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Rocky Enterprise Linux 9.2 Manual Pages on command 'cosf.3'

\$ man cosf.3

COS(3) Linux Programmer's Manual COS(3)

NAME

cos, cosf, cosl - cosine function

SYNOPSIS

```
#include <math.h>

double cos(double x);

float cosf(float x);

long double cosl(long double x);
```

Link with -lm.

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

```
cosf(), cosl():

    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

    /* Since glibc 2.19: */ _DEFAULT_SOURCE

    /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

These functions return the cosine of x, where x is given in radians.

RETURN VALUE

On success, these functions return the cosine of x.

If x is a NaN, a NaN is returned.

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

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

errno is set to EDOM (but see BUGS). An invalid floating-point exception (FE_INVALID) is raised.

ATTRIBUTES

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

??

?Interface ? Attribute ? Value ?

??

?cos(), cosf(), cosl() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008.

The variant returning double also conforms to SVr4, 4.3BSD.

BUGS

Before version 2.10, the glibc implementation did not set errno to EDOM when a domain error occurred.

SEE ALSO

acos(3), asin(3), atan(3), atan2(3), ccos(3), sin(3), sincos(3), tan(3)

COLOPHON

This page is part of release 5.10 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/>.