NAME

deps – Double-precision machine epsilon

SYNOPSIS

Fortran (77, 90, 95, HPF):

f77 *[flags] file(s) . . . -L/usr/local/lib -lgjl*

DOUBLE PRECISION FUNCTION deps(x)
DOUBLE PRECISION x

C (K&R, 89, 99), C++ (98):

cc *[flags] -I/usr/local/include file(s) . . . -L/usr/local/lib -lgjl*

Use

#include <gampsi.h>

to get this prototype:

fortran_double_precision deps(const fortran_double_precision * x_);

NB: The definition of C/C++ data types **fortran_** *xxx*, and the mapping of Fortran external names to C/C++ external names, is handled by the C/C++ header file. That way, the same function or subroutine name can be used in C, C++, and Fortran code, independent of compiler conventions for mangling of external names in these programming languages.

Last code modification: 27-Dec-1999

DESCRIPTION

Return the smallest positive number such that (**x** + **deps**(**x**)) differs from **x**.

SEE ALSO

aeps(3), **qeps**(3).

AUTHORS

The algorithms and code are described in detail in the paper

Algorithm xxx: Quadruple-Precision Gamma(x) and psi(x) Functions for Real Arguments

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