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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, compliation-2400-4077 was 0.998x the speed of compilation-2733-4077, compilation-sock-bios-4007 was 0.969x the speed of compliation-2400-4077.

Test Systems:

compilation-2993-4077

compliation-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 + srbds: 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 + srbds: 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 + srbds: Not affected + tsx_async_abort: Not affected

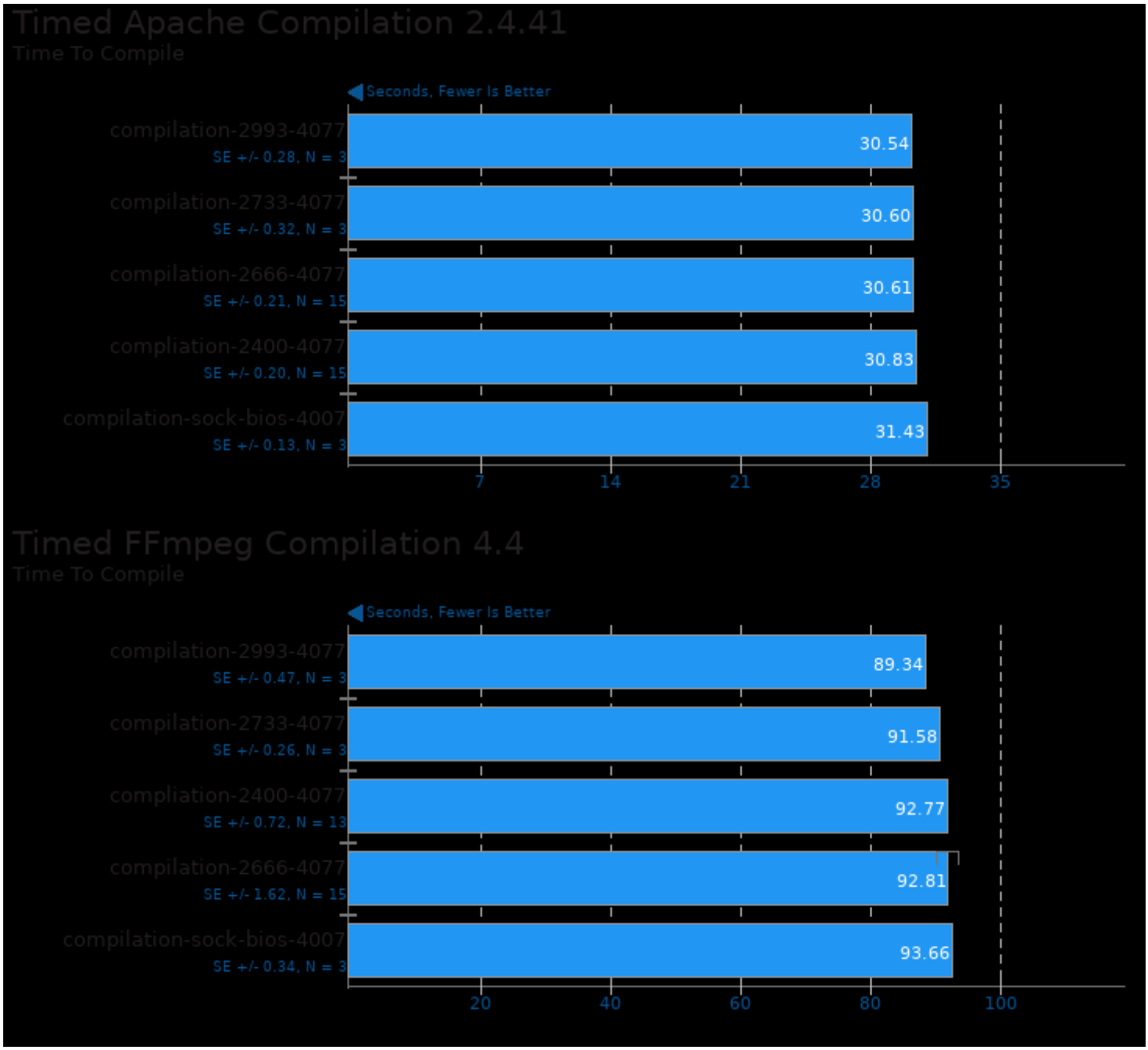
compilation-2993-4077

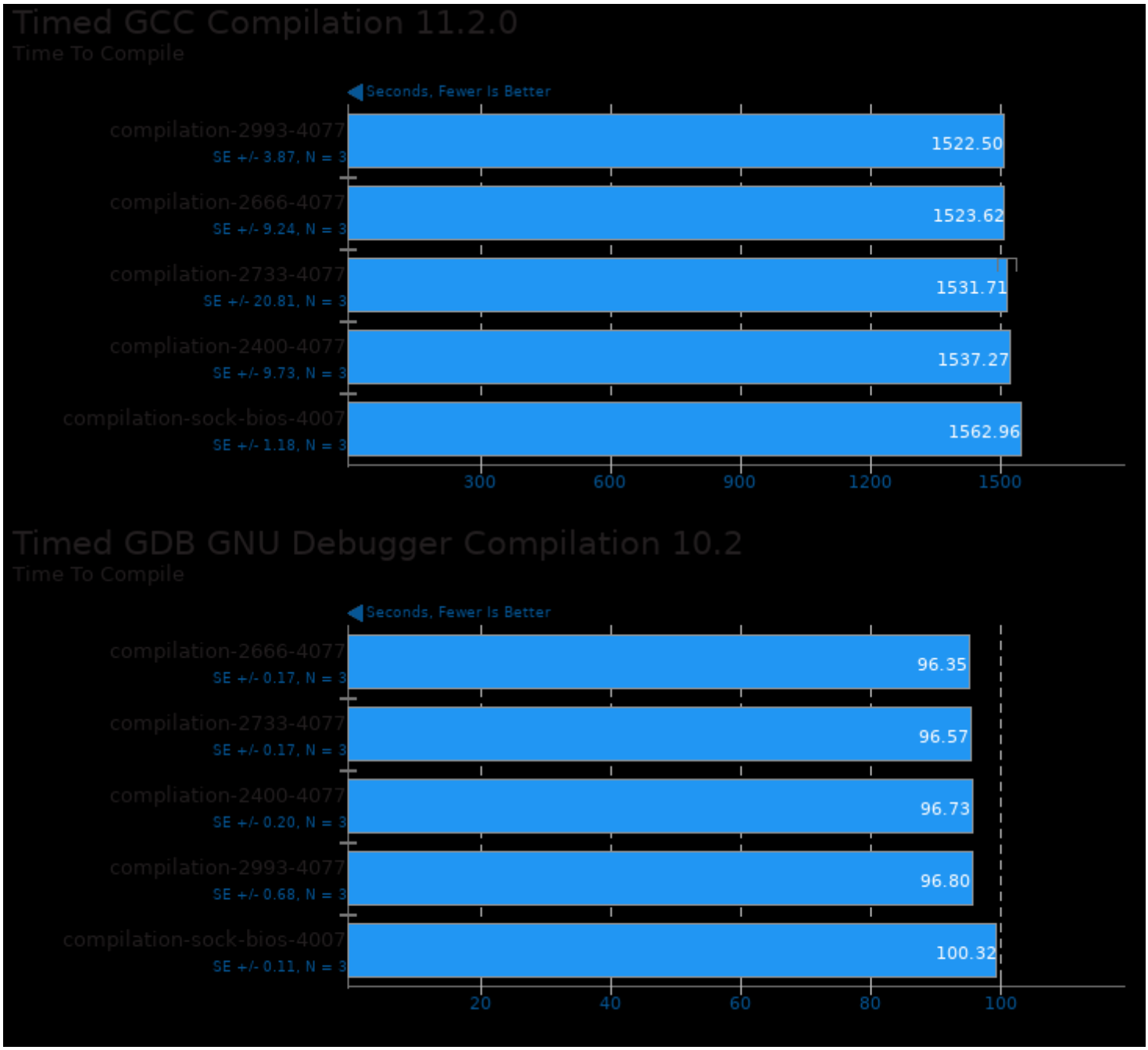
	compilation-2993-4077	compliation-2400-4077	compilation-sock-bios-4007	compilation-2666-4077	compilation-2733-4077
Timed Apache Compilation - Time To Compile (sec)	**30.542**	30.828	**31.434**	30.612	30.603
Normalized	100%	99.07%	97.16%	99.77%	99.8%
Standard Deviation	1.6%	2.5%	0.7%	2.6%	1.8%
Timed FFmpeg Compilation - Time To Compile (sec)	**89.340**	92.767	**93.661**	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%
Timed GCC Compilation - Time To Compile (sec)	**1523**	1537	**1563**	1524	1532
Normalized	100%	99.04%	97.41%	99.93%	99.4%
Standard Deviation	0.4%	1.1%	0.1%	1.1%	2.4%
Timed GDB GNU Debugger Compilation - Time To Compile (sec)	96.804	96.729	**100.316**	**96.351**	96.569
Normalized	99.53%	99.61%	96.05%	100%	99.77%
Standard Deviation	1.2%	0.4%	0.2%	0.3%	0.3%
Timed Godot Game Engine Compilation - Time To Compile (sec)	**207.955**	210.752	**216.860**	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%
Timed ImageMagick Compilation - Time To Compile (sec)	**45.315**	46.543	**49.209**	46.185	46.057
Normalized	100%	97.36%	92.09%	98.12%	98.39%
Standard Deviation	1.4%	1.5%	1.3%	0.5%	1%
Timed Linux Kernel Compilation - Time To Compile (sec)	139.761	138.479	**141.980**	140.313	**138.094**
Normalized	98.81%	99.72%	97.26%	98.42%	100%
Standard Deviation	2.3%	0.4%	0.9%	1.3%	0.6%
Timed LLVM Compilation - Ninja (sec)	**1151**	1182	**1232**	1164	1167
Normalized	100%	97.42%	93.48%	98.94%	98.65%
Standard Deviation	0.2%	0.4%	0%	0.1%	0.2%
Timed LLVM Compilation - Unix Makefiles (sec)	**1174**	1211	**1265**	1196	1200
Normalized	100%	96.9%	92.78%	98.11%	97.81%
Standard Deviation	0.8%	0.6%	0.4%	0.7%	0%
Timed MPlayer Compilation - Time To Compile (sec)	**56.984**	59.407	**59.801**	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%
Timed Node.js Compilation - Time To Compile (sec)	**732.989**	752.755	**790.790**	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%
Timed PHP Compilation - Time To Compile (sec)	86.960	88.025	**92.226**	**86.818**	87.438
Normalized	99.84%	98.63%	94.14%	100%	99.29%
Standard Deviation	0.1%	0.2%	0.3%	0.3%	0.1%

