

Copy Report to Clipboard

Graphics Feature Status

- Canvas: **Hardware accelerated**
- Flash: **Hardware accelerated**
- Flash Stage3D: **Hardware accelerated**
- Flash Stage3D Baseline profile: **Hardware accelerated**
- Compositing: **Hardware accelerated**
- Multiple Raster Threads: **Disabled**
- Out-of-process Rasterization: **Disabled**
- OpenGL: **Enabled**
- Hardware Protected Video Decode: **Unavailable**
- Rasterization: **Software only. Hardware acceleration disabled**
- Skia Renderer: **Enabled**
- Video Decode: **Unavailable**
- Vulkan: **Disabled**
- WebGL: **Hardware accelerated**
- WebGL2: **Hardware accelerated**

Driver Bug Workarounds

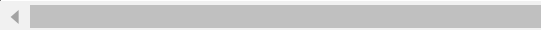
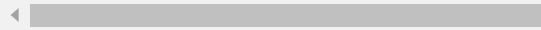
- `adjust_src_dst_region_for_blitframebuffer`
- `clear_uniforms_before_first_program_use`
- `count_all_in_varyings_packing`
- `decode_encode_srgb_for_generatemipmap`
- `disable_post_sub_buffers_for_onscreen_surfaces`
- `exit_on_context_lost`
- `m_saa_is_slow`
- `rely_on_implicit_sync_for_swap_buffers`
- `scalarize_vec_and_mat_constructor_args`
- `disabled_extension_GL_KHR_blend_equation_advanced`
- `disabled_extension_GL_KHR_blend_equation_advanced_coherent`
- `disabled_extension_GL_MESA_framebuffer_flip_y`

Problems Detected

- Accelerated video decode is unavailable on Linux: [137247](#), [1032907](#)
*Disabled Features: **accelerated_video_decode***
- Protected video decoding with swap chain is for Windows and Intel only
*Disabled Features: **protected_video_decode***
- Clear uniforms before first program use on all platforms: [124764](#), [349137](#)
*Applied Workarounds: **clear_uniforms_before_first_program_use***
- Mesa drivers in Linux handle varyings without static use incorrectly: [333885](#)
*Applied Workarounds: **count_all_in_varyings_packing***
- Disable partial swaps on Mesa drivers (detected with `GL_RENDERER`): [339493](#)
*Applied Workarounds: **disable_post_sub_buffers_for_onscreen_surfaces***
- Always rewrite vec/mat constructors to be consistent: [398694](#)
*Applied Workarounds: **scalarize_vec_and_mat_constructor_args***
- On Intel GPUs MSAA performance is not acceptable for GPU rasterization: [527565](#)
*Applied Workarounds: **m_saa_is_slow***
- Disable partial swaps on Mesa drivers (detected with `GL_VERSION`): [339493](#)
*Applied Workarounds: **disable_post_sub_buffers_for_onscreen_surfaces***
- Decode and encode before generateMipmap for srgb format textures on os except macosx: [634519](#)
*Applied Workarounds: **decode_encode_srgb_for_generatemipmap***
- adjust src/dst region if blitting pixels outside framebuffer on Linux Intel: [664740](#)
*Applied Workarounds: **adjust_src_dst_region_for_blitframebuffer***

- Disable KHR_blend_equation_advanced until cc shaders are updated: [661715](#)
Applied Workarounds: *disable(GL_KHR_blend_equation_advanced)*,
disable(GL_KHR_blend_equation_advanced_coherent)
- Some drivers can't recover after OUT_OF_MEM and context lost: [893177](#)
Applied Workarounds: *exit_on_context_lost*
- Avoid waiting on a egl fence before swapping buffers and rely on implicit sync on Intel GPUs: [938286](#)
Applied Workarounds: *rely_on_implicit_sync_for_swap_buffers*
- Disable GL_MESA_framebuffer_flip_y for desktop GL: [964010](#)
Applied Workarounds: *disable(GL_MESA_framebuffer_flip_y)*
- Raster is using a single thread.
Disabled Features: *multiple_raster_threads*

Version Information

Data exported	2020-06-14T09:58:31.670Z
Chrome version	Chrome/83.0.4103.97
Operating system	Linux 5.4.0-37-generic
Software rendering list URL	https://chromium.googlesource.com/chromium/src/+326d148b9655369b8 ◀  ▶
Driver bug list URL	https://chromium.googlesource.com/chromium/src/+326d148b9655369b8 ◀  ▶
ANGLE commit id	a4b21cf26074
2D graphics backend	Skia/83 c3d05a789930913af94174961bc6f90894196f62
Command Line	/usr/bin/google-chrome-stable --flag-switches-begin --flag-switches-end --disable-webrtc-apm-in-audio-service

