

GROMACS - Task #3157

Task # 3370 (New): Further improvements to GPU Buffer Ops and Comms

Feature # 2891 (In Progress): PME/PP GPU communications

separate PME x receive sync

10/17/2019 02:44 PM - Szilárd Páll

Status:	Closed
Priority:	Normal
Assignee:	Alan Gray
Category:	mdrun
Target version:	
Difficulty:	uncategorized
Description	
<p>As agreed the data dependency sychronization should be implemented on the consumer task's end which is PME spread in the case of PME. PME-only ranks have the receive enqueue wait as soon as MPI returns. Consider assembling a list of events and passed to spread instead.</p> <p>Consider whether having to receive from multiple PP ranks actually makes is more beneficial to overlap some receive with event wait enqueue.</p>	

Associated revisions

Revision c5595a8e - 10/21/2019 11:32 AM - Alan Gray

GPU Coordinate PME/PP Communications

Extends PmePpCommGpu class to provide PP-side support for coordinate transfers from either GPU or CPU to PME task, and adds new PmeCoordinateReceiverGpu class to recieve coordinate data directly to the GPU on the PME task.

Implements part of #2817
Refs TODOs #3157 #3158 #3159

Change-Id: lefa2bdfd9813282ad8b07feeb7691f16880e61a2

History

#1 - 02/06/2020 11:27 AM - Alan Gray

- Status changed from New to Closed

Moved to umbrella task <https://redmine.gromacs.org/issues/3370>