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Kernel415

Running pts/openarena-1.5.5, pts/tesseract-1.1.0, pts/unigine-valley-1.1.7, pts/xonotic-1.5.1, pts/gputest-1.3.2 via the Phoronix Test Suite.

Automated Executive Summary

U2010K580GTX10802D had the most wins, coming in first place for 57% of the tests.

Based on the geometric mean of all complete results, the fastest (U2010K580GTX10802D) was 1.61x the speed of the slowest (U2010K580GTX7802DNoNM). linux4.15-nv415 was 0.901x the speed of U2010K580GTX10802D, linux4.15-nv440 was 0.988x the speed of linux4.15-nv415, linux5.3-nv440-2 was 0.99x the speed of linux4.15-nv440, linux5.3-nv440 was 0.991x the speed of linux5.3-nv440-2, U2010K580GTX7802DNoNM was 0.71x the speed of linux5.3-nv440.

Test Systems:

linux4.15-nv415

Processor: Intel Core i7-6700K @ 4.60GHz (8 Cores), Motherboard: Gigabyte Z170X-Designare-CF, Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 24576MB, Disk: 427GB, Graphics: Zotac NVIDIA GeForce GTX 1080 8192MB (1683/5005MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 18.04, Kernel: 4.15.0-72-generic (x86_64), Desktop: GNOME Shell 3.28.4, Display Driver: NVIDIA 415.27, OpenGL: 4.6.0, File-System: ext4 (ecryptfs), Screen Resolution: 3840x2160

Kernel Notes: usbhid.quirks=0x1B1C:0x1B20:0x20000408
Processor Notes: Scaling Governor: intel_pstate powersave

linux4.15-nv440

Processor: Intel Core i7-6700K @ 4.60GHz (8 Cores), Motherboard: Gigabyte Z170X-Designare-CF, Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 24576MB, Disk: 427GB, Graphics: Zotac NVIDIA GeForce GTX 1080 8192MB (1683/5005MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 18.04, Kernel: 4.15.0-72-generic (x86_64), Desktop: GNOME Shell 3.28.4, Display Driver: NVIDIA 440.44, OpenGL: 4.6.0, File-System: ext4 (ecryptfs), Screen Resolution: 3840x2160

Kernel Notes: usbhid.quirks=0x1B1C:0x1B20:0x20000408
Processor Notes: Scaling Governor: intel_pstate powersave

linux5.3-nv440

linux5.3-nv440-2

Processor: Intel Core i7-6700K @ 4.60GHz (8 Cores), Motherboard: Gigabyte Z170X-Designare-CF, Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 24576MB, Disk: 427GB, Graphics: Zotac NVIDIA GeForce GTX 1080 8192MB (1683/5005MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 18.04, Kernel: 5.3.0-24-generic (x86_64), Desktop: GNOME Shell 3.28.4, Display Driver: NVIDIA 440.44, OpenGL: 4.6.0, File-System: ext4 (ecryptfs), Screen Resolution: 3840x2160

Kernel Notes: usbhid.quirks=0x1B1C:0x1B20:0x20000408
Processor Notes: Scaling Governor: intel_pstate powersave

U2010K580GTX10802D

Processor: Intel Core i7-6700K @ 4.60GHz (8 Cores), Motherboard: Gigabyte Z170X-Designare-CF, Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 24576MB, Disk: 427GB, Graphics: Zotac NVIDIA GeForce GTX 1080 8192MB (1961/5005MHz), Audio: Realtek ALC1150, Network: Intel Connection + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-38-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Driver: NVIDIA 450.102.04, OpenGL: 4.6.0, File-System: ext4 (ecryptfs), Screen Resolution: 5360x1440

Kernel Notes: usbhid.quirks=0x1B1C:0x1B20:0x20000408
Processor Notes: Scaling Governor: intel_pstate performance

