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epyc-7f72-eo-september

AMD EPYC 7F72 24-Core testing with a ASRockRack EPYCD8 (P2.10 BIOS) and ASPEED on Ubuntu 20.04 via the Phoronix Test Suite.

Automated Executive Summary

EPYC 7F72 x had the most wins, coming in first place for 42% of the tests.

Based on the geometric mean of all complete results, the fastest (EPYC 7F72 x) was 1.008x the speed of the slowest (3). 2 was 0.995x the speed of EPYC 7F72 x, EPYC 7F72 was 0.998x the speed of 2, 3 was 1x the speed of EPYC 7F72.

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

NCNN (Target: CPU - Model: mobilenet) at 1.051x
LeelaChessZero (Backend: Eigen) at 1.051x
NCNN (Target: CPU - Model: squeezenet) at 1.04x
NCNN (Target: CPU - Model: alexnet) at 1.028x
LeelaChessZero (Backend: BLAS) at 1.019x
Timed MAFFT Alignment (Multiple Sequence Alignment - LSU RNA) at 1.019x
BYTE Unix Benchmark (Computational Test: Dhrystone 2) at 1.016x
LeelaChessZero (Backend: Random) at 1.011x

NCNN (Target: CPU - Model: blazeface) at 1.011x
Mlpack Benchmark (Benchmark: scikit_ica) at 1.01x.

Test Systems:

EPYC 7F72

EPYC 7F72 x

2

3

Processor: AMD EPYC 7F72 24-Core @ 3.20GHz (24 Cores / 48 Threads), Motherboard: ASRockRack EPYCD8 (P2.10 BIOS), Chipset: AMD Starship/Matisse, Memory: 126GB, Disk: 3841GB Micron_9300_MTFDHAL3T8TDP, Graphics: ASPEED, Audio: AMD Starship/Matisse, Network: 2 x Intel I350

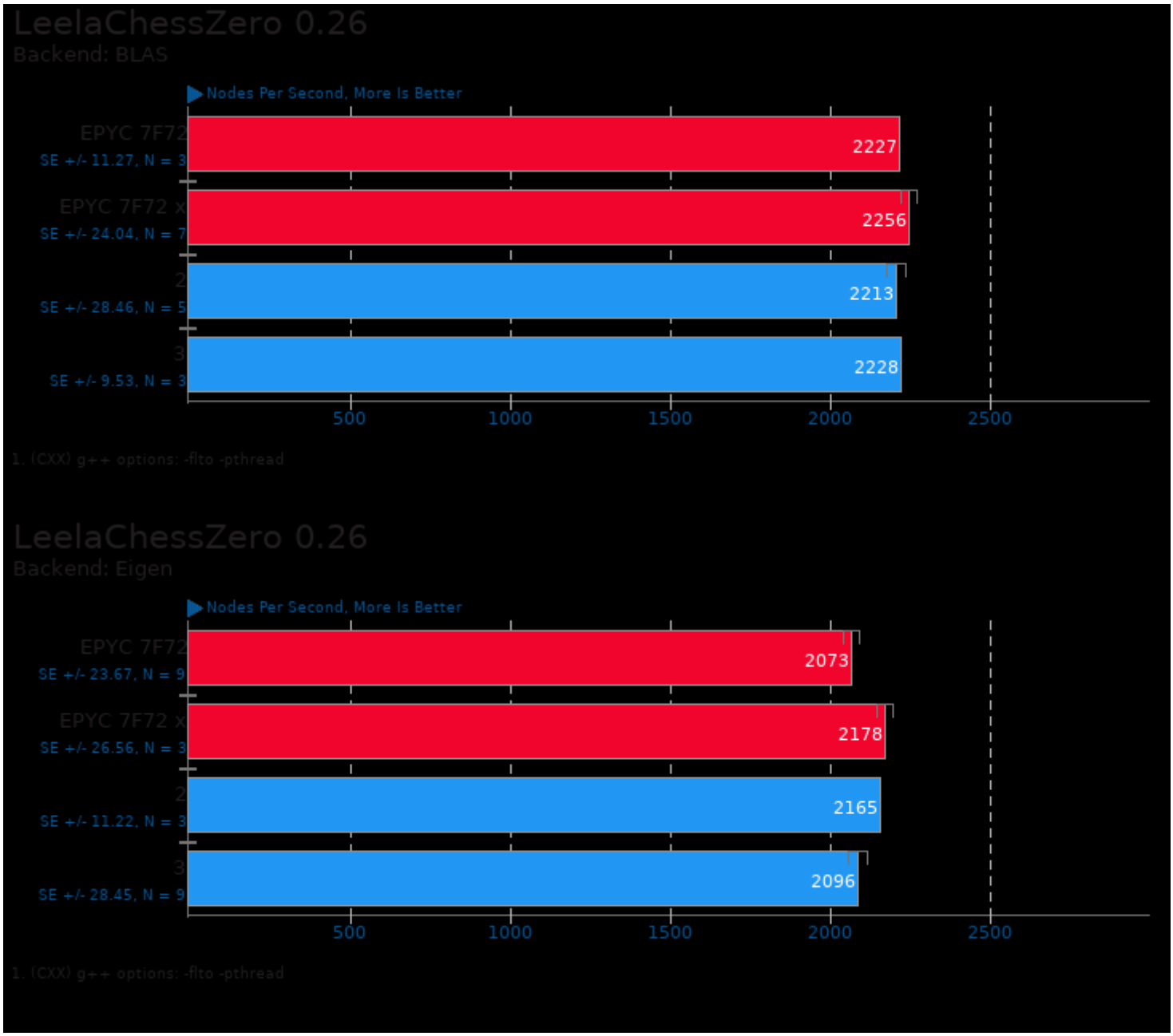
OS: Ubuntu 20.04, Kernel: 5.9.0-050900rc6daily20200921-generic (x86_64) 20200920, Desktop: GNOME Shell 3.36.4, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 1024x768

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++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none,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: 0x830101c
Python Notes: Python 3.8.2
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

	EPYC 7F72	EPYC 7F72 x	2	3
LeelaChessZero - BLAS (Nodes/s)	2227	**2256**	**2213**	2228
Normalized	98.71%	100%	98.09%	98.76%
Standard Deviation	0.9%	2.8%	2.9%	0.7%
LeelaChessZero - Eigen (Nodes/s)	**2073**	**2178**	2165	2096
Normalized	95.18%	100%	99.4%	96.24%
Standard Deviation	3.4%	2.1%	0.9%	4.1%
LeelaChessZero - Rand (Nodes/s)	164671	**164311**	**166198**	165528
Normalized	99.08%	98.86%	100%	99.6%
Standard Deviation	1.4%	1.6%	1.2%	2%
Dolfyn - C.F.D (sec)	18.627	18.637	**18.540**	**18.646**
Normalized	99.53%	99.48%	100%	99.43%
Standard Deviation	0.6%	0.7%	0.3%	0.5%
FFTE - N.2.3.C.F.R (MFLOPS)	121809	**122400**	**121264**	122021

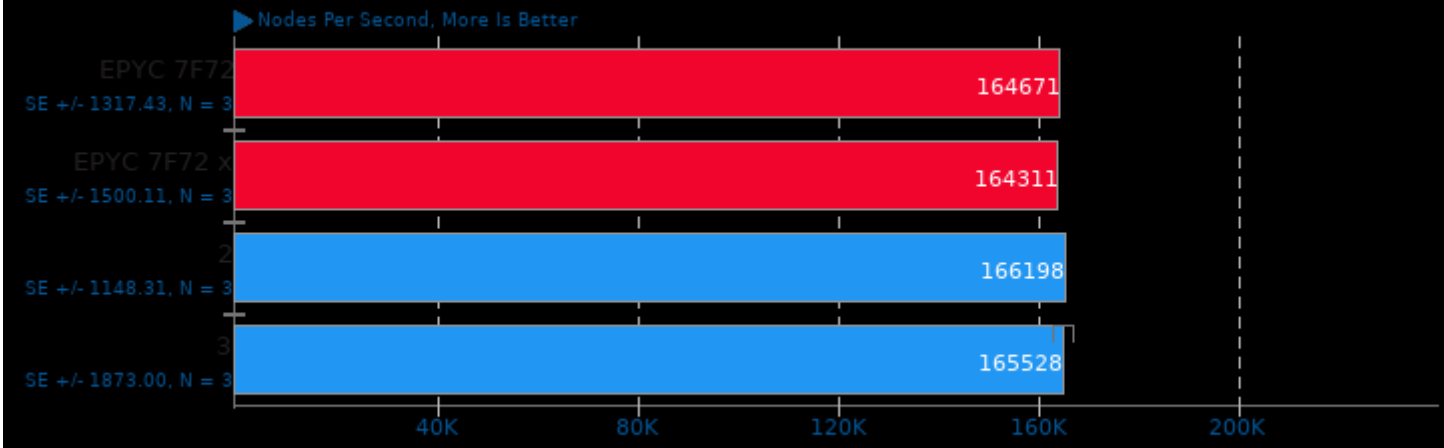
Normalized	99.52%	100%	99.07%	99.69%
Standard Deviation	0.9%	0.4%	1.2%	0.4%
Timed HMMer Search - P.D.S (sec)	**142.413**	**142.611**	142.595	142.538
Normalized	100%	99.86%	99.87%	99.91%
Standard Deviation	0.3%	0.1%	0%	0%
Timed MAFFT Alignment - M.S.A - LSU RNA (sec)	**9.465**	9.559	**9.644**	9.575
Normalized	100%	99.02%	98.14%	98.85%
Standard Deviation	1%	0.5%	1%	1%
BYTE Unix Benchmark - Dhrystone 2 (LPS)	**37756888**	**38374014**	37972490	37884312
Normalized	98.39%	100%	98.95%	98.72%
Standard Deviation	1.8%	1.9%	2.9%	2.5%
Apache CouchDB - 100 - 1000 - 24	**103.685**	103.859	104.448	**104.647**
Normalized	100%	99.83%	99.27%	99.08%
Standard Deviation	0.6%	0.1%	1%	1%
KeyDB (Ops/sec)	420384	**421676**	419756	**419091**
Normalized	99.69%	100%	99.54%	99.39%
Standard Deviation	0.1%	0.9%	0.5%	0.7%
Caffe - AlexNet - CPU - 100 (ms)		75293	**75164**	**75300**
Normalized		99.83%	100%	99.82%
Standard Deviation		0.1%	0.4%	0.5%
Caffe - AlexNet - CPU - 200 (ms)		150373	**150269**	**150626**
Normalized		99.93%	100%	99.76%
Standard Deviation		0.2%	0.1%	0.1%
Caffe - AlexNet - CPU - 1000 (ms)		**751617**	**752070**	751645
Normalized		100%	99.94%	100%
Standard Deviation		0.2%	0.2%	0.2%
Caffe - GoogleNet - CPU - 100 (ms)		190013	**189355**	**190069**
Normalized		99.65%	100%	99.62%
Standard Deviation		0.4%	0.2%	0.4%
Caffe - GoogleNet - CPU - 200 (ms)		379880	**380086**	**379324**
Normalized		99.85%	99.8%	100%
Standard Deviation		0.2%	0.2%	0.1%
Caffe - GoogleNet - CPU - 1000 (ms)		**1902543**	**1900487**	1900833
Normalized		99.89%	100%	99.98%
Standard Deviation		0.2%	0.1%	0.1%
NCNN - CPU - squeezenet (ms)		**18.87**	19.38	**19.62**
Normalized		100%	97.37%	96.18%
Standard Deviation		0.9%	2.8%	2.6%
NCNN - CPU - mobilenet (ms)		**19.42**	19.93	**20.42**
Normalized		100%	97.44%	95.1%
Standard Deviation		0.1%	3.7%	5.8%
NCNN - CPU-v2-v2 - mobilenet-v2 (ms)		**9.21**	9.26	**9.28**
Normalized		100%	99.46%	99.25%
Standard Deviation		0.9%	1.1%	2.3%
NCNN - CPU-v3-v3 - mobilenet-v3 (ms)		**8.80**	8.81	**8.88**
Normalized		100%	99.89%	99.1%
Standard Deviation		0.5%	1.2%	1.4%
NCNN - CPU - shufflenet-v2 (ms)		**9.32**	9.33	**9.34**
Normalized		100%	99.89%	99.79%
Standard Deviation		0.4%	1.4%	1%
NCNN - CPU - mnasnet (ms)		**8.40**	**8.45**	8.41
Normalized		100%	99.41%	99.88%
Standard Deviation		0.3%	1%	1.3%

