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## general-test

Intel Core i7-1165G7 testing with a LENOVO 20XXS96300 (N32ET75W 1.51 BIOS) and Intel Xe TGL GT2 31GB on Ubuntu 22.04 via the Phoronix Test Suite.

### Automated Executive Summary

*x1-ac-idling had the most wins, coming in first place for 83% of the tests.*

*Based on the geometric mean of all complete results, the fastest (x1-ac-idling) was 1.022x the speed of the slowest (x1-ac).*

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

*OpenArena (Resolution: 1920 x 1080 - Total Frame Time) at 19x*

*OpenArena (Resolution: 1920 x 1080) at 1.084x*

*Unigine Valley (Resolution: 1920 x 1080 - Mode: Windowed - Renderer: OpenGL) at 1.034x*

*ArrayFire (Test: BLAS CPU) at 1.014x*

*x265 (Video Input: Bosphorus 1080p) at 1.005x*

*glibc bench (Benchmark: log2) at 1.003x*

*R Benchmark at 1.002x*

*Embree (Binary: Pathtracer ISPC - Model: Asian Dragon) at 1x*

*Embree (Binary: Pathtracer ISPC - Model: Asian Dragon) at 1x*

*glibc bench (Benchmark: sin) at 1x.*

## Test Systems:

### x1-ac

Processor: Intel Core i7-1165G7 @ 4.70GHz (4 Cores / 8 Threads), Motherboard: LENOVO 20XXS96300 (N32ET75W 1.51 BIOS), Chipset: Intel Tiger Lake-LP, Memory: 32GB, Disk: 1024GB SAMSUNG MZVL21T0HCLR-00BL7, Graphics: Intel TigerLake-LP GT2 [Iris Xe ] (1300MHz), Audio: Realtek ALC287, Network: Intel Wi-Fi 6 AX201

OS: Ubuntu 22.04, Kernel: 5.15.0-30-generic (x86\_64), Display Server: X Server 1.21.1.3, Compiler: GCC 11.2.0, File-System: ext4, Screen Resolution: 1920x1200

Kernel Notes: Transparent Huge Pages: madvise  
Compiler Notes: --build=x86\_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-cet --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-link-serialization=2 --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-11-gBFGDP/gcc-11-11.2.0/debian/tmp-nvptx/usr,amdgn-amdhsa=/build/gcc-11-gBFGDP/gcc-11-11.2.0/debian/tmp-gcn/usr --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-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v  
Processor Notes: Scaling Governor: intel\_pstate powersave (EPP: balance\_performance) - Platform Profile: balanced - CPU Microcode: 0x9a - ACPI Profile: balanced  
Python Notes: Python 3.10.4  
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 Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx\_async\_abort: Not affected

### x1-ac-idling

Processor: Intel Core i7-1165G7 @ 4.70GHz (4 Cores / 8 Threads), Motherboard: LENOVO 20XXS96300 (N32ET75W 1.51 BIOS), Chipset: Intel Tiger Lake-LP, Memory: 32GB, Disk: 1024GB SAMSUNG MZVL21T0HCLR-00BL7, Graphics: Intel Xe TGL GT2 31GB (1300MHz), Audio: Realtek ALC287, Network: Intel Wi-Fi 6 AX201

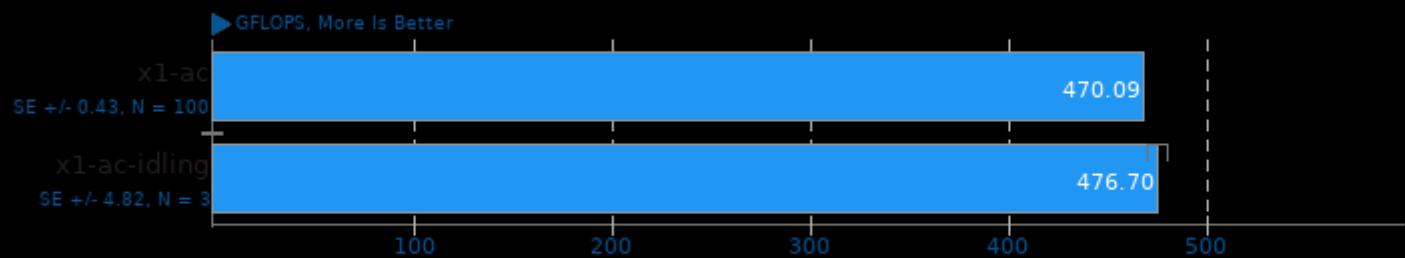
OS: Ubuntu 22.04, Kernel: 5.19.0-38-generic (x86\_64), Display Server: X Server 1.21.1.3, OpenGL: 4.6 Mesa 22.2.5-0ubuntu0.1~22.04.3, Vulkan: 1.3.224, Compiler: GCC 11.3.0, File-System: ext4, Screen Resolution: 1920x1200

