

www.phoronix-test-suite.com

NVIDIA New Vulkan Linux Driver

NVIDIA Vulkan Linux driver benchmarking by Michael Larabel.

Automated Executive Summary

NVIDIA 381.10.10 had the most wins, coming in first place for 50% of the tests.

Based on the geometric mean of all complete results, the fastest (NVIDIA 381.10.10) was 1.081x the speed of the slowest (NVIDIA 375.66). NVIDIA 381.22 was 0.995x the speed of NVIDIA 381.10.10 and NVIDIA 375.66 was 0.929x the speed of NVIDIA 381.22.

Test Systems:

NVIDIA 375.66

Processor: Intel Core i7-6800K @ 3.80GHz (12 Cores), Motherboard: MSI X99A WORKSTATION (MS-7A54) v1.0, Chipset: Intel Xeon E7 v4/Xeon, Memory: 16384MB, Disk: 120GB Samsung SSD 850 + 4 x 120GB TOSHIBA-TR150, Graphics: NVIDIA GeForce GTX TITAN X 12288MB (1001/3505MHz), Audio: Realtek ALC1150, Network: Intel

Connection

OS: Ubuntu 17.04, Kernel: 4.10.0-24-generic (x86_64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.3, Display Driver: NVIDIA 375.66, OpenGL: 4.5.0, OpenCL: OpenCL 1.2 CUDA 8.0.0, Vulkan: 1.0.42, Compiler: GCC 6.3.0 20170406 + Clang 4.0.0-1ubuntu1, File-System: ext4, Screen Resolution: 2560x1440

Processor Notes: Scaling Governor: intel_pstate performance

NVIDIA 381.22

Processor: Intel Core i7-6800K @ 3.80GHz (12 Cores), Motherboard: MSI X99A WORKSTATION (MS-7A54) v1.0, Chipset: Intel Xeon E7 v4/Xeon, Memory: 16384MB, Disk: 120GB Samsung SSD 850 + 4 x 120GB TOSHIBA-TR150, Graphics: NVIDIA GeForce GTX TITAN X 12288MB (1001/3505MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 17.04, Kernel: 4.10.0-24-generic (x86_64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.3, Display Driver: NVIDIA 381.22, OpenGL: 4.5.0, OpenCL: OpenCL 1.2 CUDA 8.0.0, Vulkan: 1.0.42, Compiler: GCC 6.3.0 20170406 + Clang 4.0.0-1ubuntu1, File-System: ext4, Screen Resolution: 2560x1440

Processor Notes: Scaling Governor: intel_pstate performance

NVIDIA 381.10.10

Processor: Intel Core i7-6800K @ 3.80GHz (12 Cores), Motherboard: MSI X99A WORKSTATION (MS-7A54) v1.0, Chipset: Intel Xeon E7 v4/Xeon, Memory: 16384MB, Disk: 120GB Samsung SSD 850 + 4 x 120GB TOSHIBA-TR150, Graphics: NVIDIA GeForce GTX TITAN X 12288MB (1001/3505MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 17.04, Kernel: 4.10.0-24-generic (x86_64), Desktop: Unity 7.5.0, Display Server: X Server 1.19.3, Display Driver: NVIDIA 381.10.10, OpenGL: 4.5.0, OpenCL: OpenCL 1.2 CUDA 8.0.0, Vulkan: 1.0.42, Compiler: GCC 6.3.0 20170406 + Clang 4.0.0-1ubuntu1, File-System: ext4, Screen Resolution: 2560x1440

