

Name	Lines of Code	Input Size	Description
2mm	221	128 x 128	2 matrix multiplications ( $D=A*B$ ; $E=C*D$ )
fw	153	64 x 64	Floyd-Warshall all-pairs shortest path algorithm
trmm	133	256 x 256	Triangular matrix multiply
correlation	235	512 x 512	Correlation computation
covariance	201	512 x 512	Covariance computation
cholesky	182	256 x 256	Cholesky decomposition
lu	143	256 x 256	LU decomposition
mvt	185	4000	Matrix vector product and transpose
syrk	154	128 x 128	Symmetric rank-k operations
syr2k	160	256 x 256	Symmetric rank-2k operations
fdtd-2d	201	1000 x 1000	2D Finite Different Time Domain Kernel
fdtd-apml	333	128 x 128 x 128	FDTD using Anisotropic Perfectly Matched Layer
jacobi1D	138	10000	1D Jacobi stencil computation
jacobi2D	152	400 x 400	2D Jacobi stencil computation
stencil9†	142	400 x 400	9-point stencil computation
pascal‡	126	100000, 100003	Computation of pascal triangle rows
folding‡	139	50400	Strided sum of consecutive array elements

† Benchmark taken from Chapel Trunk test directory

‡ Benchmark developed from scratch