



AMD ROC_mTM

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 Deprecated column.

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

https://github.com/RadeonOpenCompute/ROCm/blob/master/AMD_HIP_API_Guide_v4.1.pdf

1.1 CUDA Runtime API Supported by HIP

1.1.1 Device Management

CUDA	Deprecated	HIP	Deprecated
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	

1.1.2 Thread Management [Deprecated]

CUDA	Deprecated	HIP	Deprecated
cudaThreadExit	✓	hipDeviceReset	
cudaThreadGetCacheConfig	✓	hipDeviceGetCacheConfig	
cudaThreadSetCacheConfig	✓	hipDeviceSetCacheConfig	
cudaThreadSynchronize	✓	hipDeviceSynchronize	

1.1.3 Error Handling

CUDA	Deprecated	HIP	Deprecated
cudaGetErrorName		hipGetErrorName	
cudaGetErrorString		hipGetErrorString	
cudaGetLastError		hipGetLastError	
cudaPeekAtLastError		hipPeekAtLastError	

1.1.4 Stream Management

CUDA	Deprecated	HIP	Deprecated
cudaStreamAddCallback		hipStreamAddCallback	
cudaStreamAttachMemAsync		hipStreamAttachMemAsync	
cudaStreamCreate		hipStreamCreate	
cudaStreamCreateWithFlags		hipStreamCreateWithFlags	
cudaStreamCreateWithPriority		hipStreamCreateWithPriority	
cudaStreamDestroy		hipStreamDestroy	
cudaStreamGetFlags		hipStreamGetFlags	
cudaStreamGetPriority		hipStreamGetPriority	
cudaStreamQuery		hipStreamQuery	
cudaStreamSynchronize		hipStreamSynchronize	
cudaStreamWaitEvent		hipStreamWaitEvent	
cudaStreamAddCallback		hipStreamAddCallback	

1.1.5 Event Management

CUDA	Deprecated	HIP	Deprecated
cudaEventCreate		hipEventCreate	
cudaEventCreateWithFlags		hipEventCreateWithFlags	
cudaEventDestroy		hipEventDestroy	
cudaEventElapsedTime		hipEventElapsedTime	
cudaEventQuery		hipEventQuery	
cudaEventRecord		hipEventRecord	

CUDA	Deprecated	HIP	Deprecated
cudaEventSynchronize		hipEventSynchronize	

1.1.6 Execution Control

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

1.1.7 Occupancy

CUDA	Deprecated	HIP	Deprecated
cudaOccupancyMaxActiveBlocksPerMultiprocessor		hipOccupancyMaxActiveBlocksPerMultiprocessor	
cudaOccupancyMaxActiveBlocksPerMultiprocessorWithFlags		hipOccupancyMaxActiveBlocksPerMultiprocessorWithFlags	
cudaOccupancyMaxPotentialBlockSize		hipOccupancyMaxPotentialBlockSize	
cudaOccupancyMaxPotentialBlockSizeWithFlags		hipOccupancyMaxPotentialBlockSizeWithFlags	

1.1.8 Memory Management

CUDA	Deprecated	HIP	Deprecated
cudaFree		hipFree	
cudaFreeArray		hipFreeArray	
cudaFreeHost		hipHostFree	
cudaFreeMipmappedArray		hipFreeMipmappedArray	
cudaGetMipmappedArrayLevel		hipGetMipmappedArrayLevel	
cudaGetSymbolAddress		hipGetSymbolAddress	
cudaGetSymbolSize		hipGetSymbolSize	
cudaHostAlloc		hipHostMalloc	
cudaHostGetDevicePointer		hipHostGetDevicePointer	
cudaHostGetFlags		hipHostGetFlags	
cudaHostRegister		hipHostRegister	
cudaHostUnregister		hipHostUnregister	
cudaMalloc		hipMalloc	
cudaMalloc3D		hipMalloc3D	
cudaMalloc3DArray		hipMalloc3DArray	
cudaMallocArray		hipMallocArray	
cudaMallocHost		hipHostMalloc	

CUDA	Deprecated	HIP	Deprecated
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	
cudaMemcpy3D		hipMemcpy3D	
cudaMemcpy3DAsync		hipMemcpy3DAsync	
cudaMemcpyAsync		hipMemcpyAsync	
cudaMemcpyFromSymbol		hipMemcpyFromSymbol	
cudaMemcpyFromSymbolAsync		hipMemcpyFromSymbolAsync	
cudaMemcpyPeer		hipMemcpyPeer	
cudaMemcpyPeerAsync		hipMemcpyPeerAsync	
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	

1.1.9 Memory Management [Deprecated]

CUDA	Deprecated	HIP	Deprecated
cudaMemcpyFromArray	✓	hipMemcpyFromArray	✓
cudaMemcpyToArray	✓	hipMemcpyToArray	✓

1.1.10 Unified Addressing

CUDA	Deprecated	HIP	Deprecated
cudaPointerGetAttributes		hipPointerGetAttributes	

1.1.11 Peer Device Memory Access

CUDA	Deprecated	HIP	Deprecated
cudaDeviceCanAccessPeer		hipDeviceCanAccessPeer	
cudaDeviceDisablePeerAccess		hipDeviceDisablePeerAccess	
cudaDeviceEnablePeerAccess		hipDeviceEnablePeerAccess	

1.1.12 Texture Reference Management [Deprecated]

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

1.1.13 Texture Object Management

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

1.1.14 Surface Object Management

CUDA	Deprecated	HIP	Deprecated
cudaCreateSurfaceObject		hipCreateSurfaceObject	
cudaDestroySurfaceObject		hipDestroySurfaceObject	

1.1.15 Version Management

CUDA	Deprecated	HIP	Deprecated
cudaDriverGetVersion		hipDriverGetVersion	
cudaRuntimeGetVersion		hipRuntimeGetVersion	

1.1.16 Profiler Control

CUDA	Deprecated	HIP	Deprecated
cudaProfilerStart		hipProfilerStart	✓
cudaProfilerStop		hipProfilerStop	✓

1.1.17 Data types used by CUDA Runtime

CUDA	Deprecated	HIP	Deprecated
CUDA_IPC_HANDLE_SIZE		HIP_IPC_HANDLE_SIZE	
CUevent_st		ihipEvent_t	
CUstream_st		ihipStream_t	
cudaAddressModeBorder		hipAddressModeBorder	
cudaAddressModeClamp		hipAddressModeClamp	
cudaAddressModeMirror		hipAddressModeMirror	
cudaAddressModeWrap		hipAddressModeWrap	
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	
cudaChannelFormatKind		hipChannelFormatKind	
cudaChannelFormatKindFloat		hipChannelFormatKindFloat	
cudaChannelFormatKindNone		hipChannelFormatKindNone	
cudaChannelFormatKindSigned		hipChannelFormatKindSigned	
cudaChannelFormatKindUnsigned		hipChannelFormatKindUnsigned	
cudaComputeMode		hipComputeMode	
cudaComputeModeDefault		hipComputeModeDefault	
cudaComputeModeExclusive		hipComputeModeExclusive	
cudaComputeModeExclusiveProcess		hipComputeModeExclusiveProcess	
cudaComputeModeProhibited		hipComputeModeProhibited	
cudaCooperativeLaunchMultiDeviceNoPostSync		hipCooperativeLaunchMultiDeviceNoPostSync	
cudaCooperativeLaunchMultiDeviceNoPreSync		hipCooperativeLaunchMultiDeviceNoPreSync	

CUDA	Deprecated	HIP	Deprecated
cudaCpuDeviceId		hipCpuDeviceId	
cudaDevAttrCanMapHostMemory		hipDeviceAttributeCanMapHostMemory	
cudaDevAttrClockRate		hipDeviceAttributeClockRate	
cudaDevAttrComputeCapabilityMajor		hipDeviceAttributeComputeCapabilityMajor	
cudaDevAttrComputeCapabilityMinor		hipDeviceAttributeComputeCapabilityMinor	
cudaDevAttrComputeMode		hipDeviceAttributeComputeMode	
cudaDevAttrConcurrentKernels		hipDeviceAttributeConcurrentKernels	
cudaDevAttrConcurrentManagedAccess		hipDeviceAttributeConcurrentManagedAccess	
cudaDevAttrCooperativeLaunch		hipDeviceAttributeCooperativeLaunch	
cudaDevAttrCooperativeMultiDeviceLaunch		hipDeviceAttributeCooperativeMultiDeviceLaunch	
cudaDevAttrDirectManagedMemAccessFromHost		hipDeviceAttributeDirectManagedMemAccessFromHost	
cudaDevAttrEccEnabled		hipDeviceAttributeEccEnabled	
cudaDevAttrGlobalMemoryBusWidth		hipDeviceAttributeMemoryBusWidth	
cudaDevAttrIntegrated		hipDeviceAttributeIntegrated	
cudaDevAttrIsMultiGpuBoard		hipDeviceAttributeIsMultiGpuBoard	
cudaDevAttrKernelExecTimeout		hipDeviceAttributeKernelExecTimeout	
cudaDevAttrL2CacheSize		hipDeviceAttributeL2CacheSize	
cudaDevAttrManagedMemory		hipDeviceAttributeManagedMemory	
cudaDevAttrMaxBlockDimX		hipDeviceAttributeMaxBlockDimX	
cudaDevAttrMaxBlockDimY		hipDeviceAttributeMaxBlockDimY	
cudaDevAttrMaxBlockDimZ		hipDeviceAttributeMaxBlockDimZ	
cudaDevAttrMaxGridDimX		hipDeviceAttributeMaxGridDimX	
cudaDevAttrMaxGridDimY		hipDeviceAttributeMaxGridDimY	
cudaDevAttrMaxGridDimZ		hipDeviceAttributeMaxGridDimZ	
cudaDevAttrMaxPitch		hipDeviceAttributeMaxPitch	
cudaDevAttrMaxRegistersPerBlock		hipDeviceAttributeMaxRegistersPerBlock	
cudaDevAttrMaxSharedMemoryPerBlock		hipDeviceAttributeMaxSharedMemoryPerBlock	

CUDA	Deprecated	HIP	Deprecated
cudaDevAttrMaxSharedMemoryPerMultiprocessor		hipDeviceAttributeMaxSharedMemoryPerMultiprocessor	
cudaDevAttrMaxTexture1DWidth		hipDeviceAttributeMaxTexture1DWidth	
cudaDevAttrMaxTexture2DHeight		hipDeviceAttributeMaxTexture2DHeight	
cudaDevAttrMaxTexture2DWidth		hipDeviceAttributeMaxTexture2DWidth	
cudaDevAttrMaxTexture3DDepth		hipDeviceAttributeMaxTexture3DDepth	
cudaDevAttrMaxTexture3DHeight		hipDeviceAttributeMaxTexture3DHeight	
cudaDevAttrMaxTexture3DWidth		hipDeviceAttributeMaxTexture3DWidth	
cudaDevAttrMaxThreadsPerBlock		hipDeviceAttributeMaxThreadsPerBlock	
cudaDevAttrMaxThreadsPerMultiProcessor		hipDeviceAttributeMaxThreadsPerMultiProcessor	
cudaDevAttrMemoryClockRate		hipDeviceAttributeMemoryClockRate	
cudaDevAttrMultiProcessorCount		hipDeviceAttributeMultiProcessorCount	
cudaDevAttrPageableMemoryAccess		hipDeviceAttributePageableMemoryAccess	
cudaDevAttrPageableMemoryAccessUsesHostPageTables		hipDeviceAttributePageableMemoryAccessUsesHostPageTables	
cudaDevAttrPciBusId		hipDeviceAttributePciBusId	
cudaDevAttrPciDeviceId		hipDeviceAttributePciDeviceId	
cudaDevAttrTextureAlignment		hipDeviceAttributeTextureAlignment	
cudaDevAttrTotalConstantMemory		hipDeviceAttributeTotalConstantMemory	
cudaDevAttrWarpSize		hipDeviceAttributeWarpSize	
cudaDevP2PAttrAccessSupported		hipDevP2PAttrAccessSupported	
cudaDevP2PAttrCudaArrayAccessSupported		hipDevP2PAttrHipArrayAccessSupported	
cudaDevP2PAttrNativeAtomicSupported		hipDevP2PAttrNativeAtomicSupported	
cudaDevP2PAttrPerformanceRank		hipDevP2PAttrPerformanceRank	
cudaDeviceAttr		hipDeviceAttribute_t	
cudaDeviceBlockingSync		hipDeviceScheduleBlockingSync	
cudaDeviceLmemResizeToMax		hipDeviceLmemResizeToMax	
cudaDeviceMapHost		hipDeviceMapHost	
cudaDeviceP2PAttr		hipDeviceP2PAttr	

