



www.phoronix-test-suite.com

webserver-ct134

Ixc testing on Ubuntu 21.10 via the Phoronix Test Suite.

Test Systems:

webserver-ct134

webserver-ct131

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASRock Rack 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, Monitor: TFT1980, 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: ext4, Screen Resolution: 1280x1024, System Layer: Ixc

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
--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: Disabled) - 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/swaps barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retrpeline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbs: Not affected + tsx_async_abort: Not affected

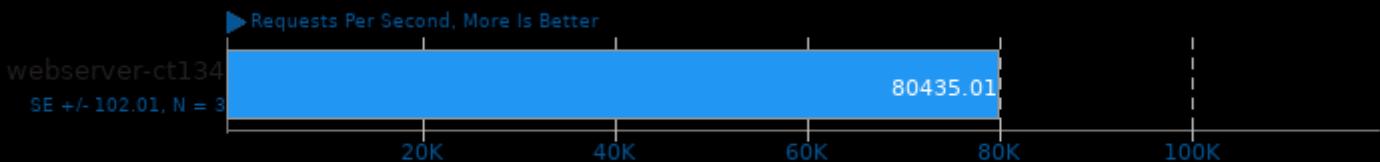
	webserver-ct134	webserver-ct131
nginx - 1 (Req/sec)	80435	
Standard Deviation	0.2%	
nginx - 20 (Req/sec)	231688	
Standard Deviation	0.3%	
nginx - 100 (Req/sec)	235111	
Standard Deviation	0.3%	
nginx - 200 (Req/sec)	236532	
Standard Deviation	0.1%	
nginx - 500 (Req/sec)	237271	
Standard Deviation	0.1%	
nginx - 1000 (Req/sec)	235130	
Standard Deviation	0.1%	
Apache HTTP Server - 1 (Req/sec)	15600	
Standard Deviation	0.7%	
Apache HTTP Server - 20 (Req/sec)	52510	
Standard Deviation	0.3%	
Apache HTTP Server - 100 (Req/sec)	91418	
Standard Deviation	3.7%	
Apache HTTP Server - 200 (Req/sec)	90679	
Standard Deviation	1.3%	
Apache HTTP Server - 500 (Req/sec)	77864	
Standard Deviation	1.2%	
Apache HTTP Server - 1000 (Req/sec)	71534	
Standard Deviation	0.5%	
RAMspeed SMP - Add - Integer (MB/s)	34605	
Standard Deviation	0.6%	
RAMspeed SMP - Copy - Integer (MB/s)	35715	
Standard Deviation	0.1%	
RAMspeed SMP - Scale - Integer (MB/s)	35737	
Standard Deviation	0.2%	
RAMspeed SMP - Triad - Integer (MB/s)	33711	
Standard Deviation	1.4%	
RAMspeed SMP - Average - Integer (MB/s)	34834	
Standard Deviation	0.7%	
RAMspeed SMP - Add - Floating Point (MB/s)	34142	
Standard Deviation	0.7%	
RAMspeed SMP - Copy - Floating Point (MB/s)	35645	
Standard Deviation	0.3%	
RAMspeed SMP - Scale - Floating Point (MB/s)	36328	
Standard Deviation	0.4%	

RAMspeed SMP - Triad - Floating Point (MB/s)	33404
Standard Deviation	1.1%
RAMspeed SMP - Average - Floating Point (MB/s)	35095
Standard Deviation	0.4%
Tinymembench - Standard Memcpy (MB/s)	20743
Standard Deviation	0.1%
Tinymembench - Standard Memset (MB/s)	21264
Standard Deviation	0%
MBW - Memory Copy - 1024 MiB (MiB/s)	15806
Standard Deviation	1.3%
MBW - M.C.F.B.S - 1024 MiB (MiB/s)	9343
Standard Deviation	5.4%
t-test1 - 1 (sec)	18.281
Standard Deviation	0.4%
t-test1 - 2 (sec)	6.951
Standard Deviation	1.1%
NAMD - ATPase Simulation - 327,506 Atoms (days/ns)	1.22555
Standard Deviation	0.9%
CacheBench - Read Cache (MB/s)	2590
Standard Deviation	0%
CacheBench - Write Cache (MB/s)	24866
Standard Deviation	0%
GraphicsMagick - Swirl (Iterations/min)	851
Standard Deviation	0%
GraphicsMagick - Rotate (Iterations/min)	679
Standard Deviation	0.8%
GraphicsMagick - Sharpen (Iterations/min)	181
Standard Deviation	0%
GraphicsMagick - Enhanced (Iterations/min)	337
Standard Deviation	0.2%
GraphicsMagick - Resizing (Iterations/min)	1481
Standard Deviation	0.1%
GraphicsMagick - Noise-Gaussian (Iterations/min)	341
Standard Deviation	0.2%
GraphicsMagick - HWB Color Space (Iterations/min)	746
Standard Deviation	0.2%
Kvazaar - Bosphorus 4K - Slow (FPS)	12.26
Standard Deviation	0.2%
Kvazaar - Bosphorus 4K - Medium (FPS)	12.46
Standard Deviation	0.2%
Kvazaar - Bosphorus 1080p - Slow (FPS)	47.13
Standard Deviation	0.2%
Kvazaar - Bosphorus 1080p - Medium (FPS)	48.43
Standard Deviation	0.2%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	25.04
Standard Deviation	0.2%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	45.43
Standard Deviation	0.4%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	97.28
Standard Deviation	0.4%
Kvazaar - Bosphorus 1080p - Ultra Fast (FPS)	175.33
Standard Deviation	0.2%
x264 - H.2.V.E (FPS)	166.27

Standard Deviation	0.2%
x265 - Bosphorus 4K (FPS)	21.52
Standard Deviation	0.4%
x265 - Bosphorus 1080p (FPS)	65.54
Standard Deviation	0.5%
Stockfish - Total Time (Nodes/s)	48302334
Standard Deviation	1.2%
asmFish - 1.H.M.2.D (Nodes/s)	50091575
Standard Deviation	1.6%
POV-Ray - Trace Time (sec)	27.227
Standard Deviation	1.4%
Rust Mandelbrot - T.T.C.S.P.M (sec)	42.364
Standard Deviation	0%
Rust Prime Benchmark - P.N.T.T.2.0.0 (sec)	6.967
Standard Deviation	0%
Radiance Benchmark - Serial (sec)	636.414
Radiance Benchmark - SMP Parallel (sec)	192.506
OpenSSL - R.4.b.P (Signs/sec)	3936
Standard Deviation	0.1%
ctx_clock - C.S.T (Clocks)	340
Standard Deviation	0%
Sysbench - CPU (Events/sec)	69166
Standard Deviation	0%
Blender - Barbershop - CPU-Only (sec)	555.93

