

www.phoronix-test-suite.com

cpu-test-boost

lxc testing on Ubuntu 21.10 via the Phoronix Test Suite.

Test Systems:

cpu-test-boost

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASRockRack X570D4U-2L2T (P1.40 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 1920GB SAMSUNG MZ1L21T9HCLS-00A07 + 2000GB Samsung SSD 980 PRO 2TB + 2 x 240GB SAMSUNG MZ7L3240, Graphics: ASPEED, Audio: AMD Starship/Matisse, Network: 2 x Intel 10G X550T + 2 x Intel I210

OS: Ubuntu 21.10, Kernel: 5.13.19-1-pve (x86_64), Vulkan: 1.1.182, Compiler: GCC 11.2.0, File-System: zfs, Screen Resolution: 1024x768, System Layer: lxc

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

cpu-test-boost

--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 performance (Boost: Enabled) - CPU Microcode: 0xa201009
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: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	cpu-test-boost
GraphicsMagick - Swirl (Iterations/min)	901
Standard Deviation	2.5%
GraphicsMagick - Rotate (Iterations/min)	902
Standard Deviation	1%
GraphicsMagick - Sharpen (Iterations/min)	197
Standard Deviation	2.5%
GraphicsMagick - Enhanced (Iterations/min)	365
Standard Deviation	0.9%
GraphicsMagick - Resizing (Iterations/min)	1570
Standard Deviation	1.1%
GraphicsMagick - Noise-Gaussian (Iterations/min)	379
Standard Deviation	0.8%
GraphicsMagick - HWB Color Space (Iterations/min)	942
Standard Deviation	1%
Rust Mandelbrot - T.T.C.S.P.M (sec)	30.647
Standard Deviation	1.9%
Rust Prime Benchmark - P.N.T.T.2.0.0 (sec)	5.306
Standard Deviation	0.1%
NAMD - ATPase Simulation - 327,506 Atoms (days/ns)	1.37656
Standard Deviation	2.4%
Kvazaar - Bosphorus 4K - Slow (FPS)	11.62
Standard Deviation	2.3%
Kvazaar - Bosphorus 4K - Medium (FPS)	11.70
Standard Deviation	2.4%
Kvazaar - Bosphorus 1080p - Slow (FPS)	52.45
Standard Deviation	0.2%
Kvazaar - Bosphorus 1080p - Medium (FPS)	54.79
Standard Deviation	0.8%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	26.32
Standard Deviation	1.5%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	47.10
Standard Deviation	0.2%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	109.60
Standard Deviation	0.1%
Kvazaar - Bosphorus 1080p - Ultra Fast (FPS)	194.00
Standard Deviation	0.3%
x264 - H.2.V.E (FPS)	183.09
Standard Deviation	16.3%
x265 - Bosphorus 4K (FPS)	23.39
Standard Deviation	0.5%
x265 - Bosphorus 1080p (FPS)	77.81
Standard Deviation	0.3%

