

**NAME**

csin, csinf, csinl - complex sine function

**SYNOPSIS**

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

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

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

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

Link with *-lm*.

**DESCRIPTION**

The complex sine function is defined as:

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

These functions first appeared in glibc in version 2.1.

**CONFORMING TO**

C99.

**SEE ALSO**

[cabs\(3\)](#), [casin\(3\)](#), [ccos\(3\)](#), [ctan\(3\)](#), [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/>.