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2021-01-13_3800X_4.2-v1

AMD Ryzen 7 3800X 8-Core testing with a ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3102 BIOS) and ASUS AMD Radeon RX 470/480/570/570X/580/580X/590 8GB on Arch rolling via the Phoronix Test Suite.

Test Systems:

AMD Ryzen 7 3800X 8-Core

Processor: AMD Ryzen 7 3800X 8-Core @ 4.10GHz (8 Cores / 16 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3102 BIOS), Chipset: AMD Starship/Matisse, Memory: 64GB, Disk: 1000GB Seagate FireCuda 520 SSD ZP1000GM30002, Graphics: ASUS AMD Radeon RX 470/480/570/570X/580/580X/590 8GB (1360/2000MHz), Audio: AMD Ellesmere HDMI Audio, Monitor: DELL U3417W + DELL U2415, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Arch rolling, Kernel: 5.10.6-arch1-1 (x86_64), Display Server: X Server 1.19.5, OpenGL: 4.6 Mesa 20.3.2 (LLVM 11.0.0), Compiler: GCC 10.2.0 + Clang 11.0.1 + LLVM 11.0.1, File-System: f2fs, Screen Resolution: 4640x1920

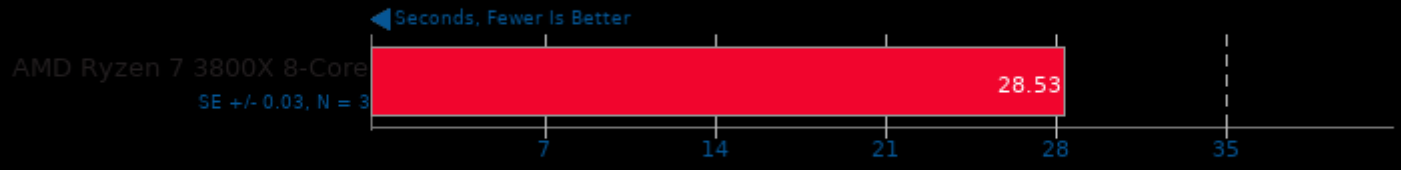
Kernel Notes: amdgpu.audio=0
Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-werror --enable-__cxa_atexit --enable-cet=auto --enable-checking=release

--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,lto,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 schedutil (Boost: Disabled) - CPU Microcode: 0x8701021
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: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	AMD Ryzen 7 3800X 8-Core
Rodinia - OpenMP LavaMD (sec)	28.525
Standard Deviation	0.2%
Rodinia - OpenMP CFD Solver (sec)	23.908
Standard Deviation	1.6%
NAMD - ATPase Simulation - 327,506 Atoms (days/ns)	2.00703
Standard Deviation	0.8%
Kvazaar - Bosphorus 4K - Slow (FPS)	6.03
Standard Deviation	0.1%
Kvazaar - Bosphorus 4K - Medium (FPS)	6.13
Standard Deviation	0.1%
Kvazaar - Bosphorus 1080p - Slow (FPS)	26.23
Standard Deviation	0.3%
Kvazaar - Bosphorus 1080p - Medium (FPS)	26.89
Standard Deviation	0.2%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	17.06
Standard Deviation	0.3%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	30.60
Standard Deviation	0%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	64.13
Standard Deviation	0.8%
Kvazaar - Bosphorus 1080p - Ultra Fast (FPS)	116.50
Standard Deviation	1.1%
x264 - H.2.V.E (FPS)	102.89
Standard Deviation	0.4%
x265 - Bosphorus 4K (FPS)	13.04
Standard Deviation	1%
x265 - Bosphorus 1080p (FPS)	56.97
Standard Deviation	0.7%
Stockfish - Total Time (Nodes/s)	28189755
Standard Deviation	0.4%
asmFish - 1.H.M.2.D (Nodes/s)	28944249
Standard Deviation	2.1%
POV-Ray - Trace Time (sec)	43.461
Standard Deviation	0.1%
OpenSSL - R.4.b.P (Signs/sec)	2444
Standard Deviation	0.5%
ctx_clock - C.S.T (Clocks)	287
Sysbench - CPU (Events/sec)	17688
Standard Deviation	0.2%