nginx 1.21.1

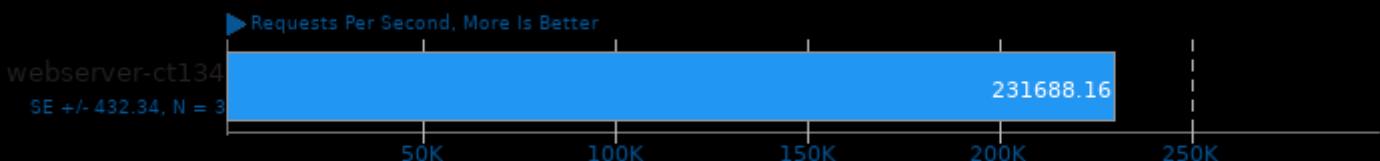
Concurrent Requests: 1



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

nginx 1.21.1

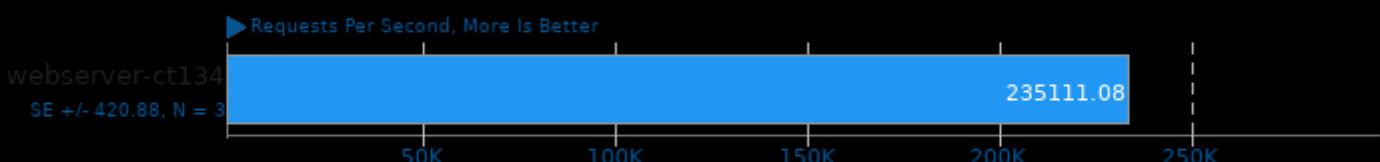
Concurrent Requests: 20



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

nginx 1.21.1

Concurrent Requests: 100



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

nginx 1.21.1

Concurrent Requests: 200



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

nginx 1.21.1

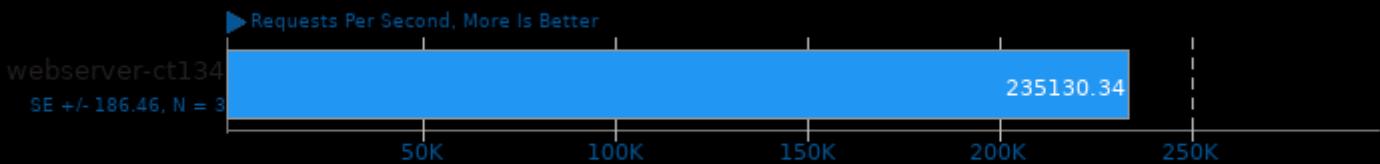
Concurrent Requests: 500



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

nginx 1.21.1

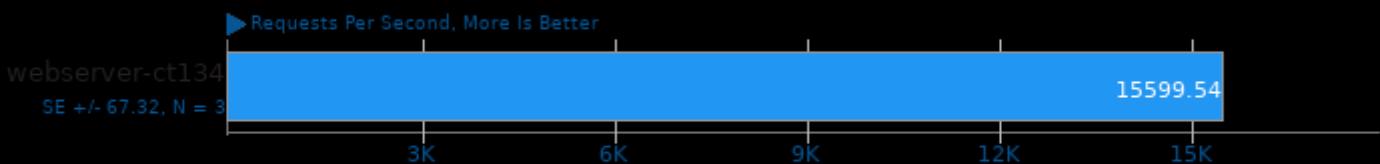
Concurrent Requests: 1000



1. (CC) gcc options: -lcrypt -fPIC -O2

Apache HTTP Server 2.4.48

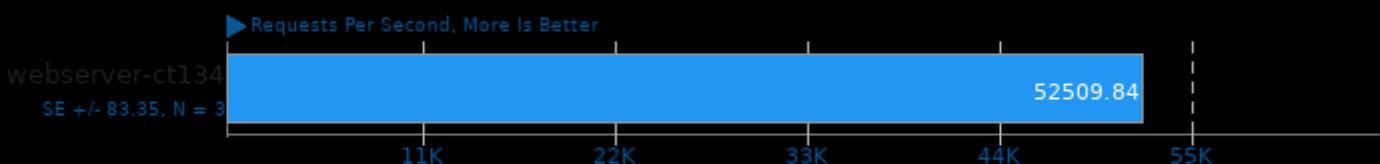
Concurrent Requests: 1



1. (CC) gcc options: -shared -fPIC -O2

Apache HTTP Server 2.4.48

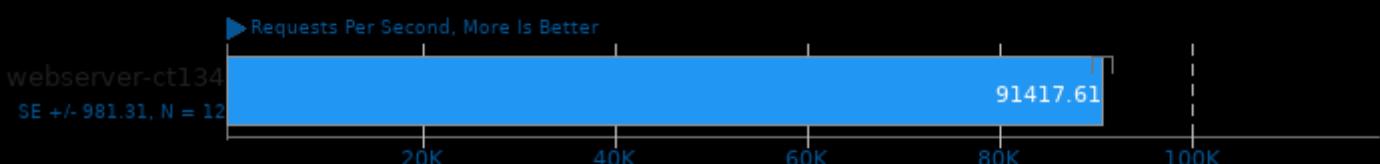
Concurrent Requests: 20



1. (CC) gcc options: -shared -fPIC -O2

Apache HTTP Server 2.4.48

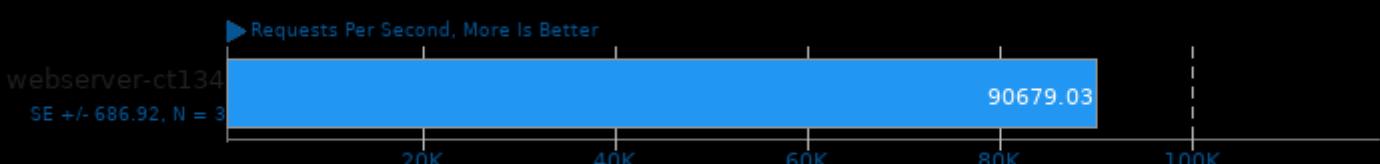
Concurrent Requests: 100



1. (CC) gcc options: -shared -fPIC -O2

Apache HTTP Server 2.4.48

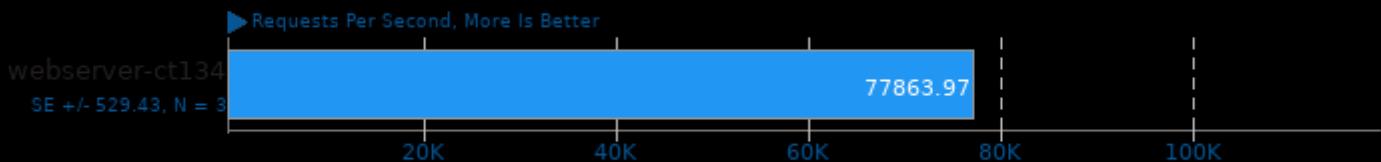
Concurrent Requests: 200



