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tr-2990wx-ubuntu-linux

AMD Ryzen Threadripper 2990WX 32-Core testing with a ASUS ROG ZENITH EXTREME (1701 BIOS) and Gigabyte AMD Radeon RX 470/480/570/570X/580/580X/590 4GB on Ubuntu 20.10 via the Phoronix Test Suite.

Automated Executive Summary

Threadripper had the most wins, coming in first place for 44% of the tests.

Based on the geometric mean of all complete results, the fastest (Threadripper) was 1.005x the speed of the slowest (AMD Threadripper). Threadripper 2990WX was 0.999x the speed of Threadripper and AMD Threadripper was 0.996x the speed of Threadripper 2990WX.

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

FFTE (N=256, 3D Complex FFT Routine) at 1.037x
LeelaChessZero (Backend: Eigen) at 1.033x
Rodinia (Test: OpenMP CFD Solver) at 1.028x
Incompact3D (Input: Cylinder) at 1.026x
Timed MAFFT Alignment (Multiple Sequence Alignment - LSU RNA) at 1.022x
NAMD (ATPase Simulation - 327,506 Atoms) at 1.016x
WebP Image Encode (Encode Settings: Quality 100, Lossless) at 1.016x
WebP Image Encode (Encode Settings: Quality 100, Lossless, Highest Compression) at 1.013x

Monte Carlo Simulations of Ionised Nebulae (Input: Dust 2D tau100.0) at 1.013x
LeelaChessZero (Backend: BLAS) at 1.013x.

Test Systems:

Threadripper 2990WX

Threadripper

AMD Threadripper

Processor: AMD Ryzen Threadripper 2990WX 32-Core @ 3.00GHz (32 Cores / 64 Threads), Motherboard: ASUS ROG ZENITH EXTREME (1701 BIOS), Chipset: AMD 17h, Memory: 32GB, Disk: Samsung SSD 970 EVO 500GB, Graphics: Gigabyte AMD Radeon RX 470/480/570/570X/580/580X/590 4GB (1244/1750MHz), Audio: Realtek ALC1220, Monitor: G237HL, Network: Intel I211 + Qualcomm Atheros QCA6174 802.11ac + Wilocity Wil6200 802.11ad

OS: Ubuntu 20.10, Kernel: 5.8.0-20-generic (x86_64), Desktop: GNOME Shell 3.38.0, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, OpenGL: 4.6 Mesa 20.1.8 (LLVM 10.0.1), Vulkan: 1.2.131, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1920x1080

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: acpi-cpufreq ondemand - CPU Microcode: 0x800820d
Graphics Notes: GLAMOR
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 Full AMD retpoline IBPB: conditional STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

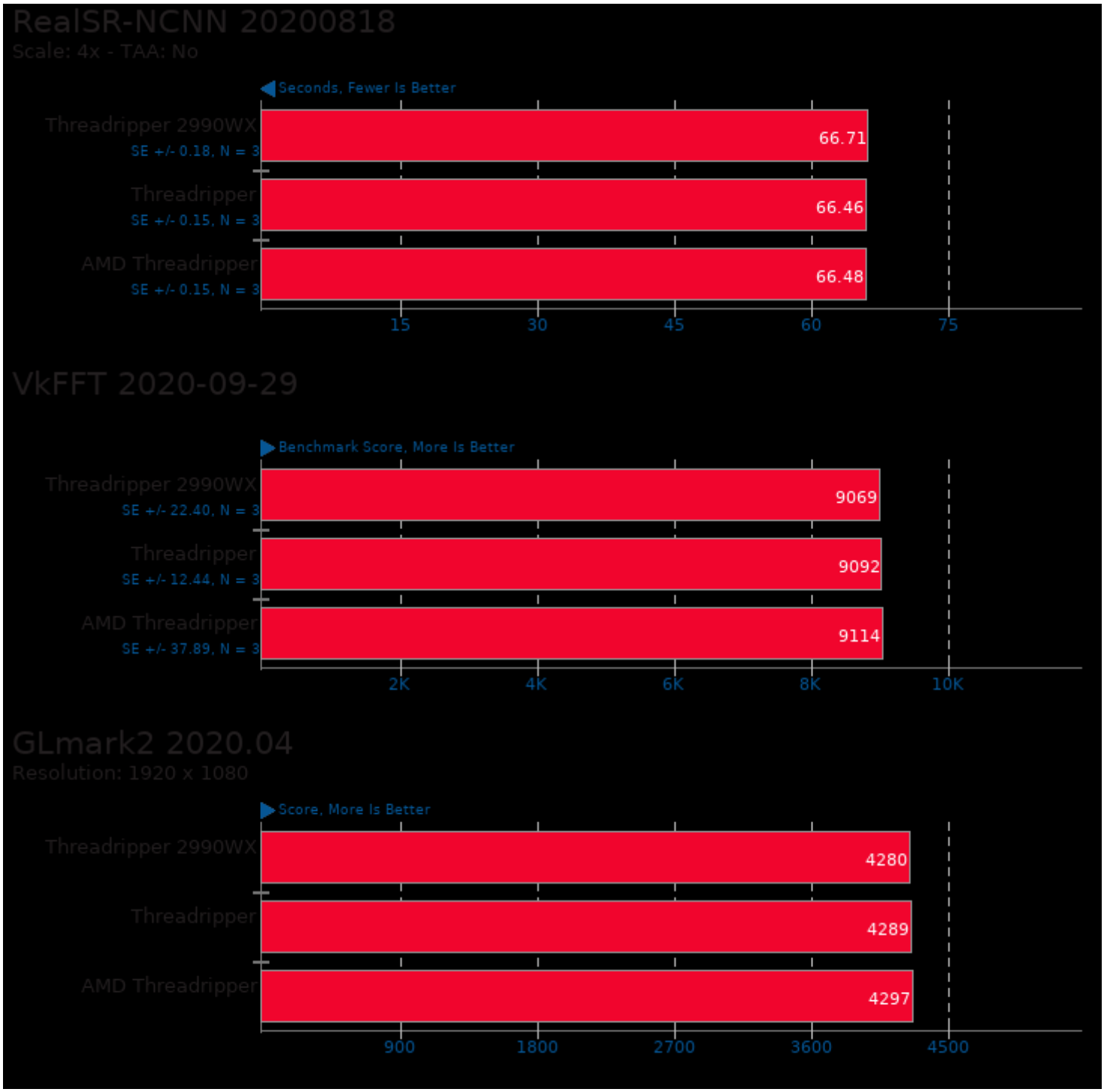
	Threadripper 2990WX	Threadripper	AMD Threadripper
RealSR-NCNN - 4x - No (sec)	**66.706**	**66.463**	66.478
Normalized	99.64%	100%	99.98%
Standard Deviation	0.5%	0.4%	0.4%
VkFFT (Benchmark Score)	**9069**	9092	**9114**
Normalized	99.51%	99.76%	100%
Standard Deviation	0.4%	0.2%	0.7%
GLmark2 - 1920 x 1080 (Score)	**4280**	4289	**4297**
Normalized	99.6%	99.81%	100%
WireGuard + Linux Networking Stack Stress Test (sec)	376.133	**376.195**	**375.786**
Normalized	99.91%	99.89%	100%
Standard Deviation	0.9%	0.6%	0.7%

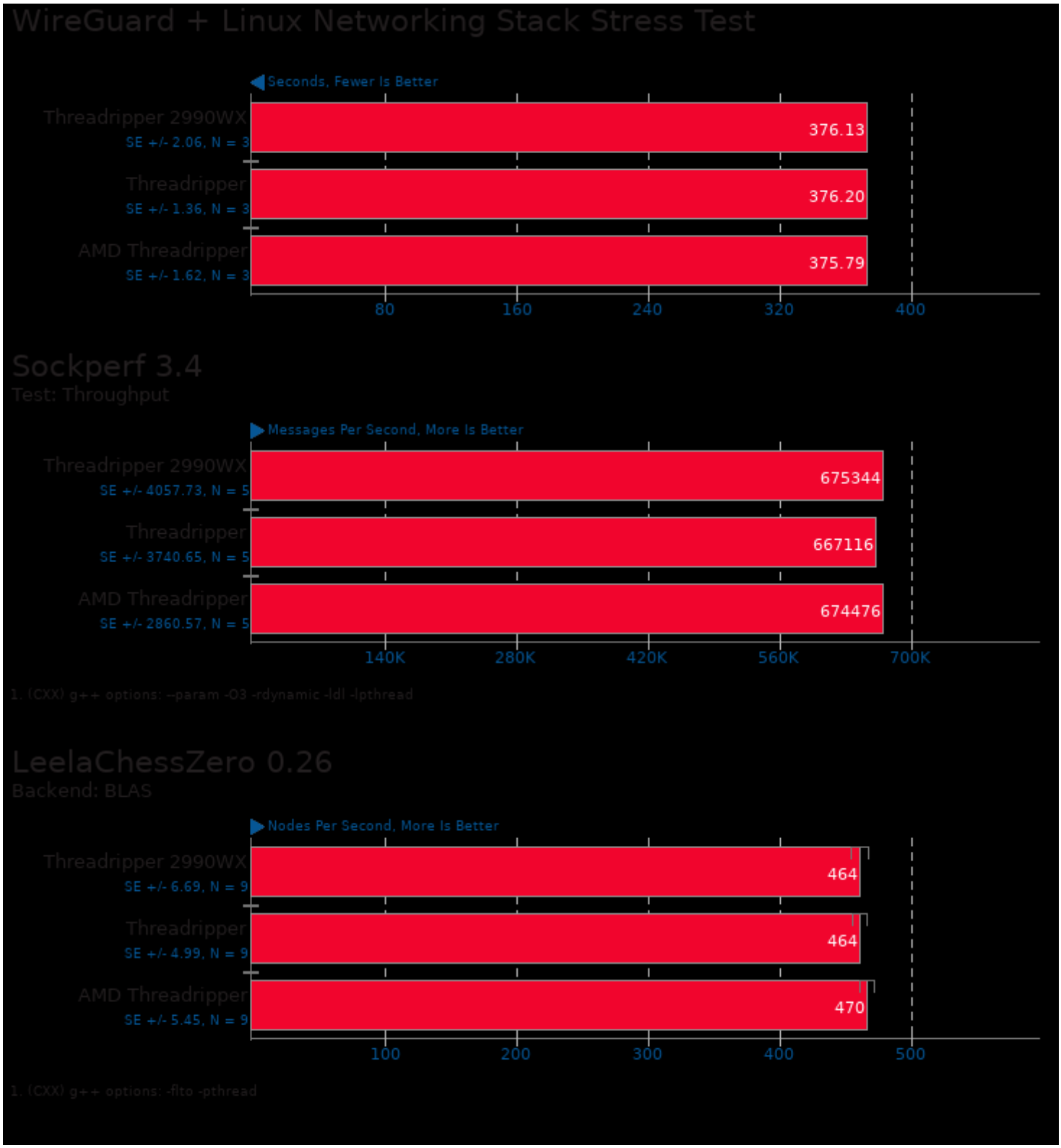
Sockperf - Throughput (Messages/sec)	**675344**	**667116**	674476
Normalized	100%	98.78%	99.87%
Standard Deviation	1.3%	1.3%	0.9%
LeelaChessZero - BLAS (Nodes/s)	**464**	**464**	**470**
Normalized	98.72%	98.72%	100%
Standard Deviation	4.3%	3.2%	3.5%
LeelaChessZero - Eigen (Nodes/s)	475	**476**	**461**
Normalized	99.79%	100%	96.85%
Standard Deviation	1.1%	2.5%	3.8%
Rodinia - OpenMP LavaMD (sec)	**81.820**	82.084	**82.101**
Normalized	100%	99.68%	99.66%
Standard Deviation	0.4%	0.2%	0.1%
Rodinia - OpenMP HotSpot3D (sec)	102.514	**102.255**	**102.738**
Normalized	99.75%	100%	99.53%
Standard Deviation	0.8%	1.5%	1.4%
Rodinia - OpenMP Leukocyte (sec)	58.975	**59.394**	**58.805**
Normalized	99.71%	99.01%	100%
Standard Deviation	0.1%	2.2%	0.4%
Rodinia - OpenMP CFD Solver (sec)	**8.895**	8.970	**9.148**
Normalized	100%	99.16%	97.23%
Standard Deviation	0.5%	1.7%	1.7%
Rodinia - O.S (sec)	27.292	**26.798**	**27.351**
Normalized	98.19%	100%	97.98%
Standard Deviation	10.3%	6.6%	10.7%
NAMD - ATPase Simulation - 327,506 Atoms (days/ns)	0.79083	**0.78824**	**0.80103**
Normalized	99.67%	100%	98.4%
Standard Deviation	0.3%	0.3%	0.7%
Dolfyn - C.F.D (sec)	17.601	**17.590**	**17.661**
Normalized	99.94%	100%	99.6%
Standard Deviation	0.5%	0.5%	0.2%
FFTE - N.2.3.C.F.R (MFLOPS)	59089	**60371**	**58221**
Normalized	97.88%	100%	96.44%
Standard Deviation	1.5%	3%	2.9%
Timed HMMer Search - P.D.S (sec)	**162.007**	161.998	**161.944**
Normalized	99.96%	99.97%	100%
Standard Deviation	0.3%	0.3%	0.5%
Incompact3D - Cylinder (sec)	**235.441386**	231.748406	**229.514486**
Normalized	97.48%	99.04%	100%
Standard Deviation	1.1%	1.2%	1.2%
Timed MAFFT Alignment - M.S.A - LSU RNA (sec)	**12.231**	**11.969**	12.104
Normalized	97.86%	100%	98.88%
Standard Deviation	2.6%	1.3%	1.1%
Monte Carlo Simulations of Ionised Nebulae - Dust 2D tau100.0 (sec)	**234**	**231**	232
Normalized	98.72%	100%	99.57%
Standard Deviation	1.9%		0.4%
LAMMPS Molecular Dynamics Simulator - 20k Atoms (ns/day)	14.992		
Standard Deviation	1.6%		
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)	**13.601**	**12.793**	12.835
Normalized	100%	94.06%	94.37%

