



[www.phoronix-test-suite.com](http://www.phoronix-test-suite.com)

## **compilation-2993-4077**

Docker testing on Ubuntu 20.04.3 LTS via the Phoronix Test Suite.

### **Automated Executive Summary**

*compilation-2993-4077 had the most wins, coming in first place for 68% of the tests.*

*Based on the geometric mean of all complete results, the fastest (compilation-2993-4077) was 1.046x the speed of the slowest (compilation-sock-bios-4007). compilation-2666-4077 was 0.989x the speed of compilation-2993-4077, compilation-2733-4077 was 0.998x the speed of compilation-2666-4077, compilation-2400-4077 was 0.998x the speed of compilation-2733-4077, compilation-sock-bios-4007 was 0.969x the speed of compilation-2400-4077.*

### **Test Systems:**

**compilation-2993-4077**

**compilation-2400-4077**

Processor: AMD Ryzen 7 1800X Eight-Core @ 3.60GHz (8 Cores / 16 Threads), Motherboard: ASUS ROG CROSSHAIR VII HERO (4402 BIOS), Memory: 64GB, Disk: Samsung SSD 960 EVO 500GB + 2 x 3001GB TOSHIBA HDWD130 + 275GB Crucial CT275MX3, Graphics: amdgpudrmfb (1288/2000MHz), Monitor: 38GN950

OS: Ubuntu 20.04.3 LTS, Kernel: 5.13.12-gentoo (x86\_64), Display Driver: amdgpudrmfb, Compiler: GCC 9.3.0, File-System: overlayfs, Screen Resolution: 3840x1600, System Layer: Docker

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++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/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 performance (Boost: Enabled) - CPU Microcode: 0x8001138

Python Notes: Python 3.8.10

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 + srbs: Not affected + tsx\_async\_abort: Not affected

## compilation-sock-bios-4007

Processor: AMD Ryzen 7 1800X Eight-Core @ 3.60GHz (8 Cores / 16 Threads), Motherboard: ASUS ROG CROSSHAIR VII HERO (4007 BIOS), Memory: 64GB, Disk: Samsung SSD 960 EVO 500GB + 2 x 3001GB TOSHIBA HDWD130 + 275GB Crucial CT275MX3, Graphics: amdgpudrmfb (1288/2000MHz), Monitor: 38GN950

OS: Ubuntu 20.04.3 LTS, Kernel: 5.13.12-gentoo (x86\_64), Display Driver: amdgpudrmfb, Compiler: GCC 9.3.0, File-System: overlayfs, Screen Resolution: 3840x1600, System Layer: Docker

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++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/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 performance (Boost: Enabled) - CPU Microcode: 0x8001138

Python Notes: Python 3.8.10

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 + srbs: Not affected + tsx\_async\_abort: Not affected

## compilation-2666-4077

### compilation-2733-4077

Processor: AMD Ryzen 7 1800X Eight-Core @ 3.60GHz (8 Cores / 16 Threads), Motherboard: ASUS ROG CROSSHAIR VII HERO (4402 BIOS), Memory: 64GB, Disk: Samsung SSD 960 EVO 500GB + 2 x 3001GB TOSHIBA HDWD130 + 275GB Crucial CT275MX3, Graphics: amdgpudrmfb (1288/2000MHz), Monitor: 38GN950

OS: Ubuntu 20.04.3 LTS, Kernel: 5.13.12-gentoo (x86\_64), Display Driver: amdgpudrmfb, Compiler: GCC 9.3.0, File-System: overlayfs, Screen Resolution: 3840x1600, System Layer: Docker

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++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/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 performance (Boost: Enabled) - CPU Microcode: 0x8001138

Python Notes: Python 3.8.10

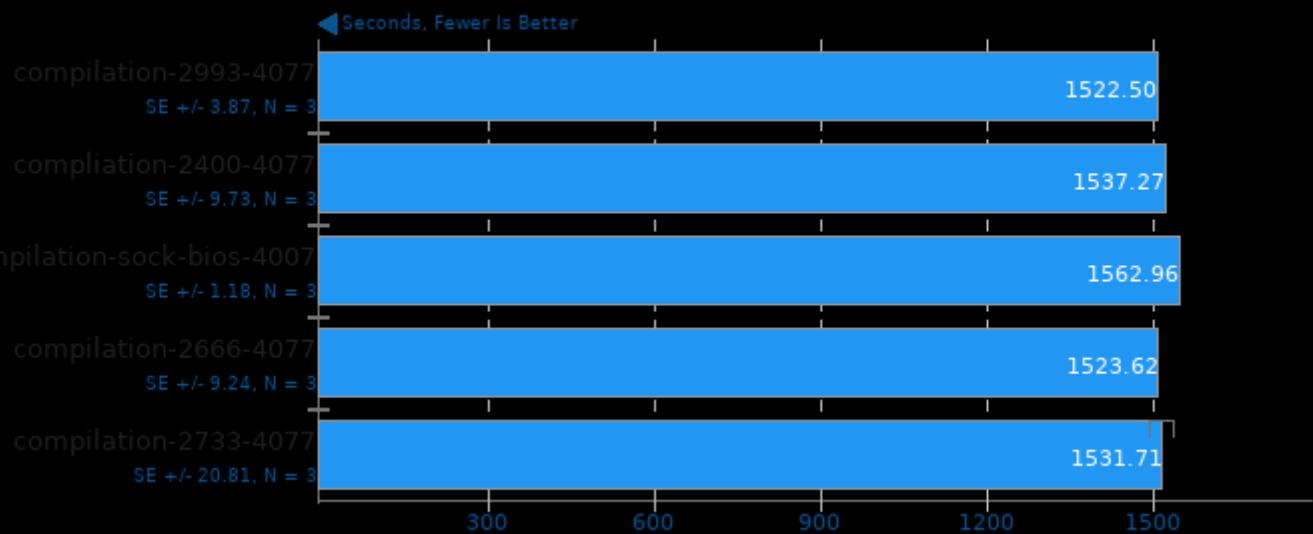
Security Notes: itlb\_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec\_store\_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre\_v1: Mitigation of usercopy/swapgs barriers and \_\_user pointer sanitization + spectre\_v2: Mitigation of Full AMD retpoline IBPB: conditional STIBP: disabled RSB filling + srbs: Not affected + tsx\_async\_abort: Not affected

