NAME

log2, log2f, log2l − base-2 logarithmic function

LIBRARY

Math library (*libm*, *−lm*)

SYNOPSIS

```
#include <math.h>

double log2(double x);
float log2f(float x);
long double log2l(long double x);
```

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

log2(), **log2f**(), **log2l**():
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

DESCRIPTION

These functions return the base 2 logarithm of *x*.

RETURN VALUE

On success, these functions return the base 2 logarithm of *x*.

For special cases, including where *x* is 0, 1, negative, infinity, or NaN, see **log**(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 **log**(3).

VERSIONS

These functions were added in glibc 2.1.

ATTRIBUTES

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

Interface	Attribute	Value
log2(), **log2f**(), **log2l**()	Thread safety	MT-Safe

STANDARDS

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

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

SEE ALSO

cbrt(3), **clog2**(3), **log**(3), **log10**(3), **sqrt**(3)