Rodinia 2.4

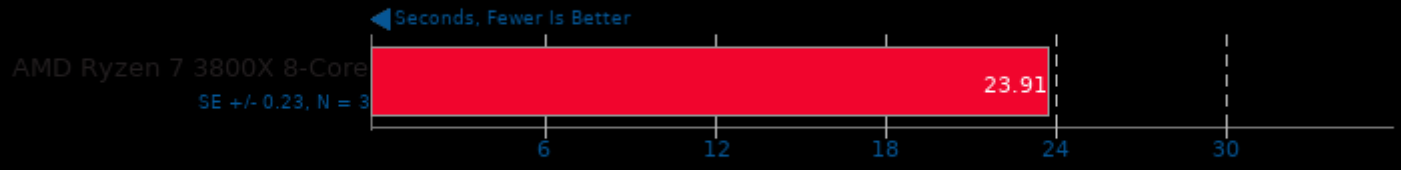
Test: OpenMP LavaMD



1. (CXX) g++ options: -O2 -lOpenCL

Rodinia 2.4

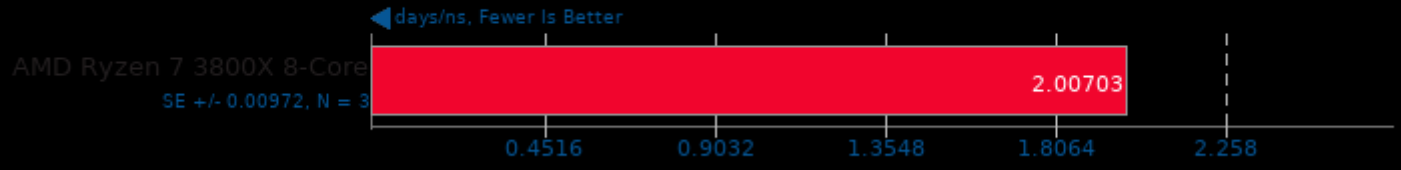
Test: OpenMP CFD Solver



1. (CXX) g++ options: -O2 -lOpenCL

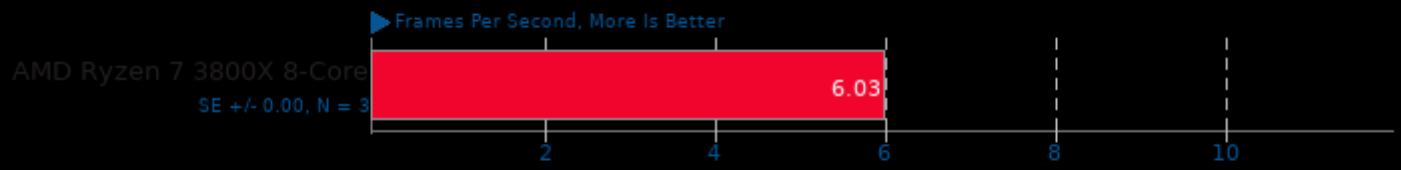
NAMD 2.13b1

ATPase Simulation - 327,506 Atoms



Kvazaar 2.0

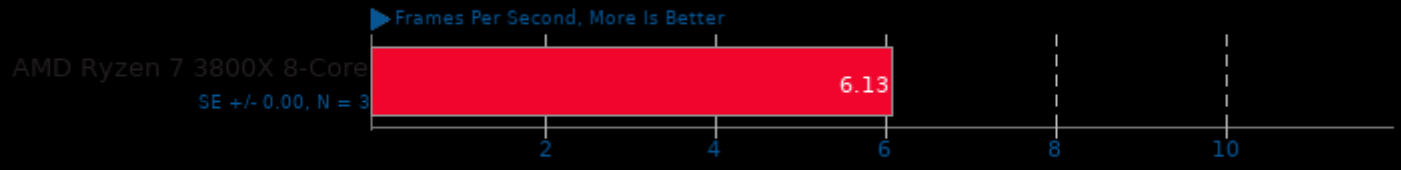
Video Input: Bosphorus 4K - Video Preset: Slow



