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EPYC 7763 Okt

2 x AMD EPYC 7763 64-Core testing with a AMD DAYTONA_X (RYM1001D BIOS) and ASPEED on Ubuntu 21.04 via the Phoronix Test Suite.

Automated Executive Summary

A had the most wins, coming in first place for 66% of the tests.

Based on the geometric mean of all complete results, the fastest (A) was 1.034x the speed of the slowest (B).

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

PostgreSQL pgbench (Scaling Factor: 100 - Clients: 100 - Mode: Read Write) at 2.144x
PostgreSQL pgbench (Scaling Factor: 100 - Clients: 100 - Mode: Read Write - Average Latency) at 2.143x
PostgreSQL pgbench (Scaling Factor: 1 - Clients: 100 - Mode: Read Only) at 1.733x
PostgreSQL pgbench (Scaling Factor: 1 - Clients: 100 - Mode: Read Only - Average Latency) at 1.732x
PostgreSQL pgbench (Scaling Factor: 100 - Clients: 100 - Mode: Read Only) at 1.518x
PostgreSQL pgbench (Scaling Factor: 100 - Clients: 100 - Mode: Read Only - Average Latency) at 1.508x
PyHPC Benchmarks (Device: CPU - Backend: Numba - Project Size: 65536 - Benchmark: Equation of State) at 1.25x
PostgreSQL pgbench (Scaling Factor: 100 - Clients: 250 - Mode: Read Only - Average Latency) at 1.175x
PostgreSQL pgbench (Scaling Factor: 1 - Clients: 100 - Mode: Read Write - Average Latency) at 1.175x
PostgreSQL pgbench (Scaling Factor: 1 - Clients: 100 - Mode: Read Write) at 1.174x.

Test Systems:

A

B

Processor: 2 x AMD EPYC 7763 64-Core (128 Cores / 256 Threads), Motherboard: AMD DAYTONA_X (RYM1001D BIOS), Chipset: AMD Starship/Matisse, Memory: 504GB, Disk: 3841GB Micron_9300_MTFDHAL3T8TDP, Graphics: ASPEED, Monitor: VE228, Network: 2 x Mellanox MT27710

OS: Ubuntu 21.04, Kernel: 5.14.0-rc7-amd-pstate-phx (x86_64) 20210909, Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Vulkan: 1.0.2, Compiler: GCC 10.3.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --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-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/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-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: CPU Microcode: 0xa001119
Python Notes: Python 3.9.5
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 IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	A	B
PostgreSQL pgbench - 100 - 100 - Read Write (TPS)	**65938**	**30758**
Normalized	100%	46.65%
PostgreSQL pgbench - 100 - 100 - Read Write - Average Latency (ms)	**1.517**	**3.251**
Normalized	100%	46.66%
PostgreSQL pgbench - 1 - 100 - Read Only (TPS)	**1410688**	**814240**
Normalized	100%	57.72%
PostgreSQL pgbench - 1 - 100 - Read Only - Average Latency (ms)	**0.071**	**0.123**
Normalized	100%	57.72%
PostgreSQL pgbench - 100 - 100 - Read Only (TPS)	**1643553**	**1082624**
Normalized	100%	65.87%
PostgreSQL pgbench - 100 - 100 - Read Only - Average Latency (ms)	**0.061**	**0.092**
Normalized	100%	66.3%
PyHPC Benchmarks - CPU - Numba - 65536 - Equation of State (sec)	**0.005**	**0.004**
Normalized	80%	100%
PostgreSQL pgbench - 100 - 250 - Read Only - Average Latency (ms)	**0.114**	**0.134**
Normalized	100%	85.07%

PostgreSQL pgbench - 1 - 100 - Read Write - Average Latency (ms)	27.962	32.846
Normalized	100%	85.13%
PostgreSQL pgbench - 1 - 100 - Read Write (TPS)	3576	3045
Normalized	100%	85.15%
PostgreSQL pgbench - 100 - 250 - Read Write (TPS)	31065	26525
Normalized	100%	85.39%
PostgreSQL pgbench - 100 - 250 - Read Write - Average Latency (ms)	8.048	9.425
Normalized	100%	85.39%
PostgreSQL pgbench - 100 - 250 - Read Only (TPS)	2183429	1867623
Normalized	100%	85.54%
PostgreSQL pgbench - 100 - 500 - Read Only (TPS)	2252892	1929606
Normalized	100%	85.65%
PostgreSQL pgbench - 100 - 500 - Read Only - Average Latency (ms)	0.222	0.259
Normalized	100%	85.71%
AOM AV1 - Speed 8 Realtime - Bosphorus 1080p	116.17	100.79
Normalized	100%	86.76%
Cpuminer-Opt - Deepcoin (kH/s)	93240	81270
Normalized	100%	87.16%
PostgreSQL pgbench - 1 - 500 - Read Only (TPS)	2117465	1848622
Normalized	100%	87.3%
PostgreSQL pgbench - 1 - 500 - Read Only - Average Latency (ms)	0.236	0.27
Normalized	100%	87.41%
Cpuminer-Opt - Blake-2 S (kH/s)	7015370	6174500
Normalized	100%	88.01%
PyHPC Benchmarks - CPU - JAX - 65536 - Isoneutral Mixing (sec)	0.017	0.015
Normalized	88.24%	100%
PostgreSQL pgbench - 1 - 250 - Read Write - Average Latency (ms)	194.424	172.264
Normalized	88.6%	100%
PostgreSQL pgbench - 1 - 250 - Read Write (TPS)	1286	1451
Normalized	88.63%	100%
PostgreSQL pgbench - 1 - 250 - Read Only - Average Latency (ms)	0.12	0.135
Normalized	100%	88.89%
PostgreSQL pgbench - 1 - 250 - Read Only (TPS)	2076011	1856269
Normalized	100%	89.42%
AOM AV1 - Speed 6 Two-Pass - Bosphorus 1080p	26.67	24.4
Normalized	100%	91.49%
PyHPC Benchmarks - CPU - JAX - 1048576 - Equation of State (sec)	0.011	0.012
Normalized	100%	91.67%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	32.9	35.8
Normalized	91.9%	100%
RAR Compression - L.S.T.A.T.R (sec)	89.655	82.563
Normalized	92.09%	100%

PyHPC Benchmarks - CPU - JAX - 4194304 - Isoneutral Mixing (sec)	0.69	0.636
Normalized	92.17%	100%
PostgreSQL pgbench - 1 - 500 - Read Write (TPS)	552	588
Normalized	93.88%	100%
AOM AV1 - Speed 6 Realtime - Bosphorus 4K (FPS)	8.9	9.48
Normalized	93.88%	100%
PostgreSQL pgbench - 1 - 500 - Read Write - Average Latency (ms)	905.188	850.892
Normalized	94%	100%
Nginx - Short Connection - 1000 (Reqs/sec)	16360	17126
Normalized	95.53%	100%
PyHPC Benchmarks - CPU - JAX - 1048576 - Isoneutral Mixing (sec)	0.131	0.137
Normalized	100%	95.62%
Cpuminer-Opt - Ringcoin (kH/s)	2950	2847
Normalized	100%	96.49%
PyHPC Benchmarks - CPU - JAX - 262144 - Isoneutral Mixing (sec)	0.029	0.028
Normalized	96.55%	100%
AOM AV1 - Speed 10 Realtime - Bosphorus 4K (FPS)	52.18	54.03
Normalized	96.58%	100%
PyHPC Benchmarks - CPU - PyTorch - 4194304 - Equation of State (sec)	0.121	0.117
Normalized	96.69%	100%
Kvazaar - Bosphorus 1080p - Very Fast (FPS)	187.52	193.88
Normalized	96.72%	100%
PyHPC Benchmarks - CPU - Numpy - 1048576 - Equation of State (sec)	0.205	0.199
Normalized	97.07%	100%
AOM AV1 - Speed 6 Two-Pass - Bosphorus 4K (FPS)	10.53	10.84
Normalized	97.14%	100%
Cpuminer-Opt - Skeincoin (kH/s)	1258760	1223070
Normalized	100%	97.16%
Zstd Compression - 19 - Compression Speed (MB/s)	75.8	78
Normalized	97.18%	100%
PostgreSQL pgbench - 100 - 500 - Read Write - Average Latency (ms)	21.618	21.027
Normalized	97.27%	100%
PostgreSQL pgbench - 100 - 500 - Read Write (TPS)	23129	23778
Normalized	97.27%	100%
PyHPC Benchmarks - CPU - PyTorch - 262144 - Isoneutral Mixing (sec)	0.076	0.074
Normalized	97.37%	100%
Kvazaar - Bosphorus 4K - Very Fast (FPS)	58.7	57.2
Normalized	100%	97.44%
Zstd Compression - 8, Long Mode - D.S (MB/s)	3596	3505
Normalized	100%	97.49%
Zstd Compression - 19, Long Mode - D.S (MB/s)	3162	3088
Normalized	100%	97.65%

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PyHPC Benchmarks - CPU - Numpy - 262144 - Isoneutral Mixing (sec)	0.135	0.132
Normalized	97.78%	100%
Cpuminer-Opt - T.S.2.O (kH/s)	2956780	2891680
Normalized	100%	97.8%
PyHPC Benchmarks - CPU - Theano - 1048576 - Equation of State (sec)	0.094	0.096
Normalized	100%	97.92%
AOM AV1 - Speed 9 Realtime - Bosphorus 1080p	126.62	129.18
Normalized	98.02%	100%
PyHPC Benchmarks - CPU - TensorFlow - 4194304 - Equation of State (sec)	0.155	0.152
Normalized	98.06%	100%
PyHPC Benchmarks - CPU - Numpy - 262144 - Equation of State (sec)	0.055	0.054
Normalized	98.18%	100%
Kvazaar - Bosphorus 4K - Medium (FPS)	30.95	30.39
Normalized	100%	98.19%
Cpuminer-Opt - Magi (kH/s)	5852	5951
Normalized	98.33%	100%
PyHPC Benchmarks - CPU - PyTorch - 4194304 - Isoneutral Mixing (sec)	1.586	1.609
Normalized	100%	98.57%
Kvazaar - Bosphorus 1080p - Ultra Fast (FPS)	228.09	225.16
Normalized	100%	98.72%
PyHPC Benchmarks - CPU - Theano - 262144 - Isoneutral Mixing (sec)	0.081	0.082
Normalized	100%	98.78%
GIMP - auto-levels (sec)	16.606	16.415
Normalized	98.85%	100%
Nginx - Long Connection - 1000 (Reqs/sec)	169586	167751
Normalized	100%	98.92%
Cpuminer-Opt - Myriad-Groestl (kH/s)	10280	10390
Normalized	98.94%	100%
Cpuminer-Opt - Q.S.2.P (kH/s)	1005410	1016070
Normalized	98.95%	100%
PyHPC Benchmarks - CPU - Numpy - 1048576 - Isoneutral Mixing (sec)	0.572	0.566
Normalized	98.95%	100%
Cpuminer-Opt - x25x (kH/s)	3063	3033
Normalized	100%	99.02%
GIMP - unsharp-mask (sec)	21.972	21.76
Normalized	99.04%	100%
OpenSSL (sign/s)	28454	28186
Normalized	100%	99.06%
AOM AV1 - Speed 4 Two-Pass - Bosphorus 4K (FPS)	5.4	5.35
Normalized	100%	99.07%
Nginx - Long Connection - 500 (Reqs/sec)	183662	181977
Normalized	100%	99.08%
GIMP - rotate (sec)	13.553	13.439
Normalized	99.16%	100%

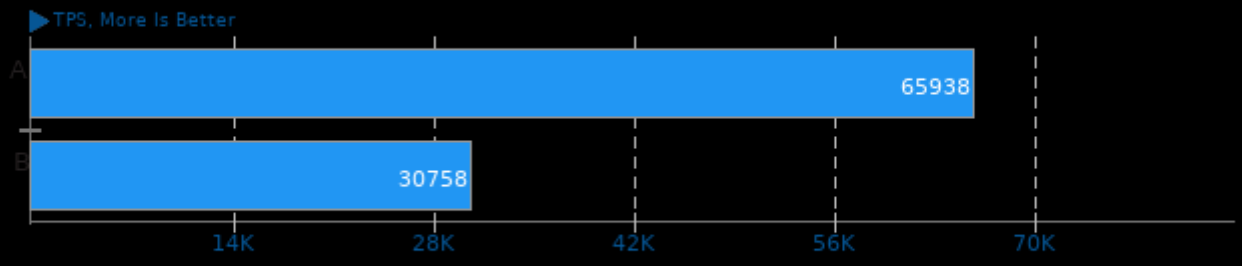
PyHPC Benchmarks - CPU - Theano - 1048576 - Isoneutral Mixing (sec)	0.373	0.376
Normalized	100%	99.2%
PyHPC Benchmarks - CPU - Numba - 4194304 - Isoneutral Mixing (sec)	1.43	1.419
Normalized	99.23%	100%
Timed LLVM Compilation - Ninja (sec)	98.457	99.219
Normalized	100%	99.23%
Timed LLVM Compilation - Unix Makefiles (sec)	182.052	183.421
Normalized	100%	99.25%
PyHPC Benchmarks - CPU - Numpy - 4194304 - Isoneutral Mixing (sec)	2.339	2.356
Normalized	100%	99.28%
Kvazaar - Bosphorus 4K - Ultra Fast (FPS)	60.14	60.57
Normalized	99.29%	100%
Cpuminer-Opt - Garlicoin (kH/s)	24160	24330
Normalized	99.3%	100%
Nginx - Short Connection - 500 (Reqs/sec)	39351	39599
Normalized	99.37%	100%
Kvazaar - Bosphorus 1080p - Medium (FPS)	88.5	89.05
Normalized	99.38%	100%
Cpuminer-Opt - LBC, LBRY Credits (kH/s)	321850	323810
Normalized	99.39%	100%
AOM AV1 - Speed 4 Two-Pass - Bosphorus 1080p	8.28	8.33
Normalized	99.4%	100%
Zstd Compression - 3, Long Mode - D.S (MB/s)	3330	3311
Normalized	100%	99.41%
PyHPC Benchmarks - CPU - PyTorch - 1048576 - Isoneutral Mixing (sec)	0.343	0.345
Normalized	100%	99.42%
OpenSSL (verify/s)	1842543	1832365
Normalized	100%	99.45%
Kvazaar - Bosphorus 1080p - Slow (FPS)	89.49	89
Normalized	100%	99.45%
Zstd Compression - 8 - Compression Speed (MB/s)	2742	2757
Normalized	99.47%	100%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	317.9	316.3
Normalized	100%	99.5%
PyHPC Benchmarks - CPU - Numpy - 4194304 - Equation of State (sec)	1.14	1.145
Normalized	100%	99.56%
Kvazaar - Bosphorus 4K - Slow (FPS)	30.72	30.59
Normalized	100%	99.58%
Zstd Compression - 3 - Compression Speed (MB/s)	6302	6326
Normalized	99.61%	100%
ASTC Encoder - Thorough (sec)	5.5361	5.5574
Normalized	100%	99.62%
Zstd Compression - 19 - D.S (MB/s)	3039	3027
Normalized	100%	99.63%
AOM AV1 - Speed 10 Realtime - Bosphorus 1080p	143.49	143.98
Normalized	99.66%	100%

Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	288.1	289
Normalized	99.69%	100%
PyHPC Benchmarks - CPU - Numba - 1048576 - Isoneutral Mixing (sec)	0.34	0.341
Normalized	100%	99.71%
AOM AV1 - Speed 9 Realtime - Bosphorus 4K (FPS)	49.01	48.87
Normalized	100%	99.71%
PyHPC Benchmarks - CPU - Theano - 4194304 - Equation of State (sec)	0.375	0.374
Normalized	99.73%	100%
AOM AV1 - Speed 6 Realtime - Bosphorus 1080p	7.53	7.51
Normalized	100%	99.73%
ASTC Encoder - Exhaustive (sec)	5.9083	5.8966
Normalized	99.8%	100%
AOM AV1 - Speed 8 Realtime - Bosphorus 4K (FPS)	40.61	40.55
Normalized	100%	99.85%
GIMP - resize (sec)	9.844	9.833
Normalized	99.89%	100%
ASTC Encoder - Medium (sec)	4.2684	4.2718
Normalized	100%	99.92%
Zstd Compression - 3 - D.S (MB/s)		3134
PyHPC Benchmarks - CPU - TensorFlow - 1048576 - Equation of State (sec)	0.032	0.032
PyHPC Benchmarks - CPU - TensorFlow - 262144 - Equation of State (sec)	0.007	0.007
PyHPC Benchmarks - CPU - TensorFlow - 65536 - Equation of State (sec)	0.003	0.003
PyHPC Benchmarks - CPU - TensorFlow - 16384 - Equation of State (sec)	0.001	0.001
PyHPC Benchmarks - CPU - PyTorch - 1048576 - Equation of State (sec)	0.026	0.026
PyHPC Benchmarks - CPU - Theano - 4194304 - Isoneutral Mixing (sec)	1.573	1.573
PyHPC Benchmarks - CPU - PyTorch - 262144 - Equation of State (sec)	0.006	0.006
PyHPC Benchmarks - CPU - Theano - 262144 - Equation of State (sec)	0.023	0.023
PyHPC Benchmarks - CPU - PyTorch - 65536 - Isoneutral Mixing (sec)	0.02	0.02
PyHPC Benchmarks - CPU - PyTorch - 65536 - Equation of State (sec)	0.002	0.002
PyHPC Benchmarks - CPU - PyTorch - 16384 - Isoneutral Mixing (sec)	0.005	0.005
PyHPC Benchmarks - CPU - Numba - 4194304 - Equation of State (sec)	0.268	0.268
PyHPC Benchmarks - CPU - Numba - 1048576 - Equation of State (sec)	0.067	0.067

PyHPC Benchmarks - CPU - Theano - 65536 - Isoneutral Mixing (sec)	0.023	0.023
PyHPC Benchmarks - CPU - Theano - 65536 - Equation of State (sec)	0.006	0.006
PyHPC Benchmarks - CPU - Theano - 16384 - Isoneutral Mixing (sec)	0.005	0.005
PyHPC Benchmarks - CPU - Theano - 16384 - Equation of State (sec)	0.002	0.002
PyHPC Benchmarks - CPU - Numba - 262144 - Isoneutral Mixing (sec)	0.074	0.074
PyHPC Benchmarks - CPU - Numba - 262144 - Equation of State (sec)	0.016	0.016
PyHPC Benchmarks - CPU - Numpy - 65536 - Isoneutral Mixing (sec)	0.034	0.034
PyHPC Benchmarks - CPU - Numpy - 65536 - Equation of State (sec)	0.015	0.015
PyHPC Benchmarks - CPU - Numpy - 16384 - Isoneutral Mixing (sec)	0.008	0.008
PyHPC Benchmarks - CPU - Numpy - 16384 - Equation of State (sec)	0.003	0.003
PyHPC Benchmarks - CPU - Numba - 65536 - Isoneutral Mixing (sec)	0.019	0.019
PyHPC Benchmarks - CPU - Numba - 16384 - Isoneutral Mixing (sec)	0.004	0.004
PyHPC Benchmarks - CPU - Numba - 16384 - Equation of State (sec)	0.001	0.001
PyHPC Benchmarks - CPU - JAX - 4194304 - Equation of State (sec)	0.06	0.06
PyHPC Benchmarks - CPU - JAX - 262144 - Equation of State (sec)	0.003	0.003
PyHPC Benchmarks - CPU - JAX - 65536 - Equation of State (sec)	0.001	0.001
PyHPC Benchmarks - CPU - JAX - 16384 - Isoneutral Mixing (sec)	0.003	0.003
PyHPC Benchmarks - CPU - JAX - 16384 - Equation of State (sec)	0.001	0.001
AOM AV1 - Speed 0 Two-Pass - Bosphorus 1080p	0.35	0.35
AOM AV1 - Speed 0 Two-Pass - Bosphorus 4K (FPS)	0.19	0.19

PostgreSQL pgbench 14.0

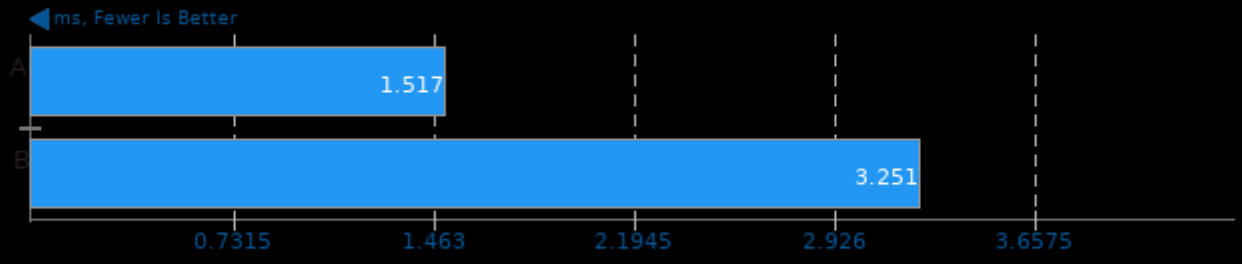
Scaling Factor: 100 - Clients: 100 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

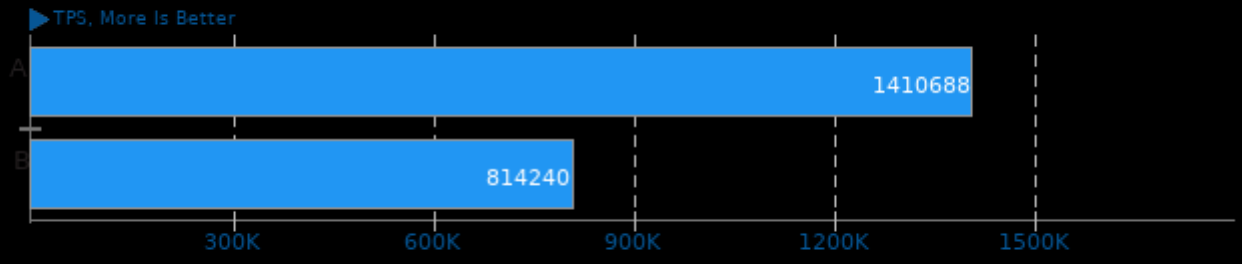
Scaling Factor: 100 - Clients: 100 - Mode: Read Write - Average Latency



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PostgreSQL pgbench 14.0

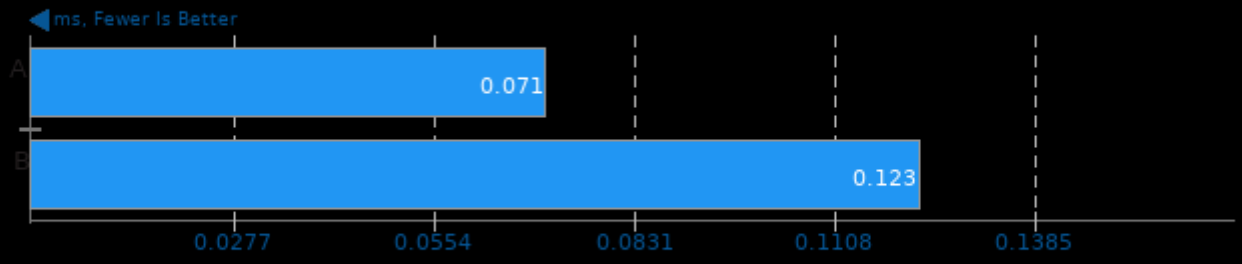
Scaling Factor: 1 - Clients: 100 - Mode: Read Only



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PostgreSQL pgbench 14.0

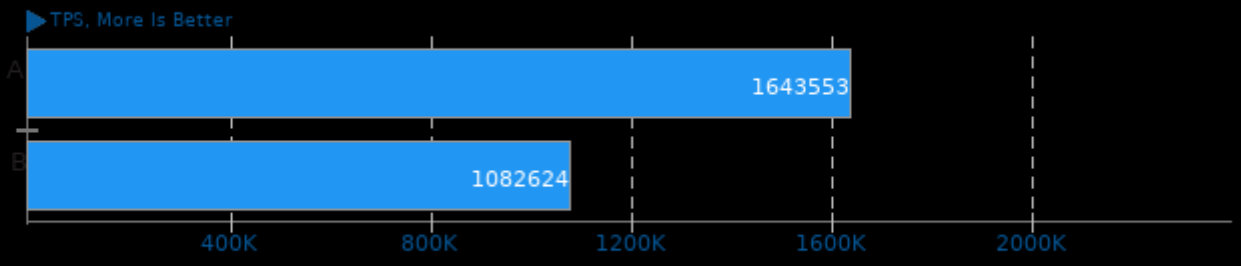
Scaling Factor: 1 - Clients: 100 - Mode: Read Only - Average Latency