U2010K580GTX7802DNoNM

Processor: Intel Core i7-6700K @ 4.60GHz (8 Cores), Motherboard: Gigabyte Z170X-Designare-CF, Chipset: Intel Xeon E3-1200 v5/E3-1500, Memory: 24576MB, Disk: 427GB, Graphics: Gigabyte NVIDIA GeForce GTX 780 3072MB (1019/3004MHz), Audio: Realtek ALC1150, Network: Intel Connection + Intel Wi-Fi 6 AX200

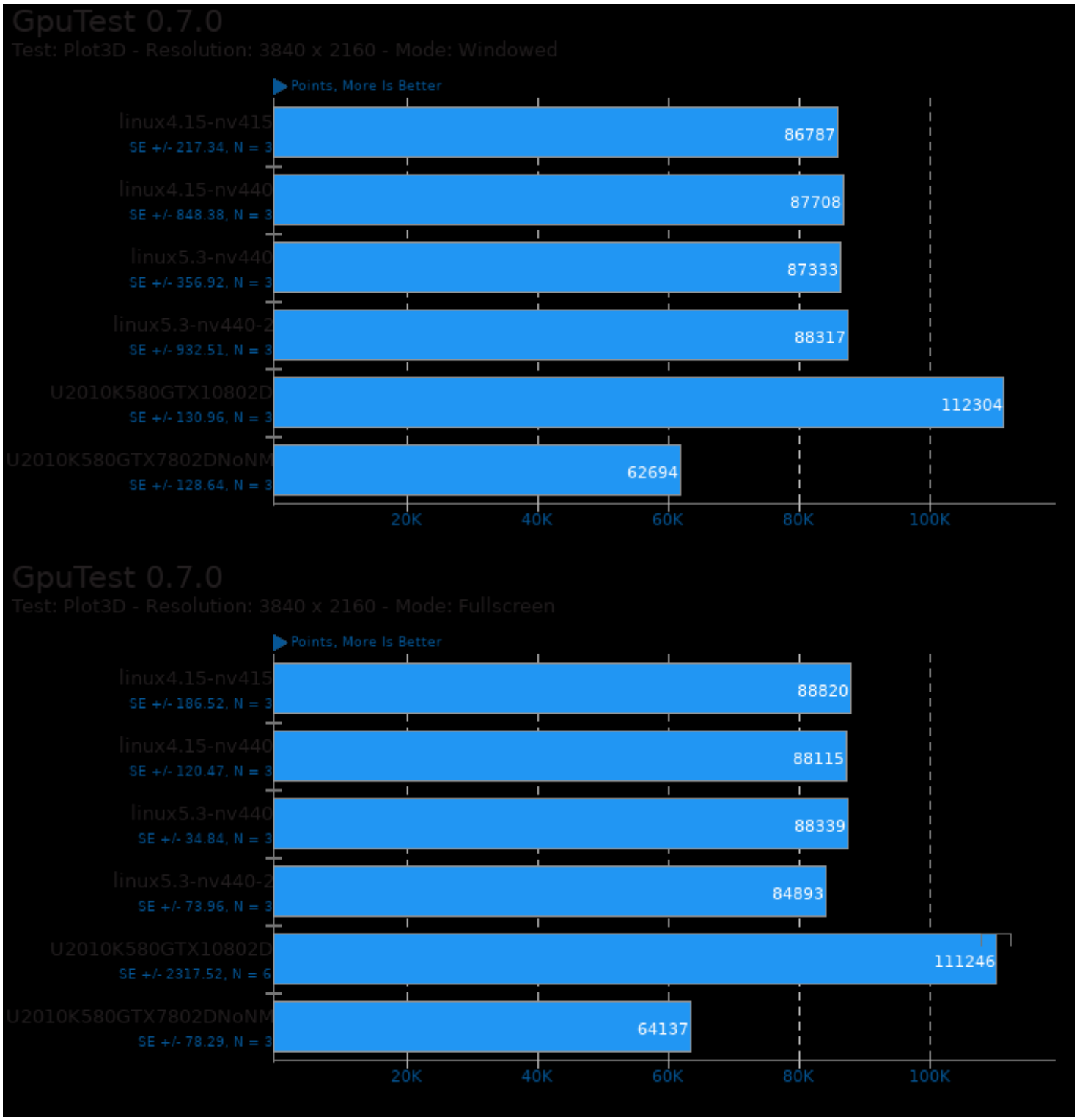
Kernel415

OS: Ubuntu 20.10, Kernel: 5.8.0-40-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Driver: NVIDIA 450.102.04, OpenGL: 4.6.0, File-System: ext4 (ecryptfs), Screen Resolution: 5360x1440

