Bell Telephone Laboratories, Incorporated PROGRAM APPLICATION INSTRUCTION - 1 -

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IOMAP(b)

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NAME

iomap - map segid/offset to virtual address

SYNOPSIS

(iomap = 2.)
iomap(segid, offset, count)
int segid; /* segment ID */
int offset; /* byte offset into segment */
int count; /* byte count */

DESCRIPTION

lomap maps the virtual address given by *segid* and *offset* into a virtual address using kernel I-space register 5. If the segment is a stack segment, the byte offset is from the top of the segment. The virtual address is returned from C. Up to 8192 bytes may be transferred once this virtual address is determined.

In assembly language, r0 must contain the segment ID, *segid*, r1 the byte offset into the segment, and r2 the actual number of bytes to be transferred. The virtual address is returned in r0.

SEE ALSO

ioqueuem(b).

DIAGNOSTICS

A value of zero is returned from C if *segid* is not a valid segment ID, if the segment is not in memory, or if the transfer to be initiated would be outside the address space of the segment.

In assembly language, the c-bit is set.

FUTURE AND DMERT DIAGNOSTICS

A value of -1 is returned from C if *segid* is not a valid segment ID, if the segment is not in memory, or if the transfer to be initiated would be outside the address space of the segment.