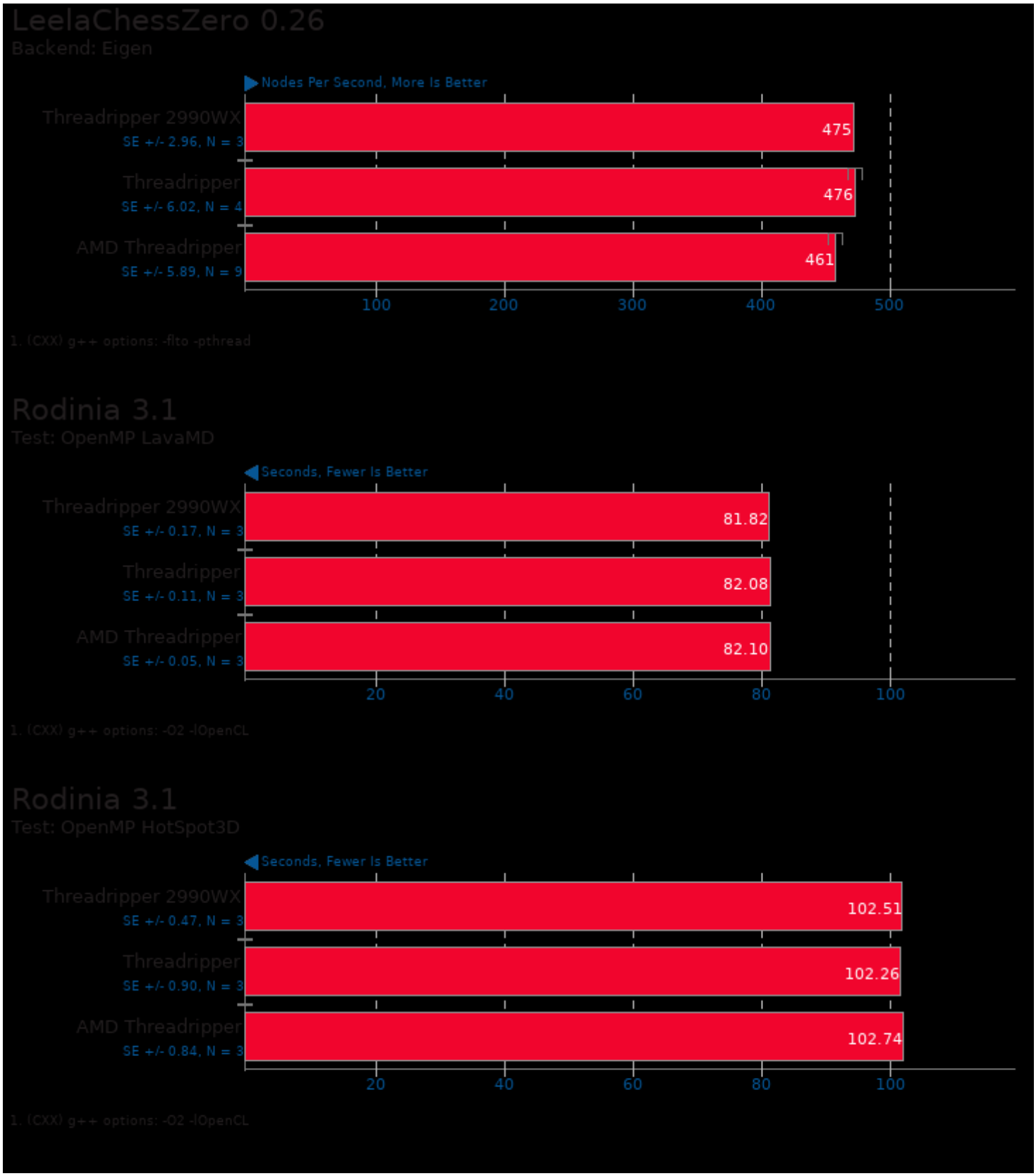
Standard Deviation	6.8%	6.2%	6.2%
WebP Image Encode - Default (Encode Time - sec)	1.460	**1.457**	**1.461**
Normalized	99.79%	100%	99.73%
Standard Deviation	0.7%	0.1%	0.5%
WebP Image Encode - Quality 100 (Encode Time - sec)	**2.282**	2.302	**2.307**
Normalized	100%	99.13%	98.92%
Standard Deviation	0.1%	0.1%	0.4%
WebP Image Encode - Q.1.L (Encode Time - sec)	18.999	**18.816**	**19.119**
Normalized	99.04%	100%	98.42%
Standard Deviation	0.6%	0.4%	0.9%
WebP Image Encode - Q.1.H.C (Encode Time - sec)	**7.823**	7.787	**7.783**
Normalized	99.49%	99.95%	100%
Standard Deviation	0.1%	0.1%	0.1%
WebP Image Encode - Q.1.L.H.C (Encode Time - sec)	38.608	**38.300**	**38.801**
Normalized	99.2%	100%	98.71%
Standard Deviation	0.1%	0.5%	1.1%
BYTE Unix Benchmark - Dhrystone 2 (LPS)	**40664081**	40620936	**40180990**
Normalized	100%	99.89%	98.81%
Standard Deviation	0.2%	0.6%	0.9%
Zstd Compression - 3 (MB/s)	**3594**		**3537**
Normalized	100%		98.42%
Standard Deviation	8.6%		6.2%
Zstd Compression - 19 (MB/s)	36.1		
Standard Deviation	4.3%		
LibRaw - P.P.B (Mpix/sec)	30.32		
Standard Deviation	0.8%		
Crafty - Elapsed Time (Nodes/s)	7361032		
Standard Deviation	0.7%		
TSCP - A.C.P (Nodes/s)	1091958		
Standard Deviation	0.4%		
AOM AV1 - Speed 0 Two-Pass (FPS)	0.24		
Standard Deviation	2.4%		
AOM AV1 - Speed 4 Two-Pass (FPS)	1.89		
Standard Deviation	0.6%		
AOM AV1 - Speed 6 Realtime (FPS)	14.60		
Standard Deviation	1.1%		
AOM AV1 - Speed 6 Two-Pass (FPS)	3.00		
Standard Deviation	1.2%		
AOM AV1 - Speed 8 Realtime (FPS)	27.50		
Standard Deviation	2.5%		
Stockfish - Total Time (Nodes/s)	67697545		
Standard Deviation	1.2%		
asmFish - 1.H.M.2.D (Nodes/s)	71442767		
Standard Deviation	0.9%		
Timed Apache Compilation - Time To Compile (sec)	26.166		
Standard Deviation	0.2%		

