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2700 blend

AMD Ryzen 7 2700 Eight-Core testing with a Gigabyte AB350N-Gaming WIFI-CF (F20 BIOS) and HIS AMD Radeon HD 6450/7450/8450 / R5 230 OEM 1GB on Ubuntu 19.10 via the Phoronix Test Suite.

Automated Executive Summary

B had the most wins, coming in first place for 30% of the tests.

Based on the geometric mean of all complete results, the fastest (C) was 1.238x the speed of the slowest (A). D was 0.839x the speed of C, B was 0.991x the speed of D, A was 0.971x the speed of B.

Test Systems:

A

B

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C

D

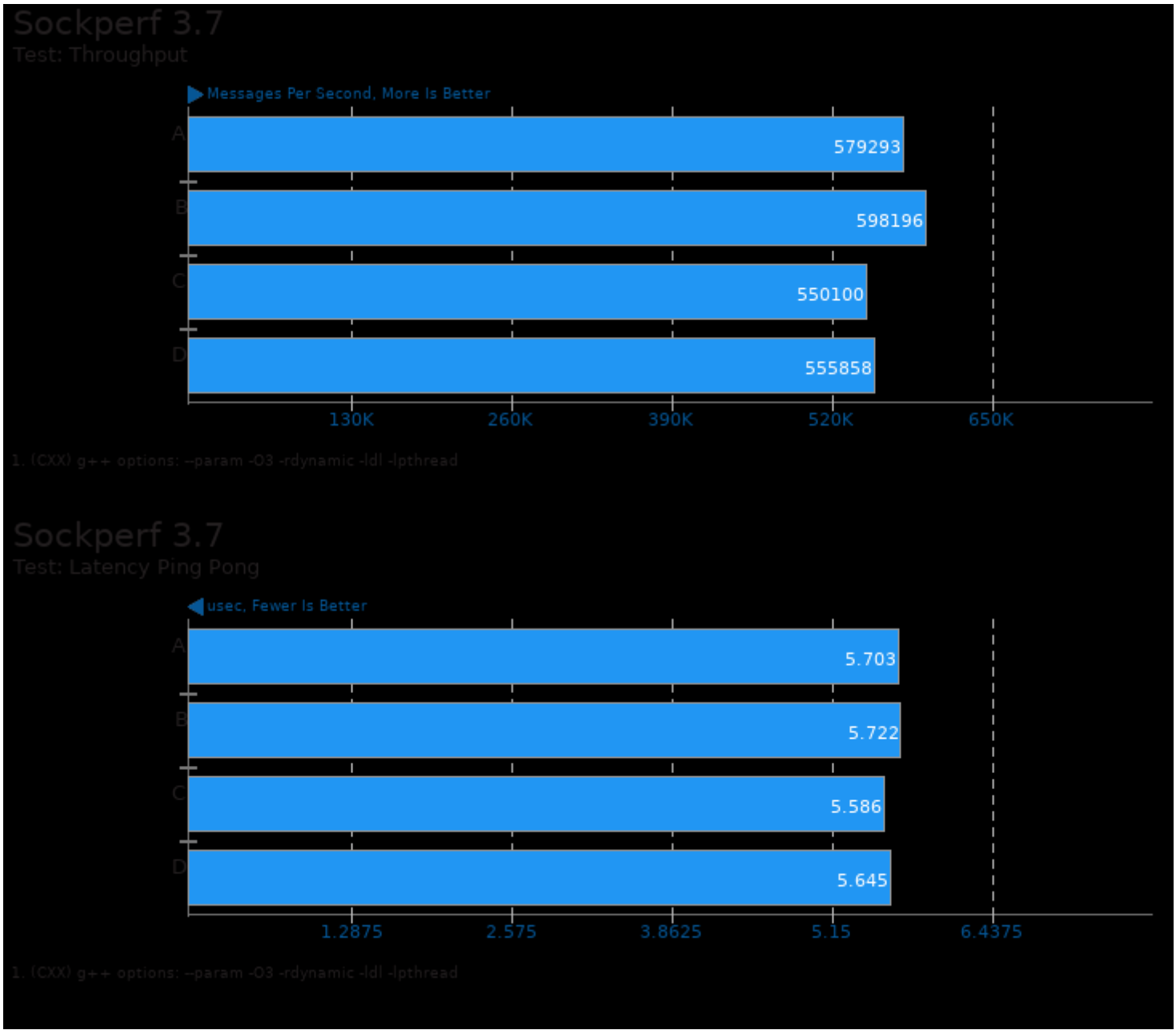
Processor: AMD Ryzen 7 2700 Eight-Core @ 3.20GHz (8 Cores / 16 Threads), Motherboard: Gigabyte AB350N-Gaming WIFI-CF (F20 BIOS), Chipset: AMD 17h, Memory: 16GB, Disk: 120GB ADATA SU700, Graphics: HIS AMD Radeon HD 6450/7450/8450 / R5 230 OEM 1GB, Audio: AMD Caicos HDMI Audio, Monitor: DELL S2409W, Network: Realtek RTL8111/8168/8411 + Intel 3165

