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test-glibc-bench

KVM testing on CentOS Linux 8 via the Phoronix Test Suite.

Automated Executive Summary

4 x Intel Xeon had the most wins, coming in first place for 71% of the tests.

Based on the geometric mean of all complete results, the fastest (4 x Intel Xeon) was 1.003x the speed of the slowest (2 x Intel Xeon).

Test Systems:

2 x Intel Xeon

Processor: 2 x Intel Xeon (Cascadelake) (2 Cores / 4 Threads), Motherboard: QEMU Standard PC (i440FX + PIIX 1996) (1.13.0-1ubuntu1.1 BIOS), Chipset: Intel 440FX 82441FX PMC, Memory: 1 x 8 GB RAM QEMU, Disk: 215GB QEMU HDD, Graphics: Cirrus Logic GD 5446, Network: 2 x Red Hat Virtio device

OS: CentOS Linux 8, Kernel: 4.18.0-240.el8.x86_64 (x86_64), Compiler: GCC 8.5.0 20210514, File-System: xfs, Screen Resolution: 1024x768, System Layer: KVM

Kernel Notes: Transparent Huge Pages: always
 Compiler Notes: --build=x86_64-redhat-linux --disable-libmpx --disable-libunwind-exceptions --enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,fortran,lto --enable-multilib --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch_32=x86-64 --with-gcc-major-version-only --with-isl --with-linker-hash-style-gnu --with-tune=generic --without-cuda-driver

Processor Notes: CPU Microcode: 0x1
 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 Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

4 x Intel Xeon

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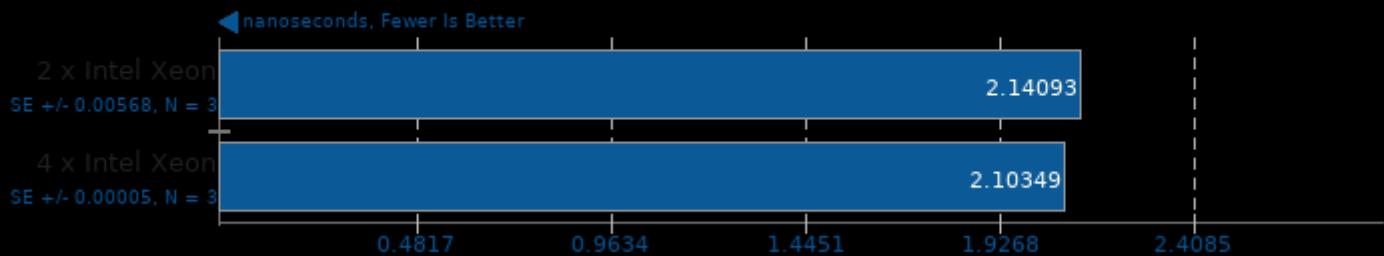
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	2 x Intel Xeon	4 x Intel Xeon
glibc bench - ffsll (nanoseconds)	2.14093	2.10349
Normalized	98.25%	100%
Standard Deviation	0.5%	0%
glibc bench - cos (nanoseconds)	68.1199	68.9714
Normalized	100%	98.77%
Standard Deviation	0.1%	0.5%
glibc bench - tanh (nanoseconds)	16.7969	17.0054
Normalized	100%	98.77%
Standard Deviation	0.2%	2.2%
glibc bench - sinh (nanoseconds)	14.7164	14.5450
Normalized	98.84%	100%
Standard Deviation	2.5%	0.4%
glibc bench - pthread_once (nanoseconds)	2.15410	2.12911
Normalized	98.84%	100%
Standard Deviation	0.9%	0.1%
glibc bench - sqrt (nanoseconds)	2.44363	2.42045
Normalized	99.05%	100%
Standard Deviation	0.3%	0.3%
glibc bench - asinh (nanoseconds)	20.0043	19.8812
Normalized	99.38%	100%
Standard Deviation	0.5%	0.7%