Driver Information

Initialization time	992
In-process GPU	false
Passthrough Command Decoder	false
Sandboxed	true
GPU0	VENDOR= 0x8086 [Intel Open Source Technology Center], DEVICE=0x29b2 [Mesa DRI Intel(R) Q35] *ACTIVE*
Optimus	false
AMD switchable	false
Driver vendor	Mesa
Driver version	20.0.4
GPU CUDA compute capability major version	0
Pixel shader version	1.20
Vertex shader version	1.20
Max. MSAA samples	0
Machine model name	
Machine model version	
GL_VENDOR	Intel Open Source Technology Center
GL_RENDERER	Mesa DRI Intel(R) Q35
GL_VERSION	1.4 Mesa 20.0.4
GL_EXTENSIONS	GL_ARB_multisample GL_EXT_abgr GL_EXT_bgra GL_EXT_blend_color GL_EXT_blend_minmax GL_EXT_blend_subtract GL_EXT_copy_texture GL_EXT_subtexture GL_EXT_texture_object

GL_EXT_vertex_array GL_EXT_compiled_vertex_array GL_EXT_texture
GL_EXT_texture3D GL_IBM_rasterpos_clip GL_ARB_point_parameters
GL_EXT_draw_range_elements GL_EXT_packed_pixels
GL_EXT_point_parameters GL_EXT_rescale_normal
GL_EXT_separate_specular_color GL_EXT_texture_edge_clamp
GL_SGIS_generate_mipmap GL_SGIS_texture_border_clamp
GL_SGIS_texture_edge_clamp GL_SGIS_texture_lod
GL_ARB_multitexture GL_IBM_multimode_draw_arrays
GL_IBM_texture_mirrored_repeat GL_3DFX_texture_compression_FXT1
GL_ARB_texture_cube_map GL_ARB_texture_env_add
GL_ARB_transpose_matrix GL_EXT_blend_func_separate
GL_EXT_fog_coord GL_EXT_multi_draw_arrays
GL_EXT_secondary_color GL_EXT_texture_env_add
GL_EXT_texture_filter_anisotropic GL_EXT_texture_lod_bias
GL_INGR_blend_func_separate GL_NV_blend_square
GL_NV_light_max_exponent GL_NV_texgen_reflection
GL_NV_texture_env_combine4 GL_S3_s3tc
GL_SUN_multi_draw_arrays GL_ARB_texture_border_clamp
GL_ARB_texture_compression GL_EXT_framebuffer_object
GL_EXT_texture_compression_s3tc GL_EXT_texture_env_combine
GL_EXT_texture_env_dot3 GL_MESA_window_pos
GL_NV_packed_depth_stencil GL_NV_texture_rectangle
GL_ARB_depth_texture GL_ARB_shadow
GL_ARB_texture_env_combine GL_ARB_texture_env_crossbar
GL_ARB_texture_env_dot3 GL_ARB_texture_mirrored_repeat
GL_ARB_window_pos GL_EXT_stencil_two_side
GL_EXT_texture_cube_map GL_APPLE_packed_pixels
GL_ARB_draw_buffers GL_ARB_fragment_program
GL_ARB_fragment_shader GL_ARB_shader_objects
GL_ARB_vertex_program GL_ARB_vertex_shader GL_ATI_draw_buffers
GL_ATI_texture_env_combine3 GL_EXT_shadow_funcs
GL_EXT_stencil_wrap GL_MESA_pack_invert GL_MESA_ycbcr_texture
GL_ARB_half_float_pixel GL_ARB_point_sprite
GL_ARB_shading_language_100 GL_ARB_sync
GL_ARB_texture_non_power_of_two GL_ARB_vertex_buffer_object
GL_ATI_blend_equation_separate GL_EXT_blend_equation_separate
GL_OES_read_format GL_ARB_pixel_buffer_object
GL_ARB_texture_rectangle GL_EXT_pixel_buffer_object
GL_EXT_texture_compression_dxt1 GL_EXT_texture_rectangle
GL_EXT_texture_sRGB GL_ARB_framebuffer_object
GL_EXT_framebuffer_blit GL_EXT_packed_depth_stencil
GL_APPLE_object_purgeable GL_ARB_vertex_array_object
GL_ATI_separate_stencil GL_EXT_gpu_program_parameters
GL_EXT_texture_sRGB_decode GL_OES_EGL_image
GL_ARB_copy_buffer GL_ARB_map_buffer_range
GL_ARB_ES2_compatibility GL_ARB_debug_output
GL_ARB_draw_elements_base_vertex GL_ARB_explicit_attrib_location
GL_ARB_provoking_vertex GL_ARB_sampler_objects
GL_EXT_provoking_vertex GL_ARB_get_program_binary
GL_ARB_robustness GL_ARB_separate_shader_objects
GL_EXT_direct_state_access GL_ANGLE_texture_compression_dxt3
GL_ANGLE_texture_compression_dxt5
GL_ARB_compressed_texture_pixel_storage
GL_ARB_internalformat_query GL_ARB_map_buffer_alignment
GL_ARB_texture_storage GL_AMD_shader_trinary_minmax
GL_ARB_clear_buffer_object GL_ARB_explicit_uniform_location
GL_ARB_invalidate_subdata GL_ARB_program_interface_query
GL_ARB_vertex_attrib_binding GL_KHR_debug GL_ARB_multi_bind