	compilation-29 93-4077	compilation-24 00-4077	compilation-so ck-bios-4007	compilation-26 66-4077	compilation-27 33-4077
<b>Timed GCC Compilation - Time To Compile (sec)</b>	<b>1523</b>	1537	<b>1563</b>	1524	1532
Normalized	100%	99.04%	97.41%	99.93%	99.4%
Standard Deviation	0.4%	1.1%	0.1%	1.1%	2.4%
<b>Timed LLVM Compilation - Unix Makefiles (sec)</b>	<b>1174</b>	1211	<b>1265</b>	1196	1200
Normalized	100%	96.9%	92.78%	98.11%	97.81%
Standard Deviation	0.8%	0.6%	0.4%	0.7%	0%
<b>Timed LLVM Compilation - Ninja (sec)</b>	<b>1151</b>	1182	<b>1232</b>	1164	1167
Normalized	100%	97.42%	93.48%	98.94%	98.65%
Standard Deviation	0.2%	0.4%	0%	0.1%	0.2%
<b>Timed Node.js Compilation - Time To Compile (sec)</b>	<b>732.989</b>	752.755	<b>790.790</b>	741.475	740.927
Normalized	100%	97.37%	92.69%	98.86%	98.93%
Standard Deviation	0.2%	0.2%	0.2%	0.4%	0.1%
<b>Timed Erlang/OTP Compilation - Time To Compile (sec)</b>	158.137	159.862	157.873	<b>157.778</b>	<b>161.191</b>
Normalized	99.77%	98.7%	99.94%	100%	97.88%
Standard Deviation	0.4%	1.3%	0.1%	1.7%	2.4%
<b>Timed FFmpeg Compilation - Time To Compile (sec)</b>	<b>89.340</b>	92.767	<b>93.661</b>	92.811	91.578
Normalized	100%	96.31%	95.39%	96.26%	97.56%
Standard Deviation	0.9%	2.8%	0.6%	6.8%	0.5%
<b>Timed Godot Game Engine Compilation - Time To Compile (sec)</b>	<b>207.955</b>	210.752	<b>216.860</b>	211.322	209.899
Normalized	100%	98.67%	95.89%	98.41%	99.07%
Standard Deviation	0.3%	0.6%	0.1%	0.2%	0.3%
<b>Timed MPlayer Compilation - Time To Compile (sec)</b>	<b>56.984</b>	59.407	<b>59.801</b>	58.120	58.941
Normalized	100%	95.92%	95.29%	98.05%	96.68%
Standard Deviation	0.2%	4.9%	0.2%	4%	5.1%
<b>Build2 - Time To Compile (sec)</b>	<b>188.021</b>	190.785	<b>193.942</b>	189.120	190.041
Normalized	100%	98.55%	96.95%	99.42%	98.94%
Standard Deviation	0.8%	1%	1.4%	1.3%	1%
<b>Timed Linux Kernel Compilation - Time To Compile (sec)</b>	139.761	138.479	<b>141.980</b>	140.313	<b>138.094</b>
Normalized	98.81%	99.72%	97.26%	98.42%	100%
Standard Deviation	2.3%	0.4%	0.9%	1.3%	0.6%
<b>Timed Wasmer Compilation - Time To Compile (sec)</b>	<b>116.364</b>	117.893	<b>124.250</b>	122.553	120.594
Normalized	100%	98.7%	93.65%	94.95%	96.49%
Standard Deviation	1%	0.8%	0.1%	1.4%	2.1%
<b>Timed Eigen Compilation - Time To Compile (sec)</b>	109.847	106.961	<b>112.800</b>	<b>106.906</b>	108.689
Normalized	97.32%	99.95%	94.77%	100%	98.36%
Standard Deviation	0.3%	0.1%	0.5%	0.4%	0.2%

<b>Timed GDB GNU Debugger</b>	96.804	96.729	<b>100.316</b>	<b>96.351</b>	96.569
<b>Compilation - Time To Compile (sec)</b>					
Normalized	99.53%	99.61%	96.05%	100%	99.77%
Standard Deviation	1.2%	0.4%	0.2%	0.3%	0.3%
<b>Timed PHP Compilation - Time To Compile (sec)</b>					
Normalized	99.84%	98.63%	94.14%	100%	99.29%
Standard Deviation	0.1%	0.2%	0.3%	0.3%	0.1%
<b>Timed Apache Compilation - Time To Compile (sec)</b>	<b>30.542</b>	30.828	<b>31.434</b>	30.612	30.603
Normalized	100%	99.07%	97.16%	99.77%	99.8%
Standard Deviation	1.6%	2.5%	0.7%	2.6%	1.8%
<b>Timed ImageMagick Compilation - Time To Compile (sec)</b>					
Normalized	100%	97.36%	92.09%	98.12%	98.39%
Standard Deviation	1.4%	1.5%	1.3%	0.5%	1%