compilation-2993-4077

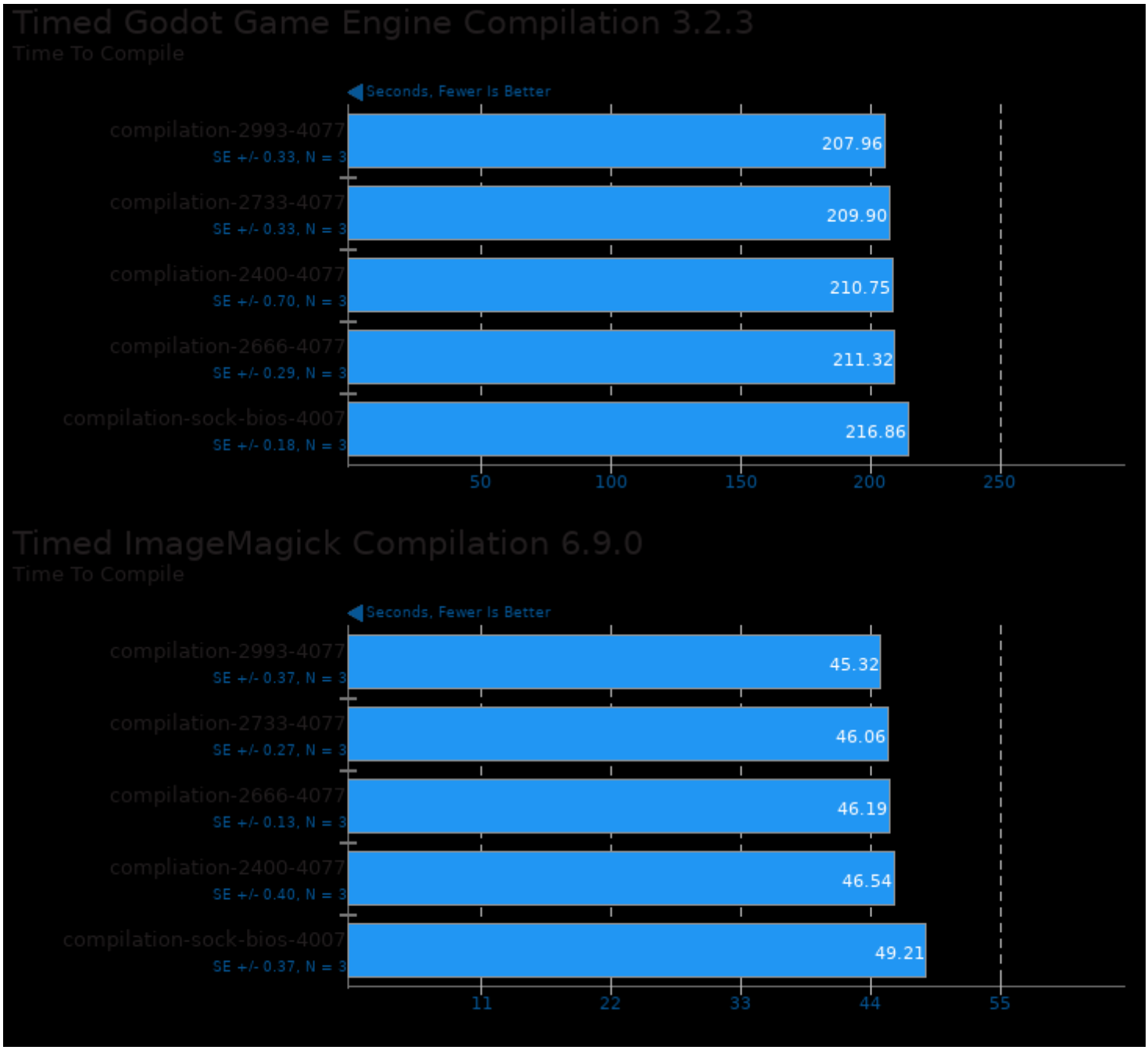
Build2 - Time To Compile (sec)	**188.021**	190.785	**193.942**	189.120	190.041
Normalized	100%	98.55%	96.95%	99.42%	98.94%
Standard Deviation	0.8%	1%	1.4%	1.3%	1%
Timed Eigen Compilation - Time To Compile (sec)	109.847	106.961	**112.800**	**106.906**	108.689
Normalized	97.32%	99.95%	94.77%	100%	98.36%
Standard Deviation	0.3%	0.1%	0.5%	0.4%	0.2%
Timed Erlang/OTP Compilation - Time To Compile (sec)	158.137	159.862	157.873	**157.778**	**161.191**
Normalized	99.77%	98.7%	99.94%	100%	97.88%
Standard Deviation	0.4%	1.3%	0.1%	1.7%	2.4%
Timed Wasmer Compilation - Time To Compile (sec)	**116.364**	117.893	**124.250**	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%