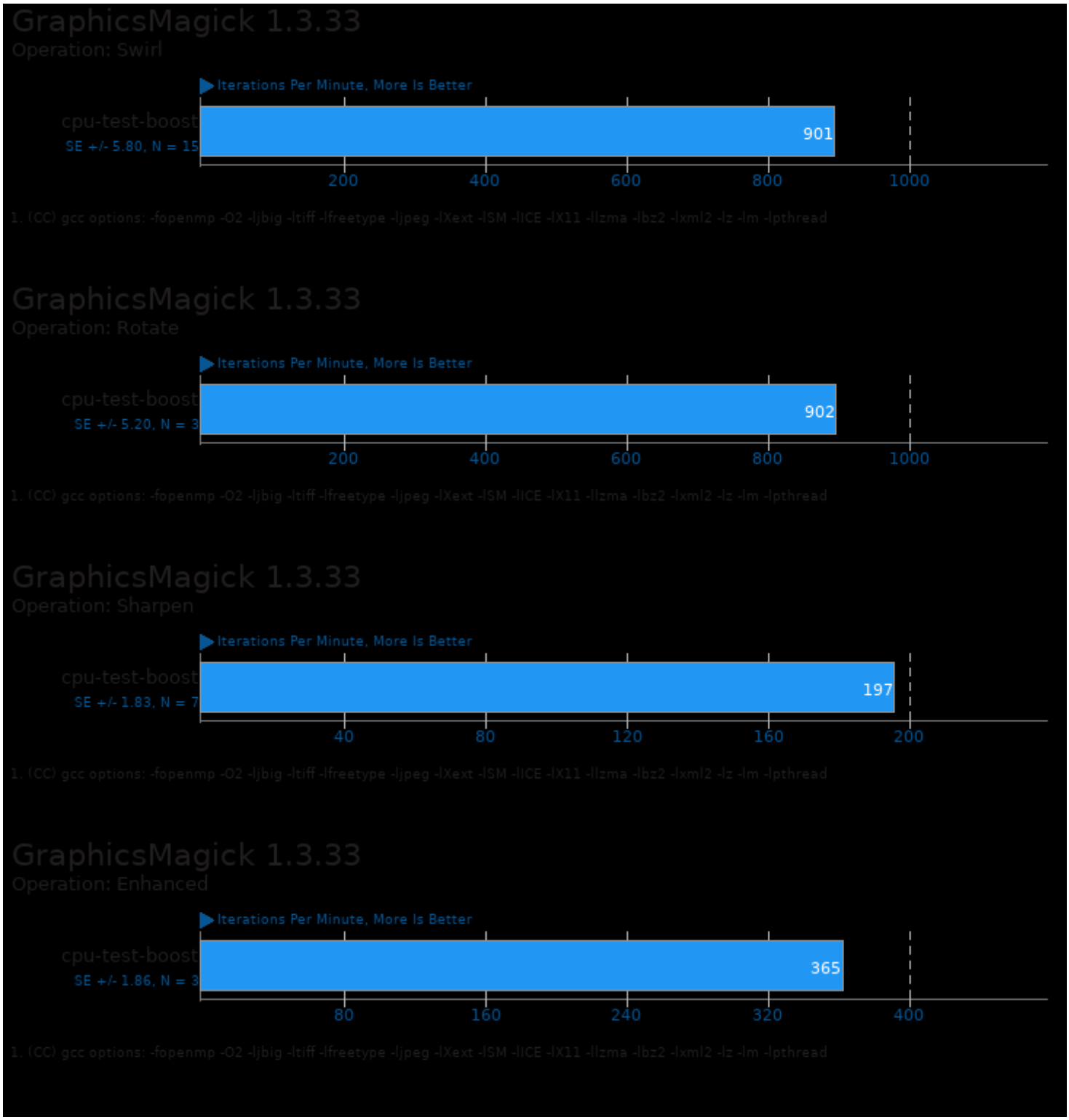
cpu-test-boost

Stockfish - Total Time (Nodes/s)	45168149
Standard Deviation	3.7%
asmFish - 1.H.M.2.D (Nodes/s)	48830730
Standard Deviation	1.2%
POV-Ray - Trace Time (sec)	26.225
Standard Deviation	1%
Radiance Benchmark - Serial (sec)	477.242
Radiance Benchmark - SMP Parallel (sec)	149.426
OpenSSL - R.4.b.P (Signs/sec)	4336
Standard Deviation	2.5%
OpenSSL - SHA256 (byte/s)	22089713950
Standard Deviation	1.6%
OpenSSL - RSA4096 (sign/s)	4179
Standard Deviation	1%
OpenSSL - RSA4096 (verify/s)	268726
Standard Deviation	0.3%
ctx_clock - C.S.T (Clocks)	238
Standard Deviation	0%
Sysbench - CPU (Events/sec)	85707
Standard Deviation	1.7%
Blender - Barbershop - CPU-Only (sec)	548.14
RAMspeed SMP - Add - Integer (MB/s)	34863
Standard Deviation	0.7%
RAMspeed SMP - Copy - Integer (MB/s)	36817
Standard Deviation	0.2%
RAMspeed SMP - Scale - Integer (MB/s)	36393
Standard Deviation	0.6%
RAMspeed SMP - Triad - Integer (MB/s)	34266
Standard Deviation	1.1%
RAMspeed SMP - Average - Integer (MB/s)	35627
Standard Deviation	0.4%
RAMspeed SMP - Add - Floating Point (MB/s)	34763
Standard Deviation	1%
RAMspeed SMP - Copy - Floating Point (MB/s)	36693
Standard Deviation	0.7%
RAMspeed SMP - Scale - Floating Point (MB/s)	37171
Standard Deviation	0.8%
RAMspeed SMP - Triad - Floating Point (MB/s)	34542
Standard Deviation	1.4%
RAMspeed SMP - Average - Floating Point (MB/s)	35754
Standard Deviation	0.3%
Tinymembench - Standard Memcpy (MB/s)	20748
Standard Deviation	0.2%
Tinymembench - Standard Memset (MB/s)	21268
Standard Deviation	0%
MBW - Memory Copy - 1024 MiB (MiB/s)	16437
Standard Deviation	0.6%
MBW - M.C.F.B.S - 1024 MiB (MiB/s)	9548
Standard Deviation	2.1%
t-test1 - 1 (sec)	13.618
Standard Deviation	0.5%
t-test1 - 2 (sec)	5.616
Standard Deviation	0.1%

