

www.phoronix-test-suite.com

11900k april

Intel Core i9-11900K testing with a ASUS ROG MAXIMUS XIII HERO (0703 BIOS) and AMD Radeon VII 16GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 40% of the tests.

Based on the geometric mean of all complete results, the fastest (1) was 1.003x the speed of the slowest (3). 4 was 0.999x the speed of 1, 2 was 1x the speed of 4, 3 was 0.998x the speed of 2.

Test Systems:

1

2

3

4

Processor: Intel Core i9-11900K @ 5.10GHz (8 Cores / 16 Threads), Motherboard: ASUS ROG MAXIMUS XIII HERO (0703 BIOS), Chipset: Intel Tiger Lake-H, Memory: 32GB, Disk: 1000GB Western Digital WD_BLACK SN850 1TB, Graphics: AMD Radeon VII 16GB (1801/1000MHz), Audio: Intel Tiger Lake-H HD Audio, Monitor: ASUS MG28U, Network: 2 x Intel + Intel Wi-Fi 6 AX210/AX211/AX411

OS: Ubuntu 20.10, Kernel: 5.12.0-051200rc6daily20210407-generic (x86_64) 20210406, Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, OpenGL: 4.6 Mesa 21.1.0-devel (git-d1f96e0 2021-04-08 groovy-oibaf-ppa) (LLVM 12.0.0), Vulkan: 1.1.168, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 3840x2160

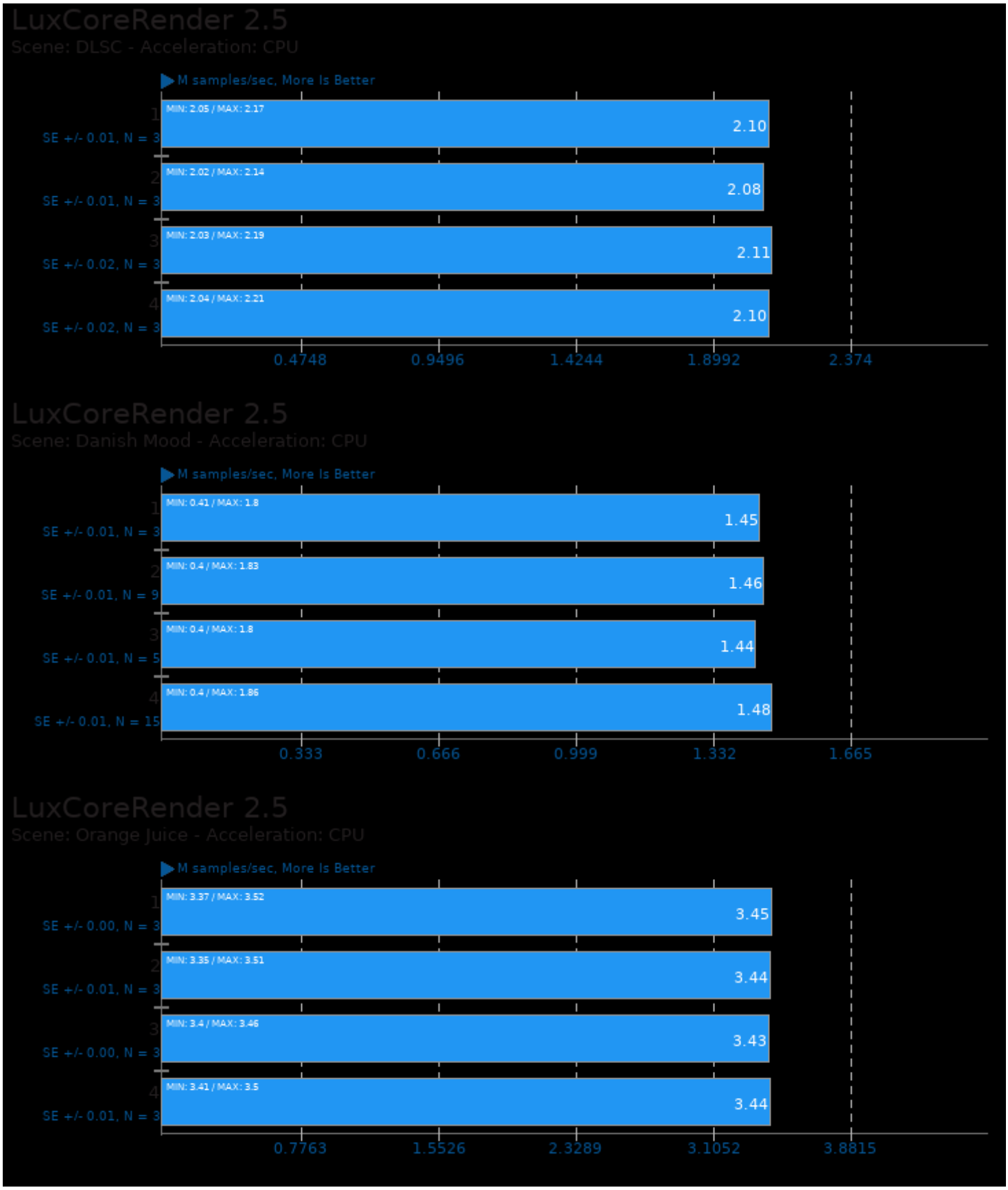
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-gcn/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: intel_pstate powersave - CPU Microcode: 0x3c - Thermald 2.3
Python Notes: Python 3.8.6
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

