AMD ROCm™

HIP-Supported CUDA API Reference Guide

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Chapter 1 HIP-Supported CUDA API

This reference guide consists of CUDA APIs supported in HIP and covers the Driver API, Runtime API, cuComplex API, Device API, and APIs for the following supported libraries:

- cuBLAS
- cuRAND
- cuFFT
- cuSPARSE
- cuDNN

NOTE:

- Deprecated APIs are identified and marked in the D column.
- Experimental APIs are identified and marked in the E column.

For details about HIP APIs, see the HIP API Guide at

https://github.com/RadeonOpenCompute/ROCm/blob/master/AMD-HIP-API-4.5.pdf

1.1   CUDA Driver API Supported by HIP

1.1.1   CUDA Driver Data Types

CUDA	D	HIP	D	E
CUDA_ARRAY3D_CUBEMAP		hipArrayCubemap		
CUDA_ARRAY3D_DESCRIPTOR		HIP_ARRAY3D_DESCRIPTOR		
CUDA_ARRAY3D_DESCRIPTOR_st		HIP_ARRAY3D_DESCRIPTOR		
CUDA_ARRAY3D_DESCRIPTOR_v2		HIP_ARRAY3D_DESCRIPTOR		
CUDA_ARRAY3D_LAYERED		hipArrayLayered		
CUDA_ARRAY3D_SURFACE_LDST		hipArraySurfaceLoadStore		
CUDA_ARRAY3D_TEXTURE_GATHER		hipArrayTextureGather		
CUDA_ARRAY_DESCRIPTOR		HIP_ARRAY_DESCRIPTOR		
CUDA_ARRAY_DESCRIPTOR_st		HIP_ARRAY_DESCRIPTOR		
CUDA_ARRAY_DESCRIPTOR_v1		HIP_ARRAY_DESCRIPTOR		
CUDA_ARRAY_DESCRIPTOR_v1_st		HIP_ARRAY_DESCRIPTOR		
CUDA_ARRAY_DESCRIPTOR_v2		HIP_ARRAY_DESCRIPTOR		
CUDA_COOPERATIVE_LAUNCH_MULTI_DEVICE_NO_POST_LAUNCH_SYNC		hipCooperativeLaunchMultiDeviceNoPostSync		
CUDA_COOPERATIVE_LAUNCH_MULTI_DEVICE_NO_PRE_LAUNCH_SYNC		hipCooperativeLaunchMultiDeviceNoPreSync		
CUDA_ERROR_ALREADY_ACQUIRED		hipErrorAlreadyAcquired		
CUDA_ERROR_ALREADY_MAPPED		hipErrorAlreadyMapped		
CUDA_ERROR_ARRAY_IS_MAPPED		hipErrorArrayIsMapped		
CUDA_ERROR_ASSERT		hipErrorAssert		
CUDA_ERROR_CAPTURED_EVENT		hipErrorCapturedEvent		
CUDA_ERROR_CONTEXT_ALREADY_CURRENT	+	hipErrorContextAlreadyCurrent		
CUDA_ERROR_CONTEXT_ALREADY_IN_USE		hipErrorContextAlreadyInUse		
CUDA_ERROR_CONTEXT_IS_DESTROYED		hipErrorContextIsDestroyed		
CUDA_ERROR_COOPERATIVE_LAUNCH_TOO_LARGE		hipErrorCooperativeLaunchTooLarge		
CUDA_ERROR_DEINITIALIZED		hipErrorDeinitialized		
CUDA_ERROR_ECC_UNCORRECTABLE		hipErrorECCNotCorrectable		
CUDA_ERROR_FILE_NOT_FOUND		hipErrorFileNotFound		
CUDA_ERROR_HOST_MEMORY_ALREADY_REGISTERED		hipErrorHostMemoryAlreadyRegistered		

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CUDA_ERROR_HOST_MEMORY_NOT_REGISTERED		hipErrorHostMemoryNotRegistered		
CUDA_ERROR_ILLEGAL_ADDRESS		hipErrorIllegalAddress		
CUDA_ERROR_INVALID_CONTEXT		hipErrorInvalidContext		
CUDA_ERROR_INVALID_DEVICE		hipErrorInvalidDevice		
CUDA_ERROR_INVALID_GRAPHICS_CONTEXT		hipErrorInvalidGraphicsContext		
CUDA_ERROR_INVALID_HANDLE		hipErrorInvalidHandle		
CUDA_ERROR_INVALID_IMAGE		hipErrorInvalidImage		
CUDA_ERROR_INVALID_PTX		hipErrorInvalidKernelFile		
CUDA_ERROR_INVALID_SOURCE		hipErrorInvalidSource		
CUDA_ERROR_INVALID_VALUE		hipErrorInvalidValue		
CUDA_ERROR_LAUNCH_FAILED		hipErrorLaunchFailure		
CUDA_ERROR_LAUNCH_OUT_OF_RESOURCES		hipErrorLaunchOutOfResources		
CUDA_ERROR_LAUNCH_TIMEOUT		hipErrorLaunchTimeOut		
CUDA_ERROR_MAP_FAILED		hipErrorMapFailed		
CUDA_ERROR_NOT_FOUND		hipErrorNotFound		
CUDA_ERROR_NOT_INITIALIZED		hipErrorNotInitialized		
CUDA_ERROR_NOT_MAPPED		hipErrorNotMapped		
CUDA_ERROR_NOT_MAPPED_AS_ARRAY		hipErrorNotMappedAsArray		
CUDA_ERROR_NOT_MAPPED_AS_POINTER		hipErrorNotMappedAsPointer		
CUDA_ERROR_NOT_READY		hipErrorNotReady		
CUDA_ERROR_NOT_SUPPORTED		hipErrorNotSupported		
CUDA_ERROR_NO_BINARY_FOR_GPU		hipErrorNoBinaryForGpu		
CUDA_ERROR_NO_DEVICE		hipErrorNoDevice		
CUDA_ERROR_OPERATING_SYSTEM		hipErrorOperatingSystem		
CUDA_ERROR_OUT_OF_MEMORY		hipErrorOutOfMemory		
CUDA_ERROR_PEER_ACCESS_ALREADY_ENABLED		hipErrorPeerAccessAlreadyEnabled		
CUDA_ERROR_PEER_ACCESS_NOT_ENABLED		hipErrorPeerAccessNotEnabled		
CUDA_ERROR_PEER_ACCESS_UNSUPPORTED		hipErrorPeerAccessUnsupported		
CUDA_ERROR_PRIMARY_CONTEXT_ACTIVE		hipErrorSetOnActiveProcess		
CUDA_ERROR_PROFILER_ALREADY_STARTED	+	hipErrorProfilerAlreadyStarted		
CUDA_ERROR_PROFILER_ALREADY_STOPPED	+	hipErrorProfilerAlreadyStopped		
CUDA_ERROR_PROFILER_DISABLED		hipErrorProfilerDisabled		
CUDA_ERROR_PROFILER_NOT_INITIALIZED	+	hipErrorProfilerNotInitialized		
CUDA_ERROR_SHARED_OBJECT_INIT_FAILED		hipErrorSharedObjectInitFailed		

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CUDA_ERROR_SHARED_OBJECT_SYMBOL_NOT_FOUND		hipErrorSharedObjectSymbolNotFound		
CUDA_ERROR_STREAM_CAPTURE_IMPLICIT		hipErrorStreamCaptureImplicit		
CUDA_ERROR_STREAM_CAPTURE_INVALIDATED		hipErrorStreamCaptureInvalidated		
CUDA_ERROR_STREAM_CAPTURE_ISOLATION		hipErrorStreamCaptureIsolation		
CUDA_ERROR_STREAM_CAPTURE_MERGE		hipErrorStreamCaptureMerge		
CUDA_ERROR_STREAM_CAPTURE_UNJOINED		hipErrorStreamCaptureUnjoined		
CUDA_ERROR_STREAM_CAPTURE_UNMATCHED		hipErrorStreamCaptureUnmatched		
CUDA_ERROR_STREAM_CAPTURE_UNSUPPORTED		hipErrorStreamCaptureUnsupported		
CUDA_ERROR_STREAM_CAPTURE_WRONG_THREAD		hipErrorStreamCaptureWrongThread		
CUDA_ERROR_UNKNOWN		hipErrorUnknown		
CUDA_ERROR_UNMAP_FAILED		hipErrorUnmapFailed		
CUDA_ERROR_UNSUPPORTED_LIMIT		hipErrorUnsupportedLimit		
CUDA_EXTERNAL_MEMORY_BUFFER_DESC		hipExternalMemoryBufferDesc		
CUDA_EXTERNAL_MEMORY_BUFFER_DESC_st		hipExternalMemoryBufferDesc_st		
CUDA_EXTERNAL_MEMORY_BUFFER_DESC_v1		hipExternalMemoryBufferDesc		
CUDA_EXTERNAL_MEMORY_HANDLE_DESC		hipExternalMemoryHandleDesc		
CUDA_EXTERNAL_MEMORY_HANDLE_DESC_st		hipExternalMemoryHandleDesc_st		
CUDA_EXTERNAL_MEMORY_HANDLE_DESC_v1		hipExternalMemoryHandleDesc		
CUDA_EXTERNAL_SEMAPHORE_HANDLE_DESC		hipExternalSemaphoreHandleDesc		
CUDA_EXTERNAL_SEMAPHORE_HANDLE_DESC_st		hipExternalSemaphoreHandleDesc_st		
CUDA_EXTERNAL_SEMAPHORE_HANDLE_DESC_v1		hipExternalSemaphoreHandleDesc		
CUDA_EXTERNAL_SEMAPHORE_SIGNAL_PARAMS		hipExternalSemaphoreSignalParams		
CUDA_EXTERNAL_SEMAPHORE_SIGNAL_PARAMS_st		hipExternalSemaphoreSignalParams_st		
CUDA_EXTERNAL_SEMAPHORE_SIGNAL_PARAMS_v1		hipExternalSemaphoreSignalParams		
CUDA_EXTERNAL_SEMAPHORE_WAIT_PARAMS		hipExternalSemaphoreWaitParams		
CUDA_EXTERNAL_SEMAPHORE_WAIT_PARAMS_st		hipExternalSemaphoreWaitParams_st		
CUDA_EXTERNAL_SEMAPHORE_WAIT_PARAMS_v1		hipExternalSemaphoreWaitParams		

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CUDA_HOST_NODE_PARAMS		hipHostNodeParams		
CUDA_HOST_NODE_PARAMS_st		hipHostNodeParams		
CUDA_HOST_NODE_PARAMS_v1		hipHostNodeParams		
CUDA_KERNEL_NODE_PARAMS		hipKernelNodeParams		
CUDA_KERNEL_NODE_PARAMS_st		hipKernelNodeParams		
CUDA_KERNEL_NODE_PARAMS_v1		hipKernelNodeParams		
CUDA_MEMCPY2D		hip_Memcpy2D		
CUDA_MEMCPY2D_st		hip_Memcpy2D		
CUDA_MEMCPY2D_v1		hip_Memcpy2D		
CUDA_MEMCPY2D_v1_st		hip_Memcpy2D		
CUDA_MEMCPY2D_v2		hip_Memcpy2D		
CUDA_MEMCPY3D		HIP_MEMCPY3D		
CUDA_MEMCPY3D_st		HIP_MEMCPY3D		
CUDA_MEMCPY3D_v1		HIP_MEMCPY3D		
CUDA_MEMCPY3D_v1_st		HIP_MEMCPY3D		
CUDA_MEMCPY3D_v2		HIP_MEMCPY3D		
CUDA_RESOURCE_DESC		HIP_RESOURCE_DESC		
CUDA_RESOURCE_DESC_st		HIP_RESOURCE_DESC_st		
CUDA_RESOURCE_DESC_v1		HIP_RESOURCE_DESC		
CUDA_RESOURCE_VIEW_DESC		HIP_RESOURCE_VIEW_DESC		
CUDA_RESOURCE_VIEW_DESC_st		HIP_RESOURCE_VIEW_DESC_st		
CUDA_RESOURCE_VIEW_DESC_v1		HIP_RESOURCE_VIEW_DESC		
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CUDA_TEXTURE_DESC		HIP_TEXTURE_DESC		
CUDA_TEXTURE_DESC_st		HIP_TEXTURE_DESC_st		
CUDA_TEXTURE_DESC_v1		HIP_TEXTURE_DESC		
CUDA_VERSION		HIP_VERSION		
CU_AD_FORMAT_FLOAT		HIP_AD_FORMAT_FLOAT		
CU_AD_FORMAT_HALF		HIP_AD_FORMAT_HALF		
CU_AD_FORMAT_SIGNED_INT16		HIP_AD_FORMAT_SIGNED_INT16		
CU_AD_FORMAT_SIGNED_INT32		HIP_AD_FORMAT_SIGNED_INT32		
CU_AD_FORMAT_SIGNED_INT8		HIP_AD_FORMAT_SIGNED_INT8		
CU_AD_FORMAT_UNSIGNED_INT16		HIP_AD_FORMAT_UNSIGNED_INT16		
CU_AD_FORMAT_UNSIGNED_INT32		HIP_AD_FORMAT_UNSIGNED_INT32		

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CU_AD_FORMAT_UNSIGNED_INT8		HIP_AD_FORMAT_UNSIGNED_INT8		
CU_COMPUTEMODE_DEFAULT		hipComputeModeDefault		
CU_COMPUTEMODE_EXCLUSIVE		hipComputeModeExclusive		
CU_COMPUTEMODE_EXCLUSIVE_PROCESS		hipComputeModeExclusiveProcess		
CU_COMPUTEMODE_PROHIBITED		hipComputeModeProhibited		
CU_CTX_BLOCKING_SYNC	+	hipDeviceScheduleBlockingSync		
CU_CTX_LMEM_RESIZE_TO_MAX		hipDeviceLmemResizeToMax		
CU_CTX_MAP_HOST		hipDeviceMapHost		
CU_CTX_SCHED_AUTO		hipDeviceScheduleAuto		
CU_CTX_SCHED_BLOCKING_SYNC		hipDeviceScheduleBlockingSync		
CU_CTX_SCHED_MASK		hipDeviceScheduleMask		
CU_CTX_SCHED_SPIN		hipDeviceScheduleSpin		
CU_CTX_SCHED_YIELD		hipDeviceScheduleYield		
CU_DEVICE_ATTRIBUTE_ASYNC_ENGINE_COUNT		hipDeviceAttributeAsyncEngineCount		
CU_DEVICE_ATTRIBUTE_CAN_MAP_HOST_MEMORY		hipDeviceAttributeCanMapHostMemory		
CU_DEVICE_ATTRIBUTE_CAN_USE_HOST_POINTER_FOR_REGISTERED_MEM		hipDeviceAttributeCanUseHostPointerForRegisteredMem		
CU_DEVICE_ATTRIBUTE_CAN_USE_STREAM_WAIT_VALUE_NOR		hipDeviceAttributeCanUseStreamWaitValue		
CU_DEVICE_ATTRIBUTE_CLOCK_RATE		hipDeviceAttributeClockRate		
CU_DEVICE_ATTRIBUTE_COMPUTE_CAPABILITY_MAJOR		hipDeviceAttributeComputeCapabilityMajor		
CU_DEVICE_ATTRIBUTE_COMPUTE_CAPABILITY_MINOR		hipDeviceAttributeComputeCapabilityMinor		
CU_DEVICE_ATTRIBUTE_COMPUTE_MODE		hipDeviceAttributeComputeMode		
CU_DEVICE_ATTRIBUTE_COMPUTE_PREEMPTION_SUPPORTED		hipDeviceAttributeComputePreemptionSupported		
CU_DEVICE_ATTRIBUTE_CONCURRENT_KERNELS		hipDeviceAttributeConcurrentKernels		
CU_DEVICE_ATTRIBUTE_CONCURRENT_MANAGED_ACCESS		hipDeviceAttributeConcurrentManagedAccess		
CU_DEVICE_ATTRIBUTE_COOPERATIVE_LAUNCH		hipDeviceAttributeCooperativeLaunch		
CU_DEVICE_ATTRIBUTE_COOPERATIVE_MULTI_DEVICE_LAUNCH		hipDeviceAttributeCooperativeMultiDeviceLaunch		

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CU_DEVICE_ATTRIBUTE_DIRECT_MAN AGED_MEM_ACCESS_FROM_HOST		hipDeviceAttributeDirect ManagedMemAccessFro mHost		
CU_DEVICE_ATTRIBUTE_ECC_ENABLE D		hipDeviceAttributeEccEn abled		
CU_DEVICE_ATTRIBUTE_GLOBAL_L1_C ACHE_SUPPORTED		hipDeviceAttributeGlobal L1CacheSupported		
CU_DEVICE_ATTRIBUTE_GLOBAL_ME MORY_BUS_WIDTH		hipDeviceAttributeMemor yBusWidth		
CU_DEVICE_ATTRIBUTE_GPU_OVERLA P	+	hipDeviceAttributeAsync EngineCount		
CU_DEVICE_ATTRIBUTE_HOST_NATIVE _ATOMIC_SUPPORTED		hipDeviceAttributeHostN ativeAtomicSupported		
CU_DEVICE_ATTRIBUTE_INTEGRATED		hipDeviceAttributeIntegra ted		
CU_DEVICE_ATTRIBUTE_KERNEL_EXE C_TIMEOUT		hipDeviceAttributeKernel ExecTimeout		
CU_DEVICE_ATTRIBUTE_L2_CACHE_SI ZE		hipDeviceAttributeL2Cac heSize		
CU_DEVICE_ATTRIBUTE_LOCAL_L1_CA CHE_SUPPORTED		hipDeviceAttributeLocalL 1CacheSupported		
CU_DEVICE_ATTRIBUTE_MANAGED_M EMORY		hipDeviceAttributeManag edMemory		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE1D_LAYERED_WIDTH		hipDeviceAttributeMaxSu rface1DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE1D_WIDTH		hipDeviceAttributeMaxSu rface1D		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE2D_HEIGHT		hipDeviceAttributeMaxSu rface2D		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE2D_LAYERED_HEIGHT		hipDeviceAttributeMaxSu rface2DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE2D_LAYERED_WIDTH		hipDeviceAttributeMaxSu rface2DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE2D_WIDTH		hipDeviceAttributeMaxSu rface2D		
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CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE3D_HEIGHT		hipDeviceAttributeMaxSu rface3D		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACE3D_WIDTH		hipDeviceAttributeMaxSu rface3D		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACECUBEMAP_LAYERED_WIDTH		hipDeviceAttributeMaxSu rfaceCubemapLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_S URFACECUBEMAP_WIDTH		hipDeviceAttributeMaxSu rfaceCubemap		

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CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE1D_LAYERED_WIDTH		hipDeviceAttributeMaxTexture1DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE1D_LINEAR_WIDTH	+	hipDeviceAttributeMaxTexture1DLinear		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE1D_MIPMAPPED_WIDTH		hipDeviceAttributeMaxTexture1DMipmap		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE1D_WIDTH		hipDeviceAttributeMaxTexture1DWidth		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_ARRAY_HEIGHT	+	hipDeviceAttributeMaxTexture2DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_ARRAY_WIDTH	+	hipDeviceAttributeMaxTexture2DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_GATHER_HEIGHT		hipDeviceAttributeMaxTexture2DGather		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_GATHER_WIDTH		hipDeviceAttributeMaxTexture2DGather		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_HEIGHT		hipDeviceAttributeMaxTexture2DHeight		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_LAYERED_HEIGHT		hipDeviceAttributeMaxTexture2DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_LAYERED_WIDTH		hipDeviceAttributeMaxTexture2DLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_LINEAR_HEIGHT		hipDeviceAttributeMaxTexture2DLinear		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_LINEAR_PITCH		hipDeviceAttributeMaxTexture2DLinear		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_LINEAR_WIDTH		hipDeviceAttributeMaxTexture2DLinear		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_MIPMAPPED_HEIGHT		hipDeviceAttributeMaxTexture2DMipmap		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_MIPMAPPED_WIDTH		hipDeviceAttributeMaxTexture2DMipmap		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE2D_WIDTH		hipDeviceAttributeMaxTexture2DWidth		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE3D_DEPTH		hipDeviceAttributeMaxTexture3DDepth		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE3D_DEPTH_ALTERNATE		hipDeviceAttributeMaxTexture3DAlt		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE3D_HEIGHT		hipDeviceAttributeMaxTexture3DHeight		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE3D_HEIGHT_ALTERNATE		hipDeviceAttributeMaxTexture3DAlt		

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CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE3D_WIDTH		hipDeviceAttributeMaxTexture3DWidth		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURE3D_WIDTH_ALTERNATE		hipDeviceAttributeMaxTexture3DAlt		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURECUBEMAP_LAYERED_WIDTH		hipDeviceAttributeMaxTextureCubemapLayered		
CU_DEVICE_ATTRIBUTE_MAXIMUM_TEXTURECUBEMAP_WIDTH		hipDeviceAttributeMaxTextureCubemap		
CU_DEVICE_ATTRIBUTE_MAX_BLOCKS_PER_MULTIPROCESSOR		hipDeviceAttributeMaxBlocksPerMultiprocessor		
CU_DEVICE_ATTRIBUTE_MAX_BLOCK_DIM_X		hipDeviceAttributeMaxBlockDimX		
CU_DEVICE_ATTRIBUTE_MAX_BLOCK_DIM_Y		hipDeviceAttributeMaxBlockDimY		
CU_DEVICE_ATTRIBUTE_MAX_BLOCK_DIM_Z		hipDeviceAttributeMaxBlockDimZ		
CU_DEVICE_ATTRIBUTE_MAX_GRID_DIM_X		hipDeviceAttributeMaxGridDimX		
CU_DEVICE_ATTRIBUTE_MAX_GRID_DIM_Y		hipDeviceAttributeMaxGridDimY		
CU_DEVICE_ATTRIBUTE_MAX_GRID_DIM_Z		hipDeviceAttributeMaxGridDimZ		
CU_DEVICE_ATTRIBUTE_MAX_PITCH		hipDeviceAttributeMaxPitch		
CU_DEVICE_ATTRIBUTE_MAX_REGISTERS_PER_BLOCK		hipDeviceAttributeMaxRegistersPerBlock		
CU_DEVICE_ATTRIBUTE_MAX_REGISTERS_PER_MULTIPROCESSOR		hipDeviceAttributeMaxRegistersPerMultiprocessor		
CU_DEVICE_ATTRIBUTE_MAX_SHARED_MEMORY_PER_BLOCK		hipDeviceAttributeMaxSharedMemoryPerBlock		
CU_DEVICE_ATTRIBUTE_MAX_SHARED_MEMORY_PER_BLOCK_OPTIN		hipDeviceAttributeSharedMemPerBlockOptin		
CU_DEVICE_ATTRIBUTE_MAX_SHARED_MEMORY_PER_MULTIPROCESSOR		hipDeviceAttributeMaxSharedMemoryPerMultiprocessor		
CU_DEVICE_ATTRIBUTE_MAX_THREADS_PER_BLOCK		hipDeviceAttributeMaxThreadsPerBlock		
CU_DEVICE_ATTRIBUTE_MAX_THREADS_PER_MULTIPROCESSOR		hipDeviceAttributeMaxThreadsPerMultiProcessor		
CU_DEVICE_ATTRIBUTE_MEMORY_CLOCK_RATE		hipDeviceAttributeMemoryClockRate		
CU_DEVICE_ATTRIBUTE_MULTIPROCESSOR_COUNT		hipDeviceAttributeMultiprocessorCount		
CU_DEVICE_ATTRIBUTE_MULTI_GPU_BOARD		hipDeviceAttributeIsMultiGpuBoard		
CU_DEVICE_ATTRIBUTE_MULTI_GPU_BOARD_GROUP_ID		hipDeviceAttributeMultiGpuBoardGroupId		

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CU_DEVICE_ATTRIBUTE_PAGEABLE_MEMORY_ACCESS		hipDeviceAttributePageableMemoryAccess		
CU_DEVICE_ATTRIBUTE_PAGEABLE_MEMORY_ACCESS_USES_HOST_PAGE_TABLES		hipDeviceAttributePageableMemoryAccessUsesHostPageTables		
CU_DEVICE_ATTRIBUTE_PCI_BUS_ID		hipDeviceAttributePciBusId		
CU_DEVICE_ATTRIBUTE_PCI_DEVICE_ID		hipDeviceAttributePciDeviceId		
CU_DEVICE_ATTRIBUTE_PCI_DOMAIN_ID		hipDeviceAttributePciDomainId		
CU_DEVICE_ATTRIBUTE_REGISTERS_PER_BLOCK	+	hipDeviceAttributeMaxRegistersPerBlock		
CU_DEVICE_ATTRIBUTE_SHARED_MEMORY_PER_BLOCK	+	hipDeviceAttributeMaxSharedMemoryPerBlock		
CU_DEVICE_ATTRIBUTE_SINGLE_TO_DOUBLE_PRECISION_PERF_RATIO		hipDeviceAttributeSingleToDoublePrecisionPerfRatio		
CU_DEVICE_ATTRIBUTE_STREAM_PRIORITIES_SUPPORTED		hipDeviceAttributeStreamPrioritiesSupported		
CU_DEVICE_ATTRIBUTE_SURFACE_ALIGNMENT		hipDeviceAttributeSurfaceAlignment		
CU_DEVICE_ATTRIBUTE_TCC_DRIVER		hipDeviceAttributeTccDriver		
CU_DEVICE_ATTRIBUTE_TEXTURE_ALIGNMENT		hipDeviceAttributeTextureAlignment		
CU_DEVICE_ATTRIBUTE_TEXTURE_PITCH_ALIGNMENT		hipDeviceAttributeTexturePitchAlignment		
CU_DEVICE_ATTRIBUTE_TOTAL_CONSTANT_MEMORY		hipDeviceAttributeTotalConstantMemory		
CU_DEVICE_ATTRIBUTE_UNIFIED_ADDRESSING		hipDeviceAttributeUnifiedAddressing		
CU_DEVICE_ATTRIBUTE_WARP_SIZE		hipDeviceAttributeWarpSize		
CU_DEVICE_CPU		hipCpuDeviceId		
CU_DEVICE_INVALID		hipInvalidDeviceId		
CU_DEVICE_P2P_ATTRIBUTE_ACCESS_ACCESS_SUPPORTED	+	hipDevP2PAttrHipArrayAccessSupported		
CU_DEVICE_P2P_ATTRIBUTE_ACCESS_SUPPORTED		hipDevP2PAttrAccessSupported		
CU_DEVICE_P2P_ATTRIBUTE_ARRAY_ACCESS_ACCESS_SUPPORTED	+	hipDevP2PAttrHipArrayAccessSupported		
CU_DEVICE_P2P_ATTRIBUTE_CUDA_ARRAY_ACCESS_SUPPORTED		hipDevP2PAttrHipArrayAccessSupported		
CU_DEVICE_P2P_ATTRIBUTE_NATIVE_ATOMIC_SUPPORTED		hipDevP2PAttrNativeAtomicSupported		
CU_DEVICE_P2P_ATTRIBUTE_PERFORMANCE_RANK		hipDevP2PAttrPerformanceRank		
CU_EVENT_BLOCKING_SYNC		hipEventBlockingSync		

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CU_EVENT_DEFAULT		hipEventDefault		
CU_EVENT_DISABLE_TIMING		hipEventDisableTiming		
CU_EVENT_INTERPROCESS		hipEventInterprocess		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_D3D11_RESOURCE		hipExternalMemoryHandleTypeD3D11Resource		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_D3D11_RESOURCE_KMT		hipExternalMemoryHandleTypeD3D11ResourceKmt		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_D3D12_HEAP		hipExternalMemoryHandleTypeD3D12Heap		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_D3D12_RESOURCE		hipExternalMemoryHandleTypeD3D12Resource		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_OPAQUE_FD		hipExternalMemoryHandleTypeOpaqueFd		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_OPAQUE_WIN32		hipExternalMemoryHandleTypeOpaqueWin32		
CU_EXTERNAL_MEMORY_HANDLE_TYPE_OPAQUE_WIN32_KMT		hipExternalMemoryHandleTypeOpaqueWin32Kmt		
CU_EXTERNAL_SEMAPHORE_HANDLE_TYPE_D3D12_FENCE		hipExternalSemaphoreHandleTypeD3D12Fence		
CU_EXTERNAL_SEMAPHORE_HANDLE_TYPE_OPAQUE_FD		hipExternalSemaphoreHandleTypeOpaqueFd		
CU_EXTERNAL_SEMAPHORE_HANDLE_TYPE_OPAQUE_WIN32		hipExternalSemaphoreHandleTypeOpaqueWin32		
CU_EXTERNAL_SEMAPHORE_HANDLE_TYPE_OPAQUE_WIN32_KMT		hipExternalSemaphoreHandleTypeOpaqueWin32Kmt		
CU_FUNC_ATTRIBUTE_BINARY_VERSION		HIP_FUNC_ATTRIBUTE_BINARY_VERSION		
CU_FUNC_ATTRIBUTE_CACHE_MODE_CA		HIP_FUNC_ATTRIBUTE_CACHE_MODE_CA		
CU_FUNC_ATTRIBUTE_CONST_SIZE_BYTES		HIP_FUNC_ATTRIBUTE_CONST_SIZE_BYTES		
CU_FUNC_ATTRIBUTE_LOCAL_SIZE_BYTES		HIP_FUNC_ATTRIBUTE_LOCAL_SIZE_BYTES		
CU_FUNC_ATTRIBUTE_MAX		HIP_FUNC_ATTRIBUTE_MAX		
CU_FUNC_ATTRIBUTE_MAX_DYNAMIC_SHARED_SIZE_BYTES		HIP_FUNC_ATTRIBUTE_MAX_DYNAMIC_SHARED_SIZE_BYTES		
CU_FUNC_ATTRIBUTE_MAX_THREADS_PER_BLOCK		HIP_FUNC_ATTRIBUTE_MAX_THREADS_PER_BLOCK		
CU_FUNC_ATTRIBUTE_NUM_REGS		HIP_FUNC_ATTRIBUTE_NUM_REGS		
CU_FUNC_ATTRIBUTE_PREFERRED_SHARED_MEMORY_CARVEOUT		HIP_FUNC_ATTRIBUTE_PREFERRED_SHARED_MEMORY_CARVEOUT		