CUDA	Deprecated	HIP	Deprecated
cudaDeviceProp		hipDeviceProp_t	
cudaDeviceScheduleAuto		hipDeviceScheduleAuto	
cudaDeviceScheduleBlockingSync		hipDeviceScheduleBlockingSync	
cudaDeviceScheduleMask		hipDeviceScheduleMask	
cudaDeviceScheduleSpin		hipDeviceScheduleSpin	
cudaDeviceScheduleYield		hipDeviceScheduleYield	
cudaError		hipError_t	
cudaErrorAlreadyAcquired		hipErrorAlreadyAcquired	
cudaErrorAlreadyMapped		hipErrorAlreadyMapped	
cudaErrorArrayIsMapped		hipErrorArrayIsMapped	
cudaErrorAssert		hipErrorAssert	
cudaErrorCooperativeLaunchTooLarge		hipErrorCooperativeLaunchTooLarge	
cudaErrorCudartUnloading		hipErrorDeinitialized	
cudaErrorDeviceAlreadyInUse		hipErrorContextAlreadyInUse	
cudaErrorDeviceUninitialized		hipErrorInvalidContext	
cudaErrorDeviceUninitialized		hipErrorInvalidContext	
cudaErrorECCUncorrectable		hipErrorECCNotCorrectable	
cudaErrorFileNotFound		hipErrorFileNotFound	
cudaErrorHostMemoryAlreadyRegistered		hipErrorHostMemoryAlreadyRegistered	
cudaErrorHostMemoryNotRegistered		hipErrorHostMemoryNotRegistered	
cudaErrorIllegalAddress		hipErrorIllegalAddress	
cudaErrorInitializationError		hipErrorNotInitialized	
cudaErrorInsufficientDriver		hipErrorInsufficientDriver	
cudaErrorInvalidConfiguration		hipErrorInvalidConfiguration	
cudaErrorInvalidDevice		hipErrorInvalidDevice	
cudaErrorInvalidDeviceFunction		hipErrorInvalidDeviceFunction	
cudaErrorInvalidDevicePointer	✓	hipErrorInvalidDevicePointer	
cudaErrorInvalidGraphicsContext		hipErrorInvalidGraphicsContext	
cudaErrorInvalidKernelImage		hipErrorInvalidImage	
cudaErrorInvalidMemcpyDirection		hipErrorInvalidMemcpyDirection	
cudaErrorInvalidPtx		hipErrorInvalidKernelFile	
cudaErrorInvalidResourceHandle		hipErrorInvalidHandle	
cudaErrorInvalidSource		hipErrorInvalidSource	
cudaErrorInvalidSymbol		hipErrorInvalidSymbol	

CUDA	Deprecated	HIP	Deprecated
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	
cudaErrorProfilerAlreadyStarted	✓	hipErrorProfilerAlreadyStarted	
cudaErrorProfilerAlreadyStopped	✓	hipErrorProfilerAlreadyStopped	
cudaErrorProfilerDisabled		hipErrorProfilerDisabled	
cudaErrorProfilerNotInitialized	✓	hipErrorProfilerNotInitialized	
cudaErrorSetOnActiveProcess		hipErrorSetOnActiveProcess	
cudaErrorSharedObjectInitFailed		hipErrorSharedObjectInitFailed	
cudaErrorSharedObjectSymbolNotFound		hipErrorSharedObjectSymbolNotFound	
cudaErrorSymbolNotFound		hipErrorNotFound	
cudaErrorUnknown		hipErrorUnknown	
cudaErrorUnmapBufferObjectFailed		hipErrorUnmapFailed	
cudaErrorUnsupportedLimit		hipErrorUnsupportedLimit	
cudaError_t		hipError_t	

CUDA	Deprecated	HIP	Deprecated
cudaEventBlockingSync		hipEventBlockingSync	
cudaEventDefault		hipEventDefault	
cudaEventDisableTiming		hipEventDisableTiming	
cudaEventInterprocess		hipEventInterprocess	
cudaEvent_t		hipEvent_t	
cudaExtent		hipExtent	
cudaFilterModeLinear		hipFilterModeLinear	
cudaFilterModePoint		hipFilterModePoint	
cudaFuncAttribute		hipFuncAttribute	
cudaFuncAttributeMax		hipFuncAttributeMax	
cudaFuncAttributeMaxDynamicSharedMemorySize		hipFuncAttributeMaxDynamicSharedMemorySize	
cudaFuncAttributePreferredSharedMemoryCarveout		hipFuncAttributePreferredSharedMemoryCarveout	
cudaFuncAttributes		hipFuncAttributes	
cudaFuncCache		hipFuncCache_t	
cudaFuncCachePreferEqual		hipFuncCachePreferEqual	
cudaFuncCachePreferL1		hipFuncCachePreferL1	
cudaFuncCachePreferNone		hipFuncCachePreferNone	
cudaFuncCachePreferShared		hipFuncCachePreferShared	
cudaHostAllocDefault		hipHostMallocDefault	
cudaHostAllocMapped		hipHostMallocMapped	
cudaHostAllocPortable		hipHostMallocPortable	
cudaHostAllocWriteCombined		hipHostMallocWriteCombined	
cudaHostRegisterDefault		hipHostRegisterDefault	
cudaHostRegisterIoMemory		hipHostRegisterIoMemory	
cudaHostRegisterMapped		hipHostRegisterMapped	
cudaHostRegisterPortable		hipHostRegisterPortable	
cudaInvalidDeviceId		hipInvalidDeviceId	
cudaIpcEventHandle_st		hipIpcEventHandle_st	
cudaIpcEventHandle_t		hipIpcEventHandle_t	
cudaIpcMemHandle_st		hipIpcMemHandle_st	
cudaIpcMemHandle_t		hipIpcMemHandle_t	
cudaIpcMemLazyEnablePeerAccess		hipIpcMemLazyEnablePeerAccess	
cudaLaunchParams		hipLaunchParams	
cudaLimit		hipLimit_t	
cudaLimitMallocHeapSize		hipLimitMallocHeapSize	
cudaMemAdviseSetAccessedBy		hipMemAdviseSetAccessedBy	
cudaMemAdviseSetPreferredLocation		hipMemAdviseSetPreferredLocation	
cudaMemAdviseSetReadMostly		hipMemAdviseSetReadMostly	
cudaMemAdviseUnsetAccessedBy		hipMemAdviseUnsetAccessedBy	
cudaMemAdviseUnsetPreferredLocation		hipMemAdviseUnsetPreferredLocation	

CUDA	Deprecated	HIP	Deprecated
cudaMemAdviseUnsetReadMostly		hipMemAdviseUnsetReadMostly	
cudaMemAttachGlobal		hipMemAttachGlobal	
cudaMemAttachHost		hipMemAttachHost	
cudaMemAttachSingle		hipMemAttachSingle	
cudaMemRangeAttribute		hipMemRangeAttribute	
cudaMemRangeAttributeAccessedBy		hipMemRangeAttributeAccessedBy	
cudaMemRangeAttributeLastPrefetchLocation		hipMemRangeAttributeLastPrefetchLocation	
cudaMemRangeAttributePreferredLocation		hipMemRangeAttributePreferredLocation	
cudaMemRangeAttributeReadMostly		hipMemRangeAttributeReadMostly	
cudaMemcpy3DParms		hipMemcpy3DParms	
cudaMemcpyDefault		hipMemcpyDefault	
cudaMemcpyDeviceToDevice		hipMemcpyDeviceToDevice	
cudaMemcpyDeviceToHost		hipMemcpyDeviceToHost	
cudaMemcpyHostToDevice		hipMemcpyHostToDevice	
cudaMemcpyHostToHost		hipMemcpyHostToHost	
cudaMemcpyKind		hipMemcpyKind	
cudaMemoryAdvise		hipMemoryAdvise	
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	

CUDA	Deprecated	HIP	Deprecated
cudaResViewFormatSignedBlockCompressed6H		hipResViewFormatSignedBlockCompressed6H	
cudaResViewFormatSignedChar1		hipResViewFormatSignedChar1	
cudaResViewFormatSignedChar2		hipResViewFormatSignedChar2	
cudaResViewFormatSignedChar4		hipResViewFormatSignedChar4	
cudaResViewFormatSignedInt1		hipResViewFormatSignedInt1	
cudaResViewFormatSignedInt2		hipResViewFormatSignedInt2	
cudaResViewFormatSignedInt4		hipResViewFormatSignedInt4	
cudaResViewFormatSignedShort1		hipResViewFormatSignedShort1	
cudaResViewFormatSignedShort2		hipResViewFormatSignedShort2	
cudaResViewFormatSignedShort4		hipResViewFormatSignedShort4	
cudaResViewFormatUnsignedBlockCompressed1		hipResViewFormatUnsignedBlockCompressed1	
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	

CUDA	Deprecated	HIP	Deprecated
cudaResourceTypeArray		hipResourceTypeArray	
cudaResourceTypeLinear		hipResourceTypeLinear	
cudaResourceTypeMipmappedArray		hipResourceTypeMipmappedArray	
cudaResourceTypePitch2D		hipResourceTypePitch2D	
cudaResourceViewDesc		hipResourceViewDesc	
cudaResourceViewFormat		hipResourceViewFormat	
cudaSharedMemBankSizeDefault		hipSharedMemBankSizeDefault	
cudaSharedMemBankSizeEightByte		hipSharedMemBankSizeEightByte	
cudaSharedMemBankSizeFourByte		hipSharedMemBankSizeFourByte	
cudaSharedMemConfig		hipSharedMemConfig	
cudaStreamCallback_t		hipStreamCallback_t	
cudaStreamDefault		hipStreamDefault	
cudaStreamNonBlocking		hipStreamNonBlocking	
cudaStream_t		hipStream_t	
cudaSuccess		hipSuccess	
cudaSurfaceBoundaryMode		hipSurfaceBoundaryMode	
cudaSurfaceObject_t		hipSurfaceObject_t	
cudaTextureAddressMode		hipTextureAddressMode	
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	

1.1.18 Execution Control [Removed]

CUDA	Deprecated	HIP	Deprecated
cudaConfigureCall		hipConfigureCall	
cudaLaunch		hipLaunchByPtr	
cudaSetupArgument		hipSetupArgument	

1.1.19 Unsupported APIs

API	Unsupported	Deprecated
Graph Management	✓	
C++ API Routines	✓	
Interactions with the CUDA Driver API	✓	
Profiler Control	✓	✓
Surface Reference Management	✓	✓
OpenGL Interoperability	✓	
External Resource Interoperability	✓	
OpenGL Interoperability	✓	✓
Direct3D 9 Interoperability	✓	
Direct3D 9 Interoperability	✓	✓
Direct3D 10 Interoperability	✓	
Direct3D 10 Interoperability	✓	✓
Direct3D 11 Interoperability	✓	
Direct3D 11 Interoperability	✓	✓
VDPAU Interoperability	✓	
EGL Interoperability	✓	
Graphics Interoperability	✓	
Stream Ordered Memory Allocator	✓	

1.2 CUDA Driver API Supported by HIP

1.2.1 CUDA Driver Data Types

CUDA	Deprecated	HIP	Deprecated
CUDA_ARRAY3D_CUBEMAP		hipArrayCubemap	
CUDA_ARRAY3D_DESCRIPTOR		HIP_ARRAY3D_DESCRIPTOR	
CUDA_ARRAY3D_DESCRIPTOR_st		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_COOPERATIVE_LAUNCH_MULTI_DEVICE		hipCooperativeLaunchMultiDeviceNoPostSync	

CUDA	Deprecated	HIP	Deprecated
CUDA_NO_POST_LAUNCH_SYNC			
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_CONTEXT_ALREADY_CURRENT	✓	hipErrorContextAlreadyCurrent	
CUDA_ERROR_CONTEXT_ALREADY_IN_USE		hipErrorContextAlreadyInUse	
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	
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_KERNEL_FILE		hipErrorInvalidKernelFile	
CUDA_ERROR_INVALID_SOURCE		hipErrorInvalidSource	
CUDA_ERROR_INVALID_VALUE		hipErrorInvalidValue	

CUDA	Deprecated	HIP	Deprecated
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	

CUDA	Deprecated	HIP	Deprecated
CUDA_ERROR_SHARED_OBJECT_SYMBOL_NOT_FOUND		hipErrorSharedObjectSymbolNotFound	
CUDA_ERROR_UNKNOWN		hipErrorUnknown	
CUDA_ERROR_UNMAP_FAILED		hipErrorUnmapFailed	
CUDA_ERROR_UNSUPPORTED_LIMIT		hipErrorUnsupportedLimit	
CUDA_LAUNCH_PARAMS		hipLaunchParams	
CUDA_LAUNCH_PARAMS_st		hipLaunchParams	
CUDA_MEMCPY2D		hip_Memcpy2D	
CUDA_MEMCPY2D_st		hip_Memcpy2D	
CUDA_MEMCPY2D_v1		hip_Memcpy2D	
CUDA_MEMCPY2D_v1_st		hip_Memcpy2D	
CUDA_MEMCPY3D		HIP_MEMCPY3D	
CUDA_MEMCPY3D_st		HIP_MEMCPY3D	
CUDA_MEMCPY3D_v1		HIP_MEMCPY3D	
CUDA_MEMCPY3D_v1_st		HIP_MEMCPY3D	
CUDA_RESOURCE_DESC		HIP_RESOURCE_DESC	
CUDA_RESOURCE_DESC_st		HIP_RESOURCE_DESC_st	
CUDA_RESOURCE_VIEW_DESC		HIP_RESOURCE_VIEW_DESC	
CUDA_RESOURCE_VIEW_DESC_st		HIP_RESOURCE_VIEW_DESC_st	
CUDA_SUCCESS		hipSuccess	
CUDA_TEXTURE_DESC		HIP_TEXTURE_DESC	
CUDA_TEXTURE_DESC_st		HIP_TEXTURE_DESC_st	
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	
CU_AD_FORMAT_UNSIGNED_INT8		HIP_AD_FORMAT_UNSIGNED_INT8	

