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icelake-caffe

Intel Core i7-1065G7 testing with a Dell 06CDVY (1.0.9 BIOS) and Intel Iris Plus G7 3GB on Ubuntu 20.04 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 83% of the tests.

Test Systems:

1

2

3

3a

4

Processor: Intel Core i7-1065G7 @ 3.90GHz (4 Cores / 8 Threads), Motherboard: Dell 06CDVY (1.0.9 BIOS), Chipset: Intel Device 34ef, Memory: 16GB, Disk: KBG40ZPZ512G NVMe TOSHIBA 512GB, Graphics: Intel Iris Plus G7 3GB (1100MHz), Audio: Realtek ALC289, Network: Intel Killer Wi-Fi 6 AX1650i 160MHz

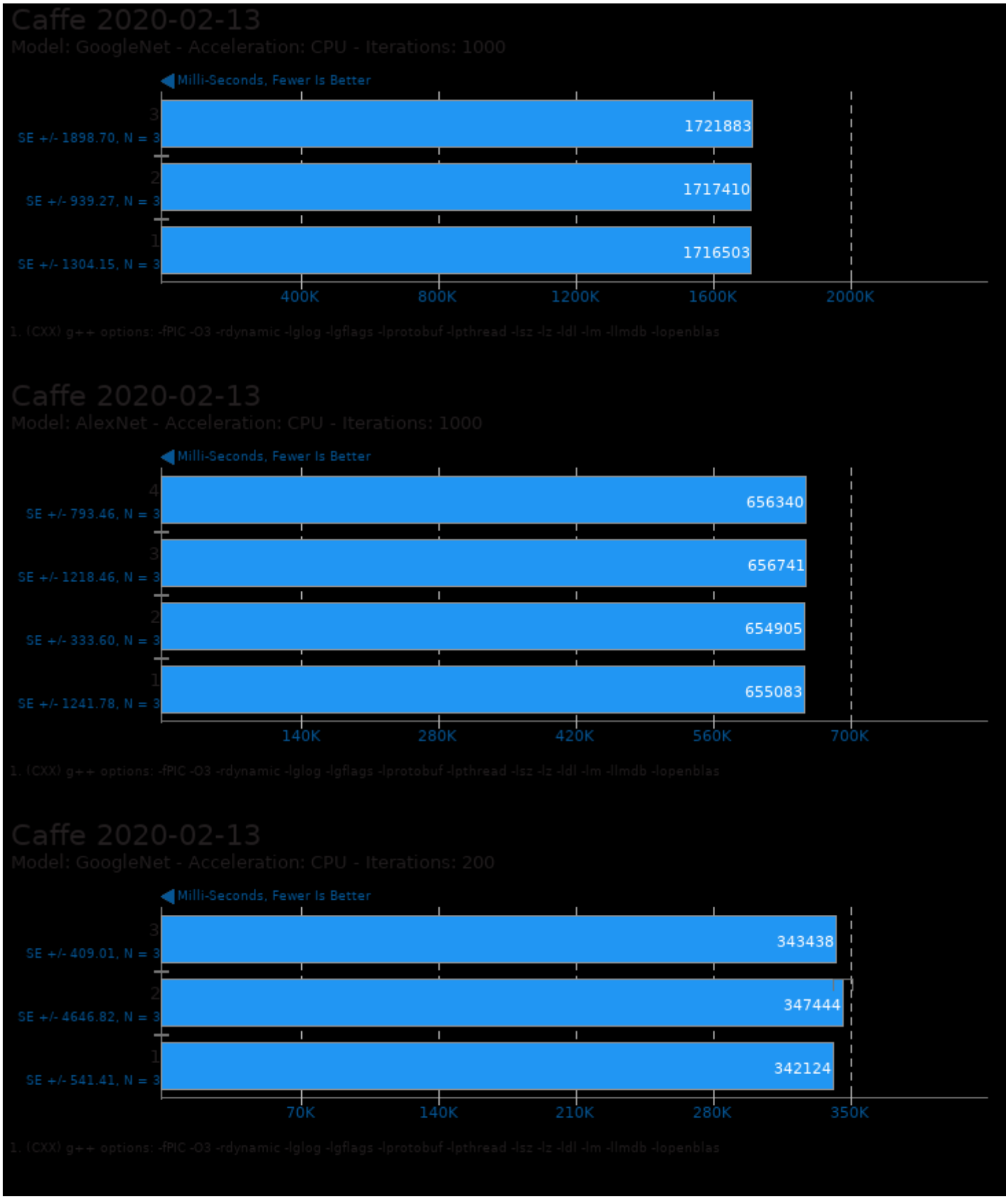
OS: Ubuntu 20.04, Kernel: 5.9.0-050900rc1daily20200819-generic (x86_64) 20200818, Desktop: GNOME Shell 3.36.4, Display Server: X Server 1.20.8, Display Driver: modesetting 1.20.8, OpenGL: 4.6 Mesa 20.0.4, Vulkan: 1.2.131, Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 1920x1200