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CU_FUNC_ATTRIBUTE_PTX_VERSION		HIP_FUNC_ATTRIBUTE_PTX_VERSION		
CU_FUNC_ATTRIBUTE_SHARED_SIZE_BYTES		HIP_FUNC_ATTRIBUTE_SHARED_SIZE_BYTES		
CU_FUNC_CACHE_PREFER_EQUAL		hipFuncCachePreferEqual		
CU_FUNC_CACHE_PREFER_L1		hipFuncCachePreferL1		
CU_FUNC_CACHE_PREFER_NONE		hipFuncCachePreferNone		
CU_FUNC_CACHE_PREFER_SHARED		hipFuncCachePreferShared		
CU_GRAPH_EXEC_UPDATE_ERROR		hipGraphExecUpdateError		
CU_GRAPH_EXEC_UPDATE_ERROR_FUNCTION_CHANGED		hipGraphExecUpdateErrorFunctionChanged		
CU_GRAPH_EXEC_UPDATE_ERROR_NODE_TYPE_CHANGED		hipGraphExecUpdateErrorNodeTypeChanged		
CU_GRAPH_EXEC_UPDATE_ERROR_NOT_SUPPORTED		hipGraphExecUpdateErrorNotSupported		
CU_GRAPH_EXEC_UPDATE_ERROR_PARAMETERS_CHANGED		hipGraphExecUpdateErrorParametersChanged		
CU_GRAPH_EXEC_UPDATE_ERROR_TOPOLOGY_CHANGED		hipGraphExecUpdateErrorTopologyChanged		
CU_GRAPH_EXEC_UPDATE_ERROR_UNSUPPORTED_FUNCTION_CHANGE		hipGraphExecUpdateErrorUnsupportedFunctionChange		
CU_GRAPH_EXEC_UPDATE_SUCCESS		hipGraphExecUpdateSuccess		
CU_GRAPH_NODE_TYPE_COUNT		hipGraphNodeTypeCount		
CU_GRAPH_NODE_TYPE_EMPTY		hipGraphNodeTypeEmpty		
CU_GRAPH_NODE_TYPE_EVENT_RECORD		hipGraphNodeTypeEventRecord		
CU_GRAPH_NODE_TYPE_GRAPH		hipGraphNodeTypeGraph		
CU_GRAPH_NODE_TYPE_HOST		hipGraphNodeTypeHost		
CU_GRAPH_NODE_TYPE_KERNEL		hipGraphNodeTypeKernel		
CU_GRAPH_NODE_TYPE_MEMCPY		hipGraphNodeTypeMemcpy		
CU_GRAPH_NODE_TYPE_MEMSET		hipGraphNodeTypeMemset		
CU_GRAPH_NODE_TYPE_WAIT_EVENT		hipGraphNodeTypeWaitEvent		
CU_IPC_HANDLE_SIZE		HIP_IPC_HANDLE_SIZE		
CU_IPC_MEM_LAZY_ENABLE_PEER_ACCESS		hipIpcMemLazyEnablePeerAccess		
CU_JIT_CACHE_MODE		hipJitOptionCacheMode		
CU_JIT_ERROR_LOG_BUFFER		hipJitOptionErrorLogBuffer		

CUDA	D	HIP	D	E
CU_JIT_ERROR_LOG_BUFFER_SIZE_BYTES		hipJitOptionErrorLogBufferSizeBytes		
CU_JIT_FALLBACK_STRATEGY		hipJitOptionFallbackStrategy		
CU_JIT_FAST_COMPILE		hipJitOptionFastCompile		
CU_JIT_GENERATE_DEBUG_INFO		hipJitOptionGenerateDebugInfo		
CU_JIT_GENERATE_LINE_INFO		hipJitOptionGenerateLineInfo		
CU_JIT_INFO_LOG_BUFFER		hipJitOptionInfoLogBuffer		
CU_JIT_INFO_LOG_BUFFER_SIZE_BYTES		hipJitOptionInfoLogBufferSizeBytes		
CU_JIT_LOG_VERBOSE		hipJitOptionLogVerbose		
CU_JIT_MAX_REGISTERS		hipJitOptionMaxRegisters		
CU_JIT_NEW_SM3X_OPT		hipJitOptionSm3xOpt		
CU_JIT_NUM_OPTIONS		hipJitOptionNumOptions		
CU_JIT_OPTIMIZATION_LEVEL		hipJitOptionOptimizationLevel		
CU_JIT_TARGET		hipJitOptionTarget		
CU_JIT_TARGET_FROM_CUCONTEXT		hipJitOptionTargetFromContext		
CU_JIT_THREADS_PER_BLOCK		hipJitOptionThreadsPerBlock		
CU_JIT_WALL_TIME		hipJitOptionWallTime		
CU_LAUNCH_PARAM_BUFFER_POINTER		HIP_LAUNCH_PARAM_BUFFER_POINTER		
CU_LAUNCH_PARAM_BUFFER_SIZE		HIP_LAUNCH_PARAM_BUFFER_SIZE		
CU_LAUNCH_PARAM_END		HIP_LAUNCH_PARAM_END		
CU_LIMIT_MALLOC_HEAP_SIZE		hipLimitMallocHeapSize		
CU_LIMIT_PRINTF_FIFO_SIZE		hipLimitPrintfFifoSize		
CU_MEMHOSTALLOC_DEVICEMAP		hipHostMallocMapped		
CU_MEMHOSTALLOC_PORTABLE		hipHostMallocPortable		
CU_MEMHOSTALLOC_WRITECOMBINED		hipHostMallocWriteCombined		
CU_MEMHOSTREGISTER_DEVICEMAP		hipHostRegisterMapped		
CU_MEMHOSTREGISTER_IOMEMORY		hipHostRegisterIoMemory		
CU_MEMHOSTREGISTER_PORTABLE		hipHostRegisterPortable		
CU_MEMORYTYPE_ARRAY		hipMemoryTypeArray		
CU_MEMORYTYPE_DEVICE		hipMemoryTypeDevice		
CU_MEMORYTYPE_HOST		hipMemoryTypeHost		
CU_MEMORYTYPE_UNIFIED		hipMemoryTypeUnified		
CU_MEM_ADVISE_SET_ACCESSED_BY		hipMemAdviseSetAccessedBy		
CU_MEM_ADVISE_SET_PREFERRED_LOCATION		hipMemAdviseSetPreferredLocation		

CUDA	D	HIP	D	E
CU_MEM_ADVISE_SET_READ_MOSTLY		hipMemAdviseSetReadMostly		
CU_MEM_ADVISE_UNSET_ACCESSED_BY		hipMemAdviseUnsetAccessedBy		
CU_MEM_ADVISE_UNSET_PREFERRED_LOCATION		hipMemAdviseUnsetPreferredLocation		
CU_MEM_ADVISE_UNSET_READ_MOSTLY		hipMemAdviseUnsetReadMostly		
CU_MEM_ATTACH_GLOBAL		hipMemAttachGlobal		
CU_MEM_ATTACH_HOST		hipMemAttachHost		
CU_MEM_ATTACH_SINGLE		hipMemAttachSingle		
CU_MEM_RANGE_ATTRIBUTE_ACCESSED_BY		hipMemRangeAttributeAccessedBy		
CU_MEM_RANGE_ATTRIBUTE_LAST_PREFETCH_LOCATION		hipMemRangeAttributeLastPrefetchLocation		
CU_MEM_RANGE_ATTRIBUTE_PREFERRED_LOCATION		hipMemRangeAttributePreferredLocation		
CU_MEM_RANGE_ATTRIBUTE_READ_MOSTLY		hipMemRangeAttributeReadMostly		
CU_OCCUPANCY_DEFAULT		hipOccupancyDefault		
CU_RESOURCE_TYPE_ARRAY		HIP_RESOURCE_TYPE_ARRAY		
CU_RESOURCE_TYPE_LINEAR		HIP_RESOURCE_TYPE_LINEAR		
CU_RESOURCE_TYPE_MIPMAPPED_ARRAY		HIP_RESOURCE_TYPE_MIPMAPPED_ARRAY		
CU_RESOURCE_TYPE_PITCH2D		HIP_RESOURCE_TYPE_PITCH2D		
CU_RES_VIEW_FORMAT_FLOAT_1X16		HIP_RES_VIEW_FORMAT_FLOAT_1X16		
CU_RES_VIEW_FORMAT_FLOAT_1X32		HIP_RES_VIEW_FORMAT_FLOAT_1X32		
CU_RES_VIEW_FORMAT_FLOAT_2X16		HIP_RES_VIEW_FORMAT_FLOAT_2X16		
CU_RES_VIEW_FORMAT_FLOAT_2X32		HIP_RES_VIEW_FORMAT_FLOAT_2X32		
CU_RES_VIEW_FORMAT_FLOAT_4X16		HIP_RES_VIEW_FORMAT_FLOAT_4X16		
CU_RES_VIEW_FORMAT_FLOAT_4X32		HIP_RES_VIEW_FORMAT_FLOAT_4X32		
CU_RES_VIEW_FORMAT_NONE		HIP_RES_VIEW_FORMAT_NONE		
CU_RES_VIEW_FORMAT_SIGNED_BC4		HIP_RES_VIEW_FORMAT_SIGNED_BC4		
CU_RES_VIEW_FORMAT_SIGNED_BC5		HIP_RES_VIEW_FORMAT_SIGNED_BC5		
CU_RES_VIEW_FORMAT_SIGNED_BC6H		HIP_RES_VIEW_FORMAT_SIGNED_BC6H		
CU_RES_VIEW_FORMAT_SINT_1X16		HIP_RES_VIEW_FORMAT_SINT_1X16		

CUDA	D	HIP	D	E
CU_RES_VIEW_FORMAT_SINT_1X32		HIP_RES_VIEW_FORMAT_SINT_1X32		
CU_RES_VIEW_FORMAT_SINT_1X8		HIP_RES_VIEW_FORMAT_SINT_1X8		
CU_RES_VIEW_FORMAT_SINT_2X16		HIP_RES_VIEW_FORMAT_SINT_2X16		
CU_RES_VIEW_FORMAT_SINT_2X32		HIP_RES_VIEW_FORMAT_SINT_2X32		
CU_RES_VIEW_FORMAT_SINT_2X8		HIP_RES_VIEW_FORMAT_SINT_2X8		
CU_RES_VIEW_FORMAT_SINT_4X16		HIP_RES_VIEW_FORMAT_SINT_4X16		
CU_RES_VIEW_FORMAT_SINT_4X32		HIP_RES_VIEW_FORMAT_SINT_4X32		
CU_RES_VIEW_FORMAT_SINT_4X8		HIP_RES_VIEW_FORMAT_SINT_4X8		
CU_RES_VIEW_FORMAT_UINT_1X16		HIP_RES_VIEW_FORMAT_UINT_1X16		
CU_RES_VIEW_FORMAT_UINT_1X32		HIP_RES_VIEW_FORMAT_UINT_1X32		
CU_RES_VIEW_FORMAT_UINT_1X8		HIP_RES_VIEW_FORMAT_UINT_1X8		
CU_RES_VIEW_FORMAT_UINT_2X16		HIP_RES_VIEW_FORMAT_UINT_2X16		
CU_RES_VIEW_FORMAT_UINT_2X32		HIP_RES_VIEW_FORMAT_UINT_2X32		
CU_RES_VIEW_FORMAT_UINT_2X8		HIP_RES_VIEW_FORMAT_UINT_2X8		
CU_RES_VIEW_FORMAT_UINT_4X16		HIP_RES_VIEW_FORMAT_UINT_4X16		
CU_RES_VIEW_FORMAT_UINT_4X32		HIP_RES_VIEW_FORMAT_UINT_4X32		
CU_RES_VIEW_FORMAT_UINT_4X8		HIP_RES_VIEW_FORMAT_UINT_4X8		
CU_RES_VIEW_FORMAT_UNSIGNED_BC1		HIP_RES_VIEW_FORMAT_UNSIGNED_BC1		
CU_RES_VIEW_FORMAT_UNSIGNED_BC2		HIP_RES_VIEW_FORMAT_UNSIGNED_BC2		
CU_RES_VIEW_FORMAT_UNSIGNED_BC3		HIP_RES_VIEW_FORMAT_UNSIGNED_BC3		
CU_RES_VIEW_FORMAT_UNSIGNED_BC4		HIP_RES_VIEW_FORMAT_UNSIGNED_BC4		
CU_RES_VIEW_FORMAT_UNSIGNED_BC5		HIP_RES_VIEW_FORMAT_UNSIGNED_BC5		
CU_RES_VIEW_FORMAT_UNSIGNED_BC6H		HIP_RES_VIEW_FORMAT_UNSIGNED_BC6H		
CU_RES_VIEW_FORMAT_UNSIGNED_BC7		HIP_RES_VIEW_FORMAT_UNSIGNED_BC7		
CU_SHARED_MEM_CONFIG_DEFAULT_BANK_SIZE		hipSharedMemBankSizeDefault		
CU_SHARED_MEM_CONFIG_EIGHT_BYTE_BANK_SIZE		hipSharedMemBankSizeEightByte		

CUDA	D	HIP	D	E
CU_SHARED_MEM_CONFIG_FOUR_BYTE_BANK_SIZE		hipSharedMemBankSizeFourByte		
CU_STREAM_CAPTURE_MODE_GLOBAL		hipStreamCaptureModeGlobal		
CU_STREAM_CAPTURE_MODE_RELAXED		hipStreamCaptureModeRelaxed		
CU_STREAM_CAPTURE_MODE_THREAD_LOCAL		hipStreamCaptureModeThreadLocal		
CU_STREAM_CAPTURE_STATUS_ACTIVE		hipStreamCaptureStatusActive		
CU_STREAM_CAPTURE_STATUS_INVALIDATED		hipStreamCaptureStatusInvalidated		
CU_STREAM_CAPTURE_STATUS_NONE		hipStreamCaptureStatusNone		
CU_STREAM_DEFAULT		hipStreamDefault		
CU_STREAM_NON_BLOCKING		hipStreamNonBlocking		
CU_STREAM_PER_THREAD		hipStreamPerThread		
CU_STREAM_WAIT_VALUE_AND		hipStreamWaitValueAnd		
CU_STREAM_WAIT_VALUE_EQ		hipStreamWaitValueEq		
CU_STREAM_WAIT_VALUE_GEQ		hipStreamWaitValueGte		
CU_STREAM_WAIT_VALUE_NOR		hipStreamWaitValueNor		
CU_TRSA_OVERRIDE_FORMAT		HIP_TRSA_OVERRIDE_FORMAT		
CU_TRSF_NORMALIZED_COORDINATES		HIP_TRSF_NORMALIZED_COORDINATES		
CU_TRSF_READ_AS_INTEGER		HIP_TRSF_READ_AS_INTEGER		
CU_TRSF_SRGB		HIP_TRSF_SRGB		
CU_TR_ADDRESS_MODE_BORDER		HIP_TR_ADDRESS_MODE_BORDER		
CU_TR_ADDRESS_MODE_CLAMP		HIP_TR_ADDRESS_MODE_CLAMP		
CU_TR_ADDRESS_MODE_MIRROR		HIP_TR_ADDRESS_MODE_MIRROR		
CU_TR_ADDRESS_MODE_WRAP		HIP_TR_ADDRESS_MODE_WRAP		
CU_TR_FILTER_MODE_LINEAR		HIP_TR_FILTER_MODE_LINEAR		
CU_TR_FILTER_MODE_POINT		HIP_TR_FILTER_MODE_POINT		
CUaddress_mode		HIPaddress_mode		
CUaddress_mode_enum		HIPaddress_mode_enum		
CUarray		hipArray*		
CUarray_format		hipArray_Format		
CUarray_format_enum		hipArray_Format		
CUarray_st		hipArray		
CUcomputemode		hipComputeMode		
CUcomputemode_enum		hipComputeMode		

CUDA	D	HIP	D	E
CUcontext		hipCtx_t		
CUctx_st		ihipCtx_t		
CUdevice		hipDevice_t		
CUdevice_P2PAttribute		hipDeviceP2PAttr		
CUdevice_P2PAttribute_enum		hipDeviceP2PAttr		
CUdevice_attribute		hipDeviceAttribute_t		
CUdevice_attribute_enum		hipDeviceAttribute_t		
CUdevice_v1		hipDevice_t		
CUdeviceptr		hipDeviceptr_t		
CUdeviceptr_v1		hipDeviceptr_t		
CUdeviceptr_v2		hipDeviceptr_t		
CUevent		hipEvent_t		
CUevent_st		ihipEvent_t		
CUexternalMemory		hipExternalMemory_t		
CUexternalMemoryHandleType		hipExternalMemoryHandleType		
CUexternalMemoryHandleType_enum		hipExternalMemoryHandleType_enum		
CUexternalSemaphore		hipExternalSemaphore_t		
CUexternalSemaphoreHandleType		hipExternalSemaphoreHandleType		
CUexternalSemaphoreHandleType_enum		hipExternalSemaphoreHandleType_enum		
CUfilter_mode		HIPfilter_mode		
CUfilter_mode_enum		HIPfilter_mode_enum		
CUfunc_cache		hipFuncCache_t		
CUfunc_cache_enum		hipFuncCache_t		
CUfunc_st		ihipModuleSymbol_t		
CUfunction		hipFunction_t		
CUfunction_attribute		hipFunction_attribute		
CUfunction_attribute_enum		hipFunction_attribute		
CUgraph		hipGraph_t		
CUgraphExec		hipGraphExec_t		
CUgraphExecUpdateResult		hipGraphExecUpdateResult		
CUgraphExecUpdateResult_enum		hipGraphExecUpdateResult		
CUgraphExec_st		hipGraphExec		
CUgraphNode		hipGraphNode_t		
CUgraphNodeType		hipGraphNodeType		
CUgraphNodeType_enum		hipGraphNodeType		
CUgraphNode_st		hipGraphNode		
CUgraph_st		ihipGraph		
CUgraphicsResource		hipGraphicsResource_t		

CUDA	D	HIP	D	E
CUgraphicsResource_st		hipGraphicsResource		
CUhostFn		hipHostFn_t		
CUipcEventHandle		hipIpcEventHandle_t		
CUipcEventHandle_st		hipIpcEventHandle_st		
CUipcEventHandle_v1		hipIpcEventHandle_t		
CUipcMemHandle		hipIpcMemHandle_t		
CUipcMemHandle_st		hipIpcMemHandle_st		
CUipcMemHandle_v1		hipIpcMemHandle_t		
CUjit_option		hipJitOption		
CUjit_option_enum		hipJitOption		
CUlimit		hipLimit_t		
CUlimit_enum		hipLimit_t		
CUmem_advise		hipMemoryAdvise		
CUmem_advise_enum		hipMemoryAdvise		
CUmem_range_attribute		hipMemRangeAttribute		
CUmem_range_attribute_enum		hipMemRangeAttribute		
CUmemorytype		hipMemoryType		
CUmemorytype_enum		hipMemoryType		
CUmipmappedArray		hipMipmappedArray_t		
CUmipmappedArray_st		hipMipmappedArray		
CUmod_st		ihipModule_t		
CUmodule		hipModule_t		
CUresourceViewFormat		HIPresourceViewFormat		
CUresourceViewFormat_enum		HIPresourceViewFormat_enum		
CUresourcetype		HIPresourcetype		
CUresourcetype_enum		HIPresourcetype_enum		
CUresult		hipError_t		
CUsharedconfig		hipSharedMemConfig		
CUsharedconfig_enum		hipSharedMemConfig		
CUstream		hipStream_t		
CUstreamCallback		hipStreamCallback_t		
CUstreamCaptureMode		hipStreamCaptureMode		
CUstreamCaptureMode_enum		hipStreamCaptureMode		
CUstreamCaptureStatus		hipStreamCaptureStatus		
CUstreamCaptureStatus_enum		hipStreamCaptureStatus		
CUstream_st		ihipStream_t		
CUsurfObject		hipSurfaceObject_t		
CUsurfObject_v1		hipSurfaceObject_t		
CUtexObject		hipTextureObject_t		
CUtexObject_v1		hipTextureObject_t		
CUtexref		hipTexRef		

CUDA	D	HIP	D	E
CUtexref_st		textureReference		
__CUDACC__		__HIPCC__		
cudaError_enum		hipError_t		
CUDA_MEMSET_NODE_PARAMS		hipMemsetParams		
CUDA_MEMSET_NODE_PARAMS_st		hipMemsetParams		
CUDA_MEMSET_NODE_PARAMS_v1		hipMemsetParams		
CUGLDeviceList		hipGLDeviceList		
CUGLDeviceList_enum		hipGLDeviceList		
CU_GL_DEVICE_LIST_ALL		hipGLDeviceListAll		
CU_GL_DEVICE_LIST_CURRENT_FRAME		hipGLDeviceListCurrentFrame		
CU_GL_DEVICE_LIST_NEXT_FRAME		hipGLDeviceListNextFrame		
CU_GRAPHICS_REGISTER_FLAGS_NONE		hipGraphicsRegisterFlagsNone		
CU_GRAPHICS_REGISTER_FLAGS_READ_ONLY		hipGraphicsRegisterFlagsReadOnly		
CU_GRAPHICS_REGISTER_FLAGS_SURFACE_LDST		hipGraphicsRegisterFlagsSurfaceLoadStore		
CU_GRAPHICS_REGISTER_FLAGS_TEXTURE_GATHER		hipGraphicsRegisterFlagsTextureGather		
CU_GRAPHICS_REGISTER_FLAGS_WRITE_DISCARD		hipGraphicsRegisterFlagsWriteDiscard		
CUgraphicsRegisterFlags		hipGraphicsRegisterFlags		
CUgraphicsRegisterFlags_enum		hipGraphicsRegisterFlags		
CU_GRAPH_EXEC_UPDATE_ERROR		hipGraphExecUpdateError		+
CU_GRAPH_EXEC_UPDATE_ERROR_FUNCTION_CHANGED		hipGraphExecUpdateErrorFunctionChanged		+
CU_GRAPH_EXEC_UPDATE_ERROR_NODE_TYPE_CHANGED		hipGraphExecUpdateErrorNodeTypeChanged		+
CU_GRAPH_EXEC_UPDATE_ERROR_NOT_SUPPORTED		hipGraphExecUpdateErrorNotSupported		+
CU_GRAPH_EXEC_UPDATE_ERROR_PARAMETERS_CHANGED		hipGraphExecUpdateErrorParametersChanged		+
CU_GRAPH_EXEC_UPDATE_ERROR_TOPOLOGY_CHANGED		hipGraphExecUpdateErrorTopologyChanged		+
CU_GRAPH_EXEC_UPDATE_ERROR_UNSUPPORTED_FUNCTION_CHANGE		hipGraphExecUpdateErrorUnsupportedFunctionChange		+
CU_GRAPH_EXEC_UPDATE_SUCCESS		hipGraphExecUpdateSuccess		+
CU_GRAPH_NODE_TYPE_COUNT		hipGraphNodeTypeCount		+
CU_GRAPH_NODE_TYPE_EMPTY		hipGraphNodeTypeEmpty		+
CU_GRAPH_NODE_TYPE_EVENT_RECORD		hipGraphNodeTypeEventRecord		+
CU_GRAPH_NODE_TYPE_GRAPH		hipGraphNodeTypeGraph		+
CU_GRAPH_NODE_TYPE_HOST		hipGraphNodeTypeHost		+
CU_GRAPH_NODE_TYPE_KERNEL		hipGraphNodeTypeKernel		+

CUDA	D	HIP	D	E
CU_GRAPH_NODE_TYPE_MEMCPY		hipGraphNodeTypeMemcpy		+
CU_GRAPH_NODE_TYPE_MEMSET		hipGraphNodeTypeMemset		+
CU_GRAPH_NODE_TYPE_WAIT_EVENT		hipGraphNodeTypeWaitEvent		+

1.1.2   Error Handling

Error Handling is currently supported.

1.1.3   Initialization

CUDA	D	HIP	D	E
cuInit		hipInit		

1.1.4   Version Management

CUDA	D	HIP	D	E
cuDriverGetVersion		hipDriverGetVersion		

1.1.5   Device Management

CUDA	D	HIP	D	E
cuDeviceGet		hipDeviceGet		
cuDeviceGetAttribute		hipDeviceGetAttribute		
cuDeviceGetCount		hipGetDeviceCount		
cuDeviceGetName		hipDeviceGetName		
cuDeviceTotalMem		hipDeviceTotalMem		
cuDeviceTotalMem_v2		hipDeviceTotalMem		

1.1.6   Device Management [DEPRECATED]

CUDA	D	HIP	D	E
cuDeviceComputeCapability	+	hipDeviceComputeCapability		

1.1.7 Primary Context Management

CUDA	D	HIP	D	E
cuDevicePrimaryCtxGetState		hipDevicePrimaryCtxGetState		
cuDevicePrimaryCtxRelease		hipDevicePrimaryCtxRelease		
cuDevicePrimaryCtxRelease_v2		hipDevicePrimaryCtxRelease		
cuDevicePrimaryCtxReset		hipDevicePrimaryCtxReset		
cuDevicePrimaryCtxReset_v2		hipDevicePrimaryCtxReset		
cuDevicePrimaryCtxRetain		hipDevicePrimaryCtxRetain		
cuDevicePrimaryCtxSetFlags		hipDevicePrimaryCtxSetFlags		
cuDevicePrimaryCtxSetFlags_v2		hipDevicePrimaryCtxSetFlags		

1.1.8 Context Management

CUDA	D	HIP	D	E
cuCtxCreate		hipCtxCreate	+	
cuCtxCreate_v2		hipCtxCreate	+	
cuCtxCreate_v3		hipCtxCreate	+	
cuCtxDestroy		hipCtxDestroy	+	
cuCtxDestroy_v2		hipCtxDestroy	+	
cuCtxGetApiVersion		hipCtxGetApiVersion	+	
cuCtxGetCacheConfig		hipCtxGetCacheConfig	+	
cuCtxGetCurrent		hipCtxGetCurrent	+	
cuCtxGetDevice		hipCtxGetDevice	+	
cuCtxGetFlags		hipCtxGetFlags	+	
cuCtxGetLimit		hipDeviceGetLimit		
cuCtxGetSharedMemConfig		hipCtxGetSharedMemConfig	+	
cuCtxGetStreamPriorityRange		hipDeviceGetStreamPriorityRange		
cuCtxPopCurrent		hipCtxPopCurrent	+	
cuCtxPopCurrent_v2		hipCtxPopCurrent	+	
cuCtxPushCurrent		hipCtxPushCurrent	+	
cuCtxPushCurrent_v2		hipCtxPushCurrent	+	
cuCtxSetCacheConfig		hipCtxSetCacheConfig	+	
cuCtxSetCurrent		hipCtxSetCurrent	+	
cuCtxSetSharedMemConfig		hipCtxSetSharedMemConfig	+	
cuCtxSynchronize		hipCtxSynchronize	+	
cuCtxCreate_v3		hipCtxCreate	+	

1.1.9   Context Management [DEPRECATED]

Context Management [Deprecated] is currently unsupported.

1.1.10   Module Management

CUDA	D	HIP	D	E
cuModuleGetFunction		hipModuleGetFunction		
cuModuleGetGlobal		hipModuleGetGlobal		
cuModuleGetGlobal_v2		hipModuleGetGlobal		
cuModuleGetTexRef		hipModuleGetTexRef		
cuModuleLoad		hipModuleLoad		
cuModuleLoadData		hipModuleLoadData		
cuModuleLoadDataEx		hipModuleLoadDataEx		
cuModuleUnload		hipModuleUnload		

1.1.11   Memory Management

CUDA	D	HIP	D	E
cuArA581:C639		hipArray3DCreate		
cuArray3DCreate_v2		hipArray3DCreate		
cuArrayCreate		hipArrayCreate		
cuArrayCreate_v2		hipArrayCreate		
cuArrayDestroy		hipArrayDestroy		
cuDeviceGetByPCIBusId		hipDeviceGetByPCIBusId		
cuDeviceGetPCIBusId		hipDeviceGetPCIBusId		
cuIpcCloseMemHandle		hipIpcCloseMemHandle		
cuIpcGetEventHandle		hipIpcGetEventHandle		
cuIpcGetMemHandle		hipIpcGetMemHandle		
cuIpcOpenEventHandle		hipIpcOpenEventHandle		
cuIpcOpenMemHandle		hipIpcOpenMemHandle		
cuMemAlloc		hipMalloc		
cuMemAllocHost		hipHostAlloc		
cuMemAllocHost_v2		hipHostAlloc		
cuMemAllocManaged		hipMallocManaged		
cuMemAllocPitch		hipMemAllocPitch		
cuMemAllocPitch_v2		hipMemAllocPitch		
cuMemAlloc_v2		hipMalloc		
cuMemFree		hipFree		
cuMemFreeHost		hipHostFree		

CUDA	D	HIP	D	E
cuMemFree_v2		hipFree		
cuMemGetAddressRange		hipMemGetAddressRange		
cuMemGetAddressRange_v2		hipMemGetAddressRange		
cuMemGetInfo		hipMemGetInfo		
cuMemGetInfo_v2		hipMemGetInfo		
cuMemHostAlloc		hipHostAlloc		
cuMemHostGetDevicePointer		hipHostGetDevicePointer		
cuMemHostGetDevicePointer_v2		hipHostGetDevicePointer		
cuMemHostGetFlags		hipHostGetFlags		
cuMemHostRegister		hipHostRegister		
cuMemHostRegister_v2		hipHostRegister		
cuMemHostUnregister		hipHostUnregister		
cuMemcpy2D		hipMemcpyParam2D		
cuMemcpy2DAsync		hipMemcpyParam2DAsync		
cuMemcpy2DAsync_v2		hipMemcpyParam2DAsync		
cuMemcpy2DUnaligned		hipDrvMemcpy2DUnaligned		
cuMemcpy2DUnaligned_v2		hipDrvMemcpy2DUnaligned		
cuMemcpy2D_v2		hipMemcpyParam2D		
cuMemcpy3D		hipDrvMemcpy3D		
cuMemcpy3DAsync		hipDrvMemcpy3DAsync		
cuMemcpy3DAsync_v2		hipDrvMemcpy3DAsync		
cuMemcpy3D_v2		hipDrvMemcpy3D		
cuMemcpyAtoH		hipMemcpyAtoH		
cuMemcpyAtoH_v2		hipMemcpyAtoH		
cuMemcpyDtoD		hipMemcpyDtoD		
cuMemcpyDtoDAsync		hipMemcpyDtoDAsync		
cuMemcpyDtoDAsync_v2		hipMemcpyDtoDAsync		
cuMemcpyDtoD_v2		hipMemcpyDtoD		
cuMemcpyDtoH		hipMemcpyDtoH		
cuMemcpyDtoHAsync		hipMemcpyDtoHAsync		
cuMemcpyDtoHAsync_v2		hipMemcpyDtoHAsync		
cuMemcpyDtoH_v2		hipMemcpyDtoH		
cuMemcpyHtoA		hipMemcpyHtoA		
cuMemcpyHtoA_v2		hipMemcpyHtoA		
cuMemcpyHtoD		hipMemcpyHtoD		
cuMemcpyHtoDAsync		hipMemcpyHtoDAsync		
cuMemcpyHtoDAsync_v2		hipMemcpyHtoDAsync		
cuMemcpyHtoD_v2		hipMemcpyHtoD		
cuMemsetD16		hipMemsetD16		
cuMemsetD16Async		hipMemsetD16Async		
cuMemsetD16_v2		hipMemsetD16		
cuMemsetD32		hipMemsetD32		

CUDA	D	HIP	D	E
cuMemsetD32Async		hipMemsetD32Async		
cuMemsetD32_v2		hipMemsetD32		
cuMemsetD8		hipMemsetD8		
cuMemsetD8Async		hipMemsetD8Async		
cuMemsetD8_v2		hipMemsetD8		
cuMipmappedArrayCreate		hipMipmappedArrayCreate		
cuMipmappedArrayDestroy		hipMipmappedArrayDestroy		
cuMipmappedArrayGetLevel		hipMipmappedArrayGetLevel		

1.1.12   Virtual Memory Management

Virtual Memory Management is currently unsupported.

1.1.13   Stream Ordered Memory Allocator

Stream Ordered Memory Allocator is currently unsupported.

