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unvanquished-rx-6800-xt

Intel Core i9-12900K testing with a ASUS ROG STRIX Z690-E GAMING WIFI (1601 BIOS) and AMD Radeon RX 6800 XT 16GB on Ubuntu 22.04 via the Phoronix Test Suite.

Automated Executive Summary

C had the most wins, coming in first place for 41% of the tests.

Based on the geometric mean of all complete results, the fastest (B) was 1.005x the speed of the slowest (C). AA was 0.997x the speed of B, D was 0.999x the speed of AA, C was 0.999x the speed of D.

Test Systems:

AA

B

C

D

Processor: Intel Core i9-12900K @ 5.20GHz (16 Cores / 24 Threads), Motherboard: ASUS ROG STRIX Z690-E GAMING WIFI (1601 BIOS), Chipset: Intel Alder Lake-S PCH, Memory: 32GB, Disk: 1000GB Western Digital WDS100T1X0E-00AFY0, Graphics: AMD Radeon RX 6800 XT 16GB (2575/1000MHz), Audio: Intel Alder Lake-S HD Audio, Monitor: ASUS VP28U, Network: Intel I225-V + Intel Wi-Fi 6 AX210/AX211/AX411

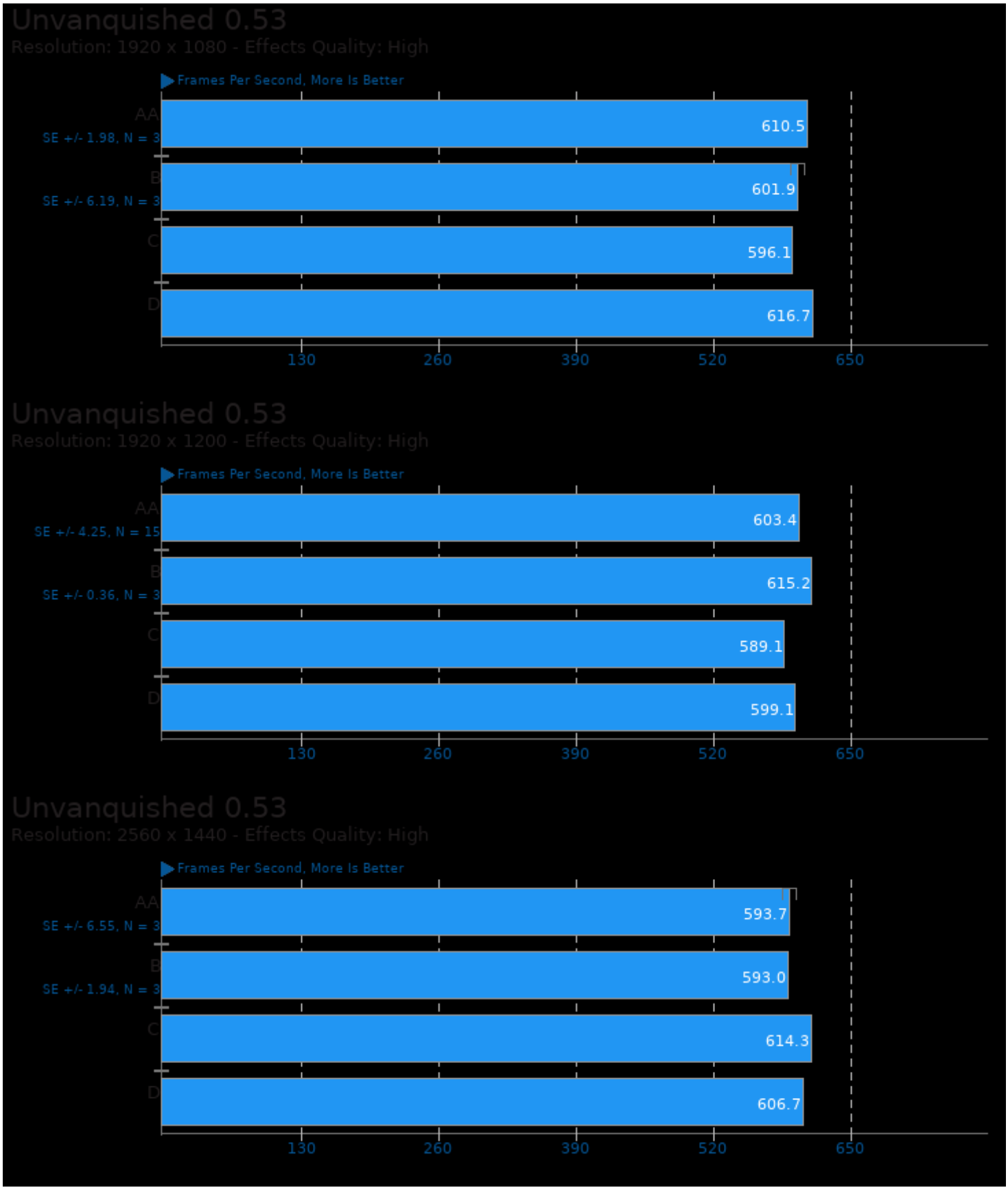
OS: Ubuntu 22.04, Kernel: 5.18.0-051800-generic (x86_64), Desktop: GNOME Shell 42.2, Display Server: X Server 1.21.1.3 + Wayland, OpenGL: 4.6 Mesa 22.2.0-devel (git-c6ded153d1) (LLVM 12.0.0 DRM 3.46), Vulkan: 1.3.211, Compiler: GCC 11.2.0, File-System: ext4, Screen Resolution: 3840x2160