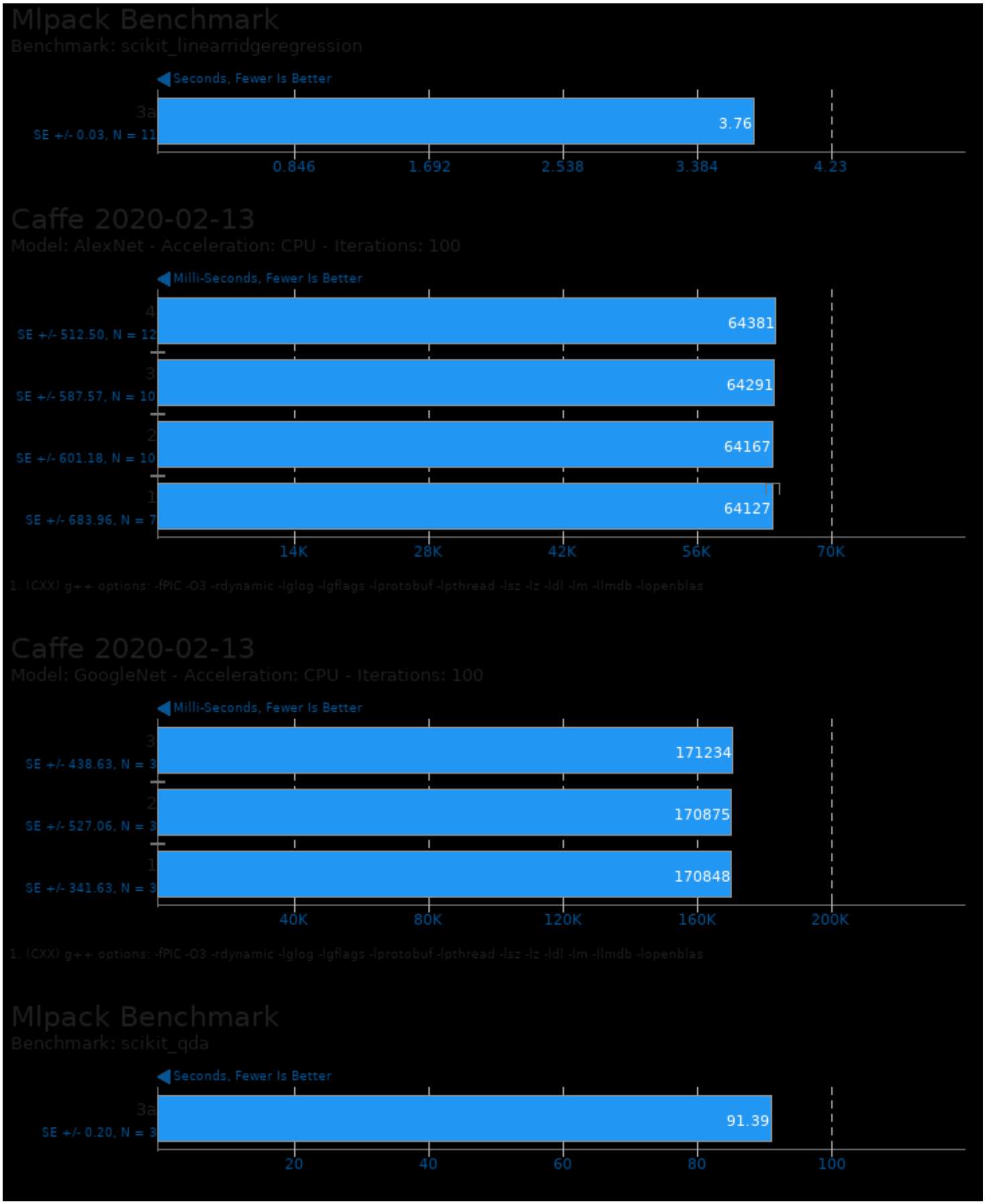
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --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: intel_pstate powersave - CPU Microcode: 0x78
Python Notes: Python 3.8.2
Security Notes: itlb_multihit: KVM: Mitigation of VMX disabled + 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 Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