1.1.14   Unified Addressing

CUDA	D	HIP	D	E
cuMemAdvise		hipMemAdvise		
cuMemRangeGetAttribute		hipMemRangeGetAttribute		
cuMemRangeGetAttributes		hipMemRangeGetAttributes		
cuMemPrefetchAsync		hipMemPrefetchAsync		

1.1.15   Stream Management

CUDA	D	HIP	D	E
cuStreamAddCallback		hipStreamAddCallback		
cuStreamAttachMemAsync		hipStreamAttachMemAsync		
cuStreamBeginCapture		hipStreamBeginCapture		
cuStreamBeginCapture_v2		hipStreamBeginCapture		
cuStreamCreate		hipStreamCreateWithFlags		
cuStreamCreateWithPriority		hipStreamCreateWithPriority		
cuStreamDestroy		hipStreamDestroy		
cuStreamDestroy_v2		hipStreamDestroy		
cuStreamEndCapture		hipStreamEndCapture		
cuStreamGetFlags		hipStreamGetFlags		
cuStreamGetPriority		hipStreamGetPriority		
cuStreamQuery		hipStreamQuery		
cuStreamSynchronize		hipStreamSynchronize		

1.1.16   Event Management

CUDA	D	HIP	D	E
cuEventCreate		hipEventCreateWithFlags		
cuEventDestroy		hipEventDestroy		
cuEventDestroy_v2		hipEventDestroy		
cuEventElapsedTime		hipEventElapsedTime		
cuEventQuery		hipEventQuery		
cuEventRecord		hipEventRecord		
cuEventSynchronize		hipEventSynchronize		

1.1.17   External Resource Interoperability

CUDA	D	HIP	D	E
cuDestroyExternalMemory		hipDestroyExternalMemory		
cuExternalMemoryGetMappedBuffer		hipExternalMemoryGetMappedBuffer		
cuImportExternalMemory		hipImportExternalMemory		
cuImportExternalSemaphore		hipImportExternalSemaphore		
cuSignalExternalSemaphoresAsync		hipSignalExternalSemaphoresAsync		
cuWaitExternalSemaphoresAsync		hipWaitExternalSemaphoresAsync		

1.1.18   Stream Memory Operations

CUDA	D	HIP	D	E
cuStreamWaitValue32		hipStreamWaitValue32		
cuStreamWaitValue64		hipStreamWaitValue64		
cuStreamWriteValue32		hipStreamWriteValue32		
cuStreamWriteValue64		hipStreamWriteValue64		

1.1.19   Execution Control

CUDA	D	HIP	D	E
cuFuncGetAttribute		hipFuncGetAttribute		
cuLaunchKernel		hipModuleLaunchKernel		

1.1.20   Execution Control [DEPRECATED]

Execution Control (Deprecated) is no longer unsupported.

1.1.21   Graph Management

CUDA	D	HIP	D	E
cuGraphAddDependencies		hipGraphAddDependencies		+
cuGraphAddEmptyNode		hipGraphAddEmptyNode		+
cuGraphAddKernelNode		hipGraphAddKernelNode		+
cuGraphAddMemcpyNode		hipGraphAddMemcpyNode		+
cuGraphAddMemsetNode		hipGraphAddMemsetNode		+
cuGraphCreate		hipGraphCreate		+
cuGraphDestroy		hipGraphDestroy		+
cuGraphExecDestroy		hipGraphExecDestroy		+
cuGraphExecKernelNodeSetParams		hipGraphExecKernelNodeSetParams		+
cuGraphGetNodes		hipGraphGetNodes		+
cuGraphGetRootNodes		hipGraphGetRootNodes		+
cuGraphInstantiate		hipGraphInstantiate		+
cuGraphInstantiate_v2		hipGraphInstantiate		+
cuGraphKernelNodeGetParams		hipGraphKernelNodeGetParams		+
cuGraphKernelNodeSetParams		hipGraphKernelNodeSetParams		+
cuGraphLaunch		hipGraphLaunch		+
cuGraphMemcpyNodeGetParams		hipGraphMemcpyNodeGetParams		+
cuGraphMemcpyNodeSetParams		hipGraphMemcpyNodeSetParams		+
cuGraphMemsetNodeGetParams		hipGraphMemsetNodeGetParams		+
cuGraphMemsetNodeSetParams		hipGraphMemsetNodeSetParams		+

1.1.22   Occupancy

CUDA	D	HIP	D	E
cuOccupancyMaxActiveBlocksPerMultiprocessor		hipModuleOccupancyMaxActiveBlocksPerMultiprocessor		
cuOccupancyMaxActiveBlocksPerMultiprocessorWithFlags		hipModuleOccupancyMaxActiveBlocksPerMultiprocessorWithFlags		
cuOccupancyMaxPotentialBlockSize		hipModuleOccupancyMaxPotentialBlockSize		
cuOccupancyMaxPotentialBlockSizeWithFlags		hipModuleOccupancyMaxPotentialBlockSizeWithFlags		

1.1.23   Texture Reference Management [DEPRECATED]

CUDA	D	HIP	D	E
cuTeA760:D781	+	hipTexRefGetAddress	+	
cuTexRefGetAddressMode	+	hipTexRefGetAddressMode	+	

CUDA	D	HIP	D	E
cuTexRefGetAddress_v2	+	hipTexRefGetAddress	+	
cuTexRefGetArray	+	hipTexRefGetArray		
cuTexRefGetFilterMode	+	hipTexRefGetFilterMode	+	
cuTexRefGetFlags	+	hipTexRefGetFlags	+	
cuTexRefGetFormat	+	hipTexRefGetFormat	+	
cuTexRefGetMaxAnisotropy	+	hipTexRefGetMaxAnisotropy	+	
cuTexRefGetMipmapFilterMode	+	hipTexRefGetMipmapFilterMode	+	
cuTexRefGetMipmapLevelBias	+	hipTexRefGetMipmapLevelBias	+	
cuTexRefGetMipmapLevelClamp	+	hipTexRefGetMipmapLevelClamp	+	
cuTexRefGetMipmappedArray	+	hipTexRefGetMipMappedArray	+	
cuTexRefSetAddress	+	hipTexRefSetAddress	+	
cuTexRefSetAddress2D	+	hipTexRefSetAddress2D	+	
cuTexRefSetAddress2D_v2		hipTexRefSetAddress2D	+	
cuTexRefSetAddress2D_v3		hipTexRefSetAddress2D	+	
cuTexRefSetAddressMode	+	hipTexRefSetAddressMode		
cuTexRefSetAddress_v2	+	hipTexRefSetAddress	+	
cuTexRefSetArray	+	hipTexRefSetArray		
cuTexRefSetBorderColor	+	hipTexRefSetBorderColor		
cuTexRefSetFilterMode	+	hipTexRefSetFilterMode		
cuTexRefSetFlags	+	hipTexRefSetFlags		
cuTexRefSetFormat	+	hipTexRefSetFormat		
cuTexRefSetMaxAnisotropy	+	hipTexRefSetMaxAnisotropy		
cuTexRefSetMipmapFilterMode	+	hipTexRefSetMipmapFilterMode		
cuTexRefSetMipmapLevelBias	+	hipTexRefSetMipmapLevelBias		
cuTexRefSetMipmapLevelClamp	+	hipTexRefSetMipmapLevelClamp		
cuTexRefSetMipmappedArray	+	hipTexRefSetMipmappedArray		

1.1.24   Surface Reference Management [DEPRECATED]

Surface Reference Management (Deprecated) is no longer supported.

1.1.25   Texture Object Management

CUDA	D	HIP	D	E
cuTexObjectCreate		hipTexObjectCreate		
cuTexObjectDestroy		hipTexObjectDestroy		
cuTexObjectGetResourceDesc		hipTexObjectGetResourceDesc		
cuTexObjectGetResourceViewDesc		hipTexObjectGetResourceViewDesc		
cuTexObjectGetTextureDesc		hipTexObjectGetTextureDesc		

1.1.26   Surface Object Management

Surface Object Management is no longer supported.

1.1.27   Peer Context Memory Access

CUDA	D	HIP	D	E
cuCtxDisablePeerAccess		hipCtxDisablePeerAccess	+	
cuCtxEnablePeerAccess		hipCtxEnablePeerAccess	+	
cuDeviceCanAccessPeer		hipDeviceCanAccessPeer		
cuDeviceGetP2PAttribute		hipDeviceGetP2PAttribute		

1.1.28   Graphics Interoperability

CUDA	D	HIP	D	E
cuGraphicsMapResources		hipGraphicsMapResources		
cuGraphicsResourceGetMappedPointer		hipGraphicsResourceGetMappedPointer		
cuGraphicsResourceGetMappedPointer_v2		hipGraphicsResourceGetMappedPointer		
cuGraphicsUnmapResources		hipGraphicsUnmapResources		
cuGraphicsUnregisterResource		hipGraphicsUnregisterResource		

1.1.29   Driver Entry Point Access

Driver Entry Point Access is no longer supported.

1.1.30   Profiler Control [DEPRECATED]

Profiler Control (Deprecated) is no longer supported.

1.1.31   Profiler Control

CUDA	D	HIP	D	E
cuProfilerStart		hipProfilerStart	+	
cuProfilerStop		hipProfilerStop	+	

1.1.32   OpenGL Interoperability

CUDA	D	HIP	D	E
cuGLGetDevices		hipGLGetDevices		
cuGraphicsGLRegisterBuffer		hipGraphicsGLRegisterBuffer		

1.1.33   VDPAU Interoperability

VDPAU Interoperability is no longer supported.

1.1.34   EGL Interoperability

EGL Interoperability is no longer supported.

1.1.35   Direct3D 9 Interoperability

Direct3D 9 Interoperability is no longer supported.

1.1.36   Direct3D 10 Interoperability

 Direct3D 10 Interoperability is no longer supported.

1.1.37   Direct3D 11 Interoperability

Direct3D 11 Interoperability is no longer supported

1.2   CUDA Runtime API Supported by HIP

1.2.1   Device Management

CUDA	D	HIP	D	E
cudaChooseDevice		hipChooseDevice		
cudaDeviceGetAttribute		hipDeviceGetAttribute		
cudaDeviceGetByPCIBusId		hipDeviceGetByPCIBusId		
cudaDeviceGetCacheConfig		hipDeviceGetCacheConfig		
cudaDeviceGetLimit		hipDeviceGetLimit		
cudaDeviceGetP2PAttribute		hipDeviceGetP2PAttribute		
cudaDeviceGetPCIBusId		hipDeviceGetPCIBusId		
cudaDeviceGetSharedMemConfig		hipDeviceGetSharedMemConfig		
cudaDeviceGetStreamPriorityRange		hipDeviceGetStreamPriorityRange		
cudaDeviceReset		hipDeviceReset		
cudaDeviceSetCacheConfig		hipDeviceSetCacheConfig		
cudaDeviceSetSharedMemConfig		hipDeviceSetSharedMemConfig		
cudaDeviceSynchronize		hipDeviceSynchronize		
cudaGetDevice		hipGetDevice		
cudaGetDeviceCount		hipGetDeviceCount		
cudaGetDeviceFlags		hipGetDeviceFlags		
cudaGetDeviceProperties		hipGetDeviceProperties		
cudaIpcCloseMemHandle		hipIpcCloseMemHandle		
cudaIpcGetEventHandle		hipIpcGetEventHandle		
cudaIpcGetMemHandle		hipIpcGetMemHandle		
cudaIpcOpenEventHandle		hipIpcOpenEventHandle		
cudaIpcOpenMemHandle		hipIpcOpenMemHandle		
cudaSetDevice		hipSetDevice		
cudaSetDeviceFlags		hipSetDeviceFlags		

1.2.2   Thread Management [DEPRECATED]

CUDA	D	HIP	D	E
cudaThreadExit	+	hipDeviceReset		
cudaThreadGetCacheConfig	+	hipDeviceGetCacheConfig		
cudaThreadSetCacheConfig	+	hipDeviceSetCacheConfig		
cudaThreadSynchronize	+	hipDeviceSynchronize		

1.2.3   Error Handling

CUDA	D	HIP	D	E
cudaGetErrorName		hipGetErrorName		
cudaGetErrorString		hipGetErrorString		
cudaGetLastError		hipGetLastError		
cudaPeekAtLastError		hipPeekAtLastError		

1.2.4   Stream Management

CUDA	D	HIP	D	E
cudaStreamAddCallback		hipStreamAddCallback		
cudaStreamAttachMemAsync		hipStreamAttachMemAsync		
cudaStreamBeginCapture		hipStreamBeginCapture		
cudaStreamCreate		hipStreamCreate		
cudaStreamCreateWithFlags		hipStreamCreateWithFlags		
cudaStreamCreateWithPriority		hipStreamCreateWithPriority		
cudaStreamDestroy		hipStreamDestroy		
cudaStreamEndCapture		hipStreamEndCapture		
cudaStreamGetFlags		hipStreamGetFlags		
cudaStreamGetPriority		hipStreamGetPriority		
cudaStreamQuery		hipStreamQuery		
cudaStreamSynchronize		hipStreamSynchronize		

1.2.5   Event Management

CUDA	D	HIP	D	E
cudaEventCreate		hipEventCreate		
cudaEventCreateWithFlags		hipEventCreateWithFlags		
cudaEventDestroy		hipEventDestroy		
cudaEventElapsedTime		hipEventElapsedTime		
cudaEventQuery		hipEventQuery		
cudaEventRecord		hipEventRecord		
cudaEventSynchronize		hipEventSynchronize		

1.2.6   External Resource Interoperability

CUDA	D	HIP	D	E
cudaDestroyExternalMemory		hipDestroyExternalMemory		
cudaDestroyExternalSemaphore		hipDestroyExternalSemaphore		
cudaExternalMemoryGetMappedBuffer		hipExternalMemoryGetMapped Buffer		
cudaImportExternalMemory		hipImportExternalMemory		
cudaImportExternalSemaphore		hipImportExternalSemaphore		

cudaSignalExternalSemaphoresAsync		hipSignalExternalSemaphoresAsync		
cudaWaitExternalSemaphoresAsync		hipWaitExternalSemaphoresAsync		

1.2.7   Execution Control

CUDA	D	HIP	D	E
cudaFuncGetAttributes		hipFuncGetAttributes		
cudaFuncSetAttribute		hipFuncSetAttribute		
cudaFuncSetCacheConfig		hipFuncSetCacheConfig		
cudaFuncSetSharedMemConfig		hipFuncSetSharedMemConfig		
cudaLaunchCooperativeKernel		hipLaunchCooperativeKernel		
cudaLaunchCooperativeKernelMultiDevice	+	hipLaunchCooperativeKernelMultiDevice		
cudaLaunchKernel		hipLaunchKernel		

1.2.8   Occupancy

CUDA	D	HIP	D	E
cudaOccupancyMaxActiveBlocksPerMultiprocessor		hipOccupancyMaxActiveBlocksPerMultiprocessor		
cudaOccupancyMaxActiveBlocksPerMultiprocessorWithFlags		hipOccupancyMaxActiveBlocksPerMultiprocessorWithFlags		
cudaOccupancyMaxPotentialBlockSize		hipOccupancyMaxPotentialBlockSize		

1.2.9 Memory Management

CUDA	D	HIP	D	E
cudaFree		hipFree		
cudaFreeArray		hipFreeArray		
cudaFreeHost		hipHostFree		
cudaFreeMipmappedArray		hipFreeMipmappedArray		
cudaGetMipmappedArrayLevel		hipGetMipmappedArrayLevel		
cudaGetSymbolAddress		hipGetSymbolAddress		
cudaGetSymbolSize		hipGetSymbolSize		
cudaHostAlloc		hipHostAlloc		
cudaHostGetDevicePointer		hipHostGetDevicePointer		
cudaHostGetFlags		hipHostGetFlags		
cudaHostRegister		hipHostRegister		
cudaHostUnregister		hipHostUnregister		
cudaMalloc		hipMalloc		
cudaMalloc3D		hipMalloc3D		
cudaMalloc3DArray		hipMalloc3DArray		
cudaMallocArray		hipMallocArray		
cudaMallocHost		hipMallocHost		
cudaMallocManaged		hipMallocManaged		
cudaMallocMipmappedArray		hipMallocMipmappedArray		
cudaMallocPitch		hipMallocPitch		
cudaMemAdvise		hipMemAdvise		
cudaMemGetInfo		hipMemGetInfo		
cudaMemPrefetchAsync		hipMemPrefetchAsync		
cudaMemRangeGetAttribute		hipMemRangeGetAttribute		
cudaMemRangeGetAttributes		hipMemRangeGetAttributes		
cudaMemcpy		hipMemcpy		
cudaMemcpy2D		hipMemcpy2D		
cudaMemcpy2DAsync		hipMemcpy2DAsync		
cudaMemcpy2DFromArray		hipMemcpy2DFromArray		
cudaMemcpy2DFromArrayAsync		hipMemcpy2DFromArrayAsync		
cudaMemcpy2DToArray		hipMemcpy2DToArray		
cudaMemcpy2DToArrayAsync		hipMemcpy2DToArrayAsync		
cudaMemcpy3D		hipMemcpy3D		
cudaMemcpy3DAsync		hipMemcpy3DAsync		
cudaMemcpyAsync		hipMemcpyAsync		
cudaMemcpyFromSymbol		hipMemcpyFromSymbol		
cudaMemcpyFromSymbolAsync		hipMemcpyFromSymbolAsync		
cudaMemcpyPeer		hipMemcpyPeer		
cudaMemcpyPeerAsync		hipMemcpyPeerAsync		

CUDA	D	HIP	D	E
cudaMemcpyToSymbol		hipMemcpyToSymbol		
cudaMemcpyToSymbolAsync		hipMemcpyToSymbolAsync		
cudaMemset		hipMemset		
cudaMemset2D		hipMemset2D		
cudaMemset2DAsync		hipMemset2DAsync		
cudaMemset3D		hipMemset3D		
cudaMemset3DAsync		hipMemset3DAsync		
cudaMemsetAsync		hipMemsetAsync		
make_cudaExtent		make_hipExtent		
make_cudaPitchedPtr		make_hipPitchedPtr		
make_cudaPos		make_hipPos		

1.2.10   Memory Management [DEPRECATED]

CUDA	D	HIP	D	E
cudaMemcpyFromArray	+	hipMemcpyFromArray	+	
cudaMemcpyToArray	+	hipMemcpyToArray	+	

1.2.11   Stream Ordered Memory Allocator

Stream Ordered Memory Allocator is no longer supported.

1.2.12   Unified Addressing

CUDA	D	HIP	D	E
cudaPointerGetAttributes		hipPointerGetAttributes		

1.2.13   Peer Device Memory Access

CUDA	D	HIP	D	E
cudaDeviceCanAccessPeer		hipDeviceCanAccessPeer		
cudaDeviceDisablePeerAccess		hipDeviceDisablePeerAccess		
cudaDeviceEnablePeerAccess		hipDeviceEnablePeerAccess		

1.2.14   OpenGL Interoperability

CUDA	D	HIP	D	E
cudaGLGetDevices		hipGLGetDevices		
cudaGraphicsGLRegisterBuffer		hipGraphicsGLRegisterBuffer		

1.2.15 VDPAU Interoperability

VDPAU Interoperability is no longer supported.

1.2.16 EGL Interoperability

EGL Interoperability is no longer supported.

1.2.17 Direct3D 9 Interoperability

Direct3D 9 Interoperability is no longer supported.

1.2.18 Direct3D 10 Interoperability

 Direct3D 10 Interoperability is no longer supported.

1.2.19 Direct3D 11 Interoperability

Direct3D 11 Interoperability is no longer supported.

1.2.20 Graphics Interoperability

CUDA	D	HIP	D	E
cudaGraphicsMapResources		hipGraphicsMapResources		
cudaGraphicsResourceGetMappedPointer		hipGraphicsResourceGetMappedPointer		
cudaGraphicsUnmapResources		hipGraphicsUnmapResources		
cudaGraphicsUnregisterResource		hipGraphicsUnregisterResource		

1.2.21 Texture Reference Management [DEPRECATED]

CUDA	D	HIP	D	E
cudaBindTexture	+	hipBindTexture	+	
cudaBindTexture2D	+	hipBindTexture2D	+	
cudaBindTextureToArray	+	hipBindTextureToArray	+	
cudaBindTextureToMipmappedArray	+	hipBindTextureToMipmappedArray		
cudaCreateChannelDesc		hipCreateChannelDesc		
cudaGetChannelDesc		hipGetChannelDesc		
cudaGetTextureAlignmentOffset	+	hipGetTextureAlignmentOffset	+	
cudaGetTextureReference	+	hipGetTextureReference		
cudaUnbindTexture	+	hipUnbindTexture	+	

1.2.22   Surface Reference Management [DEPRECATED]

Surface Reference Management [DEPRECATED] is no longer supported.

1.2.23   Texture Object Management

CUDA	D	HIP	D	E
cuTexObjectGetTextureDesc		hipGetTextureObjectTextureDesc		
cudaCreateTextureObject		hipCreateTextureObject		
cudaDestroyTextureObject		hipDestroyTextureObject		
cudaGetTextureObjectResourceDesc		hipGetTextureObjectResourceDesc		
cudaGetTextureObjectResourceViewDesc		hipGetTextureObjectResourceViewDesc		
cuTexObjectGetTextureDesc		hipGetTextureObjectTextureDesc		

1.2.24   Surface Object Management

CUDA	D	HIP	D	E
cudaCreateSurfaceObject		hipCreateSurfaceObject		
cudaDestroySurfaceObject		hipDestroySurfaceObject		

1.2.25   Version Management

CUDA	D	HIP	D	E
cudaDriverGetVersion		hipDriverGetVersion		
cudaRuntimeGetVersion		hipRuntimeGetVersion		

1.2.26   Graph Management

CUDA	D	HIP	D	E
cudaGraphAddDependencies		hipGraphAddDependencies		+
cudaGraphAddEmptyNode		hipGraphAddEmptyNode		+
cudaGraphAddKernelNode		hipGraphAddKernelNode		+
cudaGraphAddMemcpyNode		hipGraphAddMemcpyNode		+
cudaGraphAddMemcpyNode1D		hipGraphAddMemcpyNode1D		+
cudaGraphAddMemsetNode		hipGraphAddMemsetNode		+
cudaGraphCreate		hipGraphCreate		+
cudaGraphDestroy		hipGraphDestroy		+
cudaGraphExecDestroy		hipGraphExecDestroy		+
cudaGraphExecKernelNodeSetParams		hipGraphExecKernelNodeSetParams		+
cudaGraphGetNodes		hipGraphGetNodes		+
cudaGraphGetRootNodes		hipGraphGetRootNodes		+

CUDA	D	HIP	D	E
cudaGraphInstantiate		hipGraphInstantiate		+
cudaGraphKernelNodeGetParams		hipGraphKernelNodeGetParams		+
cudaGraphKernelNodeSetParams		hipGraphKernelNodeSetParams		+
cudaGraphLaunch		hipGraphLaunch		+
cudaGraphMemcpyNodeGetParams		hipGraphMemcpyNodeGetParams		+
cudaGraphMemcpyNodeSetParams		hipGraphMemcpyNodeSetParams		+

1.2.27   Driver Entry Point Access

Driver Entry Point Access is no longer supported.

1.2.28   C++ API Routines

C++ API Routines are no longer supported.

1.2.29   Interactions with CUDA Driver API

Interactions with CUDA Driver API are no longer supported.

1.2.30   Profiler Control [DEPRECATED]

Profiler Control (Deprecated) are no longer supported.

1.2.31   Profiler Control

CUDA	D	HIP	D	E
cudaProfilerStart		hipProfilerStart	+	
cudaProfilerStop		hipProfilerStop	+	

1.2.32   Data Types Used by CUDA Runtime

CUDA	D	HIP	D	E
CUDA_IPC_HANDLE_SIZE		HIP_IPC_HANDLE_SIZE		
CUevent_st		ihipEvent_t		
CUgraphExec_st		hipGraphExec		+
CUgraphNode_st		hipGraphNode		+
CUgraph_st		ihipGraph		+
CUstream_st		ihipStream_t		
cudaAddressModeBorder		hipAddressModeBorder		
cudaAddressModeClamp		hipAddressModeClamp		
cudaAddressModeMirror		hipAddressModeMirror		
cudaAddressModeWrap		hipAddressModeWrap		

CUDA	D	HIP	D	E
cudaArray		hipArray		
cudaArrayCubemap		hipArrayCubemap		
cudaArrayDefault		hipArrayDefault		
cudaArrayLayered		hipArrayLayered		
cudaArraySurfaceLoadStore		hipArraySurfaceLoadStore		
cudaArrayTextureGather		hipArrayTextureGather		
cudaArray_const_t		hipArray_const_t		
cudaArray_t		hipArray_t		
cudaBoundaryModeClamp		hipBoundaryModeClamp		
cudaBoundaryModeTrap		hipBoundaryModeTrap		
cudaBoundaryModeZero		hipBoundaryModeZero		
cudaChannelFormatDesc		hipChannelFormatDesc		
cudaChannelFormatDesc		hipChannelFormatDesc		
cudaChannelFormatKind		hipChannelFormatKind		
cudaChannelFormatKindFloat		hipChannelFormatKindFloat		
cudaChannelFormatKindNone		hipChannelFormatKindNone		
cudaChannelFormatKindSigned		hipChannelFormatKindSigned		
cudaChannelFormatKindUnsigned		hipChannelFormatKindUnsigned		
cudaComputeMode		hipComputeMode		
cudaComputeModeDefault		hipComputeModeDefault		
cudaComputeModeExclusive		hipComputeModeExclusive		
cudaComputeModeExclusiveProcess		hipComputeModeExclusiveProcess		
cudaComputeModeProhibited		hipComputeModeProhibited		
cudaCooperativeLaunchMultiDeviceNoPostSync		hipCooperativeLaunchMultiDeviceNoPostSync		
cudaCooperativeLaunchMultiDeviceNoPreSync		hipCooperativeLaunchMultiDeviceNoPreSync		
cudaCpuDeviceId		hipCpuDeviceId		
cudaDevAttrAsyncEngineCount		hipDeviceAttributeAsyncEngineCount		
cudaDevAttrCanMapHostMemory		hipDeviceAttributeCanMapHostMemory		
cudaDevAttrCanUseHostPointerForRegisteredMem		hipDeviceAttributeCanUseHostPointerForRegisteredMem		
cudaDevAttrClockRate		hipDeviceAttributeClockRate		
cudaDevAttrComputeCapabilityMajor		hipDeviceAttributeComputeCapabilityMajor		
cudaDevAttrComputeCapabilityMinor		hipDeviceAttributeComputeCapabilityMinor		

CUDA	D	HIP	D	E
cudaDevAttrComputeMode		hipDeviceAttributeComputeMode		
cudaDevAttrComputePreemptionSupported		hipDeviceAttributeComputePreemptionSupported		
cudaDevAttrConcurrentKernels		hipDeviceAttributeConcurrentKernels		
cudaDevAttrConcurrentManagedAccess		hipDeviceAttributeConcurrentManagedAccess		
cudaDevAttrCooperativeLaunch		hipDeviceAttributeCooperativeLaunch		
cudaDevAttrCooperativeMultiDeviceLaunch		hipDeviceAttributeCooperativeMultiDeviceLaunch		
cudaDevAttrDirectManagedMemAccessFromHost		hipDeviceAttributeDirectManagedMemAccessFromHost		
cudaDevAttrEccEnabled		hipDeviceAttributeEccEnabled		
cudaDevAttrGlobalL1CacheSupported		hipDeviceAttributeGlobalL1CacheSupported		
cudaDevAttrGlobalMemoryBusWidth		hipDeviceAttributeMemoryBusWidth		
cudaDevAttrGpuOverlap		hipDeviceAttributeAsyncEngineCount		
cudaDevAttrHostNativeAtomicSupported		hipDeviceAttributeHostNativeAtomicSupported		
cudaDevAttrIntegrated		hipDeviceAttributeIntegrated		
cudaDevAttrIsMultiGpuBoard		hipDeviceAttributeIsMultiGpuBoard		
cudaDevAttrKernelExecTimeout		hipDeviceAttributeKernelExecTimeout		
cudaDevAttrL2CacheSize		hipDeviceAttributeL2CacheSize		
cudaDevAttrLocalL1CacheSupported		hipDeviceAttributeLocalL1CacheSupported		
cudaDevAttrManagedMemory		hipDeviceAttributeManagedMemory		
cudaDevAttrMaxBlockDimX		hipDeviceAttributeMaxBlockDimX		
cudaDevAttrMaxBlockDimY		hipDeviceAttributeMaxBlockDimY		
cudaDevAttrMaxBlockDimZ		hipDeviceAttributeMaxBlockDimZ		
cudaDevAttrMaxBlocksPerMultiprocessor		hipDeviceAttributeMaxBlocksPerMultiprocessor		
cudaDevAttrMaxGridDimX		hipDeviceAttributeMaxGridDimX		
cudaDevAttrMaxGridDimY		hipDeviceAttributeMaxGridDimY		

CUDA	D	HIP	D	E
cudaDevAttrMaxGridDimZ		hipDeviceAttributeMaxGridDimZ		
cudaDevAttrMaxPitch		hipDeviceAttributeMaxPitch		
cudaDevAttrMaxRegistersPerBlock		hipDeviceAttributeMaxRegistersPerBlock		
cudaDevAttrMaxRegistersPerMultiprocessor		hipDeviceAttributeMaxRegistersPerMultiprocessor		
cudaDevAttrMaxSharedMemoryPerBlock		hipDeviceAttributeMaxSharedMemoryPerBlock		
cudaDevAttrMaxSharedMemoryPerBlockOptin		hipDeviceAttributeSharedMemPerBlockOptin		
cudaDevAttrMaxSharedMemoryPerMultiprocessor		hipDeviceAttributeMaxSharedMemoryPerMultiprocessor		
cudaDevAttrMaxSurface1DLayeredWidth		hipDeviceAttributeMaxSurface1DLayered		
cudaDevAttrMaxSurface1DWidth		hipDeviceAttributeMaxSurface1D		
cudaDevAttrMaxSurface2DHeight		hipDeviceAttributeMaxSurface2D		
cudaDevAttrMaxSurface2DLayeredHeight		hipDeviceAttributeMaxSurface2DLayered		
cudaDevAttrMaxSurface2DLayeredWidth		hipDeviceAttributeMaxSurface2DLayered		
cudaDevAttrMaxSurface2DWidth		hipDeviceAttributeMaxSurface2D		
cudaDevAttrMaxSurface3DDepth		hipDeviceAttributeMaxSurface3D		
cudaDevAttrMaxSurface3DHeight		hipDeviceAttributeMaxSurface3D		
cudaDevAttrMaxSurface3DWidth		hipDeviceAttributeMaxSurface3D		
cudaDevAttrMaxSurfaceCubemapLayeredWidth		hipDeviceAttributeMaxSurfaceCubemapLayered		
cudaDevAttrMaxSurfaceCubemapWidth		hipDeviceAttributeMaxSurfaceCubemap		
cudaDevAttrMaxTexture1DLayeredWidth		hipDeviceAttributeMaxTexture1DLayered		
cudaDevAttrMaxTexture1DLinearWidth		hipDeviceAttributeMaxTexture1DLinear		
cudaDevAttrMaxTexture1DMipmappedWidth		hipDeviceAttributeMaxTexture1DMipmap		
cudaDevAttrMaxTexture1DWidth		hipDeviceAttributeMaxTexture1DWidth		
cudaDevAttrMaxTexture2DGatherHeight		hipDeviceAttributeMaxTexture2DGather		
cudaDevAttrMaxTexture2DGatherWidth		hipDeviceAttributeMaxTexture2DGather		