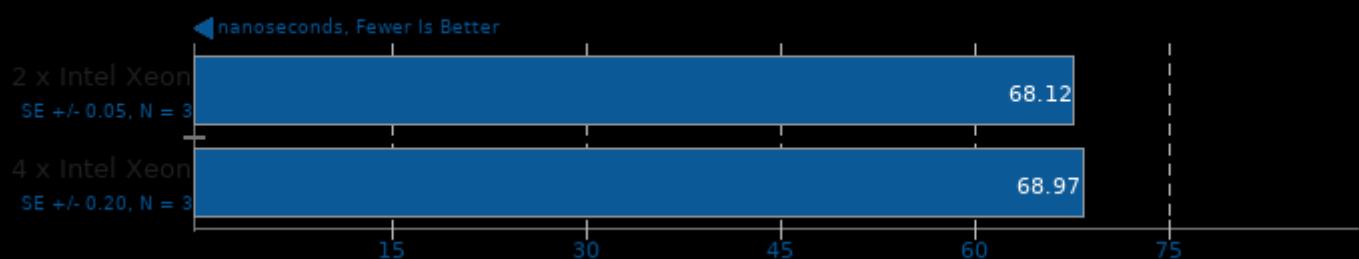
glibc bench - ffs (nanoseconds)	2.10625	2.11595
Normalized	100%	99.54%
Standard Deviation	0.1%	0.4%
glibc bench - exp (nanoseconds)	9.28863	9.24835
Normalized	99.57%	100%
Standard Deviation	1.3%	0.1%
glibc bench - sincos (nanoseconds)	19.5943	19.5114
Normalized	99.58%	100%
Standard Deviation	0.6%	0.2%
glibc bench - log2 (nanoseconds)	11.5531	11.5088
Normalized	99.62%	100%
Standard Deviation	0.1%	0.1%
glibc bench - atanh (nanoseconds)	15.6494	15.5956
Normalized	99.66%	100%
Standard Deviation	0.1%	0.1%
glibc bench - modf (nanoseconds)	2.76147	2.75701
Normalized	99.84%	100%
Standard Deviation	0.1%	0.3%
glibc bench - sin (nanoseconds)	66.4264	66.4626
Normalized	100%	99.95%
Standard Deviation	0.1%	0.1%

