

NAG Library Routine Document

X07ABF

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

X07ABF determines whether a floating-point number is a NaN (Not A Number).

2 Specification

```
FUNCTION X07ABF (X)
LOGICAL X07ABF
REAL (KIND=nag_wp) X
```

3 Description

X07ABF returns `.TRUE.` if and only if `X` is a NaN, and returns `.FALSE.` otherwise.

4 References

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

5 Arguments

1: `X` – REAL (KIND=nag_wp) *Input*
On entry: the number whose status is to be determined.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Parallelism and Performance

X07ABF is not threaded in any implementation.

9 Further Comments

None.

10 Example

See Section 10 in X07AAF.
