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5600x july

AMD Ryzen 5 5600X 6-Core testing with a ASUS TUF GAMING B550M-PLUS (WI-FI) (1804 BIOS) and XFX AMD Radeon R9 285/380 2GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 41% of the tests.

Based on the geometric mean of all complete results, the fastest (2) was 1.002x the speed of the slowest (3). 1 was 0.998x the speed of 2 and 3 was 1x the speed of 1.

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

Renaissance (Test: Scala Dotty) at 1.152x
Apache Cassandra (Test: Reads) at 1.11x
Renaissance (Test: Apache Spark PageRank) at 1.089x
Facebook RocksDB (Test: Read While Writing) at 1.069x
PostgreSQL pgbench (Scaling Factor: 1 - Clients: 50 - Mode: Read Write) at 1.058x
PostgreSQL pgbench (Scaling Factor: 1 - Clients: 50 - Mode: Read Write - Average Latency) at 1.058x
NCNN (Target: CPU - Model: resnet18) at 1.058x
Facebook RocksDB (Test: Sequential Fill) at 1.049x
PostgreSQL pgbench (Scaling Factor: 100 - Clients: 50 - Mode: Read Write - Average Latency) at 1.047x

PostgreSQL pgbench (Scaling Factor: 100 - Clients: 50 - Mode: Read Write) at 1.047x.

Test Systems:

1

2

3

Processor: AMD Ryzen 5 5600X 6-Core @ 3.70GHz (6 Cores / 12 Threads), Motherboard: ASUS TUF GAMING B550M-PLUS (WI-FI) (1804 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Samsung SSD 980 PRO 1TB, Graphics: XFX AMD Radeon R9 285/380 2GB (918/1375MHz), Audio: AMD Tonga HDMI Audio, Monitor: G237HL, Network: Realtek RTL8125 2.5GbE + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-50-generic (x86_64), Desktop: GNOME Shell 3.38.1, Display Server: X Server 1.20.9, OpenGL: 4.6 Mesa 20.2.1 (LLVM 11.0.0), Vulkan: 1.2.131, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-gcn/usr,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
Graphics Notes: GLAMOR
Java Notes: OpenJDK Runtime Environment (build 11.0.11+9-Ubuntu-0ubuntu2.20.10)
Python Notes: Python 3.8.6
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	1	2	3
GravityMark - 1920 x 1080 - OpenGL (FPS)	**28.4**	**28.8**	28.7
Normalized	98.61%	100%	99.65%
C-Blosc - blosclz (MB/s)	**22931**	22945	**23040**
Normalized	99.53%	99.59%	100%
Quantum ESPRESSO - AUSURF112 (sec)	1379	**1380**	**1378**
Normalized	99.92%	99.86%	100%
Renaissance - Scala Dotty (ms)	**772.1**	684.2	**670.1**
Normalized	86.79%	97.94%	100%
Renaissance - Rand Forest (ms)	532.5	**528.1**	**536.3**
Normalized	99.17%	100%	98.47%
Renaissance - ALS Movie Lens (ms)	**5351**	5394	**5406**

Normalized	100%	99.2%	98.97%
Renaissance - Apache Spark ALS (ms)	1697	1638	1676
Normalized	96.49%	100%	97.71%
Renaissance - Apache Spark Bayes (ms)	1689	1687	1659
Normalized	98.23%	98.34%	100%
Renaissance - Savina Reactors.IO (ms)	5067	5261	5100
Normalized	100%	96.33%	99.36%
Renaissance - A.S.P (ms)	3017	2785	2770
Normalized	91.81%	99.47%	100%
Renaissance - F.H.R (ms)	1779	1706	1734
Normalized	95.9%	100%	98.4%
Renaissance - I.M.D.S (ms)	2762	2753	2774
Normalized	99.68%	100%	99.24%
Renaissance - A.U.C.T (ms)	8582	8715	8690
Normalized	100%	98.47%	98.76%
Renaissance - G.A.U.J.F (ms)	1438	1418	1412
Normalized	98.18%	99.54%	100%
YafaRay - T.T.F.S.S (sec)	150.989	149.91	150.188
Normalized	99.29%	100%	99.81%
PostgreSQL pgbench - 1 - 1 - Read Only	36977	37069	37024
Normalized	99.75%	100%	99.88%
PostgreSQL pgbench - 1 - 1 - Read Only - Average Latency (ms)	0.027	0.027	0.027
PostgreSQL pgbench - 1 - 1 - Read Write	482	462	466
Normalized	100%	95.85%	96.68%
PostgreSQL pgbench - 1 - 1 - Read Write - Average Latency (ms)	2.074	2.162	2.146
Normalized	100%	95.93%	96.64%
PostgreSQL pgbench - 1 - 50 - Read Only (TPS)	279985	277930	279302
Normalized	100%	99.27%	99.76%
PostgreSQL pgbench - 1 - 50 - Read Only - Average Latency (ms)	0.179	0.18	0.179
Normalized	100%	99.44%	100%
PostgreSQL pgbench - 1 - 50 - Read Write (TPS)	525	510	496
Normalized	100%	97.14%	94.48%
PostgreSQL pgbench - 1 - 50 - Read Write - Average Latency (ms)	95.264	98.012	100.786
Normalized	100%	97.2%	94.52%
PostgreSQL pgbench - 100 - 1 - Read Only (TPS)	32108	31741	32195
Normalized	99.73%	98.59%	100%
PostgreSQL pgbench - 100 - 1 - Read Only - Average Latency (ms)	0.031	0.032	0.031
Normalized	100%	96.88%	100%
PostgreSQL pgbench - 100 - 1 - Read Write (TPS)	465	458	459
Normalized	100%	98.49%	98.71%
PostgreSQL pgbench - 100 - 1 - Read Write - Average Latency (ms)	2.151	2.183	2.178
Normalized	100%	98.53%	98.76%

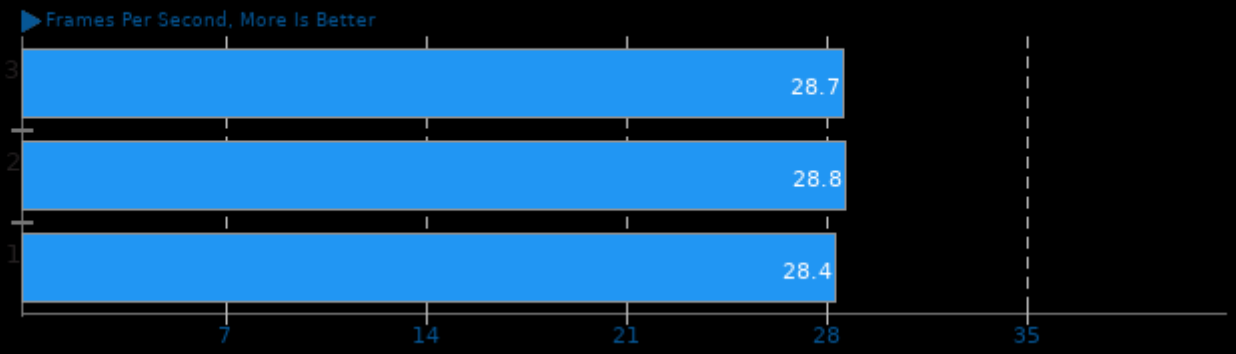
PostgreSQL pgbench - 100 - 50 - Read Only (TPS)	**242265**	**243444**	242635
Normalized	99.52%	100%	99.67%
PostgreSQL pgbench - 100 - 50 - Read Only - Average Latency (ms)	**0.206**	**0.205**	**0.206**
Normalized	99.51%	100%	99.51%
PostgreSQL pgbench - 100 - 50 - Read Write (TPS)	**10127**	9944	**9670**
Normalized	100%	98.19%	95.49%
PostgreSQL pgbench - 100 - 50 - Read Write - Average Latency (ms)	**4.937**	5.028	**5.171**
Normalized	100%	98.19%	95.47%
Mobile Neural Network - mobilenetV3 (ms)	1.07	**1.069**	**1.074**
Normalized	99.91%	100%	99.53%
Mobile Neural Network - squeezenetv1.1	**2.42**	**2.368**	2.398
Normalized	97.85%	100%	98.75%
Mobile Neural Network - resnet-v2-50 (ms)	**22.563**	**22.443**	22.462
Normalized	99.47%	100%	99.92%
Mobile Neural Network - SqueezeNetV1.0	3.546	**3.543**	**3.569**
Normalized	99.92%	100%	99.27%
Mobile Neural Network - MobileNetV2_224	**1.969**	**1.969**	**2.031**
Normalized	100%	100%	96.95%
Mobile Neural Network - mobilenet-v1-1.0	**2.88**	2.892	**2.912**
Normalized	100%	99.59%	98.9%
Mobile Neural Network - inception-v3 (ms)	25.235	**25.162**	**25.39**
Normalized	99.71%	100%	99.1%
NCNN - CPU - mobilenet (ms)	**12.59**	**12.59**	**12.29**
Normalized	97.62%	97.62%	100%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)	**2.84**	**2.76**	**2.76**
Normalized	97.18%	100%	100%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)	**2.49**	2.48	**2.47**
Normalized	99.2%	99.6%	100%
NCNN - CPU - shufflenet-v2 (ms)	2.31	**2.29**	**2.34**
Normalized	99.13%	100%	97.86%
NCNN - CPU - mnasnet (ms)	2.48	**2.47**	**2.52**
Normalized	99.6%	100%	98.02%
NCNN - CPU - efficientnet-b0 (ms)	**3.83**	3.84	**3.93**
Normalized	100%	99.74%	97.46%
NCNN - CPU - blazeface (ms)	**1.04**	**1.04**	**1.06**
Normalized	100%	100%	98.11%
NCNN - CPU - googlenet (ms)	**11.06**	**11.01**	**11.01**
Normalized	99.55%	100%	100%
NCNN - CPU - vgg16 (ms)	**58.33**	**57.41**	57.49
Normalized	98.42%	100%	99.86%
NCNN - CPU - resnet18 (ms)	**13.75**	**13**	13.04
Normalized	94.55%	100%	99.69%
NCNN - CPU - alexnet (ms)	12	12	12
NCNN - CPU - resnet50 (ms)	**23.01**	**22.04**	22.45
Normalized	95.78%	100%	98.17%
NCNN - CPU - yolov4-tiny (ms)	**19.37**	**20.01**	19.43
Normalized	100%	96.8%	99.69%
NCNN - CPU - squeezenet_ssd (ms)	**16.3**	**15.94**	16.01
Normalized	97.79%	100%	99.56%

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NCNN - CPU - regnety_400m (ms)	6.05	**6.02**	**6.19**
Normalized	99.5%	100%	97.25%
TNN - CPU - DenseNet (ms)	2586	**2583**	**2590**
Normalized	99.9%	100%	99.73%
TNN - CPU - MobileNet v2 (ms)	222.892	**222.895**	**222.719**
Normalized	99.92%	99.92%	100%
TNN - CPU - SqueezeNet v2 (ms)	**49.012**	48.503	**48.476**
Normalized	98.91%	99.94%	100%
TNN - CPU - SqueezeNet v1.1 (ms)	**216.436**	**216.595**	216.442
Normalized	100%	99.93%	100%
Apache Cassandra - Reads (Op/s)	**69316**	**76964**	73296
Normalized	90.06%	100%	95.23%
Apache Cassandra - Writes (Op/s)	**88308**	88912	**89885**
Normalized	98.25%	98.92%	100%
Apache Cassandra - Mixed 1:1 (Op/s)	**70944**	**70434**	70562
Normalized	100%	99.28%	99.46%
Apache Cassandra - Mixed 1:3 (Op/s)	**67451**	**70245**	69252
Normalized	96.02%	100%	98.59%
Facebook RocksDB - Rand Fill (Op/s)	963200	**967441**	**958904**
Normalized	99.56%	100%	99.12%
Facebook RocksDB - Rand Read (Op/s)	52116489	**50958676**	**52122308**
Normalized	99.99%	97.77%	100%
Facebook RocksDB - Update Rand (Op/s)	542449	**532950**	**543709**
Normalized	99.77%	98.02%	100%
Facebook RocksDB - Seq Fill (Op/s)	**1378055**	**1313318**	1358026
Normalized	100%	95.3%	98.55%
Facebook RocksDB - Rand Fill Sync (Op/s)	**966**	**953**	955
Normalized	100%	98.65%	98.86%
Facebook RocksDB - Read While Writing	**1809221**	1700701	**1692405**
Normalized	100%	94%	93.54%
Facebook RocksDB - R.R.W.R (Op/s)	**1642045**	**1612593**	1623259
Normalized	100%	98.21%	98.86%
Natron - Spaceship (FPS)	**2.6**	**2.5**	**2.6**
Normalized	100%	96.15%	100%
Unvanquished - 1920 x 1080 - High (FPS)	**252.7**	**247.2**	249.2
Normalized	100%	97.82%	98.61%
Standard Deviation	0.3%		
Unvanquished - 1920 x 1080 - Ultra (FPS)	**247.4**	**249.4**	247.9
Normalized	99.2%	100%	99.4%
Standard Deviation	0.2%		
Unvanquished - 1920 x 1080 - Medium (FPS)	**254.7**	254.4	**253.5**
Normalized	100%	99.88%	99.53%
Standard Deviation	0.2%		

