NAME

scsi_status – SCSI status structure

SYNOPSIS

#include <sys/scsi/scsi.h>

INTERFACE LEVEL

Solaris DDI specific (Solaris DDI)

DESCRIPTION

The SCSI-2 standard defines a status byte which is normally sent by the target to the initiator during the status phase at the completion of each command.

STRUCTURE MEMBERS

The following definitions describe the **scsi_status** structure for the SPARC and x86 architectures.

SPARC

```
u_char              : 2,   /* padding */
        sts_scsi2   : 1,   /* SCSI-2 modifier bit */
        sts_is      : 1,   /* intermediate status sent */
        sts_busy    : 1,   /* device busy or reserved */
        sts_cm      : 1,   /* condition met */
        sts_chk     : 1,   /* check condition */
                    : 1,   /* padding */
```

x86

```
u_char              : 1,   /* padding */
        sts_chk     : 1,   /* check condition */
        sts_cm      : 1,   /* condition met */
        sts_busy    : 1,   /* device busy or reserved */
        sts_is      : 1,   /* intermediate status sent */
        sts_scsi2   : 1,   /* SCSI-2 modifier bit */
                    : 2,   /* padding */
```

sts_chk indicates that a contingent allegiance condition has occurred.

sts_cm is returned whenever the requested operation is satisfied

sts_busy indicates that the target is busy. This status is returned whenever a target is unable to accept a command from an otherwise acceptable initiator (i.e. no reservation conflicts). The recommended initiator recovery action is to issue the command again at a later time.

sts_is is returned for every successfully completed command in a series of linked commands (except the last command), unless the command is terminated with a check condition status, reservation conflict, or command terminated status. Note that host bus adapter drivers may not support linked commands (see **scsi_ifsetcap**(9F)). If **sts_is** and **sts_busy** are both set then a reservation conflict has occurred.

sts_scsi2 is the SCSI-2 modifier bit. If **sts_scsi2** and **sts_chk** are both set then this indicates a command terminated status. If **sts_scsi2** and **sts_busy** are both set then this indicates that the command queue in the target is full.

For accessing the status as a byte, the following values are appropriate:

STATUS_GOOD This status indicates that the target has successfully completed the command.

STATUS_CHECK This status indicates that a contingent allegiance condition has occurred.

STATUS_MET This status is returned when the requested operations are satisfied.

STATUS_BUSY This status indicates that the target is busy.

STATUS_INTERMEDIATE
This status is returned for every successfully completed command in a series of linked commands.

STATUS_SCSI2 This is the SCSI-2 modifier bit.

STATUS_INTERMEDIATE_MET
This status is a combination of **STATUS_MET** and **STATUS_INTERMEDIATE**.

STATUS_RESERVATION_CONFLICT
This status is a combination of **STATUS_INTERMEDIATE** and **STATUS_BUSY**, and is returned whenever an initiator attempts to access a logical unit or an extent within a logical unit is reserved.

STATUS_TERMINATED
This status is a combination of **STATUS_SCSI2** and **STATUS_CHECK**, and is returned whenever the target terminates the current I/O process after receiving a terminate I/O process message.

STATUS_QFULL This status is a combination of **STATUS_SCSI2** and **STATUS_BUSY**, and is returned when the command queue in the target is full.

SEE ALSO

scsi_ifgetcap(9F), **scsi_init_pkt**(9F), **scsi_extended_sense**(9S), **scsi_pkt**(9S)

Writing Device Drivers