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# gametest3

Intel Core i7-4770K testing with a ASUS MAXIMUS VI IMPACT and MSI AMD Radeon HD 7900 3072MB on Arch rolling via the Phoronix Test Suite.

**Automated Executive Summary**

*mesa 02-12 amd-staging 4.11 had the most wins, coming in first place for 77% of the tests.*

*Based on the geometric mean of all complete results, the fastest (mesa 02-12 amd-staging 4.11) was 1.035x the speed of the slowest (mesa 19-11 amd-staging 4.14). mesa 19-11 amd-staging 4.11 was 0.994x the speed of mesa 02-12 amd-staging 4.11, mesa 02-12 amd-staging 4.14 was 0.976x the speed of mesa 19-11 amd-staging 4.11, mesa 19-11 amd-staging 4.14 was 0.996x the speed of mesa 02-12 amd-staging 4.14.*

## Test Systems:

### mesa 19-11 amd-staging 4.14

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset:

Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.14.0-2-amd-staging-drm-next-git (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-ae44845aff) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.0 + Clang 6.0.0 (SVN 318625) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: amdgpu.si_support=1
Processor Notes: Scaling Governor: intel_pstate powersave
Graphics Notes: GLAMOR

## mesa 19-11 amd-staging 4.11

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset: Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.11.0-1-amd-staging (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-ae44845aff) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.0 + Clang 6.0.0 (SVN 318625) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: radeon.si_support=0 amdgpu.si_support=1
Processor Notes: Scaling Governor: intel_pstate powersave
Graphics Notes: GLAMOR

## mesa 02-12 amd-staging 4.14

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset: Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.14.0-2-amd-staging-drm-next-git (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-fc033742d2) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.1 20171128 + Clang 6.0.0 (SVN 319529) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: amdgpu.si_support=1
Processor Notes: Scaling Governor: intel_pstate performance
Graphics Notes: GLAMOR

## mesa 02-12 amd-staging 4.11

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset: Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.11.0-1-amd-staging (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-fc033742d2) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.1 20171128 + Clang 6.0.0 (SVN 319529) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

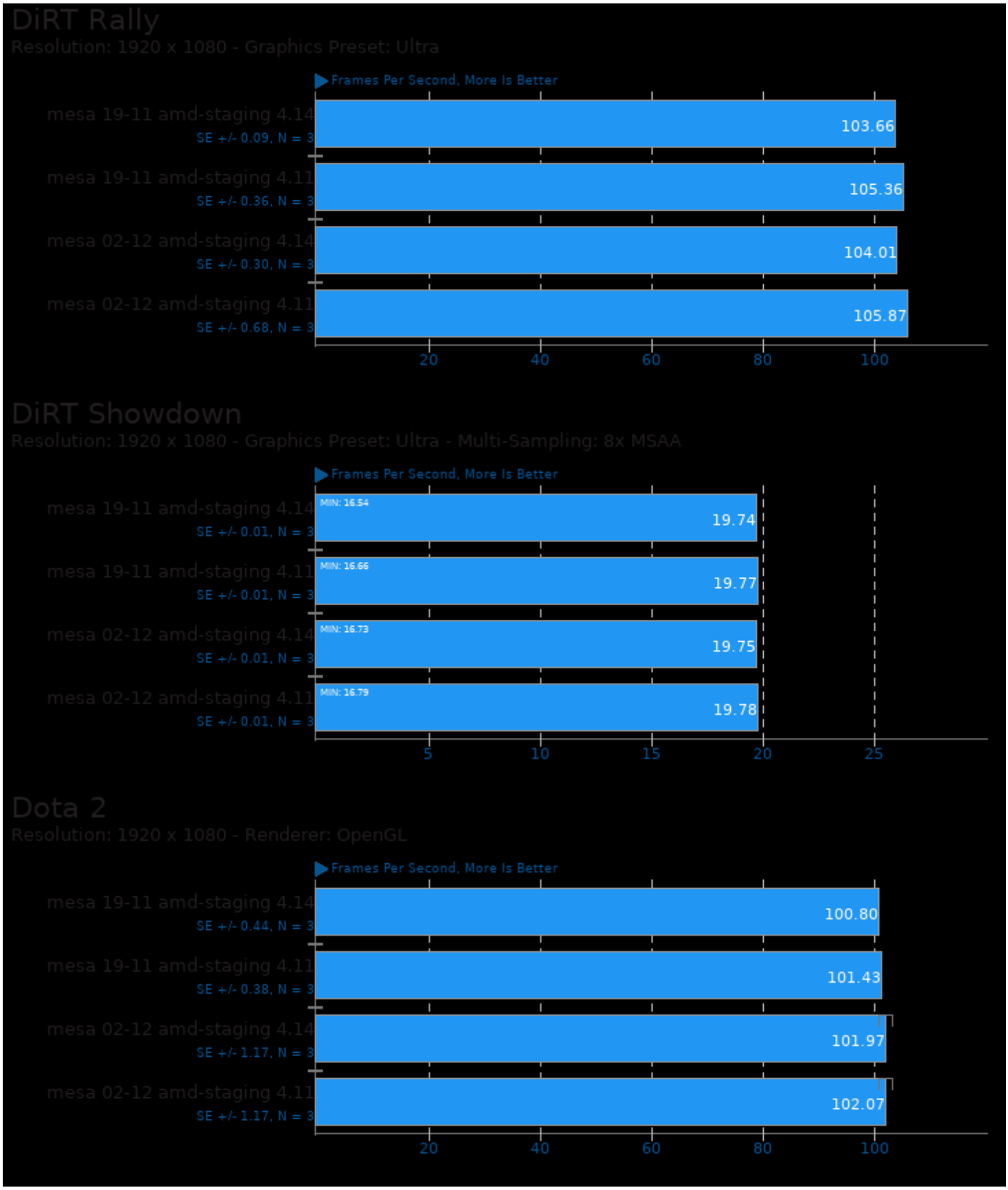
Kernel Notes: radeon.si_support=0 amdgpu.si_support=1

