

#### 4.10 Driver Interface in C Language

In addition to the assembly language interface, a driver may support the C language interface as defined below:

Function	Parameters
<code>dx_init</code>	( <code>dev</code> , <code>&amp;datap</code> , <code>tid</code> )
<code>dx_open</code>	( <code>dev</code> , <code>pargp</code> , <code>datap</code> , <code>tid</code> , <code>&amp;rval</code> )
<code>dx_close</code>	( <code>dev</code> , <code>pargp</code> , <code>datap</code> , <code>tid</code> , <code>&amp;rval</code> )
<code>dx_read</code>	( <code>dev</code> , <code>pargp</code> , <code>datap</code> , <code>tid</code> , <code>&amp;rval</code> )
<code>dx_write</code>	( <code>dev</code> , <code>pargp</code> , <code>datap</code> , <code>tid</code> , <code>&amp;rval</code> )
<code>dx_cntrl</code>	( <code>dev</code> , <code>pargp</code> , <code>datap</code> , <code>tid</code> , <code>&amp;rval</code> )

`dev` is the 32-bit device number.

bits 31-16 = major device number  
bits 15-0 = minor device number

`pargp` is the physical address of the parameter block which contains device and operation specific parameters. The format and contents of the block is determined by the driver.

`datap` is the physical address of the device's data area for all calls except INIT. `datap` is an output parameter in which the INIT routine returns the address of the device's data area.

`tid` is the task id of the calling task.

`rval` is an output parameter in which READ, WRITE and CNTRL routines may return completion information about the call.