

NAG Fortran 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>Input</i> |
| | <i>On entry:</i> n , the number of elements in x and y . | |
| 2: | X(*) – complex*16 array | <i>Input</i> |
| | <i>On entry:</i> the vector x . | |
| 3: | INCX – INTEGER | <i>Input</i> |
| | <i>On entry:</i> the increment in the subscripts of X between successive elements of x . | |
| 4: | Y(*) – complex*16 array | <i>Input</i> |
| | <i>On entry:</i> the vector y . | |
| 5: | INCY – INTEGER | <i>Input</i> |
| | <i>On entry:</i> the increment in the subscripts of Y between successive elements of y . | |

6 Error Indicators and Warnings

None.