NCNN - CPU - efficientnet-b0 (ms)	**11.09**	11.03	**11.00**
Normalized	99.19%	99.73%	100%
Standard Deviation	1.4%	1.3%	1.3%
NCNN - CPU - blazeface (ms)	3.74	**3.77**	**3.73**
Normalized	99.73%	98.94%	100%
Standard Deviation	1.2%	0.9%	1.5%
NCNN - CPU - googlenet (ms)	**19.62**	**19.74**	19.68
Normalized	100%	99.39%	99.7%
Standard Deviation	1.2%	1.2%	1.5%
NCNN - CPU - vgg16 (ms)	32.83	**32.85**	**32.52**
Normalized	99.06%	99%	100%
Standard Deviation	2.9%	2.4%	1.2%
NCNN - CPU - resnet18 (ms)	13.04	**13.05**	**13.00**
Normalized	99.69%	99.62%	100%
Standard Deviation	3.6%	2.6%	1.8%
NCNN - CPU - alexnet (ms)	**9.16**	**9.42**	9.25
Normalized	100%	97.24%	99.03%
Standard Deviation	5%	4.9%	4.4%
NCNN - CPU - resnet50 (ms)	22.78	**22.71**	**22.92**
Normalized	99.69%	100%	99.08%
Standard Deviation	1.2%	0.7%	1.8%
NCNN - CPU - yolov4-tiny (ms)	30.20	**30.14**	**30.27**
Normalized	99.8%	100%	99.57%
Standard Deviation	0.8%	0.9%	1.2%
Hierarchical INTegration - FLOAT (QUIPs)	**328822812**	328868295	**328901110**
Normalized	99.98%	99.99%	100%
Standard Deviation	0%	0%	0.2%
Mlpack Benchmark - scikit_ica (sec)	61.04	**60.77**	**61.39**
Normalized	99.56%	100%	98.99%
Standard Deviation	2.5%	2.8%	0.5%
Mlpack Benchmark - scikit_qda (sec)	39.45	**39.30**	**39.61**
Normalized	99.62%	100%	99.22%
Standard Deviation	0.6%	0.1%	0.4%
Mlpack Benchmark - scikit_svm (sec)	**24.28**	**24.28**	**24.26**
Normalized	99.92%	99.92%	100%
Standard Deviation	0.4%	0.3%	0.4%
Mlpack Benchmark - scikit_linearridgeregression (sec)	1.65	1.65	1.65
Standard Deviation	0.7%	1.4%	0.2%


LeelaChessZero 0.26
Backend: BLAS
Nodes Per Second, More Is Better
EPYC 7F72
SE +/- 11.27, N = 3
2227
EPYC 7F72 x
SE +/- 24.04, N = 7
2256
2
SE +/- 28.46, N = 5
2213
3
SE +/- 9.53, N = 3
2228
500
1000
1500
2000
2500
1. (CXX) g++ options: -flto -pthread
LeelaChessZero 0.26
Backend: Eigen
Nodes Per Second, More Is Better
EPYC 7F72
SE +/- 23.67, N = 9
2073
EPYC 7F72 x
SE +/- 26.56, N = 3
2178
2
SE +/- 11.22, N = 3
2165
3
SE +/- 28.45, N = 9
2096
500
1000
1500
2000
2500
1. (CXX) g++ options: -flto -pthread

