|  |  |  |  |
| --- | --- | --- | --- |
| **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 | 128 x 128 | 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 | 128 x 128 | LU decomposition |
| mvt | 185 | 4000 | Matrix vector product and transpose |
| syrk | 154 | 128 x 128 | Symmetric rank-k operations |
| syr2k | 160 | 128 x 128 | Symmetric rank-2k operations |
| fdtd-2d | 201 | 1000 x 1000 | 2D Finite Different Time Domain Kernel |
| fdtd-apml | 333 | 64 x 64 x 64 | 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