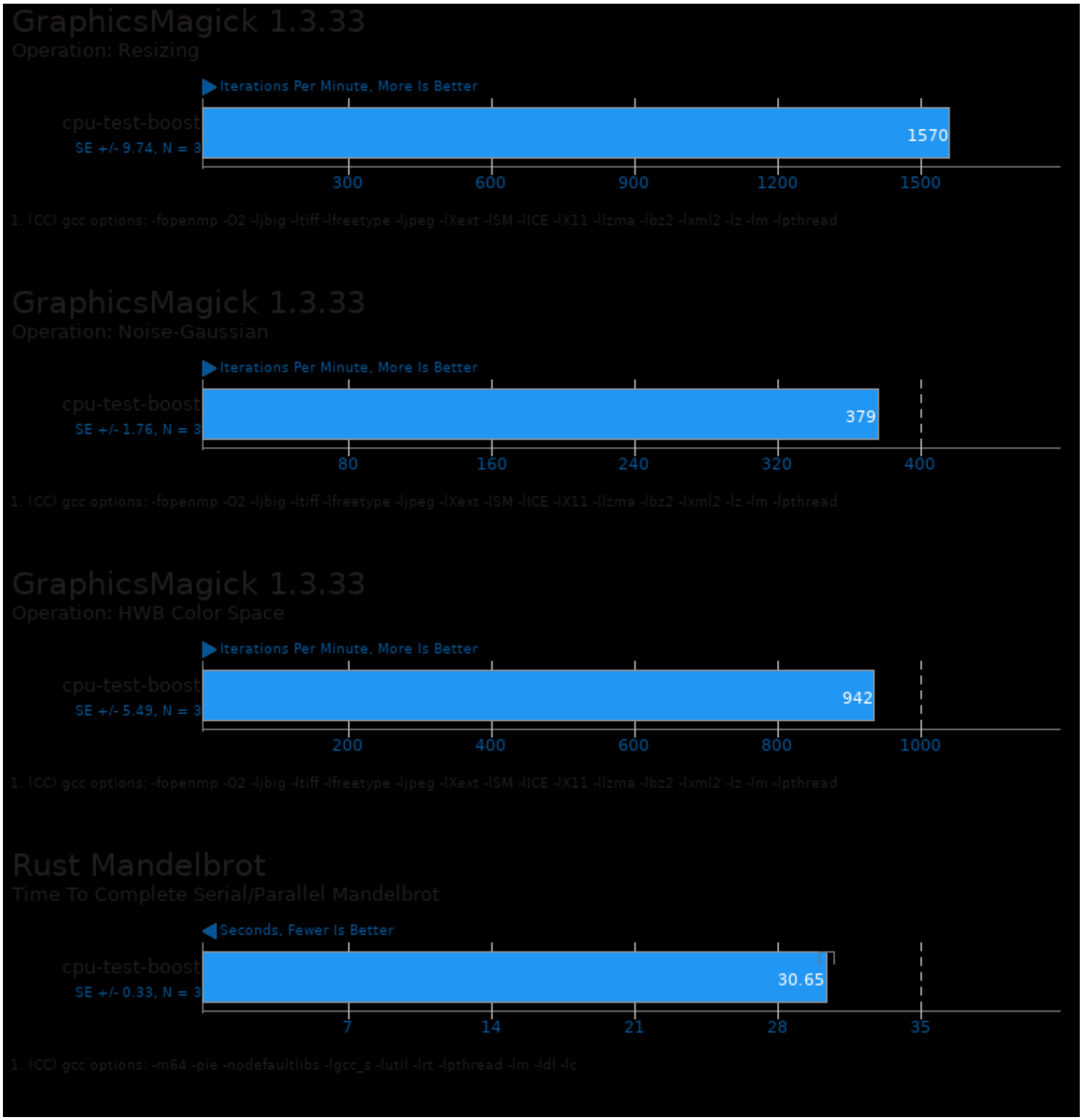
cpu-test-boost

CacheBench - Read Cache (MB/s)	3699
Standard Deviation	1.3%
CacheBench - Write Cache (MB/s)	34815
Standard Deviation	1.8%
nginx - 500 (Reqs/sec)	268375
Standard Deviation	1.8%
nginx - 1000 (Reqs/sec)	263237
Standard Deviation	0.6%
Apache HTTP Server - 500 (Reqs/sec)	80686
Standard Deviation	0.7%
Apache HTTP Server - 1000 (Reqs/sec)	75675
Standard Deviation	2.4%
PHPBench - P.B.S (Score)	654419
Standard Deviation	1.4%

cpu-test-boost



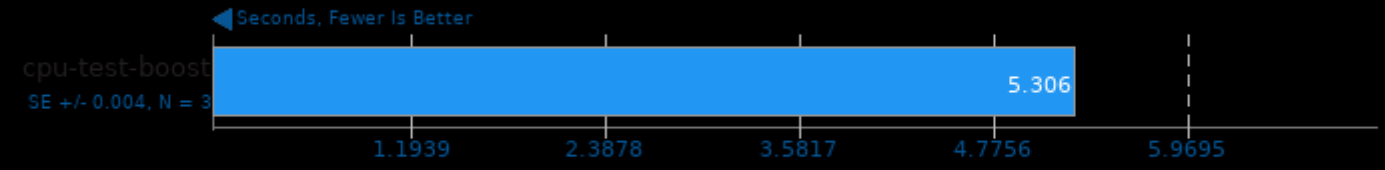
cpu-test-boost



cpu-test-boost

Rust Prime Benchmark

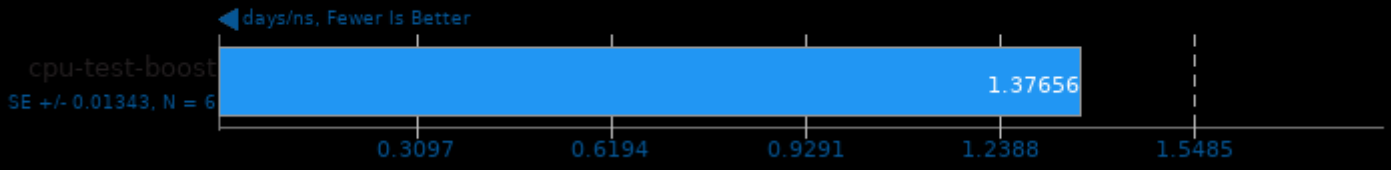
Prime Number Test To 200,000,000



1. (CC) gcc options: -m64 -pie -nodefaultlibs -lgcc_s -lutil -lrt -lpthread -lm -ldl -lc

NAMD 2.13b1

ATPase Simulation - 327,506 Atoms



Kvazaar 2.1

Video Input: Bosphorus 4K - Video Preset: Slow



1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.1

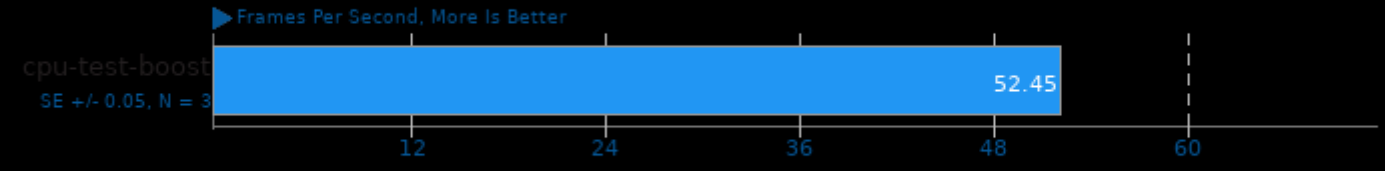
Video Input: Bosphorus 4K - Video Preset: Medium