OS: Ubuntu 19.10, Kernel: 5.9.0-050900rc7daily20201004-generic (x86_64) 20201003, Desktop: GNOME Shell 3.34.1, Display Server: X Server 1.20.5, OpenGL: 3.3 Mesa 19.2.8 (LLVM 9.0.0), Compiler: GCC 9.2.1 20191008, File-System: ext4, Screen Resolution: 1920x1080

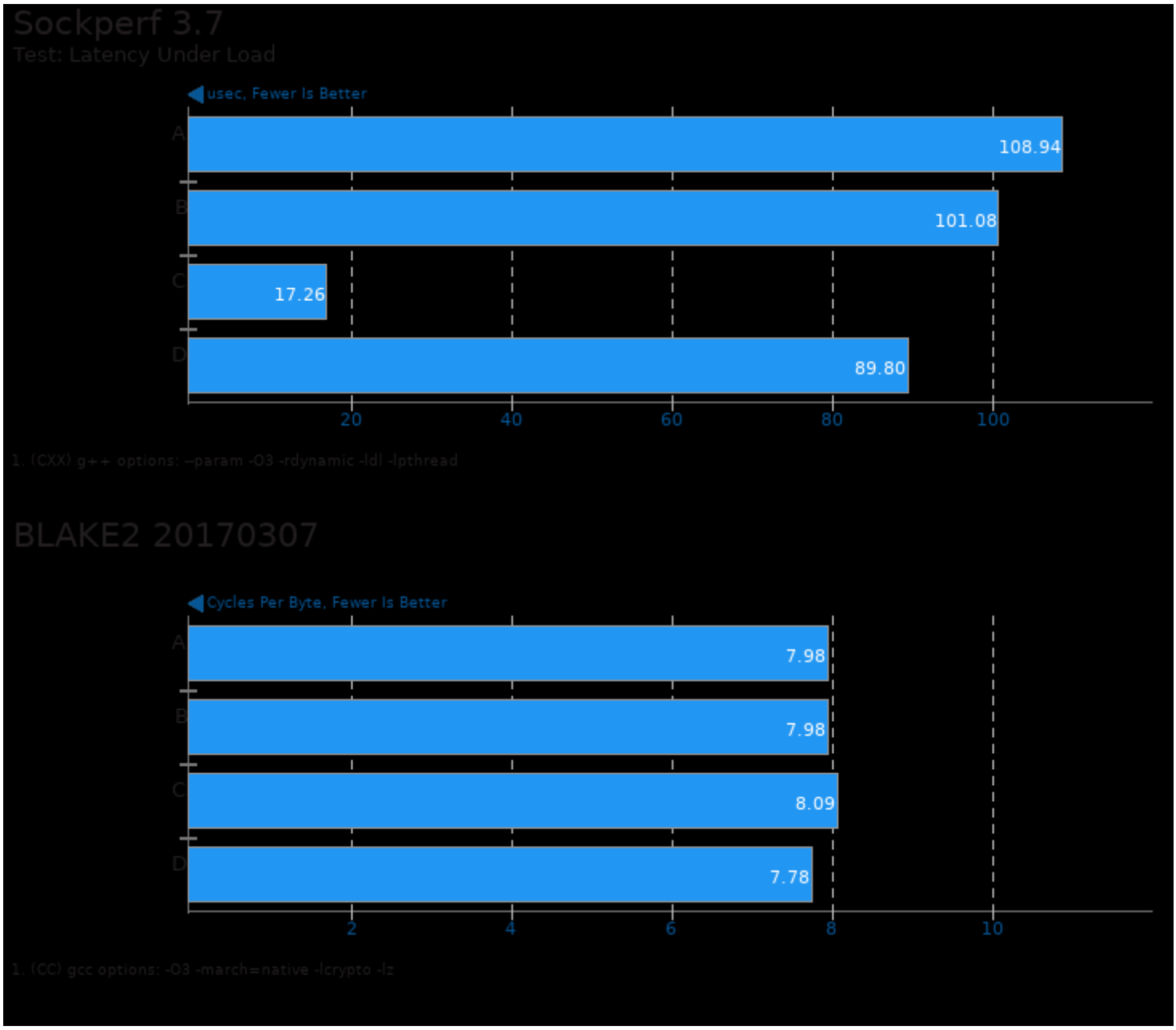
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-offload-targets=nvptx-none,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: 0x800820b
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 STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	A	B	C	D
Sockperf - Throughput	579293	**598196**	**550100**	555858
Normalized	96.84%	100%	91.96%	92.92%
Sockperf - Latency Ping Pong (usec)	5.703	**5.722**	**5.586**	5.645
Normalized	97.95%	97.62%	100%	98.95%
Sockperf - Latency Under Load (usec)	**108.938**	101.077	**17.255**	89.8
Normalized	15.84%	17.07%	100%	19.21%
BLAKE2 (Cycles/Byte)	7.98	7.98	**8.09**	**7.78**
Normalized	97.49%	97.49%	96.17%	100%
7-Zip Compression - Compression Rating (MIPS)	**39039**	**45252**	44982	45060
Normalized	86.27%	100%	99.4%	99.58%
7-Zip Compression - D.R (MIPS)	45153	**45828**	**44929**	45611
Normalized	98.53%	100%	98.04%	99.53%
Blender - BMW27 - CPU-Only (sec)	**195.97**	195.4	195.76	**195.02**
Normalized	99.52%	99.81%	99.62%	100%
Blender - Classroom - CPU-Only (sec)	**545.07**	546.89	**550.65**	545.96
Normalized	100%	99.67%	98.99%	99.84%
Blender - Fishy Cat - CPU-Only (sec)	**281.45**	281.61	**281.98**	281.46
Normalized	100%	99.94%	99.81%	100%
Blender - Pabellon Barcelona - CPU-Only (sec)	**685.3**		681.02	**680.91**
Normalized	99.36%		99.98%	100%

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Sockperf 3.7
Test: Throughput
Messages Per Second, More Is Better
A
B
C
D
579293
598196
550100
555858
130K
260K
390K
520K
650K
1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread
Sockperf 3.7
Test: Latency Ping Pong
usec, Fewer Is Better
A
B
C
D
5.703
5.722
5.586
5.645
1.2875
2.575
3.8625
5.15
6.4375
1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread

