

NAME

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

SYNOPSIS

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

```
double creal(double complex z);
```

```
float crealf(float complex z);
```

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

Link with `-lm`.

DESCRIPTION

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

One has:

$$z = \text{creal}(z) + I * \text{cimag}(z)$$
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
creal(), crealf(), creall()	Thread safety	MT-Safe

CONFORMING TO

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

NOTES

The gcc supports also `__real__`. That is a GNU extension.

SEE ALSO

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