	GL_ARB_shading_language_include GL_ARB_get_texture_sub_image GL_KHR_context_flush_control GL_ARB_parallel_shader_compile GL_KHR_no_error GL_KHR_parallel_shader_compile GL_EXT_EGL_sync
Disabled Extensions	GL_KHR_blend_equation_advanced GL_KHR_blend_equation_advanced_coherent GL_MESA_framebuffer_flip_y
Disabled WebGL Extensions	
Window system binding vendor	SGI
Window system binding version	1.4
Window system binding extensions	GLX_ARB_create_context GLX_ARB_create_context_no_error GLX_ARB_create_context_profile GLX_ARB_fbconfig_float GLX_ARB_framebuffer_sRGB GLX_ARB_get_proc_address GLX_ARB_multisample GLX_EXT_create_context_es2_profile GLX_EXT_create_context_es_profile GLX_EXT_fbconfig_packed_float GLX_EXT_framebuffer_sRGB GLX_EXT_import_context GLX_EXT_texture_from_pixmap GLX_EXT_visual_info GLX_EXT_visual_rating GLX_INTEL_swap_event GLX_MESA_copy_sub_buffer GLX_MESA_query_renderer GLX_MESA_swap_control GLX_OML_swap_method GLX_OML_sync_control GLX_SGIS_multisample GLX_SGIX_fbconfig GLX_SGIX_pbuffer GLX_SGIX_visual_select_group GLX_SGI_make_current_read GLX_SGI_swap_control GLX_SGI_video_sync
Window manager	GNOME Shell
XDG_CURRENT_DESK	ubuntu:GNOME
GDMSESSION	ubuntu
Compositing manager	Yes
System visual ID	32
RGBA visual ID	155
Direct rendering version	DRI2
Reset notification strategy	0x8261
GPU process crash count	0
gfx::BufferFormats supported for allocation and texturing	R_8: not supported, R_16: not supported, RG_88: not supported, BGR_565: not supported, RGBA_4444: not supported, RGBX_8888: not supported, RGBA_8888: not supported, BGRX_8888: not supported, BGRA_1010102: not supported, RGBA_1010102: not supported, BGRA_8888: not supported, RGBA_F16: not supported, YVU_420: not supported, YUV_420_BIPLANAR: not supported, P010: not supported

Compositor Information

Tile Update Mode	One-copy
Partial Raster	Enabled

GpuMemoryBuffers Status

R_8	Software only
R_16	Software only

RG_88	Software only
BGR_565	Software only
RGBA_4444	Software only
RGBX_8888	Software only
RGBA_8888	Software only
BGRX_8888	Software only
BGRA_1010102	Software only
RGBA_1010102	Software only
BGRA_8888	Software only
RGBA_F16	Software only
YVU_420	Software only
YUV_420_BIPLANAR	Software only
P010	Software only

Display(s) Information

Info	Display[21442169663798851] bounds=[0,0 1280x1024], workarea=[0,27 1280x997], scale=1, rotation=0, panel_rotation=0 external.
Color space (all)	{primaries_d50_referred: [[0.6249, 0.3473], [0.3429, 0.5385], [0.1584, 0.1441]], transfer:IEC61966_2_1, matrix:RGB, range:FULL}
Buffer format (all)	BGRA_8888
SDR white level in nits	100
Bits per color component	8
Bits per pixel	24
Refresh Rate in Hz	60

Video Acceleration Information

Vulkan Information

Device Performance Information