1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

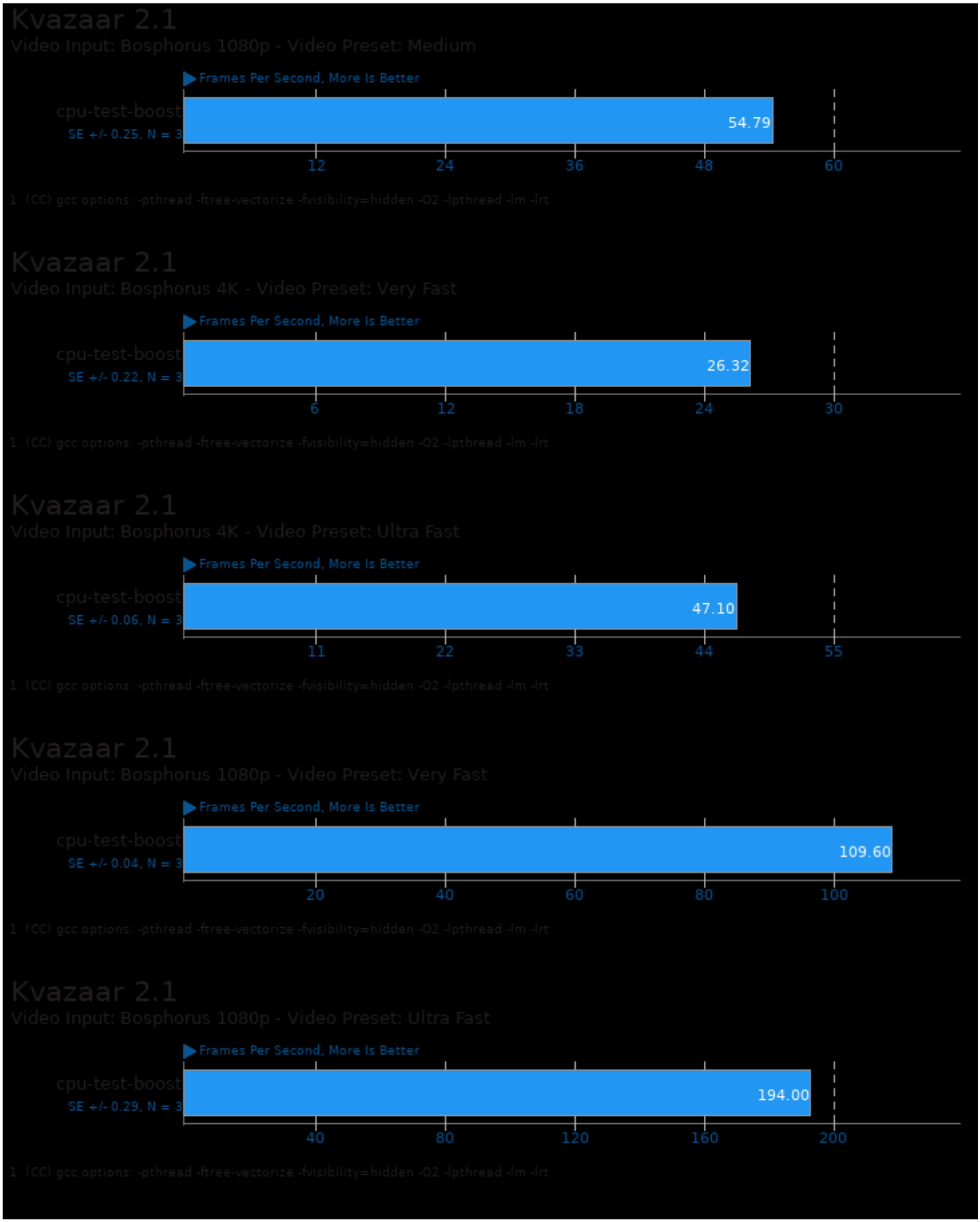
Kvazaar 2.1

Video Input: Bosphorus 1080p - Video Preset: Slow



1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

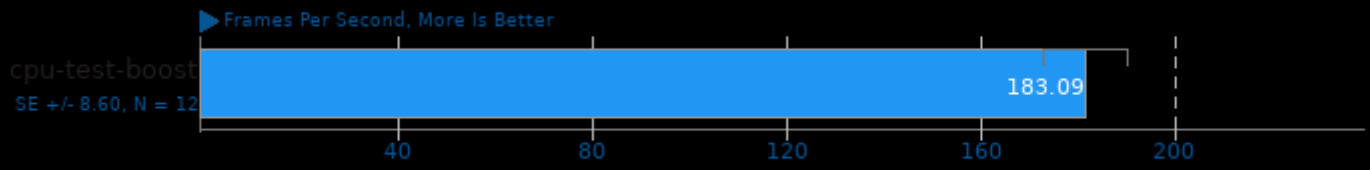
cpu-test-boost



cpu-test-boost

x264 2018-09-25

H.264 Video Encoding



1. (CC) gcc options: -ldl -m64 -lm -lpthread -O3 -ffast-math -std=gnu99 -fPIC -fomit-frame-pointer -fno-tree-vectorize

x265 3.4

Video Input: Bosphorus 4K



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

x265 3.4

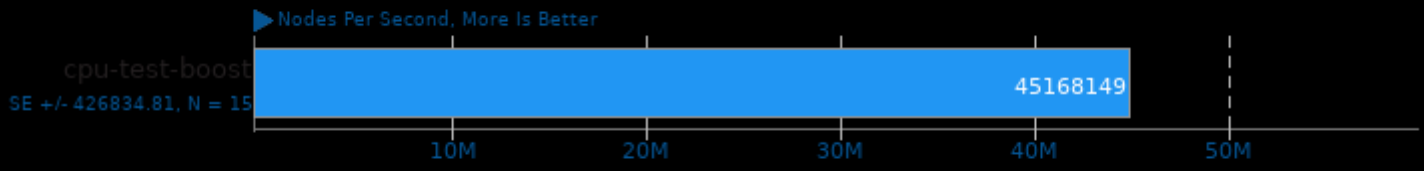
Video Input: Bosphorus 1080p



1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

Stockfish 9

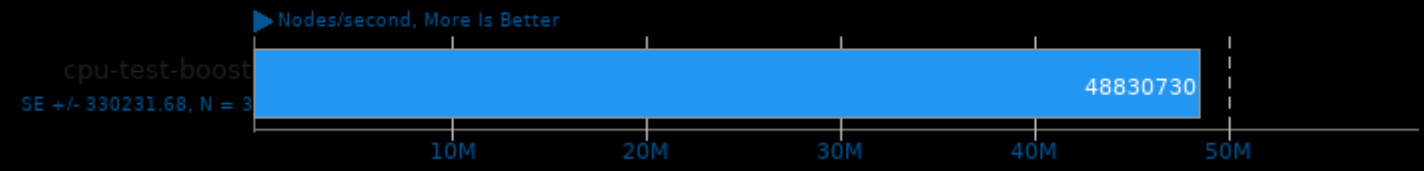
Total Time



1. (CXX) g++ options: -m64 -lpthread -fno-exceptions -std=c++11 -pedantic -O3 -msse -msse3 -mpopcnt -flto

