

NAME

`csqrt`, `csqrtf`, `csqrtl` - complex square root

SYNOPSIS

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

```
double complex csqrt(double complex z);
```

```
float complex csqrtf(float complex z);
```

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

Link with `-lm`.

DESCRIPTION

Calculate the square root of a given complex number, with nonnegative real part, and 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.)

VERSIONS

These functions first appeared in glibc in version 2.1.

CONFORMING TO

C99.

SEE ALSO

[cabs\(3\)](#), [cexp\(3\)](#), [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/>.