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2022-12-22-0913

2 x Intel Xeon Silver 4208 testing with a Dell 06WXJT (2.13.3 BIOS) and Matrox G200eW3 on Ubuntu 20.04 via the Phoronix Test Suite.

Test Systems:

2022-12-22 09:13

Processor: 2 x Intel Xeon Silver 4208 @ 3.20GHz (16 Cores / 32 Threads), Motherboard: Dell 06WXJT (2.13.3 BIOS), Chipset: Intel Sky Lake-E DMI3 Registers, Memory: 64GB, Disk: 6000GB PERC H750 Adp + 299GB PERC H750 Adp, Graphics: Matrox G200eW3, Network: 4 x Broadcom NetXtreme BCM5720 2-port PCIe

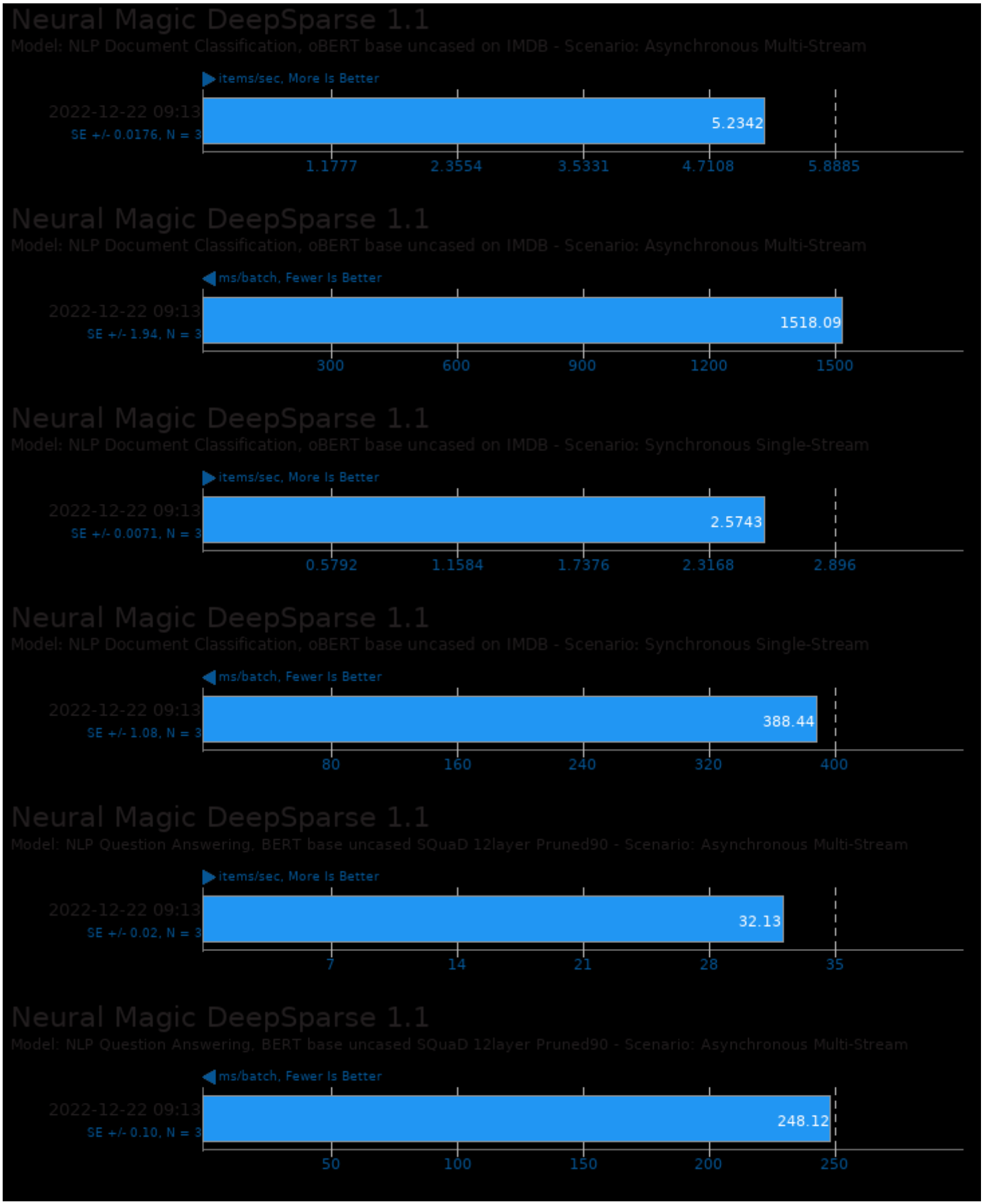
OS: Ubuntu 20.04, Kernel: 5.4.0-135-generic (x86_64), Desktop: GNOME Shell 3.36.9, Display Server: X Server, Compiler: GCC 9.4.0, File-System: ext4, Screen Resolution: 1024x768