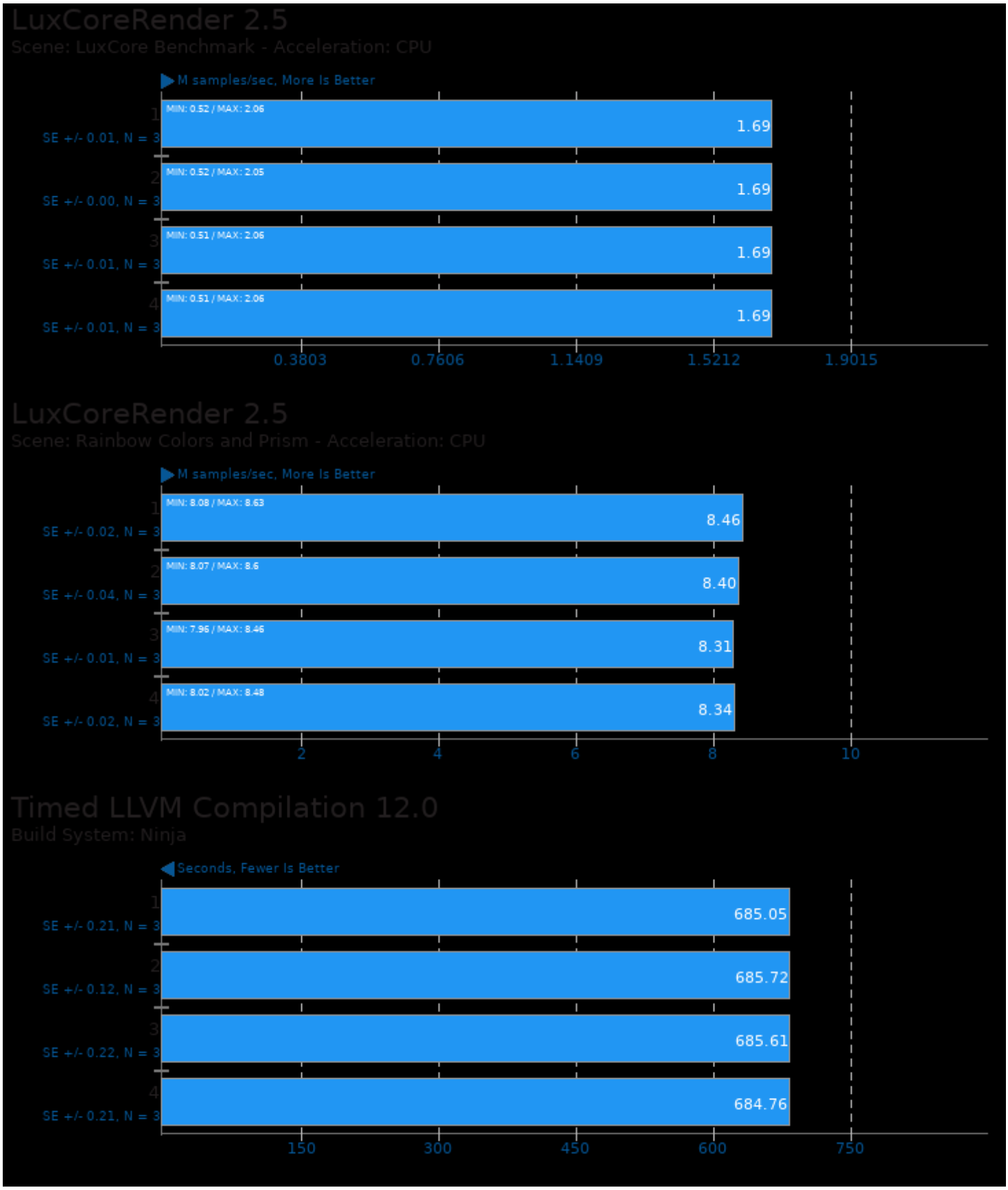
	1	2	3	4
LuxCoreRender - DLSC - CPU (M samples/sec)	2.10	**2.08**	**2.11**	2.10
Normalized	99.53%	98.58%	100%	99.53%
Standard Deviation	0.7%	0.7%	1.3%	1.4%
LuxCoreRender - Danish Mood - CPU (M samples/sec)	1.45	1.46	**1.44**	**1.48**
Normalized	97.97%	98.65%	97.3%	100%
Standard Deviation	0.8%	2.4%	2.3%	3.1%
LuxCoreRender - Orange Juice - CPU (M samples/sec)	**3.45**	3.44	**3.43**	3.44
Normalized	100%	99.71%	99.42%	99.71%
Standard Deviation	0.2%	0.4%	0.2%	0.3%
LuxCoreRender - LuxCore Benchmark - CPU (M samples/sec)	1.69	1.69	1.69	1.69
Standard Deviation	0.9%	0%	1%	0.9%
LuxCoreRender - R.C.a.P - CPU (M samples/sec)	**8.46**	8.40	**8.31**	8.34
Normalized	100%	99.29%	98.23%	98.58%
Standard Deviation	0.4%	0.8%	0.3%	0.5%
Timed LLVM Compilation - Ninja (sec)	685.046	**685.721**	685.611	**684.762**
Normalized	99.96%	99.86%	99.88%	100%
Standard Deviation	0.1%	0%	0.1%	0.1%

