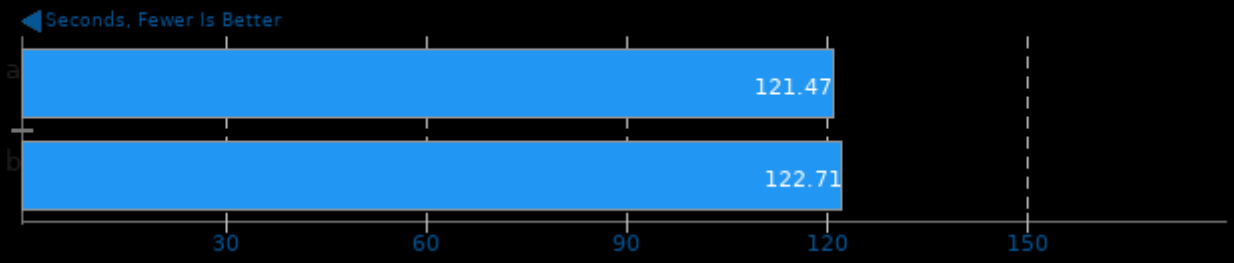
Timed CPython Compilation 3.10.6

Build Configuration: Released Build, PGO + LTO Optimized



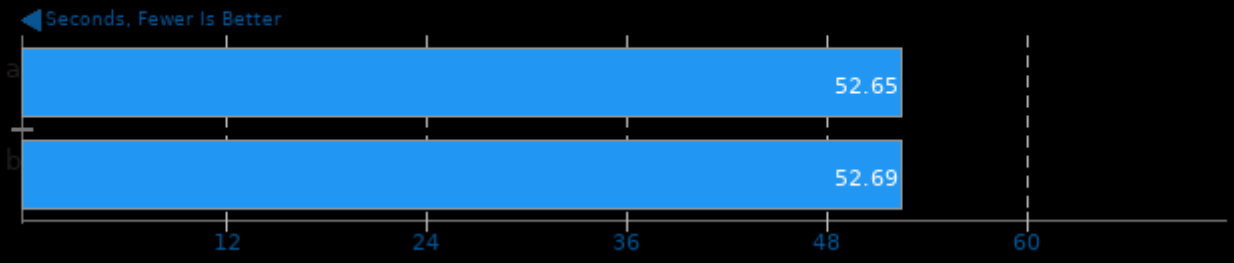
Timed Erlang/OTP Compilation 25.0

Time To Compile



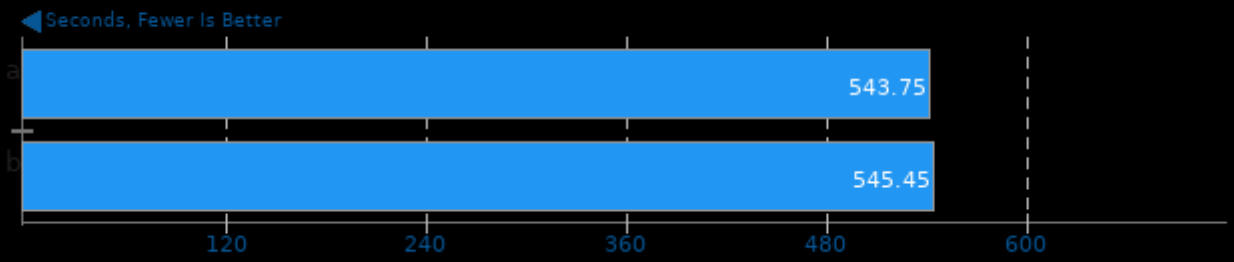
Timed Linux Kernel Compilation 6.1

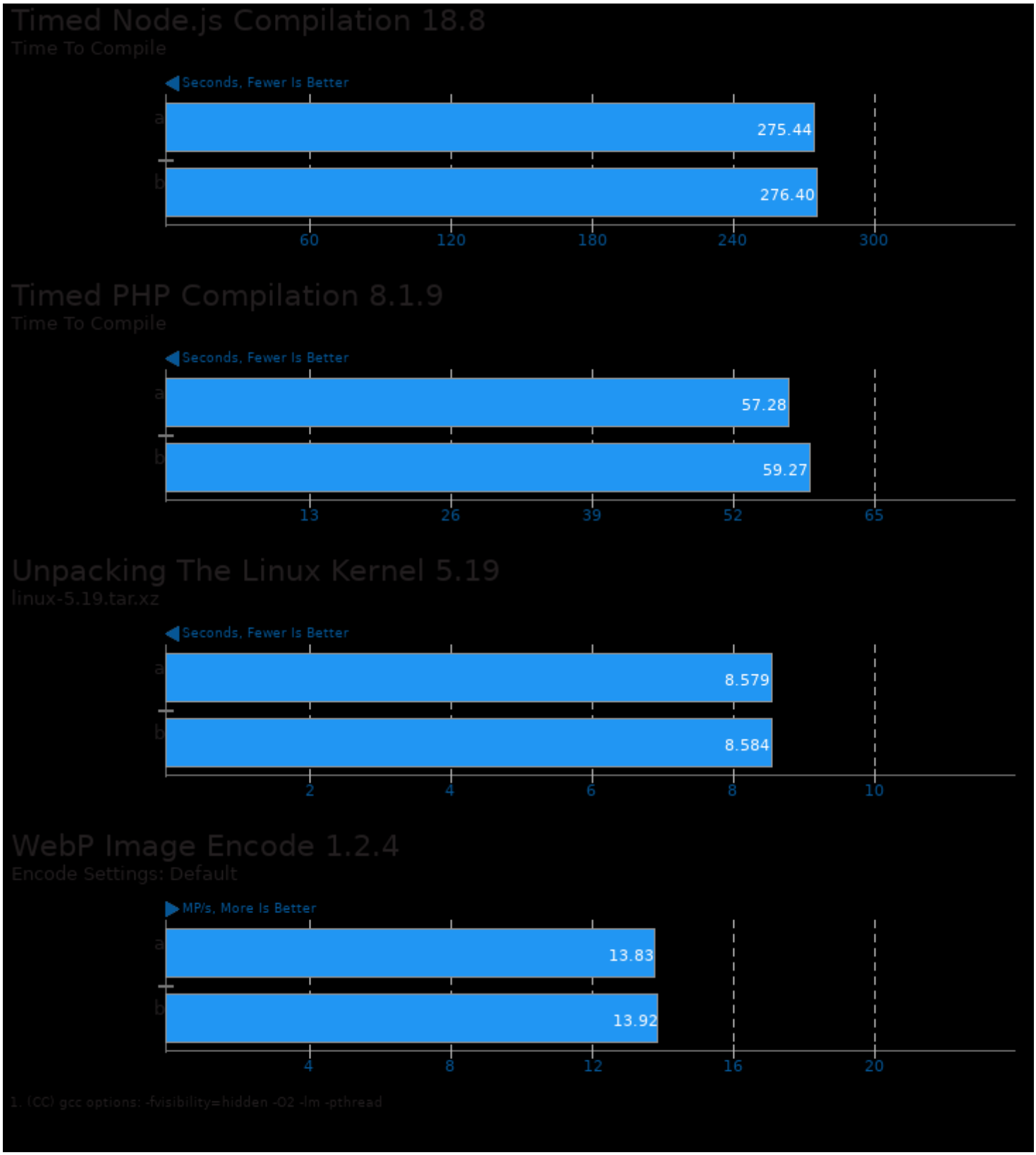
Build: defconfig



Timed Linux Kernel Compilation 6.1

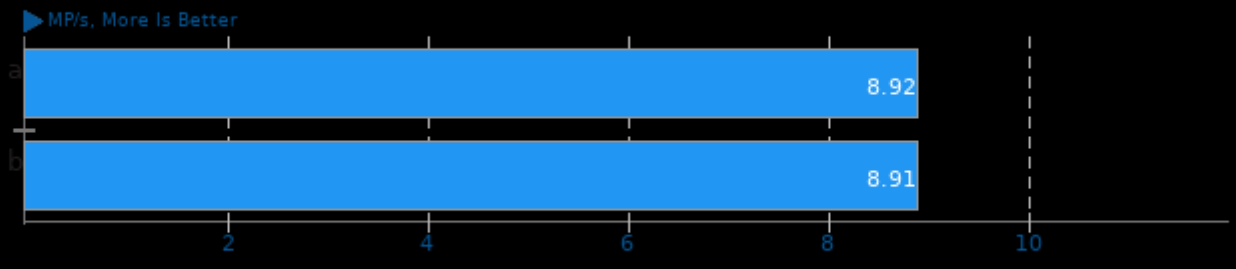
Build: allmodconfig




Timed Node.js Compilation 18.8
Time To Compile
Seconds, Fewer Is Better
a
275.44
b
276.40
60
120
180
240
300
Timed PHP Compilation 8.1.9
Time To Compile
Seconds, Fewer Is Better
a
57.28
b
59.27
13
26
39
52
65
Unpacking The Linux Kernel 5.19
linux-5.19.tar.xz
Seconds, Fewer Is Better
a
8.579
b
8.584
2
4
6
8
10
WebP Image Encode 1.2.4
Encode Settings: Default
MP/s, More Is Better
a
13.83
b
13.92
4
8
12
16
20
1. (CC) gcc options: -fvisibility=hidden -O2 -lm -pthread