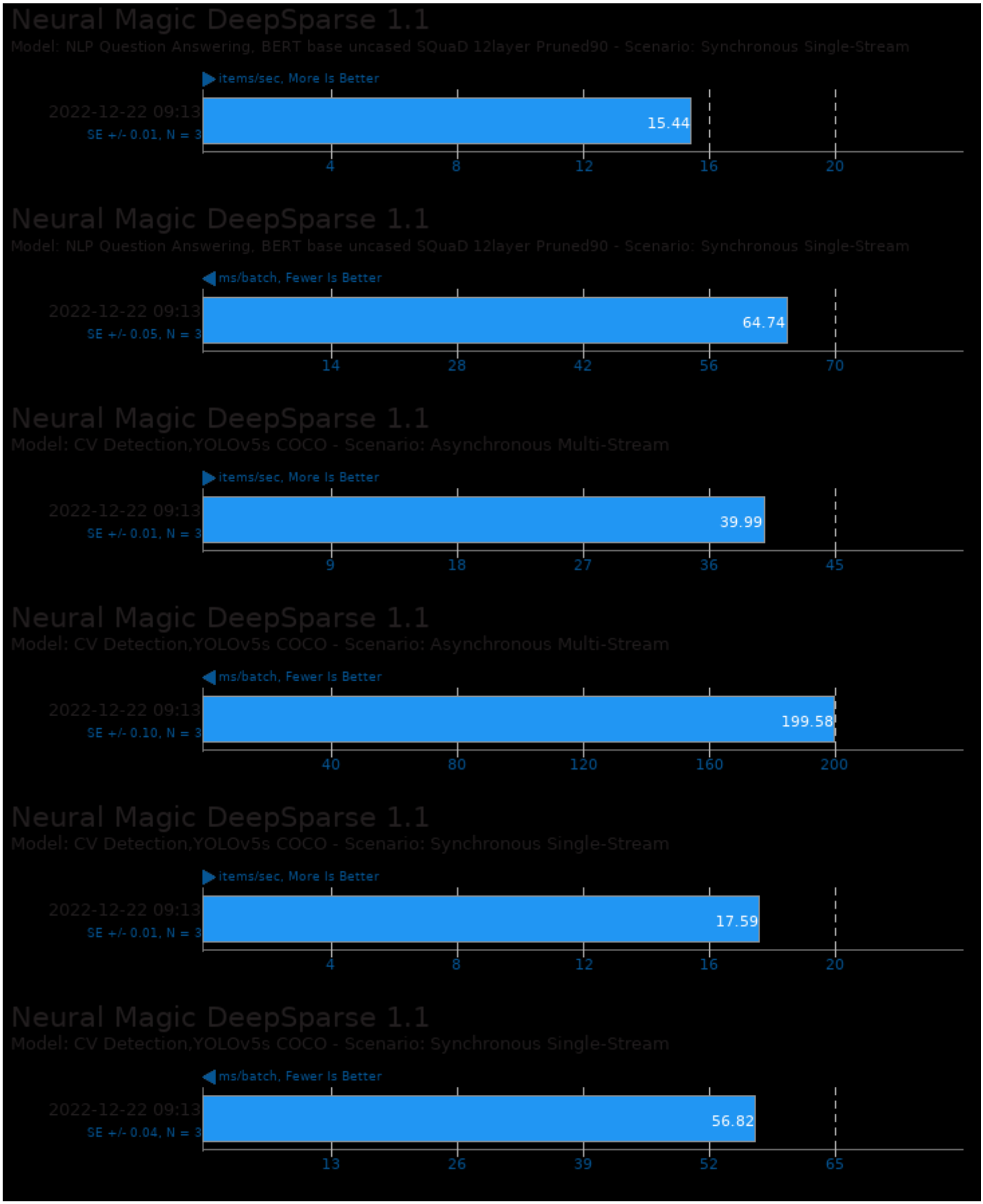
Kernel Notes: Transparent Huge Pages: madvise
Environment Notes: RUNNER_DEBUG=1
Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0x5003302
Python Notes: Python 3.10.9
Security Notes: itlb_multihit: KVM: Mitigation of Split huge pages + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Mitigation of Clear

