

NAME

`ccos`, `ccosf`, `ccosl` – complex cosine function

SYNOPSIS

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

```
double complex ccos(double complex z);
```

```
float complex ccosf(float complex z);
```

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

Link with `-lm`.

DESCRIPTION

These functions calculate the complex cosine of z .

The complex cosine function is defined as:

$$\operatorname{ccos}(z) = (\exp(i * z) + \exp(-i * z)) / 2$$

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 |
|---|---------------|---------|
| <code>ccos()</code> , <code>ccosf()</code> , <code>ccosl()</code> | Thread safety | MT-Safe |

CONFORMING TO

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

SEE ALSO

[cabs\(3\)](#), [cacos\(3\)](#), [csin\(3\)](#), [ctan\(3\)](#), [complex\(7\)](#)

COLOPHON

This page is part of release 5.05 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/>.