DPSILN(3)

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NAME

dpsiln - Double-precision psi(x) - ln(x)

SYNOPSIS

Fortran (77, 90, 95, HPF):

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

DOUBLE PRECISION FUNCTION dpsiln(x) DOUBLE PRECISION x

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

 ${f cc}$ [flags] -I/usr/local/include file(s) . . . -L/usr/local/lib -lgjl

Use

#include <gampsi.h>

to get this prototype:

 $for tran_double_precision\ dpsiln(const\ for tran_double_precision\ *\ x_);$

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: 01-Aug-2000

DESCRIPTION

Return the value of psi(x) - ln(x), computed so as to avoid unnecessary subtraction loss.

SEE ALSO

dgamma(3), dpsi(3), gamma(3), psi(3), psiln(3), qgamma(3), qpsi(3), qpsiln(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 in ACM Transactions on Mathematical Software, Volume ??, Number ??, Pages ????--???? and ????--????, 2001, by

Nelson H. F. Beebe

Center for Scientific Computing

University of Utah

Department of Mathematics, 110 LCB

155 S 1400 E RM 233

Salt Lake City, UT 84112-0090

Tel: +1 801 581 5254

FAX: +1 801 581 4148

Email: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org

WWW URL: http://www.math.utah.edu/~beebe

and

James S. Ball

University of Utah

Department of Physics

Salt Lake City, UT 84112-0830

USA

Tel: +1 801 581 8397

FAX: +1 801 581 6256

Email: ball@physics.utah.edu

WWW URL: http://www.physics.utah.edu/people/faculty/ball.html