Kernel Notes: Transparent Huge Pages: madvise  
Compiler Notes: --build=x86\_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-cet --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-link-serialization=2 --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-11-aYxV0E/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgn-amdhsa=/build/gcc-11-aYxV0E/gcc-11-11.3.0/debian/tmp-gcn/usr --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-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v  
Processor Notes: Scaling Governor: intel\_pstate powersave (EPP: balance\_performance) - Platform Profile: balanced - CPU Microcode: 0xa6 - ThermalD 2.4.9 - ACPI Profile: balanced  
Python Notes: Python 3.10.6  
Security Notes: itlb\_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio\_stale\_data: Not affected + rebleed: Not affected + spec\_store\_bypass: Mitigation of SSB disabled via prctl + spectre\_v1: Mitigation of usercopy/swapgs barriers and \_\_user pointer sanitization + spectre\_v2: Mitigation of Enhanced IBRS IBPB: conditional RSB filling PBRSB-eIBRS: SW sequence + srbds: Not affected + tsx\_async\_abort: Not affected

	x1-ac	x1-ac-idling
<b>ArrayFire - BLAS CPU (GFLOPS)</b>	<b>470.086</b>	<b>476.699</b>
Normalized	98.61%	100%
Standard Deviation	0.9%	1.8%
<b>Embree - Pathtracer ISPC - Asian Dragon (FPS)</b>	4.7522	
Standard Deviation	0.5%	
<b>Embree - Pathtracer ISPC - Asian Dragon (FPS)</b>		5.2870
Standard Deviation		0.1%
<b>glibc bench - sin (nanoseconds)</b>	30.1374	
Standard Deviation	0.5%	
<b>glibc bench - log2 (nanoseconds)</b>	<b>6.09429</b>	<b>6.07358</b>
Normalized	99.66%	100%
Standard Deviation	1.7%	1.3%
<b>Glibc Benchmarks - sin (ns)</b>		41.5786
Standard Deviation		0.7%
<b>nginx - 200 (Reqs/sec)</b>	243559	
Standard Deviation	2.2%	
<b>nginx - 200 (Reqs/sec)</b>		24006
Standard Deviation		1.5%
<b>OpenArena - 1920 x 1080 (FPS)</b>	<b>180.0</b>	<b>195.1</b>
Normalized	92.26%	100%
Standard Deviation	2.4%	3.1%
<b>R Benchmark (sec)</b>	<b>0.1390</b>	<b>0.1387</b>
Normalized	99.78%	100%
Standard Deviation	1%	1.8%
<b>System Libxml2 Parsing - 500 KB (ms)</b>		246
Standard Deviation		2%
<b>TensorFlow Lite - I.R.V (us)</b>	7512905	
Standard Deviation	0.1%	
<b>TensorFlow Lite - I.R.V (us)</b>		95861
Standard Deviation		2.1%
<b>Unigine Valley - 1920 x 1080 - Windowed - OpenGL (FPS)</b>	<b>34.7527</b>	<b>35.9459</b>
Normalized	96.68%	100%
Standard Deviation	0.2%	0.2%
<b>x265 - Bosphorus 1080p (FPS)</b>	<b>25.55</b>	<b>25.43</b>
Normalized	100%	99.53%
Standard Deviation	2.5%	2.5%

