Number   :   SW-004   Date   :   1977-01-17
Subject   :   HSPT (reader)

The support group for TWIN has connected a Digitronics 2540 HSPT
reader.
The routine mentioned in the Systems Reference Manual must be changed
to be able to read all characters.
The line numbers used are the line numbers mentioned in the System
Reference Manual:

```
INSERT after line 331 (BCFA,EQ HIS2):          BSTA,UN   TURNØF
REPLACE line 335      (EØRI,RO H'7F'):          EØRI,RO H'5F' CHECK STATUS
REPLACE line 403 (HIS7 BSTR,UN HSIØ):  HIS7     BSTR,UN TURNØN
REPLACE line 415 (HSIØ LØDI,RO H'18'): TURNØF LØDI,RO H'18'
INSERT after line 416 (WRTE,RO PCPT):           RETC,UN
REPLACE line 417      (LØDI,RO H'88'): TURNØN LØDI,RO H'88'
REPLACE line 470      (EØRI,RO H'7F'):          ANDI,RO H'AO' CHECK LEVER & EØT
REPLACE line 478      (BSTA,UN HSIØ):           BSTA,UN TURNØN
```

The GPIO card was modified in the following way:

connect A8-14 with A6-1
connect A8-3 with A6-15

cut the trace J10: next to B13b-6
                   from D13-13 to GND

The connector should be connected as follows:

Digitronics 2540	GPIO-P3	Function
4 connected to CC	17/18/19/20	GND
18	1	forward
20	4	Halt
21 connected to B		
24 connected to C		
D	36	data bit 7
E	35	6
F	34	5
H	33	4
J	32	3
K	31	2
L	30	1
M	29	0
25	21	lever
P	22	sprocket
AA	23	EOT

If all this is done and your assembly is correct integrate your
HSPT driver into SDOS as described in your SYSTEMS REFERENCE manual
and your HSPT should work.

NOTE: a. If the lever is up, a EOT is detected or a sprocket is missed
         the system will return with an error code. (parity is not
         checked, see instruction 344).

      b. The tape must have been closed with a control-Z character
         to avoid status 06 (no EOL on ASCII READ)

      c. It is advised to copy always first your paper tape to the
         disk and handle the info from the disk file.

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TWIN SUPPORT GROUP

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TWIN SUPPORT GROUP

GPIO - P3 plug		
	foR	13
1	HLT	25
4	B7	1
36	6	14
35	5	2
34	4	15
33	3	3
32	2	16
31	1	4
30	B0	17
29		~~18~~ (9?)
	LEV	
21	SPR.	6
22	EOT	83
23 -		
17-18 ⎫ t/m		5, 18, 19, 20
19-20 ⎭		