

www.phoronix-test-suite.com

pview hp zbook

Intel Core i9-10885H testing with a HP 8736 (S91 Ver. 01.04.01 BIOS) and NVIDIA Quadro RTX 5000 with Max-Q Design 16GB on Ubuntu 21.04 via the Phoronix Test Suite.

Automated Executive Summary

3 had the most wins, coming in first place for 37% of the tests.

Based on the geometric mean of all complete results, the fastest (3) was 1.002x the speed of the slowest (2). 1 was 1x the speed of 3, 4 was 0.999x the speed of 1, 2 was 0.999x the speed of 4.

The results with the greatest spread from best to worst included:

ParaView (Test: Wavelet Contour - Resolution: 800 x 600) at 1.042x
ParaView (Test: Wavelet Contour - Resolution: 800 x 600) at 1.042x
ParaView (Test: Wavelet Contour - Resolution: 1024 x 768) at 1.032x
ParaView (Test: Wavelet Contour - Resolution: 1024 x 768) at 1.032x
ParaView (Test: Wavelet Contour - Resolution: 1920 x 1080) at 1.03x
ParaView (Test: Wavelet Contour - Resolution: 1920 x 1080) at 1.03x
ParaView (Test: Many Spheres - Resolution: 800 x 600) at 1.023x
ParaView (Test: Many Spheres - Resolution: 800 x 600) at 1.023x
ParaView (Test: Wavelet Volume - Resolution: 1024 x 768) at 1.02x

ParaView (Test: Wavelet Volume - Resolution: 1024 x 768) at 1.02x.

Test Systems:

1

2

3

4

Processor: Intel Core i9-10885H @ 5.30GHz (8 Cores / 16 Threads), Motherboard: HP 8736 (S91 Ver. 01.04.01 BIOS), Chipset: Intel Comet Lake PCH, Memory: 32GB, Disk: 2048GB Kioxia KXG50PNV2T04, Graphics: NVIDIA Quadro RTX 5000 with Max-Q Design 16GB, Audio: Intel Comet Lake PCH cAVS, Network: Intel Comet Lake PCH CNVi WiFi

OS: Ubuntu 21.04, Kernel: 5.10.0-14-generic (x86_64), Desktop: GNOME Shell 3.38.3, Display Server: X Server 1.20.9, Display Driver: NVIDIA 460.39, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.136, Vulkan: 1.2.145, Compiler: GCC 10.2.1 20210206, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: intel_pstate powersave - CPU Microcode: 0xe2 - Thermald 2.4.2
Python Notes: Python 3.9.2
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: Not affected + tsx_async_abort: Not affected

	1	2	3	4
ParaView - Wavelet Contour - 800 x 600 (Frames / Sec)	344.69	341.88	**349.34**	**335.37**
Normalized	98.67%	97.86%	100%	96%
Standard Deviation	1.4%	3.3%	1%	4.3%
ParaView - Wavelet Contour - 800 x 600 (MiPolys / Sec)	3592	3563	**3641**	**3495**
Normalized	98.67%	97.87%	100%	96%
Standard Deviation	1.4%	3.3%	1%	4.3%
ParaView - Wavelet Contour - 1024 x 768 (MiPolys / Sec)	**3237**	3313	3331	**3341**
Normalized	96.89%	99.16%	99.71%	100%
Standard Deviation	2.4%	2.5%	0.2%	0.8%
ParaView - Wavelet Contour - 1024 x 768 (Frames / Sec)	**310.63**	317.89	319.66	**320.60**
Normalized	96.89%	99.15%	99.71%	100%
Standard Deviation	2.4%	2.5%	0.2%	0.8%