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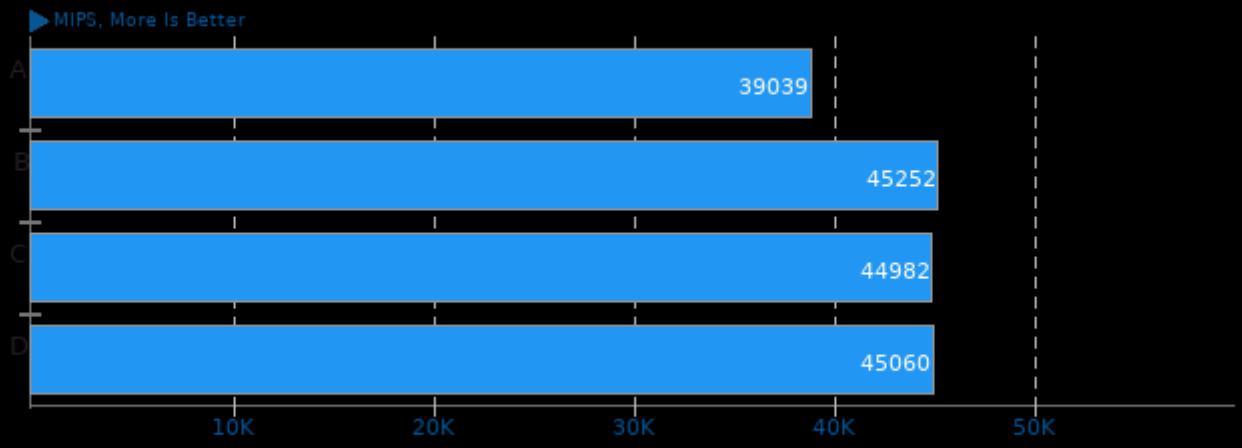

Sockperf 3.7
Test: Latency Under Load
usec, Fewer Is Better
A
B
C
D
108.94
101.08
17.26
89.80
20
40
60
80
100
1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread

BLAKE2 20170307
Cycles Per Byte, Fewer Is Better
A
B
C
D
7.98
7.98
8.09
7.78
2
4
6
8
10
1. (CC) gcc options: -O3 -march=native -lcrypto -lz

