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pgbench2

Intel Core i7-9700TE testing with a C OZE GM-1000 v0.0.01.001 (5.13 BIOS) and NVIDIA Quadro P2000 4GB on Ubuntu 20.10 via the Phoronix Test Suite.

Test Systems:

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Processor: Intel Core i7-9700TE @ 3.80GHz (8 Cores), Motherboard: C OZE GM-1000 v0.0.01.001 (5.13 BIOS), Chipset: Intel Cannon Lake PCH, Memory: 32GB, Disk: CIE M8 T405 512GB, Graphics: NVIDIA Quadro P2000 4GB (1455/3003MHz), Audio: Realtek ALC888-VD, Monitor: DELL S2409W, Network: Intel I219-LM + 2 x Intel 10G X550T + Intel I210

OS: Ubuntu 20.10, Kernel: 5.8.0-25-generic (x86_64), Desktop: GNOME Shell 3.38.1, Display Server: X Server 1.20.9, Display Driver: NVIDIA 455.28, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.1.96, Vulkan: 1.2.142, Compiler: GCC 10.2.0, File-System: ext4, Screen Resolution: 1920x1080

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++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug

pgbench2

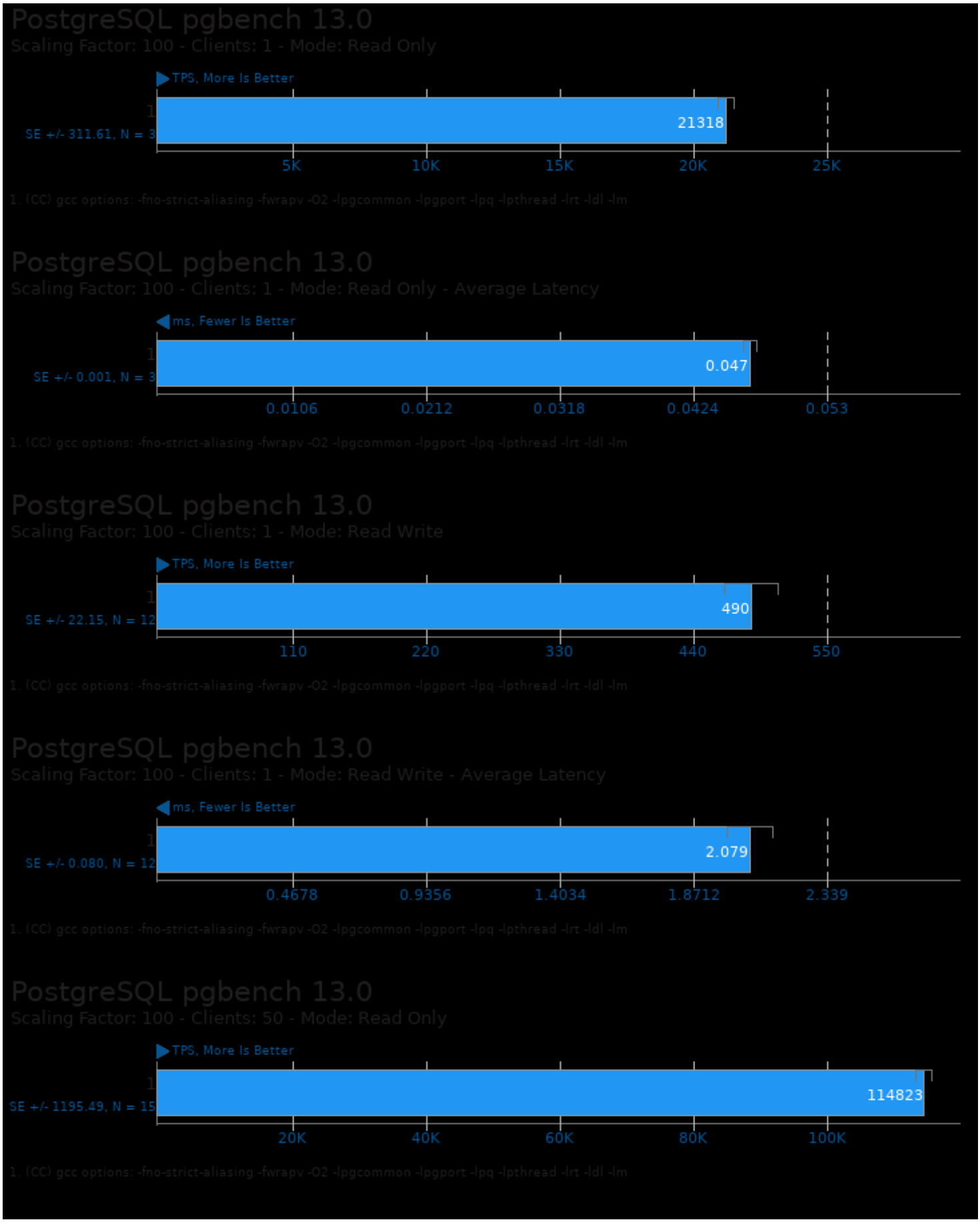
--enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-JvwpWM/gcc-10-10.2.0/debian/tmp-gcn/usr,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-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: 0xd6 - Thermald 2.3
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: Mitigation of TSX disabled + tsx_async_abort: Mitigation of TSX disabled