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PostgreSQL pgbench 14.0

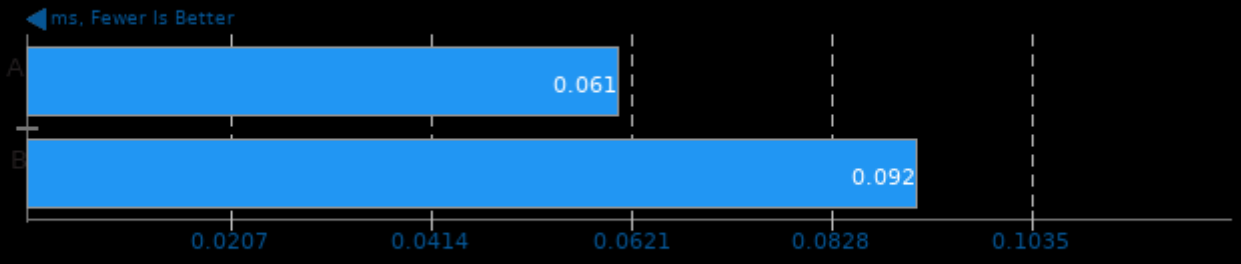
Scaling Factor: 100 - Clients: 100 - Mode: Read Only



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PostgreSQL pgbench 14.0

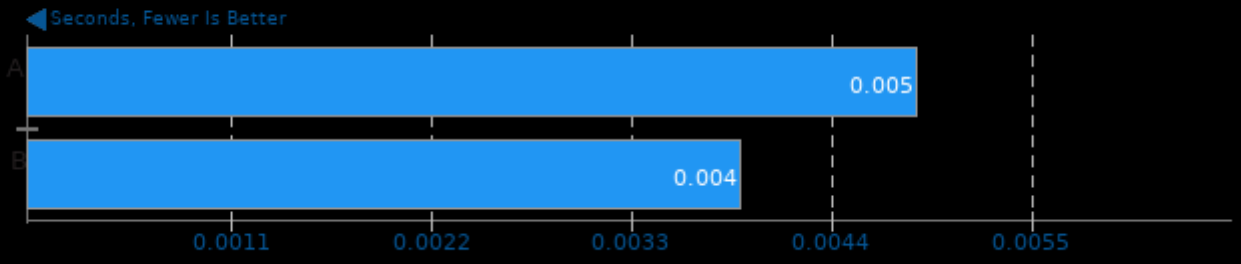
Scaling Factor: 100 - Clients: 100 - Mode: Read Only - Average Latency



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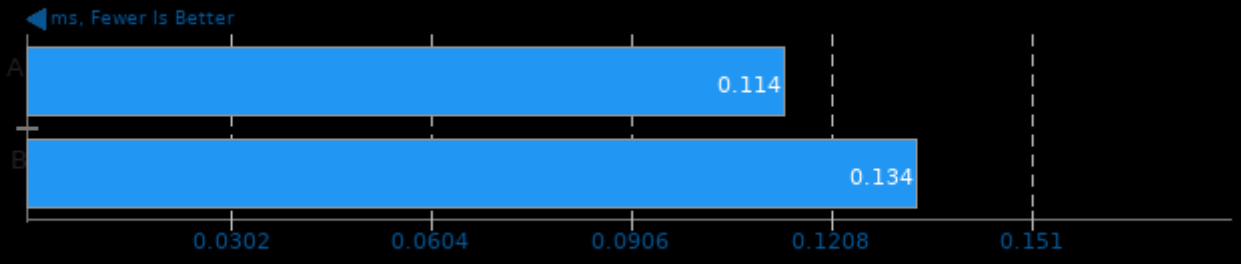
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numba - Project Size: 65536 - Benchmark: Equation of State



PostgreSQL pgbench 14.0

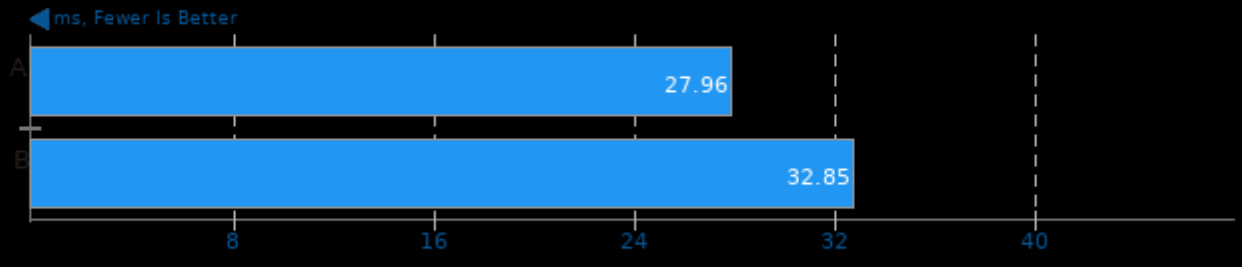
Scaling Factor: 100 - Clients: 250 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

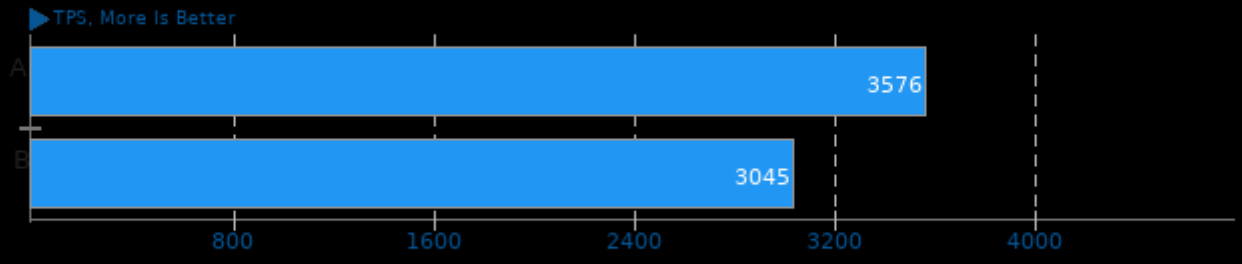
Scaling Factor: 1 - Clients: 100 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

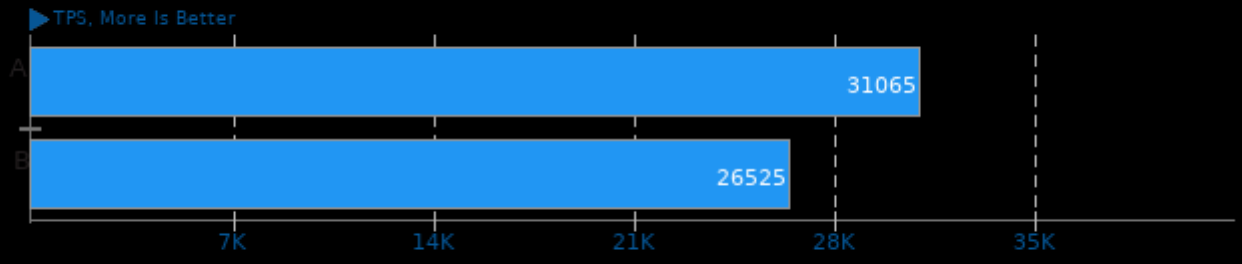
Scaling Factor: 1 - Clients: 100 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

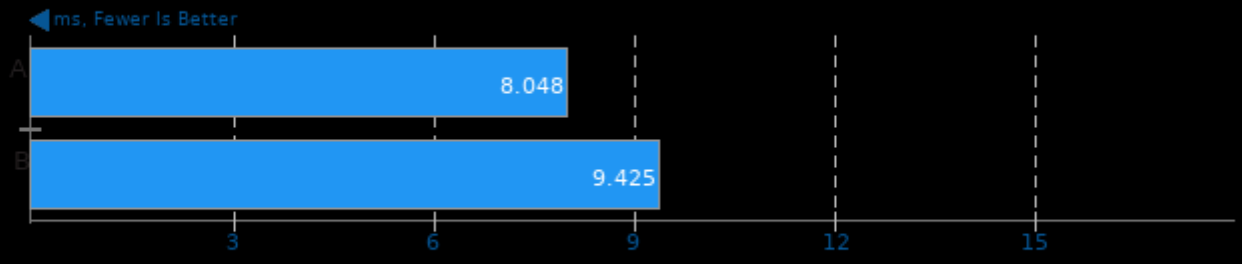
Scaling Factor: 100 - Clients: 250 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

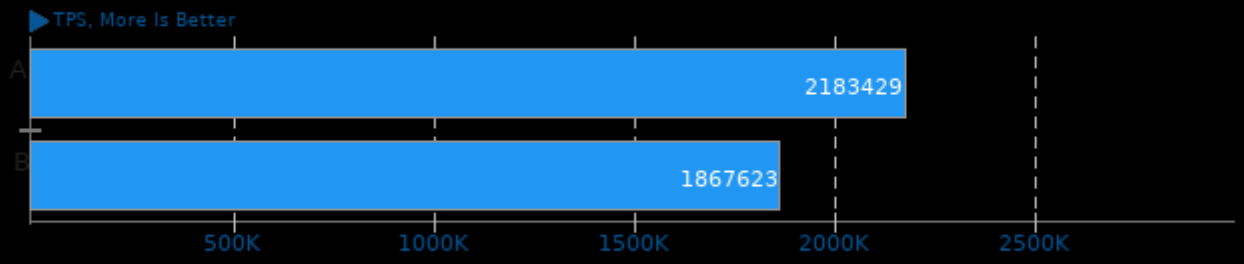
Scaling Factor: 100 - Clients: 250 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

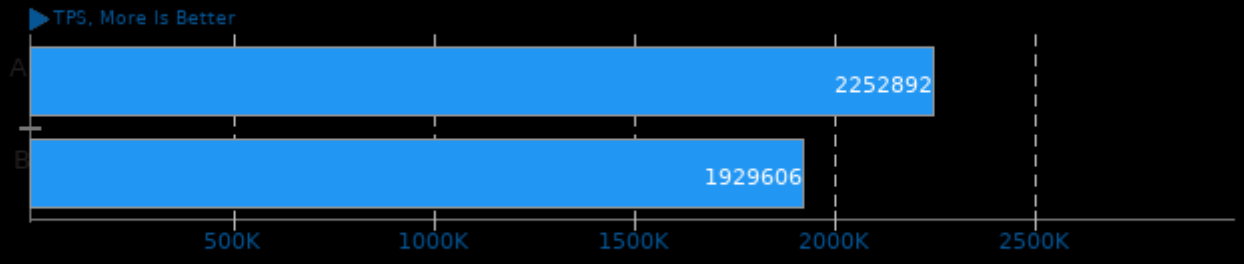
Scaling Factor: 100 - Clients: 250 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

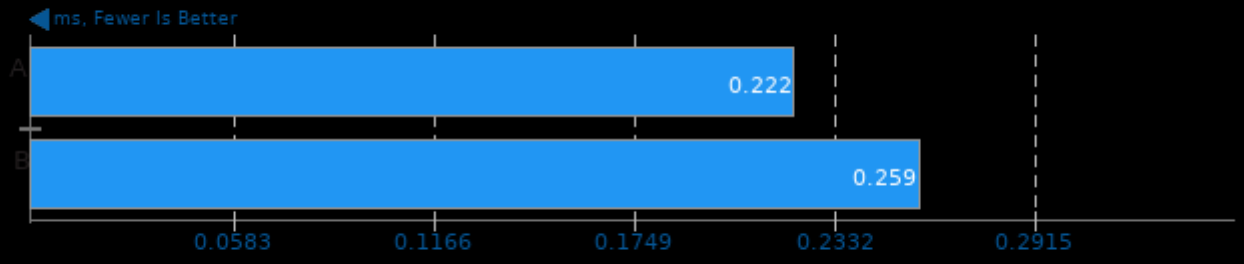
Scaling Factor: 100 - Clients: 500 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

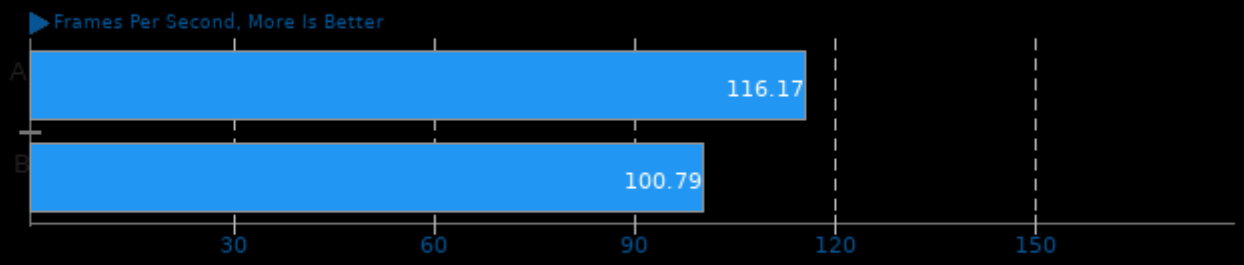
Scaling Factor: 100 - Clients: 500 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

AOM AV1 3.2

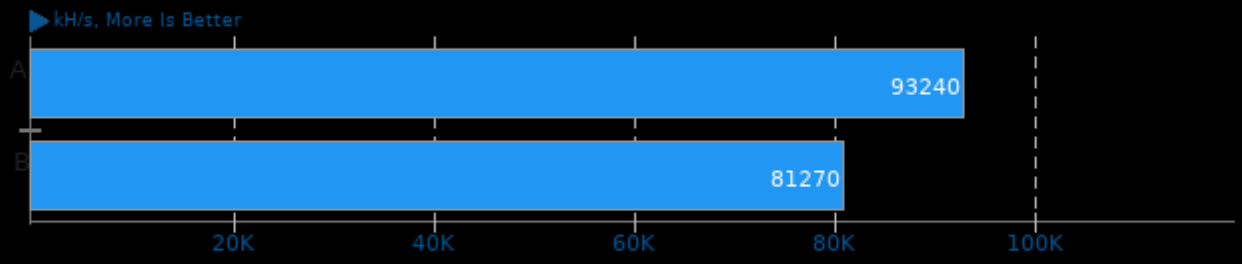
Encoder Mode: Speed 8 Realtime - Input: Bosphorus 1080p



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

Cpuminer-Opt 3.18

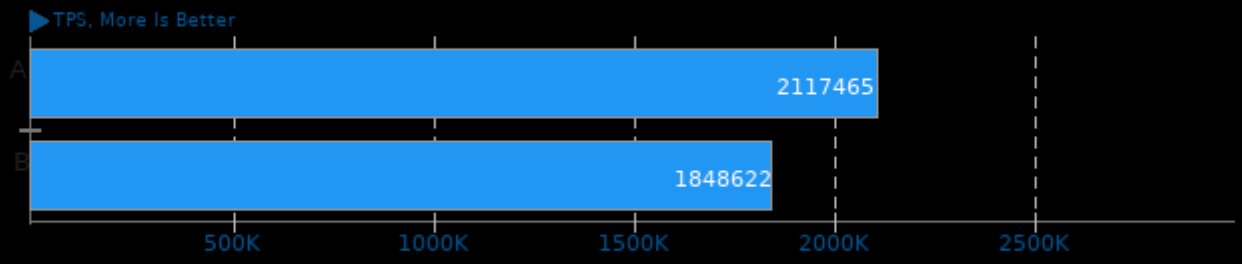
Algorithm: Deepcoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

PostgreSQL pgbench 14.0

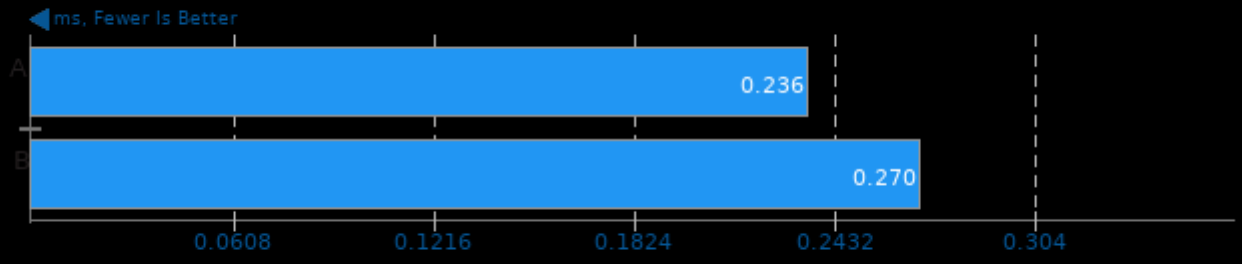
Scaling Factor: 1 - Clients: 500 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

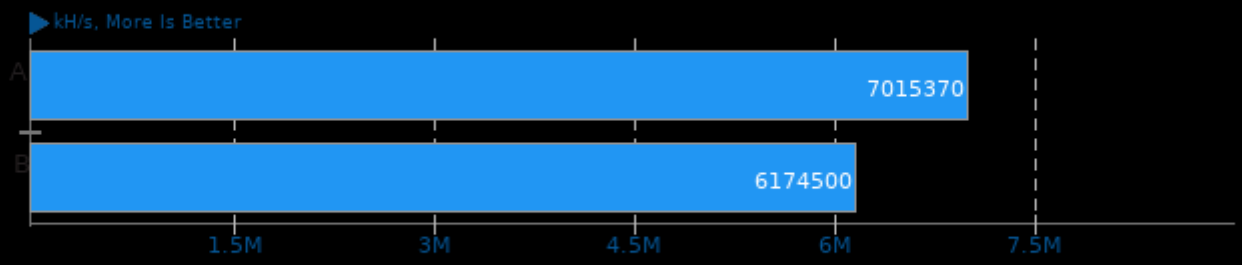
Scaling Factor: 1 - Clients: 500 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

Cpuminer-Opt 3.18

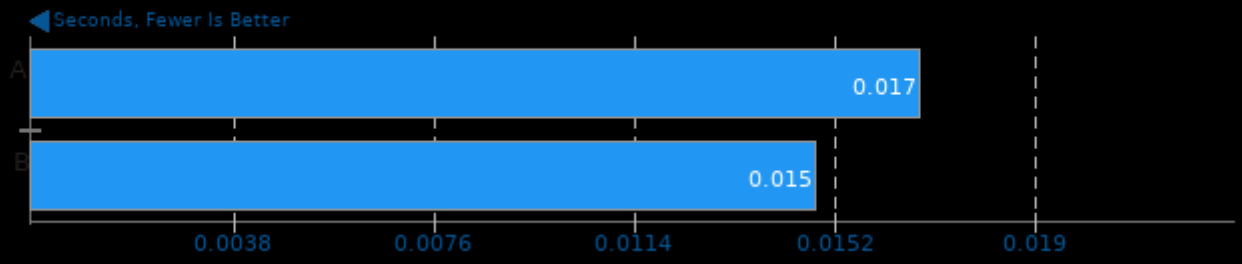
Algorithm: Blake-2 S



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

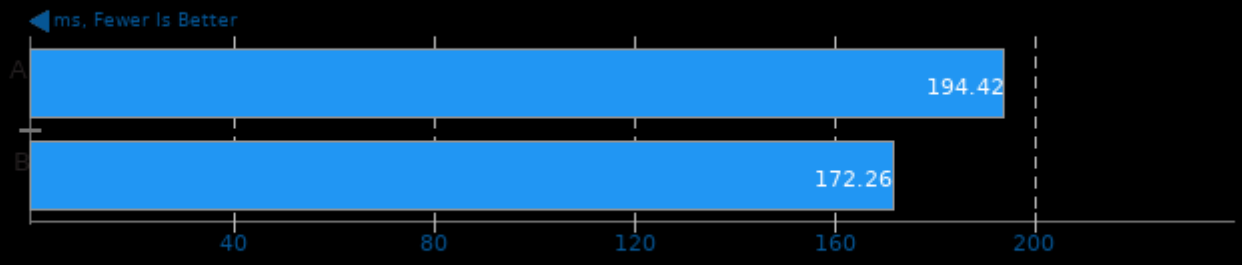
PyHPC Benchmarks 2.1

Device: CPU - Backend: JAX - Project Size: 65536 - Benchmark: Isoneutral Mixing



PostgreSQL pgbench 14.0

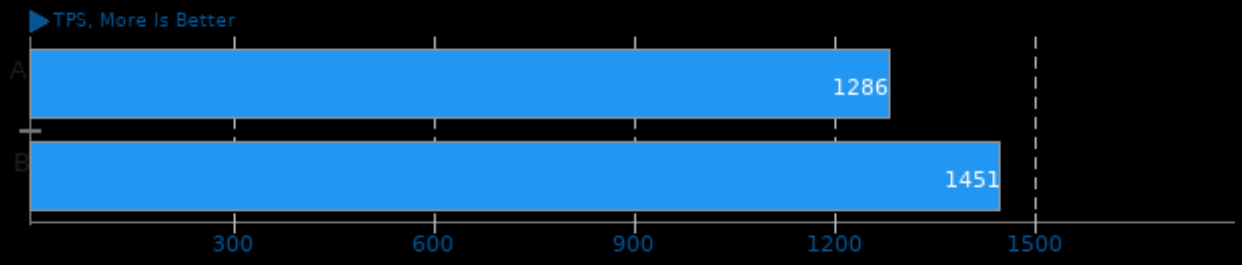
Scaling Factor: 1 - Clients: 250 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

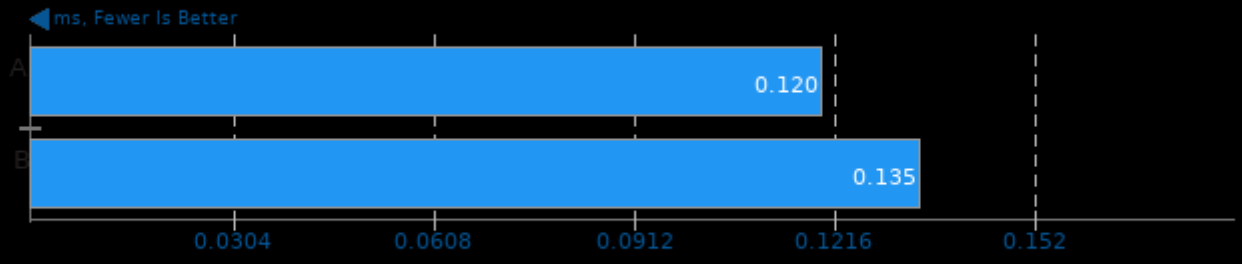
Scaling Factor: 1 - Clients: 250 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

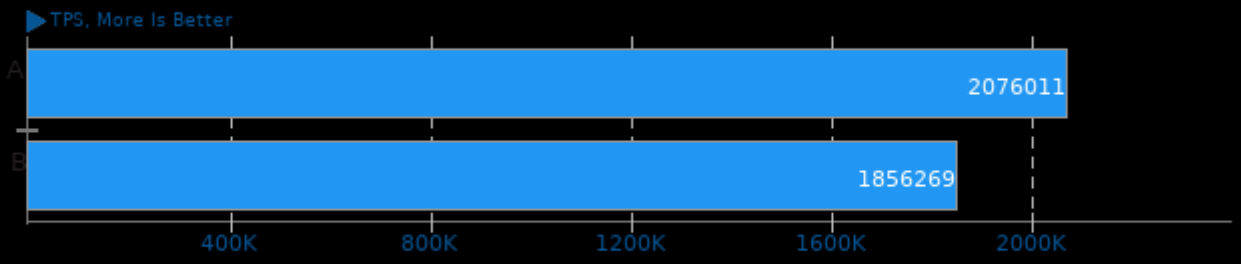
Scaling Factor: 1 - Clients: 250 - Mode: Read Only - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

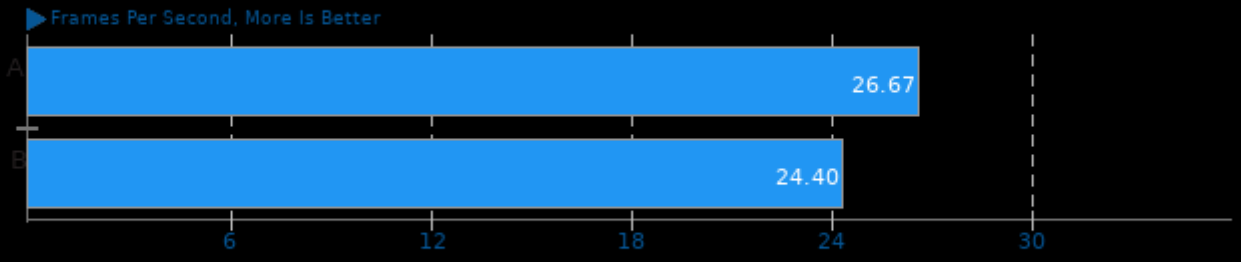
Scaling Factor: 1 - Clients: 250 - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

