

NAME

sigpause – atomically release blocked signals and wait for interrupt

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <signal.h>

int sigpause(int sigmask); /* BSD (but see NOTES) */
int sigpause(int sig);    /* System V / UNIX 95 */
```

DESCRIPTION

Don't use this function. Use **sigsuspend(2)** instead.

The function **sigpause()** is designed to wait for some signal. It changes the process's signal mask (set of blocked signals), and then waits for a signal to arrive. Upon arrival of a signal, the original signal mask is restored.

RETURN VALUE

If **sigpause()** returns, it was interrupted by a signal and the return value is `-1` with *errno* set to **EINTR**.

ATTRIBUTES

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

Interface	Attribute	Value
sigpause()	Thread safety	MT-Safe

STANDARDS

The System V version of **sigpause()** is standardized in POSIX.1-2001. It is also specified in POSIX.1-2008, where it is marked obsolete.

NOTES**History**

The classical BSD version of this function appeared in 4.2BSD. It sets the process's signal mask to *sigmask*. UNIX 95 standardized the incompatible System V version of this function, which removes only the specified signal *sig* from the process's signal mask. The unfortunate situation with two incompatible functions with the same name was solved by the **sigsuspend(2)** function, that takes a *sigset_t* * argument (instead of an *int*).

Linux notes

On Linux, this routine is a system call only on the Sparc (sparc64) architecture.

glibc uses the BSD version if the **_BSD_SOURCE** feature test macro is defined and none of **_POSIX_SOURCE**, **_POSIX_C_SOURCE**, **_XOPEN_SOURCE**, **_GNU_SOURCE**, or **_SVID_SOURCE** is defined. Otherwise, the System V version is used, and feature test macros must be defined as follows to obtain the declaration:

- Since glibc 2.26: **_XOPEN_SOURCE** \geq 500
- glibc 2.25 and earlier: **_XOPEN_SOURCE**

Since glibc 2.19, only the System V version is exposed by *<signal.h>*; applications that formerly used the BSD **sigpause()** should be amended to use **sigsuspend(2)**.

SEE ALSO

kill(2), **sigaction(2)**, **sigprocmask(2)**, **sigsuspend(2)**, **sigblock(3)**, **sigvec(3)**, **feature_test_macros(7)**