

NAME

creal, crealf, creall – get real part of a complex number

LIBRARY

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

SYNOPSIS

#include <complex.h>

double creal(double complex z);

float crealf(float complex z);

long double creall(long double complex z);

DESCRIPTION

These functions return the real part of the complex number *z*.

One has:

$$z = \text{creal}(z) + I * \text{cimag}(z)$$

ATTRIBUTES

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

Interface	Attribute	Value
creal(), crealf(), creall()	Thread safety	MT-Safe

VERSIONS

GCC supports also `__real__`. That is a GNU extension.

STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

SEE ALSO

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