



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](#), [DosGetPrtty](#), and [DosSetPrtty](#).

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 */
}

```

Family API

DOS	Process Manager	DosBeep DosExit DosSleep DosExecPgm
	File Manager	DosChDir DosChgFilePtr DosClose DosDelete DosDupHandle DosMkDir DosMove DosQCurDir DosQCurDisk DosSetFileMode DosOpen DosQFileInfo DosRead DosQFileMode DosQFSInfo DosQVerify DosRmDir DosSelectDisk DosFindClose DosFindFirst DosFindNext DosSetFileInfo DosSetVerify DosWrite DosFileLocks DosSetFHandState DosNewSize DosBufReset DosQFHandState DosSetFSinfo DosShutdown
	Memory Manager	DosFreeSeg DosSubAlloc DosSubFree DosSubSet DosAllocHuge DosAllocSeg DosReallocHuge DosReallocSeg DosGetHugeShift DosCreateCSAlias
	NLS	DosCaseMap DosGetCtryInfo DosGetDBCSEv DosSetCtryCode DosGetCollate DosGetMessage DosInsMessage DosPutMessage
	Date and Time	DosSetDateTime DosGetDateTime
	Devices	DosDevConfig DosDevIOCtl DosDevIOCtl2
	Signals	DosHoldSignal DosSetSigHandler
	Misc	BadDynLink DosGetEnv DosGetMachineMode DosGetVersion DosError DosErrClass DosSetVec
KBD		KbdCharIn KbdFlushBuffer KbdGetStatus KbdSetStatus KbdStringIn KbdPeek
VIO		VioGetBuf VioGetConfig VioGetCurPos VioGetCurType VioGetPhysBuf VioReadCellStr VioReadCharStr VioScrollUp VioScrollDn VioScrollLf VioScrollRt VioScrUnLock VioSetCurPos VioSetCurType VioSetMode VioGetMode VioShowBuf VioWrtCellStr VioWrtCharStr VioWrtCharStrAtt VioWrtNAttr VioWrtNCell VioWrtNChar VioWrtTTY VioScrLock VioPopUp
Tools		BIND
Modules		DOSCALLS.DLL VIOCALLS.DLL KBDCALLS.DLL MSG.DLL
Libraries		API.LIB OS2386.LIB FAPI.LIB DOSCALLS.LIB SUBCALLS.LIB

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