

NAG Library Routine Document

X02ALF

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

X02ALF returns the largest positive floating-point number.

2 Specification

```
FUNCTION X02ALF (  
REAL (KIND=nag_wp) X02ALF
```

3 Description

X02ALF returns the largest positive number in the model of floating-point arithmetic described in the X02 Chapter Introduction. The returned value is equal to $(1 - b^{-p}) \times b^{e_{\max}}$, where b is the arithmetic base (see X02BHF) and e_{\max} is the maximum exponent (see X02BLF) in the model.

4 References

None.

5 Arguments

None.

6 Error Indicators and Warnings

None.

7 Accuracy

None.

8 Parallelism and Performance

X02ALF is not threaded in any implementation.

9 Further Comments

None.

10 Example

See Section 10 in X02AJF.
