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TITLE	PARITY HI-LO LOADER
AUTHOR	Ronald Zane
COMPANY	University of Hawaii Honolulu, Hawaii
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SOURCE LANGUAGE	PAL III

PARITY HI-LO LOADER

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ABSTRACT

The Parity Hi-Lo Loader is a short routine for reading and storing information contained in parity coded tapes, using the ASR-33 punched paper tape reader or the PR8/I high speed punched paper tape reader.

REQUIREMENTS

A. Standard PDP8, PDP8/S, PDP8/I or PDP8/L.

B. Core Storage - 70 (decimal) core locations (7400 - 7505).

C. The Parity Hi-Lo Loader may be used with a system consisting of the PDP8 and associated teletype ASR-33 only. The same program may be used with systems containing a high speed reader such as a PR8/I or type 750.

SUBROUTINES USED

None

RESTRICTIONS

None

USAGE

Load the Parity Hi-Lo Loader program into core with either the RIM or BINARY loaders (Parity Hi-Lo Loader is available in either RIM or BIN format). Proceed as follows:

a. Place the parity format tape to be loaded by Parity Hi-Lo Loader in either the ASR-33 reader or the high speed reader. Make sure that the ASR-33 is on-line and the READER CONTROL switch is in the START position if the ASR-33 is used.

b. Place the starting address of the Parity Hi-Lo Loader program (7400) in the SWITCH REGISTER.

c. Press the LOAD ADDRESS key.

d. Select the high speed reader or ASR-33 reader by setting SWITCH REGISTER Bit Ø. SRØ (Ø)=high speed reader. SRØ (1)=ASR-33 reader.

COMMENTS

The parity format tape to be loaded must be started with leader code (8 level punch) in the reader. The Parity Hi-Lo Loader will halt if a parity error is detected. Parity Hi-Lo Loader will halt when leader code (8 level punch) is encountered at the trailing end of the parity format tape.

```
                /PARITY HI-LO LOADER. SR0(1) = LO SPEED READER AND
                /SR0(0) = HI SPEED READER.
                /R. ZANE, 9/9/70
                *7400
7400  4231  LDR,     JMS READ
7401  4271          JMS EIGHT
7402  7440          SZA
7403  5200          JMP LDR
7404  4216          JMS CONT
7405  3301          DCA ADR
7406  4231  GO,      JMS READ
7407  4271          JMS EIGHT
7410  7440          SZA
7411  7402          HLT                 /TRAILER HALT
7412  4216          JMS CONT
7413  3701          DCA I ADR
7414  2301          ISZ ADR
7415  5206          JMP GO
7416  0000  CONT,    0
7417  1302          TAD TEMP
7420  0277          AND MSK6
7421  7006          RTL
7422  7006          RTL
7423  7006          RTL
7424  3303          DCA COMB
7425  4231          JMS READ
7426  0277          AND MSK6
7427  1303          TAD COMB
7430  5616          JMP I CONT
7431  0000  READ,    0
7432  7604          LAS
7433  7510          SPA                 /HI SPEED READER?
7434  5242          JMP SLOW            /NO
7435  7300          CLA CLL             /YES
7436  6016          RRB RFC
7437  6011          RSF
7440  5237          JMP .-1
7441  5245          JMP PCHECK
7442  6031  SLOW,    KSF
7443  5242          JMP .-1
7444  6036          KRB
7445  4271  PCHECK,  JMS EIGHT
7446  7440          SZA
7447  3302          DCA TEMP
7450  3304          DCA PSUM
7451  1276          TAD M13
7452  3305          DCA TEST
7453  1302          TAD TEMP
7454  7004  LOOP,    RAL
7455  7430          SZL
7456  2304          ISZ PSUM
7457  2305          ISZ TEST
7460  5254          JMP LOOP
7461  7300          CLA CLL
```

```
7462  1304           TAD PSUM         /PARITY TEST
7463  7010           RAR
7464  7420           SNL
7465  7402           HLT              /PARITY FAIL
7466  7300           CLA CLL
7467  1302           TAD TEMP
7470  5631           JMP I READ
7471  0000  EIGHT,    0
7472  3302           DCA TEMP
7473  1302           TAD TEMP
7474  0300           AND MSK8
7475  5671           JMP I EIGHT
7476  7763  M13,      -15
7477  0077  MSK6,     0077
7500  0200  MSK8,     0200
7501  0000  ADR,      0000
7502  0000  TEMP,     0000
7503  0000  COMB,     0000
7504  0000  PSUM,     0000
7505  0000  TEST,     0000

ADR      7501
COMB     7503
CONT     7416
EIGHT    7471
GO       7406
LDR      7400
LOOP     7454
MSK6     7477
MSK8     7500
M13      7476
PCHECK   7445
PSUM     7504
READ     7431
SLOW     7442
TEMP     7502
TEST     7505
```