asmFish 2018-07-23

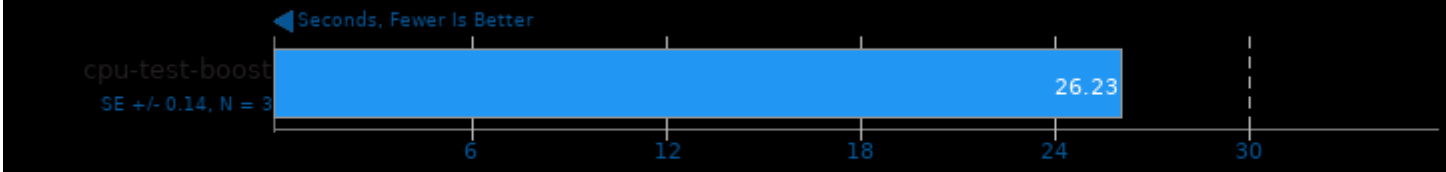
1024 Hash Memory, 26 Depth



cpu-test-boost

POV-Ray 3.7.0.7

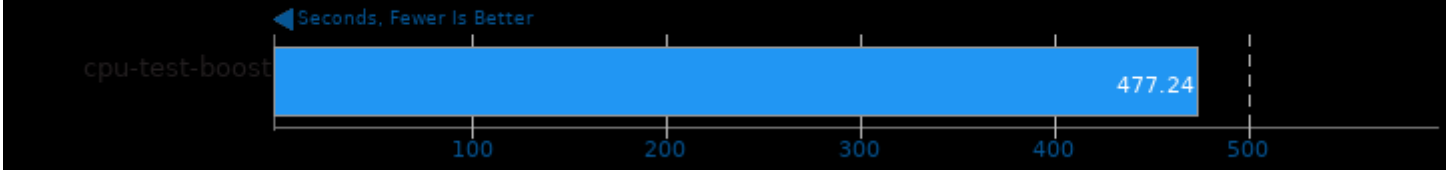
Trace Time



1. (CXX) g++ options: -pipe -O3 -ffast-math -march=native -R/usr/lib -lXpm -lSM -lICE -lX11 -ltiff -ljpeg -lpng -lz -lrt -lm -lboost_thread -lboost_system

