

!A

LLOAD RD.L,A\$4000

*** End of Pass 1

LLOAD RD1.L,A\$4000

LLOAD RD2.L,A\$4000

LLOAD RD3.L,A\$4000

LLOAD RD4.L,A\$4000

LLOAD RD5.L,A\$4000

LLOAD RD6.L,A\$4000

LLOAD RD7.L,A\$4000

LLOAD RD.L,A\$4000

*** End of Pass 2

```
0800      1          ttl "RamDisk Source Code, RD.L"
0800      2          src "RD.L"
0800      3      ;
0800      4      ;
0800      5      ; RD.L
0800      6      ;
0800      7      ;
0800      8      ; RamDisk Source Code
0800      9      ;
0800     10      ; 2024 February 14
0800     11      ;
0800     12      ;
0800     13      ; DOS 4.5, Build 06
0800     14      ;
0800     15      ; 2024 February 14
0800     16      ;
0800     17      ;
0800     18      ; Start of Source Code: 0x4000
0800     19      ; Start of Symbol List: 0x7800
0800     20      ;
0800     21      ;
0800     22      ; Copyright (c) 2024 February 14 by
0800     23      ; Walland Philip Vrbancic Jr
0800     24      ;
0800     25      ; 6223 East Peabody Street
0800     26      ; Long Beach, California 90808
0800     27      ; Unitied States of America
0800     28      ;
0800     29      ; All Rights Reserved
0800     30      ;
0800     31      ; This software is the confidential and
0800     32      ; proprietary intellectual property of
0800     33      ; Walland Philip Vrbancic Jr
0800     34      ;
0800     35      ;
0000     36      LOC0      epz $00
0006     37      PTR1      epz $06
0008     38      PTR2      epz $08
001E     39      PTR      epz $1E
0800     40      ;
0020     41      WNDLFT      epz $20
0021     42      WNDWDTH      epz $21
0022     43      WNDTOP      epz $22
0023     44      WNCBTM      epz $23
0024     45      CH          epz $24
0025     46      CV          epz $25
0800     47      ;
0026     48      BUFRADRZ      epz $26
002A     49      ZTRACK      epz $2A
002B     50      ZSECTOR      epz $2B
002B     51      SLOT16Z      epz $2B
0800     52      ;
002C     53      DATAFNDZ      epz $2C
002D     54      SECFNDZ      epz $2D
002E     55      TRKFNDZ      epz $2E
002F     56      VOLFNDZ      epz $2F
0800     57      ;
0032     58      INVFLG      epz $32
003D     59      ROMSECTR      epz $3D
003E     60      BUFADR2Z      epz $3E
```

```
0800      61 ;
004A      62 IOBADR      epz $4A
0800      63 ;
00EE      64 DATPTR      epz $EE
0800      65 ;
00FA      66 DATAPTR      epz $FA
00FC      67 PRNTPTR      epz $FC
0800      68 ;
0800      69          enz
0800      70 ;
0005      71 VERSION      equ $05
0006      72 BUILD        equ $06
0800      73 ;
0033      74 VRSN3.3      equ $33
0800      75 ;
0041      76 VRSN4.1      equ $41
0046      77 BLD4.1      equ $46
0800      78 ;
0043      79 VRSN4.3      equ $43
0008      80 BLD4.3      equ $08
0800      81 ;
0045      82 VRSN4.5      equ $45
0006      83 BLD4.5      equ $06
0800      84 ;
0001      85 READCMD      equ $01
0002      86 WRITCMD      equ $02
0004      87 FORMTCMD      equ $04
0800      88 ;
0010      89 LASTSEC      equ 16
0020      90 RCLSTRK      equ 32
0040      91 RCLSTRK2      equ RCLSTRK*2
0028      92 LASTRACK      equ 40
0800      93 ;
0011      94 CATRACK      equ $11
0038      95 BITMAP      equ $38
0800      96 ;
0000      97 RDDR1V      equ $00
0010      98 RDDR2V      equ $10
0800      99 ;
0000      100 SLOTOFF      equ $00
0001      101 ASCIIIOFF      equ $01
0002      102 CXPGOFF      equ $02
0003      103 SL16OFF      equ $03
0800      104 ;
0001      105 SLOTNDX      equ $01
0002      106 DRVNDX      equ $02
0003      107 VOLNDX      equ $03
0004      108 TRKNDX      equ $04
0005      109 SECNDX      equ $05
0008      110 BUFRNDX      equ $08
000B      111 XFERNDX      equ $0B
000C      112 CMDNDX      equ $0C
000D      113 ERRNDX      equ $0D
000E      114 LVOLNDX      equ $0E
000F      115 LSLTNDX      equ $0F
0010      116 LDRVNDX      equ $10
0800      117 ;
0000      118 ZERO          equ $00
0000      119 INITACT      equ $00
0001      120 CNECTACT      equ $01
0002      121 LOADACT      equ $02
```

0002	122	IGNORACT	equ	\$02
0003	123	RCSTRTRK	equ	\$03
0004	124	NEXTLINE	equ	\$04
0007	125	CHARCELL	equ	\$07
000F	126	CMDMASK	equ	\$0F
000F	127	NIBLMASK	equ	\$0F
000F	128	PCMDMASK	equ	\$0F
0018	129	MAXBTM	equ	\$18
0018	130	NAMESIZE	equ	\$18
001F	131	CVMASK	equ	\$1F
0028	132	RDWAIT	equ	\$28
0030	133	WAITIME	equ	\$30
003F	134	TRKMASK	equ	\$3F
007F	135	INVRMASK	equ	\$7F
007F	136	ASCIMASK	equ	\$7F
0080	137	ASCIFLAG	equ	\$80
00CE	138	NO	equ	\$CE
00D9	139	YES	equ	\$D9
00FF	140	NEGONE	equ	\$FF
0800	141	;		
0000	142	RCOFF	equ	\$00
0080	143	RCON	equ	\$80
0800	144	;		
005C	145	ROMENTRY	equ	\$5C
0800	146	;		
0000	147	TEXTMODE	equ	\$00
0001	148	GRPHMODE	equ	\$01
0002	149	TX80MODE	equ	\$02
0003	150	LV80MODE	equ	\$03
0800	151	;		
0000	152	NORMDISP	equ	\$00
0001	153	INVRDISP	equ	\$01
0800	154	;		
0000	155	INITSCRN	equ	\$00
0001	156	HOMESCRN	equ	\$01
0800	157	;		
0000	158	EOLCLR	equ	\$00
0001	159	EOPCLR	equ	\$01
0800	160	;		
0000	161	DIRECT	equ	\$00
0001	162	INDIRECT	equ	\$01
0800	163	;		
0000	164	NOPAD	equ	\$00
0040	165	ZEROPAD	equ	\$40
0080	166	SPCPAD	equ	\$80
0800	167	;		
0028	168	MAXWDTH	equ	\$28
0050	169	MAXCH	equ	\$50
0060	170	MINCV	equ	\$60
0800	171	;		
0050	172	RTNCMD	equ	\$50
0051	173	MODECMD	equ	\$51
0052	174	DISPCMD	equ	\$52
0053	175	SCRNCMD	equ	\$53
0054	176	CLRCMD	equ	\$54
0055	177	CNTRCMD	equ	\$55
0056	178	BUFRCMD	equ	\$56
0057	179	NIBLCMD	equ	\$57
0058	180	BYT1CMD	equ	\$58
0059	181	BYT2CMD	equ	\$59
005A	182	BYTNCMD	equ	\$5A

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005B      183  ADRCMD      equ  $5B
005C      184  DEC1CMD     equ  $5C
005D      185  DEC2CMD     equ  $5D
005E      186  DEC3CMD     equ  $5E
005F      187  DECNCMD    equ  $5F
0800      188  ;
0084      189  CTRLD      equ  $84
0087      190  BELLCHAR   equ  $87
0088      191  LARROW     equ  $88
008A      192  DARROW     equ  $8A
008B      193  UARROW     equ  $8B
008D      194  RETURN     equ  $8D
0091      195  CTRLQ      equ  $91
0095      196  RARROW     equ  $95
009B      197  ESCAPE     equ  $9B
00A0      198  SPACE      equ  $A0
0800      199  ;
0000      200  RWNOERR    equ  $00          ; RWTS no error
0008      201  RWINITER   equ  $08          ; RWTS initialization error
0030      202  RWSYNERR   equ  $30          ; RWTS syntax error (new)
0800      203  ;
0100      204  PAGESIZE   equ  $100
0100      205  STACK      equ  $100
0800      206  ;
0110      207  RDIJMP     equ  $110
0800      208  ;
0112      209  VRSN       equ  $112
0113      210  MESGDISK   equ  $113
0114      211  MESGCARD   equ  $114
0800      212  ;
03D9      213  RWTS       equ  $3D9
03E3      214  GETIOCB    equ  $3E3
03EA      215  HOOKDOS    equ  $3EA
0800      216  ;
0478      217  DRV0TRK    equ  $478
0800      218  ;
0478      219  RDBANK     equ  $478
04F8      220  LCRAM      equ  $4F8
0800      221  ;
04FB      222  XMODE      equ  $4FB
0800      223  ;
0578      224  RDCMD      equ  $578
05F8      225  RCCMD      equ  $5F8
0800      226  ;
0678      227  RDDRV      equ  $678
0800      228  ;
0800      229  ;
0800      230  ; Scratchpad RAM locations indexed by slot number.
0800      231  ;
0800      232  ; DOS uses the first and third pair of locations for its
0800      233  ; own use. Slot 3 locations are used entirely by 80-
0800      234  ; column firmware, so they are unavailable for storage.
0800      235  ;
0800      236  ; The only locations available are the second and fourth
0800      237  ; pair of the RamDisk slot.
0800      238  ;
0578      239  SAVEADRL   equ  $578          ; indexed by RamDisk
05F8      240  SAVEADRH   equ  $5F8          ; indexed by RamDisk
0778      241  DOSVRSN    equ  $778          ; indexed by RamDisk
0800      242  ;
07F8      243  MSLOT      equ  $7F8          ; MSB set if 0xC800 spc used