	1
PostgreSQL pgbench - 100 - 1 - Read Only (TPS)	21318
Standard Deviation	2.5%
PostgreSQL pgbench - 100 - 1 - Read Only - Average Latency (ms)	0.047
Standard Deviation	2.1%
PostgreSQL pgbench - 100 - 1 - Read Write (TPS)	490
Standard Deviation	15.7%
PostgreSQL pgbench - 100 - 1 - Read Write - Average Latency (ms)	2.079
Standard Deviation	13.3%
PostgreSQL pgbench - 100 - 50 - Read Only (TPS)	114823
Standard Deviation	4%
PostgreSQL pgbench - 100 - 50 - Read Only - Average Latency (ms)	0.436
Standard Deviation	3.9%
PostgreSQL pgbench - 1000 - 1 - Read Only (TPS)	20805
Standard Deviation	1.7%
PostgreSQL pgbench - 1000 - 1 - Read Only - Average Latency (ms)	0.048
Standard Deviation	2.1%
PostgreSQL pgbench - 100 - 100 - Read Only (TPS)	111664
Standard Deviation	4.5%
PostgreSQL pgbench - 100 - 100 - Read Only - Average Latency	0.897
Standard Deviation	4.4%
PostgreSQL pgbench - 100 - 50 - Read Write (TPS)	7147
Standard Deviation	45.3%
PostgreSQL pgbench - 100 - 50 - Read Write - Average Latency	9.167
Standard Deviation	68.3%
PostgreSQL pgbench - 1000 - 1 - Read Write (TPS)	622
Standard Deviation	33.4%
PostgreSQL pgbench - 1000 - 1 - Read Write - Average Latency	1.802
Standard Deviation	36.1%
PostgreSQL pgbench - 1000 - 50 - Read Only (TPS)	117502
Standard Deviation	3.7%
PostgreSQL pgbench - 1000 - 50 - Read Only - Average Latency	0.426
Standard Deviation	4.1%
PostgreSQL pgbench - 10000 - 1 - Read Only (TPS)	1324
Standard Deviation	1.8%
PostgreSQL pgbench - 10000 - 1 - Read Only - Average Latency	0.755
Standard Deviation	1.8%
PostgreSQL pgbench - 100 - 100 - Read Write (TPS)	7445
Standard Deviation	48.6%
PostgreSQL pgbench - 100 - 100 - Read Write - Average Latency	19.059
Standard Deviation	71.7%
PostgreSQL pgbench - 1000 - 100 - Read Only (TPS)	116726

