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renaissance-tensorflow-epyc-1

AMD EPYC 7551 32-Core testing with a GIGABYTE MZ31-AR0-00 v01010101 (F10 BIOS) and ASPEED on Debian 11 via the Phoronix Test Suite.

Automated Executive Summary

B had the most wins, coming in first place for 50% of the tests.

Based on the geometric mean of all complete results, the fastest (AA) was 1.057x the speed of the slowest (A). B was 0.946x the speed of AA and A was 1x the speed of B.

Test Systems:

A

AA

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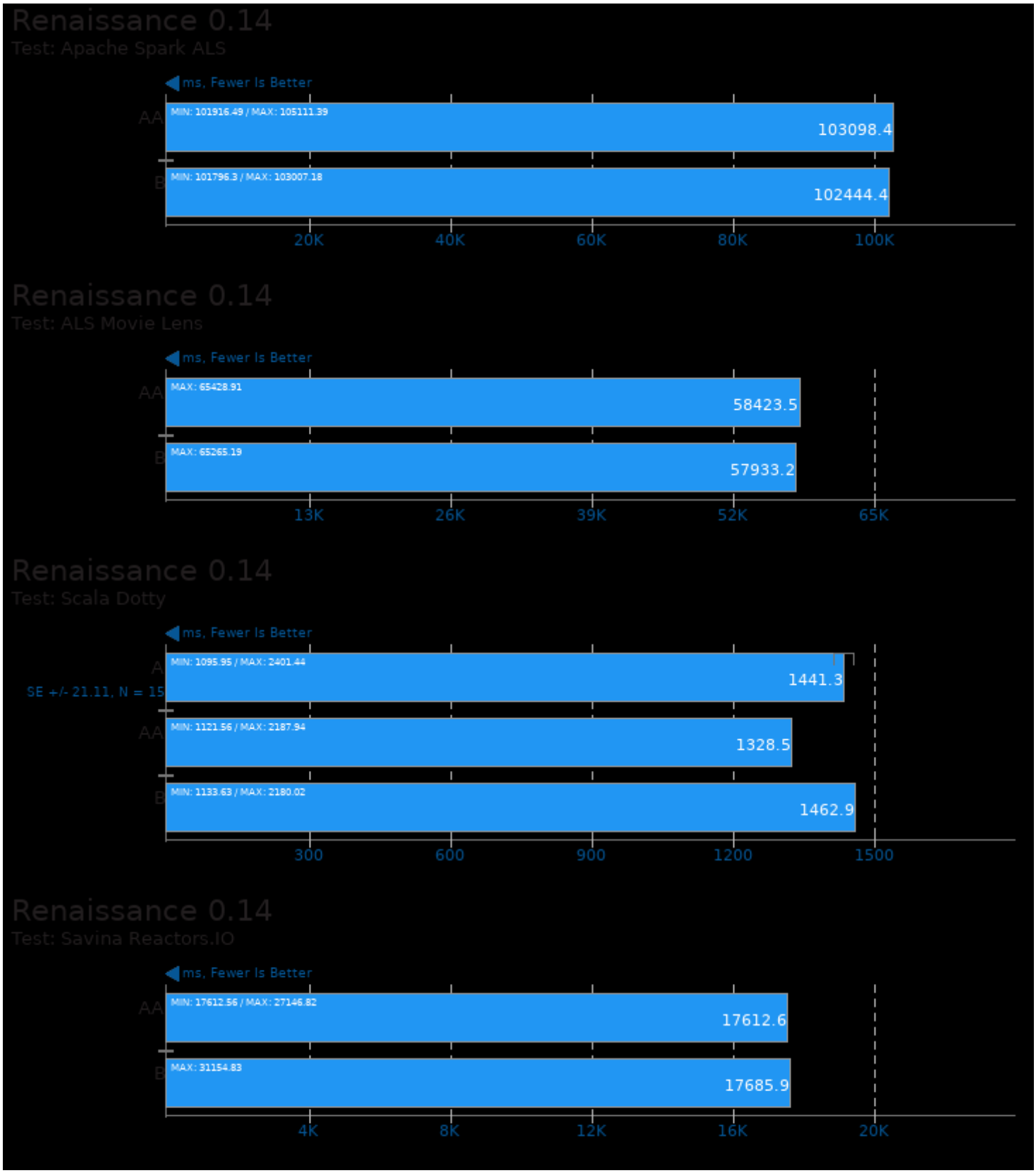
B