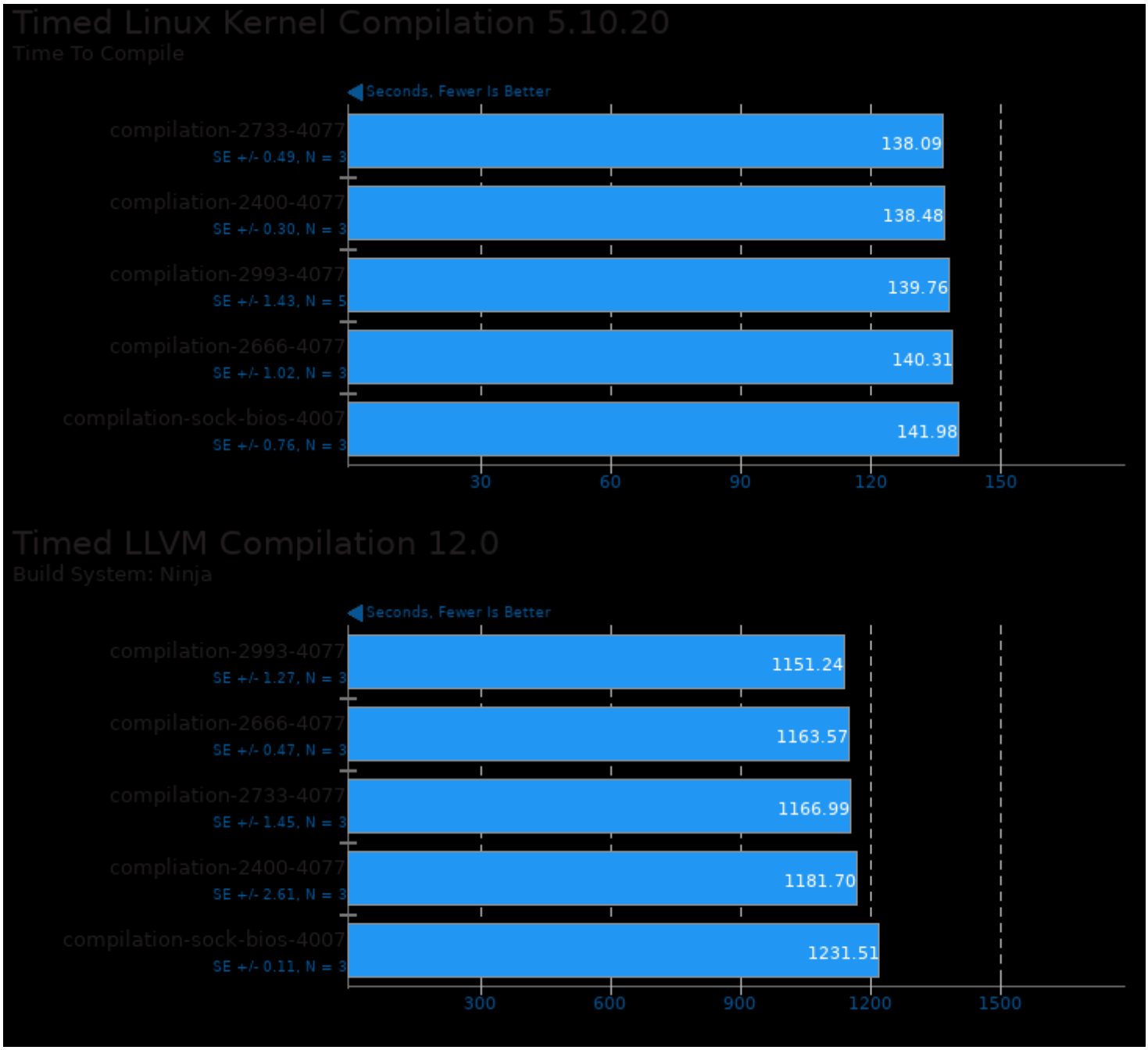
compilation-2993-4077

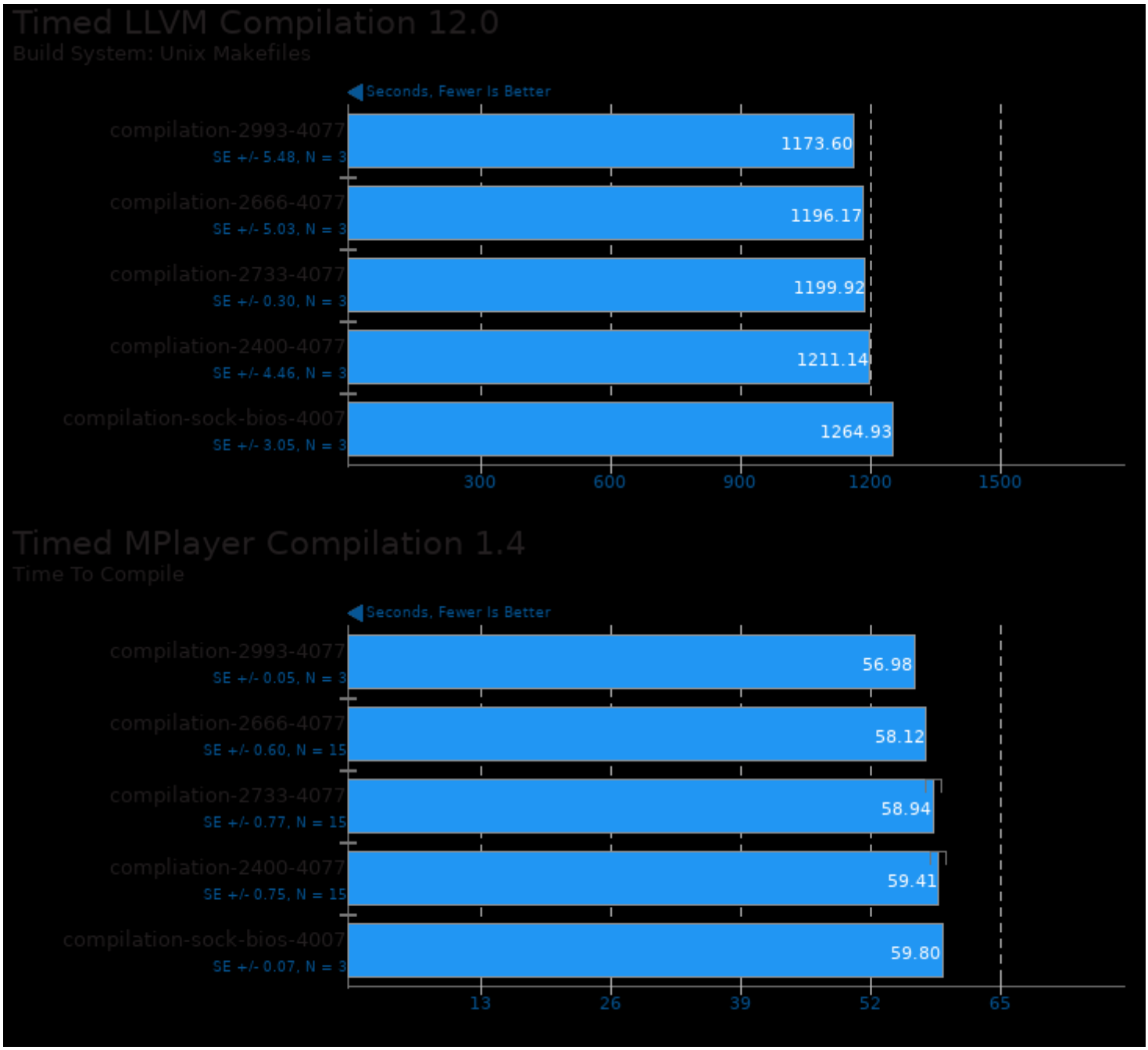



Timed GCC Compilation 11.2.0
Time To Compile
Seconds, Fewer Is Better
compilation-2993-4077
SE +/- 3.87, N = 3
1522.50
compilation-2666-4077
SE +/- 9.24, N = 3
1523.62
compilation-2733-4077
SE +/- 20.81, N = 3
1531.71
compliation-2400-4077
SE +/- 9.73, N = 3
1537.27
compilation-sock-bios-4007
SE +/- 1.18, N = 3
1562.96
300
600
900
1200
1500
Timed GDB GNU Debugger Compilation 10.2
Time To Compile
Seconds, Fewer Is Better
compilation-2666-4077
SE +/- 0.17, N = 3
96.35
compilation-2733-4077
SE +/- 0.17, N = 3
96.57
compliation-2400-4077
SE +/- 0.20, N = 3
96.73
compilation-2993-4077
SE +/- 0.68, N = 3
96.80
compilation-sock-bios-4007
SE +/- 0.11, N = 3
100.32
20
40
60
80
100

