Update notes for PICCOLINE Programmers Guide

These update notes is a part of package SW1400 CCP/M86 3.1, XIOS Release 3.0 and package SW1498D.

The notes is only relevant for Release 3.0 and later releases.

1) Afs 10.3.

Since the iSBX351 can be strapped to have different receiver and transmitter baud rate both receiver and transmitter baud rate fields of the parameter block may have effect.

2) App. A.

The following Int-28h functions is implemented in XIOS Release 3.0 and later releases:

Function 54 Initialize Serial Controller

Entry: AX = 54
Stack + 2 = Parameter block segment
Stack + 0 = Parameter block offset

Parameter block:

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Byte 0:   5 = Vituel console
Byte 1:   Mode (0=Console, 1=Printer)
Byte 2:   Protocol (0=None, 1=XonXoff)
Byte 3:   Receiver Baudrate (0-10)
Byte 4:   Transmitter Baudrate (0-10)
Byte 5:   Bits/character for receiver (5-8)
Byte 6:   Bits/character for transmitter (5-8)
Byte 7:   Stop bits (0:1, 1:1.5, 2:2)
Byte 8:   Parity (0: odd, 1: even, 2: no)
Byte 9:   RTS (0: off, 1:on)
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Function 56 Get Screen Information

Entry: AX = 56
Exit: AL = 0
AH = 0: Monochrome Display, 1: Colour Display

Function 57 Get Function Key Information

Entry: AX = 57
CL = Programming value (i.e. value after <esc><:>.
Exit: CL = Max. length (0 if unknown function key).
ES = Address Segment of key contents.
SI = Address Offset of key contents.
DI = Function key number.

Function 58 Execute Soft Reset

Entry: AX = 58

Function 59 Change Escape Codes

Entry: AX = 59
CL = Current Escape Character
CH = New Escape Character

NOTE: New escape codes are used in all consoles

Function 61 Set Text Mode Fill Character

Entry: AX = 61
CL = Fill Character Value

NOTE: The fill character is used in connection with all screen related erase function. The fill character is defined for each virtual console.

Function 62 Get Status Line Address

Entry: AX = 62
Exit: CX = Segment of Displayed Status Line
DX = Offset of Displayed Status Line

Function 63 Simulate Ascii Character Input

Entry: AX = 63
DL = Ascii key value
DH = 0

Function 64 Simulate Scan Code Input

Entry:
AX = 64
CL = Keyboard scan code

Function 65 Get SIO Information

Entry:
AX = 65
CL = 0 (Receiver) or 1 (Transmitter)
DL = Virtual console number (5)

Exit:
AL = State
AH = Protocol (0:None, 1:XonXoff)
BX = Total Buffer Length
CX = Remaining Buffer Space
DH = Config. (0:Console, 1:Printer)

Function 66 Get Palette

Entry:
AX = 66
DS = Address segment of palette definition area
DX = Address offset of palette definition area

Exit:
Palette definition filled in.

Function 68 Interpret Modem Command String

Entry:
AL = 68
DX = Address offset of command-string
DS = Address segment of command-string

Exit:
AX = error-code (and timeout-code)
SI = character-index for last character processed (= 0, 1,2, ...)

error-codes:
0 ok-result
1 modem not installed
2 no ready-tone
3 unstable ready-tone (disappeared after 1.2 seconds)
4 digit expected
5 illegal key (in number)
6 modem mode-error
7 no answer-tone (2100 HZ)
8 unstable answer-tone (disappeared after 1.5 seconds)
9 syntax-error in command-string

In case of time-out, the SIGN-BIT of the 16-bits errorcode is added.

The command-string, which controls the function of the MF917-modem, consists of a number of commands, terminated by a NULL-character. Characters less than 33 or greater than 127 are blind. A command is either a letter (lower- and upper-case letters are considered the same) or a letter followed by a string. In the following commands, <i> is optional and means an integer with a command-dependent default-value, <c> is a single character, <n> means a subscriber number formed by the characters: 0,1,2,3,4,5,6,7,8,9,A,B,C,D,* or # , which are keys in the telephone; the number-string is terminated by a 'period'; e.g. the following string is a complete number-call-command:

Q L K T01 23 71 53. S M0

The following is a list of legal commands:

L	Hang-off, i.e. connect the modem to the telephone-line
Q	Hang-on, i.e. disconnect modem
K<i>	Wait max. <i> seconds for ready-tone (default 6 seconds)
!	PABX, i.e. select city-line from PABX
S<i>	Wait max. <i> seconds for answer-tone (2100 HZ) (default 20 sec*
M<c>	Set mode and RTS, i.e. establish dataconnection. <c>=0: V.21 Orig 300bps full duplex <c>=1: V.21 Answ 300bps full duplex <c>=2: V.23 (Xmit 1200 bps, Receive 75 bps <c>=3: V.23 (Xmit 75 bps, Receive 1200 bps
T<n>.	Call subscriber, TONE-CALL - <n> is the number to call
W<i>	Wait <i> seconds - (default 1 second)
R<i>	Wait max. <i> seconds for a call (default infinite)
A	Auto-answer (send answer-tone - 2100 Hz)

Function 69 Display Message in Status Line

Entry: AX = 69
DX = Segment Address of Message
CX = Offset Address of Message
Exit: AL = Key Pressed

The message displayed is a string of length 80, and it will be displayed in status line until a key is pressed. The value of the key pressed is returned in the AL-register.

3) **App. F.**

The following escape-sequences are implemented from XIOS release 3.0:

Sequence	Value	Function
ESC <238> x	27 238 x	Changes the terminatorvalue for the programming of function-keys to x (standard 0).
ESC <239>	27 239	Set transparent mousemode. Causescharacters from the mouseport to be sendt directly to the application with 254 in The Most Significant Byte. Raw i/o must be used to invoke CCP/M86 to return 16 bit. Transparent mousemode is used when something diferent than a mouse is connected to the keyboard.
ESC <240>	27 240	Set normal mousemode. Ensures that input from the mouseport is treated by the console driver. After the call it is possible to get data from the mouseport by Int-28 function 30.