NAME

ddi_device_copy – copy data from one device register to another device register

SYNOPSIS

#include <sys/ddi.h>
#include <sys/sunddi.h>

int ddi_device_copy(ddi_acc_handle_t *src_handle*, **caddr_t** *src_addr*, **long** *src_advcnt*,
ddi_acc_handle_t *dest_handle*, **caddr_t** *dest_addr*, **long** *dest_advcnt*,
size_t *bytecount*, **ulong_t** *dev_datasz***);**

ARGUMENTS

src_handle The data access handle of the source device.

src_addr Base data source address.

src_advcnt Number of *dev_datasz* units to advance on every access.

dest_handle The data access handle of the destination device.

dest_addr Base data destination address.

dest_advcnt Number of *dev_datasz* units to advance on every access.

bytecount Number of bytes to transfer.

dev_datasz The size of each data word. Possible values are defined as:

DDI_DATA_SZ01_ACC
1 byte data size

DDI_DATA_SZ02_ACC
2 bytes data size

DDI_DATA_SZ04_ACC
4 bytes data size

DDI_DATA_SZ08_ACC
8 bytes data size

INTERFACE LEVEL

Solaris DDI specific (Solaris DDI).

DESCRIPTION

ddi_device_copy( ) copies *bytecount* bytes from the source address, *src_addr*, to the destination address, *dest_addr*. The attributes encoded in the access handles, *src_handle* and *dest_handle*, govern how data is actually copied from the source to the destination. Only matching data sizes between the source and destination are supported.

Data will automatically be translated to maintain a consistent view between the source and the destination. The translation may involve byte-swapping if the source and the destination devices have incompatible endian characteristics.

The *src_advcnt* and *dest_advcnt* arguments specifies the number of *dev_datasz* units to advance with each access to the device addresses. A value of **0** will use the same source and destination device address on every access. A positive value increments the corresponding device address by certain number of data size units in the next access. On the other hand, a negative value decrements the device address.

The *dev_datasz* argument determines the size of the data word on each access. The data size must be the same between the source and destination.

RETURN VALUES

ddi_device_copy( ) returns:

DDI_SUCCESS Successfully transferred the data.

DDI_FAILURE The byte count is not a multiple *dev_datasz*.

CONTEXT

ddi_device_copy( ) can be called from user, kernel, or interrupt context.

SEE ALSO

ddi_regs_map_setup(9F), **ddi_regs_map_free**(9F)

Writing Device Drivers