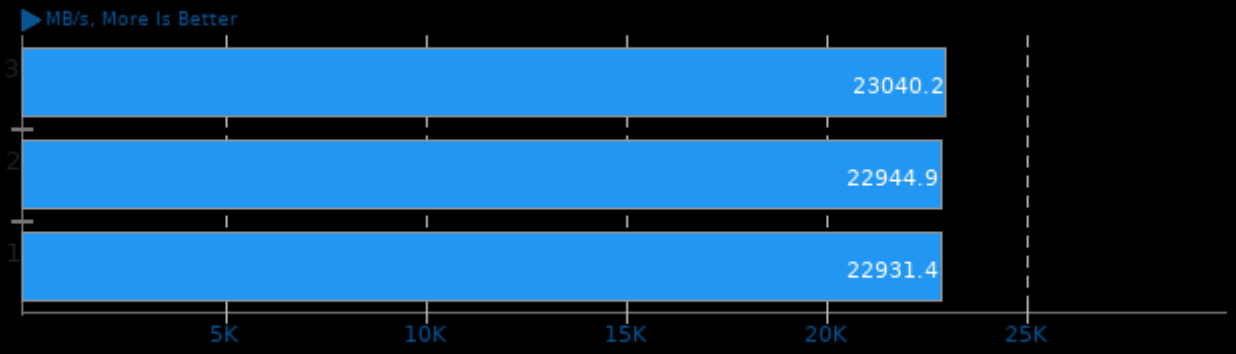
GravityMark 1.2

Resolution: 1920 x 1080 - Renderer: OpenGL



C-Blosc 2.0

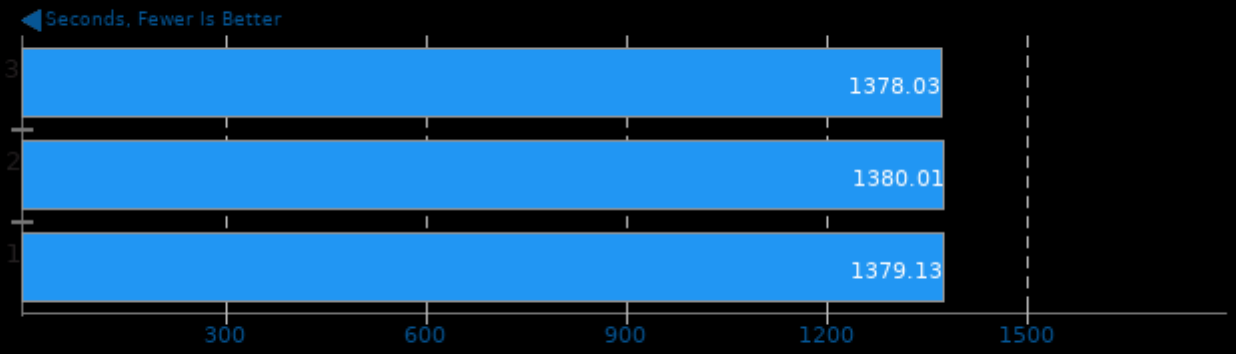
Compressor: blosclz



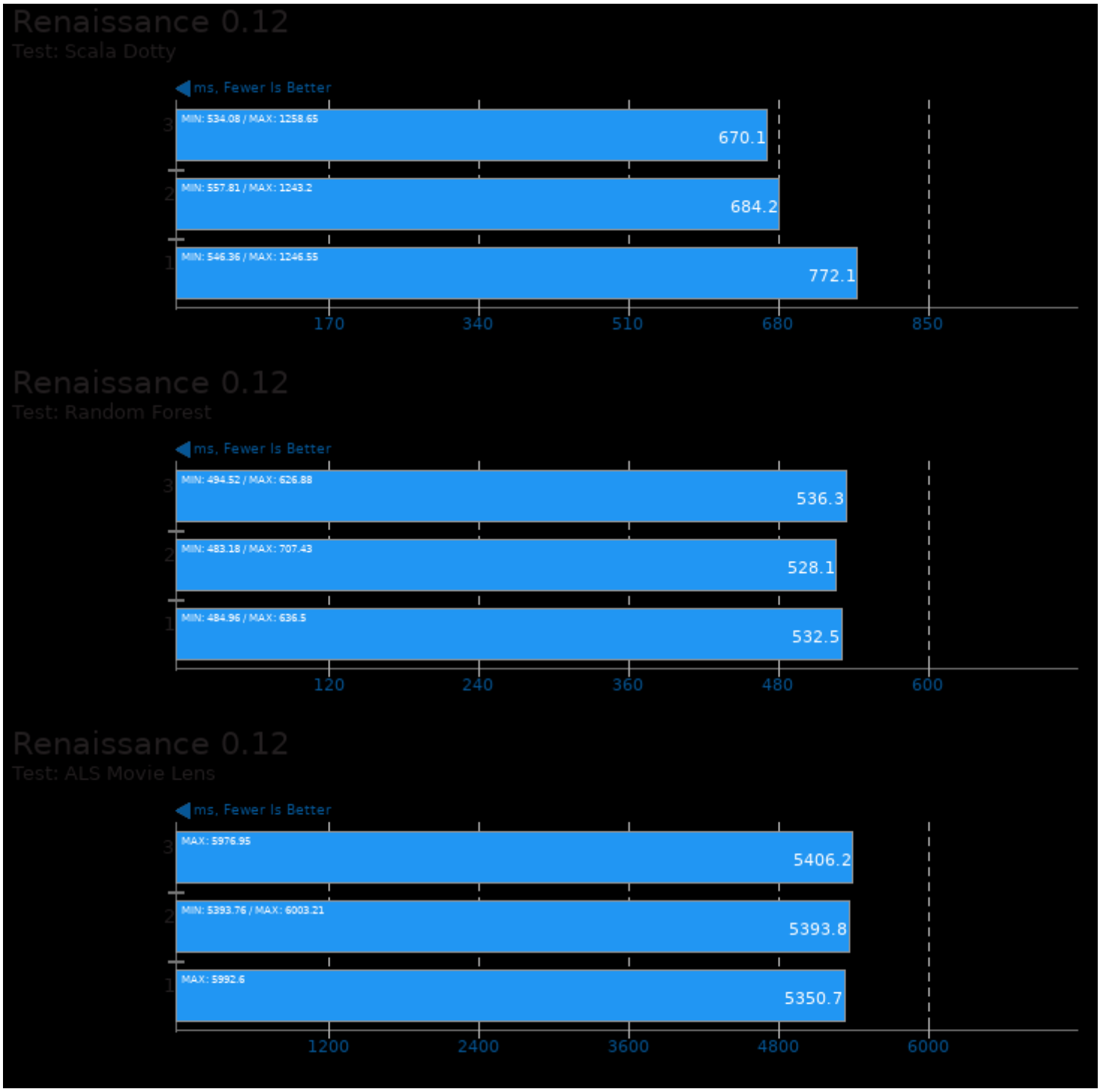
1. (CC) gcc options: -std=gnu99 -O3 -pthread -lrt -lm

Quantum ESPRESSO 6.8

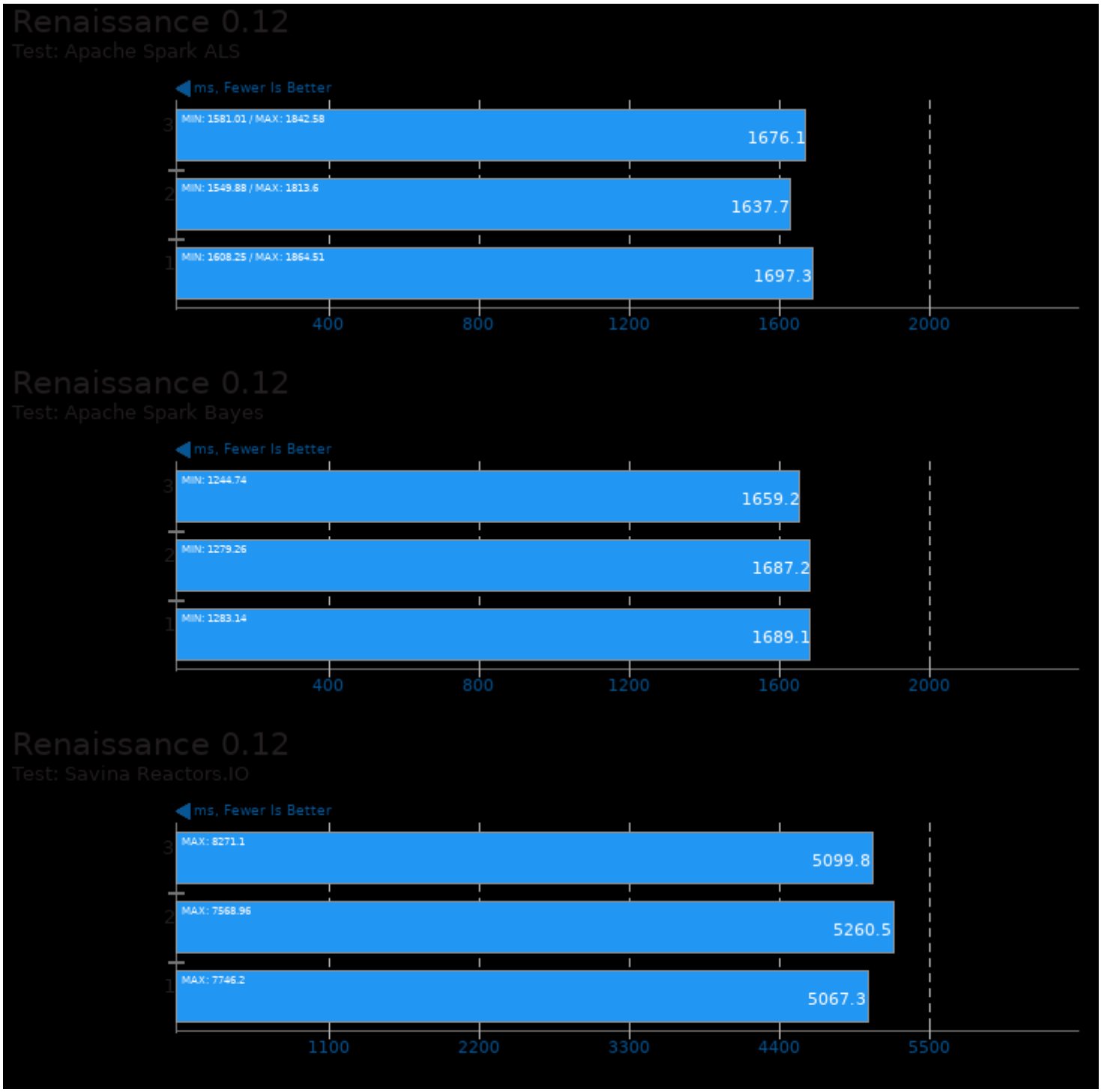
Input: AUSURF112

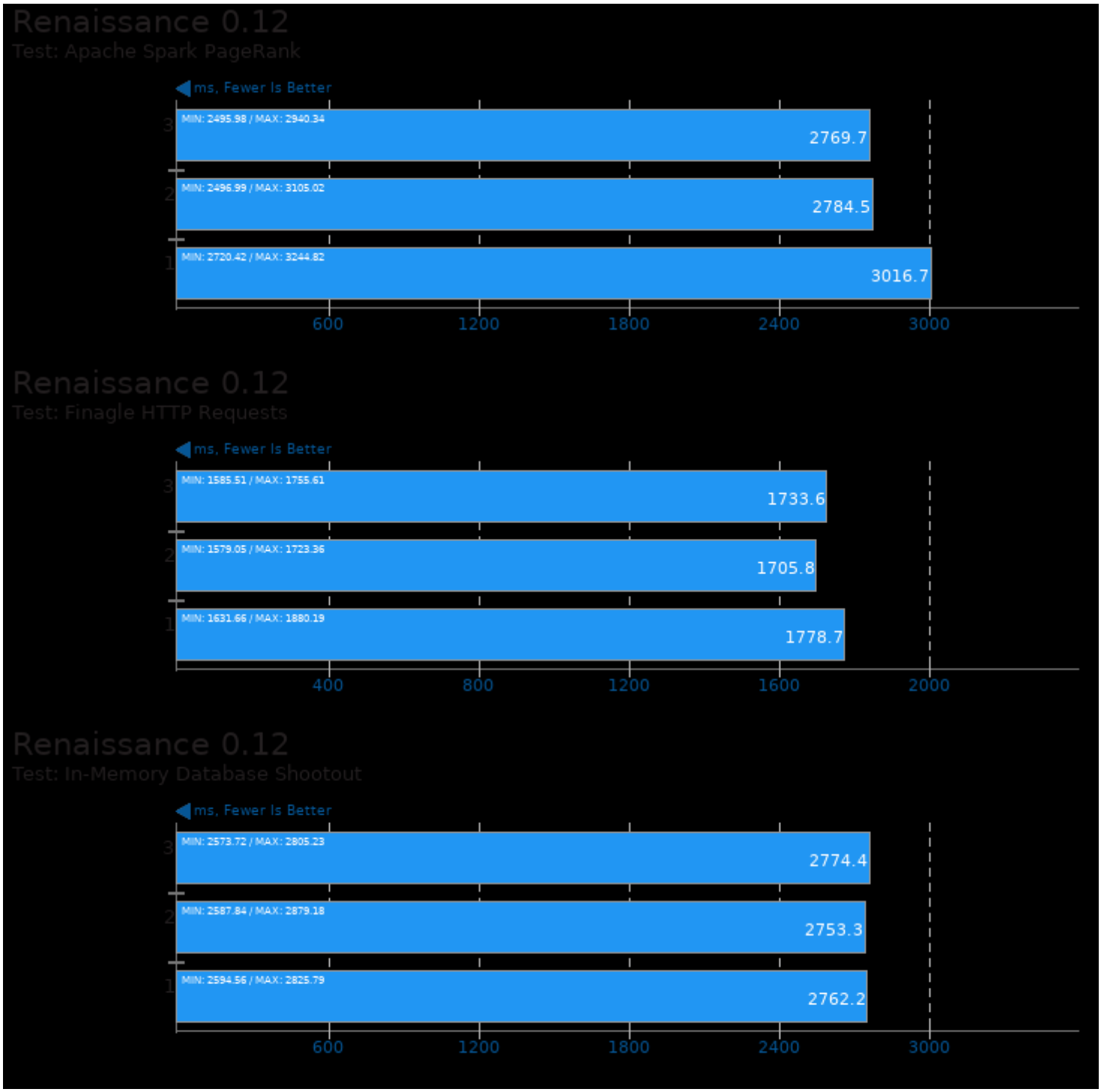


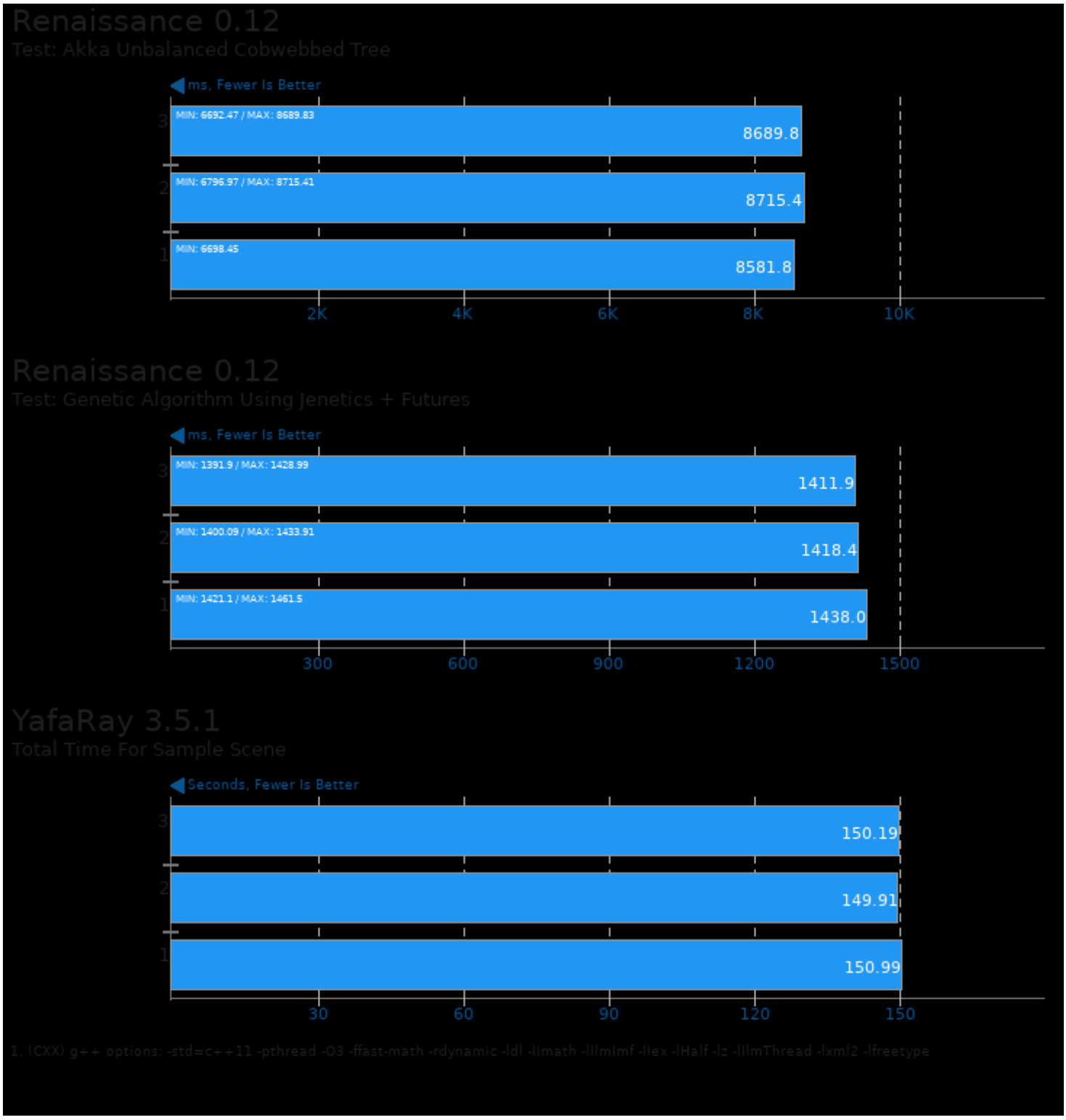
1. (F9X) gfortran options: -ldevXlib -lopenblas -lFoX_dom -lFoX_sax -lFoX_wxml -lFoX_common -lFoX_utils -lFoX_fsys -lfftw3 -pthread -lmpi_usempif08 -lmp

