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epyc 7742 compilation 2P

2 x AMD EPYC 7742 64-Core testing with a Supermicro H11DSi-NT v2.00 (2.1 BIOS) and ASPEED on Ubuntu 21.10 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 64% of the tests.

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

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

Timed Node.js Compilation (Time To Compile) at 1.061x
Timed Erlang/OTP Compilation (Time To Compile) at 1.025x
Timed Mesa Compilation (Time To Compile) at 1.018x
Timed LLVM Compilation (Build System: Ninja) at 1.015x
Timed Godot Game Engine Compilation (Time To Compile) at 1.014x
Timed ImageMagick Compilation (Time To Compile) at 1.014x
Timed GDB GNU Debugger Compilation (Time To Compile) at 1.011x
Timed Linux Kernel Compilation (Time To Compile) at 1.01x
Timed MPlayer Compilation (Time To Compile) at 1.009x
Build2 (Time To Compile) at 1.005x.

Test Systems:

1

2

Processor: 2 x AMD EPYC 7742 64-Core @ 2.25GHz (128 Cores / 256 Threads), Motherboard: Supermicro H11DSi-NT v2.00 (2.1 BIOS), Chipset: AMD Starship/Matisse, Memory: 126GB, Disk: 280GB INTEL SSDPE21D280GA, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel 10G X550T

OS: Ubuntu 21.10, Kernel: 5.15.0-rc4-cluster-sched (x86_64), Desktop: GNOME Shell 40.5, Display Server: X Server, Vulkan: 1.1.182, Compiler: GCC 11.2.0, File-System: ext4, Screen Resolution: 1920x1080

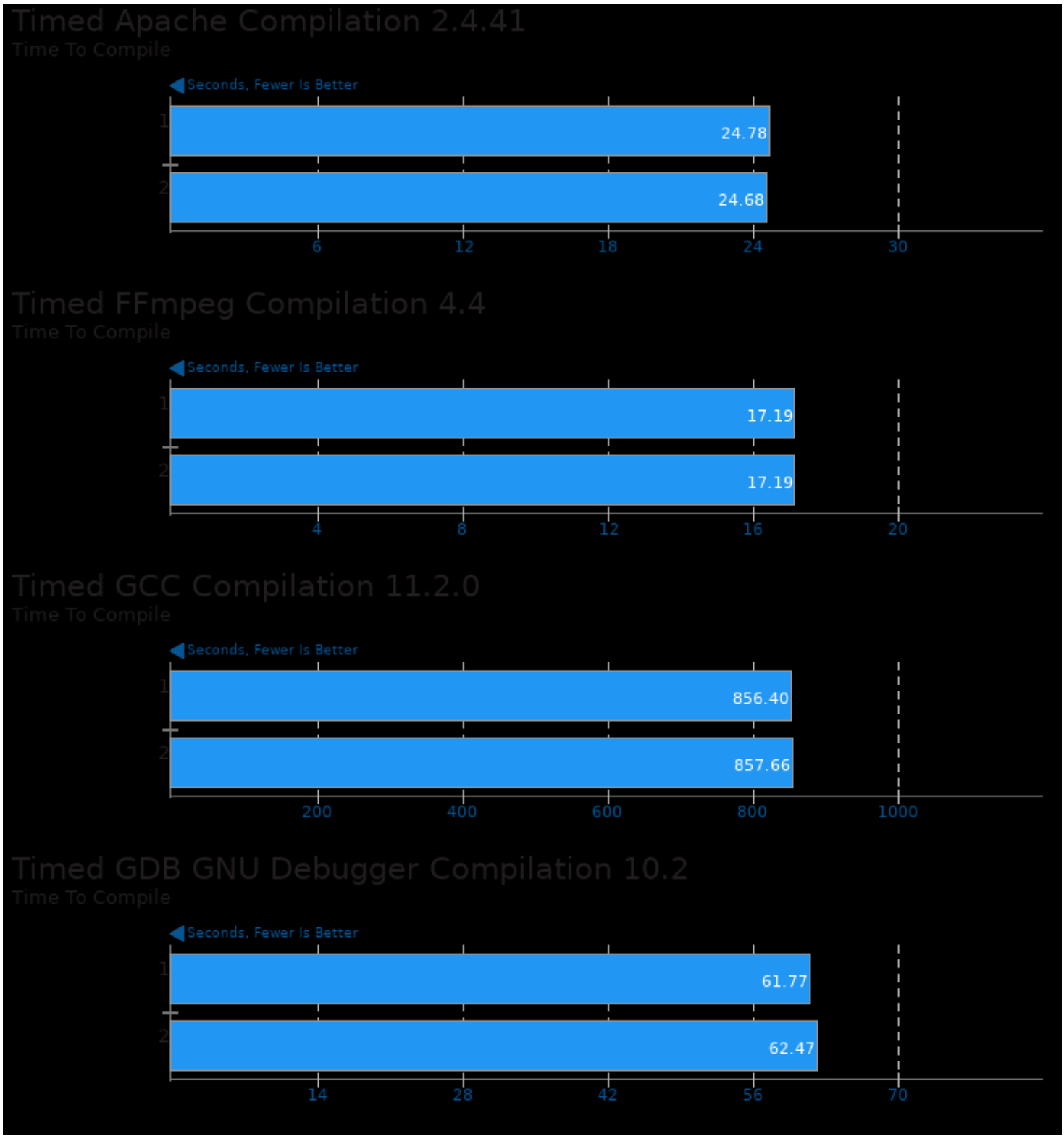
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-cet --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --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-ZPT0kp/gcc-11-11.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-11-ZPT0kp/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: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0x8301034
Python Notes: Python 3.9.7
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: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	1	2
Timed Apache Compilation - Time To Compile (sec)	**24.779**	**24.676**
Normalized	99.58%	100%
Timed FFmpeg Compilation - Time To Compile (sec)	**17.185**	**17.194**
Normalized	100%	99.95%
Timed GCC Compilation - Time To Compile (sec)	**856.4**	**857.66**
Normalized	100%	99.85%
Timed GDB GNU Debugger Compilation - Time To Compile (sec)	**61.774**	**62.471**
Normalized	100%	98.88%
Timed Godot Game Engine Compilation - Time To Compile (sec)	**63.882**	**64.797**
Normalized	100%	98.59%
Timed ImageMagick Compilation - Time To Compile	**13.767**	**13.955**
Normalized	100%	98.65%
Timed Linux Kernel Compilation - Time To Compile	**23.891**	**24.125**
Normalized	100%	99.03%
Timed LLVM Compilation - Ninja (sec)	**112.894**	**111.252**
Normalized	98.55%	100%
Timed LLVM Compilation - Unix Makefiles (sec)	**200.256**	**199.963**
Normalized	99.85%	100%
Timed Mesa Compilation - Time To Compile (sec)	**21.156**	**21.54**
Normalized	100%	98.22%
Timed MPlayer Compilation - Time To Compile (sec)	**9.945**	**9.856**
Normalized	99.11%	100%