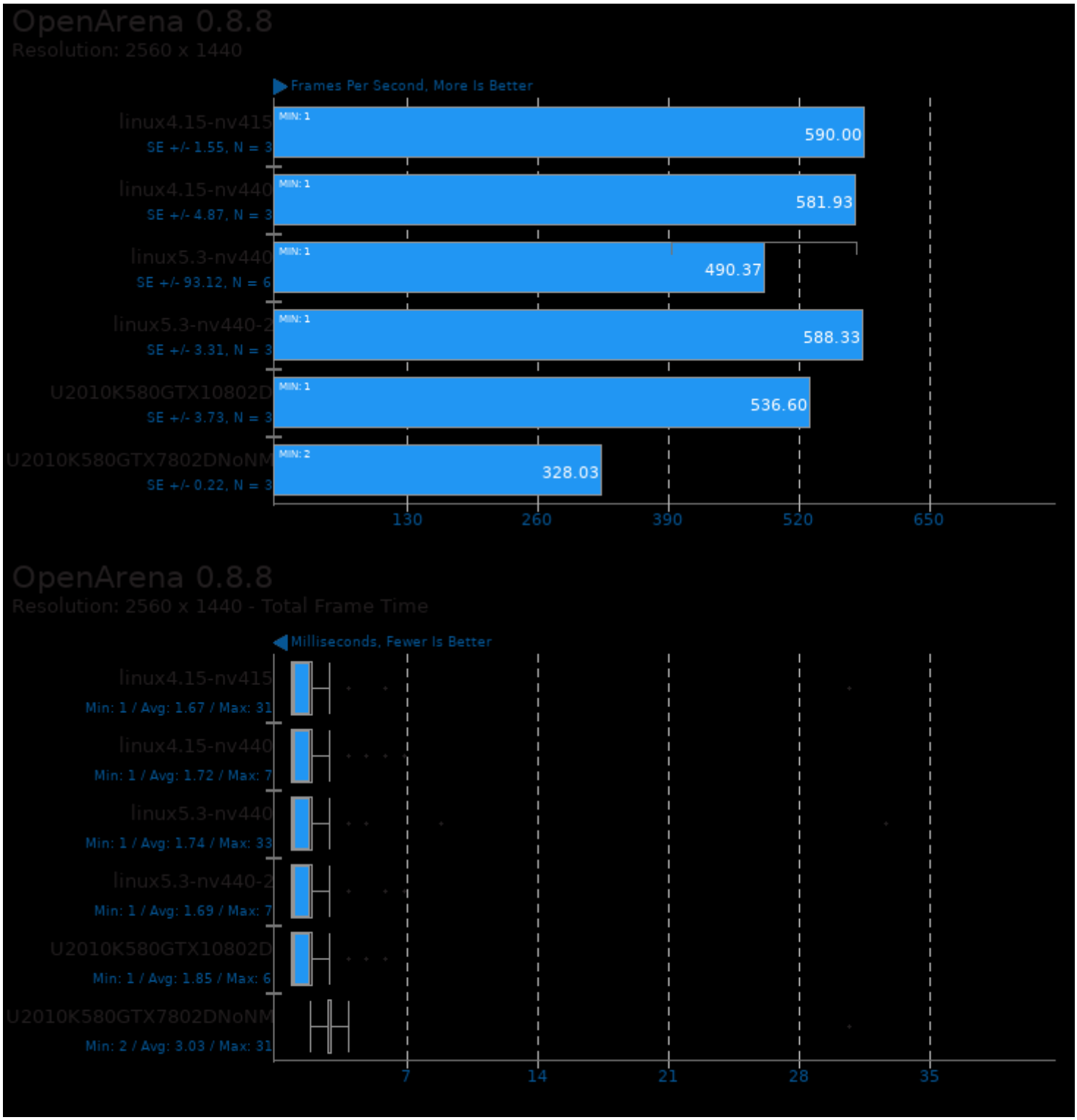
Kernel Notes: usbhid.quirks=0x1B1C:0x1B20:0x20000408
Processor Notes: Scaling Governor: intel_pstate performance