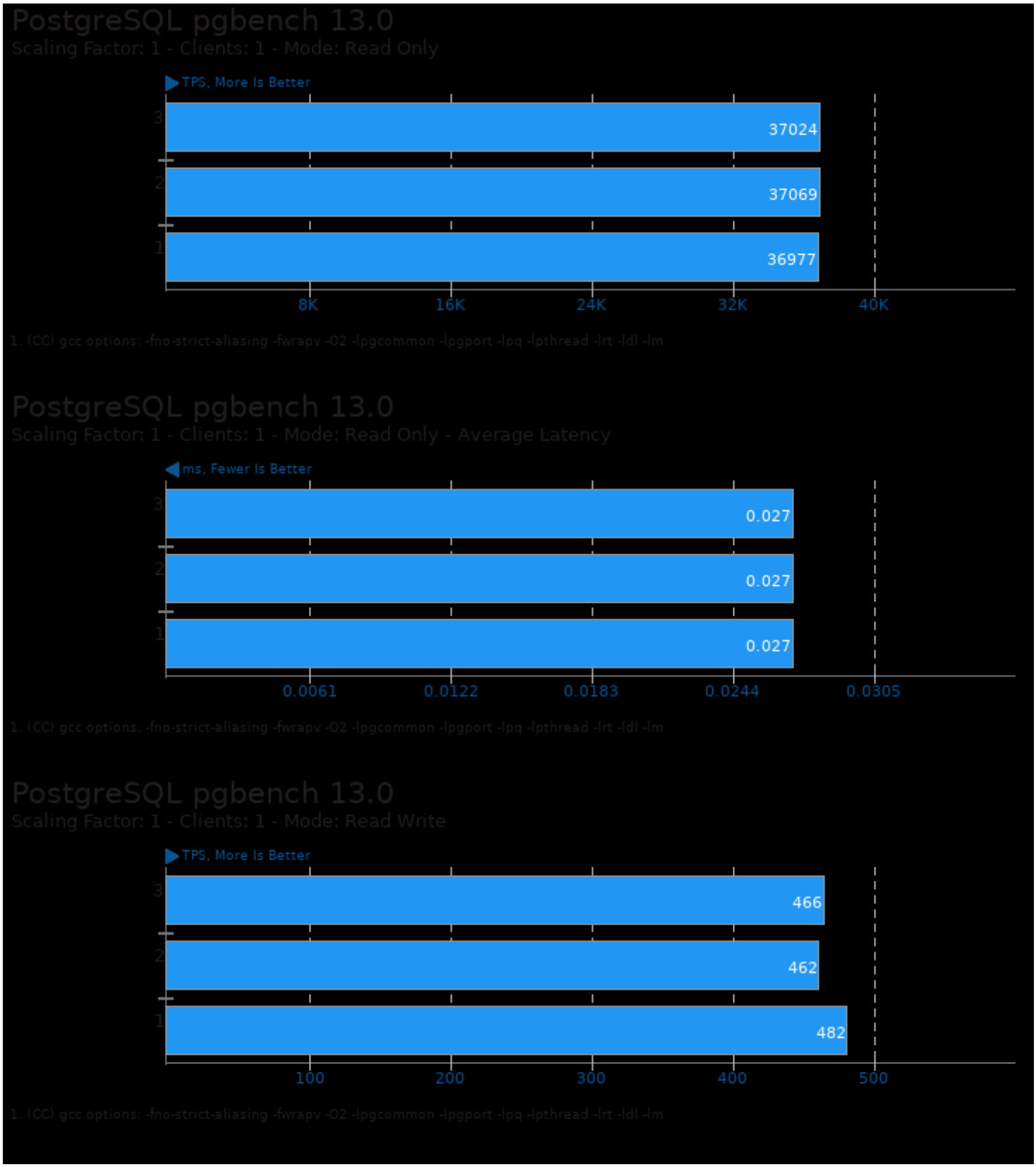

Renaissance 0.12
Test: Scala Dotty
ms, Fewer Is Better
3
MIN: 534.08 / MAX: 1258.65
670.1
2
MIN: 557.81 / MAX: 1243.2
684.2
1
MIN: 546.36 / MAX: 1246.55
772.1
170
340
510
680
850
Renaissance 0.12
Test: Random Forest
ms, Fewer Is Better
3
MIN: 494.52 / MAX: 626.88
536.3
2
MIN: 483.18 / MAX: 707.43
528.1
1
MIN: 484.96 / MAX: 636.5
532.5
120
240
360
480
600
Renaissance 0.12
Test: ALS Movie Lens
ms, Fewer Is Better
3
MAX: 5976.95
5406.2
2
MIN: 5393.76 / MAX: 6003.21
5393.8
1
MAX: 5992.6
5350.7
1200
2400
3600
4800
6000

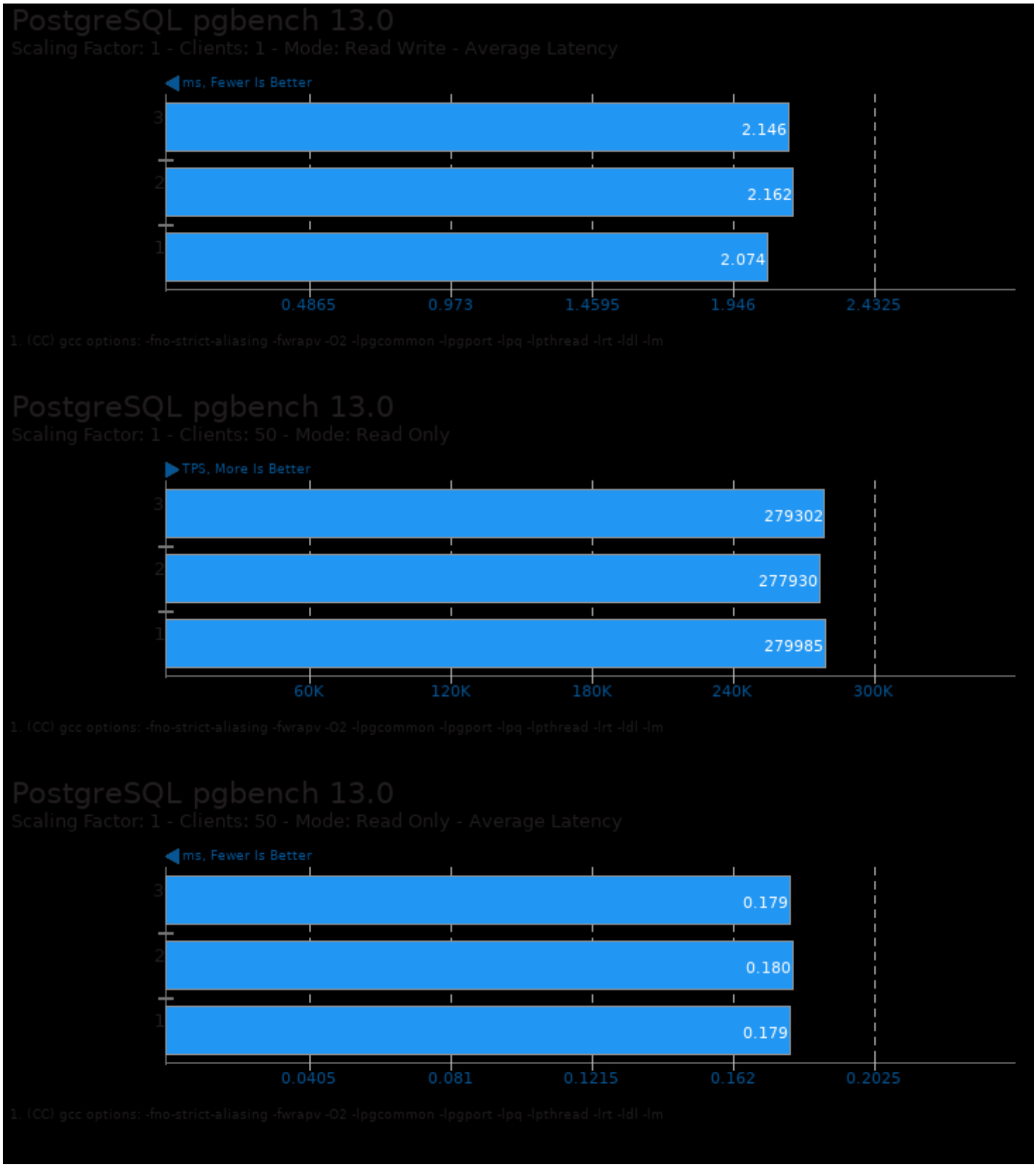
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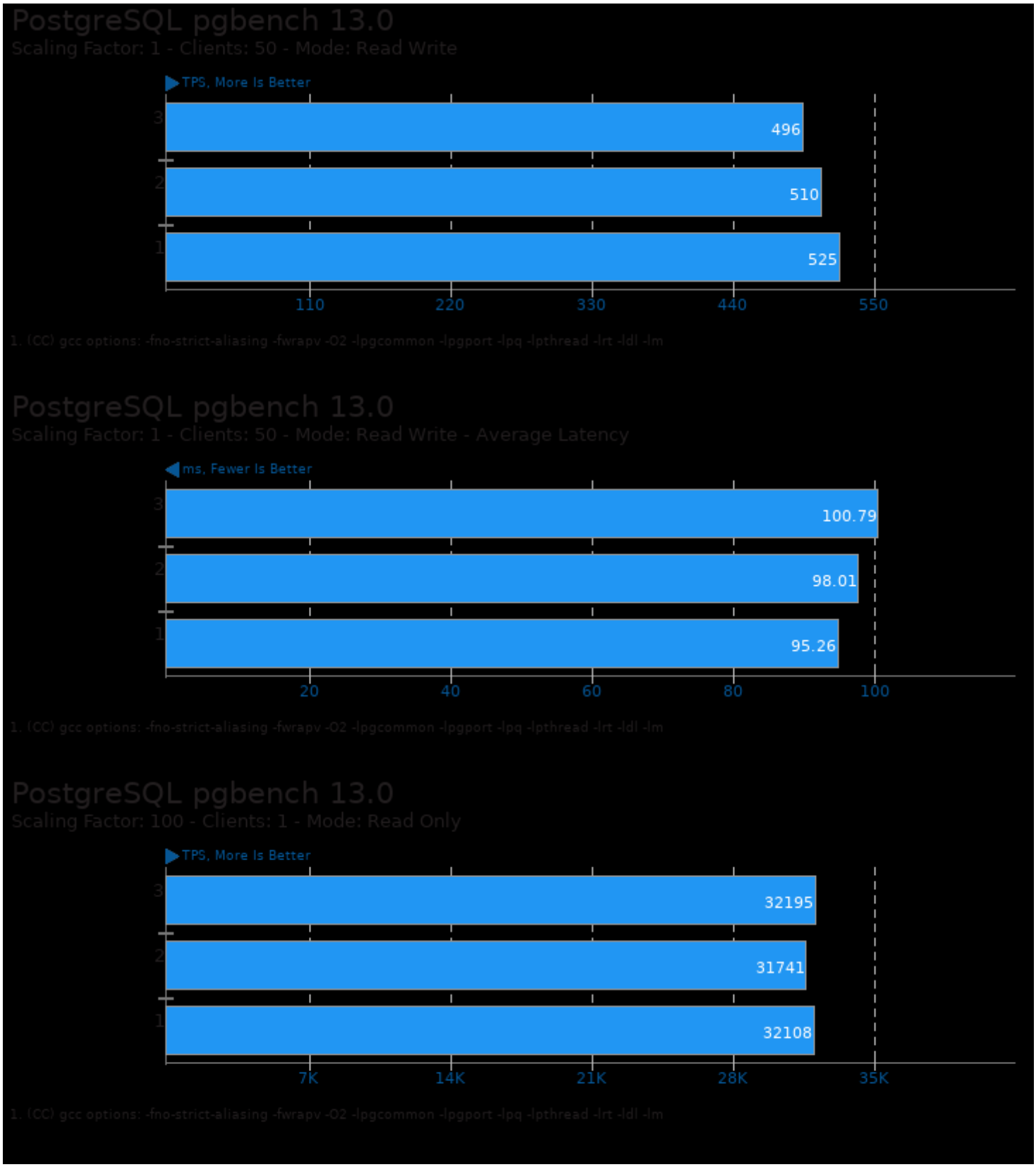

Renaissance 0.12
Test: Apache Spark ALS
ms, Fewer Is Better
3
MIN: 1581.01 / MAX: 1842.58
1676.1
2
MIN: 1549.88 / MAX: 1813.6
1637.7
1
MIN: 1608.25 / MAX: 1864.51
1697.3
400
800
1200
1600
2000
Renaissance 0.12
Test: Apache Spark Bayes
ms, Fewer Is Better
3
MIN: 1244.74
1659.2
2
MIN: 1279.26
1687.2
1
MIN: 1283.14
1689.1
400
800
1200
1600
2000
Renaissance 0.12
Test: Savina Reactors.IO
ms, Fewer Is Better
3
MAX: 8271.1
5099.8
2
MAX: 7568.96
5260.5
1
MAX: 7746.2
5067.3
1100
2200
3300
4400
5500

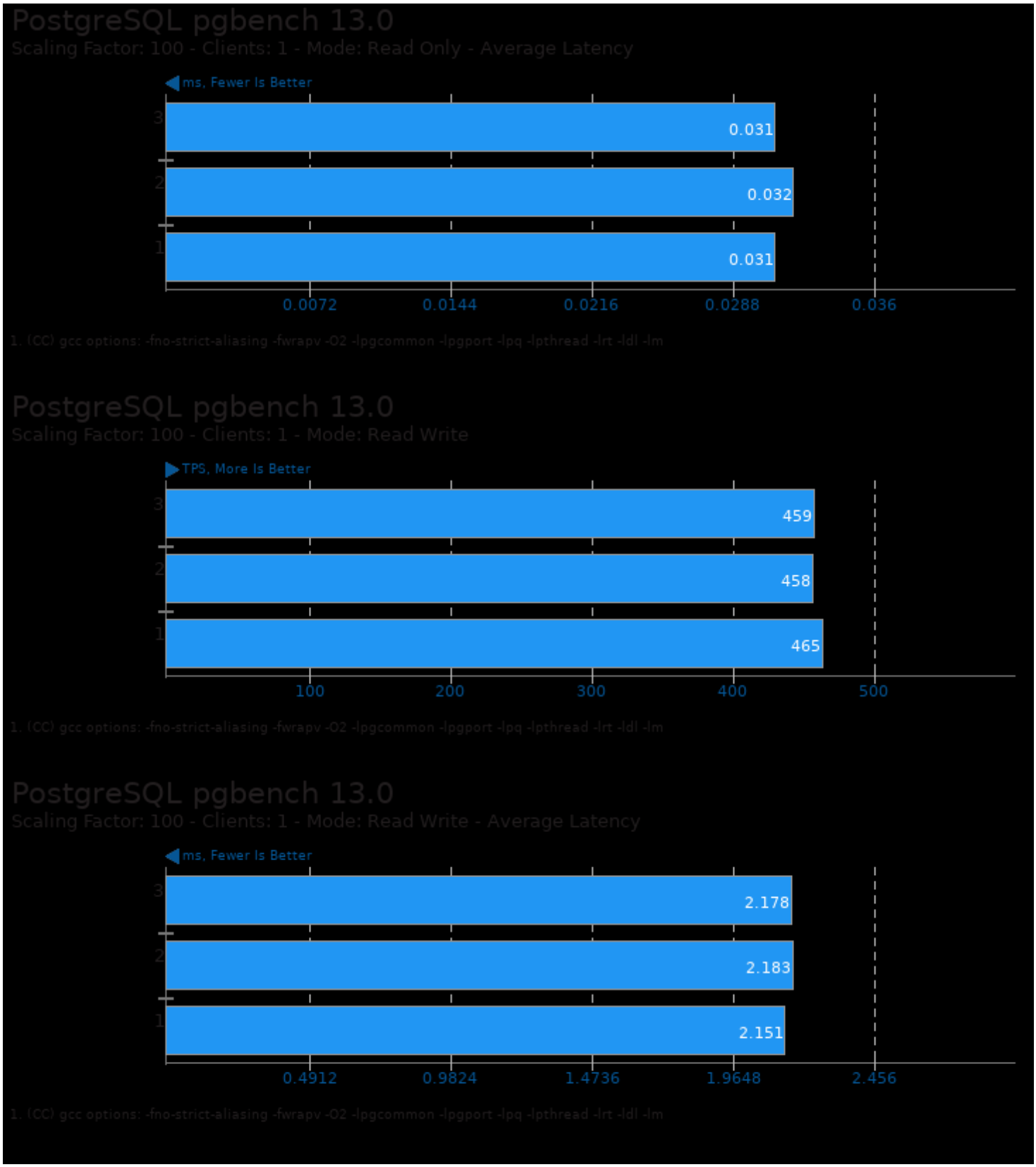

Renaissance 0.12
Test: Apache Spark PageRank
ms, Fewer Is Better
3
MIN: 2495.98 / MAX: 2940.34
2769.7
2
MIN: 2496.99 / MAX: 3105.02
2784.5
1
MIN: 2720.42 / MAX: 3244.82
3016.7
600
1200
1800
2400
3000
Renaissance 0.12
Test: Finagle HTTP Requests
ms, Fewer Is Better
3
MIN: 1585.51 / MAX: 1755.61
1733.6
2
MIN: 1579.05 / MAX: 1723.36
1705.8
1
MIN: 1631.66 / MAX: 1880.19
1778.7
400
800
1200
1600
2000
Renaissance 0.12
Test: In-Memory Database Shootout
ms, Fewer Is Better
3
MIN: 2573.72 / MAX: 2805.23
2774.4
2
MIN: 2587.84 / MAX: 2879.18
2753.3
1
MIN: 2594.56 / MAX: 2825.79
2762.2
600
1200
1800
2400
3000

