



www.phoronix-test-suite.com

xanmod-liquorix

Intel Core i7-8700K testing with a Gigabyte Z370 AORUS Gaming 7 (F6 BIOS) and Sapphire AMD Radeon RX 470/480/570/570X/580/580X/590 8GB on ManjaroLinux 20.2.1 via the Phoronix Test Suite.

Automated Executive Summary

liquorix-lqx had the most wins, coming in first place for 48% of the tests.

The results with the greatest spread from best to worst included:

OpenArena (Resolution: 2560 x 1440 - Total Frame Time) at 25x

OpenArena (Resolution: 1920 x 1080 - Total Frame Time) at 19x

iPerf (Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: TCP - Parallel: 5) at 1.592x

iPerf (Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: TCP - Parallel: 5) at 1.583x

Sockperf (Test: Throughput) at 1.416x

iPerf (Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: TCP - Parallel: 1) at 1.337x

iPerf (Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: TCP - Parallel: 1) at 1.335x

OpenArena (Resolution: 2560 x 1440) at 1.227x

OpenArena (Resolution: 1920 x 1080) at 1.181x

OSBench (Test: Create Processes) at 1.138x.

Test Systems:

xanmod-cacule

Processor: Intel Core i7-8700K @ 4.90GHz (6 Cores / 12 Threads), Motherboard: Gigabyte Z370 AORUS Gaming 7 (F6 BIOS), Chipset: Intel 8th Gen Core, Memory: 32GB, Disk: Samsung SSD 960 EVO 500GB + 240GB KINGSTON SA400S3 + 120GB KINGSTON SA400S3, Graphics: Sapphire AMD Radeon RX 470/480/570/570X/580/580X/590 8GB (1284/1750MHz), Audio: Realtek ALC1220, Monitor: Acer X34 P + D27QO, Network: Intel I219-V + Qualcomm Atheros Killer E2500

OS: ManjaroLinux 20.2.1, Kernel: 5.10.12-xanmod1-cacule-1-cacule (x86_64), Desktop: KDE Frameworks 5.78.0, Display Server: X Server 1.20.10, Display Driver: modesetting 1.20.10, OpenGL: 4.6 Mesa 20.3.3 (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: Clang 11.0.1, File-System: ext4, Screen Resolution: 4880x2560

Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-werror --enable-__cxa_atexit --enable-cet=auto --enable-checking=release --enable-clocale-gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-install-liberty --enable-languages=c,c++,ada,fortran,go,ito,objc,obj-c++,d --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-isl --with-linker-hash-style-gnu

Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0xde - Thermald 2.4.1

Graphics Notes: GLAMOR

Security Notes: iflb_multithit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + 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 generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbd: Mitigation of Microcode + tsx_async_abort: Mitigation of Clear buffers; SMT vulnerable

liquorix

liquorix-lqx

Processor: Intel Core i7-8700K @ 3.70GHz (6 Cores / 12 Threads), Motherboard: Gigabyte Z370 AORUS Gaming 7 (F6 BIOS), Chipset: Intel 8th Gen Core, Memory: 32GB, Disk: Samsung SSD 960 EVO 500GB + 240GB KINGSTON SA400S3 + 120GB KINGSTON SA400S3, Graphics: Sapphire AMD Radeon RX 470/480/570/570X/580/580X/590 8GB (1284/1750MHz), Audio: Realtek ALC1220, Monitor: Acer X34 P + D27QO, Network: Intel I219-V + Qualcomm Atheros Killer E2500

OS: ManjaroLinux 20.2.1, Kernel: 5.10.12-lqx1-1-lqx (x86_64), Desktop: KDE Frameworks 5.78.0, Display Server: X Server 1.20.10, Display Driver: modesetting 1.20.10, OpenGL: 4.6 Mesa 20.3.3 (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: Clang 11.0.1, File-System: ext4, Screen Resolution: 2560x1440

Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-werror --enable-__cxa_atexit --enable-cet=auto --enable-checking=release --enable-clocale-gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-install-liberty --enable-languages=c,c++,ada,fortran,go,ito,objc,obj-c++,d --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-isl --with-linker-hash-style-gnu

Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xde - Thermald 2.4.1

Graphics Notes: GLAMOR

Security Notes: iflb_multithit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + 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 generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbd: Mitigation of Microcode + tsx_async_abort: Mitigation of Clear buffers; SMT vulnerable

xanmod

Processor: Intel Core i7-8700K @ 4.90GHz (6 Cores / 12 Threads), Motherboard: Gigabyte Z370 AORUS Gaming 7 (F6 BIOS), Chipset: Intel 8th Gen Core, Memory: 32GB, Disk: Samsung SSD 960 EVO 500GB + 240GB KINGSTON SA400S3 + 120GB KINGSTON SA400S3 + 64GB Flash Drive, Graphics: Sapphire AMD Radeon RX 470/480/570/570X/580/580X/590 8GB (1284/1750MHz), Audio: Realtek ALC1220, Monitor: Acer X34 P + D27QO, Network: Intel I219-V + Qualcomm Atheros Killer E2500

OS: ManjaroLinux 20.2.1, Kernel: 5.10.12-xanmod1-1 (x86_64), Desktop: KDE Frameworks 5.78.0, Display Server: X Server 1.20.10, Display Driver: modesetting 1.20.10, OpenGL: 4.6 Mesa 20.3.3 (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: Clang 11.0.1, File-System: ext4, Screen Resolution: 4880x2560

Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-werror --enable-__cxa_atexit --enable-cet=auto --enable-checking=release --enable-clocale-gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-install-libiberty --enable-languages=c,c++,ada,fortran,go,io,objc,obj-c++,d --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-isl --with-linker-hash-style-gnu

Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0xde - Thermald 2.4.1

Graphics Notes: GLAMOR

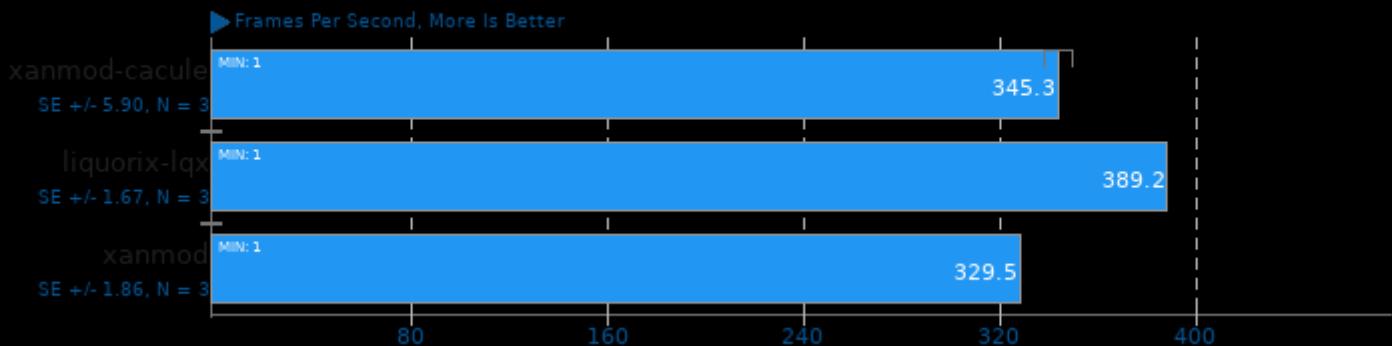
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling + srbd: Mitigation of Microcode + tsx_async_abort: Mitigation of Clear buffers; SMT vulnerable