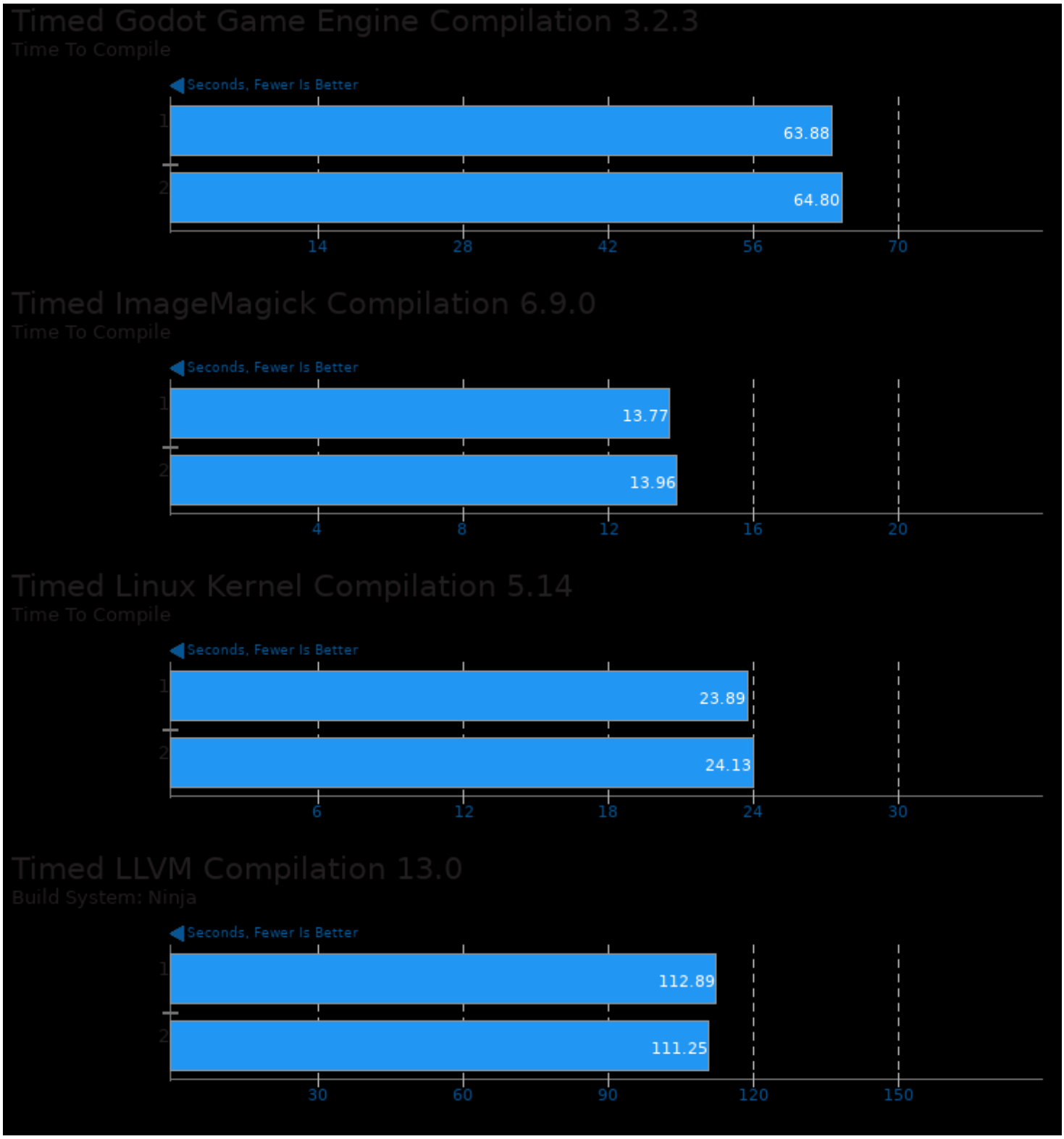
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Timed Node.js Compilation - Time To Compile (sec)	**89.414**	**84.238**
Normalized	94.21%	100%
Timed PHP Compilation - Time To Compile (sec)	**40.66**	**40.827**
Normalized	100%	99.59%
Build2 - Time To Compile (sec)	**63.916**	**64.206**
Normalized	100%	99.55%
Timed Eigen Compilation - Time To Compile (sec)	**91.757**	**92.088**
Normalized	100%	99.64%
Timed Erlang/OTP Compilation - Time To Compile	**153.814**	**150.1**
Normalized	97.59%	100%
Timed Wasmer Compilation - Time To Compile (sec)	**64.567**	**64.747**
Normalized	100%	99.72%

