

Note: This API calls are shared between DOS and Win16 personality.

DPMI is a shared interface for DOS applications to access Intel 80286+ CPUs services. DOS DMPI host provides core services for protected mode applications. Multitasking OS with DOS support also provides DMPI in most cases. Windows standard and extended mode kernel is a DPMI client app. Standard and extended mode kernel differs minimally and shares common codebase. Standard Windows kernel works under DOSX extender. DOSX is a specialized version of 16-bit DPMI Extender (but it is standard DPMI host). Standard mode is just DPMI client, exnhanced mode is DPMI client running under Virtual Machime Manager (really, multitasker which allow to run many DOS sessions). Both modes shares DPMI interface for kernel communication. The OS/2 virtual DOS Protected Mode Interface (VDPMI) device driver provides Version 0.9 DPMI support for virtual DOS machines. Win16 (up to Windows ME) provides Version 0.9 DPMI support. Windows in Standard Mode provides DPMI services only for Windows Applications, not DOS sessions.

DPMI host often merged with DPMI extender. Usually DPMI extender provide DPMI host standard services and DOS translation or True DPMI services.

2021/08/05 10:15 · prokushev · 0 Comments

Int 31H, AH=05H, AL=0BH

Version

1.0

Brief

Get Memory Information

Input

```
AX = 050BH
ES:(E)DI = selector:offset of 128-byte buffer
```

Return

```
if function successful
Carry flag = clear (this function always succeeds in DPMI 1.0)
and the buffer pointed to by ES:(E)DI is filled in with the following
```

```
information:
```

Offset	Length	Contents
00H	4	Total allocated bytes of physical memory controlled by DPMI host
04H	4	Total allocated bytes of virtual memory controlled by DPMI host
08H	4	Total available bytes of virtual memory controlled by DPMI host
0CH	4	Total allocated bytes of virtual memory for this virtual machine
10H	4	Total available bytes of virtual memory for this virtual machine
14H	4	Total allocated bytes of virtual memory for this client
18H	4	Total available bytes of virtual memory for this client
1CH	4	Total locked bytes of memory for this client
20H	4	Maximum locked bytes of memory for this client
24H	4	Highest linear address available to this client
28H	4	Size in bytes of largest available free memory block
2CH	4	Size of minimum allocation unit in bytes
30H	4	Size of the allocation alignment unit in bytes
34H	4CH	Reserved, currently zero

```
if function unsuccessful
Carry flag = set (this function always fails in DPMI 0.9)
```

Notes

Returns information about available physical and virtual memory. Since DPMI clients will often run in multitasking environments, some of information related to shared resources returned by this function should only be considered as advisory.

DPMI 1.0 clients should use this function in preference to Int 31H Function 0500H.

The “total available bytes” field of the data structure pointed by ES:(E)DI means the total bytes minus all of the allocated bytes.

See also

Note

Text based on http://www.delorie.com/djgpp/doc/dpmi/

DPMI	
Process manager	**INT 2FH** 1680H, 1687H
Signals	
Memory manager	
Misc	**INT 2FH** 1686H, 168AH
Devices	

2021/08/13 14:23 · prokushev · 0 Comments

From:
http://osfree.org/doku/ - **osFree wiki**

Permanent link:
http://osfree.org/doku/doku.php?id=en:docs:dpmi:api:int31:05:0b

Last update: **2021/08/27 05:09**