1. (CC) gcc options: -shared -fPIC -O2

Apache HTTP Server 2.4.48

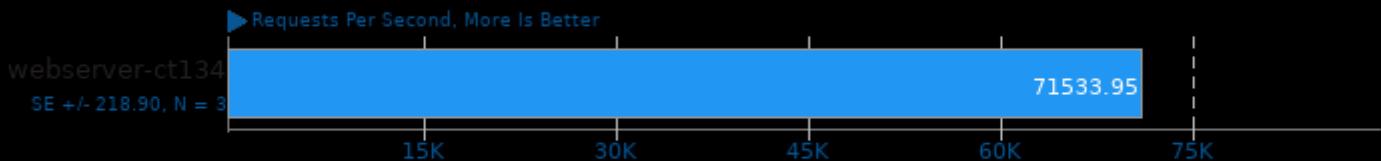
Concurrent Requests: 500



1. (CC) gcc options: -shared -fPIC -O2

Apache HTTP Server 2.4.48

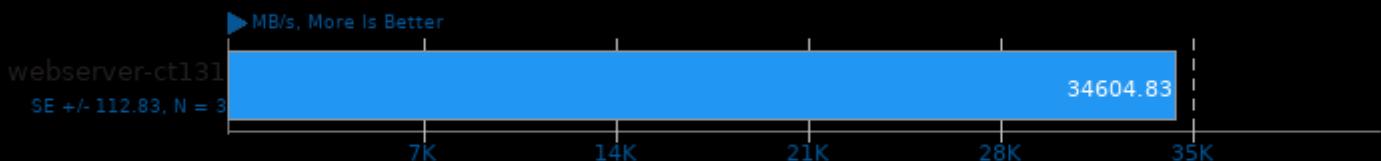
Concurrent Requests: 1000



1. (CC) gcc options: -shared -fPIC -O2

RAMspeed SMP 3.5.0

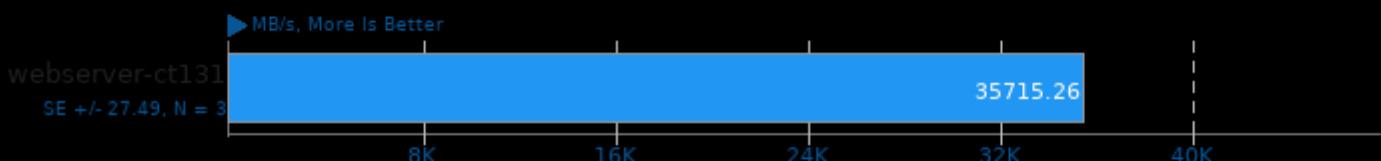
Type: Add - Benchmark: Integer



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

RAMspeed SMP 3.5.0

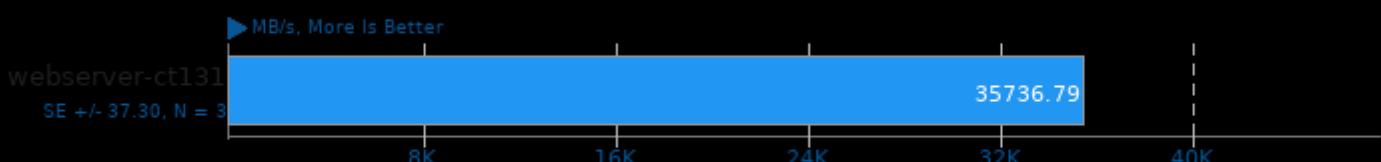
Type: Copy - Benchmark: Integer



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

RAMspeed SMP 3.5.0

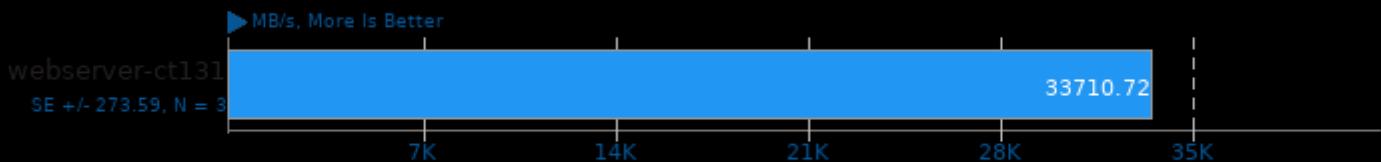
Type: Scale - Benchmark: Integer



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

RAMspeed SMP 3.5.0

Type: Triad - Benchmark: Integer



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

RAMspeed SMP 3.5.0

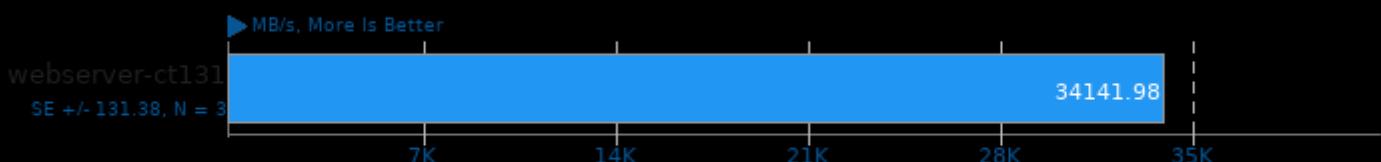
Type: Average - Benchmark: Integer



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

RAMspeed SMP 3.5.0

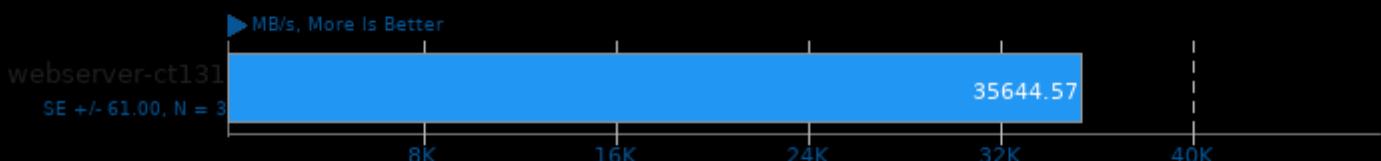
Type: Add - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

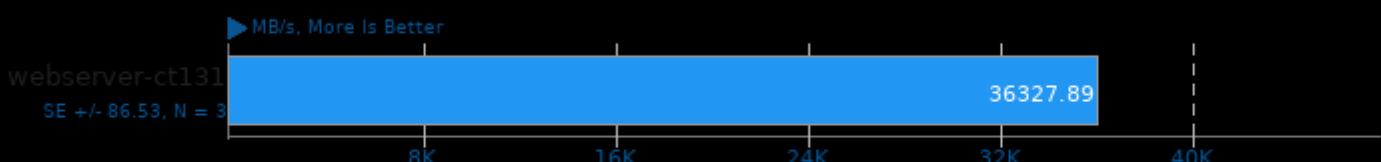
Type: Copy - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