	xanmod-cacule	liquorix	liquorix-lqx	xanmod
OpenArena - 1920 x 1080 (FPS)	345.3		389.2	329.5
Normalized	88.72%		100%	84.66%
Standard Deviation	3%		0.7%	1%
OpenArena - 2560 x 1440 (FPS)	223.8		274.6	226.6
Normalized	81.5%		100%	82.52%
Standard Deviation	2.3%		0.2%	2.1%
Stream - Copy (MB/s)	34336		34277	34317
Normalized	100%		99.83%	99.95%
Standard Deviation	0.2%		0.1%	0.2%
Stream - Triad (MB/s)	26675		26829	26902
Normalized	99.16%		99.73%	100%
Standard Deviation	0%		0%	0%
MBW - Memory Copy - 128 MiB	16974		16940	16744
Normalized	100%		99.8%	98.64%
Standard Deviation	0.8%		0.5%	1%
MBW - Memory Copy - 8192 MiB	16550		16562	16527
Normalized	99.92%		100%	99.79%
Standard Deviation	0.8%		1.3%	1.2%
iPerf - 5201 - 10 Seconds - TCP - 1	62421		83466	68179
(Mbits/s)				
Normalized	74.79%		100%	81.68%
Standard Deviation	2.8%		0.5%	2.9%
iPerf - 5201 - 10 Seconds - TCP - 5	59632		94373	67637
(Mbits/s)				
Normalized	63.19%		100%	71.67%
Standard Deviation	2.2%		1.3%	1.1%
iPerf - 5201 - 10 Seconds - UDP - 1	1.05		1.05	1.05
(Mbits/s)				
Standard Deviation	0%		0%	0%
iPerf - 5201 - 10 Seconds - UDP - 5	5.24		5.24	5.24
(Mbits/s)				
Standard Deviation	0%		0%	0%
iPerf - 5201 - 60 Seconds - TCP - 1	62360		83221	69342
(Mbits/s)				
Normalized	74.93%		100%	83.32%
Standard Deviation	1.5%		0.4%	0.5%

iPerf - 5201 - 60 Seconds - TCP - 5	58790	93610	66827
	(Mbits/s)		
Normalized	62.8%	100%	71.39%
Standard Deviation	0.3%	0.3%	1.7%
iPerf - 5201 - 60 Seconds - UDP - 1	1.05	1.05	1.05
	(Mbits/s)		
Standard Deviation	0%	0%	0%
iPerf - 5201 - 60 Seconds - UDP - 5	5.24	5.24	5.24
	(Mbits/s)		
Standard Deviation	0%	0%	0%
iPerf - 5201 - 10 Seconds - TCP - 64	57494	65028	61795
	(Mbits/s)		
Normalized	88.41%	100%	95.03%
Standard Deviation	0.5%	2.9%	2.4%
iPerf - 5201 - 10 Seconds - UDP - 64	67.1	67.1	67.1
	(Mbits/s)		
Standard Deviation	0%	0%	0%
iPerf - 5201 - 60 Seconds - TCP - 64	57732	64453	62257
	(Mbits/s)		
Normalized	89.57%	100%	96.59%
Standard Deviation	1.3%	1.7%	1.1%
iPerf - 5201 - 60 Seconds - UDP - 64	67.1	67.1	67.1
	(Mbits/s)		
Standard Deviation	0%	0%	0%
Sockperf - Throughput	369616	523538	466848
Normalized	70.6%	100%	89.17%
Standard Deviation	2.3%	0.7%	2.9%
Sockperf - Latency Under Load (usec)	20.582	7.363	17.820
Normalized	35.77%	100%	41.32%
Standard Deviation	29.9%	24.1%	31.7%
OSBench - Create Files (us/Event)	12.525619	11.873153	12.509685
Normalized	94.79%	100%	94.91%
Standard Deviation	0.5%	0.6%	0.3%
OSBench - Create Threads (us/Event)	11.363029	12.218158	11.184215
Normalized	98.43%	91.54%	100%
Standard Deviation	0.7%	3%	0.5%
OSBench - Create Processes	21.590392	23.126602	20.322800
Normalized	94.13%	87.88%	100%
Standard Deviation	1.9%	0.4%	1.3%
Coremark - CoreMark Size 666 - I.P.S	278824	275549	267955
	(Iterations/Sec)		
Normalized	100%	98.83%	96.1%
Standard Deviation	1.2%	3.4%	3.9%
Redis - GET (Req/sec)	2847693	2916793	2775834
Normalized	97.63%	100%	95.17%
Standard Deviation	6%	2.3%	5.1%
Redis - SET (Req/sec)	2283568	2259937	2204963
Normalized	100%	98.97%	96.56%
Standard Deviation	0.4%	3%	1.8%
WavPack Audio Encoding - WAV To	13.307	13.357	13.394
	(WavPack (sec))		
Normalized	100%	99.63%	99.35%
Standard Deviation	0.2%	0.4%	0.5%

