Page: Details | Process: All | Launch: 1 - 122 - global_latency | Add Baseline | Apply Rules | Save as PDF

Current 122 - global_latency (1, 1, 1) **Time:** n/a **Cycles:** n/a **Regs:** 20 **GPU:** Tesla P40 **SM Frequency:** n/a **CC:** 6.1 **Process:** [61091] all_cs_host_pinned

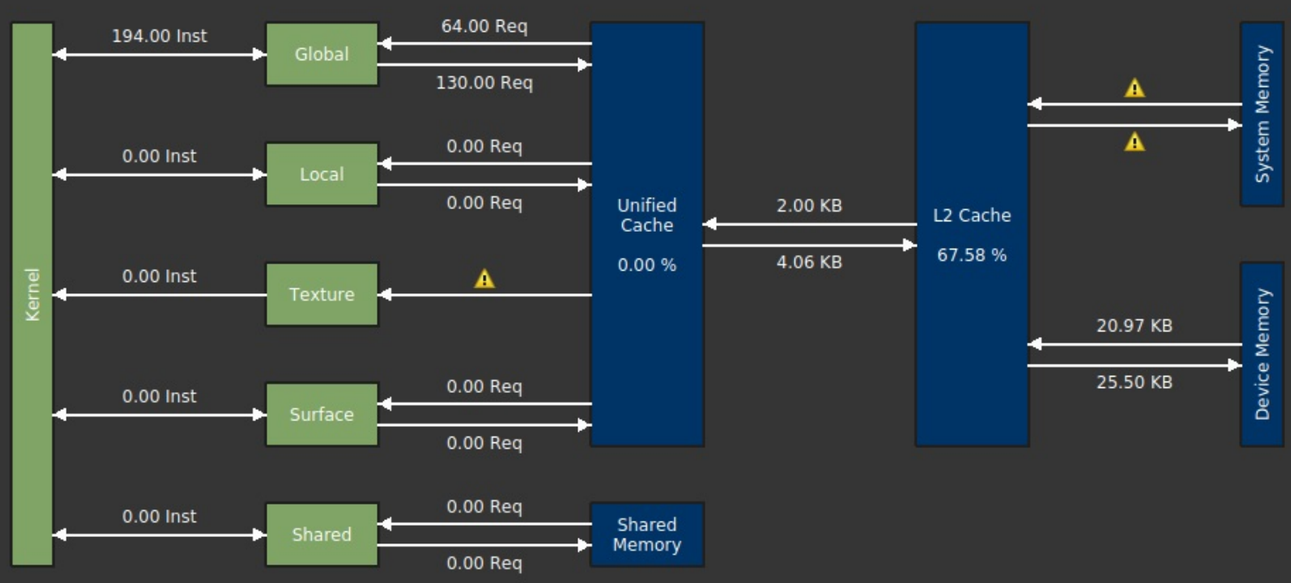
Memory Workload Analysis

All

Detailed analysis of the memory resources of the GPU. Memory can become a limiting factor for the overall kernel performance when fully utilizing the involved hardware units (Mem Busy), exhausting the available communication bandwidth between those units (Max Bandwidth), or by reaching the maximum throughput of issuing memory instructions (Mem Pipes Busy). Detailed chart of the memory units. Detailed tables with data for each memory unit.

Memory Throughput [Mbyte/second]	558.60	Mem Busy [%]	0.17
L1 Hit Rate [%]	0	Max Bandwidth [%]	0.17
L2 Hit Rate [%]	67.58	Mem Pipes Busy [%]	0.18

Memory Chart



Shared Memory

	Instructions	Requests	% Peak	Bank Conflicts
Shared Load	0	0	0	0
Shared Store	0	0	0	0
Shared Atomic	0	-	-	-
Total	0	0	0	0

First-Level (Unified) Cache

	Instructions	SM->TEX Requests	% Peak	Hit Rate	TEX->L2 Requests	% Peak	L2->TEX Returns	% Peak	TEX->SM Returns	% Peak
Global Load Cached	64	0	0	0	-	-	0	0	64	0.00
Global Load Uncached		64	0.06	-	-	-	64	0.00		
Local Load Cached	0	0	0	0	-	-	0	0		
Local Load Uncached		0	0	-	-	-	0	0		
Surface Load	0	0	0	-	-	-	0	0		
Texture Load	0									
Global Store	130	130	0.12	-	130	0.00	-	-	-	-
Local Store	0	0	0	-	0	0	-	-	-	-
Surface Store	0	0	0	-	0	0	-	-	-	-
Global Reduction	0	0	0	-	0	0	-	-	-	-
Surface Reduction	0	0	0	-	0	0	-	-	-	-
Global Atomic	0	0	0	-	0	0	0	0	0	0
Global Atomic Cas		0	0	-					0	0
Surface Atomic	0	0	0	-	0	0	0	0	0	0
Surface Atomic Cas		0	0	-					0	0
Loads	64	64	0.06	0	-	-	64	0.00	64	0.00
Stores	130	130	0.12	-	130	0.00	-	-	-	-
Total	194	194	0.18	0	130	0.00	64	0.00	64	0.00

Second-Level (L2) Cache

	TEX->L2 Requests	% Peak	L2->TEX Returns	% Peak	Total Bytes	Total Throughput
Global Load Cached	-	-	0	0	0	0
Global Load Uncached	-	-	64	0.00	2,048	2,40,42,073.63
Local Load Cached	-	-	0	0	0	0
Local Load Uncached	-	-	0	0	0	0
Surface Load	-	-	0	0	0	0
Texture Load						
Global Store	130	0.01	-	-	4,160	4,88,35,462.06
Local Store	0		-	-	0	0
Surface Store	0	0	-	-	0	0
Global Reduction	0	0	-	-	0	0
Surface Reduction	0	0	-	-	0	0
Global Atomic	0	0	0	0	0	0
Global Atomic Cas						
Surface Atomic	0	0	0	0	0	0
Surface Atomic Cas						
Loads	-	-	64	0.00	2,048	2,40,42,073.63
Stores	130	0.01	-	-	4,160	4,88,35,462.06
Total	130	0.01	64	0.00	6,208	7,28,77,535.69

Device Memory (FB)

	L2<->FB Sectors	% Peak	Bytes	Throughput
Load	671	0.08	21,472	25,20,66,115.70
Store	816	0.09	26,112	30,65,36,438.77
Total	1,487	0.17	47,584	55,86,02,554.47