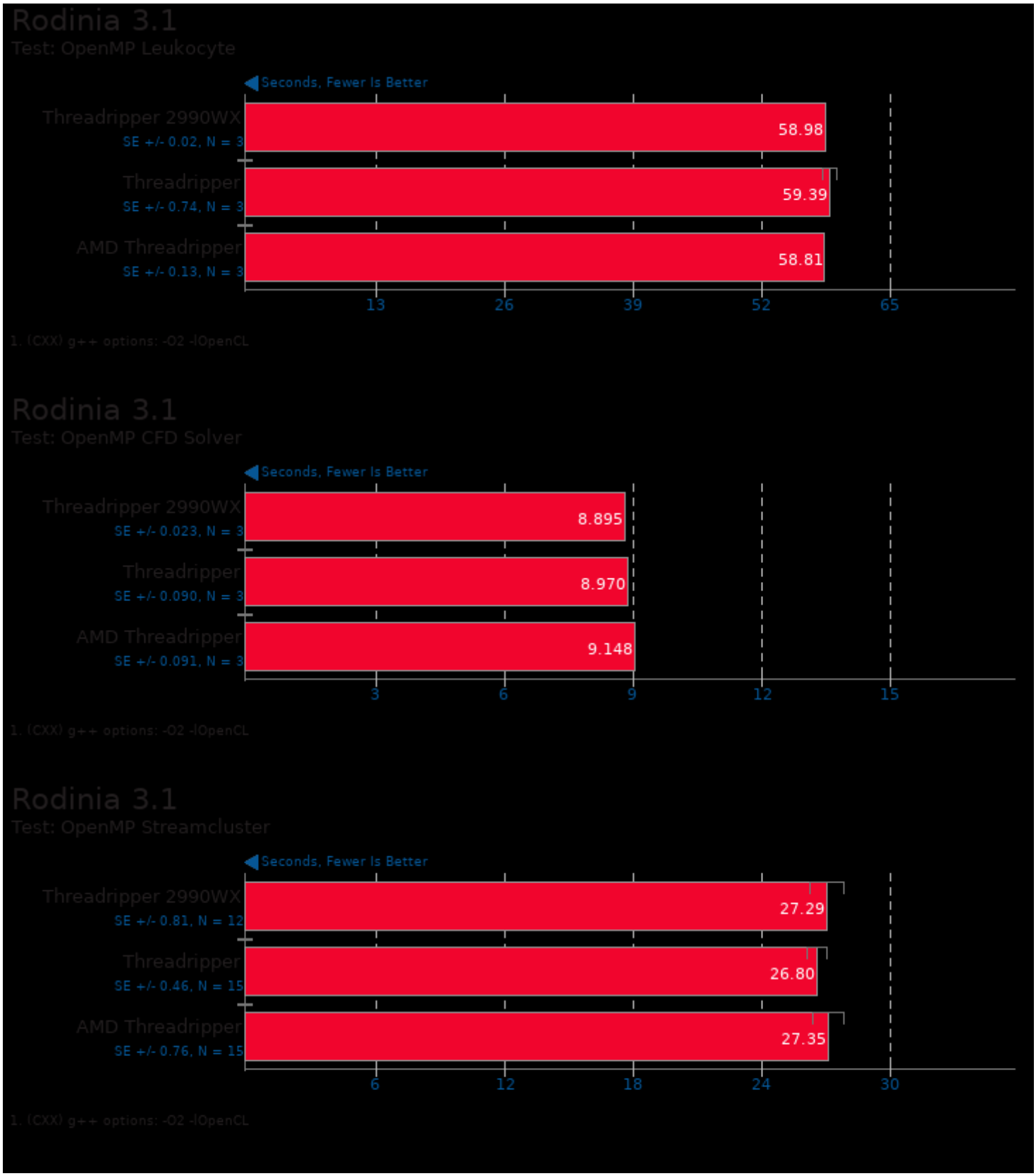
tr-2990wx-ubuntu-linux

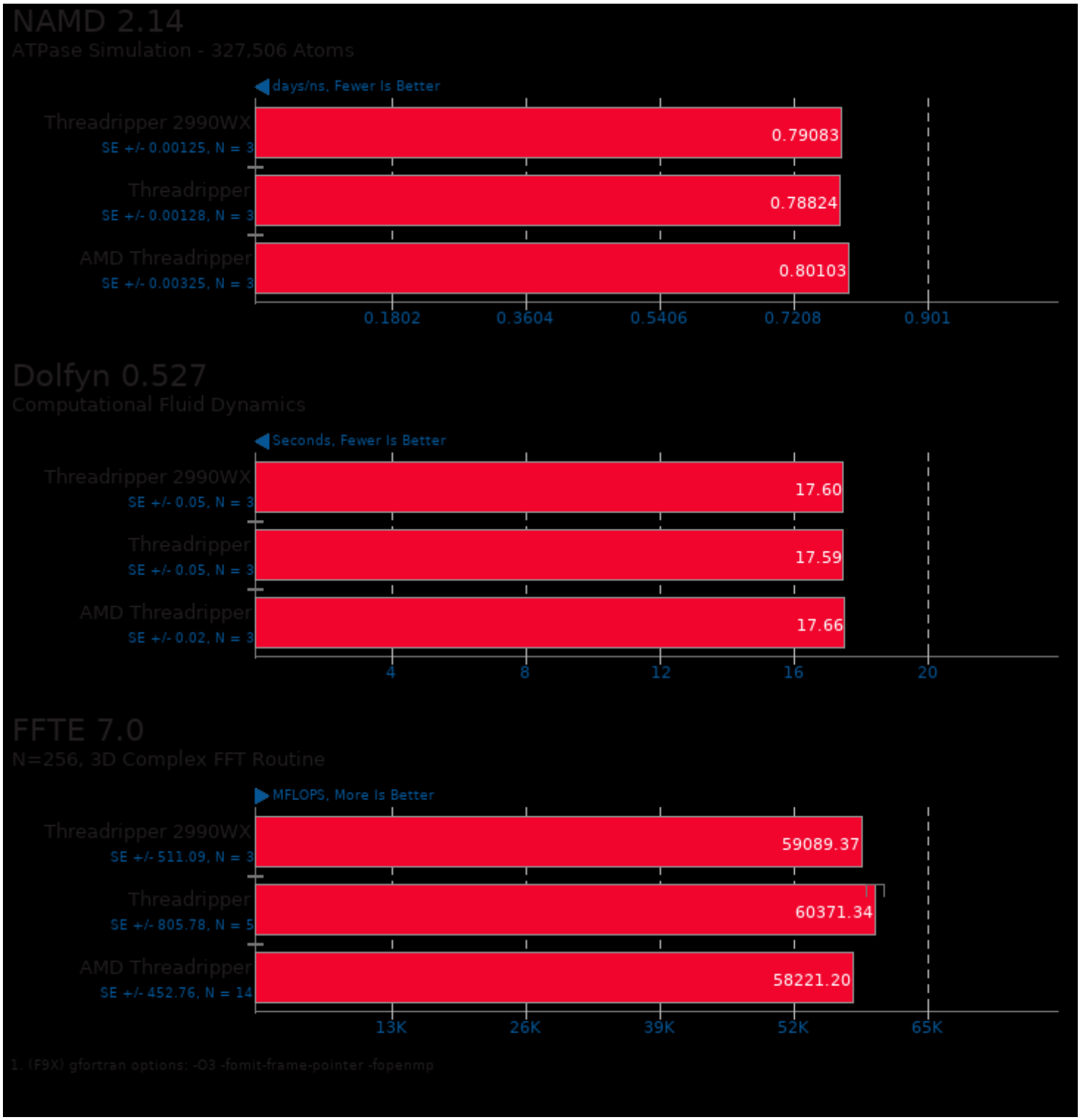
Timed FFmpeg Compilation - Time To Compile (sec)	30.461	
Standard Deviation	0.8%	
Timed Linux Kernel Compilation - Time To Compile (sec)	44.242	
Standard Deviation	2.7%	
Sockperf - Latency Ping Pong (usec)		5.686
Standard Deviation		0.9%
Sockperf - Latency Under Load (usec)		99.739
Standard Deviation		31.3%


RealSR-NCNN 20200818
Scale: 4x - TAA: No
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.18, N = 3
66.71
Threadripper
SE +/- 0.15, N = 3
66.46
AMD Threadripper
SE +/- 0.15, N = 3
66.48
15
30
45
60
75
VkFFT 2020-09-29
Benchmark Score, More Is Better
Threadripper 2990WX
SE +/- 22.40, N = 3
9069
Threadripper
SE +/- 12.44, N = 3
9092
AMD Threadripper
SE +/- 37.89, N = 3
9114
2K
4K
6K
8K
10K
GLmark2 2020.04
Resolution: 1920 x 1080
Score, More Is Better
Threadripper 2990WX
4280
Threadripper
4289
AMD Threadripper
4297
900
1800
2700
3600
4500


WireGuard + Linux Networking Stack Stress Test
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 2.06, N = 3
376.13
Threadripper
SE +/- 1.36, N = 3
376.20
AMD Threadripper
SE +/- 1.62, N = 3
375.79
80
160
240
320
400
Sockperf 3.4
Test: Throughput
Messages Per Second, More Is Better
Threadripper 2990WX
SE +/- 4057.73, N = 5
675344
Threadripper
SE +/- 3740.65, N = 5
667116
AMD Threadripper
SE +/- 2860.57, N = 5
674476
140K
280K
420K
560K
700K
1. (CXX) g++ options: --param -O3 -rdynamic -ldl -lpthread
LeelaChessZero 0.26
Backend: BLAS
Nodes Per Second, More Is Better
Threadripper 2990WX
SE +/- 6.69, N = 9
464
Threadripper
SE +/- 4.99, N = 9
464
AMD Threadripper
SE +/- 5.45, N = 9
470
100
200
300
400
500
1. (CXX) g++ options: -flto -pthread

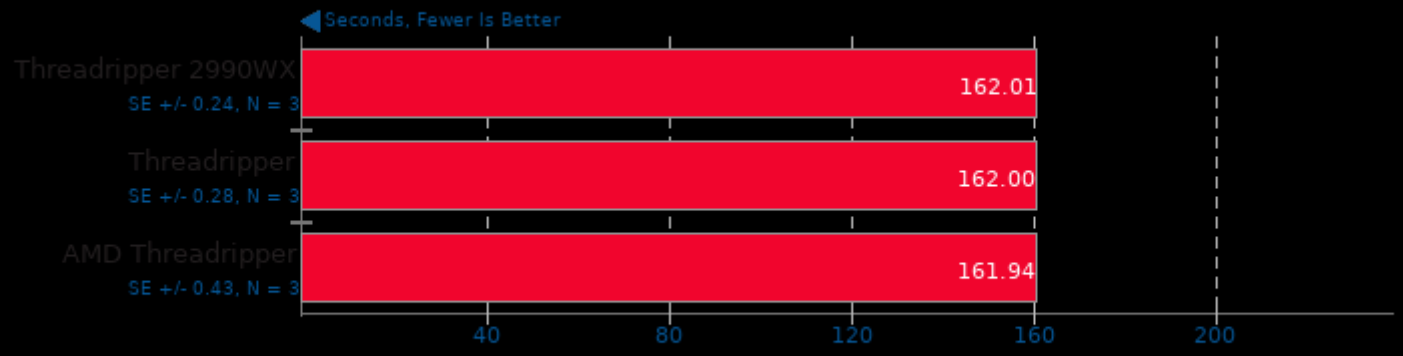

LeelaChessZero 0.26
Backend: Eigen
Nodes Per Second, More Is Better
Threadripper 2990WX
SE +/- 2.96, N = 3
475
Threadripper
SE +/- 6.02, N = 4
476
AMD Threadripper
SE +/- 5.89, N = 9
461
100
200
300
400
500
1. (CXX) g++ options: -flto -pthread
Rodinia 3.1
Test: OpenMP LavaMD
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.17, N = 3
81.82
Threadripper
SE +/- 0.11, N = 3
82.08
AMD Threadripper
SE +/- 0.05, N = 3
82.10
20
40
60
80
100
1. (CXX) g++ options: -O2 -lOpenCL
Rodinia 3.1
Test: OpenMP HotSpot3D
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.47, N = 3
102.51
Threadripper
SE +/- 0.90, N = 3
102.26
AMD Threadripper
SE +/- 0.84, N = 3
102.74
20
40
60
80
100
1. (CXX) g++ options: -O2 -lOpenCL


Rodinia 3.1
Test: OpenMP Leukocyte
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.02, N = 3
58.98
Threadripper
SE +/- 0.74, N = 3
59.39
AMD Threadripper
SE +/- 0.13, N = 3
58.81
13
26
39
52
65
1. (CXX) g++ options: -O2 -lOpenCL
Rodinia 3.1
Test: OpenMP CFD Solver
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.023, N = 3
8.895
Threadripper
SE +/- 0.090, N = 3
8.970
AMD Threadripper
SE +/- 0.091, N = 3
9.148
3
6
9
12
15
1. (CXX) g++ options: -O2 -lOpenCL
Rodinia 3.1
Test: OpenMP Streamcluster
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.81, N = 12
27.29
Threadripper
SE +/- 0.46, N = 15
26.80
AMD Threadripper
SE +/- 0.76, N = 15
27.35
6
12
18
24
30
1. (CXX) g++ options: -O2 -lOpenCL


NAMD 2.14
ATPase Simulation - 327,506 Atoms
days/ns, Fewer Is Better
Threadripper 2990WX
SE +/- 0.00125, N = 3
0.79083
Threadripper
SE +/- 0.00128, N = 3
0.78824
AMD Threadripper
SE +/- 0.00325, N = 3
0.80103
0.1802
0.3604
0.5406
0.7208
0.901
Dolfyn 0.527
Computational Fluid Dynamics
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.05, N = 3
17.60
Threadripper
SE +/- 0.05, N = 3
17.59
AMD Threadripper
SE +/- 0.02, N = 3
17.66
4
8
12
16
20
FFTE 7.0
N=256, 3D Complex FFT Routine
MFLOPS, More Is Better
Threadripper 2990WX
SE +/- 511.09, N = 3
59089.37
Threadripper
SE +/- 805.78, N = 5
60371.34
AMD Threadripper
SE +/- 452.76, N = 14
58221.20
13K
26K
39K
52K
65K
1. (F9X) gfortran options: -O3 -fomit-frame-pointer -fopenmp

