NAME

ffs, ffsl, ffsll − find first bit set in a word

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

```
#include <strings.h>

int ffs(int i);

#include <string.h>

int ffsl(long i);
int ffsll(long long i);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros**(7)):

ffs():
  Since glibc 2.12:
    _XOPEN_SOURCE >= 700
      || ! (_POSIX_C_SOURCE >= 200809L)
      || /* glibc >= 2.19: */ _DEFAULT_SOURCE
      || /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
  Before glibc 2.12:
    none

ffsl(), **ffsll**():
  Since glibc 2.27:
    _DEFAULT_SOURCE
  Before glibc 2.27:
    _GNU_SOURCE

DESCRIPTION

The **ffs**() function returns the position of the first (least significant) bit set in the word *i*. The least significant bit is position 1 and the most significant position is, for example, 32 or 64. The functions **ffsll**() and **ffsl**() do the same but take arguments of possibly different size.

RETURN VALUE

These functions return the position of the first bit set, or 0 if no bits are set in *i*.

ATTRIBUTES

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

Interface	Attribute	Value
ffs(), **ffsl**(), **ffsll**()	Thread safety	MT-Safe

STANDARDS

ffs(): POSIX.1-2001, POSIX.1-2008, 4.3BSD.

The **ffsl**() and **ffsll**() functions are glibc extensions.

NOTES

BSD systems have a prototype in<*string .h*>.

SEE ALSO

memchr(3)