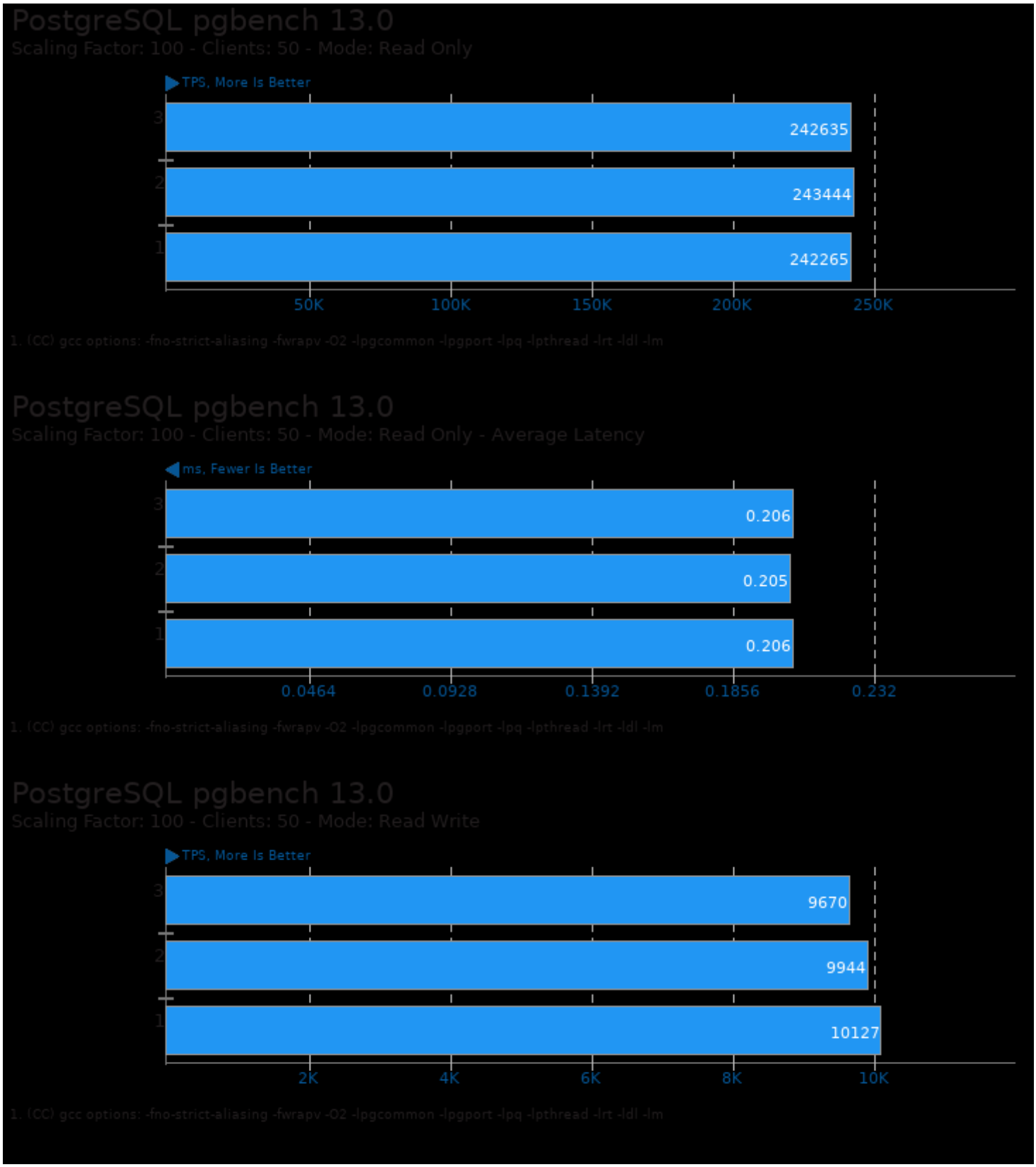

Renaissance 0.12
Test: Akka Unbalanced Cobwebbed Tree
ms, Fewer Is Better
3
MIN: 6692.47 / MAX: 8689.83
8689.8
2
MIN: 6796.97 / MAX: 8715.41
8715.4
1
MIN: 6698.45
8581.8
2K
4K
6K
8K
10K
Renaissance 0.12
Test: Genetic Algorithm Using Jenetics + Futures
ms, Fewer Is Better
3
MIN: 1391.9 / MAX: 1428.99
1411.9
2
MIN: 1400.09 / MAX: 1433.91
1418.4
1
MIN: 1421.1 / MAX: 1461.5
1438.0
300
600
900
1200
1500
YafaRay 3.5.1
Total Time For Sample Scene
Seconds, Fewer Is Better
3
150.19
2
149.91
1
150.99
30
60
90
120
150
1. (CXX) g++ options: -std=c++11 -pthread -O3 -ffast-math -rdynamic -ldl -lImath -lIlmImf -lIex -lHalf -lz -lIlmThread -lxml2 -lfreetype


PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 1 - Mode: Read Only
TPS, More Is Better
3
2
1
37024
37069
36977
8K
16K
24K
32K
40K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
3
2
1
0.027
0.027
0.027
0.0061
0.0122
0.0183
0.0244
0.0305
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 1 - Mode: Read Write
TPS, More Is Better
3
2
1
466
462
482
100
200
300
400
500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 1 - Mode: Read Write - Average Latency
ms, Fewer Is Better
3
2
1
2.146
2.162
2.074
0.4865
0.973
1.4595
1.946
2.4325
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 50 - Mode: Read Only
TPS, More Is Better
3
2
1
279302
277930
279985
60K
120K
180K
240K
300K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 50 - Mode: Read Only - Average Latency
ms, Fewer Is Better
3
2
1
0.179
0.180
0.179
0.0405
0.081
0.1215
0.162
0.2025
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

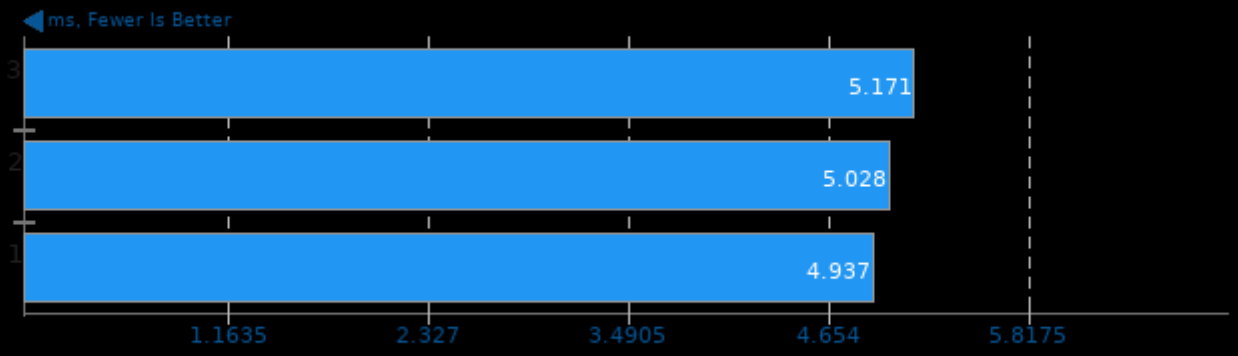

PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 50 - Mode: Read Write
TPS, More Is Better
3
2
1
496
510
525
110
220
330
440
550
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1 - Clients: 50 - Mode: Read Write - Average Latency
ms, Fewer Is Better
3
2
1
100.79
98.01
95.26
20
40
60
80
100
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Only
TPS, More Is Better
3
2
1
32195
31741
32108
7K
14K
21K
28K
35K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
3
2
1
0.031
0.032
0.031
0.0072
0.0144
0.0216
0.0288
0.036
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Write
TPS, More Is Better
3
2
1
459
458
465
100
200
300
400
500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Write - Average Latency
ms, Fewer Is Better
3
2
1
2.178
2.183
2.151
0.4912
0.9824
1.4736
1.9648
2.456
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Only
TPS, More Is Better
3
242635
2
243444
1
242265
50K
100K
150K
200K
250K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Only - Average Latency
ms, Fewer Is Better
3
0.206
2
0.205
1
0.206
0.0464
0.0928
0.1392
0.1856
0.232
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Write
TPS, More Is Better
3
9670
2
9944
1
10127
2K
4K
6K
8K
10K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 13.0

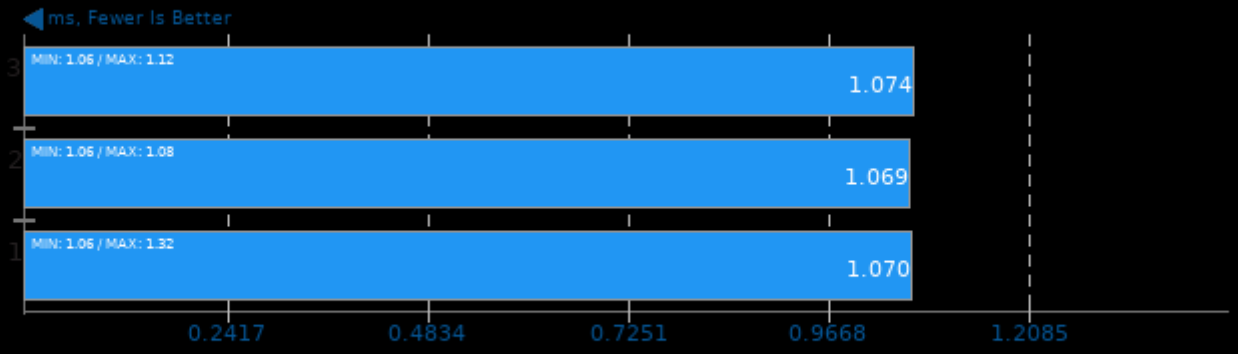
Scaling Factor: 100 - Clients: 50 - Mode: Read Write - Average Latency