# gametest3

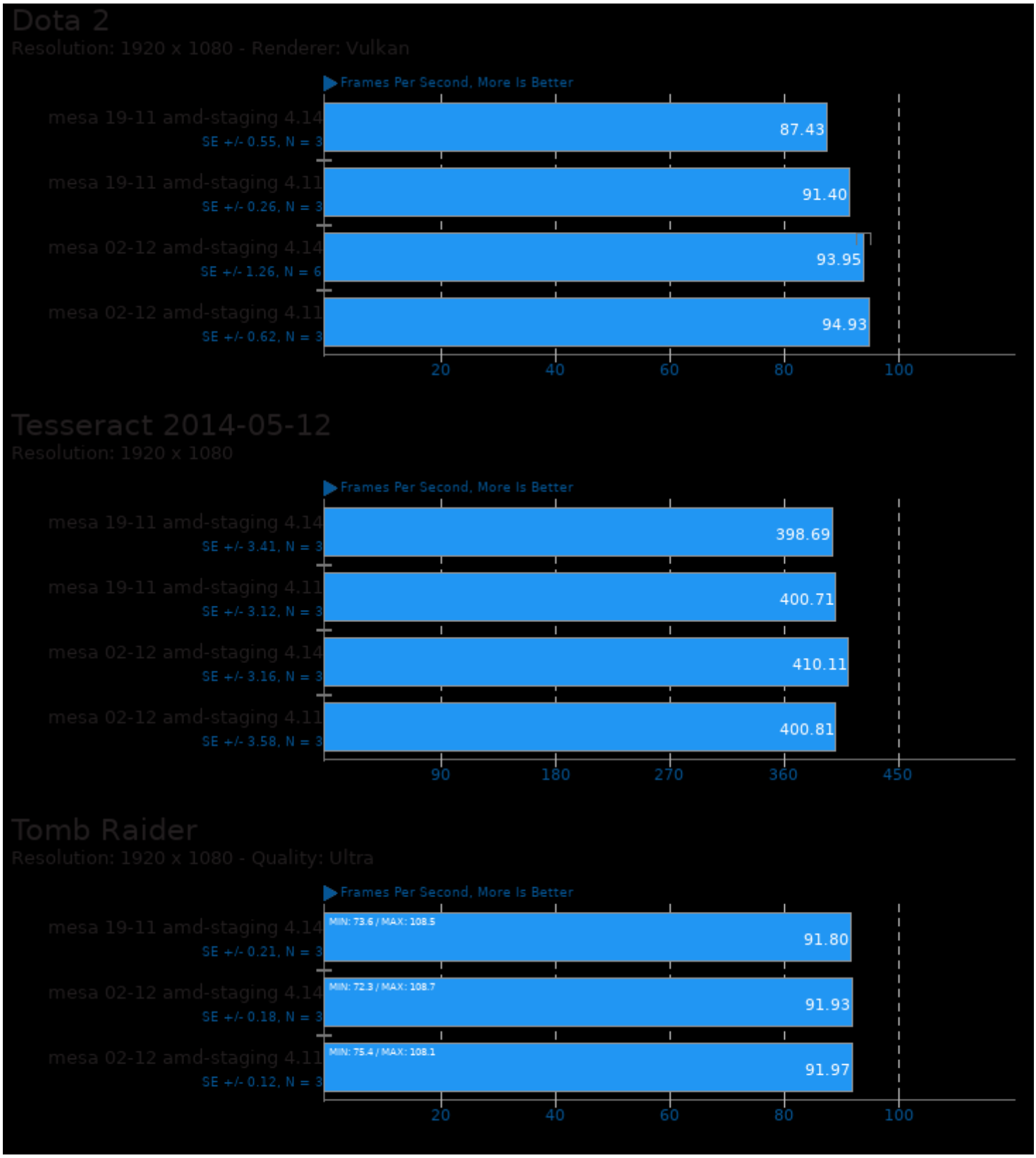
Processor Notes: Scaling Governor: intel_pstate powersave
Graphics Notes: GLAMOR

