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5600X Aug

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

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

Based on the geometric mean of all complete results, the fastest (2) was 1.007x the speed of the slowest (1). 3 was 0.995x the speed of 2 and 1 was 0.999x the speed of 3.

Test Systems:

1

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: LG

Ultra HD, 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: 3840x2160

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
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

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: LG Ultra HD, Network: Realtek RTL8125 2.5GbE + Intel Wi-Fi 6 AX200

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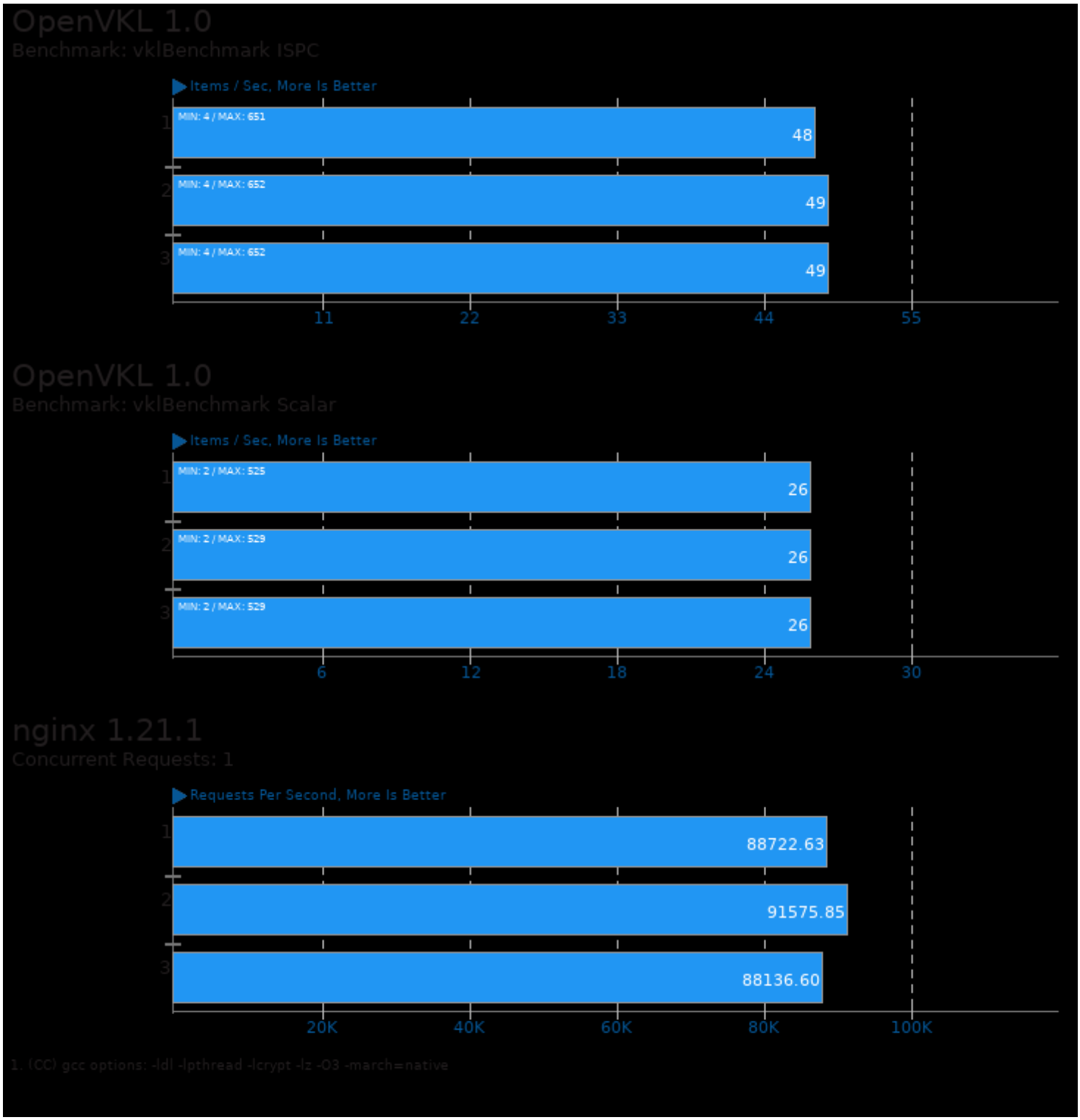
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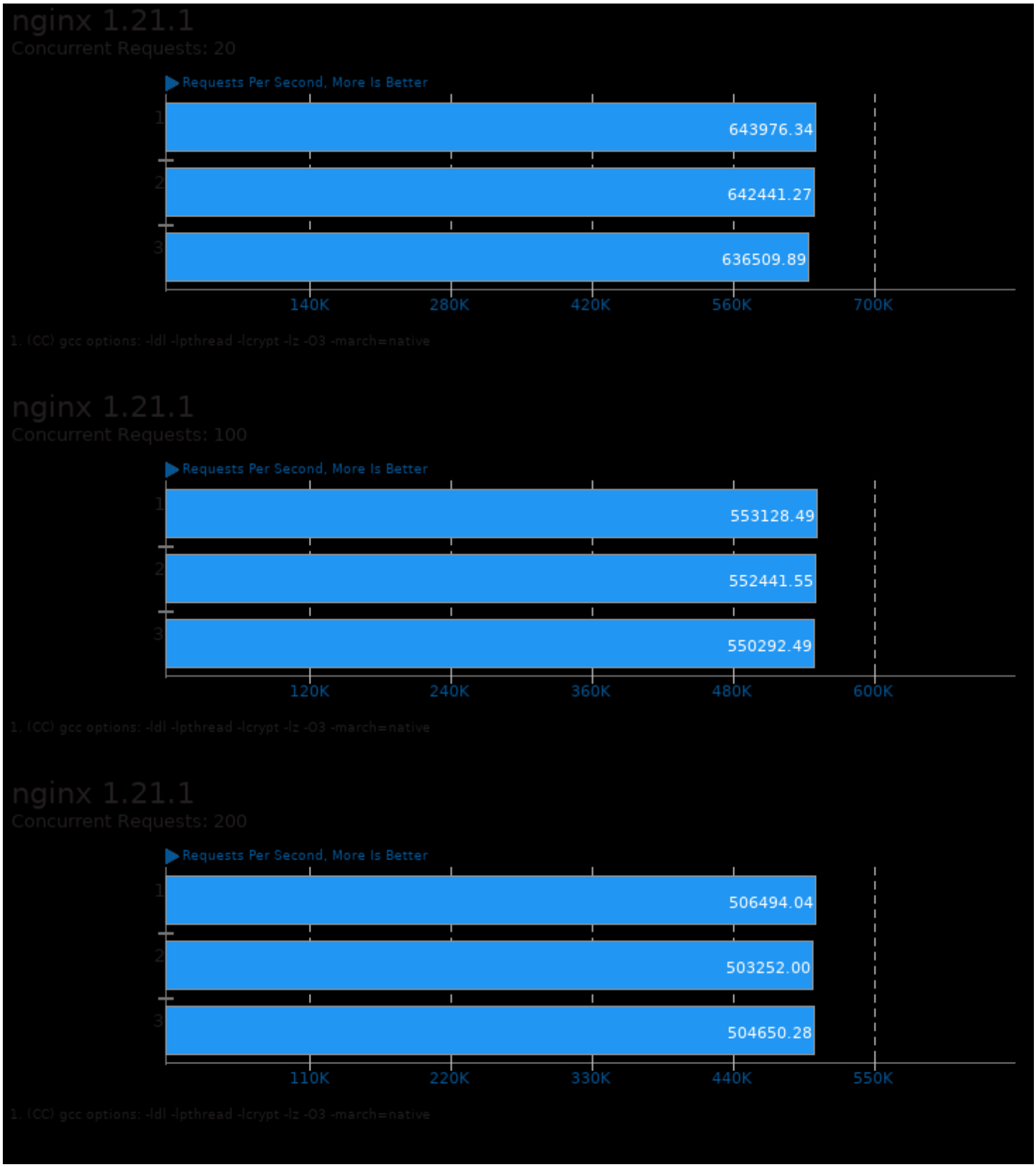
	1	2	3
OpenVKL - vklBenchmark ISPC (Items / Sec)	**48**	**49**	**49**
Normalized	97.96%	100%	100%
OpenVKL - v.S (Items / Sec)	26	26	26
nginx - 1 (Reqs/sec)	88723	**91576**	**88137**
Normalized	96.88%	100%	96.24%
nginx - 20 (Reqs/sec)	**643976**	642441	**636510**
Normalized	100%	99.76%	98.84%
nginx - 100 (Reqs/sec)	**553128**	552442	**550292**