Timed HMMer Search 3.3.1

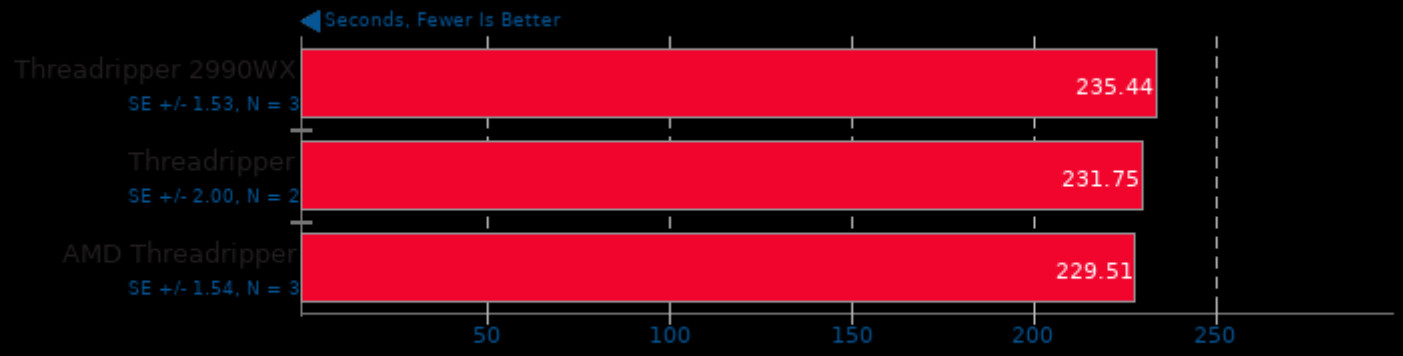
Pfam Database Search



1. (CC) gcc options: -O3 -pthread -lhmmer -leasel -lm

Incompact3D 2020-09-17

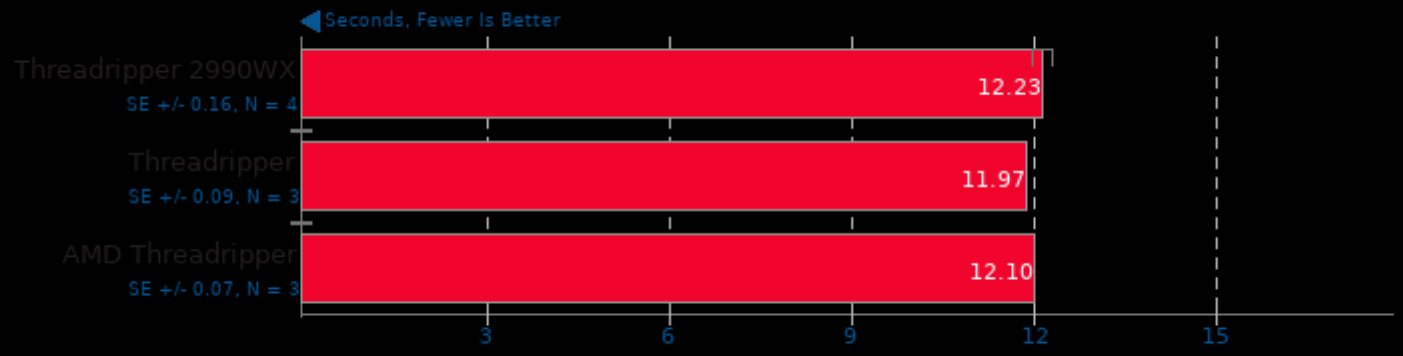
Input: Cylinder



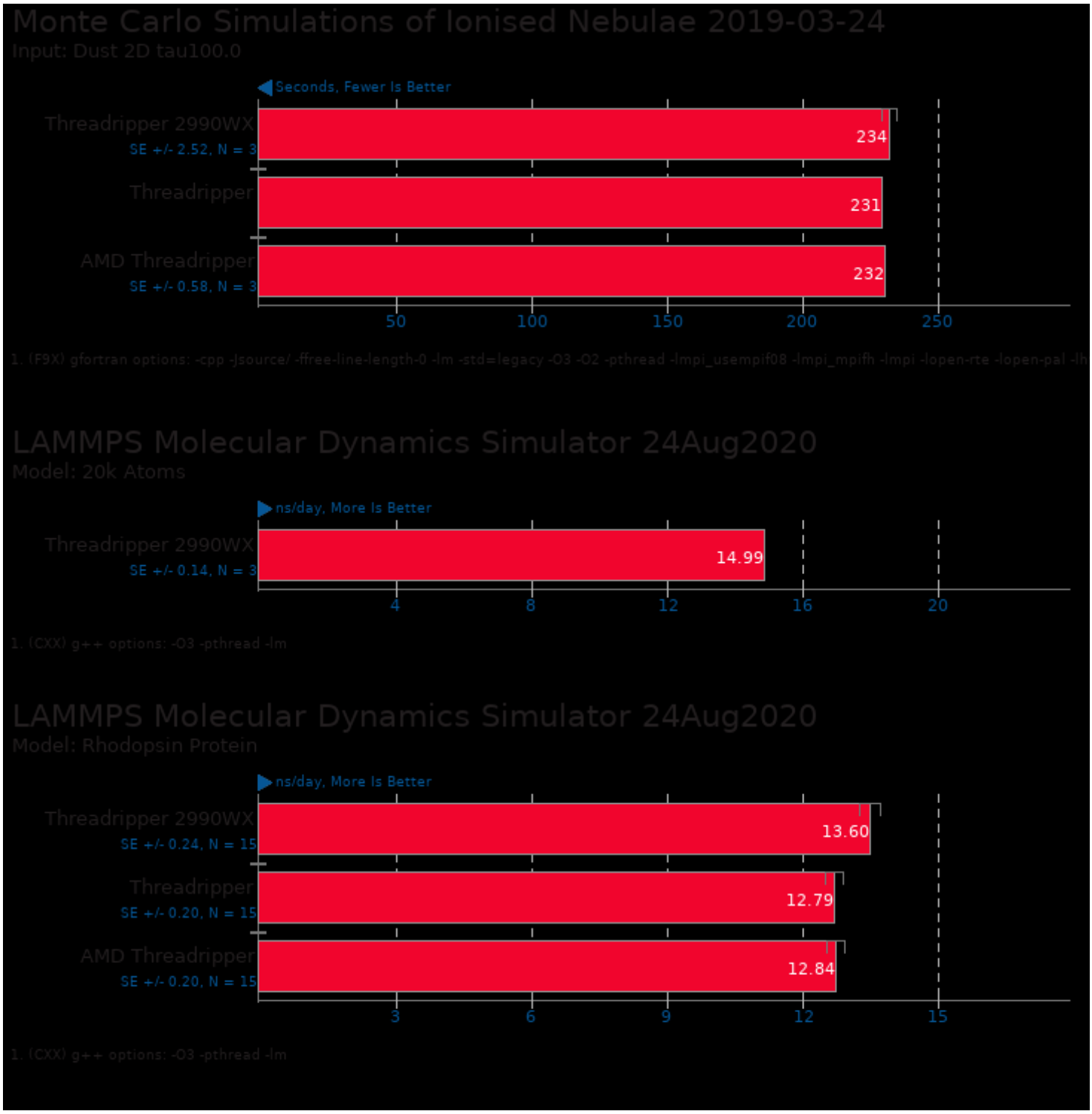
1. (F9X) gfortran options: -cpp -funroll-loops -floop-optimize -fcray-pointer -fbacktrace -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen-rte -lopen-pal

