NAG Library Function Document

nag_get_ieee_exception_mode (x07cac)

1   Purpose

nag_get_ieee_exception_mode (x07cac) gets the current IEEE exception halting mode.

2   Specification

```
#include <nag.h>
#include <nagx07.h>
void nag_get_ieee_exception_mode (Integer exceptionmode[])
```

3   Description

nag_get_ieee_exception_mode (x07cac) gets the current IEEE exception halting mode for the three common exceptions: overflow, divide-by-zero and invalid operation.

4   References

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

5   Arguments

1:      **exceptionmode**[**3**] – Integer   *Output*

On exit: each of the three elements of **exceptionmode** is set to 1 if the corresponding condition will raise an exception, and is set to 0 otherwise. **exceptionmode**[0] concerns floating-point overflow, **exceptionmode**[1] concerns floating-point division by zero, and **exceptionmode**[2] concerns floating-point invalid operation.

6   Error Indicators and Warnings

None.

7   Accuracy

Not applicable.

8   Parallelism and Performance

nag_get_ieee_exception_mode (x07cac) is not threaded in any implementation.

9   Further Comments

None.

10   Example

See Section 10 in nag_is_finite (x07aac).