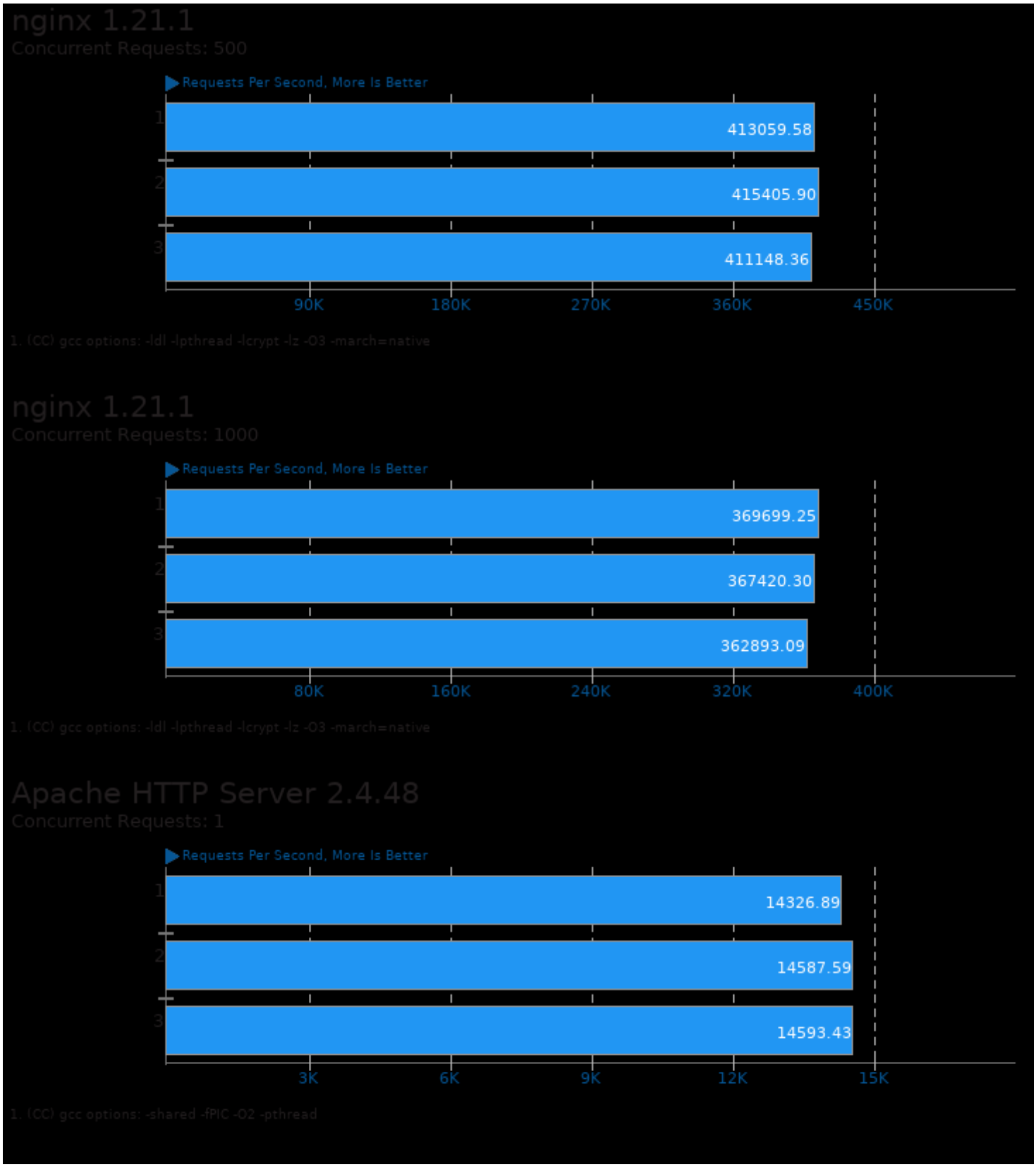
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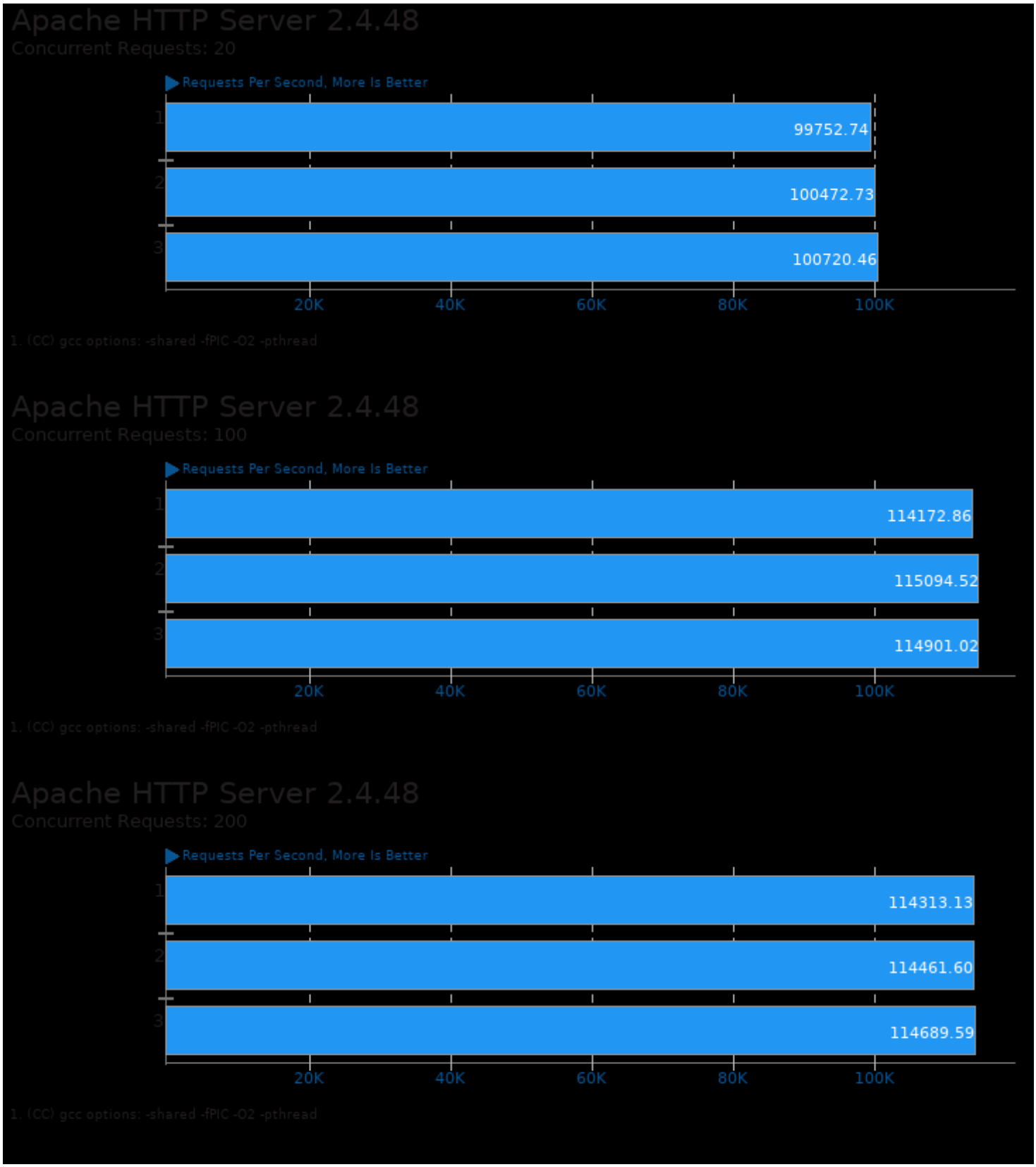
Normalized	100%	99.88%	99.49%
nginx - 200 (Reqs/sec)	**506494**	**503252**	504650
Normalized	100%	99.36%	99.64%
nginx - 500 (Reqs/sec)	413060	**415406**	**411148**
Normalized	99.44%	100%	98.98%
nginx - 1000 (Reqs/sec)	**369699**	367420	**362893**
Normalized	100%	99.38%	98.16%
Apache HTTP Server - 1 (Reqs/sec)	**14327**	14588	**14593**
Normalized	98.17%	99.96%	100%
Apache HTTP Server - 20 (Reqs/sec)	**99753**	100473	**100720**
Normalized	99.04%	99.75%	100%
Apache HTTP Server - 100 (Reqs/sec)	**114173**	**115095**	114901
Normalized	99.2%	100%	99.83%
Apache HTTP Server - 200 (Reqs/sec)	**114313**	114462	**114690**
Normalized	99.67%	99.8%	100%
Apache HTTP Server - 500 (Reqs/sec)	**84885**	85306	**85310**
Normalized	99.5%	100%	100%
Apache HTTP Server - 1000 (Reqs/sec)	**80068**	**81085**	80522
Normalized	98.75%	100%	99.31%
Tachyon - Total Time (sec)	**103.4265**	**102.6083**	103.1125
Normalized	99.21%	100%	99.51%