11900k april

Timed LLVM Compilation - Unix Makefiles (sec)	704.440	**697.306**	**704.554**	701.375
Normalized	98.99%	100%	98.97%	99.42%
Standard Deviation	1.1%	0.1%	1.5%	0.4%
Helsing - 12 digit (sec)	4.933	4.952	**4.925**	**5.007**
Normalized	99.84%	99.45%	100%	98.36%
Helsing - 14 digit (sec)	**470.155**	470.515	**471.109**	470.936
Normalized	100%	99.92%	99.8%	99.83%
SecureMark - SecureMark-TLS	317959	317771	**317596**	**318213**
Normalized	99.92%	99.86%	99.81%	100%
Standard Deviation	0.1%	0.2%	0.2%	0%

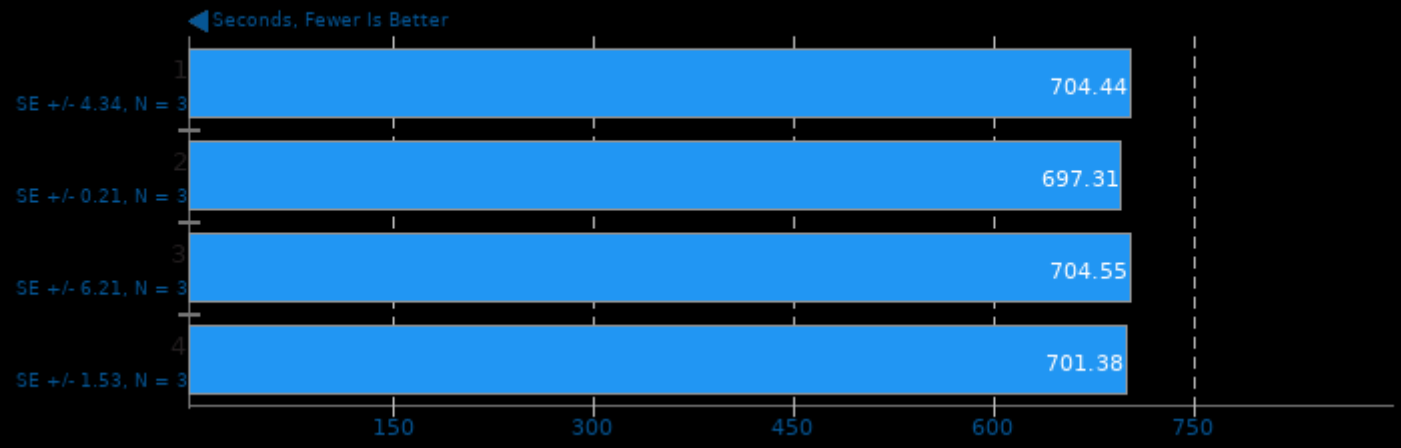
11900k april




LuxCoreRender 2.5
Scene: LuxCore Benchmark - Acceleration: CPU
M samples/sec, More Is Better
1
MIN: 0.52 / MAX: 2.06
1.69
SE +/- 0.01, N = 3
2
MIN: 0.52 / MAX: 2.05
1.69
SE +/- 0.00, N = 3
3
MIN: 0.51 / MAX: 2.06
1.69
SE +/- 0.01, N = 3
4
MIN: 0.51 / MAX: 2.06
1.69
SE +/- 0.01, N = 3
0.3803
0.7606
1.1409
1.5212
1.9015
LuxCoreRender 2.5
Scene: Rainbow Colors and Prism - Acceleration: CPU
M samples/sec, More Is Better
1
MIN: 8.08 / MAX: 8.63
8.46
SE +/- 0.02, N = 3
2
MIN: 8.07 / MAX: 8.6
8.40
SE +/- 0.04, N = 3
3
MIN: 7.96 / MAX: 8.46
8.31
SE +/- 0.01, N = 3
4
MIN: 8.02 / MAX: 8.48
8.34
SE +/- 0.02, N = 3
2
4
6
8
10
Timed LLVM Compilation 12.0
Build System: Ninja
Seconds, Fewer Is Better
1
685.05
SE +/- 0.21, N = 3
2
685.72
SE +/- 0.12, N = 3
3
685.61
SE +/- 0.22, N = 3
4
684.76
SE +/- 0.21, N = 3
150
300
450
600
750