AOM AV1 3.2

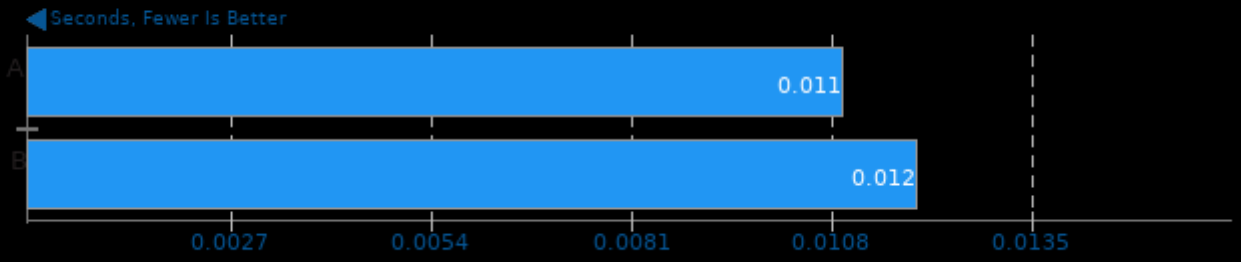
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 1080p



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

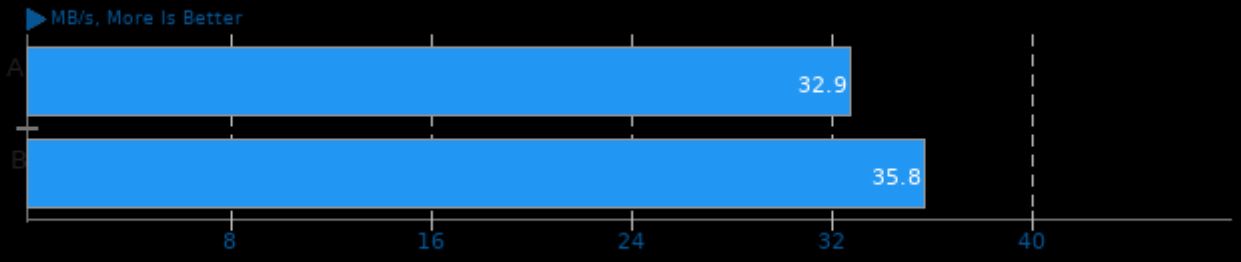
PyHPC Benchmarks 2.1

Device: CPU - Backend: JAX - Project Size: 1048576 - Benchmark: Equation of State



Zstd Compression

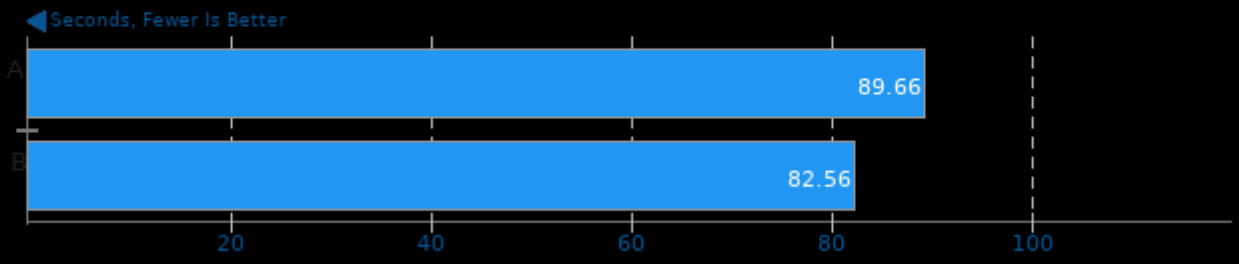
Compression Level: 19, Long Mode - Compression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

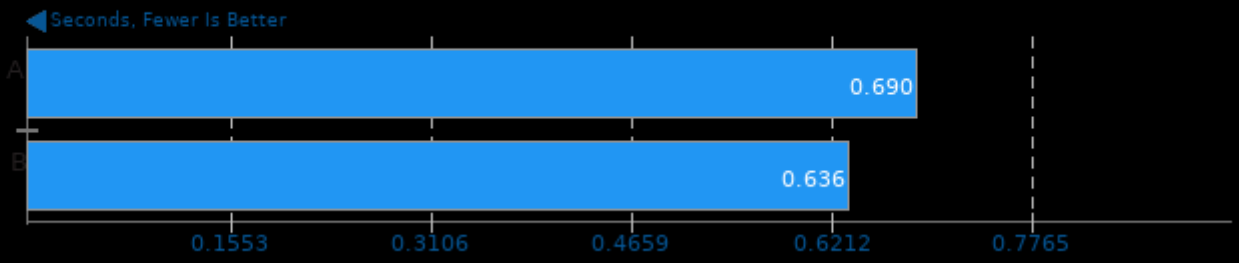
RAR Compression 6.0.2

Linux Source Tree Archiving To RAR



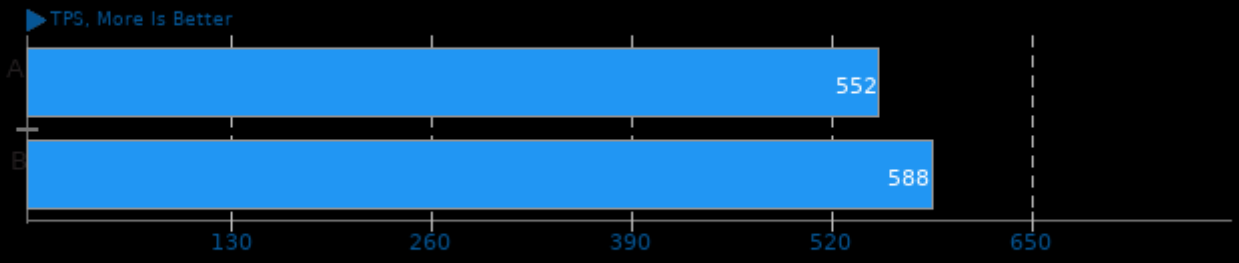
PyHPC Benchmarks 2.1

Device: CPU - Backend: JAX - Project Size: 4194304 - Benchmark: Isoneutral Mixing



PostgreSQL pgbench 14.0

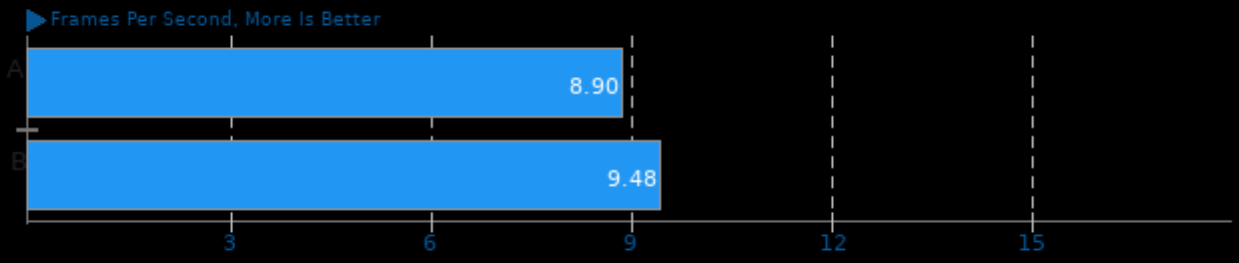
Scaling Factor: 1 - Clients: 500 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

AOM AV1 3.2

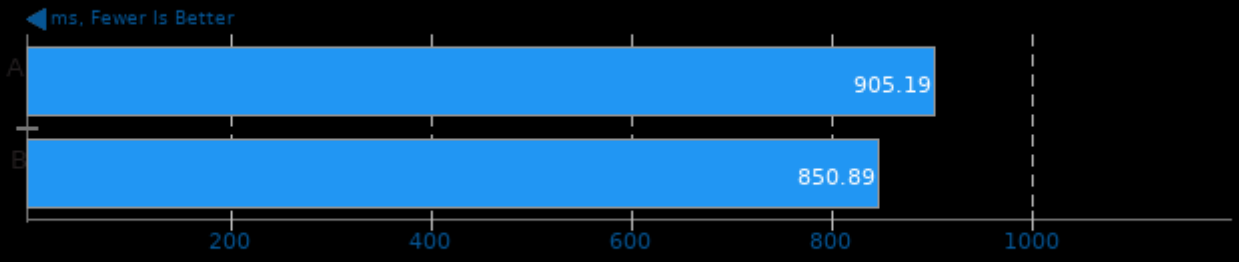
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 4K



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

PostgreSQL pgbench 14.0

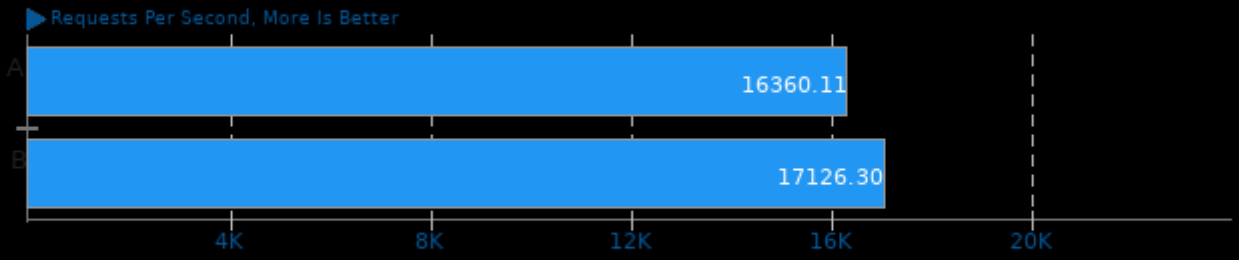
Scaling Factor: 1 - Clients: 500 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

Nginx

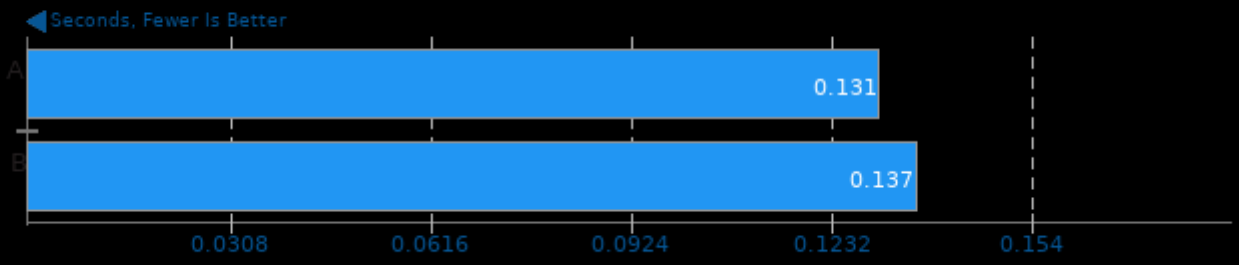
Test: Short Connection - Connections: 1000



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

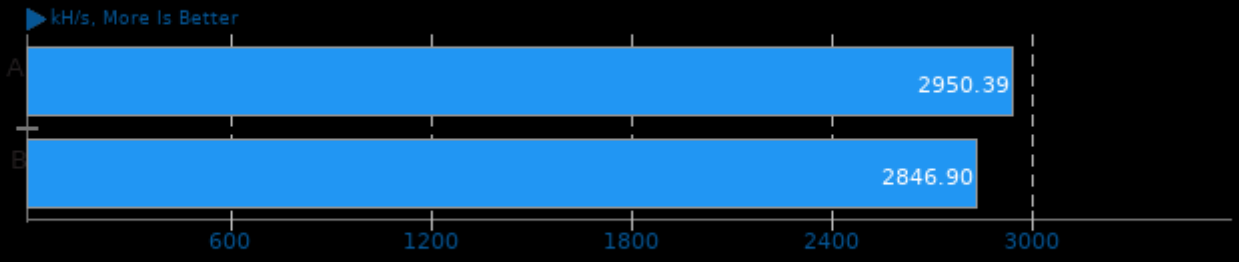
PyHPC Benchmarks 2.1

Device: CPU - Backend: JAX - Project Size: 1048576 - Benchmark: Isoneutral Mixing



Cpuminer-Opt 3.18

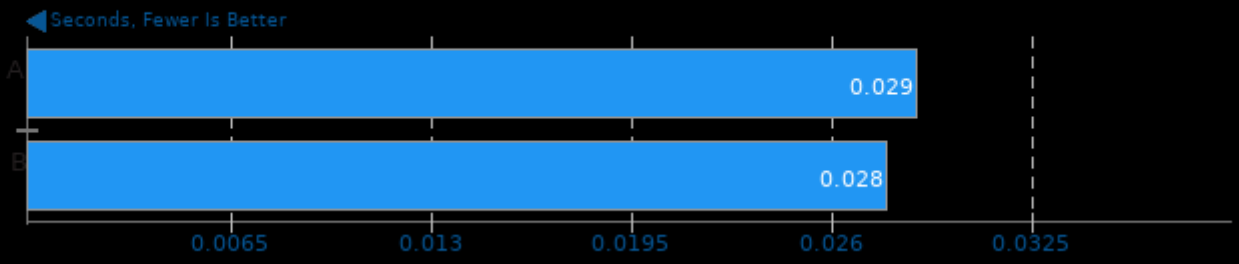
Algorithm: Ringcoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

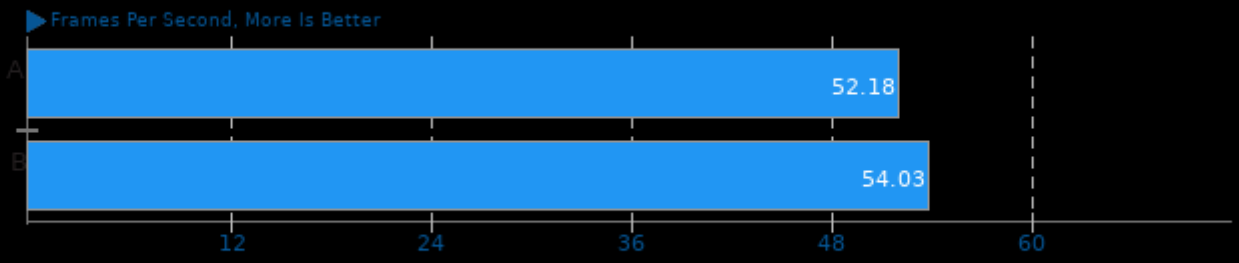
PyHPC Benchmarks 2.1

Device: CPU - Backend: JAX - Project Size: 262144 - Benchmark: Isoneutral Mixing



AOM AV1 3.2

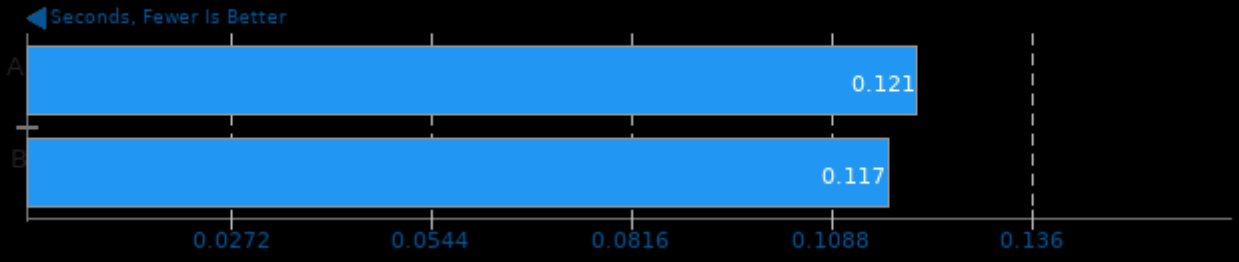
Encoder Mode: Speed 10 Realtime - Input: Bosphorus 4K



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

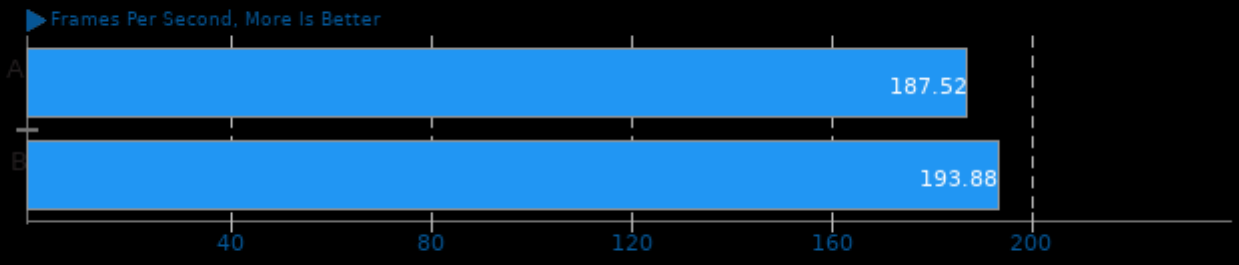
PyHPC Benchmarks 2.1

Device: CPU - Backend: PyTorch - Project Size: 4194304 - Benchmark: Equation of State



Kvazaar 2.1

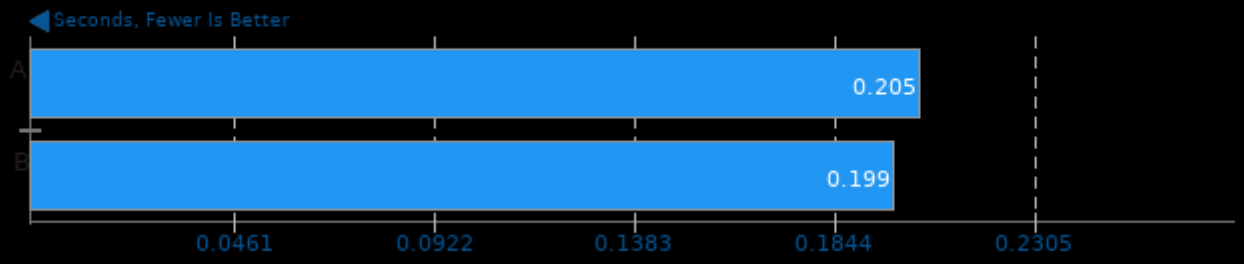
Video Input: Bosphorus 1080p - Video Preset: Very Fast



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

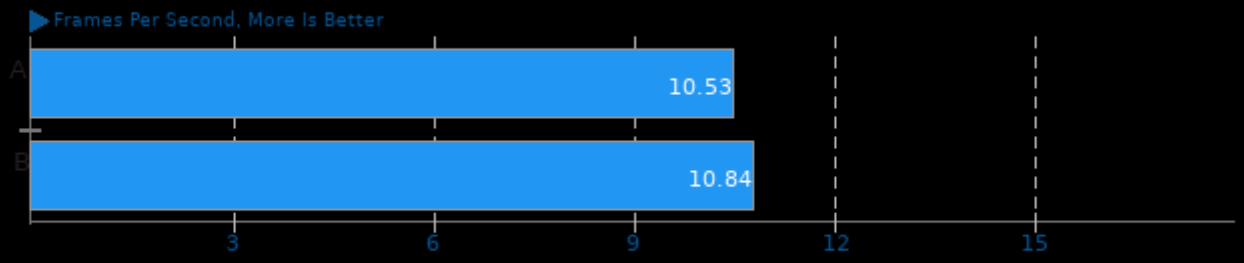
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numpy - Project Size: 1048576 - Benchmark: Equation of State



AOM AV1 3.2

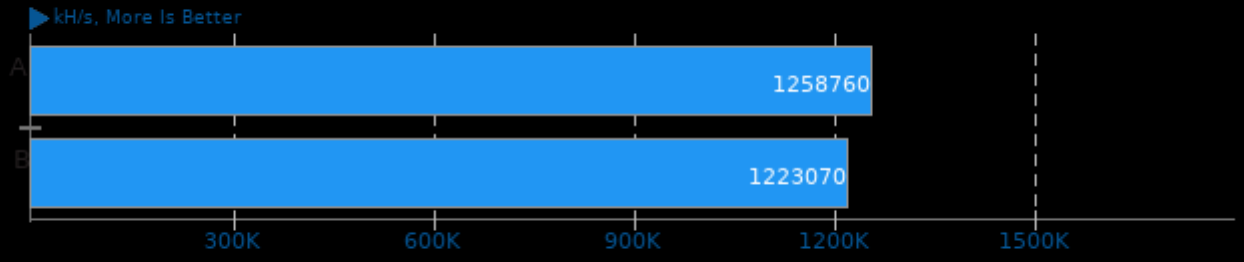
Encoder Mode: Speed 6 Two-Pass - Input: Bosphorus 4K



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

Cpuminer-Opt 3.18

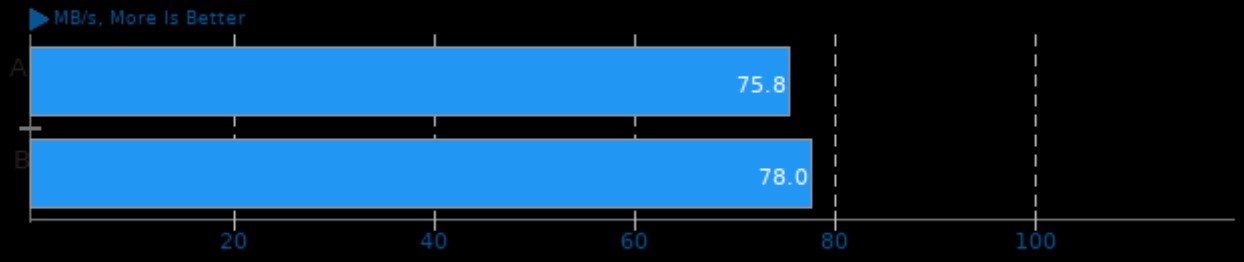
Algorithm: Skeincoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Zstd Compression

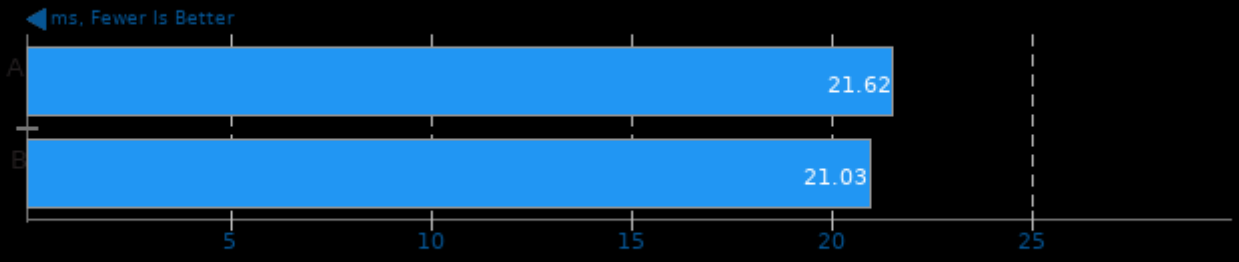
Compression Level: 19 - Compression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

PostgreSQL pgbench 14.0

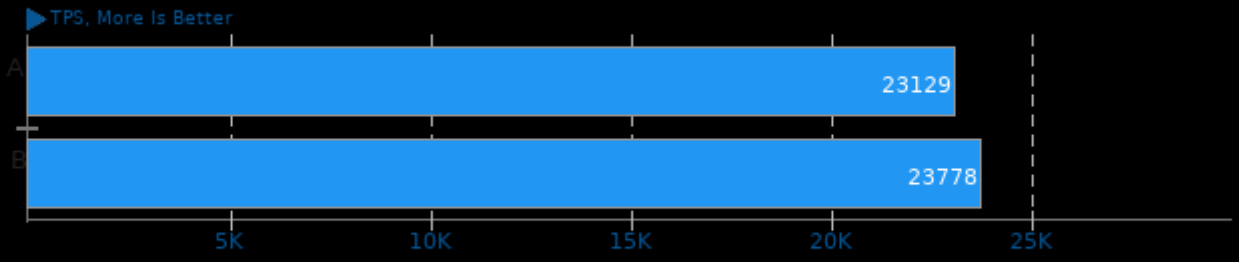
Scaling Factor: 100 - Clients: 500 - Mode: Read Write - Average Latency



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

PostgreSQL pgbench 14.0

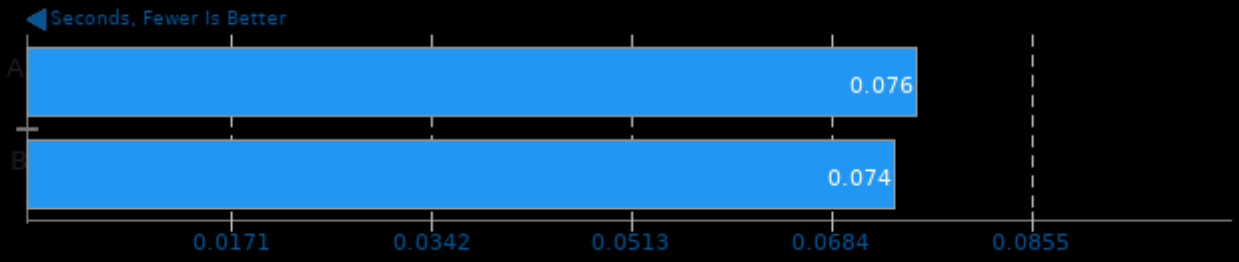
Scaling Factor: 100 - Clients: 500 - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