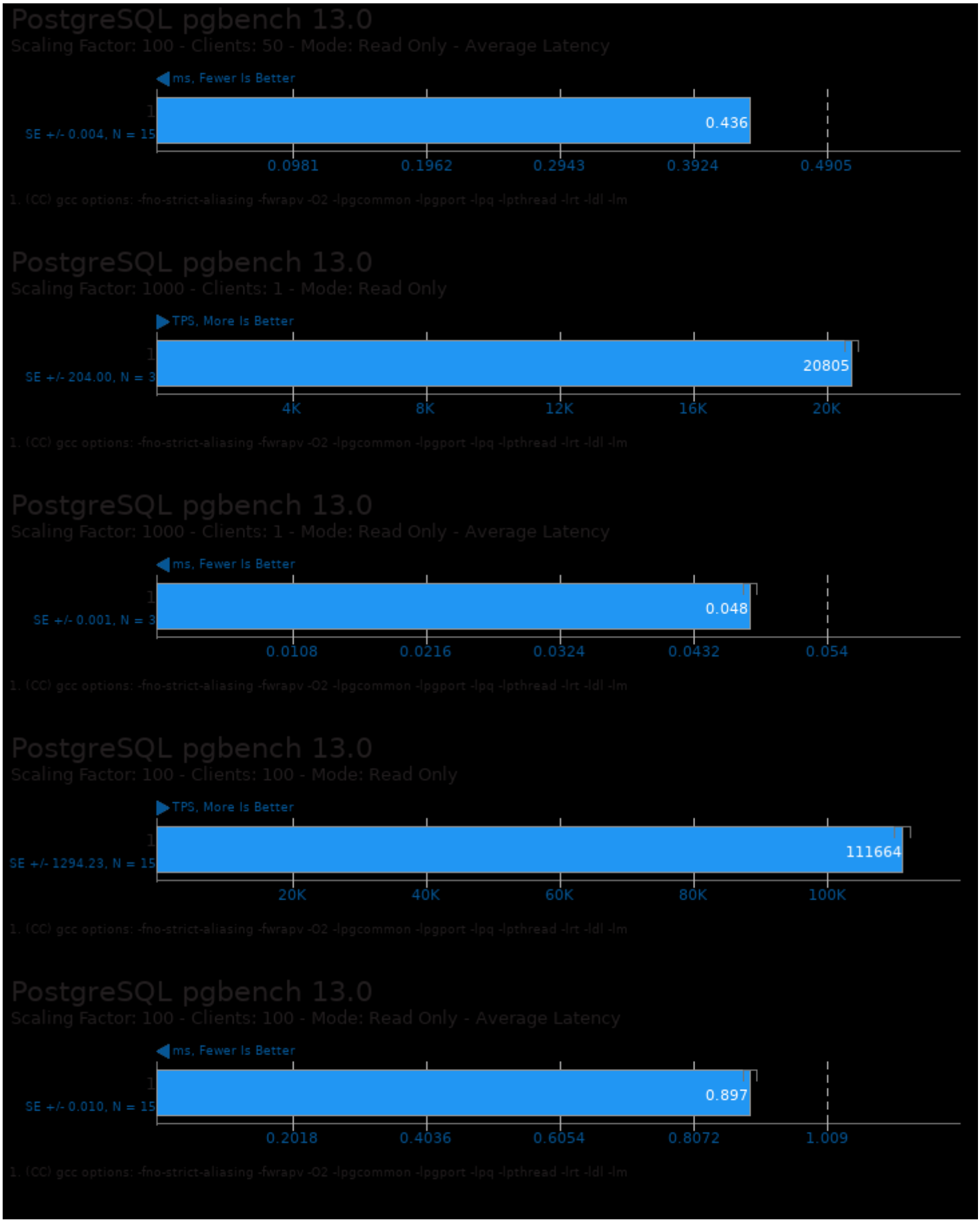
pgbench2

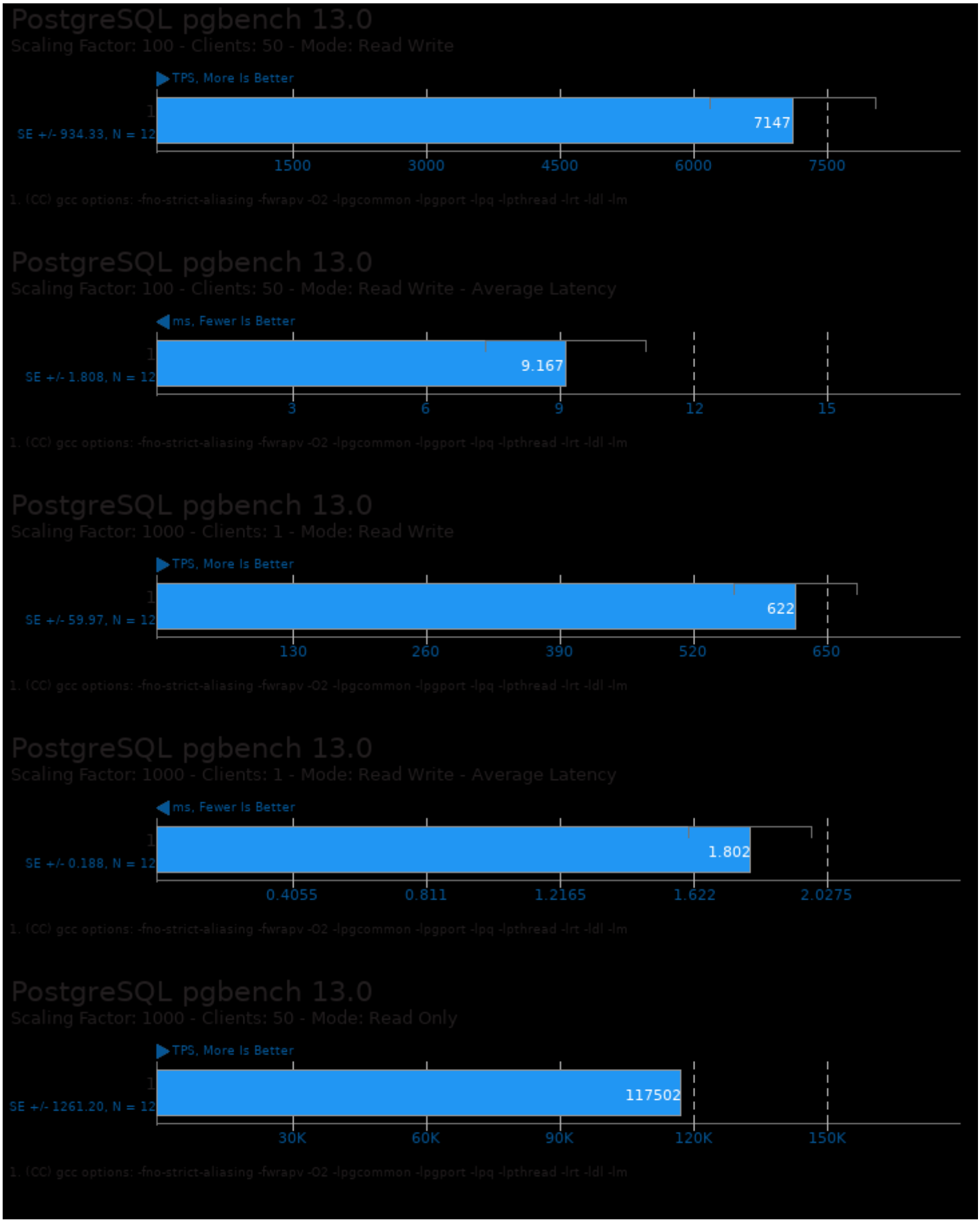
Standard Deviation	1.6%
PostgreSQL pgbench - 1000 - 100 - Read Only - Average Latency	0.857
Standard Deviation	1.6%
PostgreSQL pgbench - 1000 - 50 - Read Write (TPS)	4883
Standard Deviation	30.8%
PostgreSQL pgbench - 1000 - 50 - Read Write - Average Latency	11.026
Standard Deviation	26.7%
PostgreSQL pgbench - 10000 - 1 - Read Write (TPS)	347
Standard Deviation	20.1%
PostgreSQL pgbench - 10000 - 1 - Read Write - Average Latency	3.002
Standard Deviation	23%
PostgreSQL pgbench - 10000 - 50 - Read Only (TPS)	28727
Standard Deviation	0.9%
PostgreSQL pgbench - 10000 - 50 - Read Only - Average Latency	1.741
Standard Deviation	0.9%
PostgreSQL pgbench - 1000 - 100 - Read Write (TPS)	4164
Standard Deviation	20.7%
PostgreSQL pgbench - 1000 - 100 - Read Write - Average Latency	24.744
Standard Deviation	16.4%
PostgreSQL pgbench - 10000 - 100 - Read Only (TPS)	20044
Standard Deviation	18.1%
PostgreSQL pgbench - 10000 - 100 - Read Only - Average Latency	5.110
Standard Deviation	14.9%
PostgreSQL pgbench - 10000 - 50 - Read Write (TPS)	3197
Standard Deviation	29.1%
PostgreSQL pgbench - 10000 - 50 - Read Write - Average Latency	17.143
Standard Deviation	35.1%
PostgreSQL pgbench - 10000 - 100 - Read Write (TPS)	3300
Standard Deviation	24.5%
PostgreSQL pgbench - 10000 - 100 - Read Write - Average Latency (ms)	32.647
Standard Deviation	34.3%