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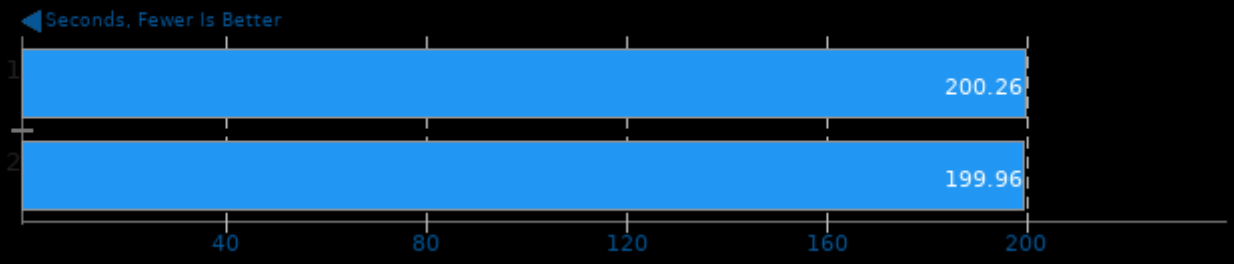
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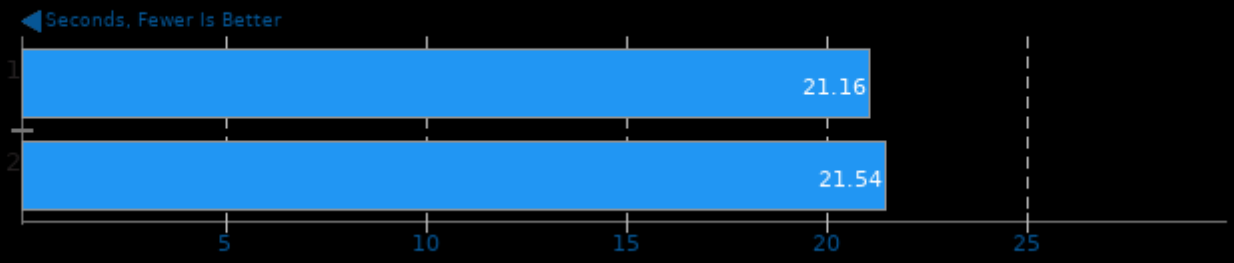
Timed LLVM Compilation 13.0