LeelaChessZero 0.26

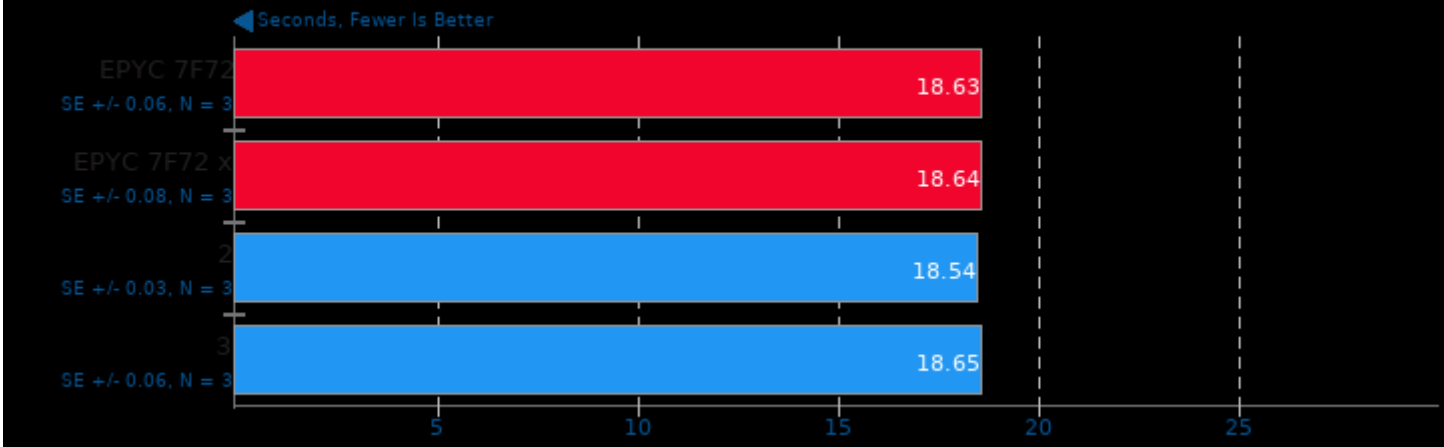
Backend: Random



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

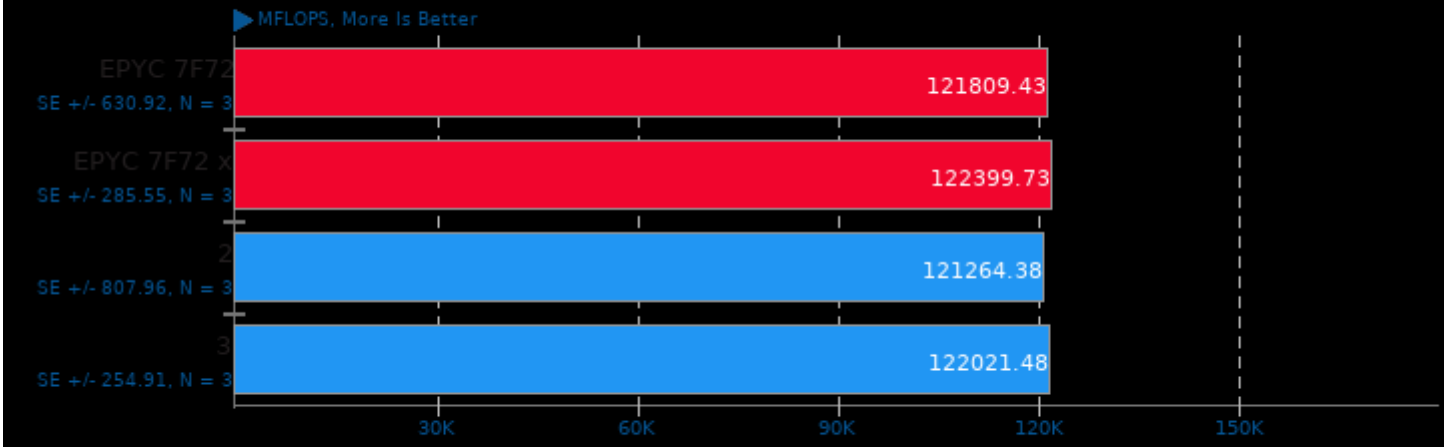
Dolfyn 0.527

Computational Fluid Dynamics

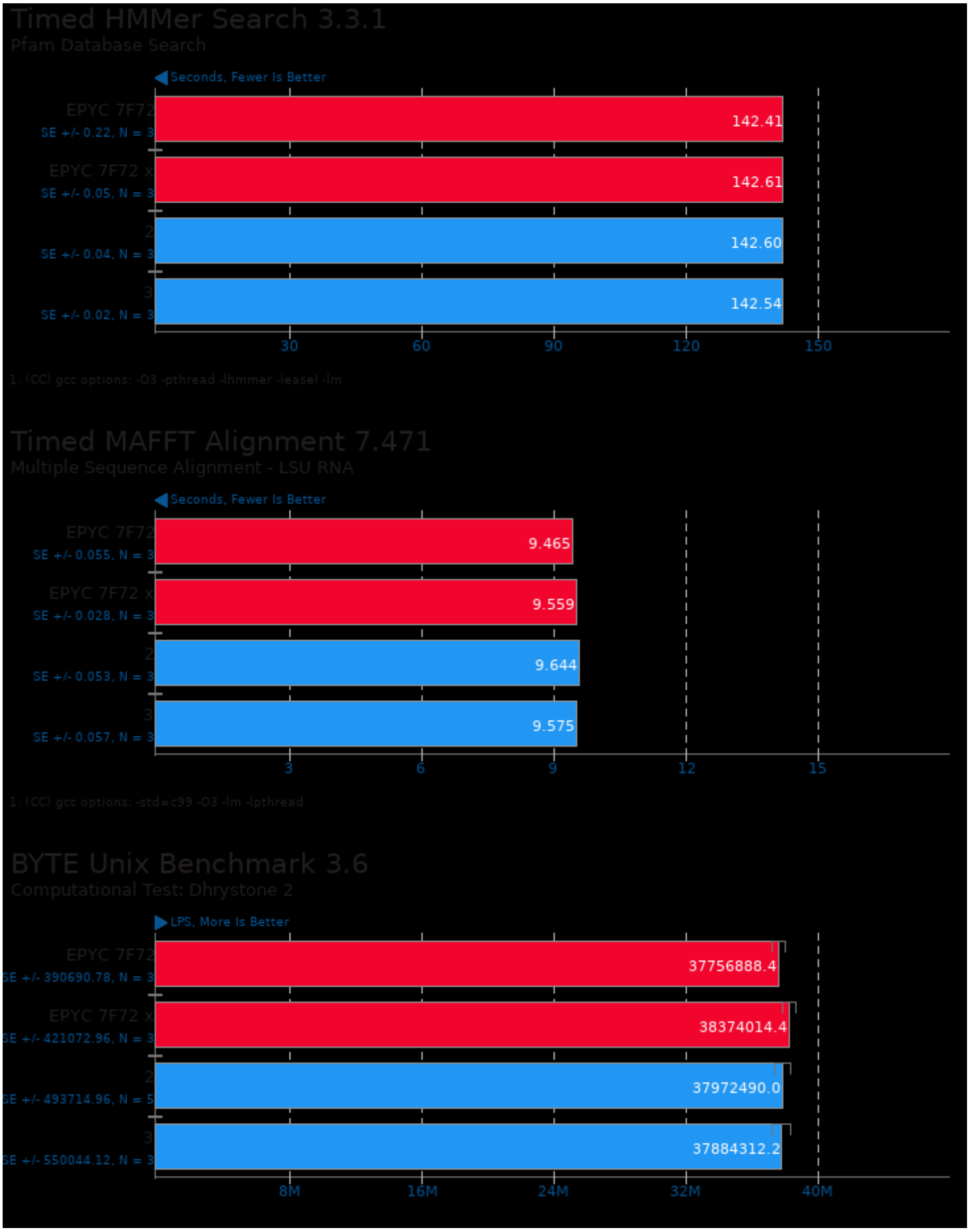


FFTE 7.0

N=256, 3D Complex FFT Routine

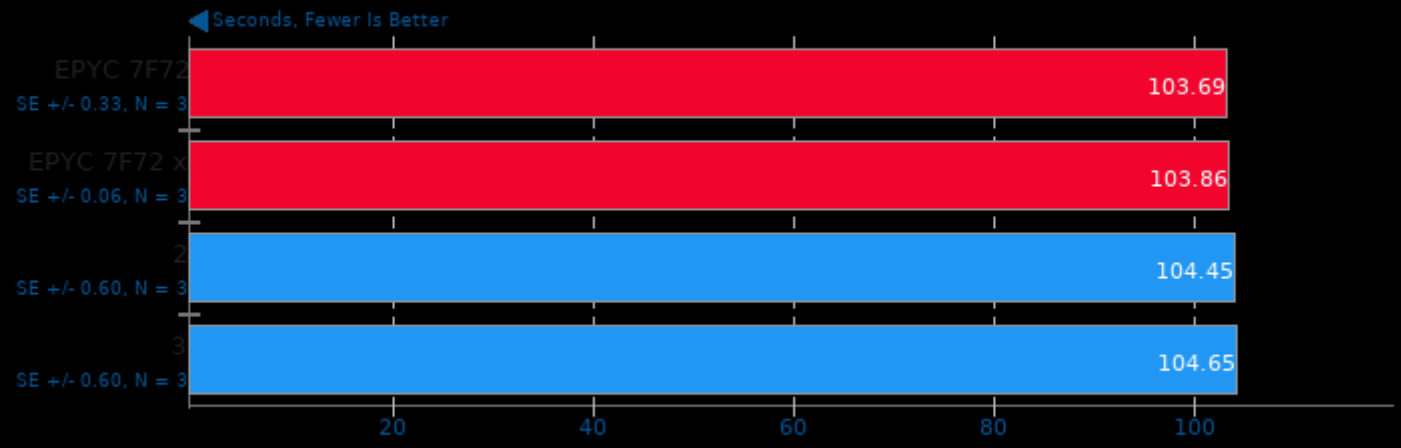


1. (F9X) gfortran options: -O3 -fomit-frame-pointer -fopenmp


Timed HMMer Search 3.3.1
Pfam Database Search
Seconds, Fewer Is Better
EPYC 7F72
SE +/- 0.22, N = 3
142.41
EPYC 7F72 x
SE +/- 0.05, N = 3
142.61
2
SE +/- 0.04, N = 3
142.60
3
SE +/- 0.02, N = 3
142.54
30
60
90
120
150
1. (CC) gcc options: -O3 -pthread -lhmmer -leasel -lm
Timed MAFFT Alignment 7.471
Multiple Sequence Alignment - LSU RNA
Seconds, Fewer Is Better
EPYC 7F72
SE +/- 0.055, N = 3
9.465
EPYC 7F72 x
SE +/- 0.028, N = 3
9.559
2
SE +/- 0.053, N = 3
9.644
3
SE +/- 0.057, N = 3
9.575
3
6
9
12
15
1. (CC) gcc options: -std=c99 -O3 -lm -lpthread
BYTE Unix Benchmark 3.6
Computational Test: Dhrystone 2
LPS, More Is Better
EPYC 7F72
SE +/- 390690.78, N = 3
37756888.4
EPYC 7F72 x
SE +/- 421072.96, N = 3
38374014.4
2
SE +/- 493714.96, N = 5
37972490.0
3
SE +/- 550044.12, N = 3
37884312.2
8M
16M
24M
32M
40M

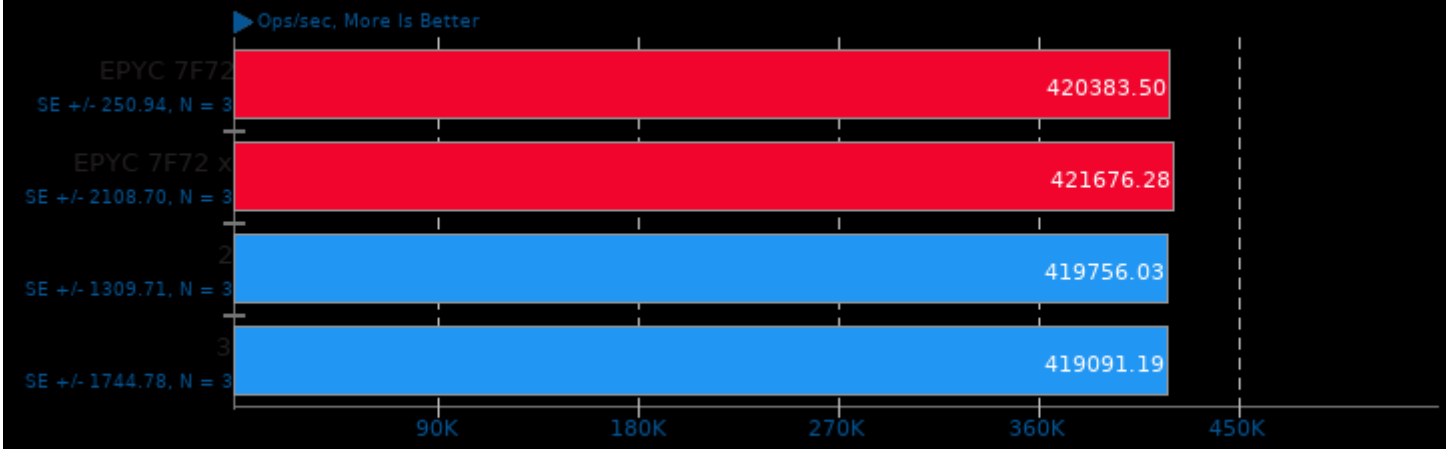
Apache CouchDB 3.1.1

Bulk Size: 100 - Inserts: 1000 - Rounds: 24



1. (CXX) g++ options: -std=c++14 -lmozjs-68 -lm -lerl_interface -lei -fPIC -MMD

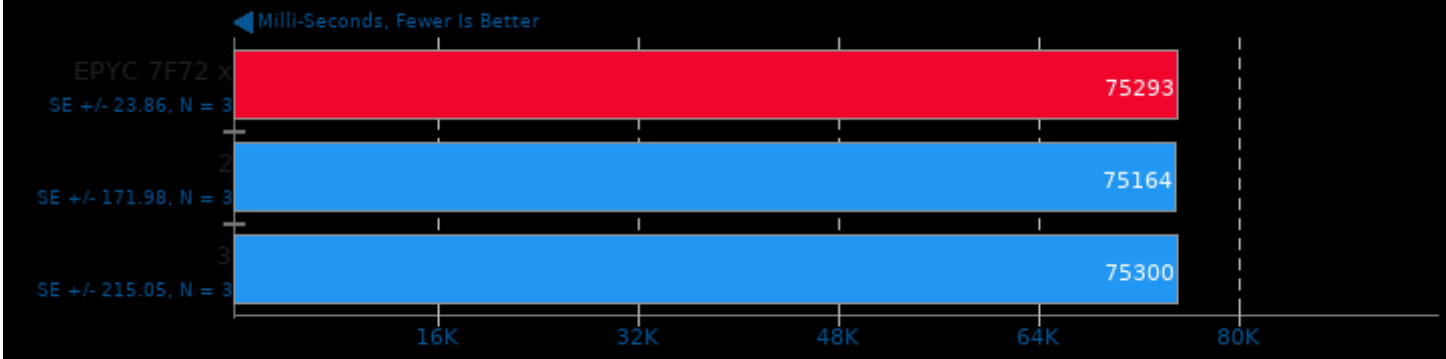
KeyDB 6.0.16



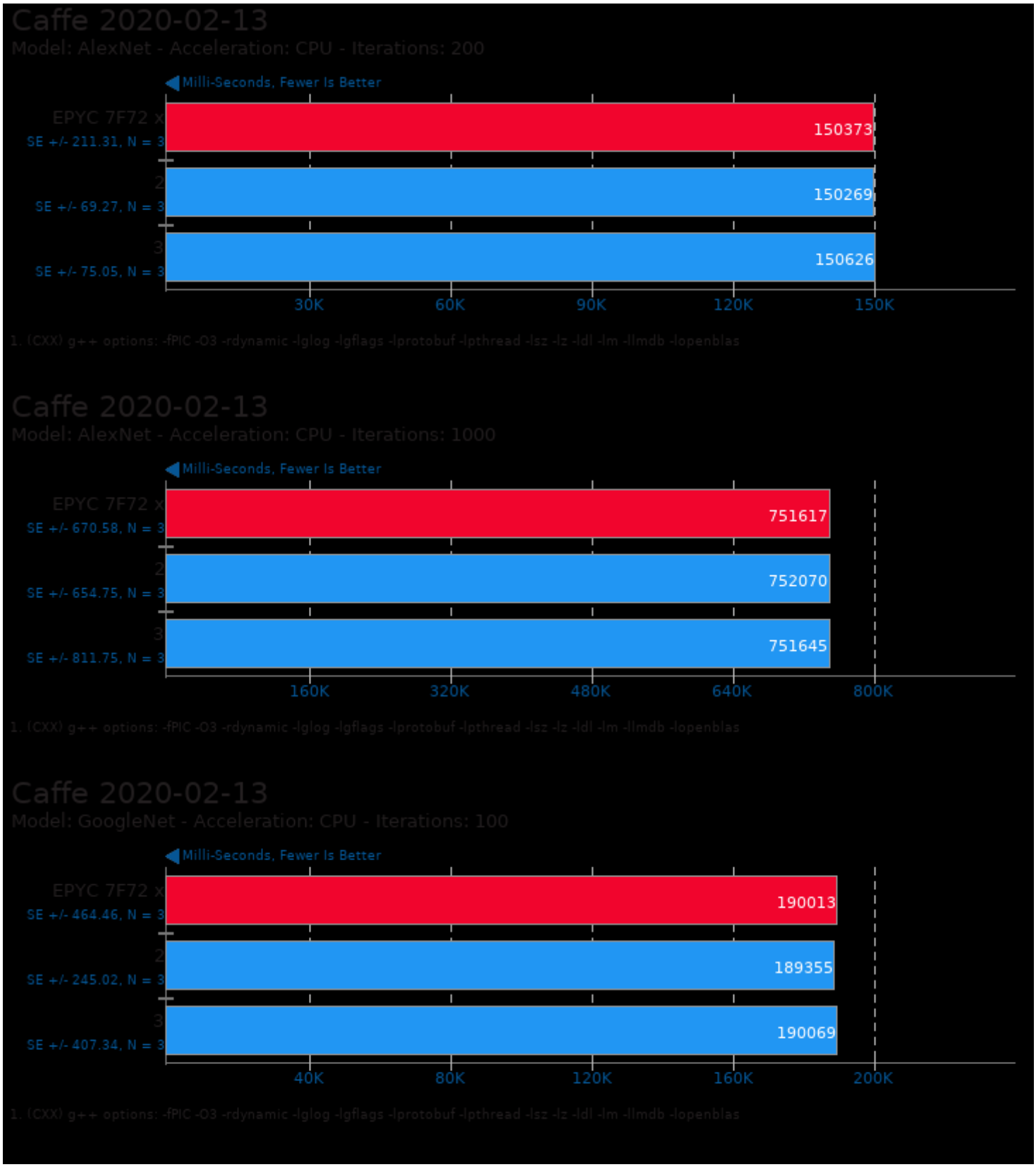
1. (CXX) g++ options: -O2 -levent_openssl -levent -lcrypto -lssl -lpthread -lz -lpcre

