

Domains	Total	↑15.8	↑1.5	↑2.8	↑5.9	↑4.3	1.0 s
	Chemistry	↑38.2	↑9.6	↑19.7	↑6.2	↑9.1	0.71 s
	Graphs	↑61.7	↑2.6	↑2.0	↑38.6	↑33.5	6.79 s
	Learning	↑9.2	↓24.3	↓5.8	↑2.6	↓1.3	0.62 s
	LinAlg	↑5.1	↓4.4	↓1.3	↑3.2	↑1.9	0.97 s
	Other	↑17.5			↑19.4	↑28.6	2.11 s
	Physics	↑18.9	↑7.0	↑7.6	↑4.1	↑2.6	5.19 s
	Signals	↑8.9	↑2.8	↑9.3	↑3.7	↑2.1	2.32 s
	Solver	↑5.7	↑3.8	↑3.9	↑3.3	↑6.3	1.01 s
	Weather	↑33.8			↑4.3	↑1.2	1.14 s
Benchmarks	doitgen	↑39.7 <sup>(46)</sup>	↓11.8	↓2.3 <sup>(1)</sup>	↑1.1	compilation	0.47 s <sup>(5)</sup>
	azimhist	↑5.2 <sup>(1)</sup>	no C version	no C version	↑3.3 <sup>(1)</sup>	↑3.1 <sup>(1)</sup>	22.88 ms
	azimnaiv	↑17.0 <sup>(4)</sup>	no C version	no C version	↓1.0	↓3.6	1.15 s
	nussinov	↑612	↑1.1k	↑910	↑420	↑871	20.37 s <sup>(2)</sup>
	floydwar	↑116	↑2.6	↑2.0	↑57.3	↑7.3	84.0 s
	spmv	↑32.7 <sup>(13)</sup>	no C version	no C version	↑26.1	↑153	0.55 s <sup>(1)</sup>
	covarian	↑1.6 <sup>(16)</sup>	↓21.3	↓5.0	↑1.3 <sup>(4)</sup>	↓20.4	80.11 ms
	correlat	↑1.6	↓27.7	↓6.6	↓1.1 <sup>(9)</sup>	validation	61.55 ms <sup>(19)</sup>
	conv2d	↑29.5	no C version	no C version	↑17.5 <sup>(5)</sup>	↑3.4	21.08 s
	resnet	↑24.7	no C version	no C version	↑3.8 <sup>(2)</sup>	compilation	3.05 s <sup>(1)</sup>
	softmax	↑21.4	no C version	no C version	↑1.0	↓1.2	1.57 s
	mlp	↑1.0	no C version	no C version	↓1.0 <sup>(1)</sup>	compilation	19.72 ms
	lenet	↑141 <sup>(12)</sup>	no C version	no C version	↑10.8 <sup>(6)</sup>	↑2.8	3.66 s
	gesummv	↑8.6 <sup>(2)</sup>	↑1.8	↑1.7	↑7.5 <sup>(5)</sup>	↑1.0	0.77 s
	gemver	↑19.1 <sup>(4)</sup>	↑1.5	↑1.9	↑2.1 <sup>(3)</sup>	↑1.3 <sup>(5)</sup>	0.79 s <sup>(5)</sup>
	gemm	↑2.3 <sup>(5)</sup>	↓107	↓70.4	↑1.4 <sup>(7)</sup>	↑1.4	78.72 ms
	mvt	↑1.0	↓47.1	↓40.1	↑1.0 <sup>(1)</sup>	↓1.0 <sup>(1)</sup>	45.22 ms <sup>(1)</sup>
	npgofast	↑14.8 <sup>(1)</sup>	no C version	no C version	↑8.5 <sup>(3)</sup>	compilation	6.51 s
	trmm	↑36.2	↑4.2	↑7.4 <sup>(1)</sup>	↑15.3 <sup>(2)</sup>	↑4.2	4.12 s <sup>(1)</sup>
	2mm	↑2.4 <sup>(2)</sup>	↓929	↓21.5	↑1.5 <sup>(9)</sup>	↑1.3 <sup>(15)</sup>	0.42 s <sup>(13)</sup>
	3mm	↑1.7 <sup>(4)</sup>	↓1.7k	↓14.1	↑1.6 <sup>(6)</sup>	↑1.2 <sup>(33)</sup>	0.46 s <sup>(19)</sup>
	symm	↑4.2	↑6.4	↑10.1	↑11.5	↑4.2	9.88 s
