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↑ 0002  PR006
01      000012 .RDX 10
02      000001 .TXTM 1
03      .TITL PR006
04      .NREL
05      ; ***** PAPER TAPE READER DRIVER *****
06      DB4: ; PROGRAM:
07 00000'140401      1B0+1B1+1B7+1 ; SPECIFICATION
08 00001'000007'    DB100 ; START
09 00002'000000      0 ; CHAIN
10 00003'000212    DB0-DB4 ; SIZE
11      .TXT .PTR<0><0>. ; NAME
      00004'050124
      00005'051000
      00006'000000
12 00007'126400 DB100:SUB 1,1 ; BREAK:
13 00010'101123      MOVZL 0,0 SNC ; IF -, POWER BREAK THEN
14 00011'045030      STA 1 RESERVER,2 ; RESERVER.CUR:=0;
15 00012'025036      LDA 1 DBDEVICE,2;
16 00013'006170      SETINTERRUPT ; SETINTERRUPT(DEVICE.CUR);
17 00014'024450      LDA 1 .DB15 ;
18 00015'045032      STA 1 CLINT,2 ; CLEAR.CUR:=SKIP BLANKS;
19 00016'102400 DB10: SUB 0,0 ; START:
20 00017'041033      STA 0 DBPARC,2 ; PARITYCOUNT:=0;
21 00020'041037      STA 0 DBSTATUS,2; STATUS.CUR:=0;
22 00021'006164      NEXTOPERATION ; NEXT OPERATION(MODE,COUNT,BUF
23 00022'000422      JMP DB12 ; +0: CONTROL);
24 00023'024121      LDA 1 .3 ;
25 00024'107400      AND 0,1 ; MODE.CUR:= MODE EXTRACT 2;
26 00025'045034      STA 1 DBMODE,2 ;
27 00026'024116      LDA 1 .4 ;
28 00027'034436      LDA 3 .DB18 ;
29 00030'107404      AND 0,1 SZR ; IF MODE(13) THEN
30 00031'055032      STA 3 CLINT,2 ; CLINT.CUR:=NORMAL READING;
31 00032'103120      ADDZL 0,0 ; MODE:= MODE SHIFT 2;
32 00033'101300      MOVS 0,0 ; MASK.CUR:= MODE SHIFT (-8);
33 00034'041035      STA 0 DBMASK,2 ;
34 00035'060277      INTDS ; DISABLE; ITO FACE OFF INTS;
35 00036'005040      JSR DBNIOS,2 ; NIOS.CUR;
36 00037'025036      LDA 1 DBDEVICE,2; DEV:=DEVICE.CUR;
37 00040'030135      LDA 2 .48 ;
38 00041'006003      WAITINTERRUPT ; WAIT INTERRUPT(DEV,48);
39 00042'000411      JMP DB13 ; +0: GOTO TIMER;
40 00043'000415      JMP DB14 ; +1: RETURN ANSWER;
41

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↑ 0003 PR006

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01
02
03 00044'006171 DB12: SETRESERVATION ; CONTROL:
04 00045'101223 MOVZR 0,0 SNC ; SET RESERVATION(MODE);
05 00046'000412 JMP DB14 ; IF CONVERSION.MODE THEN
06 00047'025026 LDA 1 ADDRESS,2 ; CONV.T.CUR:=ADDR.CUR//2;
07 00050'125220 MOVZR 1,1 ;
08 00051'045031 STA 1 CONV.T,2 ;
09 00052'000404 JMP DB135 ; GOTO RETURN;
10 00053'006170 DB13: SETINTERRUPT ; TIMER:
11 00054'024114 LDA 1 .1B11 ; SETINTERRUPT(DEV.CUR);
12 00055'004525 JSR DB30 ; TEST AND SET(1B11);
13 00056'024406 DB135:LDA 1 .DB15 ;
14 00057'045032 STA 1 CLINT,2 ; CLEARINT.CUR:=ADDR(DB15);
15
16 ; RETURN:
17 00060'021037 DB14: LDA 0 DBSTATUS,2 ; STATUS:= STATUS.CUR;
18 00061'025033 LDA 1 DBPARC,2 ;