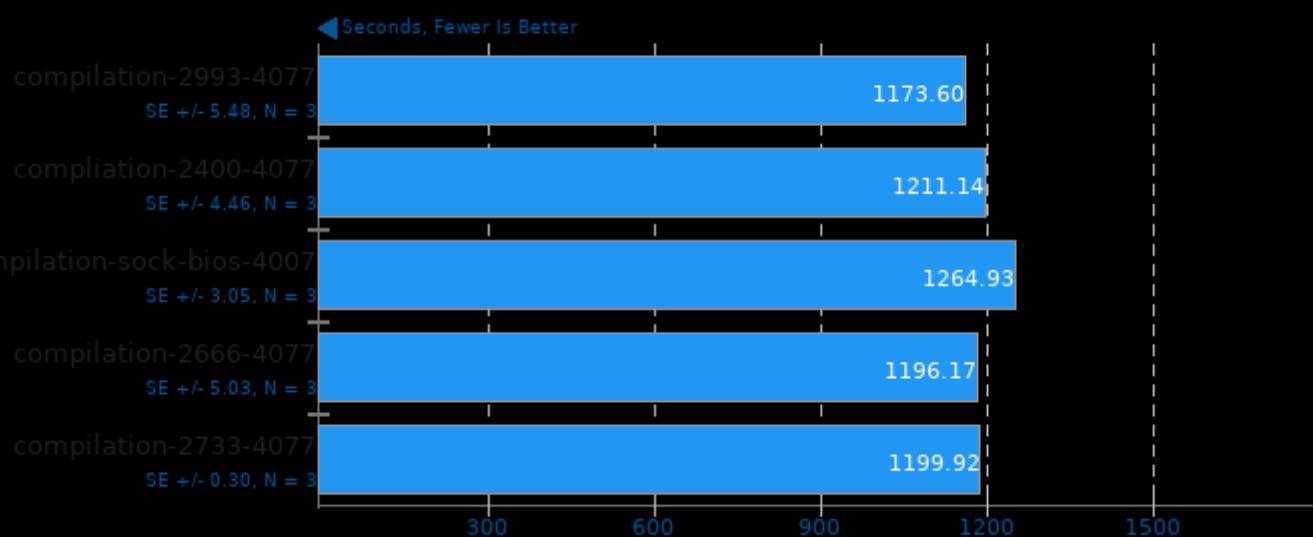
## Timed GCC Compilation 11.2.0

Time To Compile



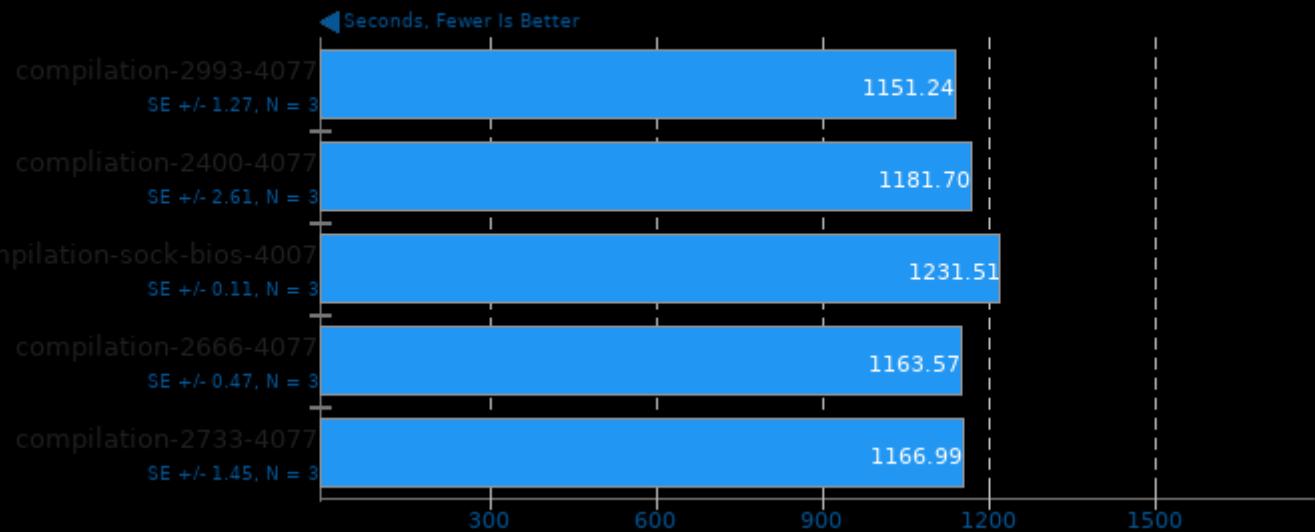
## Timed LLVM Compilation 12.0

Build System: Unix Makefiles



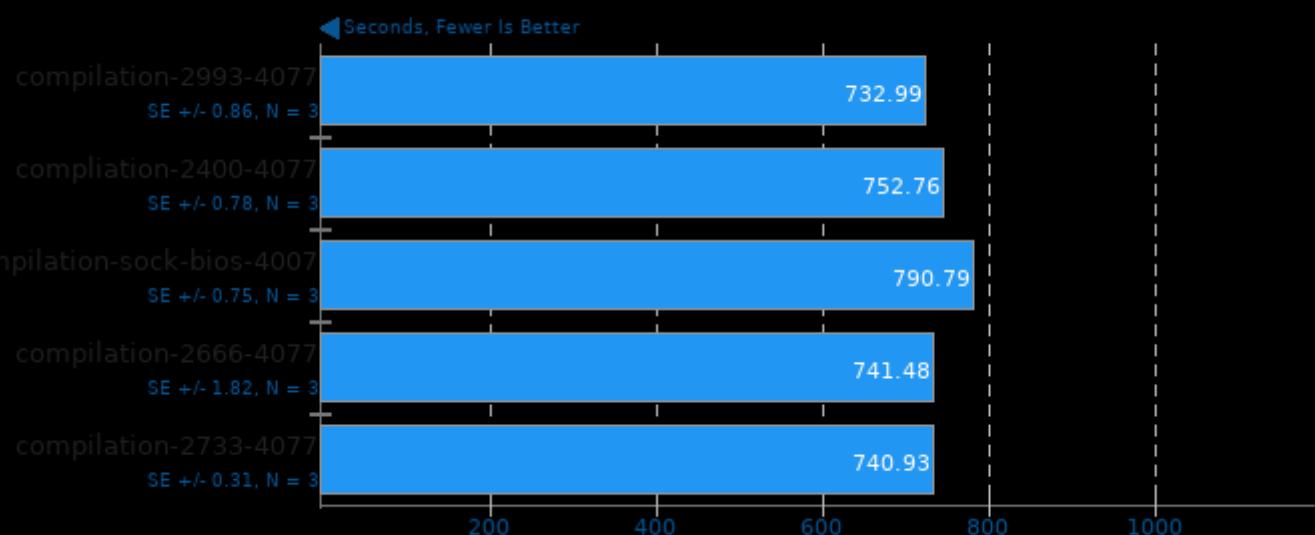
## Timed LLVM Compilation 12.0

Build System: Ninja



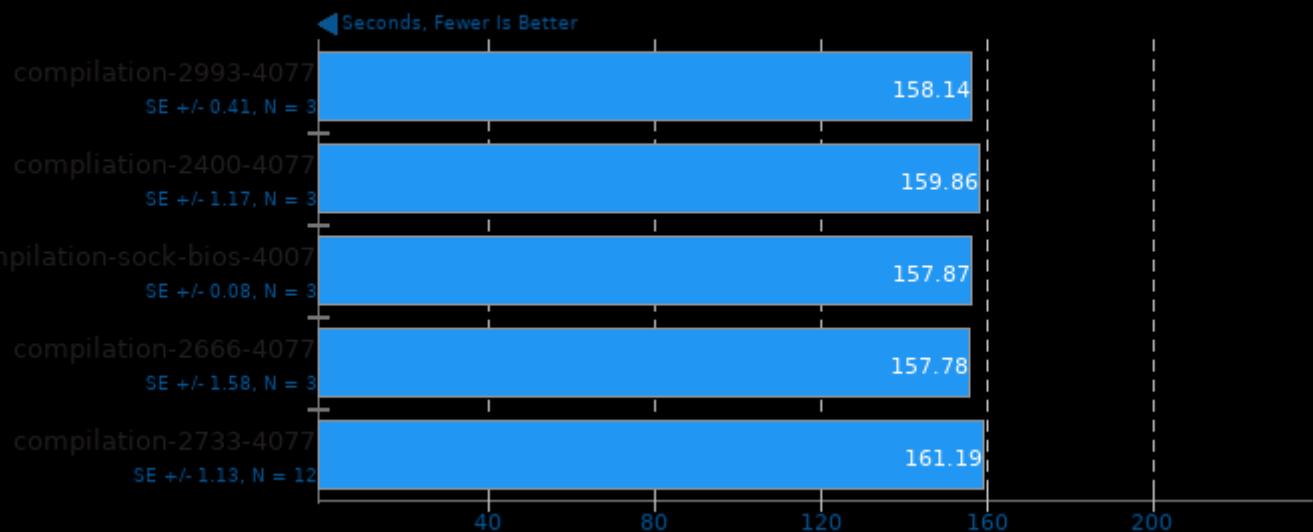