glibc bench 1.0

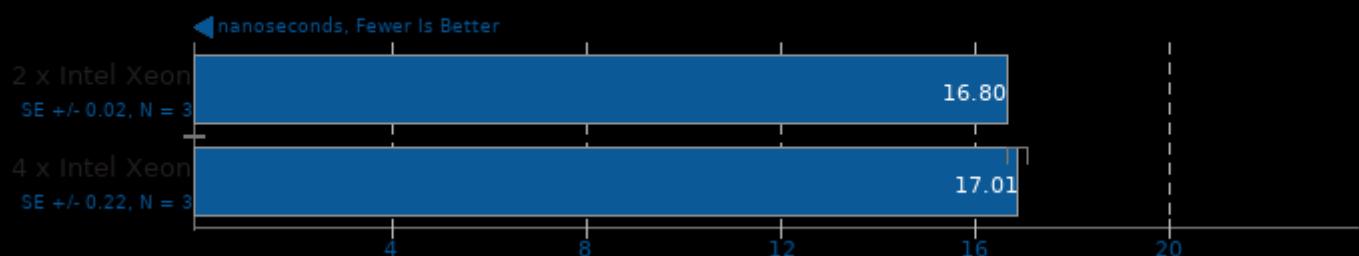
Benchmark: ffsll

**glibc bench 1.0**

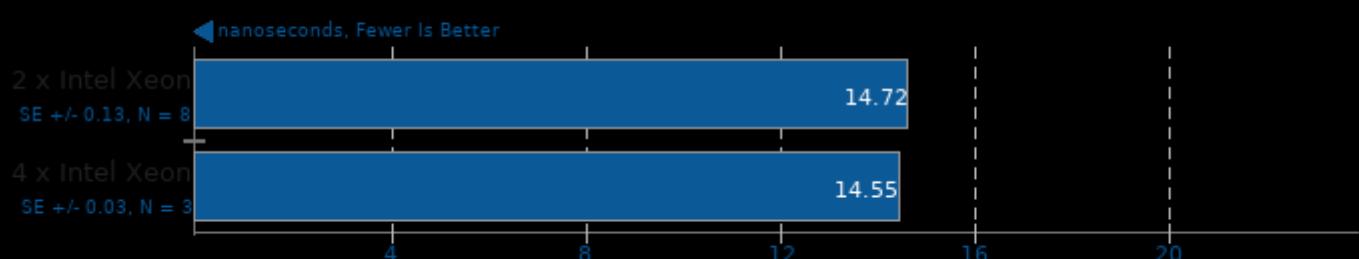
Benchmark: cos

**glibc bench 1.0**

Benchmark: tanh

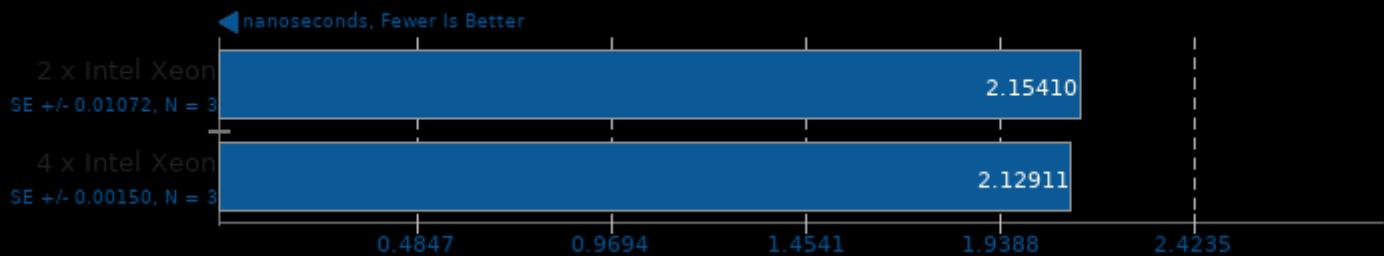
**glibc bench 1.0**

Benchmark: sinh

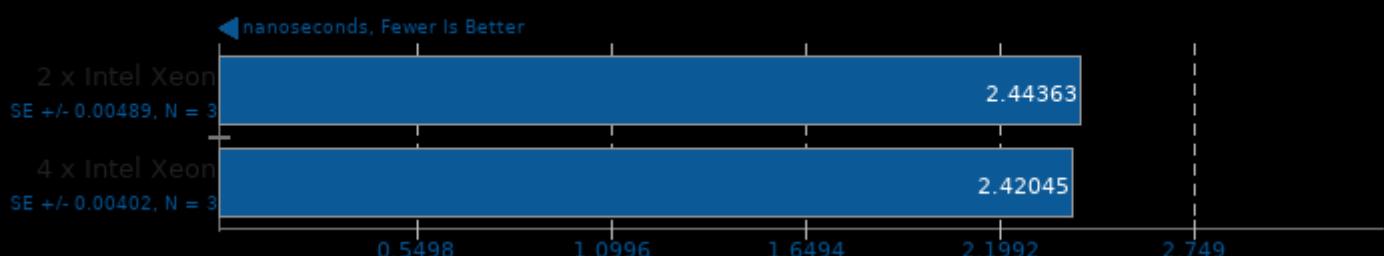


glibc bench 1.0

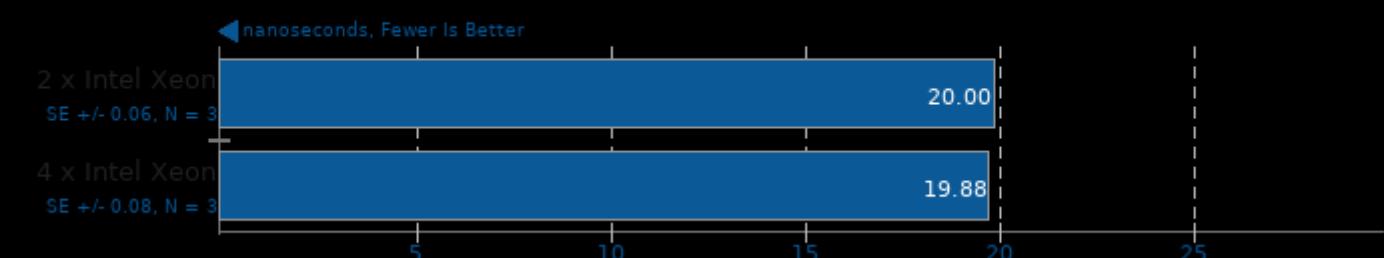
