



NVAPI SDK - PUBLIC FOR DRIVER RELEASE 352

RN-06118-352-v01 | June 2015

Release Notes



DOCUMENT CHANGE HISTORY

RN-06118-352-v01

Version	Date	Authors	Description of Change
01	6/01/2014	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 352 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 352

- [Functions](#)
- [Structures](#)
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- [Deprecated NVAPI Functions](#)
- [NVAPIDriverSettings Changes](#)
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Functions

- ▶ `NvAPI_GPU_SetScanoutCompositionParameter`
- ▶ `NvAPI_GPU_GetScanoutCompositionParameter`
- ▶ `NvAPI_D3D11_BeginUAVOverlapEx`

TCC support added to the following functions:

- ▶ N/A

Structures

- ▶ `disableVirtualModeSupport` added to `NV_DISPLAYCONFIG_PATH_ADVANCED_TARGET_INFO_V1`
- ▶ `isPreferredUnscaledTarget` added to `NV_DISPLAYCONFIG_PATH_ADVANCED_TARGET_INFO_V1`
- ▶ `isPhysicallyConnected` added to `NV_GPU_DISPLAYIDS`
- ▶ `isRgb444SupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `isYCbCr444SupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `isYCbCr422SupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `is6BPCSupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `is8BPCSupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `is10BPCSupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `is12BPCSupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `is16BPCSupportedOnCurrentMode` added to `NV_DISPLAY_PORT_INFO_V1`
- ▶ `NV_COLOR_DATA_V2`
- ▶ `NV_COLOR_DATA_V3`
- ▶ `NV_MOSAIC_GRID_TOPO_DISPLAY_V2`

- ▶ NV_MOSAIC_GRID_TOPO_V2

Enums

- ▶ NVAPI_GPU_PUBLIC_CLOCK_VIDEO added to NV_GPU_PUBLIC_CLOCK_ID
- ▶ NV_GPU_SCANOUT_COMPOSITION_PARAMETER
- ▶ NV_GPU_SCANOUT_COMPOSITION_PARAMETER_VALUE
- ▶ NV_COLOR_COLORIMETRY_BT2020RGB added to NV_COLOR_COLORIMETRY
- ▶ NV_COLOR_COLORIMETRY_BT2020YCC added to NV_COLOR_COLORIMETRY
- ▶ NV_COLOR_COLORIMETRY_BT2020cYCC added to NV_COLOR_COLORIMETRY
- ▶ NV_DYNAMIC_RANGE
- ▶ NV_BPC
- ▶ NV_PIXEL_SHIFT_TYPE
- ▶ NVAPI_D3D11_INSERTWFI_FLAG
- ▶ NVAPI_FIRMWARE_OUT_OF_DATE added to NvAPI_Status
- ▶ NVAPI_FIRMWARE_REVISION_NOT_SUPPORTED added to NvAPI_Status

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

- ▶ EValues_NV_QUALITY_UPSCALING
- ▶ EValues_VRR_APP_OVERRIDE
- ▶ EValues_VRR_MODE
- ▶ SHIM_RENDERING_OPTIONS_ENABLE_NEW_HOOKING changed to SHIM_RENDERING_OPTIONS_IGPU_TRANSCODING_FWD_OPTIMUS
- ▶ SHIM_RENDERING_OPTIONS_HANDLE_WIN7_ASYNC_RUNTIME_BUG added to EValues_SHIM_RENDERING_OPTIONS
- ▶ VRRREQUESTSTATE_ENABLED changed to VRRREQUESTSTATE_FULLSCREEN_ONLY

- ▶ VRRREQUESTSTATE_FULLSCREEN_AND_WINDOWED added to EValues_VRRREQUESTSTATE
- ▶ NV_QUALITY_UPSCALING_ID added to ESetting
- ▶ VRR_APP_OVERRIDE_ID added to ESetting
- ▶ VRR_MODE_ID added to ESetting

HLSL Extension Additions

- ▶ N/A

About the Sample Code

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

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

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