

NAG Library Routine Document

F06GBF (ZDOTC)

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

F06GBF (ZDOTC) returns, via the function name, the value of the scalar product

$$x^H y$$

where x and y are n element complex vectors.

2 Specification

```
complex*16 FUNCTION F06GBF(N, X, INCX, Y, INCY)
      INTEGER          N, INCX, INCY
complex*16          X(*), Y(*)
```

The routine may be called by its BLAS name ***zdotc***.

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: | $X(*)$ – <i>complex*16</i> 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> |
| 3: | INCX – INTEGER
<i>On entry:</i> the increment in the subscripts of X between successive elements of x . | <i>Input</i> |
| 4: | $Y(*)$ – <i>complex*16</i> array
Note: the dimension of the array Y must be at least $1 + (N - 1) INCY $.
<i>On entry:</i> the incremented array Y must contain the n element vector y . | <i>Input</i> |
| 5: | 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.
