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3950x sat

AMD Ryzen 3 3200U testing with a MOTILE PF4PU1F (N.1.03 BIOS) and AMD Picasso 512MB on Ubuntu 20.04 via the Phoronix Test Suite.

Automated Executive Summary

1 had the most wins, coming in first place for 33% of the tests.

Based on the geometric mean of all complete results, the fastest (4) was 1.004x the speed of the slowest (1). 2 was 0.999x the speed of 4, 3 was 1x the speed of 2, 1 was 0.998x the speed of 3.

Test Systems:

1

2

3

4

Processor: AMD Ryzen 3 3200U @ 2.60GHz (2 Cores / 4 Threads), Motherboard: MOTILE PF4PU1F (N.1.03 BIOS), Chipset: AMD Raven/Raven2, Memory: 3584MB, Disk: 128GB BIWIN SSD, Graphics: AMD Picasso 512MB (1200/1200MHz), Audio: AMD Raven/Raven2/Fenghuang, Network: Realtek RTL8111/8168/8411 + Intel Dual Band-AC 3168NGW

OS: Ubuntu 20.04, Kernel: 5.8.0-50-generic (x86_64), Desktop: GNOME Shell 3.36.4, Display Server: X Server 1.20.9, OpenGL: 4.6 Mesa 20.0.8 (LLVM 10.0.0), Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 1920x1080

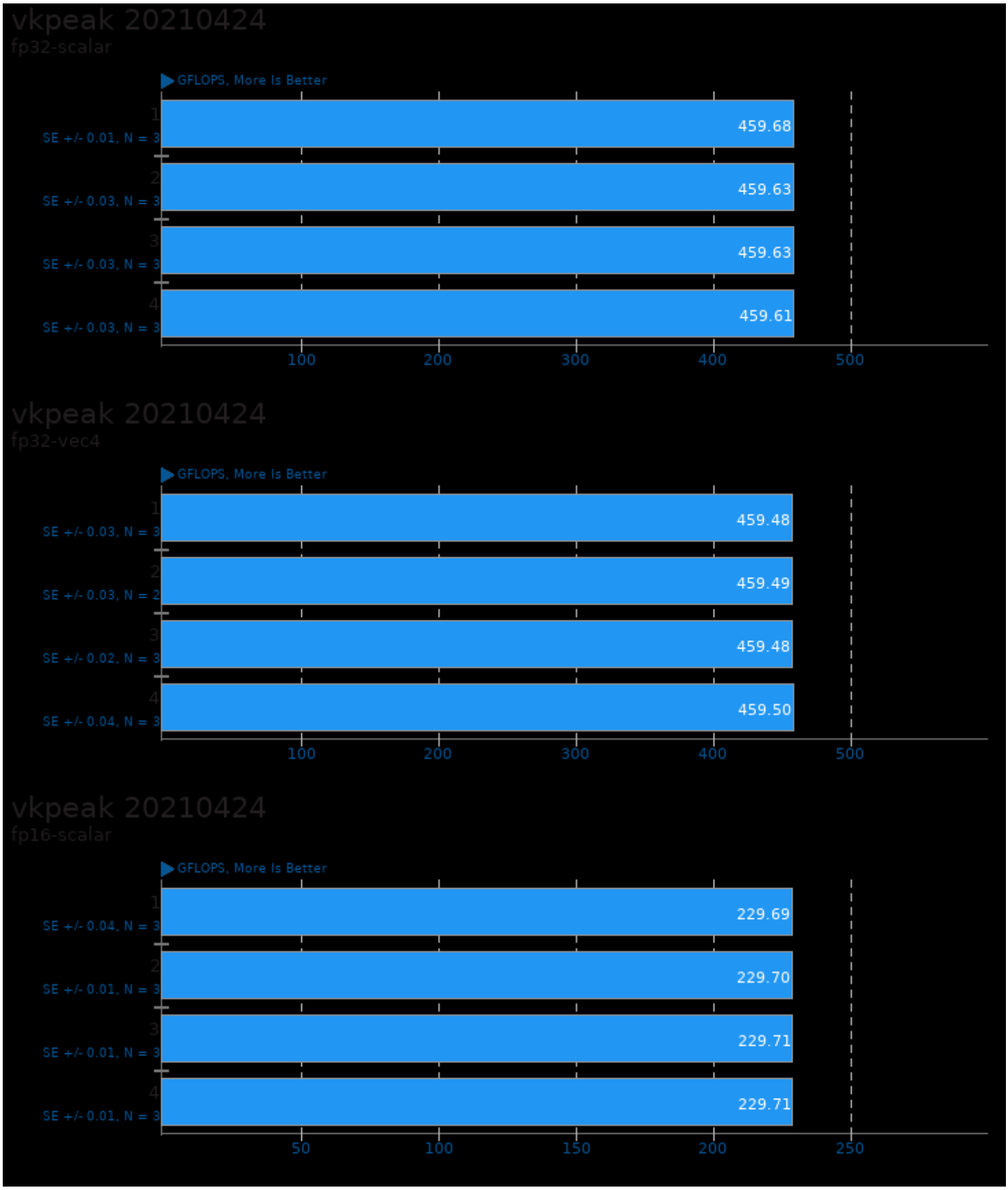
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/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: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0x8108102
Graphics Notes: GLAMOR
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