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```
0800      244      ;
08FE      245      BOOTADR      equ      $8FE
08FF      246      BOOTPGS      equ      $8FF
0800      247      ;
0800      248      ;
0800      249      ; DOS 3.3 addresses.
0800      250      ;
A955      251      KWRANGE      equ      $A955
AA65      252      KYWRDFND      equ      $AA65
AA66      253      VOLVAL      equ      $AA66
B5F9      254      VOLNUMBR      equ      $B5F9
B600      255      BOOTCODE      equ      $B600
B744      256      RESTART      equ      $B744
B7B5      257      CALLRWTS      equ      $B7B5
B7EB      258      VOLEXPT      equ      $B7EB
BD00      259      RWTSENT      equ      $BD00
0800      260      ;
0800      261      ;
0800      262      ; DOS 4.1 routine addresses
0800      263      ;
BED9      264      INITADR      equ      $BED9
BFF8      265      INITDOS      equ      $BFF8
BFFB      266      DISKTBL      equ      $BFFB
0800      267      ;
0800      268      ;
0800      269      ; DOS 4.3/5 routine addresses.
0800      270      ;
BFF0      271      BLDVRSN      equ      $BFF0
BFF1      272      BLDNMBR      equ      $BFF1
0800      273      ;
BFF2      274      MNGDISK      equ      $BFF2
0800      275      ;
0800      276      ;
0800      277      PAGE08      equ      $0800
2000      278      PAGE20      equ      $2000
4000      279      PAGE40      equ      $4000
C000      280      PAGEC0      equ      $C000
C900      281      PAGEC9      equ      $C900
0800      282      ;
C000      283      KEY          equ      $C000
C00C      284      VID80OFF      equ      $C00C
C00E      285      ALTCHOFF      equ      $C00E
C010      286      CLRKEY      equ      $C010
C011      287      RDBANK2      equ      $C011
C012      288      RDLGRAM      equ      $C012
0800      289      ;
C050      290      TXTCLR      equ      $C050
C051      291      TXTSET      equ      $C051
C052      292      MIXCLR      equ      $C052
C054      293      LOWSCR      equ      $C054
C057      294      HIRES      equ      $C057
0800      295      ;
C080      296      PHASEOFF      equ      $C080
C088      297      MOTOROFF      equ      $C088
C089      298      MOTORON      equ      $C089
C08A      299      DRVENG      equ      $C08A
C08C      300      LATCH      equ      $C08C
C08E      301      RWSELC      equ      $C08E
0800      302      ;
C080      303      RAM2WP      equ      $C080
C081      304      ROM2WE      equ      $C081
```

C082	305	ROM2WP	equ	\$C082
C083	306	RAM2WE	equ	\$C083
C088	307	RAM1WP	equ	\$C088
C089	308	ROM1WE	equ	\$C089
C08A	309	ROM1WP	equ	\$C08A
C08B	310	RAM1WE	equ	\$C08B
0800	311	;		
C080	312	RDSECTR	equ	\$C080
C081	313	RDTRACK	equ	\$C081
0800	314	;		
C084	315	RAMCARD	equ	\$C084
0800	316	;		
C800	317	RCWNDOW	equ	\$C800
C800	318	RDWNDOW	equ	\$C800
0800	319	;		
CFFF	320	CLRROM	equ	\$CFFF
0800	321	;		
D64B	322	APSNEW	equ	\$D64B
0800	323	;		
E003	324	BASIC	equ	\$E003
0800	325	;		
FB2F	326	INIT	equ	\$FB2F
FB5B	327	TABV	equ	\$FB5B
FC22	328	VTAB	equ	\$FC22
FC42	329	CLREOP	equ	\$FC42
FC58	330	HOME	equ	\$FC58
FC9C	331	CLREOL	equ	\$FC9C
FCA8	332	WAIT	equ	\$FCA8
FD8E	333	CROUT	equ	\$FD8E
FDDA	334	PRBYTE	equ	\$FDDA
FDED	335	COUT	equ	\$FDED
FE84	336	SETNORM	equ	\$FE84
FE89	337	SETKBD	equ	\$FE89
FE93	338	SETVID	equ	\$FE93
FE95	339	OUTPORT	equ	\$FE95
FF3A	340	BELL	equ	\$FF3A
FF65	341	MONITOR	equ	\$FF65
0800	342	;		
0800	343	;		
0800	344		icl	"RD1.L"

LLOAD RD1.L,A\$4000

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0800          1          ttl "RamDisk Source Code, RD1.L"
0800          2          ;
0800          3          ;
0800          4          ; RD1.L
0800          5          ;
0800          6          ;
0001          7  DISPLAY equ GRPHMODE          ; graphics mode ON
0800          8          ;
0800          9          ;
4000         10          org PAGE40
4000         11          obj PAGE08
4000         12          usr
4000         13          ;
4000         14          ;
4000 D8       15          cld
4001         16          ;
4001 8D 82 C0  17          sta ROM2WP
4004         18          ;
4004 20 36 4B  19          jsr CLRSCRN1
4007         20          ;
4007 20 4A 4B  21          jsr PRINT
400A         22          .if DISPLAY=TEXTMODE
400A         23          byt MODECMD,TEXTMODE
400A         24          .fi
400A         25          .if DISPLAY=GRPHMODE
400A 8D       26          byt RETURN
400B 51 01    27          byt MODECMD,GRPHMODE
400D         28          .fi
400D         29          .if DISPLAY=TX80MODE
400D         30          byt MODECMD,TX80MODE
400D         31          .fi
400D 52 00    32          byt DISPCMD,NORMDISP
400F 53 00    33          byt SCRNCMD,INITSCRN
4011 53 01    34          byt SCRNCMD,HOMESCRN
4013 50       35          byt RTNCMD
4014         36          ;
4014 20 4B D6  37          jsr APSNEW
4017 20 EA 03  38          jsr HOOKDOS
401A         39          ;
401A         40          ;
401A 20 4A 4B  41  MAIN   jsr PRINT
401D D2 E1 ED  42          asc "RamDisk 320/RamCard 128 Connect Program"
4020 C4 E9 F3
4023 EB A0 B3
4026 B2 B0 AF
4029 D2 E1 ED
402C C3 E1 F2
402F E4 A0 B1
4032 B2 B8 A0
4035 C3 EF EE
4038 EE E5 E3
403B F4 A0 D0
403E F2 EF E7
4041 F2 E1 ED
4044 50       43          byt RTNCMD
4045         44          ;
4045         45          ;
4045 20 69 42  46  MAIN1  jsr GETMDSLT
4048 90 15    47          bcc >1
404A         48          ;

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404A 20 CD 47      49      jsr ABRTMSG
404D B0 F6        50      bcs MAIN1
404F              51      ;
404F 20 4A 4B     52      jsr PRINT
4052 51 00        53      byt MODECMD,TEXTMODE
4054 52 00        54      byt DISPCMD,NORMDISP
4056 53 00        55      byt SCRNCMD,INITSCRN
4058 53 01        56      byt SCRNCMD,HOMESCRN
405A 8D           57      byt RETURN
405B 50           58      byt RTNCMD
405C              59      ;
405C 4C 03 E0     60      jmp BASIC
405F              61      ;
405F 20 4D 41     62      ^1    jsr TESTMD
4062 B0 E1        63      bcs MAIN1
4064              64      ;
4064 20 92 42     65      MAIN2  jsr GETRDSLT
4067 B0 DC        66      bcs MAIN1
4069              67      ;
4069 AD 2D 4F     68      lda MDPARMS+SLOTOFF
406C CD 31 4F     69      cmp RDPARMS+SLOTOFF
406F D0 06        70      bne >2
4071              71      ;
4071 20 F7 47     72      jsr DIFFMSG1
4074              73      ;
4074 4C 64 40     74      jmp MAIN2
4077              75      ;
4077 20 AD 41     76      ^2    jsr TESTRD
407A              77      ;
407A              78      ;
407A 20 BD 42     79      MAIN3  jsr GETRCSLT
407D B0 E5        80      bcs MAIN2
407F              81      ;
407F AD 35 4F     82      lda RCPARMS+SLOTOFF
4082 CD 2D 4F     83      cmp MDPARMS+SLOTOFF
4085 D0 06        84      bne >3
4087              85      ;
4087 20 91 48     86      jsr DIFFMSG2
408A              87      ;
408A 4C 7A 40     88      jmp MAIN3
408D              89      ;
408D CD 31 4F     90      ^3    cmp RDPARMS+SLOTOFF
4090 D0 06        91      bne >4
4092              92      ;
4092 20 C3 48     93      jsr DIFFMSG3
4095              94      ;
4095 4C 7A 40     95      jmp MAIN3
4098              96      ;
4098 A9 00        97      ^4    lda #ZERO
409A 8D 2A 4F     98      sta RCBYPASS
409D              99      ;
409D 20 1C 42    100      jsr TESTRC
40A0 90 08        101      bcc MAIN4
40A2              102      ;
40A2 A9 02        103      lda #IGNORACT
40A4 8D 29 4F    104      sta RCACT
40A7              105      ;
40A7 CE 2A 4F    106      dec RCBYPASS
40AA              107      ;
40AA 20 3E 43    108      MAIN4  jsr SELCDRV
40AD B0 CB        109      bcs MAIN3

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40AF      110 ;
40AF 20 79 43 111 MAIN5 jsr GETRDACT
40B2 B0 F6 112 bcs MAIN4
40B4      113 ;
40B4 20 D3 43 114 MAIN6 jsr GETRCACT
40B7 B0 F6 115 bcs MAIN5
40B9      116 ;
40B9 AE 31 4F 117 ldx RDPARMS+SLOTOFF
40BC      118 ;
40BC A9 FF 119 lda #NEGONE
40BE 8D 05 56 120 sta RDCODE2+RDSTATE-PAGEC9 ; always enable RamDisk
40C1      121 ;
40C1 AD 28 4F 122 lda RDACT
40C4 C9 00 123 cmp #INITACT
40C6 D0 05 124 bne >1
40C8      125 ;
40C8 20 2F 44 126 jsr INITRD
40CB B0 E2 127 bcs MAIN5
40CD      128 ;
40CD AD 28 4F 129 ^1 lda RDACT
40D0 C9 01 130 cmp #CNECTACT
40D2 F0 0D 131 beq >2
40D4      132 ;
40D4 20 F7 48 133 jsr DISKMESG
40D7 B0 DB 134 bcs MAIN6
40D9      135 ;
40D9 20 E4 44 136 jsr LOADRD
40DC 90 03 137 bcc >2
40DE      138 ;
40DE 4C 1A 40 139 jmp MAIN
40E1      140 ;
40E1 AE 35 4F 141 ^2 ldx RCPARMS+SLOTOFF
40E4      142 ;
40E4 A9 00 143 lda #ZERO ; disable RamCard
40E6 8D 06 56 144 sta RDCODE2+RCSTATE-PAGEC9 ; disable RamCard
40E9      145 ;
40E9 AD 29 4F 146 lda RCACT
40EC C9 02 147 cmp #IGNORACT
40EE F0 05 148 beq >3
40F0      149 ;
40F0 A9 FF 150 lda #NEGONE ; enable RamCard
40F2 8D 06 56 151 sta RDCODE2+RCSTATE-PAGEC9 ; enable RamCard
40F5      152 ;
40F5 A9 10 153 ^3 lda #ROMHOOK
40F7 85 1E 154 sta PTR
40F9      155 ;
40F9 AD 33 4F 156 lda RDPARMS+CXPGOFF
40FC 85 1F 157 sta PTR+1
40FE      158 ;
40FE 20 4A 41 159 jsr DOJMP
4101 20 71 49 160 jsr USERMSG
4104      161 ;
4104 AD 28 4F 162 lda RDACT
4107 C9 01 163 cmp #CNECTACT
4109 F0 12 164 beq >4
410B      165 ;
410B AD 27 4F 166 lda DRIVES
410E D0 0D 167 bne >4
4110      168 ;
4110 A2 02 169 ldx #2
4112 AD 31 4F 170 lda RDPARMS+SLOTOFF

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4115      171 ;
4115 20 7E 45 172      jsr INITDRIV
4118 90 03 173      bcc >4
411A      174 ;
411A 4C 1A 40 175      jmp MAIN
411D      176 ;
411D AD 29 4F 177 ^4      lda RCACT
4120 C9 00 178      cmp #INITACT
4122 D0 0D 179      bne >5
4124      180 ;
4124 A2 01 181      ldx #1
4126 AD 35 4F 182      lda RCPARMS+SLOTOFF
4129      183 ;
4129 20 7E 45 184      jsr INITDRIV
412C 90 03 185      bcc >5
412E      186 ;
412E 4C 1A 40 187      jmp MAIN
4131      188 ;
4131 20 C6 4A 189 ^5      jsr CONTMSG
4134      190 ;
4134 20 4A 4B 191      jsr PRINT
4137 51 00 192      byt MODECMD,TEXTMODE
4139 52 00 193      byt DISPCMD,NORMDISP
413B 53 00 194      byt SCRNCMD,INITSCRN
413D 53 01 195      byt SCRNCMD,HOMESCRN
413F 8D 196      byt RETURN
4140 50 197      byt RTNCMD
4141      198 ;
4141 A9 00 199      lda #ZERO
4143 85 1E 200      sta PTR
4145      201 ;
4145 AD 33 4F 202      lda RDPARMS+CXPGOFF
4148 85 1F 203      sta PTR+1
414A      204 ;
414A 6C 1E 00 205 DOJMP      jmp (PTR)
414D      206 ;
414D      207 ;
414D A9 00 208 TESTMD      lda #ZERO
414F 85 1E 209      sta PTR
4151      210 ;
4151 AD 2F 4F 211      lda MDPARMS+CXPGOFF
4154 85 1F 212      sta PTR+1
4156      213 ;
4156 A0 07 214      ldy #7
4158      215 ;
4158 B1 1E 216 ^1      lda (PTR),Y
415A D9 00 55 217      cmp RDCODE1,Y
415D D0 1E 218      bne >4
415F      219 ;
415F 88 220      dey
4160 D0 F6 221      bne <1
4162      222 ;
4162 B1 1E 223      lda (PTR),Y
4164 C9 A2 224      cmp #$A2          ; Disk ][ check
4166 F0 04 225      beq >2
4168      226 ;
4168 C9 09 227      cmp #$09          ; Rana check
416A D0 11 228      bne >4
416C      229 ;
416C 49 FF 230 ^2      eor #NEGONE          ; ROM check
416E 91 1E 231      sta (PTR),Y

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4170          232 ;
4170 D1 1E      233      cmp (PTR),Y
4172 F0 05      234      beq >3
4174          235 ;
4174 2C FF CF    236      bit CLRROM
4177          237 ;
4177 18          238      clc
4178          239 ;
4178 60          240      rts
4179          241 ;
4179 49 FF      242 ^3      eor #NEGONE
417B 91 1E      243      sta (PTR),Y
417D          244 ;
417D 2C FF CF    245 ^4      bit CLRROM
4180          246 ;
4180 20 4A 4B    247      jsr PRINT
4183 02 73      248      hex 0273
4185 D4 E8 E9    249      asc "This is NOT a Mechanical Drive Slot"
4188 F3 A0 E9
418B F3 A0 CE
418E CF D4 A0
4191 E1 A0 CD
4194 E5 E3 E8
4197 E1 EE E9
419A E3 E1 EC
419D A0 C4 F2
41A0 E9 F6 E5
41A3 A0 D3 EC
41A6 EF F4
41A8 50          250      byt RTNCMD
41A9          251 ;
41A9 20 C6 4A    252      jsr CONTMMSG
41AC          253 ;
41AC 60          254      rts
41AD          255 ;
41AD          256 ;
41AD A0 00      257 TESTRD    ldy #ZERO
41AF 84 1E      258      sty PTR
41B1          259 ;
41B1 AD 33 4F    260      lda RDPARMS+CXPGOFF
41B4 85 1F      261      sta PTR+1
41B6          262 ;
41B6 B1 1E      263      lda (PTR),Y
41B8 49 FF      264      eor #NEGONE
41BA 91 1E      265      sta (PTR),Y
41BC          266 ;
41BC 48          267      pha
41BD          268 ;
41BD A9 28      269      lda #RDWAIT
41BF 20 A8 FC    270      jsr WAIT
41C2          271 ;
41C2 68          272      pla
41C3 D1 1E      273      cmp (PTR),Y
41C5 D0 09      274      bne >1
41C7          275 ;
41C7 49 FF      276      eor #NEGONE
41C9 91 1E      277      sta (PTR),Y
41CB          278 ;
41CB 2C FF CF    279      bit CLRROM
41CE          280 ;
41CE 18          281      clc

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41CF          282 ;
41CF 60        283      rts
41D0          284 ;
41D0 2C FF CF  285 ^1    bit CLRROM
41D3          286 ;
41D3 20 4A 4B  287      jsr PRINT
41D6 04 72     288      hex 0472
41D8 D4 E8 E9  289      asc "This is NOT a RamDisk Drive Slot"
41DB F3 A0 E9
41DE F3 A0 CE
41E1 CF D4 A0
41E4 E1 A0 D2
41E7 E1 ED C4
41EA E9 F3 EB
41ED A0 C4 F2
41F0 E9 F6 E5
41F3 A0 D3 EC
41F6 EF F4
41F8 05 73     290      hex 0573
41FA EF F2 A0  291      asc "or the RamDisk is Powered OFF"
41FD F4 E8 E5
4200 A0 D2 E1
4203 ED C4 E9
4206 F3 EB A0
4209 E9 F3 A0
420C D0 EF F7
420F E5 F2 E5
4212 E4 A0 CF
4215 C6 C6
4217 50        292      byt RTNCMD
4218          293 ;
4218 20 C6 4A  294      jsr CONTMMSG
421B          295 ;
421B 60        296      rts
421C          297 ;
421C          298 ;
421C AE 34 4F  299 TESTRC  ldx RDPARMS+SL16OFF
421F          300 ;
421F A9 80     301      lda #RCON
4221 9D 84 C0  302      sta RAMCARD,X
4224          303 ;
4224 AD 00 C8  304      lda RCWINDOW
4227 49 FF     305      eor #NEGONE
4229 8D 00 C8  306      sta RCWINDOW
422C          307 ;
422C CD 00 C8  308      cmp RCWINDOW
422F D0 0C     309      bne >1
4231          310 ;
4231 49 FF     311      eor #NEGONE
4233 8D 00 C8  312      sta RCWINDOW
4236          313 ;
4236 A9 00     314      lda #RCOFF
4238 9D 84 C0  315      sta RAMCARD,X
423B          316 ;
423B 18        317      clc
423C          318 ;
423C 60        319      rts
423D          320 ;
423D A9 00     321 ^1    lda #RCOFF
423F 9D 84 C0  322      sta RAMCARD,X
4242          323 ;

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4242 20 4A 4B    324          jsr PRINT
4245 05 73      325          hex 0573
4247 D4 E8 E5    326          asc "There is NO RamCard available"
424A F2 E5 A0
424D E9 F3 A0
4250 CE CF A0
4253 D2 E1 ED
4256 C3 E1 F2
4259 E4 A0 E1
425C F6 E1 E9
425F EC E1 E2
4262 EC E5
4264 50          327          byt RTNCMD
4265          328          ;
4265 20 C6 4A    329          jsr CONTMSG
4268          330          ;
4268 60          331          rts
4269          332          ;
4269          333          ;
4269 20 4A 4B    334  GETMDSLT jsr PRINT
426C 02 64      335          hex 0264
426E 54 01      336          byt CLRCMD,EOPCLR
4270 C4 F2 E9    337          asc "Drive Slot:"
4273 F6 E5 A0
4276 D3 EC EF
4279 F4 BA
427B 50          338          byt RTNCMD
427C          339          ;
427C AE 24 4F    340          ldx MDSLOT0
427F A0 B4      341          ldy #"4"
4281          342          ;
4281 20 E8 42    343          jsr SELCSLOT
4284 B0 0B      344          bcs >1
4286          345          ;
4286 8E 24 4F    346          stx MDSLOT0
4289          347          ;
4289 A0 00      348          ldy #MDPARMS-SLTPARMS
428B A9 04      349          lda #4
428D          350          ;
428D 20 25 43    351          jsr INITPRMS
4290          352          ;
4290 18          353          clc
4291          354          ;
4291 60          355          ^1 rts
4292          356          ;
4292          357          ;
4292 20 4A 4B    358  GETRDSLT jsr PRINT
4295 00 66      359          hex 0066
4297 54 01      360          byt CLRCMD,EOPCLR
4299 D2 E1 ED    361          asc "RamDisk Slot:"
429C C4 E9 F3
429F EB A0 D3
42A2 EC EF F4
42A5 BA
42A6 50          362          byt RTNCMD
42A7          363          ;
42A7 AE 25 4F    364          ldx RDSLOT0
42AA A0 B4      365          ldy #"4"
42AC          366          ;
42AC 20 E8 42    367          jsr SELCSLOT
42AF B0 0B      368          bcs >1

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42B1          369 ;
42B1 8E 25 4F 370      stx RDSLOT0
42B4          371 ;
42B4 A0 04    372      ldy #RDPARMS-SLTPARMS
42B6 A9 04    373      lda #4
42B8          374 ;
42B8 20 25 43 375      jsr INITPRMS
42BB          376 ;
42BB 18       377      clc
42BC          378 ;
42BC 60       379      ^1 rts
42BD          380 ;
42BD          381 ;
42BD 20 4A 4B 382  GETRCSLT jsr PRINT
42C0 00 68    383      hex 0068
42C2 54 01    384      byt CLRCMD,EOPCLR
42C4 D2 E1 ED 385      asc "RamCard Slot:"
42C7 C3 E1 F2
42CA E4 A0 D3
42CD EC EF F4
42D0 BA
42D1 50       386      byt RTNCMD
42D2          387 ;
42D2 AE 26 4F 388      ldx RCSLOT0
42D5 A0 B2    389      ldy #"2"
42D7          390 ;
42D7 20 E8 42 391      jsr SELCSLOT
42DA B0 0B    392      bcs >1
42DC          393 ;
42DC 8E 26 4F 394      stx RCSLOT0
42DF          395 ;
42DF A0 08    396      ldy #RCPARMS-SLTPARMS
42E1 A9 02    397      lda #2
42E3          398 ;
42E3 20 25 43 399      jsr INITPRMS
42E6          400 ;
42E6 18       401      clc
42E7          402 ;
42E7 60       403      ^1 rts
42E8          404 ;
42E8          405 ;
42E8 8C 0A 43 406  SELCSLOT sty SSMOD1+2
42EB          407 ;
42EB C8       408      iny
42EC 8C 0E 43 409      sty SSMOD2+2
42EF          410 ;
42EF C8       411      iny
42F0 8C 12 43 412      sty SSMOD3+2
42F3          413 ;
42F3 C8       414      iny
42F4 8C 16 43 415      sty SSMOD4+2
42F7          416 ;
42F7 8A       417      ^1 txa
42F8 29 03    418      and #3
42FA AA       419      tax
42FB          420 ;
42FB BC 4E 4F 421      ldy SLOTADRL,X
42FE BD 52 4F 422      lda SLOTADRH,X
4301          423 ;
4301 20 F4 4A 424      jsr SETPTR
4304          425 ;

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```

4304 20 4A 4B      426          jsr PRINT
4307 11            427          hex 11
4308 52 00          428      SSMOD1  byt DISPCMD,NORMDISP
430A B4            429          asc "4"
430B 18            430          hex 18
430C 52 00          431      SSMOD2  byt DISPCMD,NORMDISP
430E B5            432          asc "5"
430F 1F            433          hex 1F
4310 52 00          434      SSMOD3  byt DISPCMD,NORMDISP
4312 B6            435          asc "6"
4313 26            436          hex 26
4314 52 00          437      SSMOD4  byt DISPCMD,NORMDISP
4316 B7            438          asc "7"
4317 52 00          439          byt DISPCMD,NORMDISP
4319 50            440          byt RTNCMD
431A              441      ;
431A 20 02 4B      442          jsr CLRPTR
431D              443      ;
431D 20 09 4B      444          jsr READKEY
4320 B0 02          445          bcs >2
4322              446      ;
4322 D0 D3          447          bne <1
4324              448      ;
4324 60            449      ^2      rts
4325              450      ;
4325              451      ;
4325 86 26          452      INITPRMS stx BUFRADRZ
4327              453      ;
4327 65 26          454          adc BUFRADRZ
4329 99 2D 4F      455          sta SLTPARMS,Y
432C              456      ;
432C 09 B0          457          ora #"0"
432E 99 2E 4F      458          sta SLTPARMS+ASCIIOFF,Y
4331              459      ;
4331 49 70          460          eor #$70
4333 99 2F 4F      461          sta SLTPARMS+CXPGOFF,Y
4336              462      ;
4336 0A            463          asl
4337 0A            464          asl
4338 0A            465          asl
4339 0A            466          asl
433A              467      ;
433A 99 30 4F      468          sta SLTPARMS+SL16OFF,Y
433D              469      ;
433D 60            470          rts
433E              471      ;
433E              472      ;
433E 20 4A 4B      473      SELCDRV  jsr PRINT
4341 06 6B          474          hex 066B
4343 54 01          475          byt CLRCMD,EOPCLR
4345 C4 F2 E9      476          asc "Drives:"
4348 F6 E5 F3
434B BA
434C 50            477          byt RTNCMD
434D              478      ;
434D AE 27 4F      479          ldx DRIVES
4350              480      ;
4350 8A            481      ^1      txa
4351 29 01          482          and #1
4353 AA            483          tax
4354              484      ;

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4354 BC 56 4F      485          ldy DRVADRL,X
4357 BD 58 4F      486          lda DRVADRH,X
435A              487          ;
435A 20 F4 4A      488          jsr SETPTR
435D              489          ;
435D 20 4A 4B      490          jsr PRINT
4360 18            491          hex 18
4361 52 00          492      SDMOD1  byt DISPCMD,NORMDISP
4363 B1            493          asc "1"
4364 1F            494          hex 1F
4365 52 00          495      SDMOD2  byt DISPCMD,NORMDISP
4367 B2            496          asc "2"
4368 52 00          497          byt DISPCMD,NORMDISP
436A 50            498          byt RTNCMD
436B              499          ;
436B 20 02 4B      500          jsr CLRPTR
436E              501          ;
436E 20 09 4B      502          jsr READKEY
4371 B0 02          503          bcs >2
4373              504          ;
4373 D0 DB          505          bne <1
4375              506          ;
4375 8E 27 4F      507      ^2      stx DRIVES
4378              508          ;
4378 60            509          rts
4379              510          ;
4379              511          ;
4379 20 4A 4B      512      GETRDACT jsr PRINT
437C 05 6E          513          hex 056E
437E 54 01          514          byt CLRCMD,EOPCLR
4380 D2 E1 ED      515          asc "RamDisk:"
4383 C4 E9 F3
4386 EB BA
4388 50            516          byt RTNCMD
4389              517          ;
4389 AE 28 4F      518          ldx RDACT
438C              519          ;
438C BC 5A 4F      520      ^1      ldy ACT1ADRL,X
438F BD 5D 4F      521          lda ACT1ADRH,X
4392              522          ;
4392 20 F4 4A      523          jsr SETPTR
4395              524          ;
4395 20 4A 4B      525          jsr PRINT
4398 0F            526          hex 0F
4399 52 00          527      SAMOD1  byt DISPCMD,NORMDISP
439B C9 EE E9      528          asc "Init"
439E F4
439F 15            529          hex 15
43A0 52 00          530      SAMOD2  byt DISPCMD,NORMDISP
43A2 C3 EF EE      531          asc "Connect"
43A5 EE E5 E3
43A8 F4
43A9 1E            532          hex 1E
43AA 52 00          533      SAMOD3  byt DISPCMD,NORMDISP
43AC CC EF E1      534          asc "Load Disk"
43AF E4 A0 C4
43B2 E9 F3 EB
43B5 52 00          535          byt DISPCMD,NORMDISP
43B7 50            536          byt RTNCMD
43B8              537          ;
43B8 20 02 4B      538          jsr CLRPTR

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43BB      539 ;
43BB 20 09 4B 540      jsr READKEY
43BE B0 0F 541      bcs >3
43C0      542 ;
43C0 F0 0D 543      beq >3
43C2      544 ;
43C2 8A 545      txa
43C3 10 02 546      bpl >2
43C5      547 ;
43C5 A2 02 548      ldx #LOADACT
43C7      549 ;
43C7 C9 03 550 ^2      cmp #LOADACT+1
43C9 D0 C1 551      bne <1
43CB      552 ;
43CB A2 00 553      ldx #INITACT
43CD 10 BD 554      bpl <1 ; always taken
43CF      555 ;
43CF 8E 28 4F 556 ^3      stx RDACT
43D2      557 ;
43D2 60 558      rts
43D3      559 ;
43D3      560 ;
43D3 20 4A 4B 561 GETRCACT jsr PRINT
43D6 05 70 562      hex 0570
43D8 54 01 563      byt CLRCMD,EOPCLR
43DA D2 E1 ED 564      asc "RamCard:"
43DD C3 E1 F2
43E0 E4 BA
43E2 50 565      byt RTNCMD
43E3      566 ;
43E3 AE 29 4F 567      ldx RCACT
43E6      568 ;
43E6 BC 60 4F 569 ^1      ldy ACT2ADRL,X
43E9 BD 63 4F 570      lda ACT2ADRH,X
43EC      571 ;
43EC 20 F4 4A 572      jsr SETPTR
43EF      573 ;
43EF 20 4A 4B 574      jsr PRINT
43F2 0F 575      hex 0F
43F3 52 00 576 SBMOD1    byt DISPCMD,NORMDISP
43F5 C9 EE E9 577      asc "Init"
43F8 F4
43F9 15 578      hex 15
43FA 52 00 579 SBMOD2    byt DISPCMD,NORMDISP
43FC C3 EF EE 580      asc "Connect"
43FF EE E5 E3
4402 F4
4403 1E 581      hex 1E
4404 52 00 582 SBMOD3    byt DISPCMD,NORMDISP
4406 C9 E7 EE 583      asc "Ignore"
4409 EF F2 E5
440C 52 00 584      byt DISPCMD,NORMDISP
440E 50 585      byt RTNCMD
440F      586 ;
440F 20 02 4B 587      jsr CLRPTR
4412      588 ;
4412 20 09 4B 589      jsr READKEY
4415 B0 14 590      bcs >3
4417      591 ;
4417 F0 12 592      beq >3
4419      593 ;

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4419 AD 2A 4F 594      lda RCBYPASS
441C 30 0D 595      bmi >3
441E 596 ;
441E 8A 597      txa
441F 10 02 598      bpl >2
4421 599 ;
4421 A2 02 600      ldx #IGNORACT
4423 601 ;
4423 C9 03 602 ^2    cmp #IGNORACT+1
4425 D0 BF 603      bne <1
4427 604 ;
4427 A2 00 605      ldx #INITACT
4429 10 BB 606      bpl <1 ; always taken
442B 607 ;
442B 8E 29 4F 608 ^3    stx RCACT
442E 609 ;
442E 60 610      rts
442F 611 ;
442F 612 ;
442F A0 00 613 INITRD  ldy #ZERO
4431 84 1E 614      sty PTR
4433 615 ;
4433 AD 33 4F 616      lda RDPARMS+CXPGOFF
4436 85 1F 617      sta PTR+1
4438 618 ;
4438 B9 00 55 619 ^1    lda RDCODE1,Y
443B 91 1E 620      sta (PTR),Y
443D 621 ;
443D A2 30 622      ldx #WAITIME
443F 8E 2B 4F 623      stx COUNT
4442 624 ;
4442 CE 2B 4F 625 ^2    dec COUNT
4445 F0 10 626      beq >3
4447 627 ;
4447 48 628      pha
4448 629 ;
4448 A9 08 630      lda #8
444A 20 A8 FC 631      jsr WAIT
444D 632 ;
444D 68 633      pla
444E 634 ;
444E D1 1E 635      cmp (PTR),Y
4450 D0 F0 636      bne <2
4452 637 ;
4452 C8 638      iny
4453 D0 E3 639      bne <1
4455 640 ;
4455 F0 03 641      beq >4 ; always taken
4457 642 ;
4457 4C BA 44 643 ^3    jmp >7
445A 644 ;
445A 2C FF CF 645 ^4    bit CLRROM
445D 646 ;
445D AD 33 4F 647      lda RDPARMS+CXPGOFF
4460 8D 00 56 648      sta RDCODE2+RDPAGECX-PAGEC9
4463 649 ;
4463 AD 34 4F 650      lda RDPARMS+SL16OFF
4466 8D 01 56 651      sta RDCODE2+RDSLOT16-PAGEC9
4469 652 ;
4469 AD 31 4F 653      lda RDPARMS+SLOTOFF
446C 8D 03 56 654      sta RDCODE2+RDSLOT-PAGEC9

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446F      655 ;
446F AD 38 4F 656      lda RCPARMS+SL16OFF
4472 8D 02 56 657      sta RDCODE2+RCSLOT16-PAGEC9
4475      658 ;
4475 AD 35 4F 659      lda RCPARMS+SLOTOFF
4478 8D 04 56 660      sta RDCODE2+RCSLOT-PAGEC9
447B      661 ;
447B A0 00      662      ldy #ZERO
447D      663 ;
447D 84 06      664      sty PTR1
447F 84 08      665      sty PTR2
4481      666 ;
4481 A9 56      667      lda /RDCODE2
4483 85 07      668      sta PTR1+1
4485      669 ;
4485 A9 C9      670      lda /PAGEC9
4487 85 09      671      sta PTR2+1
4489      672 ;
4489 A2 06      673      ldx /RDCODE3-RDCODE2
448B 8E 2C 4F 674      stx PAGES
448E      675 ;
448E B1 1E      676      lda (PTR),Y
4490      677 ;
4490 B1 06      678 ^5      lda (PTR1),Y
4492 91 08      679      sta (PTR2),Y
4494      680 ;
4494 A2 30      681      ldx #WAITIME
4496 8E 2B 4F 682      stx COUNT
4499      683 ;
4499 CE 2B 4F 684 ^6      dec COUNT
449C F0 1C      685      beq >7
449E      686 ;
449E 48      687      pha
449F      688 ;
449F A9 08      689      lda #8
44A1 20 A8 FC 690      jsr WAIT
44A4      691 ;
44A4 68      692      pla
44A5      693 ;
44A5 D1 08      694      cmp (PTR2),Y
44A7 D0 F0      695      bne <6
44A9      696 ;
44A9 C8      697      iny
44AA D0 E4      698      bne <5
44AC      699 ;
44AC E6 07      700      inc PTR1+1
44AE E6 09      701      inc PTR2+1
44B0      702 ;
44B0 CE 2C 4F 703      dec PAGES
44B3 D0 DB      704      bne <5
44B5      705 ;
44B5 2C FF CF 706      bit CLRROM
44B8      707 ;
44B8 18      708      clc
44B9      709 ;
44B9 60      710      rts
44BA      711 ;
44BA 2C FF CF 712 ^7      bit CLRROM
44BD      713 ;
44BD 20 4A 4B 714      jsr PRINT
44C0 8D 8D      715      byt RETURN,RETURN

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44C2 D5 EE E1    716          asc "Unable to write to EEPROM."
44C5 E2 EC E5
44C8 A0 F4 EF
44CB A0 F7 F2
44CE E9 F4 E5
44D1 A0 F4 EF
44D4 A0 C5 C5
44D7 D0 D2 CF
44DA CD AE
44DC 8D 8D      717          byt RETURN,RETURN
44DE 50         718          byt RTNCMD
44DF          719          ;
44DF 20 C6 4A   720          jsr CONTMSG
44E2          721          ;
44E2 38         722          sec
44E3          723          ;
44E3 60         724          rts
44E4          725          ;
44E4          726          ;
44E4 AD 33 4F   727  LOADRD   lda RDPARMS+CXPGOFF
44E7 8D 39 46   728          sta RDMOD2+2
44EA          729          ;
44EA AD 34 4F   730          lda RDPARMS+SL16OFF
44ED 09 80      731          ora #$80
44EF 8D 62 46   732          sta RDMOD5+1
44F2          733          ;
44F2 09 01      734          ora #1
44F4 8D 43 46   735          sta RDMOD3+1
44F7          736          ;
44F7 AD 30 4F   737          lda MDPARMS+SL16OFF
44FA 09 8C      738          ora #LATCH
44FC          739          ;
44FC 8D 5A 47   740          sta RSMOD1+1
44FF 8D 6E 47   741          sta RSMOD2+1
4502 8D 86 47   742          sta RSMOD3+1
4505 8D 9E 47   743          sta RSMOD4+1
4508 8D B4 47   744          sta RSMOD5+1
450B          745          ;
450B A0 00      746          ldy #ZERO
450D          747          ;
450D 20 FA 45   748          jsr READISK
4510 B0 0C      749          bcs >3
4512          750          ;
4512 AC 27 4F   751          ldy DRIVES
4515 F0 05      752          beq >2
4517          753          ;
4517 20 FA 45   754          jsr READISK
451A B0 02      755          bcs >3
451C          756          ;
451C 18         757          ^2   clc
451D          758          ;
451D 60         759          rts
451E          760          ;
451E 20 3A FF   761          ^3   jsr BELL
4521          762          ;
4521 20 4A 4B   763          jsr PRINT
4524 05 71      764          hex 0571
4526 54 01      765          byt CLRCMD,EOPCLR
4528 C1 A0 D2   766          asc "A Read Error Has Been Detected"
452B E5 E1 E4
452E A0 C5 F2

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4531 F2 EF F2
4534 A0 C8 E1
4537 F3 A0 C2
453A E5 E5 EE
453D A0 C4 E5
4540 F4 E5 E3
4543 F4 E5 E4
4546 09 72      767      hex 0972
4548 EF EE A0    768      asc "on Track "
454B D4 F2 E1
454E E3 EB A0
4551 58          769      byt BYT1CMD
4552 3B 4F        770      adr TRACK
4554 AC A0 D3     771      asc ", Sector "
4557 E5 E3 F4
455A EF F2 A0
455D 58          772      byt BYT1CMD
455E 3C 4F        773      adr SECTOR
4560 0A 73        774      hex 0A73
4562 A0 E9 EE     775      asc " in Slot "
4565 A0 D3 EC
4568 EF F4 A0
456B 58          776      byt BYT1CMD
456C 3E 4F        777      adr SLOT
456E AC A0 C4     778      asc ", Drive "
4571 F2 E9 F6
4574 E5 A0
4576 58          779      byt BYT1CMD
4577 3D 4F        780      adr DRIVE
4579 50          781      byt RTNCMD
457A          782      ;
457A 20 C6 4A     783      jsr CONTMESG
457D          784      ;
457D 60          785      rts
457E          786      ;
457E          787      ;
457E 8D 3E 4F     788      INITDRIV sta SLOT
4581 8E 3D 4F     789      stx DRIVE
4584          790      ;
4584 A0 28        791      ldy #40
4586          792      ;
4586 CD 35 4F     793      cmp RCPARMS+SLOTOFF
4589 D0 02        794      bne >1
458B          795      ;
458B A0 20        796      ldy #32
458D          797      ;
458D 8C 3F 4F     798      ^1 sty TRACKS
4590          799      ;
4590 A0 00        800      ldy #ZERO
4592          801      ;
4592 AD 33 4F     802      lda RDPARMS+CXPGOFF
4595 91 06        803      sta (PTR1),Y
4597          804      ;
4597 20 4A 4B     805      jsr PRINT
459A 06 76        806      hex 0676
459C C9 EE E9     807      asc "Initializing Slot "
459F F4 E9 E1
45A2 EC E9 FA
45A5 E9 EE E7
45A8 A0 D3 EC
45AB EF F4 A0

```

```

45AE 57          808          byt NIBLCMD
45AF 3E 4F      809          adr SLOT
45B1 AC A0 C4   810          asc ", Drive "
45B4 F2 E9 F6
45B7 E5 A0
45B9 57          811          byt NIBLCMD
45BA 3D 4F      812          adr DRIVE
45BC 8D          813          byt RETURN
45BD 51 00      814          byt MODECMD,TEXTMODE
45BF 8D 84      815          byt RETURN,CTRLD
45C1 C9 CE C9   816          asc "INIT HELLO,Ram Data Volume,R,S"
45C4 D4 A0 C8
45C7 C5 CC CC
45CA CF AC D2
45CD E1 ED A0
45D0 C4 E1 F4
45D3 E1 A0 D6
45D6 EF EC F5
45D9 ED E5 AC
45DC D2 AC D3
45DF 57          817          byt NIBLCMD
45E0 3E 4F      818          adr SLOT
45E2 AC C4      819          asc ",D"
45E4 57          820          byt NIBLCMD
45E5 3D 4F      821          adr DRIVE
45E7 AC C1 A4   822          asc ",A$"
45EA 58          823          byt BYT1CMD
45EB 3F 4F      824          adr TRACKS
45ED AC CC A4   825          asc ",L$FFFF"
45F0 C6 C6 C6
45F3 C6
45F4 8D          826          byt RETURN
45F5 51 01      827          byt MODECMD,GRPHMODE
45F7 50          828          byt RTNCMD
45F8            829          ;
45F8 18          830          clc
45F9            831          ;
45F9 60          832          rts
45FA            833          ;
45FA            834          ;

```

```

BSAVE SEG01,A$0800,B,L$05FA

```

```

45FA            835          usr SEG01
45FA            836          ;
45FA            837          ;
45FA            838          icl "RD2.L"

```

```

LLOAD RD2.L,A$4000

```

```

45FA          1          ttl "RamDisk Source Code, RD2.L"
45FA          2          ;
45FA          3          ;
45FA          4          ; RD2.L
45FA          5          ;
45FA          6          ;
45FA          7          obj PAGE08
45FA          8          usr
45FA          9          ;
45FA         10          ;
45FA         11          ;
45FA 8C 3D 4F 12 READISK sty DRIVE
45FD 8C 19 46 13          sty RDMOD1+1
4600         14          ;
4600 AD 2D 4F 15          lda MDPARMS+SLOTOFF
4603 8D 3E 4F 16          sta SLOT
4606         17          ;
4606 09 78     18          ora #DRV0TRK
4608 19 80 4F 19          ora DRV0TBL,Y
460B 8D B6 46 20          sta RDMOD6+1
460E         21          ;
460E B9 82 4F 22          lda DRV0TBL+2,Y
4611 8D 60 46 23          sta RDMOD4+1
4614         24          ;
4614 AD 30 4F 25          lda MDPARMS+SL16OFF
4617 AA       26          tax
4618         27          ;
4618 09 FF     28 RDMOD1  ora #NEGONE
461A A8       29          tay
461B         30          ;
461B B9 8A C0 31          lda DRVENG,Y
461E BD 89 C0 32          lda MOTORON,X
4621 BD 8E C0 33          lda RWSELC,X
4624         34          ;
4624 20 BA 46 35          jsr GETRCK
4627 90 0E    36          bcc RDMOD2
4629         37          ;
4629 A9 80    38          lda #$80
462B 8D 78 04 39          sta DRV0TRK
462E         40          ;
462E 0A       41          asl
462F         42          ;
462F 20 CF 46 43          jsr SEEKABS
4632         44          ;
4632 20 BA 46 45          jsr GETRCK
4635 B0 70    46          bcs >9
4637         47          ;
4637 2C 00 00 48 RDMOD2  bit *-*
463A         49          ;
463A A9 00    50          lda #ZERO
463C         51          ;
463C 8D 3B 4F 52          sta TRACK
463F 8D 40 4F 53          sta TRCKCNT
4642         54          ;
4642 8D 81 C0 55 RDMOD3  sta RDTRACK
4645         56          ;
4645 20 CF 46 57          jsr SEEKABS
4648         58          ;
4648 A0 0F    59          ldy #$0F
464A 8C 41 4F 60          sty SECTCNT