19 00062'006165 RETURNANSWER ; RETURN ANSWER(STATUS,PARITY);
20 00063'000733 JMP DB10 ; GOTO START;
21
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↑ 0004 PR006

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01
02
03           ; INTERRUPT CLEAR ACTIONS
04 00064'000066'.DB15:DB15
05 00065'000075'.DB18:DB18
06 00066'054000 DB15: STA      3      0           ; SKIP BLANK TAPE:
07 00067'005042      JSR      DBDIAC,2       ; DIAC.CUR(CHAR);
08 00070'101005      MOV      0,0 SNR         ; IF CHAR= 0 THEN
09 00071'000501      JMP      DB25          ; GOTO NEXT;
10 00072'034773      LDA      3      .DB18       ;
11 00073'055032      STA      3      CLINT,2       ; CLEARINT.CUR:=ADDR(DB18);
12 00074'000403      JMP      DB19          ; GOTO CHARMASK;
13 00075'054000 DB18: STA      3      0           ; SAVE RETURN
14 00076'005042      JSR      DBDIAC,2       ; DIAC.CUR(CHAR);
15 00077'035013 DB19: LDA      3      STATE,2       ; CHARMASK:
16 00100'136404      SUB      1,3 SZR         ; IF STATE.PROC<>DEVICE THEN
17 00101'002056      JMP#     EXIT           ; GOTO EXIT;
18 00102'025035      LDA      1      DBMASK,2       ;
19 00103'107404      AND      0,1 SZR         ; IF CHAR AND MASK<>0 THEN
20 00104'000464      JMP      DB24          ; GOTO CHAR DEFECT;
21 00105'035034      LDA      3      DBMODE,2       ;
22 00106'175625      INCZR   3,3 SNR         ; IF MODE+1>1 THEN
23 00107'000412      JMP      DB191        ; BEGIN
24 00110'034143      LDA      3      .255         ;
25 00111'105304      MOVS    0,1 SZR         ; IF CHAR=0 OR CHAR=255 THEN
26 00112'116415      SUB#    0,3 SNR         ; GOTO NEXT;
27 00113'000457      JMP      DB25          ;
28 00114'127004      ADD      1,1 SZR         ; CARRY:= -,MODE(13:13) XOR
29 00115'000777      JMP      .-1           ; PARITY(CHAR);
30 00116'024142      LDA      1      .127         ; CHAR:=CHAR(9:15);
31 00117'123403      AND      1,0 SNC         ; IF -,CARRY THEN
32 00120'004457      JSR      DB300        ; SET 26 SET(PARITY);
33                                     ; END;
34 00121'035031 DB191:LDA    3      CONVT,2       ;
35 00122'175005      MOV      3,3 SNR         ; IF CONV TABLE.CUR=0 THEN
36 00123'000434      JMP      DB20          ; GOTO PACK;
37 00124'117000      ADD      0,3          ; CLASS:=CONVTAB.CHAR(0:7);
38 00125'025400      LDA      1      +0,3       ; CHAR:=CONVTAB.CHAR(8:15);
39 00126'020143      LDA      0      .255         ;
40 00127'123400      AND      1,0          ; IF CLASS=0 THEN
41 00130'106405      SUB      0,1 SNR         ; GOTO PACK;
42 00131'000426      JMP      DB20          ; CLASS:=CLASS-128;
43 00132'127305      ADDS    1,1 SNR         ; IF CLASS=0 THEN