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7-Zip Compression 21.06

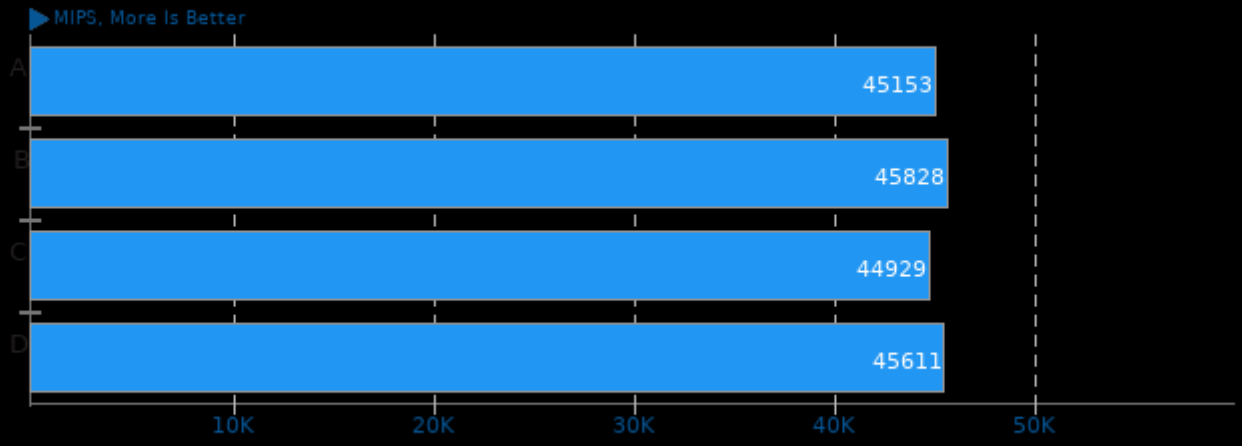
Test: Compression Rating



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