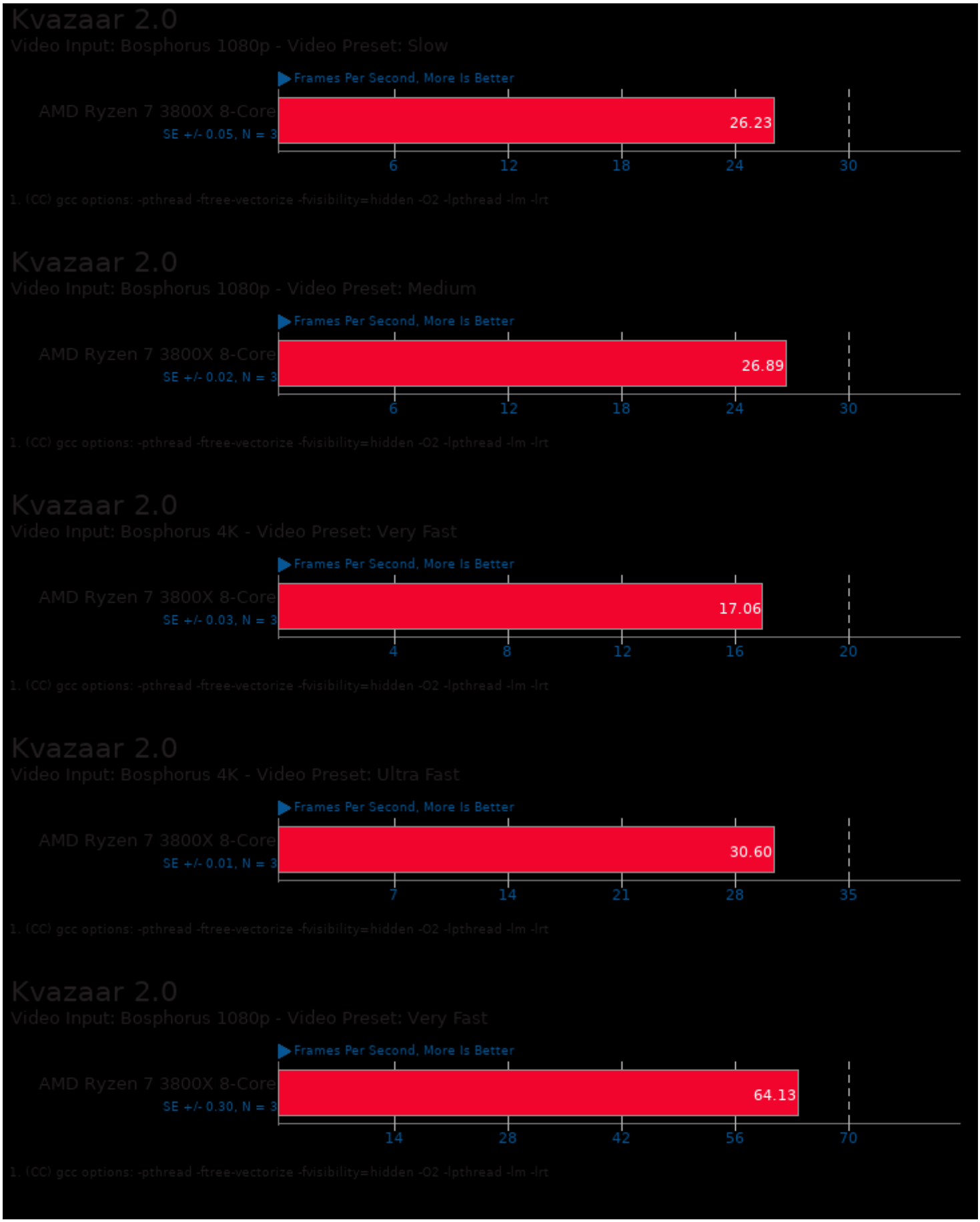
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