CUDA	Deprecated	HIP	Deprecated
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_CAN_MAP_HOST_MEMORY		hipDeviceAttributeCanMapHostMemory	
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_CONCURRENT_KERNELS		hipDeviceAttributeConcurrentKernels	
CU_DEVICE_ATTRIBUTE_CONCURRENT_MANAGED_ACCESS		hipDeviceAttributeConcurrentManagedAccess	
CU_DEVICE_ATTRIBUTE_COOPERATIVE_LAUNCH		hipDeviceAttributeCooperativeLaunch	
CU_DEVICE_ATTRIBUTE_COOPERATIVE_MULTI_DEVICE_LAUNCH		hipDeviceAttributeCooperativeMultiDeviceLaunch	
CU_DEVICE_ATTRIBUTE_DIRECT_MANAGED_MEM_ACCESS_FROM_HOST		hipDeviceAttributeDirectManagedMemAccessFromHost	
CU_DEVICE_ATTRIBUTE_ECC_ENABLED		hipDeviceAttributeEccEnabled	

CUDA	Deprecated	HIP	Deprecated
CU_DEVICE_ATTRIBUTE_GLOBAL_MEMORY_BUS_WIDTH		hipDeviceAttributeMemoryBusWidth	
CU_DEVICE_ATTRIBUTE_INTEGRATED		hipDeviceAttributeIntegrated	
CU_DEVICE_ATTRIBUTE_KERNEL_EXEC_TIMEOUT		hipDeviceAttributeKernelExecTimeout	
CU_DEVICE_ATTRIBUTE_L2_CACHE_SIZE		hipDeviceAttributeL2CacheSize	
CU_DEVICE_ATTRIBUTE_MANAGED_MEMORY		hipDeviceAttributeManagedMemory	
CU_DEVICE_ATTRIBUTE_MAX_TEXTURE1D_WIDTH		hipDeviceAttributeMaxTexture1DWidth	
CU_DEVICE_ATTRIBUTE_MAX_TEXTURE2D_HEIGHT		hipDeviceAttributeMaxTexture2DHeight	
CU_DEVICE_ATTRIBUTE_MAX_TEXTURE2D_WIDTH		hipDeviceAttributeMaxTexture2DWidth	
CU_DEVICE_ATTRIBUTE_MAX_TEXTURE3D_DEPTH		hipDeviceAttributeMaxTexture3DDepth	
CU_DEVICE_ATTRIBUTE_MAX_TEXTURE3D_HEIGHT		hipDeviceAttributeMaxTexture3DHeight	
CU_DEVICE_ATTRIBUTE_MAX_TEXTURE3D_WIDTH		hipDeviceAttributeMaxTexture3DWidth	
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	

CUDA	Deprecated	HIP	Deprecated
CU_DEVICE_ATTRIBUTE_MAX_SHARED_MEMORY_PER_BLOCK		hipDeviceAttributeMaxSharedMemoryPerBlock	
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_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_REGISTERS_PER_BLOCK	✓	hipDeviceAttributeMaxRegistersPerBlock	
CU_DEVICE_ATTRIBUTE_SHARED_MEMORY_PER_BLOCK	✓	hipDeviceAttributeMaxSharedMemoryPerBlock	
CU_DEVICE_ATTRIBUTE_TEXTURE_ALIGNMENT		hipDeviceAttributeTextureAlignment	
CU_DEVICE_ATTRIBUTE_TOTAL_CONSTANT_MEMORY		hipDeviceAttributeTotalConstantMemory	
CU_DEVICE_ATTRIBUTE_WARP_SIZE		hipDeviceAttributeWarpSize	
CU_DEVICE_CPU		hipCpuDeviceId	
CU_DEVICE_INVALID		hipInvalidDeviceId	
CU_DEVICE_P2P_ATTRIBUTE_ACCESS_SUPPORTED	✓	hipDevP2PAttrHipArrayAccessSupported	

CUDA	Deprecated	HIP	Deprecated
CU_DEVICE_P2P_ATTRIBUTE_ACCESS_SUPPORTED		hipDevP2PAttrAccessSupported	
CU_DEVICE_P2P_ATTRIBUTE_ARRAY_ACCESS_SUPPORT	✓	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	
CU_EVENT_DEFAULT		hipEventDefault	
CU_EVENT_DISABLE_TIMING		hipEventDisableTiming	
CU_EVENT_INTERPROCESS		hipEventInterprocess	
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	
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	

CUDA	Deprecated	HIP	Deprecated
CU_FUNC_CACHE_PREFER_NONE		hipFuncCachePreferNone	
CU_FUNC_CACHE_PREFER_SHARED		hipFuncCachePreferShared	
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	
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_CU_CONTEXT		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_MEMHOSTALLOC_DEVICEMAP		hipHostMallocMapped	
CU_MEMHOSTALLOC_PORTABLE		hipHostMallocPortable	
CU_MEMHOSTALLOC_WRITECOMBINED		hipHostMallocWriteCombined	

CUDA	Deprecated	HIP	Deprecated
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_ADVICE_SET_ACCESSED_BY		hipMemAdviseSetAccessedBy	
CU_MEM_ADVICE_SET_PREFERRED_LOCATION		hipMemAdviseSetPreferredLocation	
CU_MEM_ADVICE_SET_READ_MOSTLY		hipMemAdviseSetReadMostly	
CU_MEM_ADVICE_UNSET_ACCESSED_BY		hipMemAdviseUnsetAccessedBy	
CU_MEM_ADVICE_UNSET_PREFERRED_LOCATION		hipMemAdviseUnsetPreferredLocation	
CU_MEM_ADVICE_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	

CUDA	Deprecated	HIP	Deprecated
CU_RESOURCE_TYPE_MIPMAPPED_ARRAY		HIP_RESOURCE_TYPE_MIPMAPPED_ARRAY	
CU_RESOURCE_TYPE_PITCH2D		HIP_RESOURCE_TYPE_PITCH2D	
CU_RES_VIEW_FORM_AT_FLOAT_1X16		HIP_RES_VIEW_FORM_AT_FLOAT_1X16	
CU_RES_VIEW_FORM_AT_FLOAT_1X32		HIP_RES_VIEW_FORM_AT_FLOAT_1X32	
CU_RES_VIEW_FORM_AT_FLOAT_2X16		HIP_RES_VIEW_FORM_AT_FLOAT_2X16	
CU_RES_VIEW_FORM_AT_FLOAT_2X32		HIP_RES_VIEW_FORM_AT_FLOAT_2X32	
CU_RES_VIEW_FORM_AT_FLOAT_4X16		HIP_RES_VIEW_FORM_AT_FLOAT_4X16	
CU_RES_VIEW_FORM_AT_FLOAT_4X32		HIP_RES_VIEW_FORM_AT_FLOAT_4X32	
CU_RES_VIEW_FORM_AT_NONE		HIP_RES_VIEW_FORM_AT_NONE	
CU_RES_VIEW_FORM_AT_SIGNED_BC4		HIP_RES_VIEW_FORM_AT_SIGNED_BC4	
CU_RES_VIEW_FORM_AT_SIGNED_BC5		HIP_RES_VIEW_FORM_AT_SIGNED_BC5	
CU_RES_VIEW_FORM_AT_SIGNED_BC6H		HIP_RES_VIEW_FORM_AT_SIGNED_BC6H	
CU_RES_VIEW_FORM_AT_SINT_1X16		HIP_RES_VIEW_FORM_AT_SINT_1X16	
CU_RES_VIEW_FORM_AT_SINT_1X32		HIP_RES_VIEW_FORM_AT_SINT_1X32	
CU_RES_VIEW_FORM_AT_SINT_1X8		HIP_RES_VIEW_FORM_AT_SINT_1X8	
CU_RES_VIEW_FORM_AT_SINT_2X16		HIP_RES_VIEW_FORM_AT_SINT_2X16	
CU_RES_VIEW_FORM_AT_SINT_2X32		HIP_RES_VIEW_FORM_AT_SINT_2X32	
CU_RES_VIEW_FORM_AT_SINT_2X8		HIP_RES_VIEW_FORM_AT_SINT_2X8	
CU_RES_VIEW_FORM_AT_SINT_4X16		HIP_RES_VIEW_FORM_AT_SINT_4X16	
CU_RES_VIEW_FORM_AT_SINT_4X32		HIP_RES_VIEW_FORM_AT_SINT_4X32	
CU_RES_VIEW_FORM_AT_SINT_4X8		HIP_RES_VIEW_FORM_AT_SINT_4X8	
CU_RES_VIEW_FORM_AT_UINT_1X16		HIP_RES_VIEW_FORM_AT_UINT_1X16	
CU_RES_VIEW_FORM_AT_UINT_1X32		HIP_RES_VIEW_FORM_AT_UINT_1X32	
CU_RES_VIEW_FORM_AT_UINT_1X8		HIP_RES_VIEW_FORM_AT_UINT_1X8	
CU_RES_VIEW_FORM_AT_UINT_2X16		HIP_RES_VIEW_FORM_AT_UINT_2X16	
CU_RES_VIEW_FORM_AT_UINT_2X32		HIP_RES_VIEW_FORM_AT_UINT_2X32	
CU_RES_VIEW_FORM_AT_UINT_2X8		HIP_RES_VIEW_FORM_AT_UINT_2X8	

CUDA	Deprecated	HIP	Deprecated
CU_RES_VIEW_FORM_AT_UINT_4X16		HIP_RES_VIEW_FORM_AT_UINT_4X16	
CU_RES_VIEW_FORM_AT_UINT_4X32		HIP_RES_VIEW_FORM_AT_UINT_4X32	
CU_RES_VIEW_FORM_AT_UINT_4X8		HIP_RES_VIEW_FORM_AT_UINT_4X8	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC1		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC1	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC2		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC2	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC3		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC3	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC4		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC4	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC5		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC5	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC6H		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC6H	
CU_RES_VIEW_FORM_AT_UNSIGNED_BC7		HIP_RES_VIEW_FORM_AT_UNSIGNED_BC7	
CU_SHARED_MEM_CONFIG_DEFAULT_BANK_SIZE		hipSharedMemBankSizeDefault	
CU_SHARED_MEM_CONFIG_EIGHT_BYTE_BANK_SIZE		hipSharedMemBankSizeEightByte	
CU_SHARED_MEM_CONFIG_FOUR_BYTE_BANK_SIZE		hipSharedMemBankSizeFourByte	
CU_STREAM_DEFAULT		hipStreamDefault	
CU_STREAM_NON_BLOCKING		hipStreamNonBlocking	
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	

CUDA	Deprecated	HIP	Deprecated
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	
CUcontext		hipCtx_t	
CUctx_st		hipCtx_t	
CUdevice		hipDevice_t	
CUdevice_P2PAttribute		hipDeviceP2PAttr	
CUdevice_P2PAttribute_enum		hipDeviceP2PAttr	
CUdevice_attribute		hipDeviceAttribute_t	
CUdevice_attribute_enum		hipDeviceAttribute_t	
CUdeviceptr		hipDeviceptr_t	
CUdeviceptr_v1		hipDeviceptr_t	
CUevent		hipEvent_t	
CUevent_st		hipEvent_t	
CUfilter_mode		HIPfilter_mode	
CUfilter_mode_enum		HIPfilter_mode_enum	
CUfunc_cache		hipFuncCache_t	
CUfunc_cache_enum		hipFuncCache_t	
CUfunc_st		hipModuleSymbol_t	
CUfunction		hipFunction_t	
CUfunction_attribute		hipFunction_attribute	
CUfunction_attribute_enum		hipFunction_attribute	
CUipcEventHandle		hipIpcEventHandle_t	
CUipcEventHandle_st		hipIpcEventHandle_st	
CUipcMemHandle		hipIpcMemHandle_t	
CUipcMemHandle_st		hipIpcMemHandle_st	
CUjit_option		hipJitOption	
CUjit_option_enum		hipJitOption	
CULimit		hipLimit_t	
CULimit_enum		hipLimit_t	
CUmем_advise		hipMemoryAdvise	
CUmем_advise_enum		hipMemoryAdvise	
CUmем_range_attribute		hipMemRangeAttribute	
CUmем_range_attribute_enum		hipMemRangeAttribute	
CUmemorytype		hipMemoryType	
CUmemorytype_enum		hipMemoryType	
CUmipmappedArray		hipMipmappedArray_t	
CUmipmappedArray_st		hipMipmappedArray	
CUmod_st		hipModule_t	
CUmodule		hipModule_t	
CUresourceViewFormat		HIPresourceViewFormat	
CUresourceViewFormat_enum		HIPresourceViewFormat_enum	
CUresourcetype		HIPresourcetype	
CUresourcetype_enum		HIPresourcetype_enum	
CUresult		hipError_t	

CUDA	Deprecated	HIP	Deprecated
CUsharedconfig		hipSharedMemConfig	
CUsharedconfig_enum		hipSharedMemConfig	
CUstream		hipStream_t	
CUstreamCallback		hipStreamCallback_t	
CUstream_st		ihipStream_t	
CUtexObject		hipTextureObject_t	
CUtexref_st		textureReference	
CUDACC		HIPCC	
cudaError_enum		hipError_t	

