

NAG Library Function Document

nag_create_nan (x07bbc)

1 Purpose

nag_create_nan (x07bbc) creates a NaN (Not A Number).

2 Specification

```
#include <nag.h>
#include <nagx07.h>
void nag_create_nan (Integer quiet, double *x)
```

3 Description

nag_create_nan (x07bbc) 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** – double * *Output*
On exit: the required NaN value.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Parallelism and Performance

nag_create_nan (x07bbc) is not threaded in any implementation.

9 Further Comments

None.

10 Example

See Section 10 in nag_is_finite (x07aac).