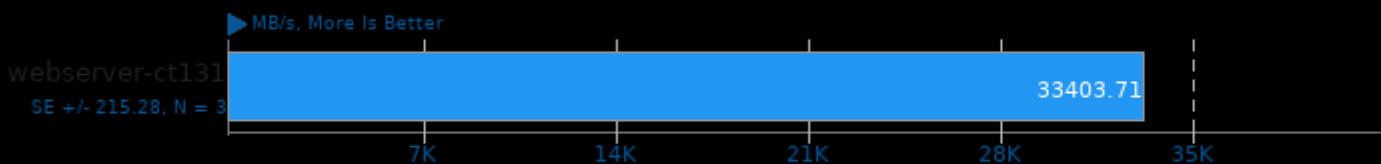
Type: Scale - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

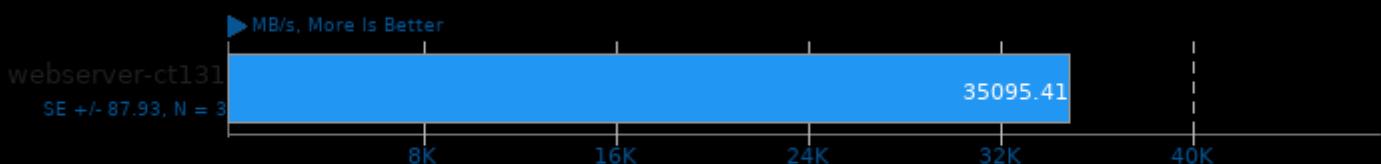
Type: Triad - Benchmark: Floating Point



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

RAMspeed SMP 3.5.0

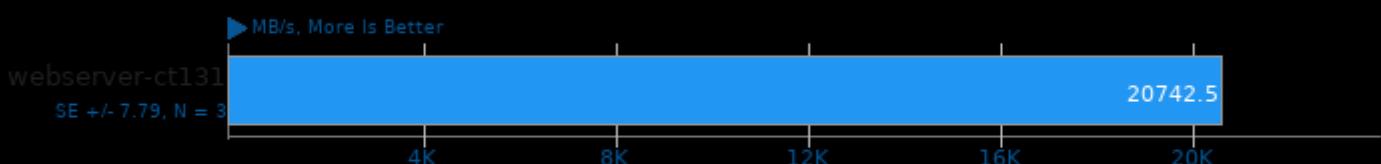
Type: Average - Benchmark: Floating Point



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

Tinymembench 2018-05-28

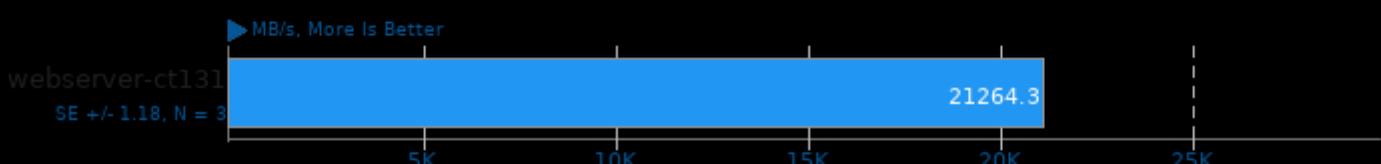
Standard Memcpy



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

Tinymembench 2018-05-28

Standard Memset



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

MBW 2018-09-08

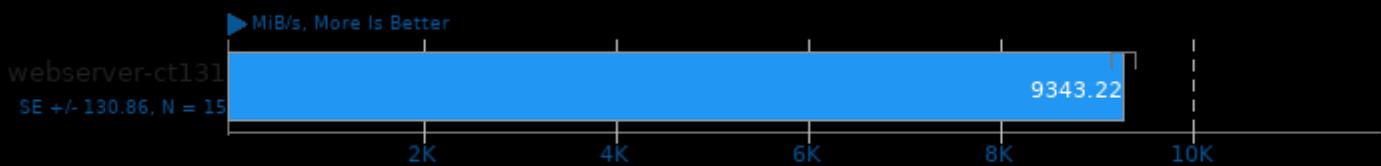
Test: Memory Copy - Array Size: 1024 MiB



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

MBW 2018-09-08

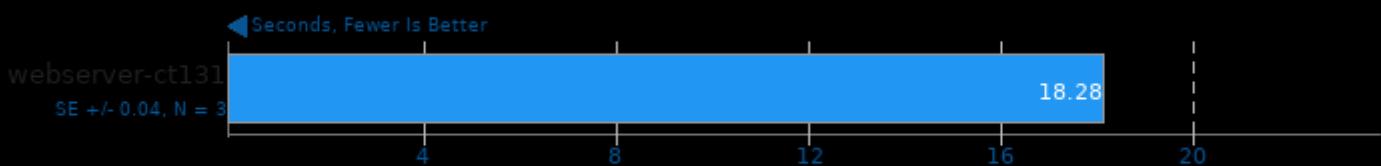
Test: Memory Copy, Fixed Block Size - Array Size: 1024 MiB