WebP Image Encode 1.2.4

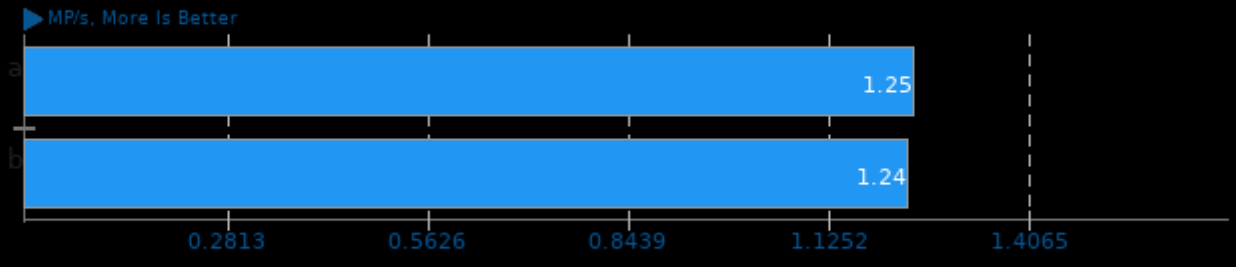
Encode Settings: Quality 100



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

WebP Image Encode 1.2.4

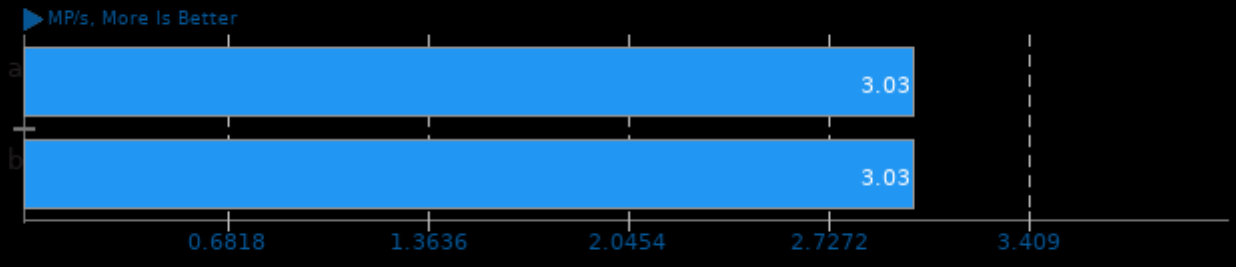
Encode Settings: Quality 100, Lossless



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

WebP Image Encode 1.2.4

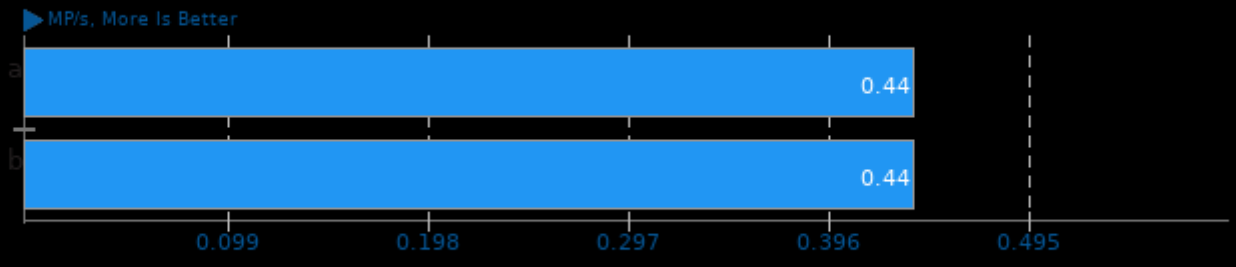
Encode Settings: Quality 100, Highest Compression



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

WebP Image Encode 1.2.4

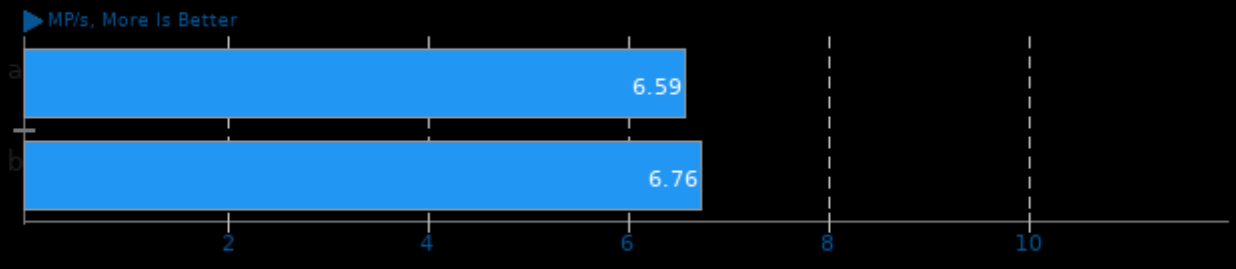
Encode Settings: Quality 100, Lossless, Highest Compression



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

WebP2 Image Encode 20220823

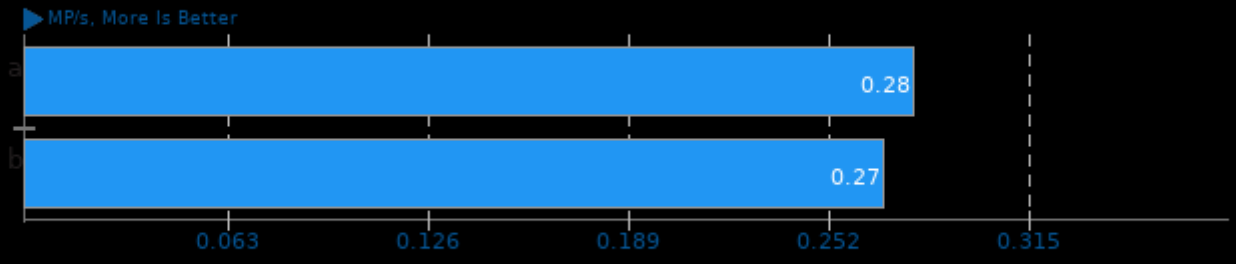
Encode Settings: Default



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl -lpthread

WebP2 Image Encode 20220823

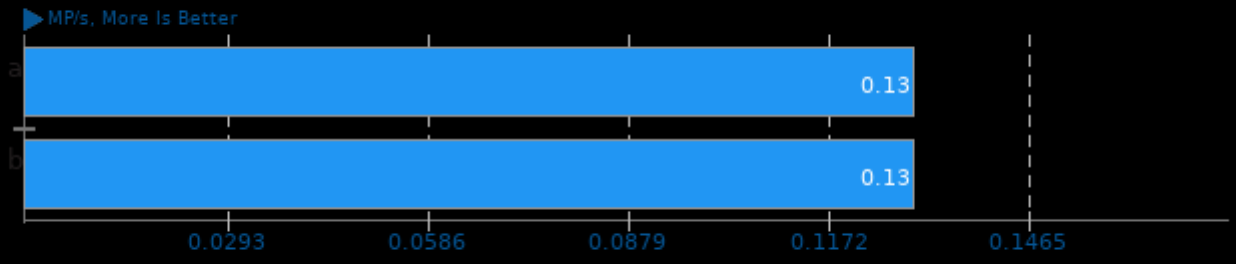
Encode Settings: Quality 75, Compression Effort 7



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl -lpthread

WebP2 Image Encode 20220823

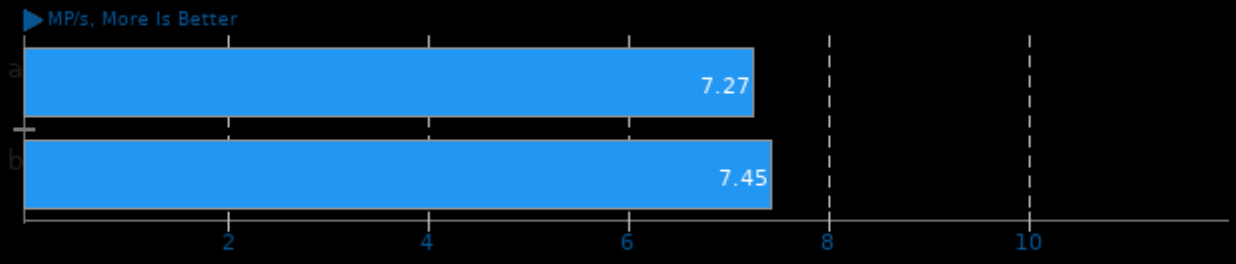
Encode Settings: Quality 95, Compression Effort 7



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl -lpthread

WebP2 Image Encode 20220823

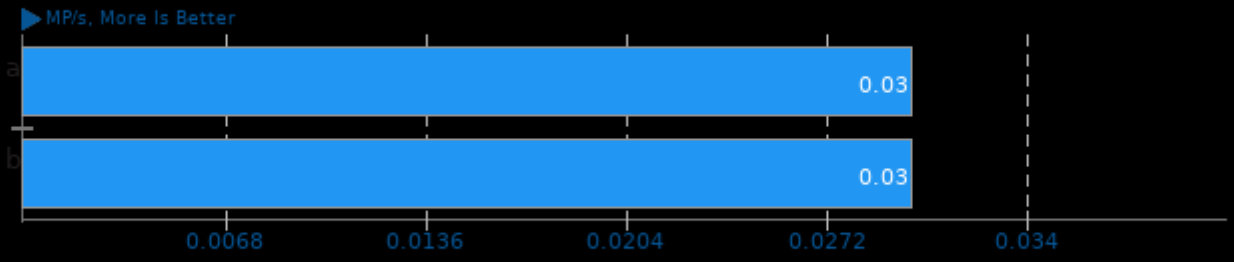
Encode Settings: Quality 100, Compression Effort 5



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl -lpthread

WebP2 Image Encode 20220823

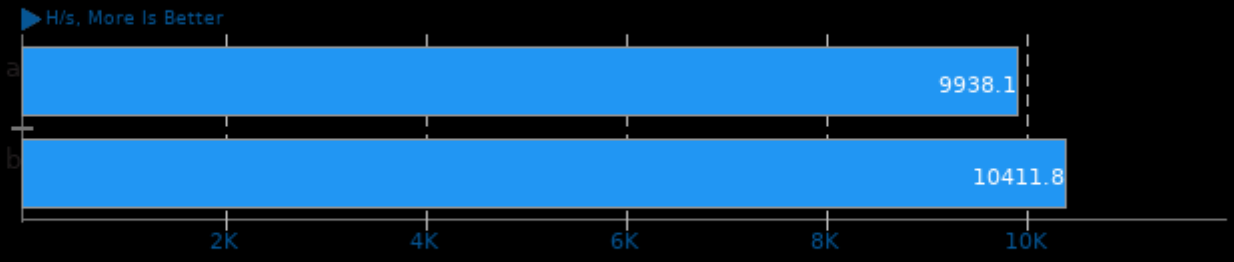
Encode Settings: Quality 100, Lossless Compression



1. (CXX) g++ options: -msse4.2 -fno-rtti -O3 -ldl -lpthread

Xmrig 6.18.1

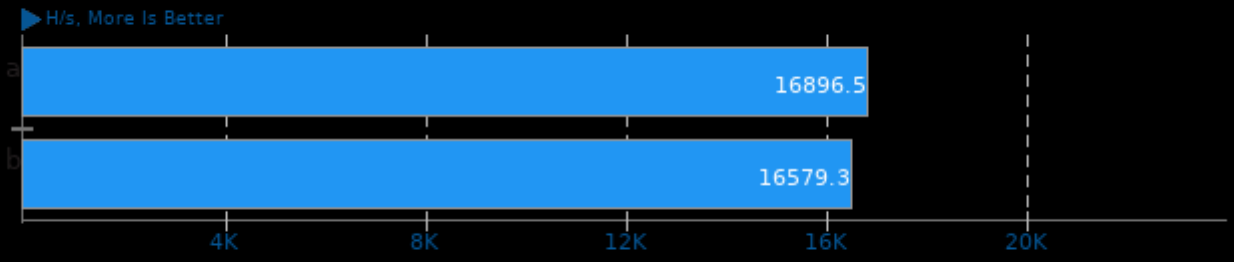
Variant: Monero - Hash Count: 1M



1. (CXX) g++ options: -fexceptions -fno-rtti -maes -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