44 00133'000437      JMP      DB25          ; GOTO NEXT;
45 00134'125220      MOVZR   1,1          ;
46 00135'125225      MOVZR   1,1 SNR         ; IF CLASS <2 THEN
47 00136'000405      JMP      DB193        ; GOTO SHIFTNEG;
48 00137'125224      MOVZR   1,1 SZR         ; IF CLASS <4 THEN
49 00140'000411      JMP      DB194        ; BEGIN
50 00141'100405      NEG     0,0 SNR         ; CHAR:=-CHAR;
51 00142'020147      LDA      0      .M256       ; IF CHAR=0 THEN CHAR:=-256;
52
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↑ 0005 PR006

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01          DB193:          ; SHIFTNEG:
02 00143'101005          MOV    0,0 SNR          ; IF CHAR=0 THEN CHAR:=256;
03 00144'020110          LDA    0 .256          ;
04 00145'025031          LDA    1 CONV,2          ;
05 00146'106400          SUB    0,1          ; CONV,2:=CONV,2-CHAR;
06 00147'045031          STA    1 CONV,2          ; GOTO NEXT
07 00150'000422          JMP    DB25          ; END;
08 00151'125224 DB194:MOVZR 1,1 SZR          ; IF CLASS <8 THEN
09 00152'000404          JMP    DB195          ; BEGIN
10 00153'126520          SUBZL 1,1          ; COUNT,CUR:=1;
11 00154'045027          STA    1 COUNT,2          ; GOTO PACK
12 00155'000402          JMP    DB20          ; END;
13 00156'004422 DB195:JSR    DB301          ; SET(PARITY);
14
15          DB20:          ; PACK:
16 00157'050417          STA    2 DBCUR          ;
17 00160'025026          LDA    1 ADDRESS,2          ; ADDR:=ADDRESS,CUR;
18 00161'006175          PUTBYTE          ; PUTBYTE(ADDR,CHAR);
19 00162'030414          LDA    2 DBCUR          ;
20 00163'011026          ISZ    ADDRESS,2          ; INCR(ADDRESS,CUR);
21 00164'015027          DSZ    COUNT,2          ; IF DECR(COUNT,CUR)<>0 THEN
22 00165'000405          JMP    DB25          ; GOTO NEXT;
23 00166'025036          LDA    1 DBDEVICE,2          ;
24 00167'002000          JMP    0          ; EXIT;
25
26 00170'024104 DB24: LDA    1 .1B3          ; CHAR DEFECT:
27 00171'004410          JSR    DB302          ; SET(CHAR DEFECT);
28
29 00172'005040 DB25: JSR    DBNIOS,2          ; NEXT: NIOS,CUR;
30 00173'020135          LDA    0 .48          ;
31 00174'041014          STA    0 TIMER,2          ; TIMER,CUR:=48;
32 00175'002056          JMP    EXIT          ; GOTO MONITOR EXIT;
33
34 00176'000000 DBCUR:0
35
36 00177'020412 DB300:LDA    0 DB26          ; SET 26 SET: CHAR:=26;
37
38 00200'024113 DB301:LDA    1 SPARITY          ; SET(PARITY);
39
40 00201'011033 DB302:ISZ    DBPARC,2          ; INCR(PARITYCOUNT);
41
42          ; PROCEDURE SET(MASK);
43          ; CALL:          RETURN:
44          ; AC0          UNCH.
