Z01CEFP

NAG Parallel Library Routine Document

Note: before using this routine, please read the Users' Note for your implementation to check for implementation-dependent details. You are advised to enclose any calls to NAG Parallel Library routines between calls to Z01AAFP and Z01ABFP.

1 Description

Z01CEFP can be used to determine the minimum size of the workspace array WORK in the tridiagonalisation routine F08FEFP (PDSYTRD). The value of LWORK in F08FEFP (PDSYTRD) must not be less than the value given by the integer function Z01CEFP.

2 Specification

```
INTEGER FUNCTION Z01CEFP(N, IA, IDESCA)
INTEGER                  N, IA, IDESCA(*)
```

3 Usage

3.1 Definitions

The arguments N, IA, and IDESCA are identical to the definitions in the tridiagonalisation routine F08FEFP (PDSYTRD).

3.2 Global and Local Arguments

The arguments N, IA and IDESCA are treated as local inputs by this routine. However, N, IA and the array elements IDESCA(1) and IDESCA(3),...,IDESCA(8) are global inputs in the tridiagonalisation routine F08FEFP (PDSYTRD).

4 Arguments

1: N — INTEGER   *Local Input*

On entry: the number of columns of the submatrix A_s to be tridiagonalised by F08FEFP (PDSYTRD).

2: IA — INTEGER   *Local Input*

On entry: the row index of the matrix A that identifies the first row of the submatrix A_s to be tridiagonalised by F08FEFP (PDSYTRD).

3: IDESCA(∗) — INTEGER array   *Local Input*

Note: the dimension of the array IDESCA must be at least 9.

On entry: the descriptor array as defined for routine F08FEFP (PDSYTRD). Only the array elements IDESCA(5), IDESCA(7) and IDESCA(9) are referenced by this routine.

5 Errors and Warnings

Not applicable.

6 Further Comments

Not applicable.

7 References

None.

8 Example

None.