| | mesa 19-11 amd-staging 4.14 | mesa 19-11 amd-staging 4.11 | mesa 02-12 amd-staging 4.14 | mesa 02-12 amd-staging 4.11 |
|---|---|---|---|---|
| **DiRT Rally - 1920 x 1080 - Ultra (FPS)** | **103.66** | 105.36 | 104.01 | **105.87** |
| **Normalized** | 97.91% | 99.52% | 98.24% | 100% |
| **Standard Deviation** | 0.2% | 0.6% | 0.5% | 1.1% |
| **DiRT Showdown - 1920 x 1080 - Ultra - 8x MSAA (FPS)** | **19.74** | 19.77 | 19.75 | **19.78** |
| **Normalized** | 99.8% | 99.95% | 99.85% | 100% |
| **Standard Deviation** | 0% | 0.1% | 0% | 0.1% |
| **Dota 2 - 1920 x 1080 - OpenGL (FPS)** | **100.80** | 101.43 | 101.97 | **102.07** |
| **Normalized** | 98.76% | 99.37% | 99.9% | 100% |
| **Standard Deviation** | 0.7% | 0.7% | 2% | 2% |
| **Dota 2 - 1920 x 1080 - Vulkan (FPS)** | **87.43** | 91.40 | 93.95 | **94.93** |
| **Normalized** | 92.1% | 96.28% | 98.97% | 100% |
| **Standard Deviation** | 1.1% | 0.5% | 3.3% | 1.1% |
| **Tesseract - 1920 x 1080 (FPS)** | **398.69** | 400.71 | **410.11** | 400.81 |
| **Normalized** | 97.22% | 97.71% | 100% | 97.73% |
| **Standard Deviation** | 1.5% | 1.4% | 1.3% | 1.5% |
| **Tomb Raider - 1920 x 1080 - Ultra** | **91.80** | | 91.93 | **91.97** |
| **Normalized** | 99.82% | | 99.96% | 100% |
| **Standard Deviation** | 0.4% | | 0.3% | 0.2% |
| **Unigine Heaven - 1920 x 1080 - Fullscreen (FPS)** | **54.22** | 55.10 | 54.61 | **55.14** |
| **Normalized** | 98.33% | 99.93% | 99.04% | 100% |
| **Standard Deviation** | 0.2% | 0.1% | 0.1% | 0.2% |
| **Unigine Superposition - 1920 x 1080 - Fullscreen - Extreme (FPS)** | 44.30 | **49.10** | **39.90** | 49 |
| **Normalized** | 90.22% | 100% | 81.26% | 99.8% |
| **Unigine Valley - 1920 x 1080 - Fullscreen (FPS)** | **63.37** | 65.55 | 64.41 | **65.57** |
| **Normalized** | 96.64% | 99.97% | 98.23% | 100% |
| **Standard Deviation** | 0.1% | 0% | 0.1% | 0.1% |

