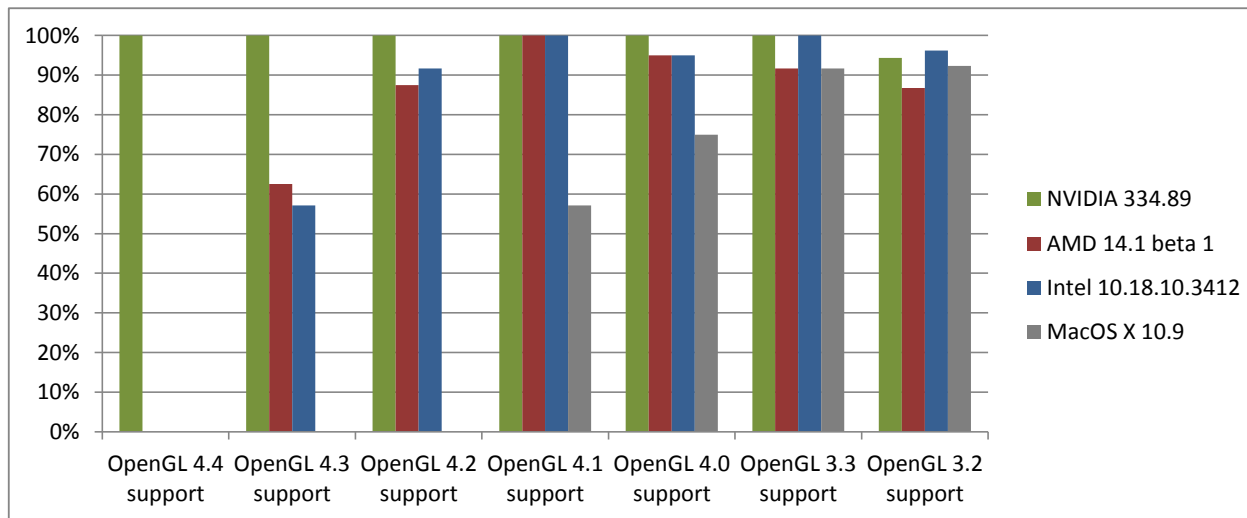


# OpenGL Status - February 2014

G-Truc Creation

Vendor	NVIDIA	AMD	Intel Windows	Apple
Release date	18/02/2014	01/02/2014	29/01/2014	10/22/2013
Drivers version	334.89	14.1 beta 1	10.18.10.3412	MacOS X 10.9
Samples versions	4.4.1.3	4.4.1.3	4.4.1.3	4.4.1.3

Summary	NVIDIA 334.89	AMD 14.1 beta 1	Intel 10.18.10.3412	MacOS X 10.9
OpenGL 4.4 support	100%	0%	0%	0%
OpenGL 4.3 support	100%	63%	57%	0%
OpenGL 4.2 support	100%	88%	92%	0%
OpenGL 4.1 support	100%	100%	100%	57%
OpenGL 4.0 support	100%	95%	95%	75%
OpenGL 3.3 support	100%	92%	100%	92%
OpenGL 3.2 support	94%	87%	96%	92%



OpenGL 4.4	NVIDIA	AMD	Intel Windows	Apple
buffer-type	Pass	Unsupported	Unsupported	Unsupported
fbo	Pass	Unsupported	Unsupported	Unsupported
interface-matching	Pass	Unsupported	Unsupported	Unsupported
sampler-wrap	Pass	Unsupported	Unsupported	Unsupported
texture-compressed	Pass	Unsupported	Unsupported	Unsupported
transform-feedback	Pass	Unsupported	Unsupported	Unsupported
Pass	6	0	0	0
Ok but not conform	0	0	0	0
Workaround	0	0	0	0
Fail	0	0	0	0
Unsupported	0	6	0	0
Sub-Total	6	6	0	0
%	100%	0%	0%	0%

