NAME

sincos, sincosf, sincosl - calculate sin and cos simultaneously

SYNOPSIS

#define _GNU_SOURCE /* See feature_test_macros(7)
*/"
#include <math.h>

void sincos(double *x***, double ****sin***, double ****cos***);**
void sincosf(float *x***, float ****sin***, float ****cos***);**
void sincosl(long double *x***, long double ****sin***, long double ****cos***);**

Link with *-lm*.

DESCRIPTION

Several applications need sine and cosine of the same angle *x*. These functions compute both at the same time, and store the results in**sin* and **cos*.

If *x* is a NaN, a NaN is returned in **sin* and **cos*.

If *x* is positive infinity or negative infinity, a domain error occurs, and a NaN is returned in**sin* and **cos*.

RETURN VALUE

These functions return *void*.

ERRORS

See math_error(7) for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Domain error: *x* is an infinity
An invalid floating-point exception (**FE_INVALID**) is raised.

These functions do not set *errno*.

VERSIONS

These functions first appeared in glibc in version 2.1.

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

Interface	Attribute	Value
sincos(), **sincosf**(), **sincosl**()	Thread safety	MT-Safe

CONFORMING TO

These functions are GNU extensions.

SEE ALSO

cos(3), sin(3), tan(3)

COLOPHON

This page is part of release 4.10 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at https://www.kernel.org/doc/man-pages/.