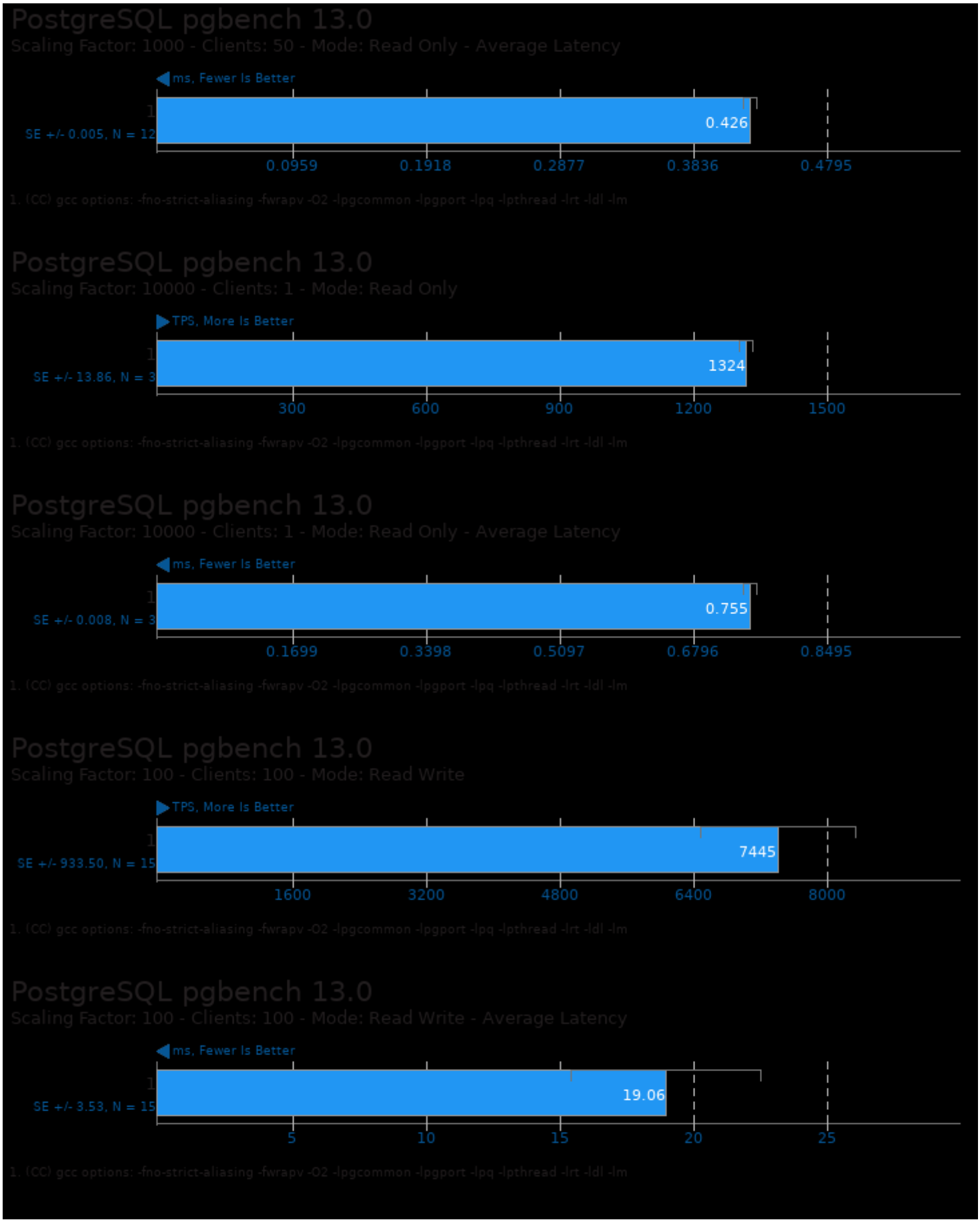
pgbench2


PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Only
TPS, More Is Better
1
21318
SE +/- 311.61, N = 3
5K
10K
15K
20K
25K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
1
0.047
SE +/- 0.001, N = 3
0.0106
0.0212
0.0318
0.0424
0.053
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Write
TPS, More Is Better
1
490
SE +/- 22.15, N = 12
110
220
330
440
550
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 1 - Mode: Read Write - Average Latency
ms, Fewer Is Better
1
2.079
SE +/- 0.080, N = 12
0.4678
0.9356
1.4034
1.8712
2.339
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Only
TPS, More Is Better
1
114823
SE +/- 1195.49, N = 15
20K
40K
60K
80K
100K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

