

**NAME**

`sem_getvalue` – get the value of a semaphore

**SYNOPSIS**

```
#include <semaphore.h>
```

```
int sem_getvalue(sem_t *sem, int *sval);
```

Link with `-pthread`.

**DESCRIPTION**

`sem_getvalue()` places the current value of the semaphore pointed to *sem* into the integer pointed to by *sval*.

If one or more processes or threads are blocked waiting to lock the semaphore with `sem_wait(3)`, POSIX.1 permits two possibilities for the value returned in *sval*: either 0 is returned; or a negative number whose absolute value is the count of the number of processes and threads currently blocked in `sem_wait(3)`. Linux adopts the former behavior.

**RETURN VALUE**

`sem_getvalue()` returns 0 on success; on error, `-1` is returned and *errno* is set to indicate the error.

**ERRORS****EINVAL**

*sem* is not a valid semaphore.

**ATTRIBUTES**

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
<code>sem_getvalue()</code>	Thread safety	MT-Safe

**CONFORMING TO**

POSIX.1-2001, POSIX.1-2008.

**NOTES**

The value of the semaphore may already have changed by the time `sem_getvalue()` returns.

**SEE ALSO**

[sem\\_post\(3\)](#), [sem\\_wait\(3\)](#), [sem\\_overview\(7\)](#)

**COLOPHON**

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