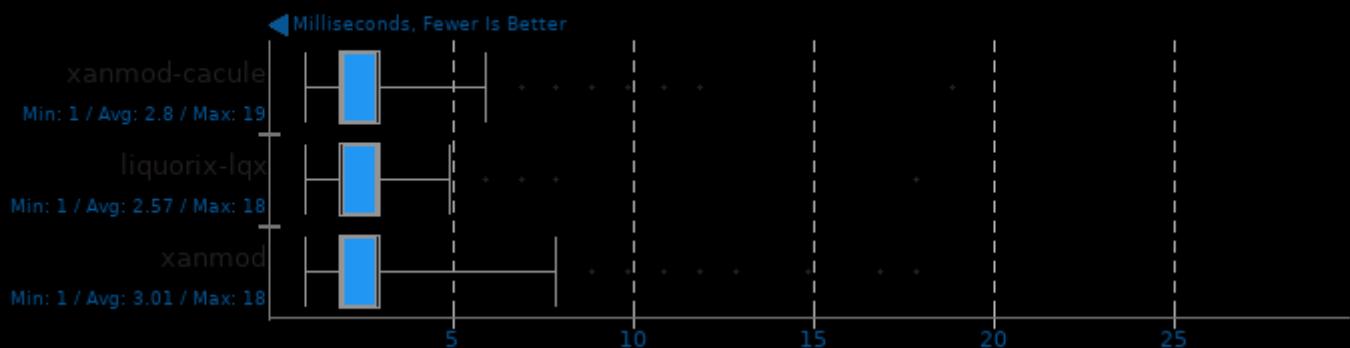
OpenArena 0.8.8

Resolution: 1920 x 1080



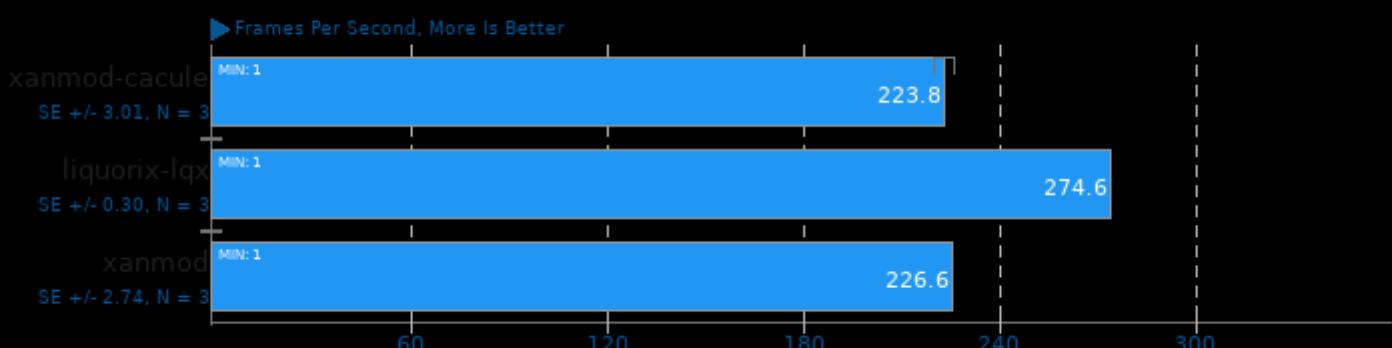
OpenArena 0.8.8

Resolution: 1920 x 1080 - Total Frame Time



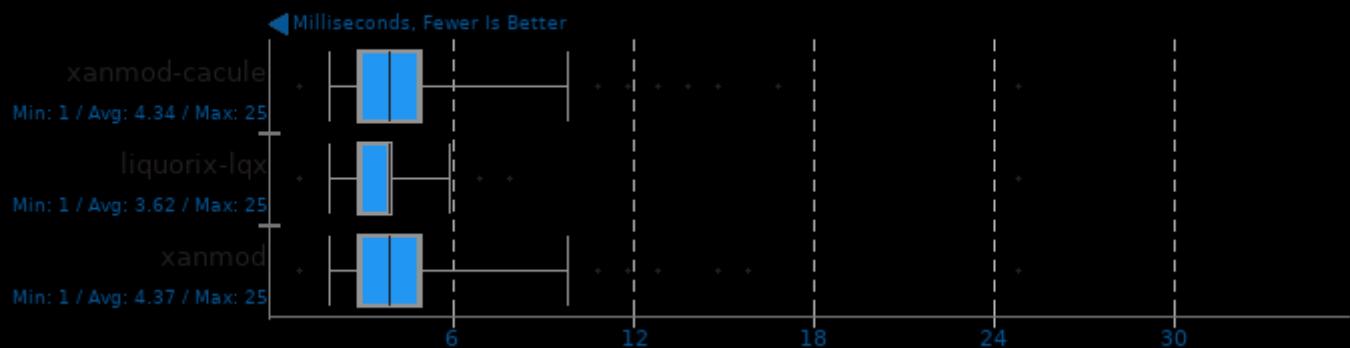
OpenArena 0.8.8

Resolution: 2560 x 1440



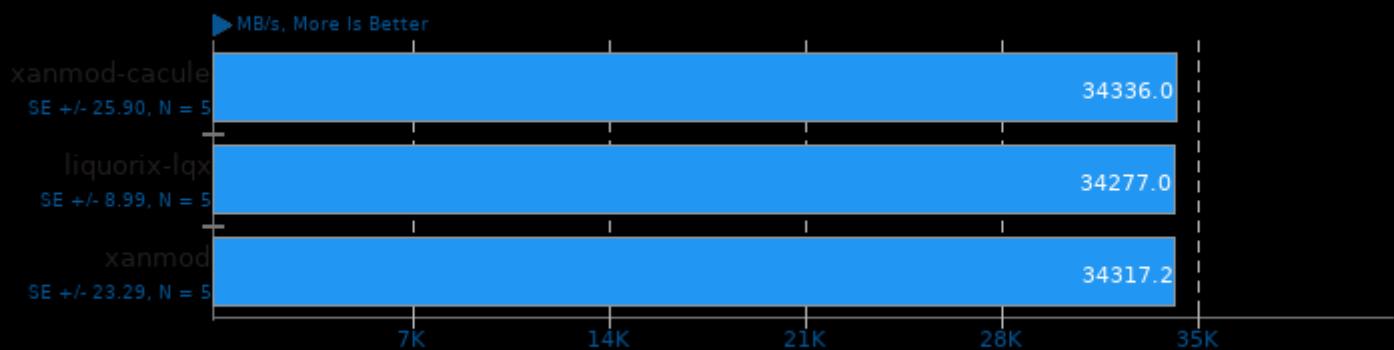
OpenArena 0.8.8

Resolution: 2560 x 1440 - Total Frame Time



Stream 2013-01-17

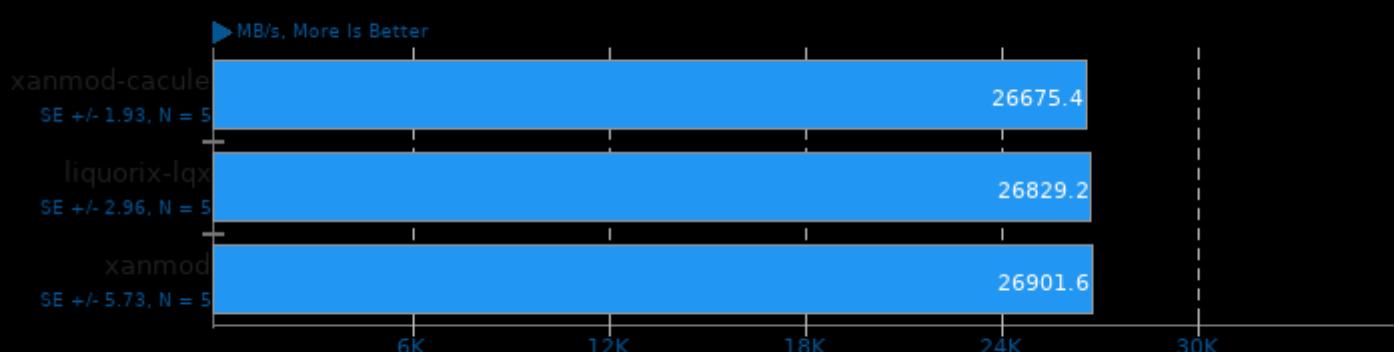
Type: Copy



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

Stream 2013-01-17

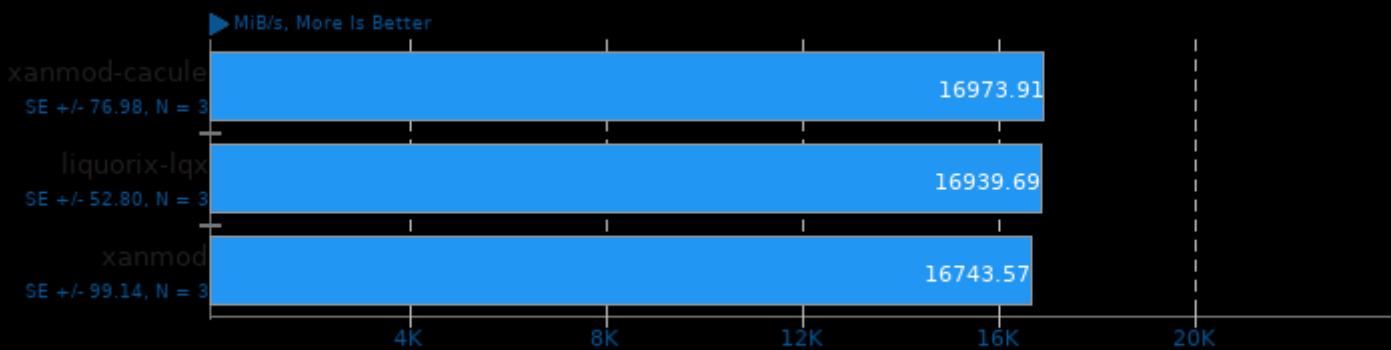
Type: Triad



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

MBW 2018-09-08

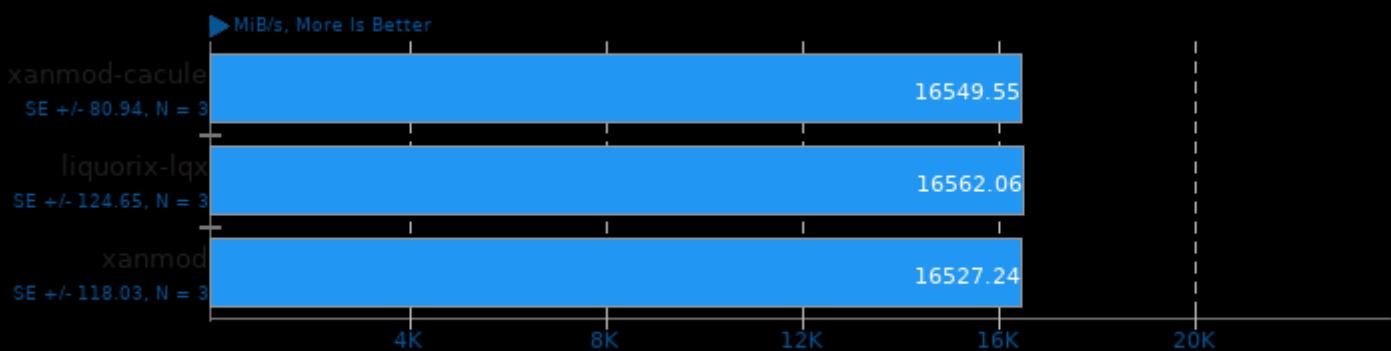
Test: Memory Copy - Array Size: 128 MiB



