	Report	Result		Size	Time	Cycles	GPU		SM Frequency	Process	Attributes
■ Current	28	528 - transposeKernelInt ▽		(16, 16, 1)x(32, 32, 1)	53.86 us	54,810	0 - NVIDIA GeForce GTX 1650 with Max-Q Design		1.02 Ghz	[21182] main ⚙	
■ Baseline 1	padding	528 - transposeKernelInt		(16, 16, 1)x(32, 32, 1)	25.41 us	25,681	0 - NVIDIA GeForce GTX 1650 with Max-Q Design		1.01 Ghz	[23857] main ⚙	

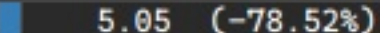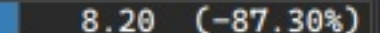Summary   Details   Source   Context   Comments   Raw   Session   🔄 Compare   🛠 Tools   👁 View   ⤓ Export   ☰
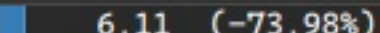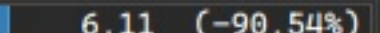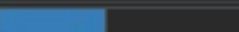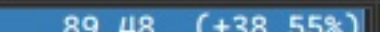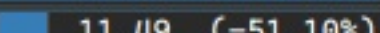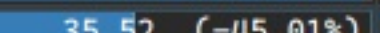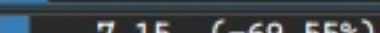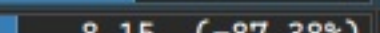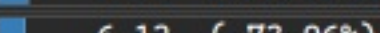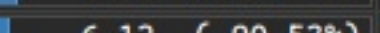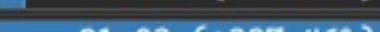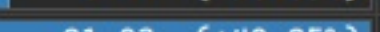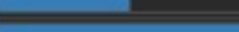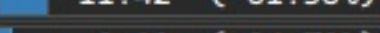
ⓘ This table shows all results in the report. Use the column headers to sort the results in this report. Double-click a result to see detailed metrics. Double-click on demangled names to rename it.

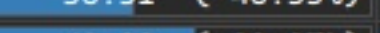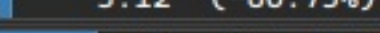| ID ▼	Estimated Speedup	Function Name	Demangled Name	Duration (8.2008e+07)	Runtime Improvement (4.26926e+07)	Compute Throughput	Memory Throughput	# Registers	Grid Size
0	52.47	checkSortedRowWi...	checkSortedRowWi...	0.05 (+81.99%)	0.02	5.05 (−78.52%)	8.20 (−87.30%)	16 (+0.00%)	16, 512,
1	65.18	checkSortedColum...	checkSortedColum...	0.03 (+28.97%)	0.02	6.11 (−73.98%)	6.11 (−90.54%)	16 (+0.00%)	16, 512,
2	23.28	sortRowsKernelInt	sortRowsKernelInt(...	22.63 (+88,966.75%)	5.27	89.48 (+280.87%)	89.48 (+38.55%)	18 (+12.50%)	512, 1,
3	89.13	transposeKernelInt	transposeKernelInt(...	0.05 (+111.96%)	0.05	11.49 (−51.10%)	35.52 (−45.01%)	16 (+0.00%)	16, 16,
4	52.18	checkSortedRowWi...	checkSortedRowWi...	0.08 (+198.99%)	0.04	7.15 (−69.55%)	8.15 (−87.38%)	16 (+0.00%)	16, 512,
5	65.06	checkSortedColum...	checkSortedColum...	0.03 (+29.35%)	0.02	6.12 (−73.96%)	6.12 (−90.53%)	16 (+0.00%)	16, 512,
6	28.37	sortRowsKernelInt	sortRowsKernelInt(...	22.25 (+87,467.76%)	6.31	91.03 (+287.46%)	91.03 (+40.95%)	18 (+12.50%)	512, 1,
7	86.92	transposeKernelInt	transposeKernelInt(...	0.06 (+121.41%)	0.05	11.42 (−51.38%)	35.31 (−45.33%)	16 (+0.00%)	16, 16,
8	87.19	checkSortedRowWi...	checkSortedRowWi...	32.41 (+127,439.17...)	28.25	3.12 (−86.73%)	49.82 (−22.87%)	16 (+0.00%)	16, 512,
9	59.99	checkSortedColum...	checkSortedColum...	4.43 (+17,318.14%)	2.66	23.11 (−1.63%)	40.01 (−38.05%)	16 (+0.00%)	16, 512,

Est. Speedup: 89.13%   locations. The 🌐 CUDA Best Practices Guide has an example on optimizing shared memory accesses.

Shared Load Bank Conflicts   The memory access pattern for shared loads might not be optimal and causes on average a 32.0 - way bank conflict across all 8192 shared load requests. This results in 253952 bank conflicts, which represent
Est. Speedup: 68.81%   96.88% of the overall 262144 wavefronts for shared loads. Check the ▷ Source Counters section for uncoalesced shared loads.

Achieved Occupancy   The difference between calculated theoretical (100.0%) and measured achieved occupancy (89.2%) can be the result of warp scheduling overheads or workload imbalances during the kernel execution. Load imbalances
Est. Speedup: 10.84%   can occur between warps within a block as well as across blocks of the same kernel. See the 🌐 CUDA Best Practices Guide for more details on optimizing occupancy.