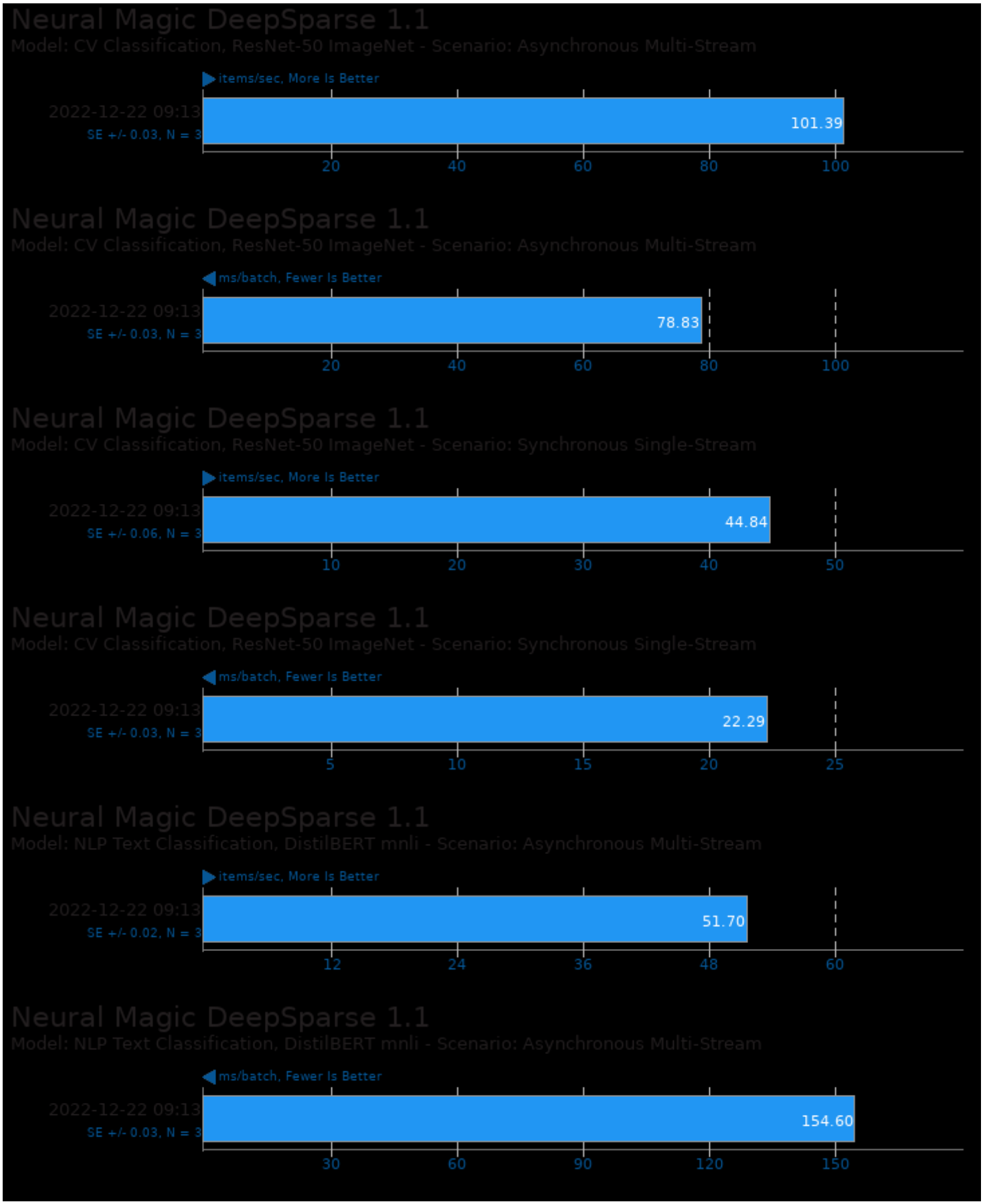
buffers; SMT vulnerable + retbleed: Mitigation of Enhanced IBRS + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Enhanced IBRS IBPB: conditional RSB filling PBRSB-eIBRS: SW sequence + srbds: Not affected + tsx_async_abort: Mitigation of TSX disabled

