

**NAME**

**ffs**, **ffsl**, **ffsll**, **fls**, **flsl**, **flsll** - find first or last bit set in a bit string

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

```
#include <strings.h>
```

*int*

```
ffs(int value);
```

*int*

```
ffsl(long value);
```

*int*

```
ffsll(long long value);
```

*int*

```
fls(int value);
```

*int*

```
flsl(long value);
```

*int*

```
flsll(long long value);
```

**DESCRIPTION**

The **ffs**(), **ffsl**() and **ffsll**() functions find the first (least significant) bit set in *value* and return the index of that bit.

The **fls**(), **flsl**() and **flsll**() functions find the last (most significant) bit set in *value* and return the index of that bit.

Bits are numbered starting at 1, the least significant bit. A return value of zero from any of these functions means that the argument was zero.

**SEE ALSO**

bitstring(3), bitset(9)

**HISTORY**

The **ffs()** function appeared in 4.3BSD. Its prototype existed previously in `<string.h>` before it was moved to `<strings.h>` for IEEE Std 1003.1-2001 ("POSIX.1") compliance.

The **ffsl()**, **fls()** and **flsl()** functions appeared in FreeBSD 5.3. The **ffsll()** and **flsll()** functions appeared in FreeBSD 7.1.