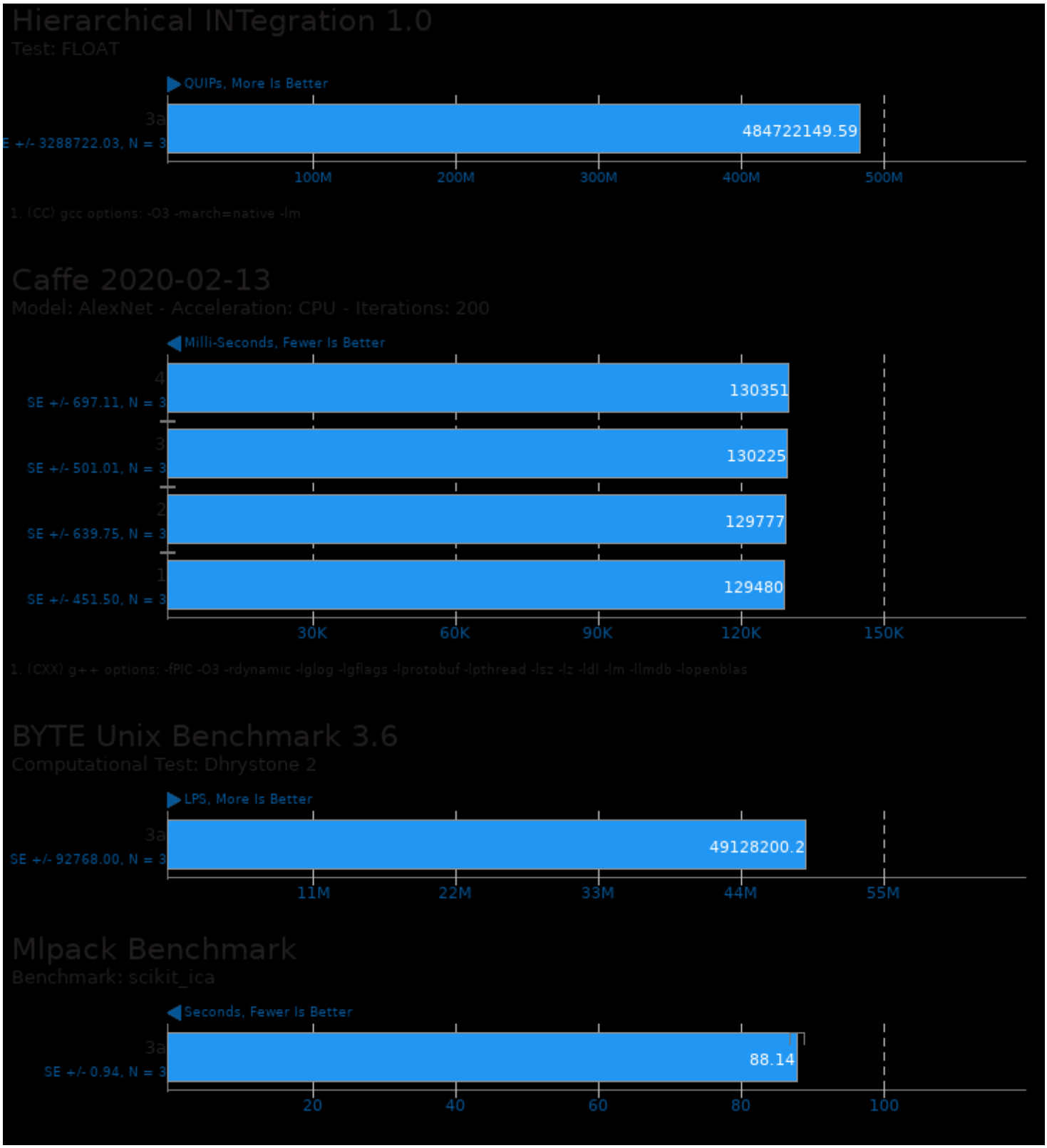
	1	2	3	3a	4
Caffe - GoogleNet - CPU - 1000 (ms)	**1716503**	1717410	**1721883**		
Normalized	100%	99.95%	99.69%		
Standard Deviation	0.1%	0.1%	0.2%		
Caffe - AlexNet - CPU - 1000 (ms)	655083	**654905**	**656741**		656340
Normalized	99.97%	100%	99.72%		99.78%
Standard Deviation	0.3%	0.1%	0.3%		0.2%
Caffe - GoogleNet - CPU - 200 (ms)	**342124**	**347444**	343438		
Normalized	100%	98.47%	99.62%		
Standard Deviation	0.3%	2.3%	0.2%		
Mlpack Benchmark - scikit_linearridgeregression				3.76	
Standard Deviation				3%	
Caffe - AlexNet - CPU - 100 (ms)	**64127**	64167	64291		**64381**
Normalized	100%	99.94%	99.74%		99.61%
Standard Deviation	2.8%	3%	2.9%		2.8%
Caffe - GoogleNet - CPU - 100 (ms)	**170848**	170875	**171234**		
Normalized	100%	99.98%	99.77%		
Standard Deviation	0.3%	0.5%	0.4%		
Mlpack Benchmark - scikit_qda (sec)				91.39	
Standard Deviation				0.4%	
Hierarchical INTegration - FLOAT (QUIPs)				484722150	
Standard Deviation				1.2%	
Caffe - AlexNet - CPU - 200 (ms)	**129480**	129777	130225		**130351**
Normalized	100%	99.77%	99.43%		99.33%
Standard Deviation	0.6%	0.9%	0.7%		0.9%