OpenGL 4.3	NVIDIA	AMD	Intel Windows	Apple
atomic-counter	Pass	Pass	Unsupported	Unsupported
debug	Pass	Fail	Fail	Unsupported
draw-vertex-attrib-binding	Pass	Pass	Fail	Unsupported
draw-without-vertex-attrib	Pass	Fail	Unsupported	Unsupported
fbo	Pass	Pass	Pass	Unsupported
image-sampling	Pass	Fail	Unsupported	Unsupported
image-store	Pass	Pass	Unsupported	Unsupported
interface-matching	Pass	Pass	Unsupported	Unsupported
multi-draw-indirect	Pass	Fail	Fail	Unsupported
program-compute	Pass	Pass	Pass	Unsupported
program-compute-image	Pass	Fail	Pass	Unsupported
program-subroutine	Pass	Pass	Unsupported	Unsupported
texture-buffer	Pass	Pass	Pass	Unsupported
texture-copy	Pass	Pass	Unsupported	Unsupported

texture-storage	Pass	Pass	Unsupported	Unsupported
texture-view	Pass	Fail	Unsupported	Unsupported
Pass	16	10	4	0
Ok but not conform	0	0	0	0
Workaround	0	0	0	0
Fail	0	6	3	0
Unsupported	0	0	0	0
Sub-Total	16	16	7	0
%	100%	63%	57%	0%

OpenGL 4.2	NVIDIA	AMD	Intel Windows	Apple
atomic-counter	Pass	Pass	Pass	Unsupported
buffer-uniform	Pass	Pass	Pass	Unsupported
clipping	Pass	Pass	Pass	Unsupported
debug-output	Pass	Pass	Pass	Unsupported
draw-base-instance	Pass	Pass	Pass	Unsupported
draw-image-space-rendering	Pass	Pass	Pass	Unsupported
fbo	Pass	Pass	Pass	Unsupported
image-load	Pass	Pass	Pass	Unsupported
image-store	Pass	Pass	Pass	Unsupported
image-unpack	Pass	Pass	Pass	Unsupported
interface-matching	Pass	Pass	Pass	Unsupported
memory-barrier	Pass	Pass	Pass	Unsupported
picking	Pass	Pass	Pass	Unsupported
primitive-line-aa	Pass	Fail	Pass	Unsupported
sampler-fetch	Pass	Pass	Pass	Unsupported
sampler-gather	Pass	Pass	Pass	Unsupported
test-depth-conservative	Pass	Pass	Fail	Unsupported
texture-array	Pass	Pass	Pass	Unsupported
texture-compressed	Pass	Pass	Pass	Unsupported
texture-conversion	Pass	Fail	Pass	Unsupported
texture-cube	Pass	Pass	Pass	Unsupported
texture-pixel-store	Pass	Pass	Fail	Unsupported

texture-storage	Pass	Workaround	Pass	Unsupported
transform-feedback-instanced	Pass	Pass	Pass	Unsupported
Pass	24	21	22	0
Ok but not conform	0	0	0	0
Workaround	0	1	0	0
Fail	0	2	2	0
Untested	0	0	0	0
Sub-Total	24	24	24	0
%	100%	88%	92%	0%

OpenGL 4.1	NVIDIA	AMD	Intel Windows	Apple
fbo-layered	Pass	Pass	Pass	Pass
primitive-instanced	Pass	Pass	Pass	Pass
primitive-tessellation-2	Pass	Pass	Pass	Fail
primitive-tessellation-5	Pass	Pass	Pass	Fail
program-64	Pass	Pass	Pass	Pass
program-binary	Pass	Pass	Pass	Ok
program-separate	Pass	Pass	Pass	Fail
Pass	7	7	7	3
Ok but not conform	0	0	0	1
Workaround	0	0	0	0
Fail	0	0	0	3
Untested	0	0	0	0
Sub-Total	7	7	7	7
%	100%	100%	100%	57%

