

实验四：Linkpack 性能测试：

22121630 汪江豪

8 个物理 CPU 单节点测试：

```
-----
- The matrix A is randomly generated for each test.
- The following scaled residual check will be computed:
  ||Ax-b||_oo / ( eps * ( || x ||_oo * || A ||_oo + || b ||_oo ) * N )
- The relative machine precision (eps) is taken to be 1.110223e-16
- Computational tests pass if scaled residuals are less than 16.0
=====
T/V          N    NB    P    Q          Time          Gflops
-----
WR00L2L2      18536  384    1    1          20.20          2.1019e+02
HPL_pdgesv() start time Wed Apr 30 18:06:51 2025
HPL_pdgesv() end time   Wed Apr 30 18:07:12 2025

||Ax-b||_oo/(eps*(||A||_oo*||x||_oo+||b||_oo)*N)= 2.54461665e-03 ..... PASSED
=====

Finished      1 tests with the following results:
               1 tests completed and passed residual checks,
               0 tests completed and failed residual checks,
               0 tests skipped because of illegal input values.

-----
End of Tests.
=====
```

2 物理 CPU 数*2 结点数测试：

```
-----
||Ax-b||_oo/(eps*(||A||_oo*||x||_oo+||b||_oo)*N)= 2.68168395e-03 ..... PASSED
=====
T/V          N    NB    P    Q          Time          Gflops
-----
WR00L2C2      4512  384    1    2           0.87          7.0511e+01
HPL_pdgesv() start time Wed Apr 30 18:24:57 2025
HPL_pdgesv() end time   Wed Apr 30 18:24:57 2025

||Ax-b||_oo/(eps*(||A||_oo*||x||_oo+||b||_oo)*N)= 2.68168395e-03 ..... PASSED
=====
T/V          N    NB    P    Q          Time          Gflops
-----
WR00L2R2      4512  384    1    2           0.83          7.3397e+01
HPL_pdgesv() start time Wed Apr 30 18:24:58 2025
HPL_pdgesv() end time   Wed Apr 30 18:24:59 2025

||Ax-b||_oo/(eps*(||A||_oo*||x||_oo+||b||_oo)*N)= 3.06197887e-03 ..... PASSED
=====

Finished      3 tests with the following results:
               3 tests completed and passed residual checks,
               0 tests completed and failed residual checks,
               0 tests skipped because of illegal input values.

-----
End of Tests.
=====
```