

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:

$$\text{ccosh}(z) = (\exp(z) + \exp(-z)) / 2$$

STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

SEE ALSO

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