```

```

464D          61 ;
464D A9 00      62      lda #ZERO
464F          63 ;
464F 99 00 5C   64 ^1      sta SECTCHK,Y
4652          65 ;
4652 88         66      dey
4653 10 FA      67      bpl <1
4655          68 ;
4655 20 29 48   69 ^2      jsr RDADR
4658 B0 16      70      bcs >4
465A          71 ;
465A A4 2D      72      ldy SECFNDZ
465C          73 ;
465C B9 70 4F   74 ^3      lda SKEWTBL,Y
465F          75 ;
465F 09 FF      76 RDMOD4   ora #NEGONE
4661          77 ;
4661 8D 80 C0   78 RDMOD5   sta RDSECTR
4664          79 ;
4664 20 31 47   80      jsr READSECT
4667 B0 07      81      bcs >4
4669          82 ;
4669 A4 2D      83      ldy SECFNDZ
466B          84 ;
466B A9 01      85      lda #1
466D 99 00 5C   86      sta SECTCHK,Y
4670          87 ;
4670 CE 41 4F   88 ^4      dec SECTCNT
4673 10 E0      89      bpl <2
4675          90 ;
4675 A0 0F      91      ldy #$0F
4677          92 ;
4677 B9 00 5C   93 ^5      lda SECTCHK,Y
467A D0 1A      94      bne >8
467C          95 ;
467C 8C 3C 4F   96      sty SECTOR
467F          97 ;
467F EE 41 4F   98      inc SECTCNT
4682          99 ;
4682 38         100 ^6      sec
4683          101 ;
4683 EE 40 4F   102 ^7      inc TRCKCNT
4686 30 1F      103      bmi >9
4688          104 ;
4688 20 29 48   105      jsr RDADR
468B B0 F6      106      bcs <7
468D          107 ;
468D A4 2D      108      ldy SECFNDZ
468F CC 3C 4F   109      cpy SECTOR
4692 F0 C8      110      beq <3
4694          111 ;
4694 D0 EC      112      bne <6
4696          113 ;
4696 88         114 ^8      dey
4697 10 DE      115      bpl <5
4699          116 ;
4699 EE 3B 4F   117      inc TRACK
469C          118 ;
469C AD 3B 4F   119      lda TRACK
469F C9 23      120      cmp #35
46A1 D0 9F      121      bne RDMOD3

```

```

46A3      122 ;
46A3 CE 3B 4F 123      dec TRACK
46A6      124 ;
46A6 18      125      clc
46A7      126 ;
46A7 08      127 ^9      php
46A8      128 ;
46A8 2C FF CF 129      bit CLRROM
46AB      130 ;
46AB BD 88 C0 131      lda MOTOROFF,X
46AE      132 ;
46AE AD 3B 4F 133      lda TRACK
46B1 8D 78 04 134      sta DRV0TRK
46B4      135 ;
46B4 0A      136      asl
46B5      137 ;
46B5 8D 78 04 138 RDMOD6 sta DRV0TRK
46B8      139 ;
46B8 28      140      plp
46B9      141 ;
46B9 60      142      rts
46BA      143 ;
46BA      144 ;
46BA A9 00      145 GETRCK  lda #ZERO
46BC 8D 40 4F 146      sta TRCKCNT
46BF      147 ;
46BF EE 40 4F 148 ^1      inc TRCKCNT
46C2 30 0A      149      bmi >2
46C4      150 ;
46C4 20 29 48 151      jsr RDADR
46C7 B0 F6      152      bcs <1
46C9      153 ;
46C9 20 29 48 154      jsr RDADR
46CC B0 F1      155      bcs <1
46CE      156 ;
46CE 60      157 ^2      rts
46CF      158 ;
46CF      159 ;
46CF 0A      160 SEEKABS  asl
46D0 85 2A      161      sta ZTRACK
46D2      162 ;
46D2 A9 00      163      lda #ZERO
46D4 85 26      164      sta BUFRADRZ
46D6      165 ;
46D6 AD 78 04 166 ^1      lda DRV0TRK
46D9 85 27      167      sta BUFRADRZ+1
46DB      168 ;
46DB 38      169      sec
46DC      170 ;
46DC E5 2A      171      sbc ZTRACK
46DE F0 33      172      beq >6
46E0      173 ;
46E0 B0 07      174      bcs >2
46E2      175 ;
46E2 49 FF      176      eor #NEGONE
46E4      177 ;
46E4 EE 78 04 178      inc DRV0TRK
46E7 90 05      179      bcc >3
46E9      180 ;
46E9 69 FE      181 ^2      adc #NEGONE-1
46EB      182 ;

```

```

46EB CE 78 04      183      dec DRV0TRK
46EE              184      ;
46EE C5 26         185      ^3      cmp BUFRADRZ
46F0 90 02         186      bcc >4
46F2              187      ;
46F2 A5 26         188      lda BUFRADRZ
46F4              189      ;
46F4 C9 08         190      ^4      cmp #8
46F6 B0 02         191      bcs >5
46F8              192      ;
46F8 38           193      sec
46F9              194      ;
46F9 A8           195      tay
46FA              196      ;
46FA 20 18 47      197      ^5      jsr SEEKABS1
46FD              198      ;
46FD B9 84 4F      199      lda ONTBL,Y
4700 20 26 47      200      jsr MSWAIT
4703              201      ;
4703 18           202      clc
4704              203      ;
4704 A5 27         204      lda BUFRADRZ+1
4706 20 1B 47      205      jsr SEEKABS2
4709              206      ;
4709 B9 8C 4F      207      lda OFFTBL,Y
470C 20 26 47      208      jsr MSWAIT
470F              209      ;
470F E6 26         210      inc BUFRADRZ
4711 D0 C3         211      bne <1
4713              212      ;
4713 6A           213      ^6      ror
4714 20 26 47      214      jsr MSWAIT
4717              215      ;
4717 18           216      clc
4718              217      ;
4718 AD 78 04      218      SEEKABS1 lda DRV0TRK
471B              219      ;
471B 29 03         220      SEEKABS2 and #3
471D 2A           221      rol
471E              222      ;
471E 0D 30 4F      223      ora MDPARMS+SL16OFF
4721 AA           224      tax
4722              225      ;
4722 BD 80 C0      226      lda PHASEOFF,X
4725              227      ;
4725 60           228      rts
4726              229      ;
4726              230      ;
4726 A2 12         231      MSWAIT ldx #18
4728              232      ;
4728 CA           233      ^1      dex
4729 D0 FD         234      bne <1
472B              235      ;
472B 38           236      sec
472C              237      ;
472C E9 01         238      sbc #1
472E D0 F6         239      bne MSWAIT
4730              240      ;
4730 60           241      rts
4731              242      ;
4731              243      ;

```

```

4731 A0 20      244 READSECT ldy #$20
4733           245 ;
4733 88         246 ^1      dey
4734 D0 03      247      bne >2
4736           248 ;
4736 4C CB 47    249      jmp RSEXIT
4739           250 ;
4739 BD 8C C0    251 ^2      lda LATCH,X
473C 10 FB      252      bpl <2
473E           253 ;
473E C9 D5      254 ^3      cmp #$D5
4740 D0 F1      255      bne <1
4742           256 ;
4742 EA         257      nop
4743           258 ;
4743 BD 8C C0    259 ^4      lda LATCH,X
4746 10 FB      260      bpl <4
4748           261 ;
4748 C9 AA       262      cmp #$AA
474A D0 F2      263      bne <3
474C           264 ;
474C 38         265      sec
474D           266 ;
474D BD 8C C0    267 ^5      lda LATCH,X
4750 10 FB      268      bpl <5
4752           269 ;
4752 E9 AD       270      sbc #$AD
4754 D0 E8      271      bne <3
4756           272 ;
4756 A8         273      tay
4757           274 ;
4757 85 27       275 ^6      sta BUFRADRZ+1
4759           276 ;
4759 AE 8C C0    277 RSMOD1  ldx LATCH
475C 10 FB      278      bpl RSMOD1
475E           279 ;
475E BD 00 50    280      lda NIBLTBL-$96,X
4761 99 AA 5C    281      sta NIBLBUFR+$AA,Y
4764           282 ;
4764 45 27       283      eor BUFRADRZ+1
4766           284 ;
4766 C8         285      iny
4767           286 ;
4767 C0 56       287      cpy #$56
4769 D0 EC      288      bne <6
476B           289 ;
476B A0 00      290      ldy #ZERO
476D           291 ;
476D AE 8C C0    292 RSMOD2  ldx LATCH
4770 10 FB      293      bpl RSMOD2
4772           294 ;
4772 5D 00 50    295      eor NIBLTBL-$96,X
4775           296 ;
4775 BE AA 5C    297      ldx NIBLBUFR+$AA,Y
4778           298 ;
4778 5D 00 51    299      eor BITBL,X
477B 99 00 C8    300      sta RDWINDOW,Y
477E           301 ;
477E C8         302      iny
477F           303 ;
477F C0 56      304      cpy #$56

```

```

4781 D0 EA      305      bne RSMOD2
4783           306      ;
4783 29 FC      307      and #$FC
4785           308      ;
4785 AE 8C C0   309      RSMOD3   ldx LATCH
4788 10 FB      310      bpl RSMOD3
478A           311      ;
478A 5D 00 50   312      eor NIBLTBL-$96,X
478D           313      ;
478D BE 54 5C   314      ldx NIBLBUFR+$54,Y
4790           315      ;
4790 5D 01 51   316      eor BITBL+1,X
4793 99 00 C8   317      sta RDWNDOW,Y
4796           318      ;
4796 C8         319      iny
4797           320      ;
4797 C0 AC      321      cpy #$AC
4799 D0 EA      322      bne RSMOD3
479B           323      ;
479B 29 FC      324      and #$FC
479D           325      ;
479D AE 8C C0   326      RSMOD4   ldx LATCH
47A0 10 FB      327      bpl RSMOD4
47A2           328      ;
47A2 5D 00 50   329      eor NIBLTBL-$96,X
47A5           330      ;
47A5 BE FE 5B   331      ldx NIBLBUFR-2,Y
47A8           332      ;
47A8 5D 02 51   333      eor BITBL+2,X
47AB 99 00 C8   334      sta RDWNDOW,Y
47AE           335      ;
47AE C8         336      iny
47AF D0 EC      337      bne RSMOD4
47B1           338      ;
47B1 29 FC      339      and #$FC
47B3           340      ;
47B3 AC 8C C0   341      RSMOD5   ldy LATCH
47B6 10 FB      342      bpl RSMOD5
47B8           343      ;
47B8 AE 30 4F   344      ldx MDPARMS+SL16OFF
47BB           345      ;
47BB 59 00 50   346      eor NIBLTBL-$96,Y
47BE D0 0B      347      bne RSEXIT
47C0           348      ;
47C0 BD 8C C0   349      ^7     lda LATCH,X
47C3 10 FB      350      bpl <7
47C5           351      ;
47C5 C9 DE      352      cmp #$DE
47C7 D0 02      353      bne RSEXIT
47C9           354      ;
47C9 18         355      clc
47CA           356      ;
47CA 60         357      rts
47CB           358      ;
47CB 38         359      RSEXIT   sec
47CC           360      ;
47CC 60         361      rts
47CD           362      ;
47CD           363      ;
47CD 20 3A FF   364      ABRTMESG jsr BELL
47D0           365      ;

```

```

47D0 20 4A 4B    366      jsr PRINT
47D3 07 76      367      hex 0776
47D5 52 01      368      byt DISPCMD,INVRDISP
47D7 D0 F2 E5    369      asc "Press ESC to Cancel ABORT"
47DA F3 F3 A0
47DD C5 D3 C3
47E0 A0 F4 EF
47E3 A0 C3 E1
47E6 EE E3 E5
47E9 EC A0 C1
47EC C2 CF D2
47EF D4
47F0 52 00      370      byt DISPCMD,NORMDISP
47F2 50          371      byt RTNCMD
47F3            372      ;
47F3 20 1F 4B    373      jsr GETKEY
47F6            374      ;
47F6 60          375      rts
47F7            376      ;
47F7            377      ;
47F7 20 4A 4B    378      DIFFMSG1 jsr PRINT
47FA 00 73      379      hex 0073
47FC C4 F2 E9    380      asc "Drive and RamDisk Slot Must be Different"
47FF F6 E5 A0
4802 E1 EE E4
4805 A0 D2 E1
4808 ED C4 E9
480B F3 EB A0
480E D3 EC EF
4811 F4 A0 CD
4814 F5 F3 F4
4817 A0 E2 E5
481A A0 C4 E9
481D E6 E6 E5
4820 F2 E5 EE
4823 F4
4824 50          381      byt RTNCMD
4825            382      ;
4825 20 C6 4A    383      jsr CONTMESG
4828            384      ;
4828 60          385      rts
4829            386      ;
4829            387      ;
4829 AE 30 4F    388      RDADR   ldx MDPARMS+SL16OFF
482C            389      ;
482C A0 05      390      ldy #5
482E 84 26      391      sty BUFRADRZ
4830            392      ;
4830 C8          393      ^1     iny
4831 D0 04      394      bne >2
4833            395      ;
4833 C6 26      396      dec BUFRADRZ
4835 F0 58      397      beq RDERR
4837            398      ;
4837 BD 8C C0    399      ^2     lda LATCH,X
483A 10 FB      400      bpl <2
483C            401      ;
483C C9 D5      402      ^3     cmp #$D5
483E D0 F0      403      bne <1
4840            404      ;
4840 EA          405      nop

```

```

4841          406 ;
4841 BD 8C C0 407 ^4      lda LATCH,X
4844 10 FB    408      bpl <4
4846          409 ;
4846 C9 AA    410      cmp #$AA
4848 D0 F2    411      bne <3
484A          412 ;
484A EA      413      nop
484B          414 ;
484B BD 8C C0 415 ^5      lda LATCH,X
484E 10 FB    416      bpl <5
4850          417 ;
4850 C9 96    418      cmp #$96
4852 D0 E8    419      bne <3
4854          420 ;
4854 A0 03    421      ldy #3
4856          422 ;
4856 A9 00    423      lda #ZERO
4858          424 ;
4858 85 27    425 ^6      sta BUFRADRZ+1
485A          426 ;
485A BD 8C C0 427 ^7      lda LATCH,X
485D 10 FB    428      bpl <7
485F          429 ;
485F 2A      430      rol
4860 85 26    431      sta BUFRADRZ
4862          432 ;
4862 BD 8C C0 433 ^8      lda LATCH,X
4865 10 FB    434      bpl <8
4867          435 ;
4867 25 26    436      and BUFRADRZ
4869 99 2C 00 437      sta DATAFNDZ,Y
486C          438 ;
486C 45 27    439      eor BUFRADRZ+1
486E          440 ;
486E 88      441      dey
486F 10 E7    442      bpl <6
4871          443 ;
4871 A8      444      tay
4872 D0 1B    445      bne RDERR
4874          446 ;
4874 BD 8C C0 447 ^9      lda LATCH,X
4877 10 FB    448      bpl <9
4879          449 ;
4879 C9 DE    450      cmp #$DE
487B D0 12    451      bne RDERR
487D          452 ;
487D EA      453      nop
487E          454 ;
487E BD 8C C0 455 ^0      lda LATCH,X
4881 10 FB    456      bpl <0
4883          457 ;
4883 C9 AA    458      cmp #$AA
4885 D0 08    459      bne RDERR
4887          460 ;
4887 A5 2E    461      lda TRKFNDZ
4889 0A      462      asl
488A 8D 78 04 463      sta DRV0TRK
488D          464 ;
488D 18      465      clc
488E          466 ;

```

```
488E 60          467          rts
488F          468      ;
488F 38          469      RDERR      sec
4890          470      ;
4890 60          471          rts
4891          472      ;
4891          473      ;
4891 20 4A 4B    474      DIFFMSG2  jsr PRINT
4894 00 73      475          hex 0073
4896 C4 F2 E9   476          asc "Drive and RamCard Slot Must be Different"
4899 F6 E5 A0
489C E1 EE E4
489F A0 D2 E1
48A2 ED C3 E1
48A5 F2 E4 A0
48A8 D3 EC EF
48AB F4 A0 CD
48AE F5 F3 F4
48B1 A0 E2 E5
48B4 A0 C4 E9
48B7 E6 E6 E5
48BA F2 E5 EE
48BD F4
48BE 50          477          byt RTNCMD
48BF          478      ;
48BF 20 C6 4A   479          jsr CONTMSG
48C2          480      ;
48C2 60          481          rts
48C3          482      ;
48C3          483      ;
48C3 20 4A 4B   484      DIFFMSG3  jsr PRINT
48C6 00 73      485          hex 0073
48C8 D2 E1 ED   486          asc "RamDisk and RamCard Slot Must be Different"
48CB C4 E9 F3
48CE EB A0 E1
48D1 EE E4 A0
48D4 D2 E1 ED
48D7 C3 E1 F2
48DA E4 A0 D3
48DD EC EF F4
48E0 A0 CD F5
48E3 F3 F4 A0
48E6 E2 E5 A0
48E9 C4 E9 E6
48EC E6 E5 F2
48EF E5 EE F4
48F2 50          487          byt RTNCMD
48F3          488      ;
48F3 20 C6 4A   489          jsr CONTMSG
48F6          490      ;
48F6 60          491          rts
48F7          492      ;
48F7          493      ;
48F7 AD 27 4F   494      DISKMESG  lda DRIVES
48FA D0 21      495          bne >1
48FC          496      ;
48FC 20 4A 4B   497          jsr PRINT
48FF 02 73      498          hex 0273
4901 C9 EE F3   499          asc "Insert Disk into Drive 1"
4904 E5 F2 F4
4907 A0 C4 E9
```

```

490A F3 EB A0
490D E9 EE F4
4910 EF A0 C4
4913 F2 E9 F6
4916 E5 A0 B1
4919 50          500      byt RTNCMD
491A          501      ;
491A 4C 43 49    502      jmp >2
491D          503      ;
491D 20 4A 4B    504      ^1      jsr PRINT
4920 00 73      505      hex 0073
4922 C9 EE F3    506      asc "Insert Disks into Drives 1 and 2"
4925 E5 F2 F4
4928 A0 C4 E9
492B F3 EB F3
492E A0 E9 EE
4931 F4 EF A0
4934 C4 F2 E9
4937 F6 E5 F3
493A A0 B1 A0
493D E1 EE E4
4940 A0 B2
4942 50          507      byt RTNCMD
4943          508      ;
4943 20 4A 4B    509      ^2      jsr PRINT
4946 AC A0 D3    510      asc ", Slot "
4949 EC EF F4
494C A0
494D 57          511      byt NIBLCMD
494E 2D 4F      512      adr MDPARMS+SLOTOFF
4950 09 76      513      hex 0976
4952 52 01      514      byt DISPCMD,INVRDISP
4954 D0 F2 E5    515      asc "Press Any Key to Load"
4957 F3 F3 A0
495A C1 EE F9
495D A0 CB E5
4960 F9 A0 F4
4963 EF A0 CC
4966 EF E1 E4
4969 87          516      byt BELLCHAR
496A 52 00      517      byt DISPCMD,NORMDISP
496C 50          518      byt RTNCMD
496D          519      ;
496D 20 1F 4B    520      jsr GETKEY
4970          521      ;
4970 60          522      rts
4971          523      ;
4971          524      ;
4971 20 4A 4B    525      USERMESG jsr PRINT
4974 53 01      526      byt SCRNCMD,HOMESCRN
4976 55          527      byt CNTRCMD
4977 D5 F3 E5    528      asc "Useful Entry Points"
497A E6 F5 EC
497D A0 C5 EE
4980 F4 F2 F9
4983 A0 D0 EF
4986 E9 EE F4
4989 F3
498A 15 63      529      hex 1563
498C D4 F9 F0    530      asc "Type From"
498F E5 A0 C6

```

```

4992 F2 EF ED
4995 1F          531      hex 1F
4996 D4 F9 F0    532      asc "Type From"
4999 E5 A0 C6
499C F2 EF ED
499F 15 64      533      hex 1564
49A1 C1 F0 F0    534      asc "Applesoft"
49A4 EC E5 F3
49A7 EF E6 F4
49AA 20          535      hex 20
49AB CD EF EE    536      asc "Monitor"
49AE E9 F4 EF
49B1 F2
49B2 50          537      byt RTNCMD
49B3          538      ;
49B3          539      ;
49B3          540      ; Show RDBOOT entry point.
49B3          541      ;
49B3 A9 00      542      lda #RDBOOT
49B5 20 AD 4A    543      jsr MAKENEG
49B8          544      ;
49B8 20 4A 4B    545      jsr PRINT
49BB 01 66      546      hex 0166
49BD D2 E1 ED    547      asc "RamDisk Boot:"
49C0 C4 E9 F3
49C3 EB A0 C2
49C6 EF EF F4
49C9 BA
49CA 14          548      hex 14
49CB C3 C1 CC    549      asc "CALL -"
49CE CC A0 AD
49D1 5F 00      550      byt DECNCMD,NOPAD
49D3 4A 4F      551      adr NEGNUM
49D5 21          552      hex 21
49D6 59          553      byt BYT2CMD
49D7 46 4F      554      adr HEXNUM
49D9 C7          555      asc "G"
49DA 50          556      byt RTNCMD
49DB          557      ;
49DB          558      ;
49DB          559      ; Show Connect RamDisk RWTS to DOS.
49DB          560      ;
49DB A9 10      561      lda #ROMHOOK
49DD 20 AD 4A    562      jsr MAKENEG
49E0          563      ;
49E0 20 4A 4B    564      jsr PRINT
49E3 01 68      565      hex 0168
49E5 C4 CF D3    566      asc "DOS Connect:"
49E8 A0 C3 EF
49EB EE EE E5
49EE E3 F4 BA
49F1 14          567      hex 14
49F2 C3 C1 CC    568      asc "CALL -"
49F5 CC A0 AD
49F8 5F 00      569      byt DECNCMD,NOPAD
49FA 4A 4F      570      adr NEGNUM
49FC 21          571      hex 21
49FD 59          572      byt BYT2CMD
49FE 46 4F      573      adr HEXNUM
4A00 C7          574      asc "G"
4A01 50          575      byt RTNCMD

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```

4A02          576 ;
4A02          577 ;
4A02          578 ; Show Disconnect RamDisk RWTS from DOS.
4A02          579 ;
4A02 A9 18     580          lda #ROMUHOOK
4A04 20 AD 4A   581          jsr MAKENEG
4A07          582 ;
4A07 20 4A 4B   583          jsr PRINT
4A0A 01 6A     584          hex 016A
4A0C C4 CF D3   585          asc "DOS Disconnect:"
4A0F A0 C4 E9
4A12 F3 E3 EF
4A15 EE EE E5
4A18 E3 F4 BA
4A1B 14        586          hex 14
4A1C C3 C1 CC   587          asc "CALL -"
4A1F CC A0 AD
4A22 5F 00     588          byt DECNCMD,NOPAD
4A24 4A 4F     589          adr NEGNUM
4A26 21        590          hex 21
4A27 59        591          byt BYT2CMD
4A28 46 4F     592          adr HEXNUM
4A2A C7        593          asc "G"
4A2B 50        594          byt RTNCMD
4A2C          595 ;
4A2C          596 ;
4A2C          597 ; Show RamDisk/RamCard 3.X RWTS entry point.
4A2C          598 ;
4A2C A9 20     599          lda #RDENTRY3
4A2E 20 AD 4A   600          jsr MAKENEG
4A31          601 ;
4A31 20 4A 4B   602          jsr PRINT
4A34 01 6C     603          hex 016C
4A36 C4 CF D3   604          asc "DOS 3.X RWTS:"
4A39 A0 B3 AE
4A3C D8 A0 D2
4A3F D7 D4 D3
4A42 BA
4A43 14        605          hex 14
4A44 C3 C1 CC   606          asc "CALL -"
4A47 CC A0 AD
4A4A 5F 00     607          byt DECNCMD,NOPAD
4A4C 4A 4F     608          adr NEGNUM
4A4E 21        609          hex 21
4A4F 59        610          byt BYT2CMD
4A50 46 4F     611          adr HEXNUM
4A52 C7        612          asc "G"
4A53 50        613          byt RTNCMD
4A54          614 ;
4A54          615 ;
4A54          616 ; Show RamDisk 4.X RWTS entry point.
4A54          617 ;
4A54 A9 40     618          lda #RDENTRY
4A56 20 AD 4A   619          jsr MAKENEG
4A59          620 ;
4A59 20 4A 4B   621          jsr PRINT
4A5C 01 6E     622          hex 016E
4A5E D2 E1 ED   623          asc "RamDisk 4.X RWTS:"
4A61 C4 E9 F3
4A64 EB A0 B4
4A67 AE D8 A0

```

```

4A6A D2 D7 D4
4A6D D3 BA
4A6F 14          624      hex 14
4A70 C3 C1 CC    625      asc "CALL -"
4A73 CC A0 AD
4A76 5F 00        626      byt DECNCMD,NOPAD
4A78 4A 4F        627      adr NEGNUM
4A7A 21          628      hex 21
4A7B 59          629      byt BYT2CMD
4A7C 46 4F        630      adr HEXNUM
4A7E C7          631      asc "G"
4A7F 50          632      byt RTNCMD
4A80          633      ;
4A80          634      ;
4A80          635      ; Show RamCard 4.X RWTS entry point.
4A80          636      ;
4A80 A9 50        637      lda #RCENTRY
4A82 20 AD 4A     638      jsr MAKENEG
4A85          639      ;
4A85 20 4A 4B     640      jsr PRINT
4A88 01 70        641      hex 0170
4A8A D2 E1 ED     642      asc "RamCard 4.X RWTS:"
4A8D C3 E1 F2
4A90 E4 A0 B4
4A93 AE D8 A0
4A96 D2 D7 D4
4A99 D3 BA
4A9B 14          643      hex 14
4A9C C3 C1 CC    644      asc "CALL -"
4A9F CC A0 AD
4AA2 5F 00        645      byt DECNCMD,NOPAD
4AA4 4A 4F        646      adr NEGNUM
4AA6 21          647      hex 21
4AA7 59          648      byt BYT2CMD
4AA8 46 4F        649      adr HEXNUM
4AAA C7          650      asc "G"
4AAB 50          651      byt RTNCMD
4AAC          652      ;
4AAC 60          653      rts
4AAD          654      ;
4AAD          655      ;
4AAD 18          656      MAKENEG clc
4AAE          657      ;
4AAE 8D 47 4F     658      sta HEXNUM+1
4AB1 49 FF        659      eor #NEGONE
4AB3          660      ;
4AB3 69 01        661      adc #1
4AB5 8D 4B 4F     662      sta NEGNUM+1
4AB8          663      ;
4AB8 AD 33 4F     664      lda RDPARMS+CXPGOFF
4ABB          665      ;
4ABB 8D 46 4F     666      sta HEXNUM
4ABE 49 FF        667      eor #NEGONE
4AC0          668      ;
4AC0 69 00        669      adc #ZERO
4AC2 8D 4A 4F     670      sta NEGNUM
4AC5          671      ;
4AC5 60          672      rts
4AC6          673      ;
4AC6          674      ;
4AC6 20 3A FF     675      CONTMESG jsr BELL

```

```

4AC9          676 ;
4AC9 20 4A 4B 677      jsr PRINT
4ACC 00 76    678      hex 0076
4ACE 54 00    679      byt CLRCMD,EOLCLR
4AD0 07       680      hex 07
4AD1 52 01    681      byt DISPCMD,INVRDISP
4AD3 D0 F2 E5 682      asc "Press Any Key to Continue"
4AD6 F3 F3 A0
4AD9 C1 EE F9
4ADC A0 CB E5
4ADF F9 A0 F4
4AE2 EF A0 C3
4AE5 EF EE F4
4AE8 E9 EE F5
4AEB E5
4AEC 52 00    683      byt DISPCMD,NORMDISP
4AEE 50       684      byt RTNCMD
4AEF          685 ;
4AEF 20 1F 4B 686      jsr GETKEY
4AF2          687 ;
4AF2 38       688      sec
4AF3          689 ;
4AF3 60       690      rts
4AF4          691 ;
4AF4          692 ;
4AF4 8E 39 4F 693 SETPTR  stx MARKER
4AF7          694 ;
4AF7 84 1E    695      sty PTR
4AF9 85 1F    696      sta PTR+1
4AFB          697 ;
4AFB A0 01    698      ldy #1
4AFD          699 ;
4AFD A9 01    700      lda #INVRDISP
4AFF 91 1E    701      sta (PTR),Y
4B01          702 ;
4B01 60       703      rts
4B02          704 ;
4B02          705 ;
4B02 A0 01    706 CLRPTR  ldy #1
4B04          707 ;
4B04 A9 00    708      lda #NORMDISP
4B06 91 1E    709      sta (PTR),Y
4B08          710 ;
4B08 60       711      rts
4B09          712 ;
4B09          713 ;
4B09 20 1F 4B 714 READKEY jsr GETKEY
4B0C          715 ;
4B0C AE 39 4F 716      ldx MARKER
4B0F          717 ;
4B0F B0 0D    718      bcs >3
4B11          719 ;
4B11 C9 88    720      cmp #LARROW
4B13 D0 01    721      bne >1
4B15          722 ;
4B15 CA       723      dex
4B16          724 ;
4B16 C9 95    725 ^1     cmp #RARROW
4B18 D0 01    726      bne >2
4B1A          727 ;
4B1A E8       728      inx

