



NVAPI SDK - PUBLIC FOR DRIVER RELEASE 367

RN-06118-367-v01 | May 2016

Release Notes



DOCUMENT CHANGE HISTORY

RN-06118-367-v01

Version	Date	Authors	Description of Change
01	5/10/2016	AP/CC	Initial release

NVAPI RELEASE NOTES

INTRODUCTION

NVAPI is NVIDIA's core software development kit that allows direct access to NVIDIA GPUs and drivers on all windows platforms. NVAPI provides support for categories of operations that range beyond the scope of those found in familiar graphics APIs such as DirectX and OpenGL. These release notes describe the changes made in the NVAPI public SDK for the Release 364 driver. The following are the provided files:

- ▶ nvapi.h
- ▶ nvapi_lite_common.h
- ▶ nvapi_lite_d3dext.h
- ▶ nvapi_lite_salend.h
- ▶ nvapi_lite_salstart.h
- ▶ nvapi_lite_sli.h
- ▶ nvapi_lite_stereo.h
- ▶ nvapi_lite_surround.h
- ▶ NvApiDriverSettings.c
- ▶ NvApiDriverSettings.h
- ▶ nvHLSLExtns.h
- ▶ nvHLSLExtnsInternal.h
- ▶ nvShaderExtnEnums.h
- ▶ nvapi.lib
- ▶ nvapi64.lib
- ▶ NVAPI_Reference_Developer.chm

CHANGES IN NVAPI FOR DRIVER RELEASE 367

- [Functions](#)
- [Structures](#)
- [Enums](#)
- [NVAPIDriverSettings Changes](#)
- [Sample Code](#)

Functions

- ▶ `NvAPI_Disp_GetHdrCapabilities`
- ▶ `NvAPI_Disp_HdrColorControl`
- ▶ `NvAPI_D3D_ConfigureAnsel`
- ▶ `NvAPI_D3D11_CreateGeometryShaderEx_2`
- ▶ `NvAPI_D3D11_CreateVertexShaderEx`
- ▶ `NvAPI_D3D11_CreateHullShaderEx`
- ▶ `NvAPI_D3D11_CreateDomainShaderEx`
- ▶ `NvAPI_D3D_QuerySinglePassStereoSupport`
- ▶ `NvAPI_D3D_SetSinglePassStereoMode`
- ▶ `NvAPI_D3D_QueryModifiedWSupport`
- ▶ `NvAPI_D3D_SetModifiedWMode`

TCC support added to the following functions:

- ▶ N/A

Structures

- ▶ `NV_HDR_CAPABILITIES`
- ▶ `NV_HDR_COLOR_DATA`
- ▶ `NVAPI_ANSEL_FEATURE_CONFIGURATION_STRUCT`
- ▶ `NVAPI_ANSEL_CONFIGURATION_STRUCT_V1`
- ▶ `NV_CUSTOM_SEMANTIC`
- ▶ `NvAPI_D3D11_CREATE_GEOMETRY_SHADER_EX_V5`
- ▶ `NvAPI_D3D11_CREATE_VERTEX_SHADER_EX_V1`
- ▶ `NvAPI_D3D11_CREATE_VERTEX_SHADER_EX_V2`
- ▶ `NvAPI_D3D11_CREATE_VERTEX_SHADER_EX_V3`

- ▶ NVAPI_D3D11_CREATE_HULL_SHADER_EX_V1
- ▶ NVAPI_D3D11_CREATE_HULL_SHADER_EX_V2
- ▶ NVAPI_D3D11_CREATE_DOMAIN_SHADER_EX_V1
- ▶ NVAPI_D3D11_CREATE_DOMAIN_SHADER_EX_V2
- ▶ NVAPI_D3D11_CREATE_DOMAIN_SHADER_EX_V3
- ▶ NV_QUERY_SINGLE_PASS_STEREO_SUPPORT_PARAMS_V1
- ▶ NV_QUERY_MODIFIED_W_SUPPORT_PARAMS_V1
- ▶ NV_MODIFIED_W_COEFFICIENTS
- ▶ NV_MODIFIED_W_PARAMS_V1
- ▶ NV_GET_CURRENT_SLI_STATE_V2

Enums

- ▶ NV_DP_8_10GBPS added to NV_DP_LINK_RATE
- ▶ NV_STATIC_METADATA_DESCRIPTOR_ID
- ▶ NV_HDR_CMD
- ▶ NV_HDR_MODE
- ▶ NVAPI_ANSEL_FEATURE
- ▶ NVAPI_ANSEL_FEATURE_STATE
- ▶ NVAPI_ANSEL_HOTKEY_MODIFIER

Deprecated NVAPI Functions

The following functions will be deprecated and replaced by new functions in coming releases:

Deprecated	Replaced By
N/A	N/A

NVAPIDriverSettings Additions/Removals

- ▶ OGL_VIDEO_EDITING_MODE_ID removed
- ▶ ANSEL_ALLOW_ID added to ESetting
- ▶ ANSEL_ENABLE_ID added to ESetting
- ▶ EXPORT_PERF_COUNTERS_DX9_ONLY_ID added to ESetting
- ▶ EValues_OGL_VIDEO_EDITING_MODE removed
- ▶ EValues_ANSEL_ALLOW

- ▶ EValues_ANSEL_ENABLE
- ▶ PREFERRED_PSTATE_OPTIMAL_POWER added to EValues_PREFERRED_PSTATE
- ▶ PS_FRAMERATE_LIMITER_2_CONTROL_DELAY_FLIP_BY_FLIPMETERING added to EValues_PS_FRAMERATE_LIMITER_2_CONTROL
- ▶ PS_FRAMERATE_MONITOR_CTRL_ENABLE_FINE_GRAINED added to EValues_PS_FRAMERATE_MONITOR_CTRL
- ▶ EValues_EXPORT_PERF_COUNTERS_DX9_ONLY
- ▶ VSYNCMODE_VIRTUAL added to EValues_VSYNCMODE

HLSL Extension Additions

- ▶ None

About the Sample Code

Sample code is provided with the SDK package that demonstrates the following features:

- ▶ CustomTiming
- ▶ DisplayConfiguration
- ▶ I2C
- ▶ Qudro Sync_Configuration

Notice

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.

Information furnished is believed to be accurate and reliable. However, NVIDIA Corporation assumes no responsibility for the consequences of use of such information or for any infringement of patents or other rights of third parties that may result from its use. No license is granted by implication of otherwise under any patent rights of NVIDIA Corporation. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all other information previously supplied. NVIDIA Corporation products are not authorized as critical components in life support devices or systems without express written approval of NVIDIA Corporation.

HDMI

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

ROVI Compliance Statement

NVIDIA Products that support Rovi Corporation's Revision 7.1.L1 Anti-Copy Process (ACP) encoding technology can only be sold or distributed to buyers with a valid and existing authorization from ROVI to purchase and incorporate the device into buyer's products.

This device is protected by U.S. patent numbers 6,516,132; 5,583,936; 6,836,549; 7,050,698; and 7,492,896 and other intellectual property rights. The use of ROVI Corporation's copy protection technology in the device must be authorized by ROVI Corporation and is intended for home and other limited pay-per-view uses only, unless otherwise authorized in writing by ROVI Corporation. Reverse engineering or disassembly is prohibited.

OpenCL

OpenCL is a trademark of Apple Inc. used under license to the Khronos Group Inc.

Trademarks

NVIDIA and the NVIDIA logo are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Other company and product names may be trademarks of the respective companies with which they are associated.

Copyright

© 2016 NVIDIA Corporation. All rights reserved.