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OpenVKL 1.0
Benchmark: vklBenchmark ISPC
Items / Sec, More Is Better
1
MIN: 4 / MAX: 651
48
2
MIN: 4 / MAX: 652
49
3
MIN: 4 / MAX: 652
49
11
22
33
44
55
OpenVKL 1.0
Benchmark: vklBenchmark Scalar
Items / Sec, More Is Better
1
MIN: 2 / MAX: 525
26
2
MIN: 2 / MAX: 529
26
3
MIN: 2 / MAX: 529
26
6
12
18
24
30
nginx 1.21.1
Concurrent Requests: 1
Requests Per Second, More Is Better
1
88722.63
2
91575.85
3
88136.60
20K
40K
60K
80K
100K
1. (CC) gcc options: -ldl -lpthread -lcrypt -lz -O3 -march=native

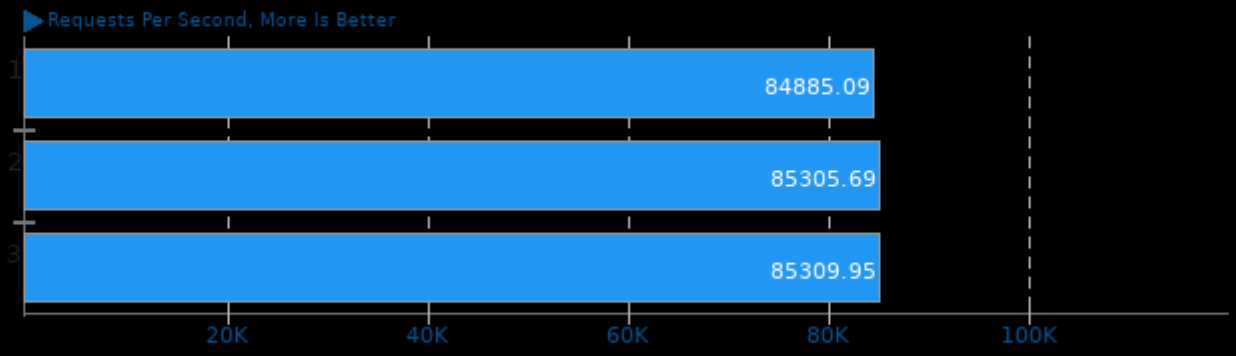

nginx 1.21.1
Concurrent Requests: 20
Requests Per Second, More Is Better
1
643976.34
2
642441.27
3
636509.89
140K
280K
420K
560K
700K
1. (CC) gcc options: -ldl -lpthread -lcrypt -lz -O3 -march=native
nginx 1.21.1
Concurrent Requests: 100
Requests Per Second, More Is Better
1
553128.49
2
552441.55
3
550292.49
120K
240K
360K
480K
600K
1. (CC) gcc options: -ldl -lpthread -lcrypt -lz -O3 -march=native
nginx 1.21.1
Concurrent Requests: 200
Requests Per Second, More Is Better
1
506494.04
2
503252.00
3
504650.28
110K
220K
330K
440K
550K
1. (CC) gcc options: -ldl -lpthread -lcrypt -lz -O3 -march=native


nginx 1.21.1
Concurrent Requests: 500
Requests Per Second, More Is Better
1
2
3
413059.58
415405.90
411148.36
90K
180K
270K
360K
450K
1. (CC) gcc options: -ldl -lpthread -lcrypt -lz -O3 -march=native
nginx 1.21.1
Concurrent Requests: 1000
Requests Per Second, More Is Better
1
2
3
369699.25
367420.30
362893.09
80K
160K
240K
320K
400K
1. (CC) gcc options: -ldl -lpthread -lcrypt -lz -O3 -march=native
Apache HTTP Server 2.4.48
Concurrent Requests: 1
Requests Per Second, More Is Better
1
2
3
14326.89
14587.59
14593.43
3K
6K
9K
12K
15K
1. (CC) gcc options: -shared -fPIC -O2 -pthread


Apache HTTP Server 2.4.48
Concurrent Requests: 20
Requests Per Second, More Is Better
1
2
3
99752.74
100472.73
100720.46
20K
40K
60K
80K
100K
1. (CC) gcc options: -shared -fPIC -O2 -pthread
Apache HTTP Server 2.4.48
Concurrent Requests: 100
Requests Per Second, More Is Better
1
2
3
114172.86
115094.52
114901.02
20K
40K
60K
80K
100K
1. (CC) gcc options: -shared -fPIC -O2 -pthread
Apache HTTP Server 2.4.48
Concurrent Requests: 200
Requests Per Second, More Is Better
1
2
3
114313.13
114461.60
114689.59
20K
40K
60K
80K
100K
1. (CC) gcc options: -shared -fPIC -O2 -pthread