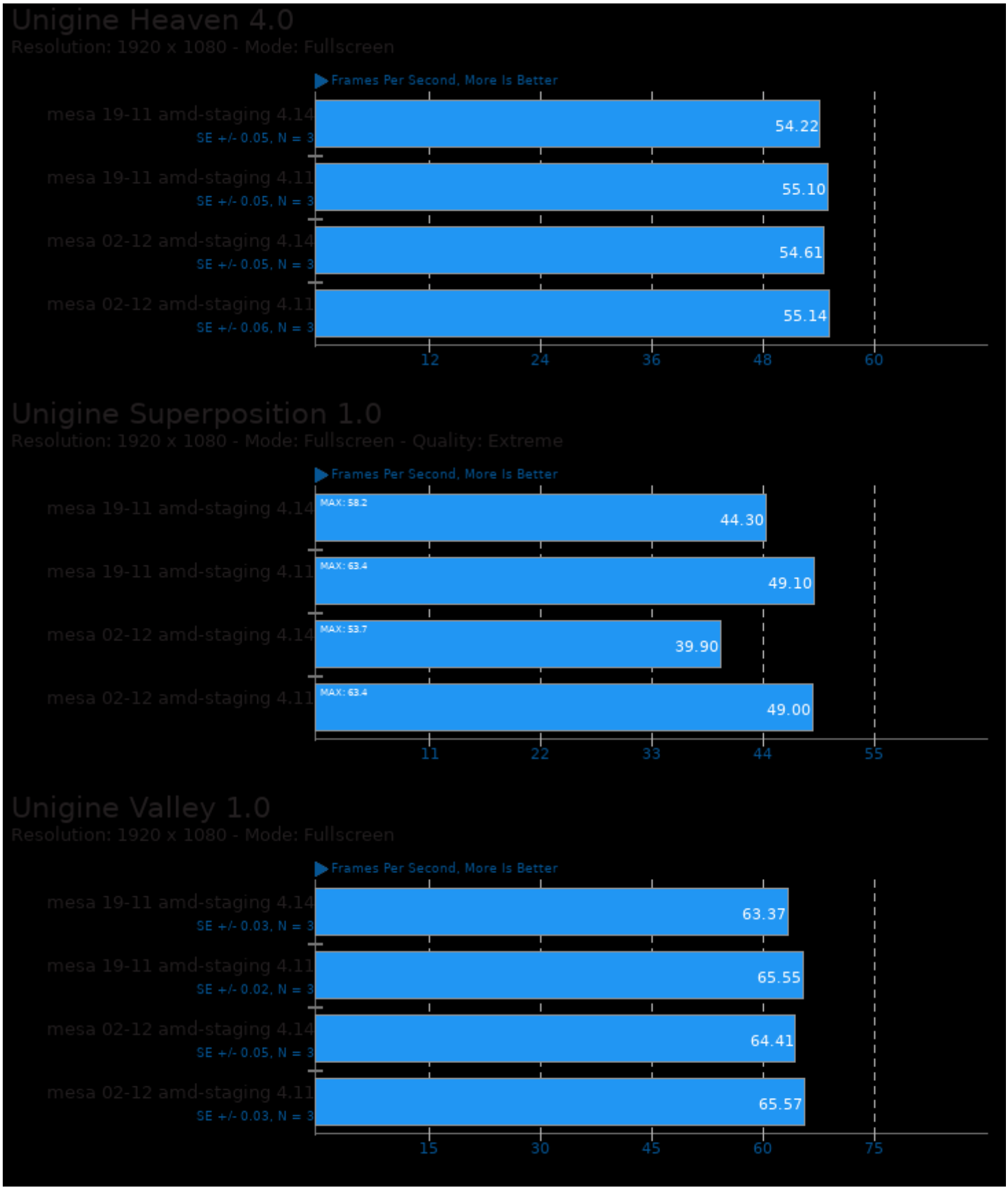
# gametest3


DiRT Rally
Resolution: 1920 x 1080 - Graphics Preset: Ultra
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.09, N = 3
103.66
mesa 19-11 amd-staging 4.11
SE +/- 0.36, N = 3
105.36
mesa 02-12 amd-staging 4.14
SE +/- 0.30, N = 3
104.01
mesa 02-12 amd-staging 4.11
SE +/- 0.68, N = 3
105.87
20
40
60
80
100
DiRT Showdown
Resolution: 1920 x 1080 - Graphics Preset: Ultra - Multi-Sampling: 8x MSAA
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.01, N = 3
MIN: 16.54
19.74
mesa 19-11 amd-staging 4.11
SE +/- 0.01, N = 3
MIN: 16.66
19.77
mesa 02-12 amd-staging 4.14
SE +/- 0.01, N = 3
MIN: 16.73
19.75
mesa 02-12 amd-staging 4.11
SE +/- 0.01, N = 3
MIN: 16.79
19.78
5
10
15
20
25
Dota 2
Resolution: 1920 x 1080 - Renderer: OpenGL
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.44, N = 3
100.80
mesa 19-11 amd-staging 4.11
SE +/- 0.38, N = 3
101.43
mesa 02-12 amd-staging 4.14
SE +/- 1.17, N = 3
101.97
mesa 02-12 amd-staging 4.11
SE +/- 1.17, N = 3
102.07
20
40
60
80
100

