



SUNDIALS

CVODE

CVODES

ARKODE

IDA

IDAS

KINSOL

N_Vector Interface

SUNMatrix Interface

SUNLinearSolver Interface

SUNNonlinearSolver Interface

Vectors

Serial

Parallel (MPI)

PThreads

OpenMP

OpenMP DEV

CUDA

HIP

RAJA

Kokkos

SYCL

ManyVector

MPI ManyVector

MPI + X

ParHyp
(hypr)

PETSc

Trilinos

Matrices

Dense

Band

Sparse

SuperLU
NRLOC

cuSPARSE

MAGMA Dense

Ginkgo Dense

oneMKL Dense

Kokkos Dense

Linear Solvers

Matrix-based

Dense

Band

LAPACK
Dense

LAPACK
Band

KLU

SuperLU
MT

SuperLU
DIST

cuSOLVER

MAGMA Dense

Ginkgo

oneMKL Dense

Kokkok
Kernels

Matrix-free

SPGMR

SPFGMR

SPTFQMR

SPBCG

PCG

Nonlinear Solvers

Newton

Fixed Point

PETSc
SNES