**NAME**

get_pktiopb, free_pktiopb – allocate/free a SCSI packet in the iopb map

**SYNOPSIS**

**#include <sys/scsi/scsi.h>**

**struct scsi_pkt *get_pktiopb(struct scsi_address** **ap*, **caddr_t** **datap*, **int** *cdblen*, **int** *statuslen*, **int** *datalen*, **int** *readflag*, **int (****callback***)(void));**

**void free_pktiopb(struct scsi_pkt** **pkt*, **caddr_t** *datap*, **int** *datalen***);**

**INTERFACE LEVEL**

Solaris DDI specific (Solaris DDI).

**ARGUMENTS**

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| *ap* | Pointer to the target's **scsi_address** structure. |
| *datap* | Pointer to the address of the packet, set by this function. |
| *cdblen* | Number of bytes required for the SCSI command descriptor block (CDB). |
| *statuslen* | Number of bytes required for the SCSI status area. |
| *datalen* | Number of bytes required for the data area of the SCSI command. |
| *readflag* | If non-zero, data will be transferred from the SCSI target. |
| *callback* | Pointer to a callback function, or **NULL_FUNC** or **SLEEP_FUNC** |
| *pkt* | Pointer to a **scsi_pkt**(9S) structure. |

**DESCRIPTION**

**get_pktiopb( )** allocates a **scsi_pkt** structure that has a small data area allocated. It is used by some SCSI commands such as **REQUEST_SENSE**, which involve a small amount of data and require cache-consistent memory for proper operation. It uses **ddi_iopb_alloc**(9F) for allocating the data area and **scsi_resalloc**(9F) to allocate the packet and DMA resources.

*callback* indicates what **get_pktiopb( )** should do when resources are not available:

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|---|---|
| **NULL_FUNC** | Do not wait for resources. Return a **NULL** pointer. |
| **SLEEP_FUNC** | Wait indefinitely for resources. |
| Other Values | *callback* points to a function which is called when resources may have become available. *callback* **must** return either **0** (indicating that it attempted to allocate resources but failed to do so again), in which case it is put back on a list to be called again later, or **1** indicating either success in allocating resources or indicating that it no longer cares for a retry. |

**free_pktiopb( )** is used for freeing the packet and its associated resources.

**RETURN VALUES**

**get_pktiopb( )** returns a pointer to the newly allocated **scsi_pkt** or a **NULL** pointer.

**CONTEXT**

If *callback* is **SLEEP_FUNC**, then this routine may only be called from user-level code. Otherwise, it may be called from either user or interrupt level. The *callback* function may not block or call routines that block.

**free_pktiopb( )** can be called from user or interrupt context.

**SEE ALSO**

**ddi_iopb_alloc**(9F), **scsi_alloc_consistent_buf**(9F), **scsi_pktalloc**(9F), **scsi_resalloc**(9F), **scsi_pkt**(9S)

*Writing Device Drivers*

**NOTES**

**get_pktiopb( )** and **free_pktiopb( )** are old functions and should be replaced with **scsi_alloc_consistent_buf**(9F) and **scsi_free_consistent_buf**(9F). **get_pktiopb( )** uses scarce resources. Use it selectively.