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

t-test1 2017-01-13

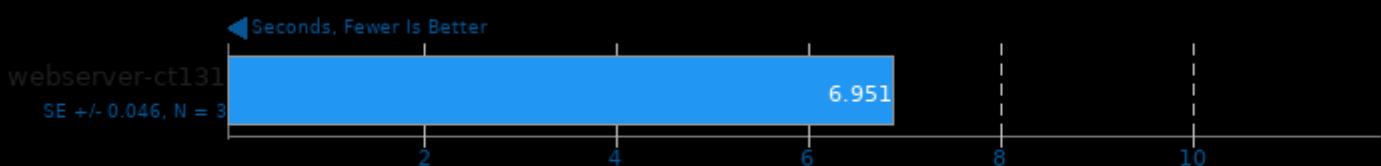
Threads: 1



1. (CC) gcc options: -pthread

t-test1 2017-01-13

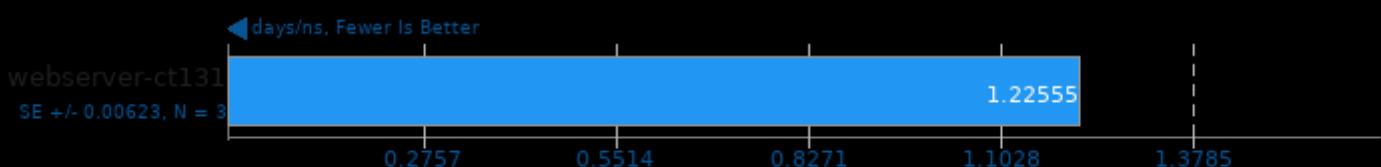
Threads: 2



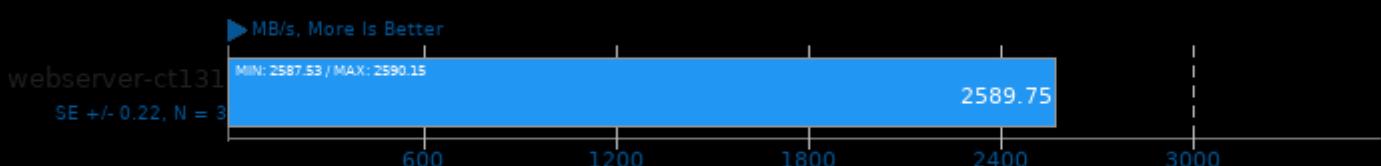
1. (CC) gcc options: -pthread

NAMD 2.13b1

ATPase Simulation - 327,506 Atoms

**CacheBench**

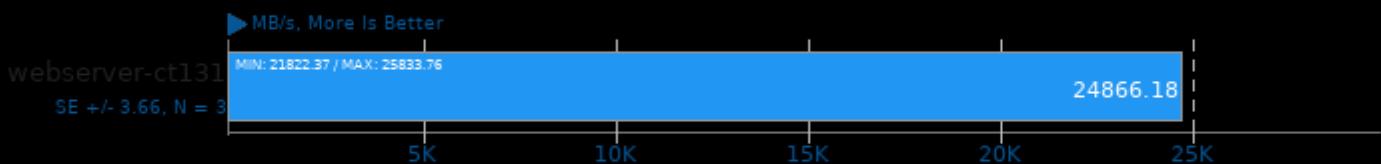
Read Cache



1. (CC) gcc options: -lrt

CacheBench

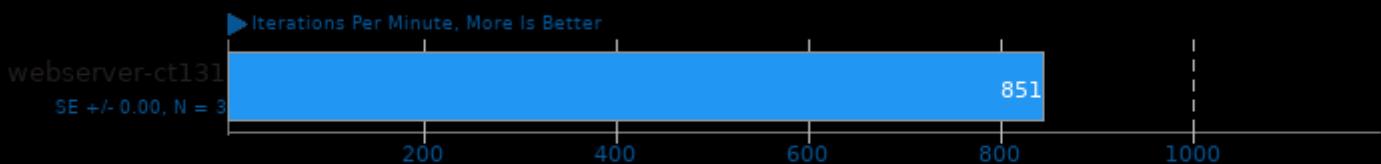
Write Cache



1. (CC) gcc options: -lrt

GraphicsMagick 1.3.33

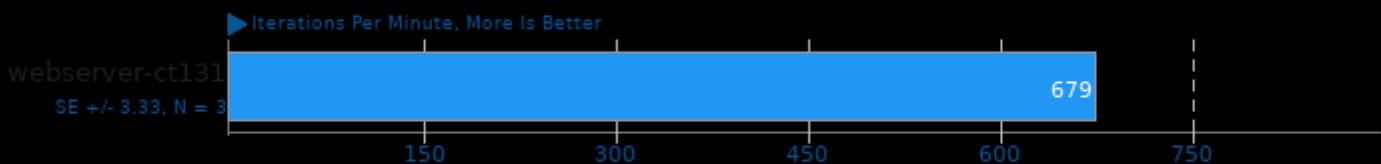
Operation: Swirl



1. (CC) gcc options: -fopenmp -O2 -ljpeg -ltiff -lfreetype -lxml2 -lm -lpthread

GraphicsMagick 1.3.33

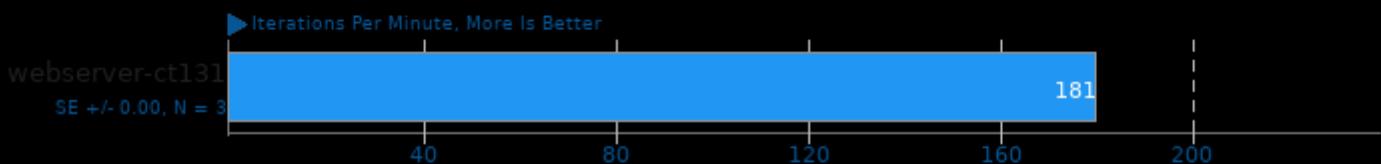
Operation: Rotate



1. (CC) gcc options: -fopenmp -O2 -ljpeg -ltiff -lfreetype -lxml2 -lm -lpthread

GraphicsMagick 1.3.33

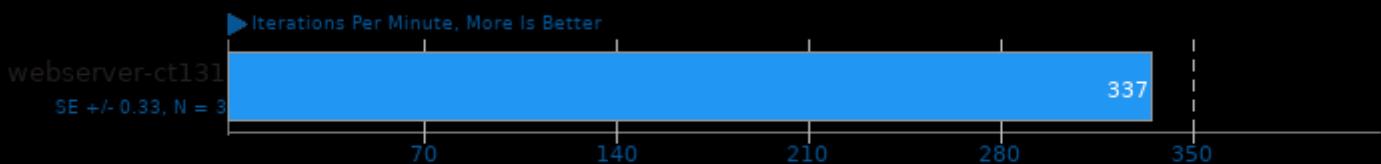
Operation: Sharpen



1. (CC) gcc options: -fopenmp -O2 -ljpeg -ltiff -lfreetype -lxml2 -lm -lpthread

GraphicsMagick 1.3.33

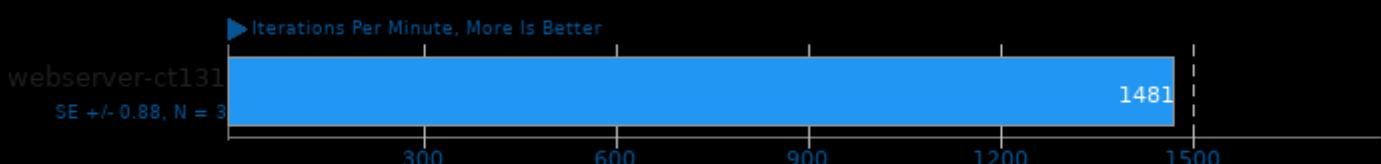
Operation: Enhanced



1. (CC) gcc options: -fopenmp -O2 -ljbig -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lIzma -lbz2 -lxml2 -lz -lm -lpthread