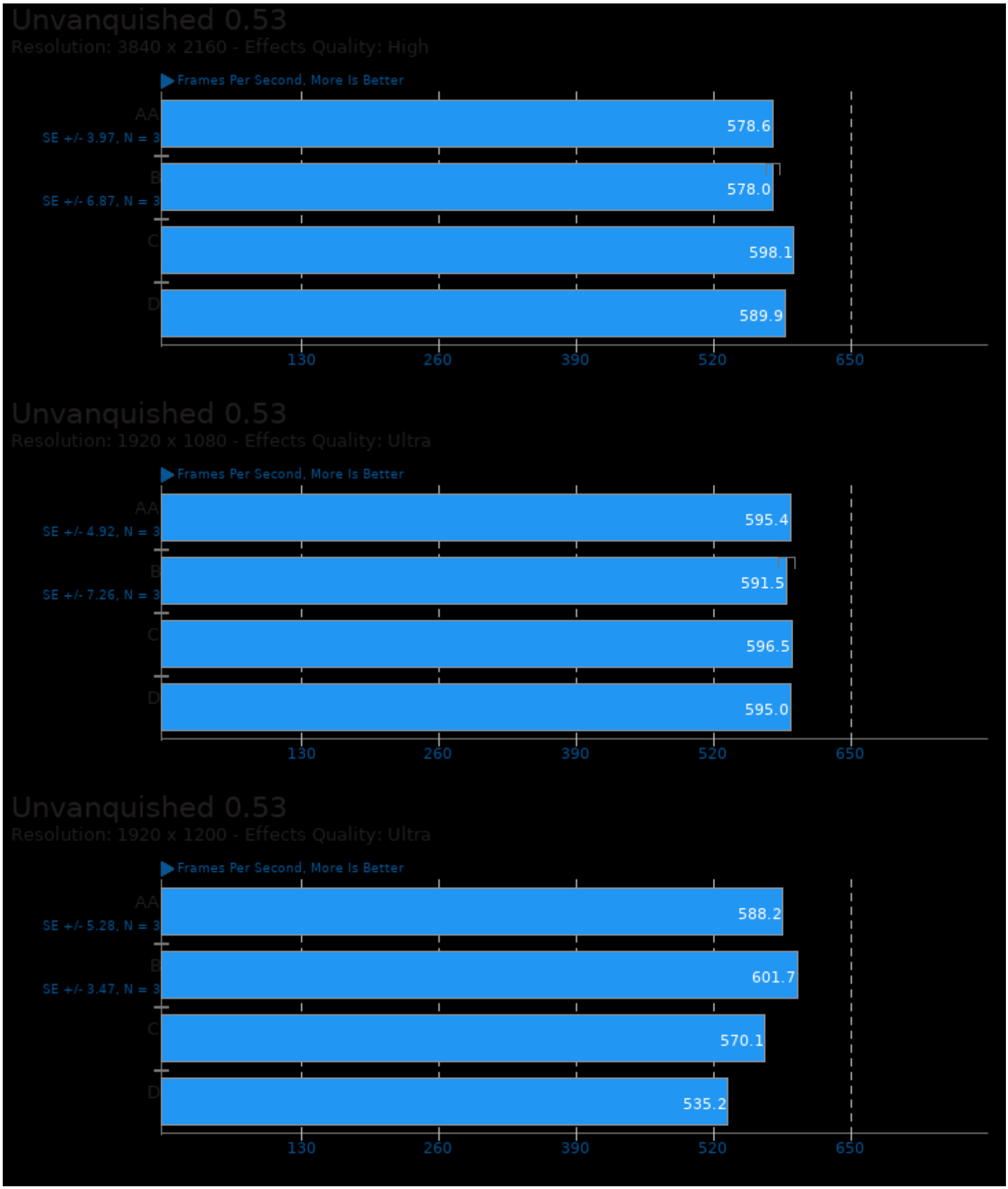
Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: intel_pstate powersave (EPP: balance_performance) - CPU Microcode: 0x1f - Thermald 2.4.9
Graphics Notes: BAR1 / Visible vRAM Size: 16368 MB - vBIOS Version: 113-D4120500-101
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + 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