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

MBW 2018-09-08

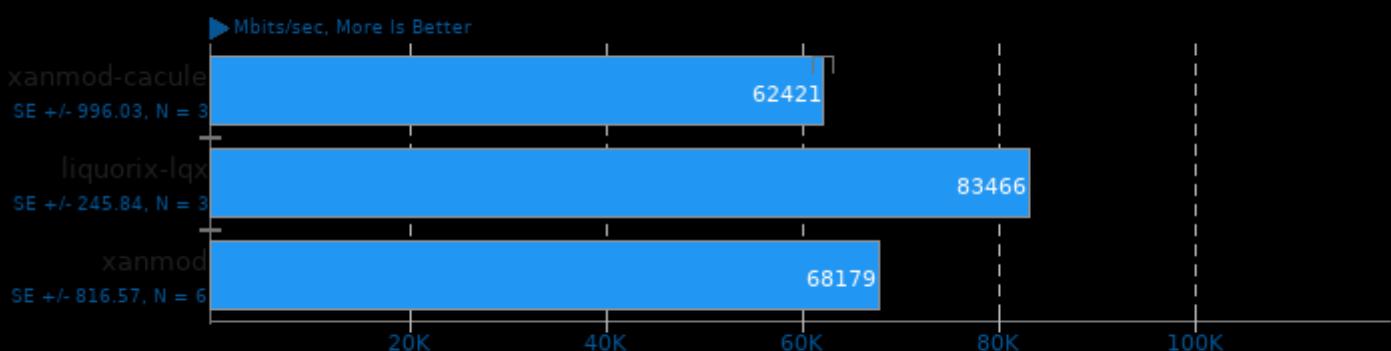
Test: Memory Copy - Array Size: 8192 MiB



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

iPerf 3.7

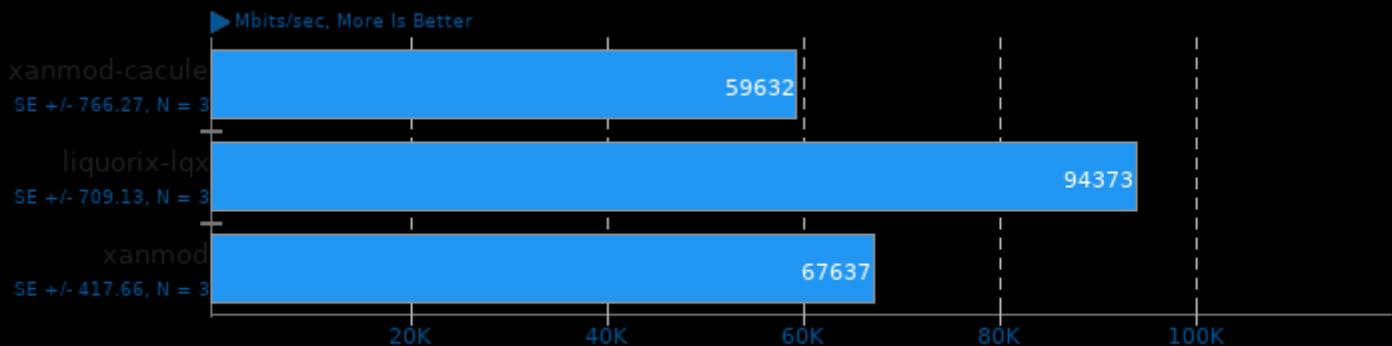
Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: TCP - Parallel: 1



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

iPerf 3.7

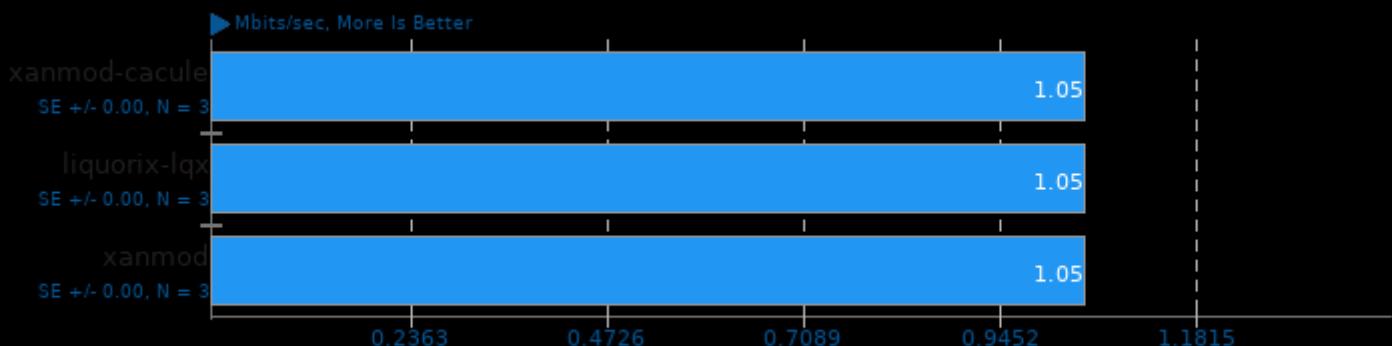
Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: TCP - Parallel: 5



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

iPerf 3.7

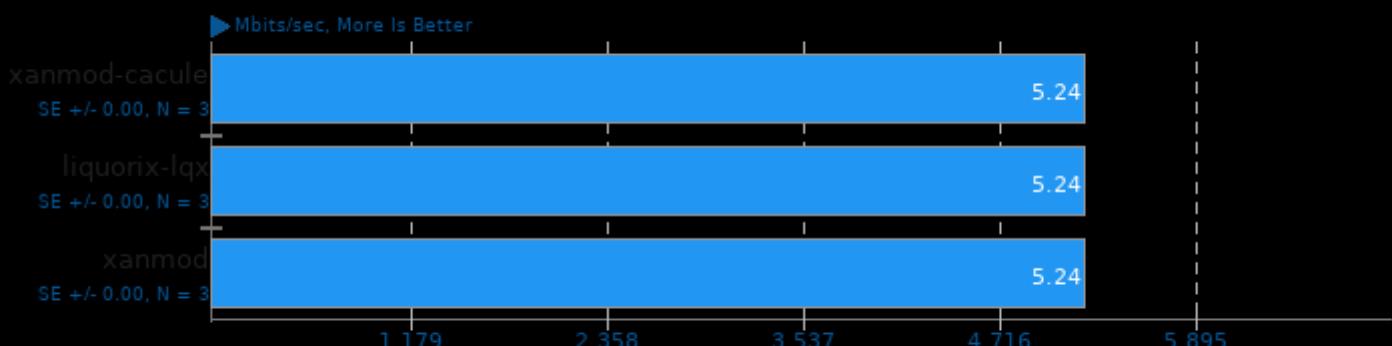
Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - Parallel: 1



