NAME

cproj, cprojf, cprojl - project into Riemann Sphere

SYNOPSIS

#include <complex.h>

double complex cproj(double complex z**);**
float complex cprojf(float complex z**);**
long double complex cprojl(long double complex z**);**

Link with *-lm*.

DESCRIPTION

These functions project a point in the plane onto the surface of a Riemann Sphere, the one-point compactification of the complex plane. Each finite point z projects to z itself. Every complex infinite value is projected to a single infinite value, namely to positive infinity on the real axis.

VERSIONS

These functions first appeared in glibc in version 2.1.

ATTRIBUTES

Multithreading (see pthreads(7))

The **cproj**(), **cprojf**(), and **cprojl**() functions are thread-safe.

CONFORMING TO

C99.

NOTES

In glibc 2.11 and earlier, the implementation does something different (a *stereographic* projection onto a Riemann Sphere).

SEE ALSO

cabs(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/.