



Linux Ubuntu 26.04 Manual Pages on command 'socketpair.2'

\$ man socketpair.2

socketpair(2) System Calls Manual socketpair(2)

NAME

socketpair - create a pair of connected sockets

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

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

int socketpair(int domain, int type, int protocol, int sv[2]);
```

DESCRIPTION

The `socketpair()` call creates an unnamed pair of connected sockets in the specified domain, of the specified type, and using the optionally specified protocol. For further details of these arguments, see `socket(2)`.

The file descriptors used in referencing the new sockets are returned in `sv[0]` and `sv[1]`.

The two sockets are indistinguishable.

RETURN VALUE

On success, zero is returned. On error, -1 is returned, `errno` is set to indicate the error, and `sv` is left unchanged

On Linux (and other systems), `socketpair()` does not modify `sv` on failure. A requirement standardizing this behavior was added in POSIX.1-2008 TC2.

ERRORS

EAFNOSUPPORT

The specified address family is not supported on this machine.

EFAULT The address `sv` does not specify a valid part of the process address space.

EMFILE The per-process limit on the number of open file descriptors has been reached.

ENFILE The system-wide limit on the total number of open files has been reached.

EOPNOTSUPP

The specified protocol does not support creation of socket pairs.

EPROTONOSUPPORT

The specified protocol is not supported on this machine.

VERSIONS

On Linux, the only supported domains for this call are AF_UNIX (or synonymously, AF_LOCAL) and AF_TIPC (since Linux 4.12).

STANDARDS

POSIX.1-2024.

HISTORY

POSIX.1-2001, 4.2BSD.

It is generally portable to/from non-BSD systems supporting clones of the BSD `socket` layer (including System V variants).

SOCK_CLOEXEC

SOCK_NONBLOCK

POSIX.1-2024; Linux 2.6.27. (See `socket(2)`.)

SEE ALSO

`pipe(2)`, `read(2)`, `socket(2)`, `write(2)`, `socket(7)`, `unix(7)`

Linux man-pages 6.17

2025-10-29

`socketpair(2)`