# gametest3

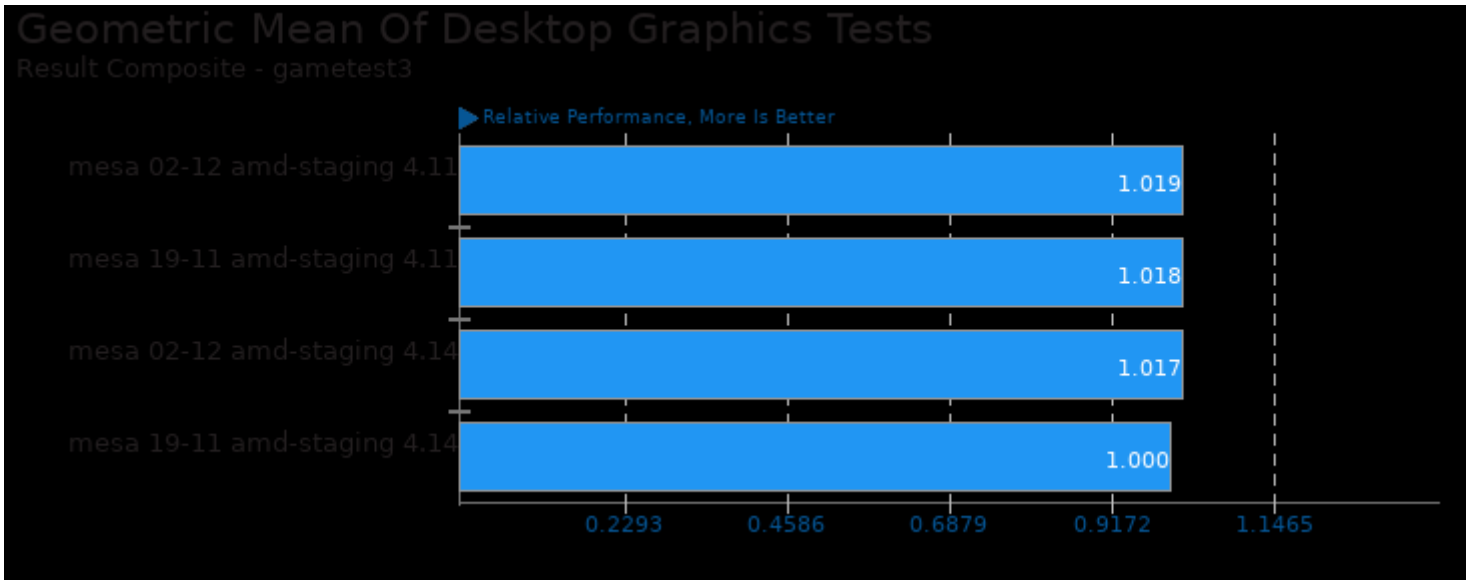

Dota 2
Resolution: 1920 x 1080 - Renderer: Vulkan
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.55, N = 3
87.43
mesa 19-11 amd-staging 4.11
SE +/- 0.26, N = 3
91.40
mesa 02-12 amd-staging 4.14
SE +/- 1.26, N = 6
93.95
mesa 02-12 amd-staging 4.11
SE +/- 0.62, N = 3
94.93
20
40
60
80
100
Tesseract 2014-05-12
Resolution: 1920 x 1080
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 3.41, N = 3
398.69
mesa 19-11 amd-staging 4.11
SE +/- 3.12, N = 3
400.71
mesa 02-12 amd-staging 4.14
SE +/- 3.16, N = 3
410.11
mesa 02-12 amd-staging 4.11
SE +/- 3.58, N = 3
400.81
90
180
270
360
450
Tomb Raider
Resolution: 1920 x 1080 - Quality: Ultra
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.21, N = 3
MIN: 73.6 / MAX: 108.5
91.80
mesa 02-12 amd-staging 4.14
SE +/- 0.18, N = 3
MIN: 72.3 / MAX: 108.7
91.93
mesa 02-12 amd-staging 4.11
SE +/- 0.12, N = 3
MIN: 75.4 / MAX: 108.1
91.97
20
40
60
80
100