1.2.2 Initialization

CUDA	Deprecated	HIP	Deprecated
cuInit		hipInit	

1.2.3 Version Management

CUDA	Deprecated	HIP	Deprecated
cuDriverGetVersion		hipDriverGetVersion	

1.2.4 Device Management

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

1.2.5 Device Management [Deprecated]

CUDA	Deprecated	HIP	Deprecated
cuDeviceComputeCapability	✓	hipDeviceComputeCapability	

1.2.6 Primary Context Management

CUDA	Deprecated	HIP	Deprecated
cuDevicePrimaryCtxGetState		hipDevicePrimaryCtxGetState	
cuDevicePrimaryCtxRelease		hipDevicePrimaryCtxRelease	
cuDevicePrimaryCtxRelease_v2		hipDevicePrimaryCtxRelease	
cuDevicePrimaryCtxReset		hipDevicePrimaryCtxReset	
cuDevicePrimaryCtxReset_v2		hipDevicePrimaryCtxReset	

CUDA	Deprecated	HIP	Deprecated
cuDevicePrimaryCtxRetain		hipDevicePrimaryCtxRetain	
cuDevicePrimaryCtxSetFlags		hipDevicePrimaryCtxSetFlags	
cuDevicePrimaryCtxSetFlags_v2		hipDevicePrimaryCtxSetFlags	

1.2.7 Context Management

CUDA	Deprecated	HIP	Deprecated
cuCtxCreate		hipCtxCreate	✓
cuCtxCreate_v2		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	✓

1.2.8 Module Management

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

1.2.9 Memory Management

CUDA	Deprecated	HIP	Deprecated
cuArray3DCreate		hipArray3DCreate	
cuArray3DCreate_v2		hipArray3DCreate	
cuArrayCreate		hipArrayCreate	
cuArrayCreate_v2		hipArrayCreate	
cuDeviceGetByPCIBusId		hipDeviceGetByPCIBusId	
cuDeviceGetPCIBusId		hipDeviceGetPCIBusId	
cuIpcCloseMemHandle		hipIpcCloseMemHandle	
cuIpcGetEventHandle		hipIpcGetEventHandle	
cuIpcGetMemHandle		hipIpcGetMemHandle	
cuIpcOpenEventHandle		hipIpcOpenEventHandle	
cuIpcOpenMemHandle		hipIpcOpenMemHandle	
cuMemAlloc		hipMalloc	
cuMemAllocHost		hipHostMalloc	
cuMemAllocHost_v2		hipHostMalloc	
cuMemAllocManaged		hipMallocManaged	
cuMemAllocPitch		hipMemAllocPitch	
cuMemAllocPitch_v2		hipMemAllocPitch	
cuMemAlloc_v2		hipMalloc	
cuMemFree		hipFree	
cuMemFreeHost		hipHostFree	
cuMemFree_v2		hipFree	
cuMemGetAddressRange		hipMemGetAddressRange	
cuMemGetAddressRange_v2		hipMemGetAddressRange	
cuMemGetInfo		hipMemGetInfo	
cuMemGetInfo_v2		hipMemGetInfo	
cuMemHostAlloc		hipHostMalloc	
cuMemHostGetDevicePointer		hipHostGetDevicePointer	
cuMemHostGetDevicePointer_v2		hipHostGetDevicePointer	
cuMemHostGetFlags		hipHostGetFlags	
cuMemHostRegister		hipHostRegister	
cuMemHostRegister_v2		hipHostRegister	
cuMemHostUnregister		hipHostUnregister	
cuMemcpy2D		hipMemcpyParam2D	
cuMemcpy2DAsync		hipMemcpyParam2DAsync	
cuMemcpy2DAsync_v2		hipMemcpyParam2DAsync	
cuMemcpy2D_v2		hipMemcpyParam2D	
cuMemcpy3D		hipDrvMemcpy3D	
cuMemcpy3DAsync		hipDrvMemcpy3DAsync	
cuMemcpy3DAsync_v2		hipDrvMemcpy3DAsync	
cuMemcpy3D_v2		hipDrvMemcpy3D	
cuMemcpyAtoH		hipMemcpyAtoH	
cuMemcpyAtoH_v2		hipMemcpyAtoH	
cuMemcpyDtoD		hipMemcpyDtoD	
cuMemcpyDtoDAsync		hipMemcpyDtoDAsync	

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

1.2.10 Unified Addressing

CUDA	Deprecated	HIP	Deprecated
cuMemAdvise		hipMemAdvise	
cuMemRangeGetAttribute		hipMemRangeGetAttribute	
cuMemRangeGetAttributes		hipMemRangeGetAttributes	

1.2.11 Stream Management

CUDA	Deprecated	HIP	Deprecated
cuStreamAddCallback		hipStreamAddCallback	
cuStreamAttachMemAsync		hipStreamAttachMemAsync	
cuStreamCreate		hipStreamCreateWithFlags	
cuStreamCreateWithPriority		hipStreamCreateWithPriority	
cuStreamDestroy		hipStreamDestroy	
cuStreamDestroy_v2		hipStreamDestroy	
cuStreamGetFlags		hipStreamGetFlags	
cuStreamGetPriority		hipStreamGetPriority	
cuStreamQuery		hipStreamQuery	

CUDA	Deprecated	HIP	Deprecated
cuStreamSynchronize		hipStreamSynchronize	
cuStreamWaitEvent		hipStreamWaitEvent	

1.2.12 Event Management

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

1.2.13 Execution Control

CUDA	Deprecated	HIP	Deprecated
cuFuncGetAttribute		hipFuncGetAttribute	
cuLaunchKernel		hipModuleLaunchKernel	

1.2.14 Occupancy

CUDA	Deprecated	HIP	Deprecated
cuOccupancyMaxActiveBlocksPerMultiprocessor		hipModuleOccupancyMaxActiveBlocksPerMultiprocessor	
cuOccupancyMaxActiveBlocksPerMultiprocessorWithFlags		hipModuleOccupancyMaxActiveBlocksPerMultiprocessorWithFlags	
cuOccupancyMaxPotentialBlockSize		hipModuleOccupancyMaxPotentialBlockSize	
cuOccupancyMaxPotentialBlockSizeWithFlags		hipModuleOccupancyMaxPotentialBlockSizeWithFlags	

1.2.15 Texture Reference Management [Deprecated]

CUDA	Deprecated	HIP	Deprecated
cuTexRefGetAddress	✓	hipTexRefGetAddress	
cuTexRefGetAddressMode	✓	hipTexRefGetAddressMode	
cuTexRefGetAddress_v2	✓	hipTexRefGetAddress	
cuTexRefGetArray	✓	hipTexRefGetArray	
cuTexRefGetFilterMode	✓	hipTexRefGetFilterMode	
cuTexRefGetFlags	✓	hipTexRefGetFlags	
cuTexRefGetFormat	✓	hipTexRefGetFormat	
cuTexRefGetMaxAnisotropy	✓	hipTexRefGetMaxAnisotropy	
cuTexRefGetMipmapFilterMode	✓	hipTexRefGetMipmapFilterMode	

CUDA	Deprecated	HIP	Deprecated
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	

1.2.16 Texture Object Management

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

1.2.17 Peer Context Memory Access

CUDA	Deprecated	HIP	Deprecated
cuCtxDisablePeerAccess		hipCtxDisablePeerAccess	✓
cuCtxEnablePeerAccess		hipCtxEnablePeerAccess	✓
cuDeviceCanAccessPeer		hipDeviceCanAccessPeer	
cuDeviceGetP2PAttribute		hipDeviceGetP2PAttribute	

1.2.18 Profiler Control

CUDA	Deprecated	HIP	Deprecated
cuProfilerStart		hipProfilerStart	✓
cuProfilerStop		hipProfilerStop	✓

1.2.19 Unsupported APIs

API	Unsupported	Deprecated
Error Handling	✓	
Context Management	✓	✓
Virtual Memory Management	✓	
Stream Ordered Memory Allocator	✓	
External Resource Interoperability	✓	
Stream Memory Operations	✓	
Execution Control	✓	✓
Graph Management	✓	
Surface Reference Management	✓	✓
Surface Object Management	✓	
Graphics Interoperability	✓	
Profiler Control	✓	✓
OpenGL Interoperability	✓	
VDPAU Interoperability	✓	
EGL Interoperability	✓	
Direct3D 9 Interoperability	✓	
Direct3D 10 Interoperability	✓	
Direct3D 11 Interoperability	✓	

1.3 CUCOMPLEX API Supported by HIP

1.3.1 cuComplex Data Types

CUDA	Deprecated	HIP	Deprecated
cuComplex		hipComplex	
cuDoubleComplex		hipDoubleComplex	
cuFloatComplex		hipFloatComplex	

1.3.2 cuComplex API Functions

CUDA	Deprecated	HIP	Deprecated
cuCabs		hipCabs	
cuCabsf		hipCabsf	
cuCadd		hipCadd	
cuCaddf		hipCaddf	
cuCdiv		hipCdiv	
cuCdivf		hipCdivf	
cuCfma		hipCfma	
cuCfmaf		hipCfmaf	
cuCimag		hipCimag	
cuCimagf		hipCimagf	
cuCmul		hipCmul	

CUDA	Deprecated	HIP	Deprecated
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	

1.4 CUDA DEVICE API Supported by HIP

1.4.1 Device Functions

CUDA	Deprecated	HIP	Deprecated
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	

CUDA	Deprecated	HIP	Deprecated
double2ull rz		double2ull rz	
double as longlong		double as longlong	
exp10f		exp10f	
expf		expf	
fadd rd		fadd rd	
fadd rn		fadd rn	
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	
fmul ru		fmul ru	
fmul rz		fmul rz	
frcp rd		frcp rd	
frcp rn		frcp rn	
frcp ru		frcp ru	

CUDA	Deprecated	HIP	Deprecated
<code>frcp_rz</code>		<code>frcp_rz</code>	
<code>frsqrt_rn</code>		<code>frsqrt_rn</code>	
<code>fsqrt_rd</code>		<code>fsqrt_rd</code>	
<code>fsqrt_rn</code>		<code>fsqrt_rn</code>	
<code>fsqrt_ru</code>		<code>fsqrt_ru</code>	
<code>fsqrt_rz</code>		<code>fsqrt_rz</code>	
<code>fsub_rd</code>		<code>fsub_rd</code>	
<code>fsub_rn</code>		<code>fsub_rn</code>	
<code>fsub_ru</code>		<code>fsub_ru</code>	
<code>fsub_rz</code>		<code>fsub_rz</code>	
<code>h2div</code>		<code>h2div</code>	
<code>habs</code>		<code>habs</code>	
<code>habs2</code>		<code>habs2</code>	
<code>hadd</code>		<code>hadd</code>	
<code>hadd2</code>		<code>hadd2</code>	
<code>hadd2_sat</code>		<code>hadd2_sat</code>	
<code>hadd_sat</code>		<code>hadd_sat</code>	
<code>half22float2</code>		<code>half22float2</code>	
<code>half2float</code>		<code>half2float</code>	
<code>half2half2</code>		<code>half2half2</code>	
<code>half2int_rd</code>		<code>half2int_rd</code>	
<code>half2int_rn</code>		<code>half2int_rn</code>	
<code>half2int_ru</code>		<code>half2int_ru</code>	
<code>half2int_rz</code>		<code>half2int_rz</code>	
<code>half2ll_rd</code>		<code>half2ll_rd</code>	
<code>half2ll_rn</code>		<code>half2ll_rn</code>	
<code>half2ll_ru</code>		<code>half2ll_ru</code>	
<code>half2ll_rz</code>		<code>half2ll_rz</code>	
<code>half2short_rd</code>		<code>half2short_rd</code>	
<code>half2short_rn</code>		<code>half2short_rn</code>	
<code>half2short_ru</code>		<code>half2short_ru</code>	
<code>half2short_rz</code>		<code>half2short_rz</code>	
<code>half2uint_rd</code>		<code>half2uint_rd</code>	
<code>half2uint_rn</code>		<code>half2uint_rn</code>	
<code>half2uint_ru</code>		<code>half2uint_ru</code>	
<code>half2uint_rz</code>		<code>half2uint_rz</code>	
<code>half2ull_rd</code>		<code>half2ull_rd</code>	
<code>half2ull_rn</code>		<code>half2ull_rn</code>	
<code>half2ull_ru</code>		<code>half2ull_ru</code>	
<code>half2ull_rz</code>		<code>half2ull_rz</code>	
<code>half2ushort_rd</code>		<code>half2ushort_rd</code>	
<code>half2ushort_rn</code>		<code>half2ushort_rn</code>	
<code>half2ushort_ru</code>		<code>half2ushort_ru</code>	
<code>half2ushort_rz</code>		<code>half2ushort_rz</code>	
<code>half_as_short</code>		<code>half_as_short</code>	
<code>half_as_ushort</code>		<code>half_as_ushort</code>	
<code>halves2half2</code>		<code>halves2half2</code>	
<code>hbeq2</code>		<code>hbeq2</code>	
<code>hbequ2</code>		<code>hbequ2</code>	
<code>hbge2</code>		<code>hbge2</code>	
<code>hbgeu2</code>		<code>hbgeu2</code>	
<code>hbg2</code>		<code>hbg2</code>	

CUDA	Deprecated	HIP	Deprecated
hbgtn2		hbgtn2	
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	
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	

