



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 'casinh.3'

\$ man casinh.3

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

NAME

casinh, casinhf, casinhl - complex arc sine hyperbolic

SYNOPSIS

```
#include <complex.h>

double complex casinh(double complex z);

float complex casinhf(float complex z);

long double complex casinhl(long double complex z);

Link with -lm.
```

DESCRIPTION

These functions calculate the complex arc hyperbolic sine of z. If $y = \text{casinh}(z)$, then $z = \text{csinh}(y)$. The imaginary part of y is chosen in the interval $[-\pi/2, \pi/2]$.

One has:

$$\text{casinh}(z) = \text{clog}(z + \text{csqrt}(z * z + 1))$$

VERSIONS

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 ?

??

?casinh(), casinhf(), casinhl() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

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

SEE ALSO

asinh(3), cabs(3), cimag(3), csinh(3), complex(7)

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/>.

2015-04-19

CASINH(3)