



## homek timtaw/screening-superfast

Intel Core i5-9400F testing with a ASRock Z390 Extreme4 (P2.00 BIOS) and NVIDIA GeForce GTX 970 4GB on Ubuntu 18.04 via the Phoronix Test Suite.

### Automated Executive Summary

*nowy homek had the most wins, coming in first place for 85% of the tests.*

*Based on the geometric mean of all complete results, the fastest (nowy homek) was 1.877x the speed of the slowest (homek). korba was 0.652x the speed of nowy homek and homek was 0.817x the speed of korba.*

## Test Systems:

### homek

Processor: Intel Core i5 750 @ 2.66GHz (4 Cores), Motherboard: Gigabyte H55M-UD2H (F10 BIOS), Chipset: Intel Core DMI, Memory: 12288MB, Disk: 4001GB Western Digital WD40EFRX-68N, Graphics: NVIDIA GeForce GTX 970 4GB (1151/3505MHz), Audio: Realtek ALC889, Monitor: LG Ultra HD, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.04, Kernel: 4.15.0-54-generic (x86\_64), Display Server: X Server 1.19.6, Display Driver: NVIDIA 430.26, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 10.2.120, Compiler: GCC 7.4.0 + CUDA 9.1, File-System: ext4, Screen Resolution: 3840x2160

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v

Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw

Processor Notes: Scaling Governor: acpi-cpufreq ondemand

Security Notes: I1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Vulnerable: Clear buffers attempted no microcode; SMT disabled + meltdown: Mitigation of PTI + spec\_store\_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre\_v1: Mitigation of \_\_user pointer sanitization + spectre\_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS\_FW STIBP: disabled RSB filling

## korba

Processor: Intel Core i7-2600K @ 3.80GHz (4 Cores), Motherboard: ASUS P8H67-M EVO (1904 BIOS), Chipset: Intel 2nd Generation Core DRAM, Memory: 16384MB, Disk: 1500GB Western Digital WD1502FAEX-0 + 2000GB Western Digital WD2002FAEX-0, Graphics: Zotac NVIDIA NV117 2GB, Audio: Realtek ALC892, Monitor: SyncMaster + DELL U2410, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 18.04, Kernel: 4.15.0-54-generic (x86\_64), Display Server: X Server 1.19.6, Display Driver: modesetting 1.19.6, OpenGL: 4.3 Mesa 18.2.8, Compiler: GCC 7.4.0 + Clang 6.0.0-1ubuntu2, File-System: ext4, Screen Resolution: 3840x2160

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v

Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw

Processor Notes: Scaling Governor: intel\_pstate powersave

Security Notes: I1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Mitigation of Clear buffers; SMT disabled + meltdown: Mitigation of PTI + spec\_store\_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre\_v1: Mitigation of \_\_user pointer sanitization + spectre\_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS\_FW RSB filling

## nowy homek

Processor: Intel Core i5-9400F @ 4.10GHz (6 Cores), Motherboard: ASRock Z390 Extreme4 (P2.00 BIOS), Chipset: Intel Cannon Lake PCH, Memory: 32768MB, Disk: 4001GB Western Digital WD40EFRX-68N, Graphics: NVIDIA GeForce GTX 970 4GB (1151/3505MHz), Audio: Realtek ALC1220, Monitor: LG Ultra HD, Network: Intel I219-V

OS: Ubuntu 18.04, Kernel: 4.15.0-54-generic (x86\_64), Display Server: X Server 1.19.6, Display Driver: NVIDIA 430.26, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 10.2.120, Compiler: GCC 7.4.0 + CUDA 9.1, File-System: ext4, Screen Resolution: 3840x2160

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++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --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 --with-tune=generic --without-cuda-driver -v