CUDA	D	HIP	D	E
cudaDevAttrMaxTexture2DHeight		hipDeviceAttributeMaxTexture2DHeight		
cudaDevAttrMaxTexture2DLayeredHeight		hipDeviceAttributeMaxTexture2DLayered		
cudaDevAttrMaxTexture2DLayeredWidth		hipDeviceAttributeMaxTexture2DLayered		
cudaDevAttrMaxTexture2DLinearHeight		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DLinearPitch		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DLinearWidth		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DMipmappedHeight		hipDeviceAttributeMaxTexture2DMipmap		
cudaDevAttrMaxTexture2DMipmappedWidth		hipDeviceAttributeMaxTexture2DMipmap		
cudaDevAttrMaxTexture2DWidth		hipDeviceAttributeMaxTexture2DWidth		
cudaDevAttrMaxTexture3DDepth		hipDeviceAttributeMaxTexture3DDepth		
cudaDevAttrMaxTexture3DDepthAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTexture3DHeight		hipDeviceAttributeMaxTexture3DHeight		
cudaDevAttrMaxTexture3DHeightAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTexture3DWidth		hipDeviceAttributeMaxTexture3DWidth		
cudaDevAttrMaxTexture3DWidthAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTextureCubemapWidth		hipDeviceAttributeMaxTextureCubemap		
cudaDevAttrMaxTexture1DLayeredWidth		hipDeviceAttributeMaxTexture1DLayered		
cudaDevAttrMaxTexture1DLinearWidth		hipDeviceAttributeMaxTexture1DLinear		
cudaDevAttrMaxTexture1DMipmappedWidth		hipDeviceAttributeMaxTexture1DMipmap		
cudaDevAttrMaxTexture1DWidth		hipDeviceAttributeMaxTexture1DWidth		
cudaDevAttrMaxTexture2DGatherHeight		hipDeviceAttributeMaxTexture2DGather		
cudaDevAttrMaxTexture2DGatherWidth		hipDeviceAttributeMaxTexture2DGather		
cudaDevAttrMaxTexture2DHeight		hipDeviceAttributeMaxTexture2DHeight		
cudaDevAttrMaxTexture2DLayeredHeight		hipDeviceAttributeMaxTexture2DLayered		

CUDA	D	HIP	D	E
cudaDevAttrMaxTexture2DLayeredWidth		hipDeviceAttributeMaxTexture2DLayered		
cudaDevAttrMaxTexture2DLinearHeight		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DLinearPitch		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DLinearWidth		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DMipmappedHeight		hipDeviceAttributeMaxTexture2DMip		
cudaDevAttrMaxTexture2DMipmappedWidth		hipDeviceAttributeMaxTexture2DMip		
cudaDevAttrMaxTexture2DWidth		hipDeviceAttributeMaxTexture2DWidth		
cudaDevAttrMaxTexture3DDepth		hipDeviceAttributeMaxTexture3DDepth		
cudaDevAttrMaxTexture3DDepthAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTexture3DHeight		hipDeviceAttributeMaxTexture3DHeight		
cudaDevAttrMaxTexture3DHeightAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTexture3DWidth		hipDeviceAttributeMaxTexture3DWidth		
cudaDevAttrMaxTexture3DWidthAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTextureCubemapWidth		hipDeviceAttributeMaxTextureCubemap		
cudaDevAttrMaxTexture2DHeight		hipDeviceAttributeMaxTexture2DHeight		
cudaDevAttrMaxTexture2DLayeredHeight		hipDeviceAttributeMaxTexture2DLayered		
cudaDevAttrMaxTexture2DLayeredWidth		hipDeviceAttributeMaxTexture2DLayered		
cudaDevAttrMaxTexture2DLinearHeight		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DLinearPitch		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DLinearWidth		hipDeviceAttributeMaxTexture2DLinear		
cudaDevAttrMaxTexture2DMipmappedHeight		hipDeviceAttributeMaxTexture2DMip		
cudaDevAttrMaxTexture2DMipmappedWidth		hipDeviceAttributeMaxTexture2DMip		
cudaDevAttrMaxTexture2DWidth		hipDeviceAttributeMaxTexture2DWidth		
cudaDevAttrMaxTexture3DDepth		hipDeviceAttributeMaxTexture3DDepth		

CUDA	D	HIP	D	E
cudaDevAttrMaxTexture3DDepthAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTexture3DHeight		hipDeviceAttributeMaxTexture3DHeight		
cudaDevAttrMaxTexture3DHeightAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTexture3DWidth		hipDeviceAttributeMaxTexture3DWidth		
cudaDevAttrMaxTexture3DWidthAlt		hipDeviceAttributeMaxTexture3DAlt		
cudaDevAttrMaxTextureCubemapWidth		hipDeviceAttributeMaxTextureCubemap		
cudaDevAttrMaxThreadsPerBlock		hipDeviceAttributeMaxThreadsPerBlock		
cudaDevAttrMaxThreadsPerMultiProcessor		hipDeviceAttributeMaxThreadsPerMultiProcessor		
cudaDevAttrMemoryClockRate		hipDeviceAttributeMemoryClockRate		
cudaDevAttrMultiGpuBoardGroupID		hipDeviceAttributeMultiGpuBoardGroupID		
cudaDevAttrMultiProcessorCount		hipDeviceAttributeMultiprocessorCount		
cudaDevAttrPageableMemoryAccess		hipDeviceAttributePageableMemoryAccess		
cudaDevAttrPageableMemoryAccessUsesHostPageTables		hipDeviceAttributePageableMemoryAccessUsesHostPageTables		
cudaDevAttrPciBusId		hipDeviceAttributePciBusId		
cudaDevAttrPciDeviceId		hipDeviceAttributePciDeviceId		
cudaDevAttrPciDomainId		hipDeviceAttributePciDomainId		
cudaDevAttrReserved94		hipDeviceAttributeCanUseStreamWaitValue		
cudaDevAttrSingleToDoublePrecisionPerfRatio		hipDeviceAttributeSingleToDoublePrecisionPerfRatio		
cudaDevAttrStreamPrioritiesSupported		hipDeviceAttributeStreamPrioritiesSupported		
cudaDevAttrSurfaceAlignment		hipDeviceAttributeSurfaceAlignment		
cudaDevAttrTccDriver		hipDeviceAttributeTccDriver		
cudaDevAttrTextureAlignment		hipDeviceAttributeTextureAlignment		
cudaDevAttrTexturePitchAlignment		hipDeviceAttributeTexturePitchAlignment		
cudaDevAttrTotalConstantMemory		hipDeviceAttributeTotalConstantMemory		

CUDA	D	HIP	D	E
cudaDevAttrUnifiedAddressing		hipDeviceAttributeUnifiedAddressing		
cudaDevAttrWarpSize		hipDeviceAttributeWarpSize		
cudaDevP2PAttrAccessSupported		hipDevP2PAttrAccessSupported		
cudaDevP2PAttrCudaArrayAccessSupported		hipDevP2PAttrHipArrayAccessSupported		
cudaDevP2PAttrNativeAtomicSupported		hipDevP2PAttrNativeAtomicSupported		
cudaDevP2PAttrPerformanceRank		hipDevP2PAttrPerformanceRank		
cudaDeviceAttr		hipDeviceAttribute_t		
cudaDeviceBlockingSync		hipDeviceScheduleBlockingSync		
cudaDeviceLmemResizeToMax		hipDeviceLmemResizeToMax		
cudaDeviceMapHost		hipDeviceMapHost		
cudaDeviceP2PAttr		hipDeviceP2PAttr		
cudaDeviceProp		hipDeviceProp_t		
cudaDeviceScheduleAuto		hipDeviceScheduleAuto		
cudaDeviceScheduleBlockingSync		hipDeviceScheduleBlockingSync		
cudaDeviceScheduleMask		hipDeviceScheduleMask		
cudaDeviceScheduleSpin		hipDeviceScheduleSpin		
cudaDeviceScheduleYield		hipDeviceScheduleYield		
cudaError		hipError_t		
cudaErrorAlreadyAcquired		hipErrorAlreadyAcquired		
cudaErrorAlreadyMapped		hipErrorAlreadyMapped		
cudaErrorArrayIsMapped		hipErrorArrayIsMapped		
cudaErrorAssert		hipErrorAssert		
cudaErrorCapturedEvent		hipErrorCapturedEvent		
cudaErrorContextIsDestroyed		hipErrorContextIsDestroyed		
cudaErrorCooperativeLaunchTooLarge		hipErrorCooperativeLaunchTooLarge		
cudaErrorCudartUnloading		hipErrorDeinitialized		
cudaErrorDeviceAlreadyInUse		hipErrorContextAlreadyInUse		
cudaErrorDeviceUninitialized		hipErrorInvalidContext		
cudaErrorECCUncorrectable		hipErrorECCNotCorrectable		
cudaErrorFileNotFound		hipErrorFileNotFound		
cudaErrorHostMemoryAlreadyRegistered		hipErrorHostMemoryAlreadyRegistered		
cudaErrorHostMemoryNotRegistered		hipErrorHostMemoryNotRegistered		

CUDA	D	HIP	D	E
cudaErrorIllegalAddress		hipErrorIllegalAddress		
cudaErrorInitializationError		hipErrorNotInitialized		
cudaErrorInsufficientDriver		hipErrorInsufficientDriver		
cudaErrorInvalidConfiguration		hipErrorInvalidConfiguration		
cudaErrorInvalidDevice		hipErrorInvalidDevice		
cudaErrorInvalidDeviceFunction		hipErrorInvalidDeviceFunction		
cudaErrorInvalidDevicePointer	+	hipErrorInvalidDevicePointer		
cudaErrorInvalidGraphicsContext		hipErrorInvalidGraphicsContext		
cudaErrorInvalidKernelImage		hipErrorInvalidImage		
cudaErrorInvalidMemcpyDirection		hipErrorInvalidMemcpyDirection		
cudaErrorInvalidPitchValue		hipErrorInvalidPitchValue		
cudaErrorInvalidPtx		hipErrorInvalidKernelFile		
cudaErrorInvalidResourceHandle		hipErrorInvalidHandle		
cudaErrorInvalidSource		hipErrorInvalidSource		
cudaErrorInvalidSymbol		hipErrorInvalidSymbol		
cudaErrorInvalidValue		hipErrorInvalidValue		
cudaErrorLaunchFailure		hipErrorLaunchFailure		
cudaErrorLaunchOutOfResources		hipErrorLaunchOutOfResources		
cudaErrorLaunchTimeout		hipErrorLaunchTimeOut		
cudaErrorMapBufferObjectFailed		hipErrorMapFailed		
cudaErrorMemoryAllocation		hipErrorOutOfMemory		
cudaErrorMissingConfiguration		hipErrorMissingConfiguration		
cudaErrorNoDevice		hipErrorNoDevice		
cudaErrorNoKernelImageForDevice		hipErrorNoBinaryForGpu		
cudaErrorNotMapped		hipErrorNotMapped		
cudaErrorNotMappedAsArray		hipErrorNotMappedAsArray		
cudaErrorNotMappedAsPointer		hipErrorNotMappedAsPointer		
cudaErrorNotReady		hipErrorNotReady		
cudaErrorNotSupported		hipErrorNotSupported		
cudaErrorOperatingSystem		hipErrorOperatingSystem		
cudaErrorPeerAccessAlreadyEnabled		hipErrorPeerAccessAlreadyEnabled		
cudaErrorPeerAccessNotEnabled		hipErrorPeerAccessNotEnabled		
cudaErrorPeerAccessUnsupported		hipErrorPeerAccessUnsupported		
cudaErrorPriorLaunchFailure	+	hipErrorPriorLaunchFailure		

CUDA	D	HIP	D	E
cudaErrorProfilerAlreadyStarted	+	hipErrorProfilerAlreadyStarted		
cudaErrorProfilerAlreadyStopped	+	hipErrorProfilerAlreadyStopped		
cudaErrorProfilerDisabled		hipErrorProfilerDisabled		
cudaErrorProfilerNotInitialized	+	hipErrorProfilerNotInitialized		
cudaErrorSetOnActiveProcess		hipErrorSetOnActiveProcess		
cudaErrorSharedObjectInitFailed		hipErrorSharedObjectInitFailed		
cudaErrorSharedObjectSymbolNotFound		hipErrorSharedObjectSymbolNotFound		
cudaErrorStreamCaptureImplicit		hipErrorStreamCaptureImplicit		
cudaErrorStreamCaptureInvalidated		hipErrorStreamCaptureInvalidated		
cudaErrorStreamCaptureIsolation		hipErrorStreamCaptureIsolation		
cudaErrorStreamCaptureMerge		hipErrorStreamCaptureMerge		
cudaErrorStreamCaptureUnjoined		hipErrorStreamCaptureUnjoined		
cudaErrorStreamCaptureUnmatched		hipErrorStreamCaptureUnmatched		
cudaErrorStreamCaptureUnsupported		hipErrorStreamCaptureUnsupported		
cudaErrorStreamCaptureWrongThread		hipErrorStreamCaptureWrongThread		
cudaErrorSymbolNotFound		hipErrorNotFound		
cudaErrorUnknown		hipErrorUnknown		
cudaErrorUnmapBufferObjectFailed		hipErrorUnmapFailed		
cudaErrorUnsupportedLimit		hipErrorUnsupportedLimit		
cudaError_t		hipError_t		
cudaEventBlockingSync		hipEventBlockingSync		
cudaEventDefault		hipEventDefault		
cudaEventDisableTiming		hipEventDisableTiming		
cudaEventInterprocess		hipEventInterprocess		
cudaEvent_t		hipEvent_t		
cudaExternalMemoryBufferDesc		hipExternalMemoryBufferDesc		
cudaExternalMemoryHandleDesc		hipExternalMemoryHandleDesc		
cudaExternalMemoryHandleType		hipExternalMemoryHandleType		
cudaExternalMemoryHandleTypeD3D11Resource		hipExternalMemoryHandleTypeD3D11Resource		

CUDA	D	HIP	D	E
cudaExternalMemoryHandleTypeD3D11ResourceKmt		hipExternalMemoryHandleTypeD3D11ResourceKmt		
cudaExternalMemoryHandleTypeD3D12Heap		hipExternalMemoryHandleTypeD3D12Heap		
cudaExternalMemoryHandleTypeD3D12Resource		hipExternalMemoryHandleTypeD3D12Resource		
cudaExternalMemoryHandleTypeOpaqueFd		hipExternalMemoryHandleTypeOpaqueFd		
cudaExternalMemoryHandleTypeOpaqueWin32		hipExternalMemoryHandleTypeOpaqueWin32		
cudaExternalMemoryHandleTypeOpaqueWin32Kmt		hipExternalMemoryHandleTypeOpaqueWin32Kmt		
cudaExternalMemory_t		hipExternalMemory_t		
cudaExternalSemaphoreHandleDesc		hipExternalSemaphoreHandleDesc		
cudaExternalSemaphoreHandleType		hipExternalSemaphoreHandleType		
cudaExternalSemaphoreHandleTypeD3D12Fence		hipExternalSemaphoreHandleTypeD3D12Fence		
cudaExternalSemaphoreHandleTypeOpaqueFd		hipExternalSemaphoreHandleTypeOpaqueFd		
cudaExternalSemaphoreHandleTypeOpaqueWin32		hipExternalSemaphoreHandleTypeOpaqueWin32		
cudaExternalSemaphoreHandleTypeOpaqueWin32Kmt		hipExternalSemaphoreHandleTypeOpaqueWin32Kmt		
cudaExternalSemaphoreSignalParams		hipExternalSemaphoreSignalParams		
cudaExternalSemaphoreSignalParams_v1		hipExternalSemaphoreSignalParams		
cudaExternalSemaphoreWaitParams		hipExternalSemaphoreWaitParams		
cudaExternalSemaphoreWaitParams_v1		hipExternalSemaphoreWaitParams		
cudaExternalSemaphore_t		hipExternalSemaphore_t		
cudaFilterModeLinear		hipFilterModeLinear		
cudaFilterModePoint		hipFilterModePoint		
cudaFuncAttribute		hipFuncAttribute		
cudaFuncAttributeMax		hipFuncAttributeMax		
cudaFuncAttributeMaxDynamicSharedMemorySize		hipFuncAttributeMaxDynamicSharedMemorySize		
cudaFuncAttributePreferredSharedMemoryCarveout		hipFuncAttributePreferredSharedMemoryCarveout		
cudaFuncAttributes		hipFuncAttributes		
cudaFuncCache		hipFuncCache_t		
cudaFuncCachePreferEqual		hipFuncCachePreferEqual		
cudaFuncCachePreferL1		hipFuncCachePreferL1		
cudaFuncCachePreferNone		hipFuncCachePreferNone		

CUDA	D	HIP	D	E
cudaFuncCachePreferShared		hipFuncCachePreferShared		
cudaGraphExecUpdateError		hipGraphExecUpdateError		+
cudaGraphExecUpdateErrorFunctionChanged		hipGraphExecUpdateErrorFunctionChanged		+
cudaGraphExecUpdateErrorNodeTypeChanged		hipGraphExecUpdateErrorNodeTypeChanged		+
cudaGraphExecUpdateErrorNotSupported		hipGraphExecUpdateErrorNotSupported		+
cudaGraphExecUpdateErrorParametersChanged		hipGraphExecUpdateErrorParametersChanged		+
cudaGraphExecUpdateErrorTopologyChanged		hipGraphExecUpdateErrorTopologyChanged		+
cudaGraphExecUpdateErrorUnsupportedFunctionChange		hipGraphExecUpdateErrorUnsupportedFunctionChange		+
cudaGraphExecUpdateResult		hipGraphExecUpdateResult		+
cudaGraphExecUpdateSuccess		hipGraphExecUpdateSuccess		+
cudaGraphExec_t		hipGraphExec_t		+
cudaGraphNodeType		hipGraphNodeType		+
cudaGraphNodeTypeCount		hipGraphNodeTypeCount		+
cudaGraphNodeTypeEmpty		hipGraphNodeTypeEmpty		+
cudaGraphNodeTypeEventRecord		hipGraphNodeTypeEventRecord		+
cudaGraphNodeTypeGraph		hipGraphNodeTypeGraph		+
cudaGraphNodeTypeHost		hipGraphNodeTypeHost		+
cudaGraphNodeTypeKernel		hipGraphNodeTypeKernel		+
cudaGraphNodeTypeMemcpy		hipGraphNodeTypeMemcpy		+
cudaGraphNodeTypeMemset		hipGraphNodeTypeMemset		+
cudaGraphNodeTypeWaitEvent		hipGraphNodeTypeWaitEvent		+
cudaGraphNode_t		hipGraphNode_t		+
cudaGraph_t		hipGraph_t		+
cudaGraphicsResource		hipGraphicsResource		
cudaGraphicsResource_t		hipGraphicsResource_t		
cudaHostAllocDefault		hipHostMallocDefault		
cudaHostAllocMapped		hipHostMallocMapped		
cudaHostAllocPortable		hipHostMallocPortable		
cudaHostAllocWriteCombined		hipHostMallocWriteCombined		
cudaHostFn_t		hipHostFn_t		
cudaHostNodeParams		hipHostNodeParams		
cudaHostRegisterDefault		hipHostRegisterDefault		
cudaHostRegisterIoMemory		hipHostRegisterIoMemory		
cudaHostRegisterMapped		hipHostRegisterMapped		

CUDA	D	HIP	D	E
cudaHostRegisterPortable		hipHostRegisterPortable		
cudaInvalidDeviceId		hipInvalidDeviceId		
cudaIpcEventHandle_st		hipIpcEventHandle_st		
cudaIpcEventHandle_t		hipIpcEventHandle_t		
cudaIpcMemHandle_st		hipIpcMemHandle_st		
cudaIpcMemHandle_t		hipIpcMemHandle_t		
cudaIpcMemLazyEnablePeerAccess		hipIpcMemLazyEnablePeer Access		
cudaKernelNodeParams		hipKernelNodeParams		
cudaLaunchParams		hipLaunchParams		
cudaLimit		hipLimit_t		
cudaLimitMallocHeapSize		hipLimitMallocHeapSize		
cudaLimitPrintfFifoSize		hipLimitPrintfFifoSize		
cudaMemAdviseSetAccessedBy		hipMemAdviseSetAccessed By		
cudaMemAdviseSetPreferredLocation		hipMemAdviseSetPreferred Location		
cudaMemAdviseSetReadMostly		hipMemAdviseSetReadMost ly		
cudaMemAdviseUnsetAccessedBy		hipMemAdviseUnsetAccess edBy		
cudaMemAdviseUnsetPreferredLocatio n		hipMemAdviseUnsetPreferr edLocation		
cudaMemAdviseUnsetReadMostly		hipMemAdviseUnsetReadM ostly		
cudaMemAttachGlobal		hipMemAttachGlobal		
cudaMemAttachHost		hipMemAttachHost		
cudaMemAttachSingle		hipMemAttachSingle		
cudaMemRangeAttribute		hipMemRangeAttribute		
cudaMemRangeAttributeAccessedBy		hipMemRangeAttributeAcce ssedBy		
cudaMemRangeAttributeLastPrefetchL ocation		hipMemRangeAttributeLast PrefetchLocation		
cudaMemRangeAttributePreferredLoca tion		hipMemRangeAttributePrefe rredLocation		
cudaMemRangeAttributeReadMostly		hipMemRangeAttributeRead Mostly		
cudaMemcpy3DParms		hipMemcpy3DParms		
cudaMemcpyDefault		hipMemcpyDefault		
cudaMemcpyDeviceToDevice		hipMemcpyDeviceToDevice		
cudaMemcpyDeviceToHost		hipMemcpyDeviceToHost		
cudaMemcpyHostToDevice		hipMemcpyHostToDevice		
cudaMemcpyHostToHost		hipMemcpyHostToHost		
cudaMemcpyKind		hipMemcpyKind		
cudaMemoryAdvise		hipMemoryAdvise		

CUDA	D	HIP	D	E
cudaMemsetParams		hipMemsetParams		
cudaMipmappedArray		hipMipmappedArray		
cudaMipmappedArray_const_t		hipMipmappedArray_const_t		
cudaMipmappedArray_t		hipMipmappedArray_t		
cudaOccupancyDefault		hipOccupancyDefault		
cudaPitchedPtr		hipPitchedPtr		
cudaPointerAttributes		hipPointerAttribute_t		
cudaPos		hipPos		
cudaReadModeElementType		hipReadModeElementType		
cudaReadModeNormalizedFloat		hipReadModeNormalizedFloat		
cudaResViewFormatFloat1		hipResViewFormatFloat1		
cudaResViewFormatFloat2		hipResViewFormatFloat2		
cudaResViewFormatFloat4		hipResViewFormatFloat4		
cudaResViewFormatHalf1		hipResViewFormatHalf1		
cudaResViewFormatHalf2		hipResViewFormatHalf2		
cudaResViewFormatHalf4		hipResViewFormatHalf4		
cudaResViewFormatNone		hipResViewFormatNone		
cudaResViewFormatSignedBlockCompressed4		hipResViewFormatSignedBlockCompressed4		
cudaResViewFormatSignedBlockCompressed5		hipResViewFormatSignedBlockCompressed5		
cudaResViewFormatSignedBlockCompressed6H		hipResViewFormatSignedBlockCompressed6H		
cudaResViewFormatSignedChar1		hipResViewFormatSignedChar1		
cudaResViewFormatSignedChar2		hipResViewFormatSignedChar2		
cudaResViewFormatSignedChar4		hipResViewFormatSignedChar4		
cudaResViewFormatSignedInt1		hipResViewFormatSignedInt1		
cudaResViewFormatSignedInt2		hipResViewFormatSignedInt2		
cudaResViewFormatSignedInt4		hipResViewFormatSignedInt4		
cudaResViewFormatSignedShort1		hipResViewFormatSignedShort1		
cudaResViewFormatSignedShort2		hipResViewFormatSignedShort2		
cudaResViewFormatSignedShort4		hipResViewFormatSignedShort4		
cudaResViewFormatUnsignedBlockCompressed1		hipResViewFormatUnsignedBlockCompressed1		

CUDA	D	HIP	D	E
cudaResViewFormatUnsignedBlockCompressed2		hipResViewFormatUnsignedBlockCompressed2		
cudaResViewFormatUnsignedBlockCompressed3		hipResViewFormatUnsignedBlockCompressed3		
cudaResViewFormatUnsignedBlockCompressed4		hipResViewFormatUnsignedBlockCompressed4		
cudaResViewFormatUnsignedBlockCompressed5		hipResViewFormatUnsignedBlockCompressed5		
cudaResViewFormatUnsignedBlockCompressed6H		hipResViewFormatUnsignedBlockCompressed6H		
cudaResViewFormatUnsignedBlockCompressed7		hipResViewFormatUnsignedBlockCompressed7		
cudaResViewFormatUnsignedChar1		hipResViewFormatUnsignedChar1		
cudaResViewFormatUnsignedChar2		hipResViewFormatUnsignedChar2		
cudaResViewFormatUnsignedChar4		hipResViewFormatUnsignedChar4		
cudaResViewFormatUnsignedInt1		hipResViewFormatUnsignedInt1		
cudaResViewFormatUnsignedInt2		hipResViewFormatUnsignedInt2		
cudaResViewFormatUnsignedInt4		hipResViewFormatUnsignedInt4		
cudaResViewFormatUnsignedShort1		hipResViewFormatUnsignedShort1		
cudaResViewFormatUnsignedShort2		hipResViewFormatUnsignedShort2		
cudaResViewFormatUnsignedShort4		hipResViewFormatUnsignedShort4		
cudaResourceDesc		hipResourceDesc		
cudaResourceType		hipResourceType		
cudaResourceTypeArray		hipResourceTypeArray		
cudaResourceTypeLinear		hipResourceTypeLinear		
cudaResourceTypeMipmappedArray		hipResourceTypeMipmappedArray		
cudaResourceTypePitch2D		hipResourceTypePitch2D		
cudaResourceViewDesc		hipResourceViewDesc		
cudaResourceViewFormat		hipResourceViewFormat		
cudaSharedMemBankSizeDefault		hipSharedMemBankSizeDefault		
cudaSharedMemBankSizeEightByte		hipSharedMemBankSizeEightByte		
cudaSharedMemBankSizeFourByte		hipSharedMemBankSizeFourByte		
cudaSharedMemConfig		hipSharedMemConfig		
cudaStreamCallback_t		hipStreamCallback_t		

CUDA	D	HIP	D	E
cudaStreamCaptureMode		hipStreamCaptureMode		
cudaStreamCaptureModeGlobal		hipStreamCaptureModeGlobal		
cudaStreamCaptureModeRelaxed		hipStreamCaptureModeRelaxed		
cudaStreamCaptureModeThreadLocal		hipStreamCaptureModeThreadLocal		
cudaStreamCaptureStatus		hipStreamCaptureStatus		
cudaStreamCaptureStatusActive		hipStreamCaptureStatusActive		
cudaStreamCaptureStatusInvalidated		hipStreamCaptureStatusInvalidated		
cudaStreamCaptureStatusNone		hipStreamCaptureStatusNone		
cudaStreamDefault		hipStreamDefault		
cudaStreamNonBlocking		hipStreamNonBlocking		
cudaStreamPerThread		hipStreamPerThread		
cudaStream_t		hipStream_t		
cudaSuccess		hipSuccess		
cudaSurfaceBoundaryMode		hipSurfaceBoundaryMode		
cudaSurfaceObject_t		hipSurfaceObject_t		
cudaTextureDesc		hipTextureDesc		
cudaTextureFilterMode		hipTextureFilterMode		
cudaTextureObject_t		hipTextureObject_t		
cudaTextureReadMode		hipTextureReadMode		
cudaTextureType1D		hipTextureType1D		
cudaTextureType1DLayered		hipTextureType1DLayered		
cudaTextureType2D		hipTextureType2D		
cudaTextureType2DLayered		hipTextureType2DLayered		
cudaTextureType3D		hipTextureType3D		
cudaTextureTypeCubemap		hipTextureTypeCubemap		
cudaTextureTypeCubemapLayered		hipTextureTypeCubemapLayered		
surfaceReference		surfaceReference		
cudaDevAttrMaxTextureCubemapLayeredWidth		hipDeviceAttributeMaxTextureCubemapLayered		
cudaGLDeviceList		hipGLDeviceList		
cudaGLDeviceListAll		hipGLDeviceListAll		
cudaGLDeviceListCurrentFrame		hipGLDeviceListCurrentFrame		
cudaGLDeviceListNextFrame		hipGLDeviceListNextFrame		
cudaGraphicsRegisterFlags		hipGraphicsRegisterFlags		
cudaGraphicsRegisterFlagsNone		hipGraphicsRegisterFlagsNone		

CUDA	D	HIP	D	E
cudaGraphicsRegisterFlagsReadOnly		hipGraphicsRegisterFlagsReadOnly		
cudaGraphicsRegisterFlagsSurfaceLoadStore		hipGraphicsRegisterFlagsSurfaceLoadStore		
cudaGraphicsRegisterFlagsTextureGather		hipGraphicsRegisterFlagsTextureGather		
cudaGraphicsRegisterFlagsWriteDiscard		hipGraphicsRegisterFlagsWriteDiscard		
cudaMemoryType		hipMemoryType		
cudaMemoryTypeDevice		hipMemoryTypeDevice		
cudaMemoryTypeHost		hipMemoryTypeHost		

1.2.33 Execution Control [REMOVED]

CUDA	D	HIP	D	E
cudaConfigureCall		hipConfigureCall		
cudaLaunch		hipLaunchByPtr		
cudaSetupArgument		hipSetupArgument		

1.3 cuBLAS APIs Supported by HIP

1.3.1 cuBLAS Data Types

CUDA	D	HIP	D	E
CUBLAS_ATOMICS_ALLOWED		HIPBLAS_ATOMICS_ALLOWED		
CUBLAS_ATOMICS_NOT_ALLOWED		HIPBLAS_ATOMICS_NOT_ALLOWED		
CUBLAS_DIAG_NON_UNIT		HIPBLAS_DIAG_NON_UNIT		
CUBLAS_DIAG_UNIT		HIPBLAS_DIAG_UNIT		
CUBLAS_FILL_MODE_FULL		HIPBLAS_FILL_MODE_FULL		
CUBLAS_FILL_MODE_LOWER		HIPBLAS_FILL_MODE_LOWER		
CUBLAS_FILL_MODE_UPPER		HIPBLAS_FILL_MODE_UPPER		
CUBLAS_GEMM_DEFAULT		HIPBLAS_GEMM_DEFAULT		
CUBLAS_GEMM_DFALT		HIPBLAS_GEMM_DEFAULT		
CUBLAS_OP_C		HIPBLAS_OP_C		
CUBLAS_OP_HERMITAN		HIPBLAS_OP_C		
CUBLAS_OP_N		HIPBLAS_OP_N		
CUBLAS_OP_T		HIPBLAS_OP_T		
CUBLAS_POINTER_MODE_DEVICE		HIPBLAS_POINTER_MODE_DEVICE		
CUBLAS_POINTER_MODE_HOST		HIPBLAS_POINTER_MODE_HOST		
CUBLAS_SIDE_LEFT		HIPBLAS_SIDE_LEFT		
CUBLAS_SIDE_RIGHT		HIPBLAS_SIDE_RIGHT		
CUBLAS_STATUS_ALLOC_FAILED		HIPBLAS_STATUS_ALLOC_FAILED		

