

NAG Fortran Library Routine Document

F06QFF

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

F06QFF performs the matrix-copy operation

$$B \leftarrow A$$

where A and B are m by n real general or trapezoidal matrices.

2 Specification

```
SUBROUTINE F06QFF (MATRIX, M, N, A, LDA, B, LDB)
  INTEGER          M, N, LDA, LDB
  double precision A(LDA,*), B(LDB,*)
  CHARACTER*1      MATRIX
```

3 Description

None.

4 References

None.

5 Parameters

- 1: MATRIX – CHARACTER*1 *Input*
On entry: the matrix type:
 if MATRIX = 'G', general matrix;
 if MATRIX = 'U', upper trapezoidal matrix (upper triangular if $m = n$);
 if MATRIX = 'L', lower trapezoidal matrix (lower triangular if $m = n$).
Constraint: MATRIX = 'G', 'U' or 'L'.
- 2: M – INTEGER *Input*
On entry: m , the number of rows of the matrices A and B .
Constraint: $M \geq 0$.
- 3: N – INTEGER *Input*
On entry: n , the number of columns of the matrices A and B .
Constraint: $N \geq 0$.
- 4: A(LDA,*) – **double precision** array *Input*
Note: the second dimension of the array A must be at least $\max(1, N)$.
On entry: the m by n general or trapezoidal matrix A . If MATRIX = 'U', A is upper trapezoidal and the elements of the array below the diagonal are not referenced; if MATRIX = 'L', A is lower trapezoidal and the elements of the array above the diagonal are not referenced.

- 5: LDA – INTEGER *Input*
On entry: the first dimension of the array A as declared in the (sub)program from which F06QFF is called.
Constraint: $LDA \geq \max(1, M)$.
- 6: B(LDB,*) – **double precision** array *Output*
Note: the second dimension of the array B must be at least $\max(1, N)$.
On exit: the m by n general or trapezoidal matrix B . If MATRIX = 'U', B is upper trapezoidal and the elements of the array below the diagonal are not referenced; if MATRIX = 'L', B is lower trapezoidal and the elements of the array above the diagonal are not referenced.
- 7: LDB – INTEGER *Input*
On entry: the first dimension of the array B as declared in the (sub)program from which F06QFF is called.
Constraint: $LDB \geq \max(1, M)$.

6 Error Indicators and Warnings

None.