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

iPerf 3.7

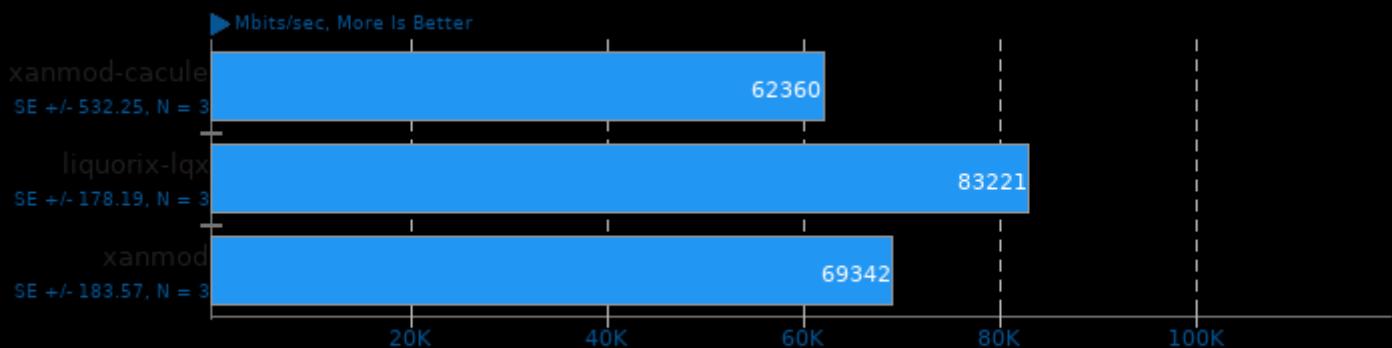
Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - Parallel: 5



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

iPerf 3.7

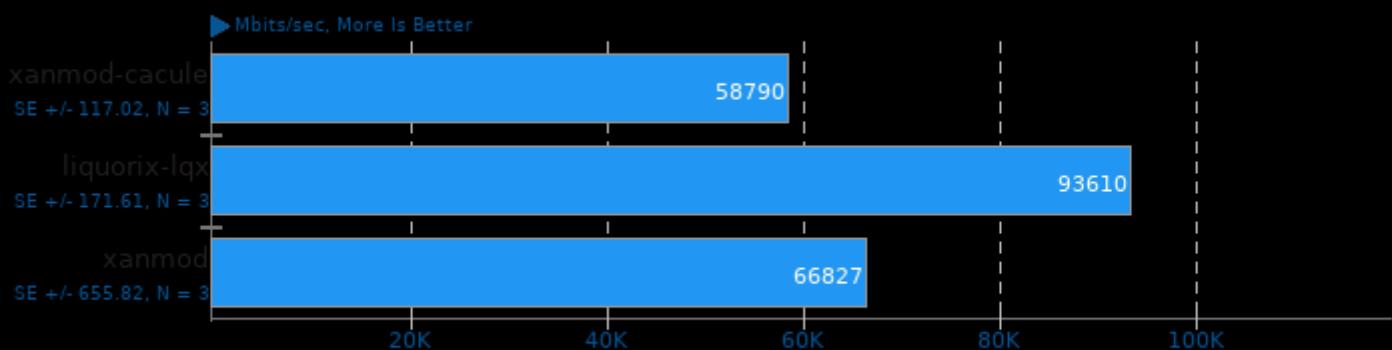
Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: TCP - Parallel: 1



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

iPerf 3.7

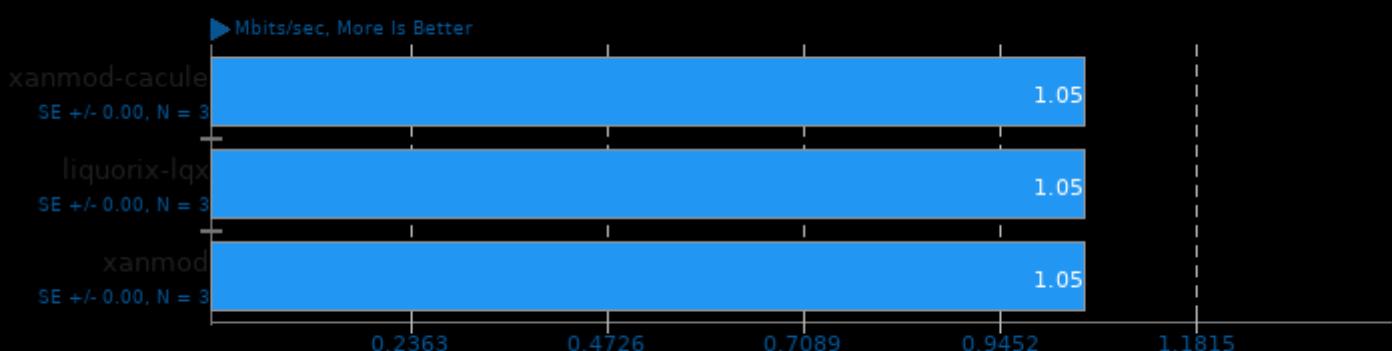
Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: TCP - Parallel: 5



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

iPerf 3.7

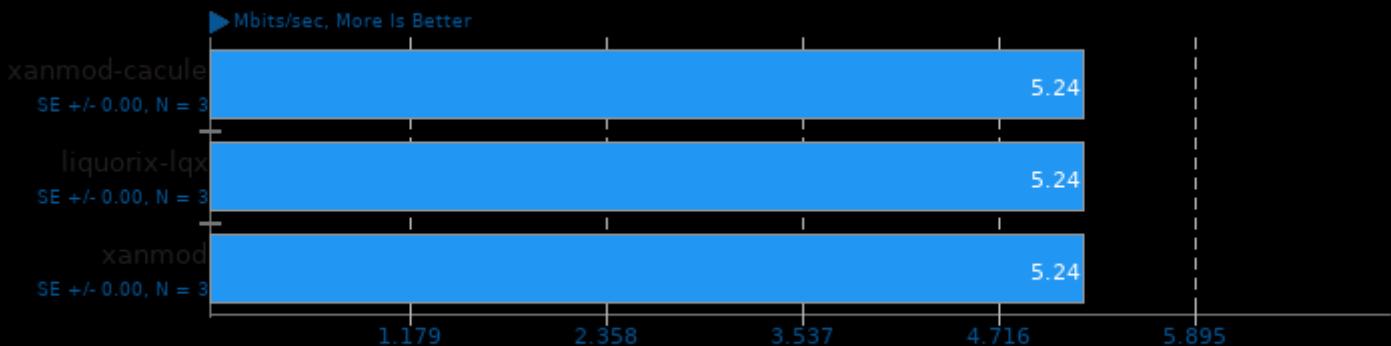
Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: UDP - Parallel: 1