## ArrayFire 3.7

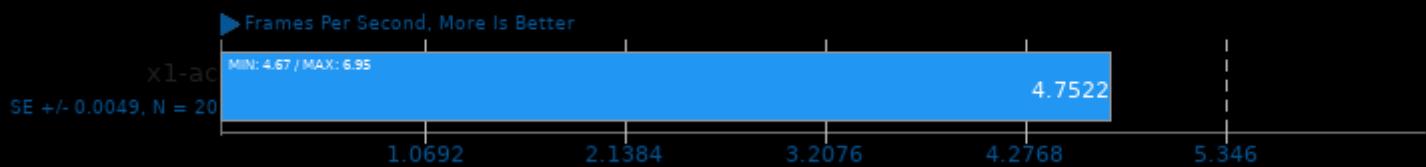
Test: BLAS CPU



1. (CXX) g++ options: -rdynamic

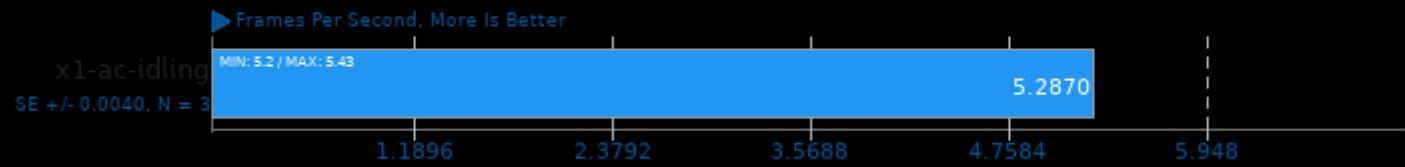
## Embree 3.13

Binary: Pathtracer ISPC - Model: Asian Dragon



## Embree 4.1

Binary: Pathtracer ISPC - Model: Asian Dragon



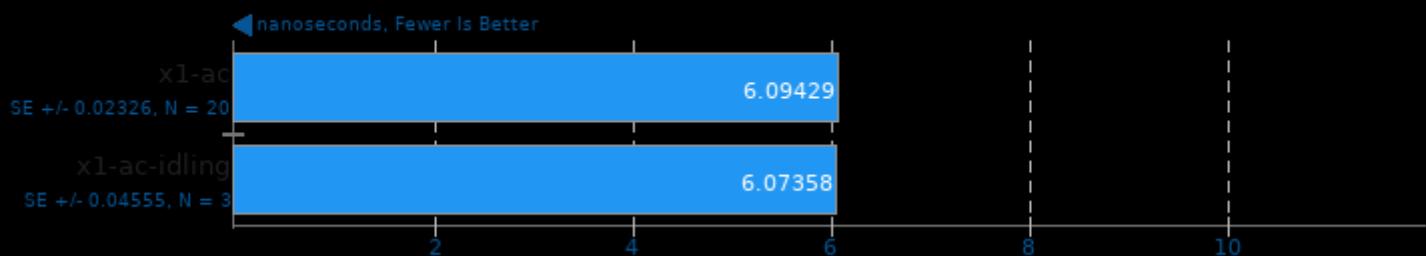
## glibc bench 1.0

Benchmark: sin



## glibc bench 1.0

Benchmark: log2



## Glibc Benchmarks 2.37

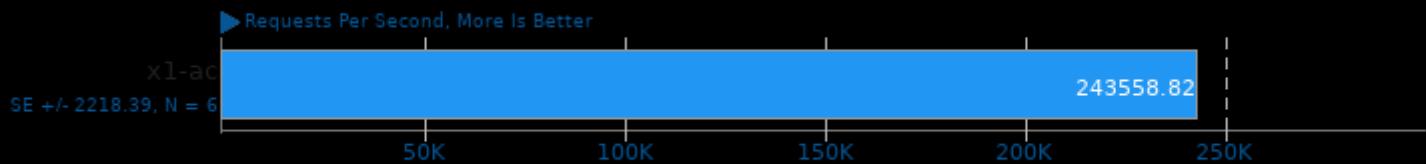
