



Linux Ubuntu 26.04 Manual Pages on command 's390_pci_mmio_write.2'

\$ man s390_pci_mmio_write.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

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <sys/syscall.h>     /* Definition of SYS_* constants */
```

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

```
int syscall(size_t length;
```

```
    SYS_s390_pci_mmio_write, unsigned long mmio_addr,
```

```
    const void user_buffer[length], size_t length);
```

```
int syscall(size_t length;
```

```
    SYS_s390_pci_mmio_read, unsigned long mmio_addr,
```

```
    void user_buffer[length], size_t length);
```

Note: glibc provides no wrappers for these system calls, necessitating the use of
syscall(2).

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 failure, -1 is returned and `errno` is set to indicate the error.

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.

STANDARDS

Linux on s390.

HISTORY

Linux 3.19. System z EC12.

SEE ALSO

`syscall(2)`

Linux man-pages 6.17

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`s390_pci_mmio_write(2)`