## Timed Node.js Compilation 15.11

Time To Compile



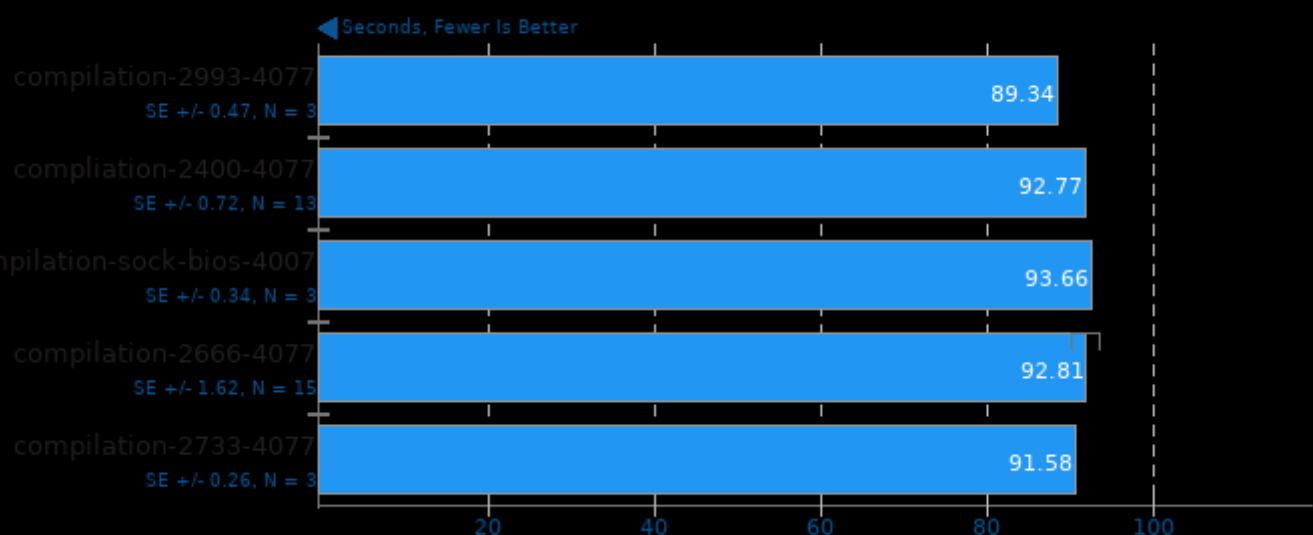
## Timed Erlang/OTP Compilation 23.2

Time To Compile



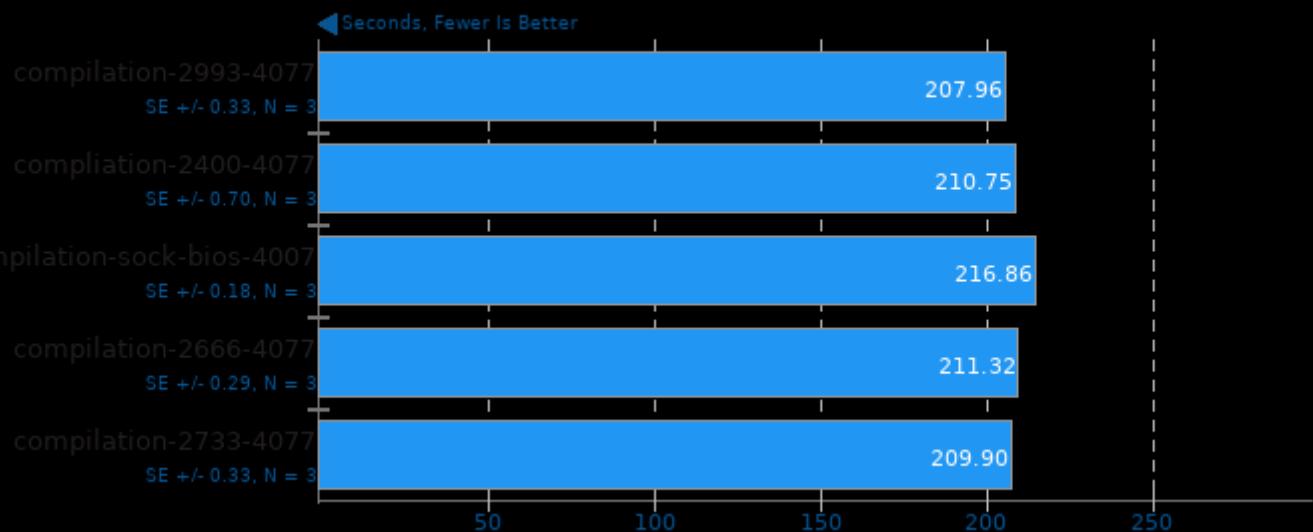
## Timed FFmpeg Compilation 4.4

Time To Compile



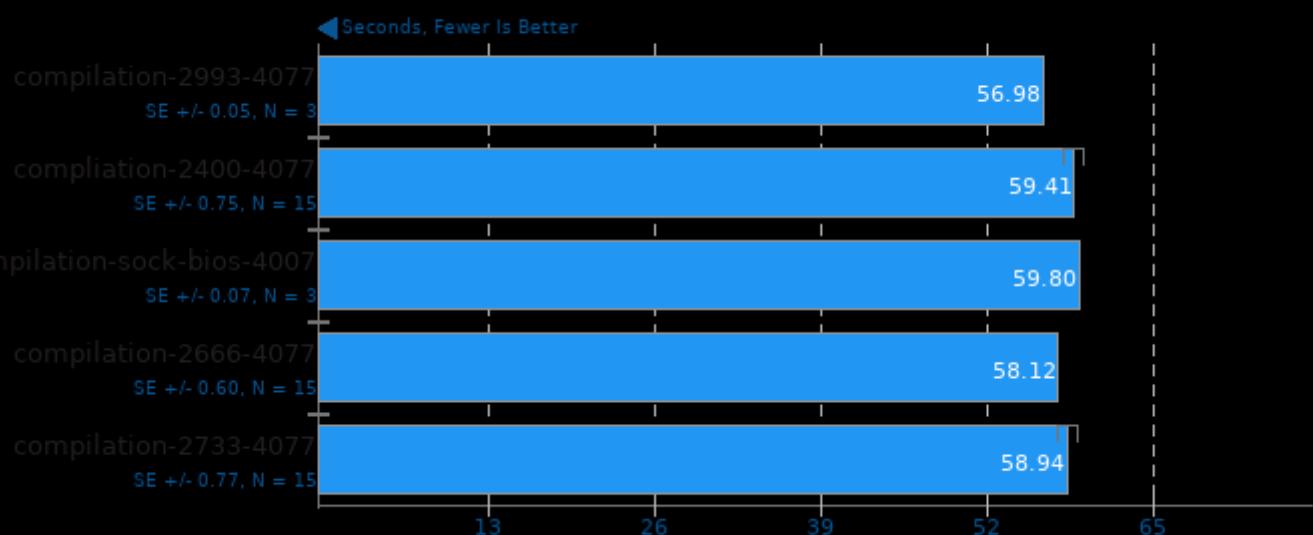
## Timed Godot Game Engine Compilation 3.2.3