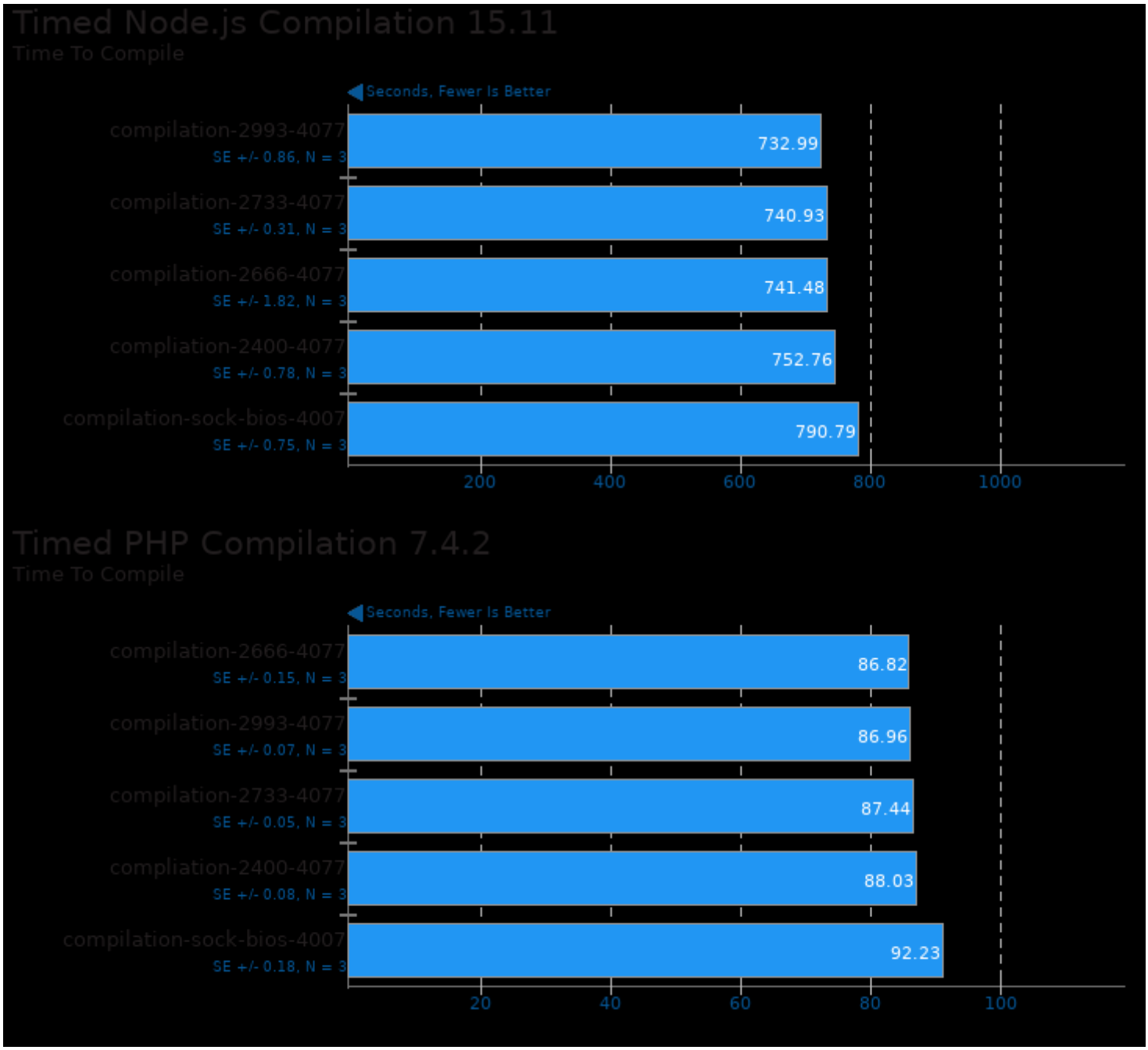
compilation-2993-4077

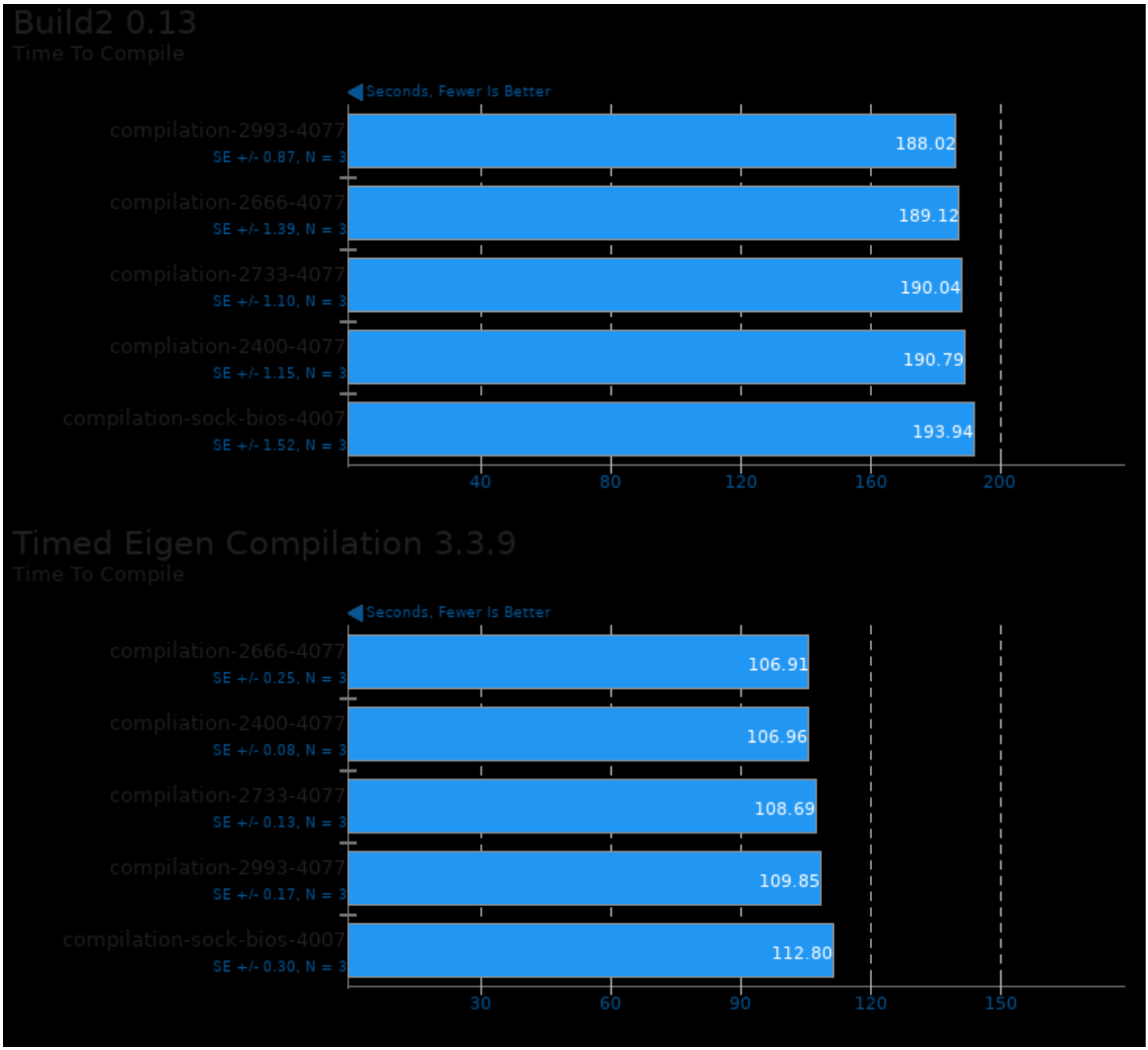


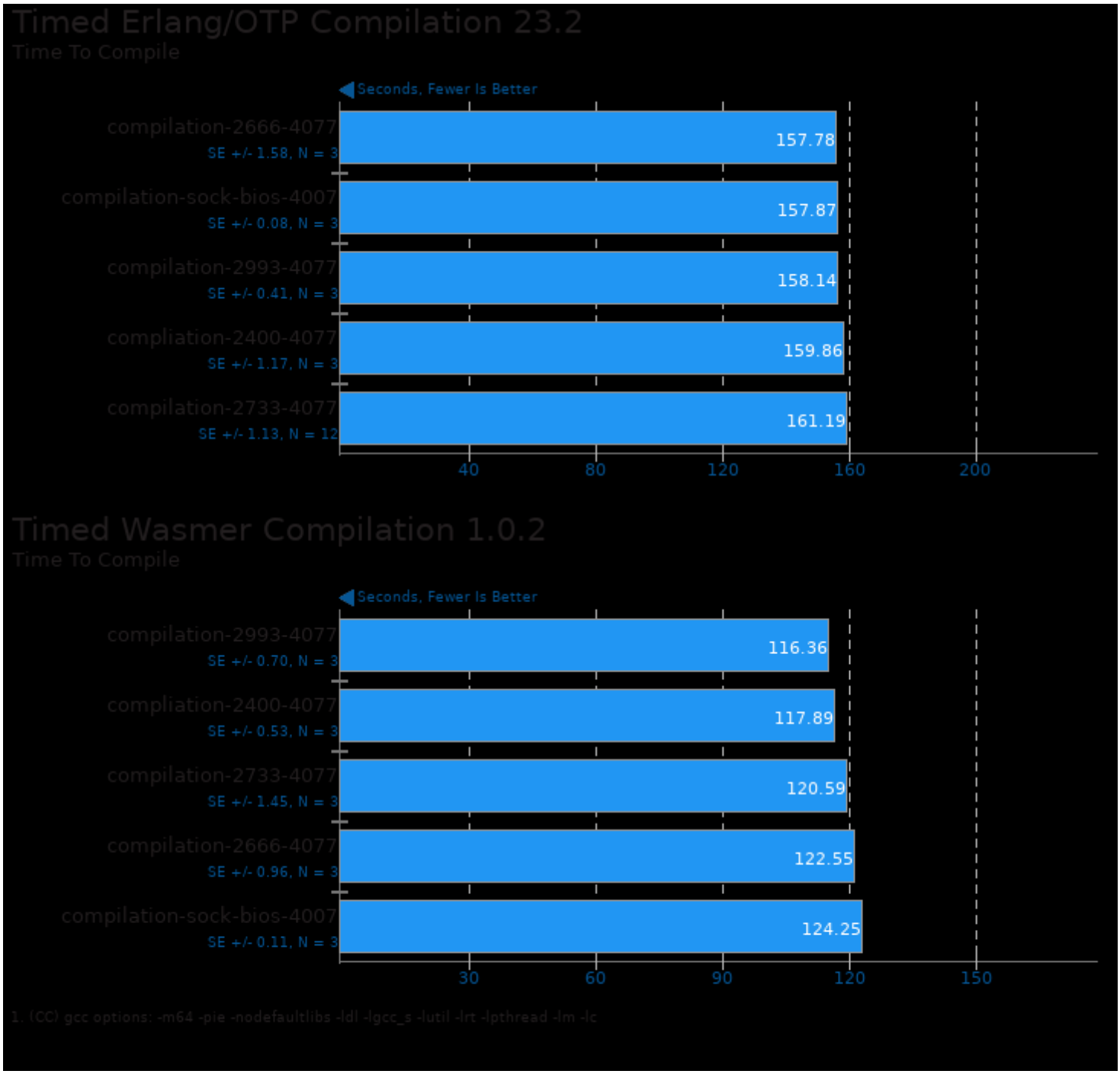

Timed Linux Kernel Compilation 5.10.20
Time To Compile
Seconds, Fewer Is Better
compilation-2733-4077
SE +/- 0.49, N = 3
138.09
compliation-2400-4077
SE +/- 0.30, N = 3
138.48
compilation-2993-4077
SE +/- 1.43, N = 5
139.76
compilation-2666-4077
SE +/- 1.02, N = 3
140.31
compilation-sock-bios-4007
SE +/- 0.76, N = 3
141.98
30
60
90
120
150
Timed LLVM Compilation 12.0
Build System: Ninja
Seconds, Fewer Is Better
compilation-2993-4077
SE +/- 1.27, N = 3
1151.24
compilation-2666-4077
SE +/- 0.47, N = 3
1163.57
compilation-2733-4077
SE +/- 1.45, N = 3
1166.99
compliation-2400-4077
SE +/- 2.61, N = 3
1181.70
compilation-sock-bios-4007
SE +/- 0.11, N = 3
1231.51
300
600
900
1200
1500


Timed LLVM Compilation 12.0
Build System: Unix Makefiles
Seconds, Fewer Is Better
compilation-2993-4077
SE +/- 5.48, N = 3
1173.60
compilation-2666-4077
SE +/- 5.03, N = 3
1196.17
compilation-2733-4077
SE +/- 0.30, N = 3
1199.92
compliation-2400-4077
SE +/- 4.46, N = 3
1211.14
compilation-sock-bios-4007
SE +/- 3.05, N = 3
1264.93
300
600
900
1200
1500
Timed MPlayer Compilation 1.4
Time To Compile
Seconds, Fewer Is Better
compilation-2993-4077
SE +/- 0.05, N = 3
56.98
compilation-2666-4077
SE +/- 0.60, N = 15
58.12
compilation-2733-4077
SE +/- 0.77, N = 15
58.94
compliation-2400-4077
SE +/- 0.75, N = 15
59.41
compilation-sock-bios-4007
SE +/- 0.07, N = 3
59.80
13
26
39
52
65