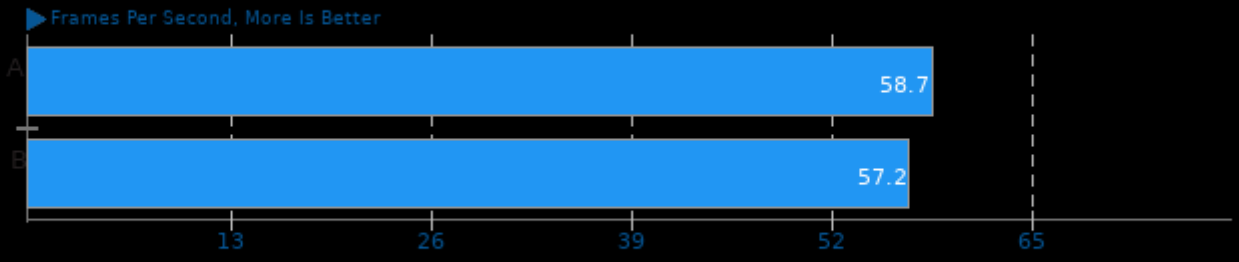
PyHPC Benchmarks 2.1

Device: CPU - Backend: PyTorch - Project Size: 262144 - Benchmark: Isoneutral Mixing



Kvazaar 2.1

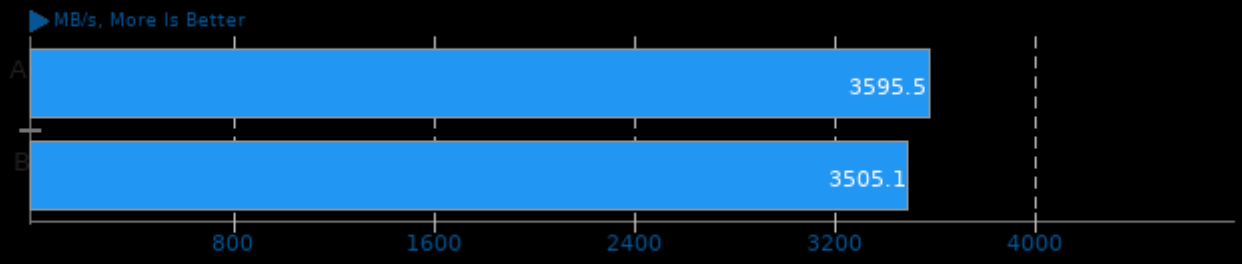
Video Input: Bosphorus 4K - Video Preset: Very Fast



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

Zstd Compression

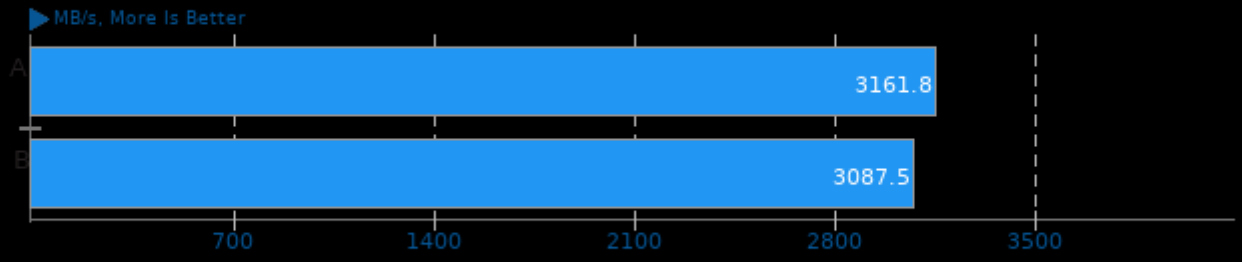
Compression Level: 8, Long Mode - Decompression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

Zstd Compression

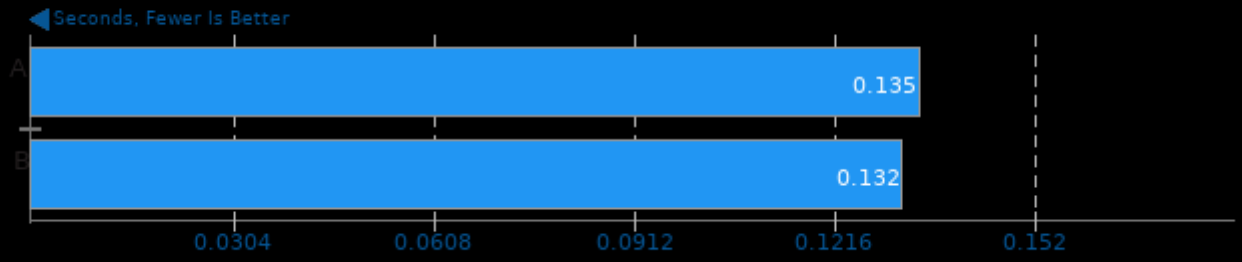
Compression Level: 19, Long Mode - Decompression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

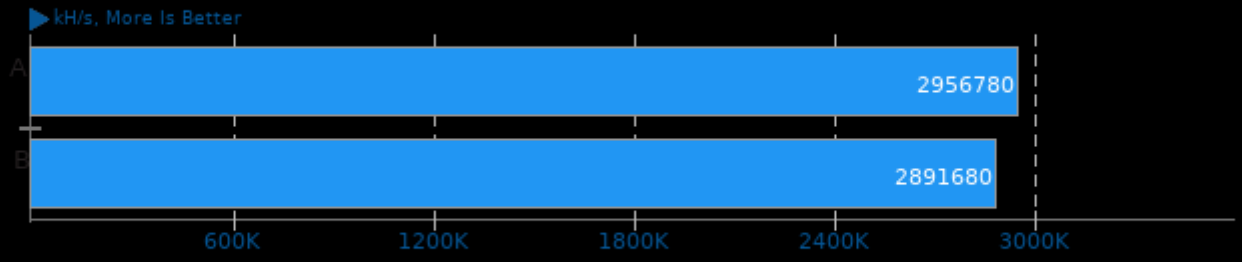
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numpy - Project Size: 262144 - Benchmark: Isoneutral Mixing



Cpuminer-Opt 3.18

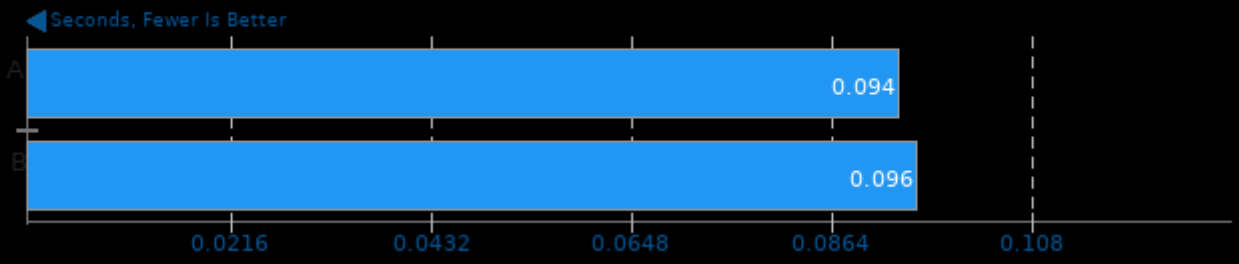
Algorithm: Triple SHA-256, Onecoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

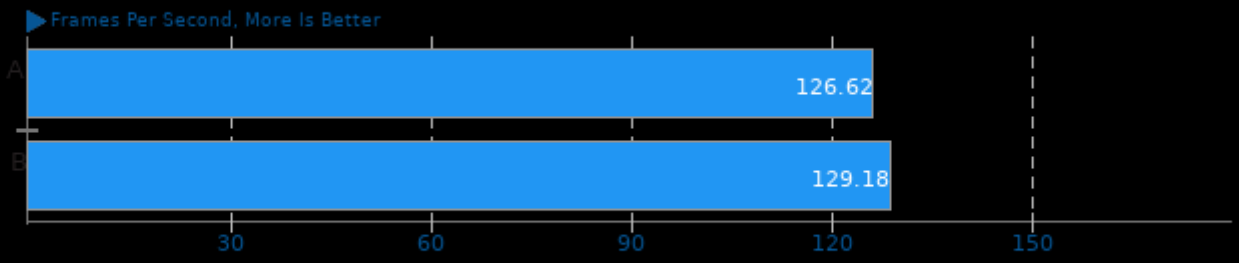
PyHPC Benchmarks 2.1

Device: CPU - Backend: Theano - Project Size: 1048576 - Benchmark: Equation of State



AOM AV1 3.2

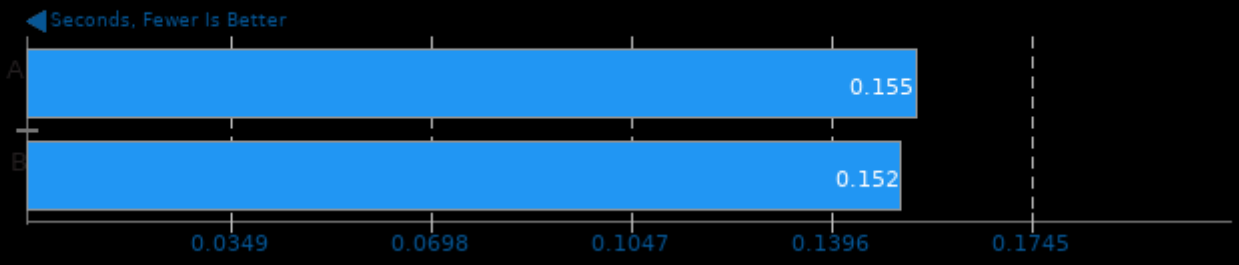
Encoder Mode: Speed 9 Realtime - Input: Bosphorus 1080p



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

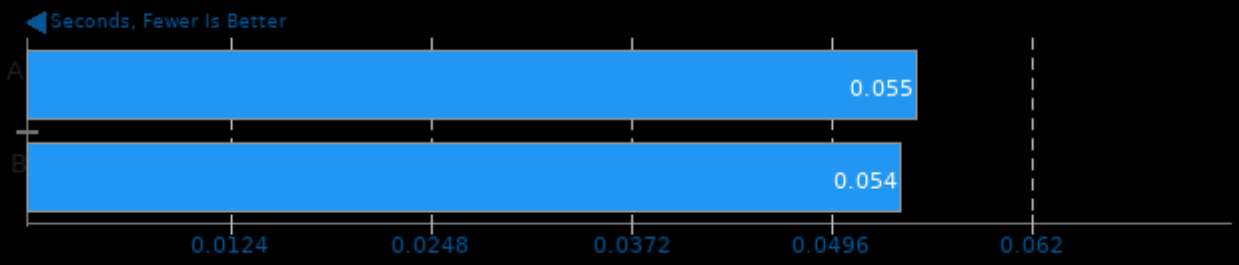
PyHPC Benchmarks 2.1

Device: CPU - Backend: TensorFlow - Project Size: 4194304 - Benchmark: Equation of State



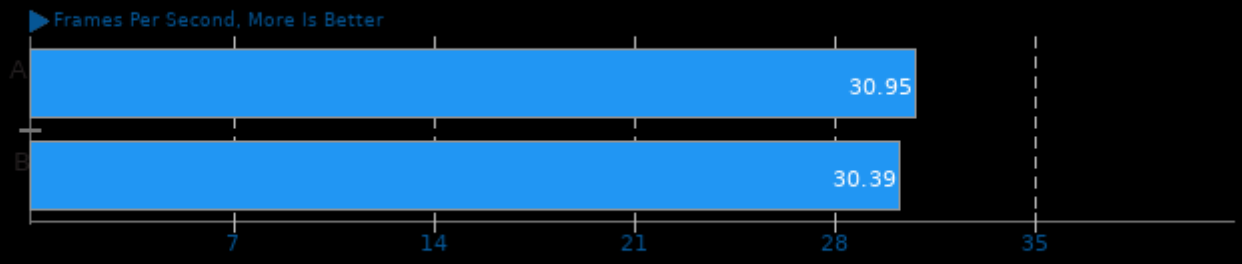
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numpy - Project Size: 262144 - Benchmark: Equation of State



Kvazaar 2.1

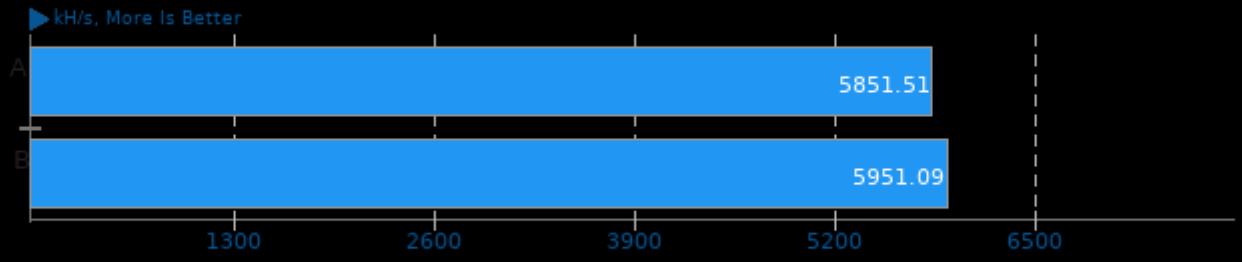
Video Input: Bosphorus 4K - Video Preset: Medium



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

Cpuminer-Opt 3.18

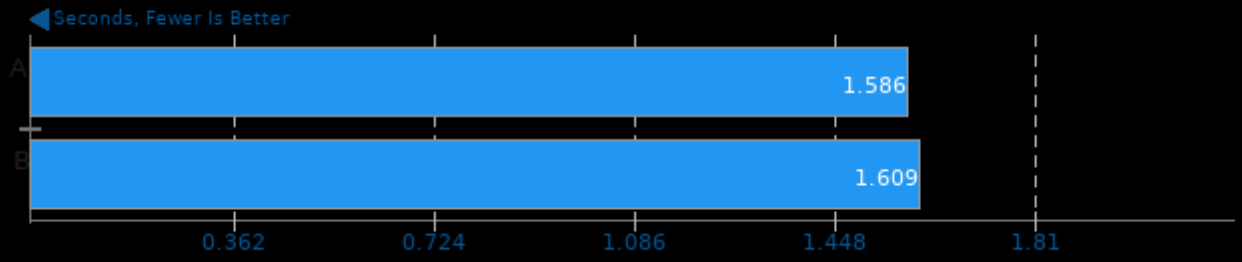
Algorithm: Magi



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

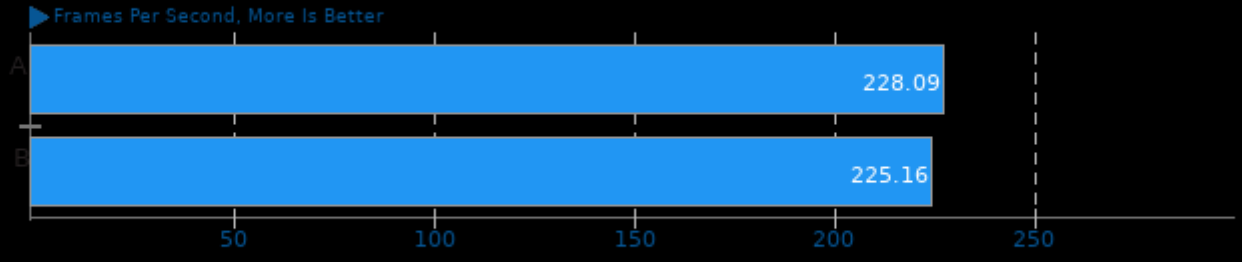
PyHPC Benchmarks 2.1

Device: CPU - Backend: PyTorch - Project Size: 4194304 - Benchmark: Isoneutral Mixing



Kvazaar 2.1

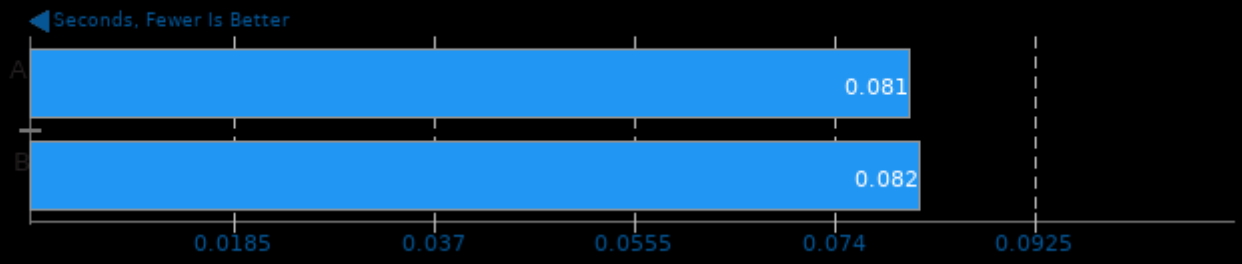
Video Input: Bosphorus 1080p - Video Preset: Ultra Fast



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

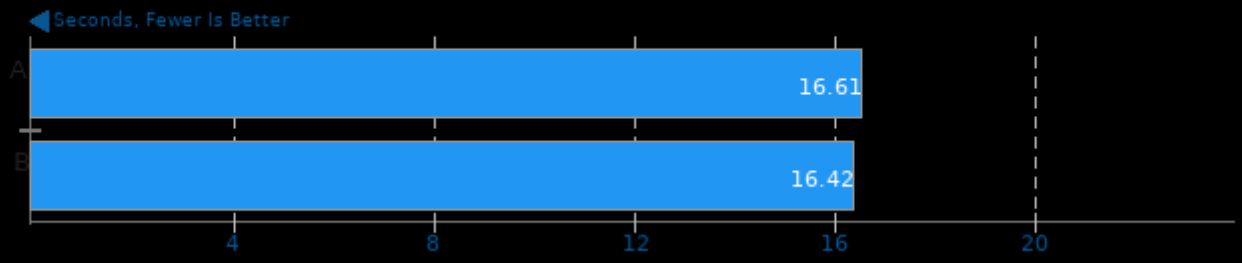
PyHPC Benchmarks 2.1

Device: CPU - Backend: Theano - Project Size: 262144 - Benchmark: Isoneutral Mixing



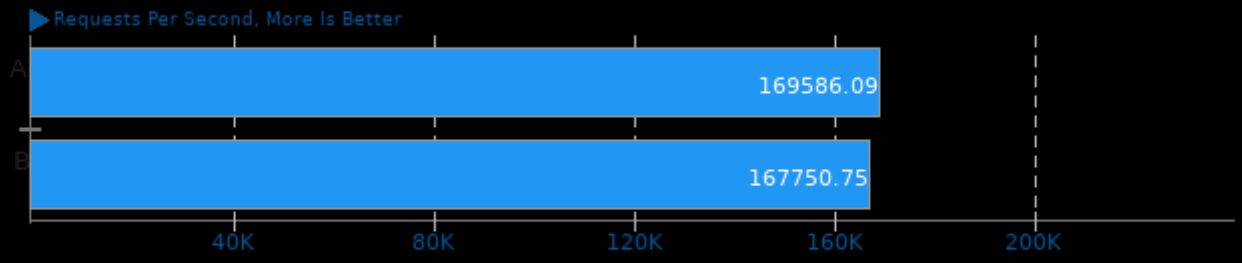
GIMP 2.10.22

Test: auto-levels



Nginx

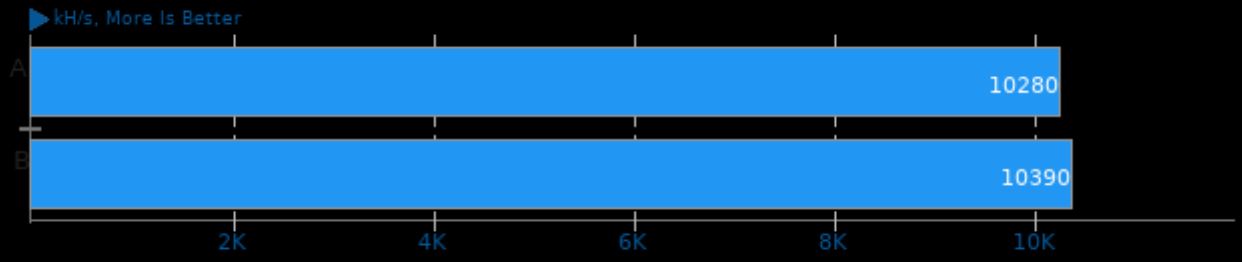
Test: Long Connection - Connections: 1000



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

Cpuminer-Opt 3.18

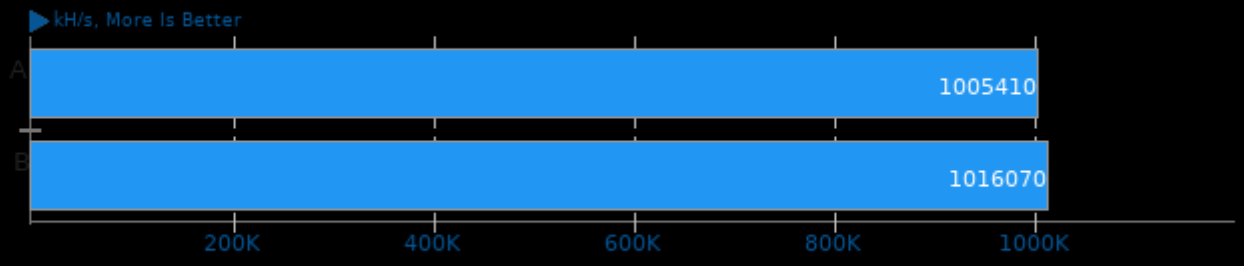
Algorithm: Myriad-Groestl



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Cpuminer-Opt 3.18

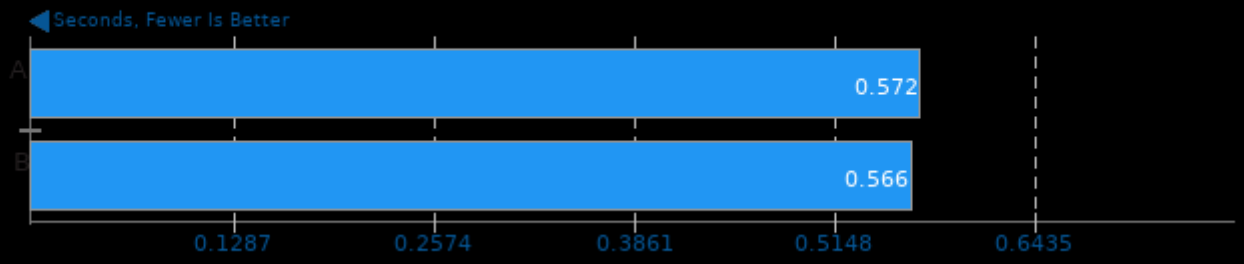
Algorithm: Quad SHA-256, Pyrite



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

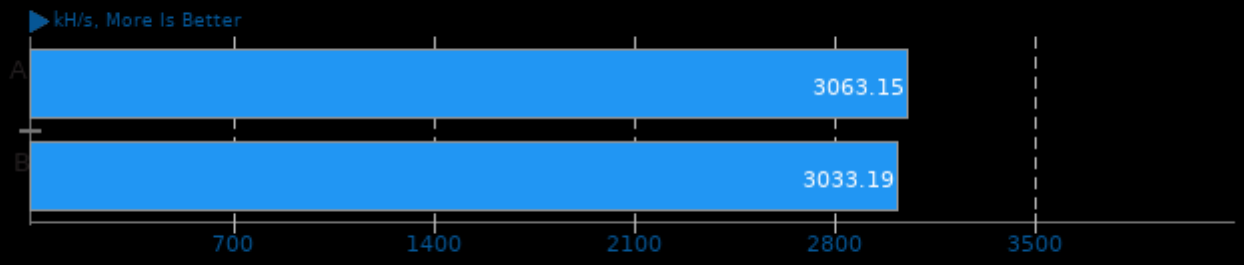
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numpy - Project Size: 1048576 - Benchmark: Isoneutral Mixing