Time To Compile



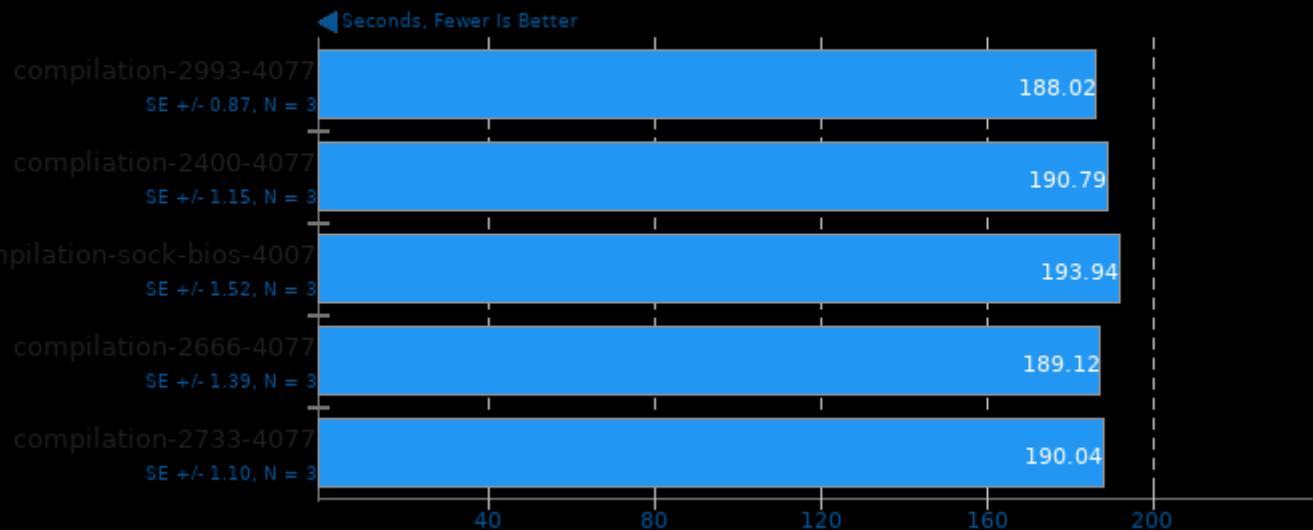
## Timed MPlayer Compilation 1.4

Time To Compile

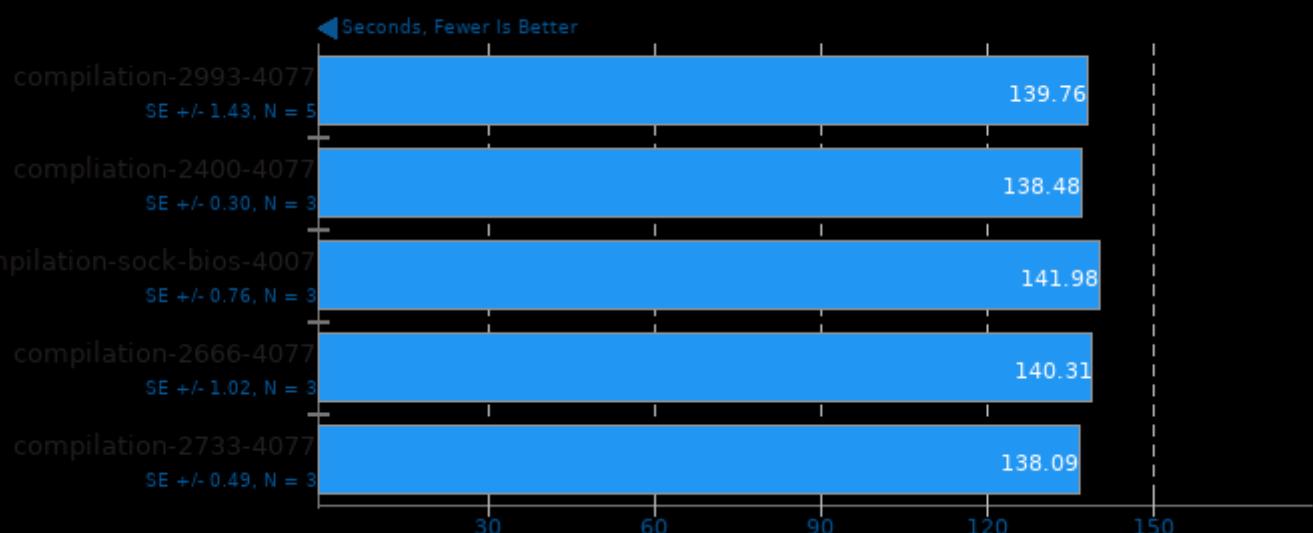


**Build2 0.13**

Time To Compile

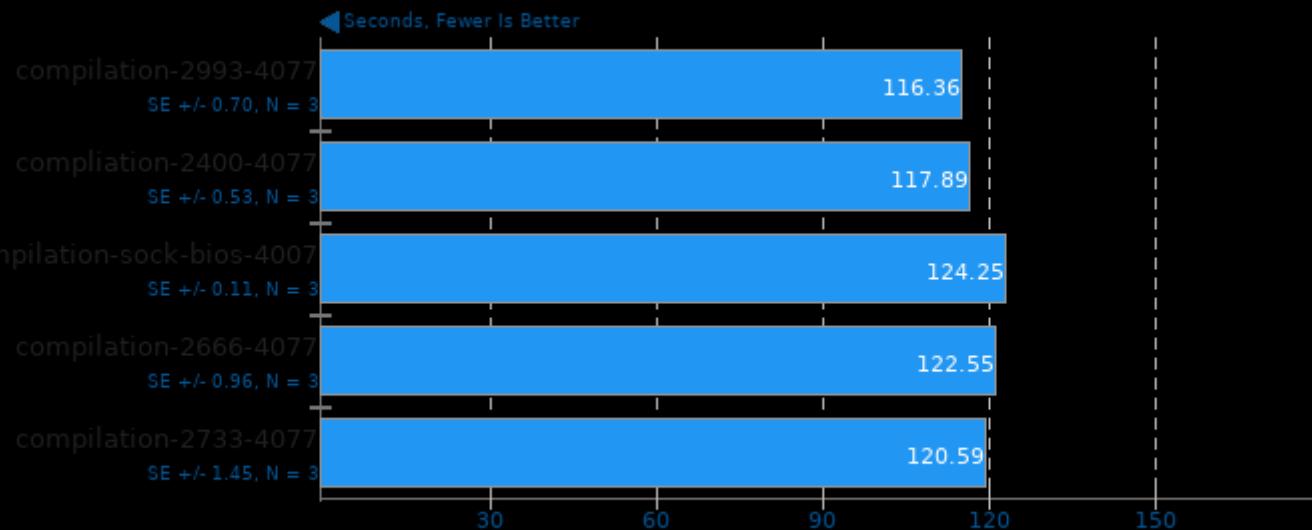
**Timed Linux Kernel Compilation 5.10.20**

Time To Compile



## Timed Wasmer Compilation 1.0.2

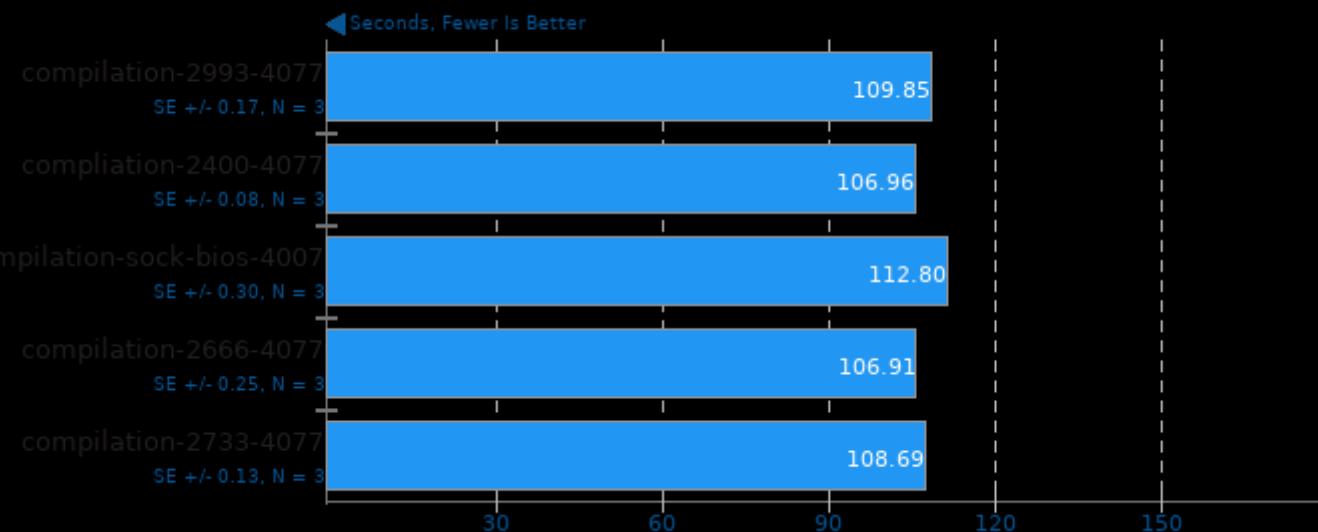
Time To Compile



1. (CC) gcc options: -m64 -pie -fno-default-lib -ldl -lgcc\_s -util -lrt -lpthread -lm -lc

