



Rocky Enterprise Linux 9.2 Manual Pages on command 's390_pci_mmio_read.2'

C:\>man s390_pci_mmio_read.2

S390_PCI_MMIO_WRITE(2) System Calls Manual S390_PCI_MMIO_WRITE(2)

NAME

s390_pci_mmio_write, s390_pci_mmio_read - transfer data to/from PCI MMIO memory page

SYNOPSIS

```
#include <asm/unistd.h>

int s390_pci_mmio_write(unsigned long mmio_addr,
                        void *user_buffer, size_t length);

int s390_pci_mmio_read(unsigned long mmio_addr,
                       void *user_buffer, size_t length);
```

DESCRIPTION

The `s390_pci_mmio_write()` system call writes `length` bytes of data from the user-space buffer `user_buffer` to the PCI MMIO memory location specified by `mmio_addr`.

The `s390_pci_mmio_read()` system call reads `length` bytes of data from the PCI MMIO memory location specified by `mmio_addr` to the user-space buffer `user_buffer`.

These system calls must be used instead of the simple assignment or data-transfer operations that are used to access the PCI MMIO memory areas mapped to user space on the Linux System z platform. The address specified by `mmio_addr` must belong to a PCI MMIO memory page mapping in the caller's address space, and the data being written or read must not cross a page boundary. The length value cannot be greater than the system page size.

RETURN VALUE

On success, `s390_pci_mmio_write()` and `s390_pci_mmio_read()` return 0. On error, -1 is returned and `errno` is set to one of the error codes listed below.

ERRORS

EFAULT The address in `mmio_addr` is invalid.

EFAULT `user_buffer` does not point to a valid location in the caller's address space.

EINVAL Invalid length argument.

ENODEV PCI support is not enabled.

ENOMEM Insufficient memory.

VERSIONS

These system calls are available since Linux 3.19.

CONFORMING TO

This Linux-specific system call is available only on the s390 architecture. The required PCI support is available beginning with System z EC12.

NOTES

Glibc does not provide a wrapper for this system call, use `syscall(2)` to call it.

SEE ALSO

`syscall(2)`

COLOPHON

This page is part of release 5.05 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.