**Note: This IBM PC BIOS API call is for DOS/Win16 personality only. Use Family API for portability.**

**Note: osFree Macro Library provides macros for most of functions**

2022/03/13 05:41 · prokushev · 0 Comments

# Int 10H, AH=09H

## Version

IBM 5150 and higher

## Brief

Print character and attribute at cursor position

## osFree Macro Library

@PutCh@PutChar

## Family API

VioWrtNCell VioWrtNAttr VioWrtNChar

## Parameters

- AH = 09h
- AL = character to display
- BH = page number (00h to number of pages - 1) (see #00010) background color in 256-color graphics modes (ET4000)
- BL = attribute (PCjr, Tandy 1000 only) or color (graphics mode) if bit 7 set in <256-color graphics mode, character is XOR'ed onto screen
- CX = number of times to write character

# Return

# Macro

```
INCLUDE BIOS.INC

@PutCh 'A', 7, 0, 5
```

# Notes

- all characters are displayed, including CR, LF, and BS
- replication count in CX may produce an unpredictable result in graphics modes if it is greater than the number of positions remaining in the current row
- With PhysTechSoft's PTS ROM-DOS the BH, BL, and CX values are ignored on entry.
- Text based on Ralf Brown Interrupt List Release 61

| **IBM PC BIOS API** | |
|---|---|
| Video I/O | **INT 10H**: 00H, 01H, 02H, 03H, 05H, 06H, 07H, 08H, 09H, 0AH, 0BH, 0CH, 0DH, 0EH, 0FH |
| Hardware info | INT 11H, INT 12H |
| Serial I/O | **INT 14H**: 00H, 01H, 02H, 03H |
| Tape I/O | **INT 15H**: 00H, 01H, 02H, 03H |
| Keyboard I/O | **INT 16H**: 00H, 01H, 02H |
| Printer I/O | **INT 17H**: 00H, 01H, 02H |
| Disk I/O | **INT 13H**: 00H, 01H, 02H, 03H, 04H, 05H |
| Date and Time | **INT 1AH**: 00H, 01H |
| **osFree Macro Library** | |
| Video I/O | @SetMode @SetCurSz @SetCurPos @GetCur @SetPage @ScrollUp @ScrollDn @Scroll @GetChAtr @PutChAtr @PutCh @SetPalet @SetColor @SetDot @GetDot @WrtTTY @VideoState @GetMode @GetDisplay @GetVideoState @GetEGAInfo @Cls |
| Hardware info | @Equipment @MemSize |
| Serial I/O | @AuxInit @AuxSendChar @AuxRecieveChar @AuxStatus |
| Tape I/O | @TapeOn @TapeOff @TapeRead @TapeWrite |
| Keyboard I/O | @KbdStatus @CharIn @CharPeek |
| Printer I/O | @PrnPrint @PrnInit @PrnStatus |
| Disk I/O | @DskReset @DskStatus @DskRead @DskWrite @DskVerify @DskFormat |
| Date and Time | @SetTime @GetTime |
| Mouse | @MouInit @MouShowPointer @MouStatus @MouSetPos @MouSetMickey @MouRegion |
| Memory manager | @ModBlok SET_BLOCK |

2022/10/04 14:28 · prokushev · 0 Comments
2022/03/13 05:54 · prokushev · 0 Comments

| **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 |

2018/08/25 15:05 · prokushev · 0 Comments

From:
https://cocorico.osfree.org/doku/ - **osFree wiki**

Permanent link:
**https://cocorico.osfree.org/doku/doku.php?id=en:docs:bios:api:int10:0a**

Last update: **2022/12/03 02:49**