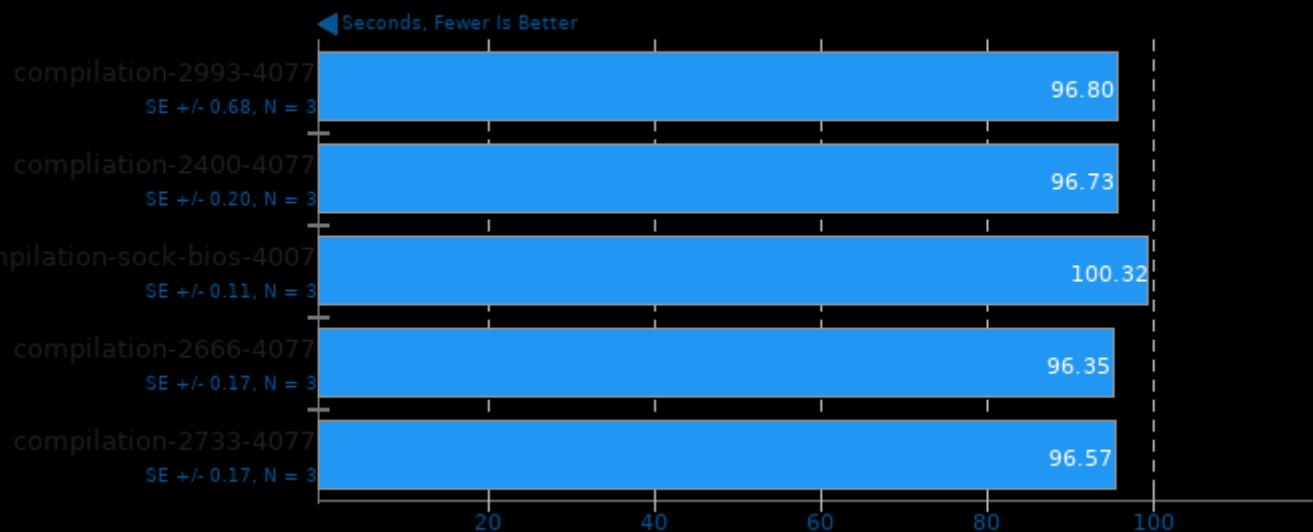
## Timed Eigen Compilation 3.3.9

Time To Compile



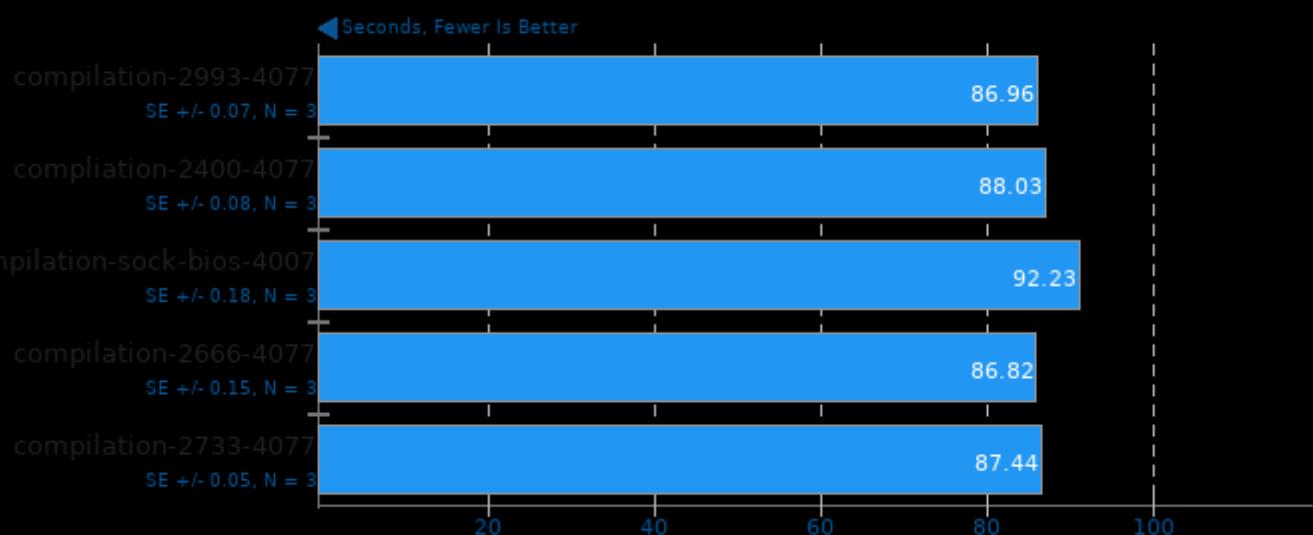
## Timed GDB GNU Debugger Compilation 10.2