CUBLAS_STATUS_ARCH_MISMATCH		HIPBLAS_STATUS_ARCH_MISMATCH		
CUBLAS_STATUS_EXECUTION_FAILED		HIPBLAS_STATUS_EXECUTION_FAILED		
CUBLAS_STATUS_INTERNAL_ERROR		HIPBLAS_STATUS_INTERNAL_ERROR		
CUBLAS_STATUS_INVALID_VALUE		HIPBLAS_STATUS_INVALID_VALUE		
CUBLAS_STATUS_MAPPING_ERROR		HIPBLAS_STATUS_MAPPING_ERROR		
CUBLAS_STATUS_NOT_INITIALIZED		HIPBLAS_STATUS_NOT_INITIALIZED		
CUBLAS_STATUS_NOT_SUPPORTED		HIPBLAS_STATUS_NOT_SUPPORTED		
CUBLAS_STATUS_SUCCESS		HIPBLAS_STATUS_SUCCESS		
cublasAtomicsMode_t		hipblasAtomicsMode_t		
cublasDataType_t		hipblasDatatype_t		
cublasDiagType_t		hipblasDiagType_t		
cublasFillMode_t		hipblasFillMode_t		
cublasGemmAlgo_t		hipblasGemmAlgo_t		
cublasHandle_t		hipblasHandle_t		
cublasOperation_t		hipblasOperation_t		
cublasPointerMode_t		hipblasPointerMode_t		
cublasSideMode_t		hipblasSideMode_t		
cublasStatus		hipblasStatus_t		
cublasStatus_t		hipblasStatus_t		

1.3.2   CUDA Datatypes Reference

CUDA	D	HIP	D	E
CUDA_C_16F		HIPBLAS_C_16F		
CUDA_C_32F		HIPBLAS_C_32F		
CUDA_C_32I		HIPBLAS_C_32I		
CUDA_C_32U		HIPBLAS_C_32U		
CUDA_C_64F		HIPBLAS_C_64F		
CUDA_C_8I		HIPBLAS_C_8I		
CUDA_C_8U		HIPBLAS_C_8U		
CUDA_R_16F		HIPBLAS_R_16F		
CUDA_R_32F		HIPBLAS_R_32F		
CUDA_R_32I		HIPBLAS_R_32I		
CUDA_R_32U		HIPBLAS_R_32U		
CUDA_R_64F		HIPBLAS_R_64F		
CUDA_R_8I		HIPBLAS_R_8I		
CUDA_R_8U		HIPBLAS_R_8U		
cudaDataType		hipblasDatatype_t		
cudaDataType_t		hipblasDatatype_t		

1.3.3 cuBLAS Helper Function Reference

CUDA	D	HIP	D	E
cublasCreate		hipblasCreate		
cublasCreate_v2		hipblasCreate		
cublasDestroy		hipblasDestroy		
cublasDestroy_v2		hipblasDestroy		
cublasGetAtomicsMode		hipblasGetAtomicsMode		
cublasGetMatrix		hipblasGetMatrix		
cublasGetMatrixAsync		hipblasGetMatrixAsync		
cublasGetPointerMode		hipblasGetPointerMode		
cublasGetPointerMode_v2		hipblasGetPointerMode		
cublasGetStream		hipblasGetStream		
cublasGetStream_v2		hipblasGetStream		
cublasGetVector		hipblasGetVector		
cublasGetVectorAsync		hipblasGetVectorAsync		
cublasSetAtomicsMode		hipblasSetAtomicsMode		
cublasSetMatrix		hipblasSetMatrix		
cublasSetMatrixAsync		hipblasSetMatrixAsync		
cublasSetPointerMode		hipblasSetPointerMode		
cublasSetPointerMode_v2		hipblasSetPointerMode		
cublasSetStream		hipblasSetStream		
cublasSetStream_v2		hipblasSetStream		
cublasSetVector		hipblasSetVector		
cublasSetVectorAsync		hipblasSetVectorAsync		

1.3.4 cuBLAS Level-1 Function Reference

CUDA	D	HIP	D	E
cublasCaxpy		hipblasCaxpy		
cublasCaxpy_v2		hipblasCaxpy		
cublasCcopy		hipblasCcopy		
cublasCcopy_v2		hipblasCcopy		
cublasCdotc		hipblasCdotc		
cublasCdotc_v2		hipblasCdotc		
cublasCdotu		hipblasCdotu		
cublasCdotu_v2		hipblasCdotu		
cublasCrot		hipblasCrot		
cublasCrot_v2		hipblasCrot		
cublasCrotg		hipblasCrotg		
cublasCrotg_v2		hipblasCrotg		

CUDA	D	HIP	D	E
cublasCscal		hipblasCscal		
cublasCscal_v2		hipblasCscal		
cublasCsrot		hipblasCsrot		
cublasCsrot_v2		hipblasCsrot		
cublasCsscal		hipblasCsscal		
cublasCsscal_v2		hipblasCsscal		
cublasCswap		hipblasCswap		
cublasCswap_v2		hipblasCswap		
cublasDasum		hipblasDasum		
cublasDasum_v2		hipblasDasum		
cublasDaxpy		hipblasDaxpy		
cublasDaxpy_v2		hipblasDaxpy		
cublasDcopy		hipblasDcopy		
cublasDcopy_v2		hipblasDcopy		
cublasDdot		hipblasDdot		
cublasDdot_v2		hipblasDdot		
cublasDnrm2		hipblasDnrm2		
cublasDnrm2_v2		hipblasDnrm2		
cublasDrot		hipblasDrot		
cublasDrot_v2		hipblasDrot		
cublasDrotg		hipblasDrotg		
cublasDrotg_v2		hipblasDrotg		
cublasDrotm		hipblasDrotm		
cublasDrotm_v2		hipblasDrotm		
cublasDrotmg		hipblasDrotmg		
cublasDrotmg_v2		hipblasDrotmg		
cublasDscal		hipblasDscal		
cublasDscal_v2		hipblasDscal		
cublasDswap		hipblasDswap		
cublasDswap_v2		hipblasDswap		
cublasDzasum		hipblasDzasum		
cublasDzasum_v2		hipblasDzasum		
cublasDznrm2		hipblasDznrm2		
cublasDznrm2_v2		hipblasDznrm2		
cublasIcamax		hipblasIcamax		
cublasIcamax_v2		hipblasIcamax		
cublasIcamin		hipblasIcamin		
cublasIcamin_v2		hipblasIcamin		
cublasIdamax		hipblasIdamax		
cublasIdamax_v2		hipblasIdamax		

CUDA	D	HIP	D	E
cublasIdamin		hipblasIdamin		
cublasIdamin_v2		hipblasIdamin		
cublasIsamax		hipblasIsamax		
cublasIsamax_v2		hipblasIsamax		
cublasIsamin		hipblasIsamin		
cublasIsamin_v2		hipblasIsamin		
cublasIzamax		hipblasIzamax		
cublasIzamax_v2		hipblasIzamax		
cublasIzamin		hipblasIzamin		
cublasIzamin_v2		hipblasIzamin		
cublasNrm2Ex		hipblasNrm2Ex		
cublasSasum		hipblasSasum		
cublasSasum_v2		hipblasSasum		
cublasSaxpy		hipblasSaxpy		
cublasSaxpy_v2		hipblasSaxpy		
cublasScasum		hipblasScasum		
cublasScasum_v2		hipblasScasum		
cublasScnrm2		hipblasScnrm2		
cublasScnrm2_v2		hipblasScnrm2		
cublasScopy		hipblasScopy		
cublasScopy_v2		hipblasScopy		
cublasSdot		hipblasSdot		
cublasSdot_v2		hipblasSdot		
cublasSnrm2		hipblasSnrm2		
cublasSnrm2_v2		hipblasSnrm2		
cublasSrot		hipblasSrot		
cublasSrot_v2		hipblasSrot		
cublasSrotg		hipblasSrotg		
cublasSrotg_v2		hipblasSrotg		
cublasSrotm		hipblasSrotm		
cublasSrotm_v2		hipblasSrotm		
cublasSrotmg		hipblasSrotmg		
cublasSrotmg_v2		hipblasSrotmg		
cublasSscal		hipblasSscal		
cublasSscal_v2		hipblasSscal		
cublasSswap		hipblasSswap		
cublasSswap_v2		hipblasSswap		
cublasZaxpy		hipblasZaxpy		
cublasZaxpy_v2		hipblasZaxpy		
cublasZcopy		hipblasZcopy		

CUDA	D	HIP	D	E
cublasZcopy_v2		hipblasZcopy		
cublasZdotc		hipblasZdotc		
cublasZdotc_v2		hipblasZdotc		
cublasZdotu		hipblasZdotu		
cublasZdotu_v2		hipblasZdotu		
cublasZdrot		hipblasZdrot		
cublasZdrot_v2		hipblasZdrot		
cublasZdscal		hipblasZdscal		
cublasZdscal_v2		hipblasZdscal		
cublasZrot		hipblasZrot		
cublasZrot_v2		hipblasZrot		
cublasZrotg		hipblasZrotg		
cublasZrotg_v2		hipblasZrotg		
cublasZscal		hipblasZscal		
cublasZscal_v2		hipblasZscal		
cublasZswap		hipblasZswap		
cublasZswap_v2		hipblasZswap		

1.3.5   cuBLAS Level-2 Function Reference

CUDA	D	HIP	D	E
cublasCgbmv		hipblasCgbmv		
cublasCgbmv_v2		hipblasCgbmv		
cublasCgemv		hipblasCgemv		
cublasCgemv_v2		hipblasCgemv		
cublasCgerc		hipblasCgerc		
cublasCgerc_v2		hipblasCgerc		
cublasCgeru		hipblasCgeru		
cublasCgeru_v2		hipblasCgeru		
cublasChbmv		hipblasChbmv		
cublasChbmv_v2		hipblasChbmv		
cublasChemv		hipblasChemv		
cublasChemv_v2		hipblasChemv		
cublasCher		hipblasCher		
cublasCher2		hipblasCher2		
cublasCher2_v2		hipblasCher2		
cublasCher_v2		hipblasCher		
cublasChpmv		hipblasChpmv		
cublasChpmv_v2		hipblasChpmv		

CUDA	D	HIP	D	E
cublasChpr		hipblasChpr		
cublasChpr2		hipblasChpr2		
cublasChpr2_v2		hipblasChpr2		
cublasChpr_v2		hipblasChpr		
cublasCsymv		hipblasCsymv		
cublasCsymv_v2		hipblasCsymv		
cublasCsyr		hipblasCsyr		
cublasCsyr2		hipblasCsyr2		
cublasCsyr2_v2		hipblasCsyr2		
cublasCsyr_v2		hipblasCsyr		
cublasCtbmv		hipblasCtbmv		
cublasCtbmv_v2		hipblasCtbmv		
cublasCtbsv		hipblasCtbsv		
cublasCtbsv_v2		hipblasCtbsv		
cublasCtpmv		hipblasCtpmv		
cublasCtpmv_v2		hipblasCtpmv		
cublasCtpsv		hipblasCtpsv		
cublasCtpsv_v2		hipblasCtpsv		
cublasCtrmv		hipblasCtrmv		
cublasCtrmv_v2		hipblasCtrmv		
cublasCtrsv		hipblasCtrsv		
cublasCtrsv_v2		hipblasCtrsv		
cublasDgbmv		hipblasDgbmv		
cublasDgbmv_v2		hipblasDgbmv		
cublasDgemv		hipblasDgemv		
cublasDgemv_v2		hipblasDgemv		
cublasDger		hipblasDger		
cublasDger_v2		hipblasDger		
cublasDsbmv		hipblasDsbmv		
cublasDsbmv_v2		hipblasDsbmv		
cublasDspmv		hipblasDspmv		
cublasDspmv_v2		hipblasDspmv		
cublasDspr		hipblasDspr		
cublasDspr2		hipblasDspr2		
cublasDspr2_v2		hipblasDspr2		
cublasDspr_v2		hipblasDspr		
cublasDsymv		hipblasDsymv		
cublasDsymv_v2		hipblasDsymv		
cublasDsyr		hipblasDsyr		
cublasDsyr2		hipblasDsyr2		

AMD

CUDA	D	HIP	D	E
cublasDsyr2_v2		hipblasDsyr2		
cublasDsyr_v2		hipblasDsyr		
cublasDtbmv		hipblasDtbmv		
cublasDtbmv_v2		hipblasDtbmv		
cublasDtbsv		hipblasDtbsv		
cublasDtbsv_v2		hipblasDtbsv		
cublasDtpmv		hipblasDtpmv		
cublasDtpmv_v2		hipblasDtpmv		
cublasDtpsv		hipblasDtpsv		
cublasDtpsv_v2		hipblasDtpsv		
cublasDtrmv		hipblasDtrmv		
cublasDtrmv_v2		hipblasDtrmv		
cublasDtrsv		hipblasDtrsv		
cublasDtrsv_v2		hipblasDtrsv		
cublasSgbmv		hipblasSgbmv		
cublasSgbmv_v2		hipblasSgbmv		
cublasSgemv		hipblasSgemv		
cublasSgemv_v2		hipblasSgemv		
cublasSger		hipblasSger		
cublasSger_v2		hipblasSger		
cublasSsbmv		hipblasSsbmv		
cublasSsbmv_v2		hipblasSsbmv		
cublasSspmv		hipblasSspmv		
cublasSspmv_v2		hipblasSspmv		
cublasSspr		hipblasSspr		
cublasSspr2		hipblasSspr2		
cublasSspr2_v2		hipblasSspr2		
cublasSspr_v2		hipblasSspr		
cublasSsymv		hipblasSsymv		
cublasSsymv_v2		hipblasSsymv		
cublasSsyr		hipblasSsyr		
cublasSsyr2		hipblasSsyr2		
cublasSsyr2_v2		hipblasSsyr2		
cublasSsyr_v2		hipblasSsyr		
cublasStbmv		hipblasStbmv		
cublasStbmv_v2		hipblasStbmv		
cublasStbsv		hipblasStbsv		
cublasStbsv_v2		hipblasStbsv		
cublasStpmv		hipblasStpmv		
cublasStpmv_v2		hipblasStpmv		

CUDA	D	HIP	D	E
cublasStpsv		hipblasStpsv		
cublasStpsv_v2		hipblasStpsv		
cublasStrmv		hipblasStrmv		
cublasStrmv_v2		hipblasStrmv		
cublasStrsv		hipblasStrsv		
cublasStrsv_v2		hipblasStrsv		
cublasZgbmv		hipblasZgbmv		
cublasZgbmv_v2		hipblasZgbmv		
cublasZgemv		hipblasZgemv		
cublasZgemv_v2		hipblasZgemv		
cublasZgerc		hipblasZgerc		
cublasZgerc_v2		hipblasZgerc		
cublasZgeru		hipblasZgeru		
cublasZgeru_v2		hipblasZgeru		
cublasZhbmv		hipblasZhbmv		
cublasZhbmv_v2		hipblasZhbmv		
cublasZhemv		hipblasZhemv		
cublasZhemv_v2		hipblasZhemv		
cublasZher		hipblasZher		
cublasZher2		hipblasZher2		
cublasZher2_v2		hipblasZher2		
cublasZher_v2		hipblasZher		
cublasZhpmv		hipblasZhpmv		
cublasZhpmv_v2		hipblasZhpmv		
cublasZhpr		hipblasZhpr		
cublasZhpr2		hipblasZhpr2		
cublasZhpr2_v2		hipblasZhpr2		
cublasZhpr_v2		hipblasZhpr		
cublasZsymv		hipblasZsymv		
cublasZsymv_v2		hipblasZsymv		
cublasZsyr		hipblasZsyr		
cublasZsyr2		hipblasZsyr2		
cublasZsyr2_v2		hipblasZsyr2		
cublasZsyr_v2		hipblasZsyr		
cublasZtbmv		hipblasZtbmv		
cublasZtbmv_v2		hipblasZtbmv		
cublasZtbsv		hipblasZtbsv		
cublasZtbsv_v2		hipblasZtbsv		
cublasZtpmv		hipblasZtpmv		
cublasZtpmv_v2		hipblasZtpmv		

CUDA	D	HIP	D	E
cublasZtpsv		hipblasZtpsv		
cublasZtpsv_v2		hipblasZtpsv		
cublasZtrmv		hipblasZtrmv		
cublasZtrmv_v2		hipblasZtrmv		
cublasZtrsv		hipblasZtrsv		
cublasZtrsv_v2		hipblasZtrsv		

1.3.6   cuBLAS Level-3 Function Reference

CUDA	D	HIP	D	E
cublasCgemm		hipblasCgemm		
cublasCgemmBatched		hipblasCgemmBatched		
cublasCgemmStridedBatched		hipblasCgemmStridedBatched		
cublasCgemm_v2		hipblasCgemm		
cublasChemm		hipblasChemm		
cublasChemm_v2		hipblasChemm		
cublasCher2k		hipblasCher2k		
cublasCher2k_v2		hipblasCher2k		
cublasCherk		hipblasCherk		
cublasCherk_v2		hipblasCherk		
cublasCherkx		hipblasCherkx		
cublasCsymm		hipblasCsymm		
cublasCsymm_v2		hipblasCsymm		
cublasCsyr2k		hipblasCsyr2k		
cublasCsyr2k_v2		hipblasCsyr2k		
cublasCsyrk		hipblasCsyrk		
cublasCsyrk_v2		hipblasCsyrk		
cublasCsyrkx		hipblasCsyrkx		
cublasCtrmm		hipblasCtrmm		
cublasCtrmm_v2		hipblasCtrmm		
cublasCtrsm		hipblasCtrsm		
cublasCtrsm_v2		hipblasCtrsm		
cublasDgemm		hipblasDgemm		
cublasDgemmBatched		hipblasDgemmBatched		
cublasDgemmStridedBatched		hipblasDgemmStridedBatched		
cublasDgemm_v2		hipblasDgemm		
cublasDsymm		hipblasDsymm		
cublasDsymm_v2		hipblasDsymm		
cublasDsyr2k		hipblasDsyr2k		

CUDA	D	HIP	D	E
cublasDsyr2k_v2		hipblasDsyr2k		
cublasDsyrk		hipblasDsyrk		
cublasDsyrk_v2		hipblasDsyrk		
cublasDsyrkx		hipblasDsyrkx		
cublasDtrmm		hipblasDtrmm		
cublasDtrmm_v2		hipblasDtrmm		
cublasDtrsm		hipblasDtrsm		
cublasDtrsm_v2		hipblasDtrsm		
cublasHgemm		hipblasHgemm		
cublasHgemmBatched		hipblasHgemmBatched		
cublasHgemmStridedBatched		hipblasHgemmStridedBatched		
cublasSgemm		hipblasSgemm		
cublasSgemmBatched		hipblasSgemmBatched		
cublasSgemmStridedBatched		hipblasSgemmStridedBatched		
cublasSgemm_v2		hipblasSgemm		
cublasSsymm		hipblasSsymm		
cublasSsymm_v2		hipblasSsymm		
cublasSsyr2k		hipblasSsyr2k		
cublasSsyr2k_v2		hipblasSsyr2k		
cublasSsyrk		hipblasSsyrk		
cublasSsyrk_v2		hipblasSsyrk		
cublasSsyrkx		hipblasSsyrkx		
cublasStrmm		hipblasStrmm		
cublasStrmm_v2		hipblasStrmm		
cublasStrsm		hipblasStrsm		
cublasStrsm_v2		hipblasStrsm		
cublasZgemm		hipblasZgemm		
cublasZgemmBatched		hipblasZgemmBatched		
cublasZgemmStridedBatched		hipblasZgemmStridedBatched		
cublasZgemm_v2		hipblasZgemm		
cublasZhemm		hipblasZhemm		
cublasZhemm_v2		hipblasZhemm		
cublasZher2k		hipblasZher2k		
cublasZher2k_v2		hipblasZher2k		
cublasZherk		hipblasZherk		
cublasZherk_v2		hipblasZherk		
cublasZherkx		hipblasZherkx		
cublasZsymm		hipblasZsymm		
cublasZsymm_v2		hipblasZsymm		
cublasZsyr2k		hipblasZsyr2k		

CUDA	D	HIP	D	E
cublasZsyr2k_v2		hipblasZsyr2k		
cublasZsyrk		hipblasZsyrk		
cublasZsyrk_v2		hipblasZsyrk		
cublasZsyrkx		hipblasZsyrkx		
cublasZtrmm		hipblasZtrmm		
cublasZtrmm_v2		hipblasZtrmm		
cublasZtrsm		hipblasZtrsm		
cublasZtrsm_v2		hipblasZtrsm		

1.3.7   BLAS-like Extension

CUDA	D	HIP	D	E
cublasAxpyEx		hipblasAxpyEx		
cublasCdgmm		hipblasCdgmm		
cublasCgeam		hipblasCgeam		
cublasCgeqrfBatched		hipblasCgeqrfBatched		
cublasCgetrfBatched		hipblasCgetrfBatched		
cublasCgetriBatched		hipblasCgetriBatched		
cublasCgetrsBatched		hipblasCgetrsBatched		
cublasCtrsmBatched		hipblasCtrsmBatched		
cublasDdgmm		hipblasDdgmm		
cublasDgeam		hipblasDgeam		
cublasDgeqrfBatched		hipblasDgeqrfBatched		
cublasDgetrfBatched		hipblasDgetrfBatched		
cublasDgetriBatched		hipblasDgetriBatched		
cublasDgetrsBatched		hipblasDgetrsBatched		
cublasDotEx		hipblasDotEx		
cublasDotcEx		hipblasDotcEx		
cublasDtrsmBatched		hipblasDtrsmBatched		
cublasGemmBatchedEx		hipblasGemmBatchedEx		
cublasGemmEx		hipblasGemmEx		
cublasGemmStridedBatchedEx		hipblasGemmStridedBatchedEx		
cublasRotEx		hipblasRotEx		
cublasScalEx		hipblasScalEx		
cublasSdgmm		hipblasSdgmm		
cublasSgeam		hipblasSgeam		
cublasSgeqrfBatched		hipblasSgeqrfBatched		
cublasSgetrfBatched		hipblasSgetrfBatched		
cublasSgetriBatched		hipblasSgetriBatched		

CUDA	D	HIP	D	E
cublasSgetrsBatched		hipblasSgetrsBatched		
cublasStrsmBatched		hipblasStrsmBatched		
cublasZdgmm		hipblasZdgmm		
cublasZgeam		hipblasZgeam		
cublasZgeqrfBatched		hipblasZgeqrfBatched		
cublasZgetrfBatched		hipblasZgetrfBatched		
cublasZgetriBatched		hipblasZgetriBatched		
cublasZgetrsBatched		hipblasZgetrsBatched		
cublasZtrsmBatched		hipblasZtrsmBatched		

1.4   cuCOMPLEX APIs Supported by HIP

1.4.1   cuComplex Data Types

CUDA	D	HIP	D	E
cuComplex		hipComplex		
cuDoubleComplex		hipDoubleComplex		
cuFloatComplex		hipFloatComplex		

1.4.2   cuComplex API functions

CUDA	D	HIP	D	E
cuCabs		hipCabs		
cuCabsf		hipCabsf		
cuCadd		hipCadd		
cuCaddf		hipCaddf		
cuCdiv		hipCdiv		
cuCdivf		hipCdivf		
cuCfma		hipCfma		
cuCfmaf		hipCfmaf		
cuCimag		hipCimag		
cuCimagf		hipCimagf		
cuCmul		hipCmul		
cuCmulf		hipCmulf		
cuComplexDoubleToFloat		hipComplexDoubleToFloat		
cuComplexFloatToDouble		hipComplexFloatToDouble		
cuConj		hipConj		
cuConjf		hipConjf		
cuCreal		hipCreal		
cuCrealf		hipCrealf		
cuCsub		hipCsub		
cuCsubf		hipCsubf		
make_cuComplex		make_hipComplex		
make_cuDoubleComplex		make_hipDoubleComplex		
make_cuFloatComplex		make_hipFloatComplex		

1.5   CUDA Device

1.5.1   Device Functions

CUDA	D	HIP	D	E
__all		__all		
__any		__any		
__assert_fail		__assert_fail		
__assertfail		__assertfail		
__ballot		__ballot		
__brev		__brev		
__brevll		__brevll		
__byte_perm		__byte_perm		
__clz		__clz		
__clzll		__clzll		
__cosf		__cosf		
__double2float_rd		__double2float_rd		
__double2float_rn		__double2float_rn		
__double2float_ru		__double2float_ru		
__double2float_rz		__double2float_rz		
__double2hiint		__double2hiint		
__double2int_rd		__double2int_rd		
__double2int_rn		__double2int_rn		
__double2int_ru		__double2int_ru		
__double2int_rz		__double2int_rz		
__double2ll_rd		__double2ll_rd		
__double2ll_rn		__double2ll_rn		
__double2ll_ru		__double2ll_ru		
__double2ll_rz		__double2ll_rz		
__double2loint		__double2loint		
__double2uint_rd		__double2uint_rd		
__double2uint_rn		__double2uint_rn		
__double2uint_ru		__double2uint_ru		
__double2uint_rz		__double2uint_rz		
__double2ull_rd		__double2ull_rd		
__double2ull_rn		__double2ull_rn		
__double2ull_ru		__double2ull_ru		
__double2ull_rz		__double2ull_rz		
__double_as_longlong		__double_as_longlong		
__exp10f		__exp10f		
__expf		__expf		
__fadd_rd		__fadd_rd		
__fadd_rn		__fadd_rn		

CUDA	D	HIP	D	E
__fadd_ru		__fadd_ru		
__fadd_rz		__fadd_rz		
__fdiv_rd		__fdiv_rd		
__fdiv_rn		__fdiv_rn		
__fdiv_ru		__fdiv_ru		
__fdiv_rz		__fdiv_rz		
__fdividef		__fdividef		
__ffs		__ffs		
__ffsll		__ffsll		
__float22half2_rn		__float22half2_rn		
__float2half		__float2half		
__float2half2_rn		__float2half2_rn		
__float2half_rd		__float2half_rd		
__float2half_rn		__float2half_rn		
__float2half_ru		__float2half_ru		
__float2half_rz		__float2half_rz		
__float2int_rd		__float2int_rd		
__float2int_rn		__float2int_rn		
__float2int_ru		__float2int_ru		
__float2int_rz		__float2int_rz		
__float2ll_rd		__float2ll_rd		
__float2ll_rn		__float2ll_rn		
__float2ll_ru		__float2ll_ru		
__float2ll_rz		__float2ll_rz		
__float2uint_rd		__float2uint_rd		
__float2uint_rn		__float2uint_rn		
__float2uint_ru		__float2uint_ru		
__float2uint_rz		__float2uint_rz		
__float2ull_rd		__float2ull_rd		
__float2ull_rn		__float2ull_rn		
__float2ull_ru		__float2ull_ru		
__float2ull_rz		__float2ull_rz		
__float_as_int		__float_as_int		
__float_as_uint		__float_as_uint		
__floats2half2_rn		__floats2half2_rn		
__fmaf_rd		__fmaf_rd		
__fmaf_rn		__fmaf_rn		
__fmaf_ru		__fmaf_ru		
__fmaf_rz		__fmaf_rz		
__fmul_rd		__fmul_rd		
__fmul_rn		__fmul_rn		

CUDA	D	HIP	D	E
__fmul_ru		__fmul_ru		
__fmul_rz		__fmul_rz		
__frcp_rd		__frcp_rd		
__frcp_rn		__frcp_rn		
__frcp_ru		__frcp_ru		
__frcp_rz		__frcp_rz		
__frsqrt_rn		__frsqrt_rn		
__fsqrt_rd		__fsqrt_rd		
__fsqrt_rn		__fsqrt_rn		
__fsqrt_ru		__fsqrt_ru		
__fsqrt_rz		__fsqrt_rz		
__fsub_rd		__fsub_rd		
__fsub_rn		__fsub_rn		
__fsub_ru		__fsub_ru		
__fsub_rz		__fsub_rz		
__funnelshift_l		__funnelshift_l		
__funnelshift_lc		__funnelshift_lc		
__funnelshift_r		__funnelshift_r		
__funnelshift_rc		__funnelshift_rc		
__h2div		__h2div		
__habs		__habs		
__habs2		__habs2		
__hadd		__hadd		
__hadd2		__hadd2		
__hadd2_sat		__hadd2_sat		
__hadd_sat		__hadd_sat		
__half22float2		__half22float2		
__half2float		__half2float		
__half2half2		__half2half2		
__half2int_rd		__half2int_rd		
__half2int_rn		__half2int_rn		
__half2int_ru		__half2int_ru		
__half2int_rz		__half2int_rz		
__half2ll_rd		__half2ll_rd		
__half2ll_rn		__half2ll_rn		
__half2ll_ru		__half2ll_ru		
__half2ll_rz		__half2ll_rz		
__half2short_rd		__half2short_rd		
__half2short_rn		__half2short_rn		
__half2short_ru		__half2short_ru		
__half2short_rz		__half2short_rz		
__half2uint_rd		__half2uint_rd		

CUDA	D	HIP	D	E
__half2uint_rn		__half2uint_rn		
__half2uint_ru		__half2uint_ru		
__half2uint_rz		__half2uint_rz		
__half2ull_rd		__half2ull_rd		
__half2ull_rn		__half2ull_rn		
__half2ull_ru		__half2ull_ru		
__half2ull_rz		__half2ull_rz		
__half2ushort_rd		__half2ushort_rd		
__half2ushort_rn		__half2ushort_rn		
__half2ushort_ru		__half2ushort_ru		
__half2ushort_rz		__half2ushort_rz		
__half_as_short		__half_as_short		
__half_as_ushort		__half_as_ushort		
__halves2half2		__halves2half2		
__hbeq2		__hbeq2		
__hbequ2		__hbequ2		
__hbge2		__hbge2		
__hbgeu2		__hbgeu2		
__hbgt2		__hbgt2		
__hbgtu2		__hbgtu2		
__hble2		__hble2		
__hbleu2		__hbleu2		
__hblt2		__hblt2		
__hbltu2		__hbltu2		
__hbne2		__hbne2		
__hbneu2		__hbneu2		
__hdiv		__hdiv		
__heq		__heq		
__heq2		__heq2		
__hequ		__hequ		
__hequ2		__hequ2		
__hfma		__hfma		
__hfma2		__hfma2		
__hfma2_sat		__hfma2_sat		
__hfma_sat		__hfma_sat		
__hge		__hge		
__hge2		__hge2		
__hgeu		__hgeu		
__hgeu2		__hgeu2		
__hgt		__hgt		
__hgt2		__hgt2		

CUDA	D	HIP	D	E
__hgtu		__hgtu		
__hgtu2		__hgtu2		
__high2float		__high2float		
__high2half		__high2half		
__high2half2		__high2half2		
__highs2half2		__highs2half2		
__hiloint2double		__hiloint2double		
__hisinf		__hisinf		
__hisnan		__hisnan		
__hisnan2		__hisnan2		
__hle		__hle		
__hle2		__hle2		
__hleu		__hleu		
__hleu2		__hleu2		
__hlt		__hlt		
__hlt2		__hlt2		
__hltu		__hltu		
__hltu2		__hltu2		
__hmul		__hmul		
__hmul2		__hmul2		
__hmul2_sat		__hmul2_sat		
__hmul_sat		__hmul_sat		
__hne		__hne		
__hne2		__hne2		
__hneg		__hneg		
__hneg2		__hneg2		
__hneu		__hneu		
__hneu2		__hneu2		
__hsub		__hsub		
__hsub2		__hsub2		
__hsub2_sat		__hsub2_sat		
__hsub_sat		__hsub_sat		
__int2double_rn		__int2double_rn		
__int2float_rd		__int2float_rd		
__int2float_rn		__int2float_rn		
__int2float_ru		__int2float_ru		
__int2float_rz		__int2float_rz		
__int2half_rd		__int2half_rd		
__int2half_rn		__int2half_rn		
__int2half_ru		__int2half_ru		
__int2half_rz		__int2half_rz		
__int_as_float		__int_as_float		