Xmrig 6.18.1

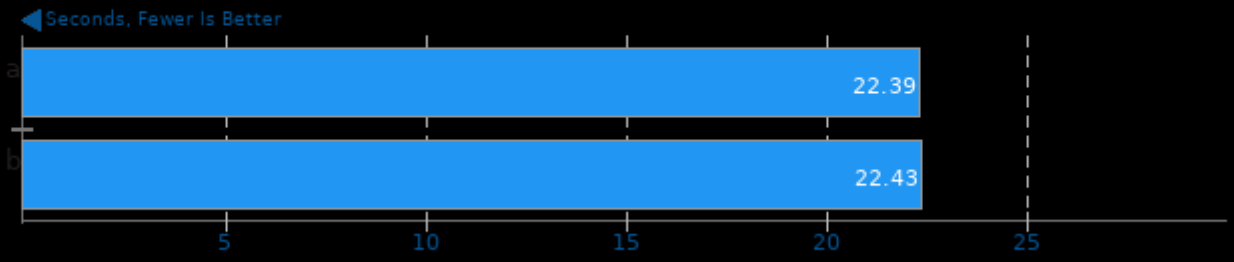
Variant: Wownero - Hash Count: 1M



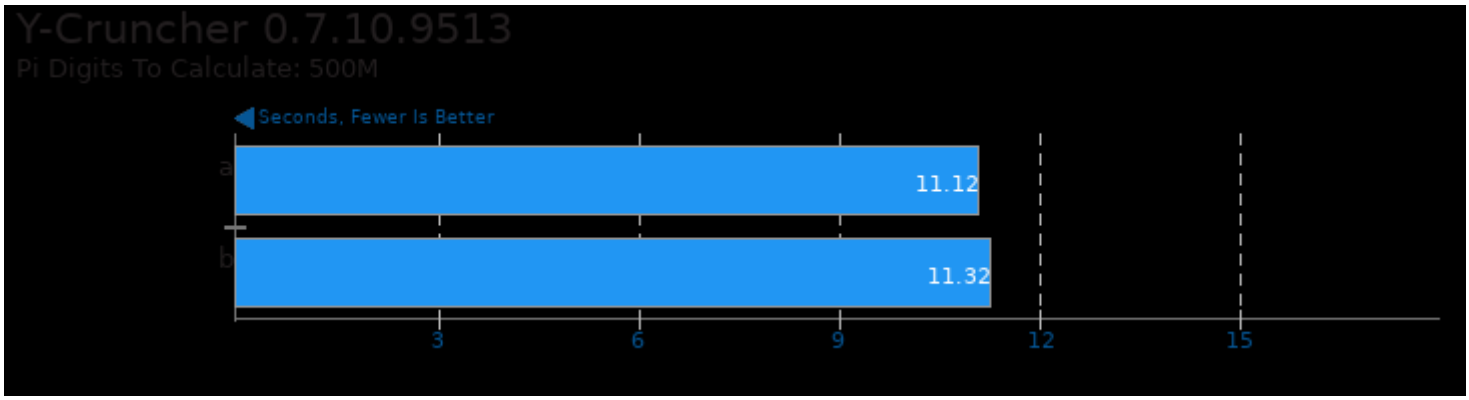
1. (CXX) g++ options: -fexceptions -fno-rtti -maes -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

Y-Cruncher 0.7.10.9513

Pi Digits To Calculate: 1B

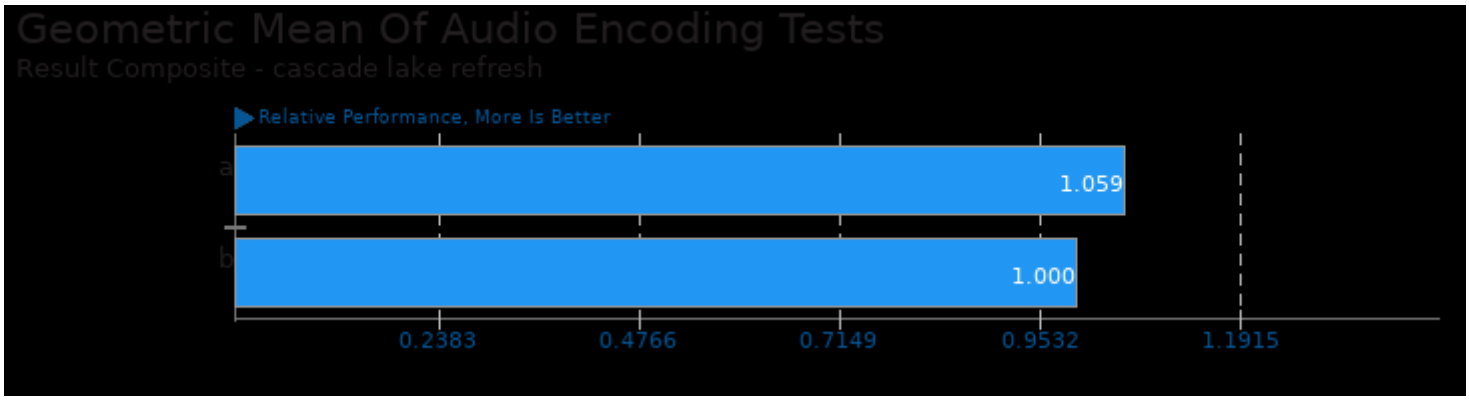


cascade lake refresh



cascade lake refresh

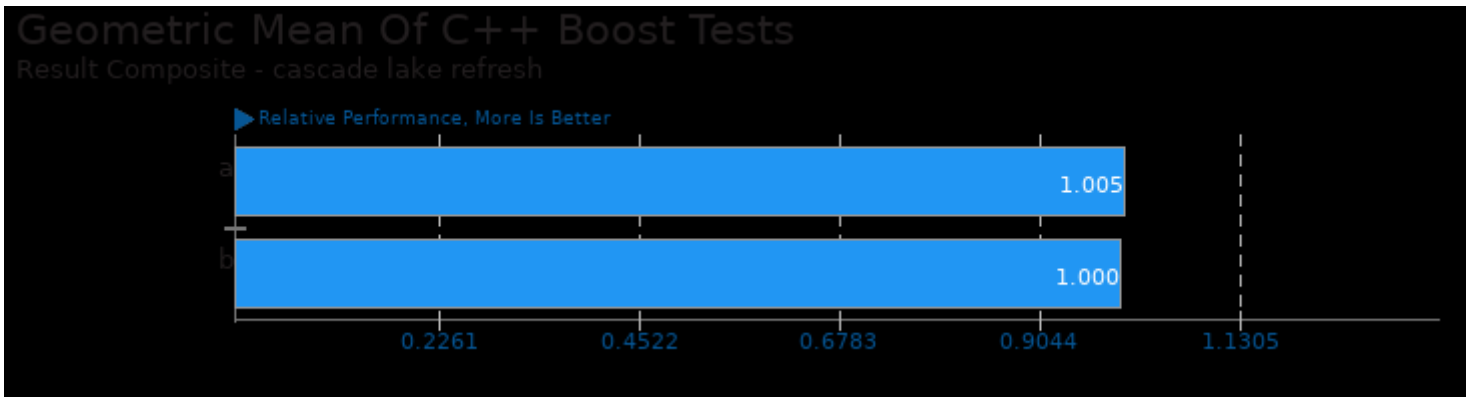
These geometric means are based upon test groupings / test suites for this result file.



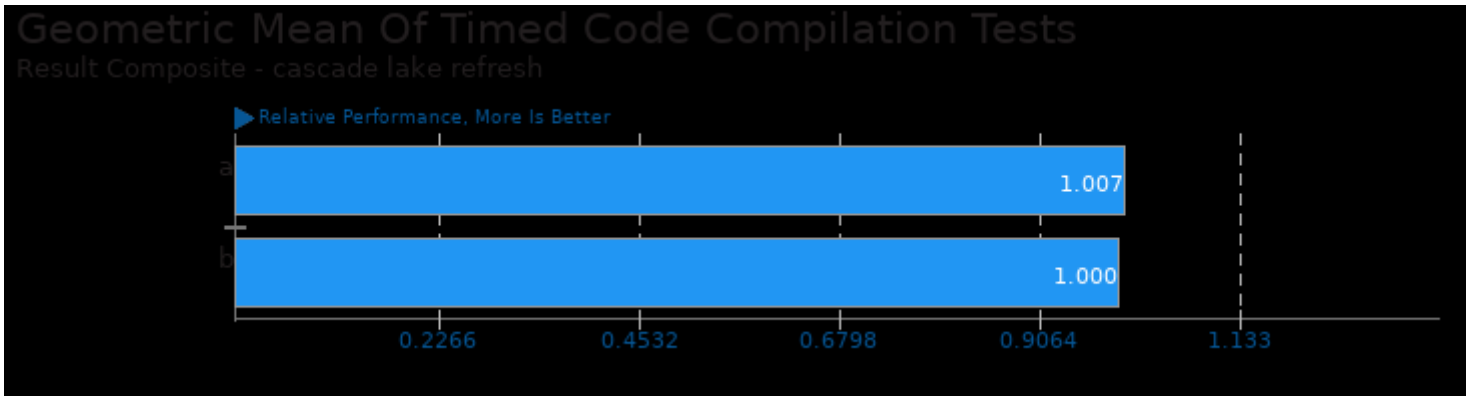
Geometric mean based upon tests: pts/encode-flac and pts/stargate



