

NAME

socketpair - create a pair of connected sockets

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

```
#include <sys/types.h>
#include <sys/socket.h>
```

int

```
socketpair(int domain, int type, int protocol, int *sv);
```

DESCRIPTION

The **socketpair()** system call creates an unnamed pair of connected sockets in the specified communications *domain*, of the specified *type*, and using the optionally specified *protocol*. The descriptors used in referencing the new sockets are returned in *sv*[0] and *sv*[1]. The two sockets are indistinguishable.

The SOCK_CLOEXEC and SOCK_NONBLOCK flags in the *type* argument apply to both descriptors.

RETURN VALUES

The **socketpair()** function returns the value 0 if successful; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

The call succeeds unless:

[EMFILE] Too many descriptors are in use by this process.

[EAFNOSUPPORT] The specified address family is not supported on this machine.

[EPROTONOSUPPORT] The specified protocol is not supported on this machine.

[EOPNOTSUPP] The specified protocol does not support creation of socket pairs.

[EFAULT] The address *sv* does not specify a valid part of the process address space.

SEE ALSO

pipe(2), read(2), socket(2), write(2)

STANDARDS

The **socketpair**() system call conforms to IEEE Std 1003.1-2001 ("POSIX.1") and IEEE Std 1003.1-2008 ("POSIX.1").

HISTORY

The **socketpair**() system call appeared in 4.2BSD.

BUGS

This call is currently implemented only for the UNIX domain.