 This is part of **Family API** which allow to create dual-os version of program runs under OS/2 and DOS

Note: This is legacy API call. It is recommended to use 32-bit equivalent

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DosGetPID

This call returns the current process ID, thread ID, and the process ID of the parent process.

Syntax

```
DosGetPID (ProcessIDs)
```

Parameters

- ProcessIDs (PPIDINFO) - output : Address of the structure where the ID information is returned.
  - pid (PID) : Current process identifier.
  - tid (TID) : Thread (of the current process) identifier.
  - pidParent (PID) : Parent process (of the current process) identifier.

Return Code

rc (USHORT) - return:Return code description is:

- 0 NO_ERROR

Remarks

The process ID may be used to generate uniquely named temporary files, or for communication with signals. For more information on signals, see DosFlagProcess and DosSendSignal.

In the OS/2 environment, thread IDs are used with calls that manipulate threads in the current process. For more information, see DosSuspendThread, DosResumeThread, DosGetPrty, and DosSetPrty.

If the application is executing in the OS/2 environment, it is more efficient to obtain these variables by calling DosGetInfoSeg instead of DosGetPID. However, applications written to the family API cannot depend on the availability of DosGetInfoSeg.

To get an ID for a process other than the current process or its parent process, issue DosGetPPID.

Bindings

MASM

```
PIDINFO struc
  pidi_pid       dw  ? ;current process' process ID
  pidi_tid       dw  ? ;current process' thread ID
  pidi_pidParent dw  ? ;process ID of the parent
PIDINFO ends

EXTRN  DosGetPID:FAR
INCL_DOSPROCESS     EQU 1

PUSH@  OTHER   ProcessIDsArea ;Process IDs (returned)
CALL   DosGetPID

Returns NONE
```

C

```
typedef struct _PIDINFO { /* pidi */
  PID pid;                /* current process' process ID */
  TID tid;                /* current process' thread ID */
  PID pidParent;          /* process ID of the parent */
} PIDINFO;

#define INCL_DOSPROCESS

USHORT  rc = DosGetPID(ProcessIDsArea);

PPIDINFO ProcessIDsArea; /* Process IDs (returned) */
USHORT   rc;             /* return code */
```

Example

The following example demonstrates how to create a process, obtain process ID information, and kill a process. Process1 invokes process2 to run asynchronously. It obtains and prints some PID information, and then kills process2.

```
/* ---- process1.c ---- */
#define INCL_DOSPROCESS
#include <os2.h>
#define START_PROGRAM "process2.exe"   /* Program pointer */
```

```
main()
{

  CHAR          ObjFail [50];       /* Object name buffer */
  RESULTCODES   ReturnCodes;        /*
  PIDINFO       PidInfo;
  PID           ParentID;           /*
  USHORT        rc;

  printf("Process1 now running. \n");

  /** Start a child process. **/
  if(!(DosExecPgm(ObjFail,            /* Object name buffer */
                  sizeof(ObjFail),    /* Length of obj. name buffer */
                  EXEC_ASYNC,         /* Execution flag - asynchronous */
                  NULL,               /* No args. to pass to process2*/
                  NULL,               /* Process2 inherits process1's
                                          environment */
                  &ReturnCodes,       /* Ptr. to resultcodes struct. */
                  START_PROGRAM)))    /* Name of program file */
    printf("Process2 started. \n");

  /** Obtain Process ID information and print it **/
  if(!(rc=DosGetPID(&PidInfo)))       /* Process ID's (returned) */
    printf("DosGetPID: current process ID is %d; thread ID is %d; parent
process ID is %d.\n",
            PidInfo.pid, PidInfo.tid, PidInfo.pidParent);
  if(!(rc=DosGetPPID(
           ReturnCodes.codeTerminate, /* Process whose parent is wanted */
           &ParentID)))               /* Address to put parent's PID */
    printf("Child process ID is %d; Parent process ID is %d.\n",
            ReturnCodes.codeTerminate, ParentID);

  /** Terminate process2 **/
  if(!(rc=DosKillProcess(DKP_PROCESSTREE,     /* Action code - kill process
                                                 and descendants */
                 ReturnCodes.codeTerminate)))  /* PID of root of process tree
*/
    printf("Process2 terminated by process1.\n");
}
```

```
/* ---- process2.c ---- */

#define INCL_DOSPROCESS

#include <os2.h>

#define SLEEPTIME   500L
#define RETURN_CODE 0
```

```
main()
{
  printf("Process2 now running.\n");

  /* Sleep to allow process1 to kill it */
  DosSleep(SLEEPTIME);                /* Sleep interval */
  DosExit(EXIT_PROCESS,               /* Action Code */
          RETURN_CODE);               /* Result Code */
}
```

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