NAG Library Routine Document

F06KFF

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of **bold italicised** terms and other implementation-dependent details.

1 Purpose

F06KFF copies a real vector to a complex vector.

2 Specification

```
SUBROUTINE F06KFF (N, X, INCX, Y, INCY)
INTEGER            N, INCX, INCY
REAL (KIND=nag_wp)    X(*)
COMPLEX (KIND=nag_wp) Y(*)
```

3 Description

F06KFF performs the operation

$$y \leftarrow x$$

where x is an n-element real vector, and y is an n-element complex vector scattered with stride INCX and INCY respectively.

4 References

None.

5 Arguments

1: N – INTEGER *Input*

On entry: n, the number of elements in x and y.

2: X($*$) – REAL (KIND=nag_wp) array *Input*

Note: the dimension of the array X must be at least $\max(1, 1 + (N - 1) \times |INCX|)$.

On entry: the n-element vector x.

If INCX > 0, x_i must be stored in $X(1 + (i - 1) \times INCX)$, for $i = 1, 2, \ldots, N$.

If INCX < 0, x_i must be stored in $X(1 - (N - i) \times INCX)$, for $i = 1, 2, \ldots, N$.

Intermediate elements of X are not referenced.

3: INCX – INTEGER *Input*

On entry: the increment in the subscripts of X between successive elements of x.

4: Y($*$) – COMPLEX (KIND=nag_wp) array *Output*

Note: the dimension of the array Y must be at least $\max(1, 1 + (N - 1) \times |INCY|)$.

On exit: the vector y.

If INCY > 0, y_i will be stored in $Y(1 + (i - 1) \times INCY)$, for $i = 1, 2, \ldots, N$.

If INCY < 0, y_i will be stored in $Y(1 - (N - i) \times INCY)$, for $i = 1, 2, \ldots, N$.

Intermediate elements of Y are unchanged.

5:   INCY – INTEGER   *Input*

On entry: the increment in the subscripts of Y between successive elements of y.

6   Error Indicators and Warnings

None.

7   Accuracy

Not applicable.

8   Parallelism and Performance

F06KFF is not threaded in any implementation.

9   Further Comments

None.

10   Example

None.