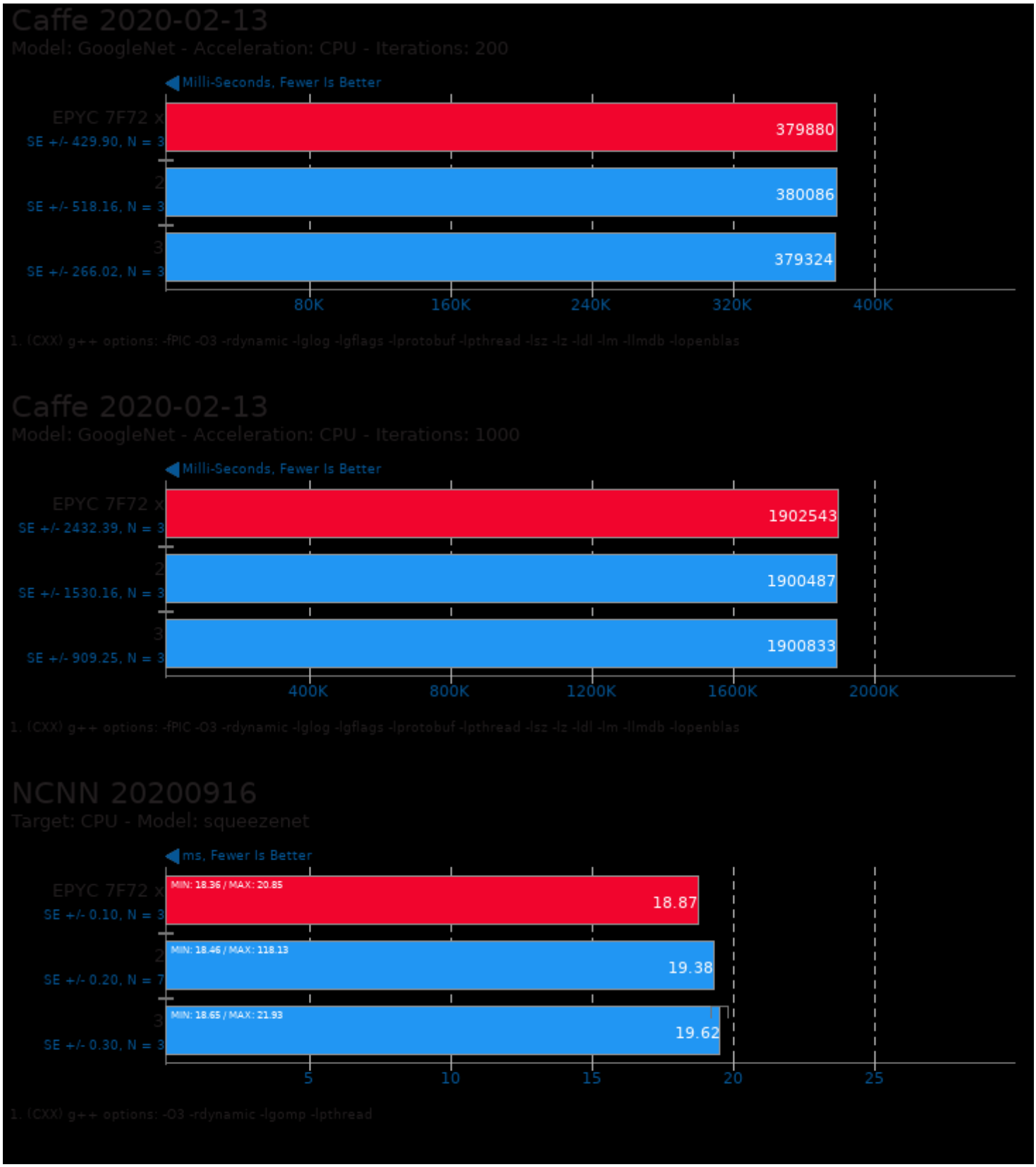
Caffe 2020-02-13

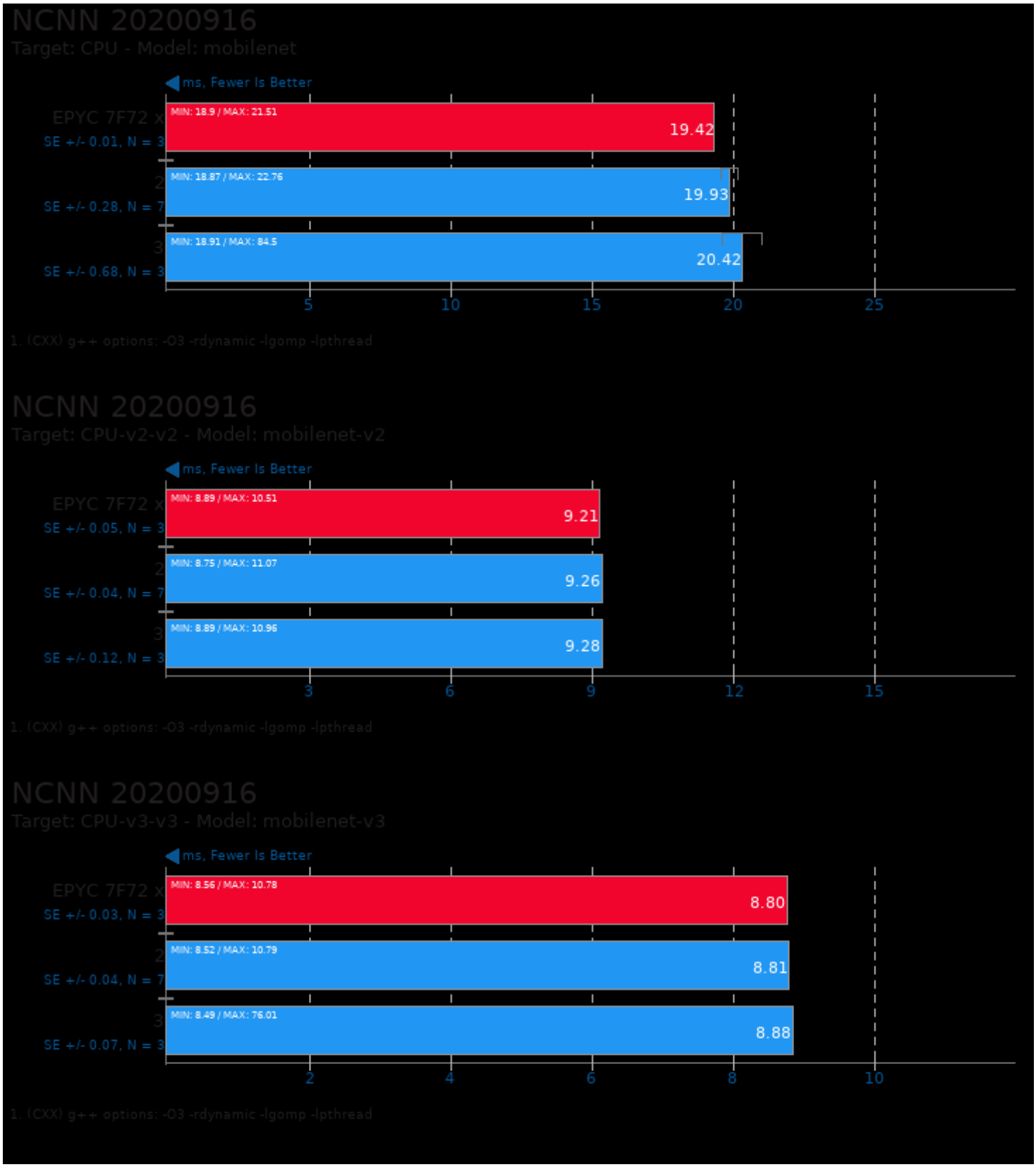
Model: AlexNet - Acceleration: CPU - Iterations: 100

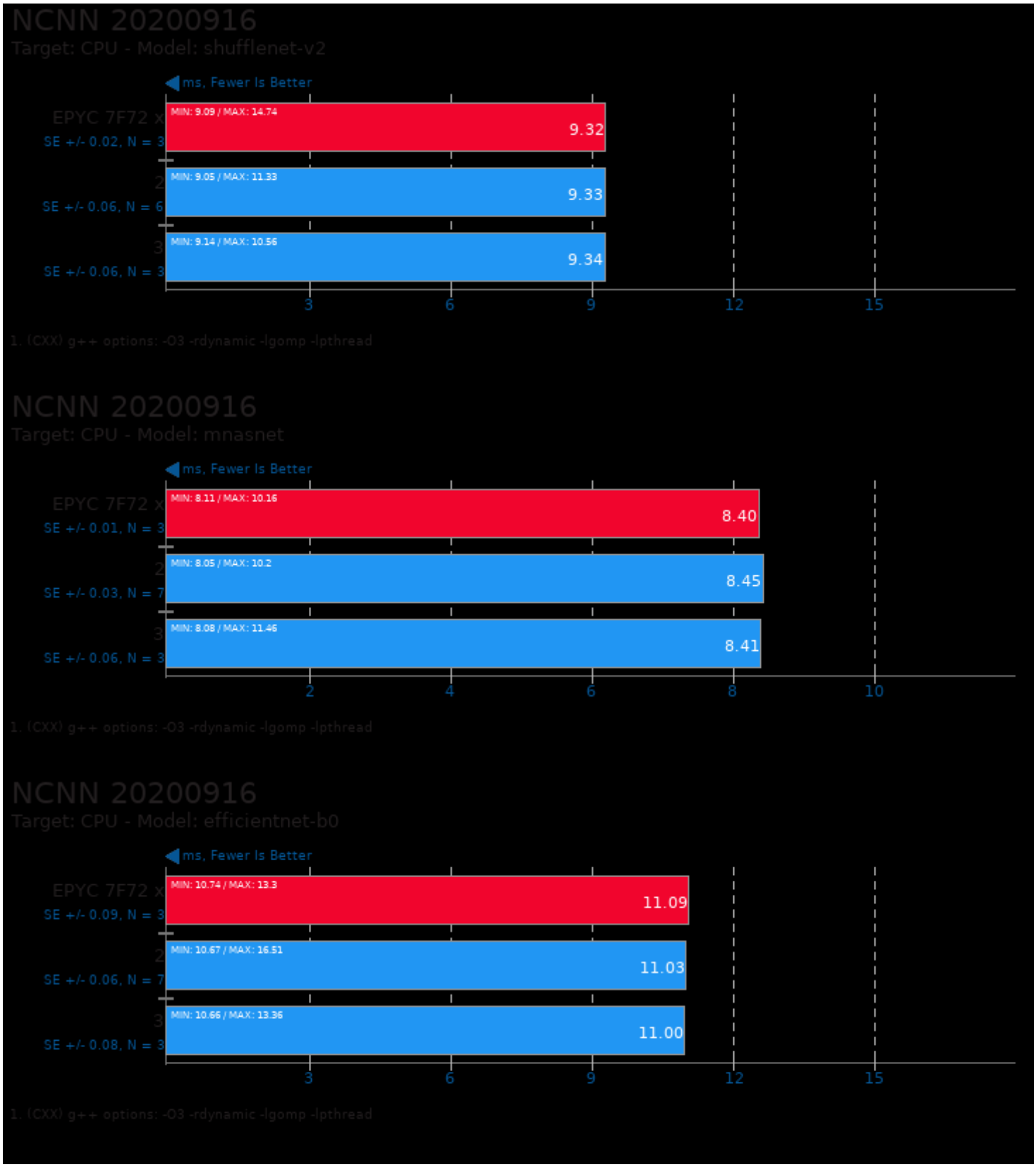


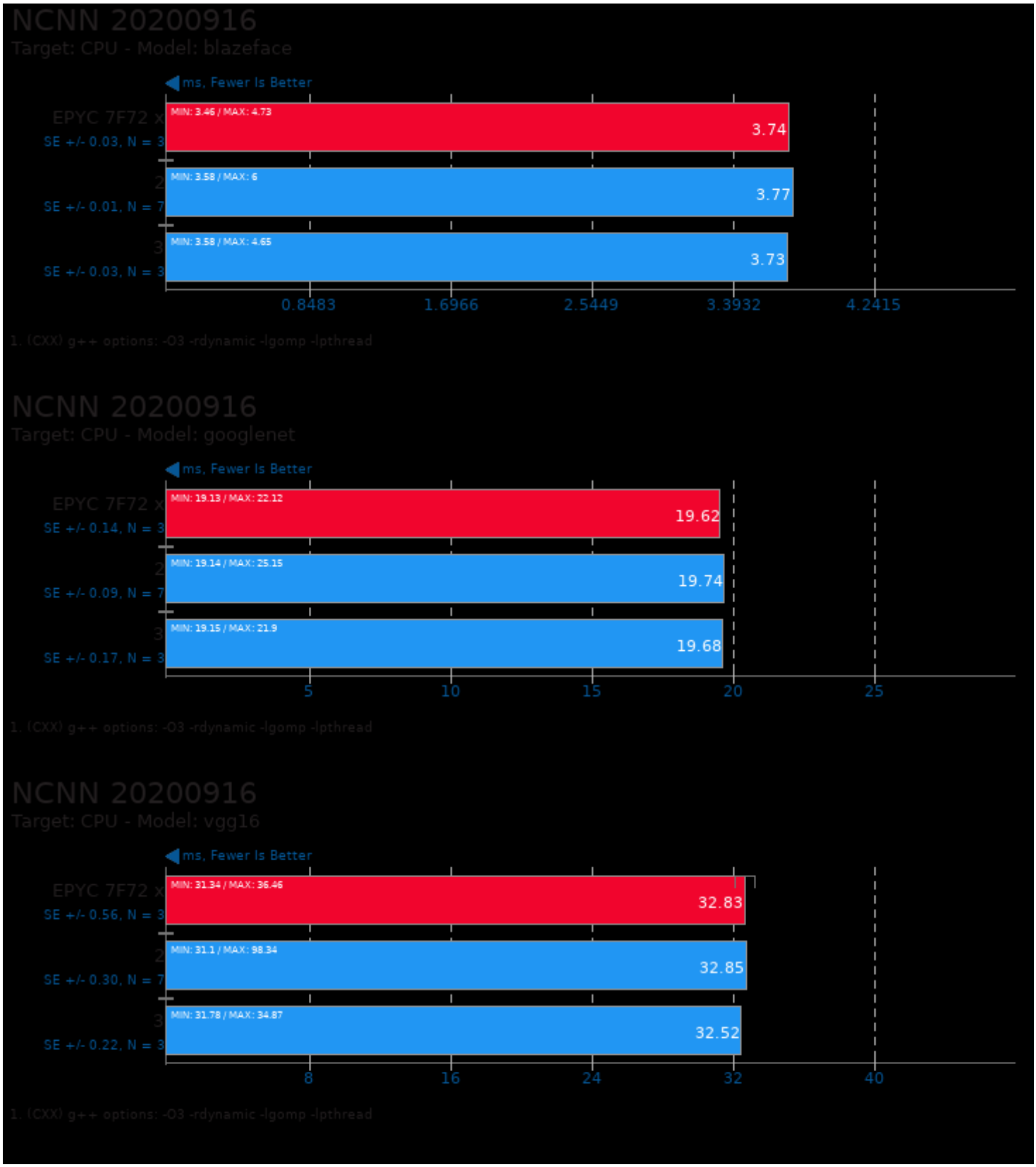
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas