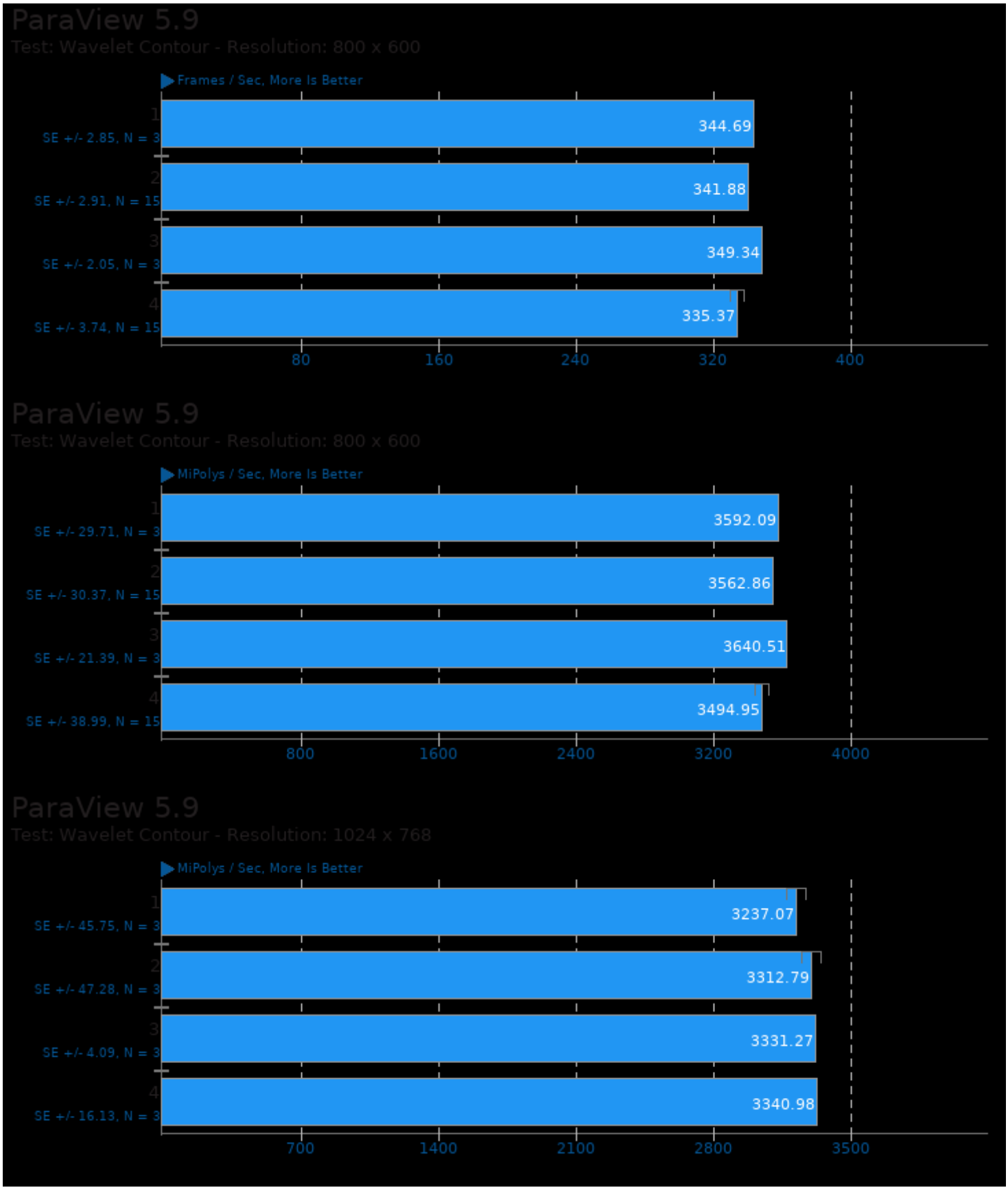
pview hp zbook

ParaView - Wavelet Contour - 1920 x 1080 (Frames / Sec)	**271.32**	268.04	**263.39**	264.74
Normalized	100%	98.79%	97.08%	97.57%
Standard Deviation	2.3%	4.1%	3.4%	3.3%
ParaView - Wavelet Contour - 1920 x 1080 (MiPolys / Sec)	**2827**	2793	**2745**	2759
Normalized	100%	98.79%	97.08%	97.57%
Standard Deviation	2.3%	4.1%	3.4%	3.3%
ParaView - Many Spheres - 800 x 600 (Frames / Sec)	67.79	**66.49**	67.81	**68.01**
Normalized	99.68%	97.77%	99.71%	100%
Standard Deviation	1.3%	1.1%	1.2%	1%
ParaView - Many Spheres - 800 x 600 (MiPolys / Sec)	6796	**6666**	6798	**6818**
Normalized	99.68%	97.77%	99.71%	100%
Standard Deviation	1.3%	1.1%	1.2%	1%
ParaView - Wavelet Volume - 1024 x 768 (Frames / Sec)	513.27	520.61	**510.96**	**521.08**
Normalized	98.5%	99.91%	98.06%	100%
Standard Deviation	0.2%	1.6%	0.9%	0.3%
ParaView - Wavelet Volume - 1024 x 768 (MiVoxels / Sec)	8212	8330	**8175**	**8337**
Normalized	98.5%	99.91%	98.06%	100%
Standard Deviation	0.2%	1.6%	0.9%	0.3%
ParaView - Wavelet Contour - 1280 x 1024 (MiPolys / Sec)	2913	**2928**	2882	**2877**
Normalized	99.47%	100%	98.41%	98.24%
Standard Deviation	2.7%	2.4%	3.2%	2.8%
ParaView - Wavelet Contour - 1280 x 1024 (Frames / Sec)	279.52	**281.00**	276.54	**276.05**
Normalized	99.47%	100%	98.41%	98.24%
Standard Deviation	2.7%	2.4%	3.2%	2.8%
ParaView - Many Spheres - 1024 x 768 (MiPolys / Sec)	6604	**6516**	**6608**	6605
Normalized	99.94%	98.61%	100%	99.95%
Standard Deviation	0.7%	0.7%	0.5%	0.8%
ParaView - Many Spheres - 1024 x 768 (Frames / Sec)	65.87	**65.00**	**65.91**	65.88
Normalized	99.94%	98.62%	100%	99.95%
Standard Deviation	0.7%	0.7%	0.5%	0.8%
ParaView - Many Spheres - 1280 x 1024 (Frames / Sec)	63.67	**63.24**	**63.91**	63.66
Normalized	99.62%	98.95%	100%	99.61%
Standard Deviation	0.7%	0.7%	0.7%	0.9%
ParaView - Many Spheres - 1280 x 1024 (MiPolys / Sec)	6383	**6340**	**6407**	6382
Normalized	99.62%	98.96%	100%	99.61%
Standard Deviation	0.7%	0.7%	0.7%	0.9%
ParaView - Wavelet Volume - 1920 x 1080 (MiVoxels / Sec)	**6490**	**6433**	6489	6485
Normalized	100%	99.12%	99.99%	99.93%
Standard Deviation	1.1%	0.8%	0.9%	0.3%