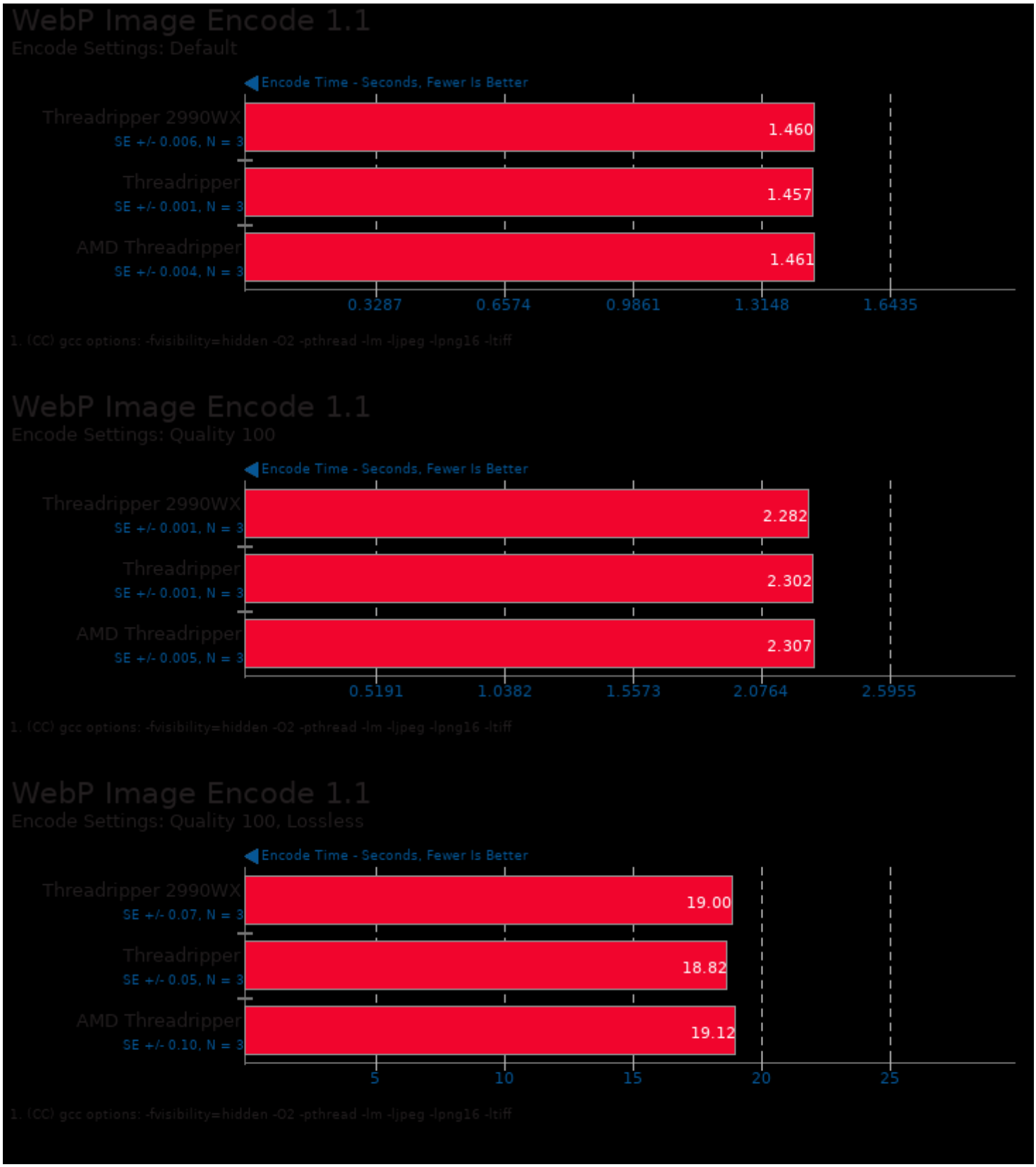
Timed MAFFT Alignment 7.471

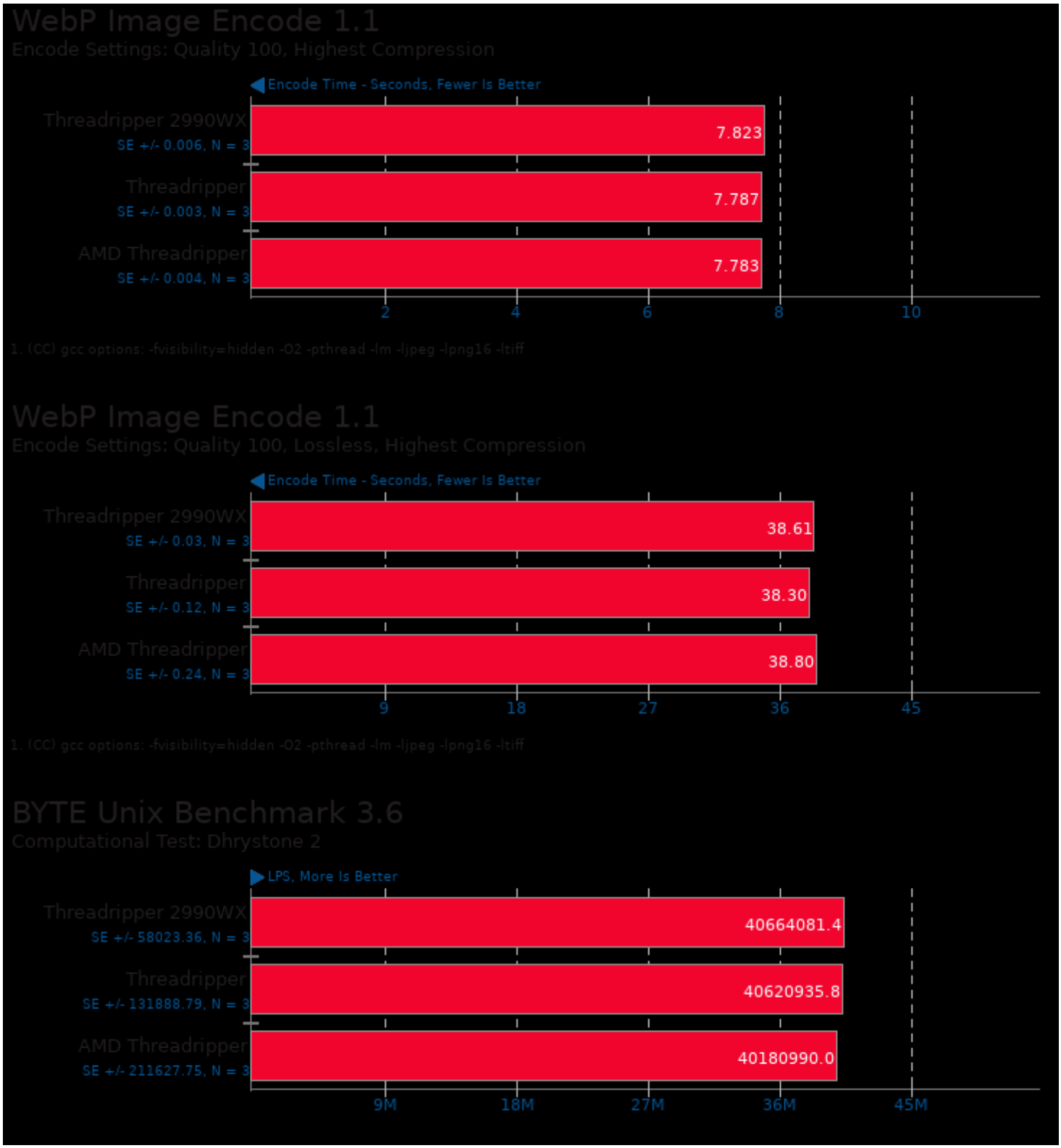
Multiple Sequence Alignment - LSU RNA

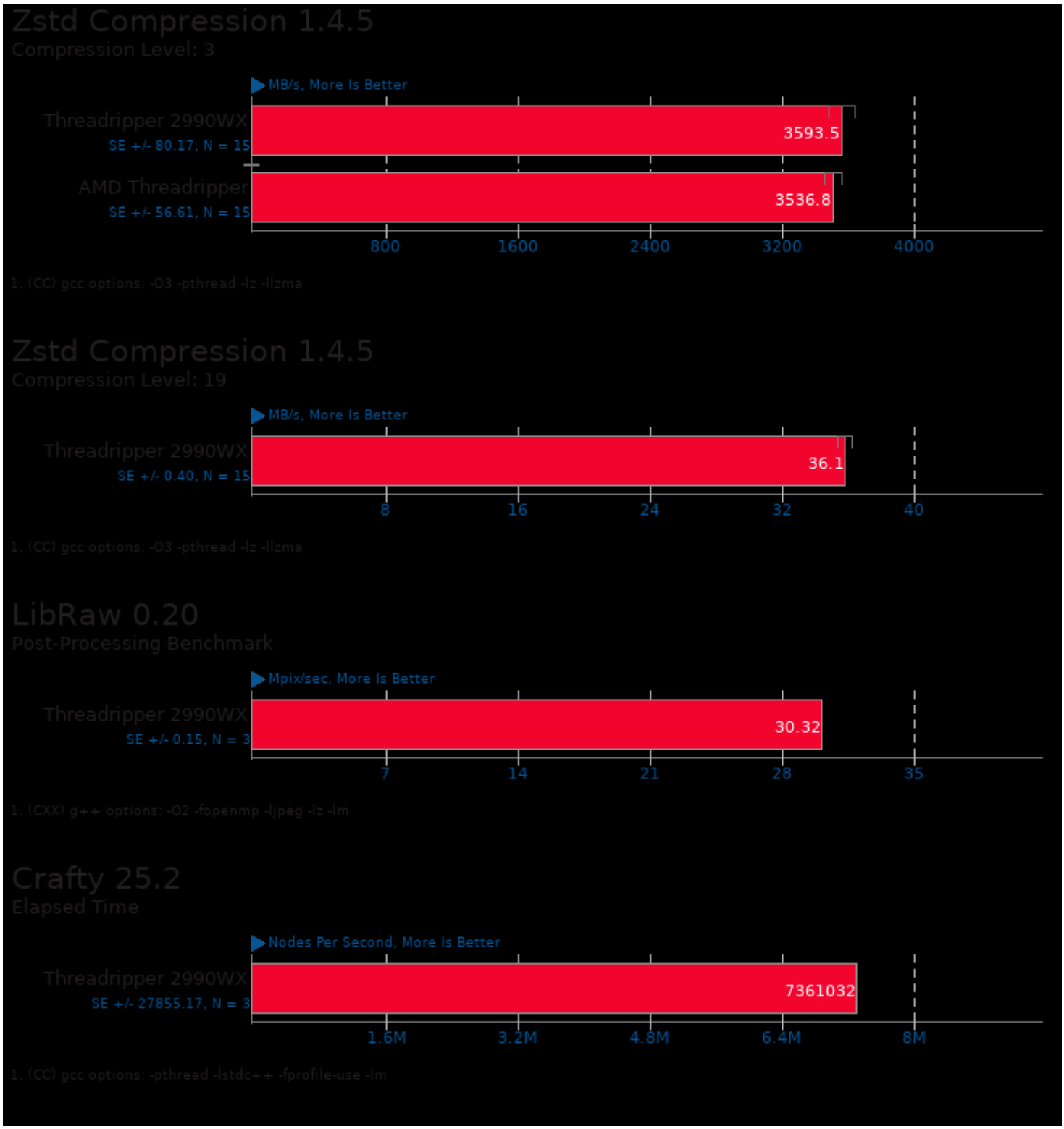


1. (CC) gcc options: -std=c99 -O3 -lm -lpthread


Monte Carlo Simulations of Ionised Nebulae 2019-03-24
Input: Dust 2D tau100.0
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 2.52, N = 3
234
Threadripper
231
AMD Threadripper
SE +/- 0.58, N = 3
232
50
100
150
200
250
1. (F9X) gfortran options: -cpp -Jsource/ -ffree-line-length-0 -lm -std=legacy -O3 -O2 -pthread -lmpi_usempif08 -lmpi_mpifh -lmpi -lopen-rte -lopen-pal -lh
LAMMPS Molecular Dynamics Simulator 24Aug2020
Model: 20k Atoms
ns/day, More Is Better
Threadripper 2990WX
SE +/- 0.14, N = 3
14.99
4
8
12
16
20
1. (CXX) g++ options: -O3 -pthread -lm
LAMMPS Molecular Dynamics Simulator 24Aug2020
Model: Rhodopsin Protein
ns/day, More Is Better
Threadripper 2990WX
SE +/- 0.24, N = 15
13.60
Threadripper
SE +/- 0.20, N = 15
12.79
AMD Threadripper
SE +/- 0.20, N = 15
12.84
3
6
9
12
15
1. (CXX) g++ options: -O3 -pthread -lm

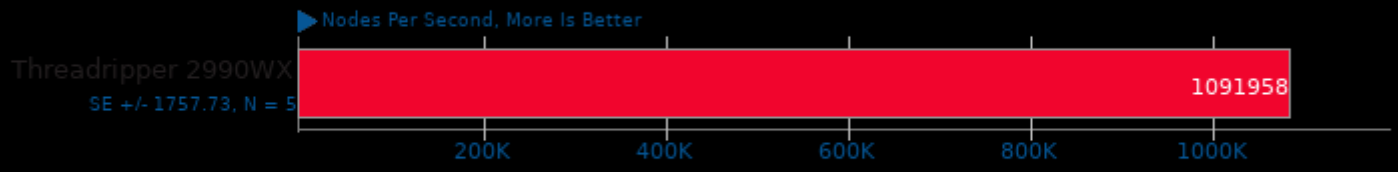

WebP Image Encode 1.1
Encode Settings: Default
Encode Time - Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.006, N = 3
1.460
Threadripper
SE +/- 0.001, N = 3
1.457
AMD Threadripper
SE +/- 0.004, N = 3
1.461
0.3287
0.6574
0.9861
1.3148
1.6435
1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff
WebP Image Encode 1.1
Encode Settings: Quality 100
Encode Time - Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.001, N = 3
2.282
Threadripper
SE +/- 0.001, N = 3
2.302
AMD Threadripper
SE +/- 0.005, N = 3
2.307
0.5191
1.0382
1.5573
2.0764
2.5955
1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff
WebP Image Encode 1.1
Encode Settings: Quality 100, Lossless
Encode Time - Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.07, N = 3
19.00
Threadripper
SE +/- 0.05, N = 3
18.82
AMD Threadripper
SE +/- 0.10, N = 3
19.12
5
10
15
20
25
1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff


WebP Image Encode 1.1
Encode Settings: Quality 100, Highest Compression
Encode Time - Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.006, N = 3
7.823
Threadripper
SE +/- 0.003, N = 3
7.787
AMD Threadripper
SE +/- 0.004, N = 3
7.783
2
4
6
8
10
1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff
WebP Image Encode 1.1
Encode Settings: Quality 100, Lossless, Highest Compression
Encode Time - Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.03, N = 3
38.61
Threadripper
SE +/- 0.12, N = 3
38.30
AMD Threadripper
SE +/- 0.24, N = 3
38.80
9
18
27
36
45
1. (CC) gcc options: -fvisibility=hidden -O2 -pthread -lm -ljpeg -lpng16 -ltiff
BYTE Unix Benchmark 3.6
Computational Test: Dhrystone 2
LPS, More Is Better
Threadripper 2990WX
SE +/- 58023.36, N = 3
40664081.4
Threadripper
SE +/- 131888.79, N = 3
40620935.8
AMD Threadripper
SE +/- 211627.75, N = 3
40180990.0
9M
18M
27M
36M
45M


Zstd Compression 1.4.5
Compression Level: 3
MB/s, More Is Better
Threadripper 2990WX
SE +/- 80.17, N = 15
3593.5
AMD Threadripper
SE +/- 56.61, N = 15
3536.8
800
1600
2400
3200
4000
1. (CC) gcc options: -O3 -pthread -lz -llzma
Zstd Compression 1.4.5
Compression Level: 19
MB/s, More Is Better
Threadripper 2990WX
SE +/- 0.40, N = 15
36.1
8
16
24
32
40
1. (CC) gcc options: -O3 -pthread -lz -llzma
LibRaw 0.20
Post-Processing Benchmark
Mpix/sec, More Is Better
Threadripper 2990WX
SE +/- 0.15, N = 3
30.32
7
14
21
28
35
1. (CXX) g++ options: -O2 -fopenmp -ljpeg -lz -lm
Crafty 25.2
Elapsed Time
Nodes Per Second, More Is Better
Threadripper 2990WX
SE +/- 27855.17, N = 3
7361032
1.6M
3.2M
4.8M
6.4M
8M
1. (CC) gcc options: -pthread -lstdc++ -fprofile-use -lm

TSCP 1.81

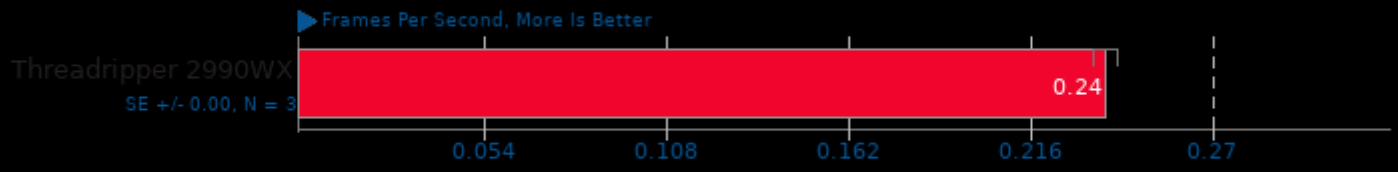
AI Chess Performance



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

AOM AV1 2.0

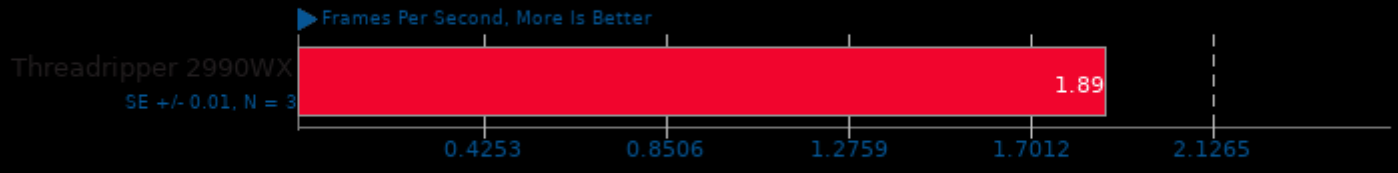
Encoder Mode: Speed 0 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

AOM AV1 2.0

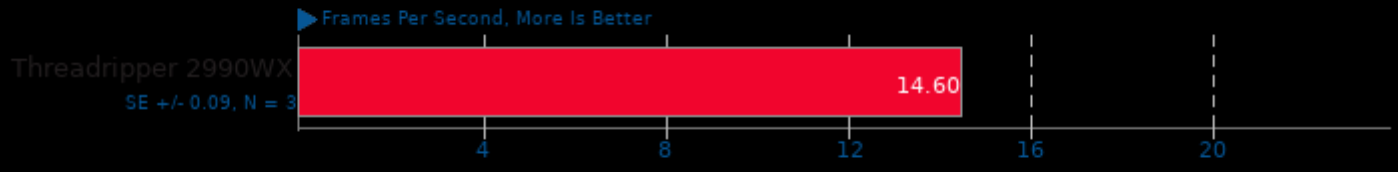
Encoder Mode: Speed 4 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

