NAME
      csinh, csinhf, csinhl – complex hyperbolic sine

LIBRARY
      Math library (*libm*, *−lm*)

SYNOPSIS
      #include <complex.h>

      double complex csinh(double complex *z***);**
      float complex csinhf(float complex *z***);**
      long double complex csinhl(long double complex *z***);**

DESCRIPTION
      These functions calculate the complex hyperbolic sine of *z*.

      The complex hyperbolic sine function is defined as:

```
csinh(z) = (exp(z)−exp(−z))/2
```

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
csinh(), **csinhf**(), **csinhl**()	Thread safety	MT-Safe

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

SEE ALSO
      cabs(3), **casinh**(3), **ccosh**(3), **ctanh**(3), **complex**(7)