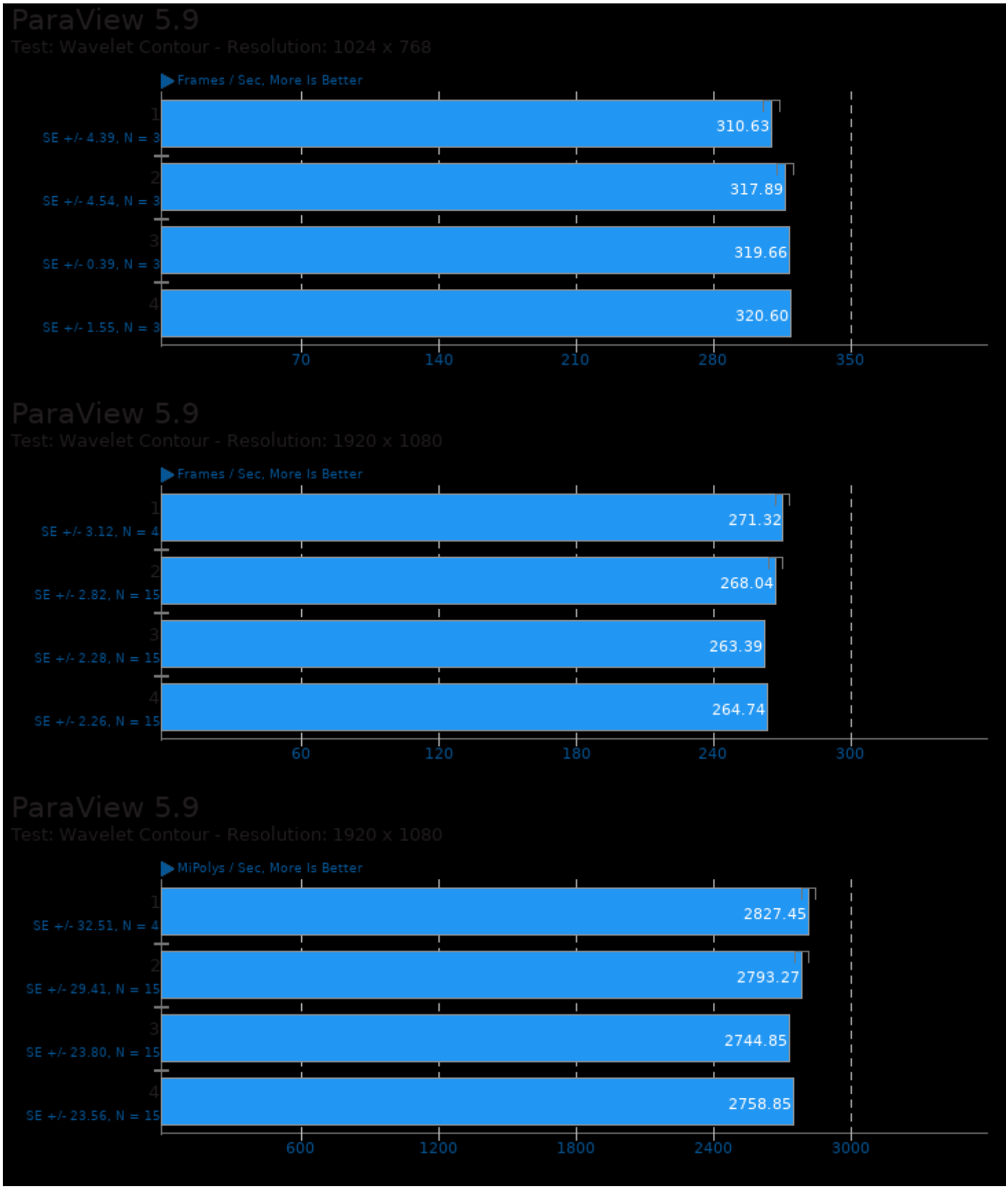
pview hp zbook

ParaView - Wavelet Volume - 1920 x 1080 (Frames / Sec)	**405.61**	**402.05**	405.55	405.32
Normalized	100%	99.12%	99.99%	99.93%
Standard Deviation	1.1%	0.8%	0.9%	0.3%
ParaView - Wavelet Volume - 800 x 600 (Frames / Sec)	574.87	**579.31**	**574.59**	576.62
Normalized	99.23%	100%	99.19%	99.54%
Standard Deviation	1.3%	0.5%	0.4%	1.4%
ParaView - Wavelet Volume - 800 x 600 (MiVoxels / Sec)	9198	**9269**	**9193**	9226
Normalized	99.23%	100%	99.19%	99.54%
Standard Deviation	1.3%	0.5%	0.4%	1.4%
ParaView - Many Spheres - 1920 x 1080 (MiPolys / Sec)	6301	**6272**	6303	**6303**
Normalized	99.96%	99.5%	99.99%	100%
Standard Deviation	0.5%	0.5%	0.6%	0.6%
ParaView - Many Spheres - 1920 x 1080 (Frames / Sec)	62.85	**62.56**	**62.87**	**62.87**
Normalized	99.97%	99.51%	100%	100%
Standard Deviation	0.5%	0.5%	0.6%	0.6%
ParaView - Wavelet Volume - 1280 x 1024 (Frames / Sec)	410.57	**409.33**	**411.07**	410.83
Normalized	99.88%	99.58%	100%	99.94%
Standard Deviation	0.8%	0.6%	0.3%	1.1%
ParaView - Wavelet Volume - 1280 x 1024 (MiVoxels / Sec)	6569	**6549**	**6577**	6573
Normalized	99.88%	99.58%	100%	99.94%
Standard Deviation	0.8%	0.6%	0.3%	1.1%