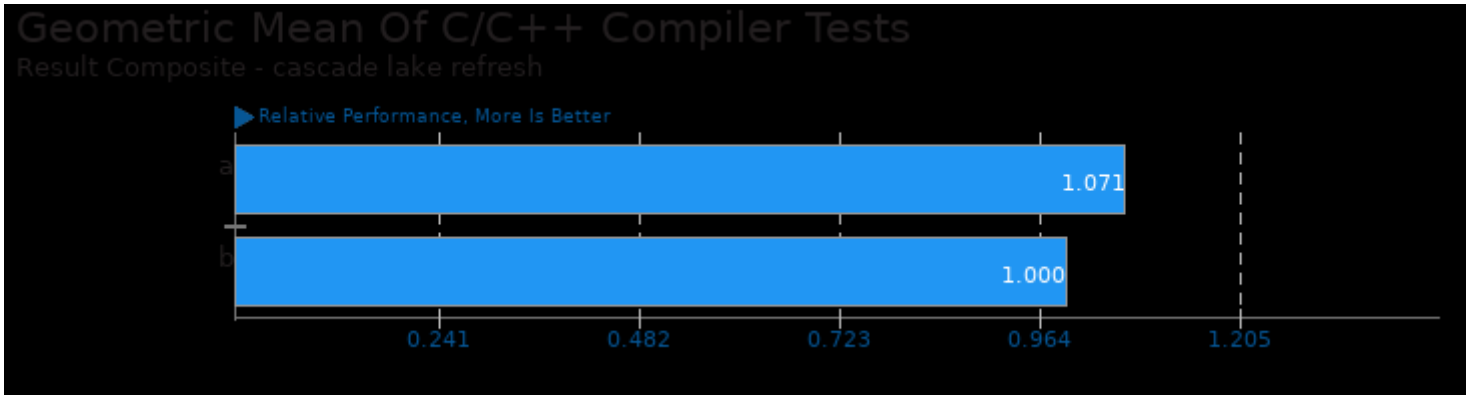
Geometric mean based upon tests: pts/aom-av1, pts/svt-av1 and pts/avifenc



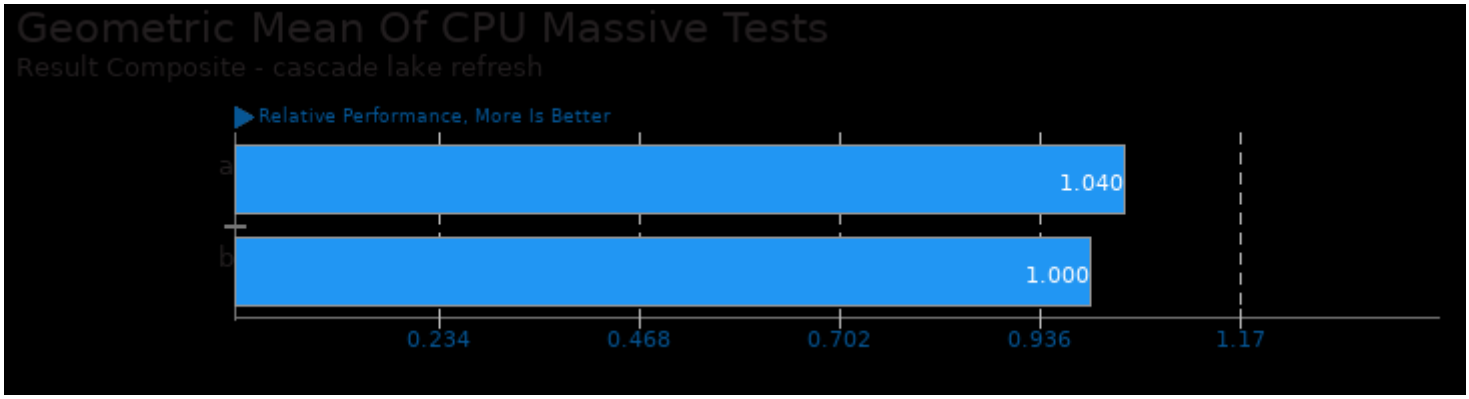
Geometric mean based upon tests: pts/openfoam and pts/srsran



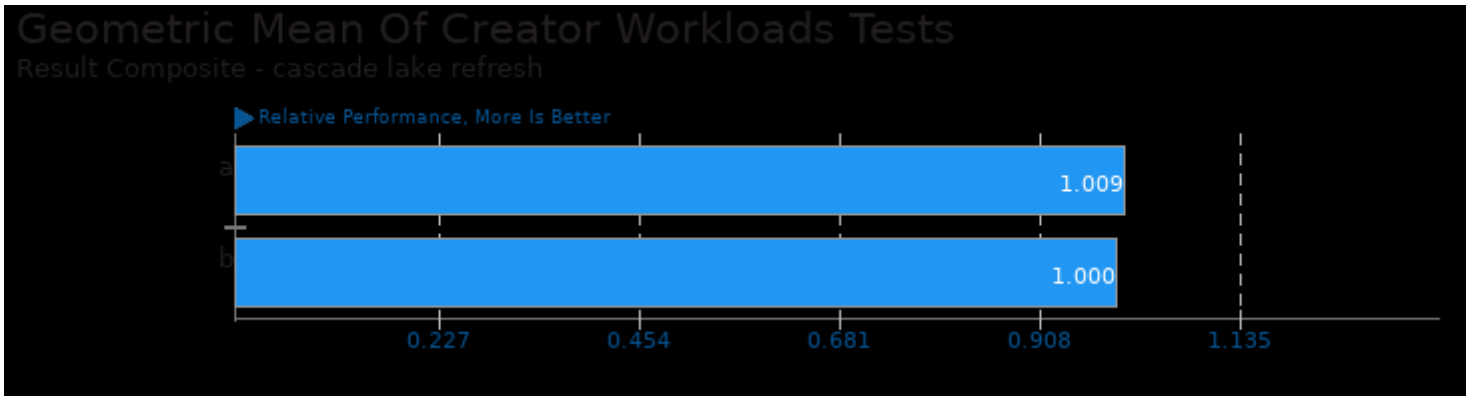
Geometric mean based upon tests: pts/build-php, pts/build-linux-kernel, pts/build-python, pts/build-erlang and pts/build-nodejs



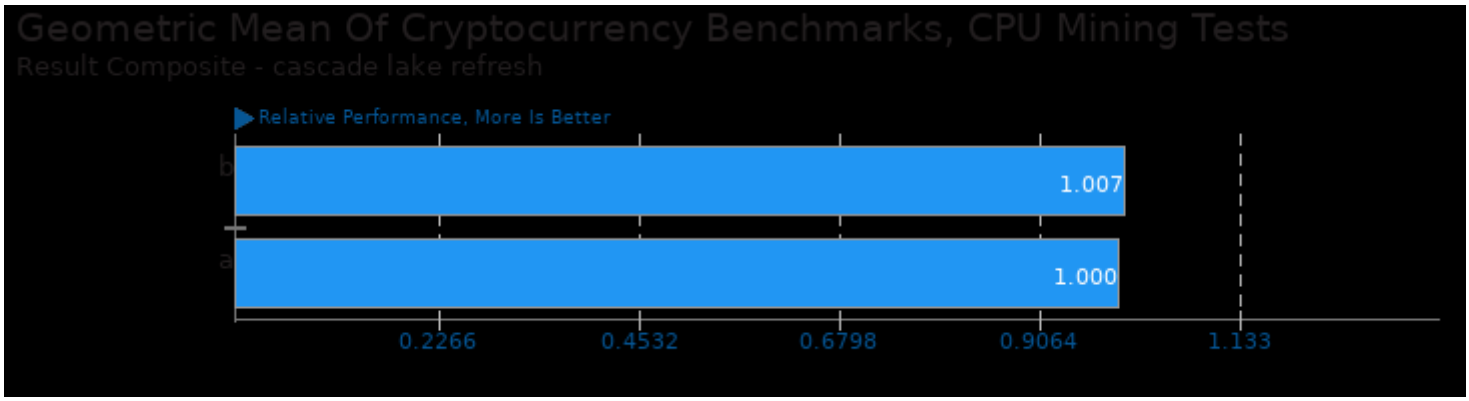
Geometric mean based upon tests: pts/graphics-magick, pts/build-php, pts/compress-7zip, pts/encode-flac, pts/pgbench, pts/lammps, pts/aircrack-ng, pts/aom-av1 and pts/svt-av1



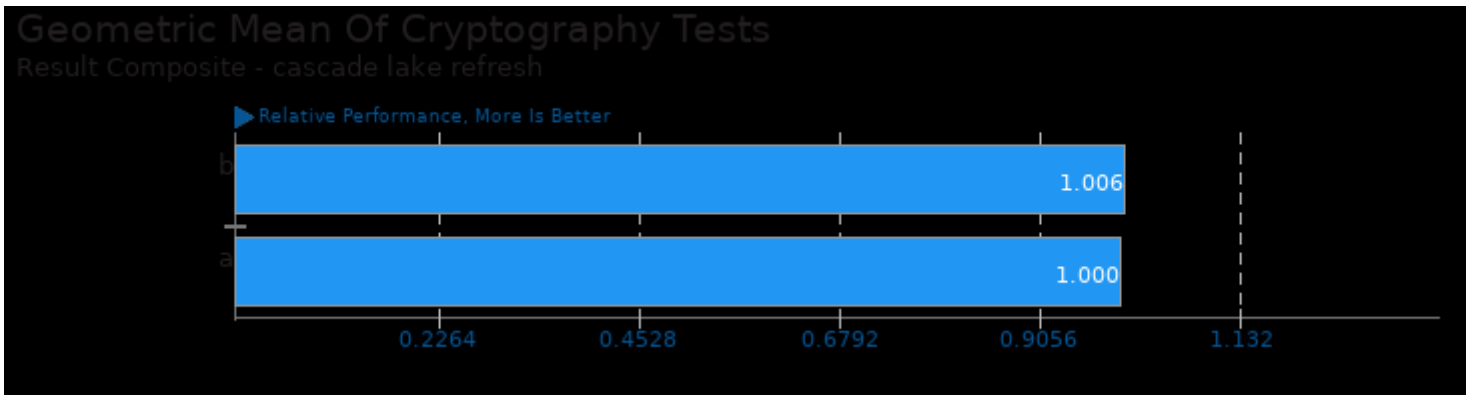
Geometric mean based upon tests: pts/brl-cad, pts/build-linux-kernel, pts/build-php, pts/compress-7zip, pts/svt-av1, pts/encode-flac, pts/graphics-magick, pts/lammps, pts/onednn, pts/numenta-nab, pts/pgbench, pts/redis, pts/stress-ng, pts/tensorflow, pts/blender and pts/cpuminer-opt