Video Input: Bosphorus 4K - Video Preset: Medium

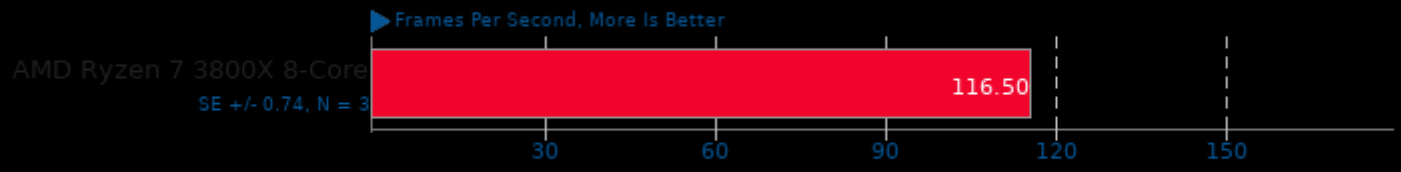


1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt


Kvazaar 2.0
Video Input: Bosphorus 1080p - Video Preset: Slow
Frames Per Second, More Is Better
AMD Ryzen 7 3800X 8-Core
SE +/- 0.05, N = 3
26.23
6
12
18
24
30
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt
Kvazaar 2.0
Video Input: Bosphorus 1080p - Video Preset: Medium
Frames Per Second, More Is Better
AMD Ryzen 7 3800X 8-Core
SE +/- 0.02, N = 3
26.89
6
12
18
24
30
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt
Kvazaar 2.0
Video Input: Bosphorus 4K - Video Preset: Very Fast
Frames Per Second, More Is Better
AMD Ryzen 7 3800X 8-Core
SE +/- 0.03, N = 3
17.06
4
8
12
16
20
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt
Kvazaar 2.0
Video Input: Bosphorus 4K - Video Preset: Ultra Fast
Frames Per Second, More Is Better
AMD Ryzen 7 3800X 8-Core
SE +/- 0.01, N = 3
30.60
7
14
21
28
35
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt
Kvazaar 2.0
Video Input: Bosphorus 1080p - Video Preset: Very Fast
Frames Per Second, More Is Better
AMD Ryzen 7 3800X 8-Core
SE +/- 0.30, N = 3
64.13
14
28
42
56
70
1. (CC) gcc options: -pthread -ftree-vectorize -fvisibility=hidden -O2 -lpthread -lm -lrt

Kvazaar 2.0

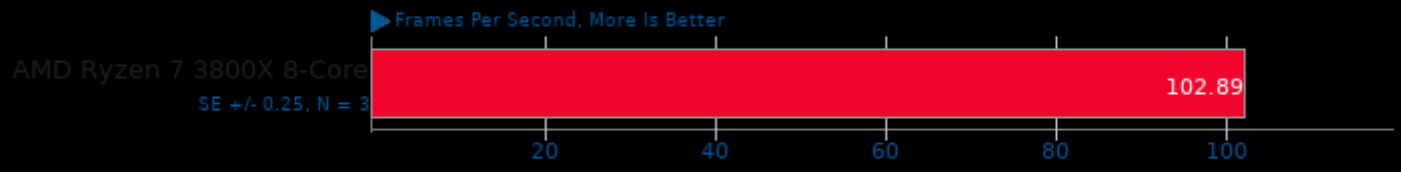
Video Input: Bosphorus 1080p - Video Preset: Ultra Fast



