NAME

ssd – driver for SPARCstorage Array disk devices

SYNOPSIS

ssd@*port***,***target***:***partition*

DESCRIPTION

This driver handles SCSI-2 disks in the SPARCstorage Array.

The SPARCstorage Array currently supports fixed media disk drives. The specific type of each disk in the SPARCstorage Array is determined by the SCSI inquiry command and reading the volume label stored on block 0 of the drive. The volume label describes the disk geometry and partitioning; it must be present or the disk cannot be mounted by the system.

The block-files access the disk using the system's normal buffering mechanism and are read and written without regard to physical disk records. There is also a "raw" interface that provides for direct transmission between the disk and the user's read or write buffer. A single read or write call usually results in one I/O operation; raw I/O is therefore considerably more efficient when many bytes are transmitted. The names of the block files are found in **/dev/dsk**; the names of the raw files are found in **/dev/rdsk**.

I/O requests (such as **lseek**(2)) to the SCSI disk must have an offset that is a multiple of 512 bytes (DEV_BSIZE), or the driver returns an EINVAL error. If the transfer length is not a multiple of 512 bytes, the transfer count is rounded up by the driver.

Partition **0** is normally used for the root file system on a disk, partition **1** as a paging area (for example, **swap**), and partition **2** for backing up the entire disk. Partition **2** normally maps the entire disk and may also be used as the mount point for secondary disks in the system. The rest of the disk is normally partition **6**. For the primary disk, the user file system is located here.

IOCTLS

Refer to **dkio**(7I).

ERRORS

EACCES	Permission denied.
EBUSY	The partition was opened exclusively by another thread.
EFAULT	The argument was a bad address.
EINVAL	Invalid argument.
EIO	An I/O error occurred.
ENOTTY	The device does not support the requested ioctl function.
ENXIO	When returned during **open**(2), this error indicates the device does not exist.
EROFS	The device is a read-only device.

FILES

ssd.conf	driver configuration file
/dev/dsk/c*n***t***n***d***n***s***n*	block files
/dev/rdsk/c*n***t***n***d***n***s***n*	raw files

where:

- **c***n* is the controller number on the system. Each SPARCstorage Array will have a unique controller number
- **t***n* port number within the SPARCstorage Array *n*
- **d***n* SCSI target *n*
- **s***n* partition *n*

SEE ALSO

format(1M), **ioctl**(2), **lseek**(2), **read**(2), **write**(2), **driver.conf**(4), **cdio**(7I), **dkio**(7I)

ANSI Small Computer System Interface-2 (SCSI-2)
SPARCstorage Array User's Guide