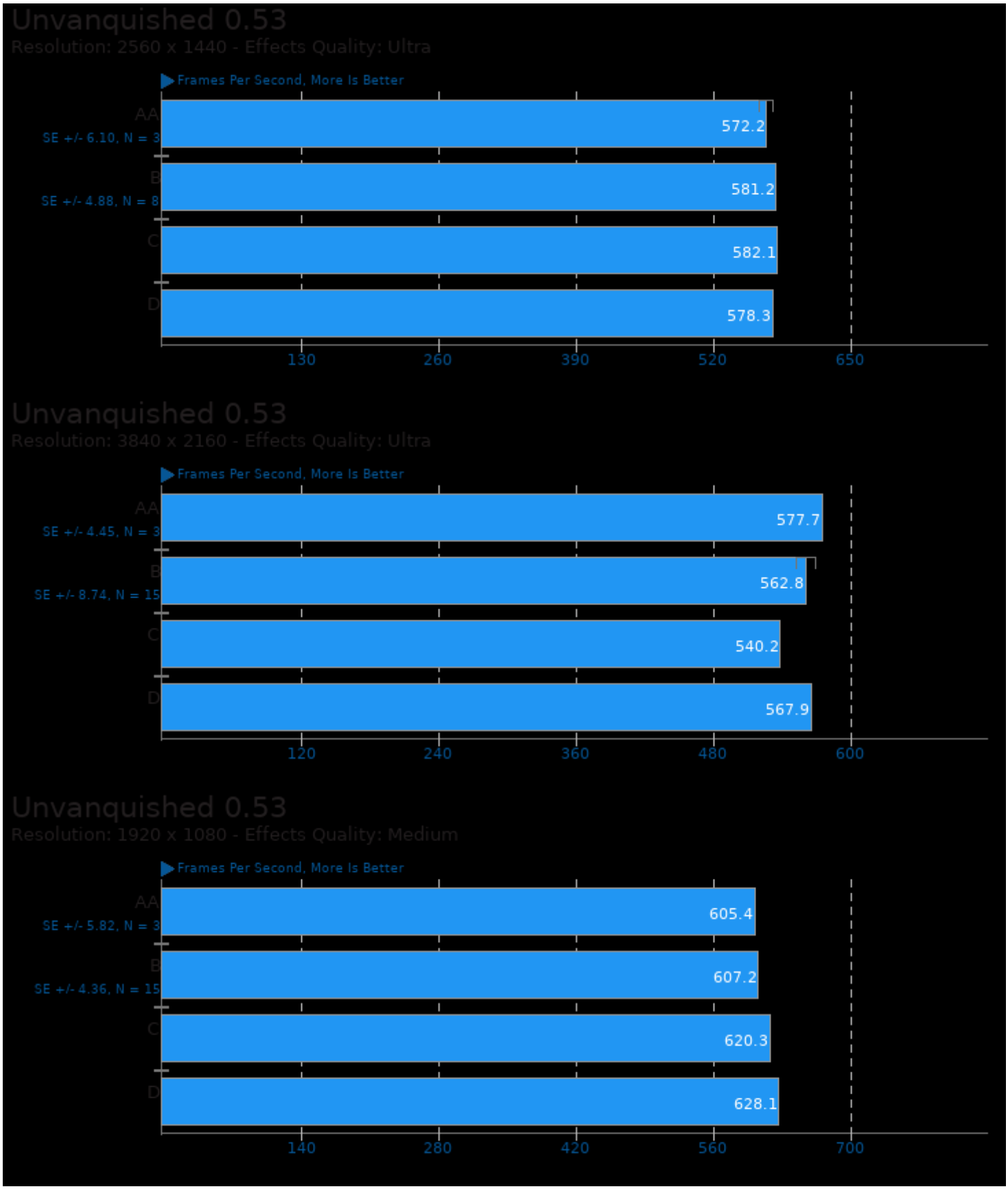
	AA	B	C	D
Unvanquished - 1920 x 1080 - High (FPS)	610.5	601.9	**596.1**	**616.7**
Normalized	98.99%	97.6%	96.66%	100%
Standard Deviation	0.6%	1.8%		
Unvanquished - 1920 x 1200 - High (FPS)	603.4	**615.2**	**589.1**	599.1
Normalized	98.08%	100%	95.76%	97.38%
Standard Deviation	2.7%	0.1%		
Unvanquished - 2560 x 1440 - High (FPS)	593.7	**593.0**	**614.3**	606.7
Normalized	96.65%	96.53%	100%	98.76%
Standard Deviation	1.9%	0.6%		
Unvanquished - 3840 x 2160 - High (FPS)	578.6	**578.0**	**598.1**	589.9
Normalized	96.74%	96.64%	100%	98.63%
Standard Deviation	1.2%	2.1%		
Unvanquished - 1920 x 1080 - Ultra (FPS)	595.4	**591.5**	**596.5**	595
Normalized	99.82%	99.16%	100%	99.75%
Standard Deviation	1.4%	2.1%		
Unvanquished - 1920 x 1200 - Ultra (FPS)	588.2	**601.7**	570.1	**535.2**
Normalized	97.76%	100%	94.75%	88.95%
Standard Deviation	1.6%	1%		
Unvanquished - 2560 x 1440 - Ultra (FPS)	**572.2**	581.2	**582.1**	578.3
Normalized	98.3%	99.85%	100%	99.35%
Standard Deviation	1.8%	2.4%		