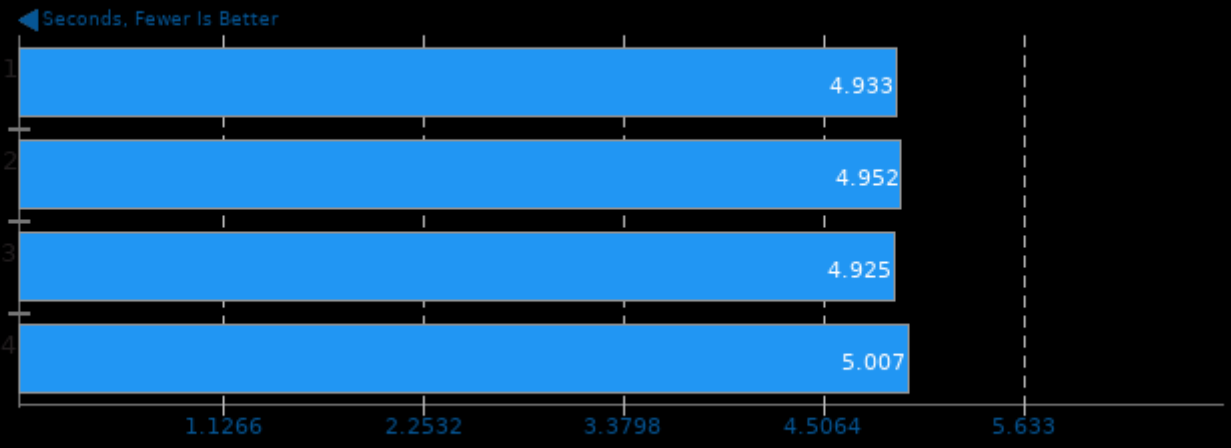
Timed LLVM Compilation 12.0

Build System: Unix Makefiles



Helsing 1.0-beta

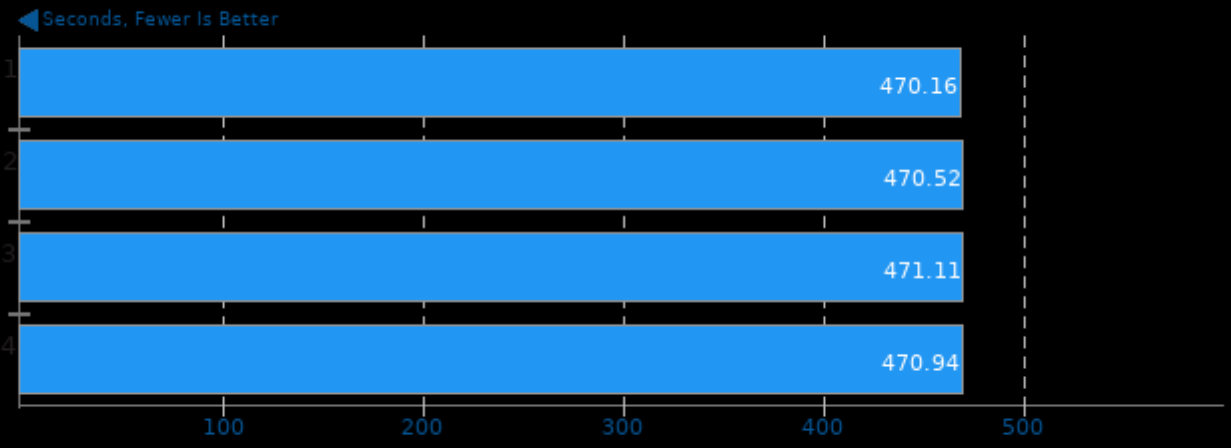
Digit Range: 12 digit