	1	2	3	4
vkpeak - fp32-scalar (GFLOPS)	**459.68**	459.63	459.63	**459.61**
Normalized	100%	99.99%	99.99%	99.98%
Standard Deviation	0%	0%	0%	0%
vkpeak - fp32-vec4 (GFLOPS)	**459.48**	459.49	**459.48**	**459.50**
Normalized	100%	100%	100%	100%
Standard Deviation	0%	0%	0%	0%
vkpeak - fp16-scalar (GFLOPS)	**229.69**	229.70	**229.71**	**229.71**
Normalized	99.99%	100%	100%	100%
Standard Deviation	0%	0%	0%	0%
vkpeak - fp16-vec4 (GFLOPS)	229.70	**229.72**	229.70	**229.67**
Normalized	99.99%	100%	99.99%	99.98%
Standard Deviation	0%	0%	0%	0%
vkpeak - fp64-scalar (GFLOPS)	19.15	19.15	19.15	19.15
Standard Deviation	0%	0%	0%	0%
vkpeak - int32-scalar (GIOPS)	**91.90**	**91.92**	**91.9**	**91.90**
Normalized	99.98%	100%	99.98%	99.98%
Standard Deviation	0%	0%	0%	0%
vkpeak - int32-vec4 (GIOPS)	91.92	91.92	91.92	91.92
Standard Deviation	0%		0%	
vkpeak - int16-scalar (GIOPS)	**459.55**	459.61	459.57	**459.64**
Normalized	99.98%	99.99%	99.98%	100%
Standard Deviation	0%	0%	0%	0%
vkpeak - int16-vec4 (GIOPS)	**459.62**	**459.44**	459.49	459.50
Normalized	100%	99.96%	99.97%	99.97%
Standard Deviation	0.1%	0%	0%	0%
libjpeg-turbo tjbench - D.T (Megapixels/sec)	**144.115398**	146.414117	**146.466851**	146.432999
Normalized	98.39%	99.96%	100%	99.98%