AOM AV1 2.0

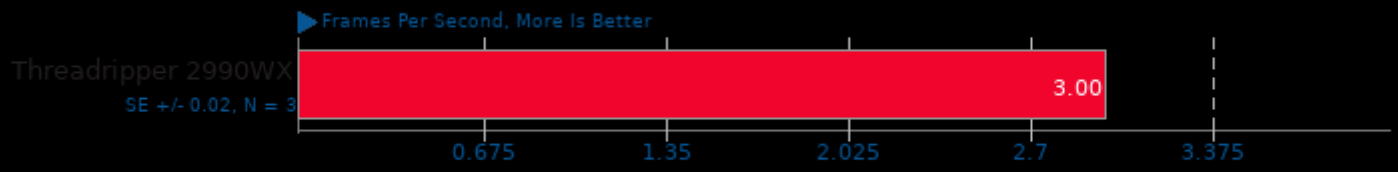
Encoder Mode: Speed 6 Realtime



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

AOM AV1 2.0

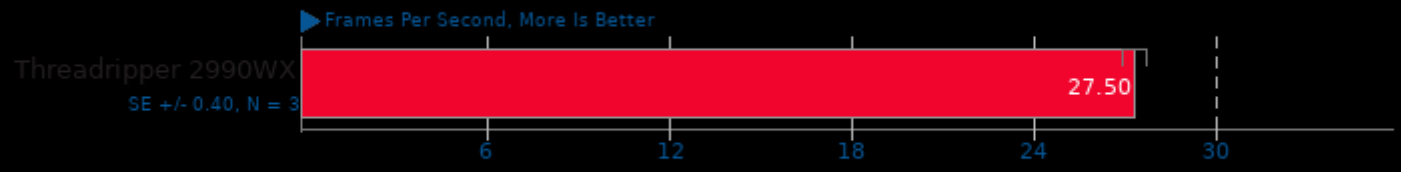
Encoder Mode: Speed 6 Two-Pass



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

AOM AV1 2.0

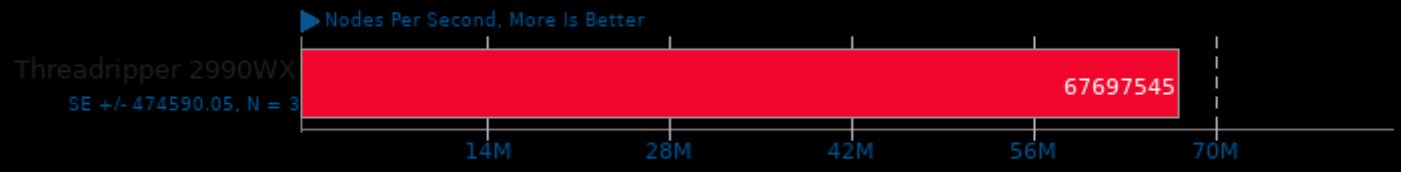
Encoder Mode: Speed 8 Realtime



1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

Stockfish 9

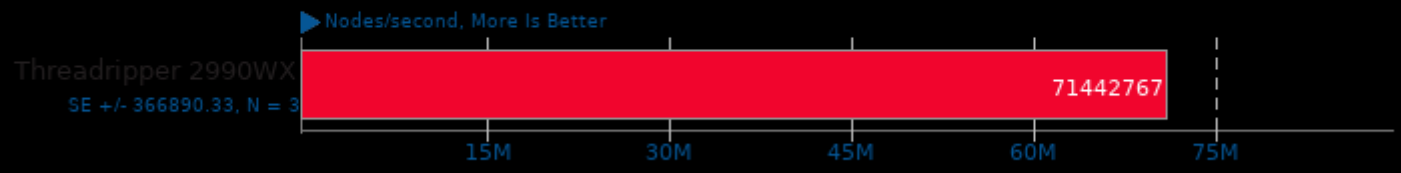
Total Time



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

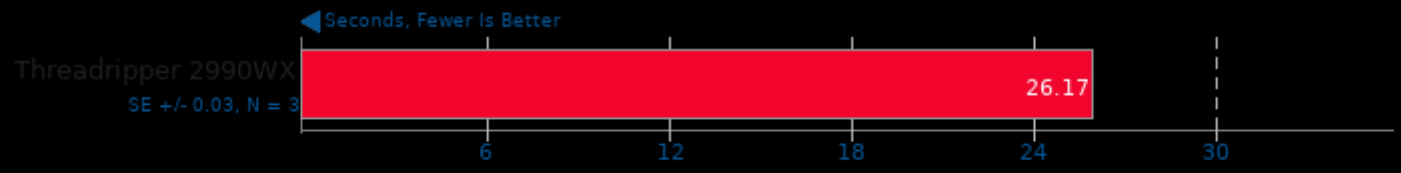
asmFish 2018-07-23

1024 Hash Memory, 26 Depth



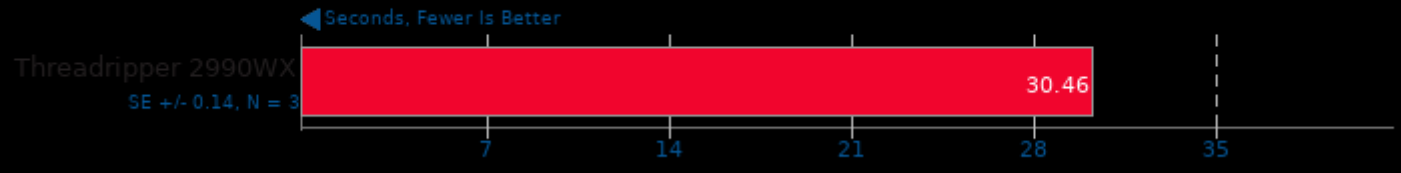
Timed Apache Compilation 2.4.41

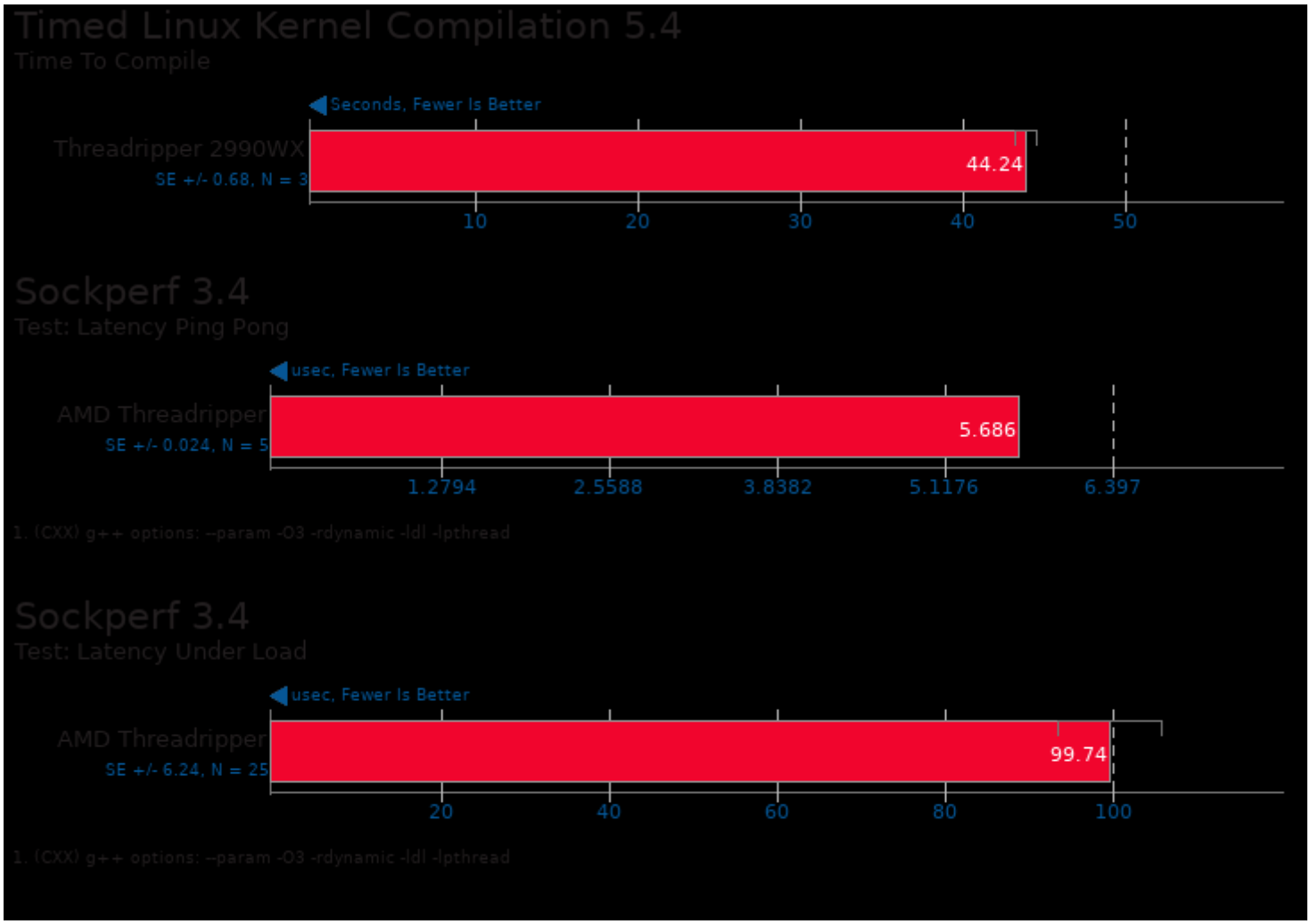
Time To Compile



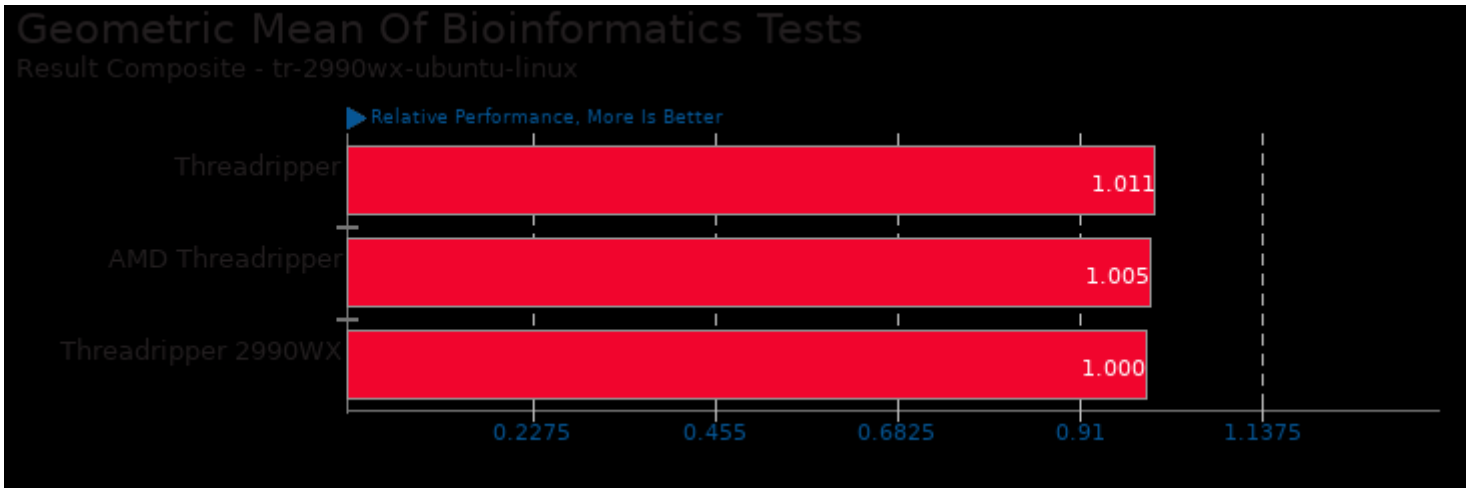
Timed FFmpeg Compilation 4.2.2

Time To Compile




Timed Linux Kernel Compilation 5.4
Time To Compile
Seconds, Fewer Is Better
Threadripper 2990WX
SE +/- 0.68, N = 3
44.24
10
20
30
40
50
Sockperf 3.4
Test: Latency Ping Pong
usec, Fewer Is Better
AMD Threadripper
SE +/- 0.024, N = 5
5.686
1.2794
2.5588
3.8382
5.1176
6.397
1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread
Sockperf 3.4
Test: Latency Under Load
usec, Fewer Is Better
AMD Threadripper
SE +/- 6.24, N = 25
99.74
20
40
60
80
100
1. (CXX) g++ options: -param -O3 -rdynamic -ldl -lpthread

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



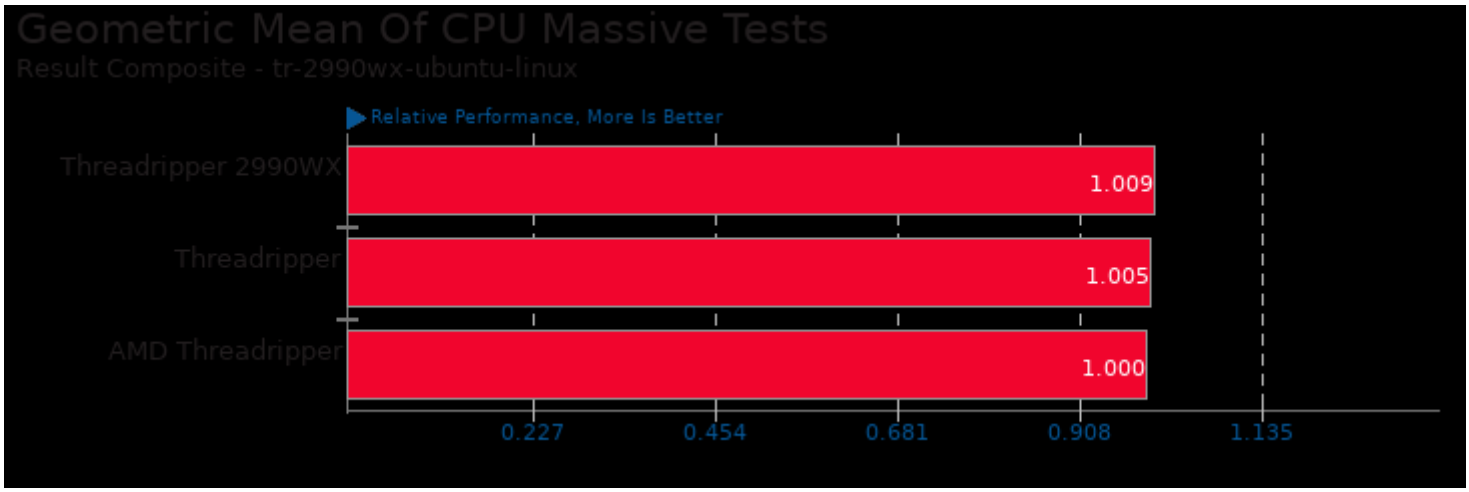
Geometric mean based upon tests: pts/hmmer and pts/mafft



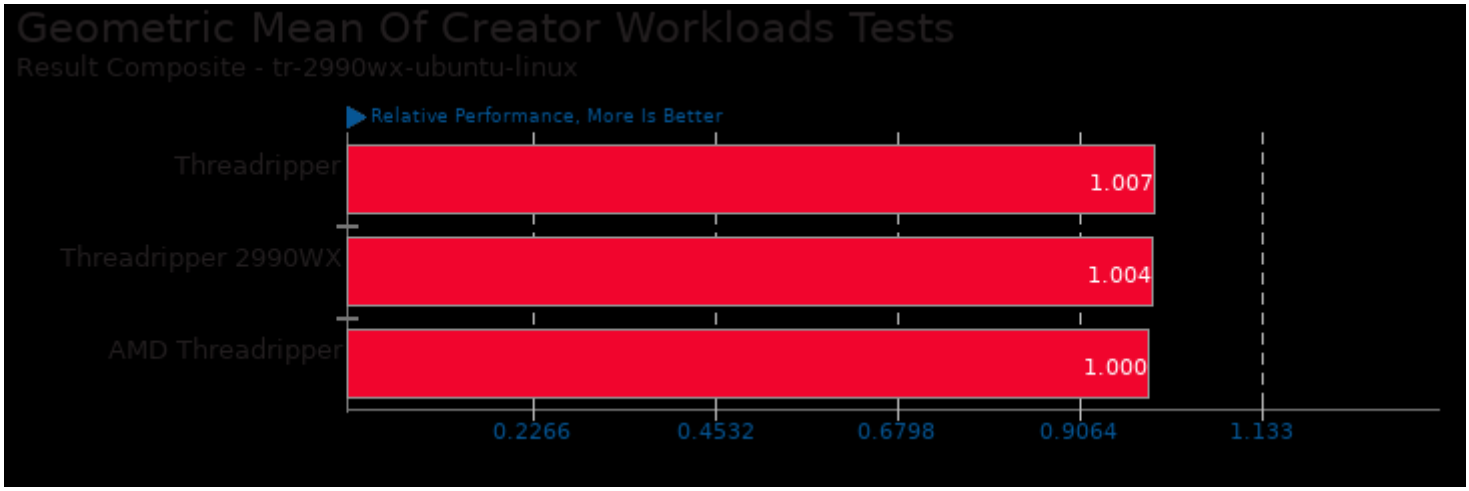
Geometric mean based upon tests: pts/crafty, pts/tscp, pts/lczero, pts/stockfish and pts/asmfish