OpenGL 4.0	NVIDIA	AMD	Intel Windows	Apple
blend-rtt	Pass	Pass	Pass	Fail
draw-indirect	Pass	Pass	Pass	Pass
fbo-layered	Pass	Pass	Pass	Pass
fbo-multisample	Pass	Pass	Pass	Pass
fbo-rtt	Pass	Pass	Pass	Pass
fbo-rtt-texture-array	Pass	Pass	Pass	Pass

fbo-shadow	Pass	Fail	Pass	Fail
primitive-instanced	Pass	Pass	Pass	Pass
primitive-smooth-shading	Pass	Pass	Pass	Pass
primitive-tessellation	Pass	Pass	Pass	Pass
program-64	Pass	Pass	Pass	Pass
program-subroutine	Pass	Pass	Pass	Fail
program-varying-blocks	Pass	Pass	Pass	Pass
program-varying-structs	Pass	Pass	Pass	Fail
sampler-array	Pass	Pass	Pass	Pass
sampler-fetch	Pass	Pass	Pass	Pass
texture-buffer-rgb	Pass	Pass	Pass	Pass
texture-derivative	Ok	Pass	Fail	Pass
transform-feedback-object	Pass	Pass	Pass	Pass
transform-feedback-stream	Pass	Pass	Pass	Fail
Pass	19	19	19	15
Ok but not conform	1	0	0	0
Workaround	0	0	0	0
Fail	0	1	1	5
Untested	0	0	0	0
Sub-Total	20	20	20	20
%	100%	95%	95%	75%

OpenGL 3.3	NVIDIA	AMD	Intel Windows	Apple
blend-index	Pass	Pass	Pass	Pass
blend-rtt	Pass	Fail	Pass	Fail
buffer-type	Pass	Pass	Pass	Pass
draw-instanced-array	Pass	Pass	Pass	Pass
query-timer	Pass	Pass	Pass	Pass
sampler-anisotropy-ext	Pass	Pass	Pass	Pass
sampler-filter	Pass	Pass	Pass	Pass
sampler-object	Pass	Pass	Pass	Pass
sampler-wrap	Pass	Pass	Pass	Pass
texture-integer-rgb10a2ui	Pass	Pass	Pass	Pass

texture-rect	Pass	Pass	Pass	Pass
texture-swizzle	Pass	Pass	Pass	Pass
Pass	12	11	12	11
Ok but not conform	0	0	0	0
Workaround	0	0	0	0
Fail	0	1	0	1
Untested	0	0	0	0
Sub-Total	12	12	12	12
%	100%	92%	100%	92%

OpenGL 3.2	NVIDIA	AMD	Intel Windows	Apple
buffer-uniform	Pass	Pass	Pass	Pass
buffer-uniform-shared	Pass	Pass	Pass	Pass
buffer-update	Pass	Pass	Pass	Pass
draw-base-vertex	Pass	Fail	Pass	Pass
draw-image-space	Pass	Pass	Pass	Pass
draw-instanced	Pass	Pass	Pass	Pass
draw-multiple	Pass	Pass	Pass	Pass
draw-range-arrays	Pass	Pass	Pass	Pass
draw-range-elements	Pass	Pass	Pass	Pass
draw-without-vertex-attrib	Pass	Pass	Pass	Pass
fbo	Pass	Pass	Pass	Pass
fbo-blit	Pass	Pass	Pass	Fail
fbo-depth	Pass	Fail	Pass	Pass
fbo-depth-multisample	Pass	Fail	Pass	Pass
fbo-layered	Pass	Pass	Pass	Pass
fbo-multisample	Pass	Pass	Pass	Pass
fbo-multisample-explicit	Pass	Pass	Pass	Pass
fbo-multisample-integer	Pass	Fail	Fail	Fail
fbo-rtt	Pass	Pass	Pass	Pass
fbo-rtt-texture-array	Pass	Pass	Pass	Pass
fbo-shadow	Pass	Fail	Pass	Fail
fbo-srgb	Pass	Pass	Pass	Pass