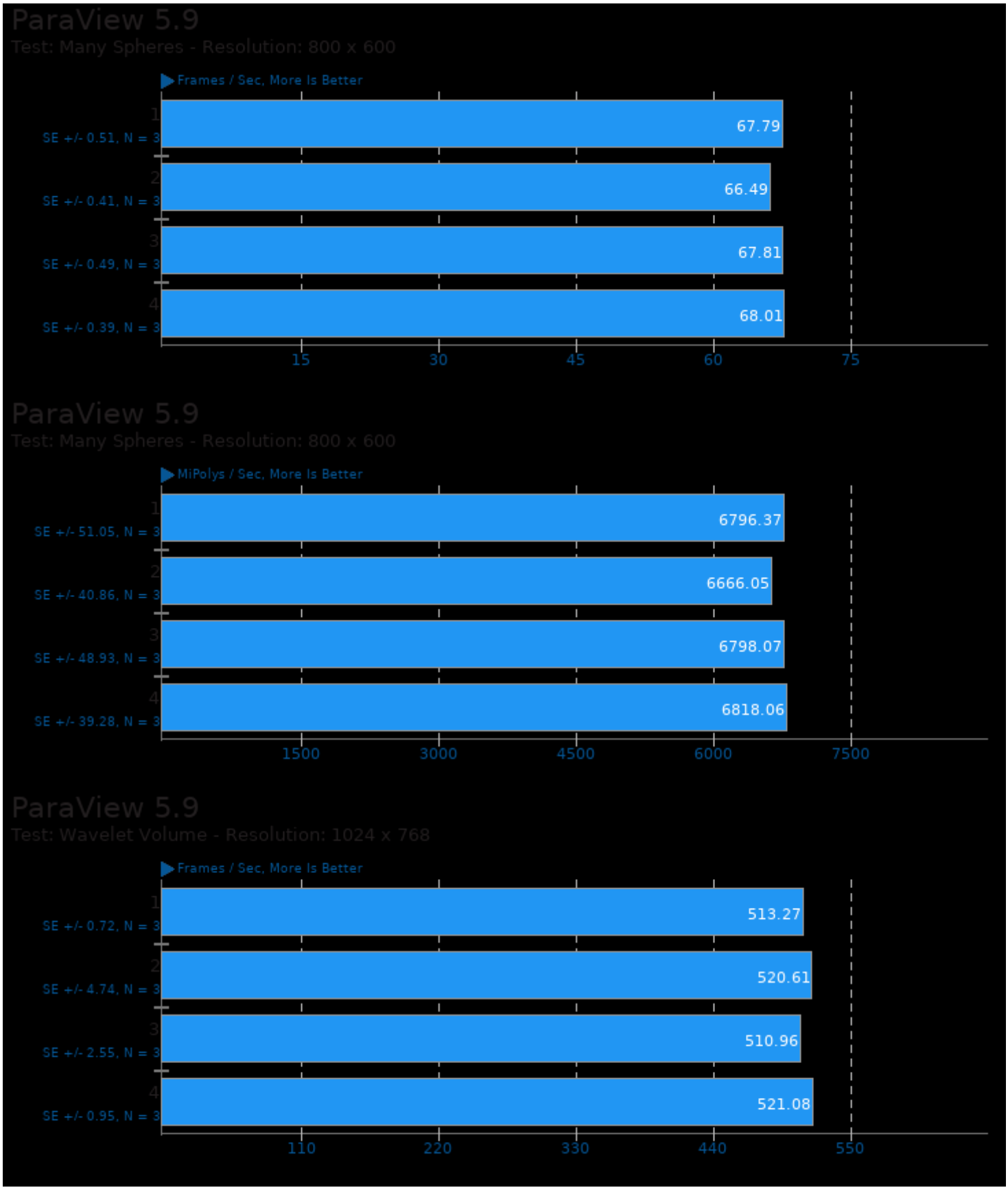
pview hp zbook



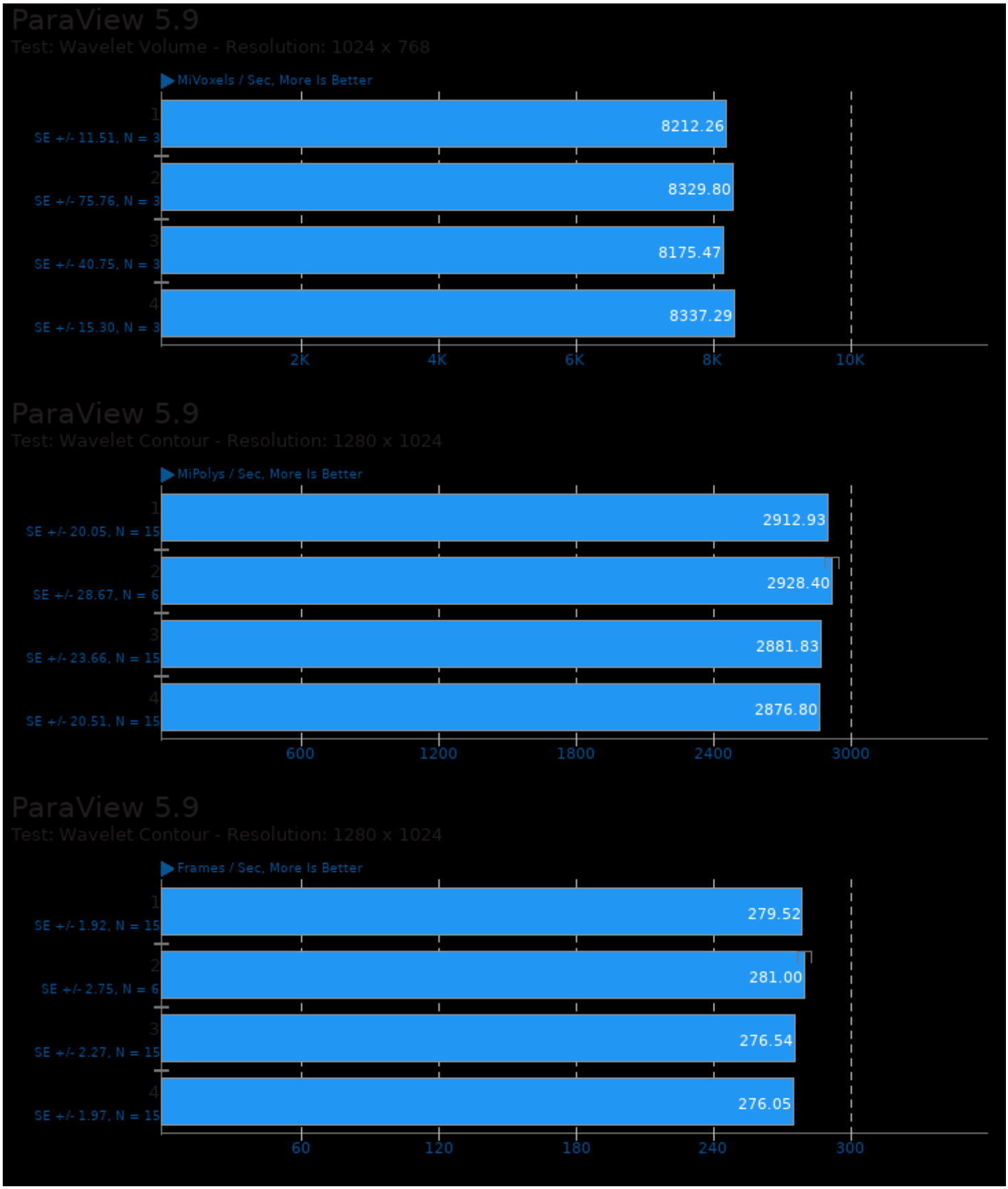