```

```

4B1B          729 ;
4B1B C9 8D    730 ^2      cmp #RETURN
4B1D          731 ;
4B1D 18       732      clc
4B1E          733 ;
4B1E 60       734 ^3      rts
4B1F          735 ;
4B1F          736 ;
4B1F 2C 10 C0 737 GETKEY  bit CLRKEY
4B22          738 ;
4B22 AD 00 C0 739 ^1      lda KEY
4B25 10 FB    740      bpl <1
4B27          741 ;
4B27 2C 10 C0 742      bit CLRKEY
4B2A          743 ;
4B2A C9 E0    744      cmp #$E0
4B2C 90 02    745      bcc >2
4B2E          746 ;
4B2E 49 20    747      eor #$20
4B30          748 ;
4B30 C9 9B    749 ^2      cmp #ESCAPE
4B32 F0 01    750      beq >3
4B34          751 ;
4B34 18       752      clc
4B35          753 ;
4B35 60       754 ^3      rts
4B36          755 ;
4B36          756 ;
4B36 A0 00    757 CLRSCRN1 ldy #ZERO
4B38 84 06    758      sty PTR1
4B3A          759 ;
4B3A A2 20    760      ldx /PAGE20
4B3C 86 07    761      stx PTR1+1
4B3E          762 ;
4B3E 98       763      tya
4B3F          764 ;
4B3F 91 06    765 ^1      sta (PTR1),Y
4B41          766 ;
4B41 C8       767      iny
4B42 D0 FB    768      bne <1
4B44          769 ;
4B44 E6 07    770      inc PTR1+1
4B46          771 ;
4B46 CA       772      dex
4B47 D0 F6    773      bne <1
4B49          774 ;
4B49 60       775      rts
4B4A          776 ;
4B4A          777 ;

```

```
BSAVE SEG02,A$0800,B,L$0550
```

```

4B4A          778      usr SEG02
4B4A          779 ;
4B4A          780 ;
4B4A          781      icl "RD3.L"

```

```
LLOAD RD3.L,A$4000
```

```

4B4A      1          ttl "RamDisk Source Code, RD3.L"
4B4A      2      ;
4B4A      3      ;
4B4A      4      ; RD3.L
4B4A      5      ;
4B4A      6      ;
4B4A      7          obj PAGE08
4B4A      8          usr
4B4A      9      ;
4B4A     10      ;
4B4A  8D  2A  4C    11  PRINT      sta PRNTSAVA+1
4B4D  8E  28  4C    12              stx PRNTSAVX+1
4B50  8C  26  4C    13              sty PRNTSAVY+1
4B53     14      ;
4B53  68          15          pla
4B54  85  FC      16          sta PRNTPTR
4B56     17      ;
4B56  68          18          pla
4B57  85  FD      19          sta PRNTPTR+1
4B59     20      ;
4B59  E6  FC      21  PRNTLOOP  inc PRNTPTR
4B5B  D0  02      22              bne >1
4B5D     23      ;
4B5D  E6  FD      24              inc PRNTPTR+1
4B5F     25      ;
4B5F  A0  00      26      ^1      ldy #ZERO
4B61     27      ;
4B61  B1  FC      28              lda (PRNTPTR),Y
4B63  10  10      29              bpl >3
4B65     30      ;
4B65  C9  A0      31              cmp #SPACE
4B67  90  06      32              bcc >2
4B69     33      ;
4B69  20  C4  4B    34              jsr PRNTOUT
4B6C     35      ;
4B6C  4C  59  4B    36              jmp PRNTLOOP
4B6F     37      ;
4B6F  20  C8  4B    38      ^2      jsr PRNTOUT2
4B72     39      ;
4B72  4C  59  4B    40              jmp PRNTLOOP
4B75     41      ;
4B75  C9  50      42      ^3      cmp #MAXCH
4B77  B0  04      43              bcs >4
4B79     44      ;
4B79  85  24      45              sta CH
4B7B     46      ;
4B7B  90  DC      47              bcc PRNTLOOP
4B7D     48      ;
4B7D  C9  60      49      ^4      cmp #MINCV
4B7F  90  0A      50              bcc >5
4B81     51      ;
4B81  29  1F      52              and #CVMASK
4B83  85  25      53              sta CV
4B85     54      ;
4B85  20  22  FC    55  PRNTMOD1 jsr VTAB
4B88     56      ;
4B88  4C  59  4B    57              jmp PRNTLOOP
4B8B     58      ;
4B8B  29  0F      59      ^5      and #PCMDMASK
4B8D  AA          60              tax

```

```

4B8E      61 ;
4B8E BD EA 4B 62      lda PRNTBL,X
4B91 8D A1 4B 63      sta PRNTMOD2+1
4B94      64 ;
4B94 BD FA 4B 65      lda PRNTBLL,X
4B97 8D BF 4B 66      sta PRNTMOD3+1
4B9A      67 ;
4B9A BD 0A 4C 68      lda PRNTBLH,X
4B9D 8D C0 4B 69      sta PRNTMOD3+2
4BA0      70 ;
4BA0 90 19    71 PRNTMOD2 bcc PRNTBR4
4BA2      72 ;
4BA2 C8      73 PRNTBR1  iny
4BA3      74 ;
4BA3 B1 FC    75      lda (PRNTPTR),Y
4BA5 8D E9 4B 76      sta FRMTVAL
4BA8      77 ;
4BA8 C8      78 PRNTBR2  iny
4BA9      79 ;
4BA9 B1 FC    80      lda (PRNTPTR),Y
4BAB 85 FA    81      sta DATAPTR
4BAD      82 ;
4BAD C8      83 PRNTBR3  iny
4BAE      84 ;
4BAE B1 FC    85      lda (PRNTPTR),Y
4BB0 85 FB    86      sta DATAPTR+1
4BB2      87 ;
4BB2 98      88      tya
4BB3      89 ;
4BB3 65 FC    90      adc PRNTPTR
4BB5 85 FC    91      sta PRNTPTR
4BB7 90 02    92      bcc PRNTBR4
4BB9      93 ;
4BB9 E6 FD    94      inc PRNTPTR+1
4BBB      95 ;
4BBB 18      96 PRNTBR4  clc
4BBC      97 ;
4BBC A0 00    98      ldy #ZERO
4BBE      99 ;
4BBE 20 00 00 100 PRNTMOD3 jsr *-*
4BC1     101 ;
4BC1 4C 59 4B 102      jmp PRNTLOOP
4BC4     103 ;
4BC4     104 ;
4BC4     105 PRNTOUT:
4BC4     106 ;
4BC4 09 00    107 OUTMOD1  ora #ZERO
4BC6 49 00    108 OUTMOD2  eor #ZERO
4BC8     109 ;
4BC8 4C ED FD 110 PRNTOUT2 jmp COUT
4BCB     111 ;
4BCB     112 ;
4BCB     113 ; Notes on DISPCMD as index
4BCB     114 ;
4BCB     115 ; 0 - Normal display
4BCB     116 ; 1 - Inverse display
4BCB     117 ;
4BCB 00 40    118 OUTTBL1  hex 0040      ; TEXT
4BCD 00 00    119      hex 0000      ; GRPH
4BCF 00 00    120      hex 0000      ; TX80
4BD1     121 ;

```

```

4BD1 00 C0      122  OUTTBL2  hex 00C0
4BD3 00 80      123           hex 0080
4BD5 00 00      124           hex 0000
4BD7           125  ;
4BD7 FF 3F      126  OUT80COL hex FF3F
4BD9           127  ;
4BD9           128  ;
4BD9 22 FC      129  VTABADRS adr VTAB
4BDB 2C 4C      130           adr PRINTRTN
4BDD 22 FC      131           adr VTAB
4BDF           132  ;
4BDF           133  ;
4BDF ED FD      134  OUTADRS  adr COUT
4BE1 D1 4D      135           adr PRNTGRPH
4BE3 ED FD      136           adr COUT
4BE5           137  ;
4BE5 00         138  PRNTSAV  hex 00
4BE6 00 00      139  PRNTNUM  hex 0000
4BE8           140  ;
4BE8           141  ;
4BE8           142  ; Notes on MODEVAL and FRMTVAL
4BE8           143  ;
4BE8           144  ; 0 - 40 column TEXT mode
4BE8           145  ; 1 - GRAPHICS mode
4BE8           146  ; 2 - 80 column TEXT mode
4BE8           147  ; 3 - exit 80 TEXT, enter 40 TEXT
4BE8           148  ;
4BE8           149  ; $00 - no left padding
4BE8           150  ; $40 - zero left padding
4BE8           151  ; $80 - space left padding
4BE8           152  ;
4BE8 00         153  MODEVAL  hex 00
4BE9 00         154  FRMTVAL  hex 00
4BEA           155  ;
4BEA           156  ;
4BEA           157  ; Branch table of command routines.
4BEA           158  ;
4BEA           159  PRNTBL:
4BEA 19         160           byt PRNTBR4-PRNTBR1 ; 50
4BEB 0B         161           byt PRNTBR3-PRNTBR1 ; 51
4BEC 0B         162           byt PRNTBR3-PRNTBR1 ; 52
4BED 0B         163           byt PRNTBR3-PRNTBR1 ; 53
4BEE 0B         164           byt PRNTBR3-PRNTBR1 ; 54
4BEF 19         165           byt PRNTBR4-PRNTBR1 ; 55
4BF0 00         166           byt PRNTBR1-PRNTBR1 ; 56
4BF1 06         167           byt PRNTBR2-PRNTBR1 ; 57
4BF2 06         168           byt PRNTBR2-PRNTBR1 ; 58
4BF3 06         169           byt PRNTBR2-PRNTBR1 ; 59
4BF4 00         170           byt PRNTBR1-PRNTBR1 ; 5A
4BF5 00         171           byt PRNTBR1-PRNTBR1 ; 5B
4BF6 06         172           byt PRNTBR2-PRNTBR1 ; 5C
4BF7 06         173           byt PRNTBR2-PRNTBR1 ; 5D
4BF8 06         174           byt PRNTBR2-PRNTBR1 ; 5E
4BF9 00         175           byt PRNTBR1-PRNTBR1 ; 5F
4BFA           176  ;
4BFA           177  ;
4BFA           178  ; Address tables of command routines.
4BFA           179  ;
4BFA           180  PRNTBL:
4BFA 1A         181           byt PRNTRTN           ; 50
4BFB 2D         182           byt PRNTMODE          ; 51

```

```

4BFC 78      183      byt PRNTDISP      ; 52
4BFD 97      184      byt PRNTSCRN      ; 53
4BFE B8      185      byt PRNTCLR      ; 54
4BFF D3      186      byt PRNTCNTR      ; 55
4C00 E5      187      byt PRNTBUFR      ; 56
4C01 00      188      byt PRNTNIBL      ; 57
4C02 09      189      byt PRNT1BYT      ; 58
4C03 0C      190      byt PRNT2BYT      ; 59
4C04 05      191      byt PRNTNBYT      ; 5A
4C05 18      192      byt PRNTADR      ; 5B
4C06 30      193      byt PRNT1DEC      ; 5C
4C07 36      194      byt PRNT2DEC      ; 5D
4C08 43      195      byt PRNT3DEC      ; 5E
4C09 4D      196      byt PRNTNDEC      ; 5F
4C0A        197      ;
4C0A        198      PRNTBLH:
4C0A 4C      199      hby PRNTRTN      ; 50
4C0B 4C      200      hby PRNTMODE      ; 51
4C0C 4C      201      hby PRNTDISP      ; 52
4C0D 4C      202      hby PRNTSCRN      ; 53
4C0E 4C      203      hby PRNTCLR      ; 54
4C0F 4C      204      hby PRNTCNTR      ; 55
4C10 4C      205      hby PRNTBUFR      ; 56
4C11 4D      206      hby PRNTNIBL      ; 57
4C12 4D      207      hby PRNT1BYT      ; 58
4C13 4D      208      hby PRNT2BYT      ; 59
4C14 4D      209      hby PRNTNBYT      ; 5A
4C15 4D      210      hby PRNTADR      ; 5B
4C16 4D      211      hby PRNT1DEC      ; 5C
4C17 4D      212      hby PRNT2DEC      ; 5D
4C18 4D      213      hby PRNT3DEC      ; 5E
4C19 4D      214      hby PRNTNDEC      ; 5F
4C1A        215      ;
4C1A        216      ;
4C1A        217      ; RTNCMD ($50)
4C1A        218      ;
4C1A BA      219      PRNTRTN tsx
4C1B        220      ;
4C1B A5 FC      221      lda PRNTPTR
4C1D 9D 01 01      222      sta STACK+1,X
4C20        223      ;
4C20 A5 FD      224      lda PRNTPTR+1
4C22 9D 02 01      225      sta STACK+2,X
4C25        226      ;
4C25 A0 00      227      PRNTSAVY ldy #ZERO
4C27 A2 00      228      PRNTSAVX ldx #ZERO
4C29 A9 00      229      PRNTSAVA lda #ZERO
4C2B        230      ;
4C2B 18        231      clc
4C2C        232      ;
4C2C 60        233      PRINTRTN rts
4C2D        234      ;
4C2D        235      ;
4C2D        236      ; MODECMD ($51)
4C2D        237      ;
4C2D        238      ; 0 - 40 column TEXT mode
4C2D        239      ; 1 - GRAPHICS mode
4C2D        240      ; 2 - 80 column TEXT mode
4C2D        241      ; 3 - exit 80 TEXT, enter 40 TEXT
4C2D        242      ;
4C2D A5 FB      243      PRNTMODE lda DATAPTR+1

```

```

4C2F 29 03      244      and #3
4C31           245      ;
4C31 C9 02      246      cmp #TX80MODE
4C33 D0 09      247      bne >1
4C35           248      ;
4C35 A9 B3      249      lda #"3"
4C37 20 95 FE    250      jsr OUTPORT
4C3A           251      ;
4C3A A9 02      252      lda #TX80MODE
4C3C D0 1A      253      bne >2
4C3E           254      ;
4C3E C9 03      255      ^1 cmp #LV80MODE
4C40 D0 16      256      bne >2
4C42           257      ;
4C42 AD D7 4B    258      lda OUT80COL
4C45 85 32      259      sta INVFLG
4C47           260      ;
4C47 A9 9B      261      lda #ESCAPE
4C49 20 ED FD    262      jsr COUT
4C4C           263      ;
4C4C A9 91      264      lda #CTRLQ
4C4E 20 ED FD    265      jsr COUT
4C51           266      ;
4C51 A9 B0      267      lda #"0"
4C53 20 95 FE    268      jsr OUTPORT
4C56           269      ;
4C56 A9 00      270      lda #TEXTMODE
4C58           271      ;
4C58 8D E8 4B    272      ^2 sta MODEVAL
4C5B           273      ;
4C5B 0A          274      asl
4C5C A8          275      tay
4C5D           276      ;
4C5D B9 D9 4B    277      lda VTABADRS,Y
4C60 8D 86 4B    278      sta PRNTMOD1+1
4C63           279      ;
4C63 B9 DA 4B    280      lda VTABADRS+1,Y
4C66 8D 87 4B    281      sta PRNTMOD1+2
4C69           282      ;
4C69 B9 DF 4B    283      lda OUTADRS,Y
4C6C 8D C9 4B    284      sta PRNTOUT2+1
4C6F           285      ;
4C6F B9 E0 4B    286      lda OUTADRS+1,Y
4C72 8D CA 4B    287      sta PRNTOUT2+2
4C75           288      ;
4C75 4C EA 03    289      jmp HOOKDOS
4C78           290      ;
4C78           291      ;
4C78           292      ; DISPCMD ($52)
4C78           293      ;
4C78           294      ; 0 - Normal display
4C78           295      ; 1 - Inverse display
4C78           296      ;
4C78 A4 FB      297      PRNTDISP ldy DATAPTR+1
4C7A           298      ;
4C7A AD E8 4B    299      lda MODEVAL
4C7D C9 02      300      cmp #TX80MODE
4C7F D0 05      301      bne >1
4C81           302      ;
4C81 BE D7 4B    303      ldx OUT80COL,Y
4C84 86 32      304      stx INVFLG

```

```

4C86          305 ;
4C86 0A       306 ^1      asl
4C87 65 FB    307          adc DATAPTR+1
4C89          308 ;
4C89 A8       309          tay
4C8A          310 ;
4C8A B9 CB 4B 311          lda OUTTBL1,Y
4C8D 8D C5 4B 312          sta OUTMOD1+1
4C90          313 ;
4C90 B9 D1 4B 314          lda OUTTBL2,Y
4C93 8D C7 4B 315          sta OUTMOD2+1
4C96          316 ;
4C96 60       317          rts
4C97          318 ;
4C97          319 ;
4C97          320 ; SCRNCMD ($53)
4C97          321 ;
4C97          322 ; 0 - INIT
4C97          323 ; 1 - HOME
4C97          324 ;
4C97 2C 54 C0 325 PRNTSCRN bit LOWSCR
4C9A          326 ;
4C9A          327 ; .if DISPLAY=GRPHMODE
4C9A          328 ;
4C9A AD E8 4B 329          lda MODEVAL
4C9D C9 01    330          cmp #GRPHMODE
4C9F D0 0A    331          bne >2
4CA1          332 ;
4CA1 A5 FB    333          lda DATAPTR+1
4CA3 D0 03    334          bne >1
4CA5          335 ;
4CA5 4C 68 4E 336          jmp SCRNNINIT
4CA8          337 ;
4CA8 4C FB 4E 338 ^1      jmp SCRNHOME
4CAB          339 ;
4CAB          340 ; .fi
4CAB          341 ;
4CAB A5 FB    342 ^2      lda DATAPTR+1
4CAD D0 06    343          bne >3
4CAF          344 ;
4CAF 2C 51 C0 345          bit TXTSET
4CB2          346 ;
4CB2 4C 2F FB 347          jmp INIT
4CB5          348 ;
4CB5 4C 58 FC 349 ^3      jmp HOME
4CB8          350 ;
4CB8          351 ;
4CB8          352 ; CLRCMD ($54)
4CB8          353 ;
4CB8          354 ; 0 - EOL
4CB8          355 ; 1 - EOP
4CB8          356 ;
4CB8          357 PRNTCLR:
4CB8          358 ; .if DISPLAY=GRPHMODE
4CB8          359 ;
4CB8 AD E8 4B 360          lda MODEVAL
4CBB C9 01    361          cmp #GRPHMODE
4CBD D0 0A    362          bne >2
4CBF          363 ;
4CBF A5 FB    364          lda DATAPTR+1
4CC1 D0 03    365          bne >1

```

```

4CC3          366 ;
4CC3 4C D1 4E 367      jmp SCRNEOL
4CC6          368 ;
4CC6 4C 03 4F 369 ^1    jmp SCRNEOP
4CC9          370 ;
4CC9          371      .fi
4CC9          372 ;
4CC9 A5 FB    373 ^2    lda DATAPTR+1
4CCB D0 03    374      bne >3
4CCD          375 ;
4CCD 4C 9C FC 376      jmp CLREOL
4CD0          377 ;
4CD0 4C 42 FC 378 ^3    jmp CLREOP
4CD3          379 ;
4CD3          380 ;
4CD3          381 ; CNTRCMD ($55)
4CD3          382 ;
4CD3 A9 9F    383 PRNTCNTR lda #SPACE-1
4CD5          384 ;
4CD5 C8       385 ^1    iny
4CD6          386 ;
4CD6 D1 FC    387      cmp (PRNTPTR),Y
4CD8 90 FB    388      bcc <1
4CDA          389 ;
4CDA 98       390      tya
4CDB          391 ;
4CDB 49 FF    392      eor #NEGONE
4CDD 65 21    393      adc WNDWDTH
4CDF          394 ;
4CDF 4A       395      lsr
4CE0          396 ;
4CE0 65 20    397      adc WNDLFT
4CE2 85 24    398      sta CH
4CE4          399 ;
4CE4 60       400      rts
4CE5          401 ;
4CE5          402 ;
4CE5          403 ; BUFRCMD ($56)
4CE5          404 ;
4CE5          405 ; 0 - direct address
4CE5          406 ; 1 - indirect address
4CE5          407 ;
4CE5 AD E9 4B 408 PRNTBUFR lda FRMTVAL
4CE8 F0 0B    409      beq >1
4CEA          410 ;
4CEA B1 FA    411      lda (DATAPTR),Y
4CEC AA       412      tax
4CED          413 ;
4CED C8       414      iny
4CEE          415 ;
4CEE B1 FA    416      lda (DATAPTR),Y
4CF0          417 ;
4CF0 86 FA    418      stx DATAPTR
4CF2 85 FB    419      sta DATAPTR+1
4CF4          420 ;
4CF4 88       421      dey
4CF5          422 ;
4CF5 B1 FA    423 ^1    lda (DATAPTR),Y
4CF7 F0 06    424      beq >2
4CF9          425 ;
4CF9 20 C4 4B 426      jsr PRNTOUT

```

```

4CFC          427 ;
4CFC C8       428         iny
4CFD D0 F6    429         bne <1
4CFF          430 ;
4CFF 60       431 ^2      rts
4D00          432 ;
4D00          433 ;
4D00          434 ; NIBLCMD ($57)
4D00          435 ;
4D00 B1 FA    436 PRNTNIBL lda (DATAPTR),Y
4D02          437 ;
4D02 4C 8B 4D 438         jmp PRNTHEx
4D05          439 ;
4D05          440 ;
4D05          441 ; BYT1CMD ($58)
4D05          442 ; BYT2CMD ($59)
4D05          443 ;
4D05          444 ; BYTNCMD ($5A)
4D05          445 ;
4D05          446 ; n - number of hex bytes to print
4D05          447 ;
4D05 AE E9 4B 448 PRNTNBYT ldx FRMTVAL
4D08          449 ;
4D08 2C 00 00 450         bit *-*
4D0B          451         dfs !-2
4D09          452 ;
4D09 A2 01    453 PRNT1BYT ldx #1
4D0B          454 ;
4D0B 2C 00 00 455         bit *-*
4D0E          456         dfs !-2
4D0C          457 ;
4D0C A2 02    458 PRNT2BYT ldx #2
4D0E          459 ;
4D0E B1 FA    460 PRNTBYT  lda (DATAPTR),Y
4D10          461 ;
4D10 20 82 4D 462         jsr PRNTBYTE
4D13          463 ;
4D13 C8       464         iny
4D14          465 ;
4D14 CA       466         dex
4D15 D0 F7    467         bne PRNTBYT
4D17          468 ;
4D17 60       469         rts
4D18          470 ;
4D18          471 ;
4D18          472 ; ADRCMD ($5B)
4D18          473 ;
4D18          474 ; 0 - direct address
4D18          475 ; 1 - indirect address
4D18          476 ;
4D18 AD E9 4B 477 PRNTADR  lda FRMTVAL
4D1B D0 06    478         bne >1
4D1D          479 ;
4D1D A6 FA    480         ldx DATAPTR
4D1F A5 FB    481         lda DATAPTR+1
4D21          482 ;
4D21 90 06    483         bcc >2                ; always taken
4D23          484 ;
4D23 B1 FA    485 ^1      lda (DATAPTR),Y
4D25 AA       486         tax
4D26          487 ;

```

```

4D26 C8          488      iny
4D27          489      ;
4D27 B1 FA      490      lda (DATAPTR),Y
4D29          491      ;
4D29 20 82 4D   492      ^2      jsr PRNTBYTE
4D2C          493      ;
4D2C 8A          494      txa
4D2D          495      ;
4D2D 4C 82 4D   496      jmp PRNTBYTE
4D30          497      ;
4D30          498      ;
4D30          499      ; DEC1CMD ($5C)
4D30          500      ;
4D30 20 98 4D   501      PRNT1DEC jsr HEXTODEC
4D33          502      ;
4D33 4C 8B 4D   503      jmp PRNTHEx
4D36          504      ;
4D36          505      ;
4D36          506      ; DEC2CMD ($5D)
4D36          507      ;
4D36 20 98 4D   508      PRNT2DEC jsr HEXTODEC
4D39          509      ;
4D39          510      ;
4D39 8A          511      PRNTDEC  txa
4D3A 20 8B 4D   512      jsr PRNTHEx
4D3D          513      ;
4D3D AD E5 4B   514      lda PRNTSAV
4D40          515      ;
4D40 4C 8B 4D   516      jmp PRNTHEx
4D43          517      ;
4D43          518      ;
4D43          519      ; DEC3CMD ($5E)
4D43          520      ;
4D43 20 98 4D   521      PRNT3DEC jsr HEXTODEC
4D46          522      ;
4D46 98          523      tya
4D47          524      ;
4D47 20 8B 4D   525      jsr PRNTHEx
4D4A          526      ;
4D4A 4C 39 4D   527      jmp PRNTDEC
4D4D          528      ;
4D4D          529      ;
4D4D          530      ; DECNCMD ($5F)
4D4D          531      ;
4D4D          532      ; $00 - no left padding
4D4D          533      ; $40 - zero left padding
4D4D          534      ; $80 - space left padding
4D4D          535      ;
4D4D          536      ; data in high/low order
4D4D          537      ;
4D4D B1 FA      538      PRNTNDEC lda (DATAPTR),Y
4D4F 8D E7 4B   539      sta PRNTNUM+1
4D52          540      ;
4D52 C8          541      iny
4D53          542      ;
4D53 B1 FA      543      lda (DATAPTR),Y
4D55 8D E6 4B   544      sta PRNTNUM
4D58          545      ;
4D58 A2 03      546      ldx #3
4D5A          547      ;
4D5A 2C E9 4B   548      bit FRMTVAL