Cpuminer-Opt 3.18

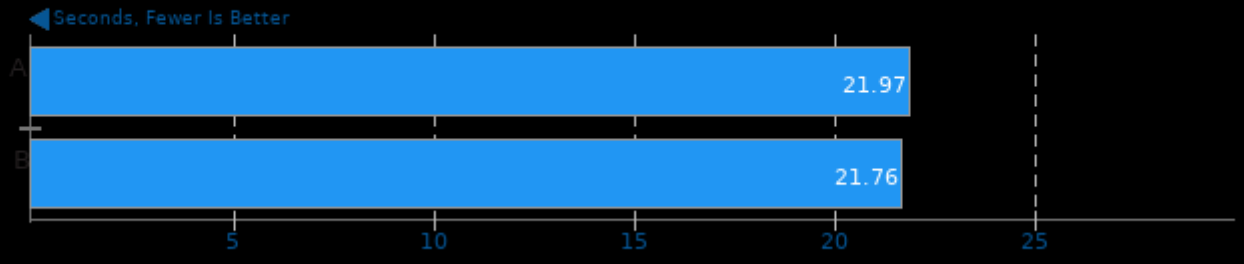
Algorithm: x25x



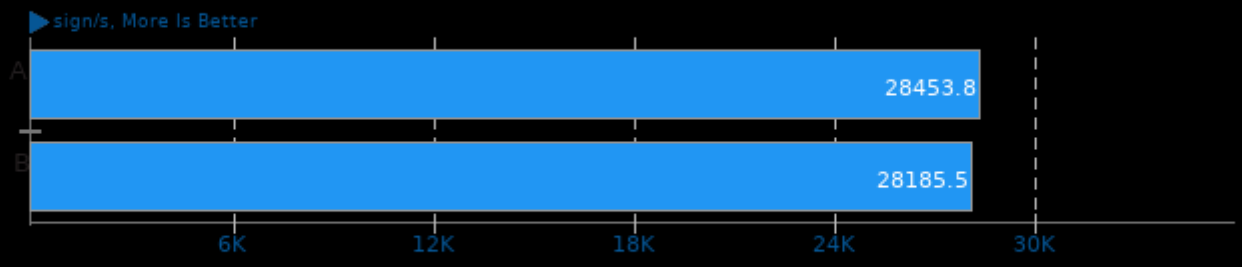
1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

GIMP 2.10.22

Test: unsharp-mask



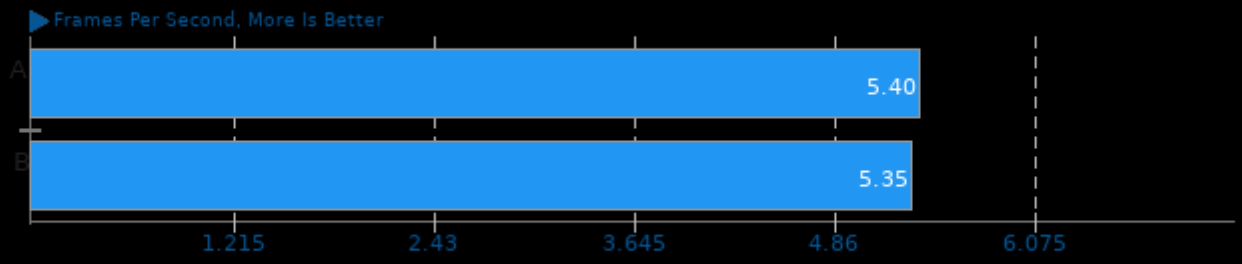
OpenSSL



1. OpenSSL 1.1.1j 16 Feb 2021

AOM AV1 3.2

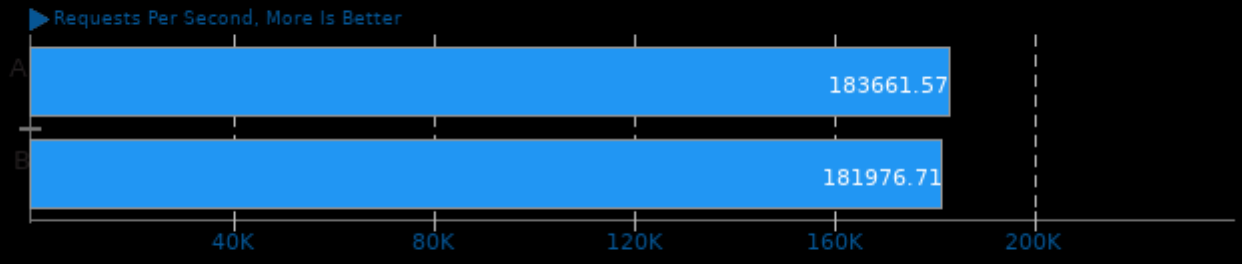
Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 4K



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

Nginx

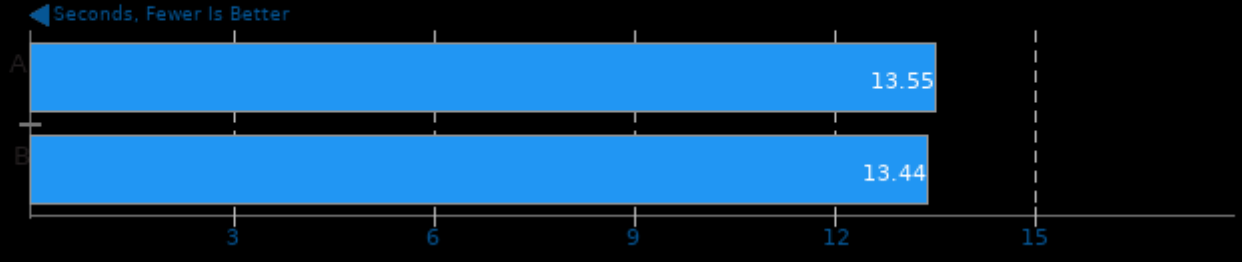
Test: Long Connection - Connections: 500



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

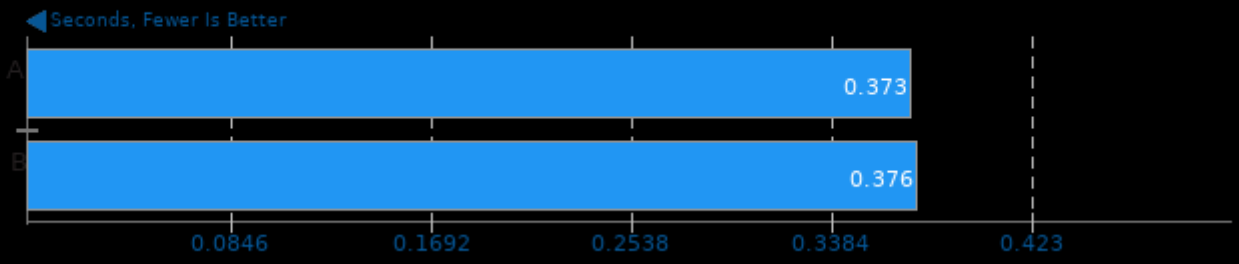
GIMP 2.10.22

Test: rotate



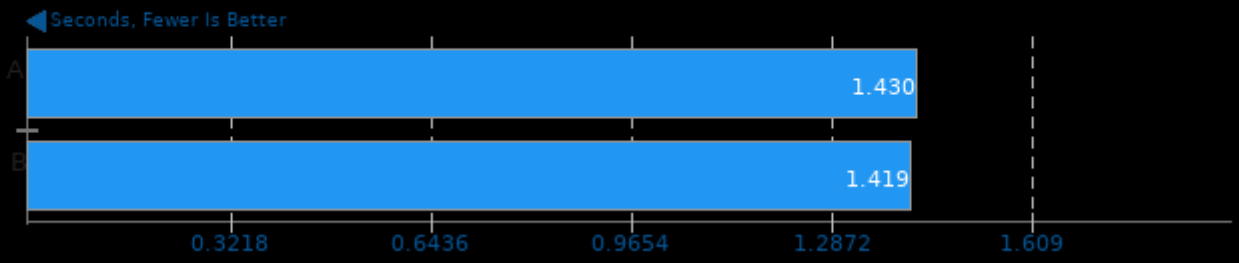
PyHPC Benchmarks 2.1

Device: CPU - Backend: Theano - Project Size: 1048576 - Benchmark: Isoneutral Mixing



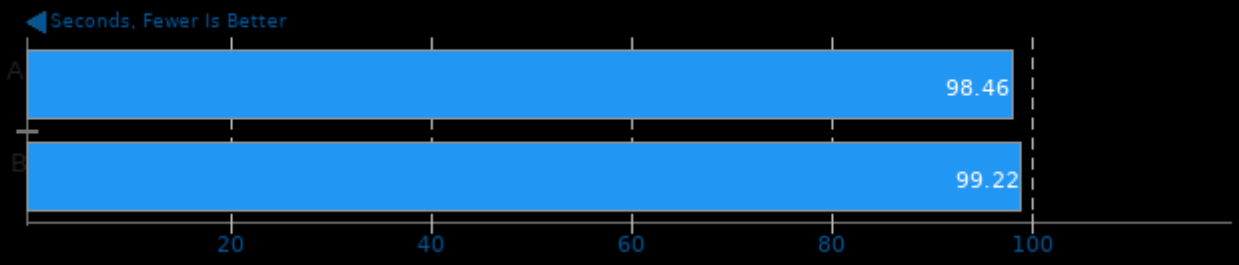
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numba - Project Size: 4194304 - Benchmark: Isoneutral Mixing



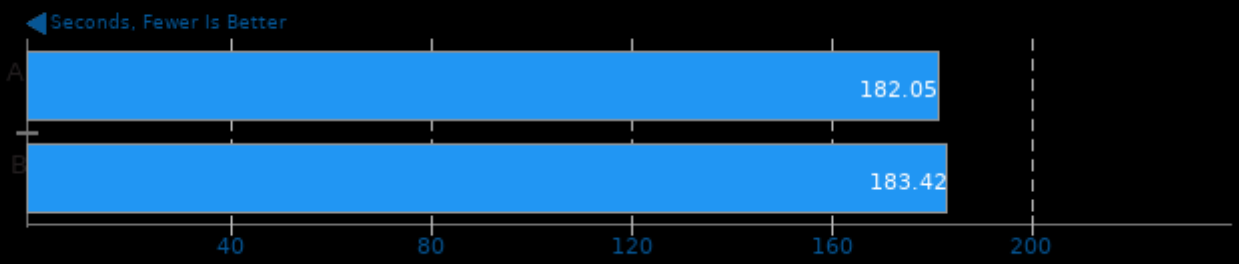
Timed LLVM Compilation 13.0

Build System: Ninja



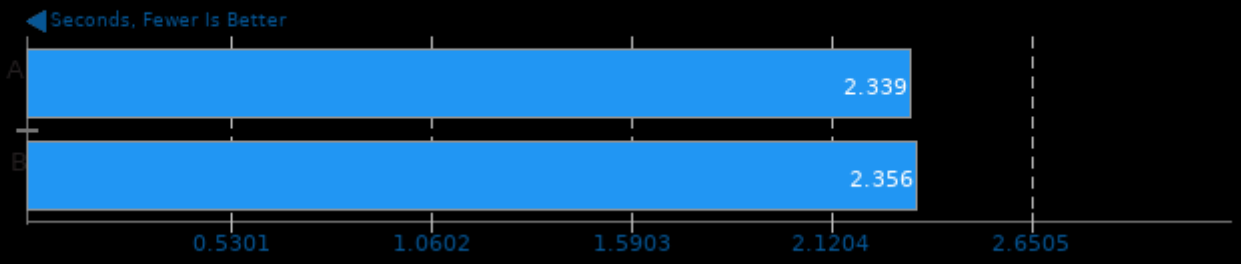
Timed LLVM Compilation 13.0

Build System: Unix Makefiles



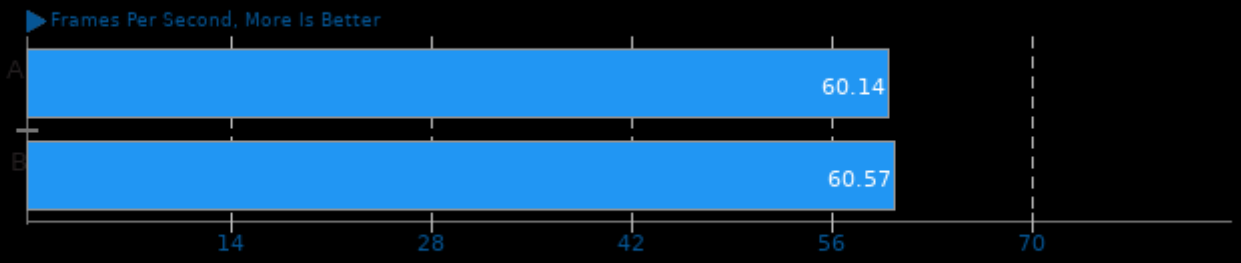
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numpy - Project Size: 4194304 - Benchmark: Isoneutral Mixing



Kvazaar 2.1

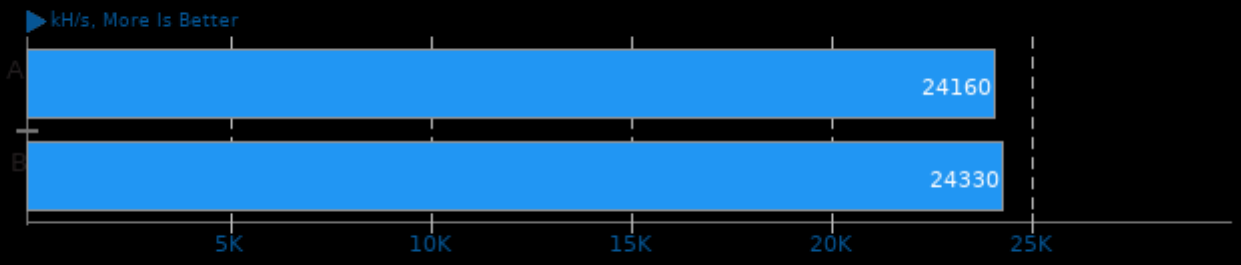
Video Input: Bosphorus 4K - Video Preset: Ultra Fast



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

Cpuminer-Opt 3.18

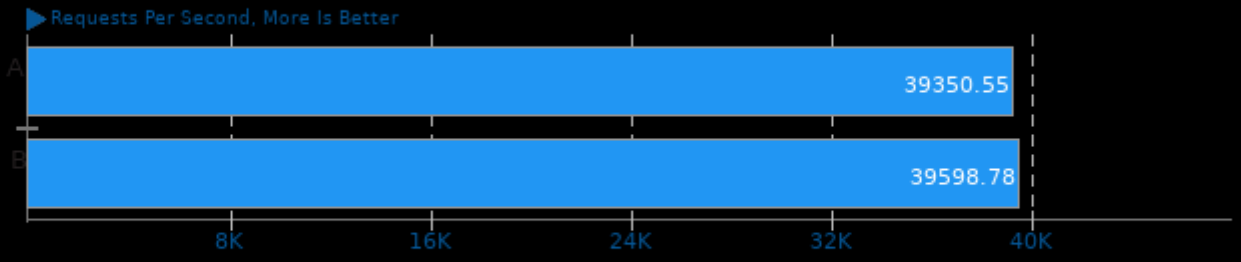
Algorithm: Garlicoin



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

Nginx

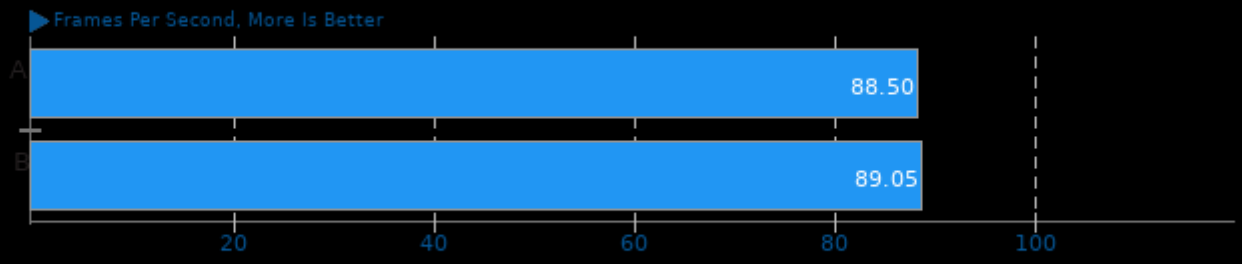
Test: Short Connection - Connections: 500



1. (CC) gcc options: -lluajit-5.1 -lm -lssl -lcrypto -lpthread -ldl -std=c99 -O2
2. nginx version: nginx/1.18.0 (Ubuntu)

Kvazaar 2.1

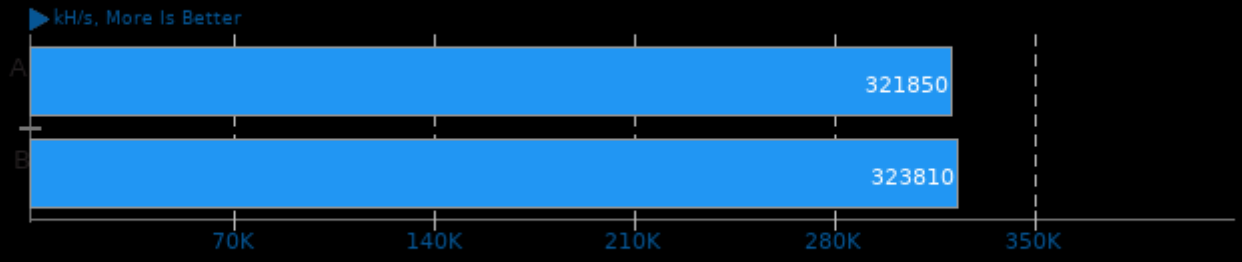
Video Input: Bosphorus 1080p - Video Preset: Medium



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

Cpuminer-Opt 3.18

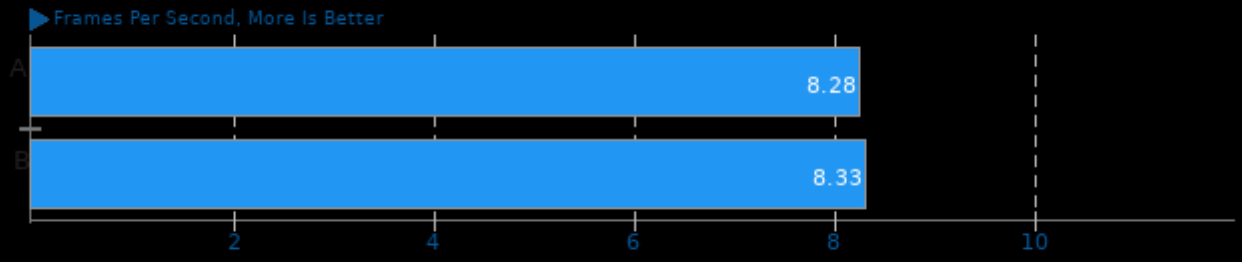
Algorithm: LBC, LBRY Credits



1. (CXX) g++ options: -O2 -lcurl -lz -lpthread -lssl -lcrypto -lgmp

AOM AV1 3.2

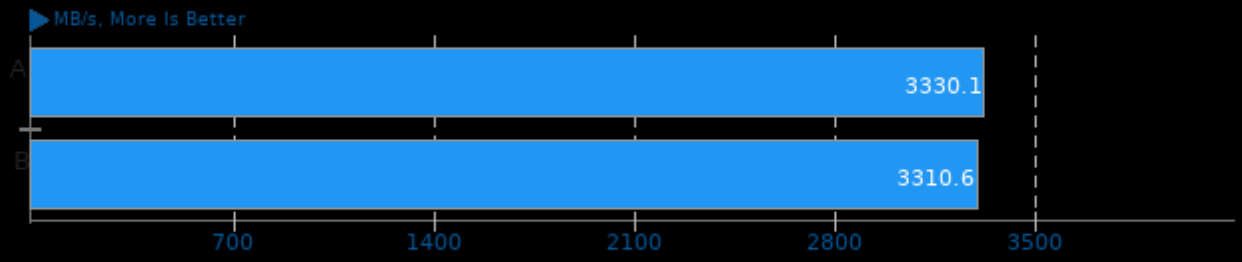
Encoder Mode: Speed 4 Two-Pass - Input: Bosphorus 1080p



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

Zstd Compression

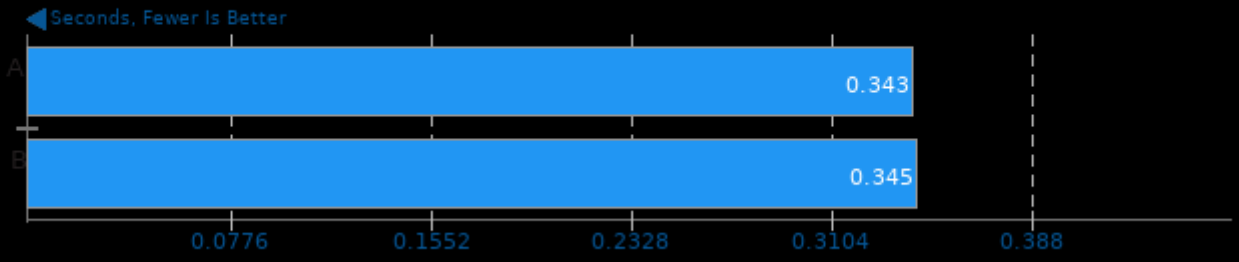
Compression Level: 3, Long Mode - Decompression Speed



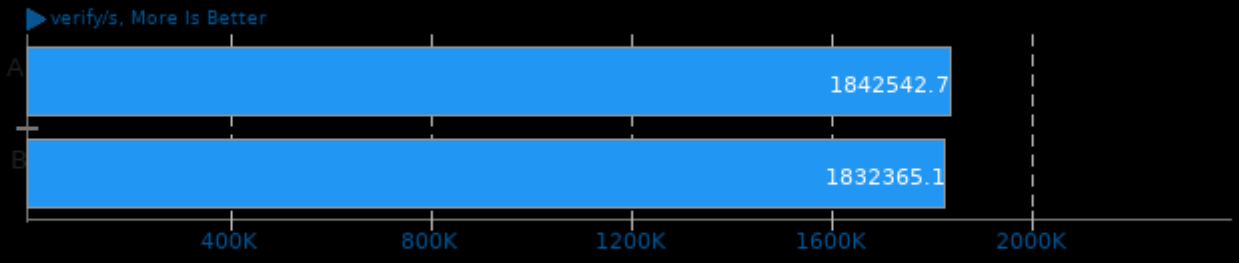
1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

PyHPC Benchmarks 2.1

Device: CPU - Backend: PyTorch - Project Size: 1048576 - Benchmark: Isoneutral Mixing



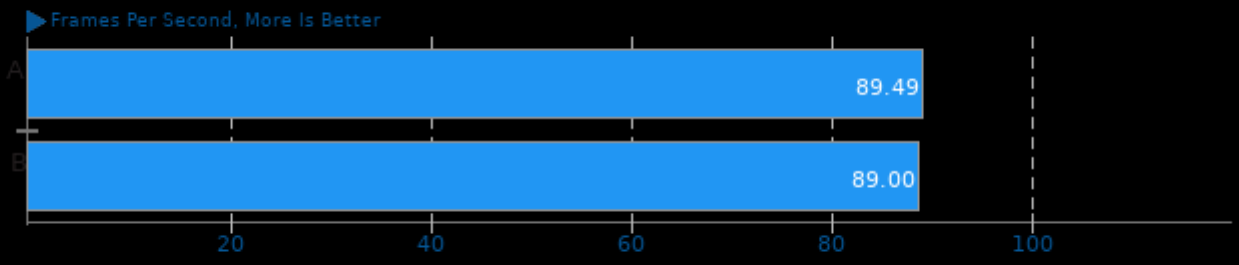
OpenSSL



1. OpenSSL 1.1.1j 16 Feb 2021

Kvazaar 2.1

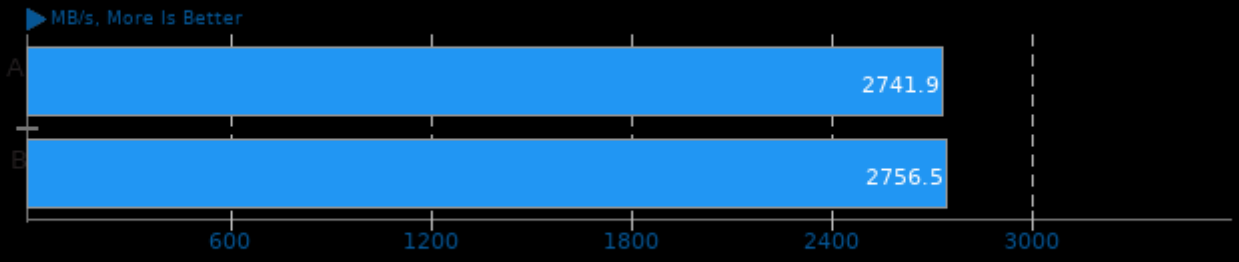
Video Input: Bosphorus 1080p - Video Preset: Slow