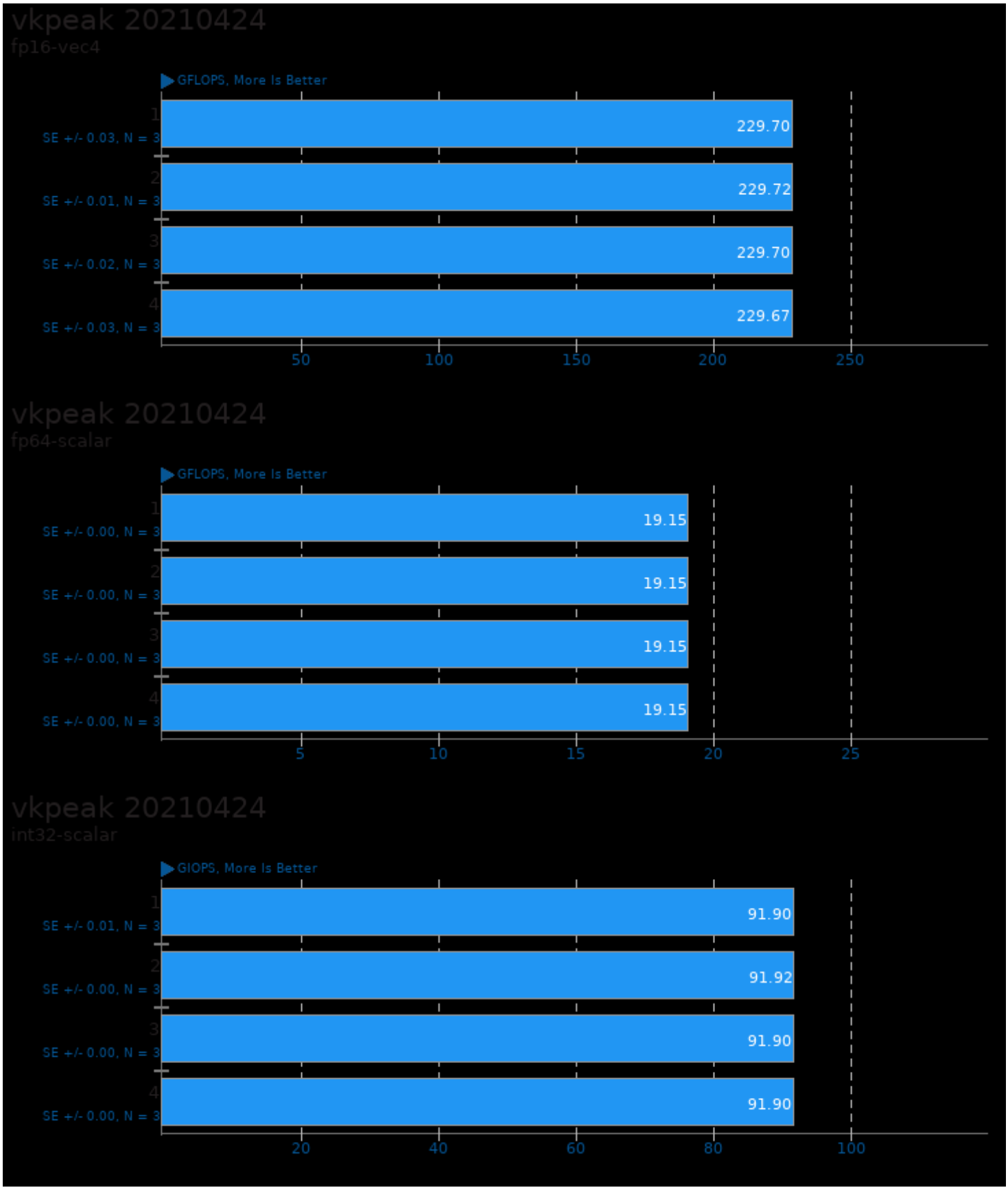
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Standard Deviation	3%	0%	0%	0.1%
Xmrig - Monero - 1M (H/s)	**598.5**	601.6	599.2	**605.5**
Normalized	98.84%	99.36%	98.96%	100%
Standard Deviation	0.8%	0.2%	1.1%	0.4%
Xmrig - Wownero - 1M (H/s)	**897.8**	903.1	906.5	**913.2**
Normalized	98.31%	98.89%	99.27%	100%
Standard Deviation	1.4%	1.1%	0.8%	0.1%