GraphicsMagick 1.3.33

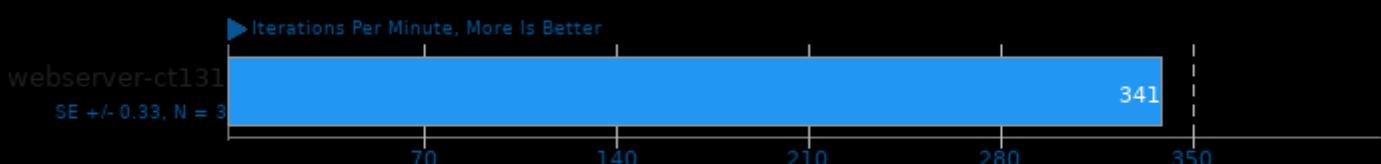
Operation: Resizing



1. (CC) gcc options: -fopenmp -O2 -ljbig -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lIzma -lbz2 -lxml2 -lz -lm -lpthread

GraphicsMagick 1.3.33

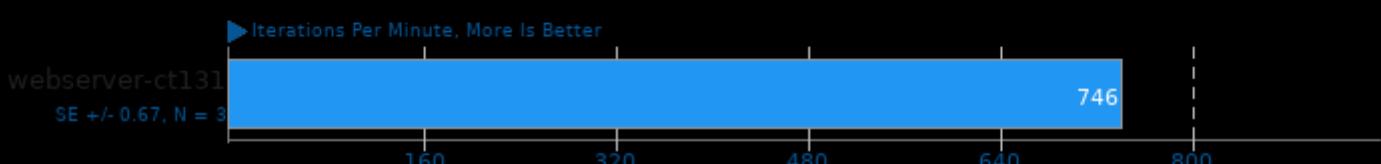
Operation: Noise-Gaussian



1. (CC) gcc options: -fopenmp -O2 -ljbig -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lIzma -lbz2 -lxml2 -lz -lm -lpthread

GraphicsMagick 1.3.33

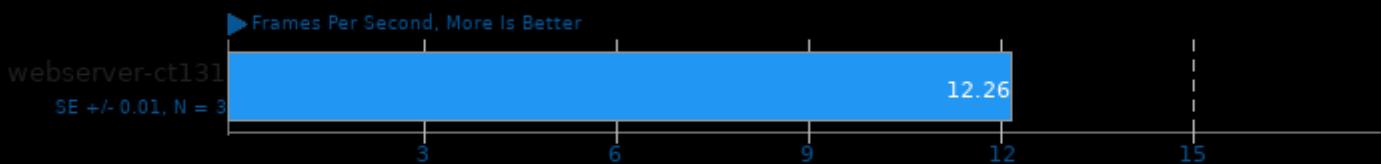
Operation: HWB Color Space



1. (CC) gcc options: -fopenmp -O2 -ljbig -ltiff -lfreetype -ljpeg -lXext -lSM -lICE -lX11 -lIzma -lbz2 -lxml2 -lz -lm -lpthread

Kvazaar 2.1

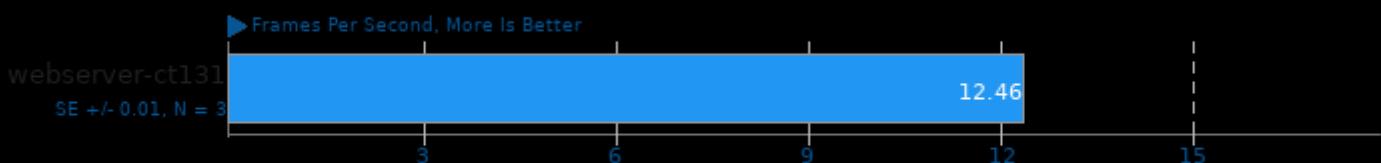
Video Input: Bosphorus 4K - Video Preset: Slow



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

Kvazaar 2.1

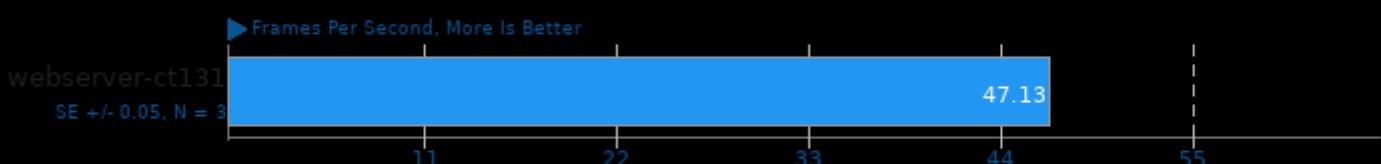
Video Input: Bosphorus 4K - Video Preset: Medium



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

Kvazaar 2.1

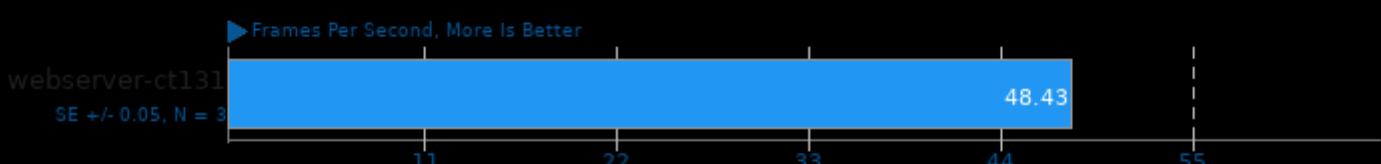
Video Input: Bosphorus 1080p - Video Preset: Slow



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

Kvazaar 2.1

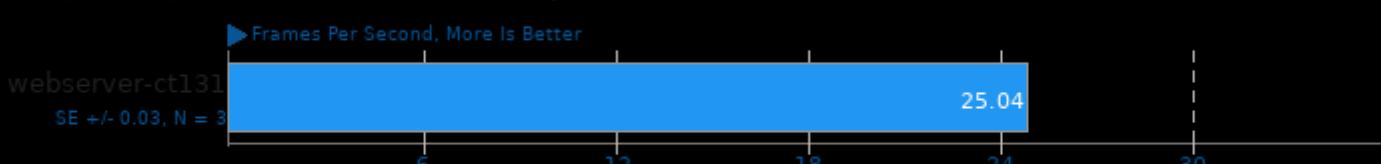
Video Input: Bosphorus 1080p - Video Preset: Medium



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

Kvazaar 2.1

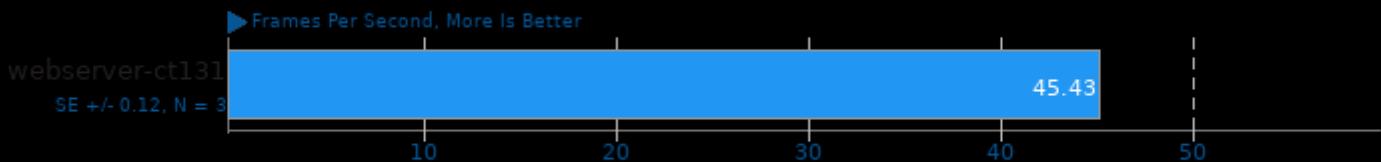
Video Input: Bosphorus 4K - Video Preset: Very Fast