7-Zip Compression 21.06

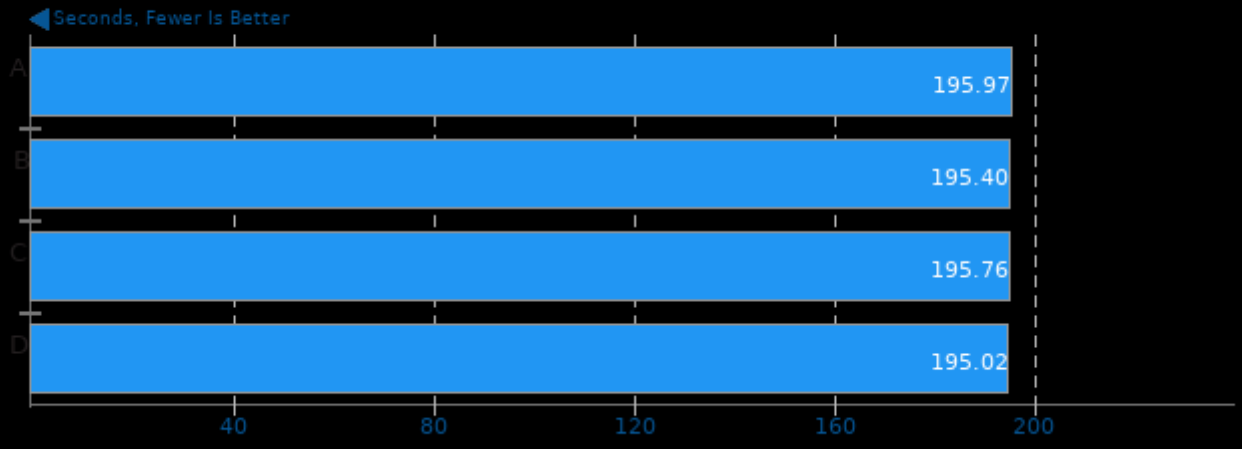
Test: Decompression Rating



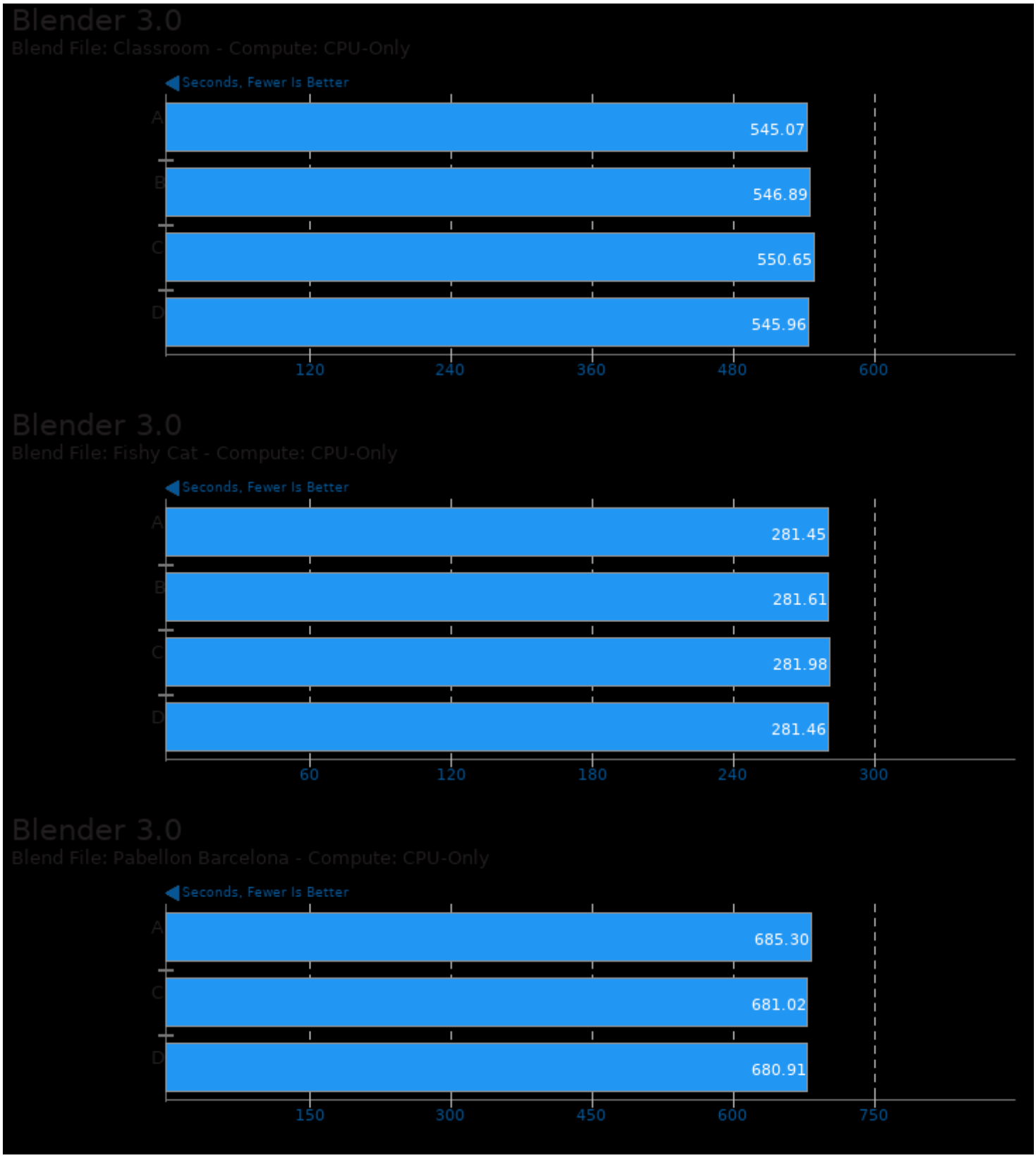
1. (CXX) g++ options: -lpthread -ldl -O2 -fPIC