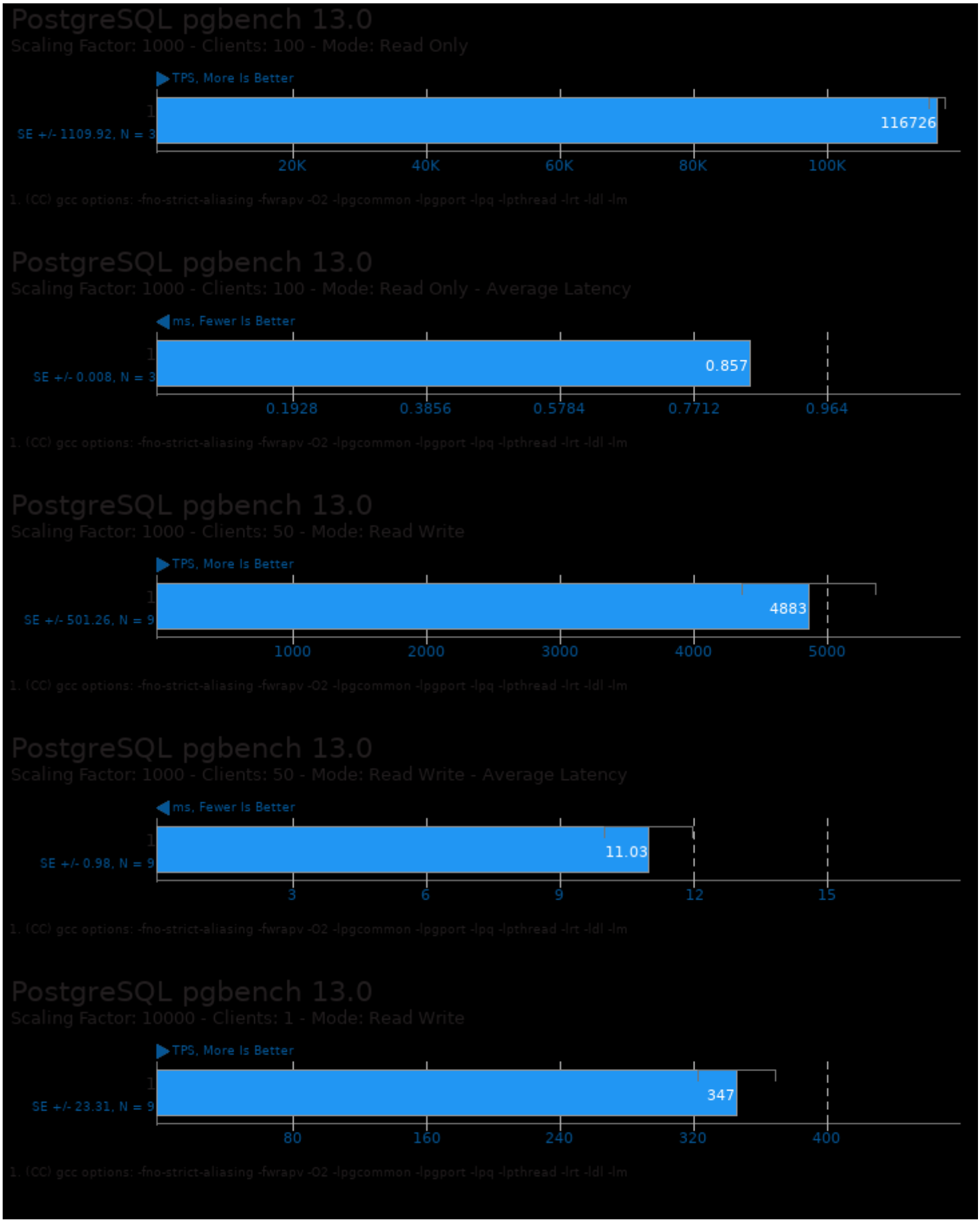
pgbench2

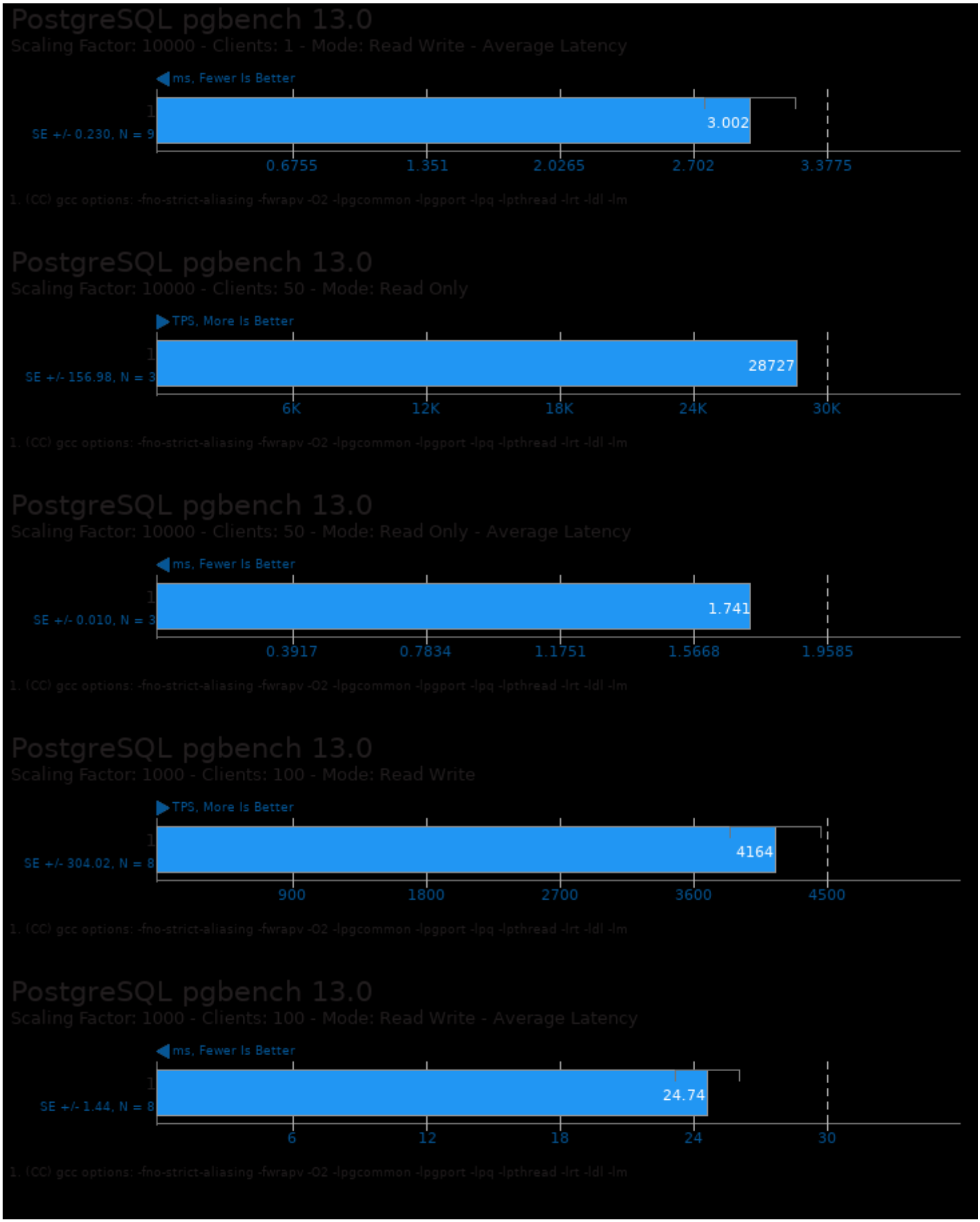

PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.004, N = 15
0.436
0.0981
0.1962
0.2943
0.3924
0.4905
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 1 - Mode: Read Only
TPS, More Is Better
SE +/- 204.00, N = 3
20805
4K
8K
12K
16K
20K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.001, N = 3
0.048
0.0108
0.0216
0.0324
0.0432
0.054
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 100 - Mode: Read Only
TPS, More Is Better
SE +/- 1294.23, N = 15
111664
20K
40K
60K
80K
100K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 100 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.010, N = 15
0.897
0.2018
0.4036
0.6054
0.8072
1.009
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Write
TPS, More Is Better
1
SE +/- 934.33, N = 12
7147
1500
3000
4500
6000
7500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 50 - Mode: Read Write - Average Latency
ms, Fewer Is Better
1
SE +/- 1.808, N = 12
9.167
3
6
9
12
15
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 1 - Mode: Read Write
TPS, More Is Better
1
SE +/- 59.97, N = 12
622
130
260
390
520
650