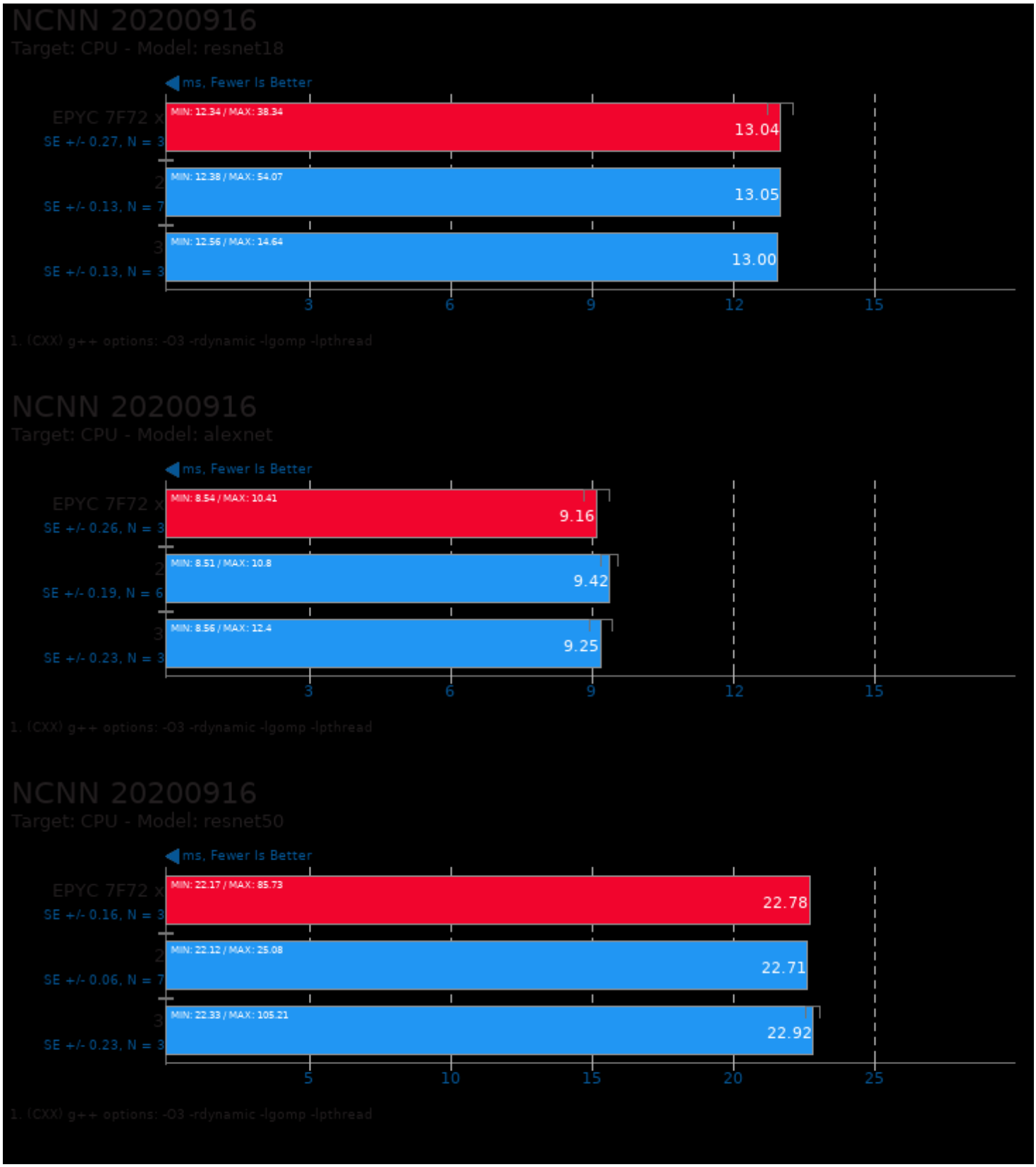

Caffe 2020-02-13
Model: AlexNet - Acceleration: CPU - Iterations: 200
Milli-Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 211.31, N = 3
150373
2
SE +/- 69.27, N = 3
150269
3
SE +/- 75.05, N = 3
150626
30K
60K
90K
120K
150K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas
Caffe 2020-02-13
Model: AlexNet - Acceleration: CPU - Iterations: 1000
Milli-Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 670.58, N = 3
751617
2
SE +/- 654.75, N = 3
752070
3
SE +/- 811.75, N = 3
751645
160K
320K
480K
640K
800K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas
Caffe 2020-02-13
Model: GoogleNet - Acceleration: CPU - Iterations: 100
Milli-Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 464.46, N = 3
190013
2
SE +/- 245.02, N = 3
189355
3
SE +/- 407.34, N = 3
190069
40K
80K
120K
160K
200K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas

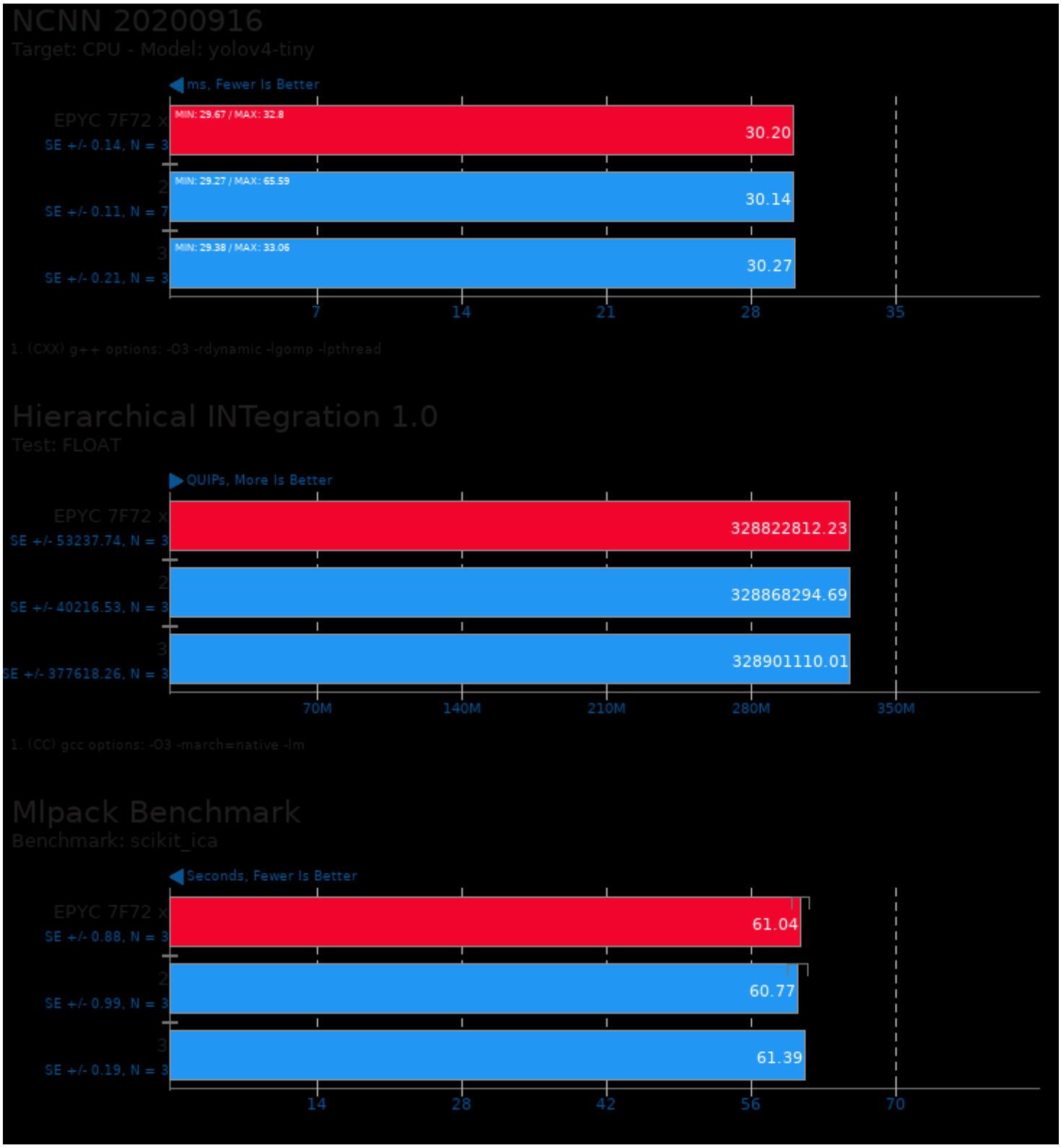

Caffe 2020-02-13
Model: GoogleNet - Acceleration: CPU - Iterations: 200
Milli-Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 429.90, N = 3
379880
2
SE +/- 518.16, N = 3
380086
3
SE +/- 266.02, N = 3
379324
80K
160K
240K
320K
400K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas
Caffe 2020-02-13
Model: GoogleNet - Acceleration: CPU - Iterations: 1000
Milli-Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 2432.39, N = 3
1902543
2
SE +/- 1530.16, N = 3
1900487
3
SE +/- 909.25, N = 3
1900833
400K
800K
1200K
1600K
2000K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas
NCNN 20200916
Target: CPU - Model: squeezenet
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.10, N = 3
MIN: 18.36 / MAX: 20.85
18.87
2
SE +/- 0.20, N = 7
MIN: 18.46 / MAX: 118.13
19.38
3
SE +/- 0.30, N = 3
MIN: 18.65 / MAX: 21.93
19.62
5
10
15
20
25
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

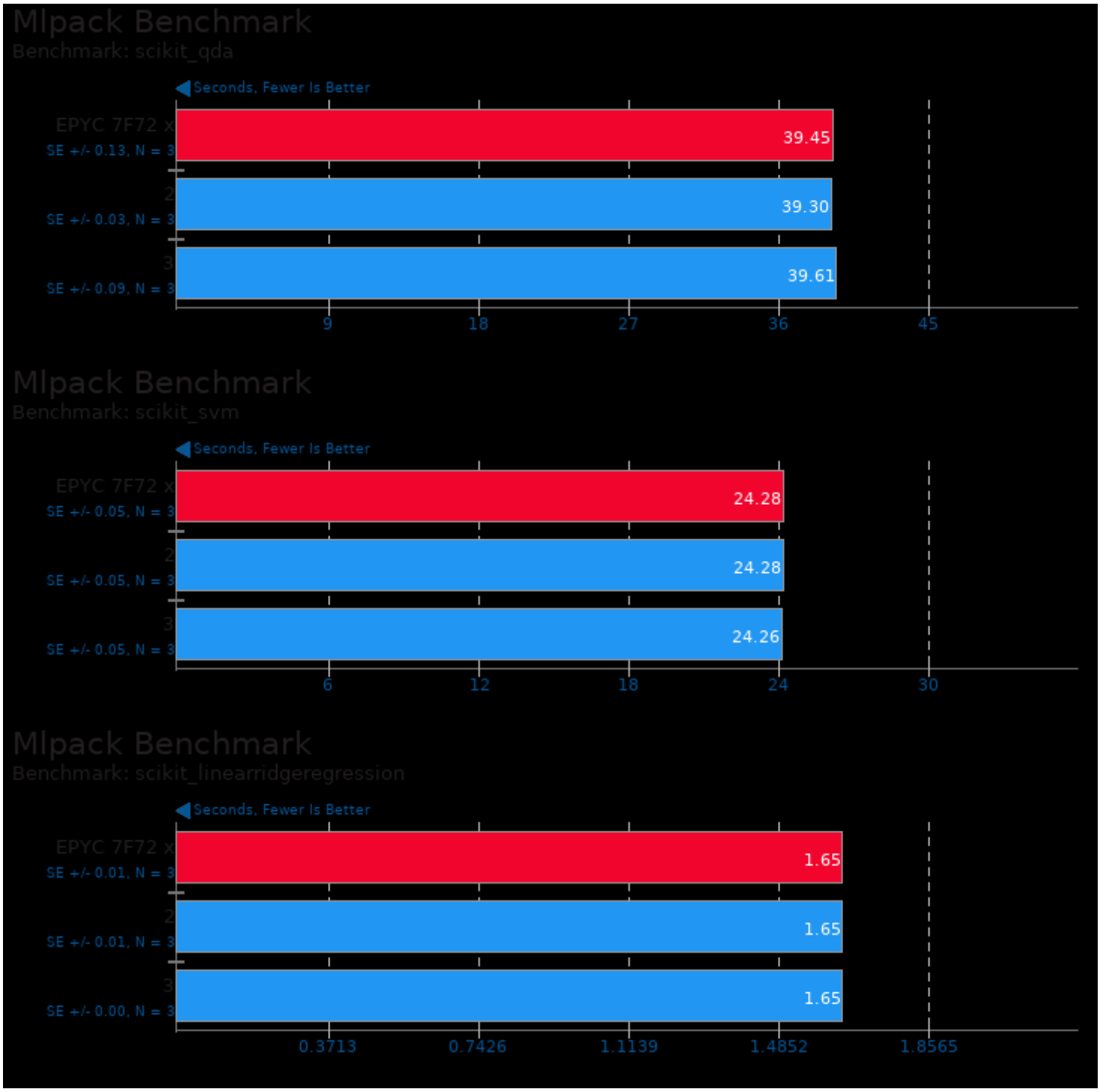

NCNN 20200916
Target: CPU - Model: mobilenet
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.01, N = 3
MIN: 18.9 / MAX: 21.51
19.42
2
SE +/- 0.28, N = 7
MIN: 18.87 / MAX: 22.76
19.93
3
SE +/- 0.68, N = 3
MIN: 18.91 / MAX: 84.5
20.42
5
10
15
20
25
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU-v2-v2 - Model: mobilenet-v2
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.05, N = 3
MIN: 8.89 / MAX: 10.51
9.21
2
SE +/- 0.04, N = 7
MIN: 8.75 / MAX: 11.07
9.26
3
SE +/- 0.12, N = 3
MIN: 8.89 / MAX: 10.96
9.28
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU-v3-v3 - Model: mobilenet-v3
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.03, N = 3
MIN: 8.56 / MAX: 10.78
8.80
2
SE +/- 0.04, N = 7
MIN: 8.52 / MAX: 10.79
8.81
3
SE +/- 0.07, N = 3
MIN: 8.49 / MAX: 76.01
8.88
2
4
6
8
10
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread


