

HP-41C Routine Listing of 8K PPC Custom ROM LF  
PPC Calculator Journal V8 N2 P1/5 Mar-Apr 1981  
Including line changes to match PPC Custom ROM

```
01 LBL "LF" ;Locate Free Register Block - XROM 10,05
02 XROM 10,62 ;E? (End Finder)
03 17
04 -
05 E3
06 /
07 177
08 +
09 XROM 10,58 ;OM (Open Memory)
10 "\2A\10\2A\00\00\2A\2A\F0" ;2A102A00002A2AF0 hex
11 .
12 ENTER
13 DSE T
14 GTO 14
15 LBL 00
16 X<> IND T
17 X=Y?
18 GTO 14
19 X<> M
20 >"\10" ;Append 10 hex
21 STO N
22 ARCL X
23 RDN
24 RCL N
25 X<> IND T
26 ISG T
27 GTO 00
28 LBL 14
29 X<> M
30 ARCL X
31 X<> N
32 SF 10
33 X=Y?
34 DSE T
35 CF 10
36 X<> Z
37 X<> c
38 R^
39 RTN
40 LBL "CK" ;Clear Key Assignments - XROM 10,06
41 XROM 10,62 ;E? (End Finder)
42 17
43 -
44 E3
45 /
46 177
47 +
48 DSE X
49 RTN
50 XROM 10,58 ;OM (Open Memory)
51 .
52 STO R
53 STO e
54 LBL 06
55 STO IND Z
56 ISG Z
57 GTO 06
58 X<>Y
59 X<> c
60 R^
61 RTN
62 LBL "VA" ;View Alpha - XROM 10,07
63 SF 25
64 XROM 29,08 ;PRA
65 SF 25 ;Line added in PPC ROM, not shown in V8 N2 P1/5
66 FS?C 21
```

```

67 CF 25
68 AVIEW
69 FC?C 25
70 SF 21
71 RTN
72 LBL "UD" ;Uncover Data Register - XROM 10,08
73 CLA
74 ARCL 00
75 ASTO c
76 SREG 01 ;SigmaREG
77 RTN
78 LBL "PK" ;Pack Key Assignment Registers - XROM 10,09
79 XROM 10,62 ;E? (End Finder)
80 17
81 -
82 E3
83 /
84 175
85 +
86 ENTER
87 CF 09
88 CF 10
89 E
90 +
91 XROM 10,58 ;OM (Open Memory)
92 .
93 GTO 03
94 LBL 07
95 FS?C 09
96 X#0?
97 FS? 09
98 GTO 03
99 X<> M
100 FS?C 10
101 GTO 08
102 SF 10
103 "\2A\2A\F0" ;2 asterisks, F0 hex
104 X<> M
105 X<> N
106 ASTO L
107 GTO 03
108 LBL 08
109 ARCL L
110 X<> M
111 STO N
112 >"***" ;Append 3 asterisks
113 GTO 02
114 LBL 01
115 X<> IND T
116 SF 25
117 X#0?
118 FS?C 25
119 GTO 04
120 "****" ;4 asterisks
121 ARCL c ;Was incorrect ARCL Y in V8 N2 P1/5
122 STO M
123 >"****" ;Append 4 asterisks
124 ASHF
125 X<> N
126 X=0?
127 SF 09
128 CLX
129 X<> N
130 FC? 09
131 STO M
132 X<> M
133 ASHF
134 X<> M
135 FC? 09
136 >"\F0" ;Append F0 hex