	linux4.15-nv415	linux4.15-nv440	linux5.3-nv440	linux5.3-nv440-2	U2010K580GTX10802D	U2010K580GTX7802DNoNM
GpuTest - Plot3D - 3840 x 2160 - Windowed (Points)	86787	87708	87333	88317	**112304**	**62694**
Normalized	77.28%	78.1%	77.76%	78.64%	100%	55.83%
Standard Deviation	0.4%	1.7%	0.7%	1.8%	0.2%	0.4%
GpuTest - Plot3D - 3840 x 2160 - Fullscreen (Points)	88820	88115	88339	84893	**111246**	**64137**
Normalized	79.84%	79.21%	79.41%	76.31%	100%	57.65%
Standard Deviation	0.4%	0.2%	0.1%	0.2%	5.1%	0.2%
OpenArena - 2560 x 1440 (FPS)	**590.00**	581.93	490.37	588.33	536.60	**328.03**
Normalized	100%	98.63%	83.11%	99.72%	90.95%	55.6%
Standard Deviation	0.5%	1.4%	46.5%	1%	1.2%	0.1%
Tesseract - 3840 x 2160	286.65	286.06	288.47	268.90	**354.17**	**249.88**
Normalized	80.94%	80.77%	81.45%	75.92%	100%	70.55%
Standard Deviation	4.2%	3.1%	2.4%	0.7%	3.2%	1.1%
Unigine Valley - 3840 x 2160 - Windowed - D3D11 (FPS)	**48.77**	48.49	48.53	48.35	47.24	**25.47**
Normalized	100%	99.43%	99.51%	99.14%	96.86%	52.22%
Standard Deviation	0.1%	0.2%	0.4%	0.3%	0.6%	1.4%
Unigine Valley - 3840 x 2160 - Fullscreen - D3D11 (FPS)	**50.73**	47.50	49.05	47.30	50.49	**27.92**
Normalized	100%	93.63%	96.69%	93.24%	99.53%	55.04%
Standard Deviation	0.4%	0.1%	3.4%	0%	0.1%	1.6%
Xonotic - 3840 x 2160 - Ultimate (FPS)	**213.90**	214.02	214.25	218.32	**251.91**	216.82
Normalized	84.91%	84.96%	85.05%	86.67%	100%	86.07%
Standard Deviation	0.6%	0.6%	0.2%	0.5%	0.5%	0.8%

