

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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