

Benchmarks

Total	↑1.8	↑4.5	↑3.5	↑2.7	↑19.8	↑1.5	
2mm	↓1.2	↓1.2	↑1.0 <sup>(1)</sup>	↓1.2	↓3.6		0.72 s
3mm	↓1.3	↓1.3	↑1.1	↓1.0	↓4.1		1.03 s
adi	↓15.1 <sup>(4)</sup>	↓1.1 <sup>(15)</sup>	↑12.5 <sup>(2)</sup>	↑17.7 <sup>(3)</sup>		↑1.5 <sup>(5)</sup>	0.75 s
adist	↑20.2	↑53.1	↑11.7 <sup>(16)</sup>	↑1.4 <sup>(1)</sup>	↑48.5	↑8.7 <sup>(87)</sup>	0.65 s
atax	↑14.9	↑14.8	↑1.0 <sup>(2)</sup>	↑1.0	↑4.6	↑1.0	0.26 s
azimhist	↑12.7 <sup>(1)</sup>	↑22.5 <sup>(1)</sup>	↓1.0	↓1.3 <sup>(4)</sup>	↑36.5 <sup>(1)</sup>	↓40.5 <sup>(18)</sup>	13.87 ms
azimnaiv	↑1.8 <sup>(1)</sup>	↑6.1 <sup>(1)</sup>	↑6.2 <sup>(7)</sup>	↓4.5 <sup>(2)</sup>		↑1.2 <sup>(89)</sup>	0.58 s
bicg	↑15.7	↑15.6	↓1.0 <sup>(3)</sup>	↓1.0 <sup>(1)</sup>	↑21.2	↑1.0 <sup>(1)</sup>	0.25 s
cavtflow	↓4.7 <sup>(4)</sup>	↑3.4 <sup>(8)</sup>	↑1.1 <sup>(1)</sup>	↑1.4 <sup>(1)</sup>		↑2.8 <sup>(2)</sup>	2.34 s
chanflow	↓7.3 <sup>(2)</sup>	↑3.7 <sup>(8)</sup>	↑1.5	↑1.9 <sup>(4)</sup>		↑2.2	4.42 s
cholesky		↓6.8 <sup>(17)</sup>	↑11.6 <sup>(11)</sup>	↑10.1 <sup>(5)</sup>	↑27.1 <sup>(4)</sup>	↑13.4	3.86 s
cholesky2	↑2.7	↑3.5 <sup>(2)</sup>	↓2.0		↓2.3	↑1.0 <sup>(11)</sup>	63.65 ms
clipping	↑26.6	↑97.1	↑4.7 <sup>(3)</sup>	↑1.3 <sup>(7)</sup>	↑97.0	↑4.9	0.92 s
coninteg	↑1.5					↓2.6 <sup>(18)</sup>	0.96 s
conv2d	↑4.0 <sup>(6)</sup>		↑8.1 <sup>(5)</sup>	↑2.3		↑2.2	15.37 s
correlat	↓1.1	↑1.9 <sup>(4)</sup>	↓1.1 <sup>(44)</sup>	↓17.3 <sup>(1)</sup>	↑1.9		97.89 ms
covarian	↓1.5	↑1.7 <sup>(5)</sup>	↓1.4 <sup>(30)</sup>	↓17.1 <sup>(1)</sup>	↑1.9		97.31 ms
covarian2					↓2.8		18.32 ms
crc16			↑535.0	↑375.0 <sup>(1)</sup>	↑76.5		3.27 s
doitgen	↑13.7	↑13.0 <sup>(1)</sup>	↑1.6		↑225.0		0.62 s
durbin	↓4.4 <sup>(7)</sup>	↑1.1 <sup>(22)</sup>	↓1.6 <sup>(39)</sup>	↑6.4	↓5.1 <sup>(3)</sup>		0.69 s