pview hp zbook



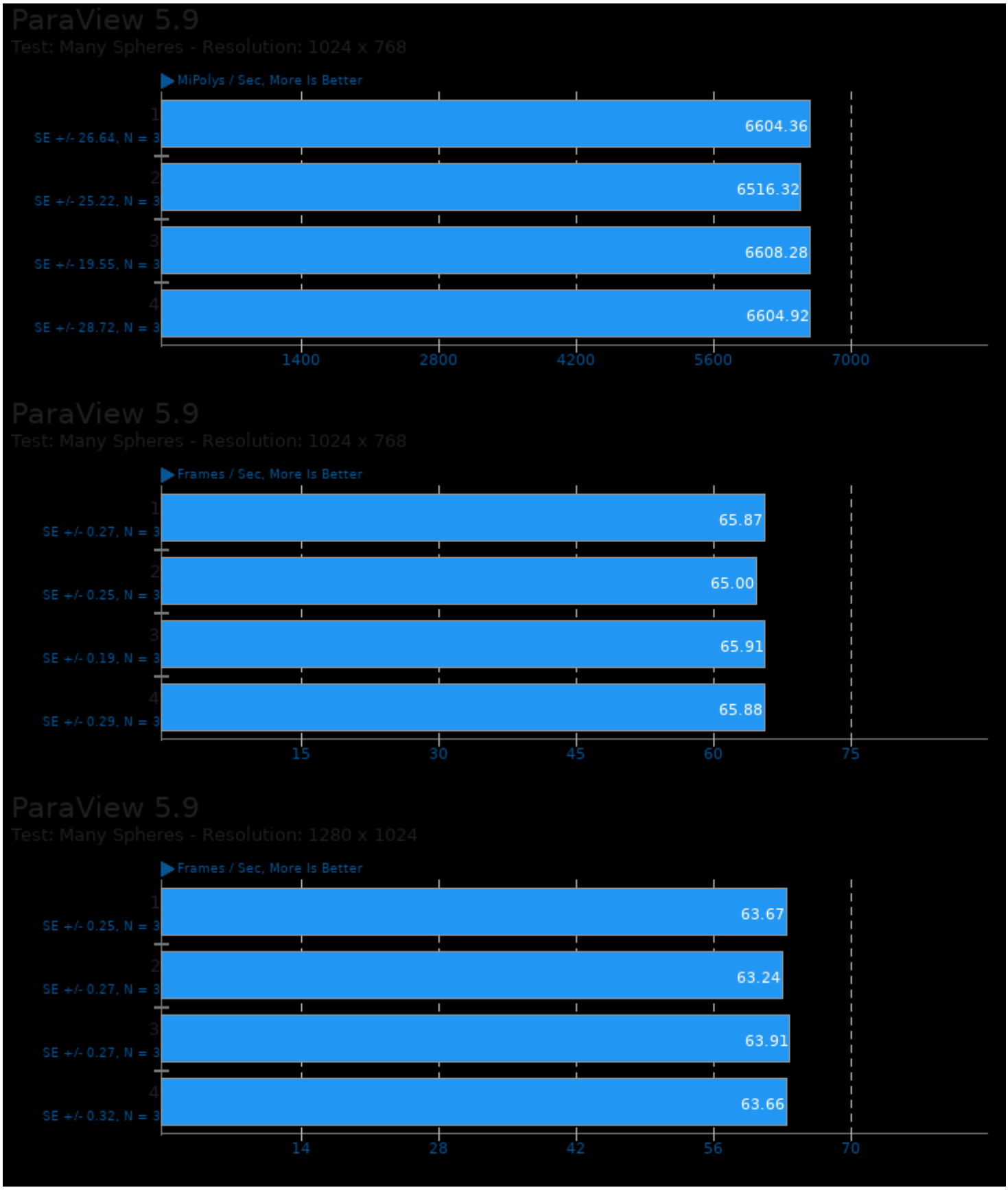
pview hp zbook



