

# NAG Library Function Document

## nag\_set\_ieee\_exception\_mode (x07cbc)

### 1 Purpose

nag\_set\_ieee\_exception\_mode (x07cbc) sets the current IEEE exception halting mode.

### 2 Specification

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

### 3 Description

nag\_set\_ieee\_exception\_mode (x07cbc) sets 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] – const Integer *Input*

*On entry:* each of the three elements of **exceptionmode** must contain any nonzero value if the corresponding condition should raise an exception, and contain 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

Not applicable.

### 9 Further Comments

None.

### 10 Example

See Section 10 in nag\_is\_finite (x07aac).

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