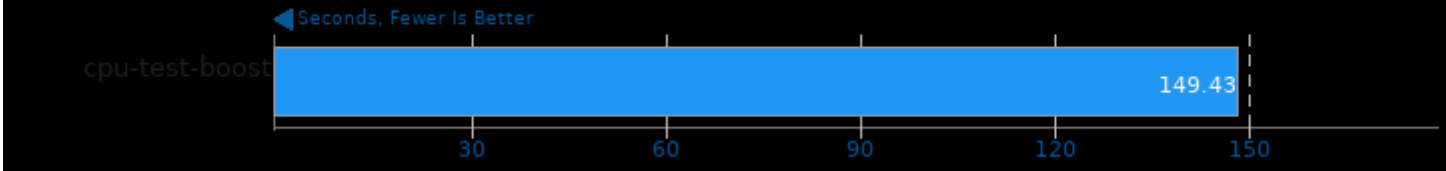
Radiance Benchmark 5.0

Test: Serial



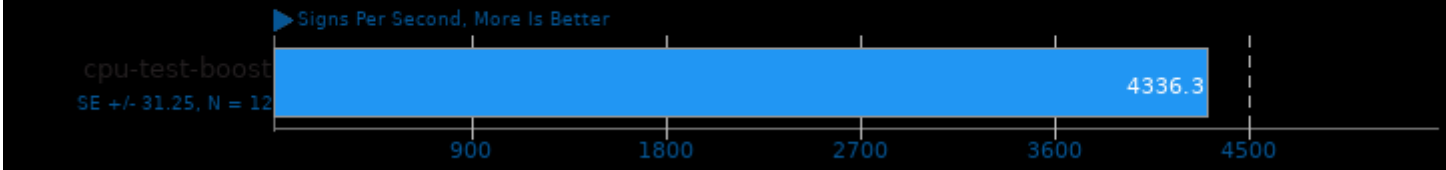
Radiance Benchmark 5.0

Test: SMP Parallel



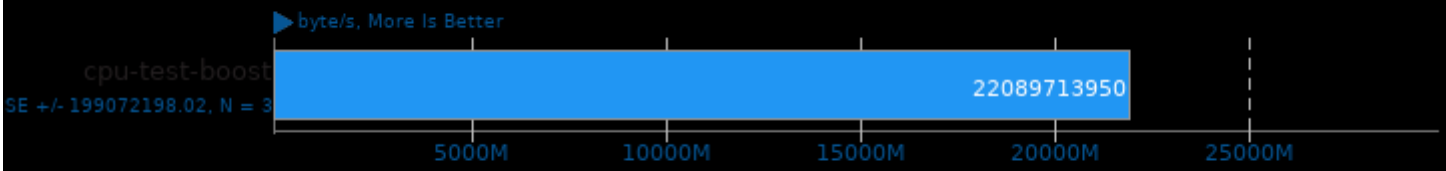
OpenSSL 1.1.1

RSA 4096-bit Performance



OpenSSL 3.0

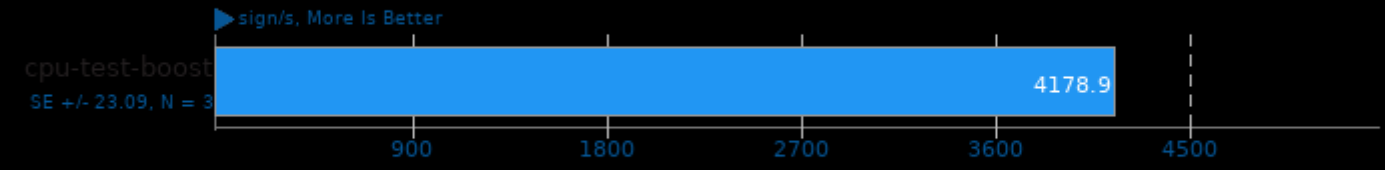
Algorithm: SHA256



1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

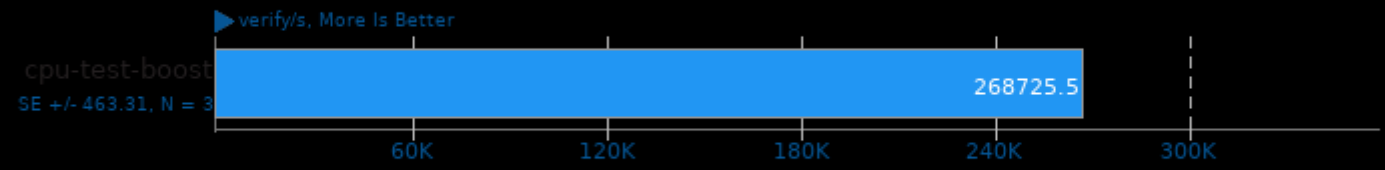
cpu-test-boost

OpenSSL 3.0
Algorithm: RSA4096



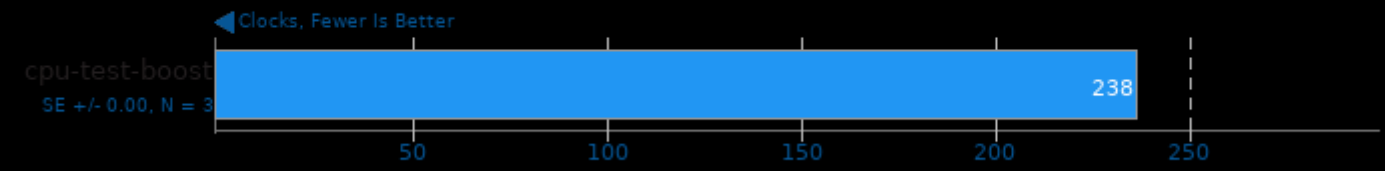
1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

