

NAG Library Routine Document

X07BBF

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

X07BBF creates a NaN (Not A Number).

2 Specification

```
SUBROUTINE X07BBF (QUIET, X)
INTEGER          QUIET
REAL (KIND=nag_wp) X
```

3 Description

X07BBF sets X to be a quiet or a signalling NaN (Not A Number).

4 References

IEEE (2008) *Standard for Floating-Point Arithmetic IEEE Standard 754-2008* IEEE, New York.

5 Arguments

- 1: QUIET – INTEGER *Input*
On entry: determines whether a quiet or a signalling NaN is to be created. If QUIET = 1, the returned NaN is quiet, otherwise it is signalling. See reference IEEE (2008) for the distinction between the two kinds.
- 2: X – REAL (KIND=nag_wp) *Output*
On exit: the required NaN value.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Parallelism and Performance

X07BBF is not threaded in any implementation.

9 Further Comments

None.

10 Example

See Section 10 in X07AAF.