CUDA	Deprecated	HIP	Deprecated
<code>__hsub2_sat</code>		<code>__hsub2_sat</code>	
<code>__hsub_sat</code>		<code>__hsub_sat</code>	
<code>__int2double_rn</code>		<code>__int2double_rn</code>	
<code>__int2float_rd</code>		<code>__int2float_rd</code>	
<code>__int2float_rn</code>		<code>__int2float_rn</code>	
<code>__int2float_ru</code>		<code>__int2float_ru</code>	
<code>__int2float_rz</code>		<code>__int2float_rz</code>	
<code>__int2half_rd</code>		<code>__int2half_rd</code>	
<code>__int2half_rn</code>		<code>__int2half_rn</code>	
<code>__int2half_ru</code>		<code>__int2half_ru</code>	
<code>__int2half_rz</code>		<code>__int2half_rz</code>	
<code>__int_as_float</code>		<code>__int_as_float</code>	
<code>__ldca</code>		<code>__ldca</code>	
<code>__ldcg</code>		<code>__ldcg</code>	
<code>__ldcs</code>		<code>__ldcs</code>	
<code>__ldg</code>		<code>__ldg</code>	
<code>__l12double_rd</code>		<code>__l12double_rd</code>	
<code>__l12double_rn</code>		<code>__l12double_rn</code>	
<code>__l12double_ru</code>		<code>__l12double_ru</code>	
<code>__l12double_rz</code>		<code>__l12double_rz</code>	
<code>__l12float_rd</code>		<code>__l12float_rd</code>	
<code>__l12float_rn</code>		<code>__l12float_rn</code>	
<code>__l12float_ru</code>		<code>__l12float_ru</code>	
<code>__l12float_rz</code>		<code>__l12float_rz</code>	
<code>__l12half_rd</code>		<code>__l12half_rd</code>	
<code>__l12half_rn</code>		<code>__l12half_rn</code>	
<code>__l12half_ru</code>		<code>__l12half_ru</code>	
<code>__l12half_rz</code>		<code>__l12half_rz</code>	
<code>__log10f</code>		<code>__log10f</code>	
<code>__log2f</code>		<code>__log2f</code>	
<code>__logf</code>		<code>__logf</code>	
<code>__longlong_as_double</code>		<code>__longlong_as_double</code>	
<code>__low2float</code>		<code>__low2float</code>	
<code>__low2half</code>		<code>__low2half</code>	
<code>__low2half2</code>		<code>__low2half2</code>	
<code>__lowhigh2highlow</code>		<code>__lowhigh2highlow</code>	
<code>__lows2half2</code>		<code>__lows2half2</code>	
<code>__mul24</code>		<code>__mul24</code>	
<code>__mul64hi</code>		<code>__mul64hi</code>	
<code>__mulhi</code>		<code>__mulhi</code>	
<code>__popc</code>		<code>__popc</code>	
<code>__popcll</code>		<code>__popcll</code>	
<code>__powf</code>		<code>__powf</code>	
<code>__rhadd</code>		<code>__rhadd</code>	
<code>__sad</code>		<code>__sad</code>	
<code>__saturatef</code>		<code>__saturatef</code>	
<code>__shfl</code>	✓	<code>__shfl</code>	
<code>__shfl_down</code>	✓	<code>__shfl_down</code>	
<code>__shfl_up</code>	✓	<code>__shfl_up</code>	
<code>__shfl_xor</code>	✓	<code>__shfl_xor</code>	
<code>__short2half_rd</code>		<code>__short2half_rd</code>	
<code>__short2half_rn</code>		<code>__short2half_rn</code>	

CUDA	Deprecated	HIP	Deprecated
short2half_ru		short2half_ru	
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	
_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	

CUDA	Deprecated	HIP	Deprecated
asinf		asinf	
asinh		asinh	
asinhf		asinhf	
atan		atan	
atan2		atan2	
atan2f		atan2f	
atanf		atanf	
atanh		atanh	
atanhf		atanhf	
atomicAdd		atomicAdd	
atomicAnd		atomicAnd	
atomicCAS		atomicCAS	
atomicDec		atomicDec	
atomicExch		atomicExch	
atomicInc		atomicInc	
atomicMax		atomicMax	
atomicMin		atomicMin	
atomicOr		atomicOr	
atomicSub		atomicSub	
atomicXor		atomicXor	
cbrt		cbrt	
cbrtf		cbrtf	
ceil		ceil	
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	

CUDA	Deprecated	HIP	Deprecated
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	
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	
hrsqr		hrsqr	
hsin		hsin	
hsqr		hsqr	
htrunc		htrunc	
hypot		hypot	

CUDA	Deprecated	HIP	Deprecated
hypotf		hypotf	
ilogb		ilogb	
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	
nextafter		nextafter	
nextafterf		nextafterf	
norm		norm	
norm3d		norm3d	
norm3df		norm3df	
norm4d		norm4d	
norm4df		norm4df	
normcdf		normcdf	

CUDA	Deprecated	HIP	Deprecated
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	
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	

CUDA	Deprecated	HIP	Deprecated
y0f		y0f	
y1		y1	
y1f		y1f	
yn		yn	
ynf		ynf	

1.5 CUBLAS API Supported by HIP

1.5.1 CUBLAS Data Types

CUDA	Deprecated	HIP	Deprecated
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_DFALT	
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	

CUDA	Deprecated	HIP	Deprecated
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	

1.5.2 CUDA Data Types Reference

CUDA	Deprecated	HIP	Deprecated
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	

1.5.3 CUBLAS Helper Function Reference

CUDA	Deprecated	HIP	Deprecated
cublasCreate		hipblasCreate	
cublasCreate_v2		hipblasCreate	
cublasDestroy		hipblasDestroy	
cublasDestroy_v2		hipblasDestroy	
cublasGetAtomicsMode		hipblasGetAtomicsMode	
cublasGetMatrix		hipblasGetMatrix	
cublasGetMatrixAsync		hipblasGetMatrixAsync	
cublasGetPointerMode		hipblasGetPointerMode	
cublasGetPointerMode_v2		hipblasGetPointerMode	
cublasGetStream		hipblasGetStream	

CUDA	Deprecated	HIP	Deprecated
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	

1.5.4 CUBLAS Level-1 Function Reference

CUDA	Deprecated	HIP	Deprecated
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	
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	

CUDA	Deprecated	HIP	Deprecated
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	
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	
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	

CUDA	Deprecated	HIP	Deprecated
cublasZaxpy		hipblasZaxpy	
cublasZaxpy_v2		hipblasZaxpy	
cublasZcopy		hipblasZcopy	
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	

1.5.5 CUBLAS Level-2 Function Reference

CUDA	Deprecated	HIP	Deprecated
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	
cublasChpr		hipblasChpr	
cublasChpr2		hipblasChpr2	
cublasChpr2_v2		hipblasChpr2	
cublasChpr_v2		hipblasChpr	
cublasCsymv		hipblasCsymv	
cublasCsymv_v2		hipblasCsymv	
cublasCsyr		hipblasCsyr	
cublasCsyr2		hipblasCsyr2	
cublasCsyr2_v2		hipblasCsyr2	

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CUDA	Deprecated	HIP	Deprecated
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	
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	
cublasZhbm		hipblasZhbm	
cublasZhbm v2		hipblasZhbm	
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	

CUDA	Deprecated	HIP	Deprecated
cublasZsyr2_v2		hipblasZsyr2	
cublasZsyr_v2		hipblasZsyr	
cublasZtbmv		hipblasZtbmv	
cublasZtbmv_v2		hipblasZtbmv	
cublasZtbsv		hipblasZtbsv	
cublasZtbsv_v2		hipblasZtbsv	
cublasZtpmv		hipblasZtpmv	
cublasZtpmv_v2		hipblasZtpmv	
cublasZtpsv		hipblasZtpsv	
cublasZtpsv_v2		hipblasZtpsv	
cublasZtrmv		hipblasZtrmv	
cublasZtrmv_v2		hipblasZtrmv	
cublasZtrsv		hipblasZtrsv	
cublasZtrsv_v2		hipblasZtrsv	

1.5.6 CUBLAS Level-3 Function Reference

CUDA	Deprecated	HIP	D
cublasCgemm		hipblasCgemm	
cublasCgemmBatched		hipblasCgemmBatched	
cublasCgemmStridedBatched		hipblasCgemmStridedBatched	
cublasCgemm_v2		hipblasCgemm	
cublasChemmm		hipblasChemmm	
cublasChemmm_v2		hipblasChemmm	
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	
cublasDsyr2k_v2		hipblasDsyr2k	
cublasDsyrk		hipblasDsyrk	

CUDA	Deprecated	HIP	D
cublasDsyrc_v2		hipblasDsyrc	
cublasDsyrcx		hipblasDsyrcx	
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	
cublasZsyr2k_v2		hipblasZsyr2k	
cublasZsyrk		hipblasZsyrk	
cublasZsyrk_v2		hipblasZsyrk	
cublasZsyrkx		hipblasZsyrkx	
cublasZtrmm		hipblasZtrmm	
cublasZtrmm_v2		hipblasZtrmm	
cublasZtrsm		hipblasZtrsm	
cublasZtrsm_v2		hipblasZtrsm	

1.5.7 BLAS-like Extension

CUDA	Deprecated	HIP	Deprecated
cublasCdggmm		hipblasCdggmm	
cublasCgeam		hipblasCgeam	
cublasCgeqrfBatched		hipblasCgeqrfBatched	
cublasCgetrfBatched		hipblasCgetrfBatched	
cublasCgetriBatched		hipblasCgetriBatched	
cublasCgetrsBatched		hipblasCgetrsBatched	
cublasCtrsmBatched		hipblasCtrsmBatched	
cublasDdggmm		hipblasDdggmm	
cublasDgeam		hipblasDgeam	
cublasDgeqrfBatched		hipblasDgeqrfBatched	
cublasDgetrfBatched		hipblasDgetrfBatched	
cublasDgetriBatched		hipblasDgetriBatched	
cublasDgetrsBatched		hipblasDgetrsBatched	
cublasDtrsmBatched		hipblasDtrsmBatched	
cublasGemmBatchedEx		hipblasGemmBatchedEx	
cublasGemmEx		hipblasGemmEx	
cublasGemmStridedBatchedEx		hipblasGemmStridedBatchedEx	
cublasSdggmm		hipblasSdggmm	
cublasSgeam		hipblasSgeam	
cublasSgeqrfBatched		hipblasSgeqrfBatched	
cublasSgetrfBatched		hipblasSgetrfBatched	
cublasSgetriBatched		hipblasSgetriBatched	
cublasSgetrsBatched		hipblasSgetrsBatched	
cublasStrsmBatched		hipblasStrsmBatched	
cublasZdggmm		hipblasZdggmm	
cublasZgeam		hipblasZgeam	
cublasZgeqrfBatched		hipblasZgeqrfBatched	
cublasZgetrfBatched		hipblasZgetrfBatched	
cublasZgetriBatched		hipblasZgetriBatched	
cublasZgetrsBatched		hipblasZgetrsBatched	
cublasZtrsmBatched		hipblasZtrsmBatched	

1.6 CURAND API Supported by HIP

1.6.1 CURAND Data Types

CUDA	Deprecated	HIP	Deprecated
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_SOBOL_32		HIPRAND_RNG_QUASI_SCRAMBLED_SOBOL_32	
CURAND_RNG_QUASI_SCRAMBLED_SOBOL_64		HIPRAND_RNG_QUASI_SCRAMBLED_SOBOL_64	
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	

CUDA	Deprecated	HIP	Deprecated
CURAND_STATUS_TY PE_ERROR		HIPRAND_STATUS_TY PE_ERROR	
CURAND_STATUS_VE RSION_MISMATCH		HIPRAND_STATUS_VE RSION_MISMATCH	
CURAND_VERSION		HIPRAND_VERSION	
curandDirectionVectors32 _t		hiprandDirectionVectors3 2_t	
curandDiscreteDistributio n_st		hiprandDiscreteDistributio n_st	
curandDiscreteDistributio n_t		hiprandDiscreteDistributio n_t	
curandGenerator_st		hiprandGenerator_st	
curandGenerator_t		hiprandGenerator_t	
curandRngType		hiprandRngType_t	
curandRngType_t		hiprandRngType_t	
curandState		hiprandState	
curandStateMRG32k3a		hiprandStateMRG32k3a	
curandStateMRG32k3a_t		hiprandStateMRG32k3a_t	
curandStateMtg32		hiprandStateMtg32	
curandStateMtg32_t		hiprandStateMtg32_t	
curandStatePhilox4_32_10		hiprandStatePhilox4_32_1 0	
curandStatePhilox4_32_10 _t		hiprandStatePhilox4_32_1 0_t	
curandStateSobol32		hiprandStateSobol32	
curandStateSobol32_t		hiprandStateSobol32_t	
curandStateXORWOW		hiprandStateXORWOW	
curandStateXORWOW_t		hiprandStateXORWOW_t	
curandState_t		hiprandState_t	
curandStatus		hiprandStatus_t	
curandStatus_t		hiprandStatus_t	

1.6.2 Host API Functions

CUDA	Deprecated	HIP	Deprecated
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	

1.6.3 Device API Functions

CUDA	Deprecated	HIP	Deprecated
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	

CUDA	Deprecated	HIP	Deprecated
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	