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

Mobile Neural Network 1.2

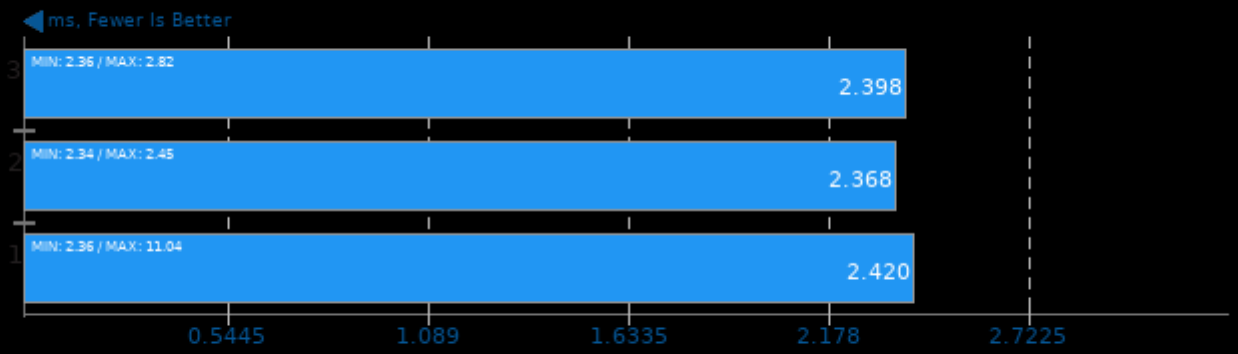
Model: mobilenetV3



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 1.2

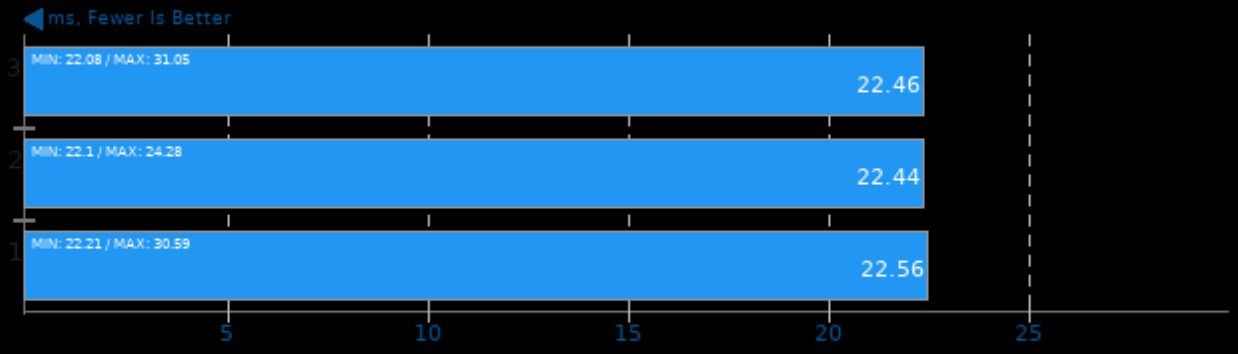
Model: squeezenetv1.1



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 1.2

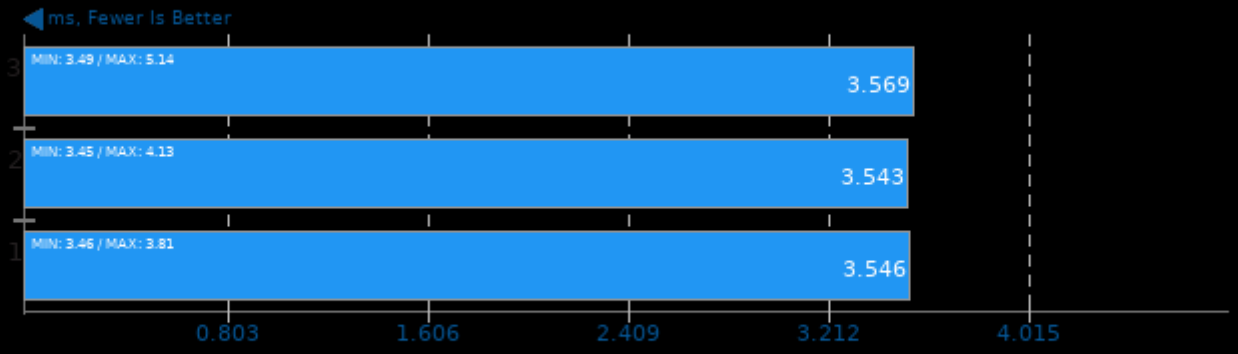
Model: resnet-v2-50



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

Mobile Neural Network 1.2

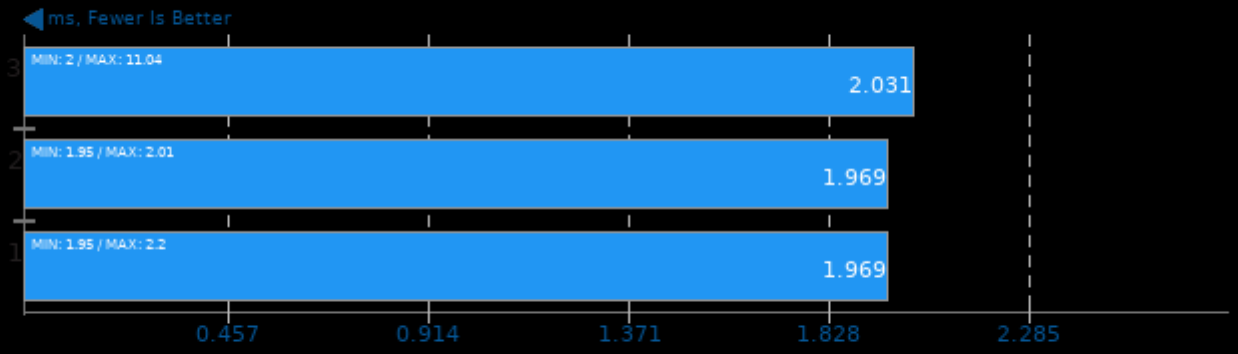
Model: SqueezeNetV1.0



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

Mobile Neural Network 1.2

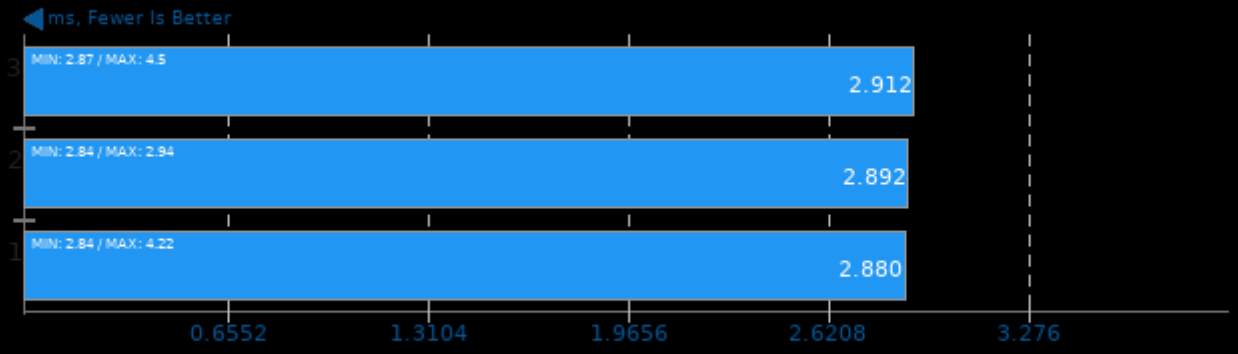
Model: MobileNetV2_224



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

Mobile Neural Network 1.2

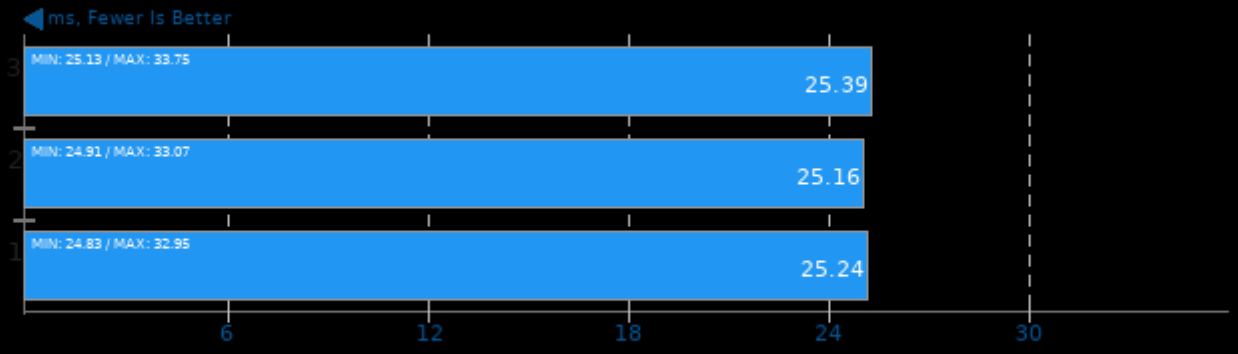
Model: mobilenet-v1-1.0



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

Mobile Neural Network 1.2

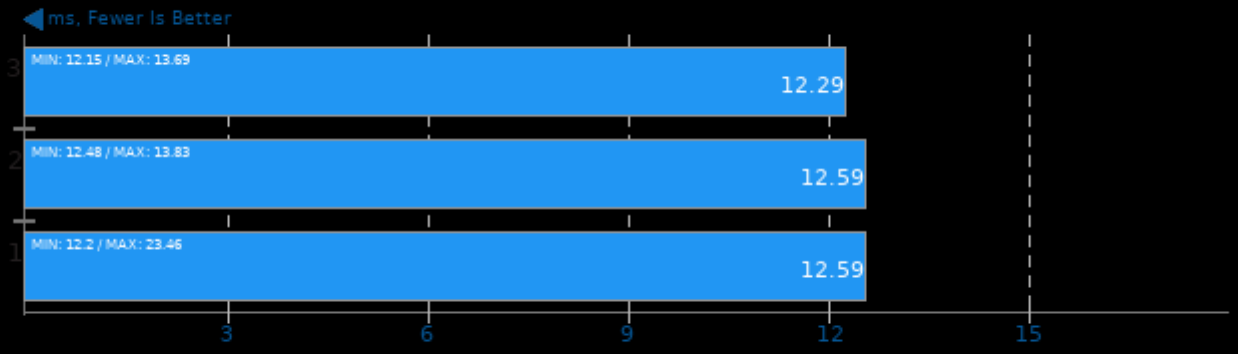
Model: inception-v3



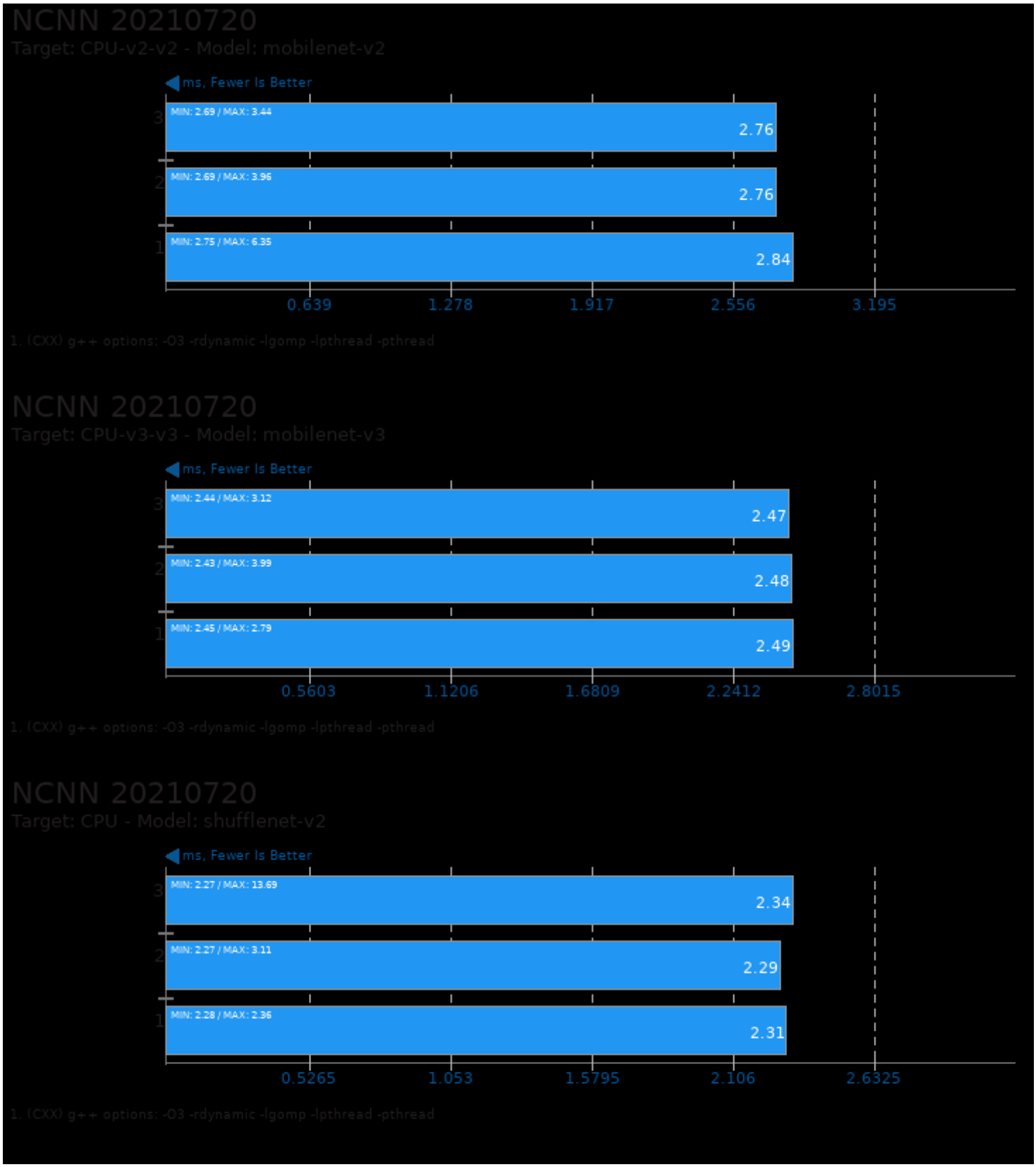
1. (CXX) g++ options: -std=c++11 -O3 -fvisibility=hidden -fomit-frame-pointer -fstrict-aliasing -ffunction-sections -fdata-sections -ffast-math -fno-rtti -fv

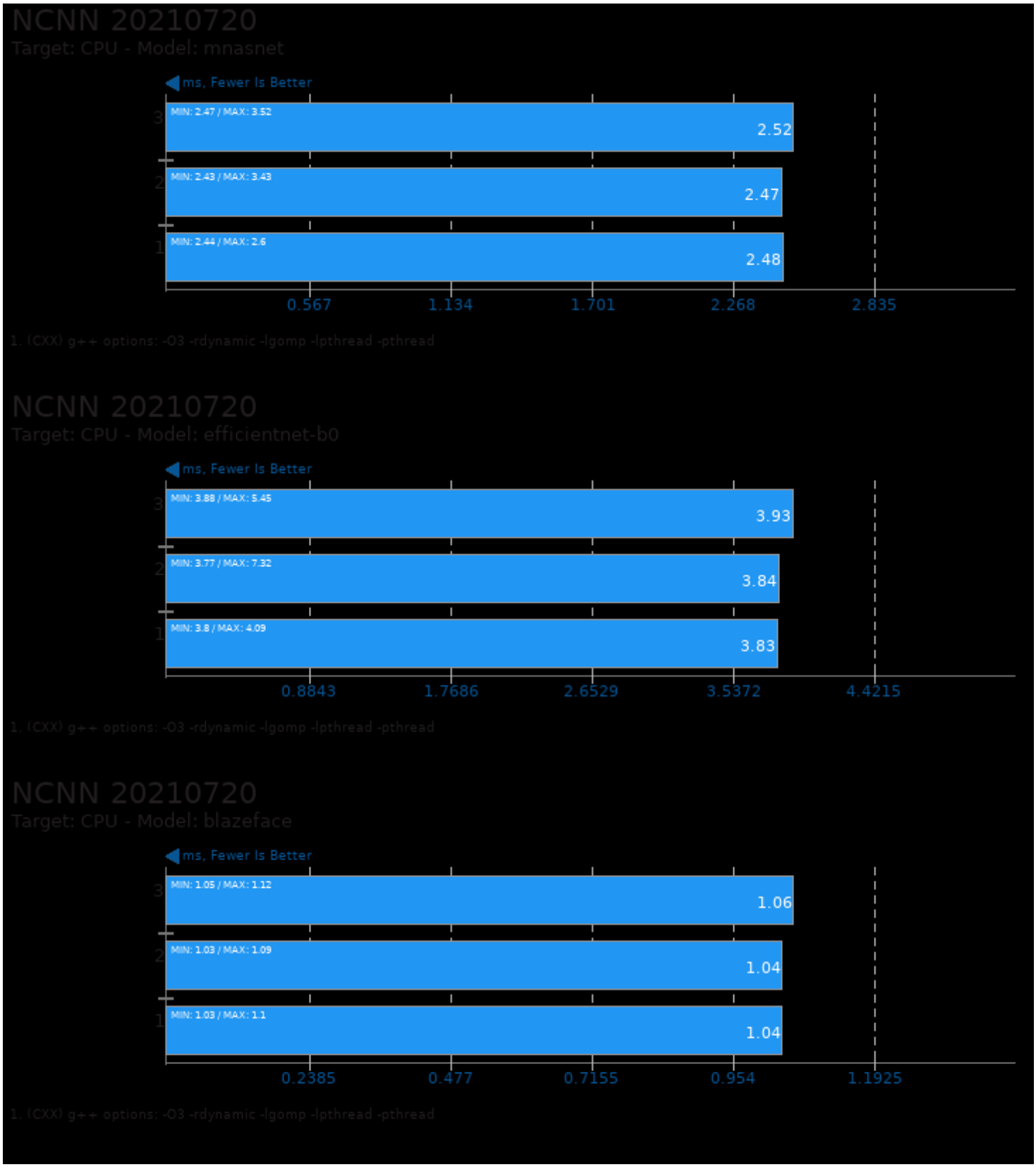
NCNN 20210720

Target: CPU - Model: mobilenet



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

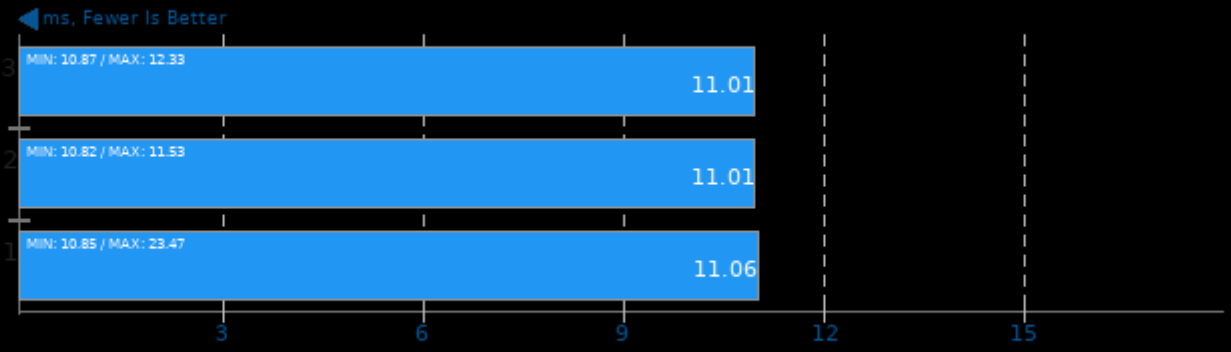

NCNN 20210720
Target: CPU-v2-v2 - Model: mobilenet-v2
ms, Fewer Is Better
MIN: 2.69 / MAX: 3.44
2.76
MIN: 2.69 / MAX: 3.96
2.76
MIN: 2.75 / MAX: 6.35
2.84
0.639
1.278
1.917
2.556
3.195
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20210720
Target: CPU-v3-v3 - Model: mobilenet-v3
ms, Fewer Is Better
MIN: 2.44 / MAX: 3.12
2.47
MIN: 2.43 / MAX: 3.99
2.48
MIN: 2.45 / MAX: 2.79
2.49
0.5603
1.1206
1.6809
2.2412
2.8015
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20210720
Target: CPU - Model: shufflenet-v2
ms, Fewer Is Better
MIN: 2.27 / MAX: 13.69
2.34
MIN: 2.27 / MAX: 3.11
2.29
MIN: 2.28 / MAX: 2.36
2.31
0.5265
1.053
1.5795
2.106
2.6325
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread


NCNN 20210720
Target: CPU - Model: mnasnet
ms, Fewer Is Better
MIN: 2.47 / MAX: 3.52
2.52
MIN: 2.43 / MAX: 3.43
2.47
MIN: 2.44 / MAX: 2.6
2.48
0.567
1.134
1.701
2.268
2.835
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20210720
Target: CPU - Model: efficientnet-b0
ms, Fewer Is Better
MIN: 3.88 / MAX: 5.45
3.93
MIN: 3.77 / MAX: 7.32
3.84
MIN: 3.8 / MAX: 4.09
3.83
0.8843
1.7686
2.6529
3.5372
4.4215
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20210720
Target: CPU - Model: blazeface
ms, Fewer Is Better
MIN: 1.05 / MAX: 1.12
1.06
MIN: 1.03 / MAX: 1.09
1.04
MIN: 1.03 / MAX: 1.1
1.04
0.2385
0.477
0.7155
0.954
1.1925
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread

5600x july

NCNN 20210720

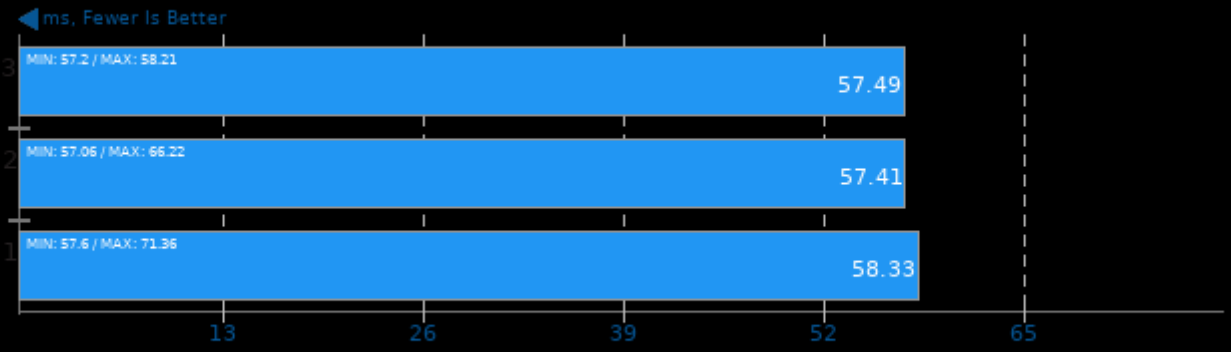
Target: CPU - Model: googlenet



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

NCNN 20210720

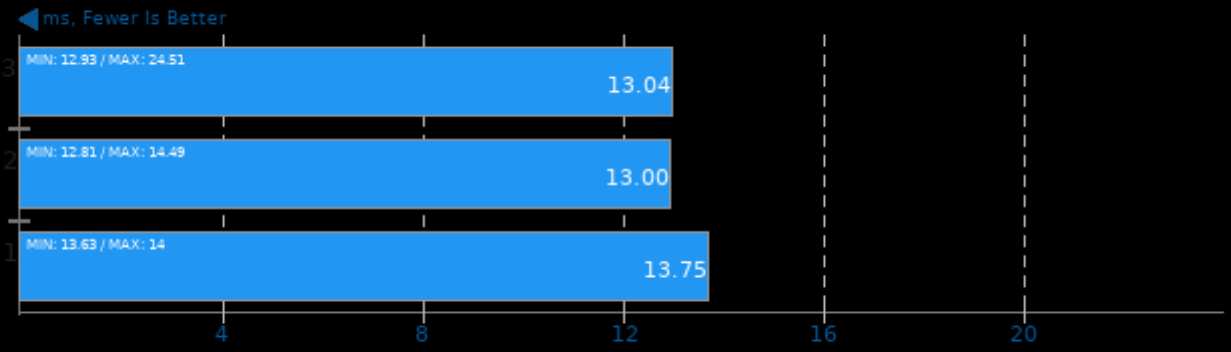
Target: CPU - Model: vgg16



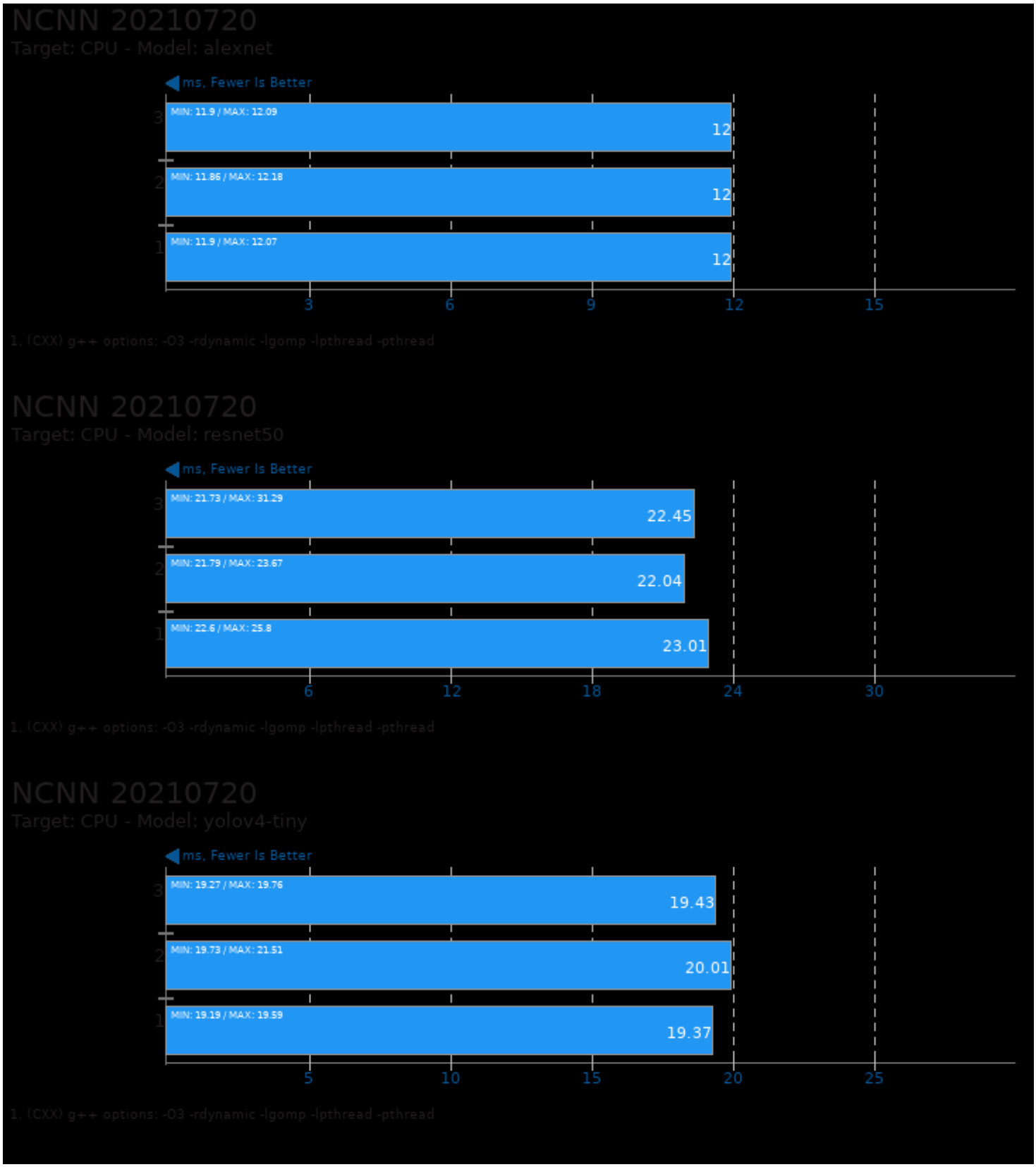
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread

NCNN 20210720

Target: CPU - Model: resnet18

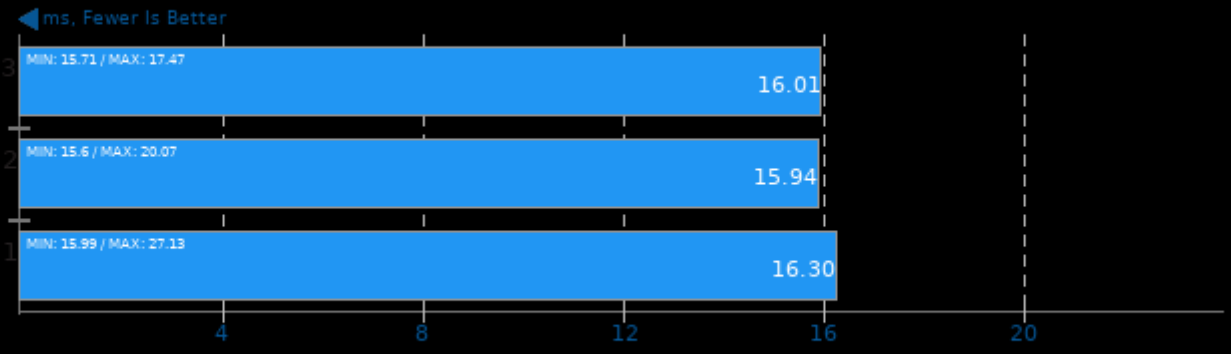


1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread


NCNN 20210720
Target: CPU - Model: alexnet
ms, Fewer Is Better
MIN: 11.9 / MAX: 12.09
12
MIN: 11.86 / MAX: 12.18
12
MIN: 11.9 / MAX: 12.07
12
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20210720
Target: CPU - Model: resnet50
ms, Fewer Is Better
MIN: 21.73 / MAX: 31.29
22.45
MIN: 21.79 / MAX: 23.67
22.04
MIN: 22.6 / MAX: 25.8
23.01
6
12
18
24
30
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread
NCNN 20210720
Target: CPU - Model: yolov4-tiny
ms, Fewer Is Better
MIN: 19.27 / MAX: 19.76
19.43
MIN: 19.73 / MAX: 21.51
20.01
MIN: 19.19 / MAX: 19.59
19.37
5
10
15
20
25
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread -pthread