```

```

4D5D 70 18      549      bvs >4
4D5F            550      ;
4D5F 20 B2 4D   551      ^1      jsr GETDIGIT
4D62 D0 16      552      bne >5
4D64            553      ;
4D64 2C E9 4B   554      bit FRMTVAL
4D67 10 05      555      bpl >2
4D69            556      ;
4D69 A9 A0      557      lda #SPACE
4D6B 20 C4 4B   558      jsr PRNTOUT
4D6E            559      ;
4D6E CA        560      ^2      dex
4D6F 10 EE      561      bpl <1
4D71            562      ;
4D71 AD E6 4B   563      ^3      lda PRNTNUM
4D74            564      ;
4D74 4C 8B 4D   565      jmp PRNTHEx
4D77            566      ;
4D77 20 B2 4D   567      ^4      jsr GETDIGIT
4D7A            568      ;
4D7A 20 8B 4D   569      ^5      jsr PRNTHEx
4D7D            570      ;
4D7D CA        571      dex
4D7E 10 F7      572      bpl <4
4D80            573      ;
4D80 30 EF      574      bmi <3      ; always taken
4D82            575      ;
4D82            576      ;
4D82 48        577      PRNTBYTE pha
4D83            578      ;
4D83 4A        579      lsr
4D84 4A        580      lsr
4D85 4A        581      lsr
4D86 4A        582      lsr
4D87            583      ;
4D87 20 8D 4D   584      jsr PRNTHEx2
4D8A            585      ;
4D8A 68        586      pla
4D8B            587      ;
4D8B            588      ;
4D8B 29 0F      589      PRNTHEx and #NIBLMASK
4D8D            590      ;
4D8D 09 B0      591      PRNTHEx2 ora #"0"
4D8F            592      ;
4D8F C9 BA      593      cmp #"9"+1
4D91 90 02      594      bcc >1
4D93            595      ;
4D93 69 06      596      adc #6
4D95            597      ;
4D95 4C C4 4B   598      ^1      jmp PRNTOUT
4D98            599      ;
4D98            600      ;
4D98 B1 FA      601      HEXTODEC lda (DATAPTR),Y
4D9A            602      ;
4D9A A2 00      603      HEXTOC22 ldx #ZERO
4D9C            604      ;
4D9C C9 64      605      ^1      cmp #100
4D9E 90 05      606      bcc >2
4DA0            607      ;
4DA0 E9 64      608      sbc #100
4DA2            609      ;

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```

4DA2 C8          610          iny
4DA3 D0 F7      611          bne <1
4DA5           612          ;
4DA5 C9 0A      613          ^2      cmp #10
4DA7 90 05      614          bcc >3
4DA9           615          ;
4DA9 E9 0A      616          sbc #10
4DAB           617          ;
4DAB E8          618          inx
4DAC D0 F7      619          bne <2
4DAE           620          ;
4DAE 8D E5 4B   621          ^3      sta PRNTSAV
4DB1           622          ;
4DB1 60          623          rts
4DB2           624          ;
4DB2           625          ;
4DB2 A0 00      626      GETDIGIT ldy #ZERO
4DB4           627          ;
4DB4 38          628          ^1      sec
4DB5           629          ;
4DB5 AD E6 4B   630          lda PRNTNUM
4DB8 FD 95 4F   631          sbc DECTBLL+1,X
4DBB 48          632          pha
4DBC           633          ;
4DBC AD E7 4B   634          lda PRNTNUM+1
4DBF FD 9A 4F   635          sbc DECTBLH+1,X
4DC2 90 0A      636          bcc >2
4DC4           637          ;
4DC4 8D E7 4B   638          sta PRNTNUM+1
4DC7           639          ;
4DC7 68          640          pla
4DC8 8D E6 4B   641          sta PRNTNUM
4DCB           642          ;
4DCB C8          643          iny
4DCC D0 E6      644          bne <1
4DCE           645          ;
4DCE 68          646          ^2      pla
4DCF           647          ;
4DCF 98          648          tya
4DD0           649          ;
4DD0 60          650          rts
4DD1           651          ;
4DD1           652          ;
4DD1           653      PRNTGRPH:
4DD1           654          .if DISPLAY=GRPHMODE
4DD1           655          ;
4DD1 C9 A0      656          cmp #SPACE
4DD3 B0 37      657          bcs >3
4DD5           658          ;
4DD5 C9 80      659          cmp #ASCIFLAG
4DD7 90 33      660          bcc >3
4DD9           661          ;
4DD9 C9 87      662          cmp #BELLCHAR
4DDB D0 03      663          bne >1
4DDD           664          ;
4DDD 4C 3A FF   665          jmp BELL
4DE0           666          ;
4DE0 C9 8D      667          ^1      cmp #RETURN
4DE2 F0 19      668          beq >2
4DE4           669          ;
4DE4 C9 88      670          cmp #LARROW

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```

4DE6 D0 02      671      bne >1
4DE8            672      ;
4DE8 C6 24      673      dec CH
4DEA            674      ;
4DEA C9 8A      675      ^1      cmp #DARROW
4DEC D0 02      676      bne >1
4DEE            677      ;
4DEE E6 25      678      inc CV
4DF0            679      ;
4DF0 C9 8B      680      ^1      cmp #UARROW
4DF2 D0 02      681      bne >1
4DF4            682      ;
4DF4 C6 25      683      dec CV
4DF6            684      ;
4DF6 C9 95      685      ^1      cmp #RARROW
4DF8 D0 02      686      bne >1
4DFA            687      ;
4DFA E6 24      688      inc CH
4DFC            689      ;
4DFC 60         690      ^1      rts
4DFD            691      ;
4DFD A5 20      692      ^2      lda WNDLFT
4DFF 85 24      693      sta CH
4E01            694      ;
4E01 E6 25      695      inc CV
4E03            696      ;
4E03 A5 25      697      lda CV
4E05 C5 23      698      cmp WNDBTM
4E07 90 5E      699      bcc >8
4E09            700      ;
4E09 4C 80 4E    701      jmp SCROLL
4E0C            702      ;
4E0C 8E 66 4E    703      ^3      stx SCRNSAVX+1
4E0F 8C 64 4E    704      sty SCRNSAVY+1
4E12            705      ;
4E12 A2 52      706      ldx /CHARTBL
4E14            707      ;
4E14 A0 00      708      ldy #ZERO
4E16            709      ;
4E16 0A         710      asl
4E17 B0 03      711      bcs >4
4E19            712      ;
4E19 A0 7F      713      ldy #INVRMASK
4E1B            714      ;
4E1B 38         715      sec
4E1C            716      ;
4E1C 8C 4D 4E    717      ^4      sty SCRNMOD2+1
4E1F            718      ;
4E1F E9 40      719      sbc #$40
4E21            720      ;
4E21 0A         721      asl
4E22 90 02      722      bcc >5
4E24            723      ;
4E24 A2 54      724      ldx /CHARTBL+$200
4E26            725      ;
4E26 0A         726      ^5      asl
4E27 90 02      727      bcc >6
4E29            728      ;
4E29 E8         729      inx
4E2A            730      ;
4E2A 18         731      clc

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```

4E2B          732 ;
4E2B 69 00    733 ^6      adc #CHARTBL
4E2D 8D 4A 4E 734          sta SCRNMOD1+1
4E30 90 01    735          bcc >7
4E32          736 ;
4E32 E8       737          inx
4E33          738 ;
4E33 8E 4B 4E 739 ^7      stx SCRNMOD1+2
4E36          740 ;
4E36 18       741          clc
4E37          742 ;
4E37 A6 25    743          ldx CV
4E39          744 ;
4E39 BD 9E 4F 745          lda YBASELO,X
4E3C 8D 4F 4E 746          sta SCRNMOD3+1
4E3F          747 ;
4E3F BD B6 4F 748          lda YBASEHI,X
4E42 8D 50 4E 749          sta SCRNMOD3+2
4E45          750 ;
4E45 A4 24    751          ldy CH
4E47 A2 07    752          ldx #CHARCELL
4E49          753 ;
4E49 BD 00 00 754 SCRNMOD1 lda *-,X
4E4C          755 ;
4E4C 49 00    756 SCRNMOD2 eor #ZERO
4E4E          757 ;
4E4E 99 00 00 758 SCRNMOD3 sta *-,Y
4E51          759 ;
4E51 AD 50 4E 760          lda SCRNMOD3+2
4E54 69 04    761          adc #NEXTLINE
4E56 8D 50 4E 762          sta SCRNMOD3+2
4E59          763 ;
4E59 CA       764          dex
4E5A 10 ED    765          bpl SCRNMOD1
4E5C          766 ;
4E5C C8       767          iny
4E5D          768 ;
4E5D C0 28    769 SCRNMOD4 cpy #MAXWDTH
4E5F B0 9C    770          bcs <2
4E61          771 ;
4E61 84 24    772          sty CH
4E63          773 ;
4E63 A0 00    774 SCRNSAVY ldy #ZERO
4E65 A2 00    775 SCRNSAVX ldx #ZERO
4E67          776 ;
4E67 60       777 ^8      rts
4E68          778 ;
4E68          779 ;
4E68 2C 57 C0 780 SCRNINIT bit HIRES
4E6B 2C 52 C0 781          bit MIXCLR
4E6E 2C 50 C0 782          bit TXTCLR
4E71          783 ;
4E71 18       784          clc
4E72          785 ;
4E72 A9 28    786          lda #MAXWDTH
4E74 65 20    787          adc WNDLFT
4E76 8D 5E 4E 788          sta SCRNMOD4+1
4E79 8D E6 4E 789          sta EOLMOD1+1
4E7C 8D B5 4E 790          sta SCRMLMOD3+1
4E7F          791 ;
4E7F 60       792          rts

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```

4E80          793 ;
4E80          794 ;
4E80 A5 20    795 SCROLL   lda WNDLFT
4E82 85 24    796         sta CH
4E84          797 ;
4E84 A6 23    798         ldx WNDBTM
4E86 CA       799         dex
4E87 8E CE 4E 800         stx SCRLMOD4+1
4E8A          801 ;
4E8A A6 22    802         ldx WNDTOP
4E8C 86 25    803         stx CV
4E8E          804 ;
4E8E BD 9E 4F 805 ^1     lda YBASELO,X
4E91 8D B1 4E 806         sta SCRLMOD2+1
4E94          807 ;
4E94 BD B6 4F 808         lda YBASEHI,X
4E97 8D B2 4E 809         sta SCRLMOD2+2
4E9A          810 ;
4E9A E8       811         inx
4E9B 86 25    812         stx CV
4E9D          813 ;
4E9D BD 9E 4F 814         lda YBASELO,X
4EA0 8D AE 4E 815         sta SCRLMOD1+1
4EA3          816 ;
4EA3 BD B6 4F 817         lda YBASEHI,X
4EA6 8D AF 4E 818         sta SCRLMOD1+2
4EA9          819 ;
4EA9 A2 07    820         ldx #CHARCELL
4EAB          821 ;
4EAB A4 24    822 ^2     ldy CH
4EAD          823 ;
4EAD B9 00 00 824 SCRLMOD1 lda *-*,Y
4EB0 99 00 00 825 SCRLMOD2 sta *-*,Y
4EB3          826 ;
4EB3 C8       827         iny
4EB4          828 ;
4EB4 C0 28    829 SCRLMOD3 cpy #MAXWDTH
4EB6 90 F5    830         bcc SCRLMOD1
4EB8          831 ;
4EB8 AD AF 4E 832         lda SCRLMOD1+2
4EBB 69 03    833         adc #NEXTLINE-1
4EBD 8D AF 4E 834         sta SCRLMOD1+2
4EC0          835 ;
4EC0 AD B2 4E 836         lda SCRLMOD2+2
4EC3 69 04    837         adc #NEXTLINE
4EC5 8D B2 4E 838         sta SCRLMOD2+2
4EC8          839 ;
4EC8 CA       840         dex
4EC9 10 E0    841         bpl <2
4ECB          842 ;
4ECB A6 25    843         ldx CV
4ECD E0 00    844 SCRLMOD4 cpx #LOC0
4ECF D0 BD    845         bne <1
4ED1          846 ;
4ED1          847 ;
4ED1 A6 25    848 SCRNEOL ldx CV
4ED3          849 ;
4ED3 BD 9E 4F 850         lda YBASELO,X
4ED6 8D EA 4E 851         sta EOLMOD2+1
4ED9          852 ;
4ED9 BD B6 4F 853         lda YBASEHI,X

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```

4EDC 8D EB 4E      854      sta EOLMOD2+2
4EDF              855      ;
4EDF A2 07        856      ldx #CHARCELL
4EE1              857      ;
4EE1 A4 24        858      ^1    ldy CH
4EE3              859      ;
4EE3 A9 00        860      lda #ZERO
4EE5              861      ;
4EE5 C0 28        862      EOLMOD1 cpy #MAXWDTH
4EE7 B0 06        863      bcs >2
4EE9              864      ;
4EE9 99 00 00     865      EOLMOD2 sta *-*,Y
4EEC              866      ;
4EEC C8           867      iny
4EED D0 F6        868      bne EOLMOD1
4EEF              869      ;
4EEF AD EB 4E     870      ^2    lda EOLMOD2+2
4EF2 69 03        871      adc #NEXTLINE-1
4EF4 8D EB 4E     872      sta EOLMOD2+2
4EF7              873      ;
4EF7 CA           874      dex
4EF8 10 E7        875      bpl <1
4EFA              876      ;
4EFA 60           877      rts
4EFB              878      ;
4EFB              879      ;
4EFB A5 20        880      SCRNHOMELda WNDLFT
4EFD 85 24        881      sta CH
4EFF              882      ;
4EFF A5 22        883      lda WNDTOP
4F01 85 25        884      sta CV
4F03              885      ;
4F03              886      ;
4F03 20 D1 4E     887      SCRNEOP jsr SCRNEOL
4F06              888      ;
4F06 A5 24        889      lda CH
4F08 48           890      pha
4F09              891      ;
4F09 A5 25        892      lda CV
4F0B 48           893      pha
4F0C              894      ;
4F0C A5 20        895      lda WNDLFT
4F0E 85 24        896      sta CH
4F10              897      ;
4F10 E6 25        898      ^1    inc CV
4F12              899      ;
4F12 A5 25        900      lda CV
4F14 C5 23        901      cmp WNDBTM
4F16 B0 05        902      bcs >2
4F18              903      ;
4F18 20 D1 4E     904      jsr SCRNEOL
4F1B 30 F3        905      bmi <1
4F1D              906      ;
4F1D 68           907      ^2    pla
4F1E 85 25        908      sta CV
4F20              909      ;
4F20 68           910      pla
4F21 85 24        911      sta CH
4F23              912      ;
4F23 60           913      rts
4F24              914      ;

```

```

4F24          915  ;
4F24          916      .fi
4F24          917  ;
4F24          918  ;
    
```

BSAVE SEG03,A\$0800,B,L\$03DA

```

4F24          919      usr SEG03
4F24          920  ;
4F24          921  ;
4F24          922      icl "RD4.L"
    
```

LLOAD RD4.L,A\$4000

```

4F24      1          ttl "RamDisk Source Code, RD4.L"
4F24      2      ;
4F24      3      ;
4F24      4      ; RD4.L
4F24      5      ;
4F24      6      ;
4F24      7          obj PAGE08
4F24      8          usr
4F24      9      ;
4F24     10      ;
4F24     11      MDSLOT0  dfs 1,2
4F25     12      RDSLOT0  dfs 1,3
4F26     13      RCSLOT0  dfs 1,1
4F27     14      DRIVES   dfs 1,0
4F28     15      RDACT    dfs 1,2
4F29     16      RCACT    dfs 1,2
4F2A     17      RCBYPASS dfs 1,0
4F2B     18      ;
4F2B     19      COUNT    dfs 1,0
4F2C     20      PAGES    dfs 1,0
4F2D     21      ;
4F2D     22      ;
4F2D     23      ; The following parameters are Slot number (06), ASCII
4F2D     24      ; slot number (B6), CXpage (C6), and Slot*16 (60).
4F2D     25      ;
4F2D     26      SLTPARMS:
4F2D     27      ;
4F2D     28      MDPARMS  dfs 4,ZERO
4F31     29      RDPARMS  dfs 4,ZERO
4F35     30      RCPARMS  dfs 4,ZERO
4F39     31      ;
4F39     32      MARKER   dfs 2,ZERO
4F3B     33      TRACK    dfs 1,ZERO
4F3C     34      SECTOR   dfs 1,ZERO
4F3D     35      DRIVE    dfs 1,ZERO
4F3E     36      SLOT     dfs 1,ZERO
4F3F     37      TRACKS   dfs 1,ZERO
4F40     38      TRCKCNT  dfs 1,ZERO
4F41     39      SECTCNT  dfs 1,ZERO
4F42     40      BUFRH    dfs 1,ZERO
4F43     41      FNAMCNT  dfs 1,ZERO
4F44     42      FILE     dfs 1,ZERO
4F45     43      PAGE     dfs 1,ZERO
4F46     44      HEXNUM   dfs 2,ZERO
4F48     45      HEXNUM2  dfs 2,ZERO
4F4A     46      NEGNUM   dfs 2,ZERO
4F4C     47      NEGNUM2  dfs 2,ZERO
4F4E     48      ;
4F4E     49      ;
4F4E     50      SLOTADRL:
4F4E 08    51          byt SSMOD1
4F4F 0C    52          byt SSMOD2
4F50 10    53          byt SSMOD3
4F51 14    54          byt SSMOD4
4F52     55      ;
4F52     56      SLOTADRH:
4F52 43    57          hby SSMOD1
4F53 43    58          hby SSMOD2
4F54 43    59          hby SSMOD3
4F55 43    60          hby SSMOD4

```

```

4F56      61 ;
4F56      62 ;
4F56      63 DRVADRL:
4F56 61    64      byt  SDMOD1
4F57 65    65      byt  SDMOD2
4F58      66 ;
4F58      67 DRVADRH:
4F58 43    68      hby  SDMOD1
4F59 43    69      hby  SDMOD2
4F5A      70 ;
4F5A      71 ;
4F5A      72 ACT1ADRL:
4F5A 99    73      byt  SAMOD1
4F5B A0    74      byt  SAMOD2
4F5C AA    75      byt  SAMOD3
4F5D      76 ;
4F5D      77 ACT1ADRH:
4F5D 43    78      hby  SAMOD1
4F5E 43    79      hby  SAMOD2
4F5F 43    80      hby  SAMOD3
4F60      81 ;
4F60      82 ;
4F60      83 ACT2ADRL:
4F60 F3    84      byt  SBMOD1
4F61 FA    85      byt  SBMOD2
4F62 04    86      byt  SBMOD3
4F63      87 ;
4F63      88 ACT2ADRH:
4F63 43    89      hby  SBMOD1
4F64 43    90      hby  SBMOD2
4F65 44    91      hby  SBMOD3
4F66      92 ;
4F66      93 ;
4F66      94 PDTBLL:
4F66 10    95      byt  10000
4F67 E8    96      byt  1000
4F68 64    97      byt  100
4F69 0A    98      byt  10
4F6A 01    99      byt  1
4F6B      100 ;
4F6B      101 PDTBLH:
4F6B 27    102      hby  10000
4F6C 03    103      hby  1000
4F6D 00    104      hby  100
4F6E 00    105      hby  10
4F6F 00    106      hby  1
4F70      107 ;
4F70      108 ;
4F70      109 SKEWTBL:
4F70 00 07 0E 110      hex  00070E060D050C04
4F73 06 0D 05
4F76 0C 04
4F78 0B 03 0A 111      hex  0B030A020901080F
4F7B 02 09 01
4F7E 08 0F
4F80      112 ;
4F80      113 ;
4F80 00 80 00 114 DRVVTBL hex  00800010
4F83 10
4F84      115 ;
4F84      116 ;

```

```

4F84 10 30 28    117  ONTBL      hex 10302824201E1D1C
4F87 24 20 1E
4F8A 1D 1C
4F8C              118  ;
4F8C 60 2C 26    119  OFFTBL      hex 602C26221F1E1D1C
4F8F 22 1F 1E
4F92 1D 1C
4F94              120  ;
4F94              121  ;
4F94 01 0A 64    122  DECTBLL      byt 1,10,100,1000,10000
4F97 E8 10
4F99 00 00 00    123  DECTBLH      hby 1,10,100,1000,10000
4F9C 03 27
4F9E              124  ;
4F9E              125  ;
4F9E              126  .if DISPLAY=GRPHMODE
4F9E              127  ;
4F9E              128  YBASELO:
4F9E 00 80 00    129              hex 0080008000800080
4FA1 80 00 80
4FA4 00 80
4FA6 28 A8 28    130              hex 28A828A828A828A8
4FA9 A8 28 A8
4FAC 28 A8
4FAE 50 D0 50    131              hex 50D050D050D050D0
4FB1 D0 50 D0
4FB4 50 D0
4FB6              132  ;
4FB6              133  YBASEHI:
4FB6 20 20 21    134              hex 2020212122222323
4FB9 21 22 22
4FBC 23 23
4FBE 20 20 21    135              hex 2020212122222323
4FC1 21 22 22
4FC4 23 23
4FC6 20 20 21    136              hex 2020212122222323
4FC9 21 22 22
4FCC 23 23
4FCE              137  ;
4FCE              138  .fi
4FCE              139  ;
4FCE              140  ;
4FCE              141  dfs PAGESIZE-*)&NEGONE,ZERO
5000              142  ;
5000              143  dfs $96-*)&NEGONE,ZERO
5096              144  ;
5096              145  ;
5096              146  NIBLTBL:
5096 00 04 00    147              hex 00040000080C0010
5099 00 08 0C
509C 00 10
509E 14 18 00    148              hex 1418000000000000
50A1 00 00 00
50A4 00 00
50A6 1C 20 00    149              hex 1C2000000024282C
50A9 00 00 24
50AC 28 2C
50AE 30 34 00    150              hex 30340000383C4044
50B1 00 38 3C
50B4 40 44
50B6              151  ;

```

```

50B6 48 4C 00    152          hex 484C005054585C60
50B9 50 54 58
50BC 5C 60
50BE 64 68 00    153          hex 6468000000000000
50C1 00 00 00
50C4 00 00
50C6 00 00 00    154          hex 00000000006C0070
50C9 00 00 6C
50CC 00 70
50CE 74 78 00    155          hex 74780000007C0000
50D1 00 00 7C
50D4 00 00
50D6          156      ;
50D6 80 84 00    157          hex 808400888C909498
50D9 88 8C 90
50DC 94 98
50DE 9C A0 00    158          hex 9CA00000000000A4
50E1 00 00 00
50E4 00 A4
50E6 A8 AC 00    159          hex A8AC00B0B4B8BCC0
50E9 B0 B4 B8
50EC BC C0
50EE C4 C8 00    160          hex C4C80000CCD0D4D8
50F1 00 CC D0
50F4 D4 D8
50F6          161      ;
50F6 DC E0 00    162          hex DCE000E4E8ECF0F4
50F9 E4 E8 EC
50FC F0 F4
50FE F8 FC          163          hex F8FC
5100          164      ;
5100          165      BITBL:
5100 00 00 00    166          hex 0000000002000000
5103 00 02 00
5106 00 00
5108 01 00 00    167          hex 0100000003000000
510B 00 03 00
510E 00 00
5110 00 02 00    168          hex 0002000002020000
5113 00 02 02
5116 00 00
5118 01 02 00    169          hex 0102000003020000
511B 00 03 02
511E 00 00
5120          170      ;
5120 00 01 00    171          hex 0001000002010000
5123 00 02 01
5126 00 00
5128 01 01 00    172          hex 0101000003010000
512B 00 03 01
512E 00 00
5130 00 03 00    173          hex 0003000002030000
5133 00 02 03
5136 00 00
5138 01 03 00    174          hex 0103000003030000
513B 00 03 03
513E 00 00
5140          175      ;
5140 00 00 02    176          hex 0000020002000200
5143 00 02 00
5146 02 00

```

5148	01	00	02	177	hex 0100020003000200
514B	00	03	00		
514E	02	00			
5150	00	02	02	178	hex 0002020002020200
5153	00	02	02		
5156	02	00			
5158	01	02	02	179	hex 0102020003020200
515B	00	03	02		
515E	02	00			
5160				180 ;	
5160	00	01	02	181	hex 0001020002010200
5163	00	02	01		
5166	02	00			
5168	01	01	02	182	hex 0101020003010200
516B	00	03	01		
516E	02	00			
5170	00	03	02	183	hex 0003020002030200
5173	00	02	03		
5176	02	00			
5178	01	03	02	184	hex 0103020003030200
517B	00	03	03		
517E	02	00			
5180				185 ;	
5180	00	00	01	186	hex 0000010002000100
5183	00	02	00		
5186	01	00			
5188	01	00	01	187	hex 0100010003000100
518B	00	03	00		
518E	01	00			
5190	00	02	01	188	hex 0002010002020100
5193	00	02	02		
5196	01	00			
5198	01	02	01	189	hex 0102010003020100
519B	00	03	02		
519E	01	00			
51A0				190 ;	
51A0	00	01	01	191	hex 0001010002010100
51A3	00	02	01		
51A6	01	00			
51A8	01	01	01	192	hex 0101010003010100
51AB	00	03	01		
51AE	01	00			
51B0	00	03	01	193	hex 0003010002030100
51B3	00	02	03		
51B6	01	00			
51B8	01	03	01	194	hex 0103010003030100
51BB	00	03	03		
51BE	01	00			
51C0				195 ;	
51C0	00	00	03	196	hex 0000030002000300
51C3	00	02	00		
51C6	03	00			
51C8	01	00	03	197	hex 0100030003000300
51CB	00	03	00		
51CE	03	00			
51D0	00	02	03	198	hex 0002030002020300
51D3	00	02	02		
51D6	03	00			
51D8	01	02	03	199	hex 0102030003020300
51DB	00	03	02		
51DE	03	00			

```

51E0          200 ;
51E0 00 01 03 201      hex 0001030002010300
51E3 00 02 01
51E6 03 00
51E8 01 01 03 202      hex 0101030003010300
51EB 00 03 01
51EE 03 00
51F0 00 03 03 203      hex 0003030002030300
51F3 00 02 03
51F6 03 00
51F8 01 03 03 204      hex 0103030003030300
51FB 00 03 03
51FE 03 00
5200          205 ;
5200          206 ;
5200          207      .if DISPLAY=GRPHMODE
5200          208 ;
5200          209      CHARTBL:
5200 00 00 00 210      hex 0000000000000000 ;
5203 00 00 00
5206 00 00
5208 00 08 00 211      hex 0008000808080808 ; !
520B 08 08 08
520E 08 08
5210 00 00 00 212      hex 0000000000141414 ; "
5213 00 00 14
5216 14 14
5218 00 14 14 213      hex 0014143E143E1414 ; #
521B 3E 14 3E
521E 14 14
5220 00 08 1E 214      hex 00081E281C0A3C08 ; $
5223 28 1C 0A
5226 3C 08
5228 00 30 32 215      hex 0030320408102606 ; %
522B 04 08 10
522E 26 06
5230 00 2C 12 216      hex 002C122A040A0A04 ; &
5233 2A 04 0A
5236 0A 04
5238 00 00 00 217      hex 0000000000080808 ; ^
523B 00 00 08
523E 08 08
5240 00 10 08 218      hex 0010088484840810 ; (
5243 84 84 84
5246 08 10
5248 00 04 08 219      hex 0004088888880804 ; )
524B 88 88 88
524E 08 04
5250 00 08 2A 220      hex 00082A1C081C2A08 ; *
5253 1C 08 1C
5256 2A 08
5258 00 00 08 221      hex 000008083E080800 ; +
525B 08 3E 08
525E 08 00
5260 04 08 08 222      hex 0408080000000000 ; ,
5263 00 00 00
5266 00 00
5268 00 00 00 223      hex 000000003E000000 ; -
526B 00 3E 00
526E 00 00
5270 00 08 00 224      hex 0008000000000000 ; .

