

**NAME**

`cpow`, `cpowf`, `cpowl` – complex power function

**SYNOPSIS**

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

```
double complex cpow(double complex x, complex double z);
```

```
float complex cpowf(float complex x, complex float z);
```

```
long double complex cpowl(long double complex x,  
                           complex long double z);
```

Link with `-lm`.

**DESCRIPTION**

These functions calculate  $x$  raised to the power  $z$  (with a branch cut for  $x$  along the negative 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
<code>cpow()</code> , <code>cpowf()</code> , <code>cpowl()</code>	Thread safety	MT-Safe

**CONFORMING TO**

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

**SEE ALSO**

[cabs\(3\)](#), [pow\(3\)](#), [complex\(7\)](#)

**COLOPHON**

This page is part of release 5.02 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/>.