

NAME

pciconfig_read, pciconfig_write, pciconfig_iobase – pci device information handling

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <pci.h>

int pciconfig_read(unsigned long bus, unsigned long dfn,
                  unsigned long off, unsigned long len,
                  unsigned char *buf);
int pciconfig_write(unsigned long bus, unsigned long dfn,
                   unsigned long off, unsigned long len,
                   unsigned char *buf);
int pciconfig_iobase(int which, unsigned long bus,
                   unsigned long devfn);
```

DESCRIPTION

Most of the interaction with PCI devices is already handled by the kernel PCI layer, and thus these calls should not normally need to be accessed from user space.

pciconfig_read()
Reads to *buf* from device *dev* at offset *off* value.

pciconfig_write()
Writes from *buf* to device *dev* at offset *off* value.

pciconfig_iobase()
You pass it a bus/devfn pair and get a physical address for either the memory offset (for things like prep, this is 0xc0000000), the IO base for PIO cycles, or the ISA holes if any.

RETURN VALUE

pciconfig_read()
On success, zero is returned. On error, *-1* is returned and *errno* is set to indicate the error.

pciconfig_write()
On success, zero is returned. On error, *-1* is returned and *errno* is set to indicate the error.

pciconfig_iobase()
Returns information on locations of various I/O regions in physical memory according to the *which* value. Values for *which* are: **IOBASE_BRIDGE_NUMBER**, **IOBASE_MEMORY**, **IOBASE_IO**, **IOBASE_ISA_IO**, **IOBASE_ISA_MEM**.

ERRORS

EINVAL
len value is invalid. This does not apply to **pciconfig_iobase()**.

EIO I/O error.

ENODEV
For **pciconfig_iobase()**, "hose" value is NULL. For the other calls, could not find a slot.

ENOSYS
The system has not implemented these calls (**CONFIG_PCI** not defined).

EOPNOTSUPP
This return value is valid only for **pciconfig_iobase()**. It is returned if the value for *which* is invalid.

EPERM
User does not have the **CAP_SYS_ADMIN** capability. This does not apply to **pciconfig_iobase()**.

STANDARDS

These calls are Linux-specific, available since Linux 2.0.26/2.1.11.

SEE ALSO

capabilities(7)