



## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 's390\_pci\_mmio\_read.2' command**

**\$ 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

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