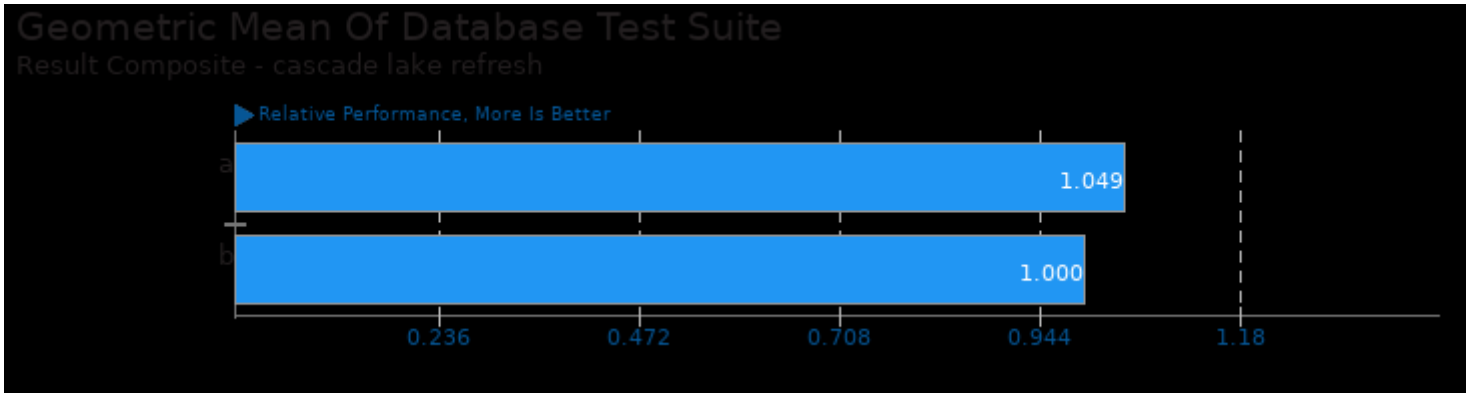
Geometric mean based upon tests: pts/ospray-studio, pts/blender, pts/natron, pts/aom-av1, pts/svt-av1, pts/avifenc, pts/encode-flac, pts/stargate, pts/graphics-magick, pts/webp, pts/webp2, pts/jpegxl, pts/jpegxl-decode, pts/onednn, pts/openvkl, pts/openvino, pts/astcenc and pts/brl-cad



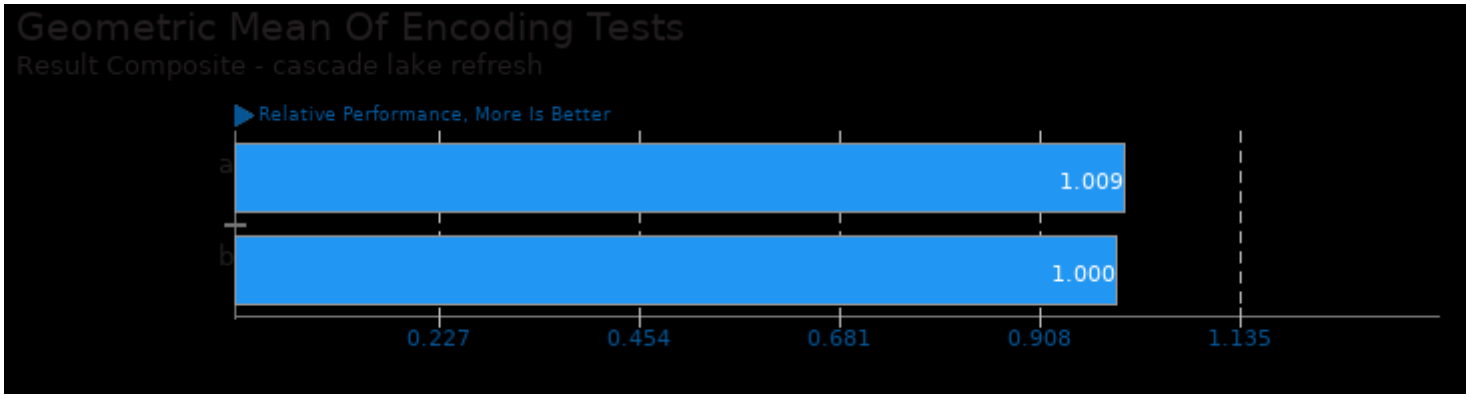
Geometric mean based upon tests: pts/cpuminer-opt and pts/xmrig



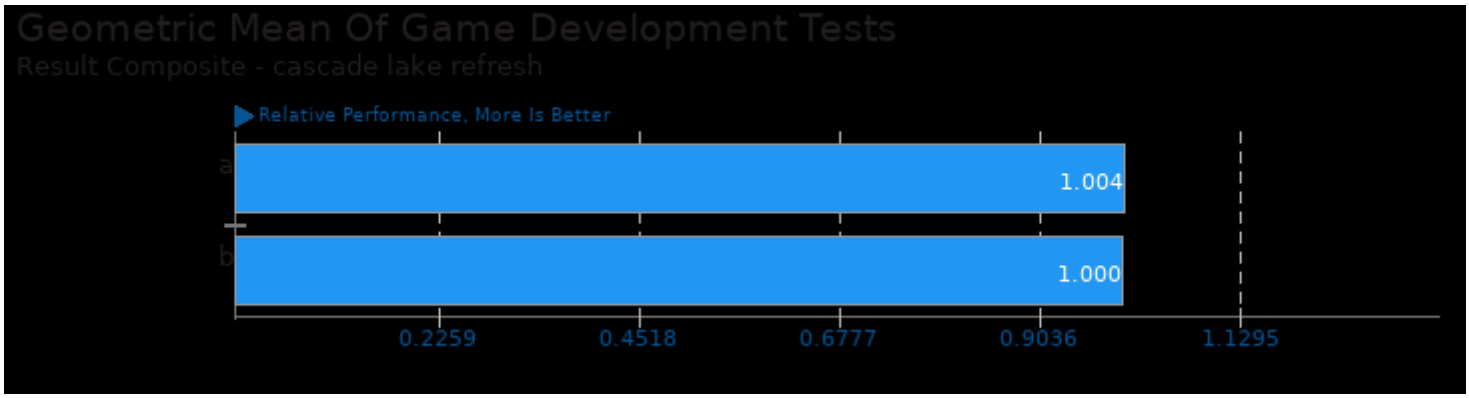
Geometric mean based upon tests: pts/aircrack-ng, pts/cpuminer-opt and pts/xmrig



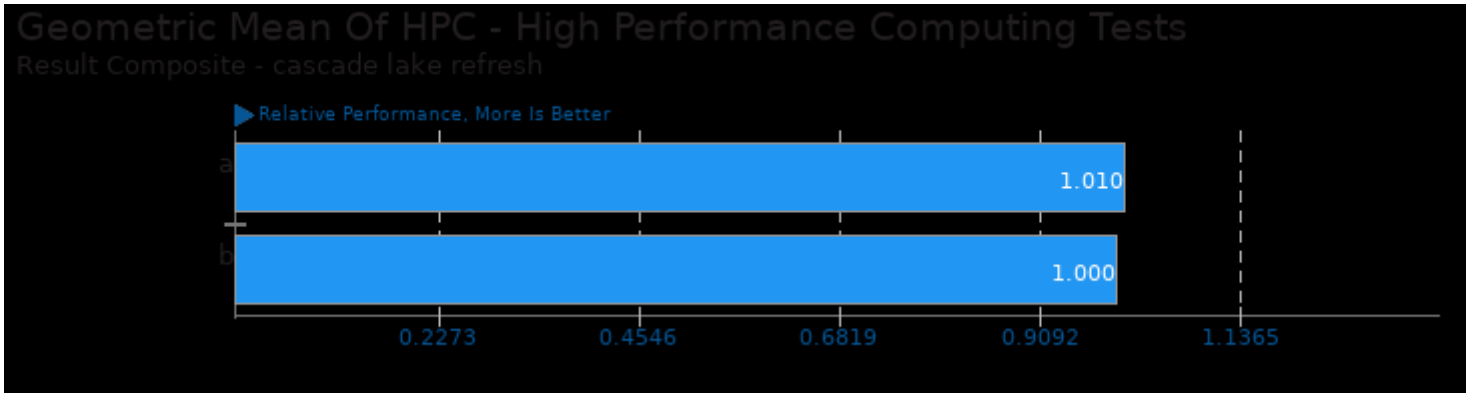
Geometric mean based upon tests: pts/redis, pts/dragonflydb, pts/memtier-benchmark, pts/rocksdb, pts/pgbench, pts/clickhouse, pts/spark and pts/cockroach



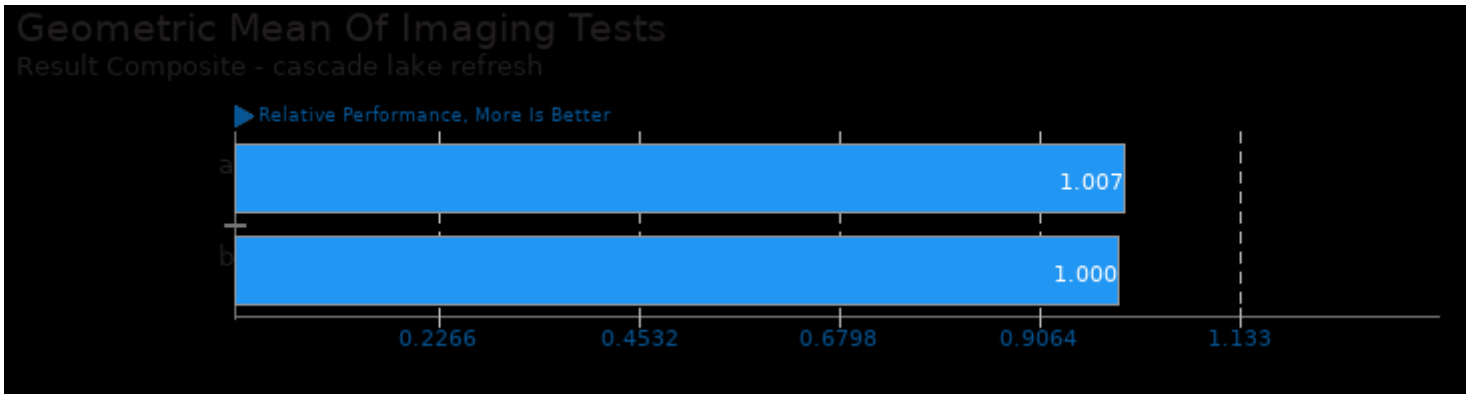
Geometric mean based upon tests: pts/encode-flac, pts/stargate, pts/aom-av1, pts/svt-av1 and pts/avifenc



