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

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

Interface	Attribute	Value
cproj(), **cprojf**(), **cprojl**()	Thread safety	MT-Safe

CONFORMING TO

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

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 4.16 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 https://www.kernel.org/doc/man−pages/.