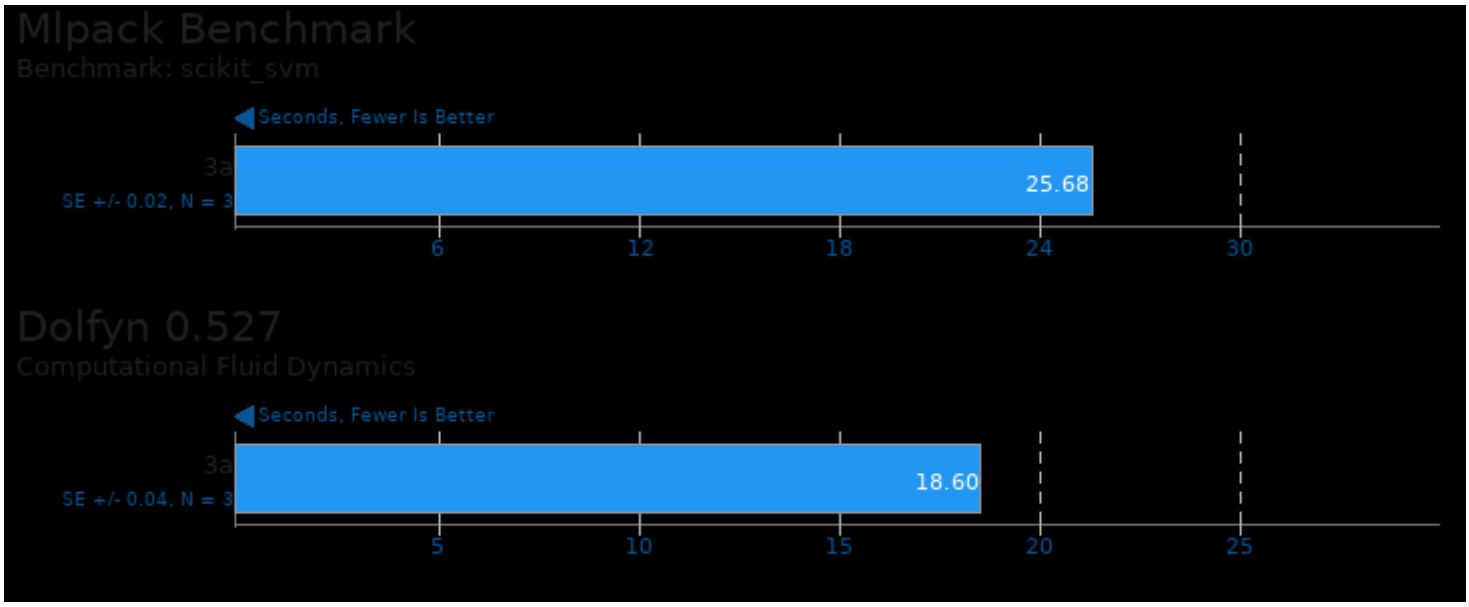
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BYTE Unix Benchmark - Dhrystone 2 (LPS)	49128200
Standard Deviation	0.3%
Mlpack Benchmark - scikit_ica (sec)	88.14
Standard Deviation	1.9%
Mlpack Benchmark - scikit_svm (sec)	25.68
Standard Deviation	0.2%
Dolfyn - C.F.D (sec)	18.601
Standard Deviation	0.3%


