

NAME

csin, csinf, csinl – complex sine function

LIBRARY

Math library (*libm*, *-lm*)

SYNOPSIS

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

```
double complex csin(double complex z);
```

```
float complex csinf(float complex z);
```

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

DESCRIPTION

These functions calculate the complex sine of z .

The complex sine function is defined as:

$$\operatorname{csin}(z) = (\exp(i * z) - \exp(-i * z)) / (2 * i)$$

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
csin() , csinf() , csinl()	Thread safety	MT-Safe

STANDARDS

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

SEE ALSO

cabs(3), **casin(3)**, **ccos(3)**, **ctan(3)**, **complex(7)**