

NVAPI SDK - PUBLIC FOR DRIVER RELEASE 378

RN-06118-378-v01 | February 2017

Release Notes



DOCUMENT CHANGE HISTORY

RN-06118-378-v01

Version	Date	Authors	Description of Change
01	2/03/2017	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 378 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
- NVAPI SDKs Samples and Tools License Agreement (Public).pdf

CHANGES IN NVAPI FOR DRIVER RELEASE 378

Functions

- NvAPI_D3D11_CreateTiledTexture2DArray
- NvAPI D3D11 TiledTexture2DArrayGetDesc
- NvAPI_D3D11_UpdateTileMappings
- NvAPI_D3D11_CopyTileMappings
- ▶ NvAPI D3D11 TiledResourceBarrier
- NvAPI D3D12 CreateReservedResource
- NvAPI_D3D12_CreateHeap *
- NvAPI_D3D12_ReservedResourceGetDesc
- NvAPI_D3D12_UpdateTileMappings
- NvAPI_D3D12_CopyTileMappings
- ► NvAPI_D3D12_ResourceAliasingBarrier

TCC support added to the following functions:

► N/A

Structures

- ▶ isYCrCb420Supported added to NV_DISPLAY_PORT_INFO_V1
- ▶ isYCbCr420SupportedOnCurrentMode added to NV_DISPLAY_PORT_INFO_V1

Enums

- ► NVAPI_PRIV_SEC_VIOLATION added to NvAPI_Status
- ▶ NVAPI INCORRECT VENDOR added to NvAPI Status
- ▶ NVAPI DISPLAY IN USE added to NvAPI Status
- ▶ NVAPI_UNSUPPORTED_CONFIG_NON_HDCP_HMD added to NvAPI_Status
- ▶ NVAPI_MAX_DISPLAY_LIMIT_REACHED added to NvAPI_Status
- ▶ NVAPI INVALID DIRECT MODE DISPLAY added to NvAPI Status

Deprecated NVAPI Functions

The following functions will be deprecated in coming releases:

Deprecated	Replaced By
N/A	

NVAPIDriverSettings Additions/Removals

- ▶ PS_FRAMERATE_LIMITER_FORCE_OPTIMUS_POLICY removed from EValues PS FRAMERATE LIMITER
- ▶ PS FRAMERATE LIMITER THRESHOLD removed from EValues_PS_FRAMERATE_LIMITER
- ▶ PS_FRAMERATE_LIMITER_TEMPERATURE removed from EValues_PS_FRAMERATE_LIMITER
- ▶ PS FRAMERATE LIMITER POWER removed from EValues_PS_FRAMERATE_LIMITER
- ▶ PS FRAMERATE LIMITER MODEMASK removed from EValues_PS_FRAMERATE_LIMITER
- ▶ PS FRAMERATE LIMITER_2_CONTROL_ENABLE_VCE added to EValues_PS_FRAMERATE_LIMITER_2_CONTROL

HLSL Extension Additions

NvLoadUavTyped

About the Sample Code

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

- CustomTiming
- DisplayConfiguration
- ► I2C
- Quadro 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

© 2017 NVIDIA Corporation. All rights reserved.

