NAME

smcf – SMC Ether100 (9232) Ethernet device driver

SYNOPSIS

#include <sys/stropts.h>
#include <sys/stream.h>
#include <sys/dlpi.h>
#include <sys/ethernet.h>

AVAILABILITY

x86

DESCRIPTION

The **smcf** Ethernet driver is a multi-threaded, loadable, clonable, STREAMS hardware driver supporting the connectionless Data Link Provider Interface over an SMC Ether100 (9232) Fast Ethernet EISA-bus adapter. The **smcf** driver is dependent on **/kernel/misc/gld**, a loadable kernel module that provides the **smcf** driver with the DLPI and STREAMS functionality required of a LAN driver. See **gld**(7D) for more details about primitives supported by the **smcf** driver.

The **smcf** driver provides basic support for the SMC Ether100 hardware. Functions include chip initialization, frame transmission and reception, multicast and promiscuous support, and error recovery and reporting.

Multiple SMC Ether100 controllers installed within the system are supported by the driver.

APPLICATION PROGRAMMING INTERFACE

The cloning character-special device **/dev/smcf** is used to access all SMC Elite32 Ultra controllers installed within the system.

The values returned by the driver in the **DL_INFO_ACK** primitive in response to the **DL_INFO_REQ** from the user are:

- The maximum SDU is 1500 (**ETHERMTU**).
- The minimum SDU is **0**. Note that the **smcf** driver will pad to the mandatory 60-octet minimum packet size.
- The **dlsap** address length is **ETHERADDRL + 2**.

  The MAC type is **DL_ETHER**.
- The SAP length value is –**2**, meaning the physical address component is followed immediately by a 2-byte SAP component within the **DLSAP** address.
- The broadcast address value is Ethernet/IEEE broadcast address (**FF:FF:FF:FF:FF:FF**). The smcf driver can support up to 16 multicast addresses on each adapter.

CONFIGURATION

The driver is shipped configured to support any legal device configuration. See the SMC Ether100 (9232) Device Configuration page in the *x86 Device Configuration Guide* for information regarding hardware configuration.

FILES

/dev/smcf	character special device
/kernel/drv/smcf	**smcf** driver
/kernel/drv/smcf.conf	configuration file

SEE ALSO

dlpi(7P), **gld**(7D)

x86 Device Configuration Guide