

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).