Blender 3.0

Blend File: BMW27 - Compute: CPU-Only

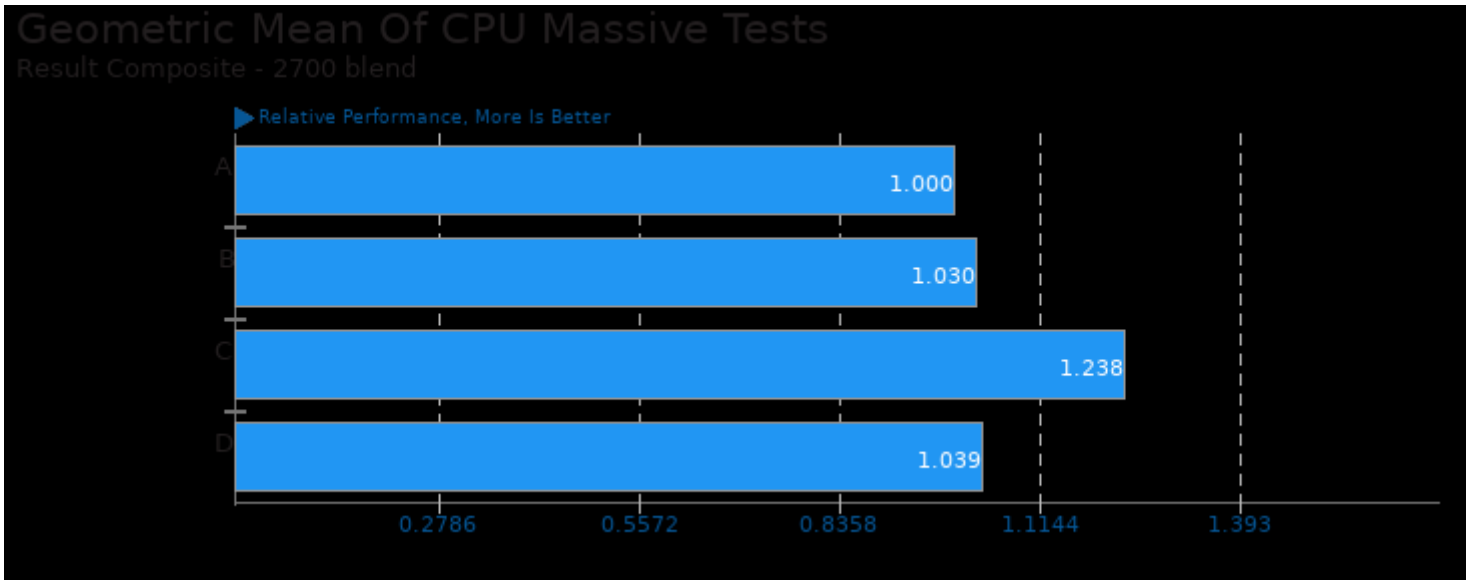


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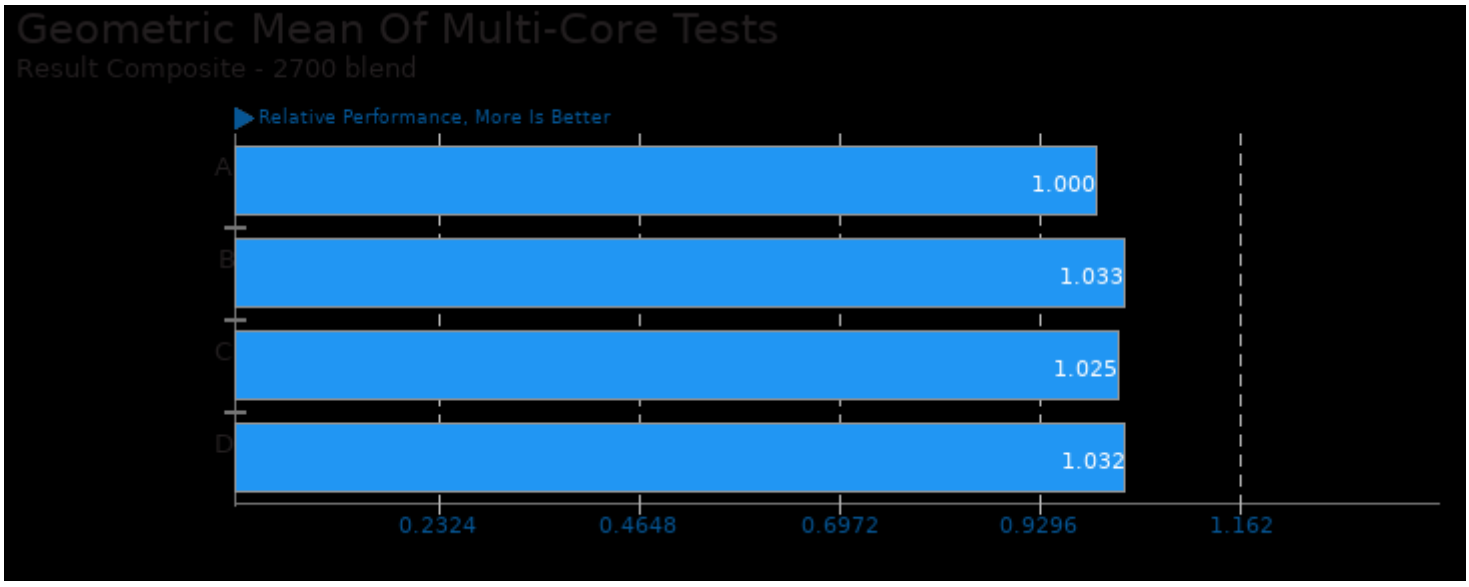