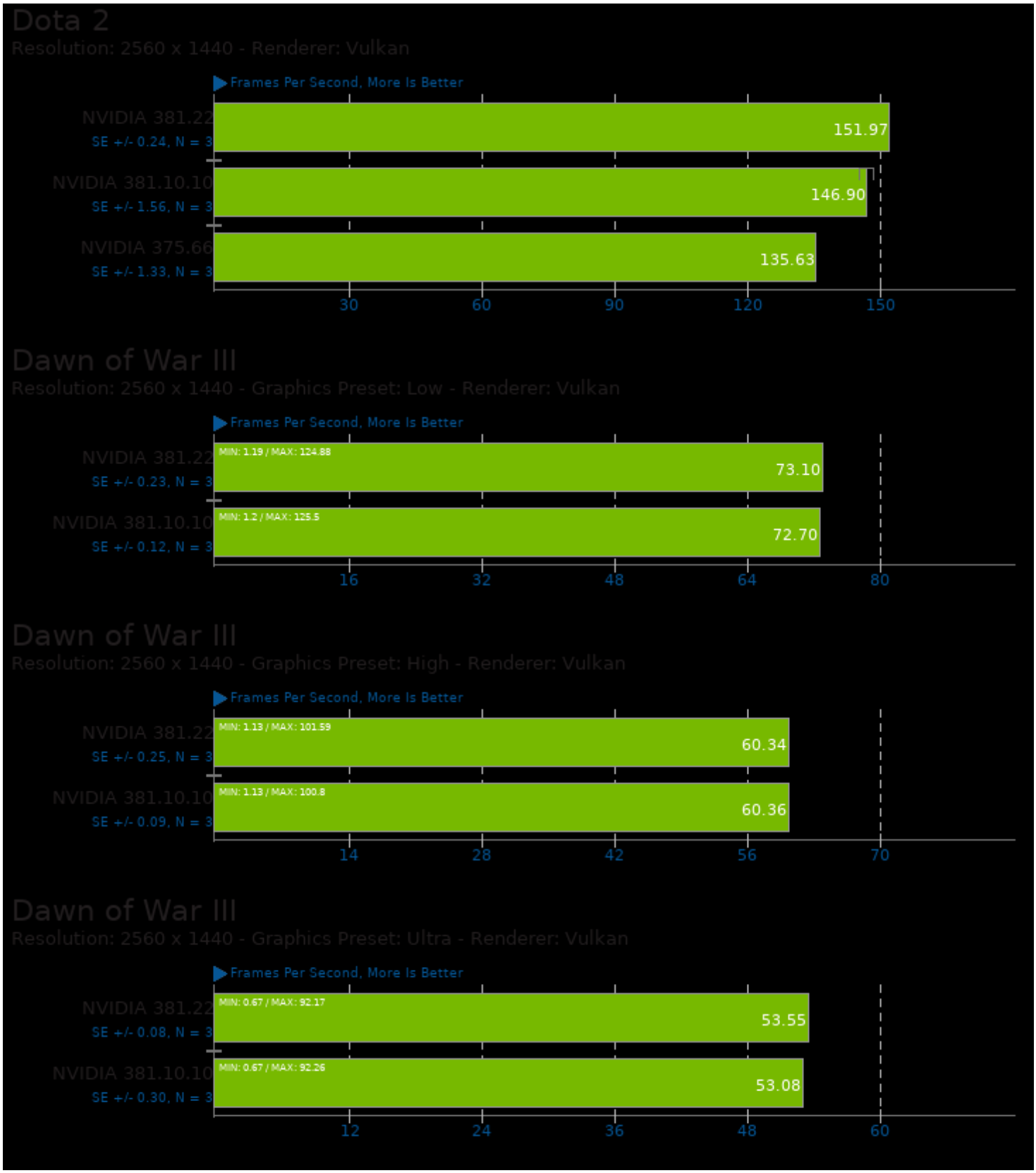
Processor Notes: Scaling Governor: intel_pstate performance

	NVIDIA 375.66	NVIDIA 381.22	NVIDIA 381.10.10
Dota 2 - 2560 x 1440 - Vulkan (FPS)	**135.63**	**151.97**	146.90
Normalized	89.25%	100%	96.66%
Standard Deviation	1.7%	0.3%	1.8%
Dawn of War III - 2560 x 1440 - Low - Vulkan (FPS)		**73.10**	**72.70**
Normalized		100%	99.45%
Standard Deviation		0.5%	0.3%
Dawn of War III - 2560 x 1440 - High - Vulkan (FPS)		**60.34**	**60.36**
Normalized		99.97%	100%
Standard Deviation		0.7%	0.3%

