

**NAME**

`cimag`, `cimagf`, `cimagl` - get imaginary part of a complex number

**SYNOPSIS**

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

```
double cimag(double complex z);
float cimagf(float complex z);
long double cimagl(long double complex z);
```

Link with `-lm`.

**DESCRIPTION**

The `cimag()` function returns the imaginary 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**

**Multithreading** (see `pthread(7)`)

The `cimag()`, `cimagf()`, and `cimagl()` functions are thread-safe.

**CONFORMING TO**

C99.

**NOTES**

gcc also supports `__imag__`. That is a GNU extension.

**SEE ALSO**

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