```

```

5273 00 00 00
5276 00 00
5278 00 00 02    225          hex 0000020408102000 ; /
527B 04 08 10
527E 20 00
5280          226 ;
5280 00 1C 22    227          hex 001C22262A32221C ; 0
5283 26 2A 32
5286 22 1C
5288 00 1C 08    228          hex 001C080808080C08 ; 1
528B 08 08 08
528E 0C 08
5290 00 3E 02    229          hex 003E02041820221C ; 2
5293 04 18 20
5296 22 1C
5298 00 1C 22    230          hex 001C22201810203E ; 3
529B 20 18 10
529E 20 3E
52A0 00 10 10    231          hex 0010103E12141810 ; 4
52A3 3E 12 14
52A6 18 10
52A8 00 1C 22    232          hex 001C2220201E023E ; 5
52AB 20 20 1E
52AE 02 3E
52B0 00 1C 22    233          hex 001C22221E020438 ; 6
52B3 22 1E 02
52B6 04 38
52B8 00 04 04    234          hex 000404040810203E ; 7
52BB 04 08 10
52BE 20 3E
52C0 00 1C 22    235          hex 001C22221C22221C ; 8
52C3 22 1C 22
52C6 22 1C
52C8 00 0E 10    236          hex 000E10203C22221C ; 9
52CB 20 3C 22
52CE 22 1C
52D0 00 00 08    237          hex 0000080008000000 ; :
52D3 00 08 00
52D6 00 00
52D8 04 08 08    238          hex 0408080008000000 ; ;
52DB 00 08 00
52DE 00 00
52E0 00 90 88    239          hex 0090888482848890 ; <
52E3 84 82 84
52E6 88 90
52E8 00 00 00    240          hex 0000003E003E0000 ; =
52EB 3E 00 3E
52EE 00 00
52F0 00 82 84    241          hex 0082848890888482 ; >
52F3 88 90 88
52F6 84 82
52F8 00 08 00    242          hex 000800089820221C ; ?
52FB 08 98 20
52FE 22 1C
5300          243 ;
5300 00 3C 02    244          hex 003C021A2A3A221C ; @
5303 1A 2A 3A
5306 22 1C
5308 00 22 22    245          hex 0022223E22221408 ; A
530B 3E 22 22
530E 14 08

```

5310	00	1E	22	246	hex 001E222221E22221E ; B
5313	22	1E	22		
5316	22	1E			
5318	00	1C	22	247	hex 001C22020202221C ; C
531B	02	02	02		
531E	22	1C			
5320	00	1E	22	248	hex 001E22222222221E ; D
5323	22	22	22		
5326	22	1E			
5328	00	3E	02	249	hex 003E02021E02023E ; E
532B	02	1E	02		
532E	02	3E			
5330	00	02	02	250	hex 000202021E02023E ; F
5333	02	1E	02		
5336	02	3E			
5338	00	3C	22	251	hex 003C22320202023C ; G
533B	32	02	02		
533E	02	3C			
5340	00	22	22	252	hex 002222223E222222 ; H
5343	22	3E	22		
5346	22	22			
5348	00	1C	08	253	hex 001C08080808081C ; I
534B	08	08	08		
534E	08	1C			
5350	00	1C	22	254	hex 001C222020202020 ; J
5353	20	20	20		
5356	20	20			
5358	00	22	12	255	hex 0022120A060A1222 ; K
535B	0A	06	0A		
535E	12	22			
5360	00	3E	02	256	hex 003E020202020202 ; L
5363	02	02	02		
5366	02	02			
5368	00	22	22	257	hex 002222222A2A3622 ; M
536B	22	2A	2A		
536E	36	22			
5370	00	22	22	258	hex 002222322A262222 ; N
5373	32	2A	26		
5376	22	22			
5378	00	1C	22	259	hex 001C22222222221C ; O
537B	22	22	22		
537E	22	1C			
5380				260 ;	
5380	00	02	02	261	hex 000202021E22221E ; P
5383	02	1E	22		
5386	22	1E			
5388	00	2C	12	262	hex 002C122A2222221C ; Q
538B	2A	22	22		
538E	22	1C			
5390	00	22	12	263	hex 0022120A1E22221E ; R
5393	0A	1E	22		
5396	22	1E			
5398	00	1C	22	264	hex 001C22201C02221C ; S
539B	20	1C	02		
539E	22	1C			
53A0	00	08	08	265	hex 000808080808083E ; T
53A3	08	08	08		
53A6	08	3E			
53A8	00	1C	22	266	hex 001C222222222222 ; U
53AB	22	22	22		
53AE	22	22			

```

53B0 00 08 14    267      hex 0008142222222222 ; V
53B3 22 22 22
53B6 22 22
53B8 00 22 36    268      hex 0022362A2A222222 ; W
53BB 2A 2A 22
53BE 22 22
53C0 00 22 22    269      hex 0022221408142222 ; X
53C3 14 08 14
53C6 22 22
53C8 00 08 08    270      hex 0008080808142222 ; Y
53CB 08 08 14
53CE 22 22
53D0 00 3E 02    271      hex 003E02040810203E ; Z
53D3 04 08 10
53D6 20 3E
53D8 00 1C 04    272      hex 001C04040404041C ; [
53DB 04 04 04
53DE 04 1C
53E0 00 00 20    273      hex 0000201008040200 ; \
53E3 10 08 04
53E6 02 00
53E8 00 1C 10    274      hex 001C10101010101C ; ]
53EB 10 10 10
53EE 10 1C
53F0 00 00 00    275      hex 0000002214080000 ; ^
53F3 22 14 08
53F6 00 00
53F8 7F 00 00    276      hex 7F00000000000000 ; _
53FB 00 00 00
53FE 00 00
5400                277      ;
5400 00 00 00    278      hex 0000000000100804 ; `
5403 00 00 10
5406 08 04
5408 00 3C 22    279      hex 003C223C201C0000 ; a
540B 3C 20 1C
540E 00 00
5410 00 1E 22    280      hex 001E2222221E0202 ; b
5413 22 22 1E
5416 02 02
5418 00 3C 02    281      hex 003C0202023C0000 ; c
541B 02 02 3C
541E 00 00
5420 00 3C 22    282      hex 003C2222223C2020 ; d
5423 22 22 3C
5426 20 20
5428 00 3C 02    283      hex 003C023E221C0000 ; e
542B 3E 22 1C
542E 00 00
5430 00 04 04    284      hex 000404041E042418 ; f
5433 04 1E 04
5436 24 18
5438 1C 20 3C    285      hex 1C203C22221C0000 ; g
543B 22 22 1C
543E 00 00
5440 00 22 22    286      hex 00222222221E0202 ; h
5443 22 22 1E
5446 02 02
5448 00 1C 08    287      hex 001C0808080C0008 ; i
544B 08 08 0C
544E 00 08

```

```

5450 0C 12 10      288      hex 0C12101010180010 ; j
5453 10 10 18
5456 00 10
5458 00 22 12      289      hex 0022120E12220202 ; k
545B 0E 12 22
545E 02 02
5460 00 1C 08      290      hex 001C08080808080C ; l
5463 08 08 08
5466 08 0C
5468 00 22 2A      291      hex 00222A2A2A360000 ; m
546B 2A 2A 36
546E 00 00
5470 00 22 22      292      hex 00222222221E0000 ; n
5473 22 22 1E
5476 00 00
5478 00 1C 22      293      hex 001C2222221C0000 ; o
547B 22 22 1C
547E 00 00
5480      294      ;
5480 02 02 1E      295      hex 02021E22221E0000 ; p
5483 22 22 1E
5486 00 00
5488 20 20 3C      296      hex 20203C22223C0000 ; q
548B 22 22 3C
548E 00 00
5490 00 02 02      297      hex 00020202063A0000 ; r
5493 02 06 3A
5496 00 00
5498 00 1E 20      298      hex 001E201C023C0000 ; s
549B 1C 02 3C
549E 00 00
54A0 00 18 24      299      hex 00182404041E0404 ; t
54A3 04 04 1E
54A6 04 04
54A8 00 2C 32      300      hex 002C322222220000 ; u
54AB 22 22 22
54AE 00 00
54B0 00 08 14      301      hex 0008142222220000 ; v
54B3 22 22 22
54B6 00 00
54B8 00 36 2A      302      hex 00362A2A22220000 ; w
54BB 2A 22 22
54BE 00 00
54C0 00 22 14      303      hex 0022140814220000 ; x
54C3 08 14 22
54C6 00 00
54C8 1C 20 3C      304      hex 1C203C2222220000 ; y
54CB 22 22 22
54CE 00 00
54D0 00 3E 04      305      hex 003E0408103E0000 ; z
54D3 08 10 3E
54D6 00 00
54D8 00 98 84      306      hex 0098848482848498 ; {
54DB 84 82 84
54DE 84 98
54E0 08 08 08      307      hex 0808080808080808 ; |
54E3 08 08 08
54E6 08 08
54E8 00 86 88      308      hex 0086888890888886 ; }
54EB 88 90 88
54EE 88 86

```

```

54F0 00 00 00    309          hex 00000000000001A2C ; ~
54F3 00 00 00
54F6 1A 2C
54F8 7F 7F 7F    310          hex 7F7F7F7F7F7F7F7F ;
54FB 7F 7F 7F
54FE 7F 7F
5500              311 ;
5500              312 .fi
5500              313 ;
5500              314 ;

```

BSAVE SEG04,A\$0800,B,L\$05DC

```

5500              315          usr SEG04
5500              316 ;
5500              317 ;
5500              318          icl "RD5.L"

```

LLOAD RD5.L,A\$4000

```

5500          1          ttl "RamDisk Source Code, RD5.L"
5500          2          ;
5500          3          ;
5500          4          ; RD5.L
5500          5          ;
5500          6          ;
5500          7          obj PAGE08
5500          8          usr
5500          9          ;
5500         10          ;
5500         11         RDCODE1:
5500         12          ;
5500         13          phs PAGEC0
C000         14          ;
C000         15          ;
C000         16          ; Boot into the RamDisk.  Load DOS 4.5H and initialize.
C000         17          ;
C000 49 20      18         RDBOOT    eor #$20
C002 A0 00      19          ldy #$00
C004 A2 03      20          ldx #$03
C006 86 3C      21          stx $3C
C008           22          ;
C008 78         23          sei
C009           24          ;
C009 2C FF CF   25          bit CLRROM
C00C           26          ;
C00C EA         27          nop
C00D           28          ;
C00D 18         29          clc
C00E 90 3B      30          bcc RDBOOT2          ; always taken
C010           31          ;
C010           32          ;
C010           33          ; Connect RamDisk and RamCard RWTS to DOS.
C010           34          ;
C010 2C FF CF   35         ROMHOOK    bit CLRROM
C013           36          ;
C013 EA         37          nop
C014           38          ;
C014 A0 00      39          ldy #ZERO
C016 F0 4E      40          beq TOGGLE          ; always taken
C018           41          ;
C018           42          ;
C018           43          ; Disconnect RamDisk and RamCard RWTS from DOS.
C018           44          ;
C018 2C FF CF   45         ROMUHOOK    bit CLRROM
C01B           46          ;
C01B EA         47          nop
C01C           48          ;
C01C A0 FF      49          ldy #NEGONE
C01E D0 46      50          bne TOGGLE          ; always taken
C020           51          ;
C020           52          ;
C020           53          ; On entry assume Y-reg and A-reg point to the IOCB.
C020           54          ;
C020 2C FF CF   55         RDENTRY3    bit CLRROM
C023           56          ;
C023 EA         57          nop
C024           58          ;
C024 84 4A      59          sty IOBADR
C026 85 4B      60          sta IOBADR+1

```

```

C028          61 ;
C028 A0 01    62      ldy #SLOTNDX
C02A          63 ;
C02A B1 4A    64      lda (IOBADR),Y
C02C          65 ;
C02C CD 01 C9 66      cmp RDSLOT16
C02F F0 13    67      beq RENTRY2
C031          68 ;
C031 2C 06 C9 69      bit RCSTATE
C034 10 05    70      bpl >1
C036          71 ;
C036 CD 02 C9 72      cmp RCSLOT16
C039 F0 19    73      beq RCENTRY2
C03B          74 ;
C03B 20 F6 C9 75      ^1 jsr DOIJMP
C03E 90 65    76      bcc EXIT3          ; always taken
C040          77 ;
C040          78 ;
C040          79 ; On entry assume Y-reg and A-reg point to the IOCB.
C040          80 ;
C040 2C FF CF 81 RENTRY bit CLRROM
C043          82 ;
C043 EA       83      nop
C044          84 ;
C044 20 F9 CC 85 RENTRY2 jsr RDRWTS
C047 90 47    86      bcc RDEXIT
C049          87 ;
C049 B0 45    88      bcs RDEXIT          ; always taken
C04B          89 ;
C04B          90 ;
C04B          91 ; Continue RDBOOT with C-flag clear.
C04B          92 ;
C04B 20 0B CA 93 RDBOOT2 jsr RDIPL
C04E 90 30    94      bcc BOOTEXIT          ; always taken
C050          95 ;
C050          96 ;
C050          97 ; On entry assume Y-reg and A-reg point to the IOCB.
C050          98 ;
C050 2C FF CF 99 RCENTRY bit CLRROM
C053          100 ;
C053 EA       101     nop
C054          102 ;
C054 20 A6 CD 103 RCENTRY2 jsr RCRWTS
C057 90 53    104     bcc RCRDWRT
C059          105 ;
C059 B0 2E    106     bcs RCEXIT2          ; always taken
C05B          107 ;
C05B          108 ;
C05B          109      dfs ROMENTRY-*)&NEGONE,ZERO
C05C          110 ;
C05C          111 ;
C05C          112 ; Continue DOS Boot Stage 1 with C-flag set.
C05C          113 ;
C05C 78       114     ROMBOOT sei
C05D          115 ;
C05D 2C FF CF 116     bit CLRROM
C060          117 ;
C060 38       118     sec
C061          119 ;
C061 20 0B CA 120     jsr RDIPL
C064 90 1A    121     bcc BOOTEXIT          ; always taken

```

```

C066      122 ;
C066      123 ;
C066      124 ; DOS connect/disconnect RamDisk/RamCard and exit.
C066      125 ;
C066 20 FF CB 126 TOGGLE      jsr DOTOGGLE
C069      127 ;
C069 18      128          clc
C06A 90 32    129          bcc HOOKEEXIT
C06C      130 ;
C06C      131 ;
C06C      132          dfs $70-*&NEGONE,ZERO
C070      133 ;
C070      134 ;
C070      135 ; Patch DOS 3.3 after Boot Stage 2.
C070      136 ;
C070 2C FF CF 137 MODOS3      bit CLRROM
C073      138 ;
C073 EA      139          nop
C074      140 ;
C074 20 DD CC 141          jsr DOMODOS3
C077      142 ;
C077 18      143          clc
C078 90 2B    144          bcc EXIT3          ; always taken
C07A      145 ;
C07A      146 ;
C07A      147          dfs $80-*&NEGONE,ZERO
C080      148 ;
C080      149 ;
C080 2C FF CF 150 BOOTEEXIT bit CLRROM
C083      151 ;
C083 58      152          cli
C084      153 ;
C084 4C 01 08 154          jmp PAGE08+1
C087      155 ;
C087      156 ;
C087 A9 00    157 RCEXIT      lda #RWNOERR
C089      158 ;
C089 A8      159 RCEXIT2    tay
C08A      160 ;
C08A A9 00    161          lda #RCOFF
C08C 9D 84 C0 162          sta RAMCARD,X
C08F      163 ;
C08F 98      164          tya
C090      165 ;
C090      166 ;
C090 A0 0D    167 RDEXIT      ldy #ERRNDX
C092      168 ;
C092 91 4A    169          sta (IOBADR),Y
C094      170 ;
C094 2C FF CF 171          bit CLRROM
C097      172 ;
C097 A8      173          tay
C098 D0 02    174          bne >1
C09A      175 ;
C09A 18      176          clc
C09B      177 ;
C09B 60      178          rts
C09C      179 ;
C09C 38      180 ^1      sec
C09D      181 ;
C09D 60      182          rts

```

```

C09E      183 ;
C09E      184 ;
C09E 2C FF CF 185 HOOKEEXIT bit CLRROM
C0A1      186 ;
C0A1 EA     187      nop
C0A2      188 ;
C0A2 4C EA 03 189      jmp HOOKDOS
C0A5      190 ;
C0A5      191 ;
C0A5 2C FF CF 192 EXIT3 bit CLRROM
C0A8      193 ;
C0A8 EA     194      nop
C0A9      195 ;
C0A9 6C 10 01 196      jmp (RDIJMP)
C0AC      197 ;
C0AC      198 ;
C0AC 30 24   199 RCRDWRT bmi RCFORMT
C0AE      200 ;
C0AE 2C FF CF 201      bit CLRROM
C0B1      202 ;
C0B1 A5 2A   203      lda ZTRACK
C0B3 09 80   204      ora #RCON
C0B5 9D 84 C0 205      sta RAMCARD,X
C0B8      206 ;
C0B8 A0 00   207      ldy #ZERO
C0BA      208 ;
C0BA AD F8 05 209      lda RCCMD
C0BD 4A     210      lsr
C0BE D0 09   211      bne >2
C0C0      212 ;
C0C0      213 ;
C0C0      214 ; RamCard -> Main memory
C0C0      215 ;
C0C0 B1 26   216 ^1      lda (BUFRADRZ),Y
C0C2 91 3E   217      sta (BUFADR2Z),Y
C0C4      218 ;
C0C4 C8     219      iny
C0C5 D0 F9   220      bne <1
C0C7      221 ;
C0C7 F0 BE   222      beq RCEXIT ; always taken
C0C9      223 ;
C0C9      224 ;
C0C9      225 ; Main memory -> RamCard
C0C9      226 ;
C0C9 B1 3E   227 ^2      lda (BUFADR2Z),Y
C0CB 91 26   228      sta (BUFRADRZ),Y
C0CD      229 ;
C0CD C8     230      iny
C0CE D0 F9   231      bne <2
C0D0      232 ;
C0D0 F0 B5   233      beq RCEXIT ; always taken
C0D2      234 ;
C0D2      235 ;
C0D2 2C FF CF 236 RCFORMT bit CLRROM
C0D5      237 ;
C0D5 EA     238      nop
C0D6      239 ;
C0D6 A0 00   240      ldy #ZERO
C0D8 84 26   241      sty BUFRADRZ
C0DA      242 ;
C0DA A9 07   243 ^1      lda #7

```

```

C0DC 85 2B      244      sta ZSECTOR
C0DE           245      ;
C0DE 09 C8      246      ora /RCWINDOW
C0E0 85 27      247      sta BUFRADRZ+1
C0E2           248      ;
C0E2 A5 2A      249      lda ZTRACK
C0E4 09 80      250      ora #RCON
C0E6 9D 84 C0   251      sta RAMCARD,X
C0E9           252      ;
C0E9 98         253      tya
C0EA           254      ;
C0EA 91 26      255      ^2 sta (BUFRADRZ),Y
C0EC           256      ;
C0EC C8         257      iny
C0ED D0 FB      258      bne <2
C0EF           259      ;
C0EF C6 27      260      dec BUFRADRZ+1
C0F1           261      ;
C0F1 C6 2B      262      dec ZSECTOR
C0F3 10 F5      263      bpl <2
C0F5           264      ;
C0F5 C6 2A      265      dec ZTRACK
C0F7 10 E1      266      bpl <1
C0F9           267      ;
C0F9 30 8C      268      bmi RCEXIT          ; always taken
C0FB           269      ;
C0FB           270      ;
C0FB           271      dfs $FE-*)&NEGONE,ZERO
C0FE           272      ;
C0FE           273      ;
C0FE 05         274      byt VERSION          ; version number
C0FF 06         275      byt BUILD            ; build number
C100           276      ;
C100           277      ;

```

BSAVE SEG05,A\$0800,B,L\$0100

```

C100           278      usr SEG05
C100           279      ;
C100           280      ;
C100           281      icl "RD6.L"

```

LLOAD RD6.L,A\$4000

```

C100          1          ttl "RamDisk Source Code, RD6.L"
C100          2          ;
C100          3          ;
C100          4          ; RD6.L
C100          5          ;
C100          6          ;
C100          7          obj PAGE08
C100          8          usr
C100          9          ;
C100         10          ;
C100         11          phs RDCODE1+PAGESIZE
5600         12          ;
5600         13          ;
5600         14          RDCODE2:
5600         15          ;
5600         16          phs PAGEC9
C900         17          ;
C900         18          ;
C900         19          RDPAGECX dfs 1,ZERO
C901         20          RDSLOT16 dfs 1,ZERO
C902         21          RCSLOT16 dfs 1,ZERO
C903         22          RDSLOT   dfs 1,ZERO
C904         23          RCSLOT   dfs 1,ZERO
C905         24          RDSTATE  dfs 1,ZERO
C906         25          RCSTATE  dfs 1,ZERO
C907         26          ;
C907         27          ;
C907         28          RVSELEAV:
C907 00 07 0E 29          hex 00070E060D050C04
C90A 06 0D 05
C90D 0C 04
C90F 0B 03 0A 30          hex 0B030A020901080F
C912 02 09 01
C915 08 0F
C917         31          ;
C917         32          ;
C917 00 10 33          RDRVTBL hex 0010
C919         34          ;
C919         35          ;
C919         36          MSGS:
C919         37          ;
C919 2E 38          MSG1A asc ´.´
C91A         39          ;
C91A 0D 8D 40          MSG1B hex 0D8D
C91C         41          ;
C91C         42          ;
C91C         43          ; Information messages.
C91C         44          ;
C91C 55 6E 61 45          MSG2A dci ´Unable to´
C91F 62 6C 65
C922 20 74 EF
C925         46          ;
C925 41 62 6C 47          MSG2B dci ´Able to´
C928 65 20 74
C92B EF
C92C         48          ;
C92C         49          ;
C92C         50          ; RamDisk messages.
C92C         51          ;
C92C 64 69 73 52          MSG3A asc ´dis´

```

```

C92F          53 ;
C92F 63 6F 6E 54 MESH3B dci 'connect RamDisk and DOS'
C932 6E 65 63
C935 74 20 52
C938 61 6D 44
C93B 69 73 6B
C93E 20 61 6E
C941 64 20 44
C944 4F D3
C946          55 ;
C946          56 ;
C946          57 ; RamCard messages.
C946          58 ;
C946 64 69 73 59 MESH4A asc 'dis'
C949          60 ;
C949 63 6F 6E 61 MESH4B dci 'connect RamCard and DOS'
C94C 6E 65 63
C94F 74 20 52
C952 61 6D 43
C955 61 72 64
C958 20 61 6E
C95B 64 20 44
C95E 4F D3
C960          62 ;
C960          63 ;
C960          64 ; DOS versions.
C960          65 ;
C960 33 2E B3 66 MESH5A dci '3.3'
C963          67 ;
C963 34 2E B1 68 MESH5B dci '4.1'
C966          69 ;
C966 34 2E B3 70 MESH5C dci '4.3'
C969          71 ;
C969 34 2E B5 72 MESH5D dci '4.5'
C96C          73 ;
C96C          74 ;
C96C          75 ; Error messages.
C96C          76 ;
C96C 52 61 6D 77 MESH6 dci 'RamDisk contains unknown DOS.'
C96F 44 69 73
C972 6B 20 63
C975 6F 6E 74
C978 61 69 6E
C97B 73 20 75
C97E 6E 6B 6E
C981 6F 77 6E
C984 20 44 4F
C987 53 AE
C989          78 ;
C989          79 ;
C989          80 TEXTS:
C989          81 ;
C989          82 ; Information messages.
C989          83 ;
C989          84 ; Unable to disconnect RamDisk and DOS.
C989 03 13 00 85 IOTEXT1A byt MESH2A-MESGS,MESH3A-MESGS,ZERO
C98C          86 ;
C98C          87 ; Unable to connect RamDisk and DOS.
C98C 03 16 00 88 IOTEXT1B byt MESH2A-MESGS,MESH3B-MESGS,ZERO
C98F          89 ;
C98F          90 ;

```

```

C98F          91  ; Disconnect messages for RamDisk.
C98F          92  ;
C98F          93  ; Able to disconnect RamDisk and DOS 3.3.
C98F 0C 13 47  94  IOTEXT2A byt MSG2B-MESGS,MSG3A-MESGS,MSG5A-MESGS
C992          95  ;
C992          96  ; Able to disconnect RamDisk and DOS 4.1.
C992 0C 13 4A  97  IOTEXT2B byt MSG2B-MESGS,MSG3A-MESGS,MSG5B-MESGS
C995          98  ;
C995          99  ; Able to disconnect RamDisk and DOS 4.3.
C995 0C 13 4D 100  IOTEXT2C byt MSG2B-MESGS,MSG3A-MESGS,MSG5C-MESGS
C998          101 ;
C998          102 ; Able to disconnect RamDisk and DOS 4.5.
C998 0C 13 50 103  IOTEXT2D byt MSG2B-MESGS,MSG3A-MESGS,MSG5D-MESGS
C99B          104 ;
C99B          105 ;
C99B          106 ; Disconnect messages for RamCard.
C99B          107 ;
C99B          108 ; Able to disconnect RamCard and DOS 3.3.
C99B 0C 2D 47 109  IOTEXT3A byt MSG2B-MESGS,MSG4A-MESGS,MSG5A-MESGS
C99E          110 ;
C99E          111 ; Able to disconnect RamCard and DOS 4.1.
C99E 0C 2D 4A 112  IOTEXT3B byt MSG2B-MESGS,MSG4A-MESGS,MSG5B-MESGS
C9A1          113 ;
C9A1          114 ; Able to disconnect RamCard and DOS 4.3.
C9A1 0C 2D 4D 115  IOTEXT3C byt MSG2B-MESGS,MSG4A-MESGS,MSG5C-MESGS
C9A4          116 ;
C9A4          117 ; Able to disconnect RamCard and DOS 4.5.
C9A4 0C 2D 50 118  IOTEXT3D byt MSG2B-MESGS,MSG4A-MESGS,MSG5D-MESGS
C9A7          119 ;
C9A7          120 ;
C9A7          121 ; Connect messages for RamDisk.
C9A7          122 ;
C9A7          123 ; Able to connect RamDisk and DOS 3.3.
C9A7 0C 16 47 124  IOTEXT4A byt MSG2B-MESGS,MSG3B-MESGS,MSG5A-MESGS
C9AA          125 ;
C9AA          126 ; Able to connect RamDisk and DOS 4.1.
C9AA 0C 16 4A 127  IOTEXT4B byt MSG2B-MESGS,MSG3B-MESGS,MSG5B-MESGS
C9AD          128 ;
C9AD          129 ; Able to connect RamDisk and DOS 4.3.
C9AD 0C 16 4D 130  IOTEXT4C byt MSG2B-MESGS,MSG3B-MESGS,MSG5C-MESGS
C9B0          131 ;
C9B0          132 ; Able to connect RamDisk and DOS 4.5.
C9B0 0C 16 50 133  IOTEXT4D byt MSG2B-MESGS,MSG3B-MESGS,MSG5D-MESGS
C9B3          134 ;
C9B3          135 ;
C9B3          136 ; Connect messages for RamCard.
C9B3          137 ;
C9B3          138 ; Able to connect RamCard and DOS 3.3.
C9B3 0C 30 47 139  IOTEXT5A byt MSG2B-MESGS,MSG4B-MESGS,MSG5A-MESGS
C9B6          140 ;
C9B6          141 ; Able to connect RamCard and DOS 4.1.
C9B6 0C 30 4A 142  IOTEXT5B byt MSG2B-MESGS,MSG4B-MESGS,MSG5B-MESGS
C9B9          143 ;
C9B9          144 ; Able to connect RamCard and DOS 4.3.
C9B9 0C 30 4D 145  IOTEXT5C byt MSG2B-MESGS,MSG4B-MESGS,MSG5C-MESGS
C9BC          146 ;
C9BC          147 ; Able to connect RamCard and DOS 4.5.
C9BC 0C 30 50 148  IOTEXT5D byt MSG2B-MESGS,MSG4B-MESGS,MSG5D-MESGS
C9BF          149 ;
C9BF          150 ;
C9BF          151 ; Print the selected 3-byte text message string.  Fall into