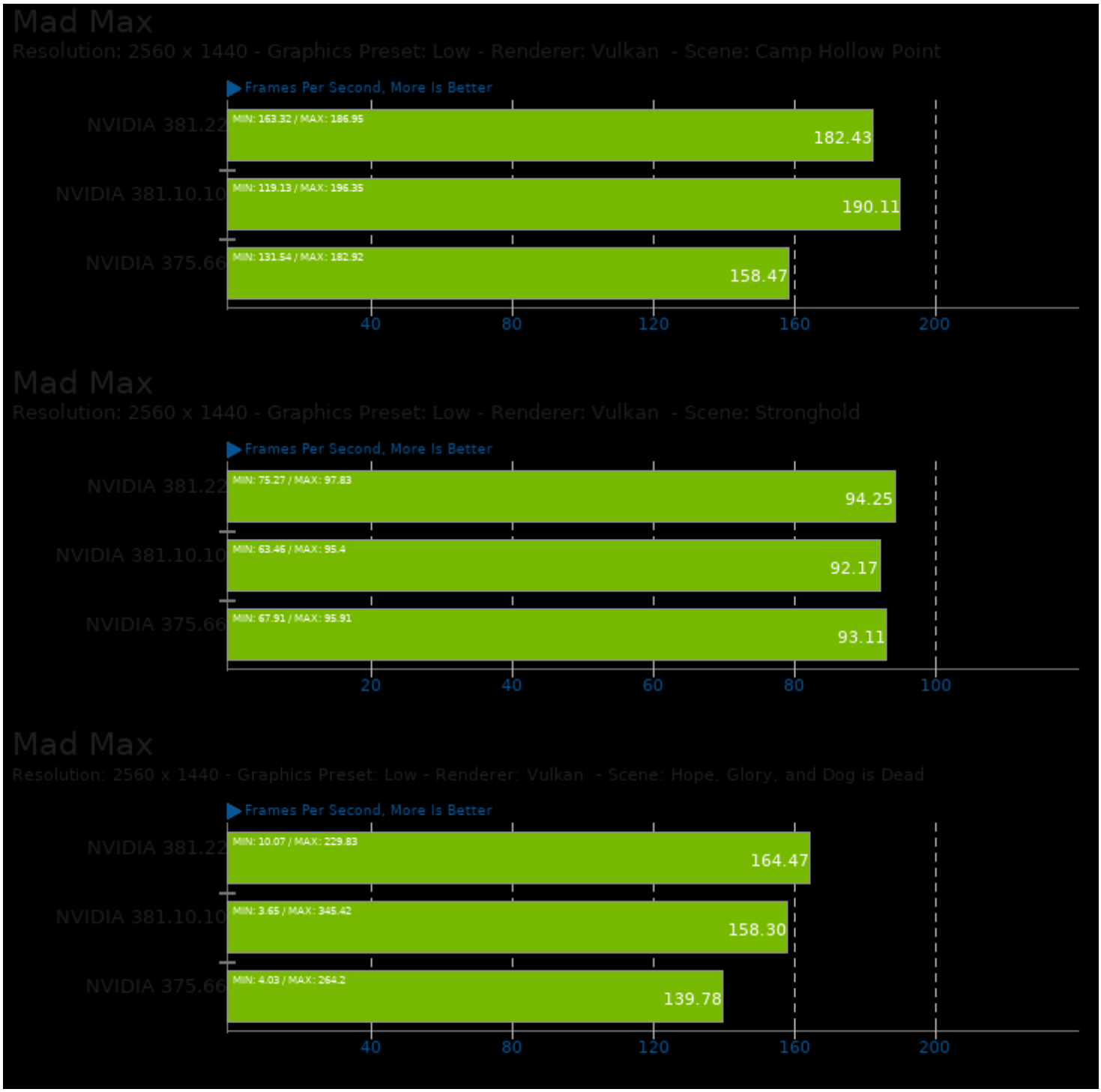
NVIDIA New Vulkan Linux Driver

Dawn of War III - 2560 x 1440 - Ultra - Vulkan (FPS)		53.55	53.08
Normalized		100%	99.12%
Standard Deviation		0.3%	1%
Mad Max - 2560 x 1440 - Low - Vulkan - Camp Hollow Point (FPS)	158.47	182.43	190.11
Normalized	83.36%	95.96%	100%
Mad Max - 2560 x 1440 - Low - Vulkan - Stronghold (FPS)	93.11	94.25	92.17
Normalized	98.79%	100%	97.79%
Mad Max - 2560 x 1440 - Low - Vulkan - H.G.a.D.i.D (FPS)	139.78	164.47	158.30
Normalized	84.99%	100%	96.25%
Mad Max - 2560 x 1440 - Low - Vulkan - Landmover (FPS)	161.65	199.41	194.03
Normalized	81.06%	100%	97.3%
Mad Max - 2560 x 1440 - High - Vulkan - Camp Hollow Point (FPS)	158.44	185.33	187.93
Normalized	84.31%	98.62%	100%
Mad Max - 2560 x 1440 - High - Vulkan - Stronghold (FPS)	91.53	90.53	93.65
Normalized	97.74%	96.67%	100%
Mad Max - 2560 x 1440 - High - Vulkan - H.G.a.D.i.D (FPS)	146.17	164.18	169.26
Normalized	86.36%	97%	100%
Mad Max - 2560 x 1440 - High - Vulkan - Landmover (FPS)	168.00	199.95	203.36
Normalized	82.61%	98.32%	100%
Serious Sam 3: BFE - 2560 x 1440 - Low - Vulkan (FPS)	246.20	258.73	258.88
Normalized	95.1%	99.94%	100%
Standard Deviation	2.5%	1.9%	4.6%
Serious Sam 3: BFE - 2560 x 1440 - High - Vulkan (FPS)	114.77	116.70	118.83
Normalized	96.58%	98.21%	100%
Standard Deviation	1.3%	0.2%	1.8%
Serious Sam 3: BFE - 2560 x 1440 - Ultra - Vulkan (FPS)	89.77	93.27	92.97
Normalized	96.25%	100%	99.68%
Standard Deviation	0.6%	2%	1.1%
The Talos Principle - Vulkan - 2560 x 1440 (FPS)	124.60	124.33	124.02
Normalized	100%	99.78%	99.53%
Standard Deviation	3.9%	1.2%	4.7%