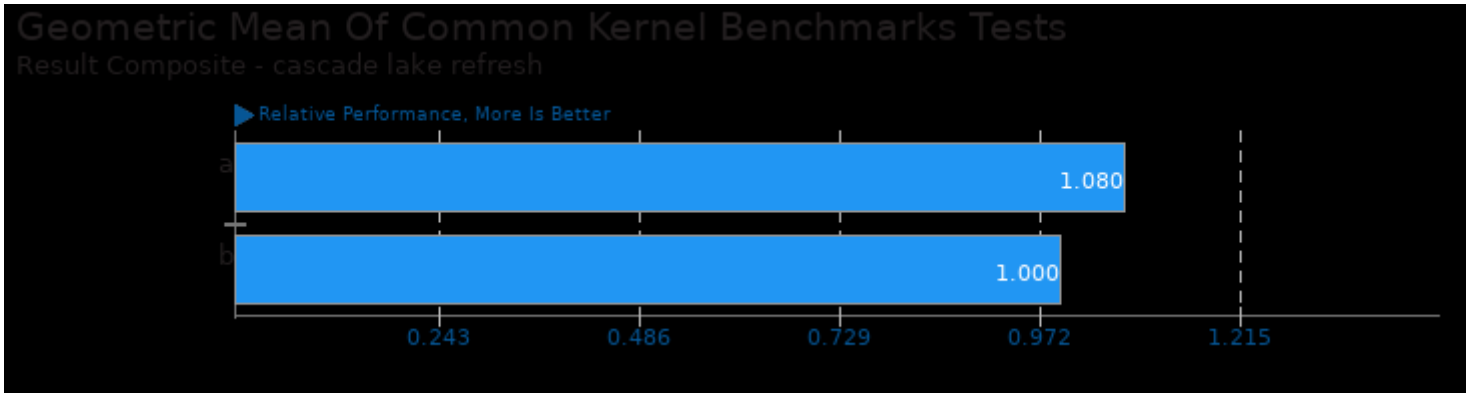
Geometric mean based upon tests: pts/astcenc, pts/blender and pts/openvkl



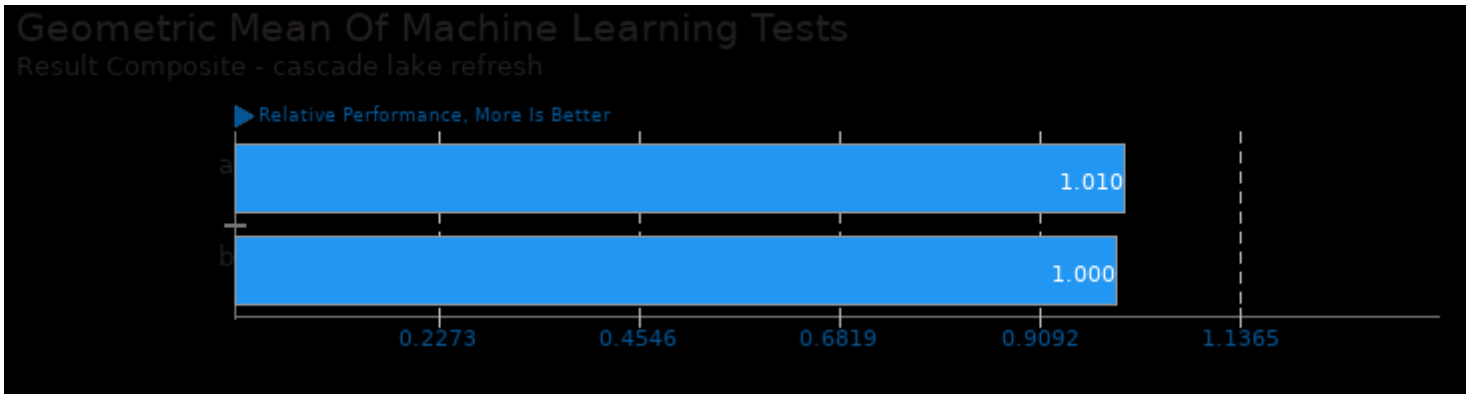
Geometric mean based upon tests: pts/lammps, pts/openfoam, pts/mnn, pts/ncnn, pts/numenta-nab, pts/tensorflow, pts/onednn, pts/openvino, pts/spacy, pts/deepsparse, pts/openradioss, pts/nekrs and pts/minibude



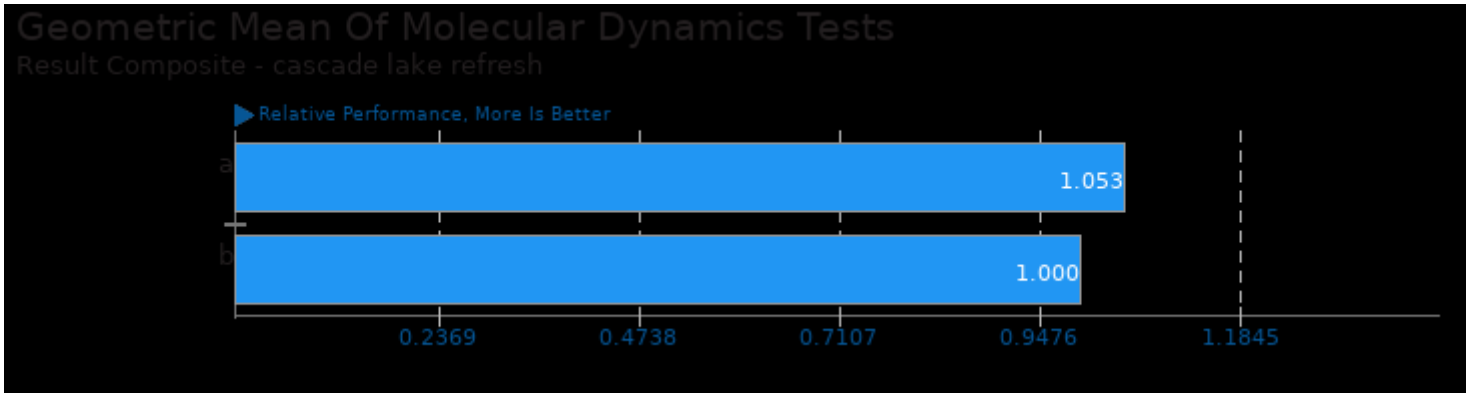
Geometric mean based upon tests: pts/graphics-magick, pts/webp, pts/webp2, pts/jpegxl, pts/jpegxl-decode and pts/avifenc



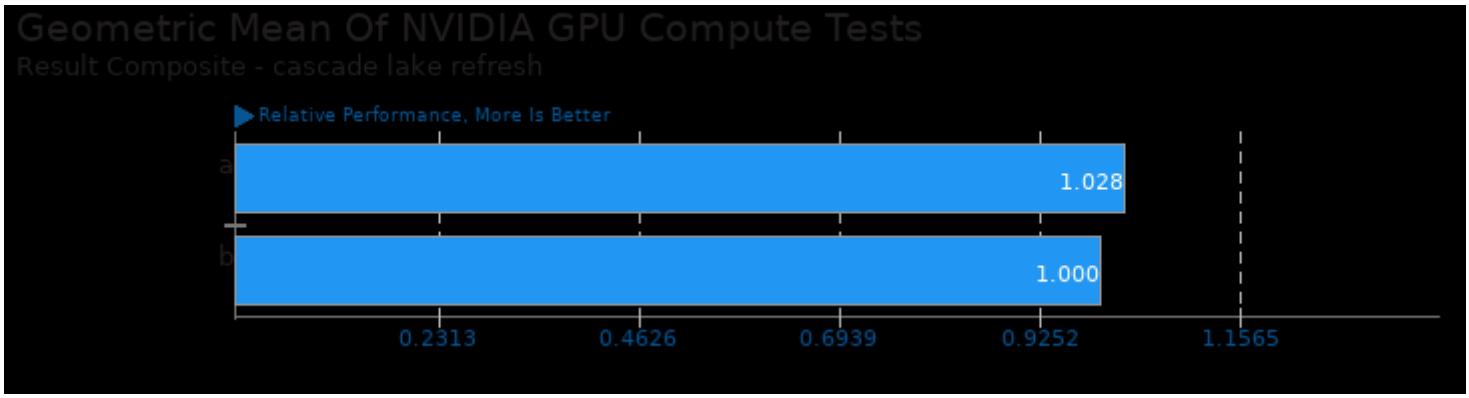
Geometric mean based upon tests: pts/pgbench, pts/stress-ng and pts/rocksdb



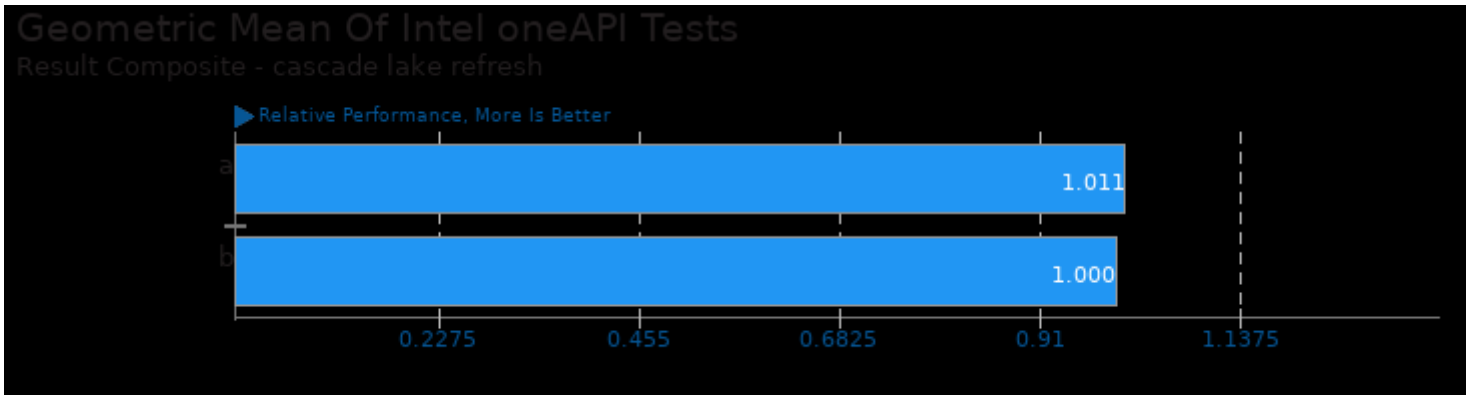
Geometric mean based upon tests: pts/mnn, pts/ncnn, pts/numenta-nab, pts/tensorflow, pts/onednn, pts/openvino, pts/spacy and pts/deepsparse