compilation-2993-4077

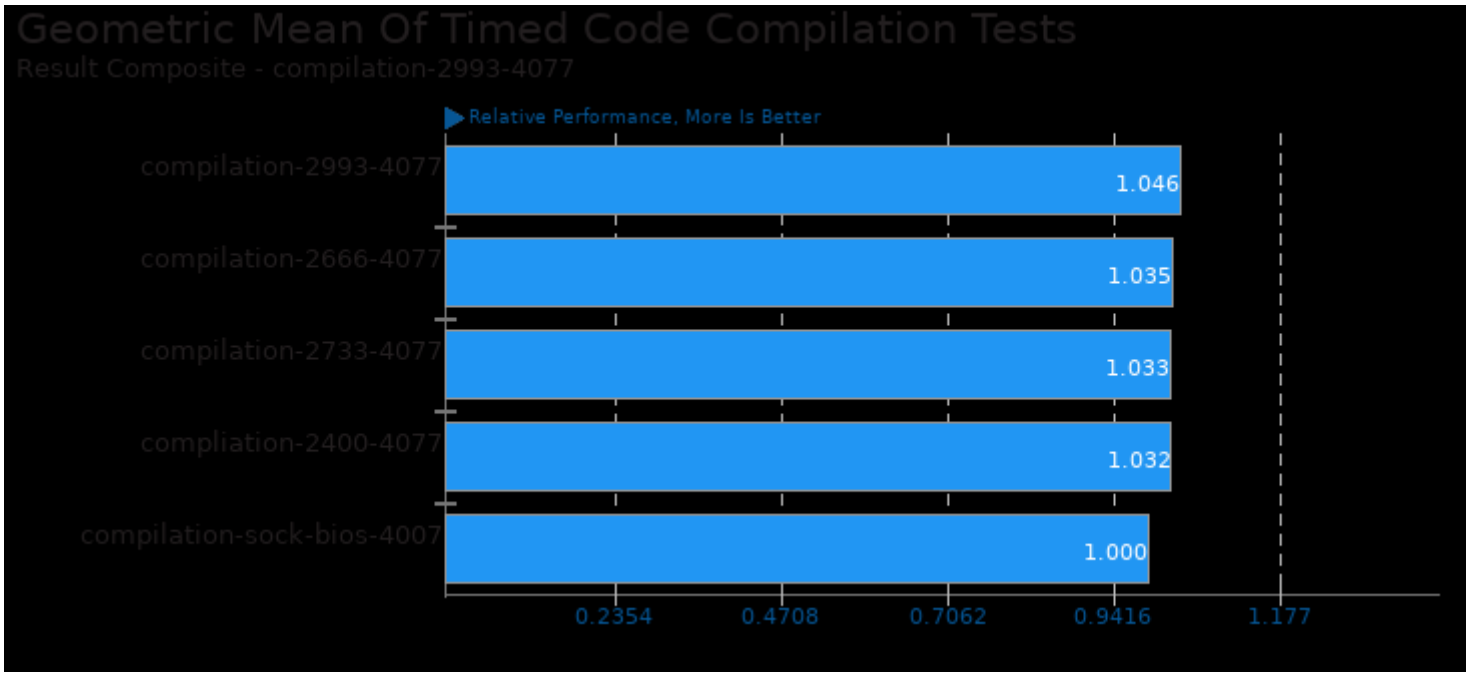



Build2 0.13
Time To Compile
Seconds, Fewer Is Better
compilation-2993-4077
SE +/- 0.87, N = 3
188.02
compilation-2666-4077
SE +/- 1.39, N = 3
189.12
compilation-2733-4077
SE +/- 1.10, N = 3
190.04
compliation-2400-4077
SE +/- 1.15, N = 3
190.79
compilation-sock-bios-4007
SE +/- 1.52, N = 3
193.94
40
80
120
160
200
Timed Eigen Compilation 3.3.9
Time To Compile
Seconds, Fewer Is Better
compilation-2666-4077
SE +/- 0.25, N = 3
106.91
compliation-2400-4077
SE +/- 0.08, N = 3
106.96
compilation-2733-4077
SE +/- 0.13, N = 3
108.69
compilation-2993-4077
SE +/- 0.17, N = 3
109.85
compilation-sock-bios-4007
SE +/- 0.30, N = 3
112.80
30
60
90
120
150

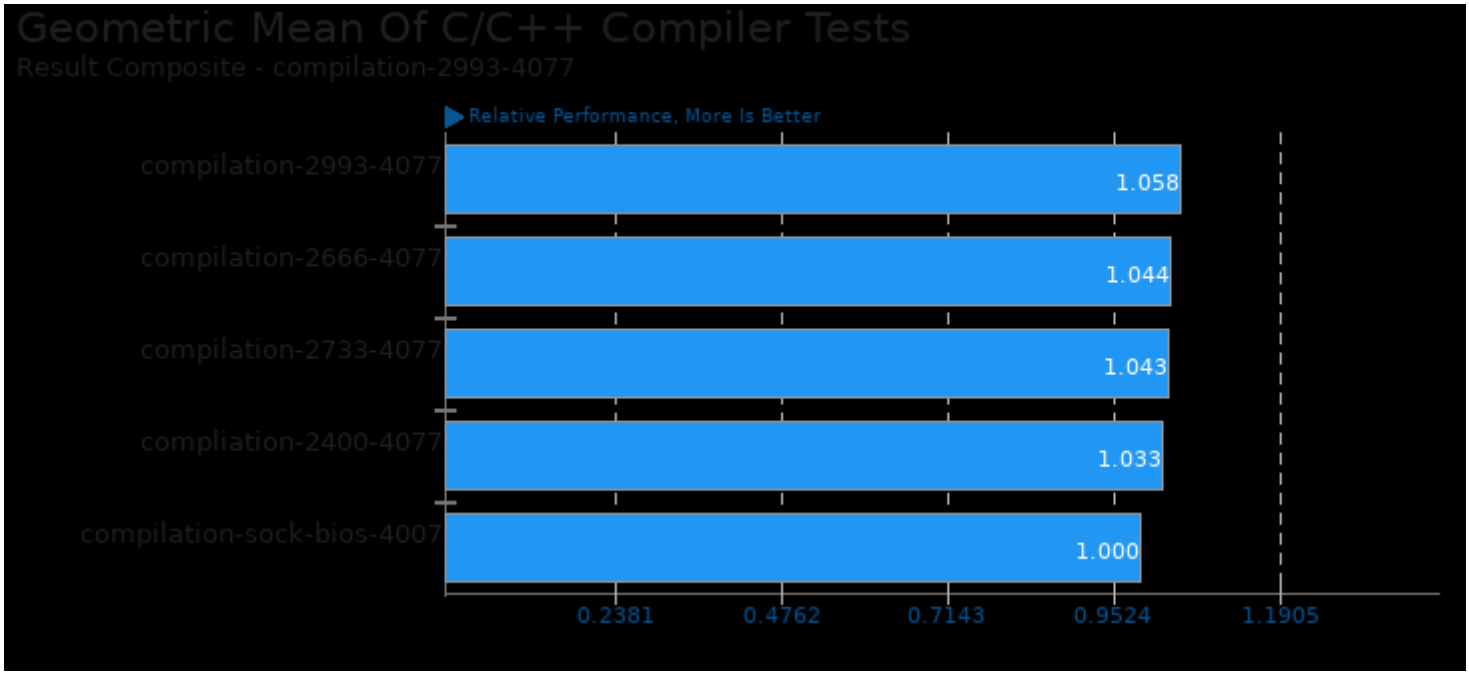

Timed Erlang/OTP Compilation 23.2
Time To Compile
Seconds, Fewer Is Better
compilation-2666-4077
SE +/- 1.58, N = 3
157.78
compilation-sock-bios-4007
SE +/- 0.08, N = 3
157.87
compilation-2993-4077
SE +/- 0.41, N = 3
158.14
compliation-2400-4077
SE +/- 1.17, N = 3
159.86
compilation-2733-4077
SE +/- 1.13, N = 12
161.19
40
80
120
160
200
Timed Wasmer Compilation 1.0.2
Time To Compile
Seconds, Fewer Is Better
compilation-2993-4077
SE +/- 0.70, N = 3
116.36
compliation-2400-4077
SE +/- 0.53, N = 3
117.89
compilation-2733-4077
SE +/- 1.45, N = 3
120.59
compilation-2666-4077
SE +/- 0.96, N = 3
122.55
compilation-sock-bios-4007
SE +/- 0.11, N = 3
124.25
30
60
90
120
150
1. (CC) gcc options: -m64 -pie -nodefaultlibs -ldl -lgcc_s -lutil -lrt -lpthread -lm -lc