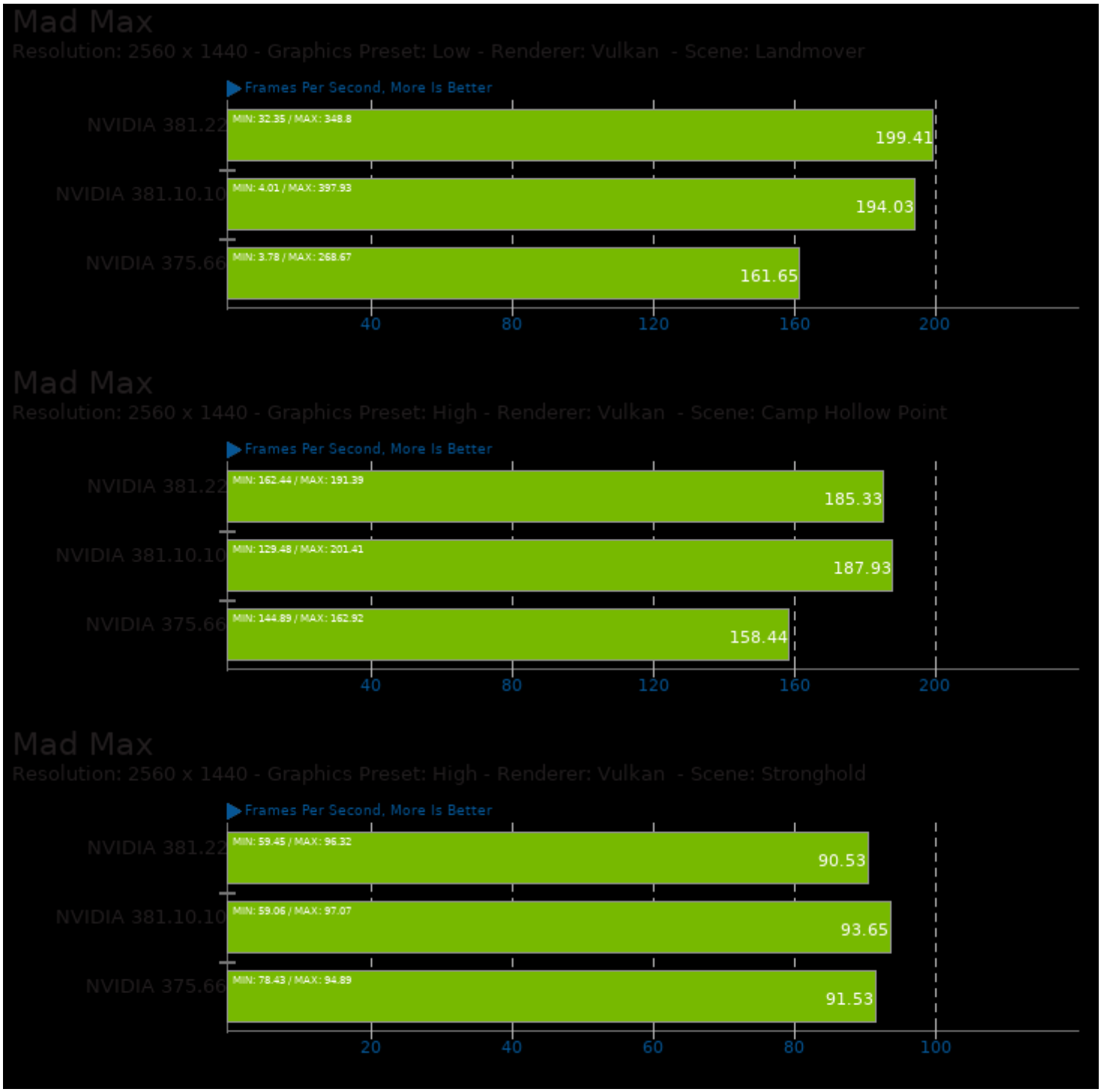
NVIDIA New Vulkan Linux Driver



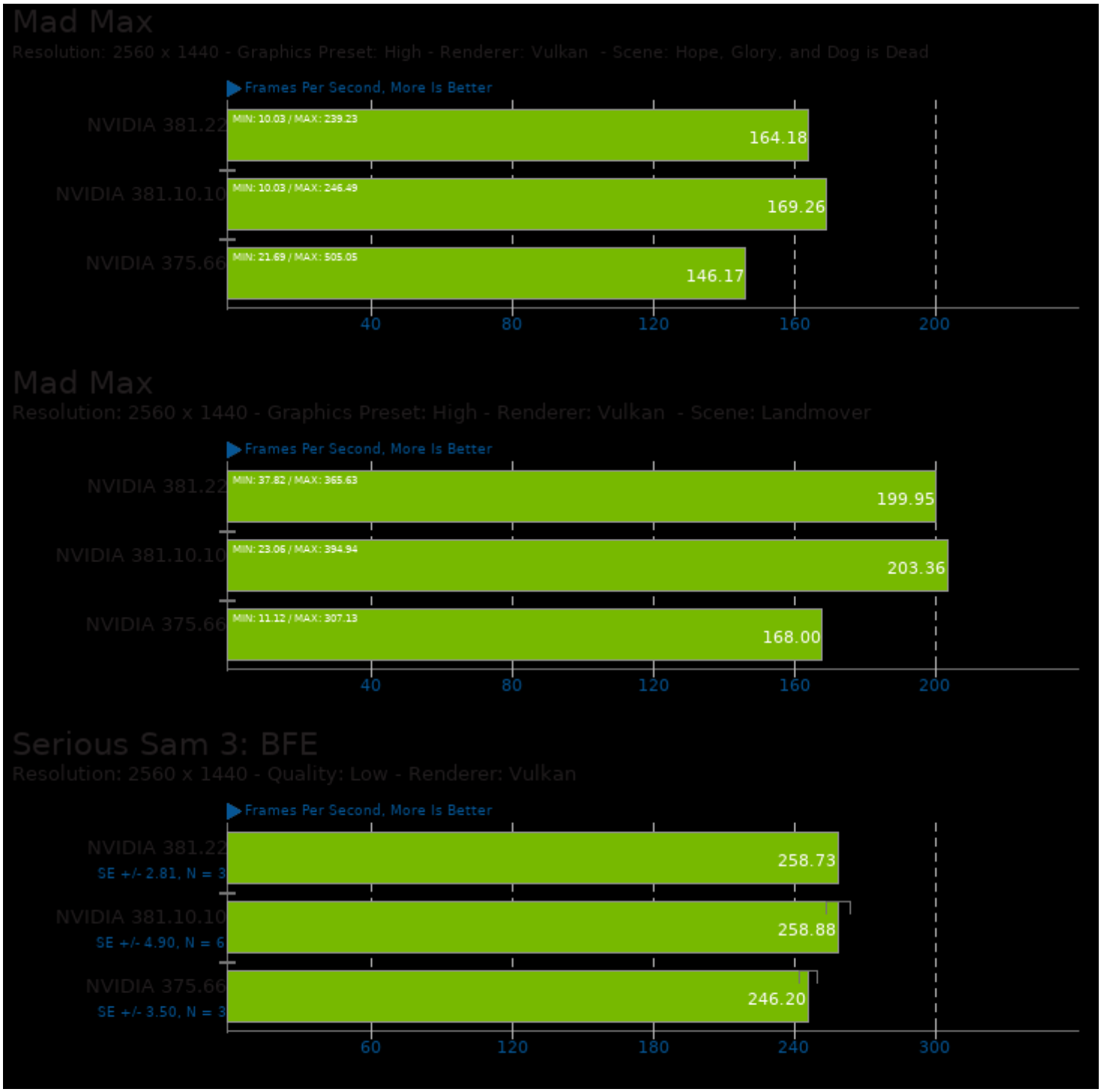
NVIDIA New Vulkan Linux Driver



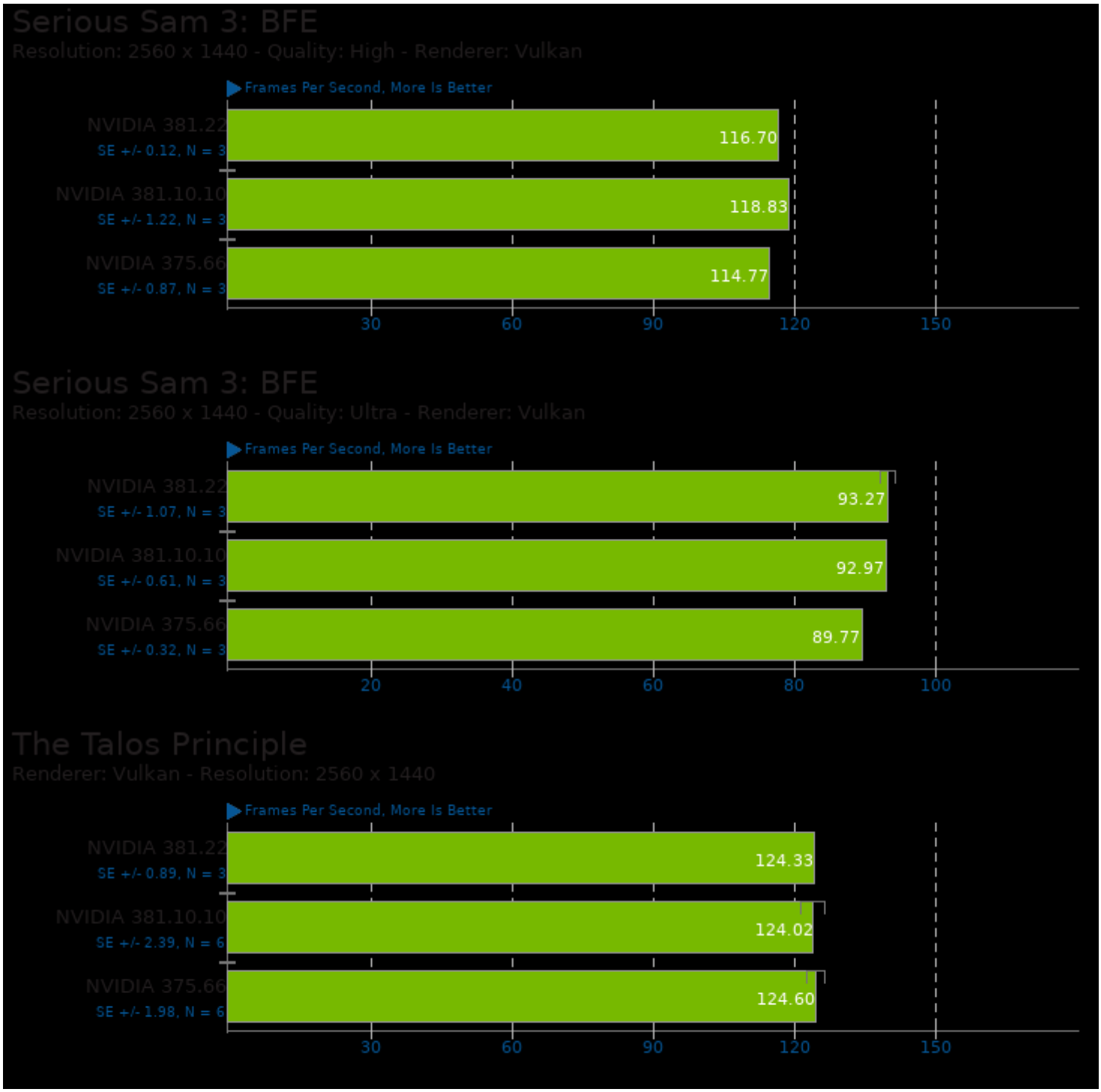
