NAME
ccosh, ccoshf, ccoshl – complex hyperbolic cosine

LIBRARY
Math library (*libm*, *−lm*)

SYNOPSIS
#include <complex.h>

double complex ccosh(double complex *z***);**
float complex ccoshf(float complex *z***);**
long double complex ccoshl(long double complex *z***);**

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

The complex hyperbolic cosine function is defined as:

```
ccosh(z) = (exp(z)+exp(-z))/2
```

VERSIONS
These functions were added in glibc 2.1.

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

SEE ALSO
cabs(3), **cacosh**(3), **csinh**(3), **ctanh**(3), **complex**(7)