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

iPerf 3.7

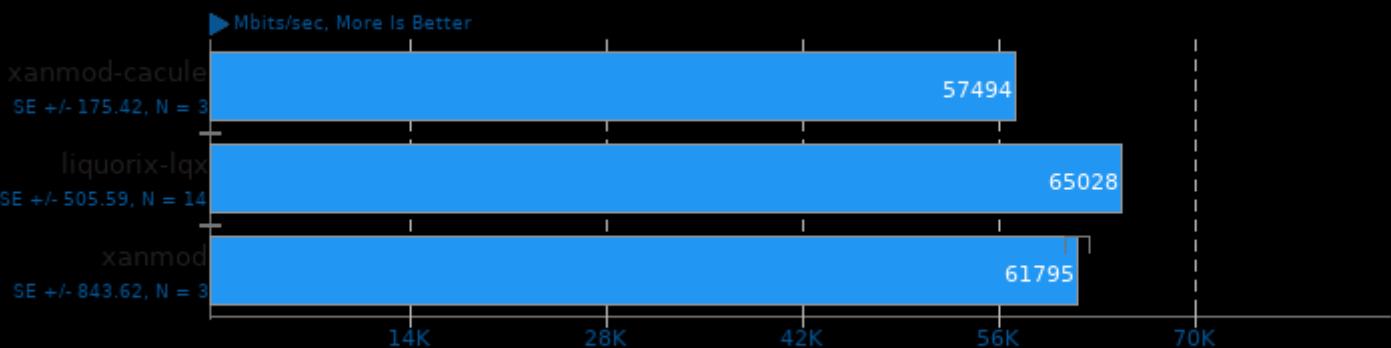
Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: UDP - Parallel: 5



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

iPerf 3.7

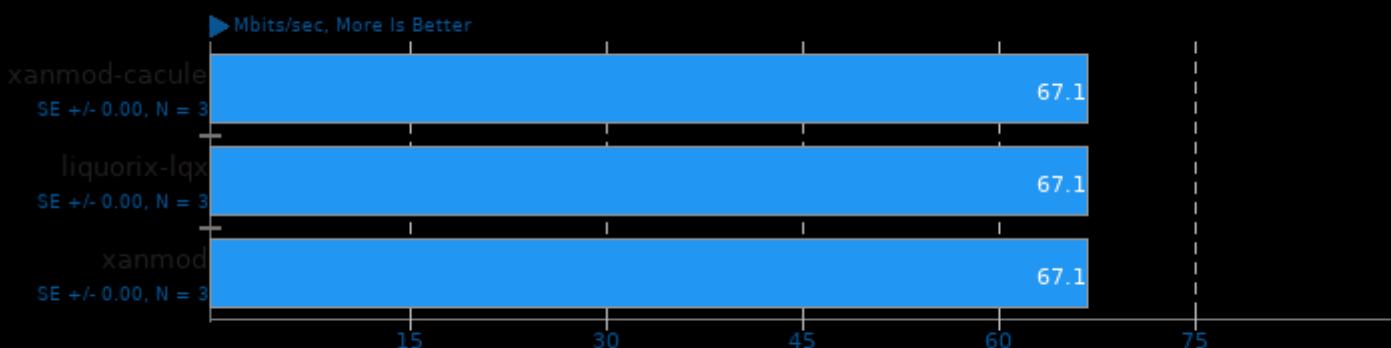
Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: TCP - Parallel: 64



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

iPerf 3.7

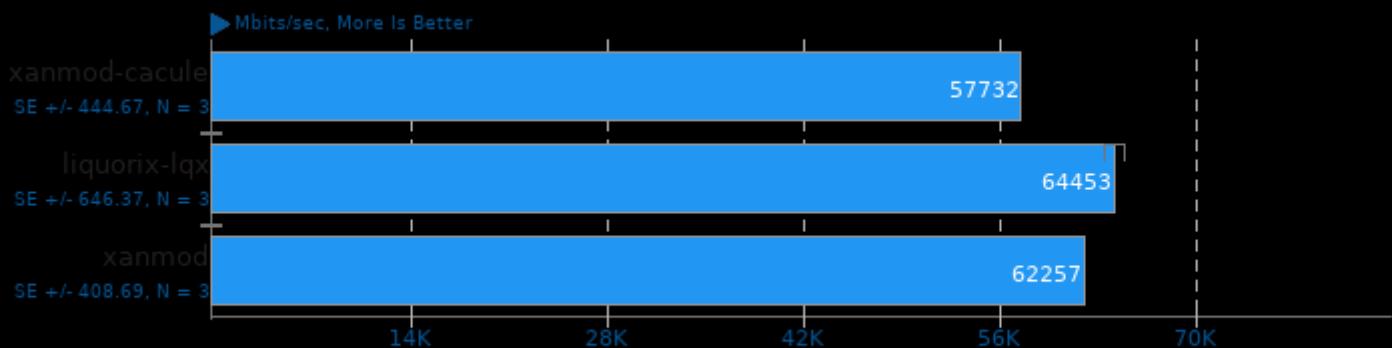
Server Address: localhost - Server Port: 5201 - Duration: 10 Seconds - Test: UDP - Parallel: 64



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

iPerf 3.7

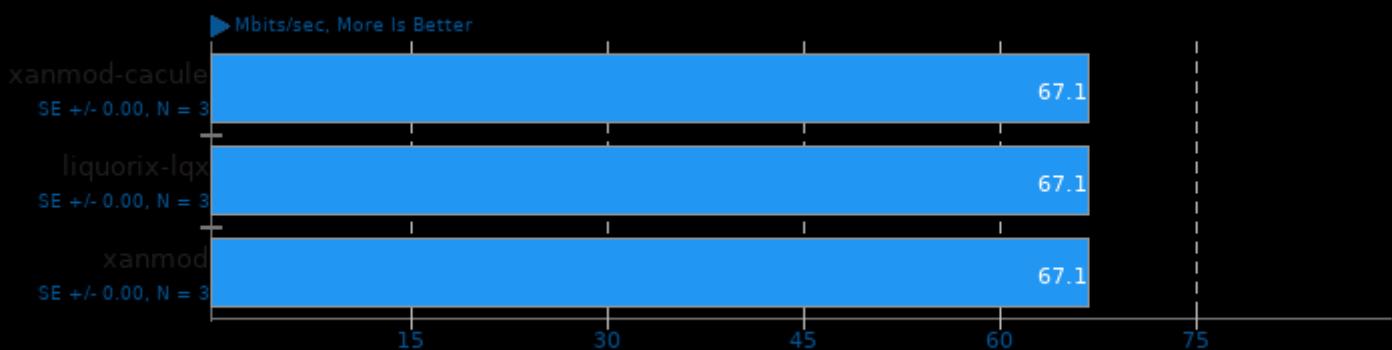
Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: TCP - Parallel: 64