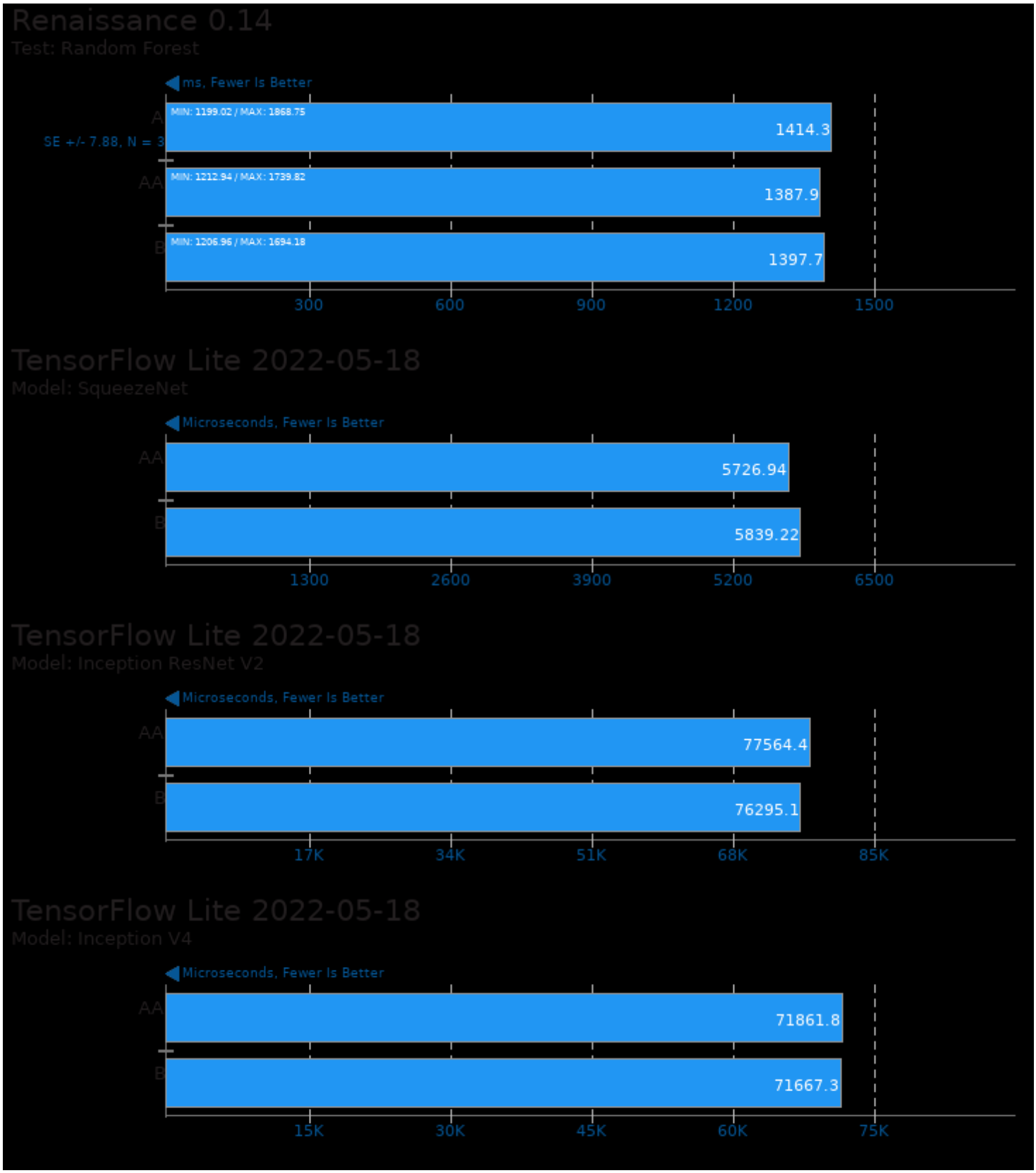
Processor: AMD EPYC 7551 32-Core @ 2.00GHz (32 Cores / 64 Threads), Motherboard: GIGABYTE MZ31-AR0-00 v01010101 (F10 BIOS), Chipset: AMD 17h, Memory: 8 x 4 GB DDR4-2667MT/s 9ASF51272PZ-2G6E1, Disk: Samsung SSD 960 EVO 500GB + 31GB SanDisk 3.2Gen1, Graphics: ASPEED, Network: Realtek RTL8111/8168/8411 + 2 x Broadcom NetXtreme II BCM57810 10