Benchmark: pthread_once

**glibc bench 1.0**

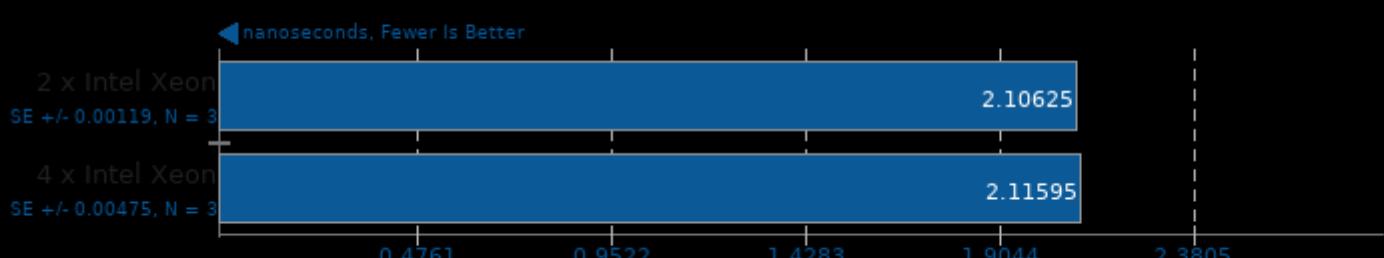
Benchmark: sqrt

**glibc bench 1.0**

Benchmark: asinh

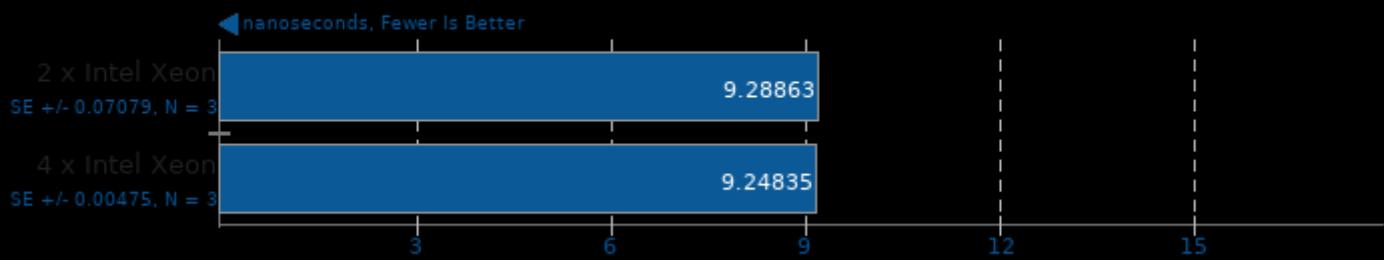
**glibc bench 1.0**

Benchmark: ffs

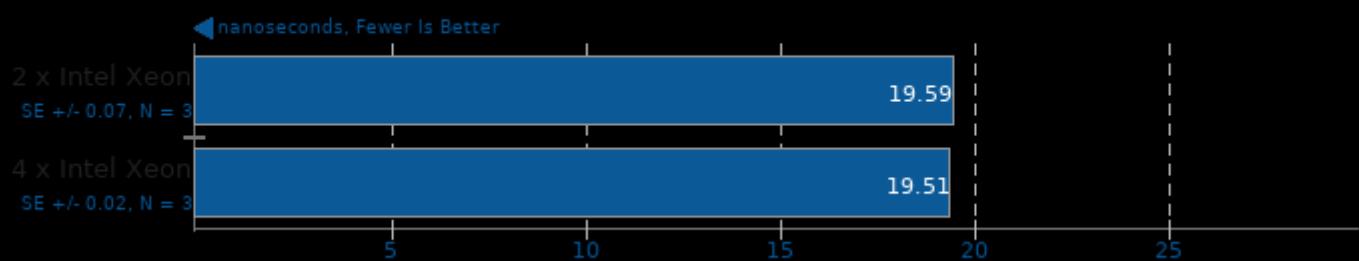


glibc bench 1.0

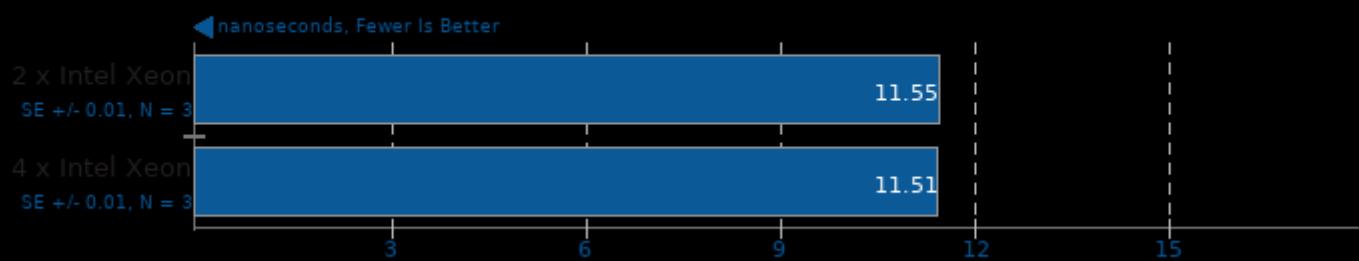
Benchmark: exp