# gametest3

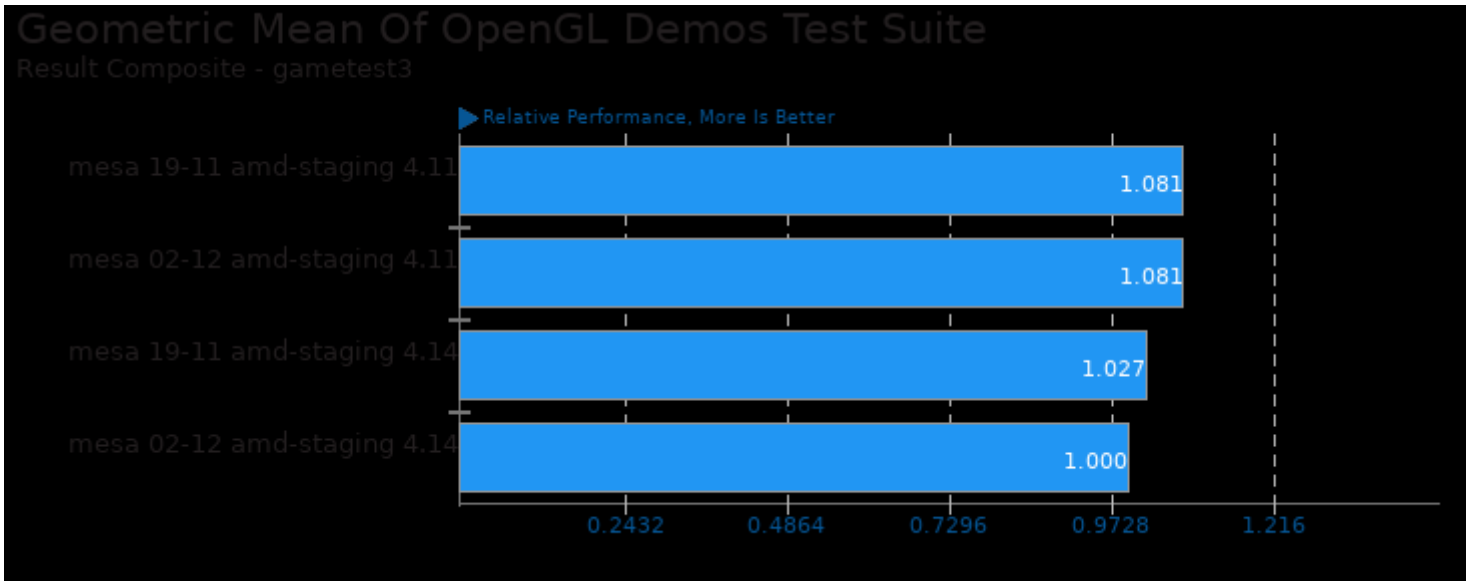

Unigine Heaven 4.0
Resolution: 1920 x 1080 - Mode: Fullscreen
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.05, N = 3
54.22
mesa 19-11 amd-staging 4.11
SE +/- 0.05, N = 3
55.10
mesa 02-12 amd-staging 4.14
SE +/- 0.05, N = 3
54.61
mesa 02-12 amd-staging 4.11
SE +/- 0.06, N = 3
55.14
12
24
36
48
60
Unigine Superposition 1.0
Resolution: 1920 x 1080 - Mode: Fullscreen - Quality: Extreme
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
MAX: 58.2
44.30
mesa 19-11 amd-staging 4.11
MAX: 63.4
49.10
mesa 02-12 amd-staging 4.14
MAX: 53.7
39.90
mesa 02-12 amd-staging 4.11
MAX: 63.4
49.00
11
22
33
44
55
Unigine Valley 1.0
Resolution: 1920 x 1080 - Mode: Fullscreen
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.14
SE +/- 0.03, N = 3
63.37
mesa 19-11 amd-staging 4.11
SE +/- 0.02, N = 3
65.55
mesa 02-12 amd-staging 4.14
SE +/- 0.05, N = 3
64.41
mesa 02-12 amd-staging 4.11
SE +/- 0.03, N = 3
65.57
15
30
45
60
75