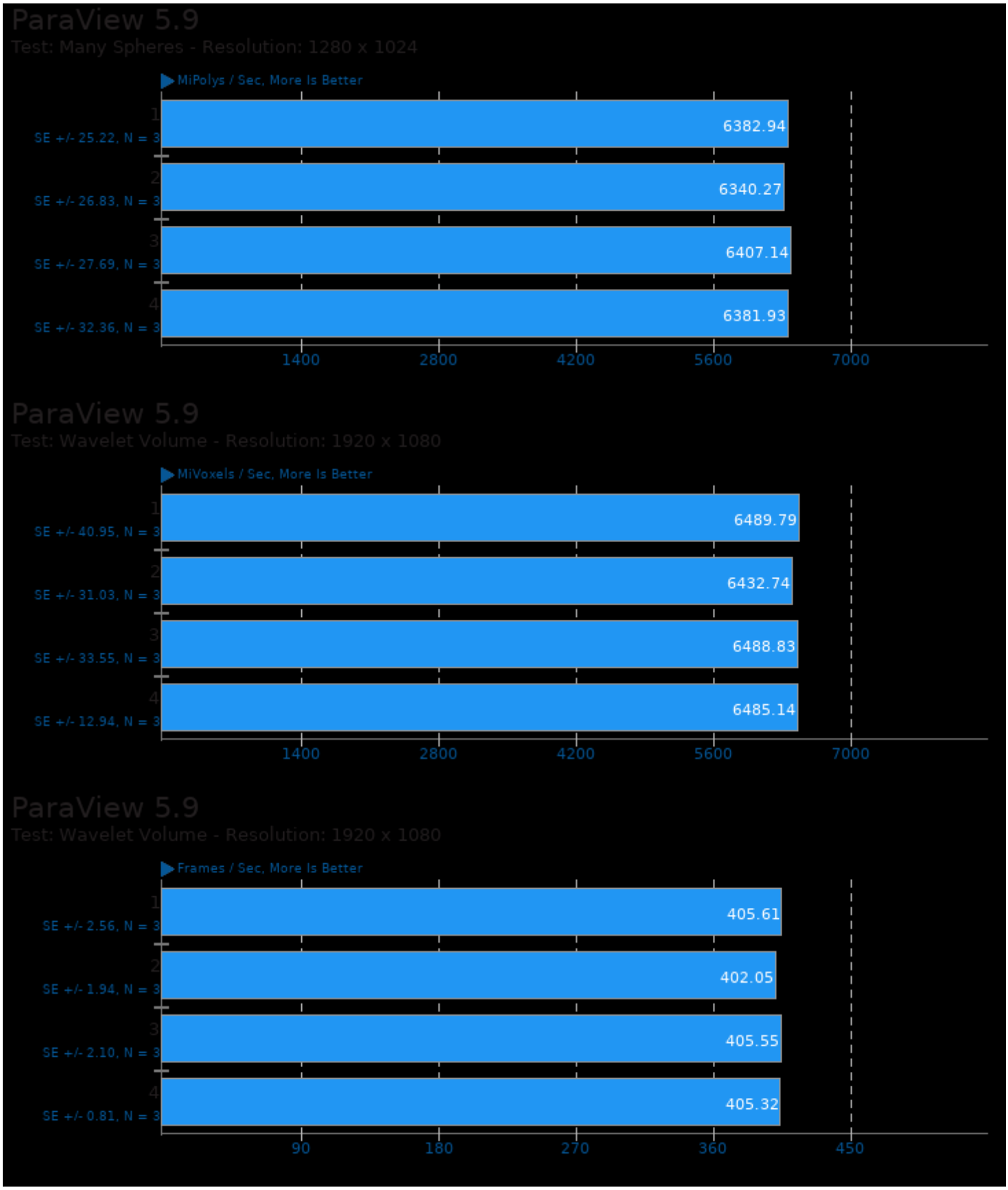
pview hp zbook



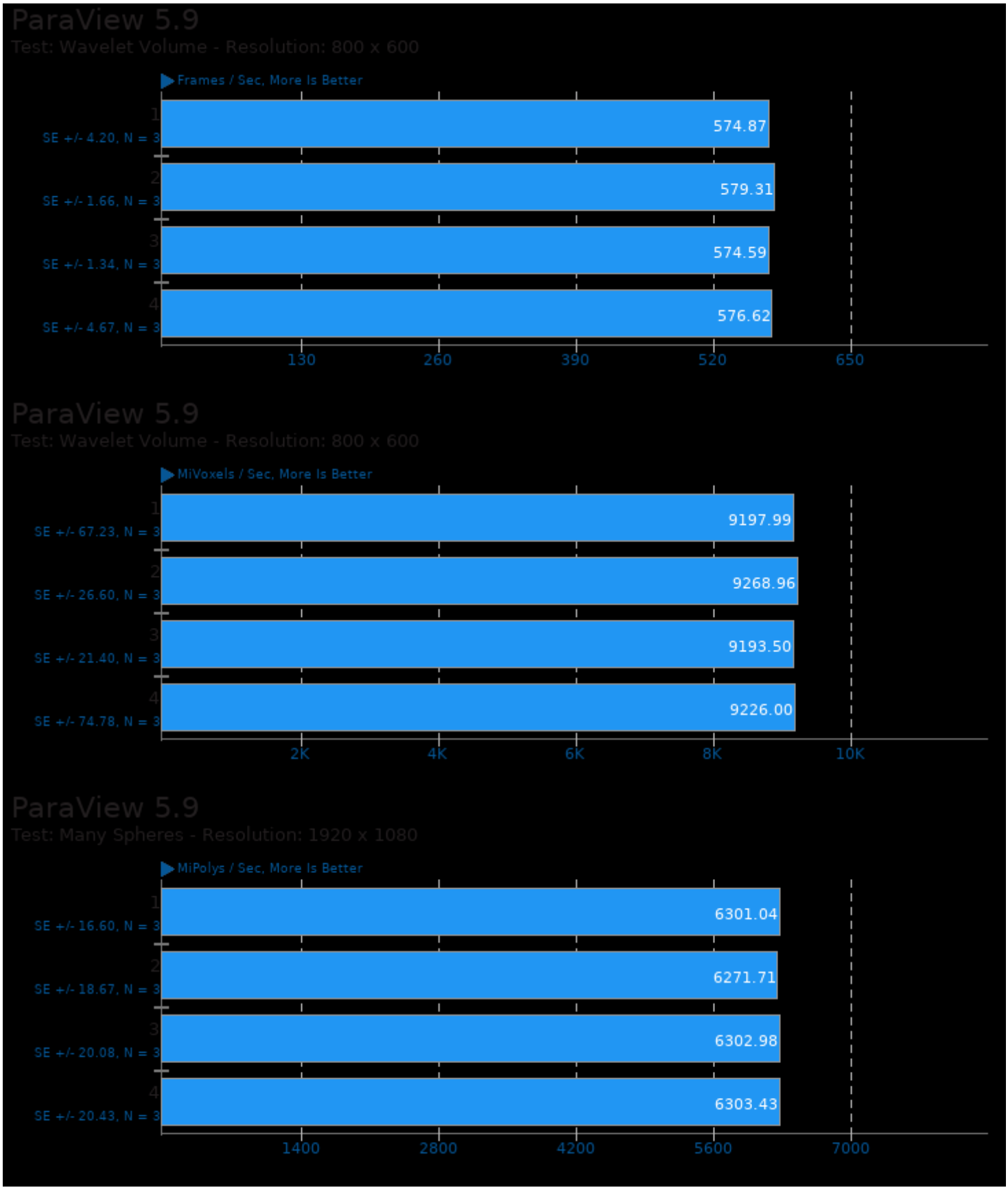