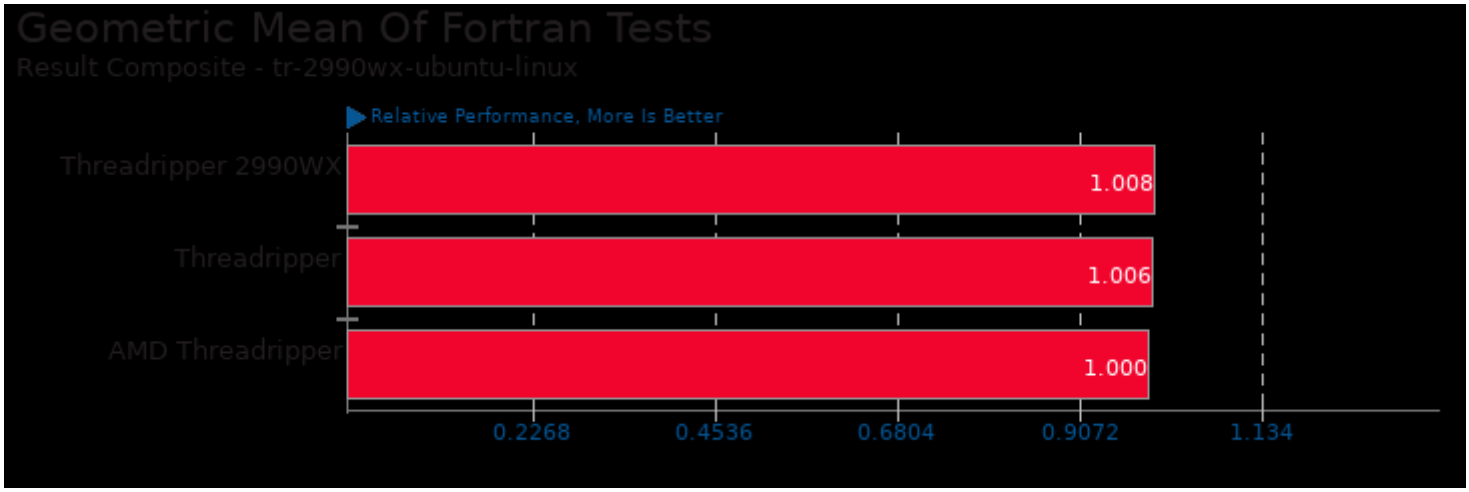
Geometric mean based upon tests: pts/mafft, pts/tscp, pts/stockfish, pts/hmmer, pts/compress-zstd, pts/lammps, pts/aom-av1, pts/build-ffmpeg and pts/build-apache



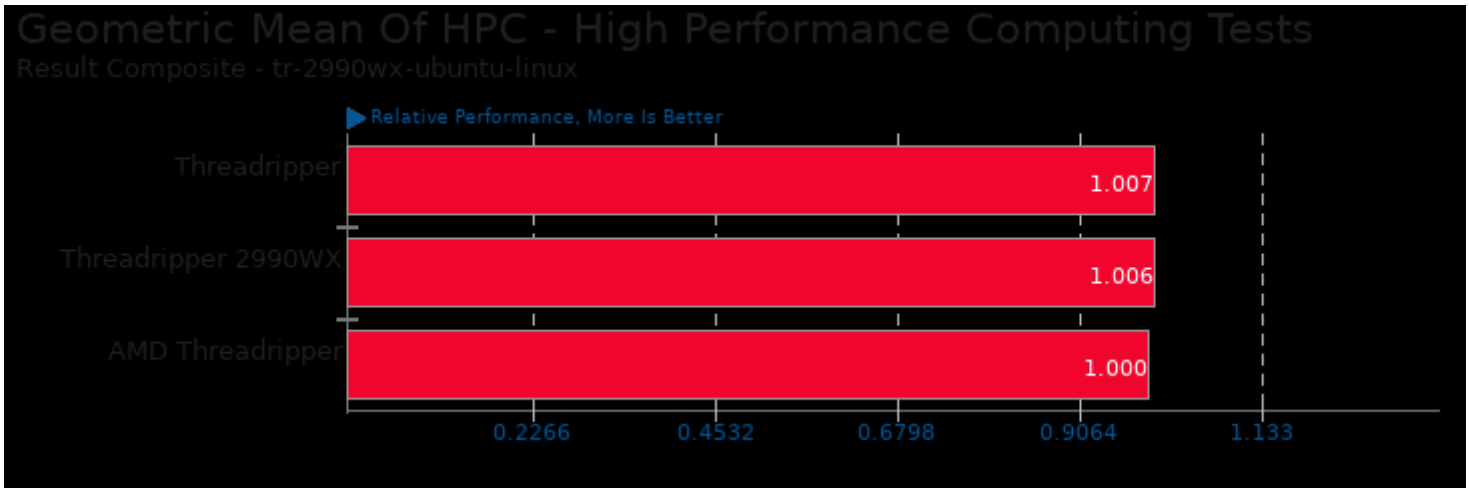
Geometric mean based upon tests: pts/asmfish, pts/build-apache, pts/build-linux-kernel, pts/compress-zstd, pts/crafty, pts/dolfyn, pts/hmmer, pts/lammps, pts/lczero, pts/mafft, pts/namd, pts/rodinia, pts/sockperf and pts/stockfish



Geometric mean based upon tests: pts/aom-av1, pts/libraw and pts/webp



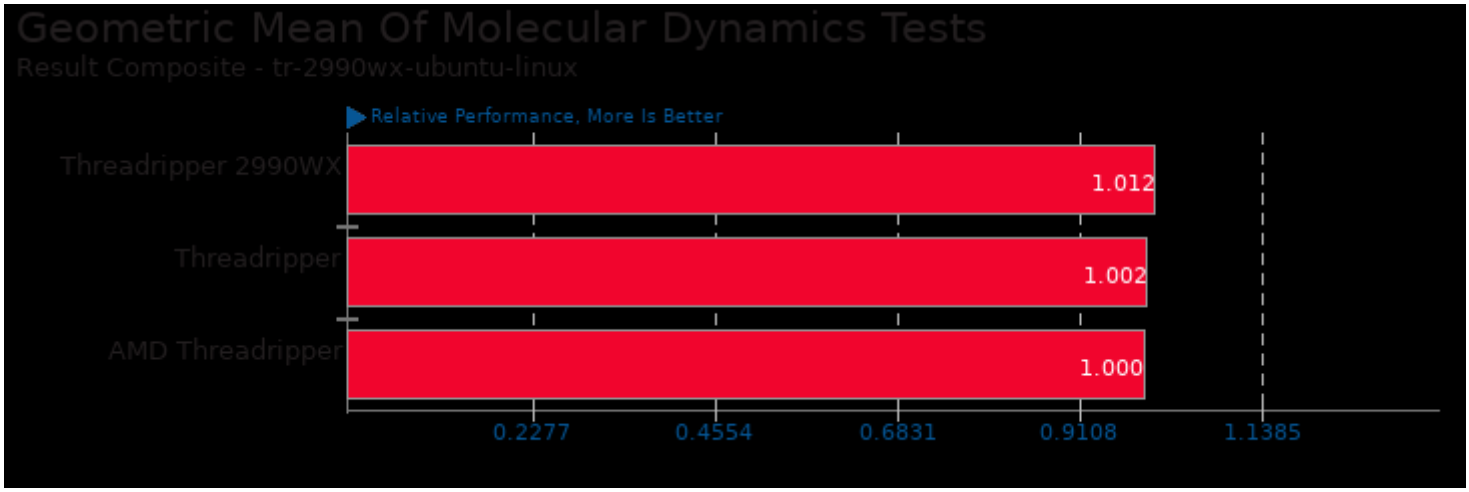
Geometric mean based upon tests: pts/dolfyn, pts/ffte, pts/incompact3d, pts/mocassin and pts/lammps



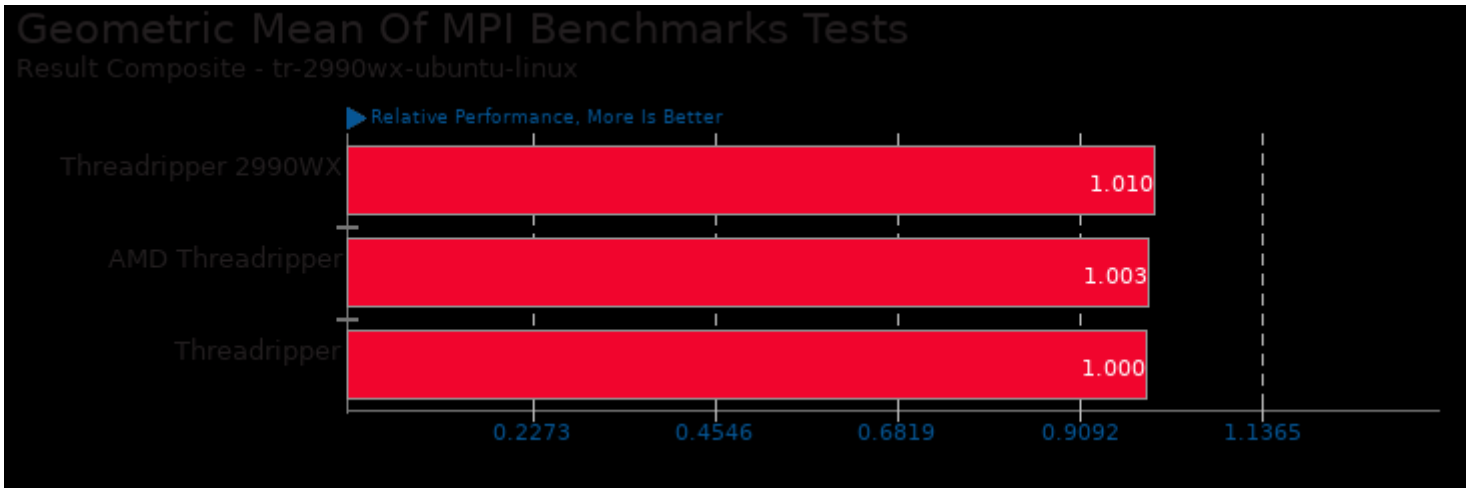
Geometric mean based upon tests: pts/rodinia, pts/fftw, pts/namd, pts/dolfyn, pts/lammps, pts/incompact3d, pts/hmmer, pts/mafft, pts/mocassin and pts/lczero



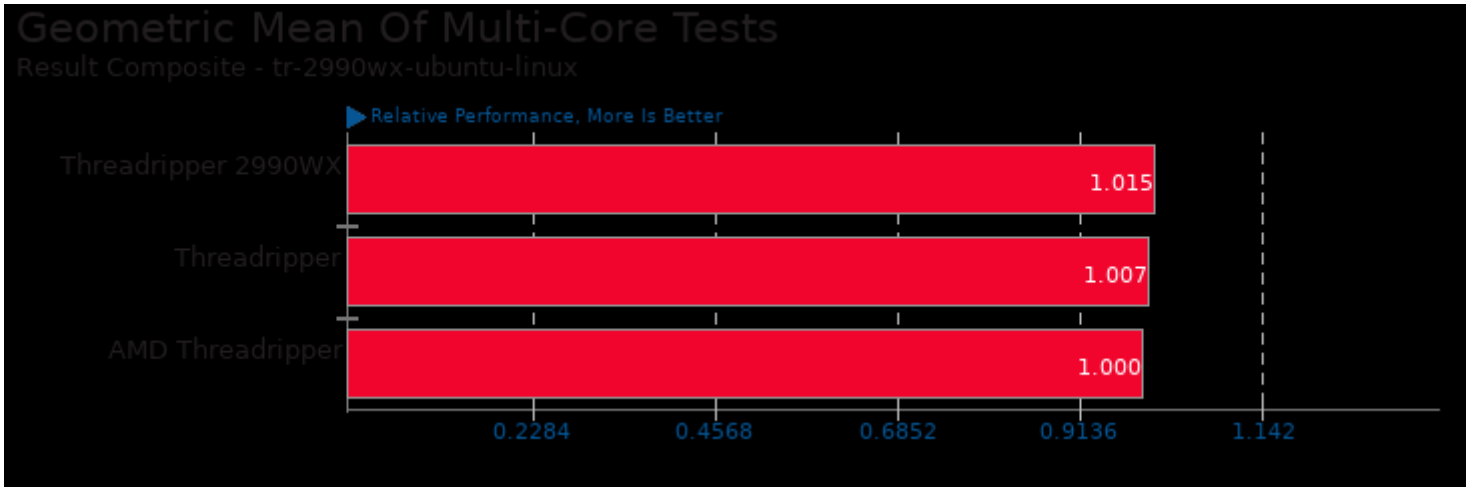
Geometric mean based upon tests: pts/libraw and pts/webp