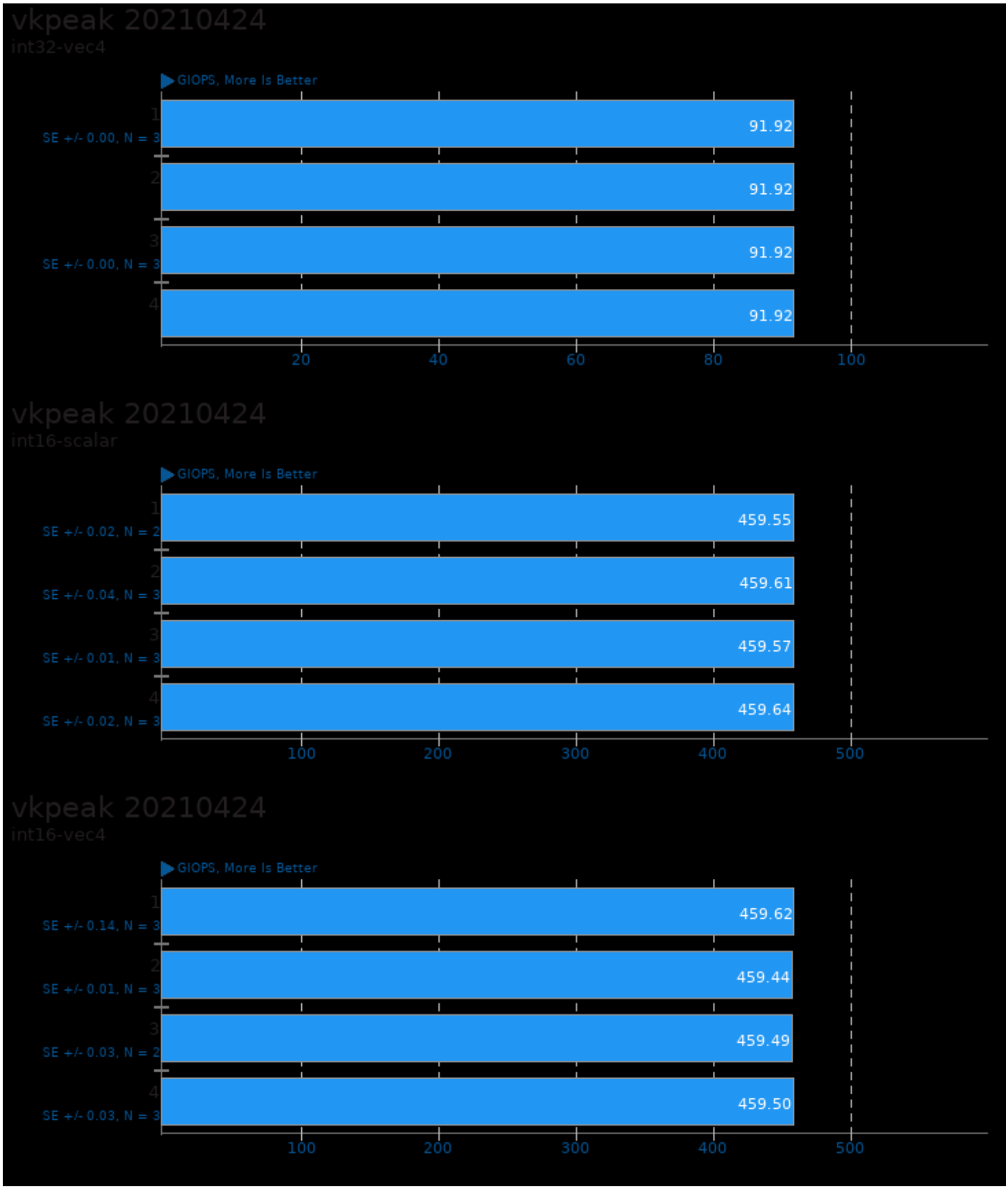
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vkpeak 20210424
fp32-scalar
GFLOPS, More Is Better
1
SE +/- 0.01, N = 3
459.68
2
SE +/- 0.03, N = 3
459.63
3
SE +/- 0.03, N = 3
459.63
4
SE +/- 0.03, N = 3
459.61
100
200
300
400
500
vkpeak 20210424
fp32-vec4
GFLOPS, More Is Better
1
SE +/- 0.03, N = 3
459.48
2
SE +/- 0.03, N = 2
459.49
3
SE +/- 0.02, N = 3
459.48
4
SE +/- 0.04, N = 3
459.50
100
200
300
400
500
vkpeak 20210424
fp16-scalar
GFLOPS, More Is Better
1
SE +/- 0.04, N = 3
229.69
2
SE +/- 0.01, N = 3
229.70
3
SE +/- 0.01, N = 3
229.71
4
SE +/- 0.01, N = 3
229.71
50
100
150
200
250

