a strip mathematically unbounded along the real axis and in the interval [−*i*π/2, +*i*π/2] along the imaginary axis.

*ccosh*      The ccosh function computes the complex hyperbolic cosine, the csinh
*csinh*   function computes the complex hyperbolic sine, and the ctanh function com-
*ctanh*   putes the complex hyperbolic tangent.

## Exponential and Logarithmic Functions

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

double complex clog(double complex z);
float complex clogf(float complex z);
long double complex clogl(long double complex z);
```

*cexp*   The cexp function computes the complex base-*e* exponential value.

*clog*      The clog function computes the complex natural (base-*e*) logarithm, with a branch cut along the negative real axis. The return value lies in a strip mathematically unbounded along the real axis and in the interval [−*i*π, +*i*π] along the imaginary axis.

## Power and Absolute-Value Functions

```
double cabs(double complex z);
float cabsf(float complex z);
long double cabsl(long double complex z);

double complex cpow(double complex x,
                    double complex y);
float complex cpowf(float complex x,
                    float complex y);
long double complex cpowl(long double complex x,
                          long double complex y);

double complex csqrt(double complex z);
float complex csqrtf(float complex z);
long double complex csqrtl(long double complex z);
```

*cabs*   The cabs function computes the complex absolute value.

*cpow*      The cpow function returns x raised to the power y, with a branch cut for the first parameter along the negative real axis.

*csqrt*      The csqrt function computes the complex square root, with a branch cut along the negative real axis. The return value lies in the right half-plane (including the imaginary axis).