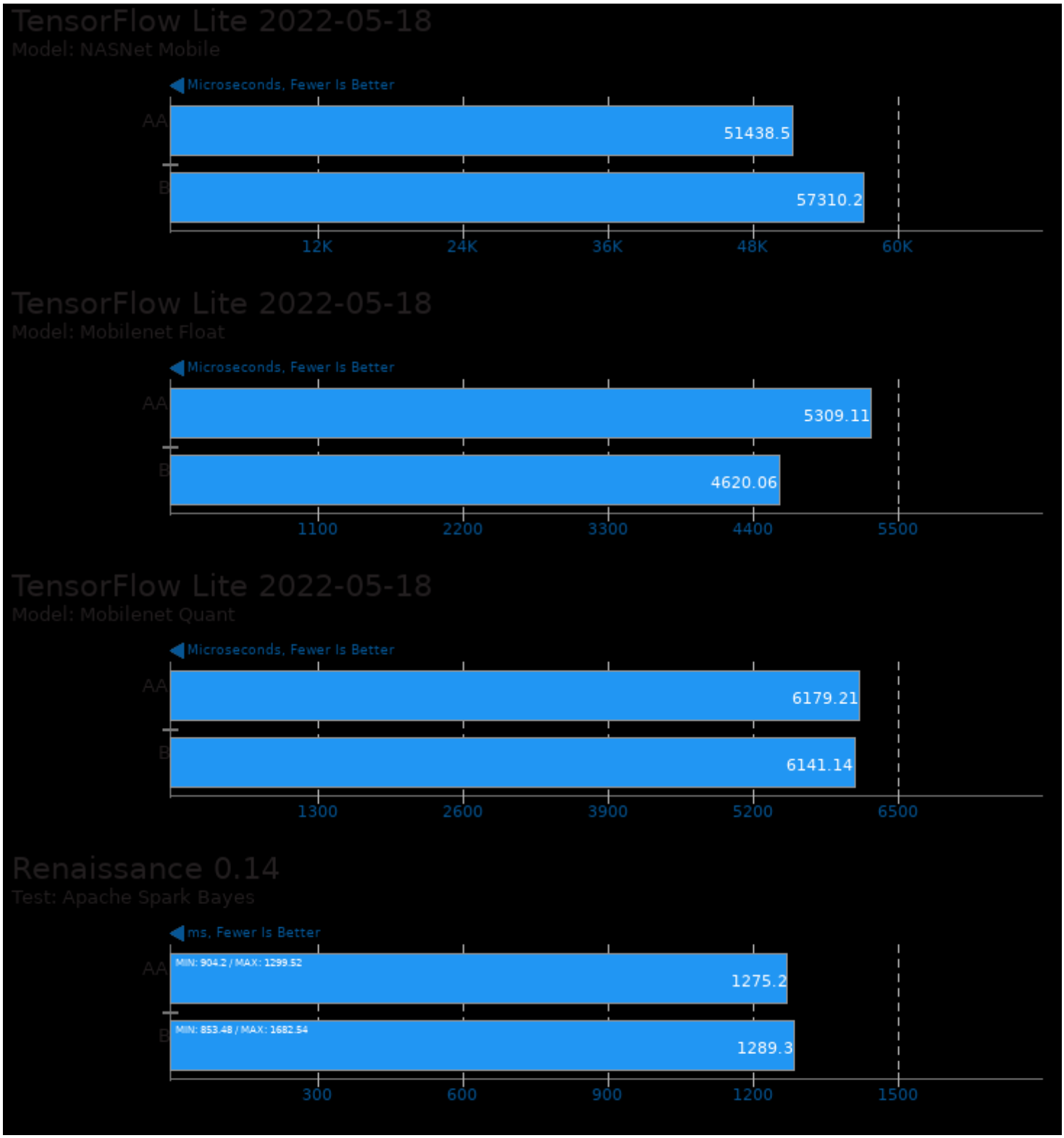
OS: Debian 11, Kernel: 5.10.0-9-amd64 (x86_64), Compiler: GCC 10.2.1 20210110, File-System: ext4, Screen Resolution: 1024x768