NCNN 20200916
Target: CPU - Model: shufflenet-v2
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.02, N = 3
MIN: 9.09 / MAX: 14.74
9.32
SE +/- 0.06, N = 6
MIN: 9.05 / MAX: 11.33
9.33
SE +/- 0.06, N = 3
MIN: 9.14 / MAX: 10.56
9.34
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU - Model: mnasnet
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.01, N = 3
MIN: 8.11 / MAX: 10.16
8.40
SE +/- 0.03, N = 7
MIN: 8.05 / MAX: 10.2
8.45
SE +/- 0.06, N = 3
MIN: 8.08 / MAX: 11.46
8.41
2
4
6
8
10
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU - Model: efficientnet-b0
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.09, N = 3
MIN: 10.74 / MAX: 13.3
11.09
SE +/- 0.06, N = 7
MIN: 10.67 / MAX: 16.51
11.03
SE +/- 0.08, N = 3
MIN: 10.66 / MAX: 13.36
11.00
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

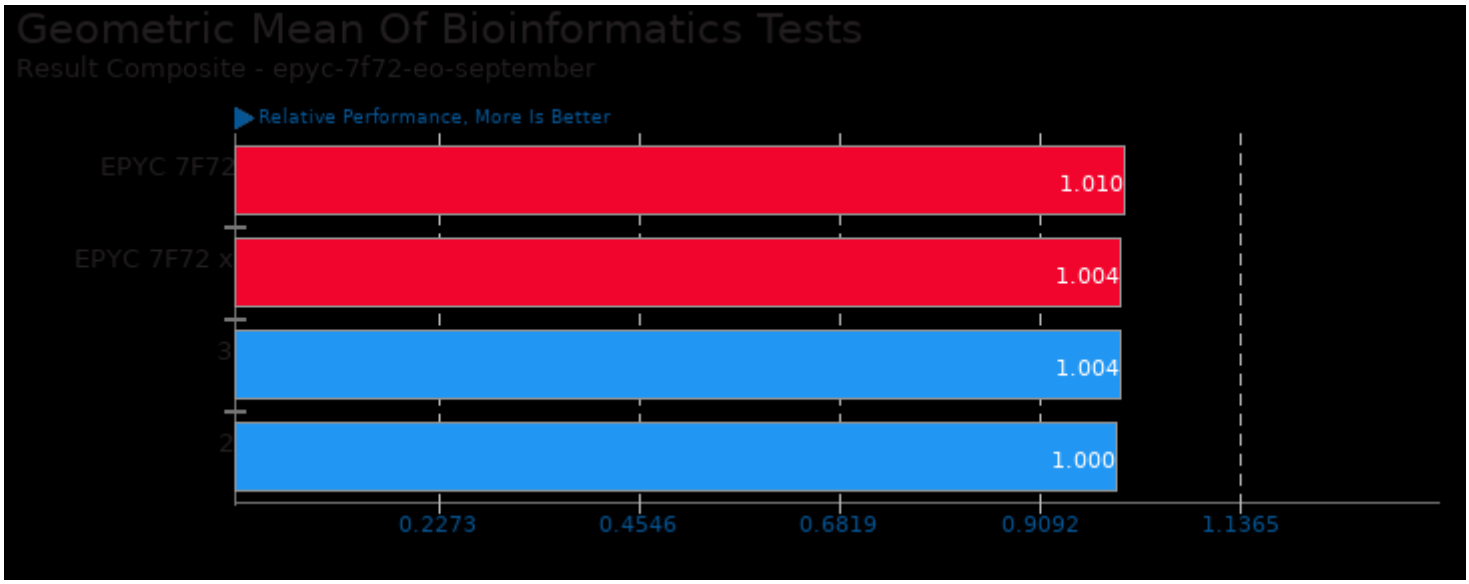

NCNN 20200916
Target: CPU - Model: blazeface
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.03, N = 3
MIN: 3.46 / MAX: 4.73
3.74
SE +/- 0.01, N = 7
MIN: 3.58 / MAX: 6
3.77
SE +/- 0.03, N = 3
MIN: 3.58 / MAX: 4.65
3.73
0.8483
1.6966
2.5449
3.3932
4.2415
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU - Model: googlenet
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.14, N = 3
MIN: 19.13 / MAX: 22.12
19.62
SE +/- 0.09, N = 7
MIN: 19.14 / MAX: 25.15
19.74
SE +/- 0.17, N = 3
MIN: 19.15 / MAX: 21.9
19.68
5
10
15
20
25
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU - Model: vgg16
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.56, N = 3
MIN: 31.34 / MAX: 36.46
32.83
SE +/- 0.30, N = 7
MIN: 31.1 / MAX: 98.34
32.85
SE +/- 0.22, N = 3
MIN: 31.78 / MAX: 34.87
32.52
8
16
24
32
40
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread


NCNN 20200916
Target: CPU - Model: resnet18
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.27, N = 3
MIN: 12.34 / MAX: 38.34
13.04
2
SE +/- 0.13, N = 7
MIN: 12.38 / MAX: 54.07
13.05
3
SE +/- 0.13, N = 3
MIN: 12.56 / MAX: 14.64
13.00
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU - Model: alexnet
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.26, N = 3
MIN: 8.54 / MAX: 10.41
9.16
2
SE +/- 0.19, N = 6
MIN: 8.51 / MAX: 10.8
9.42
3
SE +/- 0.23, N = 3
MIN: 8.56 / MAX: 12.4
9.25
3
6
9
12
15
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
NCNN 20200916
Target: CPU - Model: resnet50
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.16, N = 3
MIN: 22.17 / MAX: 85.73
22.78
2
SE +/- 0.06, N = 7
MIN: 22.12 / MAX: 25.08
22.71
3
SE +/- 0.23, N = 3
MIN: 22.33 / MAX: 105.21
22.92
5
10
15
20
25
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread

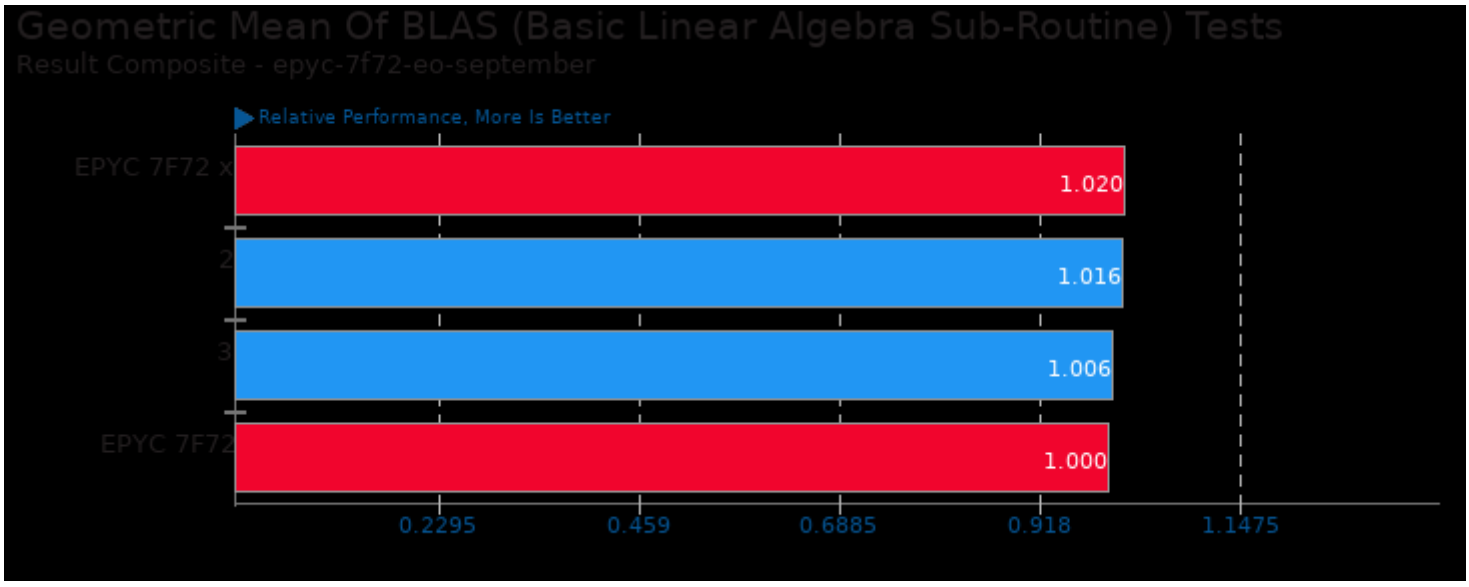

NCNN 20200916
Target: CPU - Model: yolov4-tiny
ms, Fewer Is Better
EPYC 7F72 x
SE +/- 0.14, N = 3
MIN: 29.67 / MAX: 32.8
30.20
2
SE +/- 0.11, N = 7
MIN: 29.27 / MAX: 65.59
30.14
3
SE +/- 0.21, N = 3
MIN: 29.38 / MAX: 33.06
30.27
7
14
21
28
35
1. (CXX) g++ options: -O3 -rdynamic -lgomp -lpthread
Hierarchical INTegration 1.0
Test: FLOAT
QUIPs, More Is Better
EPYC 7F72 x
SE +/- 53237.74, N = 3
328822812.23
2
SE +/- 40216.53, N = 3
328868294.69
3
SE +/- 377618.26, N = 3
328901110.01
70M
140M
210M
280M
350M
1. (CC) gcc options: -O3 -march=native -lm
Mlpack Benchmark
Benchmark: scikit_ica
Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 0.88, N = 3
61.04
2
SE +/- 0.99, N = 3
60.77
3
SE +/- 0.19, N = 3
61.39
14
28
42
56
70


Mlpack Benchmark
Benchmark: scikit_qda
Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 0.13, N = 3
39.45
2
SE +/- 0.03, N = 3
39.30
3
SE +/- 0.09, N = 3
39.61
9
18
27
36
45
Mlpack Benchmark
Benchmark: scikit_svm
Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 0.05, N = 3
24.28
2
SE +/- 0.05, N = 3
24.28
3
SE +/- 0.05, N = 3
24.26
6
12
18
24
30
Mlpack Benchmark
Benchmark: scikit_linearridgeregression
Seconds, Fewer Is Better
EPYC 7F72 x
SE +/- 0.01, N = 3
1.65
2
SE +/- 0.01, N = 3
1.65
3
SE +/- 0.00, N = 3
1.65
0.3713
0.7426
1.1139
1.4852
1.8565