1.7 CUFFT API Supported by HIP

1.7.1 CUFFT Data Types

CUDA	Deprecated	HIP	Deprecated
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	

CUDA	Deprecated	HIP	Deprecated
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	

1.7.2 CUFFT API Functions

CUDA	Deprecated	HIP	Deprecated
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	

1.8 CUSPARSE API Supported by HIP

1.8.1 CUSPARSE Types References

CUDA	Deprecated	HIP	Deprecated
CUSPARSE_ACTION_NUMERIC		HIPSPARSE_ACTION_NUMERIC	
CUSPARSE_ACTION_SYMBOLIC		HIPSPARSE_ACTION_SYMBOLIC	
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_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_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_OPERATION_CONJUGATE_TRANSPOSE		HIPSPARSE_OPERATION_CONJUGATE_TRANSPOSE	
CUSPARSE_OPERATION_NON_TRANSPOSE		HIPSPARSE_OPERATION_NON_TRANSPOSE	
CUSPARSE_OPERATION_TRANSPOSE		HIPSPARSE_OPERATION_TRANSPOSE	
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	

CUDA	Deprecated	HIP	Deprecated
CUSPARSE_SOLVE_POLICY_USE_LEVEL		HIPSPARSE_SOLVE_POLICY_USE_LEVEL	
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_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_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	
cusparseAction_t		hipsparseAction_t	
cusparseDiagType_t		hipsparseDiagType_t	
cusparseDirection_t		hipsparseDirection_t	
cusparseFillMode_t		hipsparseFillMode_t	
cusparseHandle_t		hipsparseHandle_t	
cusparseHybMat_t	✓	hipsparseHybMat_t	
cusparseHybPartition_t	✓	hipsparseHybPartition_t	
cusparseIndexBase_t		hipsparseIndexBase_t	
cusparseMatDescr_t		hipsparseMatDescr_t	
cusparseMatrixType_t		hipsparseMatrixType_t	
cusparseOperation_t		hipsparseOperation_t	
cusparsePointerMode_t		hipsparsePointerMode_t	
cusparseSolvePolicy_t		hipsparseSolvePolicy_t	
cusparseStatus_t		hipsparseStatus_t	
pruneInfo_t		pruneInfo_t	

1.8.2 CUSPARSE Management Function Reference

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

1.8.3 CUSPARSE Helper Function Reference

CUDA	Deprecated	HIP	Deprecated
cusparseCreateBsrict0Info		hipsparseCreateBsrict0Info	
cusparseCreateBsrilu0Info		hipsparseCreateBsrilu0Info	
cusparseCreateBsrsv2Info		hipsparseCreateBsrsv2Info	
cusparseCreateCsrgermm2Info	✓	hipsparseCreateCsrgermm2Info	
cusparseCreateCsrict0Info		hipsparseCreateCsrict0Info	
cusparseCreateCsrilu0Info		hipsparseCreateCsrilu0Info	
cusparseCreateCsrm2Info		hipsparseCreateCsrm2Info	
cusparseCreateCsrsv2Info		hipsparseCreateCsrsv2Info	
cusparseCreateHybMat	✓	hipsparseCreateHybMat	
cusparseCreateMatDescr		hipsparseCreateMatDescr	
cusparseCreatePruneInfo		hipsparseCreatePruneInfo	
cusparseDestroyBsrict0Info		hipsparseDestroyBsrict0Info	
cusparseDestroyBsrilu0Info		hipsparseDestroyBsrilu0Info	
cusparseDestroyBsrsv2Info		hipsparseDestroyBsrsv2Info	
cusparseDestroyCsrgermm2Info	✓	hipsparseDestroyCsrgermm2Info	
cusparseDestroyCsrict0Info		hipsparseDestroyCsrict0Info	
cusparseDestroyCsrilu0Info		hipsparseDestroyCsrilu0Info	
cusparseDestroyCsrm2Info		hipsparseDestroyCsrm2Info	
cusparseDestroyCsrsv2Info		hipsparseDestroyCsrsv2Info	
cusparseDestroyHybMat	✓	hipsparseDestroyHybMat	
cusparseDestroyMatDescr		hipsparseDestroyMatDescr	
cusparseDestroyPruneInfo		hipsparseDestroyPruneInfo	

CUDA	Deprecated	HIP	Deprecated
cusparseGetMatDiagType		hipsparseGetMatDiagType	
cusparseGetMatFillMode		hipsparseGetMatFillMode	
cusparseGetMatIndexBase		hipsparseGetMatIndexBase	
cusparseGetMatType		hipsparseGetMatType	
cusparseSetMatDiagType		hipsparseSetMatDiagType	
cusparseSetMatFillMode		hipsparseSetMatFillMode	
cusparseSetMatIndexBase		hipsparseSetMatIndexBase	
cusparseSetMatType		hipsparseSetMatType	

1.8.4 CUSPARSE Level 1 Function Reference

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

1.8.5 CUSPARSE Level 2 Function Reference

CUDA	Deprecated	HIP	Deprecated
cusparseCbsrmv		hipsparseCbsrmv	
cusparseCbsrsv2_analysis		hipsparseCbsrsv2_analysis	
cusparseCbsrsv2_bufferSize		hipsparseCbsrsv2_bufferSize	
cusparseCbsrsv2_bufferSizeExt		hipsparseCbsrsv2_bufferSizeExt	
cusparseCbsrsv2_solve		hipsparseCbsrsv2_solve	

CUDA	Deprecated	HIP	Deprecated
cusparseCcsrmv	✓	hipsparseCcsrmv	
cusparseCcsrsv2_analysis		hipsparseCcsrsv2_analysis	
cusparseCcsrsv2_bufferSize		hipsparseCcsrsv2_bufferSize	
cusparseCcsrsv2_bufferSizeExt		hipsparseCcsrsv2_bufferSizeExt	
cusparseCcsrsv2_solve		hipsparseCcsrsv2_solve	
cusparseChybmvm	✓	hipsparseChybmvm	
cusparseDbsrmv		hipsparseDbsrmv	
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	
cusparseDhybmvm	✓	hipsparseDhybmvm	
cusparseSbsrmv		hipsparseSbsrmv	
cusparseSbsrsv2_analysis		hipsparseSbsrsv2_analysis	
cusparseSbsrsv2_bufferSize		hipsparseSbsrsv2_bufferSize	
cusparseSbsrsv2_bufferSizeExt		hipsparseSbsrsv2_bufferSizeExt	
cusparseSbsrsv2_solve		hipsparseSbsrsv2_solve	
cusparseScsrmv	✓	hipsparseScsrmv	
cusparseScsrsrv2_analysis		hipsparseScsrsrv2_analysis	
cusparseScsrsrv2_bufferSize		hipsparseScsrsrv2_bufferSize	
cusparseScsrsrv2_bufferSizeExt		hipsparseScsrsrv2_bufferSizeExt	
cusparseScsrsrv2_solve		hipsparseScsrsrv2_solve	
cusparseShybmvm	✓	hipsparseShybmvm	
cusparseXbsrsv2_zeroPivot		hipsparseXbsrsv2_zeroPivot	
cusparseXcsrsv2_zeroPivot		hipsparseXcsrsv2_zeroPivot	
cusparseZbsrmv		hipsparseZbsrmv	
cusparseZbsrsv2_analysis		hipsparseZbsrsv2_analysis	
cusparseZbsrsv2_bufferSize		hipsparseZbsrsv2_bufferSize	
cusparseZbsrsv2_bufferSizeExt		hipsparseZbsrsv2_bufferSizeExt	
cusparseZbsrsv2_solve		hipsparseZbsrsv2_solve	
cusparseZcsrmv	✓	hipsparseZcsrmv	
cusparseZcsrsv2_analysis		hipsparseZcsrsv2_analysis	

CUDA	Deprecated	HIP	Deprecated
cusparseZcsrv2_bufferSize		hipsparseZcsrv2_bufferSize	
cusparseZcsrv2_bufferSizeExt		hipsparseZcsrv2_bufferSizeExt	
cusparseZcsrv2_solve		hipsparseZcsrv2_solve	
cusparseZhybm	✓	hipsparseZhybm	

1.8.6 CUSPARSE Level 3 Function Reference

CUDA	Deprecated	HIP	Deprecated
cusparseCbsrmm		hipsparseCbsrmm	
cusparseCcsrmm	✓	hipsparseCcsrmm	
cusparseCcsrmm2	✓	hipsparseCcsrmm2	
cusparseCcsrsm2_analysis		hipsparseCcsrsm2_analysis	
cusparseCcsrsm2_bufferSizeExt		hipsparseCcsrsm2_bufferSizeExt	
cusparseCcsrsm2_solve		hipsparseCcsrsm2_solve	
cusparseCgemmi	✓	hipsparseCgemmi	
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	

1.8.7 CUSPARSE Extra Function Reference

CUDA	Deprecated	HIP	Deprecated
cusparseCcsrgeam	✓	hipsparsCcsrgeam	
cusparseCcsrgeam2		hipsparsCcsrgeam2	
cusparseCcsrgeam2_bufferSizeExt		hipsparsCcsrgeam2_bufferSizeExt	
cusparseCcsrgemm	✓	hipsparsCcsrgemm	
cusparseCcsrgemm2	✓	hipsparsCcsrgemm2	
cusparseCcsrgemm2_bufferSizeExt	✓	hipsparsCcsrgemm2_bufferSizeExt	
cusparseDcsrgeam	✓	hipsparsDcsrgeam	
cusparseDcsrgeam2		hipsparsDcsrgeam2	
cusparseDcsrgeam2_bufferSizeExt		hipsparsDcsrgeam2_bufferSizeExt	
cusparseDcsrgemm	✓	hipsparsDcsrgemm	
cusparseDcsrgemm2	✓	hipsparsDcsrgemm2	
cusparseDcsrgemm2_bufferSizeExt	✓	hipsparsDcsrgemm2_bufferSizeExt	
cusparseScsrgeam	✓	hipsparsScsrgeam	
cusparseScsrgeam2		hipsparsScsrgeam2	
cusparseScsrgeam2_bufferSizeExt		hipsparsScsrgeam2_bufferSizeExt	
cusparseScsrgemm	✓	hipsparsScsrgemm	
cusparseScsrgemm2	✓	hipsparsScsrgemm2	
cusparseScsrgemm2_bufferSizeExt	✓	hipsparsScsrgemm2_bufferSizeExt	
cusparseXcsrgeam2Nnz		hipsparsXcsrgeam2Nnz	
cusparseXcsrgeamNnz	✓	hipsparsXcsrgeamNnz	
cusparseXcsrgemm2Nnz	✓	hipsparsXcsrgemm2Nnz	
cusparseXcsrgemmNnz	✓	hipsparsXcsrgemmNnz	
cusparseZcsrgeam	✓	hipsparsZcsrgeam	
cusparseZcsrgeam2		hipsparsZcsrgeam2	
cusparseZcsrgeam2_bufferSizeExt		hipsparsZcsrgeam2_bufferSizeExt	
cusparseZcsrgemm	✓	hipsparsZcsrgemm	
cusparseZcsrgemm2	✓	hipsparsZcsrgemm2	
cusparseZcsrgemm2_bufferSizeExt	✓	hipsparsZcsrgemm2_bufferSizeExt	

1.8.8 CUSPARSE Preconditioners Reference

CUDA	Deprecated	HIP	Deprecated
cusparseCbsric02		hipsparsCbsric02	
cusparseCbsric02_analysis		hipsparsCbsric02_analysis	
cusparseCbsric02_bufferSize		hipsparsCbsric02_bufferSize	
cusparseCbsrilu02		hipsparsCbsrilu02	

CUDA	Deprecated	HIP	Deprecated
cusparseCbsrilu02_analys is		hipsparseCbsrilu02_analys is	
cusparseCbsrilu02_buffer Size		hipsparseCbsrilu02_buffer Size	
cusparseCbsrilu02_numeri cBoost		hipsparseCbsrilu02_numer icBoost	
cusparseCcsric02		hipsparseCcsric02	
cusparseCcsric02_analysis		hipsparseCcsric02_analysi s	
cusparseCcsric02_bufferSi ze		hipsparseCcsric02_bufferS ize	
cusparseCcsric02_bufferSi zeExt		hipsparseCcsric02_bufferS izeExt	
cusparseCcsrilu02		hipsparseCcsrilu02	
cusparseCcsrilu02_analysi s		hipsparseCcsrilu02_analys is	
cusparseCcsrilu02_bufferS ize		hipsparseCcsrilu02_buffer Size	
cusparseCcsrilu02_bufferS izeExt		hipsparseCcsrilu02_buffer SizeExt	
cusparseCcsrilu02_numeri cBoost		hipsparseCcsrilu02_numer icBoost	
cusparseDbsric02		hipsparseDbsric02	
cusparseDbsric02_analysis		hipsparseDbsric02_analysi s	
cusparseDbsric02_bufferS ize		hipsparseDbsric02_buffer Size	
cusparseDbsrilu02		hipsparseDbsrilu02	
cusparseDbsrilu02_analysi s		hipsparseDbsrilu02_analys is	
cusparseDbsrilu02_buffer Size		hipsparseDbsrilu02_buffer Size	
cusparseDbsrilu02_numeri cBoost		hipsparseDbsrilu02_numer icBoost	
cusparseDcsric02		hipsparseDcsric02	
cusparseDcsric02_analysis		hipsparseDcsric02_analysi s	
cusparseDcsric02_bufferSi ze		hipsparseDcsric02_buffer Size	
cusparseDcsric02_bufferSi zeExt		hipsparseDcsric02_buffer SizeExt	
cusparseDcsrilu02		hipsparseDcsrilu02	
cusparseDcsrilu02_analysi s		hipsparseDcsrilu02_analys is	
cusparseDcsrilu02_buffer Size		hipsparseDcsrilu02_buffer Size	
cusparseDcsrilu02_buffer SizeExt		hipsparseDcsrilu02_buffer SizeExt	
cusparseDcsrilu02_numeri cBoost		hipsparseDcsrilu02_numer icBoost	
cusparseSbsric02		hipsparseSbsric02	
cusparseSbsric02_analysis		hipsparseSbsric02_analysi s	