pview hp zbook



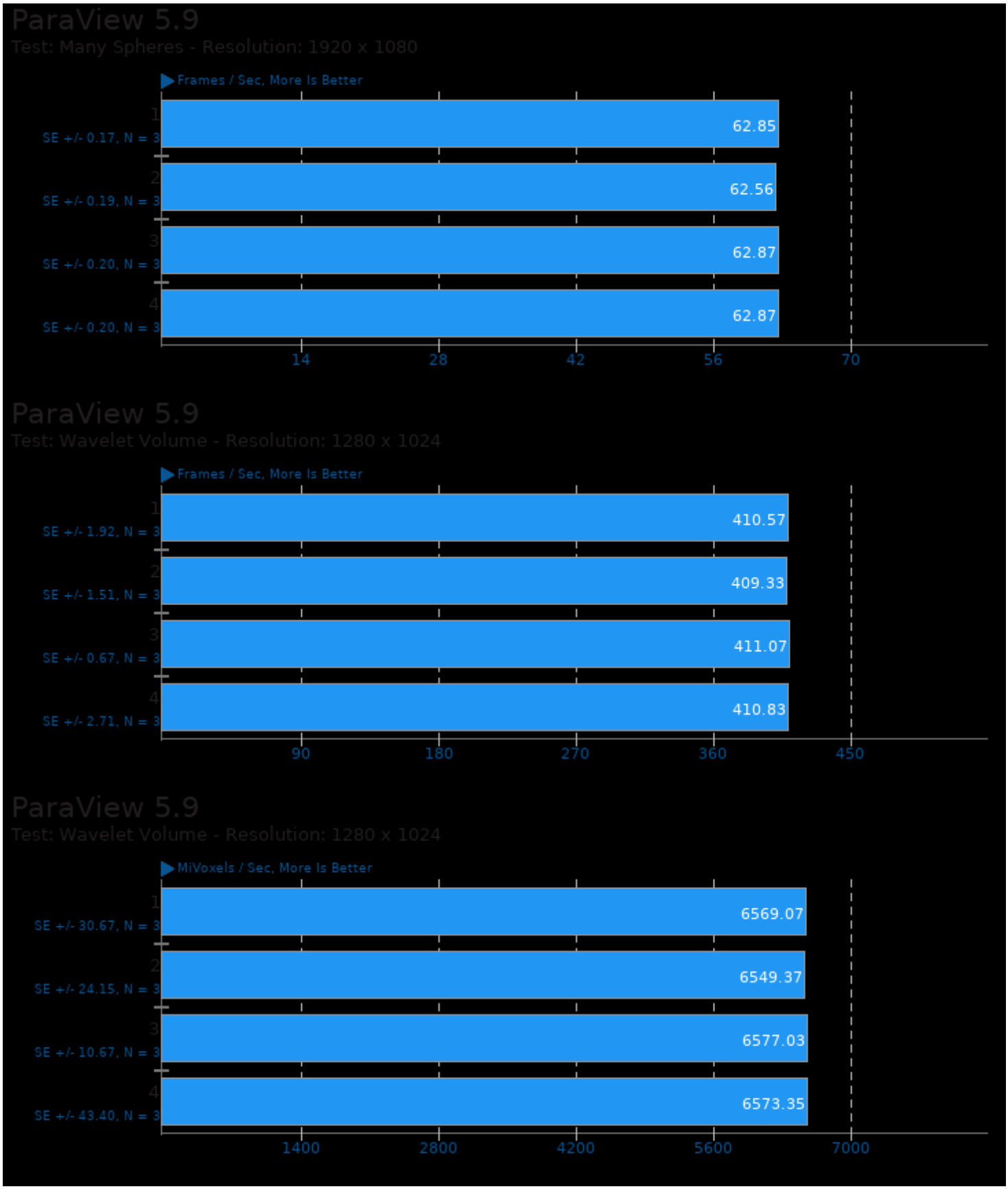
pview hp zbook



pview hp zbook



pview hp zbook



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 17:34.