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

Zstd Compression

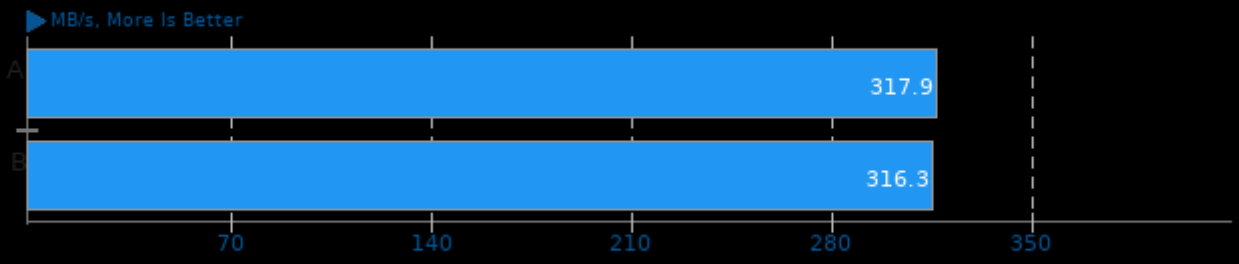
Compression Level: 8 - Compression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

Zstd Compression

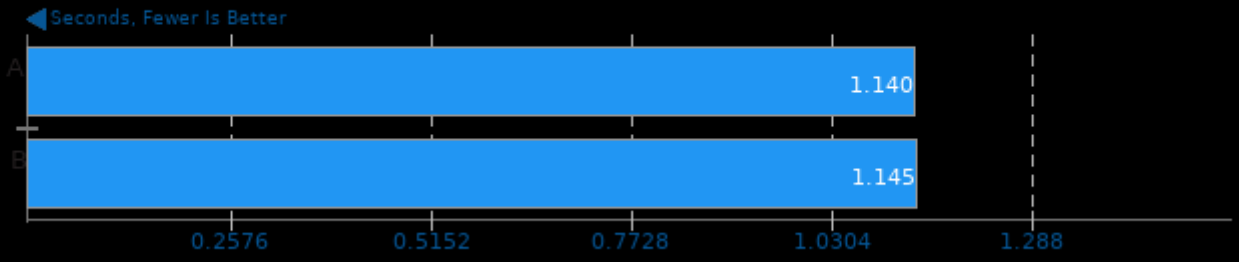
Compression Level: 8, Long Mode - Compression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

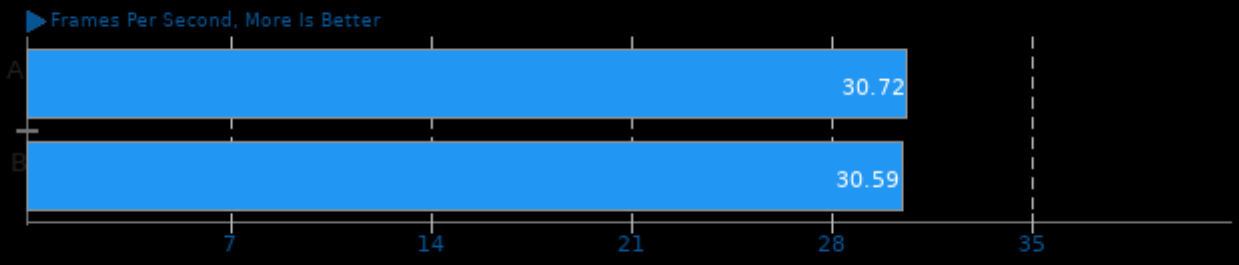
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numpy - Project Size: 4194304 - Benchmark: Equation of State



Kvazaar 2.1

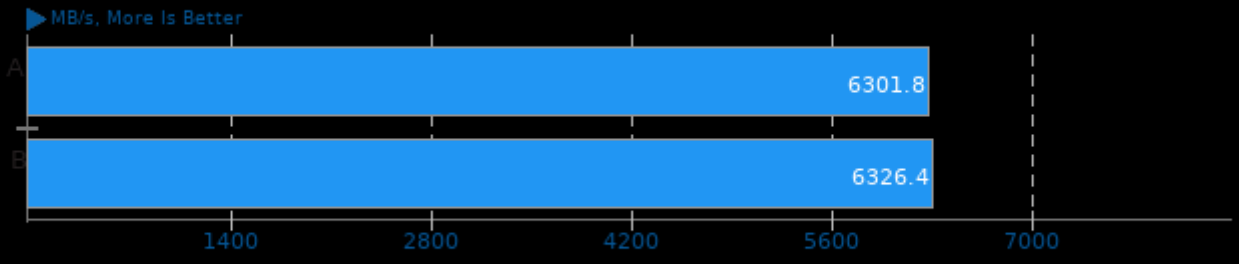
Video Input: Bosphorus 4K - Video Preset: Slow



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

Zstd Compression

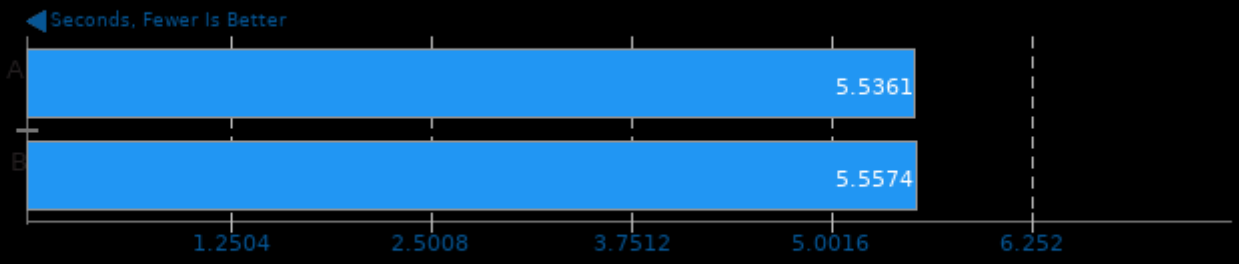
Compression Level: 3 - Compression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

ASTC Encoder 3.2

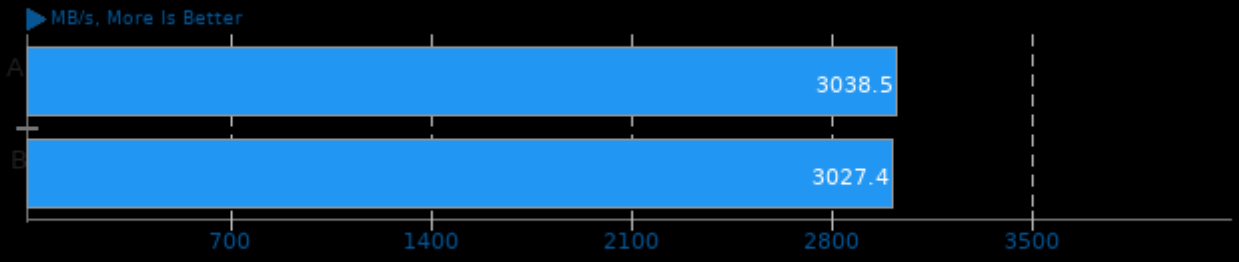
Preset: Thorough



1. (CXX) g++ options: -O3 -flto -pthread

Zstd Compression

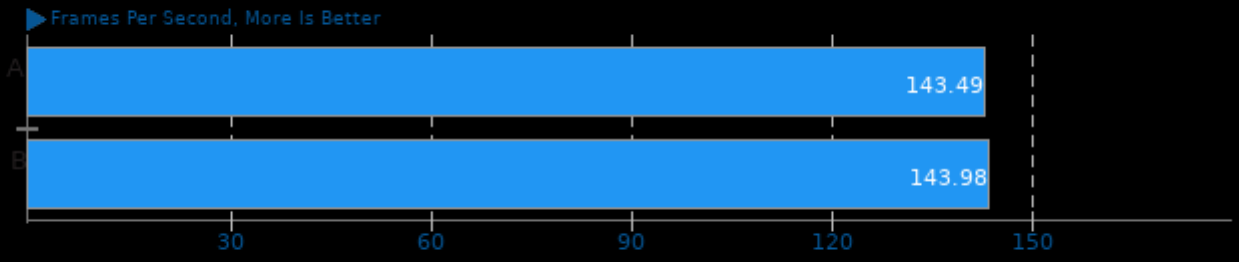
Compression Level: 19 - Decompression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

AOM AV1 3.2

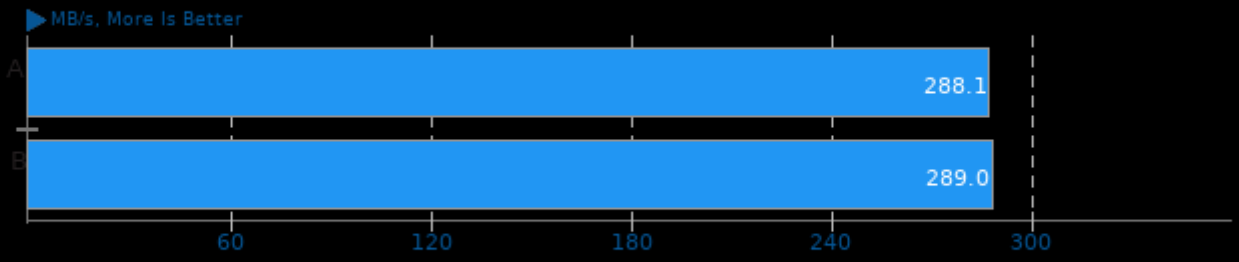
Encoder Mode: Speed 10 Realtime - Input: Bosphorus 1080p



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

Zstd Compression

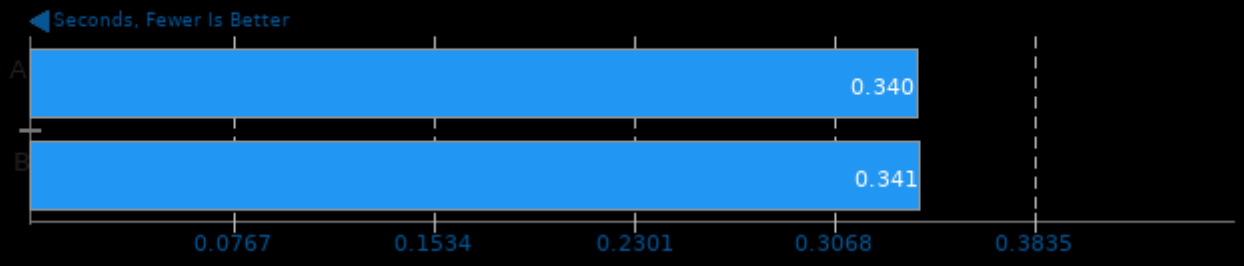
Compression Level: 3, Long Mode - Compression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

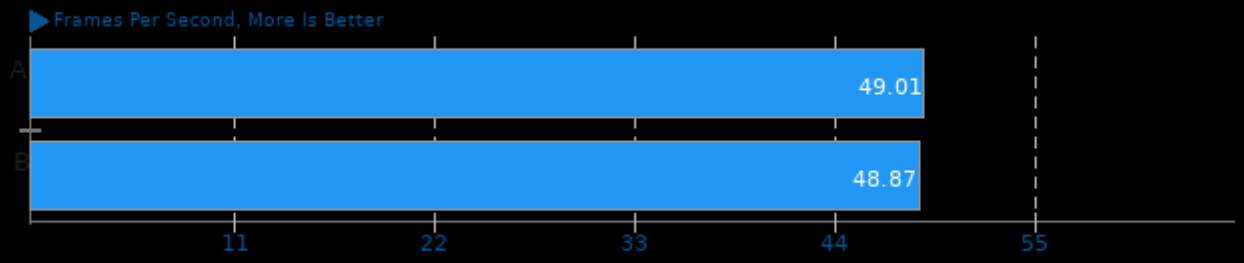
PyHPC Benchmarks 2.1

Device: CPU - Backend: Numba - Project Size: 1048576 - Benchmark: Isoneutral Mixing



AOM AV1 3.2

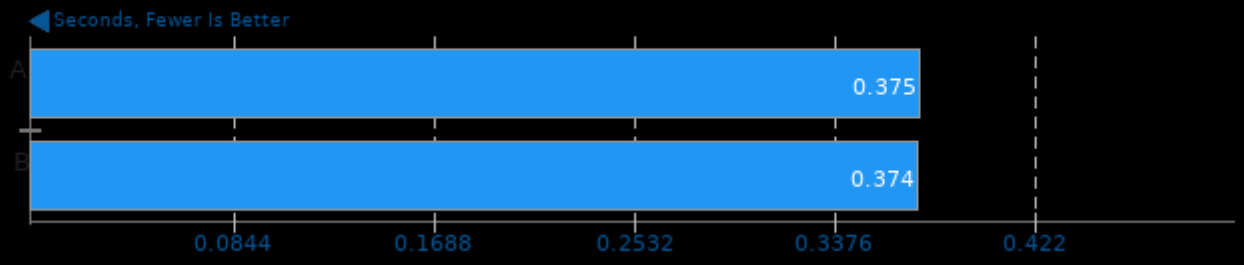
Encoder Mode: Speed 9 Realtime - Input: Bosphorus 4K



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

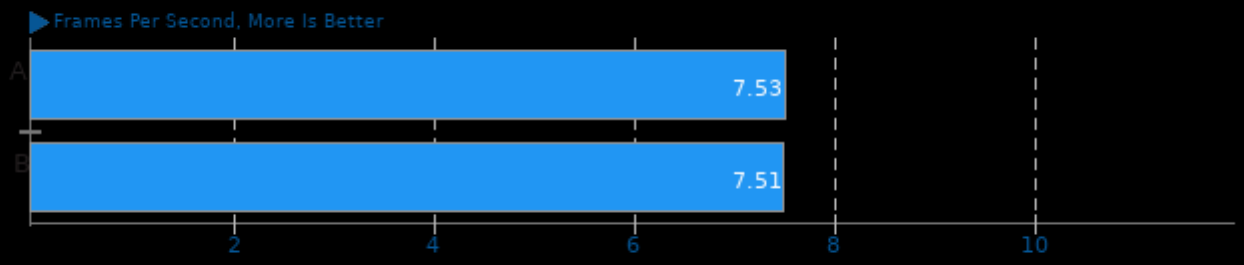
PyHPC Benchmarks 2.1

Device: CPU - Backend: Theano - Project Size: 4194304 - Benchmark: Equation of State



AOM AV1 3.2

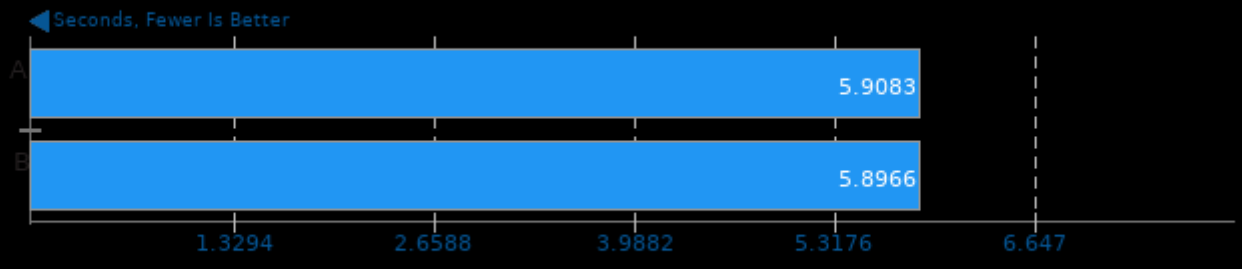
Encoder Mode: Speed 6 Realtime - Input: Bosphorus 1080p



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

ASTC Encoder 3.2

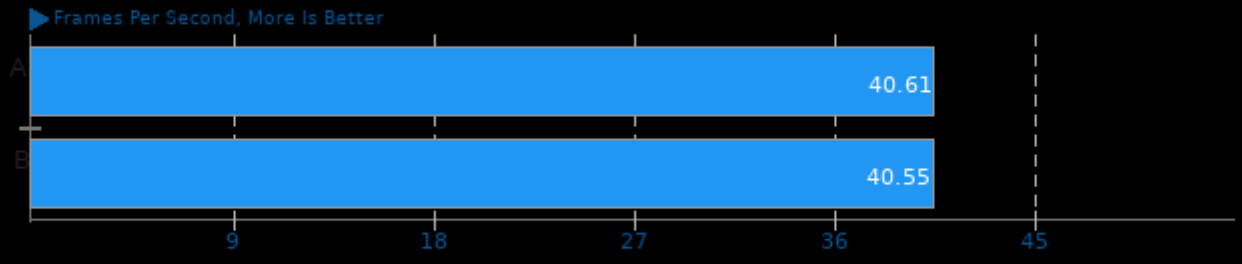
Preset: Exhaustive



1. (CXX) g++ options: -O3 -flto -pthread

AOM AV1 3.2

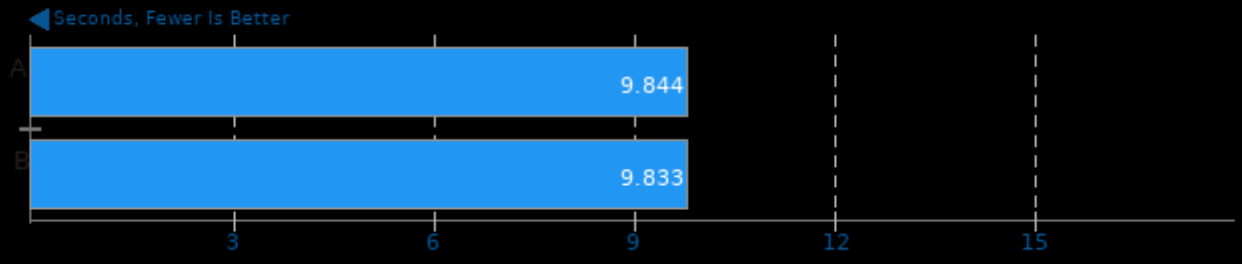
Encoder Mode: Speed 8 Realtime - Input: Bosphorus 4K



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

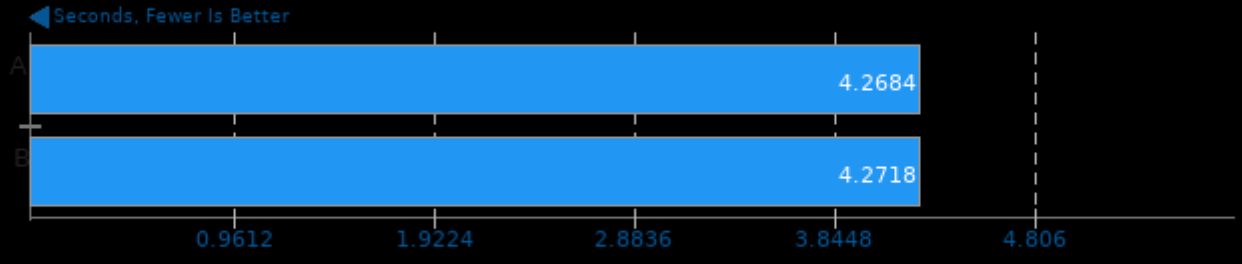
GIMP 2.10.22

Test: resize



ASTC Encoder 3.2

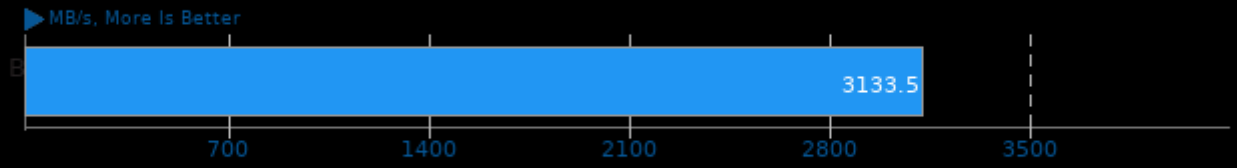
Preset: Medium



1. (CXX) g++ options: -O3 -flto -pthread

Zstd Compression

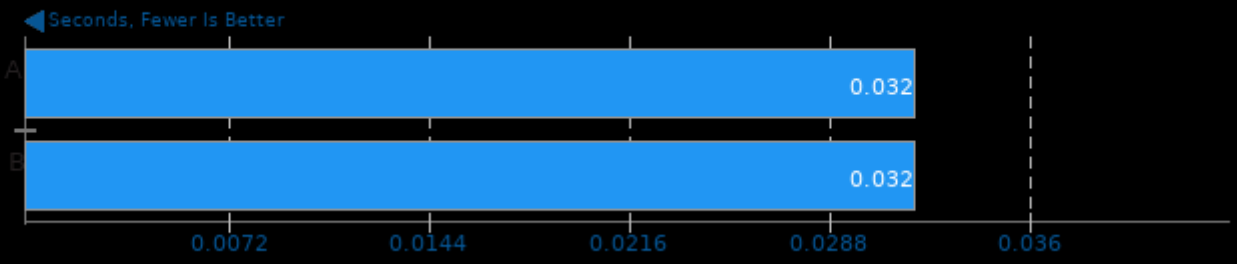
Compression Level: 3 - Decompression Speed



1. *** zstd command line interface 64-bits v1.4.8, by Yann Collet ***

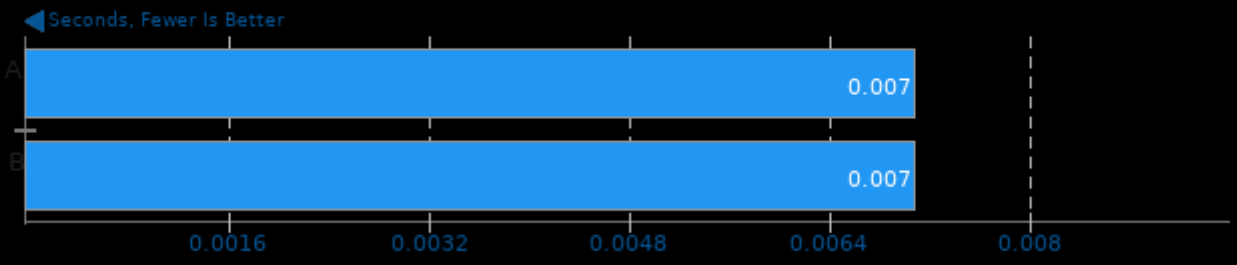
PyHPC Benchmarks 2.1

Device: CPU - Backend: TensorFlow - Project Size: 1048576 - Benchmark: Equation of State



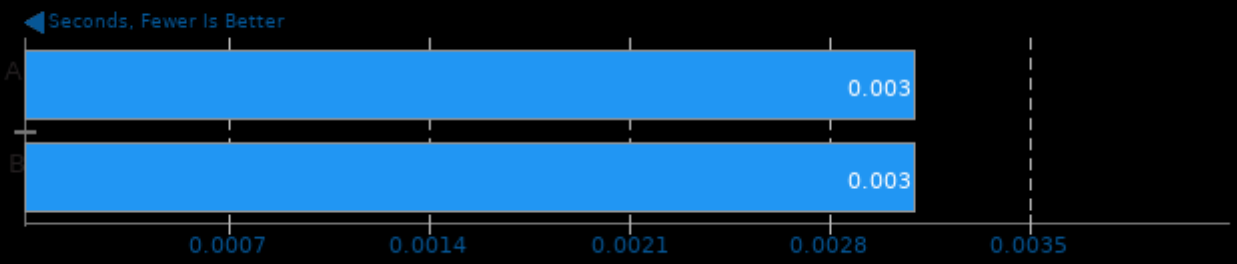
PyHPC Benchmarks 2.1

Device: CPU - Backend: TensorFlow - Project Size: 262144 - Benchmark: Equation of State



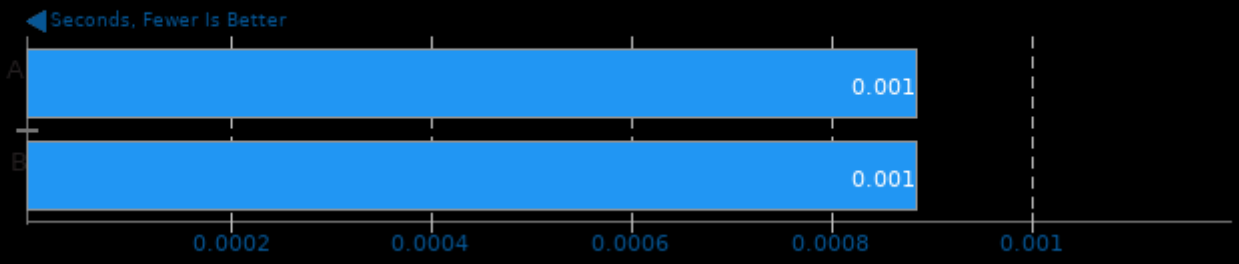
PyHPC Benchmarks 2.1

Device: CPU - Backend: TensorFlow - Project Size: 65536 - Benchmark: Equation of State