**glibc bench 1.0**

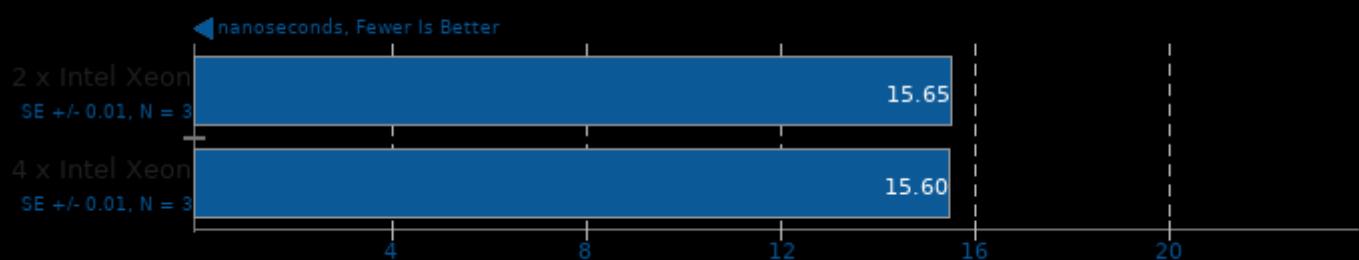
Benchmark: sincos

**glibc bench 1.0**

Benchmark: log2

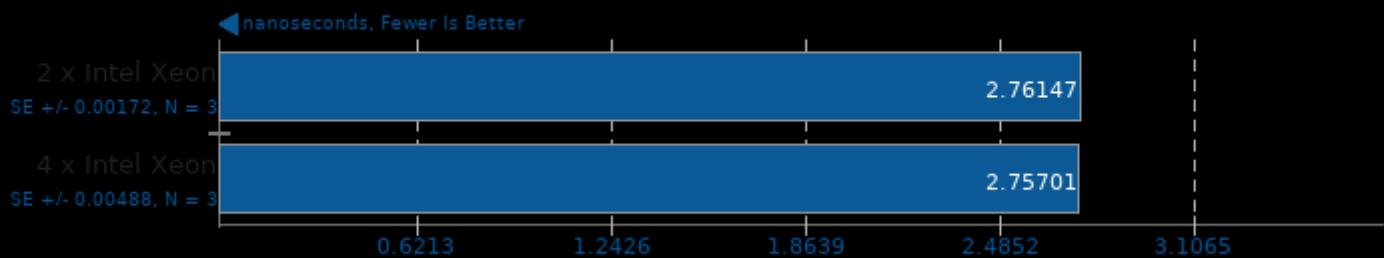
**glibc bench 1.0**

Benchmark: atanh

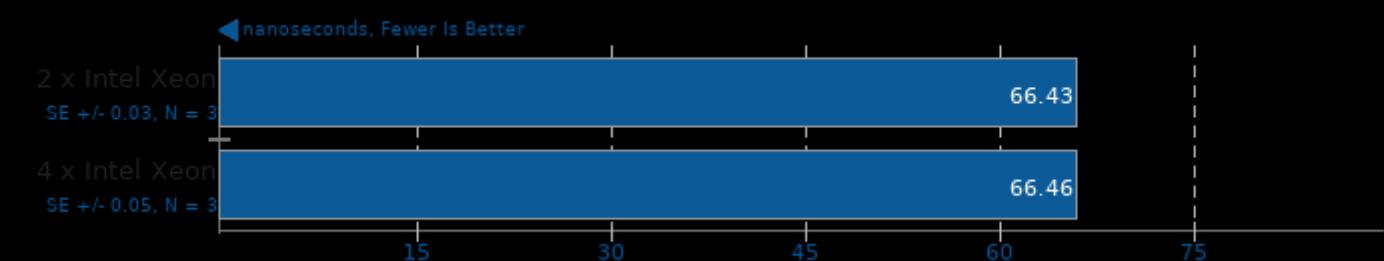


glibc bench 1.0

Benchmark: modf

**glibc bench 1.0**

Benchmark: sin



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