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

iPerf 3.7

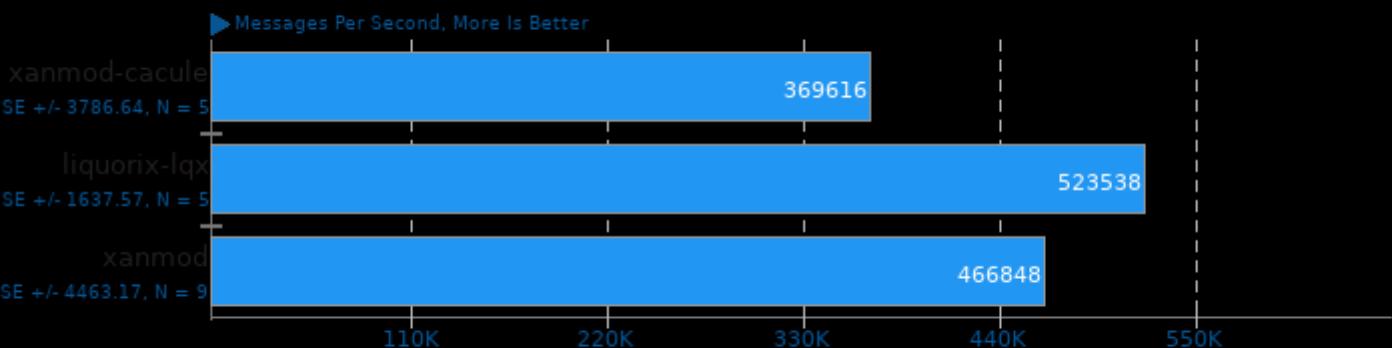
Server Address: localhost - Server Port: 5201 - Duration: 60 Seconds - Test: UDP - Parallel: 64