```

```

C9BF      152 ; PRTMSG.  Enable ROM in order to use COUT.
C9BF      153 ;
C9BF 8D 82 C0 154 PRTMSGs sta ROM2WP          ; enable ROM
C9C2      155 ;
C9C2 A0 01   156          ldy #MSG1B-MESGS      ; print two returns
C9C4 20 E1 C9 157          jsr PRTMSG
C9C7      158 ;
C9C7 BC 89 C9 159          ldy TEXTS,X          ; print first string
C9CA 20 E1 C9 160          jsr PRTMSG
C9CD      161 ;
C9CD A9 20   162          lda #SPACE&ASCIMASK ; print a leading space
C9CF      163 ;
C9CF BC 8A C9 164          ldy TEXTS+1,X          ; print second string
C9D2 20 E5 C9 165          jsr PRTMSG0
C9D5      166 ;
C9D5 A9 20   167          lda #SPACE&ASCIMASK ; print a leading space
C9D7      168 ;
C9D7 BC 8B C9 169          ldy TEXTS+2,X          ; get third string index
C9DA F0 03   170          beq >1              ; done if zero
C9DC      171 ;
C9DC 20 E5 C9 172          jsr PRTMSG0
C9DF      173 ;
C9DF A0 00   174 ^1          ldy #MSG1A-MESGS      ; print period and 2 returns
C9E1      175 ;
C9E1      176 ;
C9E1 B9 19 C9 177 PRTMSG  lda MSGS,Y
C9E4      178 ;
C9E4 C8      179          iny
C9E5      180 ;
C9E5 48      181 PRTMSG0 pha
C9E6      182 ;
C9E6 09 80   183          ora #ASCIFLAG
C9E8      184 ;
C9E8 20 ED FD 185          jsr COUT
C9EB      186 ;
C9EB 68      187          pla
C9EC 10 F3   188          bpl PRTMSG
C9EE      189 ;
C9EE 18      190          clc
C9EF      191 ;
C9EF 60      192          rts
C9F0      193 ;
C9F0      194 ;
C9F0      195 ; Call the DOS 4.X Disk Address Table manager.
C9F0      196 ;
C9F0 18      197 GETDISKC clc
C9F1      198 ;
C9F1 B0 00   199          bcs *+2
C9F3      200          dfs !-1
C9F2      201 ;
C9F2 38      202 GETDISKS sec
C9F3      203 ;
C9F3 6C F2 BF 204          jmp (MNGDISK)
C9F6      205 ;
C9F6      206 ;
C9F6      207 ; Redirect DOS 3.X RWTS to saved address.
C9F6      208 ;
C9F6 AE 03 C9 209 DOIJMP  ldx RDSLOT
C9F9      210 ;
C9F9 BC 78 05 211          ldy SAVEADRL,X
C9FC BD F8 05 212          lda SAVEADRH,X

```

```

C9FF      213 ;
C9FF 8C 10 01 214      sty RDIJMP
CA02 8D 11 01 215      sta RDIJMP+1
CA05      216 ;
CA05 A4 4A 217      ldy IOBADR
CA07 A5 4B 218      lda IOBADR+1
CA09      219 ;
CA09 18 220      clc
CA0A      221 ;
CA0A 60 222      rts
CA0B      223 ;
CA0B      224 ;
CA0B      225 ; RDIPL is used by RDBOOT2 with C-flag clear and by ROMBOOT
CA0B      226 ; with C-flag set.
CA0B      227 ;
CA0B D8 228 RDIPL    cld
CA0C      229 ;
CA0C AD 11 C0 230      lda RDBANK2
CA0F 8D 78 04 231      sta RDBANK
CA12      232 ;
CA12 AD 12 C0 233      lda RDLCRAM
CA15 8D F8 04 234      sta LCRAM
CA18      235 ;
CA18 B0 30 236      bcs RDIPL2          ; branch for ROMBOOT
CA1A      237 ;
CA1A 8D 82 C0 238      sta ROM2WP
CA1D      239 ;
CA1D A2 FF 240      ldx #NEGONE
CA1F      241 ;
CA1F 8E FB 04 242      stx XMODE
CA22 8E 0C C0 243      stx VID80OFF
CA25 8E 0E C0 244      stx ALTCHOFF
CA28      245 ;
CA28 20 84 FE 246      jsr SETNORM
CA2B 20 2F FB 247      jsr INIT
CA2E 20 93 FE 248      jsr SETVID
CA31 20 89 FE 249      jsr SETKBD
CA34      250 ;
CA34 A9 00 251      lda #ZERO
CA36 85 26 252      sta BUFRADRZ
CA38 85 3D 253      sta ROMSECTR
CA3A      254 ;
CA3A AE 03 C9 255      ldx RDSLOT
CA3D      256 ;
CA3D 9D 78 07 257      sta DOSVRSN,X
CA40      258 ;
CA40 A9 08 259      lda /PAGE08
CA42 85 27 260      sta BUFRADRZ+1
CA44      261 ;
CA44 AD 00 C9 262      lda RDPAGECX
CA47 8D F8 07 263      sta MSLOT          ; as per Apple requirement
CA4A      264 ;
CA4A      265 ;
CA4A AE 01 C9 266 RDIPL2    ldx RDSLOT16
CA4D      267 ;
CA4D A4 3D 268      ldy ROMSECTR
CA4F      269 ;
CA4F B9 07 C9 270      lda RVSELEAV,Y
CA52 9D 80 C0 271      sta RDSECTR,X
CA55      272 ;
CA55 A9 00 273      lda #ZERO

```

```

CA57 9D 81 C0    274          sta RDTRACK,X
CA5A              275      ;
CA5A A8          276          tay
CA5B              277      ;
CA5B B9 00 C8    278      ^1    lda RDWNDOW,Y
CA5E 91 26        279          sta (BUFRADRZ),Y
CA60              280      ;
CA60 C8          281          iny
CA61 D0 F8        282          bne <1
CA63              283      ;
CA63 AD FF 08     284          lda BOOTPGS
CA66 10 32        285          bpl >3
CA68              286      ;
CA68              287      ;
CA68              288      ; DOS 4.X.L Boot Stage 1 loads RWTS from 0xB900 to 0xBFFF.
CA68              289      ; DOS 4.X.H Boot Stage 1 loads RWTS from 0xD000 to 0xDFFF.
CA68              290      ;
CA68              291      ; Now check for DOS 4.X RWTS.
CA68              292      ;
CA68 20 25 CB     293          jsr CHKDOS45          ; check for DOS 4.5 code
CA6B 90 2D        294          bcc >3
CA6D              295      ;
CA6D 20 0F CB     296          jsr CHKDOS43          ; check for DOS 4.3 code
CA70 90 28        297          bcc >3
CA72              298      ;
CA72 20 9A CB     299          jsr CHKDOS41          ; check for DOS 4.1 code
CA75 90 23        300          bcc >3
CA77              301      ;
CA77              302      ;
CA77              303      ; DOS 3.X Boot Stage 1 loads memory from 0xBFFF to 0xB600.
CA77              304      ; Now check for DOS 3.X RWTS.
CA77              305      ;
CA77 20 C0 CA     306          jsr CHKDOS3X          ; check for DOS 3.X code
CA7A B0 19        307          bcs >2
CA7C              308      ;
CA7C AC 48 B7     309          ldy RESTART+4
CA7F AD 49 B7     310          lda RESTART+5
CA82              311      ;
CA82 8C 10 01     312          sty RDIJMP
CA85 8D 11 01     313          sta RDIJMP+1
CA88              314      ;
CA88 A0 70        315          ldy #MODOS3
CA8A AD 00 C9     316          lda RDPAGECX
CA8D              317      ;
CA8D 8C 48 B7     318          sty RESTART+4
CA90 8D 49 B7     319          sta RESTART+5
CA93              320      ;
CA93 90 05        321          bcc >3          ; always taken
CA95              322      ;
CA95              323      ;
CA95              324      ; Unable to connect RamDisk and DOS.
CA95              325      ;
CA95 A0 03        326      ^2    ldy #IOTEXT1B-TEXTS
CA97 20 BF C9     327          jsr PRTMESGS
CA9A              328      ;
CA9A E6 27        329      ^3    inc BUFRADRZ+1
CA9C E6 3D        330          inc ROMSECTR
CA9E              331      ;
CA9E              332      ;
CA9E              333      ; The design of DOS 4.3 is flawed at the start of STAGE 2.
CA9E              334      ; DOS 4.3 requires Language Card memory to be re-enabled

```

```

CA9E      335 ; before STAGE 2 can begin properly.  DOS 4.1 and DOS 4.5
CA9E      336 ; both enable Language Card memory properly before RWTS is
CA9E      337 ; called.  Enabling Language Card memory does not affect
CA9E      338 ; the booting of either DOS 4.1 or DOS 4.5.
CA9E      339 ;
CA9E 2C F8 04 340          bit LCRAM
CAA1 10 14    341          bpl >5
CAA3      342 ;
CAA3 2C 78 04 343          bit RDBANK
CAA6 10 09    344          bpl >4
CAA8      345 ;
CAA8 2C 83 C0 346          bit RAM2WE
CAAB 2C 83 C0 347          bit RAM2WE
CAAE      348 ;
CAAE 4C B7 CA 349          jmp >5
CAB1      350 ;
CAB1 2C 8B C0 351 ^4          bit RAM1WE
CAB4 2C 8B C0 352          bit RAM1WE
CAB7      353 ;
CAB7 A5 3D    354 ^5          lda ROMSECTR
CAB9      355 ;
CAB9 AE 01 C9 356          ldx RDSLOT16
CABC 86 2B    357          stx SLOT16Z
CABE      358 ;
CABE 18       359          clc
CABF      360 ;
CABF 60       361          rts
CAC0      362 ;
CAC0      363 ;
CAC0      364 ; Check for DOS 3.X CALLRWTS routine.
CAC0      365 ;
CAC0 A0 04    366 CHKDOS3X ldy #FNDOSLEN-1
CAC2      367 ;
CAC2 B9 BD B7 368 ^1          lda CALLRWTS+8,Y
CAC5 D9 0A CB 369          cmp FNDOS,Y
CAC8 D0 43    370          bne NODOS
CACA      371 ;
CACA 88       372          dey
CACB 10 F5    373          bpl <1
CACD      374 ;
CACD      375 ;
CACD      376 ; Connect the RamDisk to DOS 3.X if it is enabled.
CACD      377 ;
CACD AD 05 C9 378          lda RDSTATE
CAD0 F0 3B    379          beq NODOS
CAD2      380 ;
CAD2 AC B8 B7 381          ldy CALLRWTS+3
CAD5 AD B9 B7 382          lda CALLRWTS+4
CAD8      383 ;
CAD8 C0 20    384          cpy #RDENTRY3
CADA D0 05    385          bne >2
CADC      386 ;
CADC CD 00 C9 387          cmp RDPAGECX
CADF F0 1F    388          beq CHKRC3X
CAE1      389 ;
CAE1 AE 03 C9 390 ^2          ldx RDSLOT
CAE4      391 ;
CAE4 9D F8 05 392          sta SAVEADRH,X
CAE7      393 ;
CAE7 98       394          tya
CAE8 9D 78 05 395          sta SAVEADRL,X

```

```

CAEB          396 ;
CAEB A0 20     397         ldy #RDENTRY3
CAED AD 00 C9   398         lda RDPAGECX
CAF0          399 ;
CAF0 8C B8 B7   400         sty CALLRWTS+3
CAF3 8D B9 B7   401         sta CALLRWTS+4
CAF6          402 ;
CAF6 A9 33     403         lda #VRSN3.3
CAF8 9D 78 07   404         sta DOSVRSN,X
CAFB          405 ;
CAFB          406 ;
CAFB          407 ; Able to connect RamDisk and DOS 3.3.
CAFB          408 ;
CAFB A2 1E     409         ldx #IOTEXT4A-TEXTS
CAFD 20 BF C9   410         jsr PRTMESGS
CB00          411 ;
CB00          412 ;
CB00          413 ; Connect the RamCard to DOS 3.X if it is enabled.
CB00          414 ;
CB00 AD 06 C9   415 CHKRC3X  lda RCSTATE
CB03 F0 05     416         beq FNDOS
CB05          417 ;
CB05          418 ;
CB05          419 ; Able to connect RamCard and DOS 3.3.
CB05          420 ;
CB05 A2 2A     421         ldx #IOTEXT5A-TEXTS
CB07 20 BF C9   422         jsr PRTMESGS
CB0A          423 ;
CB0A          424 ;
CB0A          425 ; Code extract from DOS 3.X CALLRWTS.
CB0A          426 ;
CB0A 18        427 FNDOS    clc
CB0B 60        428         rts
CB0C          429 ;
CB0C 28        430         plp                ; code from CALLRWTS
CB0D          431 ;
CB0D 38        432 NODOS    sec
CB0E 60        433         rts
CB0F          434 ;
0005          435 FNDOSLEN equ *-FNDOS
CB0F          436 ;
CB0F          437 ;
CB0F          438 ; Check for DOS 4.3 initialization values.
CB0F          439 ;
CB0F AD F0 BF   440 CHKDOS43 lda BLDVRSN
CB12 C9 43     441         cmp #VRSN4.3
CB14 D0 F7     442         bne NODOS
CB16          443 ;
CB16 AD F1 BF   444         lda BLDNMBR
CB19 C9 08     445         cmp #BLD4.3
CB1B D0 F0     446         bne NODOS
CB1D          447 ;
CB1D A2 24     448         ldx #IOTEXT4C-TEXTS
CB1F A0 30     449         ldy #IOTEXT5C-TEXTS
CB21          450 ;
CB21 A9 43     451         lda #VRSN4.3
CB23 D0 18     452         bne CHKDOS4X
CB25          453 ;
CB25          454 ;
CB25          455 ; Check for DOS 4.5 initialization values. Allow previous
CB25          456 ; and current build number as valid.

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```

CB25          457 ;
CB25 AD F0 BF 458 CHKDOS45 lda BLDVRSN
CB28 C9 45    459          cmp #VRSN4.5
CB2A D0 E1    460          bne NODOS
CB2C          461 ;
CB2C AD F1 BF 462          lda BLDNMBR
CB2F C9 07    463          cmp #BLD4.5+1
CB31 B0 DA    464          bcs NODOS
CB33          465 ;
CB33 C9 05    466          cmp #BLD4.5-1
CB35 90 D6    467          bcc NODOS
CB37          468 ;
CB37 A2 27    469          ldx #IOTEXT4D-TEXTS
CB39 A0 33    470          ldy #IOTEXT5D-TEXTS
CB3B          471 ;
CB3B A9 45    472          lda #VRSN4.5
CB3D          473 ;
CB3D          474 ;
CB3D          475 ; Connect the CFFA to the DOS 4.3/5 Disk Address Table.
CB3D          476 ; Carry flag must be set so MNGDISK will return current
CB3D          477 ; entry address.
CB3D          478 ;
CB3D          479 ; Connect the RamDisk to DOS 4.X if it is enabled.
CB3D          480 ;
CB3D 8D 12 01 481 CHKDOS4X sta VRSN
CB40          482 ;
CB40 8E 13 01 483          stx MESGDISK
CB43 8C 14 01 484          sty MESGCARD
CB46          485 ;
CB46 AD 05 C9 486          lda RDSTATE
CB49 F0 C2    487          beq NODOS
CB4B          488 ;
CB4B A9 00    489          lda #ZERO
CB4D          490 ;
CB4D AE 03 C9 491          ldx RDSLOT
CB50 20 F2 C9 492          jsr GETDISKS
CB53          493 ;
CB53 C0 40    494          cpy #RDENTRY
CB55 D0 05    495          bne >1
CB57          496 ;
CB57 CD 00 C9 497          cmp RDPAGECX
CB5A F0 14    498          beq CHKRC4X
CB5C          499 ;
CB5C          500 ;
CB5C          501 ; Add RamDisk entry to the DOS 4.X Disk Address Table.
CB5C          502 ;
CB5C A0 40    503 ^1          ldy #RDENTRY
CB5E AD 00 C9 504          lda RDPAGECX
CB61          505 ;
CB61 20 F2 C9 506          jsr GETDISKS
CB64          507 ;
CB64 AD 12 01 508          lda VRSN
CB67 9D 78 07 509          sta DOSVRSN,X
CB6A          510 ;
CB6A AE 13 01 511          ldx MESGDISK
CB6D 20 BF C9 512          jsr PRTMESGS
CB70          513 ;
CB70          514 ;
CB70          515 ; Check if the RamCard is already connected to the
CB70          516 ; DOS 4.3/5 Disk Address Table if the RamCard is available.
CB70          517 ; The C-flag must be set so MNGDISK will return the current

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```

CB70          518 ; entry address for the RamCard slot when the A-reg is
CB70          519 ; zero.
CB70          520 ;
CB70          521 ; Connect the RamCard to DOS 4.X if it is enabled.
CB70          522 ;
CB70 AD 06 C9 523 CHKRC4X lda RCSTATE
CB73 F0 95    524      beq FNDOS
CB75          525 ;
CB75 A9 00    526      lda #ZERO
CB77          527 ;
CB77 AE 04 C9 528      ldx RCSLOT
CB7A 20 F2 C9 529      jsr GETDISKS
CB7D          530 ;
CB7D C0 50    531      cpy #RCENTRY
CB7F D0 05    532      bne >2
CB81          533 ;
CB81 CD 00 C9 534      cmp RDPAGECX
CB84 F0 84    535      beq FNDOS
CB86          536 ;
CB86          537 ;
CB86          538 ; Add RamCard entry to the DOS 4.X Disk Address Table.
CB86          539 ;
CB86 A0 50    540 ^2      ld y #RCENTRY
CB88 AD 00 C9 541      lda RDPAGECX
CB8B          542 ;
CB8B 20 F2 C9 543      jsr GETDISKS
CB8E          544 ;
CB8E AE 14 01 545      ldx MESGCARD
CB91          546 ;
CB91 4C BF C9 547      jmp PRTMESGS
CB94          548 ;
CB94          549 ;
CB94 4C 0D CB 550 NODOSJMP jmp NODOS
CB97 4C 0A CB 551 FNDOSJMP jmp FNDOS
CB9A          552 ;
CB9A          553 ;
CB9A          554 ; Check for DOS 4.1 initialization values.
CB9A          555 ;
CB9A AD F8 BF 556 CHKDOS41 lda INITDOS
CB9D C9 D9    557      cmp #INITADR
CB9F D0 F3    558      bne NODOSJMP
CBA1          559 ;
CBA1 AD F9 BF 560      lda INITDOS+1
CBA4 C9 BE    561      cmp /INITADR
CBA6 D0 EC    562      bne NODOSJMP
CBA8          563 ;
CBA8          564 ;
CBA8          565 ; Connect the RamDisk to the DOS 4.1 Disk Address Table.
CBA8          566 ;
CBA8 AD 05 C9 567      lda RDSTATE
CBAB F0 E7    568      beq NODOSJMP
CBAD          569 ;
CBAD AE 03 C9 570      ldx RDSLOT
CBB0 20 CF CC 571      jsr INITDAT
CBB3          572 ;
CBB3 B1 EE    573      lda (DATPTR),Y
CBB5 CD 00 C9 574      cmp RDPAGECX
CBB8 F0 1C    575      beq CHKRC41
CBBA          576 ;
CBBA 9D F8 05 577      sta SAVEADRH,X
CBBD          578 ;

```

```

CBBD AD 00 C9      579      lda RDPAGECX
CBC0 91 EE        580      sta (DATPTR),Y
CBC2              581      ;
CBC2 88           582      dey
CBC3              583      ;
CBC3 B1 EE        584      lda (DATPTR),Y
CBC5 9D 78 05     585      sta SAVEADRL,X
CBC8              586      ;
CBC8 A9 40        587      lda #RDENTRY
CBCA 91 EE        588      sta (DATPTR),Y
CBCC              589      ;
CBCC A9 41        590      lda #VRSN4.1
CBCE 9D 78 07     591      sta DOSVRSN,X
CBD1              592      ;
CBD1              593      ;
CBD1              594      ; Able to connect RamDisk and DOS 4.1.
CBD1              595      ;
CBD1 A2 21        596      ldx #IOTEXT4B-TEXTS
CBD3 20 BF C9     597      jsr PRTMESGS
CBD6              598      ;
CBD6              599      ;
CBD6 AD 06 C9     600      CHKRC41  lda RCSTATE
CBD9 F0 BC        601      beq FNDOSJMP
CBDB              602      ;
CBDB AE 04 C9     603      ldx RCSLOT
CBDE 20 CF CC     604      jsr INITDAT
CBE1              605      ;
CBE1 B1 EE        606      lda (DATPTR),Y
CBE3 CD 00 C9     607      cmp RDPAGECX
CBE6 F0 AF        608      beq FNDOSJMP
CBE8              609      ;
CBE8              610      ;
CBE8              611      ; Add RamCard entry to the DOS 4.1 Disk Address Table.
CBE8              612      ;
CBE8 9D F8 05     613      sta SAVEADRH,X
CBEB              614      ;
CBEB AD 00 C9     615      lda RDPAGECX
CBEE 91 EE        616      sta (DATPTR),Y
CBF0              617      ;
CBF0 88           618      dey
CBF1              619      ;
CBF1 B1 EE        620      lda (DATPTR),Y
CBF3 9D 78 05     621      sta SAVEADRL,X
CBF6              622      ;
CBF6 A9 50        623      lda #RCENTRY
CBF8 91 EE        624      sta (DATPTR),Y
CBFA              625      ;
CBFA              626      ;
CBFA              627      ; Able to connect RamCard and DOS 4.1.
CBFA              628      ;
CBFA A2 2D        629      ldx #IOTEXT5B-TEXTS
CBFC              630      ;
CBFC 4C BF C9     631      jmp PRTMESGS
CBFF              632      ;
CBFF              633      ;

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BSAVE SEG06,A\$0800,B,L\$02FF

```

CBFF              634      usr SEG06
CBFF              635      ;
CBFF              636      ;

```

CBFF 637 icl "RD7.L"

LLOAD RD7.L,A\$4000

```

CBFF      1          ttl "RamDisk Source Code, RD7.L"
CBFF      2      ;
CBFF      3      ;
CBFF      4      ; RD7.L
CBFF      5      ;
CBFF      6      ;
CBFF      7          obj PAGE08
CBFF      8          usr
CBFF      9      ;
CBFF     10      ;
CBFF     11      ; Connect or disconnect the RamDisk/RamCard to DOS based
CBFF     12      ; on the value in the Y-reg. Verify the connection.
CBFF     13      ;
CBFF AD 00 C9     14 DOTOGGLE lda RDPAGECX
CC02 8D F8 07     15          sta MSLOT          ; as per Apple requirement
CC05          16      ;
CC05 98          17          tya
CC06 D0 18        18          bne >1
CC08          19      ;
CC08 20 25 CB     20          jsr CHKDOS45
CC0B 90 3D        21          bcc >3
CC0D          22      ;
CC0D 20 0F CB     23          jsr CHKDOS43
CC10 90 38        24          bcc >3
CC12          25      ;
CC12 20 9A CB     26          jsr CHKDOS41
CC15 90 33        27          bcc >3
CC17          28      ;
CC17 20 C0 CA     29          jsr CHKDOS3X
CC1A 90 2E        30          bcc >3
CC1C          31      ;
CC1C          32      ;
CC1C          33      ; Unable to connect RamDisk and DOS.
CC1C          34      ;
CC1C A2 03        35          ldx #IOTEXT1B-TEXTS
CC1E B0 27        36          bcs >2          ; always taken
CC20          37      ;
CC20 AE 03 C9     38      ^1          ldx RDSLOT
CC23          39      ;
CC23 BC 78 07     40          ldy DOSVRSN,X
CC26 F0 22        41          beq >3
CC28          42      ;
CC28 A9 00        43          lda #ZERO
CC2A 9D 78 07     44          sta DOSVRSN,X
CC2D          45      ;
CC2D C0 33        46          cpy #VRSN3.3
CC2F F0 1A        47          beq USTDOS3X
CC31          48      ;
CC31 C0 41        49          cpy #VRSN4.1
CC33 F0 3A        50          beq USTDOS41
CC35          51      ;
CC35 A2 0C        52          ldx #IOTEXT2C-TEXTS
CC37 A9 18        53          lda #IOTEXT3C-TEXTS
CC39          54      ;
CC39 C0 43        55          cpy #VRSN4.3
CC3B F0 69        56          beq USTDOS4X
CC3D          57      ;
CC3D A2 0F        58          ldx #IOTEXT2D-TEXTS
CC3F A9 1B        59          lda #IOTEXT3D-TEXTS
CC41          60      ;

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```

CC41 C0 45      61      cpy #VRSN4.5
CC43 F0 61      62      beq USTDOS4X
CC45           63      ;
CC45           64      ;
CC45           65      ; Unable to disconnect RamDisk and DOS.
CC45           66      ;
CC45 A2 00      67      ldx #IOTEXT1A-TEXTS
CC47           68      ;
CC47 20 BF C9   69      ^2      jsr PRTMESGS
CC4A           70      ;
CC4A 60         71      ^3      rts
CC4B           72      ;
CC4B           73      ;
CC4B           74      ; Disconnect the RamDisk from DOS 3.X if it is connected.
CC4B           75      ;
CC4B AD 05 C9   76      USTDOS3X lda RDSTATE
CC4E F0 1E      77      beq UST3XRTN
CC50           78      ;
CC50 AE 03 C9   79      ldx RDSLOT
CC53           80      ;
CC53 BC 78 05   81      ldy SAVEADRL,X
CC56 BD F8 05   82      lda SAVEADRH,X
CC59           83      ;
CC59 8C B8 B7   84      sty CALLRWTS+3
CC5C 8D B9 B7   85      sta CALLRWTS+4
CC5F           86      ;
CC5F           87      ;
CC5F           88      ; Able to disconnect the RamDisk and DOS 3.X.
CC5F           89      ;
CC5F A2 06      90      ldx #IOTEXT2A-TEXTS
CC61 20 BF C9   91      jsr PRTMESGS
CC64           92      ;
CC64           93      ;
CC64           94      ; Disconnect the RamCard from DOS 3.X if it is connected.
CC64           95      ;
CC64 AD 06 C9   96      lda RCSTATE
CC67 F0 05      97      beq UST3XRTN
CC69           98      ;
CC69           99      ;
CC69          100      ; Able to disconnect the RamCard and DOS 4.1.
CC69          101      ;
CC69 A2 12      102      ldx #IOTEXT3A-TEXTS
CC6B 20 BF C9   103      jsr PRTMESGS
CC6E           104      ;
CC6E 60         105      UST3XRTN rts
CC6F           106      ;
CC6F           107      ;
CC6F           108      ; Disconnect the RamDisk from DOS 4.1 if it is connected.
CC6F           109      ;
CC6F AD 05 C9   110      USTDOS41 lda RDSTATE
CC72 F0 31      111      beq UST41RTN
CC74           112      ;
CC74 AE 03 C9   113      ldx RDSLOT
CC77 20 CF CC   114      jsr INITDAT
CC7A           115      ;
CC7A BD F8 05   116      lda SAVEADRH,X
CC7D 91 EE      117      sta (DATPTR),Y
CC7F           118      ;
CC7F 88         119      dey
CC80           120      ;
CC80 BD 78 05   121      lda SAVEADRL,X