Disk Notes: CFQ / data=ordered,errors=remount-ro,relatime,rw

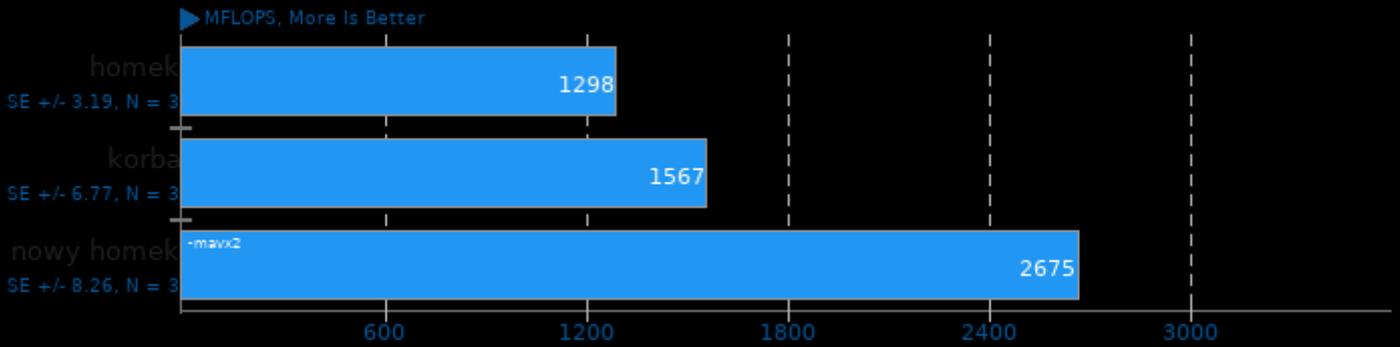
Processor Notes: Scaling Governor: intel\_pstate powersave

Security Notes: I1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT disabled + mds: Mitigation of Clear buffers; SMT disabled + meltdown: Mitigation of PTI + spec\_store\_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre\_v1: Mitigation of \_\_user pointer sanitization + spectre\_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS\_FW STIBP: disabled RSB filling

	homek	korba	nowy homek
<b>Himeno Benchmark - P.P.S (MFLOPS)</b>	<b>1298</b>	1567	<b>2675</b>
Normalized	48.52%	58.58%	100%
Standard Deviation	0.4%	0.7%	0.5%
<b>SciMark - Composite (Mflops)</b>	<b>302</b>	473	<b>631</b>
Normalized	47.86%	74.96%	100%
Standard Deviation	0.2%	2.2%	0.2%
<b>C-Ray - Total Time - 4.1.R.P.P (sec)</b>	<b>388</b>	339	<b>141</b>
Normalized	36.34%	41.59%	100%
Standard Deviation	0%	0.1%	0.6%
<b>Stream - Copy (MB/s)</b>	<b>12831</b>	18094	<b>32676</b>
Normalized	39.27%	55.37%	100%
Standard Deviation	0.1%	0.1%	0.1%
<b>Flexible IO Tester - Rand Read - POSIX AIO - Yes - No - 4KB (MB/s)</b>	0.56	<b>0.60</b>	<b>0.55</b>
Normalized	93.33%	100%	91.67%
Standard Deviation	1.2%	0.6%	0.9%
<b>Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 4KB (MB/s)</b>	<b>1180</b>	1323	<b>1964</b>
Normalized	60.08%	67.36%	100%
Standard Deviation	3.7%	2.6%	9.3%
<b>Flexible IO Tester - Rand Write - POSIX AIO - Yes - No - 4KB (IOPS)</b>	<b>302133</b>	338500	<b>502933</b>
Normalized	60.07%	67.31%	100%
Standard Deviation	3.7%	2.6%	9.3%

