VioGetMode

Bindings: C, MASM

This call returns the mode of the display.

VioGetMode (ModeData, VioHandle)

ModeData (**PVIOMODEINFO**) - input/output Far address of a structure where mode characteristics are returned.

length (**USHORT**) Input parameter to VioGetMode. *Length* specifies the length of the data structure in bytes including *length* itself. The value specified on input controls the amount of mode data returned. The minimum structure size required is 2 bytes, and the maximum structure size required is 34 bytes. For OS/2 1.2, a *length* of 2 returns the size of the maximum structure required for all the mode data. When *length* is not equal to 2, the *length* field is modified on output to reflect the actual number of bytes returned.

type (**UCHAR**) Mode characteristics bit mask:

Bit	Description
7-4	Reserved
3	0 = VGA-compatible modes 0 thru 13H
	1 = Native mode
2	0 = Enable color burst
	1 = Disable color burst
1	0 = Text mode
	1 = Graphics mode
0	0 = Monochrome compatible mode
	1 = Other.

numcolors (**UCHAR**) Number of colors defined as a power of 2. This is equivalent to the number of color bits that define the color, for example:

Value	Definition
0	Monochrome modes 7, 7+, and F.
1	2 colors
2	4 colors
4	16 colors
8	256 colors

textcols (**USHORT**) Number of text columns.

textrows (**USHORT**) Number of text rows.

pelcols (**USHORT**) Horizontal resolution, number of pel columns.

pelrows (**USHORT**) Vertical resolution, number of pel rows.

Attribute Format (**UCHAR**) Format of the attributes.

Number of Attributes (**UCHAR**) Number of attributes in a character cell.

Buffer Address (**ULONG**) 32-bit physical address of the physical display buffer for this mode.

Buffer Length (**ULONG**) Length of the physical display buffer for this mode.

Full Buffer Size (**ULONG**) Size of the buffer required for a full save of the physical display buffer for this mode.

Partial Buffer Size (**ULONG**) Size of the buffer required for a partial (pop-up) save of the physical display buffer for this mode.

Extended Data Area Address (**PCH**) Far address to an extended mode data structure or zero if none. The format of the extended mode data structure is determined by the device driver and is unknown to OS/2.

VioHandle (**HVIO**) - input Reserved word of 0s.

rc (**USHORT**) - return Return code descriptions are:

0	NO_ERROR
436	ERROR_VIO_INVALID_HANDLE
438	ERROR_VIO_INVALID_LENGTH
465	ERROR_VIO_DETACHED
494	ERROR_VIO_EXTENDED_SG

Remarks

Refer to VioSetMode for examples.

C bindings

```
typedef struct _VIOMODEINFO {
  USHORT cb;                    /* Length of the entire data structure  */
  UCHAR  fbType;                /* Bit mask of mode being set           */
  UCHAR  color;                 /* Number of colors (power of 2)        */
  USHORT col;                   /* Number of text columns               */
  USHORT row;                   /* Number of text rows                  */
  USHORT hres;                  /* Horizontal resolution                */
  USHORT vres;                  /* Vertical resolution                  */
  UCHAR  fmt_ID;                /* Attribute format                     */
  UCHAR  attrib;                /* Number of attributes                 */
  ULONG  buf_addr;
  ULONG  buf_length;
  ULONG  full_length;
  ULONG  partial_length;
  PCH    ext_data_addr;
  } VIOMODEINFO;
typedef VIOMODEINFO far *PVIOMODEINFO;
```

```
#define INCL_VIO

USHORT  rc = VioGetMode(ModeData, VioHandle);

PVIOMODEINFO     ModeData;      /* Mode characteristics */
HVIO             VioHandle;     /* Vio handle */

USHORT           rc;            /* return code */
```

MASM bindings

```
VIOMODEINFO struc
  viomi_cb             dw ? ;Length of the entire data structure
  viomi_fbType         db ? ;Bit mask of mode being set
  viomi_color          db ? ;Number of colors (power of 2)
  viomi_col            dw ? ;Number of text columns
  viomi_row            dw ? ;Number of text rows
  viomi_hres           dw ? ;Horizontal resolution
  viomi_vres           dw ? ;Vertical resolution
  viomi_fmt_ID         db ? ;Attribute format
  viomi_attrib         db ? ;Number of attributes
  viomi_buf_addr       dd ? ;
  viomi_buf_length     dd ? ;
  viomi_full_length    dd ? ;
  viomi_partial_length dd ? ;
  viomi_ext_data_addr  dd ? ;
VIOMODEINFO ends

EXTRN  VioGetMode:FAR
INCL_VIO            EQU 1

PUSH@  OTHER   ModeData      ;Mode characteristics
PUSH   WORD    VioHandle     ;Vio handle
CALL   VioGetMode

Return WORD
```

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