



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

\$ man copysign.3

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

NAME

copysign, copysignf, copysignl - copy sign of a number

SYNOPSIS

```
#include <math.h>
```

```
double copysign(double x, double y);
```

```
float copysignf(float x, float y);
```

```
long double copysignl(long double x, long double y);
```

Link with -lm.

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

copysign(), copysignf(), copysignl():

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

```
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
```

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

DESCRIPTION

These functions return a value whose absolute value matches that of x, but whose sign bit matches that of y.

For example, copysign(42.0, -1.0) and copysign(-42.0, -1.0) both return

-42.0.

RETURN VALUE

On success, these functions return a value whose magnitude is taken from *x* and whose sign is taken from *y*.

If *x* is a NaN, a NaN with the sign bit of *y* is returned.

ERRORS

No errors occur.

ATTRIBUTES

For an explanation of the terms used in this section, see at?

tributes(7).

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?Interface ? Attribute ? Value ?

??

?copysign(), copysignf(), copysignl() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008. This function is defined in IEC 559

(and the appendix with recommended functions in IEEE 754/IEEE 854).

NOTES

On architectures where the floating-point formats are not IEEE 754 compliant, these functions may treat a negative zero as positive.

SEE ALSO

signbit(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/>.

GNU 2017-09-15 COPYSIGN(3)