Benchmark: sin



1. (CC) gcc options: -pie -nostdlib -nostartfiles -lgcc -lgcc\_s

## nginx 1.21.1

Concurrent Requests: 200



1. (CC) gcc options: -lcrypt -fz -O3 -march=native

## nginx 1.23.2

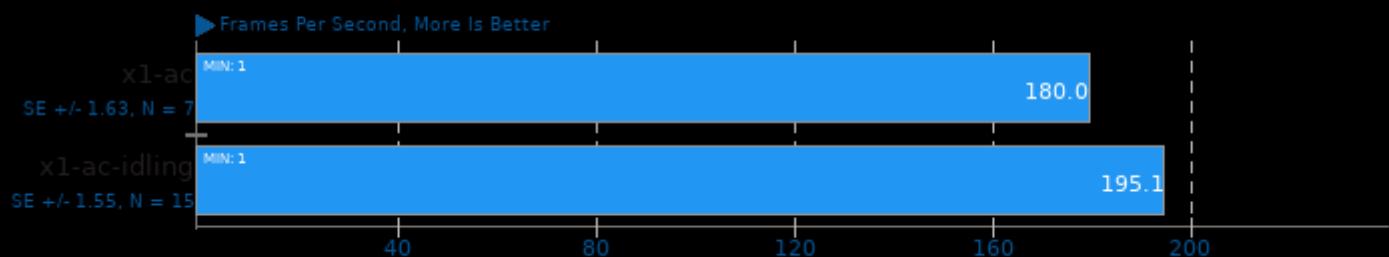
Concurrent Requests: 200



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2

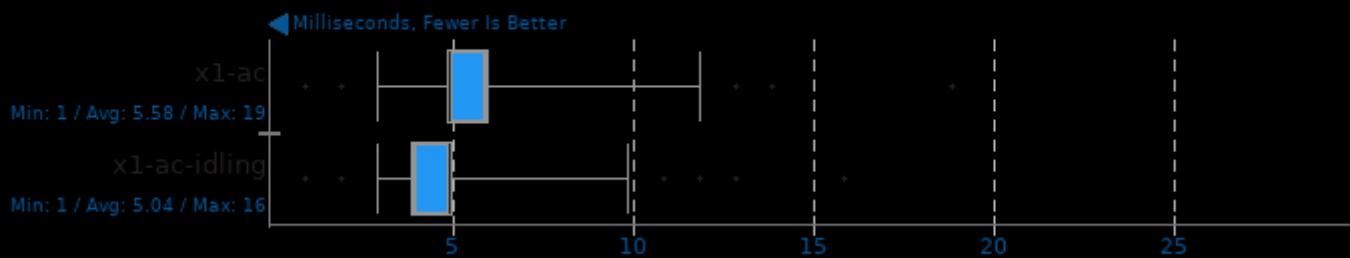
## OpenArena 0.8.8

Resolution: 1920 x 1080

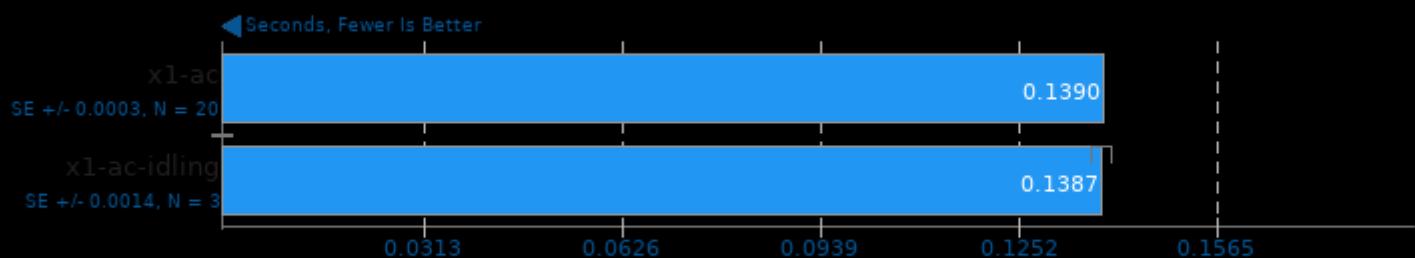