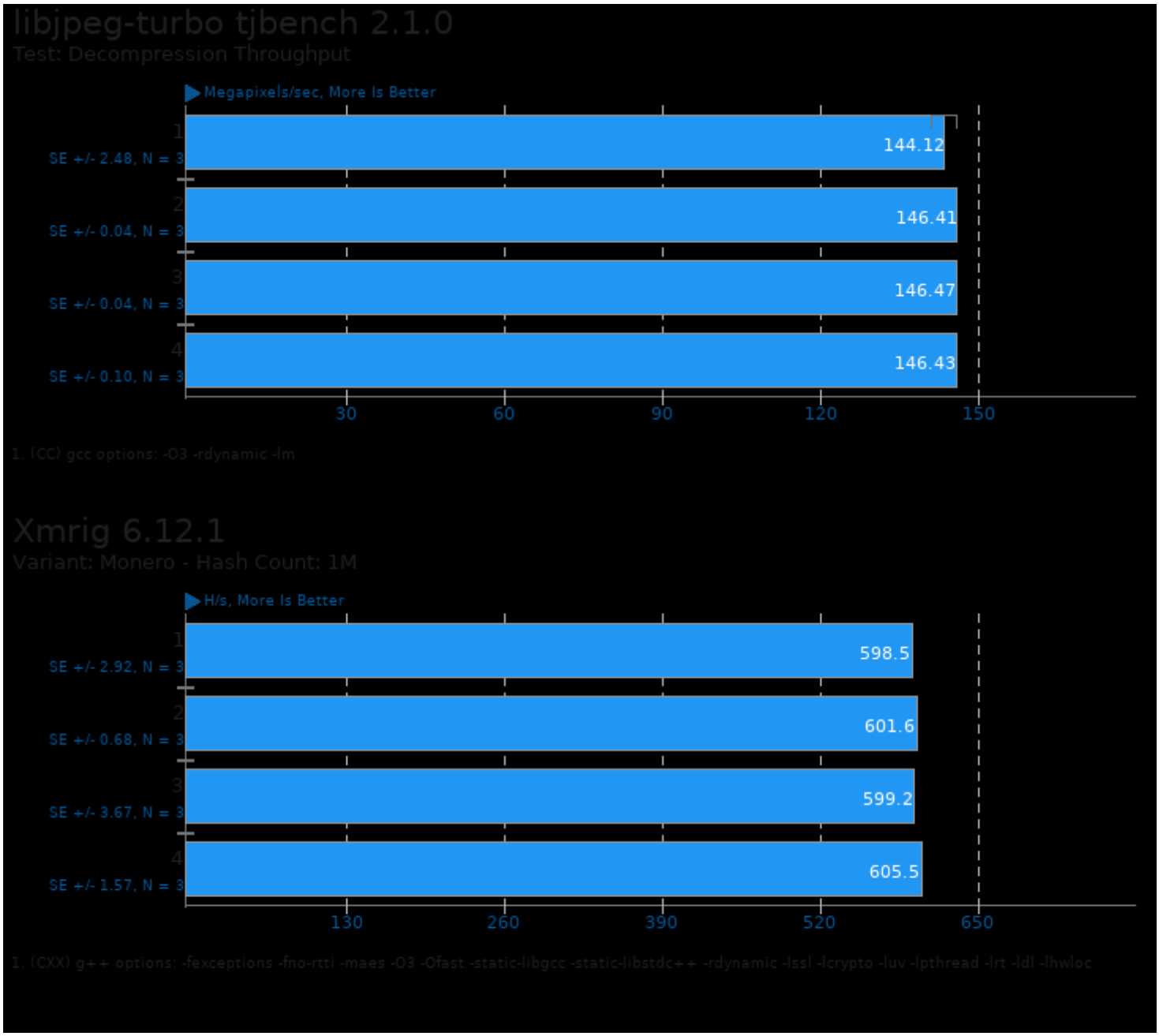
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vkpeak 20210424
fp16-vec4
GFLOPS, More Is Better
1
SE +/- 0.03, N = 3
229.70
2
SE +/- 0.01, N = 3
229.72
3
SE +/- 0.02, N = 3
229.70
4
SE +/- 0.03, N = 3
229.67
50
100
150
200
250
vkpeak 20210424
fp64-scalar
GFLOPS, More Is Better
1
SE +/- 0.00, N = 3
19.15
2
SE +/- 0.00, N = 3
19.15
3
SE +/- 0.00, N = 3
19.15
4
SE +/- 0.00, N = 3
19.15
5
10
15
20
25
vkpeak 20210424
int32-scalar
GIOPS, More Is Better
1
SE +/- 0.01, N = 3
91.90
2
SE +/- 0.00, N = 3
91.92
3
SE +/- 0.00, N = 3
91.90
4
SE +/- 0.00, N = 3
91.90
20
40
60
80
100

