

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

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

One has:

$$\text{casin}(z) = -i \log(iz + \text{csqrt}(1 - z * z))$$

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
casin() , casinf() , casinl()	Thread safety	MT-Safe

CONFORMING TO

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

SEE ALSO

clog(3), **csin(3)**, **complex(7)**

COLOPHON

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