### Himeno Benchmark 3.0

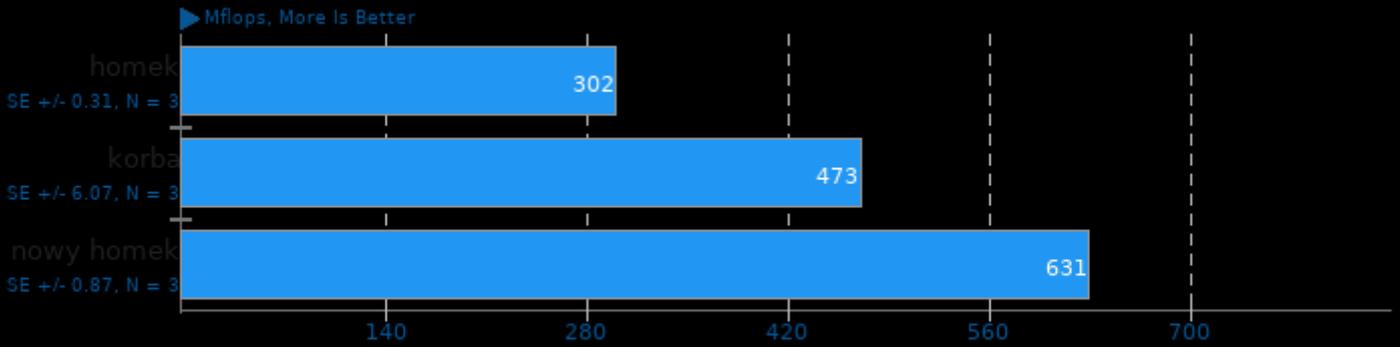
Poisson Pressure Solver



1. (CC) gcc options: -O3

### SciMark 2.0

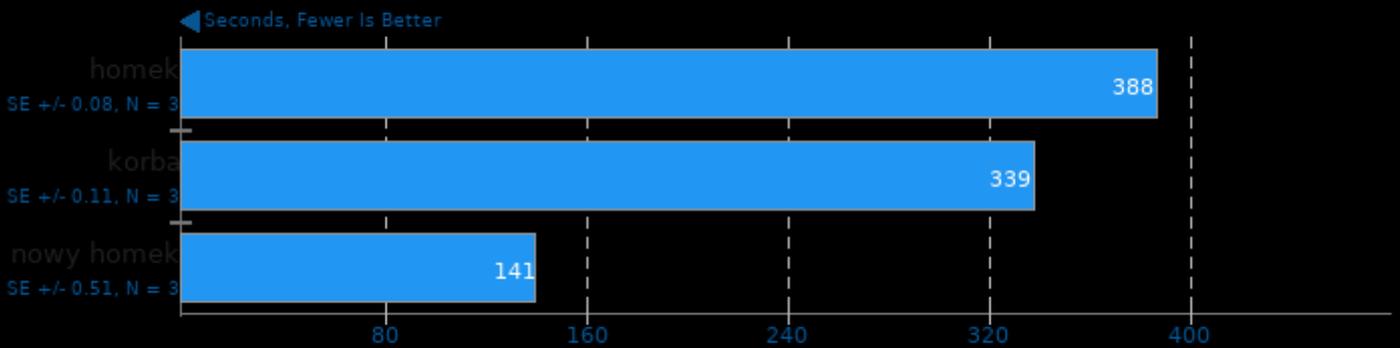
Computational Test: Composite



1. (CC) gcc options: -lm

### C-Ray 1.1

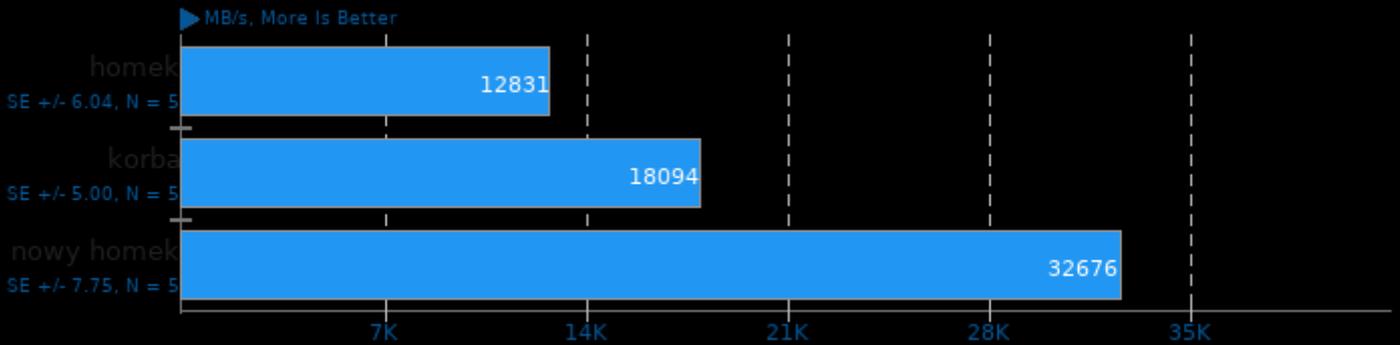
Total Time - 4K, 16 Rays Per Pixel



1. (CC) gcc options: -lm -pthread -O3

### Stream 2013-01-17

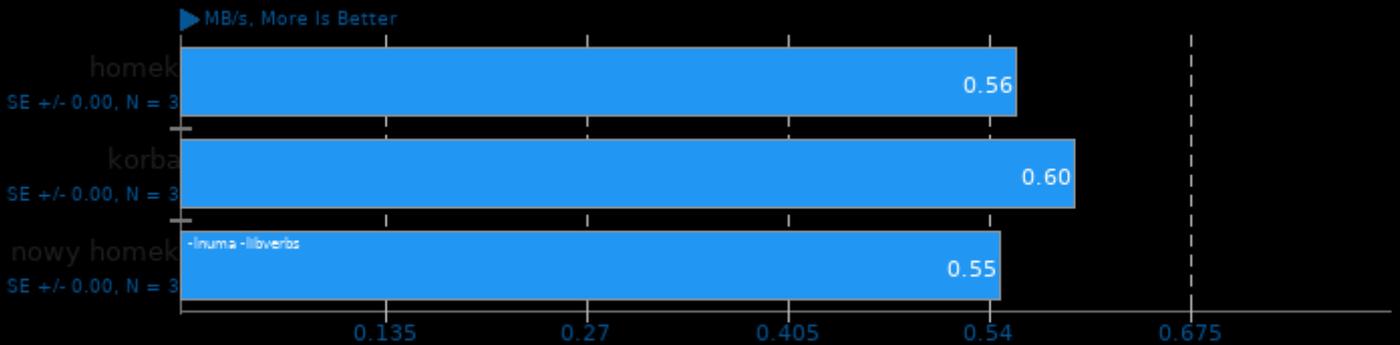