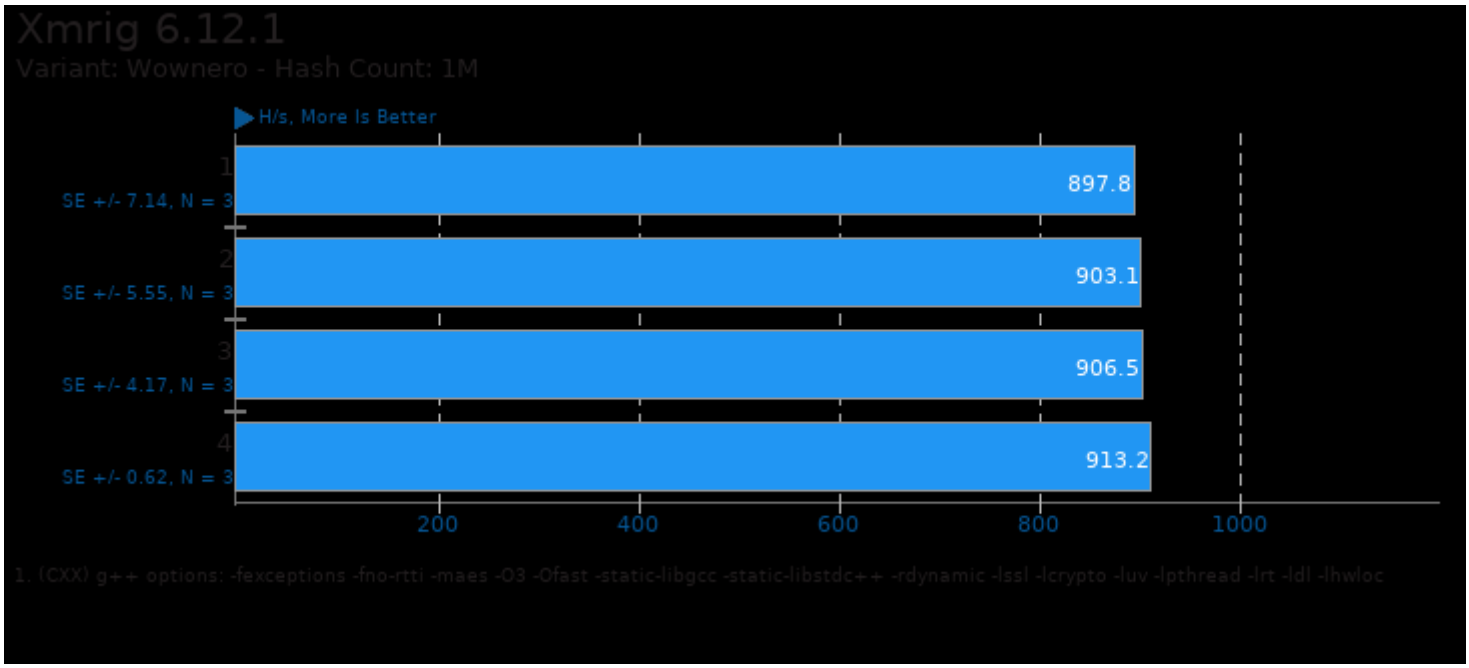
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vkpeak 20210424
int32-vec4
GIOPS, More Is Better
1
SE +/- 0.00, N = 3
91.92
2
91.92
3
SE +/- 0.00, N = 3
91.92
4
91.92
20
40
60
80
100
vkpeak 20210424
int16-scalar
GIOPS, More Is Better
1
SE +/- 0.02, N = 2
459.55
2
SE +/- 0.04, N = 3
459.61
3
SE +/- 0.01, N = 3
459.57
4
SE +/- 0.02, N = 3
459.64
100
200
300
400
500
vkpeak 20210424
int16-vec4
GIOPS, More Is Better
1
SE +/- 0.14, N = 3
459.62
2
SE +/- 0.01, N = 3
459.44
3
SE +/- 0.03, N = 2
459.49
4
SE +/- 0.03, N = 3
459.50
100
200
300
400
500

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libjpeg-turbo tjbench 2.1.0
Test: Decompression Throughput
Megapixels/sec, More Is Better
1
SE +/- 2.48, N = 3
144.12
2
SE +/- 0.04, N = 3
146.41
3
SE +/- 0.04, N = 3
146.47
4
SE +/- 0.10, N = 3
146.43
30
60
90
120
150
1. (CC) gcc options: -O3 -rdynamic -lm
Xmrig 6.12.1
Variant: Monero - Hash Count: 1M
H/s, More Is Better
1
SE +/- 2.92, N = 3
598.5
2
SE +/- 0.68, N = 3
601.6
3
SE +/- 3.67, N = 3
599.2
4
SE +/- 1.57, N = 3
605.5
130
260
390
520
650
1. (CXX) g++ options: -fexceptions -fno-rtti -maes -O3 -Ofast -static-libgcc -static-libstdc++ -rdynamic -lssl -lcrypto -luv -lpthread -lrt -ldl -lhwloc

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This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:57.