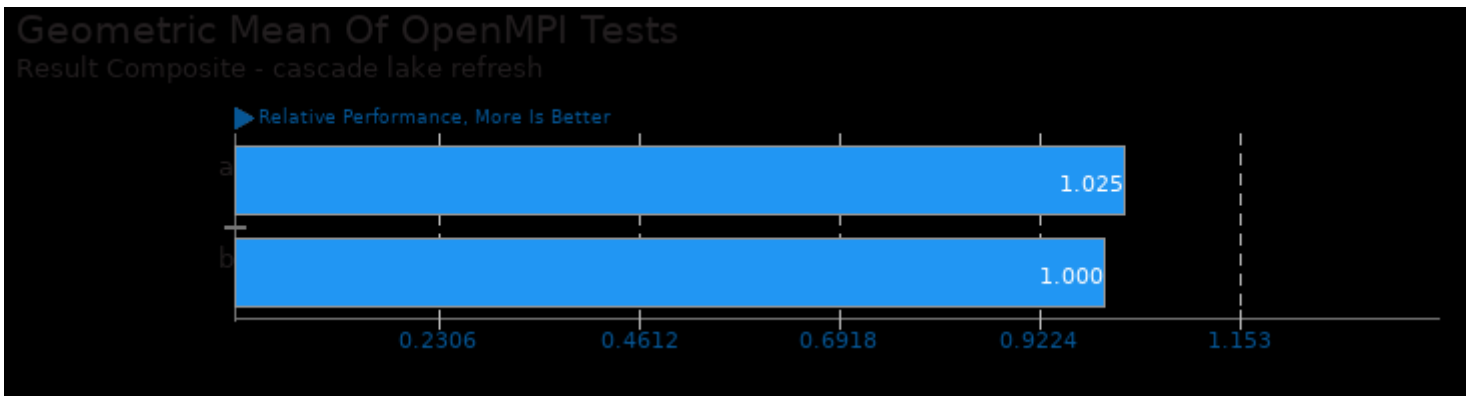
Geometric mean based upon tests: pts/lammps and pts/openfoam



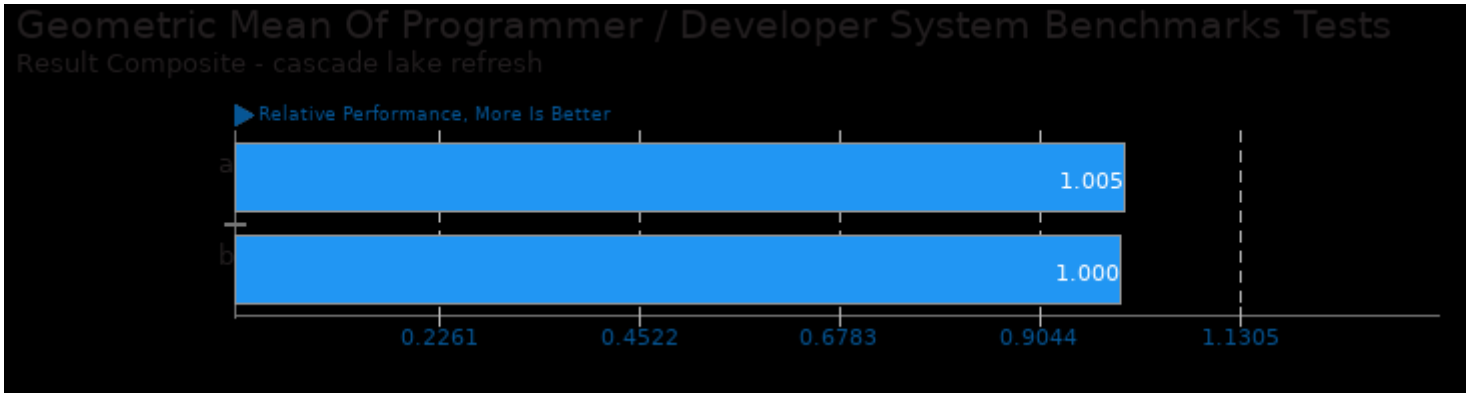
Geometric mean based upon tests: pts/blender and pts/ncnn



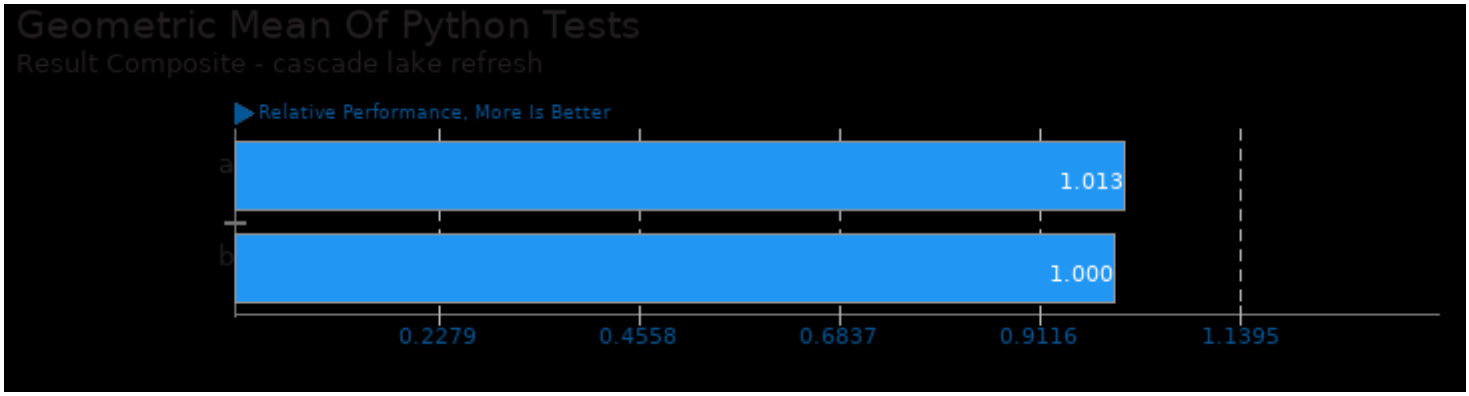
Geometric mean based upon tests: pts/onednn, pts/ospray-studio, pts/openvkl and pts/openvino



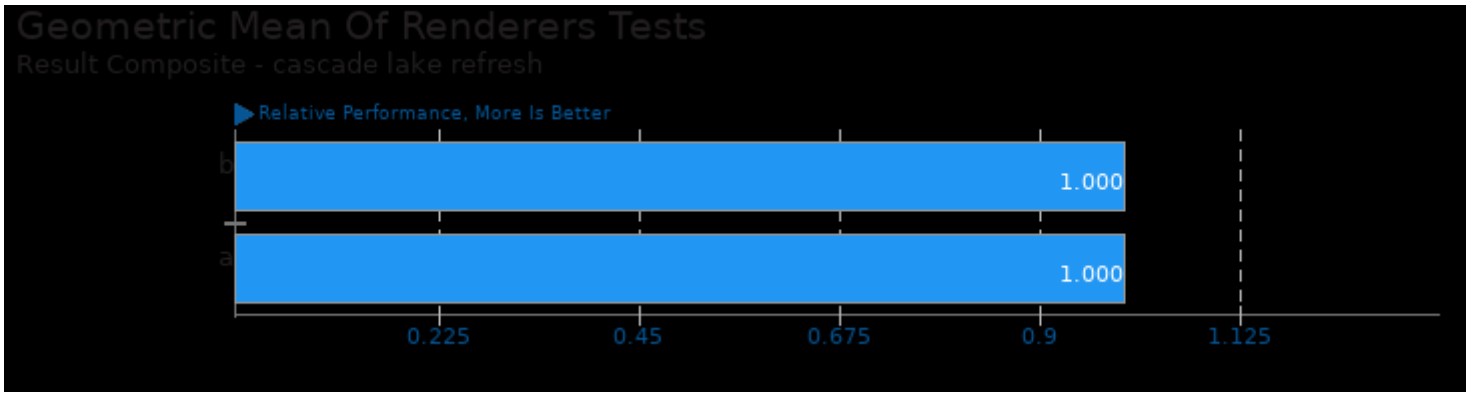
Geometric mean based upon tests: pts/lammps, pts/nekrs, pts/openfoam and pts/openradioss



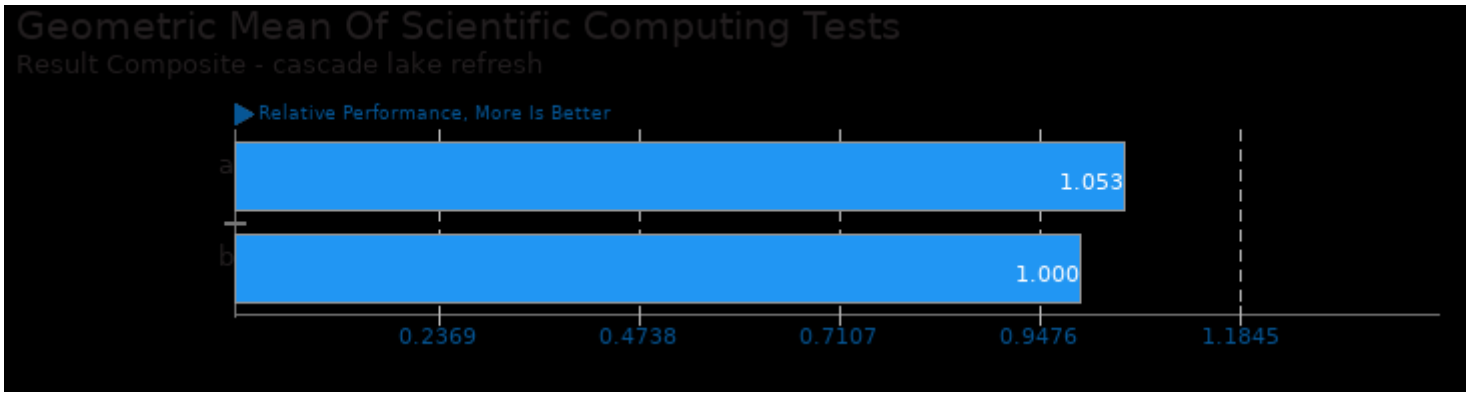
Geometric mean based upon tests: pts/node-web-tooling, pts/build-php, pts/build-linux-kernel, pts/build-python, pts/build-erlang and pts/build-nodejs



