NAME

cexp, cexpf, cexpl − complex exponential function

LIBRARY

Math library (*libm*, *−lm*)

SYNOPSIS

#include <complex.h>

double complex cexp(double complex *z***);**
float complex cexpf(float complex *z***);**
long double complex cexpl(long double complex *z***);**

DESCRIPTION

These functions calculate e (2.71828..., the base of natural logarithms) raised to the power of *z*.

One has:

```
cexp(I * z) = ccos(z) + I * csin(z)
```

VERSIONS

These functions were added in glibc 2.1.

ATTRIBUTES

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

Interface	Attribute	Value
cexp(), **cexpf**(), **cexpl**()	Thread safety	MT-Safe

STANDARDS

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

SEE ALSO

cabs(3), **cexp2**(3), **clog**(3), **cpow**(3), **complex**(7)