

HP-41C Routine Listing of 8K PPC Custom ROM VM  
PPC Calculator Journal V8 N2 P1/5 Mar-Apr 1981

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01 LBL "VM"      ;View Mantissa - XROM 10,26
02 CF 21
03 XROM 10,28 ;MT (Mantissa of X)
04 X<> M
05 RDN
06 VIEW O
07 RCL d
08 FIX 9
09 VIEW M
10 STO d
11 RDN
12 LASTX
13 RTN
14 LBL "EX"      ;Exponent of X - XROM 10,27
15 CLA
16 X#0?
17 "\10\11"     ;1011 hex
18 INT
19 X#0?
20 CLA
21 RDN
22 LASTX
23 X<> M
24 ASHF
25 >"\00\08"    ;Append 1 null, 08 hex
26 ST- M
27 X<> M
28 RTN
29 LBL "MT"      ;Mantissa of X - XROM 10,28
30 CLA
31 STO M
32 ASTO M
33 INT
34 X#0?
35 >"\00"       ;Append 1 null
36 X=0?
37 >"\A0"       ;Append A0 hex
38 CLX
39 ST+ M
40 X<> M
41 RTN
42 LBL "DS"      ;Display Set - XROM 10,29
43 SIGN
44 RDN
45 RCL d
46 STO O
47 SCI IND L
48 X<> d
49 STO M
50 >"*****"    ;Append 5 asterisks
51 X<> O
52 STO M
53 >"***"       ;Append 2 asterisks
54 X<> N
55 STO d
56 RDN
57 CLA
58 RTN
59 LBL "VS"      ;Verify Size - XROM 10,30
60 SF 25
61 INT
62 RDN
63 DSE T
64 ""           ;F0=null string (NOP)
65 RCL IND T
66 RDN
67 FS? 25
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68 RTN
69 "RESIZE>= "
70 TONE 73
71 R^
72 RCL d
73 FIX 0
74 CF 29
75 ARCL L
76 STO d
77 RDN
78 RTN
79 LBL "EP" ;Erase Program Memory - XROM 10,31
80 SF 25
81 XEQ "//" ;Position in RAM to Start Erasing
82 FC?C 14
83 FC?C 25
84 GTO 14
85 XROM 10,52 ;PD (Program Pointer to Decimal)
86 3
87 -
88 7
89 /
90 INT
91 GTO 13
92 LBL 14
93 XROM 10,16 ;C? (Curtain Finder)
94 LBL 13
95 XROM 10,62 ;E? (.END. Finder)
96 16
97 ST- Z
98 -
99 E3
100 /
101 +
102 XROM 10,58 ;OM (Open Memory)
103 .
104 DSE Z
105 XEQ 04
106 "\C0\00\2D" ;C0002D hex (nonpacked END)
107 X<> M
108 STO IND Z
109 X<>Y
110 X<> c
111 R^
112 XROM 10,60 ;GE (Go to .END.)
113 LBL 04
114 STO IND Z
115 DSE Z
116 GTO 04
117 RTN
118 LBL "TN" ;Tone N - XROM 10,32
119 "\9F" ;9F hex
120 XROM 10,11 ;DC (Decimal to Character)
121 ">\85" ;Append 85 hex
122 ASTO T
123 SF 25
124 "\06\00" ;06 hex, 1 null
125 XROM 10,19 ;XE (XROM Entry)
126 CF 25
127 RTN
128 LBL "CX" ;Curtain to Absolute Decimal Location in X - XROM 10,33
129 XROM 10,16 ;C? (Curtain Finder)
130 -
131 LBL "CU" ;Curtain Up - XROM 10,34
132 ABS
133 RDN
134 RCL c
135 STO M
136 ">\00\00\00\00" ;Append 4 nulls
137 11