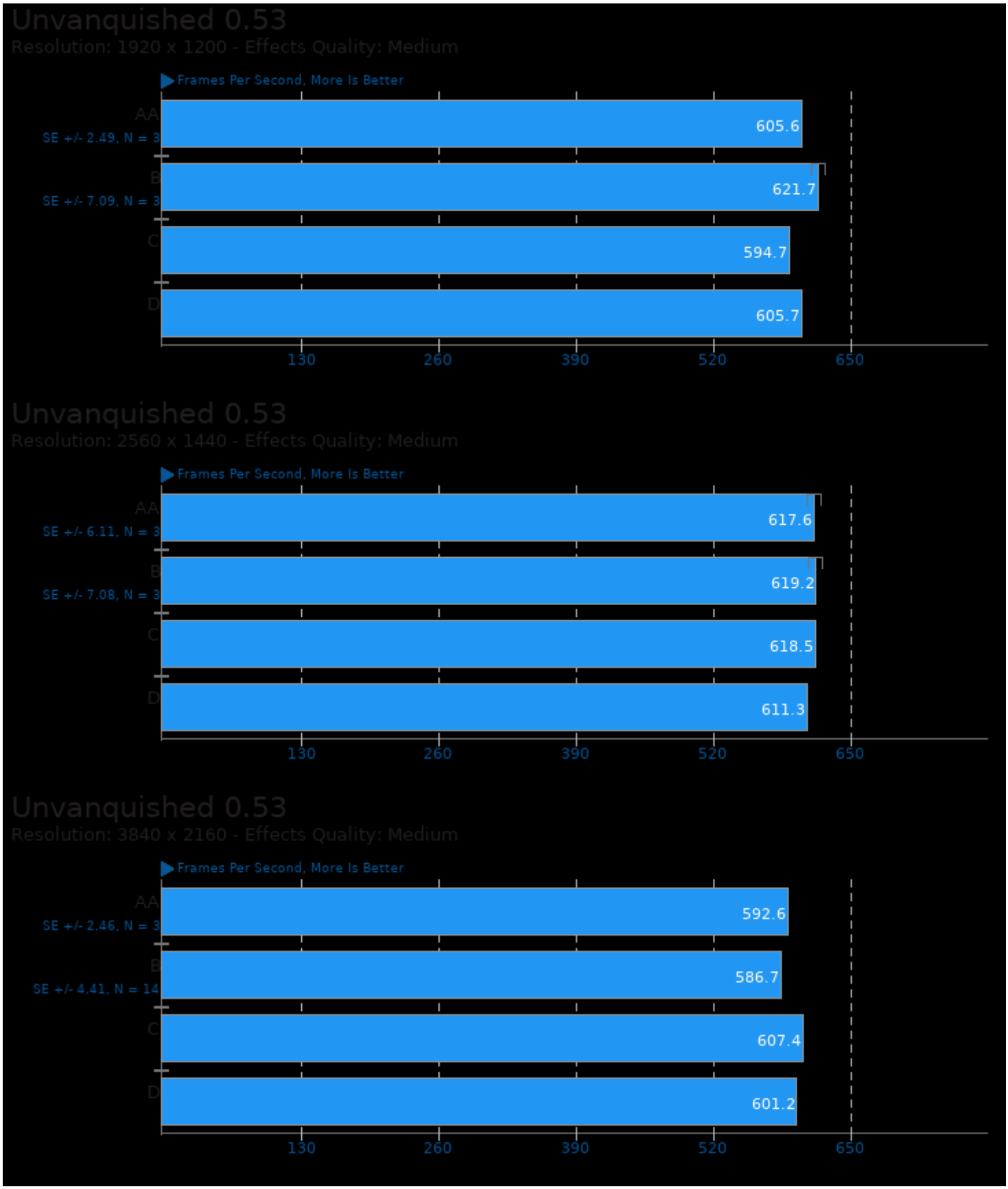
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Unvanquished - 3840 x 2160 - Ultra (FPS)	**577.7**	562.8	**540.2**	567.9
Normalized	100%	97.42%	93.51%	98.3%
Standard Deviation	1.3%	6%		
Unvanquished - 1920 x 1080 - Medium (FPS)	**605.4**	607.2	620.3	**628.1**
Normalized	96.39%	96.67%	98.76%	100%
Standard Deviation	1.7%	2.8%		
Unvanquished - 1920 x 1200 - Medium (FPS)	605.6	**621.7**	**594.7**	605.7
Normalized	97.41%	100%	95.66%	97.43%
Standard Deviation	0.7%	2%		
Unvanquished - 2560 x 1440 - Medium (FPS)	617.6	**619.2**	618.5	**611.3**
Normalized	99.74%	100%	99.89%	98.72%
Standard Deviation	1.7%	2%		
Unvanquished - 3840 x 2160 - Medium (FPS)	592.6	**586.7**	**607.4**	601.2
Normalized	97.56%	96.59%	100%	98.98%
Standard Deviation	0.7%	2.8%		