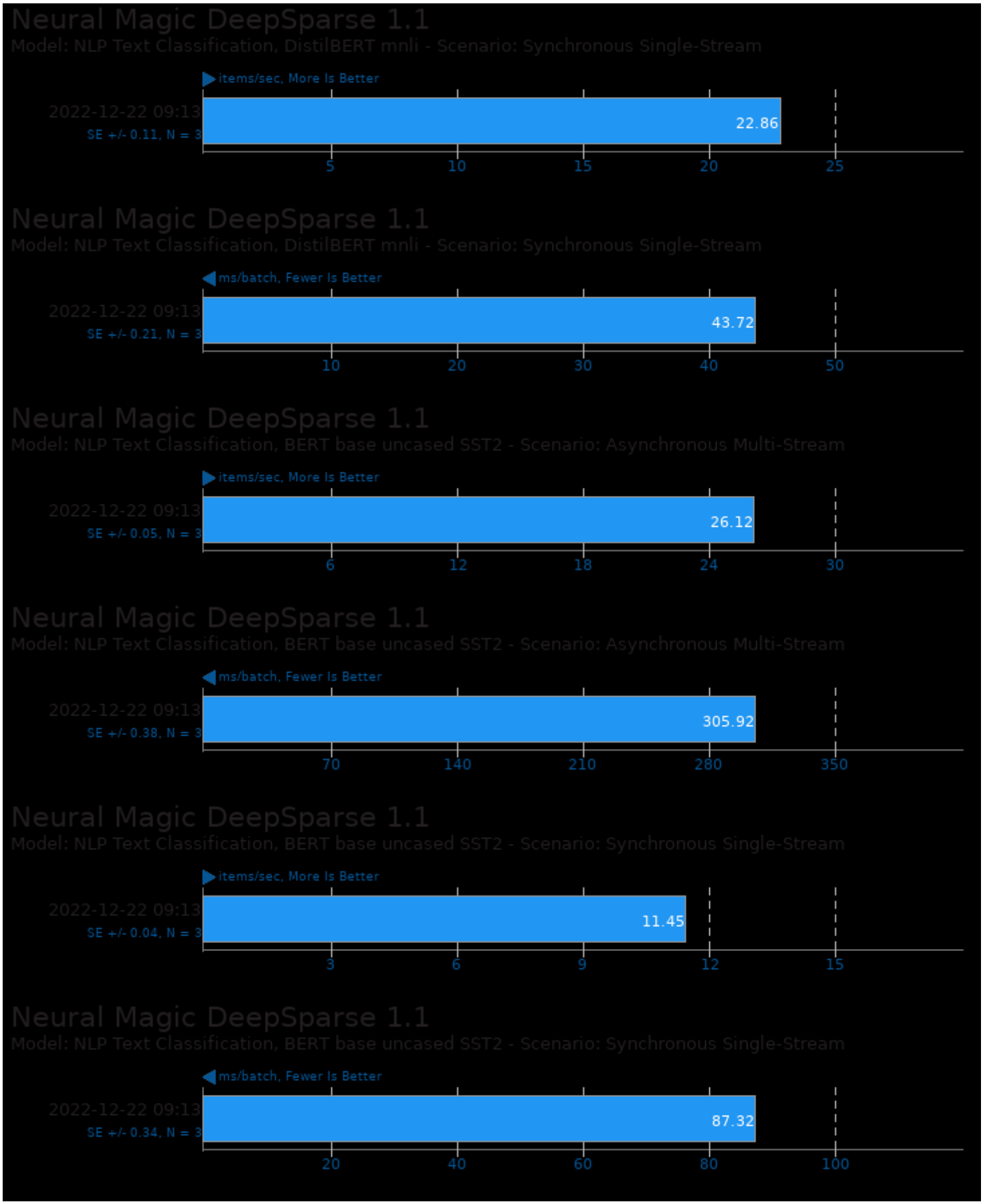
	2022-12-22 09:13
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - A.M.S (items/sec)	5.2342
Standard Deviation	0.6%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - A.M.S (ms/batch)	1518
Standard Deviation	0.2%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - S.S.S (items/sec)	2.5743
Standard Deviation	0.5%
Neural Magic DeepSparse - N.D.C.o.b.u.o.I - S.S.S (ms/batch)	388.4395
Standard Deviation	0.5%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - A.M.S (items/sec)	32.1338
Standard Deviation	0.1%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - A.M.S (ms/batch)	248.1248
Standard Deviation	0.1%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - S.S.S (items/sec)	15.4439
Standard Deviation	0.1%
Neural Magic DeepSparse - N.Q.A.B.b.u.S.1.P - S.S.S (ms/batch)	64.7355
Standard Deviation	0.1%
Neural Magic DeepSparse - C.D.Y.C - A.M.S (items/sec)	39.9877
Standard Deviation	0.1%
Neural Magic DeepSparse - C.D.Y.C - A.M.S (ms/batch)	199.5807
Standard Deviation	0.1%
Neural Magic DeepSparse - C.D.Y.C - S.S.S (items/sec)	17.5929