OpenSSL 3.0
Algorithm: RSA4096

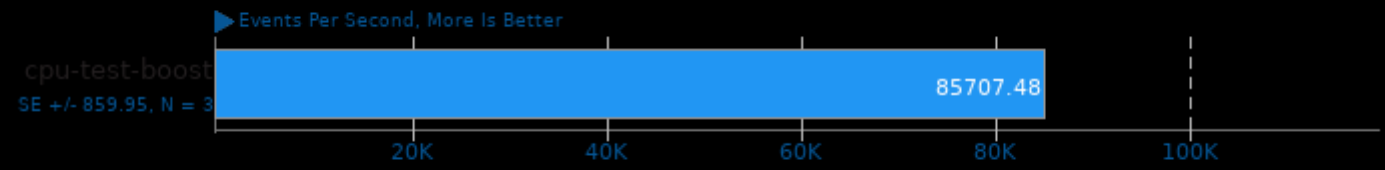


1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

ctx_clock
Context Switch Time

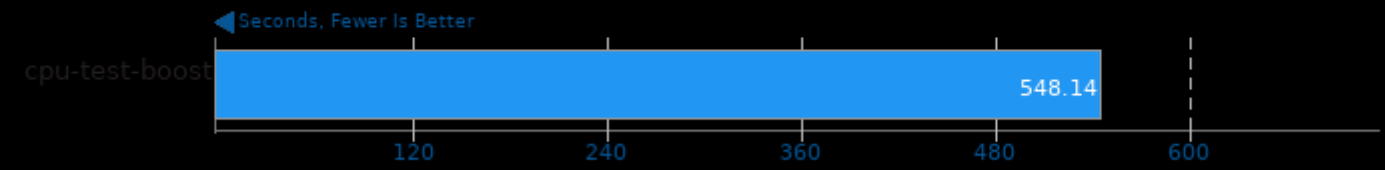


Sysbench 2018-07-28
Test: CPU

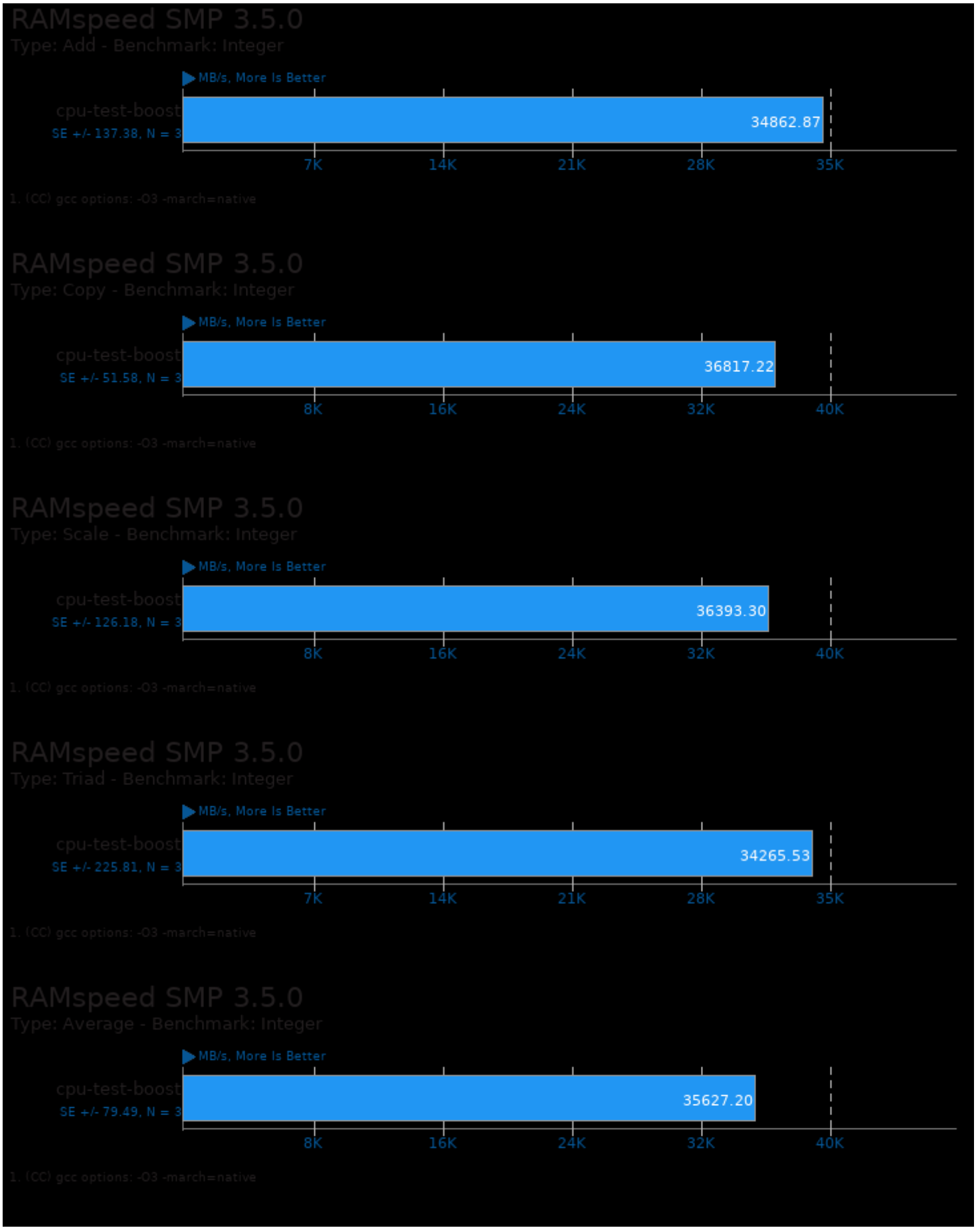


1. (CC) gcc options: -O3 -funroll-loops -ggdb3 -march=amdfam10 -rdynamic -ldl -laio -lm

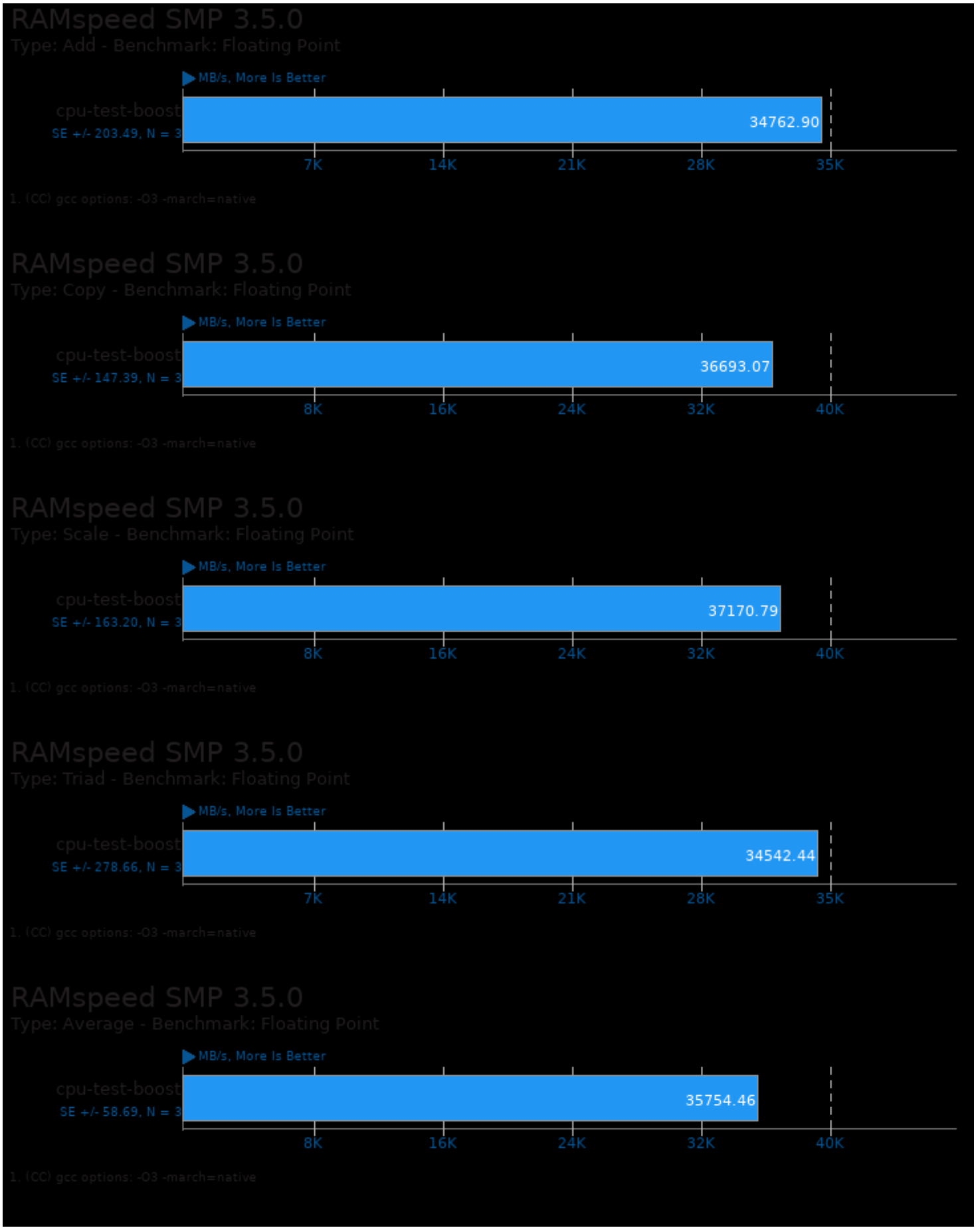
Blender 2.79a
Blend File: Barbershop - Compute: CPU-Only