Processor Notes: Scaling Governor: acpi-cpufreq schedutil (Boost: Enabled) - CPU Microcode: 0x8001227
Java Notes: OpenJDK Runtime Environment (build 11.0.12+7-post-Debian-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 STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

	A	AA	B
Renaissance - Apache Spark ALS (ms)		103098	102444
Normalized		99.37%	100%
Renaissance - ALS Movie Lens (ms)		58424	57933
Normalized		99.16%	100%
Renaissance - Scala Dotty (ms)	1441	1329	1463
Normalized	92.17%	100%	90.81%
Standard Deviation	5.7%		
Renaissance - Savina Reactors.IO (ms)		17613	17686
Normalized		100%	99.59%
Renaissance - Rand Forest (ms)	1414	1388	1398
Normalized	98.13%	100%	99.3%
Standard Deviation	1%		
TensorFlow Lite - SqueezeNet (us)		5727	5839
Normalized		100%	98.08%
TensorFlow Lite - I.R.V (us)		77564	76295
Normalized		98.36%	100%
TensorFlow Lite - Inception V4 (us)		71862	71667
Normalized		99.73%	100%
TensorFlow Lite - NASNet Mobile (us)		51439	57310
Normalized		100%	89.75%
TensorFlow Lite - Mobilenet Float (us)		5309	4620
Normalized		87.02%	100%
TensorFlow Lite - Mobilenet Quant (us)		6179	6141
Normalized		99.38%	100%
Renaissance - Apache Spark Bayes (ms)		1275	1289
Normalized		100%	98.91%


Renaissance 0.14
Test: Apache Spark ALS
ms, Fewer Is Better
AA
MIN: 101916.49 / MAX: 105111.39
103098.4
B
MIN: 101796.3 / MAX: 103007.18
102444.4
20K
40K
60K
80K
100K
Renaissance 0.14
Test: ALS Movie Lens
ms, Fewer Is Better
AA
MAX: 65428.91
58423.5
B
MAX: 65265.19
57933.2
13K
26K
39K
52K
65K
Renaissance 0.14
Test: Scala Dotty
ms, Fewer Is Better
A
MIN: 1095.95 / MAX: 2401.44
1441.3
SE +/- 21.11, N = 15
AA
MIN: 1121.56 / MAX: 2187.94
1328.5
B
MIN: 1133.63 / MAX: 2180.02
1462.9
300
600
900
1200
1500
Renaissance 0.14
Test: Savina Reactors.IO
ms, Fewer Is Better
AA
MIN: 17612.56 / MAX: 27146.82
17612.6
B
MAX: 31154.83
17685.9
4K
8K
12K
16K
20K


Renaissance 0.14
Test: Random Forest
ms, Fewer Is Better
A
SE +/- 7.88, N = 3
MIN: 1199.02 / MAX: 1868.75
1414.3
AA
MIN: 1212.94 / MAX: 1739.82
1387.9
B
MIN: 1206.96 / MAX: 1694.18
1397.7
300
600
900
1200
1500
TensorFlow Lite 2022-05-18
Model: SqueezeNet
Microseconds, Fewer Is Better
AA
5726.94
B
5839.22
1300
2600
3900
5200
6500
TensorFlow Lite 2022-05-18
Model: Inception ResNet V2
Microseconds, Fewer Is Better
AA
77564.4
B
76295.1
17K
34K
51K
68K
85K
TensorFlow Lite 2022-05-18
Model: Inception V4
Microseconds, Fewer Is Better
AA
71861.8
B
71667.3
15K
30K
45K
60K
75K



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 18:34.