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 1 - Mode: Read Write - Average Latency
ms, Fewer Is Better
1
SE +/- 0.188, N = 12
1.802
0.4055
0.811
1.2165
1.622
2.0275
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 50 - Mode: Read Only
TPS, More Is Better
1
SE +/- 1261.20, N = 12
117502
30K
60K
90K
120K
150K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

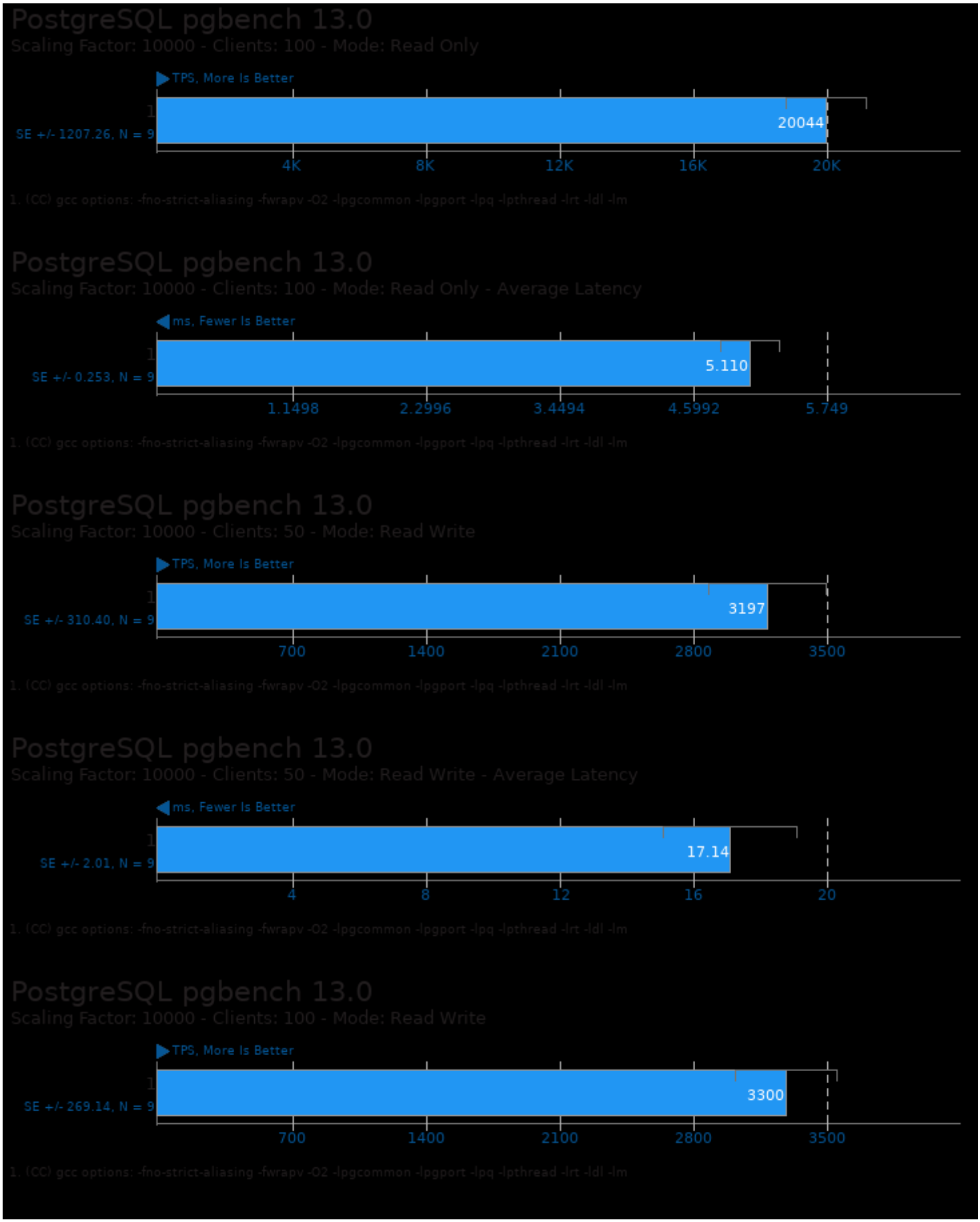

PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 50 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.005, N = 12
0.426
0.0959
0.1918
0.2877
0.3836
0.4795
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 1 - Mode: Read Only
TPS, More Is Better
SE +/- 13.86, N = 3
1324
300
600
900
1200
1500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 1 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.008, N = 3
0.755
0.1699
0.3398
0.5097
0.6796
0.8495
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 100 - Mode: Read Write
TPS, More Is Better
SE +/- 933.50, N = 15
7445
1600
3200
4800
6400
8000
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 100 - Clients: 100 - Mode: Read Write - Average Latency
ms, Fewer Is Better
SE +/- 3.53, N = 15
19.06
5
10
15
20
25
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

