

NAME

csqrt, csqrtf, csqrtl – complex square root

LIBRARY

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

SYNOPSIS

#include <complex.h>

double complex csqrt(double complex z);

float complex csqrtf(float complex z);

long double complex csqrtl(long double complex z);

DESCRIPTION

These functions calculate the complex square root of *z*, with a branch cut along the negative real axis. (That means that *csqrt(-1+eps*I)* will be close to *I* while *csqrt(-1-eps*I)* will be close to *-I*, if *eps* is a small positive real number.)

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
csqrt(), csqrtf(), csqrtl()	Thread safety	MT-Safe

STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

SEE ALSO

cabs(3), **cexp(3)**, **complex(7)**