## OpenArena 0.8.8

Resolution: 1920 x 1080 - Total Frame Time



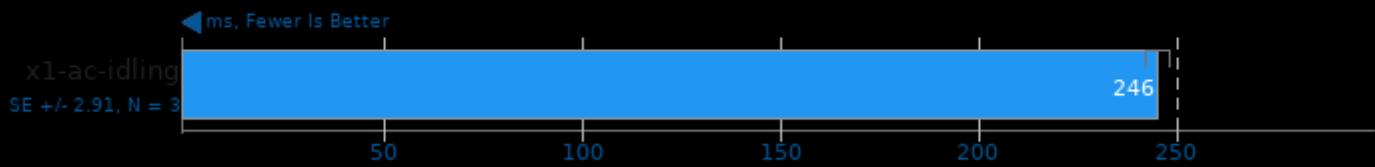
## R Benchmark



1. R scripting front-end version 4.1.2 (2021-11-01)

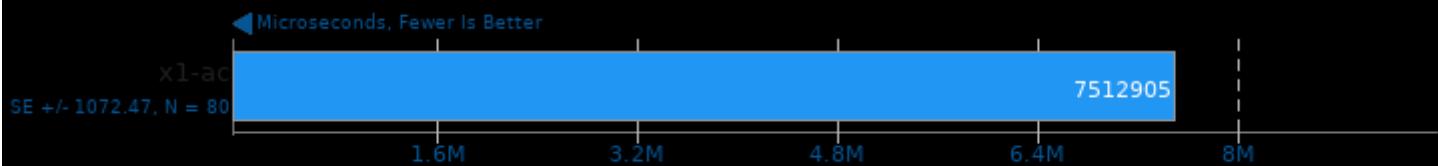
## System Libxml2 Parsing

Filesize: 500 KB



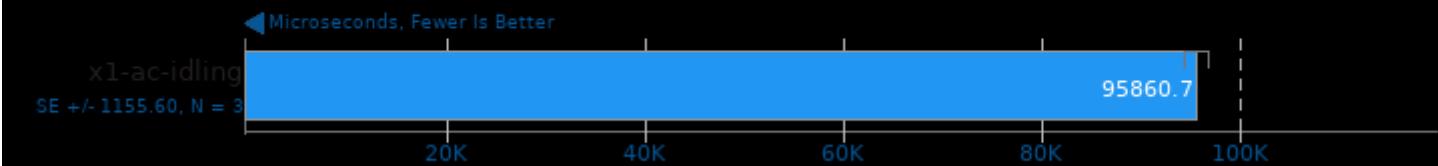
## TensorFlow Lite 2020-08-23

Model: Inception ResNet V2



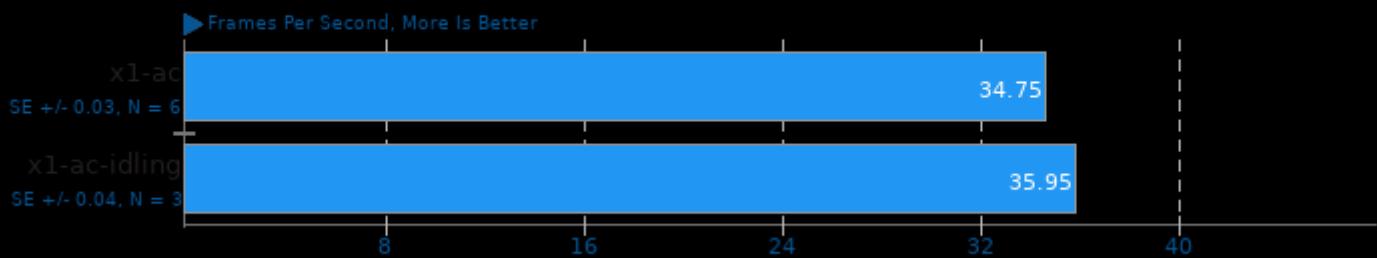