Type: Copy



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

### Flexible IO Tester 3.1

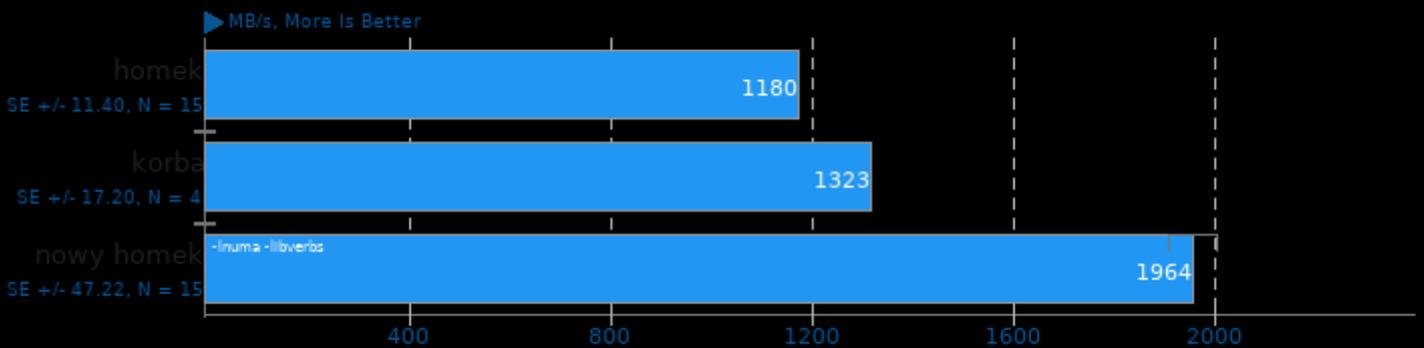
Type: Random Read - IO Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory



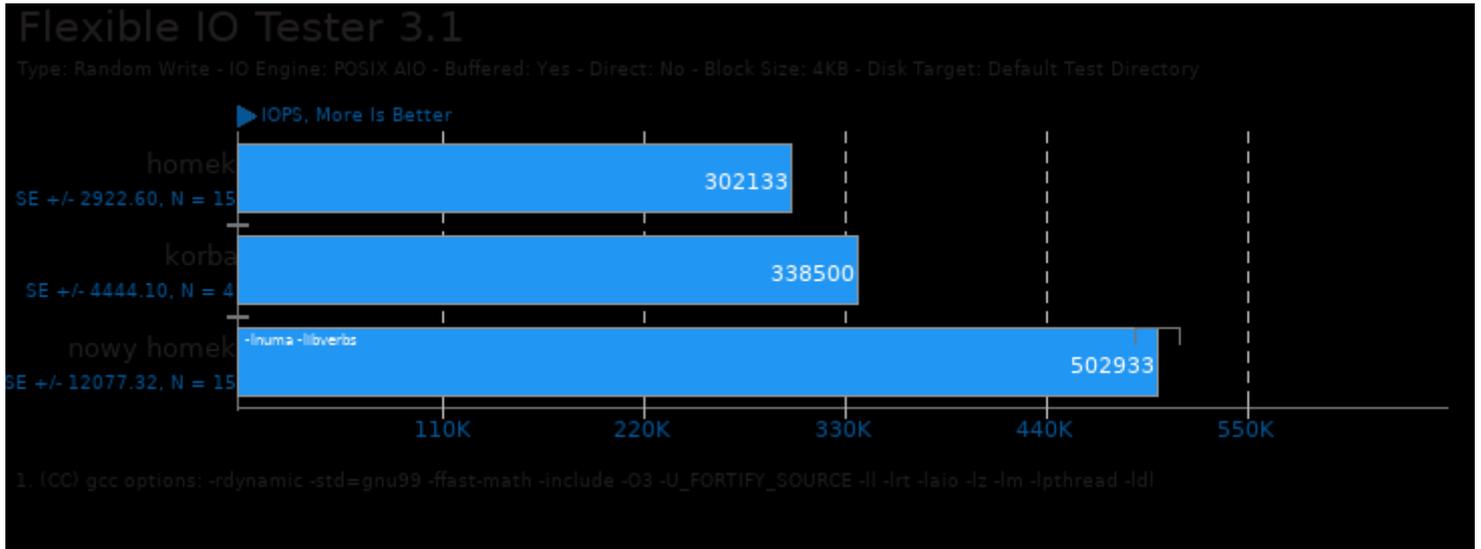
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U\_FORTIFY\_SOURCE -l -lrt -laio -lz -lm -lpthread -ldl