glsl-builtin-blocks	Pass	Pass	Pass	Pass
glsl-cast-fail	Fail	Pass	Fail	Fail
glsl-precision	Pass	Pass	Pass	Pass
glsl-discard	Pass	Pass	Pass	Pass
glsl-input-struct	Fail	Pass	Pass	Pass
glsl-precision	Pass	Pass	Pass	Pass
primitive-front-face	Pass	Pass	Pass	Pass
primitive-point	Pass	Pass	Pass	Pass
primitive-shading	Fail	Fail	Pass	Pass
primitive-point-sprite	Ok	Pass	Pass	Pass
primitive-shading	Pass	Pass	Pass	Pass
program	Pass	Pass	Pass	Pass
program-uniform	Pass	Pass	Pass	Pass
query-conditional	Pass	Fail	Pass	Pass
query-occlusion	Pass	Pass	Pass	Pass
sync	Pass	Pass	Pass	Pass
test-scissor	Pass	Pass	Pass	Pass
texture-2d	Pass	Pass	Pass	Pass
texture-3d	Pass	Pass	Pass	Pass
texture-buffer	Pass	Pass	Pass	Pass
texture-compressed-ext	Pass	Pass	Pass	Pass
texture-cube	Pass	Pass	Pass	Pass
texture-derivative	Pass	Pass	Pass	Pass
texture-fetch	Pass	Pass	Pass	Pass
texture-format	Pass	Pass	Pass	Pass
texture-integer	Pass	Pass	Pass	Pass
texture-offset	Pass	Pass	Pass	Pass
texture-pixel-store	Pass	Pass	Pass	Pass
texture-streaming	Pass	Pass	Pass	Pass
transform-feedback-interleave	Pass	Pass	Pass	Pass
transform-feedback-separate	Pass	Pass	Pass	Pass
Pass	49	46	51	48
Ok but not conform	1	0	0	0

Workaround	0	0	0	0
Fail	3	7	2	4
Untested	0	0	0	0
Sub-Total	53	53	53	52
%	94%	87%	96%	92%

Extensions	NVIDIA	AMD	Intel Windows	Apple
430-perf-monitor-amd		Pass		
430-direct-state-access-ext	Pass	Pass		
420-blend-op-amd		Pass		
420-buffer-pinned-amd		Pass		
420-fbo-layered-amd		Pass		
420-fbo-multisample-dsa-nv	Pass			
420-fbo-multisample-amd		Pass		
420-fbo-srgb-decode-ext	Pass	Pass	Fail	
420-primitive-bindless-nv	Pass			
420-test-depth-clamp-amd		Pass		
420-texture-bindless-nv	Pass			
420-texture-sparse-amd		Pass		
420-buffer-pinned-amd		Pass		
420-blend-op-amd		Pass		
400-sampler-array-nv	Pass			
330-sampler-anisotropic-ext	Pass	Pass	Pass	
330-fbo-multisample-nv	Pass	Pass		
320-texture-compressed-ext	Pass	Pass	Pass	
Pass	9	14	2	0
Ok but not conform	0	0	0	0
Workaround	0	0	0	0
Fail	0	0	1	0
Untested	0	0	0	0
Sub-Total	9	14	3	0
%	100%	100%	67%	0%

### OpenGL ES 3.0

es-300-draw-elements	Pass		Pass	
Pass	1	0	1	0
Ok but not conform	0	0	0	0
Workaround	0	0	0	0
Fail	0	0	0	0
Untested	0	0	0	0
Sub-Total	1	0	1	0
%	100%	0%	100%	0%

### OpenGL ES 2.0

es-200-draw-elements	Pass		Pass	
Pass	1	0	1	0
Ok but not conform	0	0	0	0
Workaround	0	0	0	0
Fail	0	0	0	0
Untested	0	0	0	0
Sub-Total	1	0	1	0
%	100%	0%	100%	0%