

January 22, 1988

Real Time Executive Interface Definition

If the call was not successful, an error code is returned.

ERROR CONDITIONS

Too many partitions.

NOTES

Not callable from ISR.

Will not cause a preempt.

3.7.9 PT_IDENT**NAME**

`pt_ident` - "Obtain id of a Partition"

SYNOPSIS

```
#include <memory.h>
uint pt_ident ( name, node, &ptid )
```

```
uint name; /* user defined 4-byte partition name */
uint node; /* node identifier */
           /* 0 indicates any node */
uint ptid; /* partition id - returned by this call */
```

DESCRIPTION

This directive allows a task to identify a previously created partition by name and obtain the *ptid* to use for *pt_getbuf* and *pt_retbuf* directives for the partition.

If the partition name is not unique, the *ptid* returned may not correspond to the partition named in this call.

The partition may have been created by the local processor or any remote processor in a multiprocessor configuration, as long as the partition was created with the GLOBAL flags value set (see *pt_create*). If the partition name is not unique within the multiprocessor configuration, a non-zero node identifier must be specified in the *node* field.

RETURN VALUE

If *pt_ident* directive succeeds, the *ptid* will be filled in and 0 is returned.

If the call was not successful, an error code is returned.

ERROR CONDITIONS

Named partition does not exist.

Invalid node identifier.

NOTES

Can be called from within an ISR.

Will not cause a preempt.

3.7.10 PT_DELETE

NAME

`pt_delete` -- "Delete a Partition"

SYNOPSIS

```
#include <memory.h>
uint pt_delete ( ptid )
```

```
uint ptid; /* partition id as returned by pt_create or pt_ident */
```

DESCRIPTION

This directive removes a partition, provided that none of its buffers is still allocated.

After this directive has successfully executed, the executive will reject any `pt_getbuf` or `pt_retbuf` directives for the partition.

The partition must exist on the local processor. If the partition was created with the **GLOBAL** flags value set in a multiprocessor configuration, a notification will be sent to all processors in the system, so the `ptid` can be deleted from the global resource table.

RETURN VALUE

If `pt_delete` successfully removed the partition, then 0 is returned.

If the call was not successful, an error code is returned.

ERROR CONDITIONS

Invalid `ptid`.

Cannot delete -- some buffers in use.

Partition not created from local node.

NOTES

Not callable from ISR.

Will not cause a preempt.

3.7.11 PT_GETBUF

NAME

`pt_getbuf` -- "Get a Buffer"

SYNOPSIS

```
#include <memory.h>
uint pt_getbuf ( ptid, &bufaddr )
```

```
uint ptid;      /* partition id as returned by pt_create or pt_ident */
char *bufaddr; /* buffer address - returned by this call */
```

DESCRIPTION

The `pt_getbuf` directive will get a buffer from a buffer partition. The buffer address will be returned in `bufaddr` as a result of this call.

The partition may have been created by the local processor or any remote processor in a multiprocessor configuration, as long as the partition was created with the `GLOBAL` flags value set (see `pt_create`).

RETURN VALUE

If `pt_getbuf` successfully got a buffer, then the address of the buffer is returned in `bufaddr` and 0 is returned.

If the call was not successful, an error code is returned.

ERROR CONDITIONS

Invalid `ptid`.

Partition out of free buffers.

NOTES

Can be called from within an ISR.

Will not cause a preempt.

3.7.12 PT_RETBUF

NAME

`pt_retbuf` -- "Return a Buffer"

SYNOPSIS

```
#include <memory.h>
uint pt_retbuf ( ptid, bufaddr )
```

```
    uint ptid;      /* partition id as returned by pt_create or pt_ident */
    char *bufaddr; /* buffer start address as returned by pt_getbuf */
```

DESCRIPTION

The `pt_retbuf` directive will return a buffer to the partition from which it was originally allocated.

Buffers are not automatically released when a task is deleted.

RETURN VALUE

If `pt_retbuf` successfully returned the buffer, then 0 is returned.

If the buffer was not returned, a value of -1 is returned, and `errno` is set to indicate the error.

ERROR CONDITIONS

Invalid `ptid`.

Buffer not from specified partition.

NOTES

Can be called from within an ISR.

Will not cause a preempt.