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

Sockperf 3.4

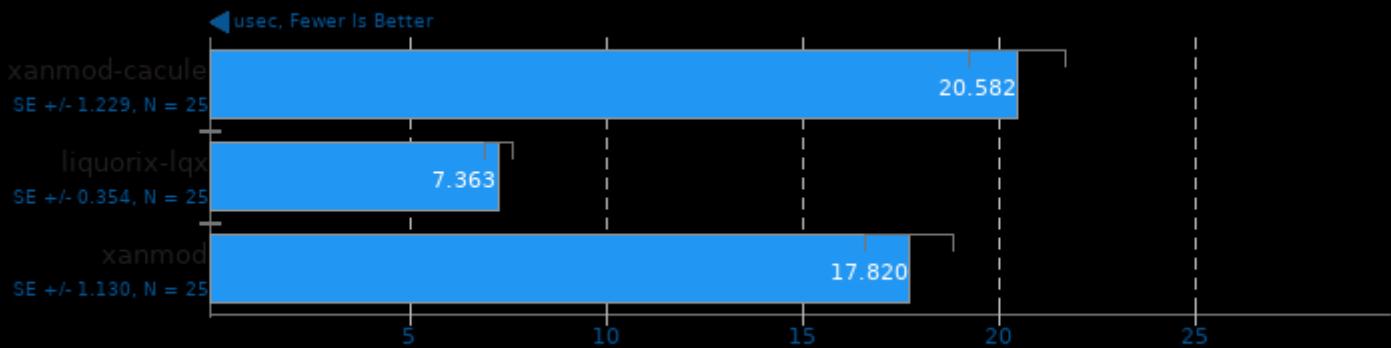
Test: Throughput



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

Sockperf 3.4

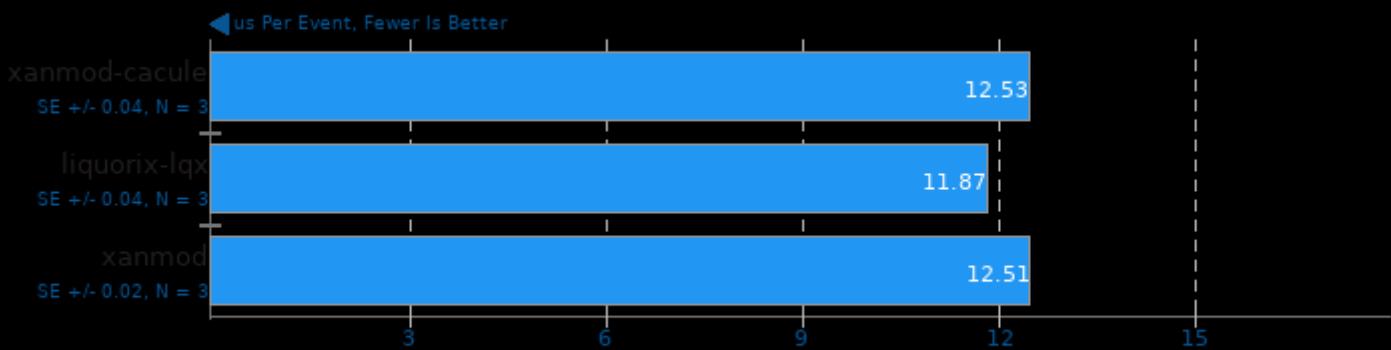
Test: Latency Under Load



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

OSBench

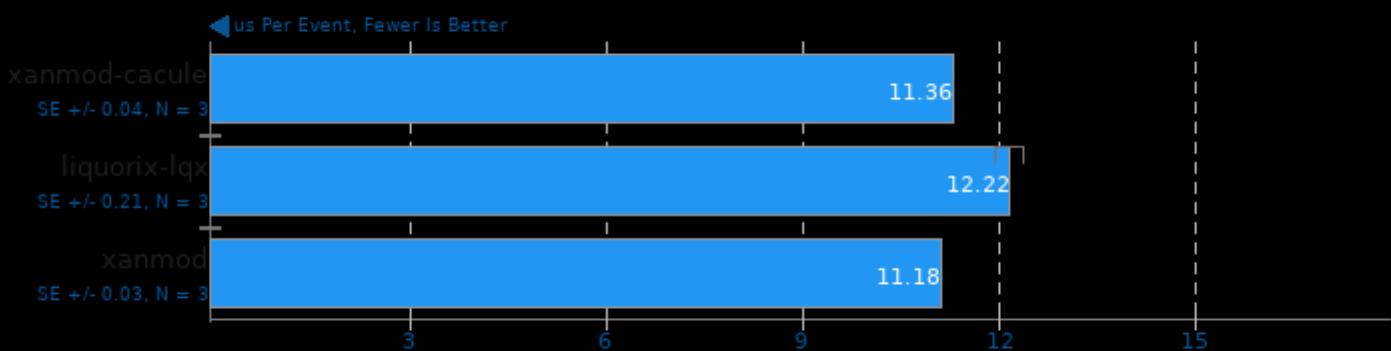
Test: Create Files



1. (CC) gcc options: -lm

OSBench

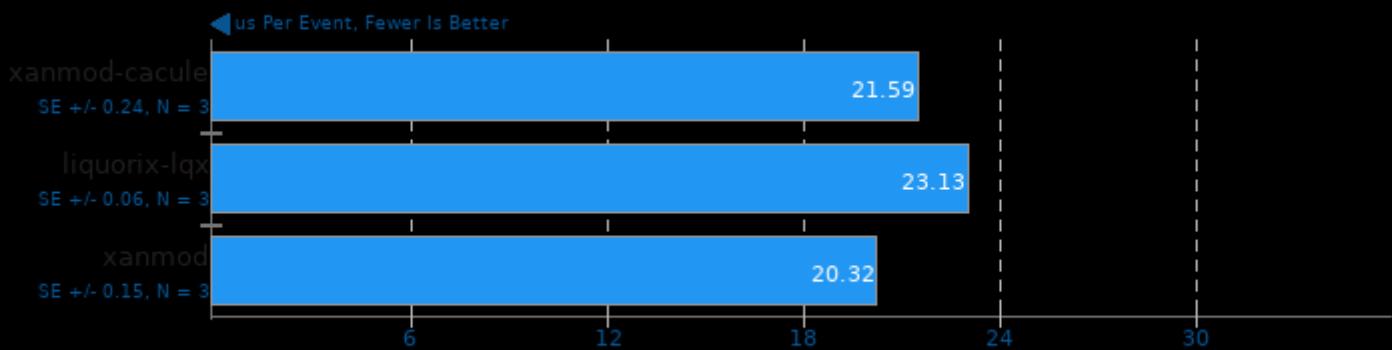
Test: Create Threads



1. (CC) gcc options: -lm

OSBench

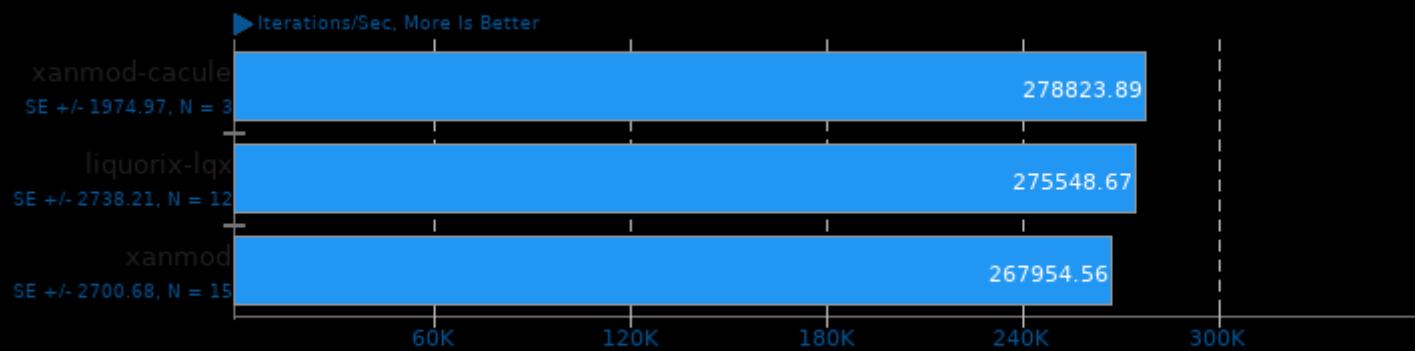
Test: Create Processes



1. (CC) gcc options: -lm

Coremark 1.0

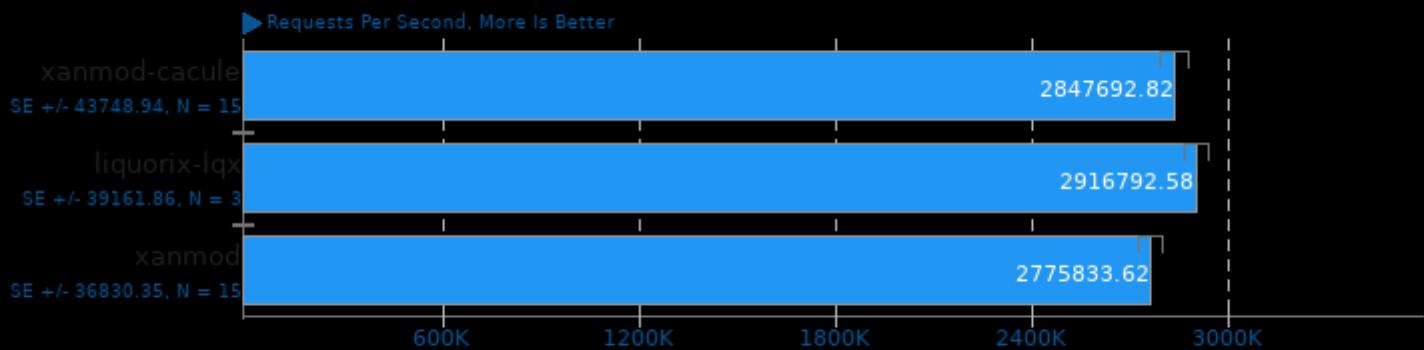
CoreMark Size 666 - Iterations Per Second



1. (CC) gcc options: -O2 -fintc -fintt

Redis 6.0.9

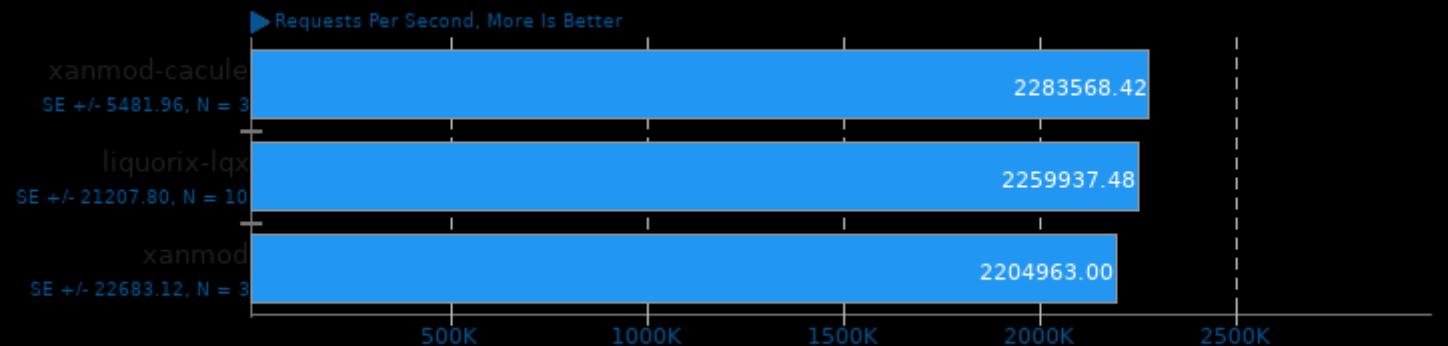
Test: GET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

Redis 6.0.9

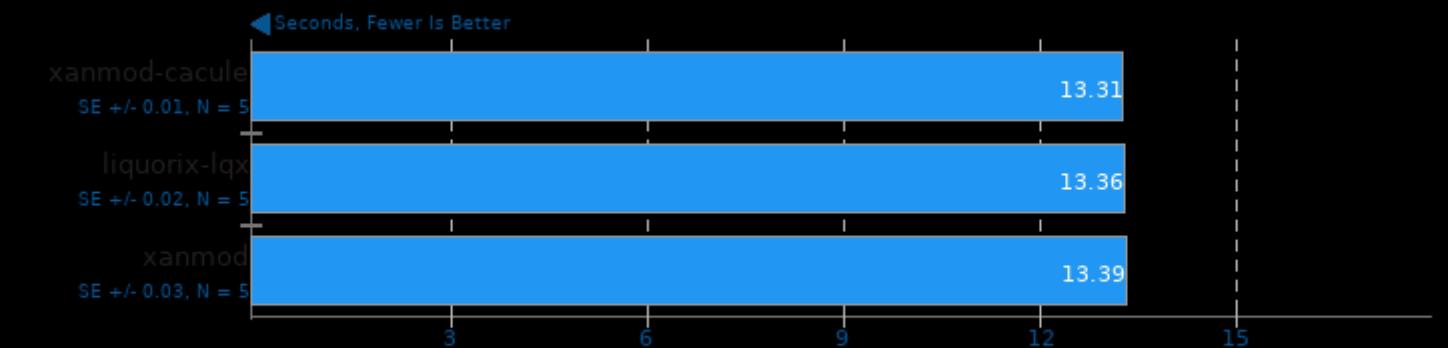
Test: SET



1. (CXX) g++ options: -MM -MT -g3 -fvisibility=hidden -O3

WavPack Audio Encoding 5.3

WAV To WavPack



1. (CXX) g++ options: -rdynamic

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 18:39.