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***Rocky Enterprise Linux 9.2 Manual Pages on command 'exp2.3'***

**\$ man exp2.3**

EXP2(3) Linux Programmer's Manual EXP2(3)

## NAME

exp2, exp2f, exp2l - base-2 exponential function

## SYNOPSIS

```
#include <math.h>

double exp2(double x);

float exp2f(float x);

long double exp2l(long double x);
```

Link with -lm.

Feature Test Macro Requirements for glibc (see feature\_test\_macros(7)):

```
exp2(), exp2f(), exp2l():

_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

## DESCRIPTION

These functions return the value of 2 raised to the power of x.

## RETURN VALUE

On success, these functions return the base-2 exponential value of x.

For various special cases, including the handling of infinity and NaN, as well as overflows and underflows, see exp(3).

## ERRORS

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

For a discussion of the errors that can occur for these functions, see exp(3).

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 ?

??

?exp2(), exp2f(), exp2l() ? Thread safety ? MT-Safe ?

??

## CONFORMING TO

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

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

## SEE ALSO

[cbrt\(3\)](#), [cexp2\(3\)](#), [exp\(3\)](#), [exp10\(3\)](#), [sqrt\(3\)](#)

## 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/>.

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