Build System: Unix Makefiles



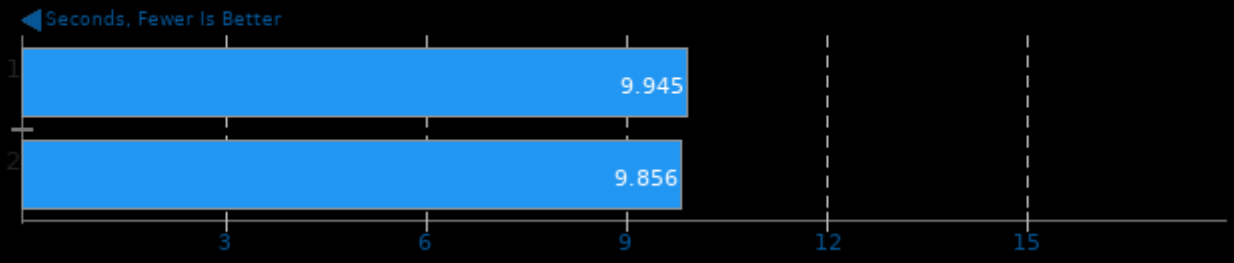
Timed Mesa Compilation 21.0

Time To Compile



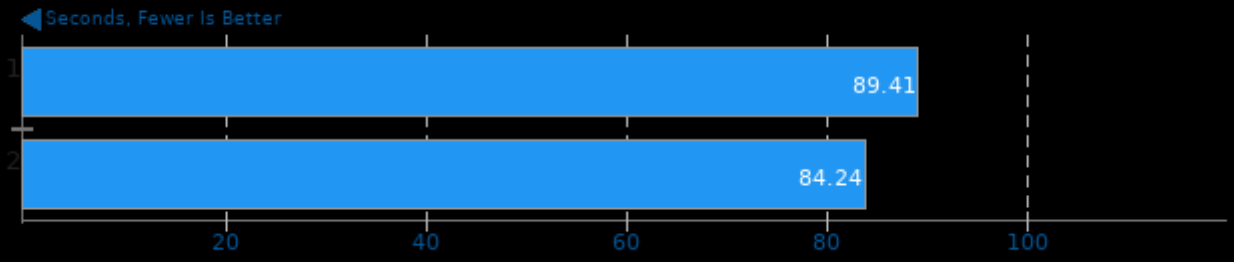
Timed MPlayer Compilation 1.4

Time To Compile