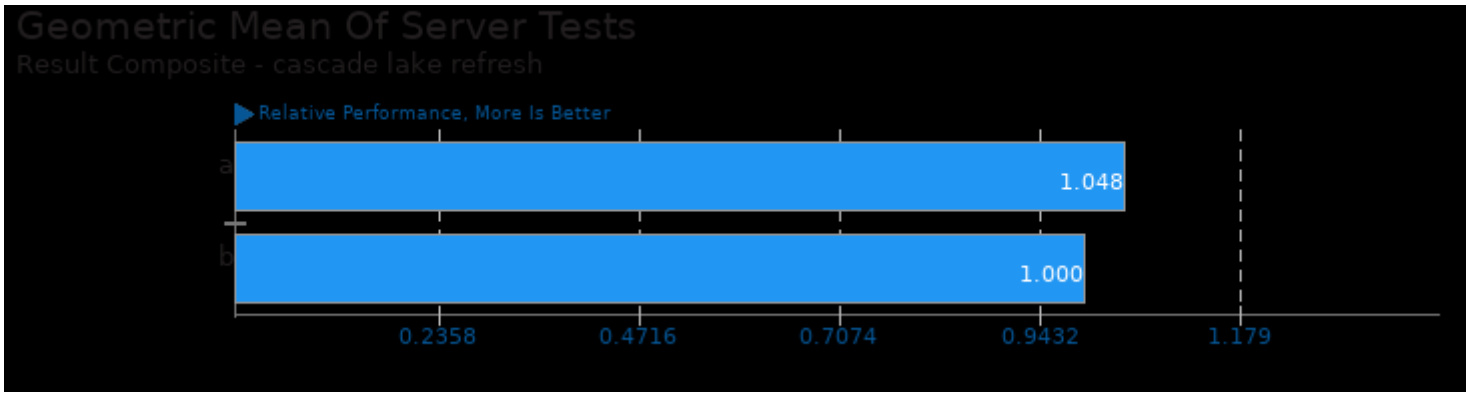
Geometric mean based upon tests: pts/spark, pts/encodec, pts/deepsparse, pts/numenta-nab, pts/openvino, pts/spacy, pts/stargate, pts/tensorflow and pts/build-nodejs



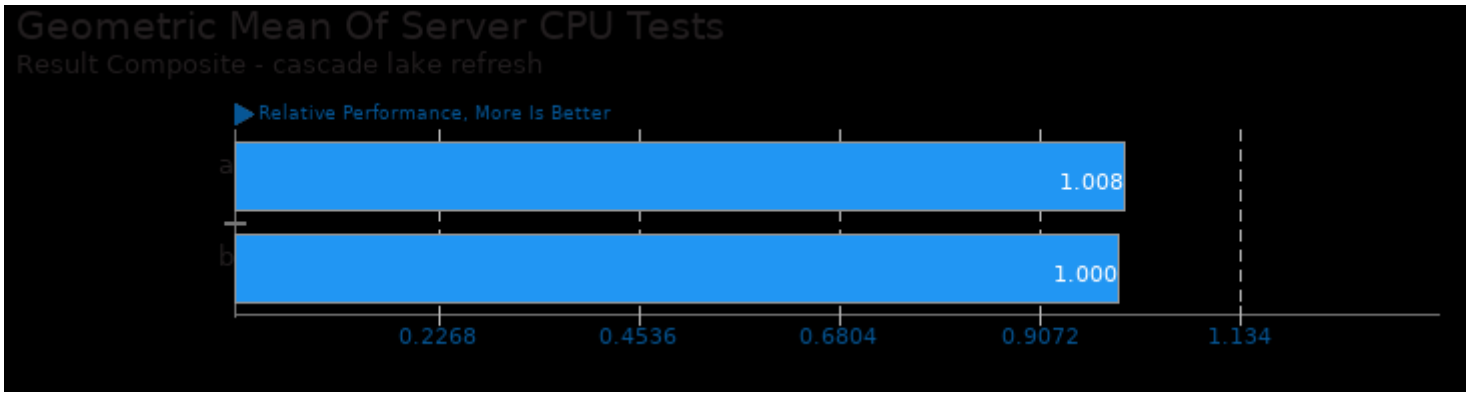
Geometric mean based upon tests: pts/ospray-studio, pts/blender and pts/natron



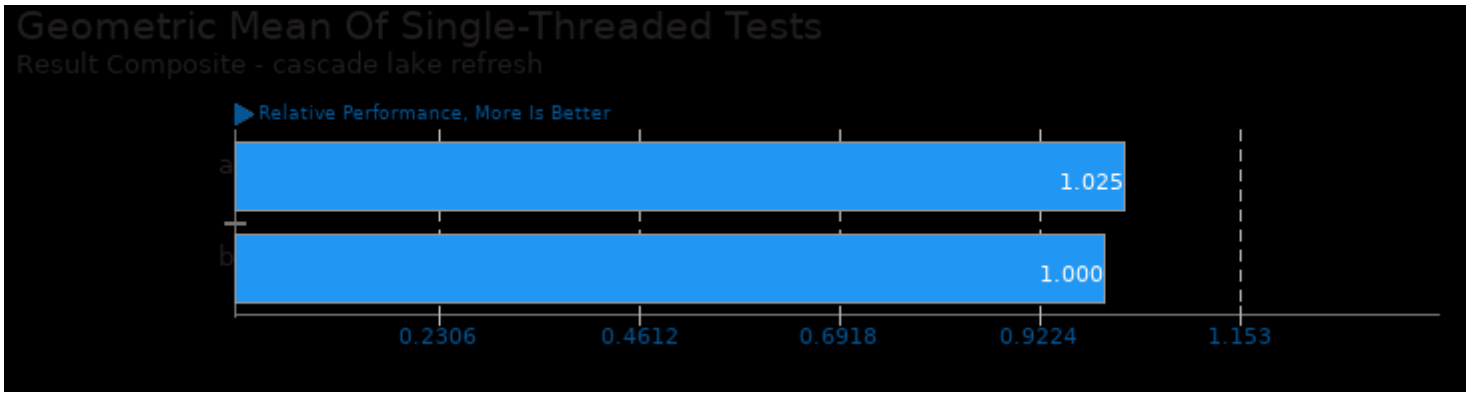
Geometric mean based upon tests: pts/lammps and pts/openfoam



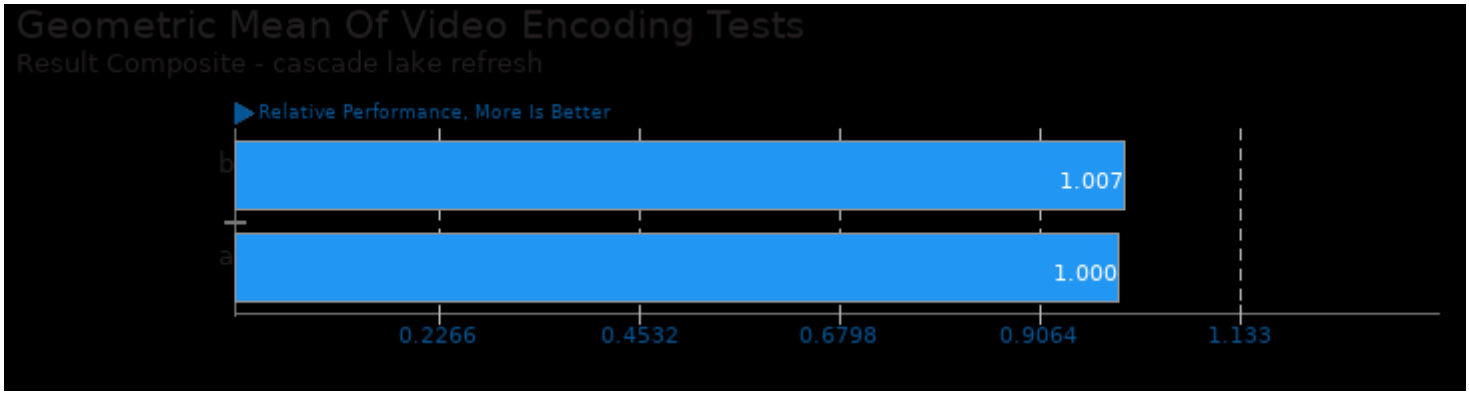
Geometric mean based upon tests: pts/memtier-benchmark, pts/pgbench, pts/redis, pts/rocksdb, pts/node-web-tooling, pts/dragonflydb, pts/clickhouse, pts/spark and pts/cockroach



Geometric mean based upon tests: pts/onednn, pts/svt-av1, pts/compress-7zip, pts/build-linux-kernel, pts/build-php, pts/redis, pts/stress-ng, pts/blender, pts/numenta-nab and pts/cpuminer-opt

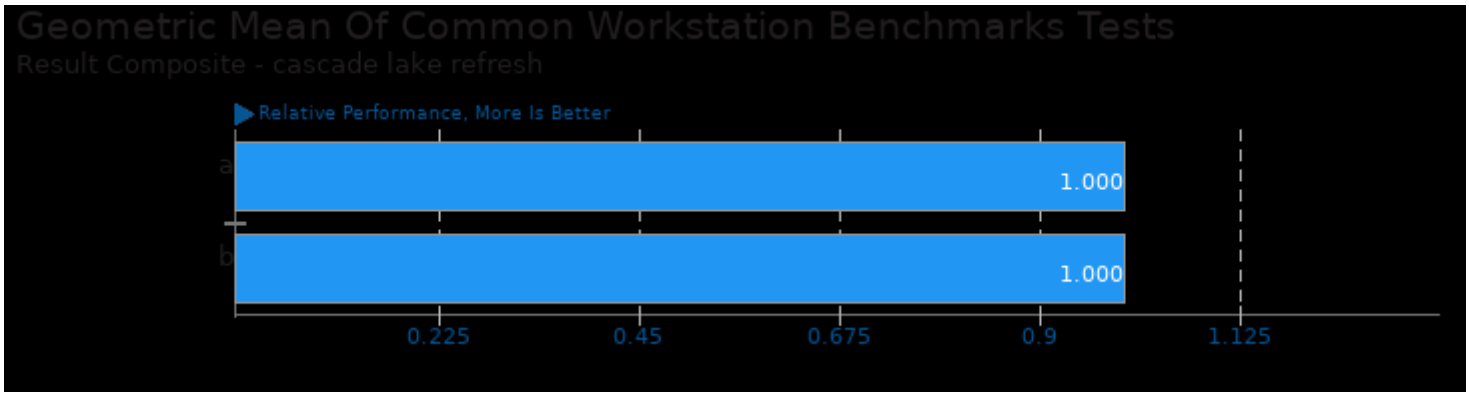


Geometric mean based upon tests: pts/encode-flac and pts/redis



cascade lake refresh

Geometric mean based upon tests: pts/aom-av1, pts/svt-av1 and pts/avifenc



Geometric mean based upon tests: pts/blender and pts/brl-cad

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 17:10.