CUDA	Deprecated	HIP	Deprecated
cusparseSbsric02_bufferSize		hipsparsSbsric02_bufferSize	
cusparseSbsrilu02		hipsparsSbsrilu02	
cusparseSbsrilu02_analysis		hipsparsSbsrilu02_analysis	
cusparseSbsrilu02_bufferSize		hipsparsSbsrilu02_bufferSize	
cusparseSbsrilu02_numericBoost		hipsparsSbsrilu02_numericBoost	
cusparseScsric02		hipsparsScsric02	
cusparseScsric02_analysis		hipsparsScsric02_analysis	
cusparseScsric02_bufferSize		hipsparsScsric02_bufferSize	
cusparseScsric02_bufferSizeExt		hipsparsScsric02_bufferSizeExt	
cusparseScsrilu02		hipsparsScsrilu02	
cusparseScsrilu02_analysis		hipsparsScsrilu02_analysis	
cusparseScsrilu02_bufferSize		hipsparsScsrilu02_bufferSize	
cusparseScsrilu02_bufferSizeExt		hipsparsScsrilu02_bufferSizeExt	
cusparseScsrilu02_numericBoost		hipsparsScsrilu02_numericBoost	
cusparseXbsric02_zeroPivot		hipsparsXbsric02_zeroPivot	
cusparseXbsrilu02_zeroPivot		hipsparsXbsrilu02_zeroPivot	
cusparseXcsric02_zeroPivot		hipsparsXcsric02_zeroPivot	
cusparseXcsrilu02_zeroPivot		hipsparsXcsrilu02_zeroPivot	
cusparseZbsric02		hipsparsZbsric02	
cusparseZbsric02_analysis		hipsparsZbsric02_analysis	
cusparseZbsric02_bufferSize		hipsparsZbsric02_bufferSize	
cusparseZbsrilu02		hipsparsZbsrilu02	
cusparseZbsrilu02_analysis		hipsparsZbsrilu02_analysis	
cusparseZbsrilu02_bufferSize		hipsparsZbsrilu02_bufferSize	
cusparseZbsrilu02_numericBoost		hipsparsZbsrilu02_numericBoost	
cusparseZcsric02		hipsparsZcsric02	
cusparseZcsric02_analysis		hipsparsZcsric02_analysis	
cusparseZcsric02_bufferSize		hipsparsZcsric02_bufferSize	
cusparseZcsric02_bufferSizeExt		hipsparsZcsric02_bufferSizeExt	
cusparseZcsrilu02		hipsparsZcsrilu02	

CUDA	Deprecated	HIP	Deprecated
cusparseZcsrilu02_analys is		hipsparseZcsrilu02_analys is	
cusparseZcsrilu02_bufferS ize		hipsparseZcsrilu02_buffer Size	
cusparseZcsrilu02_bufferS izeExt		hipsparseZcsrilu02_buffer SizeExt	
cusparseZcsrilu02_numeri cBoost		hipsparseZcsrilu02_numer icBoost	

1.8.9 CUSPARSE Format Conversion Reference

CUDA	Deprecated	HIP	Deprecated
cusparseCbsr2csr		hipsparseCbsr2csr	
cusparseCcsc2dense	✓	hipsparseCcsc2dense	
cusparseCcsr2bsr		hipsparseCcsr2bsr	
cusparseCcsr2csc	✓	hipsparseCcsr2csc	
cusparseCcsr2csr_compre ss		hipsparseCcsr2csr_compre ss	
cusparseCcsr2dense	✓	hipsparseCcsr2dense	
cusparseCcsr2hyb	✓	hipsparseCcsr2hyb	
cusparseCdense2csc	✓	hipsparseCdense2csc	
cusparseCdense2csr	✓	hipsparseCdense2csr	
cusparseChyb2csr	✓	hipsparseChyb2csr	
cusparseCnnz		hipsparseCnnz	
cusparseCnnz_compress		hipsparseCnnz_compress	
cusparseCreateIdentityPer mutation		hipsparseCreateIdentityPer mutation	
cusparseDbsr2csr		hipsparseDbsr2csr	
cusparseDcsc2dense	✓	hipsparseDcsc2dense	
cusparseDcsr2bsr		hipsparseDcsr2bsr	
cusparseDcsr2csc	✓	hipsparseDcsr2csc	
cusparseDcsr2csr_compre ss		hipsparseDcsr2csr_compre ss	
cusparseDcsr2dense	✓	hipsparseDcsr2dense	
cusparseDcsr2hyb	✓	hipsparseDcsr2hyb	
cusparseDdense2csc	✓	hipsparseDdense2csc	
cusparseDdense2csr	✓	hipsparseDdense2csr	
cusparseDhyb2csr	✓	hipsparseDhyb2csr	
cusparseDnnz		hipsparseDnnz	
cusparseDnnz_compress		hipsparseDnnz_compress	
cusparseDpruneCsr2csr		hipsparseDpruneCsr2csr	
cusparseDpruneCsr2csrBy Percentage		hipsparseDpruneCsr2csrB yPercentage	
cusparseDpruneCsr2csrBy Percentage_bufferSizeEx t		hipsparseDpruneCsr2csrB yPercentage_bufferSizeEx t	
cusparseDpruneCsr2csrNn z		hipsparseDpruneCsr2csrN nz	
cusparseDpruneCsr2csrNn zByPercentage		hipsparseDpruneCsr2csrN nzByPercentage	

CUDA	Deprecated	HIP	Deprecated
cusparseDpruneCsr2csr_bufferSizeExt		hipsparsedpruneCsr2csr_bufferSizeExt	
cusparseDpruneDense2csr		hipsparsedpruneDense2csr	
cusparseDpruneDense2csrByPercentage		hipsparsedpruneDense2csrByPercentage	
cusparseDpruneDense2csrByPercentage_bufferSizeExt		hipsparsedpruneDense2csrByPercentage_bufferSizeExt	
cusparseDpruneDense2csrNnz		hipsparsedpruneDense2csrNnz	
cusparseDpruneDense2csrNnzByPercentage		hipsparsedpruneDense2csrNnzByPercentage	
cusparseDpruneDense2csr_bufferSizeExt		hipsparsedpruneDense2csr_bufferSizeExt	
cusparseSbsr2csr		hipsparsedbsr2csr	
cusparseScsc2dense	✓	hipsparsedscsc2dense	
cusparseScsr2bsr		hipsparsedscsr2bsr	
cusparseScsr2csc	✓	hipsparsedscsr2csc	
cusparseScsr2csr_compress		hipsparsedscsr2csr_compress	
cusparseScsr2dense	✓	hipsparsedscsr2dense	
cusparseScsr2hyb	✓	hipsparsedscsr2hyb	
cusparseSdense2csc	✓	hipsparseddense2csc	
cusparseSdense2csr	✓	hipsparseddense2csr	
cusparseShyb2csr	✓	hipsparsedshyb2csr	
cusparseSnnz		hipsparsednnz	
cusparseSnnz_compress		hipsparsednnz_compress	
cusparseSpruneCsr2csr		hipsparsedspruneCsr2csr	
cusparseSpruneCsr2csrByPercentage		hipsparsedspruneCsr2csrByPercentage	
cusparseSpruneCsr2csrByPercentage_bufferSizeExt		hipsparsedspruneCsr2csrByPercentage_bufferSizeExt	
cusparseSpruneCsr2csrNnz		hipsparsedspruneCsr2csrNnz	
cusparseSpruneCsr2csrNnzByPercentage		hipsparsedspruneCsr2csrNnzByPercentage	
cusparseSpruneCsr2csr_bufferSizeExt		hipsparsedspruneCsr2csr_bufferSizeExt	
cusparseSpruneDense2csr		hipsparsedspruneDense2csr	
cusparseSpruneDense2csrByPercentage		hipsparsedspruneDense2csrByPercentage	
cusparseSpruneDense2csrByPercentage_bufferSizeExt		hipsparsedspruneDense2csrByPercentage_bufferSizeExt	
cusparseSpruneDense2csrNnz		hipsparsedspruneDense2csrNnz	
cusparseSpruneDense2csrNnzByPercentage		hipsparsedspruneDense2csrNnzByPercentage	
cusparseSpruneDense2csr_bufferSizeExt		hipsparsedspruneDense2csr_bufferSizeExt	

CUDA	Deprecated	HIP	Deprecated
cusparseXcoo2csr		hipsparseXcoo2csr	
cusparseXcoosortByColumn		hipsparseXcoosortByColumn	
cusparseXcoosortByRow		hipsparseXcoosortByRow	
cusparseXcoosort_bufferSizeExt		hipsparseXcoosort_bufferSizeExt	
cusparseXcscsort		hipsparseXcscsort	
cusparseXcscsort_bufferSizeExt		hipsparseXcscsort_bufferSizeExt	
cusparseXcsr2bsrNnz		hipsparseXcsr2bsrNnz	
cusparseXcsr2coo		hipsparseXcsr2coo	
cusparseXcsrsort		hipsparseXcsrsort	
cusparseXcsrsort_bufferSizeExt		hipsparseXcsrsort_bufferSizeExt	
cusparseZbsr2csr		hipsparseZbsr2csr	
cusparseZcsc2dense	✓	hipsparseZcsc2dense	
cusparseZcsr2bsr		hipsparseZcsr2bsr	
cusparseZcsr2csc	✓	hipsparseZcsr2csc	
cusparseZcsr2csr_compress		hipsparseZcsr2csr_compress	
cusparseZcsr2dense	✓	hipsparseZcsr2dense	
cusparseZcsr2hyb	✓	hipsparseZcsr2hyb	
cusparseZdense2csc	✓	hipsparseZdense2csc	
cusparseZdense2csr	✓	hipsparseZdense2csr	
cusparseZhyb2csr	✓	hipsparseZhyb2csr	
cusparseZnnz		hipsparseZnnz	
cusparseZnnz_compress		hipsparseZnnz_compress	

1.8.10 Unsupported APIs

API	Unsupported	Deprecated
CUSPARSE Reorderings Reference	✓	
CUSPARSE Generic API Reference	✓	

1.9 CUDNN API Supported by HIP

1.9.1 CUDNN Data Types

CUDA	Deprecated	HIP	Deprecated
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	

CUDA	Deprecated	HIP	Deprecated
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_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_BWD_DATA_NO_WORKSPACE	
CUDNN_CONVOLUTION_BWD_DATA_PREFER_FASTEST	✓	HIPDNN_CONVOLUTION_BWD_DATA_PREFER_FASTEST	

CUDA	Deprecated	HIP	Deprecated
CUDNN_CONVOLUTION_BWD_DATA_SPECIFY_WORKSPACE_LIMIT	✓	HIPDNN_CONVOLUTION_BWD_DATA_SPECIFY_WORKSPACE_LIMIT	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_0		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_0	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_1		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_1	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_3		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_3	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_COUNT		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_COUNT	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_FFT		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_FFT	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_FFT_TILING		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_FFT_TILING	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_WINOGRAD		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_WINOGRAD	
CUDNN_CONVOLUTION_BWD_FILTER_ALGO_WINOGRAD_NONFUSED		HIPDNN_CONVOLUTION_BWD_FILTER_ALGO_WINOGRAD_NONFUSED	
CUDNN_CONVOLUTION_BWD_FILTER_NO_WORKSPACE	✓	HIPDNN_CONVOLUTION_BWD_FILTER_NO_WORKSPACE	
CUDNN_CONVOLUTION_BWD_FILTER_PREFER_FASTEST	✓	HIPDNN_CONVOLUTION_BWD_FILTER_PREFER_FASTEST	
CUDNN_CONVOLUTION_BWD_FILTER_SPECIFY_WORKSPACE_LIMIT	✓	HIPDNN_CONVOLUTION_BWD_FILTER_SPECIFY_WORKSPACE_LIMIT	
CUDNN_CONVOLUTION_FWD_ALGO_COUNT		HIPDNN_CONVOLUTION_FWD_ALGO_COUNT	
CUDNN_CONVOLUTION_FWD_ALGO_DIRECT		HIPDNN_CONVOLUTION_FWD_ALGO_DIRECT	
CUDNN_CONVOLUTION_FWD_ALGO_FFT		HIPDNN_CONVOLUTION_FWD_ALGO_FFT	
CUDNN_CONVOLUTION_FWD_ALGO_FFT_TILING		HIPDNN_CONVOLUTION_FWD_ALGO_FFT_TILING	
CUDNN_CONVOLUTION_FWD_ALGO_GEMM		HIPDNN_CONVOLUTION_FWD_ALGO_GEMM	
CUDNN_CONVOLUTION_FWD_ALGO_IMPLICIT_GEMM		HIPDNN_CONVOLUTION_FWD_ALGO_IMPLICIT_GEMM	