CUDA	D	HIP	D	E
__ldca		__ldca		
__ldcg		__ldcg		
__ldcs		__ldcs		
__ldg		__ldg		
__ll2double_rd		__ll2double_rd		
__ll2double_rn		__ll2double_rn		
__ll2double_ru		__ll2double_ru		
__ll2double_rz		__ll2double_rz		
__ll2float_rd		__ll2float_rd		
__ll2float_rn		__ll2float_rn		
__ll2float_ru		__ll2float_ru		
__ll2float_rz		__ll2float_rz		
__ll2half_rd		__ll2half_rd		
__ll2half_rn		__ll2half_rn		
__ll2half_ru		__ll2half_ru		
__ll2half_rz		__ll2half_rz		
__log10f		__log10f		
__log2f		__log2f		
__logf		__logf		
__longlong_as_double		__longlong_as_double		
__low2float		__low2float		
__low2half		__low2half		
__low2half2		__low2half2		
__lowhigh2highlow		__lowhigh2highlow		
__lows2half2		__lows2half2		
__mul24		__mul24		
__mul64hi		__mul64hi		
__mulhi		__mulhi		
__popc		__popc		
__popcll		__popcll		
__powf		__powf		
__rhadd		__rhadd		
__sad		__sad		
__saturatef		__saturatef		
__shfl	+	__shfl		
__shfl_down	+	__shfl_down		
__shfl_up	+	__shfl_up		
__shfl_xor	+	__shfl_xor		
__short2half_rd		__short2half_rd		
__short2half_rn		__short2half_rn		
__short2half_ru		__short2half_ru		

CUDA	D	HIP	D	E
__short2half_rz		__short2half_rz		
__short_as_half		__short_as_half		
__sincosf		__sincosf		
__sinf		__sinf		
__syncthreads		__syncthreads		
__syncthreads_and		__syncthreads_and		
__syncthreads_count		__syncthreads_count		
__syncthreads_or		__syncthreads_or		
__tanf		__tanf		
__threadfence		__threadfence		
__threadfence_block		__threadfence_block		
__threadfence_system		__threadfence_system		
__uhadd		__uhadd		
__uint2double_rn		__uint2double_rn		
__uint2float_rd		__uint2float_rd		
__uint2float_rn		__uint2float_rn		
__uint2float_ru		__uint2float_ru		
__uint2float_rz		__uint2float_rz		
__uint2half_rd		__uint2half_rd		
__uint2half_rn		__uint2half_rn		
__uint2half_ru		__uint2half_ru		
__uint2half_rz		__uint2half_rz		
__uint_as_float		__uint_as_float		
__ull2double_rd		__ull2double_rd		
__ull2double_rn		__ull2double_rn		
__ull2double_ru		__ull2double_ru		
__ull2double_rz		__ull2double_rz		
__ull2float_rd		__ull2float_rd		
__ull2float_rn		__ull2float_rn		
__ull2float_ru		__ull2float_ru		
__ull2float_rz		__ull2float_rz		
__ull2half_rd		__ull2half_rd		
__ull2half_rn		__ull2half_rn		
__ull2half_ru		__ull2half_ru		
__ull2half_rz		__ull2half_rz		
__umul24		__umul24		
__umul64hi		__umul64hi		
__umulhi		__umulhi		
__urhadd		__urhadd		
__usad		__usad		
__ushort2half_rd		__ushort2half_rd		
__ushort2half_rn		__ushort2half_rn		

CUDA	D	HIP	D	E
__ushort2half_ru		__ushort2half_ru		
__ushort2half_rz		__ushort2half_rz		
__ushort_as_half		__ushort_as_half		
abs		abs		
acos		acos		
acosf		acosf		
acosh		acosh		
acoshf		acoshf		
asin		asin		
asinf		asinf		
asinh		asinh		
asinhf		asinhf		
atan		atan		
atan2		atan2		
atan2f		atan2f		
atanf		atanf		
atanh		atanh		
atanhf		atanhf		
atomicAdd		atomicAdd		
atomicAdd_system		atomicAdd_system		
atomicAnd		atomicAnd		
atomicAnd_system		atomicAnd_system		
atomicCAS		atomicCAS		
atomicCAS_system		atomicCAS_system		
atomicDec		atomicDec		
atomicExch		atomicExch		
atomicExch_system		atomicExch_system		
atomicInc		atomicInc		
atomicMax		atomicMax		
atomicMax_system		atomicMax_system		
atomicMin		atomicMin		
atomicMin_system		atomicMin_system		
atomicOr		atomicOr		
atomicOr_system		atomicOr_system		
atomicSub		atomicSub		
atomicSub_system		atomicSub_system		
atomicXor		atomicXor		
atomicXor_system		atomicXor_system		
cbrt		cbrt		
cbrtf		cbrtf		
ceil		ceil		

CUDA	D	HIP	D	E
ceilf		ceilf		
clock		clock		
clock64		clock64		
copysign		copysign		
copysignf		copysignf		
cos		cos		
cosf		cosf		
cosh		cosh		
coshf		coshf		
cospi		cospi		
cospif		cospif		
cyl_bessel_i0		cyl_bessel_i0		
cyl_bessel_i0f		cyl_bessel_i0f		
cyl_bessel_i1		cyl_bessel_i1		
cyl_bessel_i1f		cyl_bessel_i1f		
erf		erf		
erfc		erfc		
erfcf		erfcf		
erfcinv		erfcinv		
erfcinvf		erfcinvf		
erfcx		erfcx		
erfcxf		erfcxf		
erff		erff		
erfinv		erfinv		
erfinvf		erfinvf		
exp		exp		
exp10		exp10		
exp10f		exp10f		
exp2		exp2		
exp2f		exp2f		
expf		expf		
expm1		expm1		
expm1f		expm1f		
fabs		fabs		
fabsf		fabsf		
fdim		fdim		
fdimf		fdimf		
fdividef		fdividef		
floor		floor		
floorf		floorf		
fma		fma		
fmaf		fmaf		

CUDA	D	HIP	D	E
fmax		fmax		
fmaxf		fmaxf		
fmin		fmin		
fminf		fminf		
fmod		fmod		
fmodf		fmodf		
frexp		frexp		
frexpf		frexpf		
h2ceil		h2ceil		
h2cos		h2cos		
h2exp		h2exp		
h2exp10		h2exp10		
h2exp2		h2exp2		
h2floor		h2floor		
h2log		h2log		
h2log10		h2log10		
h2log2		h2log2		
h2rcp		h2rcp		
h2rint		h2rint		
h2rsqrt		h2rsqrt		
h2sin		h2sin		
h2sqrt		h2sqrt		
h2trunc		h2trunc		
hceil		hceil		
hcos		hcos		
hexp		hexp		
hexp10		hexp10		
hexp2		hexp2		
hfloor		hfloor		
hlog		hlog		
hlog10		hlog10		
hlog2		hlog2		
hrcp		hrcp		
hrint		hrint		
hrsqrt		hrsqrt		
hsin		hsin		
hsqrt		hsqrt		
htrunc		htrunc		
hypot		hypot		
hypotf		hypotf		
ilogb		ilogb		

CUDA	D	HIP	D	E
ilogbf		ilogbf		
isfinite		isfinite		
isinf		isinf		
isnan		isnan		
j0		j0		
j0f		j0f		
j1		j1		
j1f		j1f		
jn		jn		
jnf		jnf		
labs		labs		
ldexp		ldexp		
ldexpf		ldexpf		
lgamma		lgamma		
lgammaf		lgammaf		
llabs		llabs		
llrint		llrint		
llrintf		llrintf		
llround		llround		
llroundf		llroundf		
log		log		
log10		log10		
log10f		log10f		
log1p		log1p		
log1pf		log1pf		
log2		log2		
log2f		log2f		
logb		logb		
logbf		logbf		
logf		logf		
lrint		lrint		
lrintf		lrintf		
lround		lround		
lroundf		lroundf		
max		max		
min		min		
modf		modf		
modff		modff		
nan		nan		
nanf		nanf		
nearbyint		nearbyint		
nearbyintf		nearbyintf		

CUDA	D	HIP	D	E
nextafter		nextafter		
nextafterf		nextafterf		
norm		norm		
norm3d		norm3d		
norm3df		norm3df		
norm4d		norm4d		
norm4df		norm4df		
normcdf		normcdf		
normcdff		normcdff		
normcdfinv		normcdfinv		
normcdfinvf		normcdfinvf		
normf		normf		
pow		pow		
powf		powf		
rcbrt		rcbrt		
rcbrtf		rcbrtf		
remainder		remainder		
remainderf		remainderf		
remquo		remquo		
remquof		remquof		
rhypot		rhypot		
rhypotf		rhypotf		
rint		rint		
rintf		rintf		
rnorm		rnorm		
rnorm3d		rnorm3d		
rnorm3df		rnorm3df		
rnorm4d		rnorm4d		
rnorm4df		rnorm4df		
rnormf		rnormf		
round		round		
roundf		roundf		
rsqrt		rsqrt		
rsqrtf		rsqrtf		
scalbln		scalbln		
scalblnf		scalblnf		
scalbn		scalbn		
scalbnf		scalbnf		
signbit		signbit		
sin		sin		
sincos		sincos		

CUDA	D	HIP	D	E
sincosf		sincosf		
sincospi		sincospi		
sincospif		sincospif		
sinf		sinf		
sinh		sinh		
sinhf		sinhf		
sinpi		sinpi		
sinpif		sinpif		
sqrt		sqrt		
sqrtf		sqrtf		
tan		tan		
tanf		tanf		
tanh		tanh		
tanhf		tanhf		
tgamma		tgamma		
tgammaf		tgammaf		
trunc		trunc		
truncf		truncf		
y0		y0		
y0f		y0f		
y1		y1		
y1f		y1f		
yn		yn		
ynf		ynf		

AMD

1.6   CUDNN API Supported by HIP

1.6.1   CUDNN Data Types

CUDA	D	HIP	D	E
CUDNN_16BIT_INDICES		HIPDNN_16BIT_INDICES		
CUDNN_32BIT_INDICES		HIPDNN_32BIT_INDICES		
CUDNN_64BIT_INDICES		HIPDNN_64BIT_INDICES		
CUDNN_8BIT_INDICES		HIPDNN_8BIT_INDICES		
CUDNN_ACTIVATION_CLIPPED_RELU		HIPDNN_ACTIVATION_CLIPPED_RELU		
CUDNN_ACTIVATION_ELU		HIPDNN_ACTIVATION_ELU		
CUDNN_ACTIVATION_IDENTITY		HIPDNN_ACTIVATION_PATHTRU		
CUDNN_ACTIVATION_RELU		HIPDNN_ACTIVATION_RELU		
CUDNN_ACTIVATION_SIGMOID		HIPDNN_ACTIVATION_SIGMOID		
CUDNN_ACTIVATION_SWISH		HIPDNN_ACTIVATION_SWISH		
CUDNN_ACTIVATION_TANH		HIPDNN_ACTIVATION_TANH		
CUDNN_BATCHNORM_PER_ACTIVATION		HIPDNN_BATCHNORM_PER_ACTIVATION		
CUDNN_BATCHNORM_SPATIAL		HIPDNN_BATCHNORM_SPATIAL		
CUDNN_BATCHNORM_SPATIAL_PERSISTENT		HIPDNN_BATCHNORM_SPATIAL_PERSISTENT		
CUDNN_BIDIRECTIONAL		HIPDNN_BIDIRECTIONAL		
CUDNN_BN_MIN_EPSILON		HIPDNN_BN_MIN_EPSILON		
CUDNN_CONVOLUTION		HIPDNN_CONVOLUTION		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_0		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_0		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_1		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_1		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_COUNT		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_TRANSPOSE_GEMM		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_FFT		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_FFT		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_FFT_TILING		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_FFT_TILING		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_WINOGRAD		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_WINOGRAD		
CUDNN_CONVOLUTION_BWD_DATA_ALGO_WINOGRAD_NONFUSED		HIPDNN_CONVOLUTION_BWD_DATA_ALGO_WINOGRAD_NONFUSED		

CUDNN_CONVOLUTION_BWD_DATA _NO_WORKSPACE	+	HIPDNN_CONVOLUTION_B WD_DATA_NO_WORKSPAC E		
CUDNN_CONVOLUTION_BWD_DATA _PREFER_FASTEST	+	HIPDNN_CONVOLUTION_B WD_DATA_PREFER_FASTE ST		
CUDNN_CONVOLUTION_BWD_DATA _SPECIFY_WORKSPACE_LIMIT	+	HIPDNN_CONVOLUTION_B WD_DATA_SPECIFY_WOR KSPACE_LIMIT		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_0		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_0		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_1		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_1		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_3		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_3		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_COUNT		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_COUNT		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_FFT		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_FFT		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_FFT_TILING		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_FFT_TI LING		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_WINOGRAD		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_WINOG RAD		
CUDNN_CONVOLUTION_BWD_FILTE R_ALGO_WINOGRAD_NONFUSED		HIPDNN_CONVOLUTION_B WD_FILTER_ALGO_WINOG RAD_NONFUSED		
CUDNN_CONVOLUTION_BWD_FILTE R_NO_WORKSPACE	+	HIPDNN_CONVOLUTION_B WD_FILTER_NO_WORKSPA CE		
CUDNN_CONVOLUTION_BWD_FILTE R_PREFER_FASTEST	+	HIPDNN_CONVOLUTION_B WD_FILTER_PREFER_FAST EST		
CUDNN_CONVOLUTION_BWD_FILTE R_SPECIFY_WORKSPACE_LIMIT	+	HIPDNN_CONVOLUTION_B WD_FILTER_SPECIFY_WOR KSPACE_LIMIT		
CUDNN_CONVOLUTION_FWD_ALGO _COUNT		HIPDNN_CONVOLUTION_F WD_ALGO_COUNT		
CUDNN_CONVOLUTION_FWD_ALGO _DIRECT		HIPDNN_CONVOLUTION_F WD_ALGO_DIRECT		
CUDNN_CONVOLUTION_FWD_ALGO _FFT		HIPDNN_CONVOLUTION_F WD_ALGO_FFT		
CUDNN_CONVOLUTION_FWD_ALGO _FFT_TILING		HIPDNN_CONVOLUTION_F WD_ALGO_FFT_TILING		
CUDNN_CONVOLUTION_FWD_ALGO _GEMM		HIPDNN_CONVOLUTION_F WD_ALGO_GEMM		
CUDNN_CONVOLUTION_FWD_ALGO _IMPLICIT_GEMM		HIPDNN_CONVOLUTION_F WD_ALGO_IMPLICIT_GEM M		
CUDNN_CONVOLUTION_FWD_ALGO _IMPLICIT_PRECOMP_GEMM		HIPDNN_CONVOLUTION_F WD_ALGO_IMPLICIT_PREC OMP_GEMM		
CUDNN_CONVOLUTION_FWD_ALGO _WINOGRAD		HIPDNN_CONVOLUTION_F WD_ALGO_WINOGRAD		

CUDNN_CONVOLUTION_FWD_ALGO_WINOGRAD_NONFUSED		HIPDNN_CONVOLUTION_FWD_ALGO_WINOGRAD_NONFUSED	
CUDNN_CONVOLUTION_FWD_NO_WORKSPACE	+	HIPDNN_CONVOLUTION_FWD_NO_WORKSPACE	
CUDNN_CONVOLUTION_FWD_PREFER_FASTEST	+	HIPDNN_CONVOLUTION_FWD_PREFER_FASTEST	
CUDNN_CONVOLUTION_FWD_SPECIFY_WORKSPACE_LIMIT	+	HIPDNN_CONVOLUTION_FWD_SPECIFY_WORKSPACE_LIMIT	
CUDNN_CROSS_CORRELATION		HIPDNN_CROSS_CORRELATION	
CUDNN_DATA_DOUBLE		HIPDNN_DATA_DOUBLE	
CUDNN_DATA_FLOAT		HIPDNN_DATA_FLOAT	
CUDNN_DATA_HALF		HIPDNN_DATA_HALF	
CUDNN_DATA_INT32		HIPDNN_DATA_INT32	
CUDNN_DATA_INT8		HIPDNN_DATA_INT8	
CUDNN_DATA_INT8x4		HIPDNN_DATA_INT8x4	
CUDNN_DEFAULT_MATH		HIPDNN_DEFAULT_MATH	
CUDNN_GRU		HIPDNN_GRU	
CUDNN_LINEAR_INPUT		HIPDNN_LINEAR_INPUT	
CUDNN_LRN_CROSS_CHANNEL_DIM1		HIPDNN_LRN_CROSS_CHANNEL	
CUDNN_LSTM		HIPDNN_LSTM	
CUDNN_NOT_PROPAGATE_NAN		HIPDNN_NOT_PROPAGATE_NAN	
CUDNN_OP_TENSOR_ADD		HIPDNN_OP_TENSOR_ADD	
CUDNN_OP_TENSOR_MAX		HIPDNN_OP_TENSOR_MAX	
CUDNN_OP_TENSOR_MIN		HIPDNN_OP_TENSOR_MIN	
CUDNN_OP_TENSOR_MUL		HIPDNN_OP_TENSOR_MUL	
CUDNN_OP_TENSOR_SQRT		HIPDNN_OP_TENSOR_SQRT	
CUDNN_POOLING_AVERAGE_COUNT_EXCLUDE_PADDING		HIPDNN_POOLING_AVERAGE_COUNT_EXCLUDE_PADDING	
CUDNN_POOLING_AVERAGE_COUNT_INCLUDE_PADDING		HIPDNN_POOLING_AVERAGE_COUNT_INCLUDE_PADDING	
CUDNN_POOLING_MAX		HIPDNN_POOLING_MAX	
CUDNN_POOLING_MAX_DETERMINISTIC		HIPDNN_POOLING_MAX_DETERMINISTIC	
CUDNN_PROPAGATE_NAN		HIPDNN_PROPAGATE_NAN	
CUDNN_REDUCE_TENSOR_ADD		HIPDNN_REDUCE_TENSOR_ADD	
CUDNN_REDUCE_TENSOR_AMAX		HIPDNN_REDUCE_TENSOR_AMAX	
CUDNN_REDUCE_TENSOR_AVG		HIPDNN_REDUCE_TENSOR_AVG	
CUDNN_REDUCE_TENSOR_FLATTENED_INDICES		HIPDNN_REDUCE_TENSOR_FLATTENED_INDICES	

CUDNN_REDUCE_TENSOR_MAX		HIPDNN_REDUCE_TENSOR_MAX		
CUDNN_REDUCE_TENSOR_MIN		HIPDNN_REDUCE_TENSOR_MIN		
CUDNN_REDUCE_TENSOR_MUL		HIPDNN_REDUCE_TENSOR_MUL		
CUDNN_REDUCE_TENSOR_MUL_NO_ZEROS		HIPDNN_REDUCE_TENSOR_MUL_NO_ZEROS		
CUDNN_REDUCE_TENSOR_NORM1		HIPDNN_REDUCE_TENSOR_NORM1		
CUDNN_REDUCE_TENSOR_NORM2		HIPDNN_REDUCE_TENSOR_NORM2		
CUDNN_REDUCE_TENSOR_NO_INDICES		HIPDNN_REDUCE_TENSOR_NO_INDICES		
CUDNN_RNN_ALGO_PERSIST_DYNAMIC		HIPDNN_RNN_ALGO_PERSIST_DYNAMIC		
CUDNN_RNN_ALGO_PERSIST_STATIC		HIPDNN_RNN_ALGO_PERSIST_STATIC		
CUDNN_RNN_ALGO_PERSIST_STATIC_SMALL_H		HIPDNN_RNN_ALGO_PERSIST_STATIC_SMALL_H		
CUDNN_RNN_ALGO_STANDARD		HIPDNN_RNN_ALGO_STANDARD		
CUDNN_RNN_DOUBLE_BIAS		HIPDNN_RNN_WITH_BIAS		
CUDNN_RNN_NO_BIAS		HIPDNN_RNN_NO_BIAS		
CUDNN_RNN_RELU		HIPDNN_RNN_RELU		
CUDNN_RNN_SINGLE_INP_BIAS		HIPDNN_RNN_WITH_BIAS		
CUDNN_RNN_SINGLE_REC_BIAS		HIPDNN_RNN_WITH_BIAS		
CUDNN_RNN_TANH		HIPDNN_RNN_TANH		
CUDNN_SKIP_INPUT		HIPDNN_SKIP_INPUT		
CUDNN_SOFTMAX_ACCURATE		HIPDNN_SOFTMAX_ACCURATE		
CUDNN_SOFTMAX_FAST		HIPDNN_SOFTMAX_FAST		
CUDNN_SOFTMAX_LOG		HIPDNN_SOFTMAX_LOG		
CUDNN_SOFTMAX_MODE_CHANNEL		HIPDNN_SOFTMAX_MODE_CHANNEL		
CUDNN_SOFTMAX_MODE_INSTANCE		HIPDNN_SOFTMAX_MODE_INSTANCE		
CUDNN_STATUS_ALLOC_FAILED		HIPDNN_STATUS_ALLOC_FAILED		
CUDNN_STATUS_ARCH_MISMATCH		HIPDNN_STATUS_ARCH_MISMATCH		
CUDNN_STATUS_BAD_PARAM		HIPDNN_STATUS_BAD_PARAM		
CUDNN_STATUS_EXECUTION_FAILED		HIPDNN_STATUS_EXECUTION_FAILED		
CUDNN_STATUS_INTERNAL_ERROR		HIPDNN_STATUS_INTERNAL_ERROR		
CUDNN_STATUS_INVALID_VALUE		HIPDNN_STATUS_INVALID_VALUE		
CUDNN_STATUS_LICENSE_ERROR		HIPDNN_STATUS_LICENSE_ERROR		

CUDNN_STATUS_MAPPING_ERROR		HIPDNN_STATUS_MAPPING_ERROR		
CUDNN_STATUS_NOT_INITIALIZED		HIPDNN_STATUS_NOT_INITIALIZED		
CUDNN_STATUS_NOT_SUPPORTED		HIPDNN_STATUS_NOT_SUPPORTED		
CUDNN_STATUS_RUNTIME_PREREQUISITE_MISSING		HIPDNN_STATUS_RUNTIME_PREREQUISITE_MISSING		
CUDNN_STATUS_SUCCESS		HIPDNN_STATUS_SUCCESS		
CUDNN_TENSOR_NCHW		HIPDNN_TENSOR_NCHW		
CUDNN_TENSOR_NCHW_VECT_C		HIPDNN_TENSOR_NCHW_VECT_C		
CUDNN_TENSOR_NHWC		HIPDNN_TENSOR_NHWC		
CUDNN_TENSOR_OP_MATH		HIPDNN_TENSOR_OP_MATH		
CUDNN_UNIDIRECTIONAL		HIPDNN_UNIDIRECTIONAL		
CUDNN_VERSION		HIPDNN_VERSION		
cudnnActivationDescriptor_t		hipdnnActivationDescriptor_t		
cudnnActivationMode_t		hipdnnActivationMode_t		
cudnnBatchNormMode_t		hipdnnBatchNormMode_t		
cudnnConvolutionBwdDataAlgoPerfStruct		hipdnnConvolutionBwdDataAlgoPerf_t		
cudnnConvolutionBwdDataAlgoPerf_t		hipdnnConvolutionBwdDataAlgoPerf_t		
cudnnConvolutionBwdDataAlgo_t		hipdnnConvolutionBwdDataAlgo_t		
cudnnConvolutionBwdDataPreference_t	+	hipdnnConvolutionBwdDataPreference_t		
cudnnConvolutionBwdFilterAlgoPerfStruct		hipdnnConvolutionBwdFilterAlgoPerf_t		
cudnnConvolutionBwdFilterAlgoPerf_t		hipdnnConvolutionBwdFilterAlgoPerf_t		
cudnnConvolutionBwdFilterAlgo_t		hipdnnConvolutionBwdFilterAlgo_t		
cudnnConvolutionBwdFilterPreference_t	+	hipdnnConvolutionBwdFilterPreference_t		
cudnnConvolutionDescriptor_t		hipdnnConvolutionDescriptor_t		
cudnnConvolutionFwdAlgoPerfStruct		hipdnnConvolutionFwdAlgoPerf_t		
cudnnConvolutionFwdAlgoPerf_t		hipdnnConvolutionFwdAlgoPerf_t		
cudnnConvolutionFwdAlgo_t		hipdnnConvolutionFwdAlgo_t		
cudnnConvolutionFwdPreference_t	+	hipdnnConvolutionFwdPreference_t		
cudnnConvolutionMode_t		hipdnnConvolutionMode_t		
cudnnDataType_t		hipdnnDataType_t		
cudnnDirectionMode_t		hipdnnDirectionMode_t		
cudnnDropoutDescriptor_t		hipdnnDropoutDescriptor_t		
cudnnFilterDescriptor_t		hipdnnFilterDescriptor_t		

cudnnHandle_t		hipdnnHandle_t		
cudnnIndicesType_t		hipdnnIndicesType_t		
cudnnLRNDescriptor_t		hipdnnLRNDescriptor_t		
cudnnLRNMode_t		hipdnnLRNMode_t		
cudnnMathType_t		hipdnnMathType_t		
cudnnNanPropagation_t		hipdnnNanPropagation_t		
cudnnOpTensorDescriptor_t		hipdnnOpTensorDescriptor_t		
cudnnOpTensorOp_t		hipdnnOpTensorOp_t		
cudnnPersistentRNNPlan_t		hipdnnPersistentRNNPlan_t		
cudnnPoolingDescriptor_t		hipdnnPoolingDescriptor_t		
cudnnPoolingMode_t		hipdnnPoolingMode_t		
cudnnRNNAlgo_t		hipdnnRNNAlgo_t		
cudnnRNNBiasMode_t		hipdnnRNNBiasMode_t		
cudnnRNNDescriptor_t		hipdnnRNNDescriptor_t		
cudnnRNNInputMode_t		hipdnnRNNInputMode_t		
cudnnRNNMode_t		hipdnnRNNMode_t		
cudnnReduceTensorDescriptor_t		hipdnnReduceTensorDescriptor_t		
cudnnReduceTensorIndices_t		hipdnnReduceTensorIndices_t		
cudnnReduceTensorOp_t		hipdnnReduceTensorOp_t		
cudnnSoftmaxAlgorithm_t		hipdnnSoftmaxAlgorithm_t		
cudnnSoftmaxMode_t		hipdnnSoftmaxMode_t		
cudnnStatus_t		hipdnnStatus_t		
cudnnTensorDescriptor_t		hipdnnTensorDescriptor_t		
cudnnTensorFormat_t		hipdnnTensorFormat_t		

1.6.2   CUDNN Functions

CUDA	D	HIP	D	E
cudnnActivationBackward		hipdnnActivationBackward		
cudnnActivationForward		hipdnnActivationForward		
cudnnAddTensor		hipdnnAddTensor		
cudnnBatchNormalizationBackward		hipdnnBatchNormalizationBackward		
cudnnBatchNormalizationForwardInference		hipdnnBatchNormalizationForwardInference		
cudnnBatchNormalizationForwardTraining		hipdnnBatchNormalizationForwardTraining		
cudnnConvolutionBackwardBias		hipdnnConvolutionBackwardBias		
cudnnConvolutionBackwardData		hipdnnConvolutionBackwardData		
cudnnConvolutionBackwardFilter		hipdnnConvolutionBackwardFilter		
cudnnConvolutionForward		hipdnnConvolutionForward		

cudnnCreate		hipdnnCreate		
cudnnCreateActivationDescriptor		hipdnnCreateActivationDescriptor		
cudnnCreateConvolutionDescriptor		hipdnnCreateConvolutionDescriptor		
cudnnCreateDropoutDescriptor		hipdnnCreateDropoutDescriptor		
cudnnCreateFilterDescriptor		hipdnnCreateFilterDescriptor		
cudnnCreateLRNDescriptor		hipdnnCreateLRNDescriptor		
cudnnCreateOpTensorDescriptor		hipdnnCreateOpTensorDescriptor		
cudnnCreatePersistentRNNPlan	+	hipdnnCreatePersistentRNNPlan		
cudnnCreatePoolingDescriptor		hipdnnCreatePoolingDescriptor		
cudnnCreateRNNDescriptor		hipdnnCreateRNNDescriptor		
cudnnCreateReduceTensorDescriptor		hipdnnCreateReduceTensorDescriptor		
cudnnCreateTensorDescriptor		hipdnnCreateTensorDescriptor		
cudnnDeriveBNTensorDescriptor		hipdnnDeriveBNTensorDescriptor		
cudnnDestroy		hipdnnDestroy		
cudnnDestroyActivationDescriptor		hipdnnDestroyActivationDescriptor		
cudnnDestroyConvolutionDescriptor		hipdnnDestroyConvolutionDescriptor		
cudnnDestroyDropoutDescriptor		hipdnnDestroyDropoutDescriptor		
cudnnDestroyFilterDescriptor		hipdnnDestroyFilterDescriptor		
cudnnDestroyLRNDescriptor		hipdnnDestroyLRNDescriptor		
cudnnDestroyOpTensorDescriptor		hipdnnDestroyOpTensorDescriptor		
cudnnDestroyPersistentRNNPlan	+	hipdnnDestroyPersistentRNNPlan		
cudnnDestroyPoolingDescriptor		hipdnnDestroyPoolingDescriptor		
cudnnDestroyRNNDescriptor		hipdnnDestroyRNNDescriptor		
cudnnDestroyReduceTensorDescriptor		hipdnnDestroyReduceTensorDescriptor		
cudnnDestroyTensorDescriptor		hipdnnDestroyTensorDescriptor		
cudnnDropoutGetStatesSize		hipdnnDropoutGetStatesSize		
cudnnFindConvolutionBackwardDataAlgorithm		hipdnnFindConvolutionBackwardDataAlgorithm		
cudnnFindConvolutionBackwardDataAlgorithmEx		hipdnnFindConvolutionBackwardDataAlgorithmEx		
cudnnFindConvolutionBackwardFilterAlgorithm		hipdnnFindConvolutionBackwardFilterAlgorithm		
cudnnFindConvolutionBackwardFilterAlgorithmEx		hipdnnFindConvolutionBackwardFilterAlgorithmEx		
cudnnFindConvolutionForwardAlgorithm		hipdnnFindConvolutionForwardAlgorithm		

cudnnFindConvolutionForwardAlgorithmEx		hipdnnFindConvolutionForwardAlgorithmEx		
cudnnGetActivationDescriptor		hipdnnGetActivationDescriptor		
cudnnGetConvolution2dDescriptor		hipdnnGetConvolution2dDescriptor		
cudnnGetConvolution2dForwardOutputDim		hipdnnGetConvolution2dForwardOutputDim		
cudnnGetConvolutionBackwardDataAlgorithm	+	hipdnnGetConvolutionBackwardDataAlgorithm		
cudnnGetConvolutionBackwardDataWorkspaceSize		hipdnnGetConvolutionBackwardDataWorkspaceSize		
cudnnGetConvolutionBackwardFilterAlgorithm	+	hipdnnGetConvolutionBackwardFilterAlgorithm		
cudnnGetConvolutionBackwardFilterWorkspaceSize		hipdnnGetConvolutionBackwardFilterWorkspaceSize		
cudnnGetConvolutionForwardAlgorithm	+	hipdnnGetConvolutionForwardAlgorithm		
cudnnGetConvolutionForwardWorkspaceSize		hipdnnGetConvolutionForwardWorkspaceSize		
cudnnGetErrorString		hipdnnGetErrorString		
cudnnGetFilter4dDescriptor		hipdnnGetFilter4dDescriptor		
cudnnGetFilterNdDescriptor		hipdnnGetFilterNdDescriptor		
cudnnGetLRNDescriptor		hipdnnGetLRNDescriptor		
cudnnGetOpTensorDescriptor		hipdnnGetOpTensorDescriptor		
cudnnGetPooling2dDescriptor		hipdnnGetPooling2dDescriptor		
cudnnGetPooling2dForwardOutputDim		hipdnnGetPooling2dForwardOutputDim		
cudnnGetRNNDescriptor	+	hipdnnGetRNNDescriptor		
cudnnGetRNNLinLayerBiasParams	+	hipdnnGetRNNLinLayerBiasParams		
cudnnGetRNNLinLayerMatrixParams	+	hipdnnGetRNNLinLayerMatrixParams		
cudnnGetRNNParamsSize	+	hipdnnGetRNNParamsSize		
cudnnGetRNNTrainingReserveSize	+	hipdnnGetRNNTrainingReserveSize		
cudnnGetRNNWorkspaceSize	+	hipdnnGetRNNWorkspaceSize		
cudnnGetReduceTensorDescriptor		hipdnnGetReduceTensorDescriptor		
cudnnGetReductionWorkspaceSize		hipdnnGetReductionWorkspaceSize		
cudnnGetStream		hipdnnGetStream		
cudnnGetTensor4dDescriptor		hipdnnGetTensor4dDescriptor		
cudnnGetTensorNdDescriptor		hipdnnGetTensorNdDescriptor		
cudnnGetVersion		hipdnnGetVersion		
cudnnLRNCrossChannelBackward		hipdnnLRNCrossChannelBackward		
cudnnLRNCrossChannelForward		hipdnnLRNCrossChannelForward		
cudnnOpTensor		hipdnnOpTensor		
cudnnPoolingBackward		hipdnnPoolingBackward		

cudnnPoolingForward		hipdnnPoolingForward		
cudnnRNNBackwardData	+	hipdnnRNNBackwardData		
cudnnRNNBackwardWeights	+	hipdnnRNNBackwardWeights		
cudnnRNNForwardInference	+	hipdnnRNNForwardInference		
cudnnRNNForwardTraining	+	hipdnnRNNForwardTraining		
cudnnReduceTensor		hipdnnReduceTensor		
cudnnScaleTensor		hipdnnScaleTensor		
cudnnSetActivationDescriptor		hipdnnSetActivationDescriptor		
cudnnSetConvolution2dDescriptor		hipdnnSetConvolution2dDescriptor		
cudnnSetConvolutionGroupCount		hipdnnSetConvolutionGroupCount		
cudnnSetConvolutionMathType		hipdnnSetConvolutionMathType		
cudnnSetConvolutionNdDescriptor		hipdnnSetConvolutionNdDescriptor		
cudnnSetDropoutDescriptor		hipdnnSetDropoutDescriptor		
cudnnSetFilter4dDescriptor		hipdnnSetFilter4dDescriptor		
cudnnSetFilterNdDescriptor		hipdnnSetFilterNdDescriptor		
cudnnSetLRNDescriptor		hipdnnSetLRNDescriptor		
cudnnSetOpTensorDescriptor		hipdnnSetOpTensorDescriptor		
cudnnSetPersistentRNNPlan	+	hipdnnSetPersistentRNNPlan		
cudnnSetPooling2dDescriptor		hipdnnSetPooling2dDescriptor		
cudnnSetPoolingNdDescriptor		hipdnnSetPoolingNdDescriptor		
cudnnSetRNNDescriptor	+	hipdnnSetRNNDescriptor		
cudnnSetRNNDescriptor_v5	+	hipdnnSetRNNDescriptor_v5		
cudnnSetRNNDescriptor_v6	+	hipdnnSetRNNDescriptor_v6		
cudnnSetReduceTensorDescriptor		hipdnnSetReduceTensorDescriptor		
cudnnSetStream		hipdnnSetStream		
cudnnSetTensor		hipdnnSetTensor		
cudnnSetTensor4dDescriptor		hipdnnSetTensor4dDescriptor		
cudnnSetTensor4dDescriptorEx		hipdnnSetTensor4dDescriptorEx		
cudnnSetTensorNdDescriptor		hipdnnSetTensorNdDescriptor		
cudnnSoftmaxBackward		hipdnnSoftmaxBackward		
cudnnSoftmaxForward		hipdnnSoftmaxForward		