pgbench2

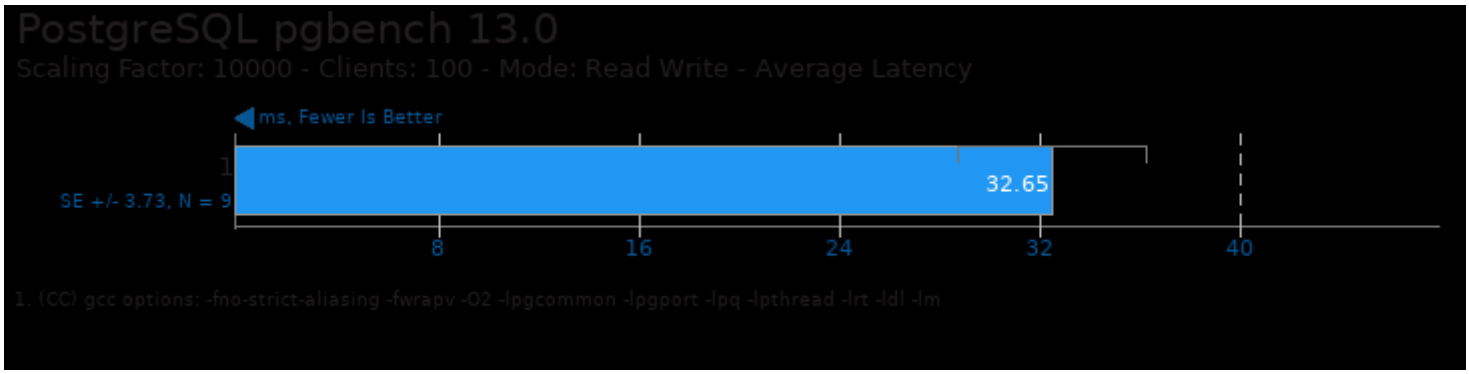

PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 100 - Mode: Read Only
TPS, More Is Better
SE +/- 1109.92, N = 3
116726
20K
40K
60K
80K
100K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 100 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.008, N = 3
0.857
0.1928
0.3856
0.5784
0.7712
0.964
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 50 - Mode: Read Write
TPS, More Is Better
SE +/- 501.26, N = 9
4883
1000
2000
3000
4000
5000
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 50 - Mode: Read Write - Average Latency
ms, Fewer Is Better
SE +/- 0.98, N = 9
11.03
3
6
9
12
15
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 1 - Mode: Read Write
TPS, More Is Better
SE +/- 23.31, N = 9
347
80
160
240
320
400
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm


PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 1 - Mode: Read Write - Average Latency
ms, Fewer Is Better
SE +/- 0.230, N = 9
3.002
0.6755
1.351
2.0265
2.702
3.3775
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 50 - Mode: Read Only
TPS, More Is Better
SE +/- 156.98, N = 3
28727
6K
12K
18K
24K
30K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 50 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.010, N = 3
1.741
0.3917
0.7834
1.1751
1.5668
1.9585
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 100 - Mode: Read Write
TPS, More Is Better
SE +/- 304.02, N = 8
4164
900
1800
2700
3600
4500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 1000 - Clients: 100 - Mode: Read Write - Average Latency
ms, Fewer Is Better
SE +/- 1.44, N = 8
24.74
6
12
18
24
30
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

pgbench2


PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 100 - Mode: Read Only
TPS, More Is Better
SE +/- 1207.26, N = 9
20044
4K
8K
12K
16K
20K
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 100 - Mode: Read Only - Average Latency
ms, Fewer Is Better
SE +/- 0.253, N = 9
5.110
1.1498
2.2996
3.4494
4.5992
5.749
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 50 - Mode: Read Write
TPS, More Is Better
SE +/- 310.40, N = 9
3197
700
1400
2100
2800
3500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 50 - Mode: Read Write - Average Latency
ms, Fewer Is Better
SE +/- 2.01, N = 9
17.14
4
8
12
16
20
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm
PostgreSQL pgbench 13.0
Scaling Factor: 10000 - Clients: 100 - Mode: Read Write
TPS, More Is Better
SE +/- 269.14, N = 9
3300
700
1400
2100
2800
3500
1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -ldl -lm

pgbench2



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:38.