CUDA	Deprecated	HIP	Deprecated
CUDNN_CONVOLUTION_FWD_ALGO_IMPLICIT_PRECOMP_GEMM		HIPDNN_CONVOLUTION_FWD_ALGO_IMPLICIT_PRECOMP_GEMM	
CUDNN_CONVOLUTION_FWD_ALGO_WINOGRAD		HIPDNN_CONVOLUTION_FWD_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	

CUDA	Deprecated	HIP	Deprecated
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	

CUDA	Deprecated	HIP	Deprecated
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	
cudnnConvolutionBwdDataAlgoPerf_t		hipdnnConvolutionBwdDataAlgoPerf_t	
cudnnConvolutionBwdDataAlgo_t		hipdnnConvolutionBwdDataAlgo_t	
cudnnConvolutionBwdDataPreference_t	✓	hipdnnConvolutionBwdDataPreference_t	

CUDA	Deprecated	HIP	Deprecated
cudaConvolutionBwdFilterAlgoPerf_t		hipDnnConvolutionBwdFilterAlgoPerf_t	
cudaConvolutionBwdFilterAlgo_t		hipDnnConvolutionBwdFilterAlgo_t	
cudaConvolutionBwdFilterPreference_t	✓	hipDnnConvolutionBwdFilterPreference_t	
cudaConvolutionDescriptor_t		hipDnnConvolutionDescriptor_t	
cudaConvolutionFwdAlgoPerf_t		hipDnnConvolutionFwdAlgoPerf_t	
cudaConvolutionFwdAlgo_t		hipDnnConvolutionFwdAlgo_t	
cudaConvolutionFwdPreference_t	✓	hipDnnConvolutionFwdPreference_t	
cudaConvolutionMode_t		hipDnnConvolutionMode_t	
cudaDataType_t		hipDnnDataType_t	
cudaDirectionMode_t		hipDnnDirectionMode_t	
cudaDropoutDescriptor_t		hipDnnDropoutDescriptor_t	
cudaFilterDescriptor_t		hipDnnFilterDescriptor_t	
cudaHandle_t		hipDnnHandle_t	
cudaIndicesType_t		hipDnnIndicesType_t	
cudaLRNDescriptor_t		hipDnnLRNDescriptor_t	
cudaLRNMode_t		hipDnnLRNMode_t	
cudaMathType_t		hipDnnMathType_t	
cudaNanPropagation_t		hipDnnNanPropagation_t	
cudaOpTensorDescriptor_t		hipDnnOpTensorDescriptor_t	
cudaOpTensorOp_t		hipDnnOpTensorOp_t	
cudaPersistentRNNPlan_t		hipDnnPersistentRNNPlan_t	
cudaPoolingDescriptor_t		hipDnnPoolingDescriptor_t	
cudaPoolingMode_t		hipDnnPoolingMode_t	
cudaRNNAlgo_t		hipDnnRNNAlgo_t	
cudaRNNBiasMode_t		hipDnnRNNBiasMode_t	
cudaRNNDescriptor_t		hipDnnRNNDescriptor_t	
cudaRNNInputMode_t		hipDnnRNNInputMode_t	
cudaRNNMode_t		hipDnnRNNMode_t	
cudaReduceTensorDescriptor_t		hipDnnReduceTensorDescriptor_t	
cudaReduceTensorIndices_t		hipDnnReduceTensorIndices_t	
cudaReduceTensorOp_t		hipDnnReduceTensorOp_t	
cudaSoftmaxAlgorithm_t		hipDnnSoftmaxAlgorithm_t	
cudaSoftmaxMode_t		hipDnnSoftmaxMode_t	
cudaStatus_t		hipDnnStatus_t	
cudaTensorDescriptor_t		hipDnnTensorDescriptor_t	
cudaTensorFormat_t		hipDnnTensorFormat_t	

1.9.2 CUDNN Functions

CUDA	Deprecated	HIP	Deprecated
cudaDnnActivationBackward		hipDnnActivationBackward	
cudaDnnActivationForward		hipDnnActivationForward	
cudaDnnAddTensor		hipDnnAddTensor	
cudaDnnBatchNormalizationBackward		hipDnnBatchNormalizationBackward	
cudaDnnBatchNormalizationForwardInference		hipDnnBatchNormalizationForwardInference	
cudaDnnBatchNormalizationForwardTraining		hipDnnBatchNormalizationForwardTraining	
cudaDnnConvolutionBackwardBias		hipDnnConvolutionBackwardBias	
cudaDnnConvolutionBackwardData		hipDnnConvolutionBackwardData	
cudaDnnConvolutionBackwardFilter		hipDnnConvolutionBackwardFilter	
cudaDnnConvolutionForward		hipDnnConvolutionForward	
cudaDnnCreate		hipDnnCreate	
cudaDnnCreateActivationDescriptor		hipDnnCreateActivationDescriptor	
cudaDnnCreateConvolutionDescriptor		hipDnnCreateConvolutionDescriptor	
cudaDnnCreateDropoutDescriptor		hipDnnCreateDropoutDescriptor	
cudaDnnCreateFilterDescriptor		hipDnnCreateFilterDescriptor	
cudaDnnCreateLRNDescriptor		hipDnnCreateLRNDescriptor	
cudaDnnCreateOpTensorDescriptor		hipDnnCreateOpTensorDescriptor	
cudaDnnCreatePersistentRNPlan	✓	hipDnnCreatePersistentRNPlan	
cudaDnnCreatePoolingDescriptor		hipDnnCreatePoolingDescriptor	
cudaDnnCreateRNNDesciptor		hipDnnCreateRNNDesciptor	
cudaDnnCreateReduceTensorDescriptor		hipDnnCreateReduceTensorDescriptor	
cudaDnnCreateTensorDescriptor		hipDnnCreateTensorDescriptor	
cudaDnnDeriveBNTensorDescriptor		hipDnnDeriveBNTensorDescriptor	
cudaDnnDestroy		hipDnnDestroy	
cudaDnnDestroyActivationDescriptor		hipDnnDestroyActivationDescriptor	
cudaDnnDestroyConvolutionDescriptor		hipDnnDestroyConvolutionDescriptor	

CUDA	Deprecated	HIP	Deprecated
cudaDestroyDropoutDescriptor		hipDestroyDropoutDescriptor	
cudaDestroyFilterDescriptor		hipDestroyFilterDescriptor	
cudaDestroyLRNDescriptor		hipDestroyLRNDescriptor	
cudaDestroyOpTensorDescriptor		hipDestroyOpTensorDescriptor	
cudaDestroyPersistentRNNPlan	✓	hipDestroyPersistentRNNPlan	
cudaDestroyPoolingDescriptor		hipDestroyPoolingDescriptor	
cudaDestroyRNNDesciptor		hipDestroyRNNDesciptor	
cudaDestroyReduceTensorDescriptor		hipDestroyReduceTensorDescriptor	
cudaDestroyTensorDescriptor		hipDestroyTensorDescriptor	
cudaDropoutGetStatesSize		hipDropoutGetStatesSize	
cudaFindConvolutionBackwardDataAlgorithm		hipFindConvolutionBackwardDataAlgorithm	
cudaFindConvolutionBackwardDataAlgorithmEx		hipFindConvolutionBackwardDataAlgorithmEx	
cudaFindConvolutionBackwardFilterAlgorithm		hipFindConvolutionBackwardFilterAlgorithm	
cudaFindConvolutionBackwardFilterAlgorithmEx		hipFindConvolutionBackwardFilterAlgorithmEx	
cudaFindConvolutionForwardAlgorithm		hipFindConvolutionForwardAlgorithm	
cudaFindConvolutionForwardAlgorithmEx		hipFindConvolutionForwardAlgorithmEx	
cudaGetActivationDescriptor		hipGetActivationDescriptor	
cudaGetConvolution2dDescriptor		hipGetConvolution2dDescriptor	
cudaGetConvolution2dForwardOutputDim		hipGetConvolution2dForwardOutputDim	
cudaGetConvolutionBackwardDataAlgorithm	✓	hipGetConvolutionBackwardDataAlgorithm	
cudaGetConvolutionBackwardDataWorkspaceSize		hipGetConvolutionBackwardDataWorkspaceSize	
cudaGetConvolutionBackwardFilterAlgorithm	✓	hipGetConvolutionBackwardFilterAlgorithm	
cudaGetConvolutionBackwardFilterWorkspaceSize		hipGetConvolutionBackwardFilterWorkspaceSize	
cudaGetConvolutionForwardAlgorithm	✓	hipGetConvolutionForwardAlgorithm	

CUDA	Deprecated	HIP	Deprecated
cudaGetConvolutionForwardWorkspaceSize		hipDnnGetConvolutionForwardWorkspaceSize	
cudaGetErrorString		hipDnnGetErrorString	
cudaGetFilter4dDescriptor		hipDnnGetFilter4dDescriptor	
cudaGetFilterNdDescriptor		hipDnnGetFilterNdDescriptor	
cudaGetLRNDescriptor		hipDnnGetLRNDescriptor	
cudaGetOpTensorDescriptor		hipDnnGetOpTensorDescriptor	
cudaGetPooling2dDescriptor		hipDnnGetPooling2dDescriptor	
cudaGetPooling2dForwardOutputDim		hipDnnGetPooling2dForwardOutputDim	
cudaGetRNNDesciptor	✓	hipDnnGetRNNDesciptor	
cudaGetRNNLinLayerBiasParams	✓	hipDnnGetRNNLinLayerBiasParams	
cudaGetRNNLinLayerMatrixParams	✓	hipDnnGetRNNLinLayerMatrixParams	
cudaGetRNNParamsSize	✓	hipDnnGetRNNParamsSize	
cudaGetRNNTrainingReserveSize	✓	hipDnnGetRNNTrainingReserveSize	
cudaGetRNNWorkspaceSize	✓	hipDnnGetRNNWorkspaceSize	
cudaGetReduceTensorDescriptor		hipDnnGetReduceTensorDescriptor	
cudaGetReductionWorkspaceSize		hipDnnGetReductionWorkspaceSize	
cudaGetStream		hipDnnGetStream	
cudaGetTensor4dDescriptor		hipDnnGetTensor4dDescriptor	
cudaGetTensorNdDescriptor		hipDnnGetTensorNdDescriptor	
cudaGetVersion		hipDnnGetVersion	
cudaLRNCrossChannelBackward		hipDnnLRNCrossChannelBackward	
cudaLRNCrossChannelForward		hipDnnLRNCrossChannelForward	
cudaOpTensor		hipDnnOpTensor	
cudaPoolingBackward		hipDnnPoolingBackward	
cudaPoolingForward		hipDnnPoolingForward	
cudaRNNBackwardData	✓	hipDnnRNNBackwardData	
cudaRNNBackwardWeights	✓	hipDnnRNNBackwardWeights	
cudaRNNForwardInference	✓	hipDnnRNNForwardInference	
cudaRNNForwardTraining	✓	hipDnnRNNForwardTraining	
cudaReduceTensor		hipDnnReduceTensor	

CUDA	Deprecated	HIP	Deprecated
cudaScaleTensor		hipDnnScaleTensor	
cudaSetActivationDescriptor		hipDnnSetActivationDescriptor	
cudaSetConvolution2dDescriptor		hipDnnSetConvolution2dDescriptor	
cudaSetConvolutionGroupCount		hipDnnSetConvolutionGroupCount	
cudaSetConvolutionMathType		hipDnnSetConvolutionMathType	
cudaSetConvolutionNdDescriptor		hipDnnSetConvolutionNdDescriptor	
cudaSetDropoutDescriptor		hipDnnSetDropoutDescriptor	
cudaSetFilter4dDescriptor		hipDnnSetFilter4dDescriptor	
cudaSetFilterNdDescriptor		hipDnnSetFilterNdDescriptor	
cudaSetLRNDescriptor		hipDnnSetLRNDescriptor	
cudaSetOpTensorDescriptor		hipDnnSetOpTensorDescriptor	
cudaSetPersistentRNNPlan	✓	hipDnnSetPersistentRNNPlan	
cudaSetPooling2dDescriptor		hipDnnSetPooling2dDescriptor	
cudaSetPoolingNdDescriptor		hipDnnSetPoolingNdDescriptor	
cudaSetRNNDDescriptor	✓	hipDnnSetRNNDDescriptor	
cudaSetRNNDDescriptor_v5	✓	hipDnnSetRNNDDescriptor_v5	
cudaSetRNNDDescriptor_v6	✓	hipDnnSetRNNDDescriptor_v6	
cudaSetReduceTensorDescriptor		hipDnnSetReduceTensorDescriptor	
cudaSetStream		hipDnnSetStream	
cudaSetTensor		hipDnnSetTensor	
cudaSetTensor4dDescriptor		hipDnnSetTensor4dDescriptor	
cudaSetTensor4dDescriptorEx		hipDnnSetTensor4dDescriptorEx	
cudaSetTensorNdDescriptor		hipDnnSetTensorNdDescriptor	
cudaSoftmaxBackward		hipDnnSoftmaxBackward	
cudaSoftmaxForward		hipDnnSoftmaxForward	