

NAME

casin, casinf, casinl - complex arc sine

SYNOPSIS

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

```
double complex casin(double complex z);
```

```
float complex casinf(float complex z);
```

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

Link with *-lm*.

DESCRIPTION

The **casin()** function calculates the complex arc sine of z . If $y = c \operatorname{asin}(z)$, then $z = c \operatorname{sin}(y)$. The real part of y is chosen in the interval $[-\pi/2, \pi/2]$.

One has:

$$\operatorname{casin}(z) = -i \operatorname{clog}(iz + \operatorname{csqrt}(1 - z * z))$$
VERSIONS

These functions first appeared in glibc in version 2.1.

CONFORMING TO

C99.

SEE ALSO

[clog\(3\)](#), [csin\(3\)](#), [complex\(7\)](#)

COLOPHON

This page is part of release 3.74 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 <http://www.kernel.org/doc/man-pages/>.