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

Kvazaar 2.1

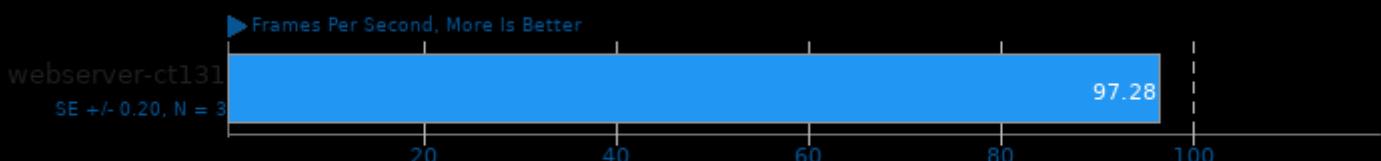
Video Input: Bosphorus 4K - Video Preset: Ultra Fast



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

Kvazaar 2.1

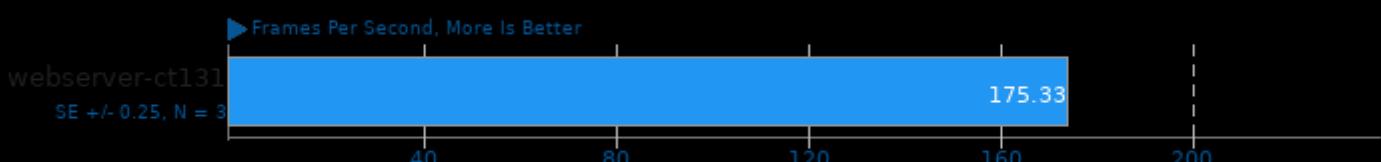
Video Input: Bosphorus 1080p - Video Preset: Very Fast



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

Kvazaar 2.1

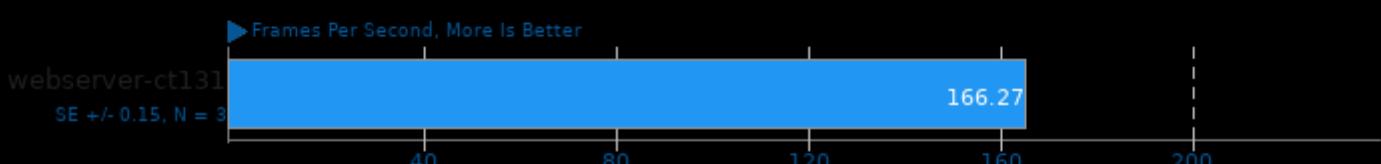
Video Input: Bosphorus 1080p - Video Preset: Ultra Fast