## TensorFlow Lite 2022-05-18

Model: Inception ResNet V2



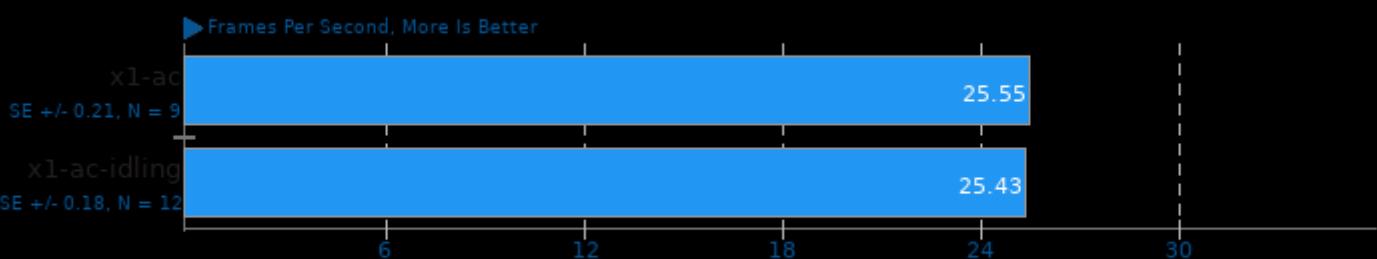
## Unigine Valley 1.0

Resolution: 1920 x 1080 - Mode: Windowed - Renderer: OpenGL



## x265 3.4

Video Input: Bosphorus 1080p

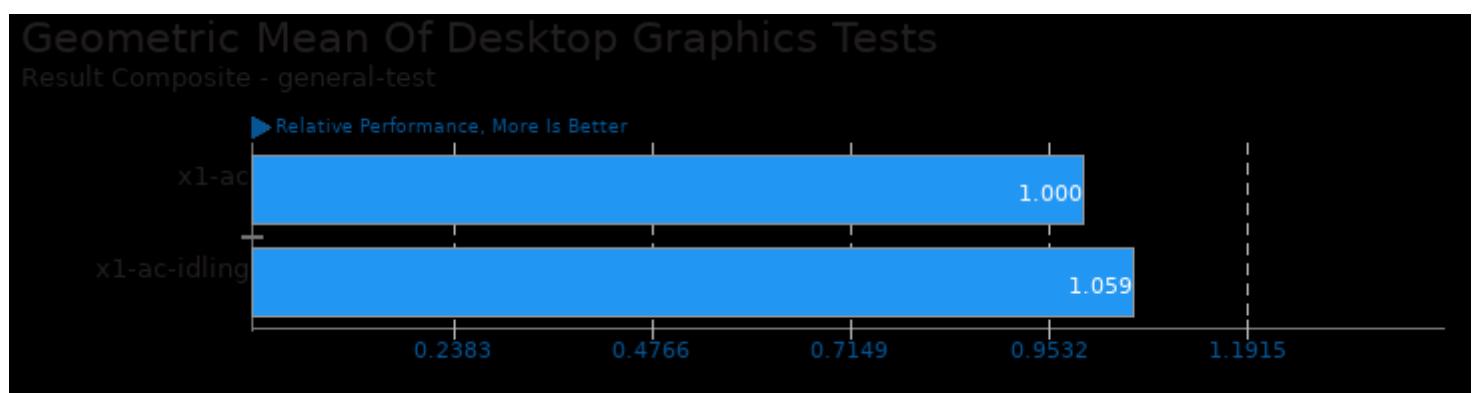


1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

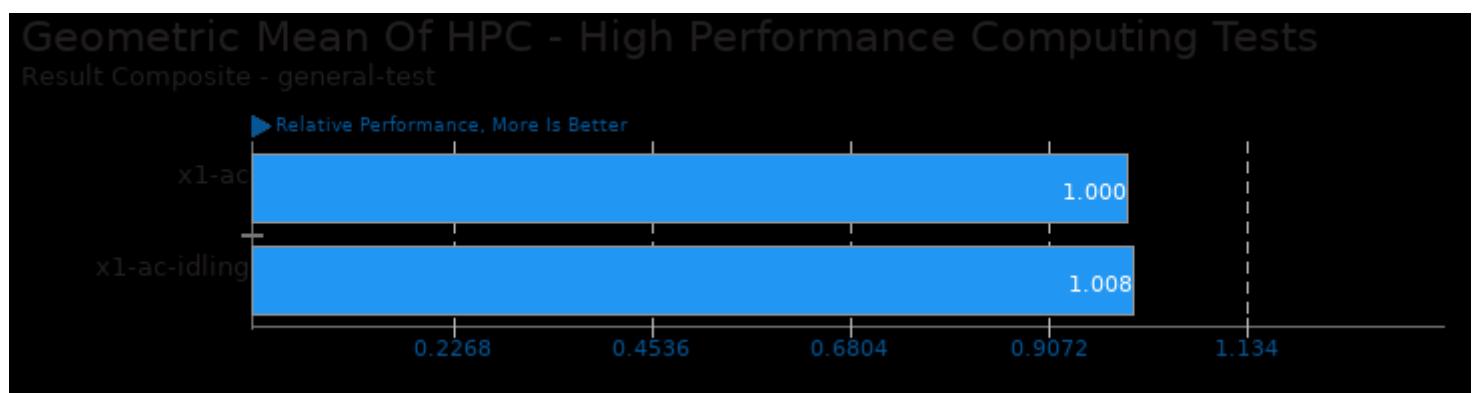
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/x265, pts/glibc-bench, pts/nginx and pts/rbenchmark