fddt_2d	↑15.3	↑40.3 <sup>(1)</sup>	↑1.9 <sup>(3)</sup>	↑2.8 <sup>(4)</sup>	↑27.8 <sup>(1)</sup>		5.14 s
floydwar		↑31.4	↑15.4 <sup>(3)</sup>	↑4.9	↑373.0		43.06 s
gemm	↑1.2	↑1.2 <sup>(8)</sup>	↓1.0 <sup>(5)</sup>	↓1.3	↑7.2 <sup>(15)</sup>		0.12 s
gemver	↑28.0	↑51.9	↓1.7 <sup>(2)</sup>	↓2.2	↑67.3		0.43 s
gesummv	↑23.5	↑22.6	↓1.3	↓2.9	↑66.5		0.40 s
gramschm	↓30.0	↓5.2 <sup>(18)</sup>	↑4.5	↑5.7			86.48 ms
hdiff	↑22.8	↑95.7	↓1.0 <sup>(2)</sup>	↓1.1	↑60.7		0.25 s
heat3d	↑24.9	↑189.0	↑12.3	↑3.3	↑189.0		34.62 s
jacobi1d	↓1.3	↑13.5	↑1.1	↑4.1			0.33 s
jacobi2d							
lenet	↓2.6 <sup>(2)</sup>		↑9.3 <sup>(1)</sup>	↑2.6 <sup>(1)</sup>			2.39 s
lu		↓4.6	↑3.8	↑4.2	↑57.6 <sup>(2)</sup>		9.02 s
ludcmp		↓6.3	↑4.0	↑4.2			8.97 s
mandel1	↑4.1 <sup>(1)</sup>	↑18.0 <sup>(25)</sup>	↑3.5 <sup>(1)</sup>	↓1.4	↑72.6		0.91 s
mandel2	↑1.8 <sup>(6)</sup>		↑1.1		↑28.3 <sup>(2)</sup>		0.41 s
mlp	↑20.7	↑20.1 <sup>(1)</sup>	↑1.1		↑7.9		70.43 ms
mvt	↑13.7	↑13.6	↑1.0	↑1.0	↑4.6		0.16 s
nbody	↓2.3 <sup>(2)</sup>		↑3.6				0.70 s
npgofast	↓1.2 <sup>(1)</sup>	↑2.8 <sup>(23)</sup>	↑1.4		↑121.0 <sup>(1)</sup>		0.20 s
nussinov			↑369.0	↑764.0	↑859.0 <sup>(1)</sup>		11.98 s
resnet	↑2.9 <sup>(6)</sup>		↓1.0 <sup>(3)</sup>	↓1.2			1.89 s
seidel2d			↑120.0	↑238.0	↑1.4		9.09 s
softmax	↑39.7	↑29.9	↑1.0	↓2.1	↑184.0		1.04 s
spmv	↓55.1 <sup>(6)</sup>	↑9.6 <sup>(34)</sup>	↑183.0 <sup>(9)</sup>	↑112.0 <sup>(1)</sup>			0.38 s
sselfeng	↓20.9 <sup>(2)</sup>	↓7.1	↑10.5	↑11.5			1.89 s
symm		↓3.7	↑22.1 <sup>(1)</sup>	↑6.2	↑58.3 <sup>(2)</sup>		6.17 s
syr2k		↓2.2	↑5.8 <sup>(1)</sup>	↑10.6	↑366.0		10.58 s
syrk	↓17.2 <sup>(6)</sup>	↓2.1	↑3.5	↑9.8	↑256.0		3.85 s
trisolv	↓17.3 <sup>(5)</sup>	↓3.2	↑1.6	↑2.0	↓1.2		93.23 ms
trmm		↑78.8	↑19.0	↑4.2	↑410.0		2.30 s
vadv	↑11.9	↑9.6	↑1.9	↑1.1			1.17 s
	cupy	dace_gpu	numba	pythran	triton	dace_cpu	numpy