NAME

llrint, **llrintf**, **llrintl**, **lrint**, **lrintf**, **lrintl** - convert to integer

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

#include <math.h>

long long
llrint(*double x*);

long long
llrintf(*float x*);

long long
llrintl(*long double x*);

long
lrint(*double x*);

long
lrintf(*float x*);

long
lrintl(*long double x*);

DESCRIPTION

The **lrint**() function returns the integer nearest to its argument *x* according to the current rounding mode. If the rounded result is too large to be represented as a *long* value, an invalid exception is raised and the return value is undefined. Otherwise, if *x* is not an integer, **lrint**() raises an inexact exception. When the rounded result is representable as a *long*, the expression **lrint**(*x*) is equivalent to (*long*)**rint**(*x*) (although the former may be more efficient).

The **llrint**(), **llrintf**(), **llrintl**(), **lrintf**(), and **lrintl**() functions differ from **lrint**() only in their input and output types.

SEE ALSO

lround(3), math(3), rint(3), round(3)

STANDARDS

These functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

The **llrint**(), **llrintf**(), **lrint**(), and **lrintf**() routines first appeared in FreeBSD 5.4. The long double variants were introduced in FreeBSD 8.0.