Result	Size	Time	Cycles	GPU	Attributes
Current 1760 - gpuvmbenchcudaexec1	1 GB, 128, 1024, 1, 1	386.72 ms	335,044,791	0 - NVIDIA GeForce RTX 3060 Laptop GPU	950.00 MHz	[1540142142_memory_coalesced_gemm

Summary | Details | Compute | Control | Instructions | Raw | Session

Compare | Tools | View | Export

GPU Speed Of Light Throughput

High-level overview of the throughput for compute and memory resources of the GPU. For each unit, the throughput reports the achieved percentage of utilization with respect to the theoretical maximum. Breakdowns show the throughput for each individual sub-metric of Compute and Memory to clearly identify the highest contributor. High-level overview of the utilization for compute and memory resources of the GPU presented as a roofline chart.

GPU Speed Of Light Throughput	
Compute Throughput [%]	86.87
Memory Throughput [%]	86.87
L1/TEX Cache Throughput [%]	87.02
L2 Cache Throughput [%]	50.65
Device Memory [%]	6.94

High-Throughput The kernel is utilizing greater than 80.0% of the available compute or memory performance of the device. To further improve performance, work will likely need to be shifted from the most utilized to another unit. Start by analyzing workloads in the Compute Workload Analysis section.

Roofline Analysis The ratio of peak float (fp32) to double (fp64) performance on this device is 64:1. The kernel achieved 0% of this device's fp32 peak performance and 0% of its fp64 peak performance. See the Roofline Analysis topic for more details on roofline analysis.

GPU Throughput

Compute Throughput Breakdown

SM: Inst Executed Pipe Lsu [%]	86.87
SM: Pipe Fma Cycles Active [%]	82.57
SM: Issue Active [%]	44.94
SM: Inst Executed [%]	44.84
SM: Pipe Fma Cycles Active [%]	31.23
SM: Mio Inst Issued [%]	28.97
SM: Pipe Mio Cycles Active [%]	28.48
SM: Inst Executed Pipe Fma [%]	25.78
SM: Inst Executed Pipe Mio [%]	23.72
SM: Inst Executed Pipe Cbu Pred On Any [%]	0.01
SM: Mio Pq Read Cycles Active [%]	0.01
SM: Mio Pq Write Cycles Active [%]	0.01
SM: Inst Executed Pipe Uniform [%]	0.00
SM: Smsp:Sass Thread Inst Executed Op Fp16 Pred On [%]	0.00
SM: Mio Cq Read Cycles Active [%]	0.00
SM: Inst Executed Pipe Ipa [%]	0.00
SM: Inst Executed Pipe Tex [%]	0.00
SM: Inst Executed Pipe Cbu [%]	0.00
SC: Request Cycles Active [%]	0.00
SM: Pipe Uniform Cycles Active [%]	0.00
SM: Pipe Tensor Cycles Active [%]	0.00

Memory Throughput Breakdown

L1: Lsu Requests [%]	86.87
L1: Tex Pipe Lsu Interfaces [%]	45.64
L1: Lsu Wfmaxlat Active [%]	45.40
L1: Lsu Stall Mask [%]	11.20
DRAM: Dram Sectors [%]	7.48
DRAM: Cycles Active [%]	7.39
L2: T Sectors [%]	7.16
L2: Lts Cycles Active [%]	6.94
L2: Xbar:Dram Read Sectors [%]	5.65
L2: Rlt:Cltc Cycles Active [%]	4.47
L2: T Tag Requests [%]	4.45
L2: Lts Cycles Active [%]	4.45
L2: Lts Cycles Active [%]	4.45
L2: Xbar:Dram Write Sectors [%]	3.71
L2: Rlt:Cltc Cycles Active [%]	2.92
L2: Lts Tcs Hit Rate [%]	2.92
L2: Lts Tcs Hit Rate [%]	2.92
L2: Lts Tcs Hit Rate