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

x264 2018-09-25

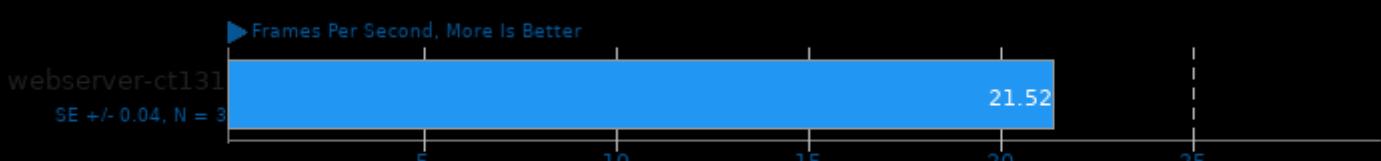
H.264 Video Encoding



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

x265 3.4

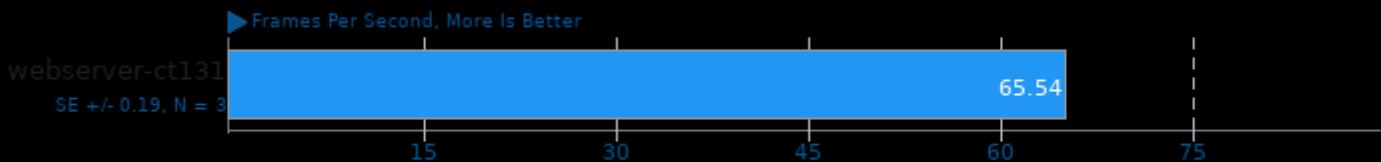
Video Input: Bosphorus 4K



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

x265 3.4

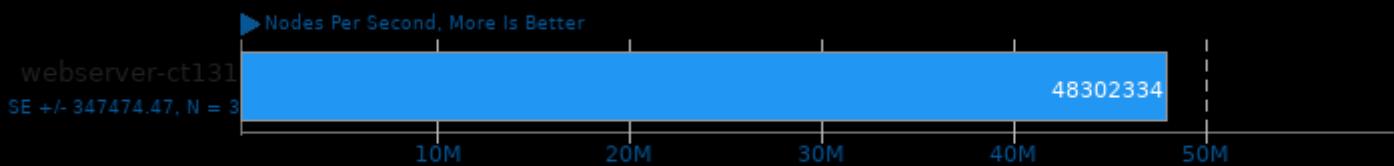
Video Input: Bosphorus 1080p



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

Stockfish 9

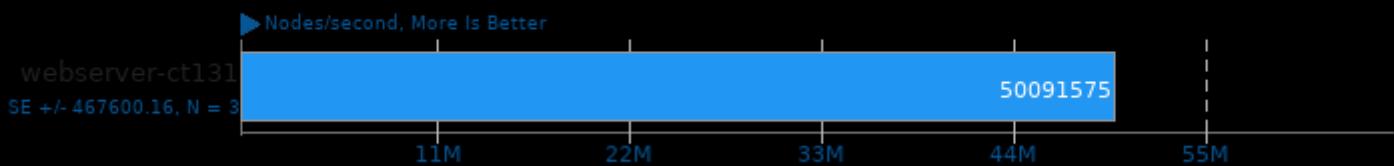
Total Time



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

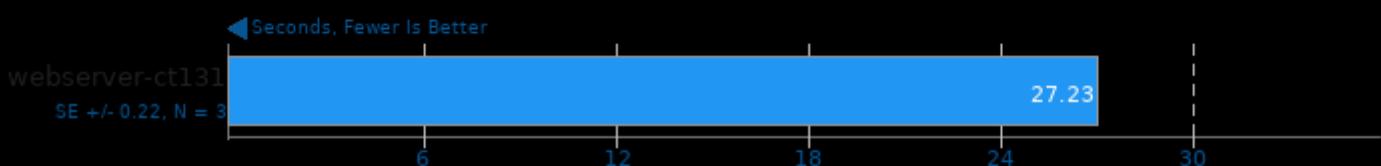
asmFish 2018-07-23

1024 Hash Memory, 26 Depth



POV-Ray 3.7.0.7

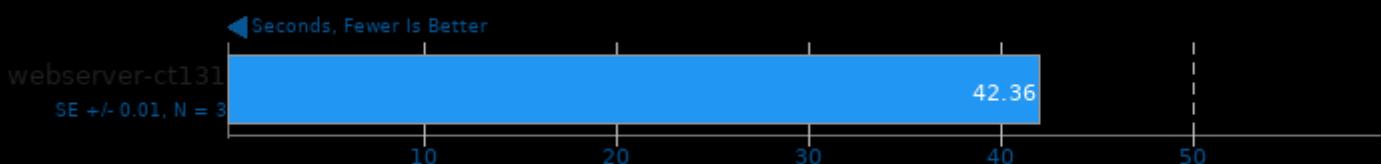
Trace Time



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

Rust Mandelbrot

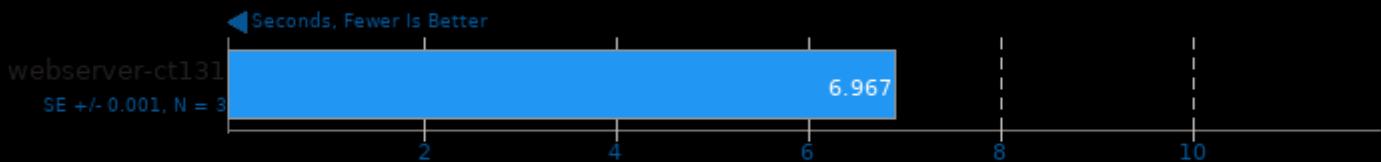
Time To Complete Serial/Parallel Mandelbrot



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

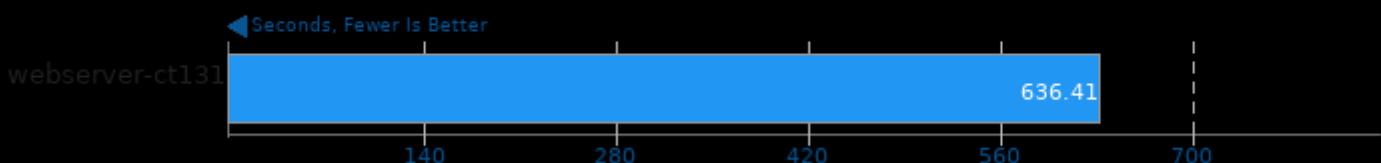
Rust Prime Benchmark

Prime Number Test To 200,000,000



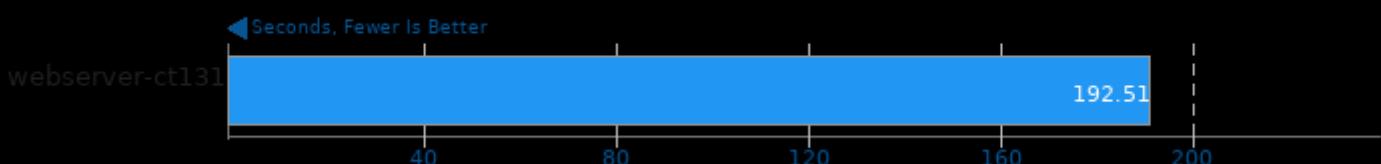
Radiance Benchmark 5.0

Test: Serial



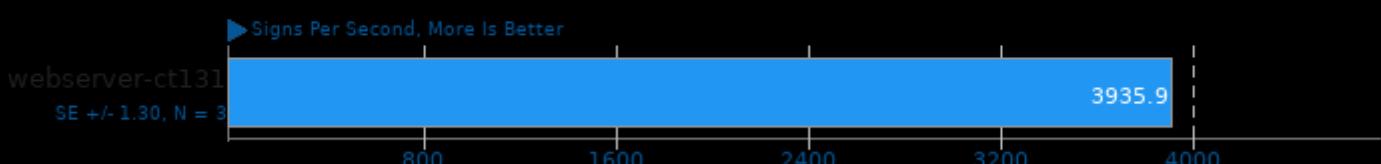
Radiance Benchmark 5.0

Test: SMP Parallel



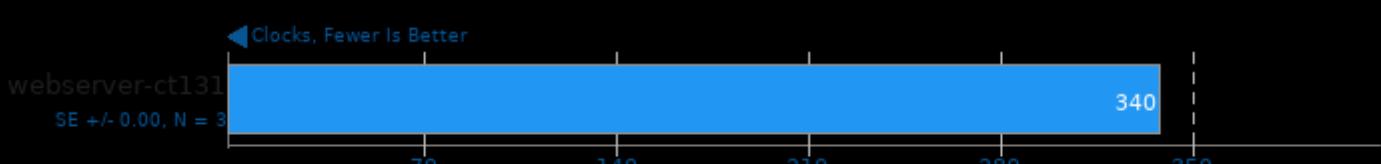
OpenSSL 1.1.1

RSA 4096-bit Performance



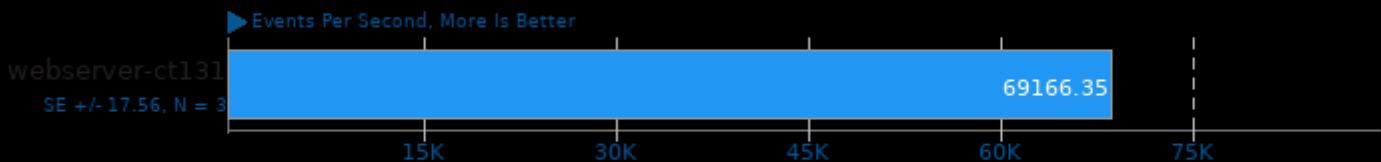
ctx_clock

Context Switch Time



Sysbench 2018-07-28

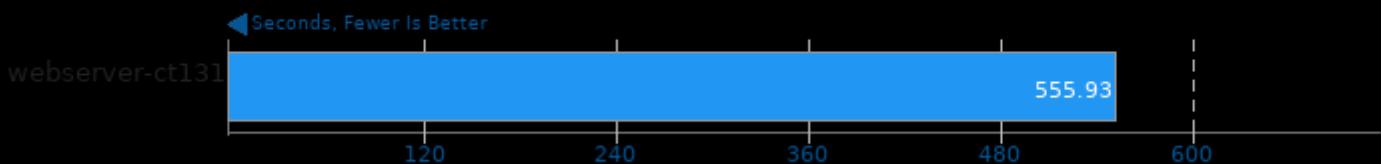
Test: CPU



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

Blender 2.79a

Blend File: Barbershop - Compute: CPU-Only



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 09:02.