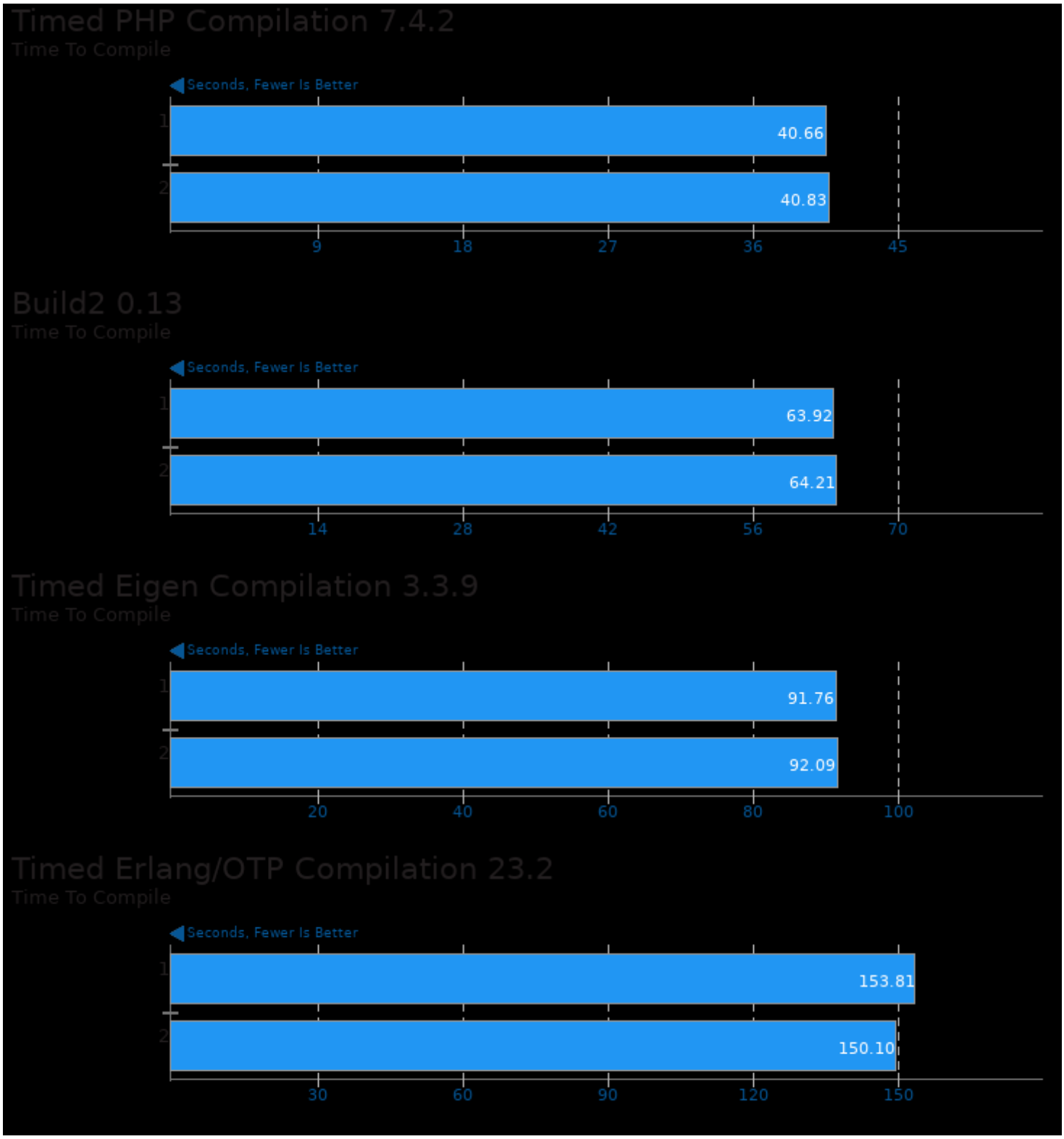


Timed Node.js Compilation 15.11

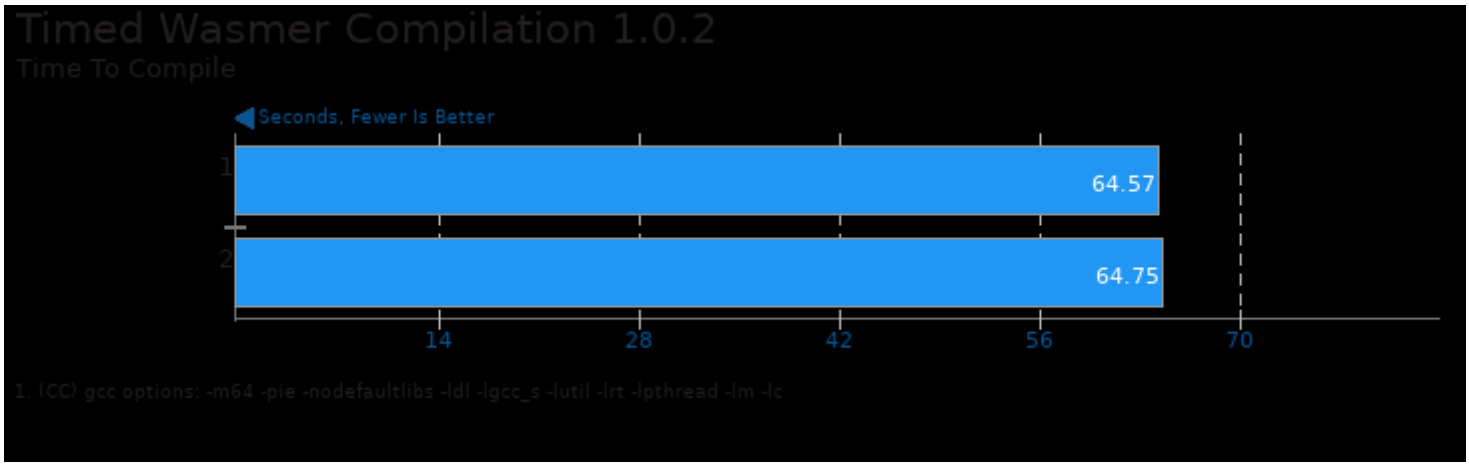
Time To Compile



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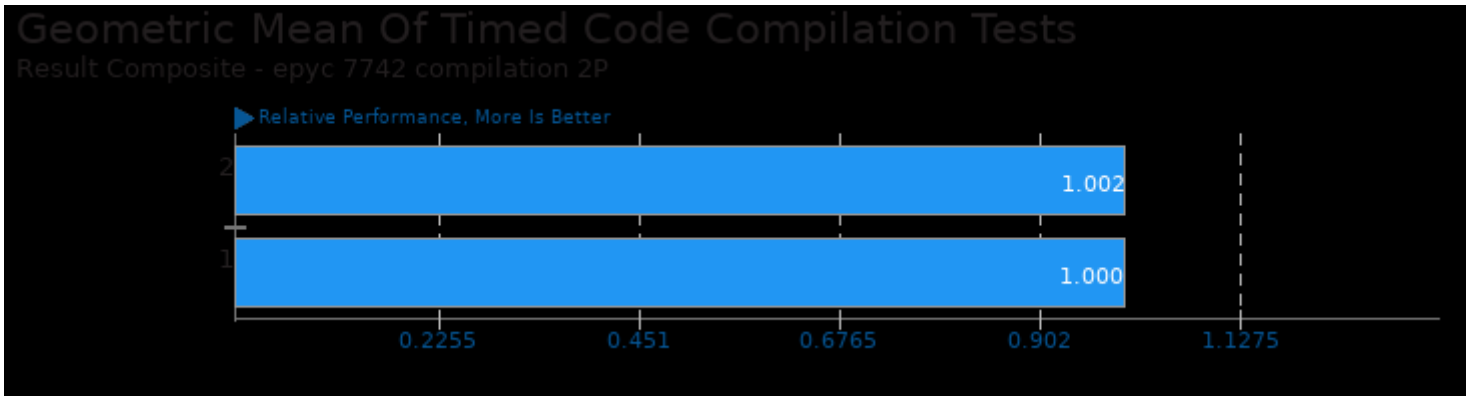