Unvanquished 0.53
Resolution: 1920 x 1080 - Effects Quality: High
Frames Per Second, More Is Better
AA
SE +/- 1.98, N = 3
610.5
B
SE +/- 6.19, N = 3
601.9
C
596.1
D
616.7
130
260
390
520
650
Unvanquished 0.53
Resolution: 1920 x 1200 - Effects Quality: High
Frames Per Second, More Is Better
AA
SE +/- 4.25, N = 15
603.4
B
SE +/- 0.36, N = 3
615.2
C
589.1
D
599.1
130
260
390
520
650
Unvanquished 0.53
Resolution: 2560 x 1440 - Effects Quality: High
Frames Per Second, More Is Better
AA
SE +/- 6.55, N = 3
593.7
B
SE +/- 1.94, N = 3
593.0
C
614.3
D
606.7
130
260
390
520
650


Unvanquished 0.53
Resolution: 3840 x 2160 - Effects Quality: High
Frames Per Second, More Is Better
AA
SE +/- 3.97, N = 3
578.6
B
SE +/- 6.87, N = 3
578.0
C
598.1
D
589.9
130
260
390
520
650
Unvanquished 0.53
Resolution: 1920 x 1080 - Effects Quality: Ultra
Frames Per Second, More Is Better
AA
SE +/- 4.92, N = 3
595.4
B
SE +/- 7.26, N = 3
591.5
C
596.5
D
595.0
130
260
390
520
650
Unvanquished 0.53
Resolution: 1920 x 1200 - Effects Quality: Ultra
Frames Per Second, More Is Better
AA
SE +/- 5.28, N = 3
588.2
B
SE +/- 3.47, N = 3
601.7
C
570.1
D
535.2
130
260
390
520
650


Unvanquished 0.53
Resolution: 2560 x 1440 - Effects Quality: Ultra
Frames Per Second, More Is Better
AA
SE +/- 6.10, N = 3
572.2
B
SE +/- 4.88, N = 8
581.2
C
582.1
D
578.3
130
260
390
520
650
Unvanquished 0.53
Resolution: 3840 x 2160 - Effects Quality: Ultra
Frames Per Second, More Is Better
AA
SE +/- 4.45, N = 3
577.7
B
SE +/- 8.74, N = 15
562.8
C
540.2
D
567.9
120
240
360
480
600
Unvanquished 0.53
Resolution: 1920 x 1080 - Effects Quality: Medium
Frames Per Second, More Is Better
AA
SE +/- 5.82, N = 3
605.4
B
SE +/- 4.36, N = 15
607.2
C
620.3
D
628.1
140
280
420
560
700



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 08:13.