Standard Deviation	0.1%
Neural Magic DeepSparse - C.D.Y.C - S.S.S (ms/batch)	56.8197
Standard Deviation	0.1%
Neural Magic DeepSparse - C.C.R.5.I - A.M.S (items/sec)	101.3910
Standard Deviation	0%
Neural Magic DeepSparse - C.C.R.5.I - A.M.S (ms/batch)	78.8317
Standard Deviation	0.1%
Neural Magic DeepSparse - C.C.R.5.I - S.S.S (items/sec)	44.8360
Standard Deviation	0.2%
Neural Magic DeepSparse - C.C.R.5.I - S.S.S (ms/batch)	22.2862
Standard Deviation	0.2%
Neural Magic DeepSparse - N.T.C.D.m - A.M.S (items/sec)	51.7008
Standard Deviation	0.1%
Neural Magic DeepSparse - N.T.C.D.m - A.M.S (ms/batch)	154.6048
Standard Deviation	0%
Neural Magic DeepSparse - N.T.C.D.m - S.S.S (items/sec)	22.8648
Standard Deviation	0.9%
Neural Magic DeepSparse - N.T.C.D.m - S.S.S (ms/batch)	43.7246
Standard Deviation	0.8%
Neural Magic DeepSparse - N.T.C.B.b.u.S - A.M.S (items/sec)	26.1230
Standard Deviation	0.3%
Neural Magic DeepSparse - N.T.C.B.b.u.S - A.M.S (ms/batch)	305.9215
Standard Deviation	0.2%
Neural Magic DeepSparse - N.T.C.B.b.u.S - S.S.S (items/sec)	11.4511

