



**Full credit is given to the above companies including the Operating System (OS) that this PDF file was generated!**

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

**\$ 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 5.10 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

SIGNBIT(3)