

```

;*****
;*Centronics Installationsroutine *
;*Port B ist Data 0..7 *
;*Port A bit 7 = -strobe *
;*Port A bit 6 = busy *
;*Rolf-Dieter Klein 1982 821218 *
;*****

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;*****
;*Portdefinitionen, PIO *
;*****

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.Z80

```

00F4          PIOA      EQU      0F4H
00F5          PIOASTS EQU      PIOA+1
00F6          PIOB      EQU      PIOA+2
00F7          PIOBSTS  EQU      PIOA+3

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0000'          START:

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0000'    3E CF          LD      A,0CFH          ;Bit Mode
0002'    D3 F5          OUT     (PIOASTS),A
0004'    3E 7F          LD      A,01111111B      ;Bit 7 ist Output
0006'    D3 F5          OUT     (PIOASTS),A      ;BIT 0,1

```

Ready

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0008'    3E CF          LD      A,0CFH
000A'    D3 F7          OUT     (PIOBSTS),A      ;als Output
000C'    3E 00          LD      A,0          ;definieren
000E'    D3 F7          OUT     (PIOBSTS),A
0010'    3E 80          LD      A,80H          ;Strobe = 1
0012'    D3 F4          OUT     (PIOA),A          ;init

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0014'    21 F9E0        LD      HL,LO      ;Adresse Vektor umstellen
0017'    22 F010        LD      (0F00FH+1),HL

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001A'    21 0077'       LD      HL,LOREL
001D'    11 F9E0        LD      DE,LO      ;reale Adresse
0020'    01 0019        LD      BC,LOEND-LO ;Laenge
0023'    ED B0          LDIR     ;Transport

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0025'    21 002E'       LD      HL,MSG
0028'    CD 006D'       CALL   PRINT
002B'    CD 0000        CALL   0          ;warmboot

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```

002E'    43 65 6E 74    MSG:  DEFM 'Centronics Routine installiert'
0032'    72 6F 6E 69
0036'    63 73 20 52
003A'    6F 75 74 69
003E'    6E 65 20 69
0042'    6E 73 74 61
0046'    6C 6C 69 65
004A'    72 74

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004C'    0D 0A          DEFB   0DH,0AH
004E'    56 65 6B 74    DEFM   'Vektor LO (LST:) ADR 0F9E0H '
0052'    6F 72 20 4C
0056'    4F 20 28 4C
005A'    53 54 3A 29

```

CENT2.PRN

005E' 20 41 44 52
 0062' 20 30 46 39
 0066' 45 30 48 20
 006A' 0D 0A
 006C' 00

DEFB 0DH,0AH
 DEFB 0

006D'
 006D' 7E
 006E' B7
 006F' C8
 0070' 4F
 0071' CD F009
 0074' 23
 0075' 18 F6

PRINT:
 LD A,(HL)
 OR A
 RET Z
 LD C,A
 CALL 0F009H ;Monitor CO
 INC HL
 JR PRINT

0077'

LOREL: ;Adresse im RAM
 ;Monitor wird dort ueberlagert

.PHASE 0F9E0H

F9E0 79
 F9E1 FE 0A
 F9E3 C8

LO: LD A,C ;je nach Druckertyp
 CP 0AH ;Linefeeds ueberlesen
 RET Z ;da sonst CR LF

;als nicht vorhanden gilt
 ;und Vorschuebe verloren gehen

F9E4

LO1:

F9E4 DB F4
 F9E6 E6 40
 F9E8 20 FA
 F9EA 79
 F9EB D3 F6
 F9ED DB F4
 F9EF CB BF
 F9F1 D3 F4
 F9F3 CB FF
 F9F5 D3 F4
 F9F7 79
 F9F8 C9

IN A,(PIOA) ;Test Status
 AND 40H ;=1 dann busy
 JR NZ,LO1 ;warten dann
 LD A,C
 OUT (PIOB),A ;Daten definieren
 IN A,(PIOA) ;ggf. alter wert
 RES 7,A ;Strobe auf 0
 OUT (PIOA),A
 SET 7,A ;wieder auf 1
 OUT (PIOA),A
 LD A,C ;konventionell Data nach A
 RET

F9F9

LOEND:

END START

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Macros:

Symbols:

F9E0	LO	F9E4	LO1	F9F9	LOEND
0077'	LOREL	002E'	MSG	00F4	PIOA
00F5	PIOASTS	00F6	PIOB	00F7	PIOBSTS
006D'	PRINT	0000'	START		

No Fatal error(s)