1.7 CUFFT API Supported by HIP

1.7.1 CUFFT Data Types

CUDA	D	HIP	D	E
CUFFT_ALLOC_FAILED		HIPFFT_ALLOC_FAILED		
CUFFT_C2C		HIPFFT_C2C		
CUFFT_C2R		HIPFFT_C2R		
CUFFT_D2Z		HIPFFT_D2Z		
CUFFT_EXEC_FAILED		HIPFFT_EXEC_FAILED		
CUFFT_FORWARD		HIPFFT_FORWARD		
CUFFT_INCOMPLETE_PARAMETER_LIST		HIPFFT_INCOMPLETE_PARAMETER_LIST		
CUFFT_INTERNAL_ERROR		HIPFFT_INTERNAL_ERROR		
CUFFT_INVALID_DEVICE		HIPFFT_INVALID_DEVICE		
CUFFT_INVALID_PLAN		HIPFFT_INVALID_PLAN		
CUFFT_INVALID_SIZE		HIPFFT_INVALID_SIZE		
CUFFT_INVALID_TYPE		HIPFFT_INVALID_TYPE		
CUFFT_INVALID_VALUE		HIPFFT_INVALID_VALUE		
CUFFT_INVERSE		HIPFFT_BACKWARD		
CUFFT_NOT_IMPLEMENTED		HIPFFT_NOT_IMPLEMENTED		
CUFFT_NOT_SUPPORTED		HIPFFT_NOT_SUPPORTED		
CUFFT_NO_WORKSPACE		HIPFFT_NO_WORKSPACE		
CUFFT_PARSE_ERROR		HIPFFT_PARSE_ERROR		
CUFFT_R2C		HIPFFT_R2C		
CUFFT_SETUP_FAILED		HIPFFT_SETUP_FAILED		
CUFFT_SUCCESS		HIPFFT_SUCCESS		
CUFFT_UNALIGNED_DATA		HIPFFT_UNALIGNED_DATA		
CUFFT_Z2D		HIPFFT_Z2D		
CUFFT_Z2Z		HIPFFT_Z2Z		
cufftComplex		hipfftComplex		
cufftDoubleComplex		hipfftDoubleComplex		
cufftDoubleReal		hipfftDoubleReal		
cufftHandle		hipfftHandle		
cufftReal		hipfftReal		
cufftResult		hipfftResult		
cufftResult_t		hipfftResult_t		
cufftType		hipfftType		
cufftType_t		hipfftType_t		
CUFFT_CB_LD_COMPLEX		HIPFFT_CB_LD_COMPLEX		
CUFFT_CB_LD_COMPLEX_DOUBLE		HIPFFT_CB_LD_COMPLEX_DOUBLE		
CUFFT_CB_LD_REAL		HIPFFT_CB_LD_REAL		

CUFFT_CB_LD_REAL_DOUBLE		HIPFFT_CB_LD_REAL_DOUBLE		
CUFFT_CB_ST_COMPLEX		HIPFFT_CB_ST_COMPLEX		
CUFFT_CB_ST_COMPLEX_DOUBLE		HIPFFT_CB_ST_COMPLEX_DOUBLE		
CUFFT_CB_ST_REAL		HIPFFT_CB_ST_REAL		
CUFFT_CB_ST_REAL_DOUBLE		HIPFFT_CB_ST_REAL_DOUBLE		
CUFFT_CB_UNDEFINED		HIPFFT_CB_UNDEFINED		
cufftXtCallbackType		hipfftXtCallbackType		
cufftXtCallbackType_t		hipfftXtCallbackType_t		

1.7.2   CUFFT API Functions

CUDA	D	HIP	D	E
cufftCreate		hipfftCreate		
cufftDestroy		hipfftDestroy		
cufftEstimate1d		hipfftEstimate1d		
cufftEstimate2d		hipfftEstimate2d		
cufftEstimate3d		hipfftEstimate3d		
cufftEstimateMany		hipfftEstimateMany		
cufftExecC2C		hipfftExecC2C		
cufftExecC2R		hipfftExecC2R		
cufftExecD2Z		hipfftExecD2Z		
cufftExecR2C		hipfftExecR2C		
cufftExecZ2D		hipfftExecZ2D		
cufftExecZ2Z		hipfftExecZ2Z		
cufftGetProperty		hipfftGetProperty		
cufftGetSize		hipfftGetSize		
cufftGetSize1d		hipfftGetSize1d		
cufftGetSize2d		hipfftGetSize2d		
cufftGetSize3d		hipfftGetSize3d		
cufftGetSizeMany		hipfftGetSizeMany		
cufftGetSizeMany64		hipfftGetSizeMany64		
cufftGetVersion		hipfftGetVersion		
cufftMakePlan1d		hipfftMakePlan1d		
cufftMakePlan2d		hipfftMakePlan2d		
cufftMakePlan3d		hipfftMakePlan3d		
cufftMakePlanMany		hipfftMakePlanMany		
cufftMakePlanMany64		hipfftMakePlanMany64		
cufftPlan1d		hipfftPlan1d		
cufftPlan2d		hipfftPlan2d		
cufftPlan3d		hipfftPlan3d		

cufftPlanMany		hipfftPlanMany	
cufftSetAutoAllocation		hipfftSetAutoAllocation	
cufftSetStream		hipfftSetStream	
cufftSetWorkArea		hipfftSetWorkArea	
cufftCallbackLoadC		hipfftCallbackLoadC	
cufftCallbackLoadD		hipfftCallbackLoadD	
cufftCallbackLoadR		hipfftCallbackLoadR	
cufftCallbackLoadZ		hipfftCallbackLoadZ	
cufftCallbackStoreC		hipfftCallbackStoreC	
cufftCallbackStoreD		hipfftCallbackStoreD	
cufftCallbackStoreR		hipfftCallbackStoreR	
cufftCallbackStoreZ		hipfftCallbackStoreZ	
cufftXtClearCallback		hipfftXtClearCallback	
cufftXtSetCallback		hipfftXtSetCallback	
cufftXtSetCallbackSharedSize		hipfftXtSetCallbackSharedSize	

AMD

1.8   CURAND API Supported by HIP

1.8.1   CURAND Data Types

CUDA	D	HIP	D	E
CURAND_RNG_PSEUDO_DEFAULT		HIPRAND_RNG_PSEUDO_DEFAULT		
CURAND_RNG_PSEUDO_MRG32K3A		HIPRAND_RNG_PSEUDO_MRG32K3A		
CURAND_RNG_PSEUDO_MT19937		HIPRAND_RNG_PSEUDO_MT19937		
CURAND_RNG_PSEUDO_MTGP32		HIPRAND_RNG_PSEUDO_MTGP32		
CURAND_RNG_PSEUDO_PHILOX4_32_10		HIPRAND_RNG_PSEUDO_PHILOX4_32_10		
CURAND_RNG_PSEUDO_XORWOW		HIPRAND_RNG_PSEUDO_XORWOW		
CURAND_RNG_QUASI_DEFAULT		HIPRAND_RNG_QUASI_DEFAULT		
CURAND_RNG_QUASI_SCRAMBLED_SOBOL32		HIPRAND_RNG_QUASI_SCRAMBLED_SOBOL32		
CURAND_RNG_QUASI_SCRAMBLED_SOBOL64		HIPRAND_RNG_QUASI_SCRAMBLED_SOBOL64		
CURAND_RNG_QUASI_SOBOL32		HIPRAND_RNG_QUASI_SOBOL32		
CURAND_RNG_QUASI_SOBOL64		HIPRAND_RNG_QUASI_SOBOL64		
CURAND_RNG_TEST		HIPRAND_RNG_TEST		
CURAND_STATUS_ALLOCATION_FAILED		HIPRAND_STATUS_ALLOCATION_FAILED		
CURAND_STATUS_ARCH_MISMATCH		HIPRAND_STATUS_ARCH_MISMATCH		
CURAND_STATUS_DOUBLE_PRECISION_REQUIRED		HIPRAND_STATUS_DOUBLE_PRECISION_REQUIRED		
CURAND_STATUS_INITIALIZATION_FAILED		HIPRAND_STATUS_INITIALIZATION_FAILED		
CURAND_STATUS_INTERNAL_ERROR		HIPRAND_STATUS_INTERNAL_ERROR		
CURAND_STATUS_LAUNCH_FAILURE		HIPRAND_STATUS_LAUNCH_FAILURE		
CURAND_STATUS_LENGTH_NOT_MULTIPLE		HIPRAND_STATUS_LENGTH_NOT_MULTIPLE		
CURAND_STATUS_NOT_INITIALIZED		HIPRAND_STATUS_NOT_INITIALIZED		
CURAND_STATUS_OUT_OF_RANGE		HIPRAND_STATUS_OUT_OF_RANGE		
CURAND_STATUS_PREEXISTING_FAILURE		HIPRAND_STATUS_PREEXISTING_FAILURE		
CURAND_STATUS_SUCCESS		HIPRAND_STATUS_SUCCESS		
CURAND_STATUS_TYPE_ERROR		HIPRAND_STATUS_TYPE_ERROR		

CUDA		HIP		
CURAND_STATUS_VERSION_MISMATCH		HIPRAND_STATUS_VERSION_MISMATCH		
CURAND_VERSION		HIPRAND_VERSION		
curandDirectionVectors32_t		hiprandDirectionVectors32_t		
curandDiscreteDistribution_st		hiprandDiscreteDistribution_st		
curandDiscreteDistribution_t		hiprandDiscreteDistribution_t		
curandGenerator_st		hiprandGenerator_st		
curandGenerator_t		hiprandGenerator_t		
curandRngType		hiprandRngType_t		
curandRngType_t		hiprandRngType_t		
curandState		hiprandState		
curandStateMRG32k3a		hiprandStateMRG32k3a		
curandStateMRG32k3a_t		hiprandStateMRG32k3a_t		
curandStateMtgp32		hiprandStateMtgp32		
curandStateMtgp32_t		hiprandStateMtgp32_t		
curandStatePhilox4_32_10		hiprandStatePhilox4_32_10		
curandStatePhilox4_32_10_t		hiprandStatePhilox4_32_10_t		
curandStateSobol32		hiprandStateSobol32		
curandStateSobol32_t		hiprandStateSobol32_t		
curandStateXORWOW		hiprandStateXORWOW		
curandStateXORWOW_t		hiprandStateXORWOW_t		
curandState_t		hiprandState_t		
curandStatus		hiprandStatus_t		
curandStatus_t		hiprandStatus_t		

1.8.2   Host API Functions

CUDA	D	HIP	D	E
curandCreateGenerator		hiprandCreateGenerator		
curandCreateGeneratorHost		hiprandCreateGeneratorHost		
curandCreatePoissonDistribution		hiprandCreatePoissonDistribution		
curandDestroyDistribution		hiprandDestroyDistribution		
curandDestroyGenerator		hiprandDestroyGenerator		
curandGenerate		hiprandGenerate		
curandGenerateLogNormal		hiprandGenerateLogNormal		
curandGenerateLogNormalDouble		hiprandGenerateLogNormalDouble		
curandGenerateNormal		hiprandGenerateNormal		
curandGenerateNormalDouble		hiprandGenerateNormalDouble		
curandGeneratePoisson		hiprandGeneratePoisson		
curandGenerateSeeds		hiprandGenerateSeeds		
curandGenerateUniform		hiprandGenerateUniform		
curandGenerateUniformDouble		hiprandGenerateUniformDouble		

curandGetVersion		hiprandGetVersion		
curandMakeMTGP32Constants		hiprandMakeMTGP32Constants		
curandMakeMTGP32KernelState		hiprandMakeMTGP32KernelState		
curandSetGeneratorOffset		hiprandSetGeneratorOffset		
curandSetPseudoRandomGeneratorSeed		hiprandSetPseudoRandomGeneratorSeed		
curandSetQuasiRandomGeneratorDimensions		hiprandSetQuasiRandomGeneratorDimensions		
curandSetStream		hiprandSetStream		

1.8.3   Device API Functions

CUDA	D	HIP	D	E
curand		hiprand		
curand_discrete		hiprand_discrete		
curand_discrete4		hiprand_discrete4		
curand_init		hiprand_init		
curand_log_normal		hiprand_log_normal		
curand_log_normal2		hiprand_log_normal2		
curand_log_normal2_double		hiprand_log_normal2_double		
curand_log_normal4		hiprand_log_normal4		
curand_log_normal4_double		hiprand_log_normal4_double		
curand_log_normal_double		hiprand_log_normal_double		
curand_normal		hiprand_normal		
curand_normal2		hiprand_normal2		
curand_normal2_double		hiprand_normal2_double		
curand_normal4		hiprand_normal4		

curand_normal4_double		hiprand_normal4_double		
curand_normal_double		hiprand_normal_double		
curand_poisson		hiprand_poisson		
curand_poisson4		hiprand_poisson4		
curand_uniform		hiprand_uniform		
curand_uniform2_double		hiprand_uniform2_double		
curand_uniform4		hiprand_uniform4		
curand_uniform4_double		hiprand_uniform4_double		
curand_uniform_double		hiprand_uniform_double		

1.9   CUSPARSE API supported by HIP

1.9.1   CUSPARSE Types References

CUDA	D	HIP	D	E
CUSPARSE_ACTION_NUMERIC		HIPSPARSE_ACTION_NUMERIC		
CUSPARSE_ACTION_SYMBOLIC		HIPSPARSE_ACTION_SYMBOLIC		
CUSPARSE_COOMM_ALG1	+	HIPSPARSE_COOMM_ALG1		
CUSPARSE_COOMM_ALG2	+	HIPSPARSE_COOMM_ALG2		
CUSPARSE_COOMM_ALG3	+	HIPSPARSE_COOMM_ALG3		
CUSPARSE_COOMV_ALG	+	HIPSPARSE_COOMV_ALG		
CUSPARSE_CSRMM_ALG1	+	HIPSPARSE_CSRMM_ALG1		
CUSPARSE_CSRMV_ALG1	+	HIPSPARSE_CSRMV_ALG1		
CUSPARSE_CSRMV_ALG2	+	HIPSPARSE_CSRMV_ALG2		
CUSPARSE_DIAG_TYPE_NON_UNIT		HIPSPARSE_DIAG_TYPE_NON_UNIT		
CUSPARSE_DIAG_TYPE_UNIT		HIPSPARSE_DIAG_TYPE_UNIT		
CUSPARSE_DIRECTION_COLUMN		HIPSPARSE_DIRECTION_COLUMN		
CUSPARSE_DIRECTION_ROW		HIPSPARSE_DIRECTION_ROW		
CUSPARSE_FILL_MODE_LOWER		HIPSPARSE_FILL_MODE_LOWER		
CUSPARSE_FILL_MODE_UPPER		HIPSPARSE_FILL_MODE_UPPER		
CUSPARSE_FORMAT_COO		HIPSPARSE_FORMAT_COO		
CUSPARSE_FORMAT_COO_AOS		HIPSPARSE_FORMAT_COO_AOS		
CUSPARSE_FORMAT_CSC		HIPSPARSE_FORMAT_CSC		
CUSPARSE_FORMAT_CSR		HIPSPARSE_FORMAT_CSR		
CUSPARSE_HYB_PARTITION_AUTO	+	HIPSPARSE_HYB_PARTITION_AUTO		
CUSPARSE_HYB_PARTITION_MAX	+	HIPSPARSE_HYB_PARTITION_MAX		
CUSPARSE_HYB_PARTITION_USER	+	HIPSPARSE_HYB_PARTITION_USER		
CUSPARSE_INDEX_16U		HIPSPARSE_INDEX_16U		

CUDA	D	HIP	D	E
CUSPARSE_INDEX_32I		HIPSPARSE_INDEX_32I		
CUSPARSE_INDEX_64I		HIPSPARSE_INDEX_64I		
CUSPARSE_INDEX_BASE_ONE		HIPSPARSE_INDEX_BASE_ONE		
CUSPARSE_INDEX_BASE_ZERO		HIPSPARSE_INDEX_BASE_ZERO		
CUSPARSE_MATRIX_TYPE_GENERAL		HIPSPARSE_MATRIX_TYPE_GENERAL		
CUSPARSE_MATRIX_TYPE_HERMITIAN		HIPSPARSE_MATRIX_TYPE_HERMITIAN		
CUSPARSE_MATRIX_TYPE_SYMMETRIC		HIPSPARSE_MATRIX_TYPE_SYMMETRIC		
CUSPARSE_MATRIX_TYPE_TRIANGULAR		HIPSPARSE_MATRIX_TYPE_TRIANGULAR		
CUSPARSE_MM_ALG_DEFAULT	+	HIPSPARSE_MM_ALG_DEFAULT		
CUSPARSE_MV_ALG_DEFAULT	+	HIPSPARSE_MV_ALG_DEFAULT		
CUSPARSE_OPERATION_CONJUGATE_TRANSPOSE		HIPSPARSE_OPERATION_CONJUGATE_TRANSPOSE		
CUSPARSE_OPERATION_NON_TRANSPOSE		HIPSPARSE_OPERATION_NON_TRANSPOSE		
CUSPARSE_OPERATION_TRANSPOSE		HIPSPARSE_OPERATION_TRANSPOSE		
CUSPARSE_ORDER_COL		HIPSPARSE_ORDER_COL		
CUSPARSE_ORDER_ROW		HIPSPARSE_ORDER_ROW		
CUSPARSE_POINTER_MODE_DEVICE		HIPSPARSE_POINTER_MODE_DEVICE		
CUSPARSE_POINTER_MODE_HOST		HIPSPARSE_POINTER_MODE_HOST		
CUSPARSE_SOLVE_POLICY_NO_LEVEL		HIPSPARSE_SOLVE_POLICY_NO_LEVEL		
CUSPARSE_SOLVE_POLICY_USE_LEVEL		HIPSPARSE_SOLVE_POLICY_USE_LEVEL		
CUSPARSE_SPARSETODENSE_ALG_DEFAULT		HIPSPARSE_SPARSETODENSE_ALG_DEFAULT		
CUSPARSE_SPGEMM_DEFAULT		HIPSPARSE_SPGEMM_DEFAULT		
CUSPARSE_SPMM_ALG_DEFAULT		HIPSPARSE_SPMM_ALG_DEFAULT		
CUSPARSE_SPMM_COO_ALG1		HIPSPARSE_SPMM_COO_ALG1		
CUSPARSE_SPMM_COO_ALG2		HIPSPARSE_SPMM_COO_ALG2		
CUSPARSE_SPMM_COO_ALG3		HIPSPARSE_SPMM_COO_ALG3		
CUSPARSE_SPMM_COO_ALG4		HIPSPARSE_SPMM_COO_ALG4		

CUDA	D	HIP	D	E
CUSPARSE_SPMM_CSR_ALG1		HIPSPARSE_SPMM_CSR_ALG1		
CUSPARSE_SPMM_CSR_ALG2		HIPSPARSE_SPMM_CSR_ALG2		
CUSPARSE_SPMV_ALG_DEFAULT		HIPSPARSE_MV_ALG_DEFAULT		
CUSPARSE_SPMV_COO_ALG1		HIPSPARSE_COOMV_ALG		
CUSPARSE_SPMV_CSR_ALG1		HIPSPARSE_CSRMV_ALG1		
CUSPARSE_SPMV_CSR_ALG2		HIPSPARSE_CSRMV_ALG2		
CUSPARSE_STATUS_ALLOC_FAILED		HIPSPARSE_STATUS_ALLOC_FAILED		
CUSPARSE_STATUS_ARCH_MISMATCH		HIPSPARSE_STATUS_ARCH_MISMATCH		
CUSPARSE_STATUS_EXECUTION_FAILED		HIPSPARSE_STATUS_EXECUTION_FAILED		
CUSPARSE_STATUS_INSUFFICIENT_RESOURCES		HIPSPARSE_STATUS_INSUFFICIENT_RESOURCES		
CUSPARSE_STATUS_INTERNAL_ERROR		HIPSPARSE_STATUS_INTERNAL_ERROR		
CUSPARSE_STATUS_INVALID_VALUE		HIPSPARSE_STATUS_INVALID_VALUE		
CUSPARSE_STATUS_MAPPING_ERROR		HIPSPARSE_STATUS_MAPPING_ERROR		
CUSPARSE_STATUS_MATRIX_TYPE_NOT_SUPPORTED		HIPSPARSE_STATUS_MATRIX_TYPE_NOT_SUPPORTED		
CUSPARSE_STATUS_NOT_INITIALIZED		HIPSPARSE_STATUS_NOT_INITIALIZED		
CUSPARSE_STATUS_NOT_SUPPORTED		HIPSPARSE_STATUS_NOT_SUPPORTED		
CUSPARSE_STATUS_SUCCESS		HIPSPARSE_STATUS_SUCCESS		
CUSPARSE_STATUS_ZERO_PIVOT		HIPSPARSE_STATUS_ZERO_PIVOT		
bsric02Info_t		bsric02Info_t		
bsrilu02Info_t		bsrilu02Info_t		
bsrsv2Info_t		bsrsv2Info_t		
csrgemm2Info_t		csrgemm2Info_t		
csrilu02Info_t		csrilu02Info_t		
csrsm2Info_t		csrsm2Info_t		
csrsv2Info_t		csrsv2Info_t		
csru2csrInfo		csru2csrInfo		

CUDA	D	HIP	D	E
csru2csrInfo_t		csru2csrInfo_t		
cusparseAction_t		hipsparseAction_t		
cusparseDiagType_t		hipsparseDiagType_t		
cusparseDirection_t		hipsparseDirection_t		
cusparseDnMatDescr		hipsparseDnMatDescr		
cusparseDnMatDescr_t		hipsparseDnMatDescr_t		
cusparseDnVecDescr_t		hipsparseDnVecDescr_t		
cusparseFillMode_t		hipsparseFillMode_t		
cusparseFormat_t		hipsparseFormat_t		
cusparseHandle_t		hipsparseHandle_t		
cusparseHybMat_t	+	hipsparseHybMat_t		
cusparseHybPartition_t	+	hipsparseHybPartition_t		
cusparseIndexBase_t		hipsparseIndexBase_t		
cusparseIndexType_t		hipsparseIndexType_t		
cusparseMatDescr_t		hipsparseMatDescr_t		
cusparseMatrixType_t		hipsparseMatrixType_t		
cusparseOperation_t		hipsparseOperation_t		
cusparseOrder_t		hipsparseOrder_t		
cusparsePointerMode_t		hipsparsePointerMode_t		
cusparseSolvePolicy_t		hipsparseSolvePolicy_t		
cusparseSpGEMMAlg_t		hipsparseSpGEMMAlg_t		
cusparseSpGEMMDescr		hipsparseSpGEMMDescr		
cusparseSpGEMMDescr_t		hipsparseSpGEMMDescr_t		
cusparseSpMMAlg_t		hipsparseSpMMAlg_t		
cusparseSpMVAlg_t		hipsparseSpMVAlg_t		
cusparseSpMatDescr_t		hipsparseSpMatDescr_t		

CUDA	D	HIP	D	E
cusparseSpVecDescr_t		hipsparseSpVecDescr_t		
cusparseSparseToDenseAlg_t		hipsparseSparseToDenseAlg_t		
cusparseStatus_t		hipsparseStatus_t		
pruneInfo_t		pruneInfo_t		

1.9.2   CUSPARSE Management Function Reference

CUDA	D	HIP	D	E
cusparseCreate		hipsparseCreate		
cusparseDestroy		hipsparseDestroy		
cusparseGetPointerMode		hipsparseGetPointerMode		
cusparseGetStream		hipsparseGetStream		
cusparseGetVersion		hipsparseGetVersion		
cusparseSetPointerMode		hipsparseSetPointerMode		
cusparseSetStream		hipsparseSetStream		
cusparseCreate		hipsparseCreate		
cusparseDestroy		hipsparseDestroy		
cusparseGetPointerMode		hipsparseGetPointerMode		
cusparseGetStream		hipsparseGetStream		
cusparseGetVersion		hipsparseGetVersion		
cusparseSetPointerMode		hipsparseSetPointerMode		
cusparseSetStream		hipsparseSetStream		

1.9.3   CUSPARSE Helper Function Reference

CUDA	D	HIP	D	E
cusparseCreateBsric02Info		hipsparseCreateBsric02Info		
cusparseCreateBsrilu02Info		hipsparseCreateBsrilu02Info		
cusparseCreateBsrsv2Info		hipsparseCreateBsrsv2Info		
cusparseCreateCsrgemm2Info	+	hipsparseCreateCsrgemm2Info		
cusparseCreateCsric02Info		hipsparseCreateCsric02Info		
cusparseCreateCsrilu02Info		hipsparseCreateCsrilu02Info		
cusparseCreateCsrsm2Info	+	hipsparseCreateCsrsm2Info		
cusparseCreateCsrsv2Info	+	hipsparseCreateCsrsv2Info		
cusparseCreateHybMat	+	hipsparseCreateHybMat		
cusparseCreateMatDescr		hipsparseCreateMatDescr		
cusparseCreatePruneInfo		hipsparseCreatePruneInfo		
cusparseDestroyBsric02Info		hipsparseDestroyBsric02Info		
cusparseDestroyBsrilu02Info		hipsparseDestroyBsrilu02Info		
cusparseDestroyBsrsv2Info		hipsparseDestroyBsrsv2Info		
cusparseDestroyCsrgemm2Info	+	hipsparseDestroyCsrgemm2Info		
cusparseDestroyCsric02Info		hipsparseDestroyCsric02Info		
cusparseDestroyCsrilu02Info		hipsparseDestroyCsrilu02Info		
cusparseDestroyCsrsm2Info	+	hipsparseDestroyCsrsm2Info		
cusparseDestroyCsrsv2Info	+	hipsparseDestroyCsrsv2Info		
cusparseDestroyHybMat	+	hipsparseDestroyHybMat		
cusparseDestroyMatDescr		hipsparseDestroyMatDescr		
cusparseDestroyPruneInfo		hipsparseDestroyPruneInfo		
cusparseGetMatDiagType		hipsparseGetMatDiagType		
cusparseGetMatFillMode		hipsparseGetMatFillMode		
cusparseGetMatIndexBase		hipsparseGetMatIndexBase		

CUDA	D	HIP	D	E
cusparseGetMatType		hipsparseGetMatType		
cusparseSetMatDiagType		hipsparseSetMatDiagType		
cusparseSetMatFillMode		hipsparseSetMatFillMode		
cusparseSetMatIndexBase		hipsparseSetMatIndexBase		
cusparseSetMatType		hipsparseSetMatType		

1.9.4   CUSPARSE Types Reference

CUDA	D	HIP	D	E
CUSPARSE_SDDMM_ALG_DEFAULT		HIPSPARSE_SDDMM_ALG_DEFAULT		
cusparseSDDMMAlg_t		hipsparseSDDMMAlg_t		

1.9.5   CUSPARSE Level 1 Function Reference

CUDA	D	HIP	D	E
cusparseCaxpyi	+	hipsparseCaxpyi		
cusparseCdotci	+	hipsparseCdotci		
cusparseCdoti	+	hipsparseCdoti		
cusparseCgthr	+	hipsparseCgthr		
cusparseCgthrz	+	hipsparseCgthrz		
cusparseCsctr	+	hipsparseCsctr		
cusparseDaxpyi	+	hipsparseDaxpyi		
cusparseDdoti	+	hipsparseDdoti		
cusparseDgthr	+	hipsparseDgthr		
cusparseDgthrz	+	hipsparseDgthrz		
cusparseDroti	+	hipsparseDroti		
cusparseDsctr	+	hipsparseDsctr		
cusparseSaxpyi	+	hipsparseSaxpyi		