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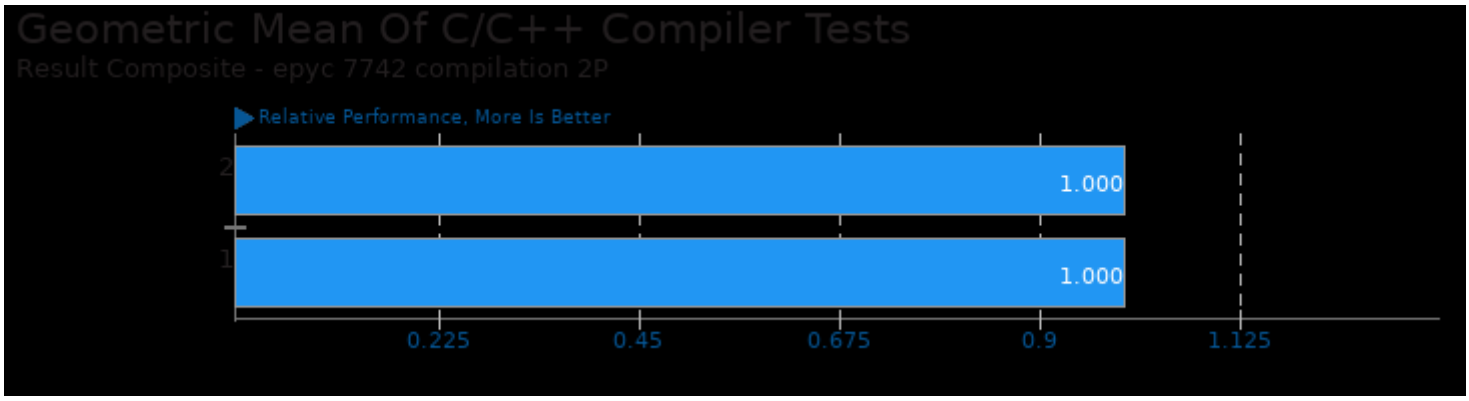


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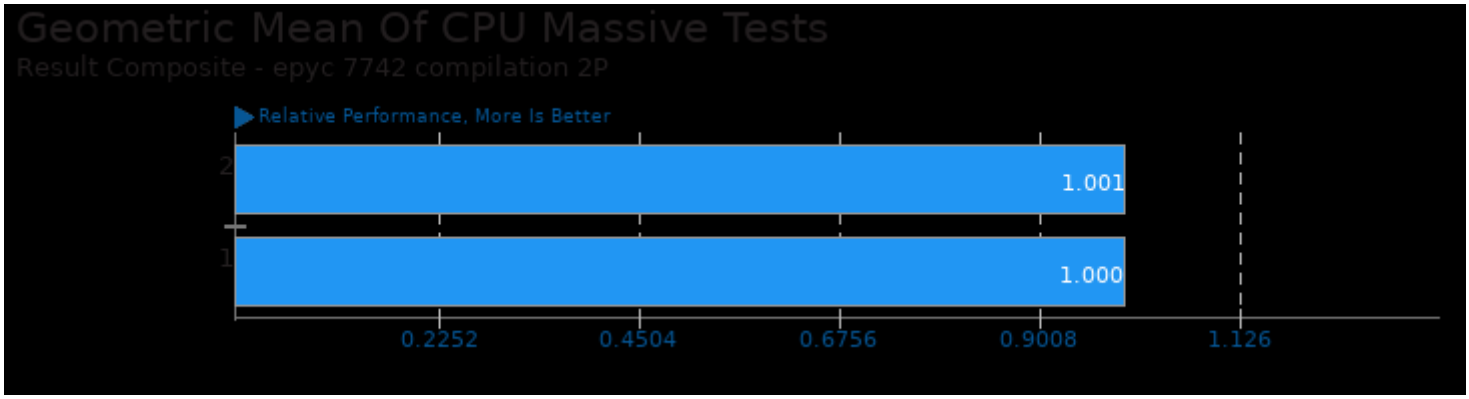
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-eigen, pts/build-linux-kernel, pts/build-imagemagick, pts/build-gcc, pts/build-gdb, pts/build-llvm, pts/build-ffmpeg, pts/build-mplayer, pts/build2, pts/build-godot, pts/build-erlang, pts/build-wasmer, pts/build-nodejs and pts/build-mesa

