



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'signbit.3'***

**C:\>man signbit.3**

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

### NAME

signbit - test sign of a real floating-point number

### SYNOPSIS

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

```
int signbit(x);
```

Link with -lm.

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

```
signbit():
```

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

### DESCRIPTION

`signbit()` is a generic macro which can work on all real floating-point types. It returns a nonzero value if the value of `x` has its sign bit set.

This is not the same as `x < 0.0`, because IEEE 754 floating point allows zero to be signed. The comparison `-0.0 < 0.0` is false, but `signbit(-0.0)` will return a nonzero value.

NaNs and infinities have a sign bit.

### RETURN VALUE

The `signbit()` macro returns nonzero if the sign of `x` is negative; otherwise it returns zero.

### ERRORS

No errors occur.

## ATTRIBUTES

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

??

?Interface ? Attribute ? Value ?

??

?signbit() ? Thread safety ? MT-Safe ?

??

## CONFORMING TO

POSIX.1-2001, POSIX.1-2008, C99. This function is defined in IEC 559 (and the appendix with recommended functions in IEEE 754/IEEE 854).

## SEE ALSO

`copysign(3)`

## COLOPHON

This page is part of release 5.05 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

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