### Flexible IO Tester 3.1

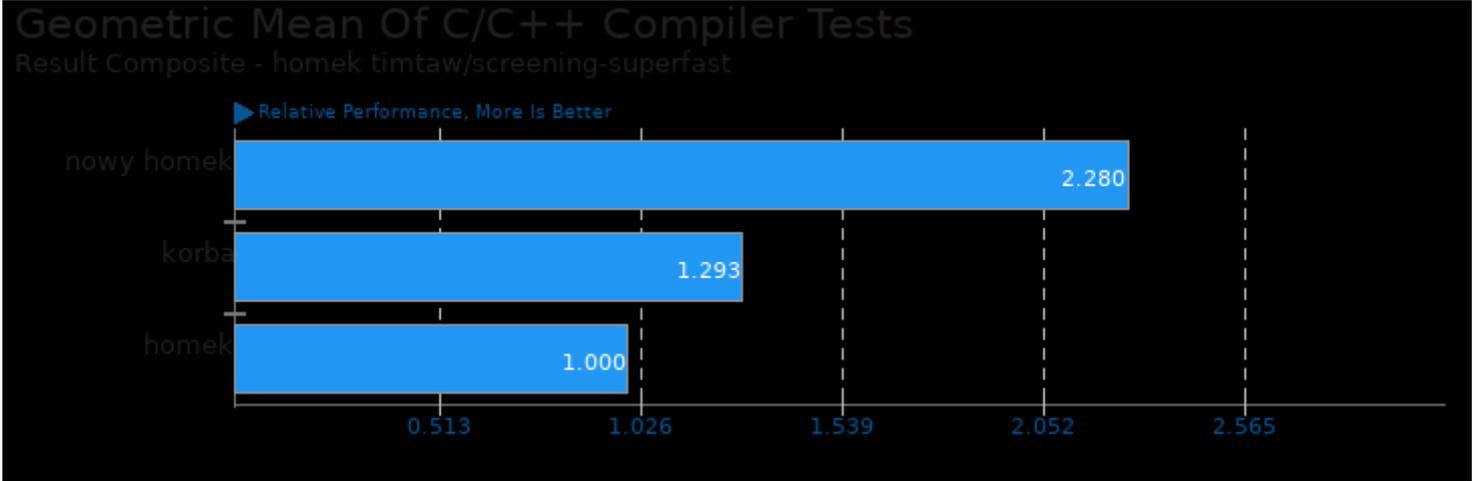
Type: Random Write - IO Engine: POSIX AIO - Buffered: Yes - Direct: No - Block Size: 4KB - Disk Target: Default Test Directory