CUDA	D	HIP	D	E
cusparseSdoti	+	hipsparseSdoti		
cusparseSgthr	+	hipsparseSgthr		
cusparseSgthrz	+	hipsparseSgthrz		
cusparseSroti	+	hipsparseSroti		
cusparseSsctr	+	hipsparseSsctr		
cusparseZaxpyi	+	hipsparseZaxpyi		
cusparseZdotci	+	hipsparseZdotci		
cusparseZdoti	+	hipsparseZdoti		
cusparseZgthr	+	hipsparseZgthr		
cusparseZgthrz	+	hipsparseZgthrz		
cusparseZsctr	+	hipsparseZsctr		

1.9.6   CUSPARSE Level 2 Function Reference

CUDA	D	HIP	D	E
cusparseCbsrmv		hipsparseCbsrmv		
cusparseCbsrsv2_analysis		hipsparseCbsrsv2_analysis		
cusparseCbsrsv2_bufferSize		hipsparseCbsrsv2_bufferSize		
cusparseCbsrsv2_bufferSizeExt		hipsparseCbsrsv2_bufferSizeExt		
cusparseCbsrsv2_solve		hipsparseCbsrsv2_solve		
cusparseCcsrmv	+	hipsparseCcsrmv		
cusparseCcsrsv2_analysis	+	hipsparseCcsrsv2_analysis		
cusparseCcsrsv2_bufferSize	+	hipsparseCcsrsv2_bufferSize		
cusparseCcsrsv2_bufferSizeExt	+	hipsparseCcsrsv2_bufferSizeExt		
cusparseCcsrsv2_solve	+	hipsparseCcsrsv2_solve		
cusparseChybmv	+	hipsparseChybmv		
cusparseDbsrmv		hipsparseDbsrmv		

CUDA	D	HIP	D	E
cusparseDbsrsv2_analysis		hipsparseDbsrsv2_analysis		
cusparseDbsrsv2_bufferSize		hipsparseDbsrsv2_bufferSize		
cusparseDbsrsv2_bufferSizeExt		hipsparseDbsrsv2_bufferSizeExt		
cusparseDbsrsv2_solve		hipsparseDbsrsv2_solve		
cusparseDcsrmv	+	hipsparseDcsrmv		
cusparseDcsrsv2_analysis	+	hipsparseDcsrsv2_analysis		
cusparseDcsrsv2_bufferSize		hipsparseDcsrsv2_bufferSize		
cusparseDcsrsv2_bufferSizeExt	+	hipsparseDcsrsv2_bufferSizeExt		
cusparseDcsrsv2_solve	+	hipsparseDcsrsv2_solve		
cusparseDhybmv	+	hipsparseDhybmv		
cusparseSbsrmv		hipsparseSbsrmv		
cusparseSbsrsv2_analysis		hipsparseSbsrsv2_analysis		
cusparseSbsrsv2_bufferSize		hipsparseSbsrsv2_bufferSize		
cusparseSbsrsv2_bufferSizeExt		hipsparseSbsrsv2_bufferSizeExt		
cusparseSbsrsv2_solve		hipsparseSbsrsv2_solve		
cusparseScsrmv	+	hipsparseScsrmv		
cusparseScsrsv2_analysis	+	hipsparseScsrsv2_analysis		
cusparseScsrsv2_bufferSize	+	hipsparseScsrsv2_bufferSize		
cusparseScsrsv2_bufferSizeExt	+	hipsparseScsrsv2_bufferSizeExt		
cusparseScsrsv2_solve	+	hipsparseScsrsv2_solve		
cusparseShybmv	+	hipsparseShybmv		
cusparseXbsrsv2_zeroPivot		hipsparseXbsrsv2_zeroPivot		
cusparseXcsrsv2_zeroPivot	+	hipsparseXcsrsv2_zeroPivot		
cusparseZbsrmv		hipsparseZbsrmv		
cusparseZbsrsv2_analysis		hipsparseZbsrsv2_analysis		
cusparseZbsrsv2_bufferSize		hipsparseZbsrsv2_bufferSize		

CUDA	D	HIP	D	E
cusparseZbsrsv2_bufferSizeExt		hipsparseZbsrsv2_bufferSizeExt		
cusparseZbsrsv2_solve		hipsparseZbsrsv2_solve		
cusparseZcsrmv	+	hipsparseZcsrmv		
cusparseZcsrsv2_analysis	+	hipsparseZcsrsv2_analysis		
cusparseZcsrsv2_bufferSize	+	hipsparseZcsrsv2_bufferSize		
cusparseZcsrsv2_bufferSizeExt	+	hipsparseZcsrsv2_bufferSizeExt		
cusparseZcsrsv2_solve	+	hipsparseZcsrsv2_solve		
cusparseZhybmv	+	hipsparseZhybmv		
cusparseCgemvi		hipsparseCgemvi		
cusparseCgemvi_bufferSize		hipsparseCgemvi_bufferSize		
cusparseDgemvi		hipsparseDgemvi		
cusparseDgemvi_bufferSize		hipsparseDgemvi_bufferSize		
cusparseSgemvi		hipsparseSgemvi		
cusparseSgemvi_bufferSize		hipsparseSgemvi_bufferSize		
cusparseZgemvi		hipsparseZgemvi		
cusparseZgemvi_bufferSize		hipsparseZgemvi_bufferSize		

1.9.7   CUSPARSE Level 3 Function Reference

CUDA	D	HIP	D	E
cusparseCbsrmm		hipsparseCbsrmm		
cusparseCcsrmm	+	hipsparseCcsrmm		
cusparseCcsrmm2	+	hipsparseCcsrmm2		
cusparseCcsrsm2_analysis	+	hipsparseCcsrsm2_analysis		
cusparseCcsrsm2_bufferSizeExt	+	hipsparseCcsrsm2_bufferSizeExt		
cusparseCcsrsm2_solve	+	hipsparseCcsrsm2_solve		
cusparseCgemmi	+	hipsparseCgemmi		

CUDA	D	HIP	D	E
cusparseDbsrmm		hipsparseDbsrmm		
cusparseDcsrmm	+	hipsparseDcsrmm		
cusparseDcsrmm2	+	hipsparseDcsrmm2		
cusparseDcsrsm2_analysis	+	hipsparseDcsrsm2_analysis		
cusparseDcsrsm2_bufferSizeExt	+	hipsparseDcsrsm2_bufferSizeExt		
cusparseDcsrsm2_solve	+	hipsparseDcsrsm2_solve		
cusparseDgemmi	+	hipsparseDgemmi		
cusparseSbsrmm		hipsparseSbsrmm		
cusparseScsrmm	+	hipsparseScsrmm		
cusparseScsrmm2	+	hipsparseScsrmm2		
cusparseScsrsm2_analysis	+	hipsparseScsrsm2_analysis		
cusparseScsrsm2_bufferSizeExt	+	hipsparseScsrsm2_bufferSizeExt		
cusparseScsrsm2_solve	+	hipsparseScsrsm2_solve		
cusparseSgemmi	+	hipsparseSgemmi		
cusparseXcsrsm2_zeroPivot	+	hipsparseXcsrsm2_zeroPivot		
cusparseZbsrmm		hipsparseZbsrmm		
cusparseZcsrmm	+	hipsparseZcsrmm		
cusparseZcsrmm2	+	hipsparseZcsrmm2		
cusparseZcsrsm2_analysis	+	hipsparseZcsrsm2_analysis		
cusparseZcsrsm2_bufferSizeExt	+	hipsparseZcsrsm2_bufferSizeExt		
cusparseZcsrsm2_solve	+	hipsparseZcsrsm2_solve		
cusparseZgemmi	+	hipsparseZgemmi		

1.9.8 CUSPARSE Extra Function Reference

CUDA	D	HIP	D	E
cusparseCcsrgeam	+	hipsparseCcsrgeam		
cusparseCcsrgeam2		hipsparseCcsrgeam2		
cusparseCcsrgeam2_bufferSizeExt		hipsparseCcsrgeam2_bufferSizeExt		
cusparseCcsrgemm	+	hipsparseCcsrgemm		
cusparseCcsrgemm2	+	hipsparseCcsrgemm2		
cusparseCcsrgemm2_bufferSizeExt	+	hipsparseCcsrgemm2_bufferSizeExt		
cusparseDcsrgeam	+	hipsparseDcsrgeam		
cusparseDcsrgeam2		hipsparseDcsrgeam2		
cusparseDcsrgeam2_bufferSizeExt		hipsparseDcsrgeam2_bufferSizeExt		
cusparseDcsrgemm	+	hipsparseDcsrgemm		
cusparseDcsrgemm2	+	hipsparseDcsrgemm2		
cusparseDcsrgemm2_bufferSizeExt	+	hipsparseDcsrgemm2_bufferSizeExt		
cusparseScsrgeam	+	hipsparseScsrgeam		
cusparseScsrgeam2		hipsparseScsrgeam2		
cusparseScsrgeam2_bufferSizeExt		hipsparseScsrgeam2_bufferSizeExt		
cusparseScsrgemm	+	hipsparseScsrgemm		
cusparseScsrgemm2	+	hipsparseScsrgemm2		
cusparseScsrgemm2_bufferSizeExt	+	hipsparseScsrgemm2_bufferSizeExt		
cusparseXcsrgeam2Nnz		hipsparseXcsrgeam2Nnz		
cusparseXcsrgeamNnz	+	hipsparseXcsrgeamNnz		
cusparseXcsrgemm2Nnz	+	hipsparseXcsrgemm2Nnz		
cusparseXcsrgemmNnz	+	hipsparseXcsrgemmNnz		
cusparseZcsrgeam	+	hipsparseZcsrgeam		
cusparseZcsrgeam2		hipsparseZcsrgeam2		
cusparseZcsrgeam2_bufferSizeExt		hipsparseZcsrgeam2_bufferSizeExt		

CUDA	D	HIP	D	E
cusparseZcsrgemm	+	hipsparseZcsrgemm		
cusparseZcsrgemm2	+	hipsparseZcsrgemm2		
cusparseZcsrgemm2_bufferSizeExt	+	hipsparseZcsrgemm2_bufferSizeExt		

1.9.9   CUSPARSE Preconditioners Reference

CUDA	D	HIP	D	E
cusparseCbsric02		hipsparseCbsric02		
cusparseCbsric02_analysis		hipsparseCbsric02_analysis		
cusparseCbsric02_bufferSize		hipsparseCbsric02_bufferSize		
cusparseCbsrilu02		hipsparseCbsrilu02		
cusparseCbsrilu02_analysis		hipsparseCbsrilu02_analysis		
cusparseCbsrilu02_bufferSize		hipsparseCbsrilu02_bufferSize		
cusparseCbsrilu02_numericBoost		hipsparseCbsrilu02_numericBoost		
cusparseCcsric02		hipsparseCcsric02		
cusparseCcsric02_analysis		hipsparseCcsric02_analysis		
cusparseCcsric02_bufferSize		hipsparseCcsric02_bufferSize		
cusparseCcsric02_bufferSizeExt		hipsparseCcsric02_bufferSizeExt		
cusparseCcsrilu02		hipsparseCcsrilu02		
cusparseCcsrilu02_analysis		hipsparseCcsrilu02_analysis		
cusparseCcsrilu02_bufferSize		hipsparseCcsrilu02_bufferSize		
cusparseCcsrilu02_bufferSizeExt		hipsparseCcsrilu02_bufferSizeExt		
cusparseCcsrilu02_numericBoost		hipsparseCcsrilu02_numericBoost		
cusparseDbsric02		hipsparseDbsric02		
cusparseDbsric02_analysis		hipsparseDbsric02_analysis		
cusparseDbsric02_bufferSize		hipsparseDbsric02_bufferSize		
cusparseDbsrilu02		hipsparseDbsrilu02		

CUDA	D	HIP	D	E
cusparseDbsrilu02_analysis		hipsparseDbsrilu02_analysis		
cusparseDbsrilu02_bufferSize		hipsparseDbsrilu02_bufferSize		
cusparseDbsrilu02_numericBoost		hipsparseDbsrilu02_numericBoost		
cusparseDcsric02		hipsparseDcsric02		
cusparseDcsric02_analysis		hipsparseDcsric02_analysis		
cusparseDcsric02_bufferSize		hipsparseDcsric02_bufferSize		
cusparseDcsric02_bufferSizeExt		hipsparseDcsric02_bufferSizeExt		
cusparseDcsrilu02		hipsparseDcsrilu02		
cusparseDcsrilu02_analysis		hipsparseDcsrilu02_analysis		
cusparseDcsrilu02_bufferSize		hipsparseDcsrilu02_bufferSize		
cusparseDcsrilu02_bufferSizeExt		hipsparseDcsrilu02_bufferSizeExt		
cusparseDcsrilu02_numericBoost		hipsparseDcsrilu02_numericBoost		
cusparseSbsric02		hipsparseSbsric02		
cusparseSbsric02_analysis		hipsparseSbsric02_analysis		
cusparseSbsric02_bufferSize		hipsparseSbsric02_bufferSize		
cusparseSbsrilu02		hipsparseSbsrilu02		
cusparseSbsrilu02_analysis		hipsparseSbsrilu02_analysis		
cusparseSbsrilu02_bufferSize		hipsparseSbsrilu02_bufferSize		
cusparseSbsrilu02_numericBoost		hipsparseSbsrilu02_numericBoost		
cusparseScsric02		hipsparseScsric02		
cusparseScsric02_analysis		hipsparseScsric02_analysis		
cusparseScsric02_bufferSize		hipsparseScsric02_bufferSize		
cusparseScsric02_bufferSizeExt		hipsparseScsric02_bufferSizeExt		
cusparseScsrilu02		hipsparseScsrilu02		
cusparseScsrilu02_analysis		hipsparseScsrilu02_analysis		
cusparseScsrilu02_bufferSize		hipsparseScsrilu02_bufferSize		

AMD

CUDA	D	HIP	D	E
cusparseScsrilu02_bufferSizeExt		hipsparseScsrilu02_bufferSizeExt		
cusparseScsrilu02_numericBoost		hipsparseScsrilu02_numericBoost		
cusparseXbsric02_zeroPivot		hipsparseXbsric02_zeroPivot		
cusparseXbsrilu02_zeroPivot		hipsparseXbsrilu02_zeroPivot		
cusparseXcsric02_zeroPivot		hipsparseXcsric02_zeroPivot		
cusparseXcsrilu02_zeroPivot		hipsparseXcsrilu02_zeroPivot		
cusparseZbsric02		hipsparseZbsric02		
cusparseZbsric02_analysis		hipsparseZbsric02_analysis		
cusparseZbsric02_bufferSize		hipsparseZbsric02_bufferSize		
cusparseZbsrilu02		hipsparseZbsrilu02		
cusparseZbsrilu02_analysis		hipsparseZbsrilu02_analysis		
cusparseZbsrilu02_bufferSize		hipsparseZbsrilu02_bufferSize		
cusparseZbsrilu02_numericBoost		hipsparseZbsrilu02_numericBoost		
cusparseZcsric02		hipsparseZcsric02		
cusparseZcsric02_analysis		hipsparseZcsric02_analysis		
cusparseZcsric02_bufferSize		hipsparseZcsric02_bufferSize		
cusparseZcsric02_bufferSizeExt		hipsparseZcsric02_bufferSizeExt		
cusparseZcsrilu02		hipsparseZcsrilu02		
cusparseZcsrilu02_analysis		hipsparseZcsrilu02_analysis		
cusparseZcsrilu02_bufferSize		hipsparseZcsrilu02_bufferSize		
cusparseZcsrilu02_bufferSizeExt		hipsparseZcsrilu02_bufferSizeExt		
cusparseZcsrilu02_numericBoost		hipsparseZcsrilu02_numericBoost		
cusparseCgtsv2		hipsparseCgtsv2		
cusparseCgtsv2_bufferSizeExt		hipsparseCgtsv2_bufferSizeExt		
cusparseCgtsv2_nopivot		hipsparseCgtsv2_nopivot		
cusparseCgtsv2_nopivot_bufferSizeExt		hipsparseCgtsv2_nopivot_bufferSizeExt		

CUDA	D	HIP	D	E
cusparseDgtsv2		hipsparseDgtsv2		
cusparseDgtsv2_bufferSizeExt		hipsparseDgtsv2_bufferSizeExt		
cusparseDgtsv2_nopivot		hipsparseDgtsv2_nopivot		
cusparseDgtsv2_nopivot_bufferSizeExt		hipsparseDgtsv2_nopivot_bufferSizeExt		
cusparseSgtsv2		hipsparseSgtsv2		
cusparseSgtsv2_bufferSizeExt		hipsparseSgtsv2_bufferSizeExt		
cusparseSgtsv2_nopivot		hipsparseSgtsv2_nopivot		
cusparseSgtsv2_nopivot_bufferSizeExt		hipsparseSgtsv2_nopivot_bufferSizeExt		
cusparseZgtsv2		hipsparseZgtsv2		
cusparseZgtsv2_bufferSizeExt		hipsparseZgtsv2_bufferSizeExt		
cusparseZgtsv2_nopivot		hipsparseZgtsv2_nopivot		
cusparseZgtsv2_nopivot_bufferSizeExt		hipsparseZgtsv2_nopivot_bufferSizeExt		

1.9.10   CUSPARSE Reorderings Reference

The CUSPARSE Reordering APIs are currently unsupported.

1.9.11   CUSPARSE Format Conversion Reference

CUDA	D	HIP	D	E
cusparseCbsr2csr		hipsparseCbsr2csr		
cusparseCcsc2dense	+	hipsparseCcsc2dense		
cusparseCcsr2bsr		hipsparseCcsr2bsr		
cusparseCcsr2csc	+	hipsparseCcsr2csc		
cusparseCcsr2csr_compress		hipsparseCcsr2csr_compress		
cusparseCcsr2csru		hipsparseCcsr2csru		
cusparseCcsr2dense	+	hipsparseCcsr2dense		
cusparseCcsr2gebsr		hipsparseCcsr2gebsr		
cusparseCcsr2gebsr_bufferSize		hipsparseCcsr2gebsr_bufferSize		
cusparseCcsr2hyb	+	hipsparseCcsr2hyb		
cusparseCcsru2csr		hipsparseCcsru2csr		
cusparseCcsru2csr_bufferSizeExt		hipsparseCcsru2csr_bufferSizeExt		
cusparseCdense2csc	+	hipsparseCdense2csc		
cusparseCdense2csr	+	hipsparseCdense2csr		
cusparseCgebsr2csr		hipsparseCgebsr2csr		
cusparseCgebsr2gebsc		hipsparseCgebsr2gebsc		
cusparseCgebsr2gebsc_bufferSize		hipsparseCgebsr2gebsc_bufferSize		
cusparseCgebsr2gebsr		hipsparseCgebsr2gebsr		
cusparseCgebsr2gebsr_bufferSize		hipsparseCgebsr2gebsr_bufferSize		
cusparseChyb2csr	+	hipsparseChyb2csr		
cusparseCnnz		hipsparseCnnz		
cusparseCnnz_compress		hipsparseCnnz_compress		
cusparseCreateCsru2csrInfo		hipsparseCreateCsru2csrInfo		
cusparseCreateIdentityPermutation		hipsparseCreateIdentityPermutation		

CUDA	D	HIP	D	E
cusparseDbsr2csr		hipsparseDbsr2csr		
cusparseDcsc2dense	+	hipsparseDcsc2dense		
cusparseDcsr2bsr		hipsparseDcsr2bsr		
cusparseDcsr2csc	+	hipsparseDcsr2csc		
cusparseDcsr2csr_compress		hipsparseDcsr2csr_compress		
cusparseDcsr2csru		hipsparseDcsr2csru		
cusparseDcsr2dense	+	hipsparseDcsr2dense		
cusparseDcsr2gebsr		hipsparseDcsr2gebsr		
cusparseDcsr2gebsr_bufferSize		hipsparseDcsr2gebsr_bufferSize		
cusparseDcsr2hyb	+	hipsparseDcsr2hyb		
cusparseDcsru2csr		hipsparseDcsru2csr		
cusparseDcsru2csr_bufferSizeExt		hipsparseDcsru2csr_bufferSizeExt		
cusparseDdense2csc	+	hipsparseDdense2csc		
cusparseDdense2csr	+	hipsparseDdense2csr		
cusparseDestroyCsru2csrInfo		hipsparseDestroyCsru2csrInfo		
cusparseDgebsr2csr		hipsparseDgebsr2csr		
cusparseDgebsr2gebsc		hipsparseDgebsr2gebsc		
cusparseDgebsr2gebsc_bufferSize		hipsparseDgebsr2gebsc_bufferSize		
cusparseDgebsr2gebsr		hipsparseDgebsr2gebsr		
cusparseDgebsr2gebsr_bufferSize		hipsparseDgebsr2gebsr_bufferSize		
cusparseDhyb2csr	+	hipsparseDhyb2csr		
cusparseDnnz		hipsparseDnnz		
cusparseDnnz_compress		hipsparseDnnz_compress		
cusparseDpruneCsr2csr		hipsparseDpruneCsr2csr		
cusparseDpruneCsr2csrByPercentage		hipsparseDpruneCsr2csrByPercentage		
cusparseDpruneCsr2csrByPercentage_buffer SizeExt		hipsparseDpruneCsr2csrByPercentage_b ufferSizeExt		

CUDA	D	HIP	D	E
cusparseDpruneCsr2csrNnz		hipsparseDpruneCsr2csrNnz		
cusparseDpruneCsr2csrNnzByPercentage		hipsparseDpruneCsr2csrNnzByPercentage		
cusparseDpruneCsr2csr_bufferSizeExt		hipsparseDpruneCsr2csr_bufferSizeExt		
cusparseDpruneDense2csr		hipsparseDpruneDense2csr		
cusparseDpruneDense2csrByPercentage		hipsparseDpruneDense2csrByPercentage		
cusparseDpruneDense2csrByPercentage_bufferSizeExt		hipsparseDpruneDense2csrByPercentage_bufferSizeExt		
cusparseDpruneDense2csrNnz		hipsparseDpruneDense2csrNnz		
cusparseDpruneDense2csrNnzByPercentage		hipsparseDpruneDense2csrNnzByPercentage		
cusparseDpruneDense2csr_bufferSizeExt		hipsparseDpruneDense2csr_bufferSizeExt		
cusparseSbsr2csr		hipsparseSbsr2csr		
cusparseScsc2dense	+	hipsparseScsc2dense		
cusparseScsr2bsr		hipsparseScsr2bsr		
cusparseScsr2csc	+	hipsparseScsr2csc		
cusparseScsr2csr_compress		hipsparseScsr2csr_compress		
cusparseScsr2csru		hipsparseScsr2csru		
cusparseScsr2dense	+	hipsparseScsr2dense		
cusparseScsr2gebsr		hipsparseScsr2gebsr		
cusparseScsr2gebsr_bufferSize		hipsparseScsr2gebsr_bufferSize		
cusparseScsr2hyb	+	hipsparseScsr2hyb		
cusparseScsru2csr		hipsparseScsru2csr		
cusparseScsru2csr_bufferSizeExt		hipsparseScsru2csr_bufferSizeExt		
cusparseSdense2csc	+	hipsparseSdense2csc		
cusparseSdense2csr	+	hipsparseSdense2csr		
cusparseSgebsr2csr		hipsparseSgebsr2csr		
cusparseSgebsr2gebsc		hipsparseSgebsr2gebsc		
cusparseSgebsr2gebsc_bufferSize		hipsparseSgebsr2gebsc_bufferSize		

CUDA	D	HIP	D	E
cusparseSgebsr2gebsr		hipsparseSgebsr2gebsr		
cusparseSgebsr2gebsr_bufferSize		hipsparseSgebsr2gebsr_bufferSize		
cusparseShyb2csr	+	hipsparseShyb2csr		
cusparseSnnz		hipsparseSnnz		
cusparseSnnz_compress		hipsparseSnnz_compress		
cusparseSpruneCsr2csr		hipsparseSpruneCsr2csr		
cusparseSpruneCsr2csrByPercentage		hipsparseSpruneCsr2csrByPercentage		
cusparseSpruneCsr2csrByPercentage_bufferSizeExt		hipsparseSpruneCsr2csrByPercentage_bufferSizeExt		
cusparseSpruneCsr2csrNnz		hipsparseSpruneCsr2csrNnz		
cusparseSpruneCsr2csrNnzByPercentage		hipsparseSpruneCsr2csrNnzByPercentage		
cusparseSpruneCsr2csr_bufferSizeExt		hipsparseSpruneCsr2csr_bufferSizeExt		
cusparseSpruneDense2csr		hipsparseSpruneDense2csr		
cusparseSpruneDense2csrByPercentage		hipsparseSpruneDense2csrByPercentage		
cusparseSpruneDense2csrByPercentage_bufferSizeExt		hipsparseSpruneDense2csrByPercentage_bufferSizeExt		
cusparseSpruneDense2csrNnz		hipsparseSpruneDense2csrNnz		
cusparseSpruneDense2csrNnzByPercentage		hipsparseSpruneDense2csrNnzByPercentage		
cusparseSpruneDense2csr_bufferSizeExt		hipsparseSpruneDense2csr_bufferSizeExt		
cusparseXcoo2csr		hipsparseXcoo2csr		
cusparseXcoosortByColumn		hipsparseXcoosortByColumn		
cusparseXcoosortByRow		hipsparseXcoosortByRow		
cusparseXcoosort_bufferSizeExt		hipsparseXcoosort_bufferSizeExt		
cusparseXcscsort		hipsparseXcscsort		
cusparseXcscsort_bufferSizeExt		hipsparseXcscsort_bufferSizeExt		
cusparseXcsr2bsrNnz		hipsparseXcsr2bsrNnz		
cusparseXcsr2coo		hipsparseXcsr2coo		
cusparseXcsr2gebsrNnz		hipsparseXcsr2gebsrNnz		

CUDA	D	HIP	D	E
cusparseXcsrsort		hipsparseXcsrsort		
cusparseXcsrsort_bufferSizeExt		hipsparseXcsrsort_bufferSizeExt		
cusparseXgebsr2gebsrNnz		hipsparseXgebsr2gebsrNnz		
cusparseZbsr2csr		hipsparseZbsr2csr		
cusparseZcsc2dense	+	hipsparseZcsc2dense		
cusparseZcsr2bsr		hipsparseZcsr2bsr		
cusparseZcsr2csc	+	hipsparseZcsr2csc		
cusparseZcsr2csr_compress		hipsparseZcsr2csr_compress		
cusparseZcsr2csru		hipsparseZcsr2csru		
cusparseZcsr2dense	+	hipsparseZcsr2dense		
cusparseZcsr2gebsr		hipsparseZcsr2gebsr		
cusparseZcsr2gebsr_bufferSize		hipsparseZcsr2gebsr_bufferSize		
cusparseZcsr2hyb	+	hipsparseZcsr2hyb		
cusparseZcsru2csr		hipsparseZcsru2csr		
cusparseZcsru2csr_bufferSizeExt		hipsparseZcsru2csr_bufferSizeExt		
cusparseZdense2csc	+	hipsparseZdense2csc		
cusparseZdense2csr	+	hipsparseZdense2csr		
cusparseZgebsr2csr		hipsparseZgebsr2csr		
cusparseZgebsr2gebsc		hipsparseZgebsr2gebsc		
cusparseZgebsr2gebsc_bufferSize		hipsparseZgebsr2gebsc_bufferSize		
cusparseZgebsr2gebsr		hipsparseZgebsr2gebsr		
cusparseZgebsr2gebsr_bufferSize		hipsparseZgebsr2gebsr_bufferSize		
cusparseZhyb2csr	+	hipsparseZhyb2csr		
cusparseZnnz		hipsparseZnnz		
cusparseZnnz_compress		hipsparseZnnz_compress		

1.9.12   CUSPARSE Generic API Reference

CUDA	D	HIP	D	E
cusparseAxpby		hipsparseAxpby		
cusparseCooAoSGet		hipsparseCooAoSGet		
cusparseCooGet		hipsparseCooGet		
cusparseCooSetPointers		hipsparseCooSetPointers		
cusparseCreateCoo		hipsparseCreateCoo		
cusparseCreateCooAoS		hipsparseCreateCooAoS		
cusparseCreateCsc		hipsparseCreateCsc		
cusparseCreateCsr		hipsparseCreateCsr		
cusparseCreateDnMat		hipsparseCreateDnMat		
cusparseCreateDnVec		hipsparseCreateDnVec		
cusparseCreateSpVec		hipsparseCreateSpVec		
cusparseCscSetPointers		hipsparseCscSetPointers		
cusparseCsrGet		hipsparseCsrGet		
cusparseCsrSetPointers		hipsparseCsrSetPointers		
cusparseDenseToSparse_analysis		hipsparseDenseToSparse_analysis		
cusparseDenseToSparse_bufferSize		hipsparseDenseToSparse_bufferSize		
cusparseDenseToSparse_convert		hipsparseDenseToSparse_convert		
cusparseDestroyDnMat		hipsparseDestroyDnMat		
cusparseDestroyDnVec		hipsparseDestroyDnVec		
cusparseDestroySpMat		hipsparseDestroySpMat		
cusparseDestroySpVec		hipsparseDestroySpVec		
cusparseDnMatGet		hipsparseDnMatGet		
cusparseDnMatGetValues		hipsparseDnMatGetValues		
cusparseDnMatSetValues		hipsparseDnMatSetValues		
cusparseDnVecGet		hipsparseDnVecGet		

CUDA	D	HIP	D	E
cusparseDnVecGetValues		hipsparseDnVecGetValues		
cusparseDnVecSetValues		hipsparseDnVecSetValues		
cusparseGather		hipsparseGather		
cusparseRot		hipsparseRot		
cusparseScatter		hipsparseScatter		
cusparseSpGEMM_compute		hipsparseSpGEMM_compute		
cusparseSpGEMM_copy		hipsparseSpGEMM_copy		
cusparseSpGEMM_createDescr		hipsparseSpGEMM_createDescr		
cusparseSpGEMM_destroyDescr		hipsparseSpGEMM_destroyDescr		
cusparseSpGEMM_workEstimation		hipsparseSpGEMM_workEstimation		
cusparseSpMM		hipsparseSpMM		
cusparseSpMM_bufferSize		hipsparseSpMM_bufferSize		
cusparseSpMV		hipsparseSpMV		
cusparseSpMV_bufferSize		hipsparseSpMV_bufferSize		
cusparseSpMatGetFormat		hipsparseSpMatGetFormat		
cusparseSpMatGetIndexBase		hipsparseSpMatGetIndexBase		
cusparseSpMatGetSize		hipsparseSpMatGetSize		
cusparseSpMatGetValues		hipsparseSpMatGetValues		
cusparseSpMatSetValues		hipsparseSpMatSetValues		
cusparseSpVV		hipsparseSpVV		
cusparseSpVV_bufferSize		hipsparseSpVV_bufferSize		
cusparseSpVecGet		hipsparseSpVecGet		
cusparseSpVecGetIndexBase		hipsparseSpVecGetIndexBase		
cusparseSpVecGetValues		hipsparseSpVecGetValues		
cusparseSpVecSetValues		hipsparseSpVecSetValues		
cusparseSparseToDense		hipsparseSparseToDense		

CUDA	D	HIP	D	E
cusparseSparseToDense_bufferSize		hipsparseSparseToDense_bufferSize		
cusparseSDDMM		hipsparseSDDMM		
cusparseSDDMM_bufferSize		hipsparseSDDMM_bufferSize		
cusparseSDDMM_preprocess		hipsparseSDDMM_preprocess		
cusparseSpMM_preprocess		hipsparseSpMM_preprocess		