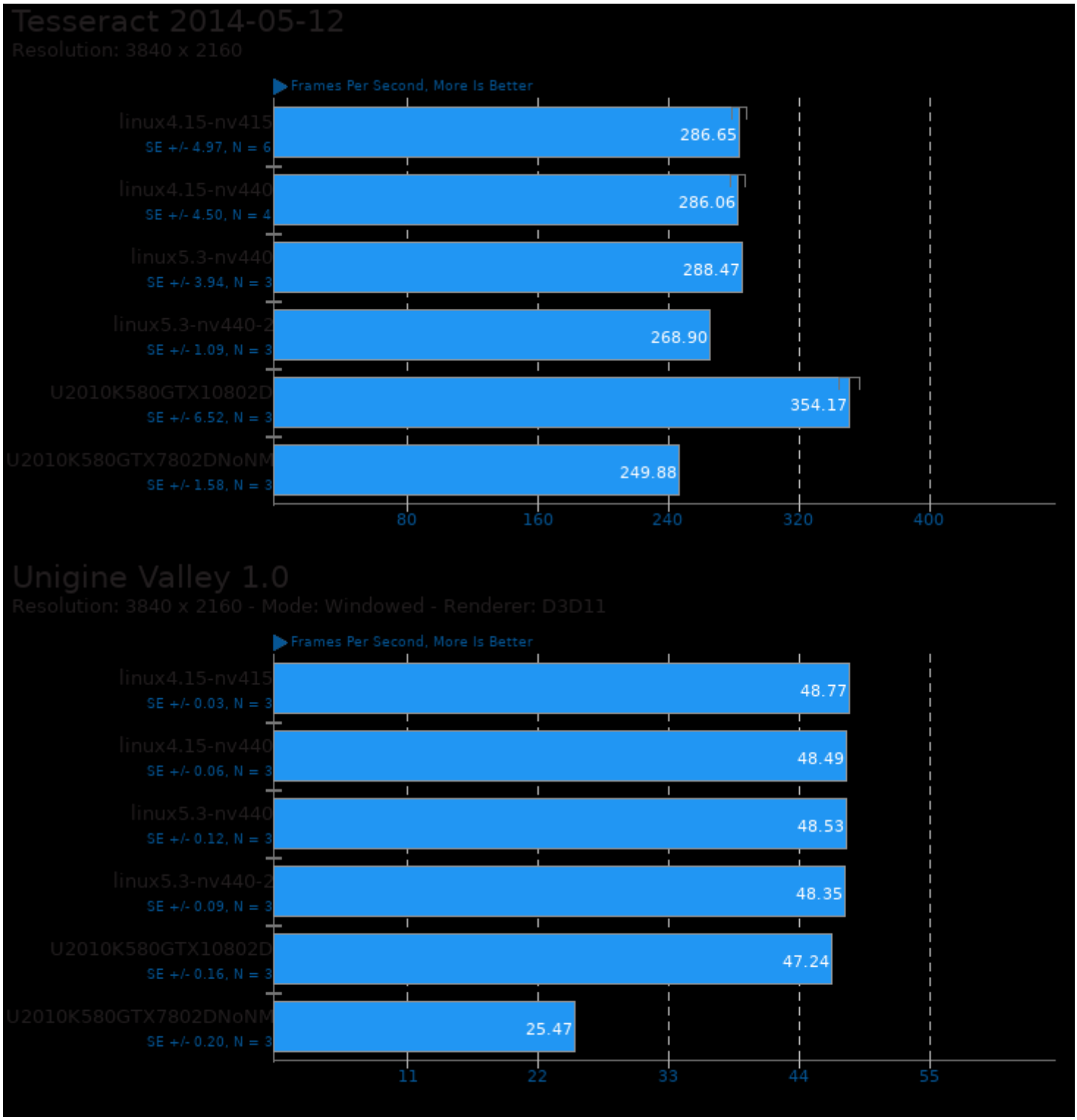
Kernel415


GpuTest 0.7.0
Test: Plot3D - Resolution: 3840 x 2160 - Mode: Windowed
Points, More Is Better
linux4.15-nv415
SE +/- 217.34, N = 3
86787
linux4.15-nv440
SE +/- 848.38, N = 3
87708
linux5.3-nv440
SE +/- 356.92, N = 3
87333
linux5.3-nv440-2
SE +/- 932.51, N = 3
88317
U2010K580GTX10802D
SE +/- 130.96, N = 3
112304
U2010K580GTX7802DNoNM
SE +/- 128.64, N = 3
62694
20K
40K
60K
80K
100K
GpuTest 0.7.0
Test: Plot3D - Resolution: 3840 x 2160 - Mode: Fullscreen
Points, More Is Better
linux4.15-nv415
SE +/- 186.52, N = 3
88820
linux4.15-nv440
SE +/- 120.47, N = 3
88115
linux5.3-nv440
SE +/- 34.84, N = 3
88339
linux5.3-nv440-2
SE +/- 73.96, N = 3
84893
U2010K580GTX10802D
SE +/- 2317.52, N = 6
111246
U2010K580GTX7802DNoNM
SE +/- 78.29, N = 3
64137
20K
40K
60K
80K
100K