Apache HTTP Server 2.4.48

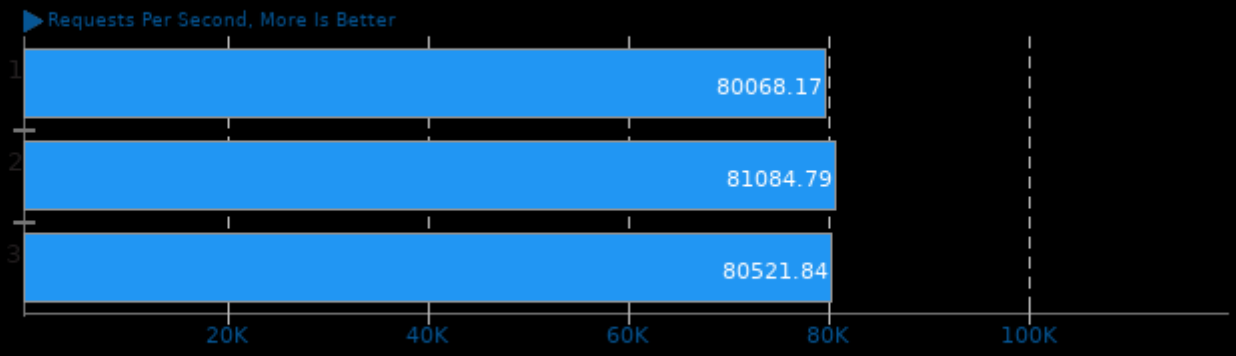
Concurrent Requests: 500



1. (CC) gcc options: -shared -fPIC -O2 -pthread

Apache HTTP Server 2.4.48

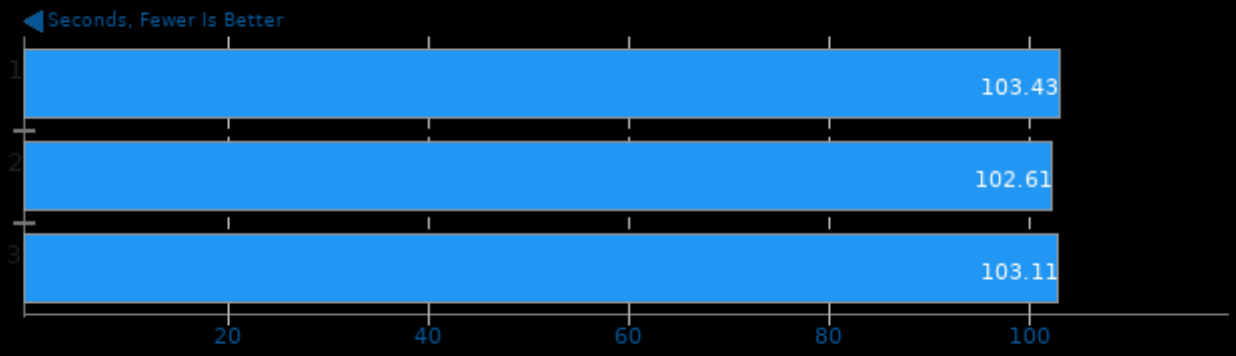
Concurrent Requests: 1000



1. (CC) gcc options: -shared -fPIC -O2 -pthread

Tachyon 0.99b6

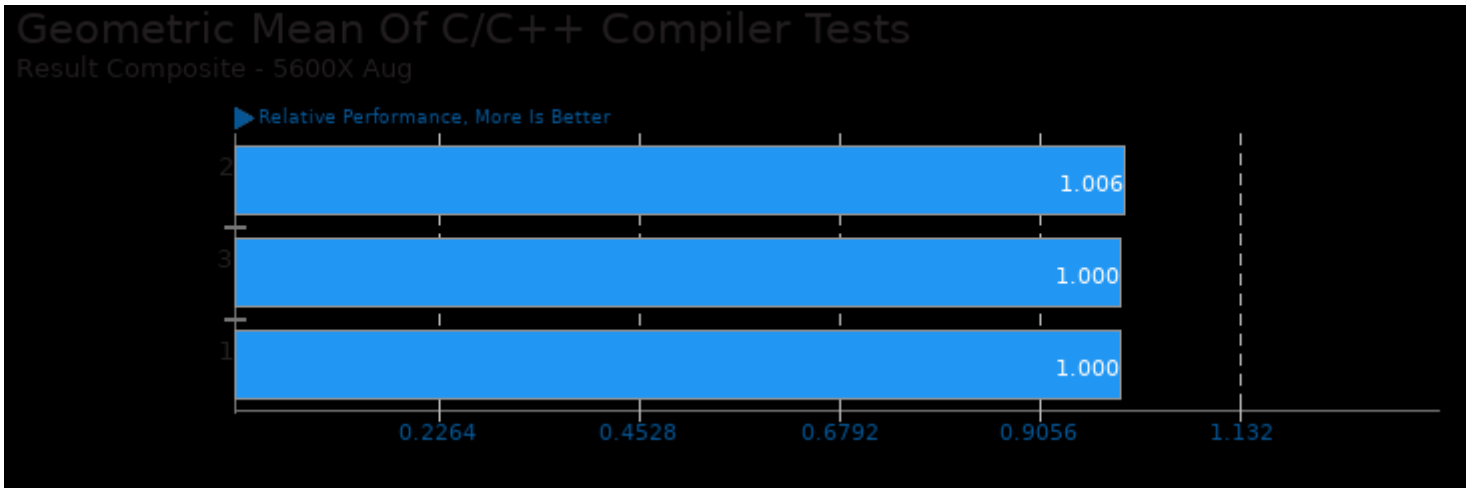
Total Time



1. (CC) gcc options: -m64 -O3 -fomit-frame-pointer -ffast-math -ltachyon -lm -lpthread

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