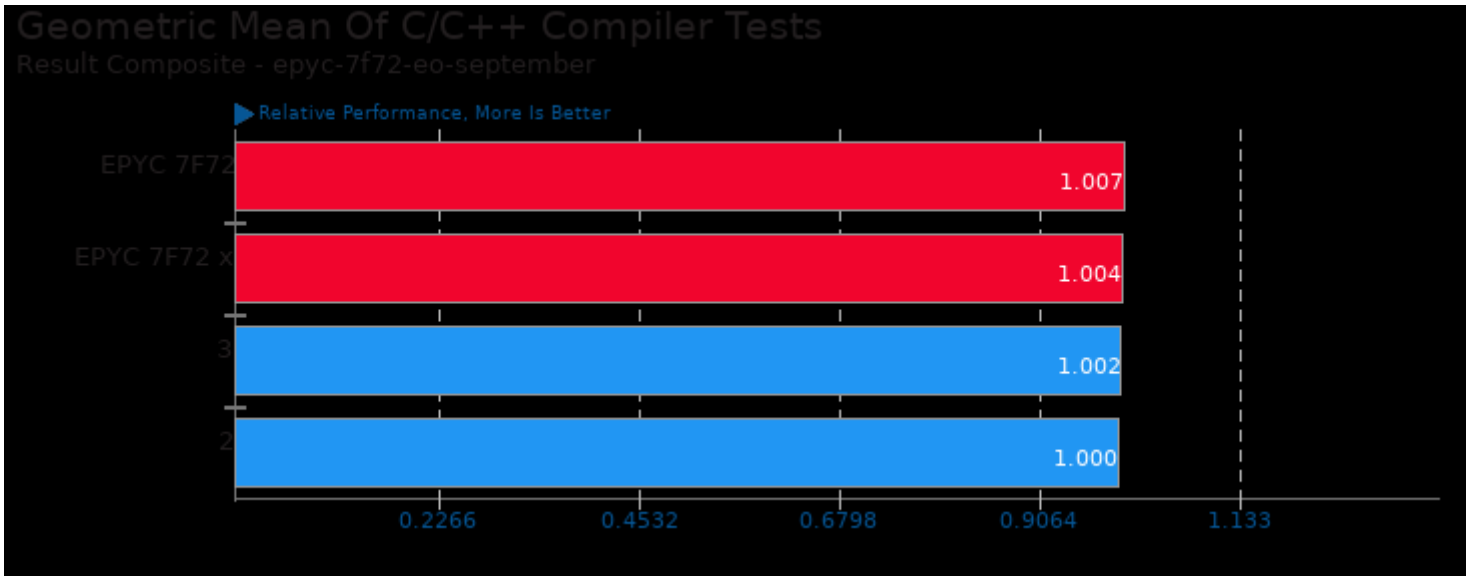
These geometric means are based upon test groupings / test suites for this result file.



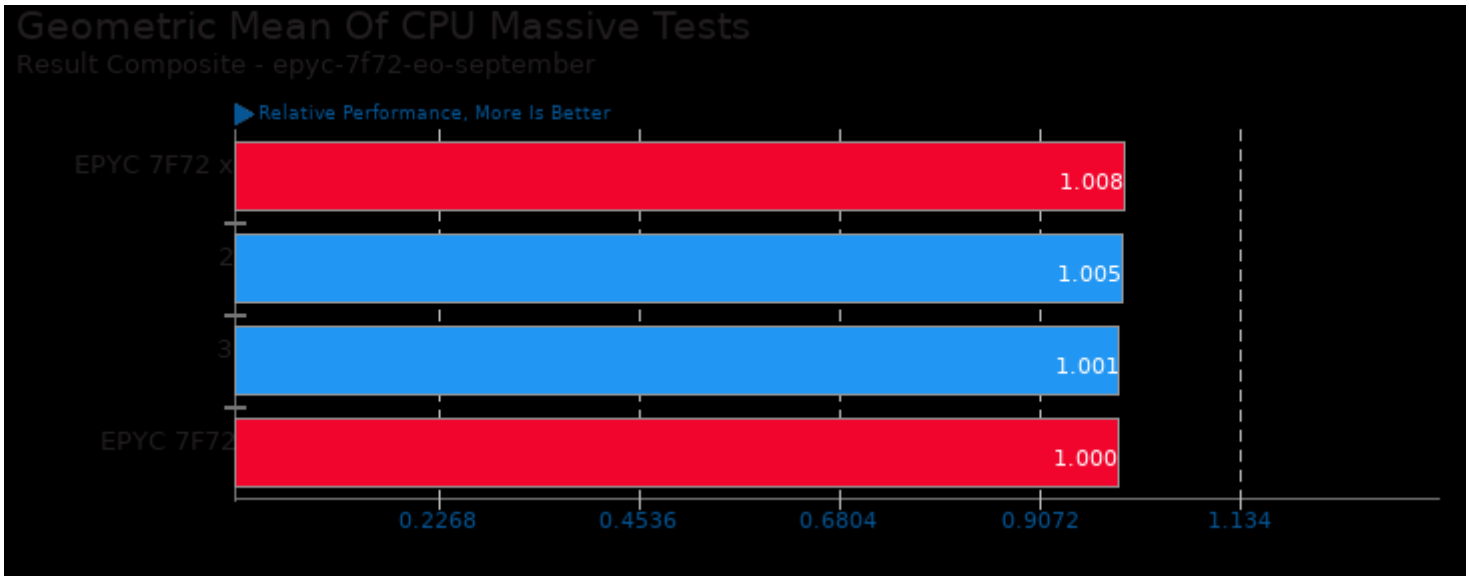
Geometric mean based upon tests: pts/hmmer and pts/mafft



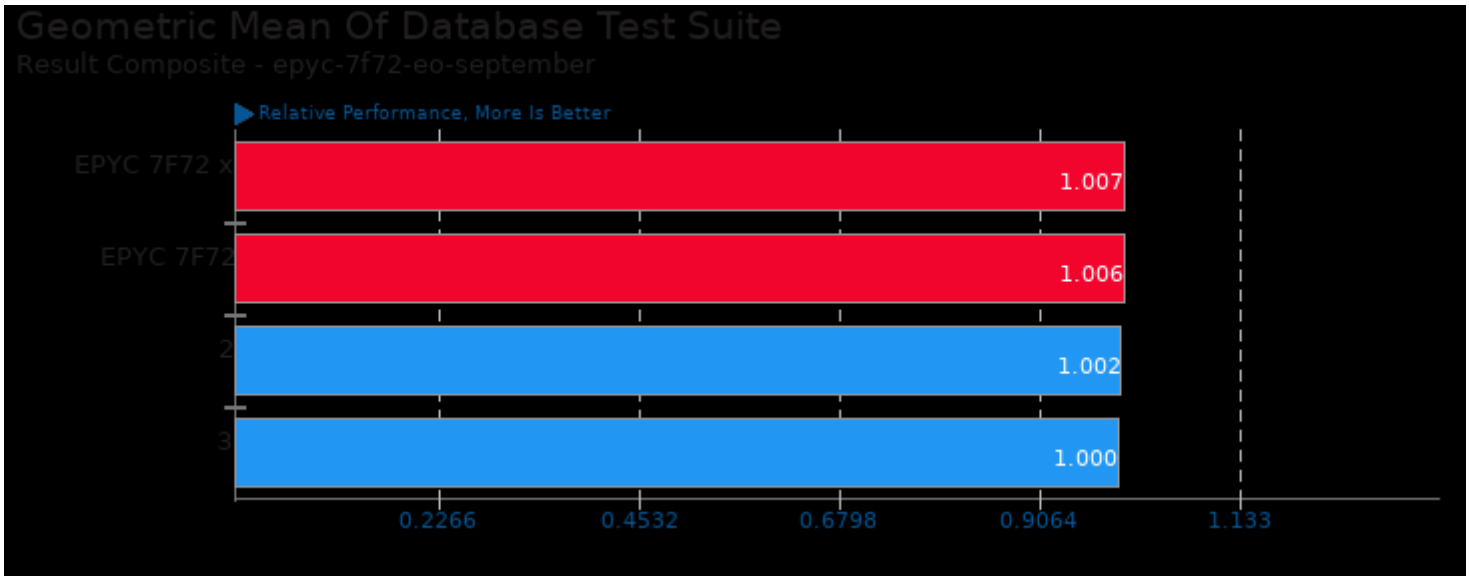
Geometric mean based upon tests: pts/lczero and pts/caffe



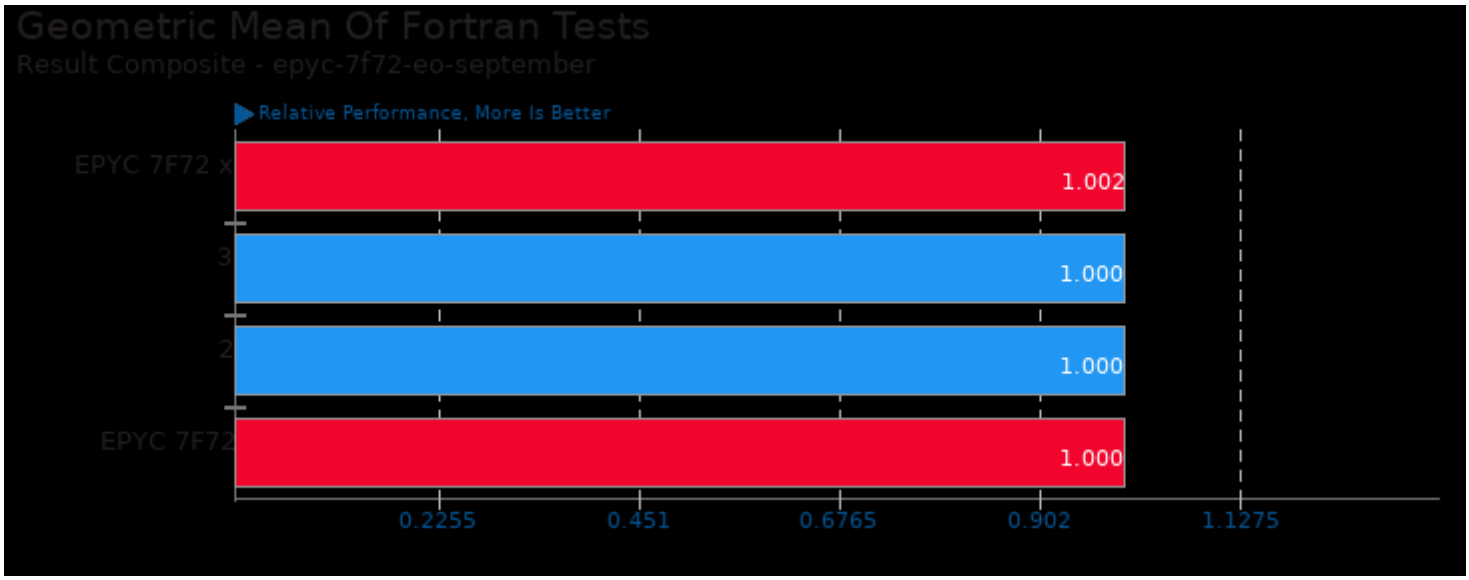
Geometric mean based upon tests: pts/mafft, pts/hmmer and pts/keydb



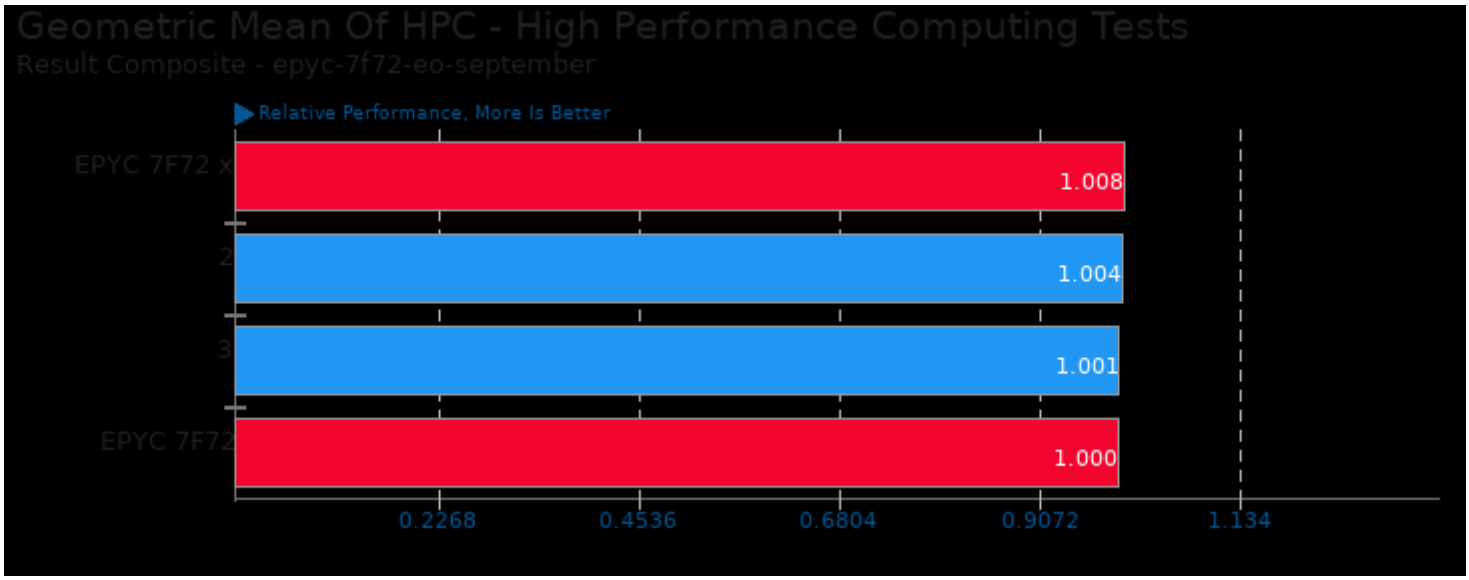
Geometric mean based upon tests: pts/dolfyn, pts/hint, pts/hmmer, pts/lczero and pts/mafft