NVIDIA New Vulkan Linux Driver



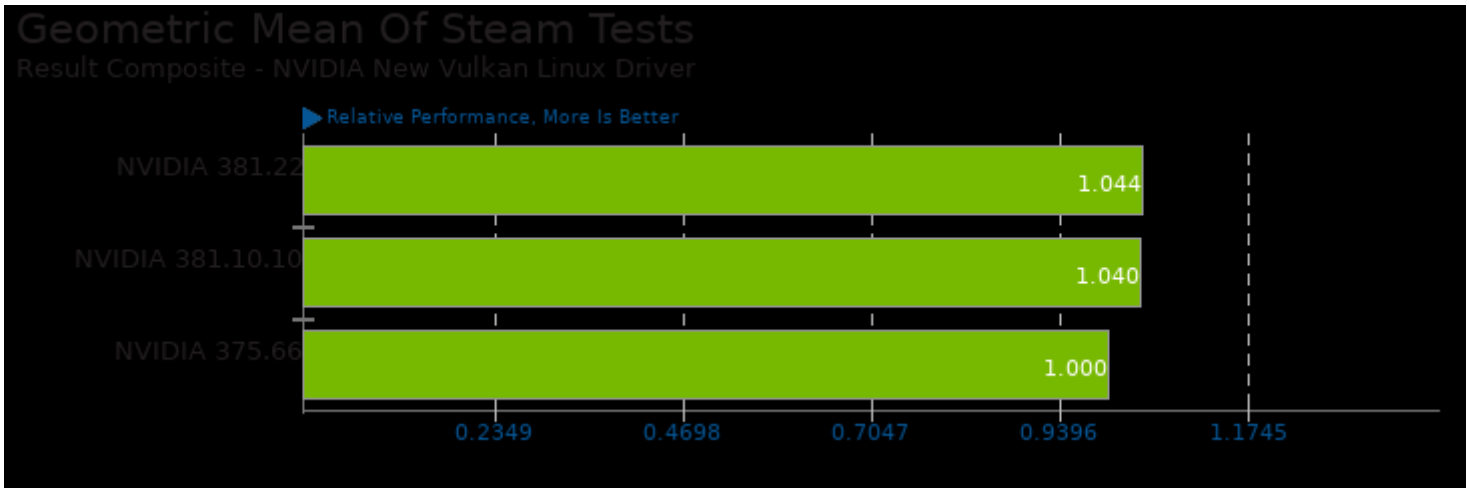
NVIDIA New Vulkan Linux Driver



NVIDIA New Vulkan Linux Driver



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



Geometric mean based upon tests: pts/dota2, pts/dow3, pts/ss3bfe and pts/talos-principle

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 04:15.