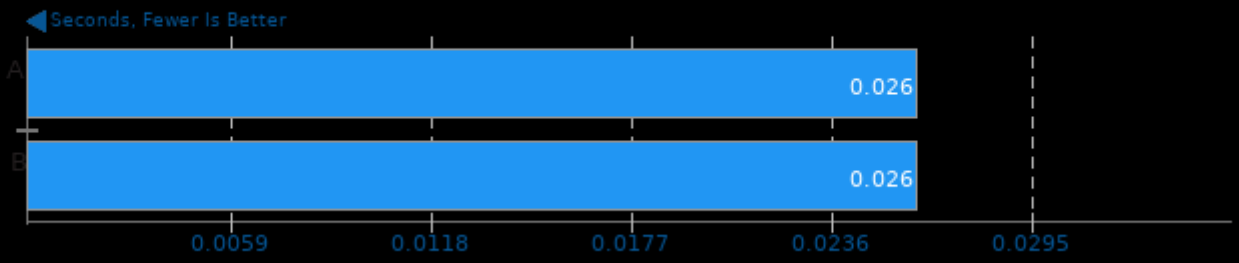
PyHPC Benchmarks 2.1

Device: CPU - Backend: TensorFlow - Project Size: 16384 - Benchmark: Equation of State



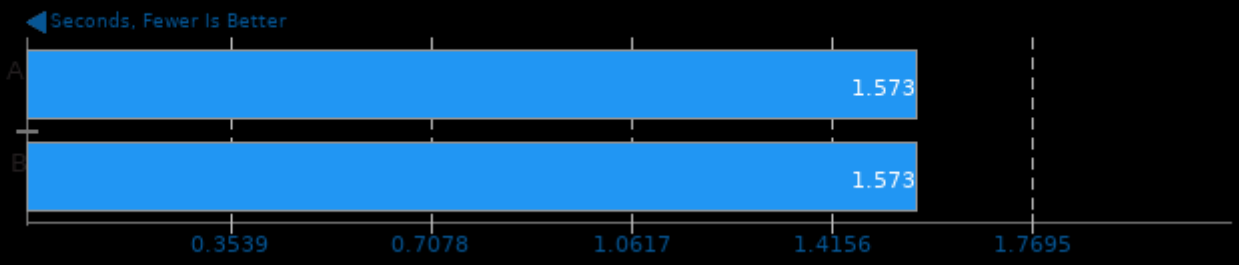
PyHPC Benchmarks 2.1

Device: CPU - Backend: PyTorch - Project Size: 1048576 - Benchmark: Equation of State



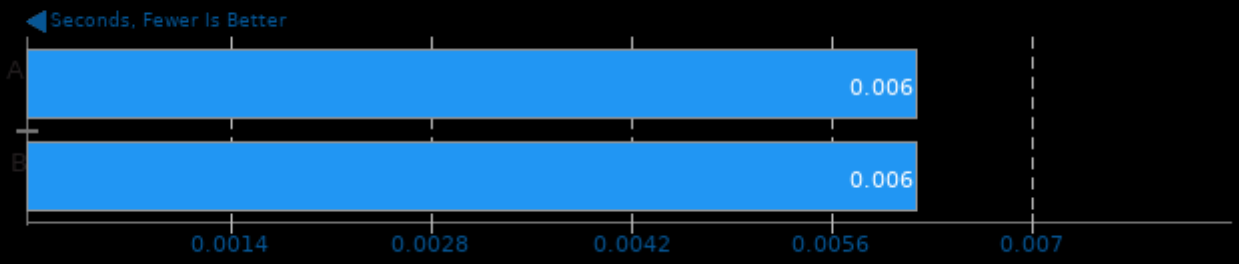
PyHPC Benchmarks 2.1

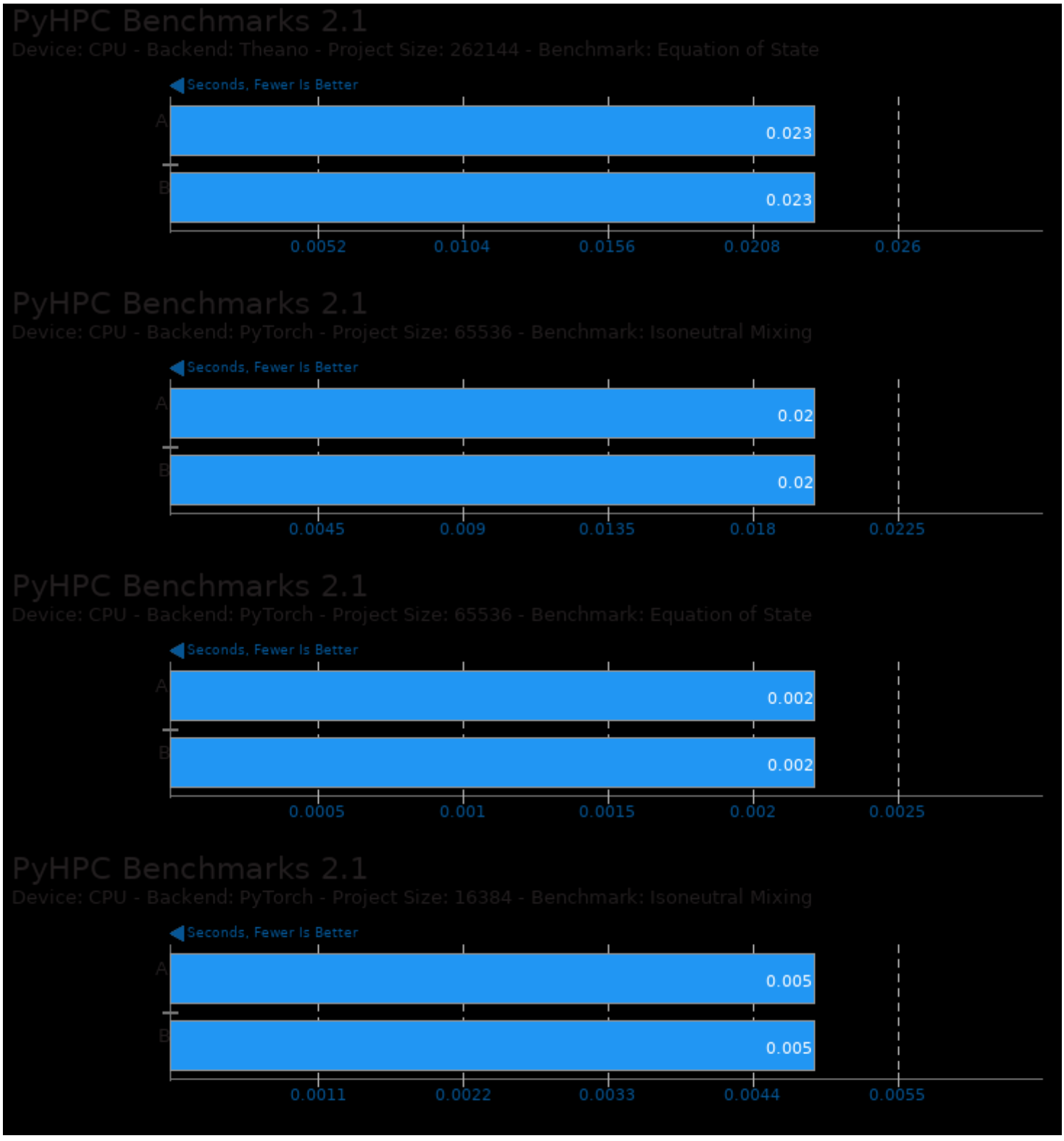
Device: CPU - Backend: Theano - Project Size: 4194304 - Benchmark: Isoneutral Mixing

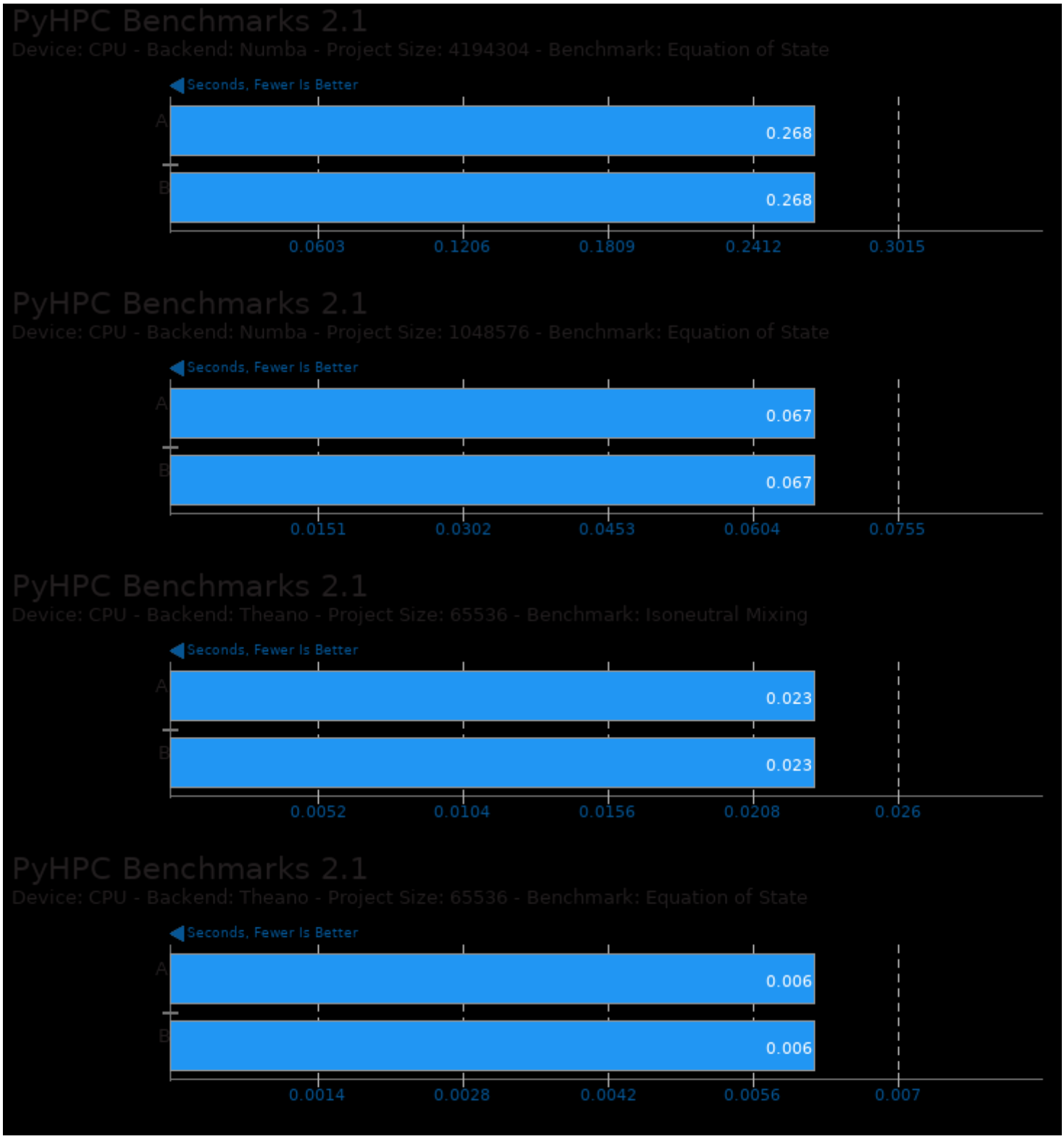


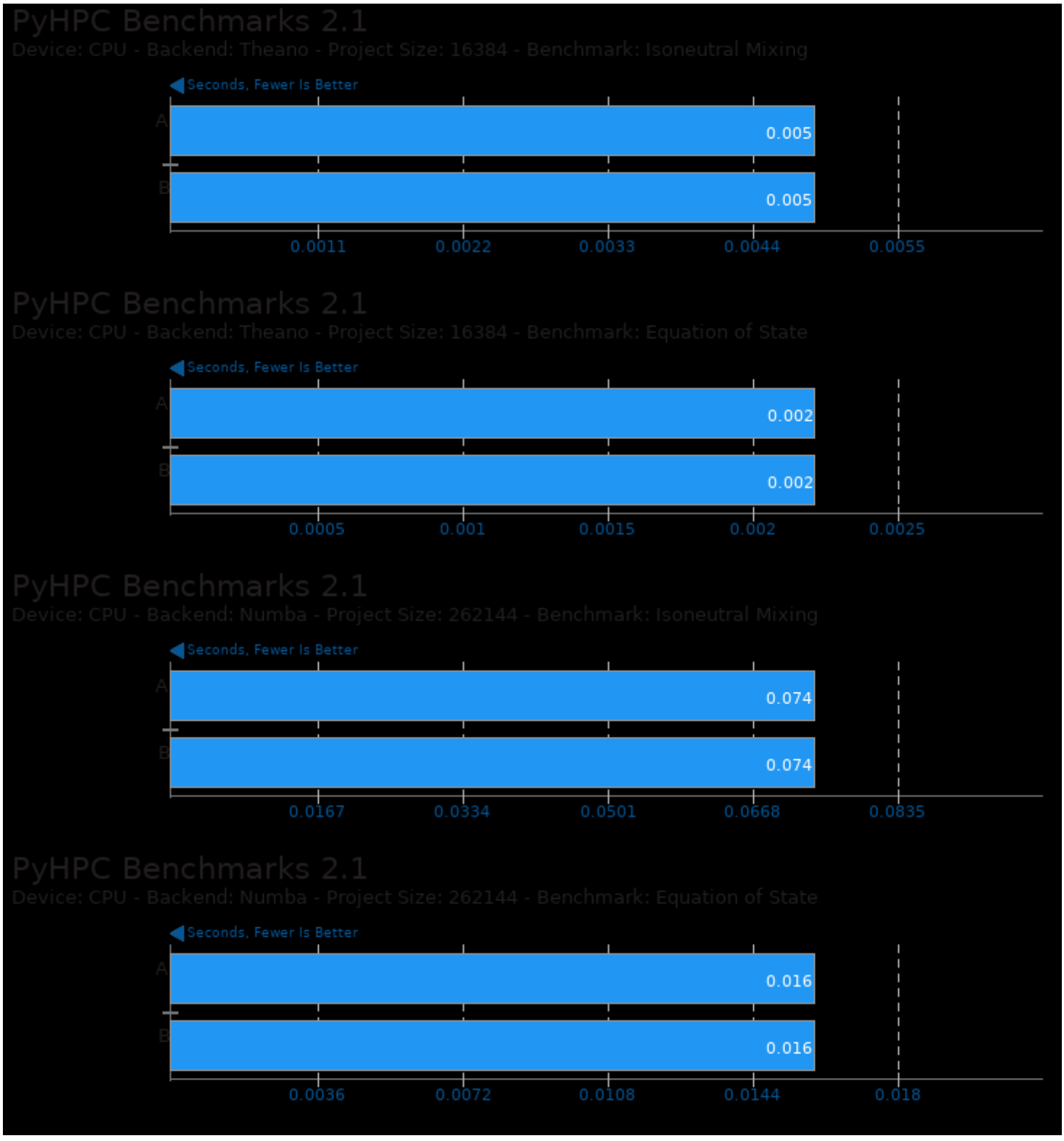
PyHPC Benchmarks 2.1

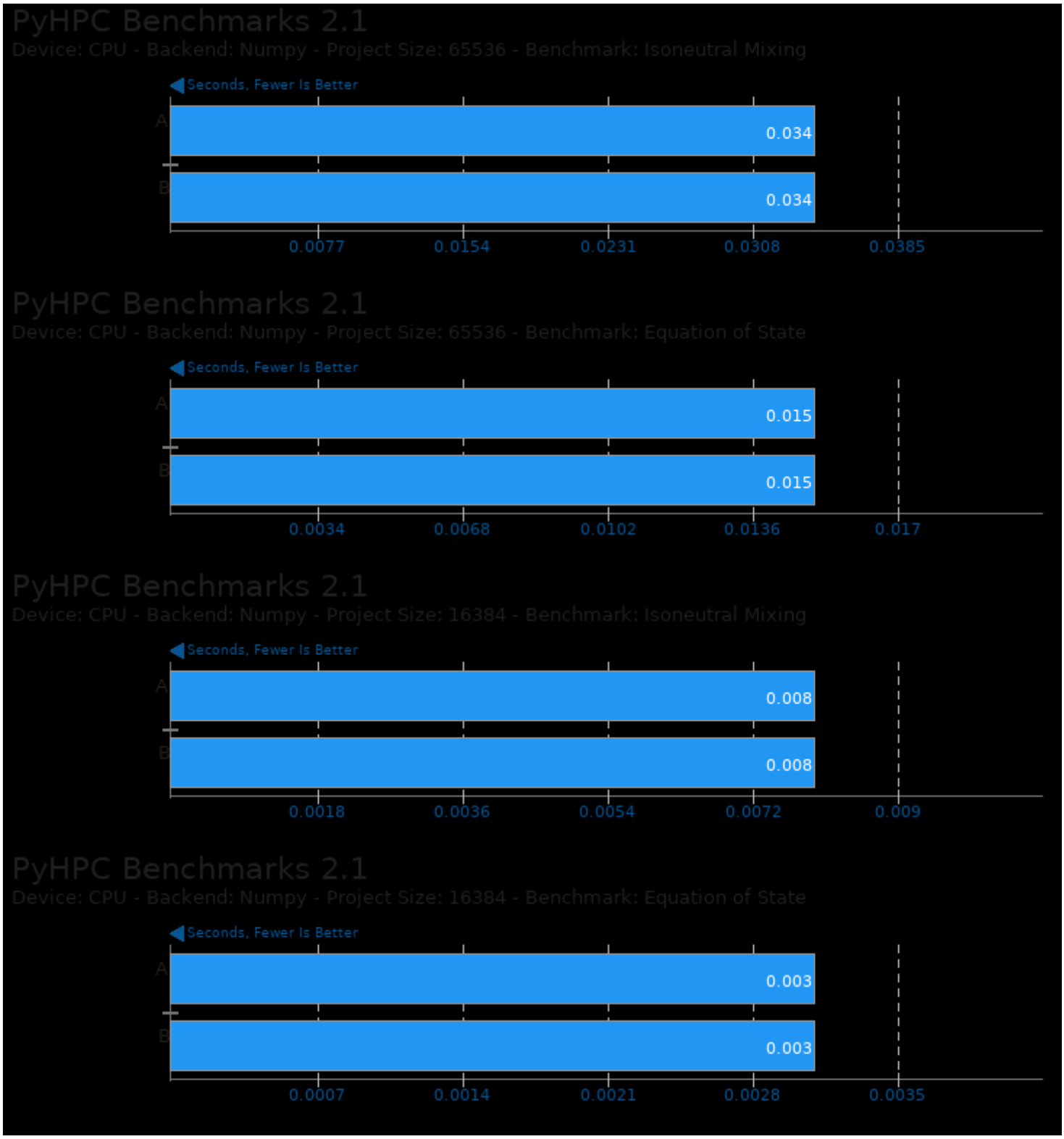
Device: CPU - Backend: PyTorch - Project Size: 262144 - Benchmark: Equation of State

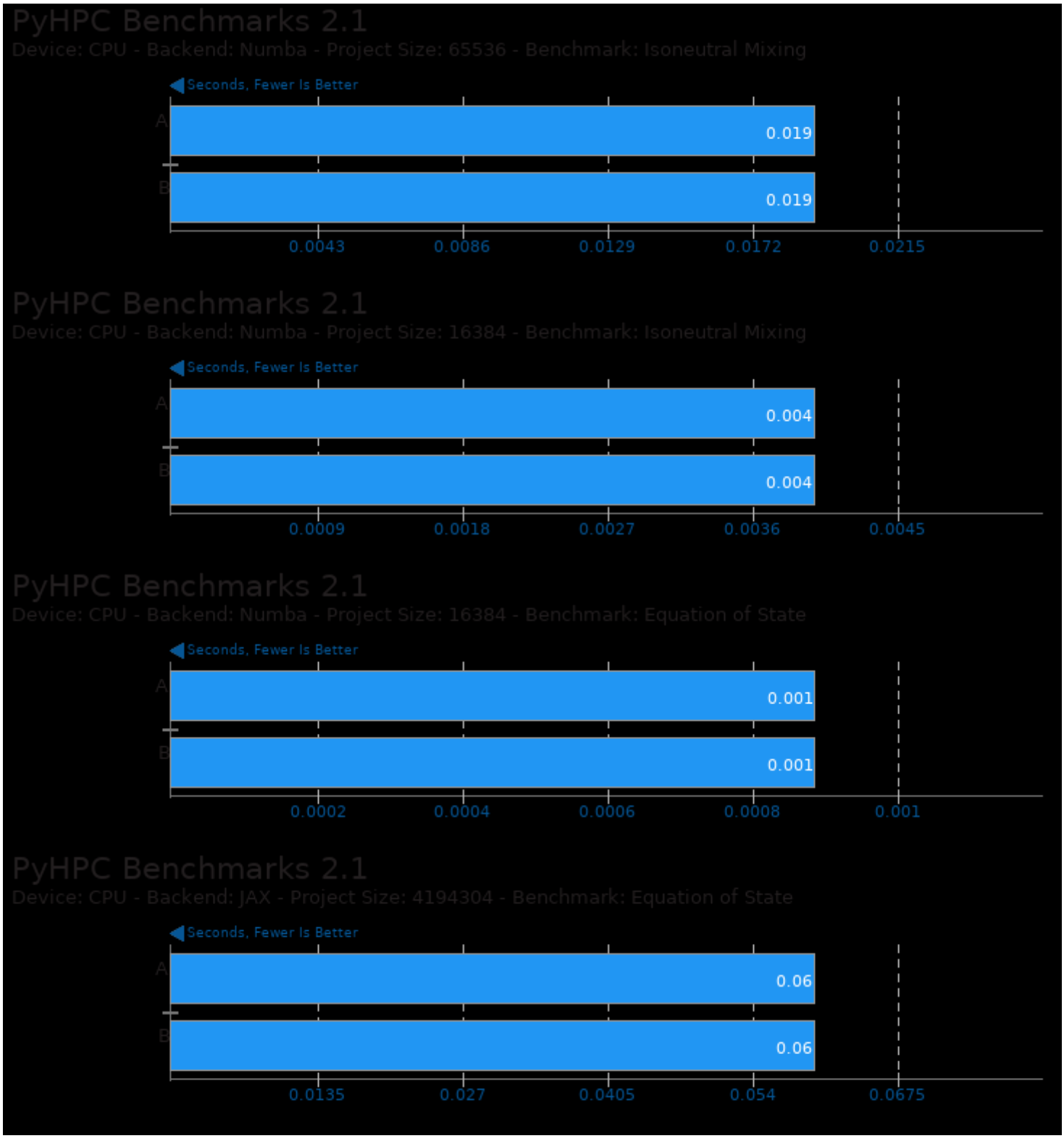


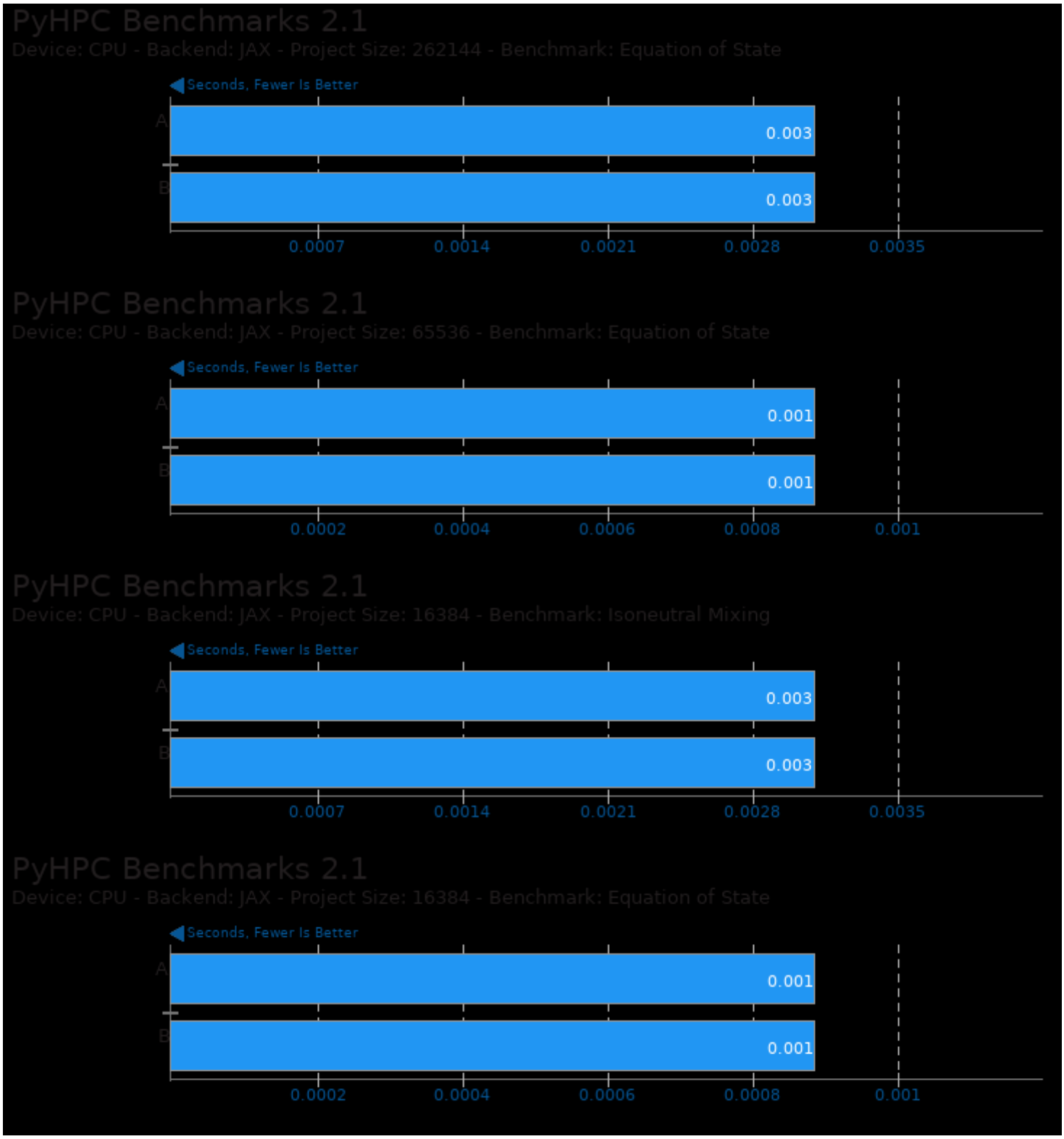

PyHPC Benchmarks 2.1
Device: CPU - Backend: Theano - Project Size: 262144 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.023
B
0.023
0.0052
0.0104
0.0156
0.0208
0.026
PyHPC Benchmarks 2.1
Device: CPU - Backend: PyTorch - Project Size: 65536 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.02
B
0.02
0.0045
0.009
0.0135
0.018
0.0225
PyHPC Benchmarks 2.1
Device: CPU - Backend: PyTorch - Project Size: 65536 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.002
B
0.002
0.0005
0.001
0.0015
0.002
0.0025
PyHPC Benchmarks 2.1
Device: CPU - Backend: PyTorch - Project Size: 16384 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.005
B
0.005
0.0011
0.0022
0.0033
0.0044
0.0055