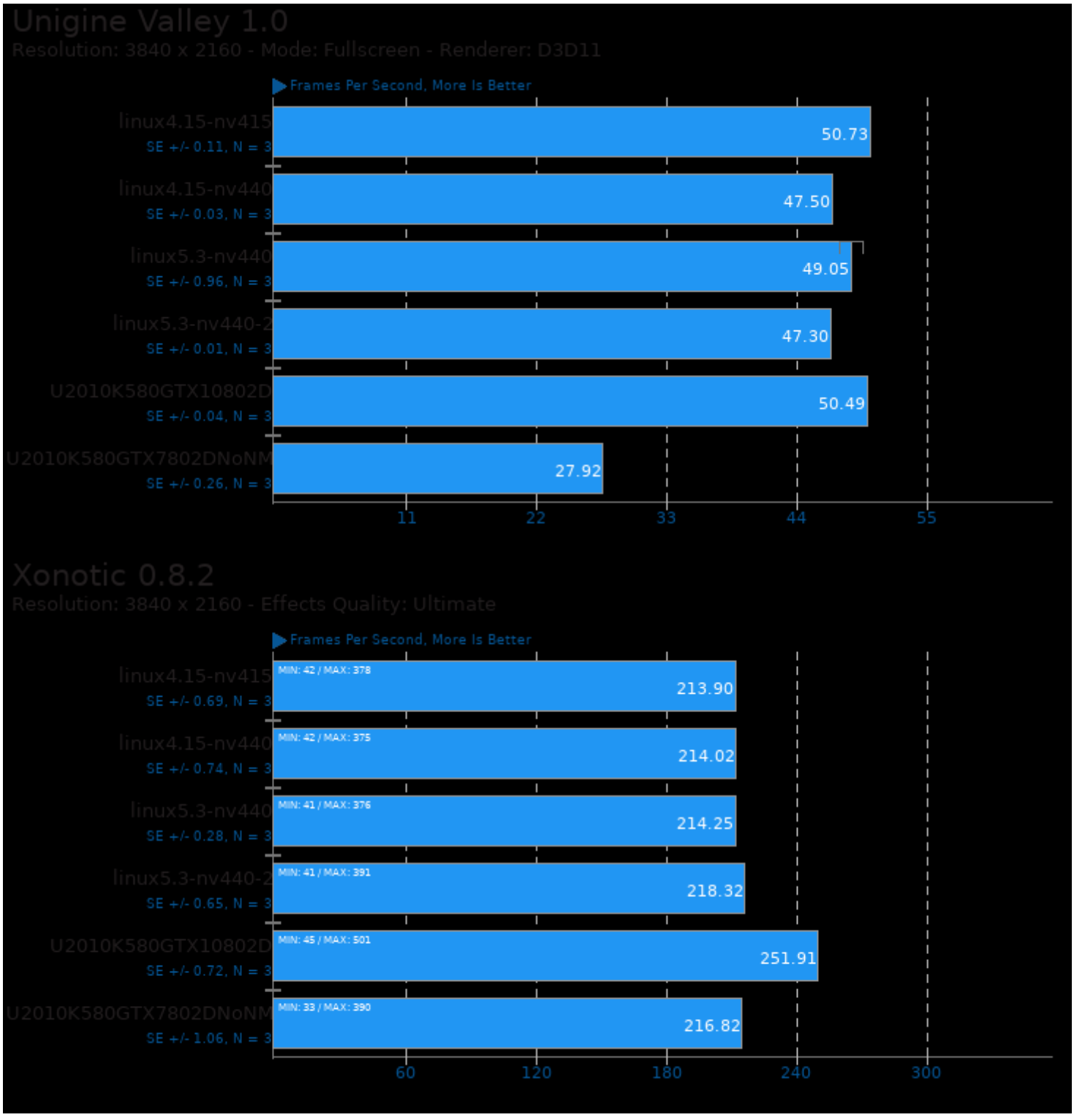
Kernel415


OpenArena 0.8.8
Resolution: 2560 x 1440
Frames Per Second, More Is Better
linux4.15-nv415
SE +/- 1.55, N = 3
MIN: 1
590.00
linux4.15-nv440
SE +/- 4.87, N = 3
MIN: 1
581.93
linux5.3-nv440
SE +/- 93.12, N = 6
MIN: 1
490.37
linux5.3-nv440-2
SE +/- 3.31, N = 3
MIN: 1
588.33
U2010K580GTX10802D
SE +/- 3.73, N = 3
MIN: 1
536.60
U2010K580GTX7802DNoNM
SE +/- 0.22, N = 3
MIN: 2
328.03
130
260
390
520
650
OpenArena 0.8.8
Resolution: 2560 x 1440 - Total Frame Time
Milliseconds, Fewer Is Better
linux4.15-nv415
Min: 1 / Avg: 1.67 / Max: 31
linux4.15-nv440
Min: 1 / Avg: 1.72 / Max: 7
linux5.3-nv440
Min: 1 / Avg: 1.74 / Max: 33
linux5.3-nv440-2
Min: 1 / Avg: 1.69 / Max: 7
U2010K580GTX10802D
Min: 1 / Avg: 1.85 / Max: 6
U2010K580GTX7802DNoNM
Min: 2 / Avg: 3.03 / Max: 31
7
14
21
28
35