Blender 3.0
Blend File: Classroom - Compute: CPU-Only
Seconds, Fewer Is Better
A
B
C
D
545.07
546.89
550.65
545.96
120
240
360
480
600
Blender 3.0
Blend File: Fishy Cat - Compute: CPU-Only
Seconds, Fewer Is Better
A
B
C
D
281.45
281.61
281.98
281.46
60
120
180
240
300
Blender 3.0
Blend File: Pabellon Barcelona - Compute: CPU-Only
Seconds, Fewer Is Better
A
C
D
685.30
681.02
680.91
150
300
450
600
750

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

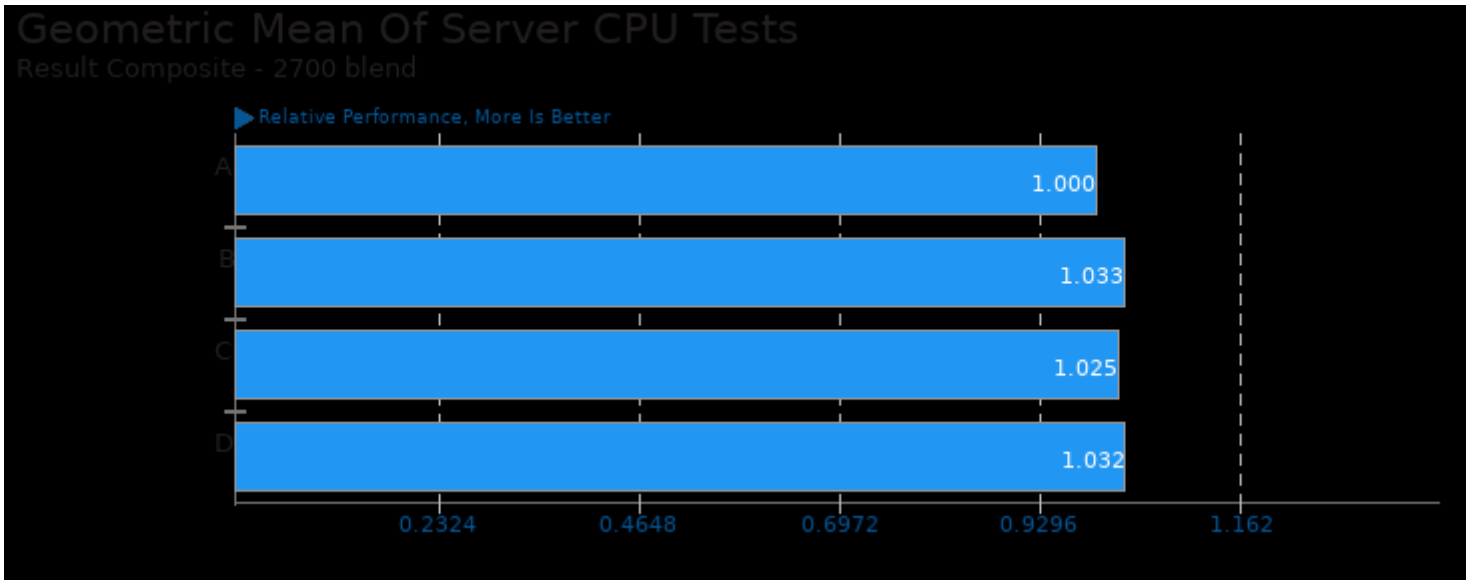


Geometric mean based upon tests: pts/blake2, pts/compress-7zip, pts/sockperf and pts/blender



Geometric mean based upon tests: pts/blender and pts/compress-7zip

2700 blend



Geometric mean based upon tests: pts/compress-7zip and pts/blender

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 06:52.