compilation-2993-4077

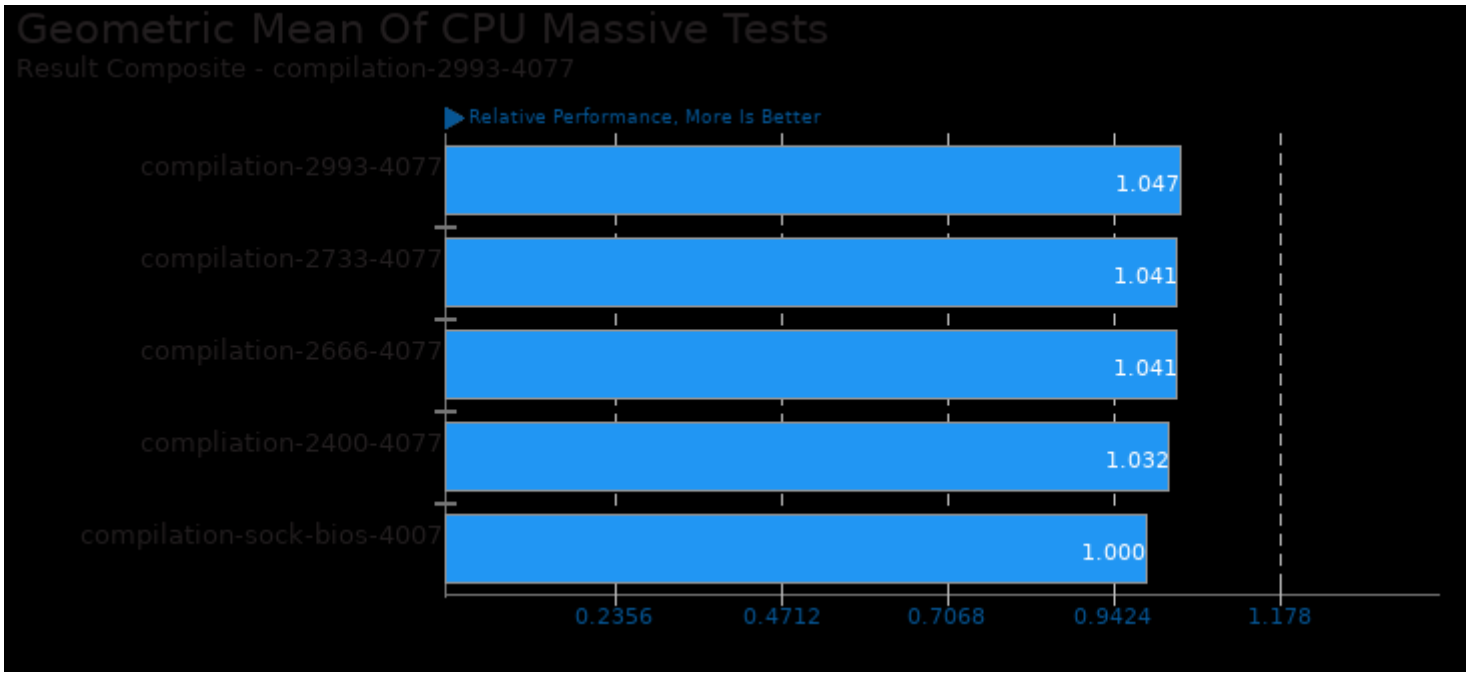
These geometric means are based upon test groupings / test suites for this result file.



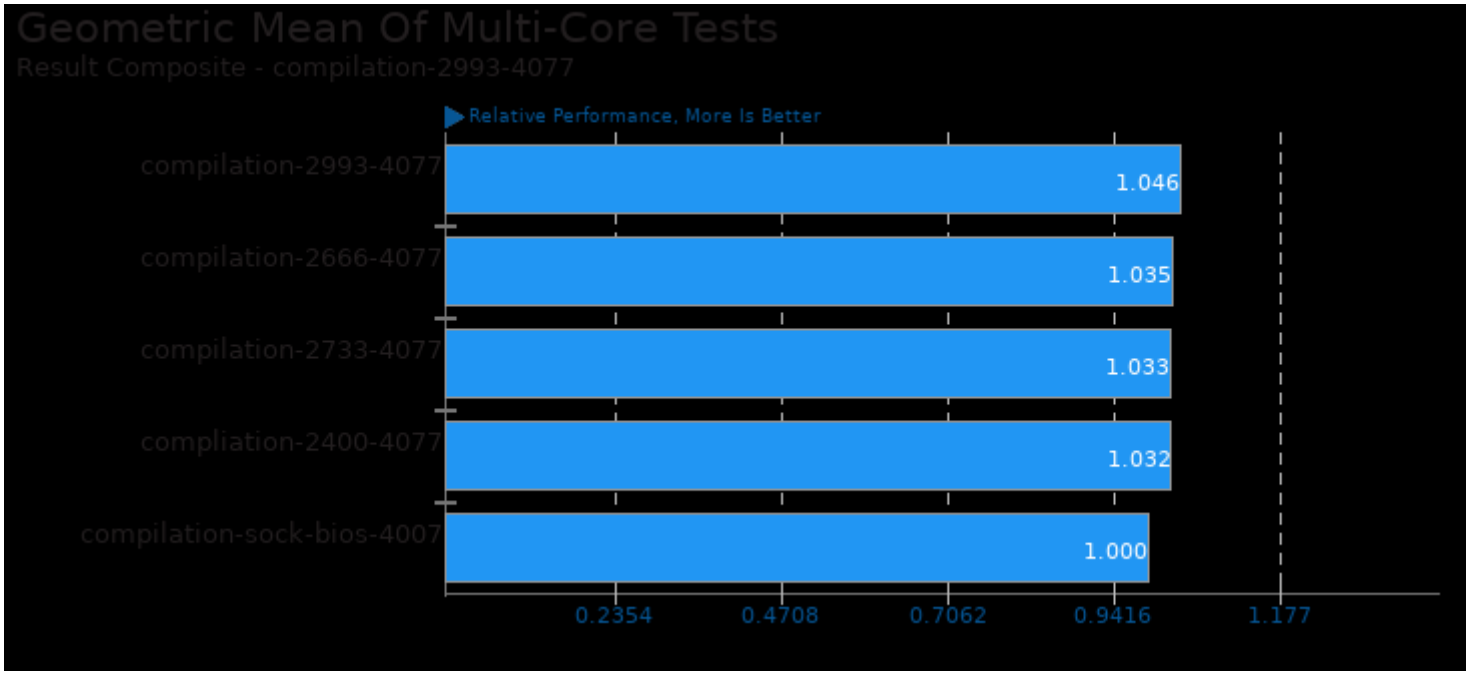
Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-eigen, pts/build-linux-kernel, pts/build-imagemagick, pts/build-gcc, pts/build-gdb, pts/build-llvm, pts/build-ffmpeg, pts/build-mplayer, pts/build2, pts/build-godot, pts/build-erlang, pts/build-wasmer and pts/build-nodejs



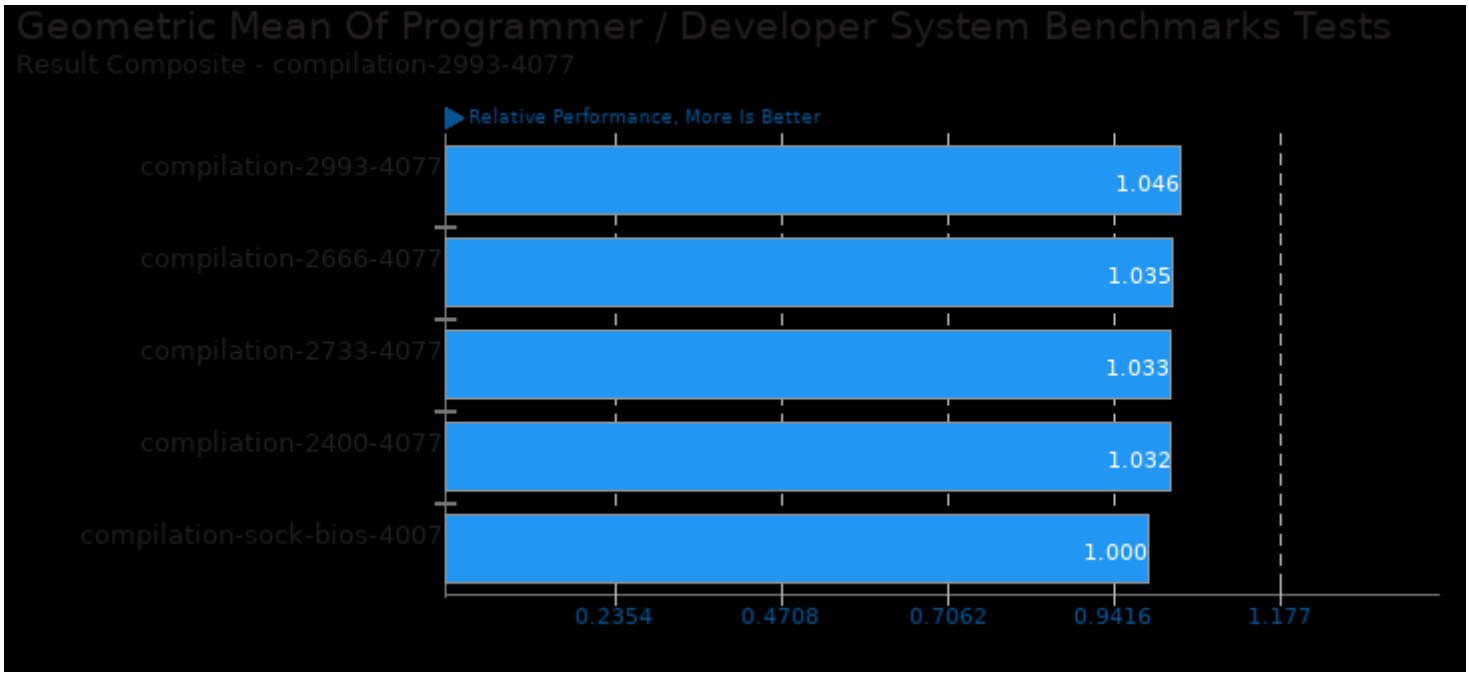
Geometric mean based upon tests: pts/build-php, pts/build-imagemagick, pts/build-llvm, pts/build-gdb, pts/build-ffmpeg, pts/build-apache and pts/build-mplayer



