**New Functions:**

Added NvAPI\_SYS\_GetPhysicalGPUs

Added NvAPI\_SYS\_GetLogicalGPUs

**New Structures:**

Added rsvd0 to NV\_LATENCY\_MARKER\_PARAMS\_V1

Added NV\_ASYNC\_FRAME\_MARKER\_PARAMS\_V1

Added NV\_PHYSICAL\_GPU\_HANDLE\_DATA

Added NV\_PHYSICAL\_GPUS\_V1

Added NV\_LOGICAL\_GPU\_HANDLE\_DATA

Added NV\_LOGICAL\_GPUS\_V1

**New Enums:**

Added OUT\_OF\_BAND\_IGNORE to NV\_OUT\_OF\_BAND\_CQ\_TYPE

Added NV\_ADAPTER\_TYPE

**New Unions:**

**New MACRO:**

**New Errors:**

**TCC Support:**

**MCDM Support:**

NvAPI\_GetPhysicalGPUFromGPUID

NvAPI\_GetGPUIDfromPhysicalGPU

NvAPI\_GPU\_GetShaderSubPipeCount

NvAPI\_GPU\_GetGpuCoreCount

NvAPI\_GPU\_GetSystemType

NvAPI\_GPU\_GetFullName

NvAPI\_GPU\_GetPCIIdentifiers

NvAPI\_GPU\_GetGPUType

NvAPI\_GPU\_GetBusType

NvAPI\_GPU\_GetBusId

NvAPI\_GPU\_GetBusSlotId

NvAPI\_GPU\_GetIRQ

NvAPI\_GPU\_GetVbiosRevision

NvAPI\_GPU\_GetVbiosOEMRevision

NvAPI\_GPU\_GetVbiosVersionString

NvAPI\_GPU\_GetCurrentPCIEDownstreamWidth

NvAPI\_GPU\_GetPhysicalFrameBufferSize

NvAPI\_GPU\_GetVirtualFrameBufferSize

NvAPI\_GPU\_GetBoardInfo

NvAPI\_GPU\_GetRamBusWidth

NvAPI\_GPU\_GetArchInfo

NvAPI\_GPU\_GetHDCPSupportStatus

NvAPI\_GPU\_GetTachReading

NvAPI\_GPU\_GetECCStatusInfo

NvAPI\_GPU\_GetECCErrorInfo

NvAPI\_GPU\_ResetECCErrorInfo

NvAPI\_GPU\_GetECCConfigurationInfo

NvAPI\_GPU\_SetECCConfiguration

NvAPI\_GPU\_GetVirtualizationInfo

NvAPI\_GPU\_GetLicensableFeatures

NvAPI\_GPU\_GetGPUInfo

NvAPI\_GPU\_GetVRReadyData

NvAPI\_GPU\_GetGspFeatures

NvAPI\_GPU\_GetPstates20

NvAPI\_GPU\_GetCurrentPstate

NvAPI\_GPU\_GetDynamicPstatesInfoEx

NvAPI\_GPU\_GetThermalSettings

NvAPI\_GPU\_GetAllClockFrequencies

NvAPI\_GPU\_QueryIlluminationSupport

NvAPI\_GPU\_GetIllumination

NvAPI\_GPU\_SetIllumination

NvAPI\_GPU\_ClientIllumDevicesGetInfo

NvAPI\_GPU\_ClientIllumDevicesGetControl

NvAPI\_GPU\_ClientIllumDevicesSetControl

NvAPI\_GPU\_ClientIllumZonesGetInfo

NvAPI\_GPU\_ClientIllumZonesGetControl

NvAPI\_GPU\_ClientIllumZonesSetControl

NvAPI\_SYS\_GetPhysicalGPUs

NvAPI\_SYS\_GetLogicalGPUs

NvAPI\_GPU\_GetMemoryInfoEx

**NVAPI Security Info:**

**Deprecation NvAPI functions:**

**Deprecation Enum values:**

**NvAPIDriverSettings additions/ removal:**

Removed WKS\_MEMORY\_ALLOCATION\_POLICY\_ID

**HLSL Extentions:**

Below header files are provided to expose intrinsic functions which are not present in HLSL instruction set. For more details please refer to [https://developer.nvidia.com/blog/unlocking-gpu-intrinsics-in-hlsl/](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdeveloper.nvidia.com%2Fblog%2Funlocking-gpu-intrinsics-in-hlsl%2F&data=05%7C02%7Csujatas%40nvidia.com%7Cccff477a594148532e7908dc852a5466%7C43083d15727340c1b7db39efd9ccc17a%7C0%7C0%7C638531664063744643%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=2VF54lrQTXOR5pXmNEmgJmuZ70c8eclyBkBazAX3Whg%3D&reserved=0).

**nvShaderExtnEnums.h** – This header file contains all the Shader extensions opcodes. The application should call NvAPI\_D3D12\_IsNvShaderExtnOpCodeSupported() / NvAPI\_D3D11\_IsNvShaderExtnOpCodeSupported() to check for support for these NV shader extension opcodes.  
**nvHLSLExtns.h** – This header file needs to be included in the application HLSL shader code to make use of Nvidia shader extensions.  
**nvHLSLExtnsInternal.h** – These are internal functions not expected to be called by application directly.