DECUS NO. 8-197

TITLE Overlay for Standard Editor and PAL III Assembler

AUTHOR John Knox

COMPANY International Controls Corporation
Houston, Texas

DATE Submitted: May 8, 1969

SOURCE LANGUAGE PAL III

Although this program has been tested by the contributor, no warranty, express or implied, is made by the contributor, Digital Equipment Computer Users Society or Digital Equipment Corporation as to the accuracy or functioning of the program or related program material, and no responsibility is assumed by these parties in connection therewith.
/THE FOLLOWING OVERLAY AND SUBROUTINES
/ALLows PAL III to read in from the editor
/instead of paper tape for each pass.
/
/OPERATION IS AS FOLLOWS:
/DEPOSIT IN LOCATION 0 FIELD 0 THE EDITOR
/BIT 0 & 1 SWITCH OPTION DESIRED.
/LOAD ADDRESS 7777, PRESS START.
/AT THIS TIME THE EDITOR IS PLACED IN
/COMMAND MODE. THE BUFFER IS NOT CLEARED,
/USE K RETURN IF A CLEAR BUFFER IS DESIRED.
/ONLY THE HIGH SPEED P PUNCH COMMAND
/OPERATION IS CHANGED. AFTER NORMAL
/EDIT OPERATION AND PAL III IS DESIRED,
/SET SWITCH REGISTER BIT 10 TO 1,
/SET THE PAL III PASS SWITCH REGISTER
/OPTION AND TYPE P RETURN. AFTER HALT IF
/PUNCH DESIRED TURN ON AND PRESS CONTINUE.
/AFTER DESIRED PAL III PASS, CONTROL IS
/RETURNED TO THE EDITOR IN COMMAND MODE.
/IF NO EDITING IS REQUIRED SELECT NEXT
/PAL III PASS SWITCH OPTION AND REPEAT
/THE P RETURN COMMAND.
/UPON COMPLETION OF PASS 3 RETURN SWITCH
/REGISTER BIT 10 TO A 0 FOR LOW SPEED
/PUNCH OUTPUT.
/
/LOADING INSTRUCTIONS - DEPOSIT RIM LOADER
/INTO FIELD 1. LOAD DEC-08-LBAA-PM BINARY
/LOADER INTO FIELD 1. LOAD DEC-08-AS81-PB
/2/24/67 PAL III BINARY TAPE INTO FIELD 1.
/LOAD DEC-08-ES61-PB 8/4/67 PDP-8 EDITOR.
/HIGH AND LOW SPEED COMBINED INTO FIELD 0.
/LOAD THE FOLLOWING OVERLAY OF BOTH FIELDS.
/
/EDITOR MODIFICATIONS

FIELD 0

0330 3333 0 /LOCATION NOW USED FOR EDITOR READ
AND OUTPUT FORMAT OPTIONS, WERE
/SWITCH REGISTER BITS 0 & 1.
0331 7733 7730 /UPPER BUFFER LIMIT

*1154

1154 5755 JMP I PALIII
1155 7746 PALIII, CKPAL

*1104

1104 1300 TAD 0 /OUTPUT FORMAT OPTION
1445 1393  IAD 0  /READ IN FORMAT OPTION CHECK.

*7746

7746 3371  CKPAL,  DCA  ASCII /SAVE CHARACTER  
7747 1376  IAD  STARTF
7750 7652  SNA CLA  /HAS PAL BEEN STARTED?
7751 5355  JMP  SETPAL /NO
7752 1371  PALOUT,  IAD  ASCII
7753 6213  CIF CDF  13 /CHANGE TO FIELD 1
7754 5774  JMP  I PAL
7755 2376  SETPAL,  ISZ  STARTF /SET PAL-STARTED FLAG
7756 6213  CIF CDF  12 /CHANGE TO FIELD 1
7757 5775  JMP  I START
7758 1372  CHAR,  IAD  CIFLAG
7761 7840  SZA CLA  /FIRST CHARACTER RECEIVED?
7762 5773  JMP  I EDITR /YES, GET NEXT CHARACTER
7763 2372  ISZ  CIFLAG
7764 5352  JMP  PALOUT
7765 7300  CLEAR,  CLL CLA
7766 3372  DCA  CIFLAG
7767 3376  DCA  STARTF
7768 5177  JMP  177
7771 3000  ASCII,  0
7772 0000  CIFLAG,  0
7773 1157  EDITR,  1157
7774 1404  PAL,  1404
7775 0200  START,  200
7776 0000  STARTF,  0
7777 5365  ENTER,  JMP  CLEAR

/NOTE: THE FOLLOWING LOCATIONS IN THE EDITOR
/CONTAIN OSR INSTRUCTIONS. *1062 - BIT 2,
/TERMINATE OUTPUT AND RETURN TO CONTROL MODE,
/*1240 - BIT 10, HIGH OR LOW SPEED PUNCH,
/*1253 - BIT 11, HIGH OR LOW SPEED READER.

/PAL III MODIFICATIONS

FIELD 1

*241

0241 5642  JMP  I PASS  /PASS COMPLETE.
0242 7600  PASS,  PASSD

*1401

1401 6203  CIF CDF  30 /CHANGE TO FIELD 0
1402 5633  JMP  I EDIT
1403 7760  EDIT,  CHAR

*7600

7600 6203  PASSD,  CIF CDF  00 /CHANGE TO FIELD 0
7601 5600  JMP  I PCLEAR
7602 7765  PCLEAR,  CLEAR
<table>
<thead>
<tr>
<th>Keyword</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCII</td>
<td>7771</td>
</tr>
<tr>
<td>CHAR</td>
<td>7763</td>
</tr>
<tr>
<td>CKPAL</td>
<td>7746</td>
</tr>
<tr>
<td>CLEAR</td>
<td>7765</td>
</tr>
<tr>
<td>CI FLAG</td>
<td>7772</td>
</tr>
<tr>
<td>EDIT</td>
<td>1433</td>
</tr>
<tr>
<td>EDITR</td>
<td>7773</td>
</tr>
<tr>
<td>ENTER</td>
<td>7777</td>
</tr>
<tr>
<td>PAL</td>
<td>7774</td>
</tr>
<tr>
<td>PALIII</td>
<td>1155</td>
</tr>
<tr>
<td>PALOUT</td>
<td>7752</td>
</tr>
<tr>
<td>PASS</td>
<td>9242</td>
</tr>
<tr>
<td>PASSD</td>
<td>7603</td>
</tr>
<tr>
<td>PCLEAR</td>
<td>7602</td>
</tr>
<tr>
<td>SETPAL</td>
<td>7755</td>
</tr>
<tr>
<td>START</td>
<td>7775</td>
</tr>
<tr>
<td>STARTF</td>
<td>7776</td>
</tr>
</tbody>
</table>