cpu-test-boost



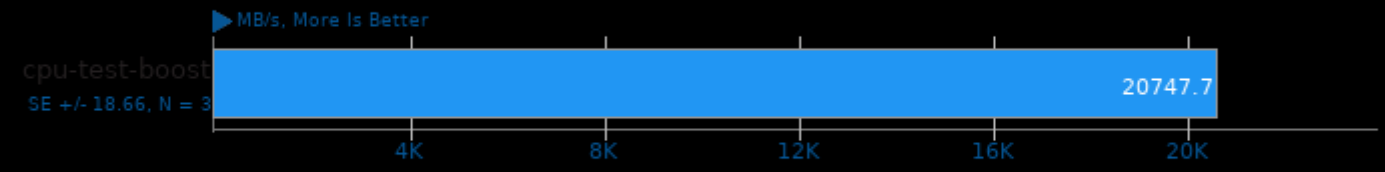
cpu-test-boost



cpu-test-boost

Tinymembench 2018-05-28

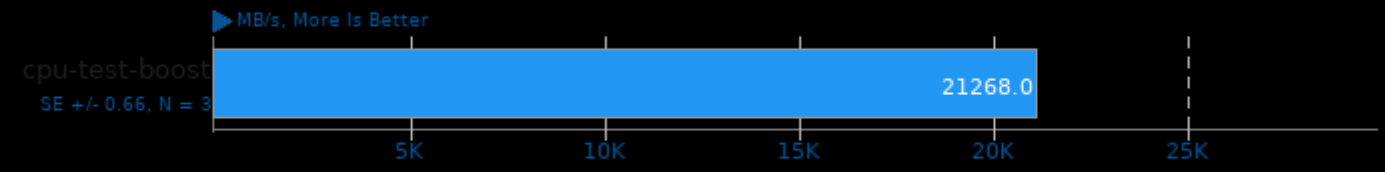
Standard Memcpy



1. (CC) gcc options: -O2 -lm

Tinymembench 2018-05-28

Standard Memset



1. (CC) gcc options: -O2 -lm

MBW 2018-09-08

Test: Memory Copy - Array Size: 1024 MiB



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

MBW 2018-09-08

Test: Memory Copy, Fixed Block Size - Array Size: 1024 MiB



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

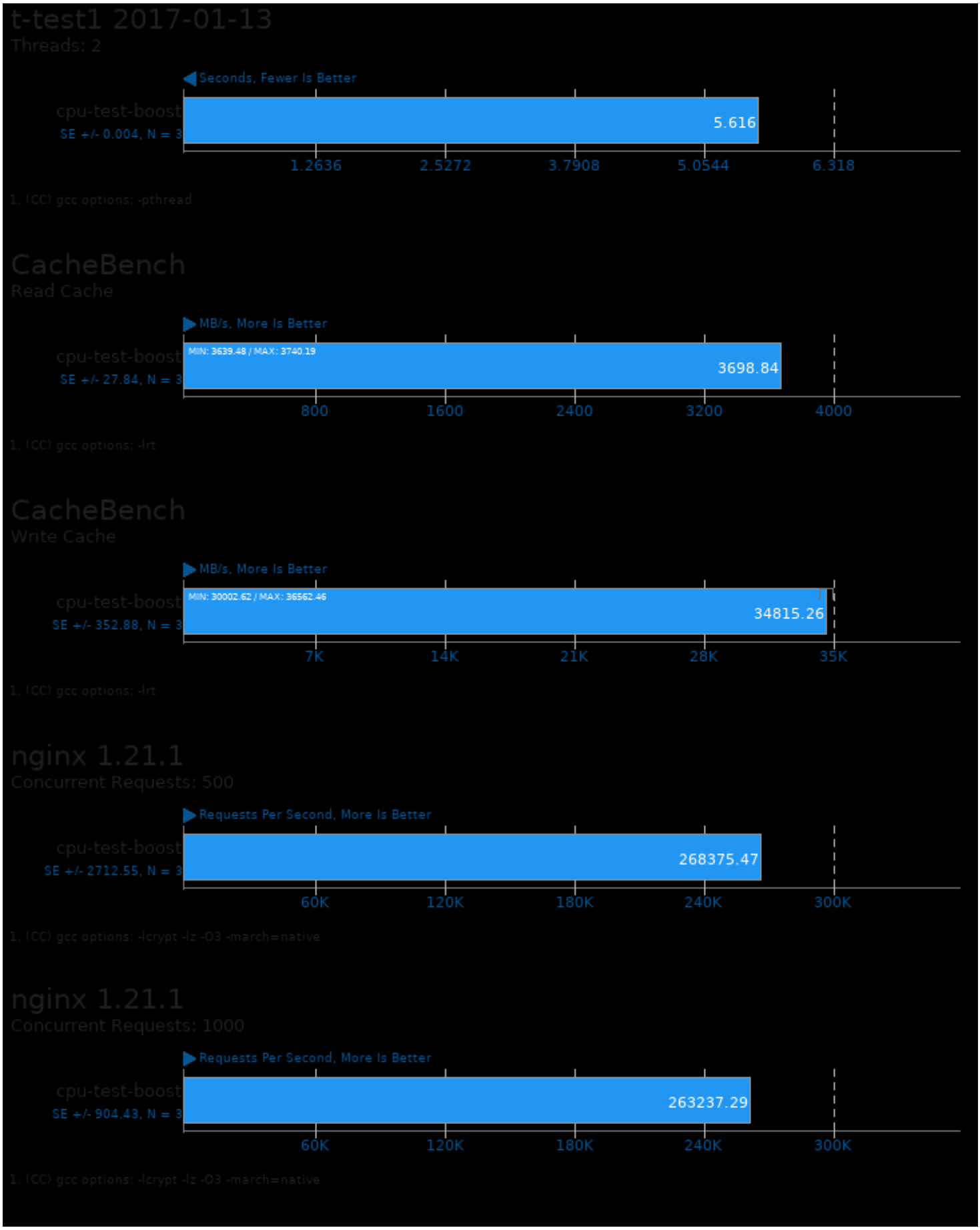
t-test1 2017-01-13

Threads: 1



1. (CC) gcc options: -pthread

cpu-test-boost





This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 19:54.