

NAG Library Routine Document

F06HDF

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

F06HDF performs the operation

$$y \leftarrow \alpha x$$

where x and y are n element complex vectors, and α is a complex scalar.

2 Specification

```
SUBROUTINE F06HDF(N, ALPHA, X, INCX, Y, INCY)
  INTEGER          N, INCX, INCY
  complex*16      ALPHA, X(*), Y(*)
```

3 Description

None.

4 References

None.

5 Parameters

- | | | |
|----|--|---------------|
| 1: | N – INTEGER
<i>On entry:</i> n , the number of elements in x and y . | <i>Input</i> |
| 2: | ALPHA – complex*16
<i>On entry:</i> the scalar α . | <i>Input</i> |
| 3: | X(*) – complex*16 array
Note: the dimension of the array X must be at least $1 + (N - 1) INCX $.
<i>On entry:</i> the incremented array X must contain the n element vector x . | <i>Input</i> |
| 4: | INCX – INTEGER
<i>On entry:</i> the increment in the subscripts of X between successive elements of x . | <i>Input</i> |
| 5: | Y(*) – complex*16 array
Note: the dimension of the array Y must be at least $\max(1, 1 + (N - 1) INCX)$.
<i>On exit:</i> the vector y scattered with a stride of INCX. Intermediate elements of Y are unchanged. | <i>Output</i> |
| 6: | INCY – INTEGER
<i>On entry:</i> the increment in the subscripts of Y between successive elements of y . | <i>Input</i> |

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

None.