Time To Compile



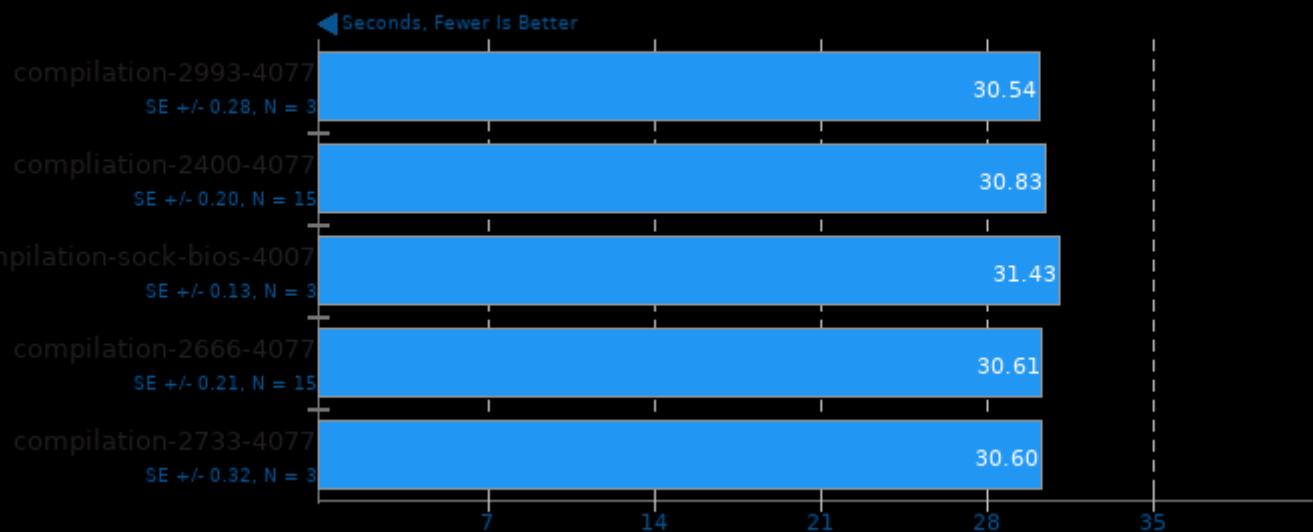
## Timed PHP Compilation 7.4.2

Time To Compile



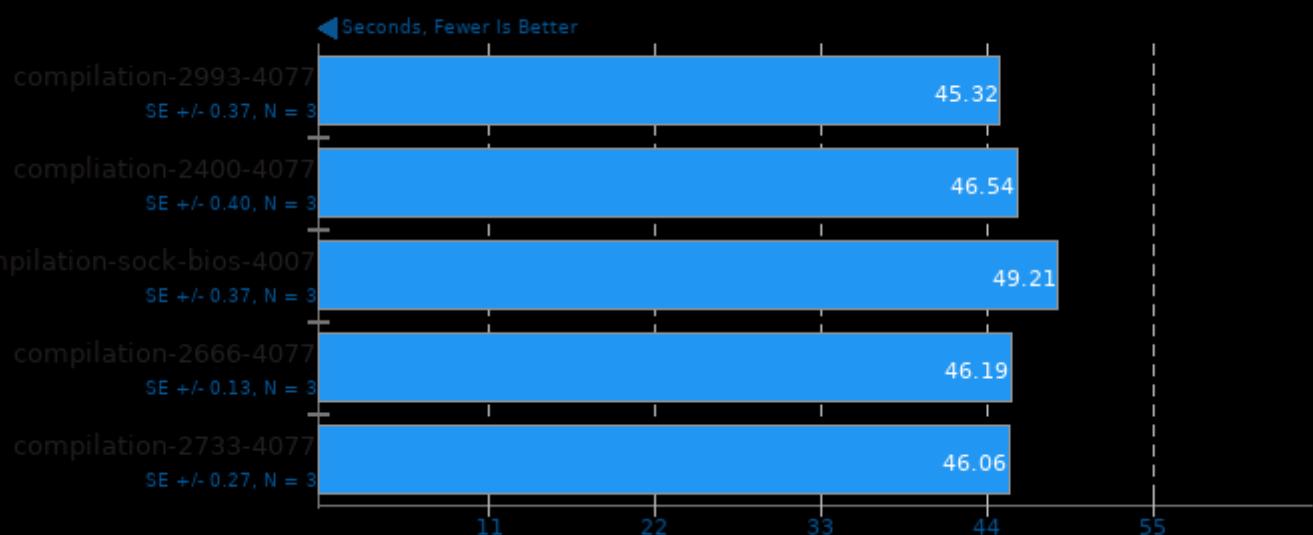
## Timed Apache Compilation 2.4.41

Time To Compile



## Timed ImageMagick Compilation 6.9.0

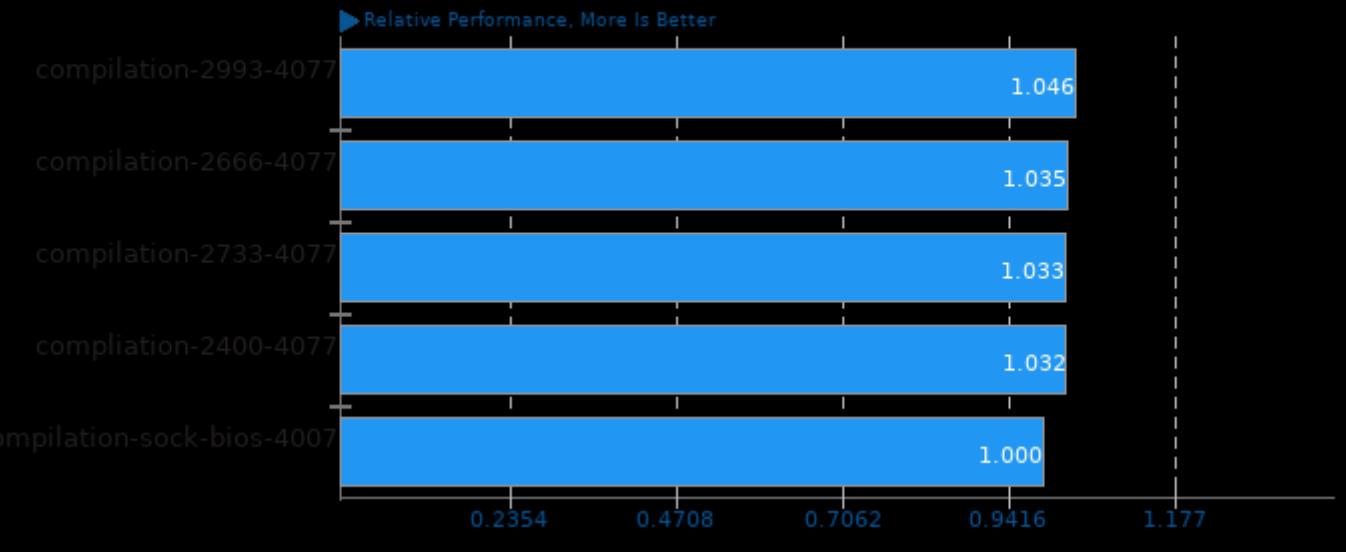
Time To Compile



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

### Geometric Mean Of Timed Code Compilation Tests

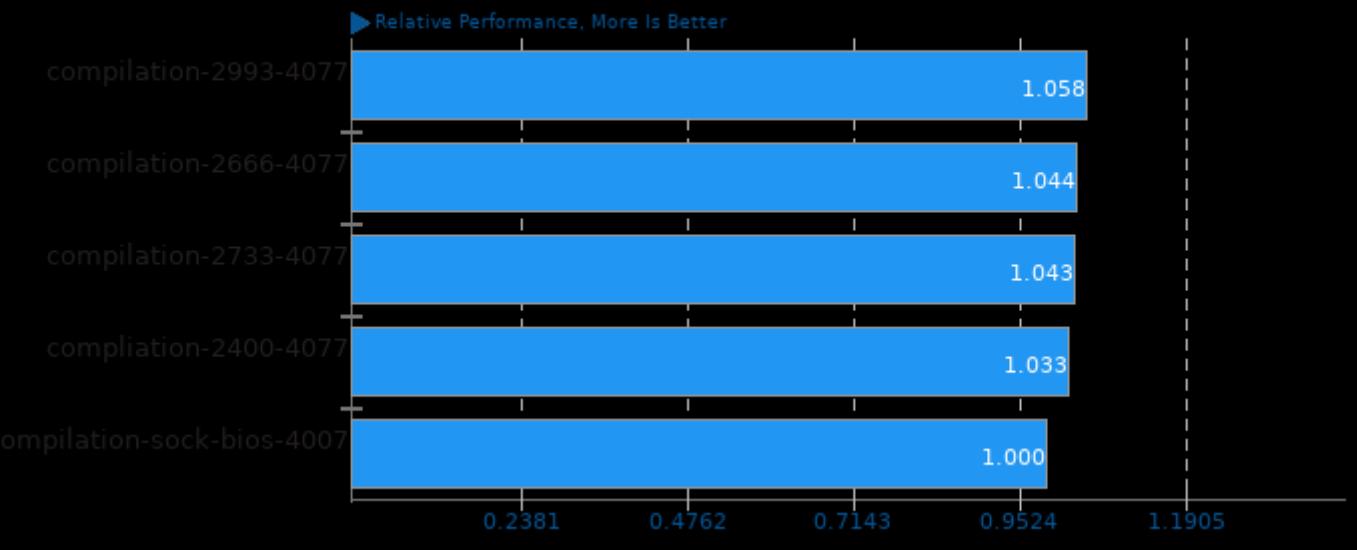
Result Composite - compilation-2993-4077



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 and pts/build-nodejs

### Geometric Mean Of C/C++ Compiler Tests

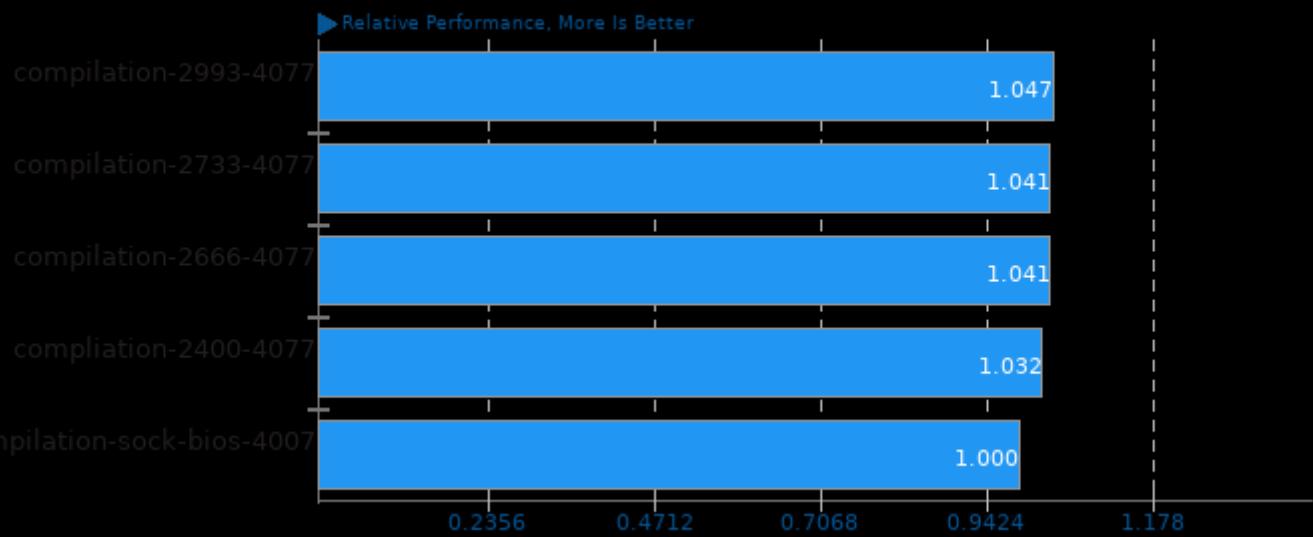
Result Composite - compilation-2993-4077



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 Of CPU Massive Tests

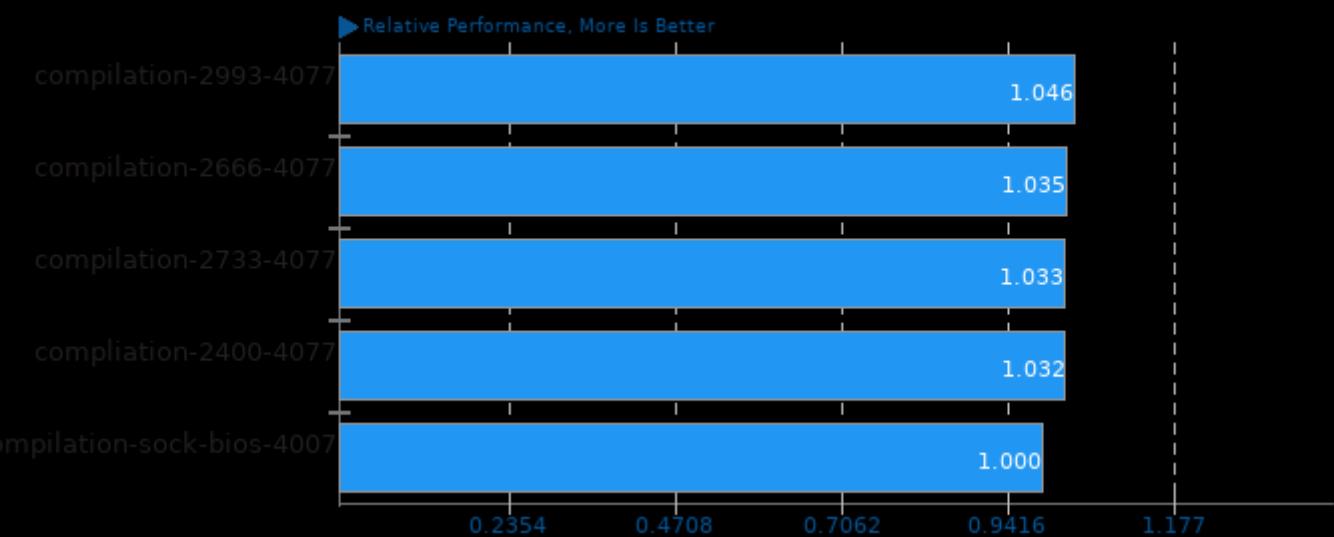
Result Composite - compilation-2993-4077