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138 X<> M
139 X<> d
140 STO O
141 LBL 00
142 RDN
143 X<> L
144 INT
145 X=0?
146 GTO 14
147 2
148 /
149 RCL M
150 X<>Y
151 FRC
152 X=0?
153 GTO 13
154 LBL 01
155 FC?C IND Y
156 SF IND Y
157 FC? IND Y
158 CHS
159 X>0?
160 GTO 13
161 FC? IND Y
162 CHS
163 DSE Y
164 GTO 01
165 LBL 13
166 DSE M
167 GTO 00
168 LBL 14
169 X<> O
170 X<> d
171 STO M
172 >"ABC"
173 X<> N
174 X<> c
175 RDN
176 CLA
177 RTN
178 LBL "CD" ;Character to Decimal - XROM 10,35
179 >"\00\07\2A\2A\2A\2A" ;Append 1 null, 07 hex, 4 asterisks
180 RCL M
181 FS? 10
182 >"*" ;Append 1 asterisk
183 STO M
184 CLX
185 X<> O
186 SIGN
187 CLX
188 X<> N
189 >"****" ;Append 3 asterisks
190 X<> M
191 X<> L
192 X<> N
193 INT
194 ST+ O
195 RDN
196 6
197 ST* O
198 RDN
199 E1
200 ST* L
201 X<> L
202 ST+ O
203 CLX
204 X<> O
205 END

```

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01A2C600F300564DA915A29CCE75759877907E9C099875917E  
757685CA03F30045588763F210116863877576CE7588F37F00  
089375CE7585C004F3004D548791759A756863F27F0067F27F  
A0779275CE7585CA03F30044537A75907E91779DF4CE7E9175  
F67F2A2A2A2A2ACE779175F37F2A2ACE76917E758785CA05F3  
005653A81968759770F090F075AC1985F9524553495A453E3D  
209F4974907E9C00A91D9B74917E7585C406F3004550A8191E  
F22F2FAB0EAB19BF00A2B41341174368BE000FA2900EA2BE11  
169371411B134340A2BA1A9771E00004F3C0002DCE7591F171  
CE7D74A2BC0591F19771B50085C40AF300544EF19FA28BF27F  
859A70A819F20600A293A91985C803F3004358A29041C401F3  
0043556175907D9175F57F000000001111CE75CE7E91770175  
CE746867BF0012439075716967BE0002ABF2A8F2ADF25464BE  
00ADF2549772B2000E9775B1000FCE77CE7E9175F47F414243  
CE76CE7D758785C20CF3004344F77F00072A2A2A2A9075AC0A  
F27F2A917577CE777A77CE76F47F2A2A2ACE75CE74CE766892  
7775169477751B119474CE74927777CE77C8080980

418 BYTES

Program Registers Needed: 60

Row 1 (1 - 5)



Row 2 (6 - 13)



Row 3 (14 - 19)



Row 4 (20 - 27)



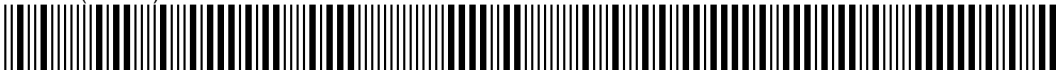
Row 5 (27 - 32)



Row 6 (33 - 40)



Row 7 (40 - 46)



Row 8 (46 - 50)



Row 9 (50 - 55)



Row 10 (56 - 62)



Row 11 (63 - 69)



Row 12 (69 - 73)



Row 13 (74 - 79)



Row 14 (79 - 84)



Row 15 (85 - 94)



Row 16 (95 - 102)



Row 17 (103 - 108)



Row 18 (108 - 116)



Row 19 (116 - 121)



Row 20 (121 - 126)



Row 21 (127 - 131)



Row 22 (131 - 136)



Row 23 (136 - 143)



Row 24 (143 - 153)



Row 25 (153 - 161)



Row 26 (161 - 169)



Row 27 (169 - 174)



Row 28 (174 - 179)



Row 29 (179 - 183)



Row 30 (183 - 189)



Row 31 (190 - 197)



Row 32 (198 - 205)



Row 33 ( 205 )