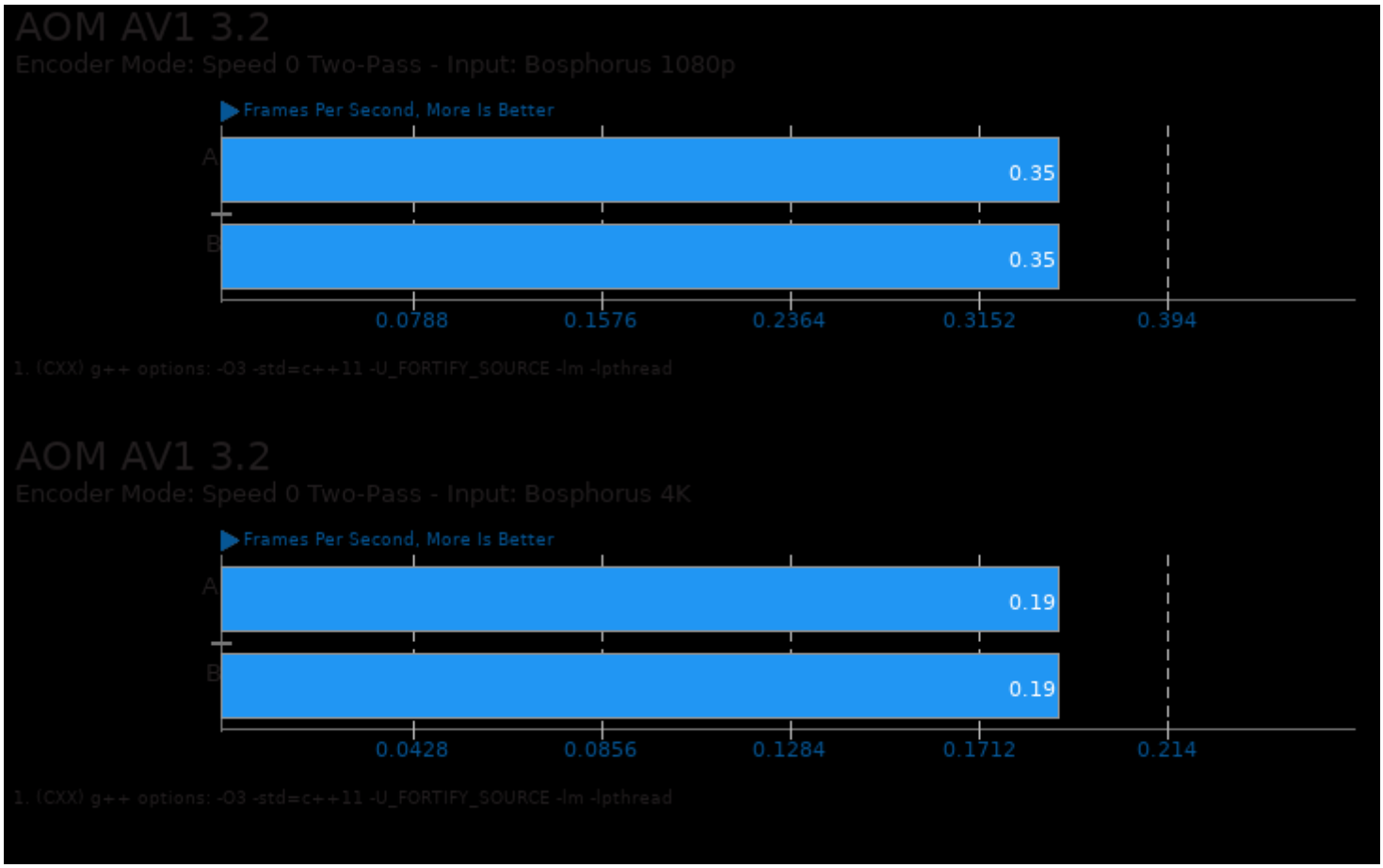

PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 4194304 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.268
B
0.268
0.0603
0.1206
0.1809
0.2412
0.3015
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 1048576 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.067
B
0.067
0.0151
0.0302
0.0453
0.0604
0.0755
PyHPC Benchmarks 2.1
Device: CPU - Backend: Theano - Project Size: 65536 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.023
B
0.023
0.0052
0.0104
0.0156
0.0208
0.026
PyHPC Benchmarks 2.1
Device: CPU - Backend: Theano - Project Size: 65536 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.006
B
0.006
0.0014
0.0028
0.0042
0.0056
0.007


PyHPC Benchmarks 2.1
Device: CPU - Backend: Theano - Project Size: 16384 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.005
B
0.005
0.0011
0.0022
0.0033
0.0044
0.0055
PyHPC Benchmarks 2.1
Device: CPU - Backend: Theano - Project Size: 16384 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.002
B
0.002
0.0005
0.001
0.0015
0.002
0.0025
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 262144 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.074
B
0.074
0.0167
0.0334
0.0501
0.0668
0.0835
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 262144 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.016
B
0.016
0.0036
0.0072
0.0108
0.0144
0.018


PyHPC Benchmarks 2.1
Device: CPU - Backend: Numpy - Project Size: 65536 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.034
B
0.034
0.0077
0.0154
0.0231
0.0308
0.0385
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numpy - Project Size: 65536 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.015
B
0.015
0.0034
0.0068
0.0102
0.0136
0.017
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numpy - Project Size: 16384 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.008
B
0.008
0.0018
0.0036
0.0054
0.0072
0.009
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numpy - Project Size: 16384 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.003
B
0.003
0.0007
0.0014
0.0021
0.0028
0.0035


PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 65536 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.019
B
0.019
0.0043
0.0086
0.0129
0.0172
0.0215
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 16384 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
0.004
B
0.004
0.0009
0.0018
0.0027
0.0036
0.0045
PyHPC Benchmarks 2.1
Device: CPU - Backend: Numba - Project Size: 16384 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.001
B
0.001
0.0002
0.0004
0.0006
0.0008
0.001
PyHPC Benchmarks 2.1
Device: CPU - Backend: JAX - Project Size: 4194304 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
0.06
B
0.06
0.0135
0.027
0.0405
0.054
0.0675

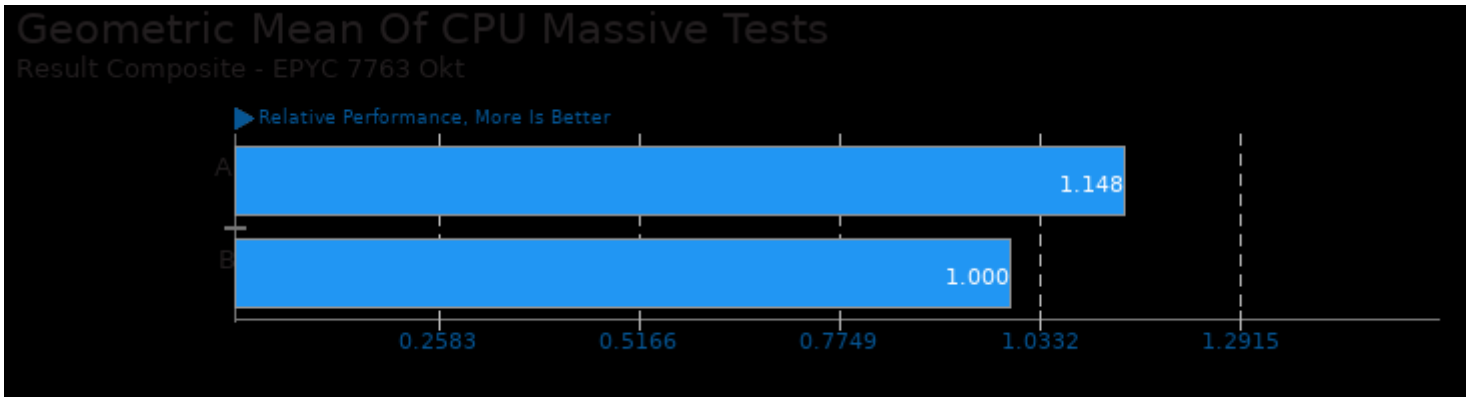

PyHPC Benchmarks 2.1
Device: CPU - Backend: JAX - Project Size: 262144 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
B
0.003
0.003
0.0007
0.0014
0.0021
0.0028
0.0035
PyHPC Benchmarks 2.1
Device: CPU - Backend: JAX - Project Size: 65536 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
B
0.001
0.001
0.0002
0.0004
0.0006
0.0008
0.001
PyHPC Benchmarks 2.1
Device: CPU - Backend: JAX - Project Size: 16384 - Benchmark: Isoneutral Mixing
Seconds, Fewer Is Better
A
B
0.003
0.003
0.0007
0.0014
0.0021
0.0028
0.0035
PyHPC Benchmarks 2.1
Device: CPU - Backend: JAX - Project Size: 16384 - Benchmark: Equation of State
Seconds, Fewer Is Better
A
B
0.001
0.001
0.0002
0.0004
0.0006
0.0008
0.001


AOM AV1 3.2
Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 1080p
Frames Per Second, More Is Better
A
B
0.35
0.35
0.0788
0.1576
0.2364
0.3152
0.394
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread
AOM AV1 3.2
Encoder Mode: Speed 0 Two-Pass - Input: Bosphorus 4K
Frames Per Second, More Is Better
A
B
0.19
0.19
0.0428
0.0856
0.1284
0.1712
0.214
1. (CXX) g++ options: -O3 -std=c++11 -U_FORTIFY_SOURCE -lm -lpthread

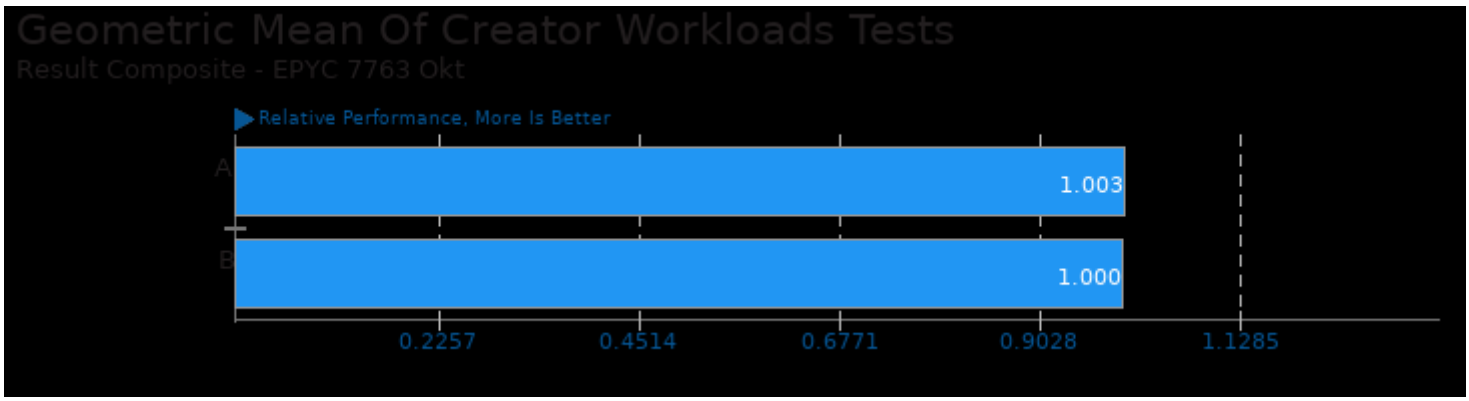
These geometric means are based upon test groupings / test suites for this result file.



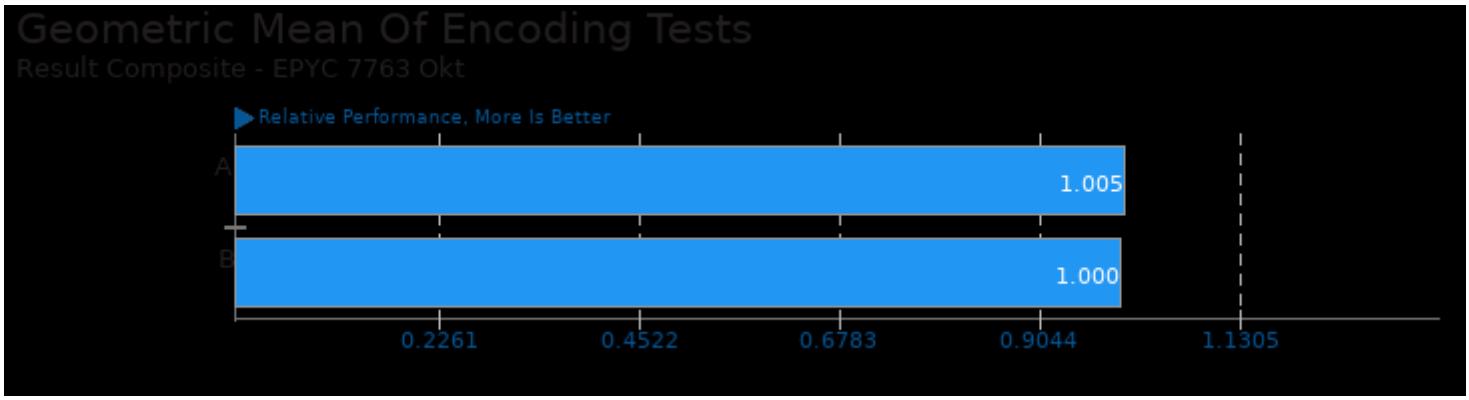
Geometric mean based upon tests: pts/build-llvm, pts/pgbench, pts/kvazaar and pts/aom-av1



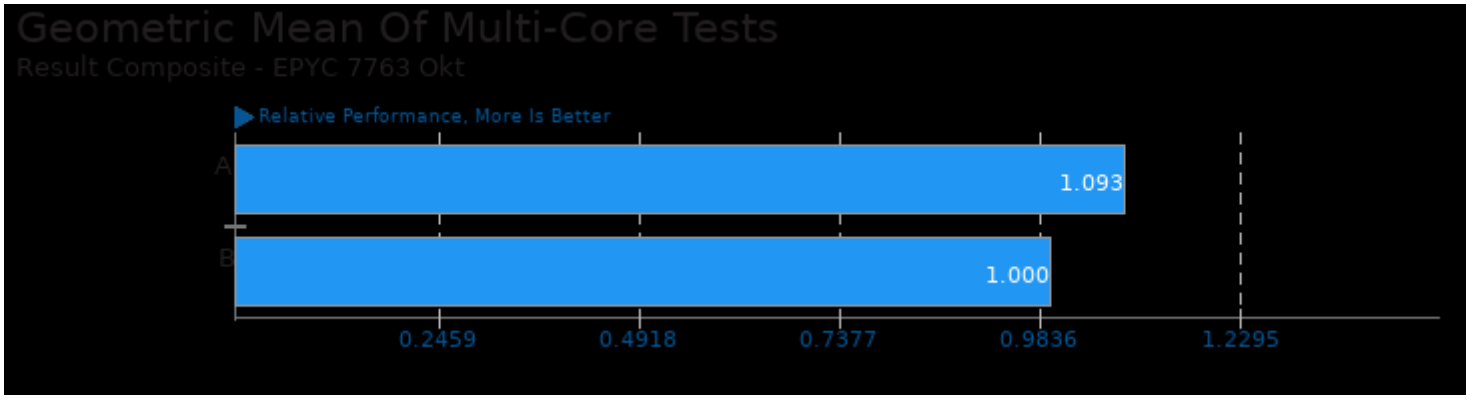
Geometric mean based upon tests: pts/build-llvm, pts/pgbench and pts/cpuminer-opt



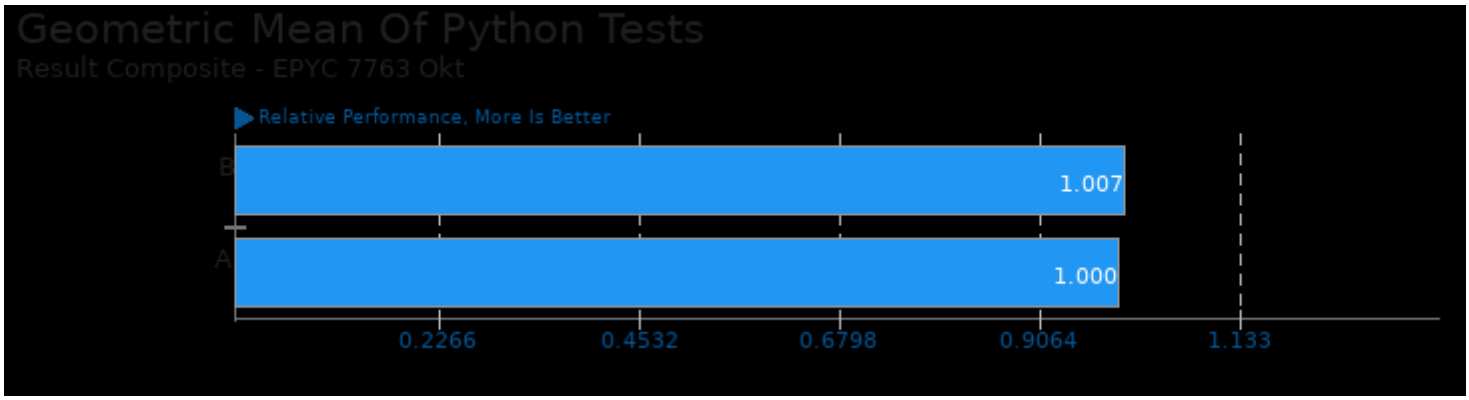
Geometric mean based upon tests: pts/kvazaar, pts/aom-av1, system/gimp and pts/astcenc



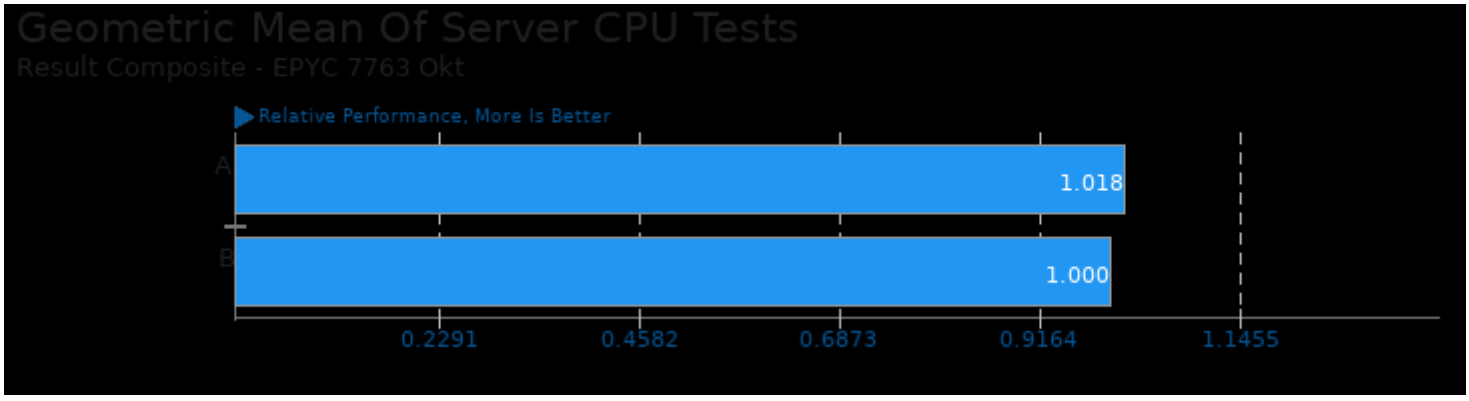
Geometric mean based upon tests: pts/kvazaar and pts/aom-av1



Geometric mean based upon tests: pts/cpuminer-opt, pts/kvazaar, pts/aom-av1, pts/build-llvm and pts/pgbench

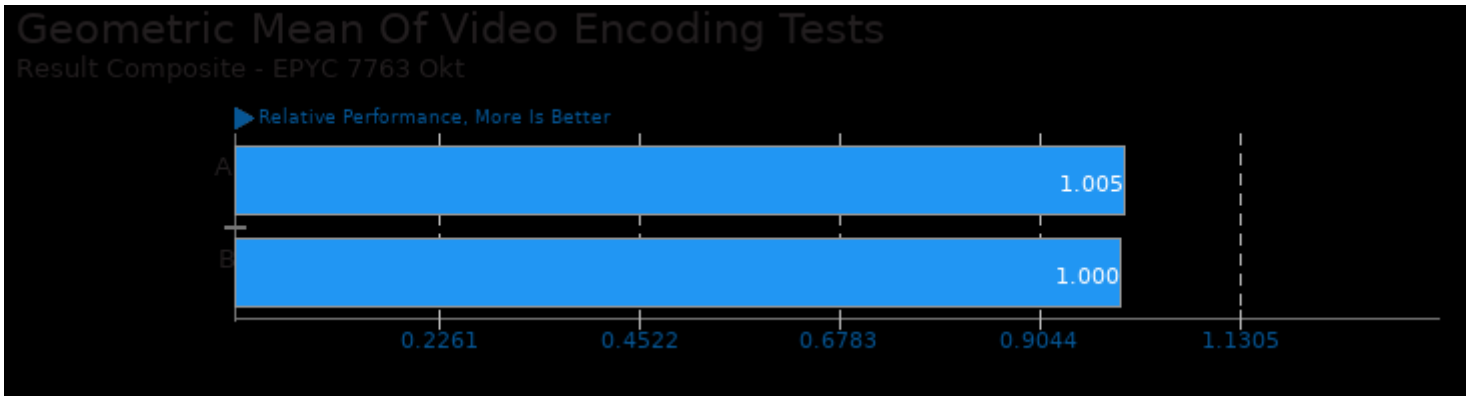


Geometric mean based upon tests: pts/pyhpc and pts/build-llvm



Geometric mean based upon tests: pts/build-llvm, system/gimp and pts/cpuminer-opt

EPYC 7763 Okt



Geometric mean based upon tests: pts/kvazaar and pts/aom-av1

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 01:14.