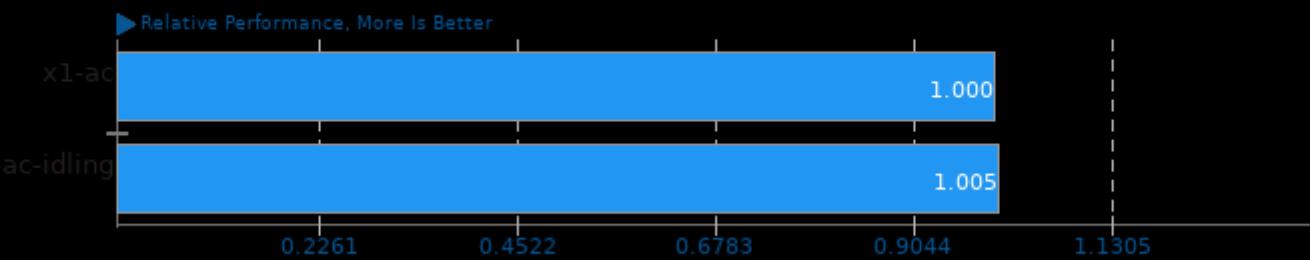
Geometric mean based upon tests: pts/openarena and pts/unigine-valley



Geometric mean based upon tests: pts/arrayfire, pts/rbenchmark, pts/ai-benchmark and pts/tensorflow-lite

## Geometric Mean Of Multi-Core Tests

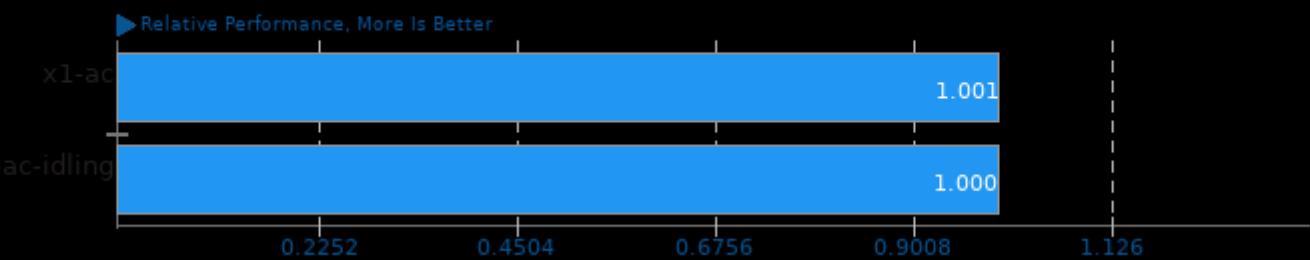
Result Composite - general-test



Geometric mean based upon tests: pts/arrayfire, pts/x265 and pts/embree

## Geometric Mean Of Server CPU Tests

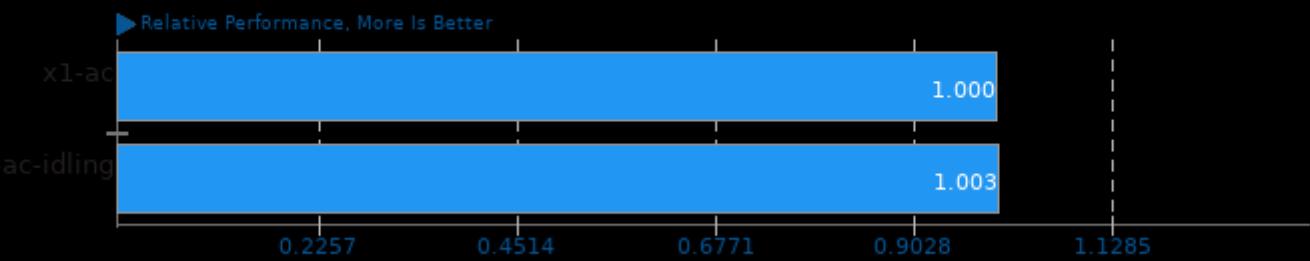
Result Composite - general-test



Geometric mean based upon tests: pts/x265 and pts/glibc-bench

## Geometric Mean Of Single-Threaded Tests

Result Composite - general-test



Geometric mean based upon tests: pts/rbenchmark, pts/system-libxml2, pts/glibc-bench and pts/nginx

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Tuesday, 10 December 2024 00:49.*