	syr2k	↑10.4	↑10.5	↑27.8	↑5.3	↑5.9	13.94 s
	atax	↓1.2 <sup>(7)</sup>	↓12.0 <sup>(1)</sup>	↓5.4 <sup>(1)</sup>	↓1.0 <sup>(5)</sup>	↓1.1 <sup>(5)</sup>	73.37 ms <sup>(5)</sup>
	syrk	↑10.0	↑9.5	↑28.1	↑3.0	↑5.5	6.58 s
	crc16	↑948 <sup>(2)</sup>	no C version	no C version	↑970	↑932	9.27 s <sup>(2)</sup>
	mandel2	↑1.9 <sup>(5)</sup>	no C version	no C version	↑1.1	compilation	0.75 s
	mandel1	↑2.9	no C version	no C version	↑6.6 <sup>(3)</sup>	↓1.1	1.36 s
	chanflow	↑6.2	no C version	no C version	↑1.4	↑1.4	5.64 s
	nbody	↑11.0 <sup>(2)</sup>	no C version	no C version	↑4.4	compilation	1.31 s
	cavtflow	↑3.0	no C version	no C version	↑1.2	↑1.1	3.78 s <sup>(3)</sup>
	fdtd_2d	↑170 <sup>(104)</sup>	↑3.8	↑4.5	↑4.1	↑1.3	7.4 s
	jacobi2d	↑56.2	↑7.4	↑8.7	↑18.2	↑21.8	174.61 s
	jacobi1d	↑11.4 <sup>(1)</sup>	↑3.5	↑4.3	↓1.2	↑3.1	0.45 s
	heat3d	↑454 <sup>(42)</sup>	↑24.5	↑19.7	↑50.1	↑2.3	50.35 s
	ssselfeng	runtime	no C version	no C version	↑12.8 <sup>(38)</sup>	compilation	3.74 s
	coninteg	↑1.5	no C version	no C version	↑1.1 <sup>(3)</sup>	unsupported	0.9 s <sup>(14)</sup>
	clipping	↑33.1 <sup>(9)</sup>	no C version	no C version	↑14.1 <sup>(4)</sup>	↑2.6	10.64 s
	sthamfft	↑1.2	no C version	no C version	↑2.2 <sup>(3)</sup>	compilation	0.42 s <sup>(4)</sup>
	deriche	↑17.3	↑2.8	↑9.3	↑1.5	↑1.6	2.83 s
	trisolv	↑2.3 <sup>(14)</sup>	↓1.5 <sup>(1)</sup>	↓1.6 <sup>(1)</sup>	↑1.9 <sup>(23)</sup>	↑1.3	0.13 s <sup>(9)</sup>
	gramschm	↑9.1 <sup>(2)</sup>	↑9.3	↑10.8	↑3.0	↑8.1	0.15 s
	ludcmp	↑3.7	↑5.6	↑5.4	↑2.3	↑4.9	13.7 s <sup>(1)</sup>
	lu	↑3.6	↑3.0	↑4.5	↑2.2	↑4.8	13.02 s
	durbin	↑2.2	↑4.9	↑5.9	↓1.1	↑3.2	0.65 s <sup>(1)</sup>
	cholesky2	↑1.7	no C version	no C version	↓1.1	unsupported	64.01 ms <sup>(4)</sup>
	cholesky	↑12.1	↑3.7	↑3.4	↑10.3	↑15.2	7.05 s
	bicg	↓1.1 <sup>(10)</sup>	↓17.1 <sup>(2)</sup>	↓17.5 <sup>(1)</sup>	↓1.1 <sup>(6)</sup>	↓1.1 <sup>(8)</sup>	75.92 ms <sup>(8)</sup>
	adi	↑16.5	↑9.1	↑13.6	↑8.2	↑9.4	0.9 s
	seidel2d	↑185	↑158	↑77.4	↑95.8	↑141	15.87 s <sup>(1)</sup>
	hdiff	↑39.3	no C version	no C version	↑2.9 <sup>(2)</sup>	↑1.7	0.48 s
	vadv	↑29.1 <sup>(15)</sup>	no C version	no C version	↑6.2 <sup>(1)</sup>	↓1.1	2.67 s
		DaCe	GCC	ICC	Numba	Pythran	NumPy