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

## Geometric Mean Of Multi-Core Tests

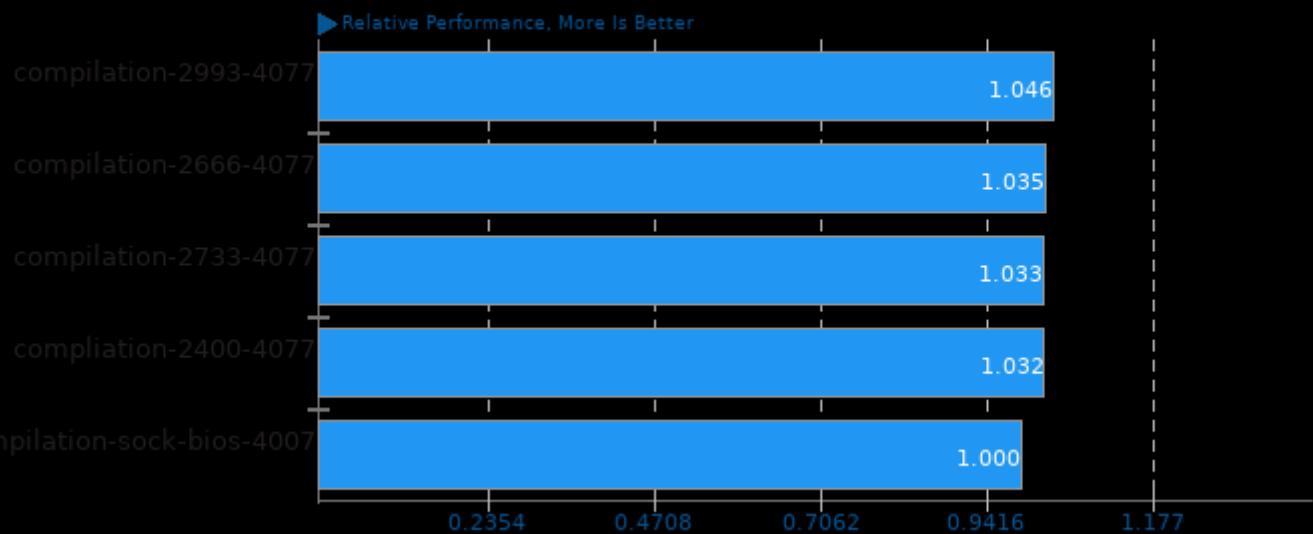
Result Composite - compilation-2993-4077



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 and pts/build-nodejs

## Geometric Mean Of Programmer / Developer System Benchmarks Tests

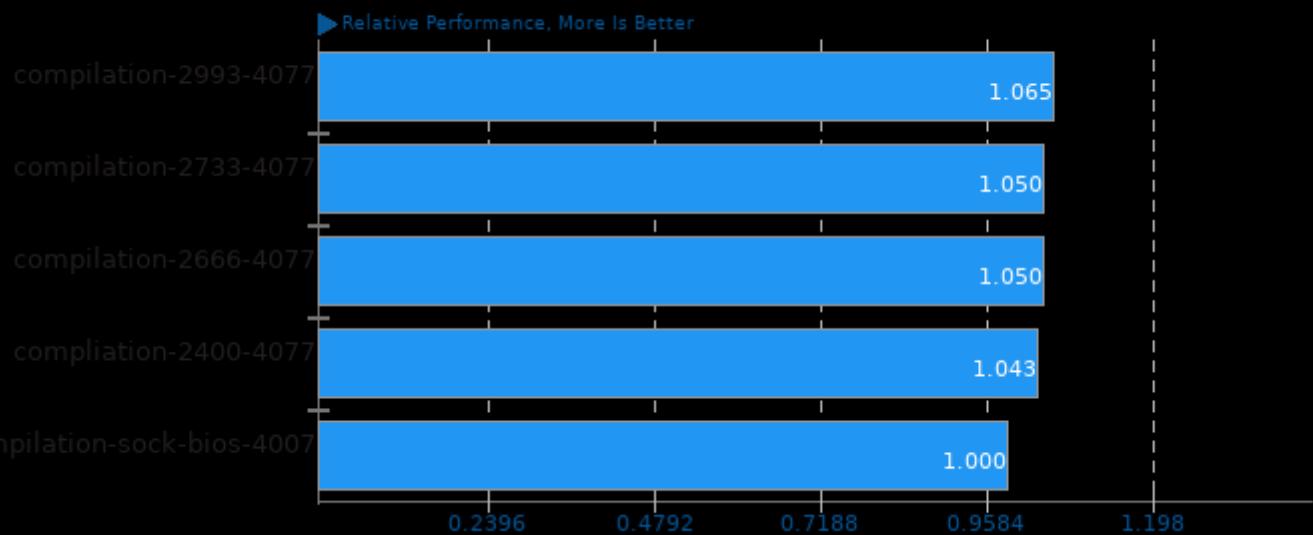
Result Composite - compilation-2993-4077



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 and pts/build-nodejs

## Geometric Mean Of Python Tests

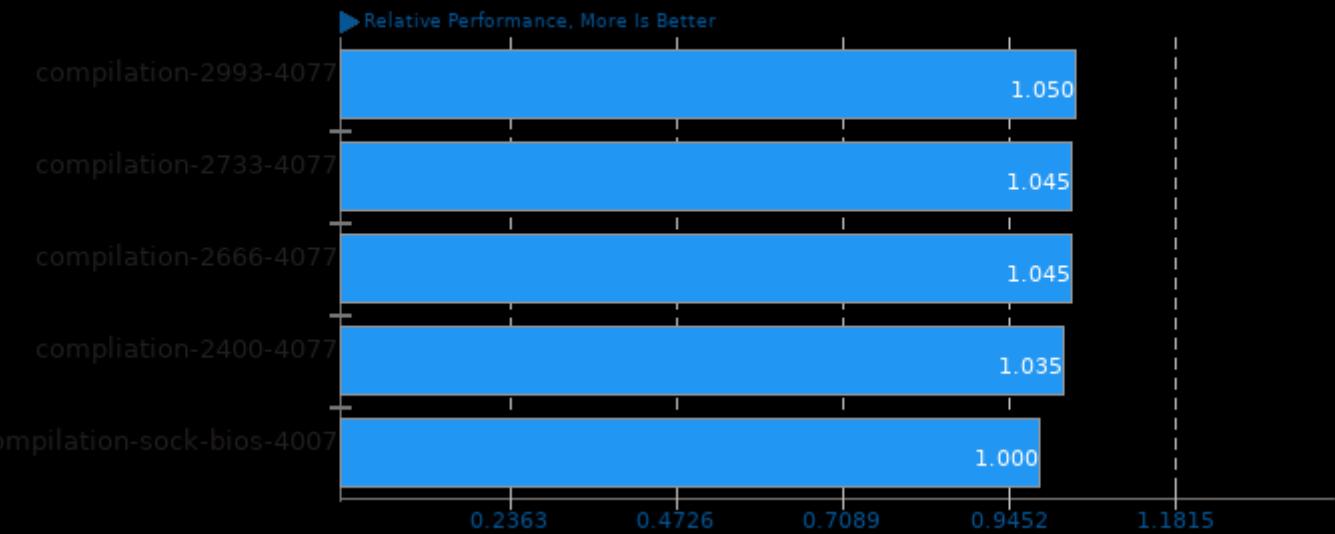
Result Composite - compilation-2993-4077



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

**Geometric Mean Of Server CPU Tests**

Result Composite - compilation-2993-4077



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 Thursday, 28 March 2024 04:52.*