

**NAME**

`clog10`, `clog10f`, `clog10l` – base-10 logarithm of a complex number

**SYNOPSIS**

```
#define _GNU_SOURCE      /* See feature_test_macros(7) */
#include <complex.h>
```

```
double complex clog10(double complex z);
float complex clog10f(float complex z);
long double complex clog10l(long double complex z);
```

Link with `-lm`.

**DESCRIPTION**

The call `clog10(z)` is equivalent to:

$$\text{clog}(z) / \log(10)$$

or equally:

$$\log_{10}(\text{cabs}(c)) + I * \text{carg}(c) / \log(10)$$

The other functions perform the same task for *float* and *long double*.

Note that  $z$  close to zero will cause an overflow.

**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>clog10()</code> , <code>clog10f()</code> , <code>clog10l()</code>	Thread safety	MT-Safe

**CONFORMING TO**

These functions are GNU extensions. The identifiers are reserved for future use in C99 and C11.

**SEE ALSO**

`cabs(3)`, `cexp(3)`, `clog(3)`, `clog2(3)`, `complex(7)`

**COLOPHON**

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