# gametest3

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

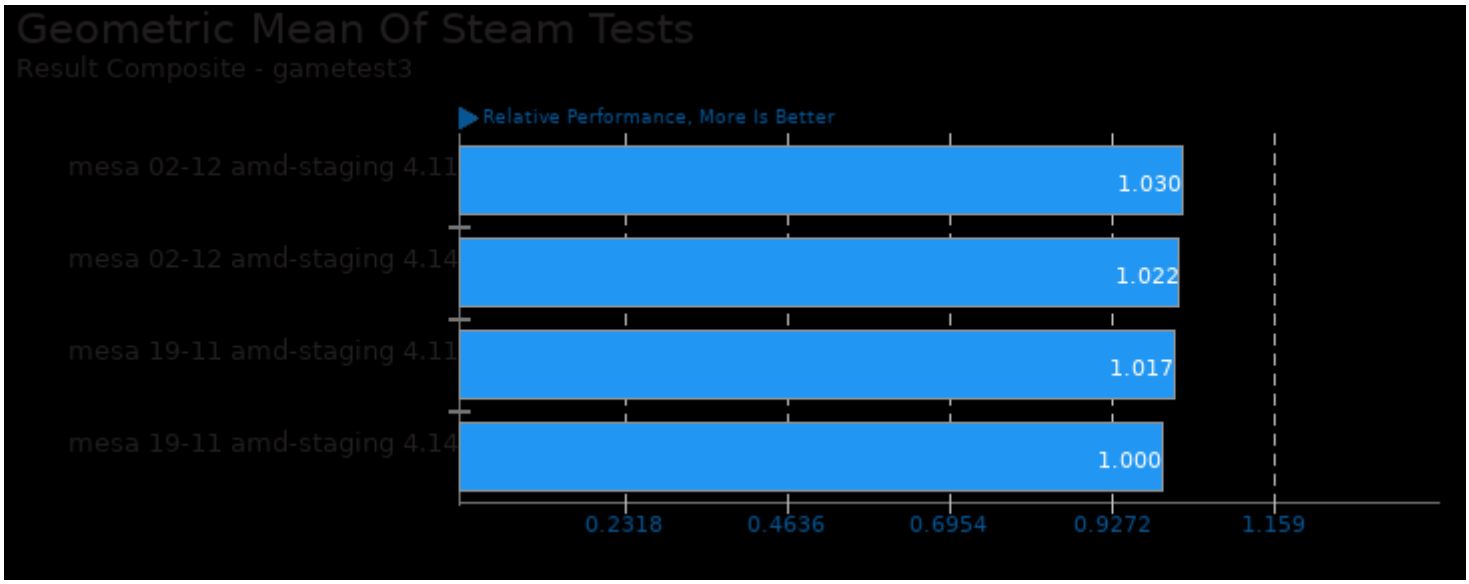



Geometric mean based upon tests: pts/tesseract, pts/unigine-valley and pts/unigine-heaven

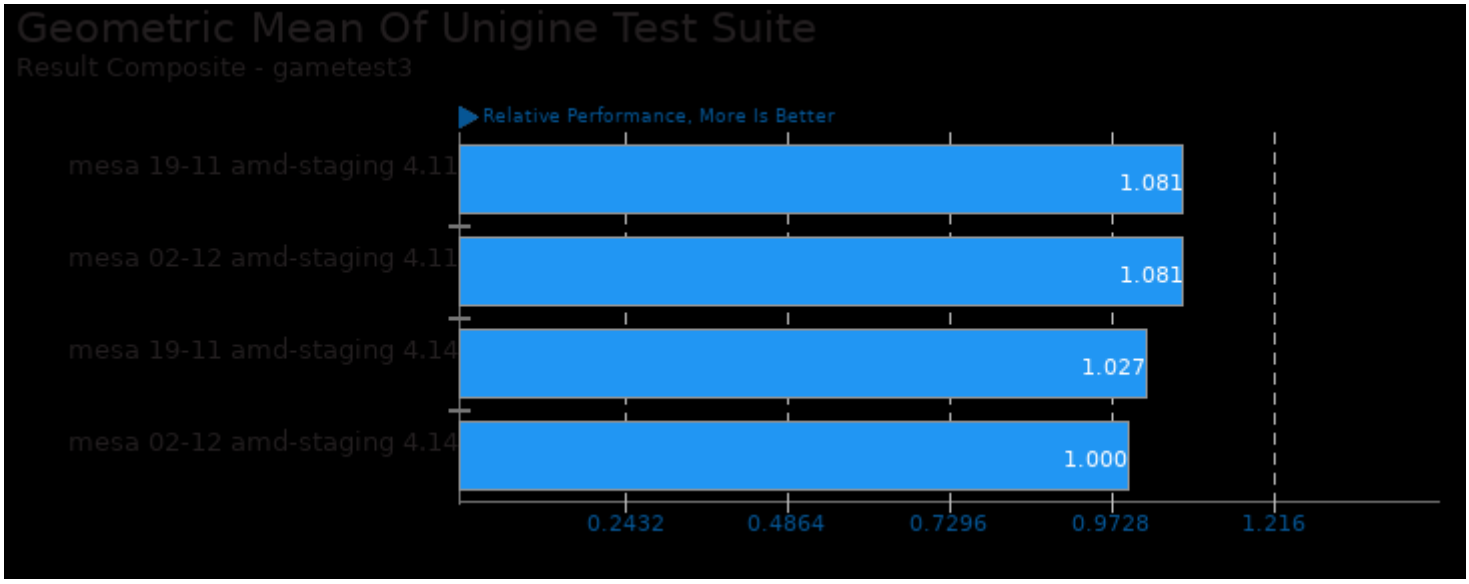



Geometric mean based upon tests: pts/unigine-valley, pts/unigine-heaven and pts/unigine-super

# gametest3




Geometric mean based upon tests: pts/dirt-rally, pts/dirt-showdown, pts/dota2 and pts/tomb-raider




Geometric mean based upon tests: pts/unigine-valley, pts/unigine-heaven and pts/unigine-super

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 15:07.*