1. (CC) gcc options: -O2 -pthread -lcrypto

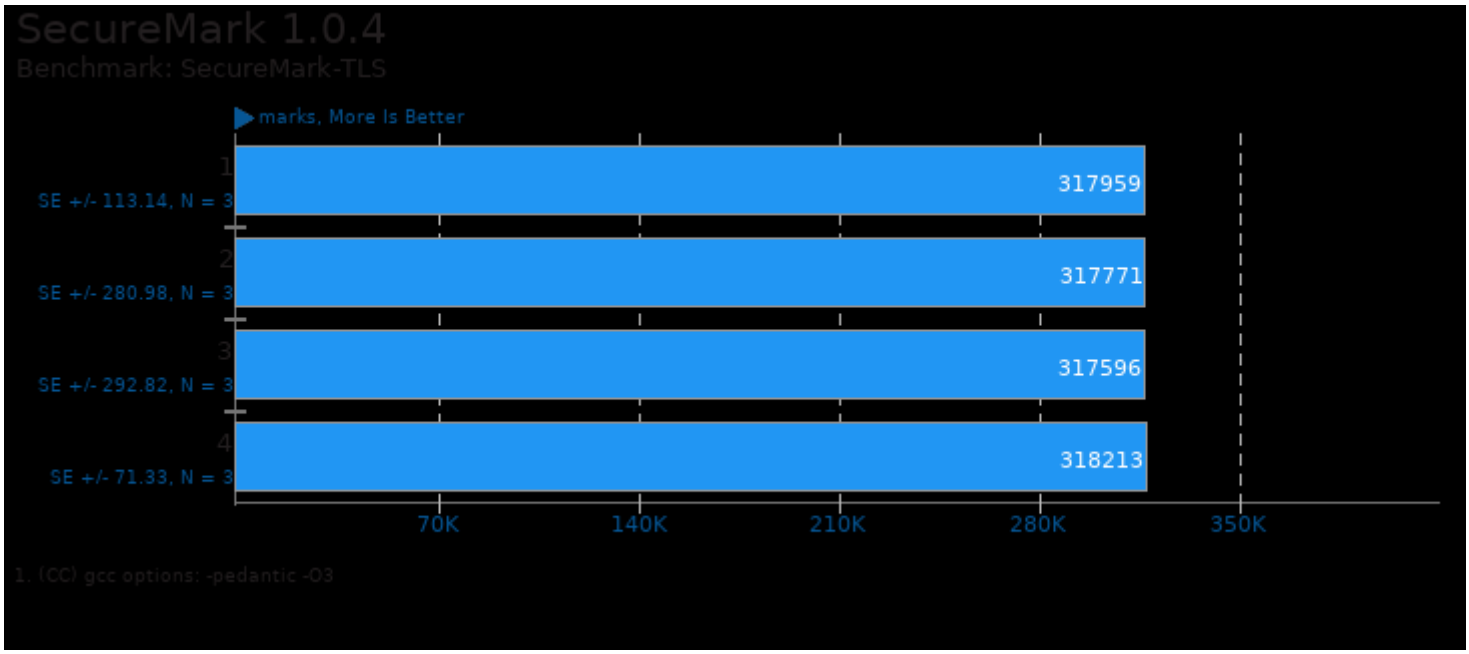
Helsing 1.0-beta

Digit Range: 14 digit



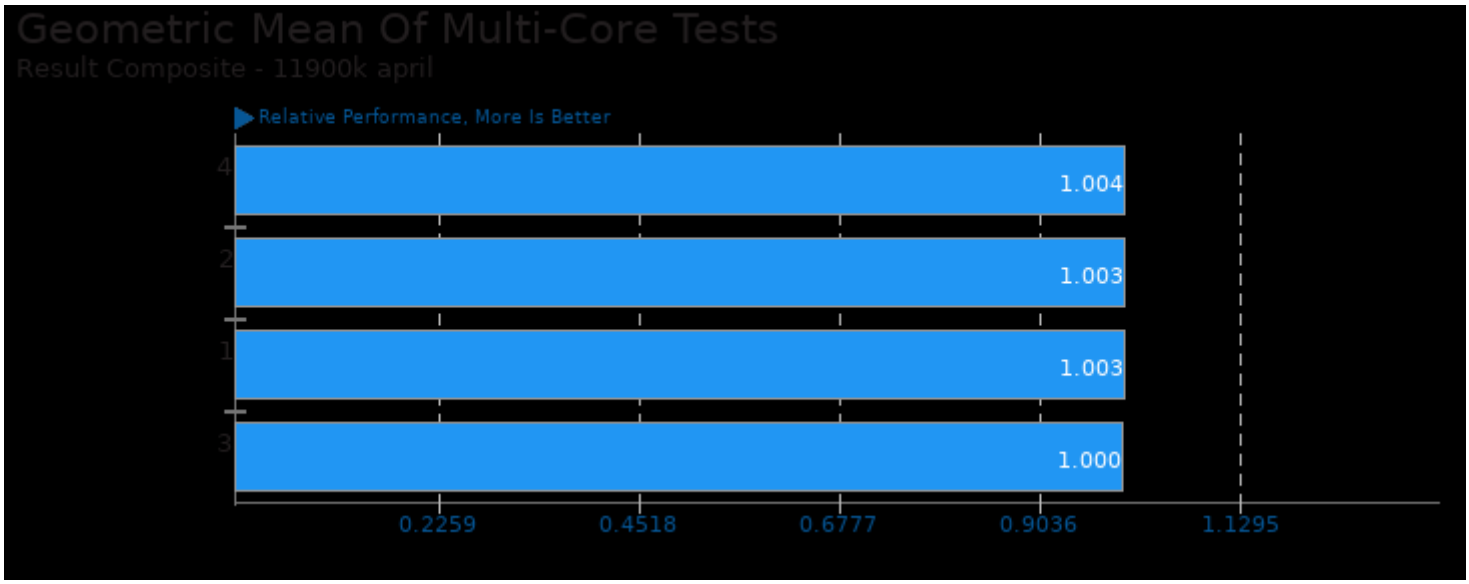
1. (CC) gcc options: -O2 -pthread -lcrypto

11900k april



11900k april

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



Geometric mean based upon tests: pts/build-llvm and pts/luxcorerender

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:11.