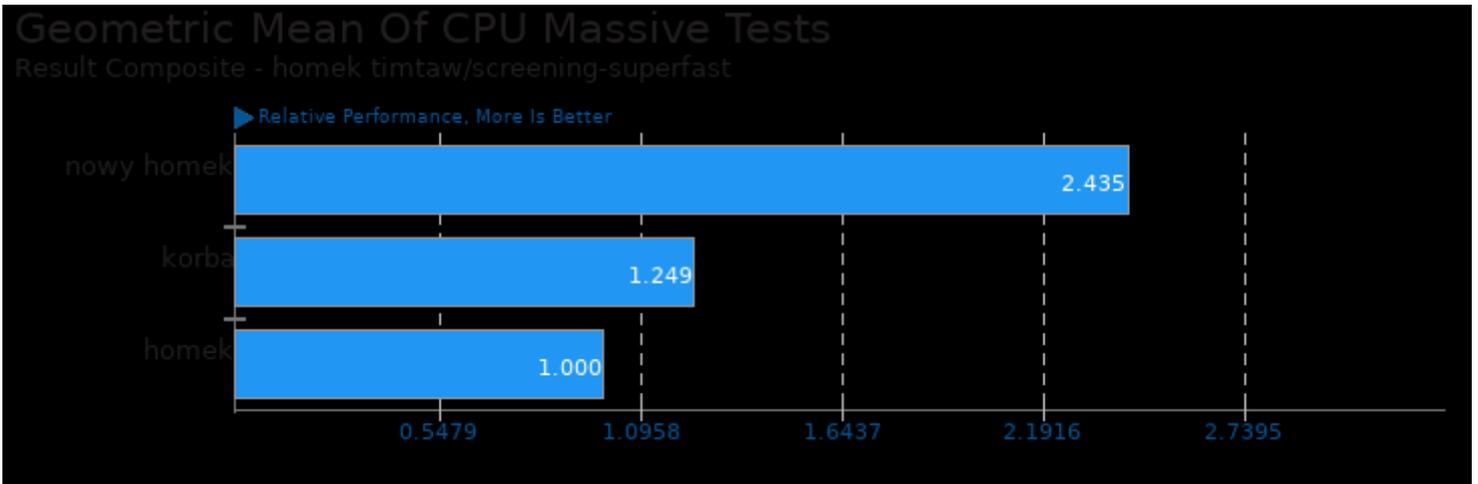
1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U\_FORTIFY\_SOURCE -l -lrt -laio -lz -lm -lpthread -ldl



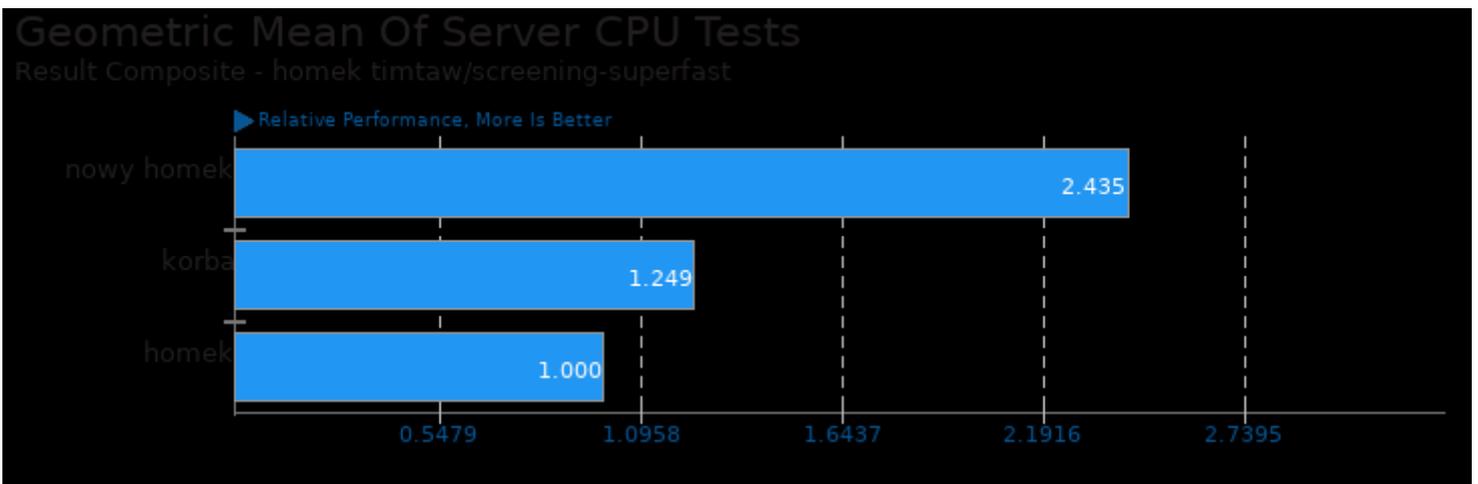
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/scimark2, pts/himeno and pts/c-ray



Geometric mean based upon tests: pts/c-ray, pts/himeno and pts/stream



Geometric mean based upon tests: pts/himeno, pts/c-ray and pts/stream

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:09.