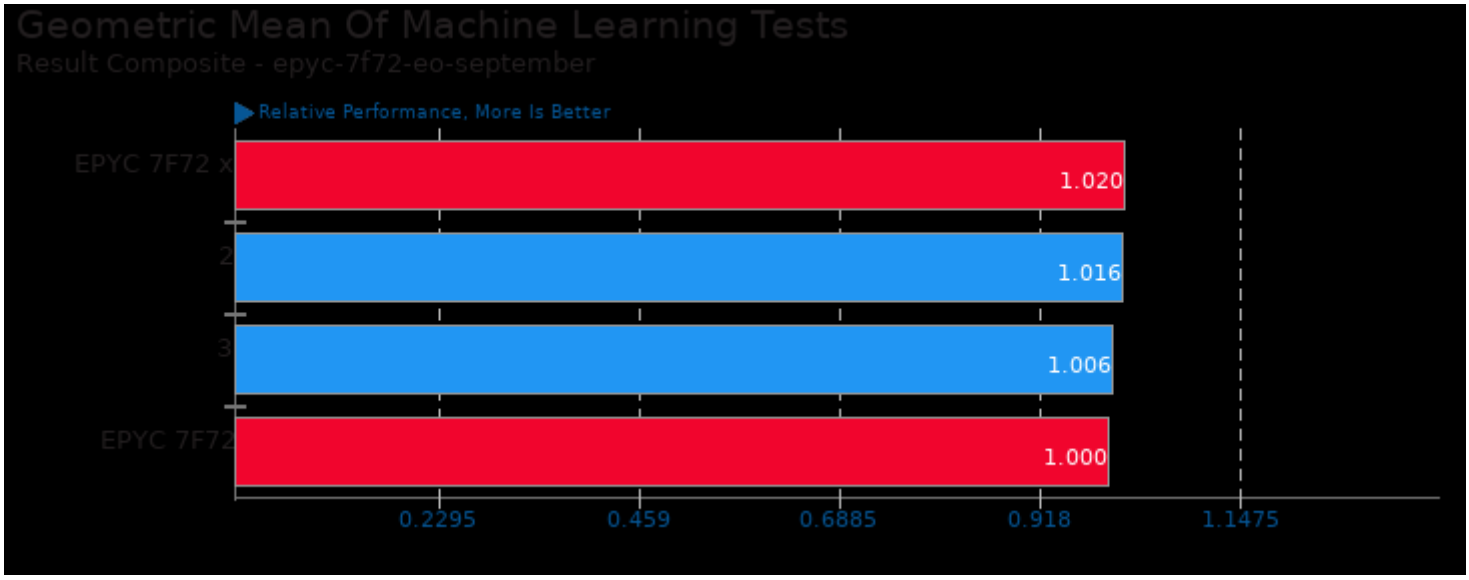
Geometric mean based upon tests: pts/keydb and pts/couchdb



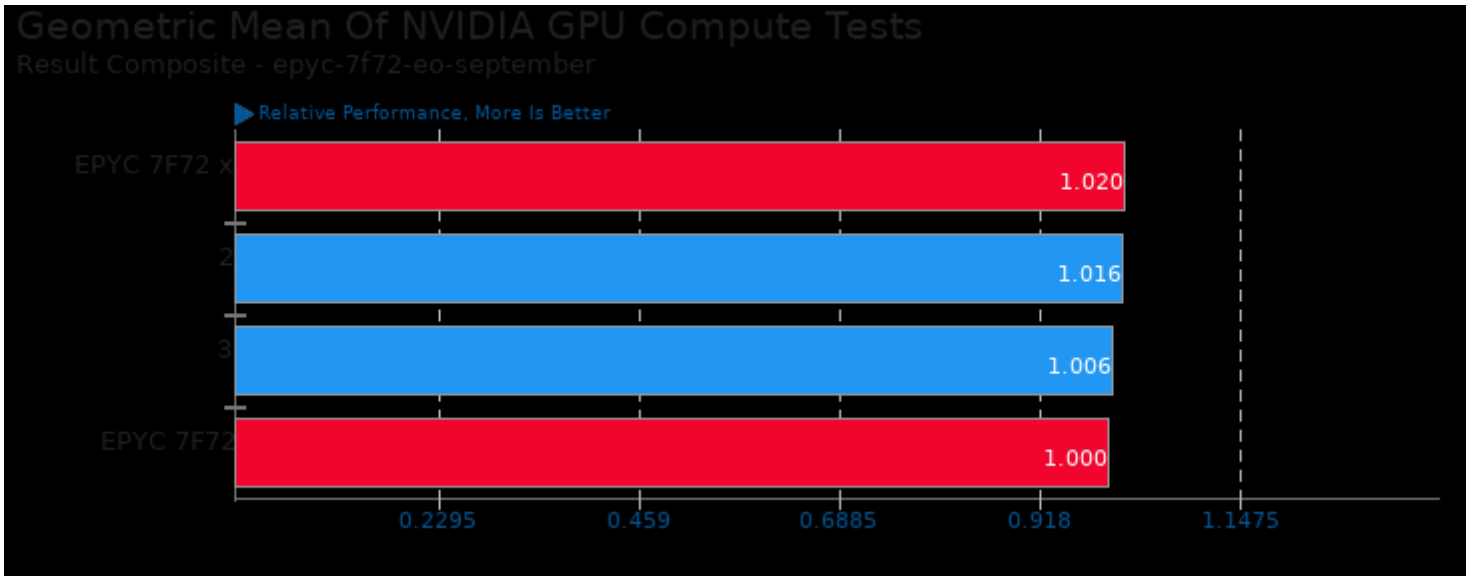
Geometric mean based upon tests: pts/dolfyn and pts/ffte



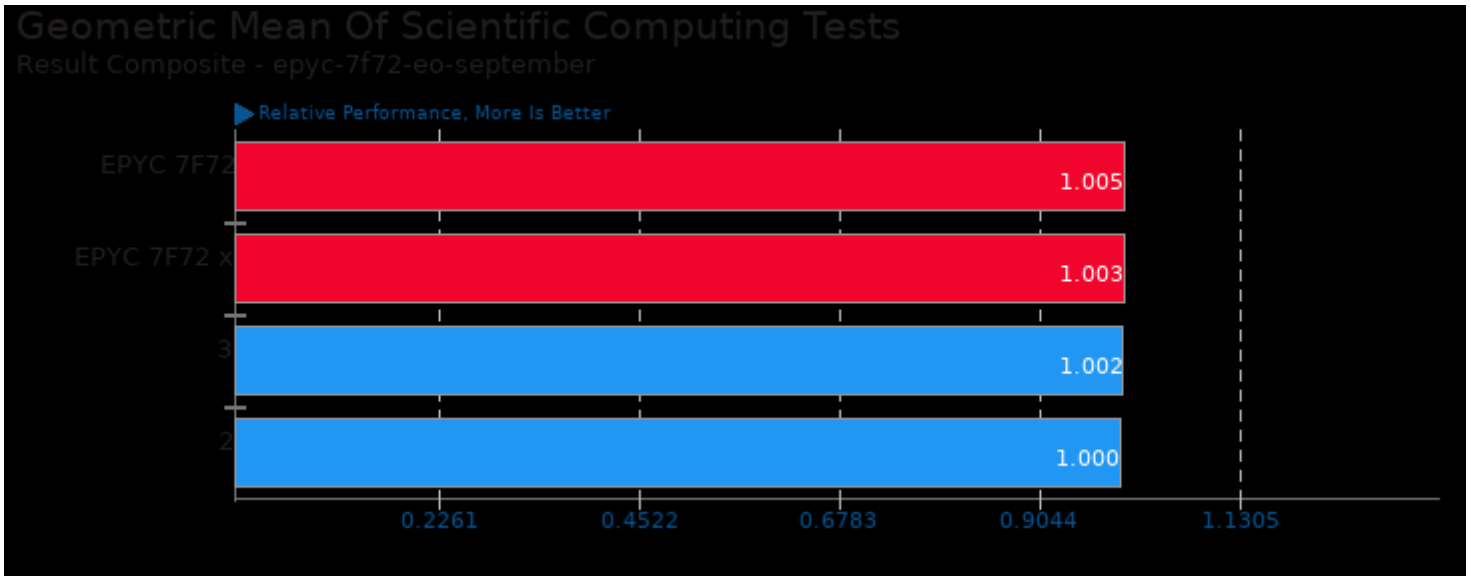
Geometric mean based upon tests: pts/ffte, pts/dolfyn, pts/hmmer, pts/mafft, pts/ncnn, pts/caffe, pts/mlpack and pts/lczero



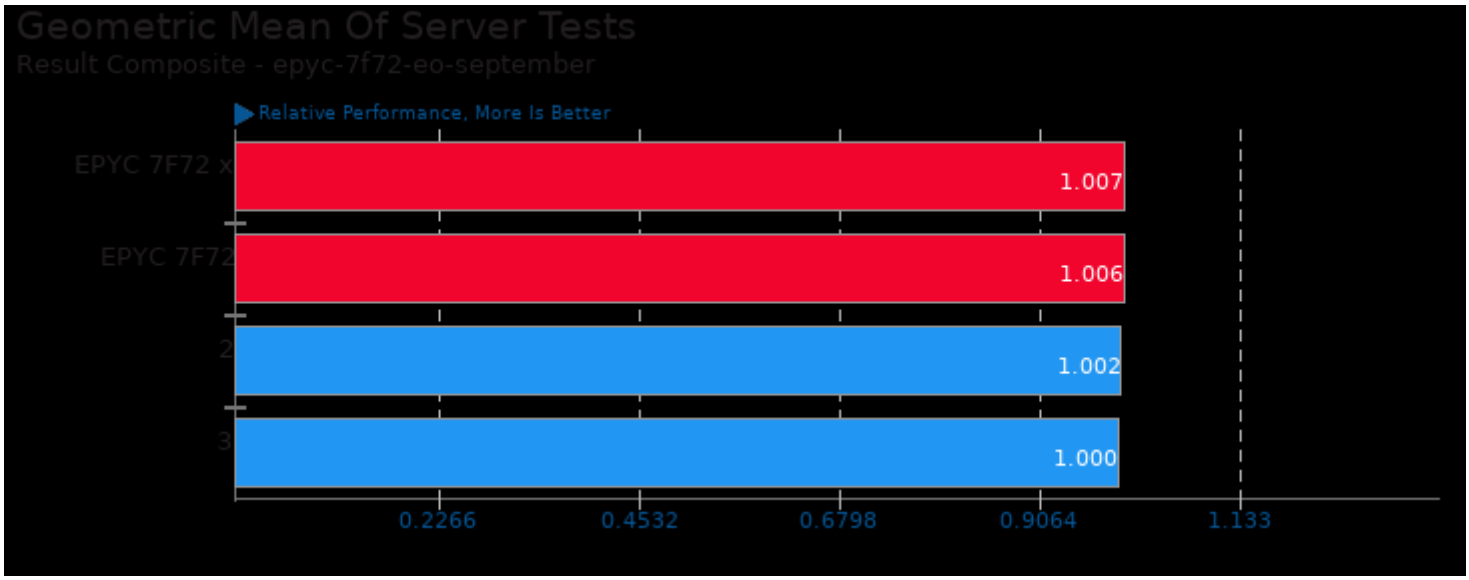
Geometric mean based upon tests: pts/ncnn, pts/caffe, pts/mlpack and pts/lczero



Geometric mean based upon tests: pts/lczero, pts/caffe and pts/ncnn



Geometric mean based upon tests: pts/ffte, pts/dolfyn, pts/hmmer and pts/mafft



Geometric mean based upon tests: pts/keydb and pts/couchdb

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:23.