Geometric mean based upon tests: pts/apache, pts/nginx and pts/tachyon

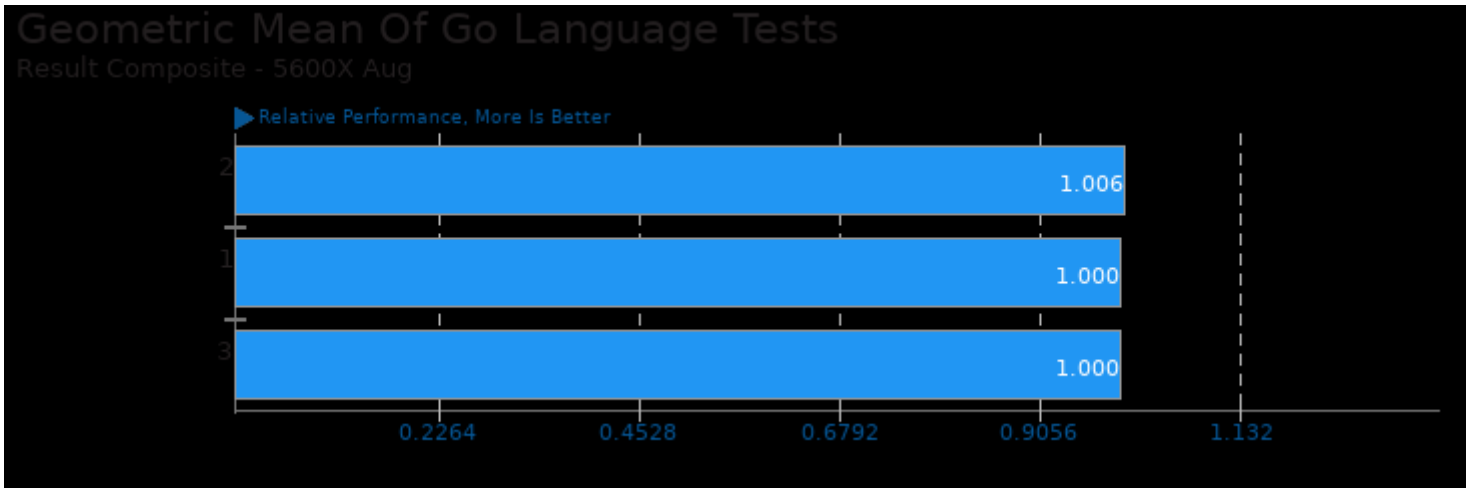


Geometric mean based upon tests: pts/apache, pts/nginx and pts/tachyon



Geometric mean based upon tests: pts/tachyon and pts/openvkl

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Geometric mean based upon tests: pts/nginx and pts/apache



Geometric mean based upon tests: pts/tachyon and pts/openvkl



Geometric mean based upon tests: pts/apache and pts/nginx

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 11:45.