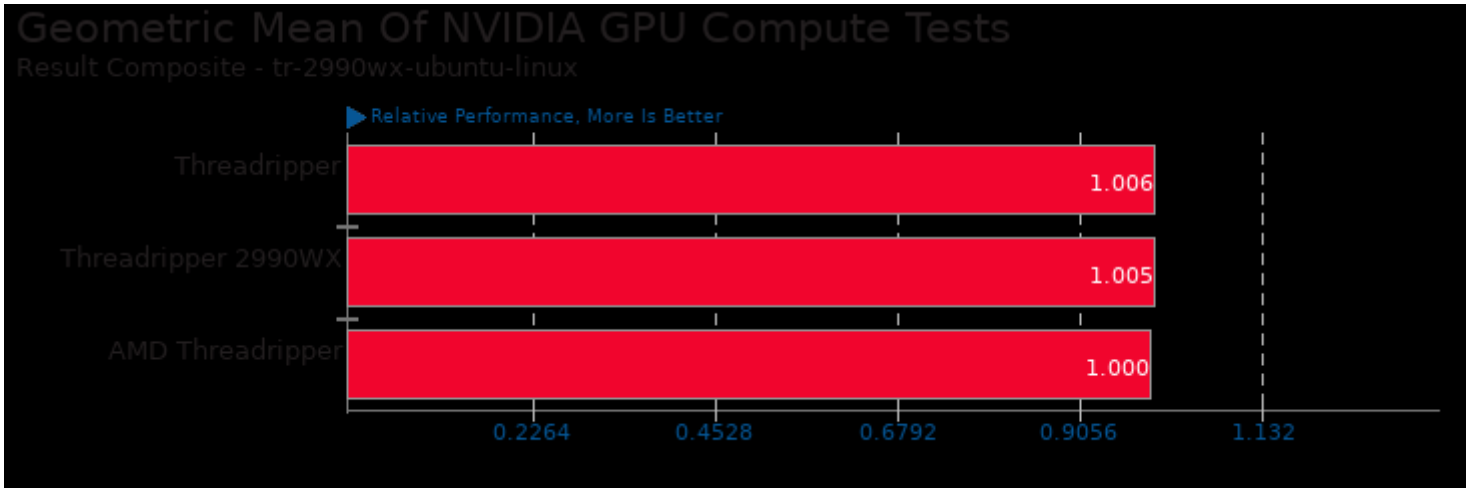
Geometric mean based upon tests: pts/namd, pts/dolfyn, pts/lammps and pts/incompact3d



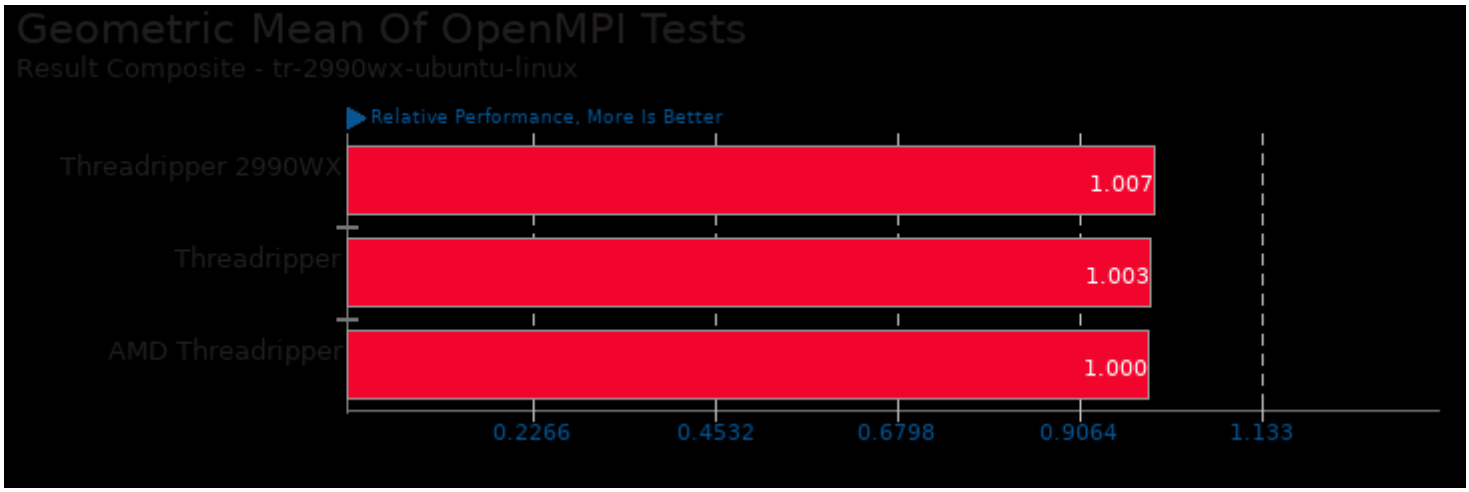
Geometric mean based upon tests: pts/lammps, pts/incompact3d and pts/mocassin



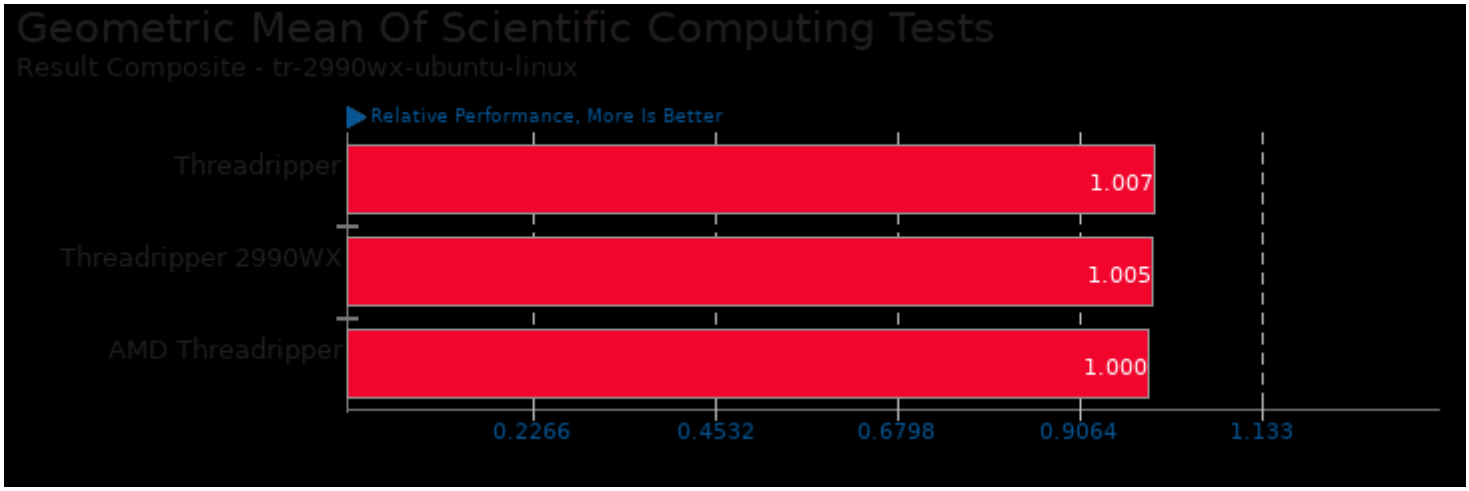
Geometric mean based upon tests: pts/stockfish, pts/aom-av1, pts/rodinia, pts/namd, pts/asmfish, pts/lammps, pts/compress-zstd, pts/build-apache, pts/build-linux-kernel and pts/build-ffmpeg



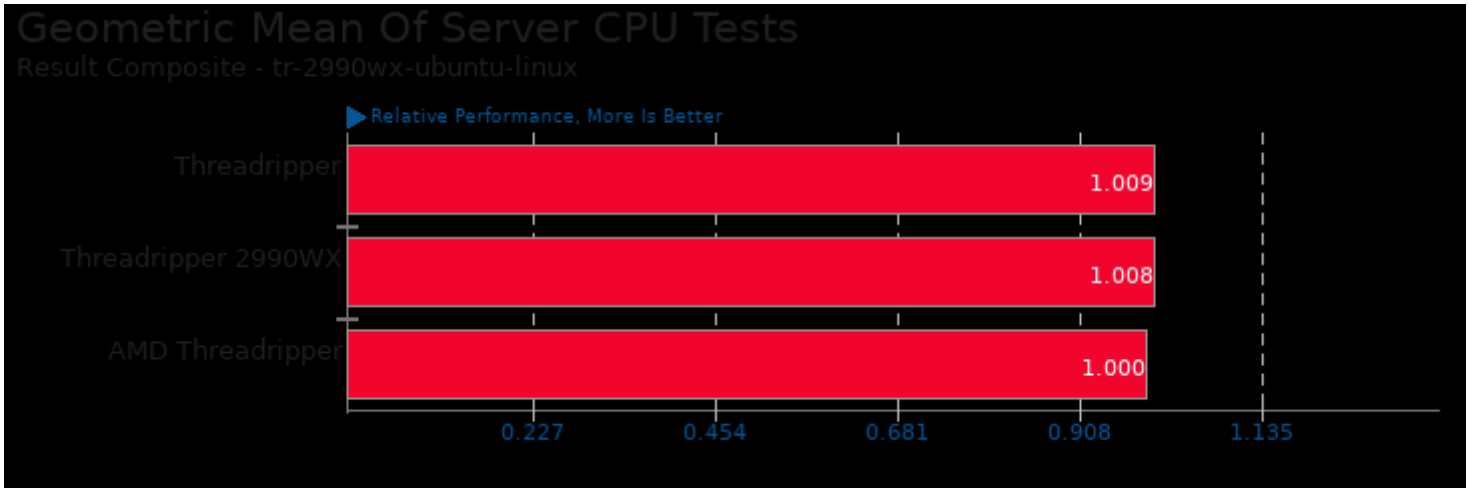
Geometric mean based upon tests: pts/rodinia, pts/lczero, pts/vkfft and pts/realsr-ncnn



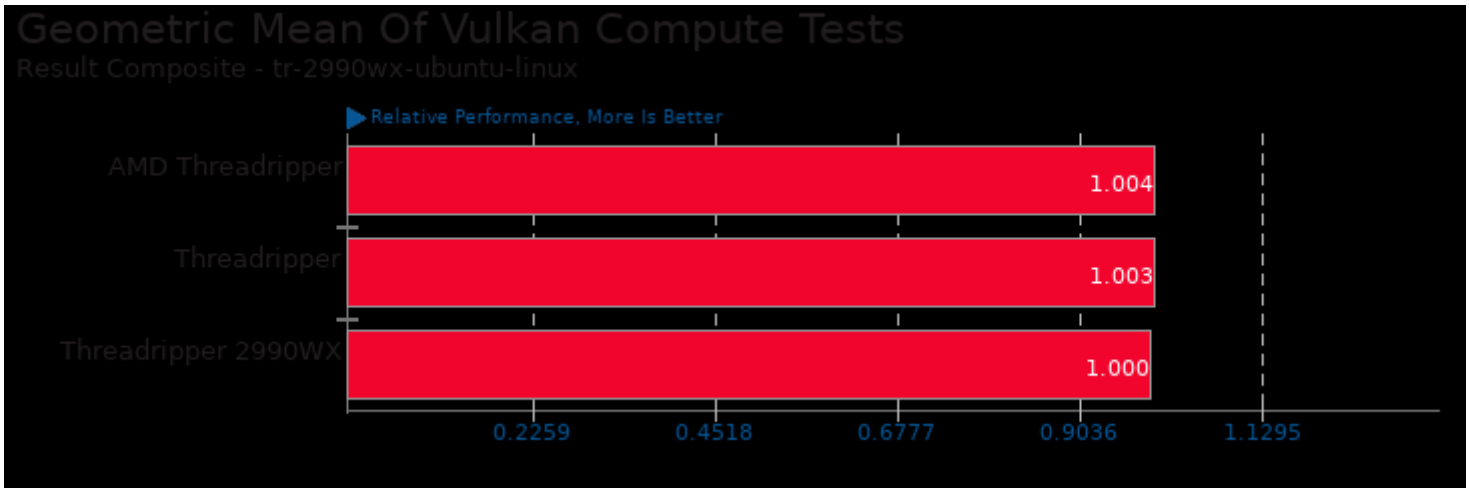
Geometric mean based upon tests: pts/rodinia, pts/incompact3d, pts/mocassin and pts/lammps



Geometric mean based upon tests: pts/ffte, pts/namd, pts/dolfyn, pts/lammps, pts/incompact3d, pts/hmmer, pts/mafft and pts/mocassin



Geometric mean based upon tests: pts/rodinia, pts/namd, pts/stockfish, pts/asmfish, pts/build-linux-kernel and pts/compress-zstd



Geometric mean based upon tests: pts/vkfft and pts/realsr-ncnn

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 10:24.