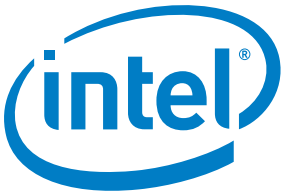

Hetero Streams Library 1.2

Release Notes for release of Hetero Streams Library 1.2

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US

Revision: 1.2

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Contents

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1 Introduction

The Hetero Streams Library is a library that supports task concurrency on heterogeneous platforms.

The concurrency may be across nodes; within a node for small matrix operations; and in the overlapping of computation and communication, particularly for tiled solutions. It relieves the user of complexity in dealing with thread affinitization, offloading, memory types, and memory affinitization. The formal name of this product is Hetero Streams Library, and the casual name is hStreams.

2 Changes

2.1 New features

2.1.1 Added x200 coprocessor support

hStreams library supports x200 coprocessor card. Currently only available on Linux operating system.

2.1.2 Ref_codes and tutorial enabled for x200 coprocessor

Both ref_codes and tutorials are enabled for x200 coprocessor. Currently only available on Linux operating system.

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3 Known issues and limitations

3.1 Using host as a target

The following app initialization APIs below,

- hStreams_app_init()
- hStreams_app_init_domains()

do not yet automatically make use of resources on the host. Use of host resources is supported with the core APIs, below. The value of the physical domain ID for the host as source is HSTR_SRC_PHYS_DOMAIN, and this should be used in the APIs below.

- hStreams_Init()
- hStreams_GetAvailable()
- hStreams_AddLogDomain()
- hStreams_StreamCreate()

3.2 Extended buffer properties

Support for a memory type other than HSTR_MEM_TYPE_NORMAL is not provided and the corresponding API – hStreams_Alloc1DEx() – will return a HSTR_RESULT_NOT_IMPLEMENTED error code if provided with an erroneous memory type in the buffer properties structure.

Further, support for the HSTR_BUF_PROP_AFFINITIZED is not provided and the corresponding API – hStreams_Alloc1DEx() – will return a HSTR_RESULT_NOT_IMPLEMENTED error code if provided with buffer properties structure with this flag set.

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4 Deprecated functionality

4.1 Functionality related to x200 coprocessor support

Some of HSTR_OPTIONS members were marked as deprecated in favor of using hStreams_SetLibrariesToLoad API.

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5 Removed functionality

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