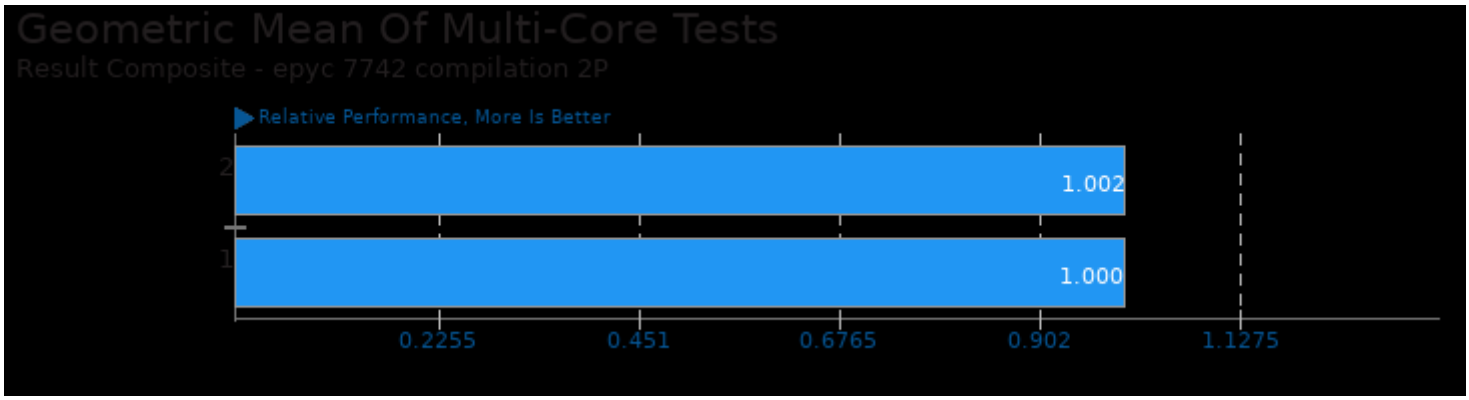


Geometric mean based upon tests: pts/build-php, pts/build-imagemagick, pts/build-llvm, pts/build-gdb, pts/build-ffmpeg, pts/build-apache and pts/build-mplayer

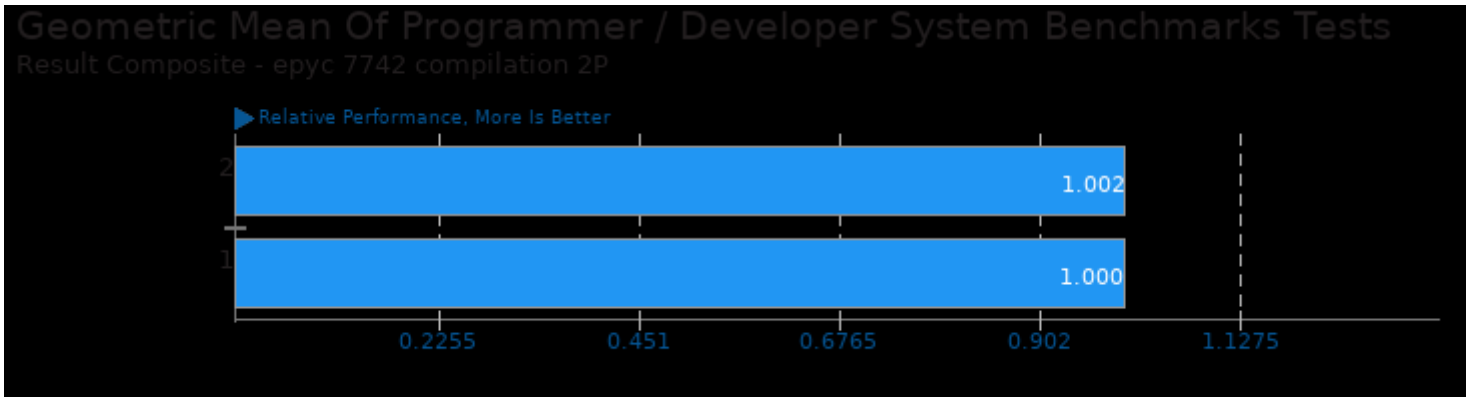


Geometric mean based upon tests: pts/build-apache, pts/build-gcc, pts/build-llvm, pts/build-linux-kernel and pts/build-php