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

x264 2018-09-25

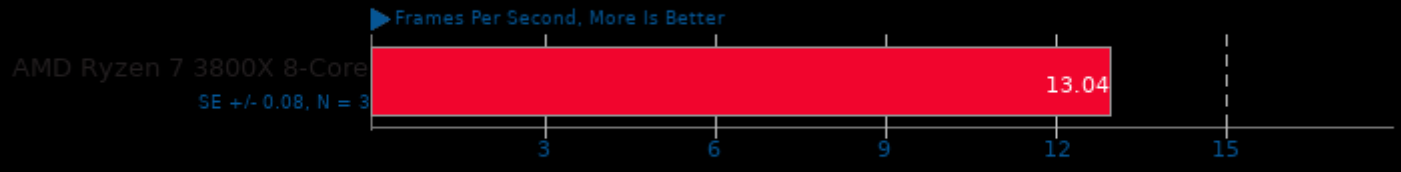
H.264 Video Encoding



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

x265 3.4

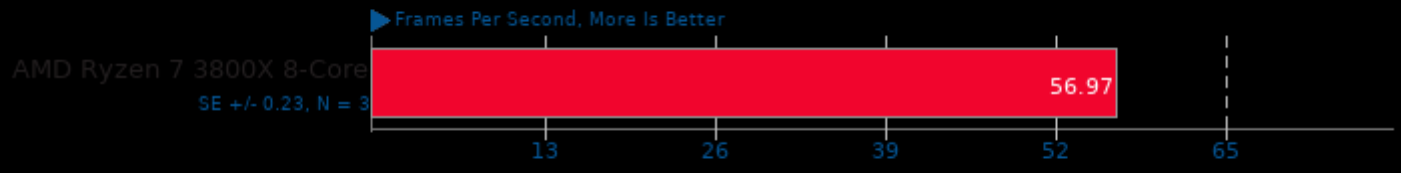
Video Input: Bosphorus 4K



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

x265 3.4

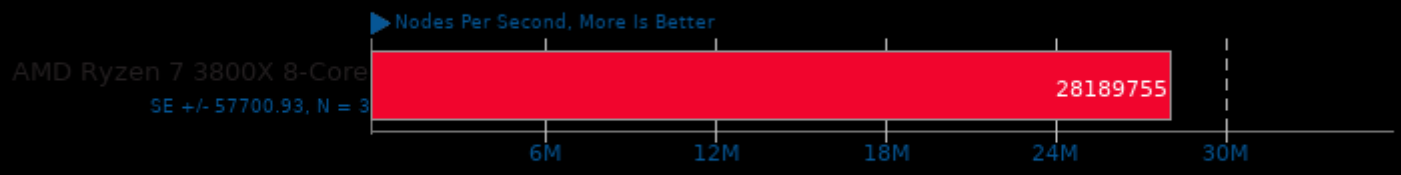
Video Input: Bosphorus 1080p



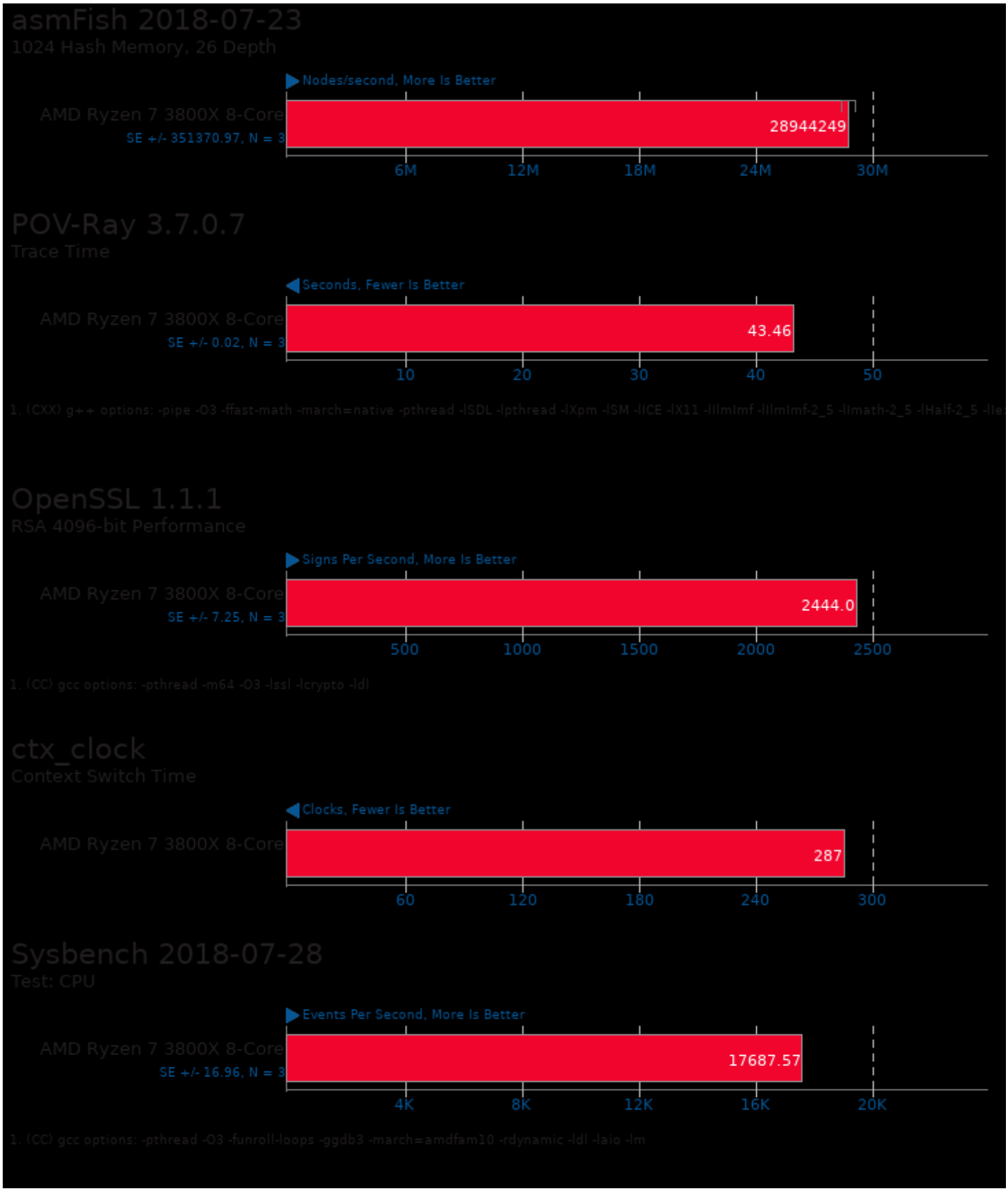
1. (CXX) g++ options: -O3 -rdynamic -lpthread -lrt -ldl -lnuma

Stockfish 9

Total Time



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



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 00:35.