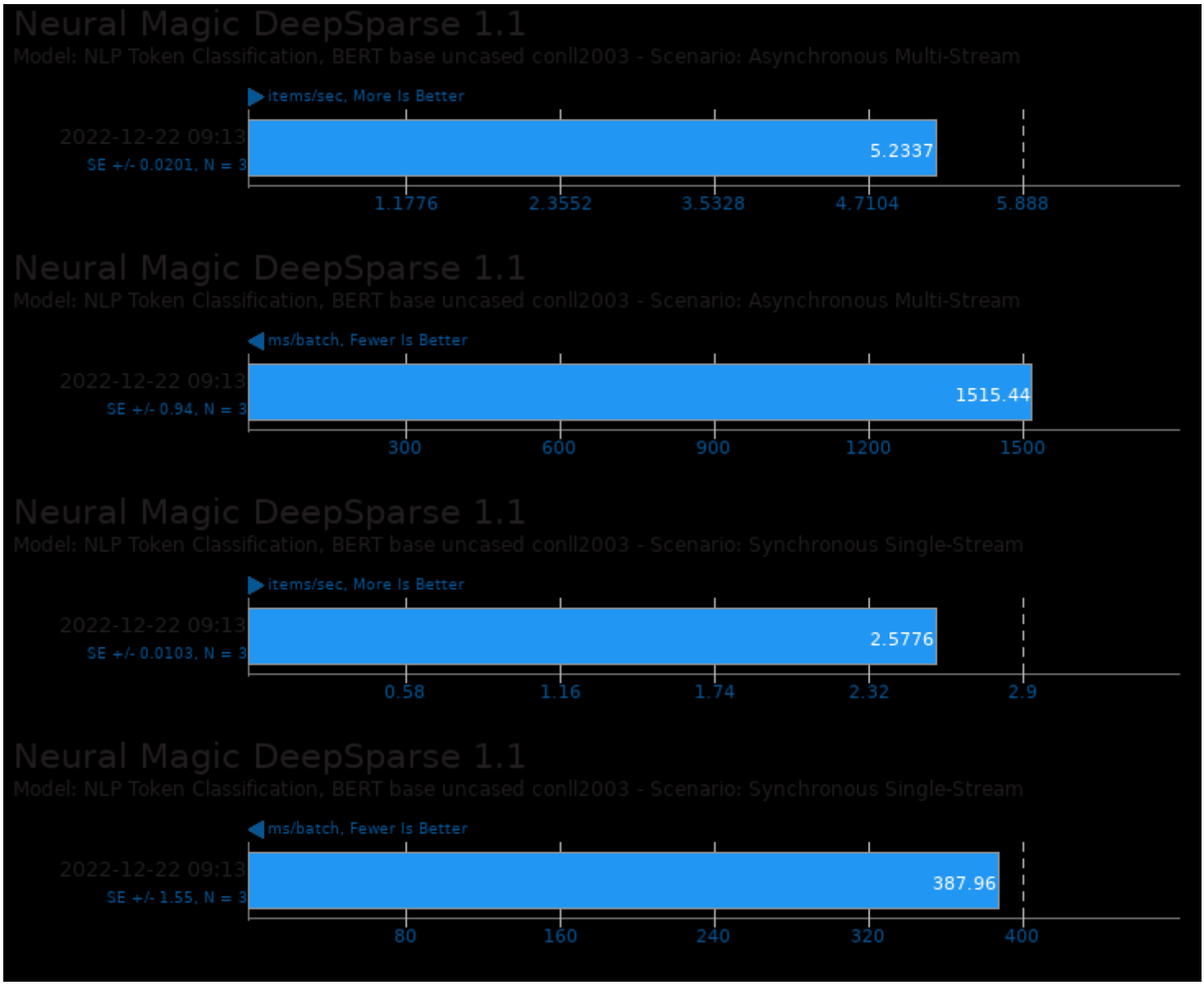
Standard Deviation	0.7%
Neural Magic DeepSparse - N.T.C.B.b.u.S - S.S.S (ms/batch)	87.3164
Standard Deviation	0.7%
Neural Magic DeepSparse - N.T.C.B.b.u.c - A.M.S (items/sec)	5.2337
Standard Deviation	0.7%
Neural Magic DeepSparse - N.T.C.B.b.u.c - A.M.S (ms/batch)	1515
Standard Deviation	0.1%
Neural Magic DeepSparse - N.T.C.B.b.u.c - S.S.S (items/sec)	2.5776
Standard Deviation	0.7%
Neural Magic DeepSparse - N.T.C.B.b.u.c - S.S.S (ms/batch)	387.9588
Standard Deviation	0.7%


Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.0176, N = 3
5.2342
1.1777
2.3554
3.5331
4.7108
5.8885
Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 1.94, N = 3
1518.09
300
600
900
1200
1500
Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Synchronous Single-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.0071, N = 3
2.5743
0.5792
1.1584
1.7376
2.3168
2.896
Neural Magic DeepSparse 1.1
Model: NLP Document Classification, oBERT base uncased on IMDB - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 1.08, N = 3
388.44
80
160
240
320
400
Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.02, N = 3
32.13
7
14
21
28
35
Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.10, N = 3
248.12
50
100
150
200
250


Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Synchronous Single-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.01, N = 3
15.44
4
8
12
16
20
Neural Magic DeepSparse 1.1
Model: NLP Question Answering, BERT base uncased SQuaD 12layer Pruned90 - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.05, N = 3
64.74
14
28
42
56
70
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.01, N = 3
39.99
9
18
27
36
45
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.10, N = 3
199.58
40
80
120
160
200
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Synchronous Single-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.01, N = 3
17.59
4
8
12
16
20
Neural Magic DeepSparse 1.1
Model: CV Detection,YOLOv5s COCO - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.04, N = 3
56.82
13
26
39
52
65


Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.03, N = 3
101.39
20
40
60
80
100
Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.03, N = 3
78.83
20
40
60
80
100
Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Synchronous Single-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.06, N = 3
44.84
10
20
30
40
50
Neural Magic DeepSparse 1.1
Model: CV Classification, ResNet-50 ImageNet - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.03, N = 3
22.29
5
10
15
20
25
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.02, N = 3
51.70
12
24
36
48
60
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.03, N = 3
154.60
30
60
90
120
150


Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Synchronous Single-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.11, N = 3
22.86
5
10
15
20
25
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, DistilBERT mnli - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.21, N = 3
43.72
10
20
30
40
50
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Asynchronous Multi-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.05, N = 3
26.12
6
12
18
24
30
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Asynchronous Multi-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.38, N = 3
305.92
70
140
210
280
350
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Synchronous Single-Stream
items/sec, More Is Better
2022-12-22 09:13
SE +/- 0.04, N = 3
11.45
3
6
9
12
15
Neural Magic DeepSparse 1.1
Model: NLP Text Classification, BERT base uncased SST2 - Scenario: Synchronous Single-Stream
ms/batch, Fewer Is Better
2022-12-22 09:13
SE +/- 0.34, N = 3
87.32
20
40
60
80
100



This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 11:03.