45          ; AC1 STATUS          STATUS
46          ; AC2 CUR          CUR
47          ; AC3 LINK          LINK
48
49 00202'055024 DB30: STA    3 SAVE,2          ; SET:
50 00203'035037          LDA    3 DBSTATUS,2          ;
51 00204'174000          COM    3,3          ; STATUS:= STATUS.CUR;
52 00205'167400          AND    3,1          ;
53 00206'166000          ADC    3,1          ; STATUS:= STATUS OR MASK;
54 00207'045037          STA    1 DBSTATUS,2          ; STATUS.CUR:= STATUS;
55 00210'003024          JMP    SAVE,2          ; RETURN;
56
57 00211'000032 DB26: 26
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↑ 0006 PR006
01 DB0: ; PROCESS DESCRIPTOR:
02 00212'000000 0 ; NEXT
03 00213'000000 0 ; PREV
04 00214'000000 0 ; CHAIN
05 00215'000044 DB2-DB0 ; SIZE
06 .TXT .PTR<0><0>. ; NAME
    00216'050124
    00217'051000
    00220'000000
07 00221'000221' DB0+EVENT ; FIRST EVENT
08 00222'000221' DB0+EVENT ; LAST EVENT
09 00223'000000 0 ; BUFFER
10 00224'000000' DB4 ; PROGRAM
11 00225'000000 0 ; STATE
12 00226'000000 0 ; TIMER COUNT
13 00227'100000 1B0 ; PRIORITY
14 00230'000007' DB100 ; BREAK ADDRESS
15 00231'000212' DB0 ; AC0
16 00232'000000 0 ; AC1
17 00233'000212' DB0 ; AC2
18 00234'000000 0 ; AC3
19 00235'000016" DB100*2 ; PSW
20 00236'000000 0 ; SAVE
21 ; OPTIONAL:
22 00237'000000 0 ; BUF
23 00240'000000 0 ; ADDRESS
24 00241'000000 0 ; COUNT
25 00242'000000 0 ; RESERVER = 0
26 00243'000000 0 ; CONVTABLE = 0
27 00244'100166 CLEAR ; CLEAR INTERRUPT
28 000033 DBPARC=.-DB0 ;
29 00245'000000 0 ;
30 000034 DBMODE=.-DB0 ;
31 00246'177777 -1 ; MODE = -1
32 000035 DBMASK =.-DB0 ;
33 00247'177777 -1 ; MASK=-1
34 000036 DBDEVICE=.-DB0 ;
35 00250'000012 PTR ; DEVICE = PTR
36 000037 DBSTATUS=.-DB0 ;
37 00251'000000 0 ; STATUS = 0
38 000040 DBNIOS=.-DB0 ;
39 00252'060112 NIOS PTR ; NIOS(PTR)
40 00253'001400 JMP +0,3 ; RETURN
41 000042 DBDIAC=.-DB0 ;
42 00254'060612 DIAC 0 PTR ; DIAC(PTR,AC0)
43 00255'001400 JMP +0,3 ; RETURN
44 DB2: ; TOP OF PROCESS DESCRIPTOR:
45
46 ; ***** END OF PAPER TAPE READER DRIVER *****
47 000372 .LOC 250
48 00372 000212'DB0
49 000212'.END DB0

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0007 PR006

DB0	000212'	2/10	6/01	6/05	6/07	6/08	6/15	6/17	6/17
		6/30	6/32	6/34	6/36	6/38	6/41	6/48	6/48
DB10	000016'	2/19	3/20						
DB100	000007'	2/08	2/12	6/14	6/19				
DB12	000044'	2/23	3/02						
DB13	000053'	2/39	3/10						
DB135	000056'	3/09	3/13						
DB14	000060'	2/40	3/05	3/17					
DB15	000066'	4/04	4/06						
DB18	000075'	4/05	4/13						
DB19	000077'	4/12	4/15						
DB191	000121'	4/23	4/34						
DB193	000143'	4/47	5/01						
DB194	000151'	4/49	5/08						
DB195	000156'	5/09	5/13						
DB2	000256'	6/05	6/44						
DB20	000157'	4/36	4/42	5/12	5/15				
DB24	000170'	4/20	5/26						
DB25	000172'	4/09	4/27	4/44	5/07	5/22	5/29		
DB26	000211'	5/36	5/57						
DB30	000202'	3/12	5/49						
DB300	000177'	4/32	5/36						
DB301	000200'	5/13	5/38						
DB302	000201'	5/27	5/40						
DB4	000000'	2/06	2/10	6/10					
DBCUR	000176'	5/16	5/19	5/34					
DBDEV	000036	2/15	2/36	5/23	6/34				
DBDIA	000042	4/07	4/14	6/41					
DBMAS	000035	2/33	4/18	6/32					
DBMOD	000034	2/26	4/21	6/30					
DBNIO	000040	2/35	5/29	6/38					
DBPAR	000033	2/20	3/18	5/40	6/28				
DBSTA	000037	2/21	3/17	5/50	5/54	6/36			
.DB15	000064'	2/17	3/13	4/04					
.DB18	000065'	2/28	4/05	4/10					