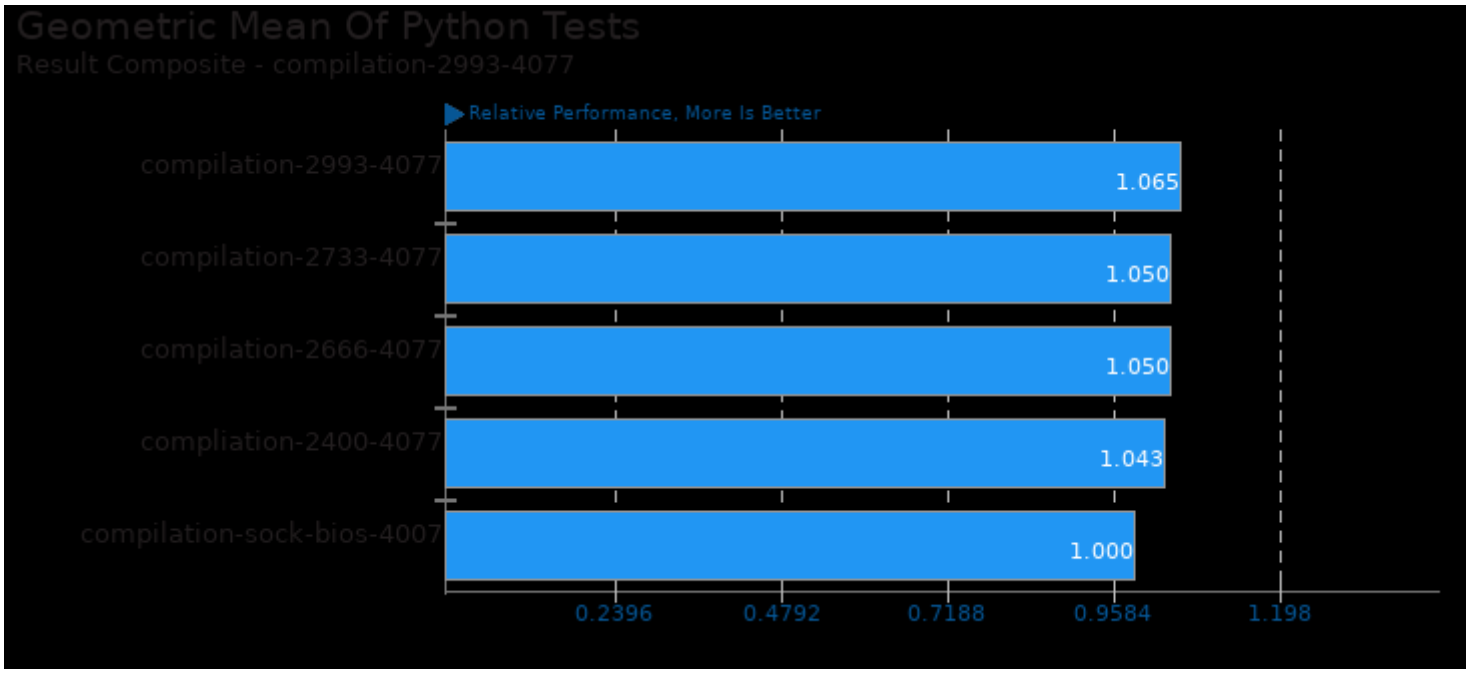
Geometric mean based upon tests: pts/build-apache, pts/build-gcc, pts/build-llvm, pts/build-linux-kernel and pts/build-php



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

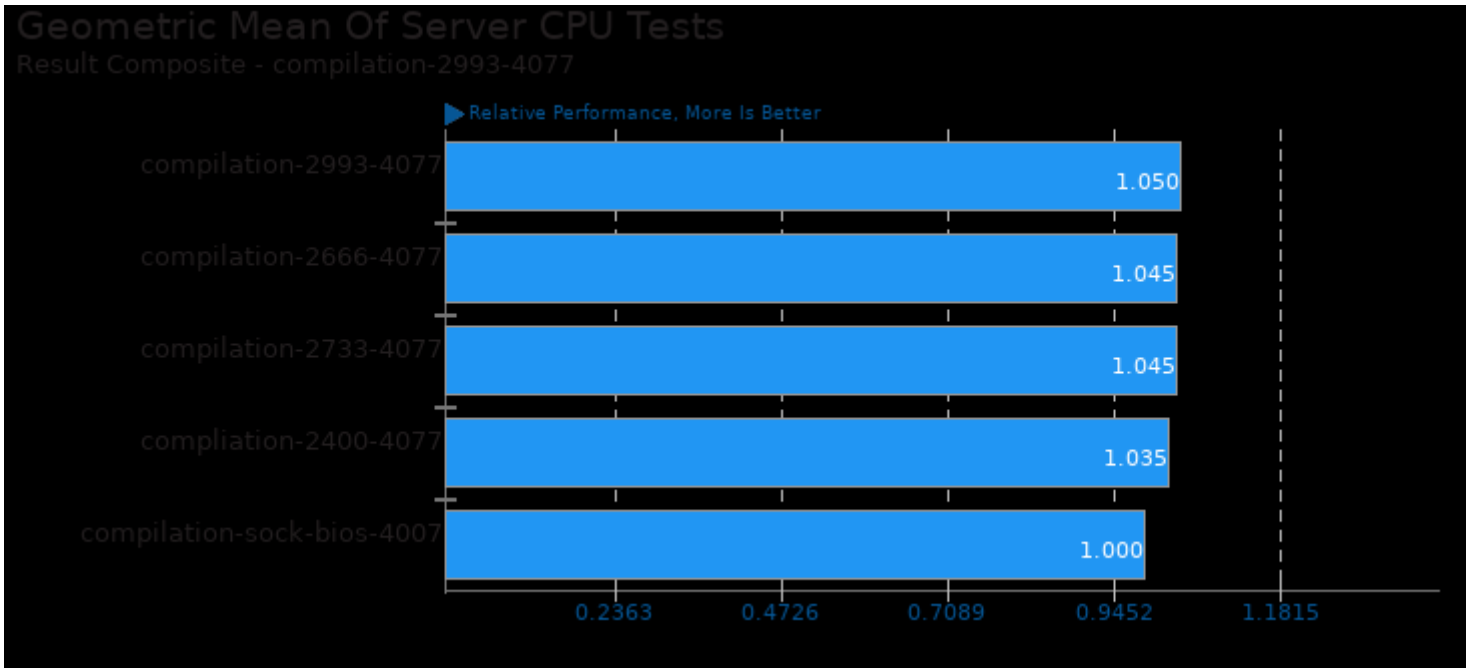


Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-eigen, pts/build-linux-kernel, pts/build-imagemagick, pts/build-gcc, pts/build-gdb, pts/build-llvm, pts/build-ffmpeg, pts/build-mplayer, pts/build2, pts/build-godot, pts/build-erlang, pts/build-wasmer and pts/build-nodejs



Geometric mean based upon tests: pts/build-godot, pts/build-llvm 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 11:34.