Kernel415

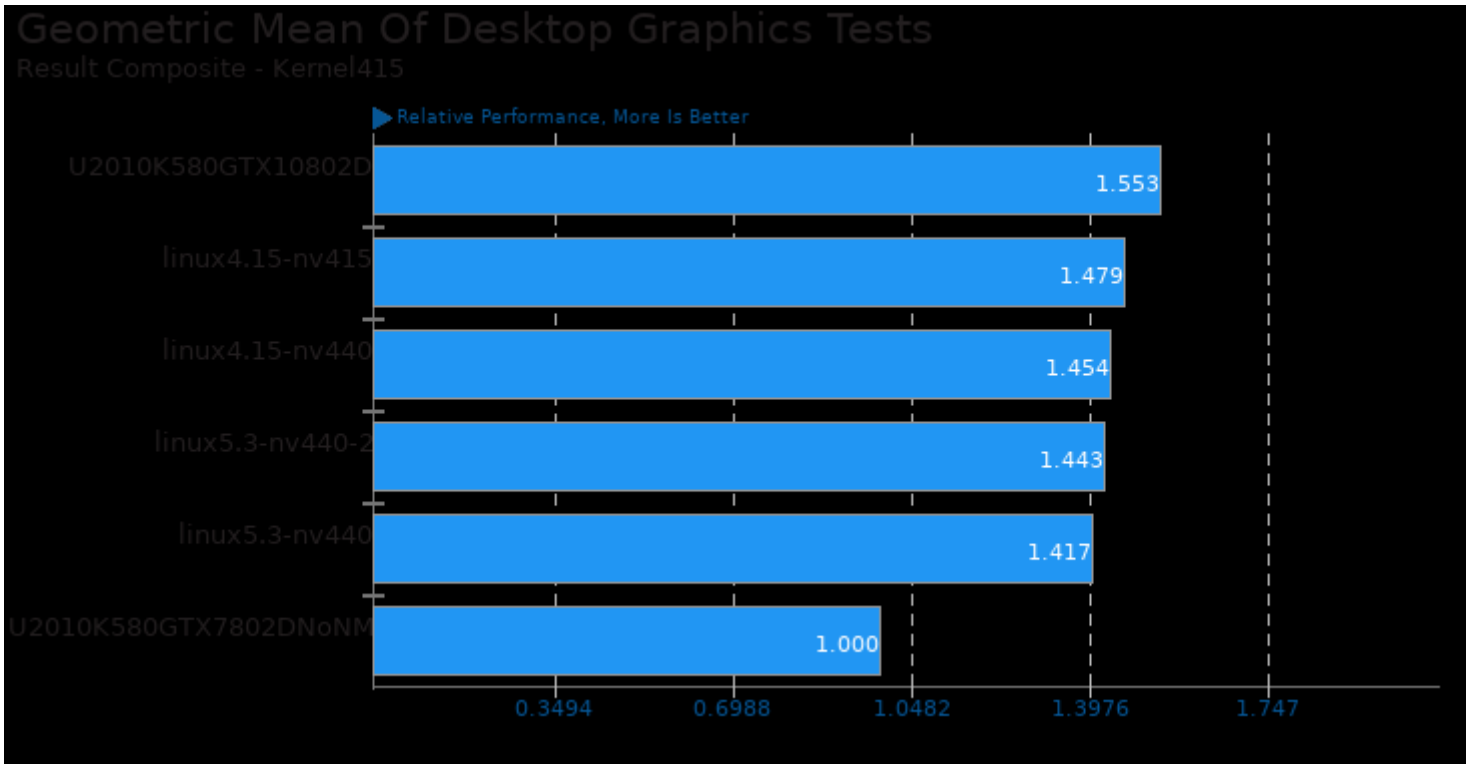

Tesseract 2014-05-12
Resolution: 3840 x 2160
Frames Per Second, More Is Better
linux4.15-nv415
SE +/- 4.97, N = 6
286.65
linux4.15-nv440
SE +/- 4.50, N = 4
286.06
linux5.3-nv440
SE +/- 3.94, N = 3
288.47
linux5.3-nv440-2
SE +/- 1.09, N = 3
268.90
U2010K580GTX10802D
SE +/- 6.52, N = 3
354.17
U2010K580GTX7802DNoNM
SE +/- 1.58, N = 3
249.88
80
160
240
320
400
Unigine Valley 1.0
Resolution: 3840 x 2160 - Mode: Windowed - Renderer: D3D11
Frames Per Second, More Is Better
linux4.15-nv415
SE +/- 0.03, N = 3
48.77
linux4.15-nv440
SE +/- 0.06, N = 3
48.49
linux5.3-nv440
SE +/- 0.12, N = 3
48.53
linux5.3-nv440-2
SE +/- 0.09, N = 3
48.35
U2010K580GTX10802D
SE +/- 0.16, N = 3
47.24
U2010K580GTX7802DNoNM
SE +/- 0.20, N = 3
25.47
11
22
33
44
55

Kernel415


Unigine Valley 1.0
Resolution: 3840 x 2160 - Mode: Fullscreen - Renderer: D3D11
Frames Per Second, More Is Better
linux4.15-nv415