NCNN 20210720

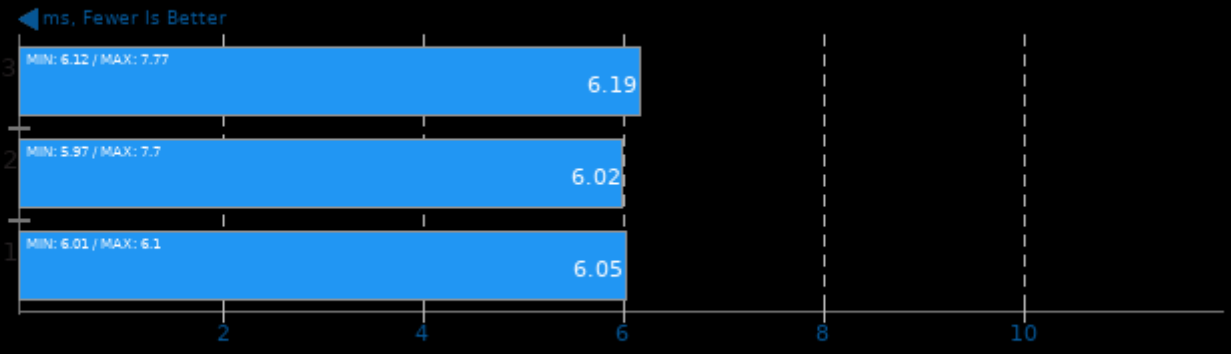
Target: CPU - Model: squeezenet_ssd



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

NCNN 20210720

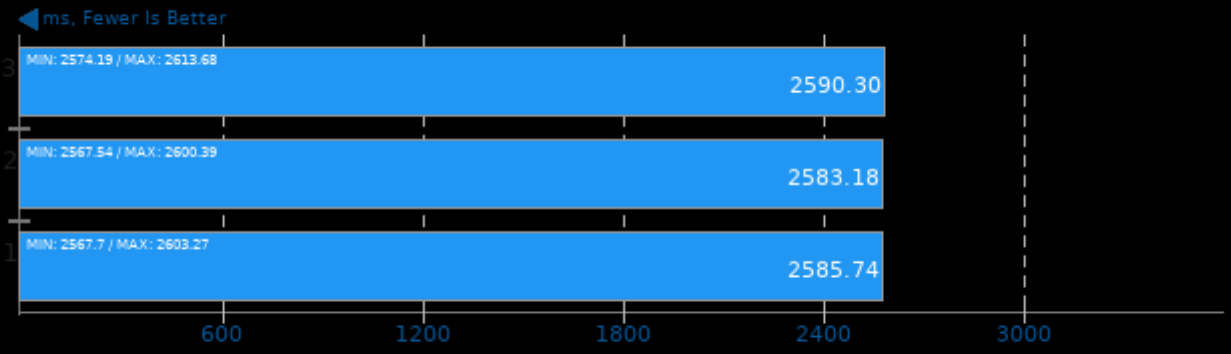
Target: CPU - Model: regnety_400m



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

TNN 0.3

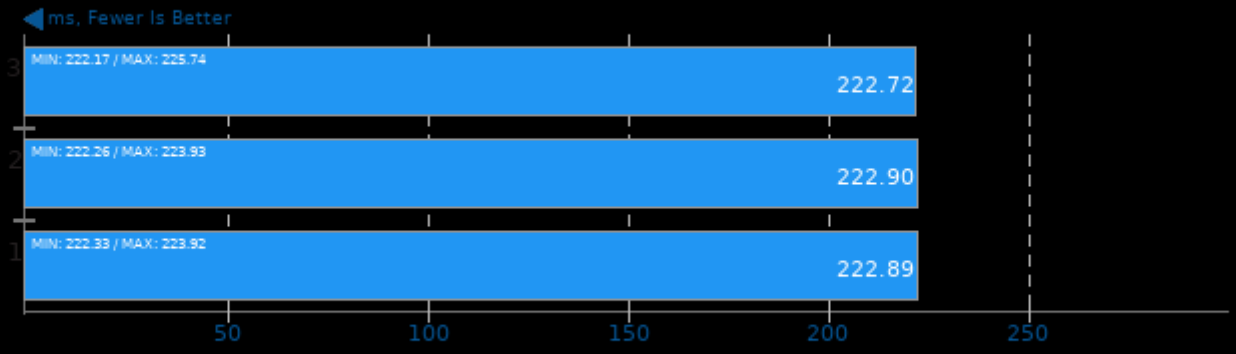
Target: CPU - Model: DenseNet



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

TNN 0.3

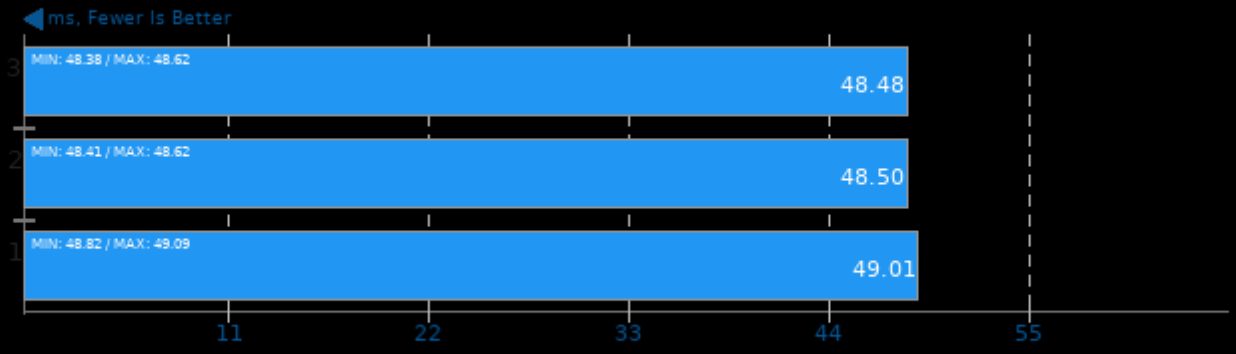
Target: CPU - Model: MobileNet v2



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

TNN 0.3

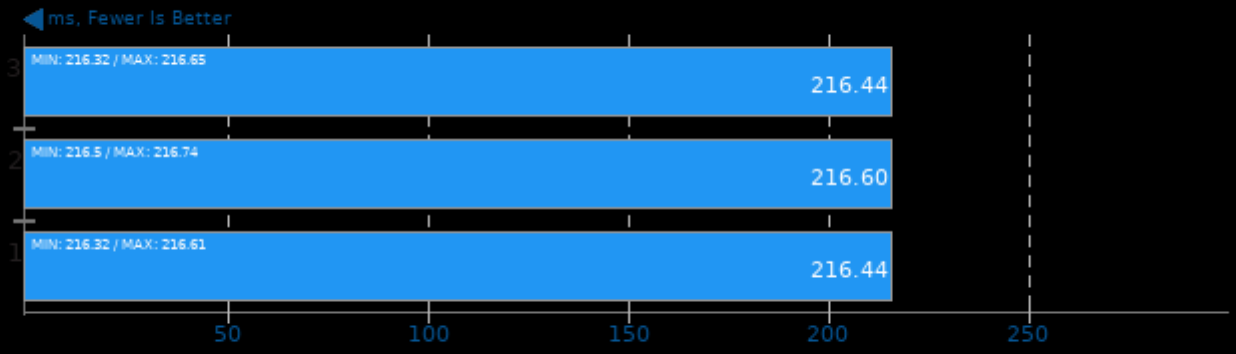
Target: CPU - Model: SqueezeNet v2



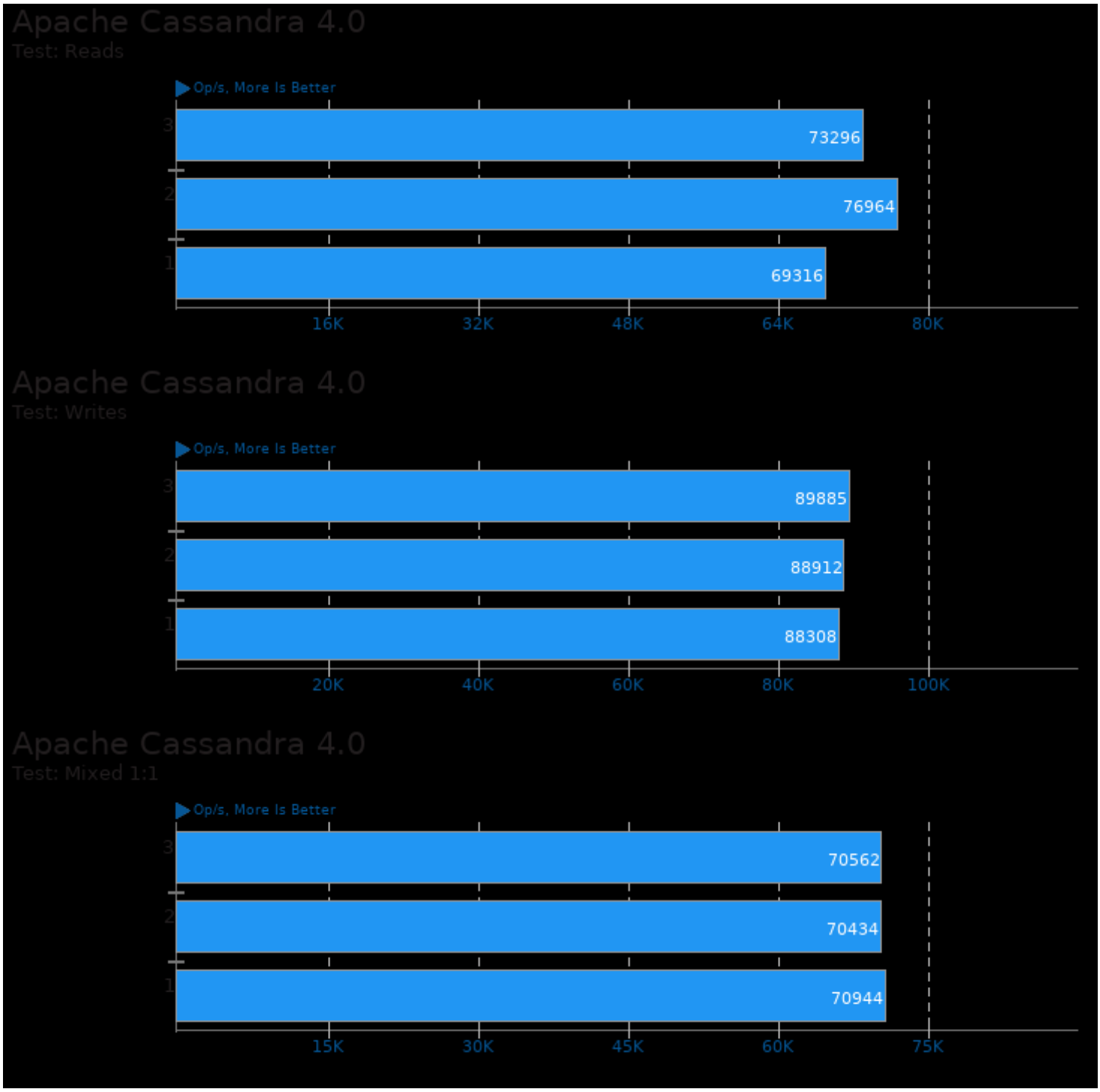
1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -fvisibility=default -O3 -rdynamic -ldl

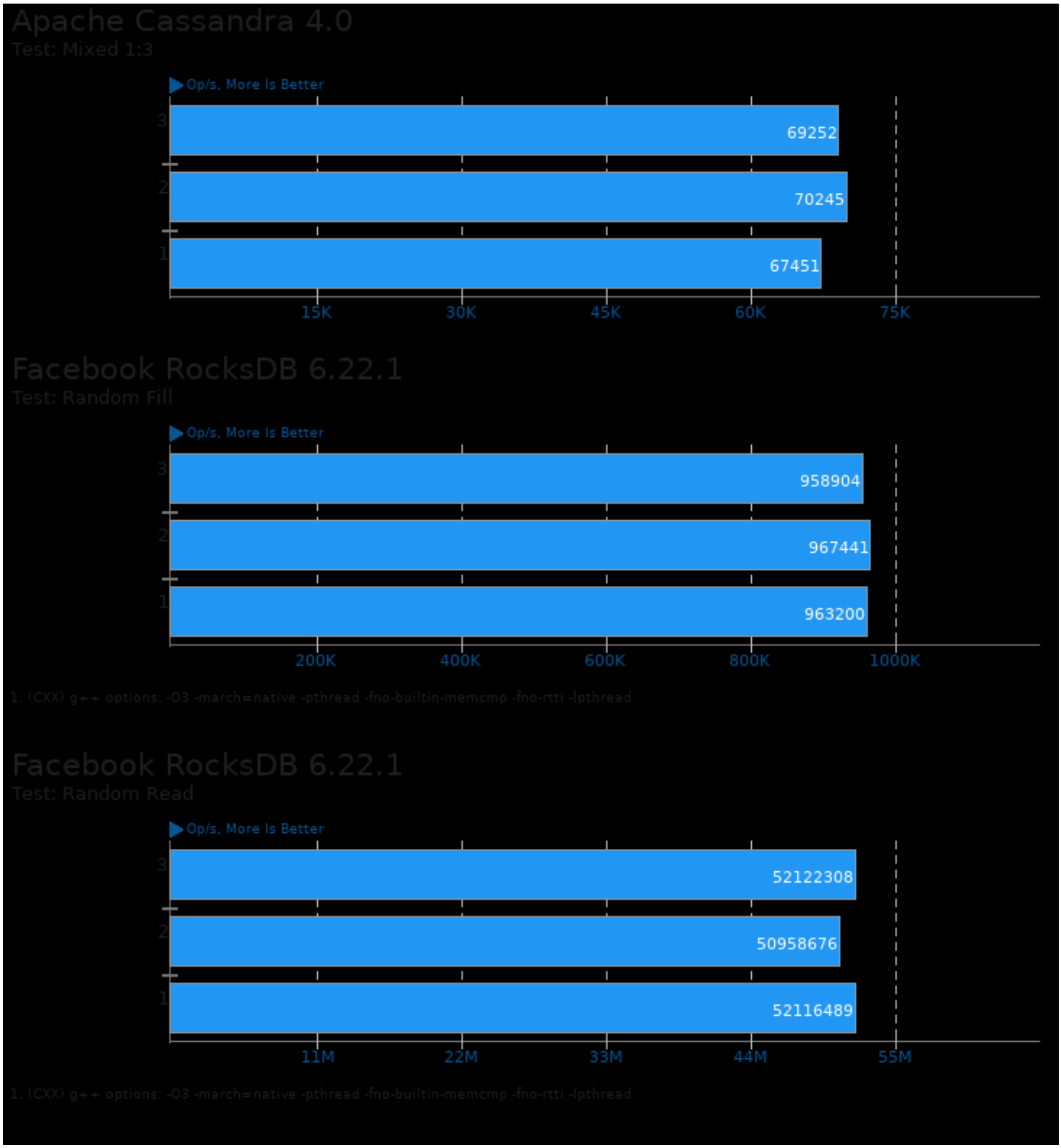
TNN 0.3

Target: CPU - Model: SqueezeNet v1.1



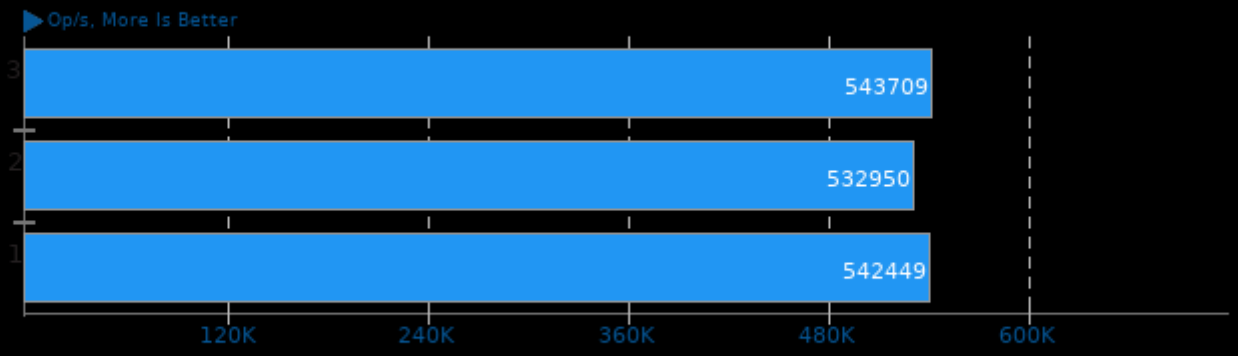
1. (CXX) g++ options: -fopenmp -pthread -fvisibility=hidden -fvisibility=default -O3 -rdynamic -ldl


Apache Cassandra 4.0
Test: Reads
Op/s, More Is Better
3
2
1
73296
76964
69316
16K
32K
48K
64K
80K
Apache Cassandra 4.0
Test: Writes
Op/s, More Is Better
3
2
1
89885
88912
88308
20K
40K
60K
80K
100K
Apache Cassandra 4.0
Test: Mixed 1:1
Op/s, More Is Better
3
2
1
70562
70434
70944
15K
30K
45K
60K
75K


Apache Cassandra 4.0
Test: Mixed 1:3
Op/s, More Is Better
3
69252
2
70245
1
67451
15K
30K
45K
60K
75K
Facebook RocksDB 6.22.1
Test: Random Fill
Op/s, More Is Better
3
958904
2
967441
1
963200
200K
400K
600K
800K
1000K
1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread
Facebook RocksDB 6.22.1
Test: Random Read
Op/s, More Is Better
3
52122308
2
50958676
1
52116489
11M
22M
33M
44M
55M
1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread

Facebook RocksDB 6.22.1

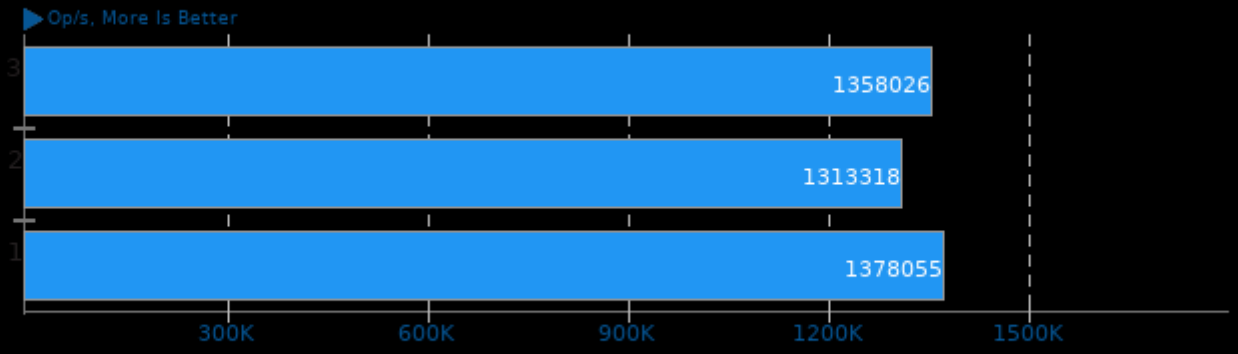
Test: Update Random



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

Facebook RocksDB 6.22.1

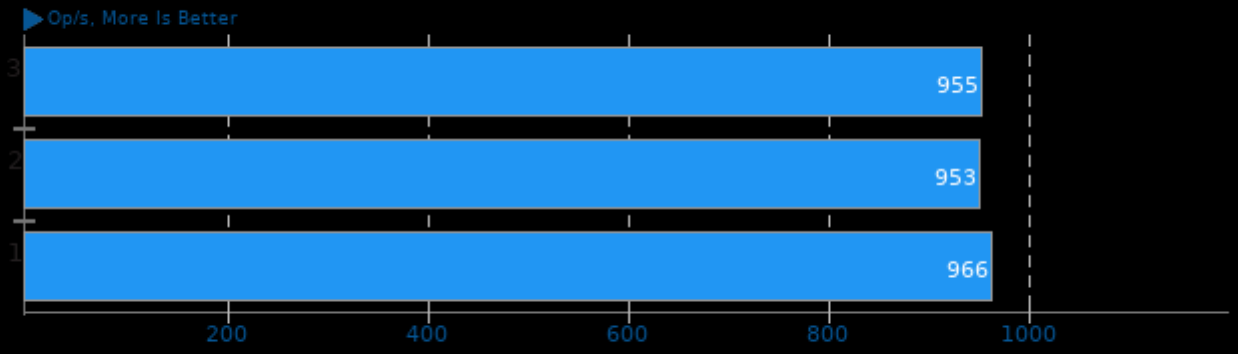
Test: Sequential Fill



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

Facebook RocksDB 6.22.1

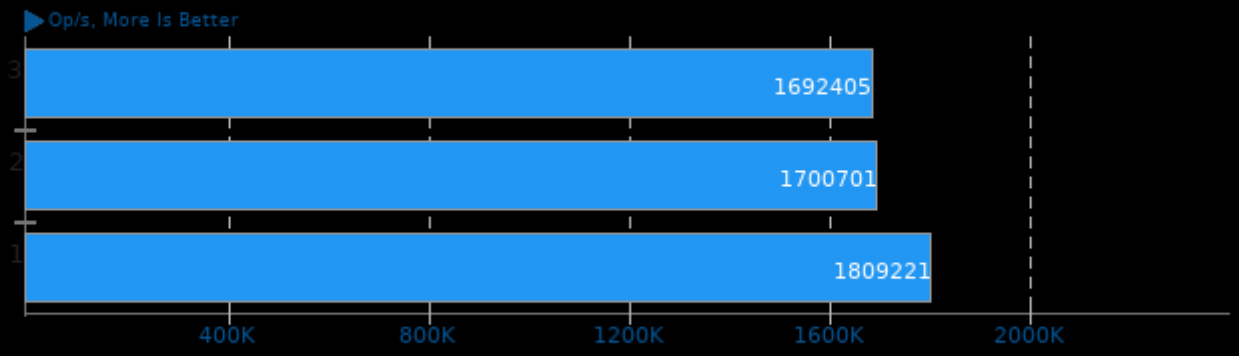
Test: Random Fill Sync



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

Facebook RocksDB 6.22.1

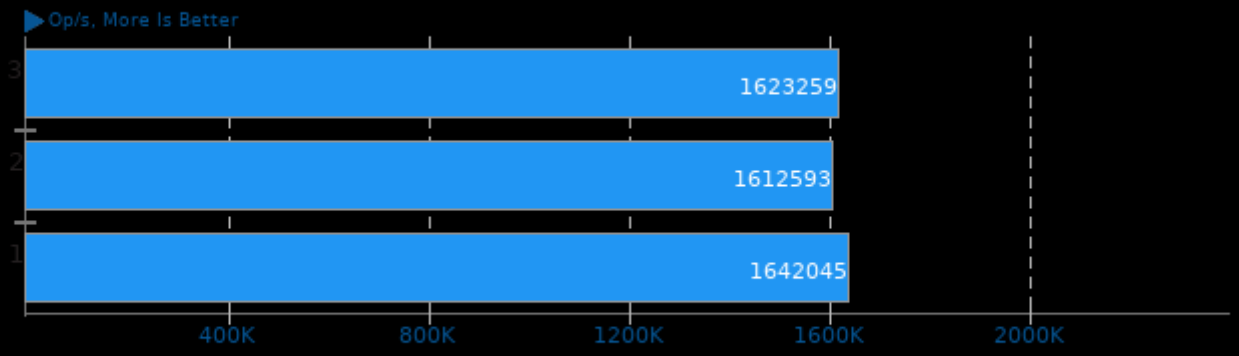
Test: Read While Writing



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

Facebook RocksDB 6.22.1

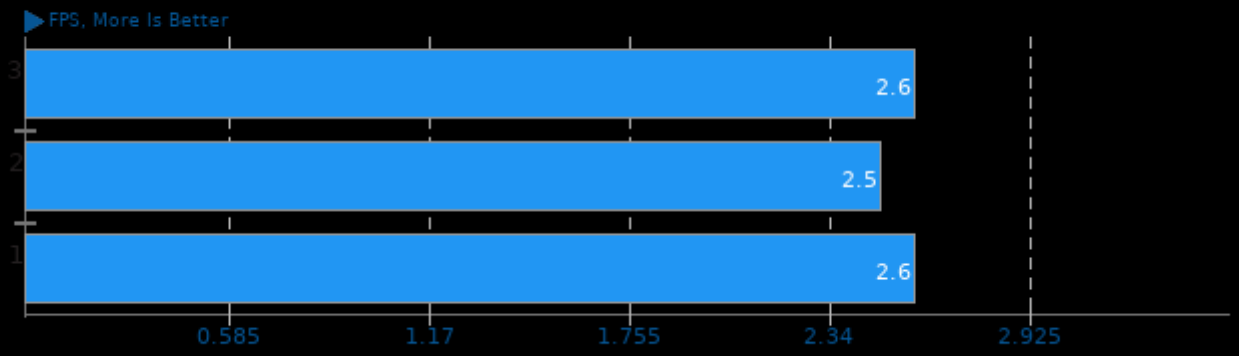
Test: Read Random Write Random

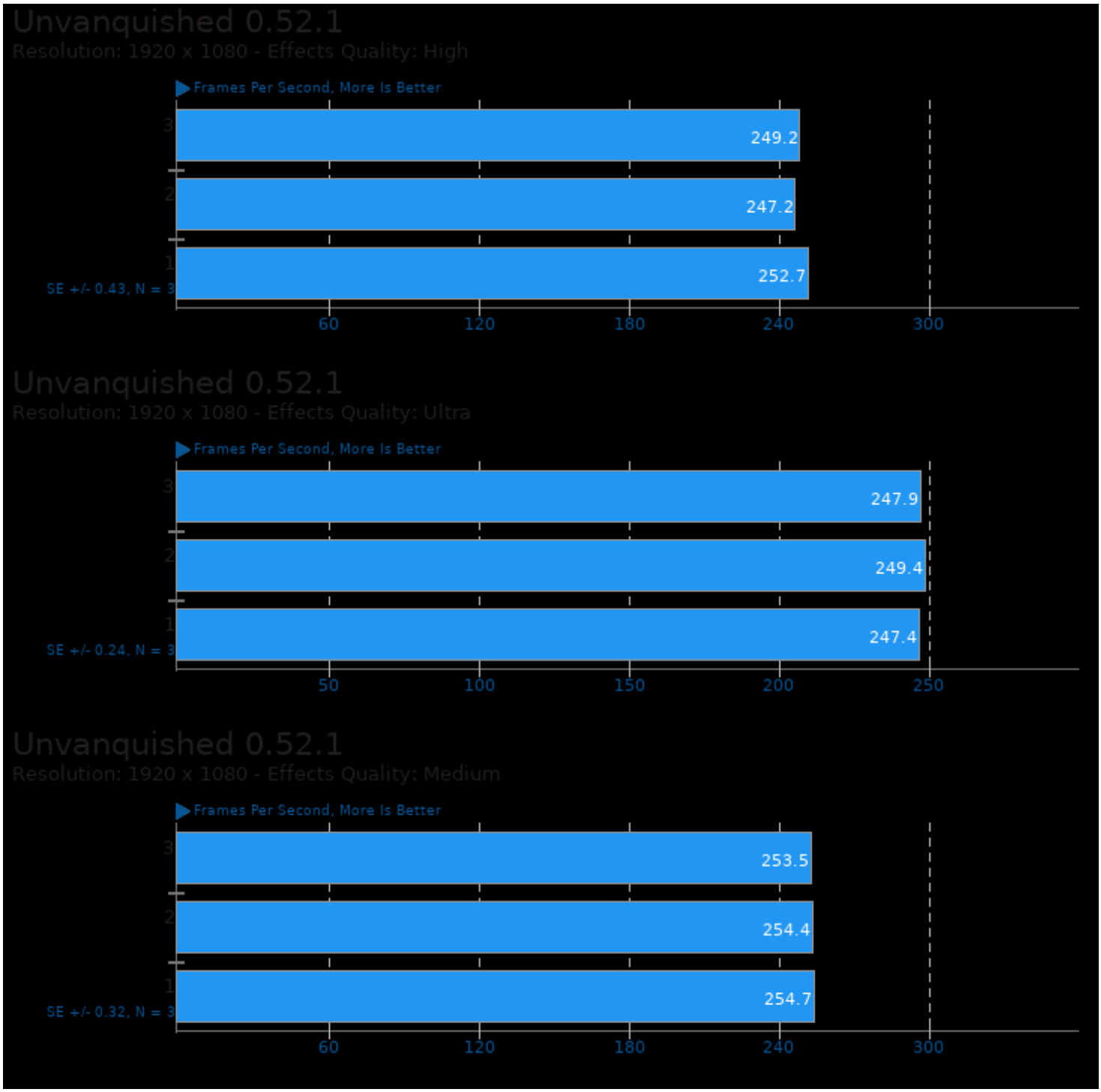


1. (CXX) g++ options: -O3 -march=native -pthread -fno-builtin-memcmp -fno-rtti -lpthread

Natron 2.4

Input: Spaceship




Unvanquished 0.52.1
Resolution: 1920 x 1080 - Effects Quality: High
Frames Per Second, More Is Better
3
2
1
249.2
247.2
252.7
SE +/- 0.43, N = 3
60
120
180
240
300
Unvanquished 0.52.1
Resolution: 1920 x 1080 - Effects Quality: Ultra
Frames Per Second, More Is Better
3
2
1
247.9
249.4
247.4
SE +/- 0.24, N = 3
50
100
150
200
250
Unvanquished 0.52.1
Resolution: 1920 x 1080 - Effects Quality: Medium
Frames Per Second, More Is Better
3
2
1
253.5
254.4
254.7
SE +/- 0.32, N = 3
60
120
180
240
300

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



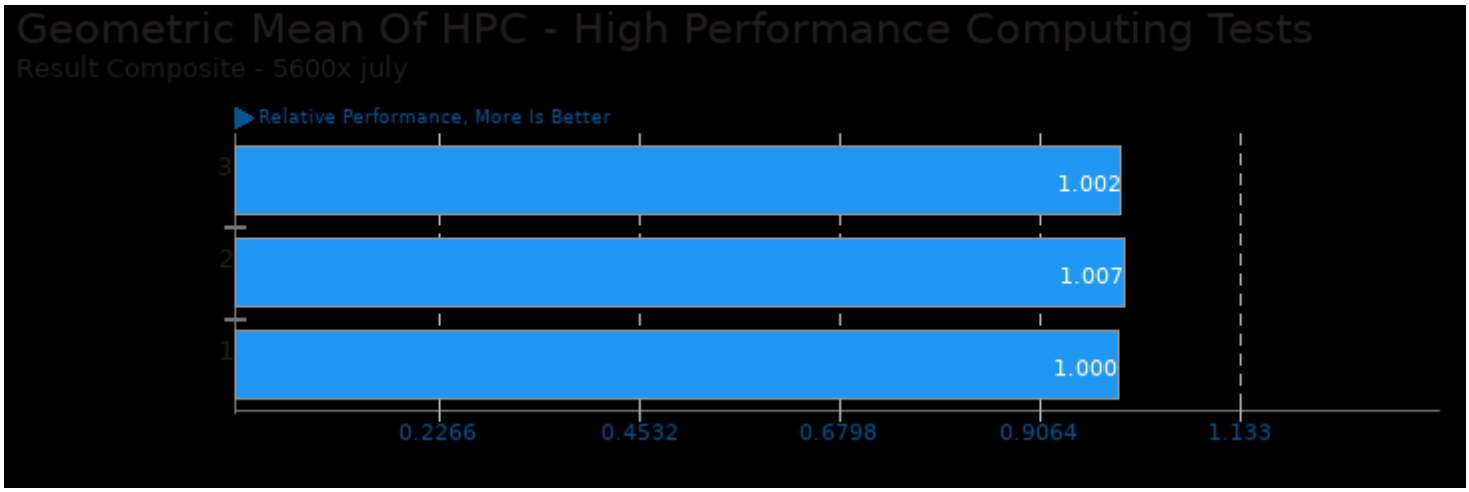
Geometric mean based upon tests: pts/pgbench and pts/renaissance



Geometric mean based upon tests: pts/yafaray and pts/natron



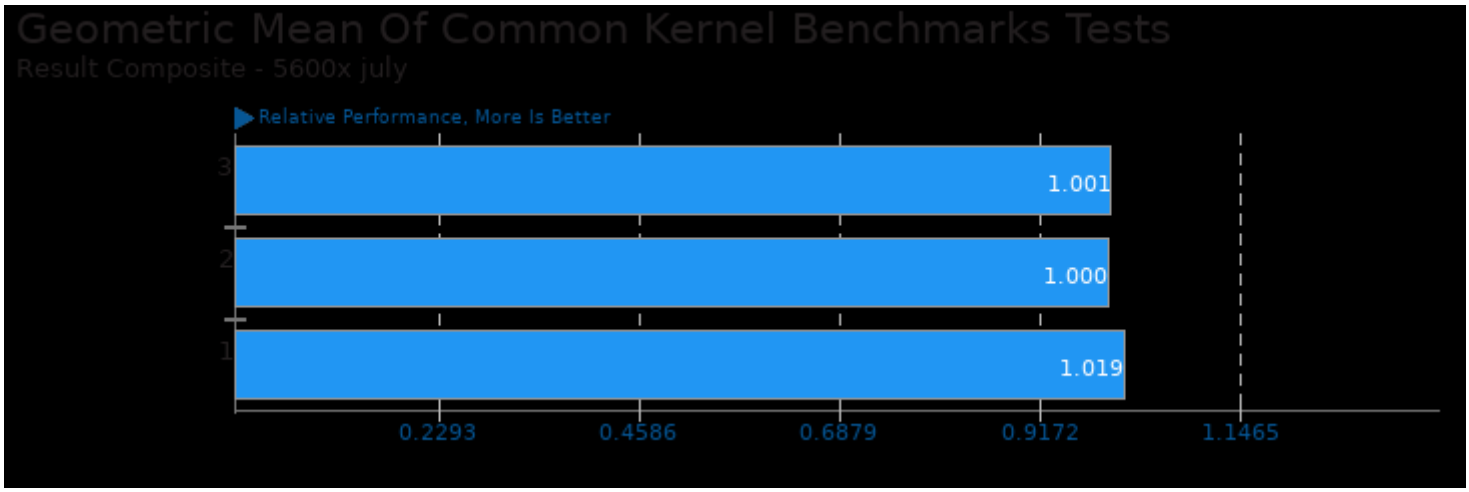
Geometric mean based upon tests: pts/rocksdb, pts/cassandra and pts/pgbench



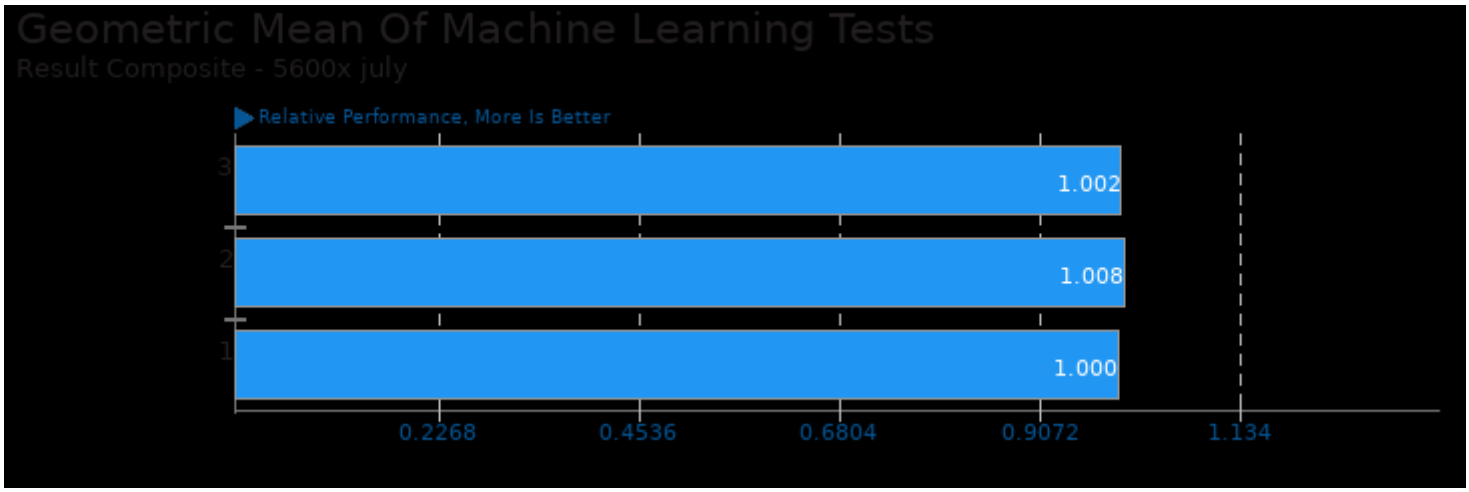
Geometric mean based upon tests: pts/qe, pts/mnn, pts/ncnn and pts/tnn



Geometric mean based upon tests: pts/renaissance and pts/cassandra



Geometric mean based upon tests: pts/pgbench and pts/rocksdb



Geometric mean based upon tests: pts/mnn, pts/ncnn and pts/tnn



Geometric mean based upon tests: pts/yafaray, pts/natron, pts/cassandra and pts/pgbench



Geometric mean based upon tests: pts/yafaray and pts/natron

5600x july



Geometric mean based upon tests: pts/pgbench, pts/cassandra and pts/rocksdb

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 09:04.