Caffe 2020-02-13
Model: GoogleNet - Acceleration: CPU - Iterations: 1000
Milli-Seconds, Fewer Is Better
3
SE +/- 1898.70, N = 3
1721883
2
SE +/- 939.27, N = 3
1717410
1
SE +/- 1304.15, N = 3
1716503
400K
800K
1200K
1600K
2000K
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
4
SE +/- 793.46, N = 3
656340
3
SE +/- 1218.46, N = 3
656741
2
SE +/- 333.60, N = 3
654905
1
SE +/- 1241.78, N = 3
655083
140K
280K
420K
560K
700K
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
3
SE +/- 409.01, N = 3
343438
2
SE +/- 4646.82, N = 3
347444
1
SE +/- 541.41, N = 3
342124
70K
140K
210K
280K
350K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas


Mlpack Benchmark
Benchmark: scikit_linearridgeregression
Seconds, Fewer Is Better
3a
SE +/- 0.03, N = 11
3.76
0.846
1.692
2.538
3.384
4.23
Caffe 2020-02-13
Model: AlexNet - Acceleration: CPU - Iterations: 100
Milli-Seconds, Fewer Is Better
4
SE +/- 512.50, N = 12
64381
3
SE +/- 587.57, N = 10
64291
2
SE +/- 601.18, N = 10
64167
1
SE +/- 683.96, N = 7
64127
14K
28K
42K
56K
70K
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
3
SE +/- 438.63, N = 3
171234
2
SE +/- 527.06, N = 3
170875
1
SE +/- 341.63, N = 3
170848
40K
80K
120K
160K
200K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas
Mlpack Benchmark
Benchmark: scikit_qda
Seconds, Fewer Is Better
3a
SE +/- 0.20, N = 3
91.39
20
40
60
80
100


Hierarchical INTegration 1.0
Test: FLOAT
QUIPs, More Is Better
3a
E +/- 3288722.03, N = 3
484722149.59
100M
200M
300M
400M
500M
1. (CC) gcc options: -O3 -march=native -lm
Caffe 2020-02-13
Model: AlexNet - Acceleration: CPU - Iterations: 200
Milli-Seconds, Fewer Is Better
4
SE +/- 697.11, N = 3
130351
3
SE +/- 501.01, N = 3
130225
2
SE +/- 639.75, N = 3
129777
1
SE +/- 451.50, N = 3
129480
30K
60K
90K
120K
150K
1. (CXX) g++ options: -fPIC -O3 -rdynamic -lglog -lgflags -lprotobuf -lpthread -lsz -lz -ldl -lm -llmdb -lopenblas
BYTE Unix Benchmark 3.6
Computational Test: Dhrystone 2
LPS, More Is Better
3a
SE +/- 92768.00, N = 3
49128200.2
11M
22M
33M
44M
55M
Mlpack Benchmark
Benchmark: scikit_ica
Seconds, Fewer Is Better
3a
SE +/- 0.94, N = 3
88.14
20
40
60
80
100



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 08:09.