SE +/- 0.11, N = 3
50.73
linux4.15-nv440
SE +/- 0.03, N = 3
47.50
linux5.3-nv440
SE +/- 0.96, N = 3
49.05
linux5.3-nv440-2
SE +/- 0.01, N = 3
47.30
U2010K580GTX10802D
SE +/- 0.04, N = 3
50.49
U2010K580GTX7802DNoNM
SE +/- 0.26, N = 3
27.92
11
22
33
44
55
Xonotic 0.8.2
Resolution: 3840 x 2160 - Effects Quality: Ultimate
Frames Per Second, More Is Better
linux4.15-nv415
SE +/- 0.69, N = 3
MIN: 42 / MAX: 378
213.90
linux4.15-nv440
SE +/- 0.74, N = 3
MIN: 42 / MAX: 375
214.02
linux5.3-nv440
SE +/- 0.28, N = 3
MIN: 41 / MAX: 376
214.25
linux5.3-nv440-2
SE +/- 0.65, N = 3
MIN: 41 / MAX: 391
218.32
U2010K580GTX10802D
SE +/- 0.72, N = 3
MIN: 45 / MAX: 501
251.91
U2010K580GTX7802DNoNM
SE +/- 1.06, N = 3
MIN: 33 / MAX: 390
216.82
60
120
180
240
300

Kernel415

These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/xonotic, pts/openarena, pts/tesseract and pts/unigine-valley

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 15:15.