```

```

137 FC? 09
138 X=0?
139 GTO 07
140 RDN
141 RCL M
142 STO N
143 ARCL c ;Was incorrect ARCL Y in V8 N2 P1/5
144 LBL 02
145 X<> N
146 X<> IND Z
147 ISG Z
148 LBL 03
149 ISG T
150 GTO 01
151 LBL 04
152 FC? 10
153 GTO 05
154 ARCL L
155 >"\00\00\00" ;Append 3 nulls
156 X<> M
157 STO IND Z
158 LBL 05
159 RDN
160 X<> c
161 X<>Y
162 ENTER
163 GTO 14
164 LBL "A?" ;Assignment Register Finder - XROM 10,10
165 XROM 10,05 ;LF (Locate Free Register Block)
166 LBL 14
167 CLA
168 INT
169 175
170 -
171 .5
172 FC?C 10
173 SIGN
174 -
175 RTN
176 LBL "DC" ;Decimal to Character - XROM 10,11
177 INT
178 256
179 MOD
180 LASTX
181 +
182 OCT
183 X<> d
184 FS?C 11
185 SF 12
186 FS?C 10
187 SF 11
188 FS?C 09
189 SF 10
190 FS? 07
191 SF 09
192 FS? 06
193 SF 08
194 X<> d
195 X<> M
196 RCL N
197 >"*" ;Append 1 asterisk
198 X<> O
199 X<>Y
200 STO N
201 X<> P
202 >"*" ;Append 1 asterisk
203 STO P
204 RDN
205 X<> O
206 X<> N

```

207 STO M  
208 RDN  
209 END

019DC000F3004C46A2BE1117411B134311171740A2BAF82A10  
2A00002A2AF01A839770BF0001CEF078BF00CE75F27F109176  
9B73759076CEF09670B1000FCE759B73CE76A80A789770A90A  
CE71CE7D7485C000F300434BA2BE1117411B13431117174097  
7385A2BA1A917A917F0791F19671B70071CE7D7485C000F300  
5641A819A748A819AA15A9197EAB19A81585C000F300554487  
9B009A7D990185C000F300504BA2BE1117411B134311171540  
83A909A90A1B40A2BA1AB40008AA0963AC09B400CE75AA0AB9  
00A80AF32A2AF0CE75CE769A74B400099B74CE759176F47F2A  
2A2AB30002CEF0A81963AA19B500F42A2A2A2A9B7D9175F57F  
2A2A2A2A88CE7667A80977CE76AD099175CE7588CE75AD09F2  
7FF0AD0967B80075907591769B7D03CE76CEF19671049670B2  
0005AD0AB6009B74F47F000000CE7591F10675CE7D7183BF00  
C000F300413FA2850F8768111715411A15AB0A7A4185C000F3  
004443681215164B76406FCE7EAA0BA80CAA0AA80BAA09A80A  
AC07A809AC06A808CE7ECE759076F27F2ACE77719176CE78F2  
7F2A917875CE77CE76917575C0000DE8

413 BYTES

Program Registers Needed: 59

Row 1 (1 - 5)



Row 2 (6 - 10)



Row 3 (10 - 17)



Row 4 (18 - 24)



Row 5 (24 - 31)



Row 6 (31 - 38)



Row 7 (39 - 44)



Row 8 (44 - 52)



Row 9 (52 - 59)



Row 10 (60 - 65)



Row 11 (65 - 72)



Row 12 (72 - 78)



Row 13 (78 - 83)



Row 14 (84 - 91)



Row 15 (92 - 99)



Row 16 (100 - 105)



Row 17 (105 - 112)



Row 18 (112 - 118)



Row 19 (118 - 123)



Row 20 (123 - 129)



Row 21 (129 - 136)



Row 22 (136 - 143)



Row 23 (143 - 150)



Row 24 (151 - 156)



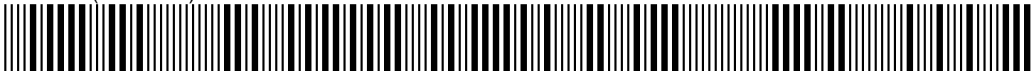
Row 25 (156 - 164)



Row 26 (164 - 170)



Row 27 (171 - 176)



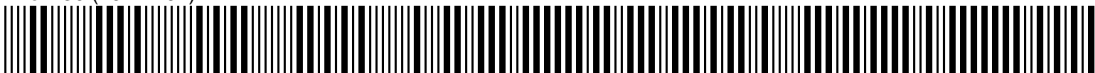
Row 28 (177 - 185)



Row 29 (185 - 191)



Row 30 (192 - 197)



Row 31 (198 - 204)



Row 32 (205 - 209)

