



Linux Ubuntu 26.04 Manual Pages on command 'casinhf.3'

\$ man casinhf.3

casinh(3) Library Functions Manual casinh(3)

NAME _____

casinh, casinhf, casinhl - complex arc sine hyperbolic

LIBRARY

Math library (libm, -lm)

SYNOPSIS

```
#include <complex.h>
```

```
double complex casinh(double complex z);
```

```
float complex casinhf(float complex z);
```

```
long double complex casinhl(long double complex z);
```

DESCRIPTION

These functions calculate the complex arc hyperbolic sine of z . If $y = \text{casinh}(z)$, then

$z = c \sinh(y)$. The imaginary part of y is chosen in the interval $[-\pi/2, \pi/2]$.

One has:

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

ATTRIBUTES

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

[illegible]

?	Interface	?	Attribute	?	Value	?
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[illegible]

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

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STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

SEE ALSO

[asinh\(3\)](#), [cabs\(3\)](#), [cimag\(3\)](#), [csinh\(3\)](#), [complex\(7\)](#)

Linux man-pages 6.17

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[casinh\(3\)](#)