

Result		Size		Time	Cycles	GPU	SM Frequency		Process	Attributes
Current	577 - convolutionKernel	(555, 444, 1)x(16, 16, 1)	77.08 ms	69,368,135	0 - NVIDIA GeForce RTX 3060 Laptop GPU	900.00 Mhz	[5548]	cuda.exe		
Summary	Details	Source	Context	Comments	Raw	Session	Compare	Tools	View	Export
<p> This table shows all results in the report. Use the column headers to sort the results in this report. Double-click a result to see detailed metrics. Double-click on demangled names to rename it.</p>										
ID	Estimated Speedup	Function Name	Demangled Name	Duration (3.06092e+08)	Runtime Improvement (1.26246e+07)	Compute Throughput	Memory Throughput	# Registers	Grid Size	Block Size
0	5.08	convolutionKernel	convolutionKer...	77.08	3.91	87.78	5.79	40	555, 444, 1	16, 16, 1
1	0.00	findMinMaxKernel	findMinMaxKern...	4.53	0.00	64.31	34.01	18	122871, 1, 1	256, 1, 1
2	0.00	normalizeKernel	normalizeKernel...	13.34	0.00	87.40	22.76	25	245741, 1, 1	256, 1, 1
3	6.18	convolutionKernel	convolutionKern...	140.90	8.71	87.75	5.84	40	555, 444, 1	16, 16, 1
4	0.00	findMinMaxKernel	findMinMaxKern...	4.53	0.00	64.32	33.69	18	122871, 1, 1	256, 1, 1
5	0.00	normalizeKernel	normalizeKernel...	13.35	0.00	87.32	22.75	25	245741, 1, 1	256, 1, 1
6	0.00	convolutionKernel	convolutionKern...	34.51	0.00	87.89	8.81	40	555, 444, 1	16, 16, 1
7	0.00	findMinMaxKernel	findMinMaxKern...	4.53	0.00	64.34	33.70	18	122871, 1, 1	256, 1, 1
8	0.00	normalizeKernel	normalizeKernel...	13.32	0.00	87.37	22.79	25	245741, 1, 1	256, 1, 1
<p>.....</p> <p>The following performance optimization opportunities were discovered for this result. Follow the rule links to see more context on the Details page. Note: Speedup estimates provide upper bounds for the optimization potential of a kernel assuming its overall algorithmic structure is kept unchanged.</p>										

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L2 Slices Workload Imbalance Est. Speedup: 5.08%

One or more L2 Slices have a much higher number of active cycles than the average number of active cycles. Maximum instance value is 9.13% above the average, while the minimum instance value is 2.13% below the average.

The following table lists the metrics that are key performance indicators:

Metric Name	Value	Guidance
lts_cycles_active.avg	3.66649e+07	Balancing the number of active cycles across L2 Slices would result in a more optimized kernel