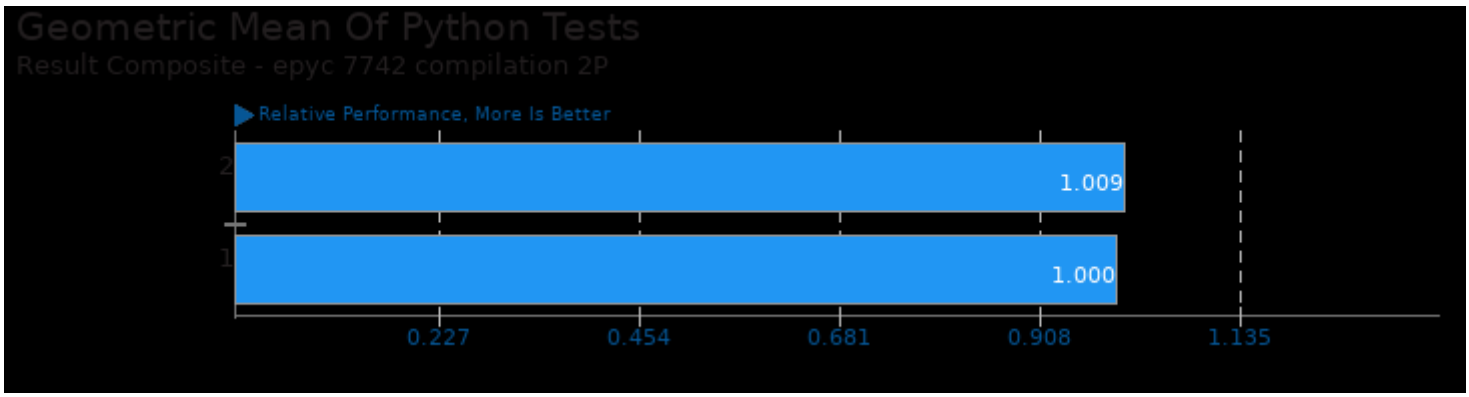
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Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-eigen, pts/build-linux-kernel, pts/build-imagemagick, pts/build-gcc, pts/build-gdb, pts/build-llvm, pts/build-ffmpeg, pts/build-mplayer, pts/build2, pts/build-godot, pts/build-erlang, pts/build-wasmer, pts/build-nodejs and pts/build-mesa

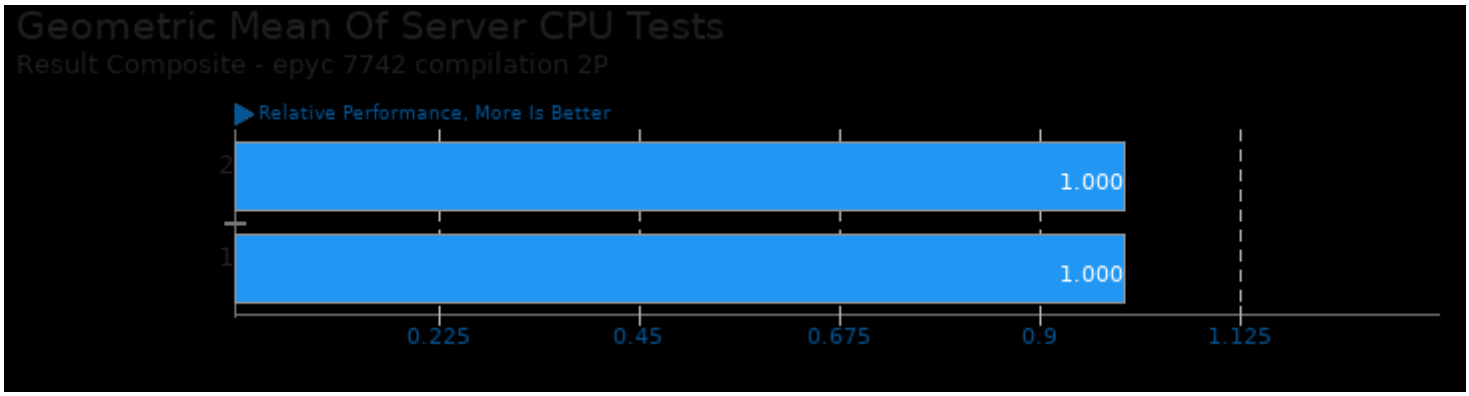


Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-eigen, pts/build-linux-kernel, pts/build-imagemagick, pts/build-gcc, pts/build-gdb, pts/build-llvm, pts/build-ffmpeg, pts/build-mplayer, pts/build2, pts/build-godot, pts/build-erlang, pts/build-wasmer, pts/build-nodejs and pts/build-mesa



Geometric mean based upon tests: pts/build-godot, pts/build-llvm, pts/build-mesa and pts/build-nodejs

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Geometric mean based upon tests: pts/build-gcc, pts/build-linux-kernel, pts/build-php and pts/build-llvm

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 03:58.