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```

CC83 91 EE      122          sta (DATPTR),Y
CC85           123      ;
CC85           124      ;
CC85           125      ; Able to disconnect the RamDisk and DOS 4.1.
CC85           126      ;
CC85 A2 09      127          ldx #IOTEXT2B-TEXTS
CC87 20 BF C9   128          jsr PRTMESGS
CC8A           129      ;
CC8A           130      ;
CC8A           131      ; Disconnect the RamCard from DOS 4.1 if it is connected.
CC8A           132      ;
CC8A AD 06 C9   133          lda RCSTATE
CC8D F0 16      134          beq UST41RTN
CC8F           135      ;
CC8F AE 04 C9   136          ldx RCSLOT
CC92 20 CF CC   137          jsr INITDAT
CC95           138      ;
CC95 BD F8 05   139          lda SAVEADRH,X
CC98 91 EE      140          sta (DATPTR),Y
CC9A           141      ;
CC9A 88         142          dey
CC9B           143      ;
CC9B BD 78 05   144          lda SAVEADRL,X
CC9E 91 EE      145          sta (DATPTR),Y
CCA0           146      ;
CCA0           147      ;
CCA0           148      ; Able to disconnect the RamCard and DOS 4.1.
CCA0           149      ;
CCA0 A2 15      150          ldx #IOTEXT3B-TEXTS
CCA2 20 BF C9   151          jsr PRTMESGS
CCA5           152      ;
CCA5 60         153      UST41RTN rts
CCA6           154      ;
CCA6           155      ;
CCA6           156      ; Disconnect the RamDisk from DOS 4.3/5 if it is connected.
CCA6           157      ;
CCA6 8E 13 01   158      USTDOS4X stx MESGDISK
CCA9 8D 14 01   159          sta MESGCARD
CCAC           160      ;
CCAC AD 05 C9   161          lda RDSTATE
CCAF F0 1D      162          beq UST4XRTN
CCB1           163      ;
CCB1 AE 03 C9   164          ldx RDSLOT
CCB4 20 F0 C9   165          jsr GETDISKC
CCB7           166      ;
CCB7 AE 13 01   167          ldx MESGDISK
CCBA 20 BF C9   168          jsr PRTMESGS
CCBD           169      ;
CCBD           170      ;
CCBD           171      ; Disconnect the RamCard from DOS 4.3/5 if it is connected.
CCBD           172      ;
CCBD AD 06 C9   173          lda RCSTATE
CCC0 F0 0C      174          beq UST4XRTN
CCC2           175      ;
CCC2 AE 04 C9   176          ldx RCSLOT
CCC5 20 F0 C9   177          jsr GETDISKC
CCC8           178      ;
CCC8 AE 14 01   179          ldx MESGCARD
CCCB 20 BF C9   180          jsr PRTMESGS
CCCE           181      ;
CCCE 60         182      UST4XRTN rts

```

```

CCCCF      183 ;
CCCCF      184 ;
CCCCF      185 ; Initialize a pointer to the slot index of DOS 4.1
CCCCF      186 ; Disk Address Table.
CCCCF      187 ;
CCCCF AC FB BF 188 INITDAT ldy DISKTBL
CCD2 A9 BF 189 lda /DISKTBL
CCD4      190 ;
CCD4 84 EE 191 sty DATPTR
CCD6 85 EF 192 sta DATPTR+1
CCD8      193 ;
CCD8 8A 194 txa
CCD9 0A 195 asl
CCDA      196 ;
CCDA A8 197 tay
CCDB C8 198 iny
CCDC      199 ;
CCDC 60 200 rts
CCDD      201 ;
CCDD      202 ;
CCDD      203 ; Patch DOS 3.X to support the DOS 4.X environment.
CCDD      204 ;
CCDD A9 65 205 DOMODOS3 lda #KYWRDFND
CCDF 8D DA A0 206 sta $A0D9+1
CCE2      207 ;
CCE2 A9 FE 208 lda #VOLNUMBR+5
CCE4 8D 9E AD 209 sta $AD9D+1
CCE7      210 ;
CCE7 A9 18 211 lda #NAME SIZE
CCE9 8D 03 B2 212 sta $B202+1
CCEC      213 ;
CCEC AC 10 01 214 ldy RDIJMP
CCEF AD 11 01 215 lda RDIJMP+1
CCF2      216 ;
CCF2 8C 48 B7 217 sty RESTART+4
CCF5 8D 49 B7 218 sta RESTART+5
CCF8      219 ;
CCF8 60 220 rts
CCF9      221 ;
CCF9      222 ;
CCF9 AD 00 C9 223 RDRWTS lda RDPAGECX
CCFC 8D F8 07 224 sta MSLOT ; as per Apple requirement
CCFF      225 ;
CCFF A0 02 226 ldy #DRVNDX
CD01      227 ;
CD01 B1 4A 228 lda (IOBADR),Y
CD03      229 ;
CD03 A0 10 230 ldy #LDRVNDX
CD05      231 ;
CD05 91 4A 232 sta (IOBADR),Y
CD07      233 ;
CD07 A8 234 tay
CD08      235 ;
CD08 B9 16 C9 236 lda RDRV TBL-1,Y
CD0B 8D 78 06 237 sta RDDR V
CD0E      238 ;
CD0E A0 03 239 ldy #VOLNDX
CD10      240 ;
CD10 B1 4A 241 lda (IOBADR),Y
CD12      242 ;
CD12 A0 0E 243 ldy #LVOLNDX

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CD14          244 ;
CD14 91 4A    245      sta (IOBADR),Y
CD16          246 ;
CD16 AE 01 C9 247      ldx RDSLOT16
CD19          248 ;
CD19 A0 0C    249      ld y #CMDNDX
CD1B          250 ;
CD1B B1 4A    251      lda (IOBADR),Y
CD1D 8D 78 05 252      sta RDCMD
CD20 F0 10    253      beq >1
CD22          254 ;
CD22 C9 01    255      cmp #READCMD
CD24 F0 0E    256      beq RDRWINIT
CD26          257 ;
CD26 C9 02    258      cmp #WRITCMD
CD28 F0 0A    259      beq RDRWINIT
CD2A          260 ;
CD2A C9 04    261      cmp #FORMTCMD
CD2C F0 4E    262      beq RDFORMAT
CD2E          263 ;
CD2E A9 30    264      lda #RWSYNERR
CD30          265 ;
CD30 38       266      sec
CD31          267 ;
CD31 60       268      rts
CD32          269 ;
CD32 18       270      ^1 clc
CD33          271 ;
CD33 60       272      rts
CD34          273 ;
CD34          274 ;
CD34 A0 08    275 RDRWINIT ld y #BUFRNDX
CD36          276 ;
CD36 B1 4A    277      lda (IOBADR),Y
CD38 85 3E    278      sta BUFADR2Z
CD3A          279 ;
CD3A C8       280      iny
CD3B          281 ;
CD3B B1 4A    282      lda (IOBADR),Y
CD3D 85 3F    283      sta BUFADR2Z+1
CD3F          284 ;
CD3F A0 04    285      ld y #TRKNDX
CD41          286 ;
CD41 B1 4A    287      lda (IOBADR),Y
CD43 29 3F    288      and #TRKMASK
CD45          289 ;
CD45 C9 28    290      cmp #LASTRACK
CD47 B0 2F    291      bcs >4
CD49          292 ;
CD49 9D 81 C0 293      sta RDTRACK,X
CD4C          294 ;
CD4C A0 05    295      ld y #SECNDX
CD4E          296 ;
CD4E B1 4A    297      lda (IOBADR),Y
CD50 C9 10    298      cmp #LASTSEC
CD52 B0 24    299      bcs >4
CD54          300 ;
CD54 0D 78 06 301      ora RDDRVR
CD57 9D 80 C0 302      sta RDSECTR,X
CD5A          303 ;
CD5A A0 00    304      ld y #ZERO

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CD5C          305 ;
CD5C AD 78 05 306      lda RDCMD
CD5F 4A       307      lsr
CD60 D0 0A    308      bne >2
CD62          309 ;
CD62          310 ;
CD62          311 ; RamDisk -> Main memory
CD62          312 ;
CD62 B9 00 C8 313 ^1    lda RDWNDOW,Y
CD65 91 3E    314      sta (BUFADR2Z),Y
CD67          315 ;
CD67 C8       316      iny
CD68 D0 F8    317      bne <1
CD6A          318 ;
CD6A F0 08    319      beq >3                ; always taken
CD6C          320 ;
CD6C          321 ;
CD6C          322 ; Main memory -> RamDisk
CD6C          323 ;
CD6C B1 3E    324 ^2    lda (BUFADR2Z),Y
CD6E 99 00 C8 325      sta RDWNDOW,Y
CD71          326 ;
CD71 C8       327      iny
CD72 D0 F8    328      bne <2
CD74          329 ;
CD74 A9 00    330 ^3    lda #RWNOERR
CD76          331 ;
CD76 18       332      clc
CD77          333 ;
CD77 60       334      rts
CD78          335 ;
CD78 A9 08    336 ^4    lda #RWINITER
CD7A          337 ;
CD7A 38       338      sec
CD7B          339 ;
CD7B 60       340      rts
CD7C          341 ;
CD7C          342 ;
CD7C A9 27    343 RDFORMAT lda #LASTRACK-1
CD7E 85 2A    344      sta ZTRACK
CD80          345 ;
CD80 A0 00    346      ldy #ZERO
CD82          347 ;
CD82 A5 2A    348 ^1    lda ZTRACK
CD84 9D 81 C0 349      sta RDTRACK,X
CD87          350 ;
CD87 A9 0F    351      lda #LASTSEC-1
CD89 85 2B    352      sta ZSECTOR
CD8B          353 ;
CD8B A5 2B    354 ^2    lda ZSECTOR
CD8D 0D 78 06 355      ora RDDR
CD90 9D 80 C0 356      sta RDSECTR,X
CD93          357 ;
CD93 98       358      tya
CD94          359 ;
CD94 99 00 C8 360 ^3    sta RDWNDOW,Y
CD97          361 ;
CD97 C8       362      iny
CD98 D0 FA    363      bne <3
CD9A          364 ;
CD9A C6 2B    365      dec ZSECTOR

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CD9C 10 ED      366      bpl <2
CD9E           367      ;
CD9E C6 2A      368      dec ZTRACK
CDA0 10 E0      369      bpl <1
CDA2           370      ;
CDA2 A9 00      371      lda #RWNOERR
CDA4           372      ;
CDA4 18         373      clc
CDA5           374      ;
CDA5 60         375      rts
CDA6           376      ;
CDA6           377      ;
CDA6 AD 00 C9   378 RCRWTS  lda RDPAGECX
CDA9 8D F8 07   379      sta MSLOT      ; as per Apple requirement
CDAC           380      ;
CDAC A0 02      381      ldy #DRVNDX
CDAE           382      ;
CDAE B1 4A      383      lda (IOBADR),Y
CDB0           384      ;
CDB0 A0 10      385      ldy #LDRVNDX
CDB2           386      ;
CDB2 91 4A      387      sta (IOBADR),Y
CDB4           388      ;
CDB4 A0 03      389      ldy #VOLNDX
CDB6           390      ;
CDB6 B1 4A      391      lda (IOBADR),Y
CDB8           392      ;
CDB8 A0 0E      393      ldy #LVOLNDX
CDBA           394      ;
CDBA 91 4A      395      sta (IOBADR),Y
CDBC           396      ;
CDBC AE 01 C9   397      ldx RDSLOT16
CDBF           398      ;
CDBF A0 0C      399      ldy #CMDNDX
CDC1           400      ;
CDC1 B1 4A      401      lda (IOBADR),Y
CDC3 8D F8 05   402      sta RCCMD
CDC6 F0 10      403      beq >1
CDC8           404      ;
CDC8 C9 01      405      cmp #READCMD
CDCA F0 0E      406      beq RCRWINIT
CDCC           407      ;
CDCC C9 02      408      cmp #WRITCMD
CDCE F0 0A      409      beq RCRWINIT
CDD0           410      ;
CDD0 C9 04      411      cmp #FORMTCMD
CDD2 F0 3D      412      beq RCFORMAT
CDD4           413      ;
CDD4 A9 30      414      lda #RWSYNERR
CDD6           415      ;
CDD6 38         416      sec
CDD7           417      ;
CDD7 60         418      rts
CDD8           419      ;
CDD8 18         420      ^1 clc
CDD9           421      ;
CDD9 60         422      rts
CDDA           423      ;
CDDA           424      ;
CDDA A0 08      425 RCRWINIT ldy #BUFRNDX
CDDC           426      ;

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CDDC B1 4A      427      lda (IOBADR),Y
CDDE 85 3E      428      sta BUFADR2Z
CDE0           429      ;
CDE0 C8         430      iny
CDE1           431      ;
CDE1 B1 4A      432      lda (IOBADR),Y
CDE3 85 3F      433      sta BUFADR2Z+1
CDE5           434      ;
CDE5 A0 04      435      ldy #TRKNDX
CDE7           436      ;
CDE7 B1 4A      437      lda (IOBADR),Y
CDE9 29 3F      438      and #TRKMASK
CDEB           439      ;
CDEB C9 20      440      cmp #RCLSTRK
CDED B0 1E      441      bcs >1
CDEF           442      ;
CDEF 0A         443      asl
CDF0           444      ;
CDF0 85 2A      445      sta ZTRACK
CDF2           446      ;
CDF2 A0 05      447      ldy #SECNDX
CDF4           448      ;
CDF4 B1 4A      449      lda (IOBADR),Y
CDF6 29 07      450      and #%00000111
CDF8           451      ;
CDF8 09 C8      452      ora /RCWNDOW
CDFA 85 27      453      sta BUFRADRZ+1
CDFC           454      ;
CDFC B1 4A      455      lda (IOBADR),Y
CDFE 29 08      456      and #%00001000
CE00           457      ;
CE00 4A         458      lsr
CE01 4A         459      lsr
CE02 4A         460      lsr
CE03           461      ;
CE03 05 2A      462      ora ZTRACK
CE05 85 2A      463      sta ZTRACK
CE07           464      ;
CE07 A9 00      465      lda #ZERO          ; for RCRDWRT
CE09 85 26      466      sta BUFRADRZ
CE0B           467      ;
CE0B 18         468      clc
CE0C           469      ;
CE0C 60         470      rts
CE0D           471      ;
CE0D A9 08      472      ^1 lda #RWINITER
CE0F           473      ;
CE0F 38         474      sec
CE10           475      ;
CE10 60         476      rts
CE11           477      ;
CE11           478      ;
CE11           479      ; RamCard contains enough memory for 32 tracks of data.
CE11           480      ;
CE11 A9 3F      481      RCFORMAT lda #RCLSTRK2-1
CE13 85 2A      482      sta ZTRACK
CE15           483      ;
CE15 A9 FF      484      lda #NEGONE          ; for RCRDWRT
CE17           485      ;
CE17 18         486      clc
CE18           487      ;

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```
CE18 60          488          rts
CE19             489  ;
CE19             490  ;
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BSAVE SEG07,A$0800,B,L$021A
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```
CE19             491          usr SEG07
CE19             492  ;
CE19             493  ;
CE19             494          dfs PAGESIZE-*)&NEGONE,ZERO
CF00             495  ;
CF00             496  ;
CF00             497          phs RDCODE2+*-PAGEC9
5C00             498  ;
5C00             499  ;
5C00             500  RDCODE3:
5C00             501  ;
5C00             502  NIBLBUFR:
5C00             503  ;
5C00             504  SECTCHK:
5C00             505  ;
5C00             506  ;
5C00             507          stt "RamDisk Symbol Table"
5C00             508  ;
5C00             509  ;
5C00             510          end 111
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*** End of Assembly
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Symbol List starts at 0x7800, ends at 0x8C50, used 0x1450, remaining 0x28E4

Symbols unsorted:

LOC0	0000	PTR1	0006	PTR2	0008	PTR	001E	WNDLFT	0020
WNDWDTH	0021	WNDTOP	0022	WNCBTM	0023	CH	0024	CV	0025
BUFRADRZ	0026	ZTRACK	002A	ZSECTOR	002B	SLOT16Z	002B	DATAFNDZ	002C
SECFNDZ	002D	TRKFNDZ	002E	VOLFNDZ	002F	INVFLG	0032	ROMSECTR	003D
BUFADR2Z	003E	IOBADR	004A	DATPTR	00EE	DATAPTR	00FA	PRNTPTR	00FC
VERSION	0005	BUILD	0006	VRSN3.3	0033	VRSN4.1	0041	BLD4.1	0046
VRSN4.3	0043	BLD4.3	0008	VRSN4.5	0045	BLD4.5	0006	READCMD	0001
WRITCMD	0002	FORMTCMD	0004	LASTSEC	0010	RCLSTRK	0020	RCLSTRK2	0040
LASTRACK	0028	CATRACK	0011	BITMAP	0038	RDDRV1	0000	RDDRV2	0010
SLOTOFF	0000	ASCIIOFF	0001	CXPGOFF	0002	SL16OFF	0003	SLOTNDX	0001
DRVNDX	0002	VOLNDX	0003	TRKNDX	0004	SECNDX	0005	BUFRNDX	0008
XFERNDX	000B	CMDNDX	000C	ERRNDX	000D	LVOLNDX	000E	LSLTNDX	000F
LDRVNDX	0010	ZERO	0000	INITACT	0000	CNECTACT	0001	LOADACT	0002
IGNORACT	0002	RCSTRTRK	0003	NEXTLINE	0004	CHARCELL	0007	CMDMASK	000F
NIBLMASK	000F	PCMDMASK	000F	MAXBTM	0018	NAMESIZE	0018	CVMASK	001F
RDWAIT	0028	WAITIME	0030	TRKMASK	003F	INVRMASK	007F	ASCIMASK	007F
ASCIFLAG	0080	NO	00CE	YES	00D9	NEGONE	00FF	RCOFF	0000
RCON	0080	ROMENTRY	005C	TEXTMODE	0000	GRPHMODE	0001	TX80MODE	0002
LV80MODE	0003	NORMDISP	0000	INVRDISP	0001	INITSCRN	0000	HOMESCRN	0001
EOLCLR	0000	EOPCLR	0001	DIRECT	0000	INDIRECT	0001	NOPAD	0000
ZEROPAD	0040	SPCPAD	0080	MAXWDTH	0028	MAXCH	0050	MINCV	0060
RTNCMD	0050	MODECMD	0051	DISPCMD	0052	SCRNCMD	0053	CLRCMD	0054
CNTRCMD	0055	BUFRCMD	0056	NIBLCMD	0057	BYT1CMD	0058	BYT2CMD	0059
BYTNCMD	005A	ADRCMD	005B	DEC1CMD	005C	DEC2CMD	005D	DEC3CMD	005E
DECNCMD	005F	CTRLD	0084	BELLCHAR	0087	LARROW	0088	DARROW	008A
UARROW	008B	RETURN	008D	CTRLQ	0091	RARROW	0095	ESCAPE	009B
SPACE	00A0	RWNOERR	0000	RWINITER	0008	RWSYNERR	0030	PAGESIZE	0100
STACK	0100	RDIJMP	0110	VRSN	0112	MESGDISK	0113	MESGCARD	0114
RWTS	03D9	GETIOCB	03E3	HOOKDOS	03EA	DRV0TRK	0478	RDBANK	0478
LCRAM	04F8	XMODE	04FB	RDCMD	0578	RCCMD	05F8	RDDRV	0678
SAVEADRL	0578	SAVEADRH	05F8	DOSVRSN	0778	MSLOT	07F8	BOOTADR	08FE
BOOTPGS	08FF	KWRANGE	A955	KYWRDFND	AA65	VOLVAL	AA66	VOLNUMBR	B5F9
BOOTCODE	B600	RESTART	B744	CALLRWTS	B7B5	VOLEXPT	B7EB	RWTSENT	BD00
INITADR	BED9	INITDOS	BFF8	DISKTBL	BFFB	BLDVRSN	BFF0	BLDNMBR	BFF1
MNGDISK	BFF2	PAGE08	0800	PAGE20	2000	PAGE40	4000	PAGEC0	C000
PAGEC9	C900	KEY	C000	VID80OFF	C00C	ALTCHOFF	C00E	CLRKEY	C010
RDBANK2	C011	RDLGRAM	C012	TXTCLR	C050	TXTSET	C051	MIXCLR	C052
LOWSCR	C054	HIRES	C057	PHASEOFF	C080	MOTOROFF	C088	MOTORON	C089
DRVENG	C08A	LATCH	C08C	RWSEL	C08E	RAM2WP	C080	ROM2WE	C081
ROM2WP	C082	RAM2WE	C083	RAM1WP	C088	ROM1WE	C089	ROM1WP	C08A
RAM1WE	C08B	RDSECTR	C080	RDTRACK	C081	RAMCARD	C084	RCWINDOW	C800
RDWINDOW	C800	CLRROM	CFFF	APSNEW	D64B	BASIC	E003	INIT	FB2F
TABV	FB5B	VTAB	FC22	CLREOP	FC42	HOME	FC58	CLREOL	FC9C
WAIT	FCA8	CROUT	FD8E	PRBYTE	FDDA	COUT	FDED	SETNORM	FE84
SETKBD	FE89	SETVID	FE93	OUTPORT	FE95	BELL	FF3A	MONITOR	FF65
DISPLAY	0001	MAIN	401A	MAIN1	4045	MAIN2	4064	MAIN3	407A
MAIN4	40AA	MAIN5	40AF	MAIN6	40B4	DOJMP	414A	TESTMD	414D
TESTRD	41AD	TESTRC	421C	GETMDSLT	4269	GETRDSLT	4292	GETRCSLT	42BD
SELCSLOT	42E8	SSMOD1	4308	SSMOD2	430C	SSMOD3	4310	SSMOD4	4314
INITPRMS	4325	SELCDRV	433E	SDMOD1	4361	SDMOD2	4365	GETRDACT	4379
SAMOD1	4399	SAMOD2	43A0	SAMOD3	43AA	GETRCACT	43D3	SBMOD1	43F3
SBMOD2	43FA	SBMOD3	4404	INITRD	442F	LOADRD	44E4	INITDRIV	457E
READISK	45FA	RDMOD1	4618	RDMOD2	4637	RDMOD3	4642	RDMOD4	465F
RDMOD5	4661	RDMOD6	46B5	GETRCK	46BA	SEEKABS	46CF	SEEKABS1	4718
SEEKABS2	471B	MSWAIT	4726	READSECT	4731	RSMOD1	4759	RSMOD2	476D
RSMOD3	4785	RSMOD4	479D	RSMOD5	47B3	RSEXIT	47CB	ABRTMESG	47CD

DIFFMSG1	47F7	RDADR	4829	RDERR	488F	DIFFMSG2	4891	DIFFMSG3	48C3
DISKMESG	48F7	USERMESG	4971	MAKENEG	4AAD	CONTMESG	4AC6	SETPTR	4AF4
CLRPTR	4B02	READKEY	4B09	GETKEY	4B1F	CLRSCRN1	4B36	PRINT	4B4A
PRNTLOOP	4B59	PRNTMOD1	4B85	PRNTMOD2	4BA0	PRNTBR1	4BA2	PRNTBR2	4BA8
PRNTBR3	4BAD	PRNTBR4	4BBB	PRNTMOD3	4BBE	PRNTOUT	4BC4	OUTMOD1	4BC4
OUTMOD2	4BC6	PRNTOUT2	4BC8	OUTTBL1	4BCB	OUTTBL2	4BD1	OUT80COL	4BD7
VTABADRS	4BD9	OUTADRS	4BDF	PRNTSAV	4BE5	PRNTNUM	4BE6	MODEVAL	4BE8
FRMTVAL	4BE9	PRNTBL	4BEA	PRNTBLL	4BFA	PRNTBLH	4C0A	PRNTRTN	4C1A
PRNTSAVY	4C25	PRNTSAVX	4C27	PRNTSAVA	4C29	PRINTRTN	4C2C	PRNTMODE	4C2D
PRNTDISP	4C78	PRNTSCRN	4C97	PRNTCLR	4CB8	PRNTCNTR	4CD3	PRNTBUFR	4CE5
PRNTNIBL	4D00	PRNTNBYT	4D05	PRNT1BYT	4D09	PRNT2BYT	4D0C	PRNTBYT	4D0E
PRNTADR	4D18	PRNT1DEC	4D30	PRNT2DEC	4D36	PRNTDEC	4D39	PRNT3DEC	4D43
PRNTNDEC	4D4D	PRNTBYTE	4D82	PRNTHex	4D8B	PRNTHEx2	4D8D	HEXTODEC	4D98
HEXTODC2	4D9A	GETDIGIT	4DB2	PRNTGRPH	4DD1	SCRNMOD1	4E49	SCRNMOD2	4E4C
SCRNMOD3	4E4E	SCRNMOD4	4E5D	SCRNSAVY	4E63	SCRNSAVX	4E65	SCRNINIT	4E68
SCROLL	4E80	SCRLMOD1	4EAD	SCRLMOD2	4EB0	SCRLMOD3	4EB4	SCRLMOD4	4ECD
SCRNEOL	4ED1	EOLMOD1	4EE5	EOLMOD2	4EE9	SCRNHOME	4EFB	SCRNEOP	4F03
MDSLOT0	4F24	RDSLOT0	4F25	RCSLOT0	4F26	DRIVES	4F27	RDACT	4F28
RCACT	4F29	RCBYPASS	4F2A	COUNT	4F2B	PAGES	4F2C	SLTPARMS	4F2D
MDPARMS	4F2D	RDPARMS	4F31	RCPARMS	4F35	MARKER	4F39	TRACK	4F3B
SECTOR	4F3C	DRIVE	4F3D	SLOT	4F3E	TRACKS	4F3F	TRCKCNT	4F40
SECTCNT	4F41	BUFRH	4F42	FNAMCNT	4F43	FILE	4F44	PAGE	4F45
HEXNUM	4F46	HEXNUM2	4F48	NEGNUM	4F4A	NEGNUM2	4F4C	SLOTADRL	4F4E
SLOTADRH	4F52	DRVADRL	4F56	DRVADRH	4F58	ACT1ADRL	4F5A	ACT1ADRH	4F5D
ACT2ADRL	4F60	ACT2ADRH	4F63	PDTBLL	4F66	PDTBLH	4F6B	SKEWTBL	4F70
DRV TBL	4F80	ONTBL	4F84	OFFTBL	4F8C	DECTBLL	4F94	DECTBLH	4F99
YBASELO	4F9E	YBASEHI	4FB6	NIBLTBL	5096	BITBL	5100	CHARTBL	5200
RDCODE1	5500	RDBOOT	C000	ROMHOOK	C010	ROMUHOOK	C018	RDENTRY3	C020
RDENTRY	C040	RDENTRY2	C044	RDBOOT2	C04B	RCENTRY	C050	RCENTRY2	C054
ROMBOOT	C05C	TOGGLE	C066	MODOS3	C070	BOOTEXIT	C080	RCEXIT	C087
RCEXIT2	C089	RDEXIT	C090	HOOKEEXIT	C09E	EXIT3	C0A5	RCRDWRT	C0AC
RCFORMAT	C0D2	RDCODE2	5600	RDPAGECX	C900	RDSLOT16	C901	RCSLOT16	C902
RDSLOT	C903	RCSLOT	C904	RDSTATE	C905	RCSTATE	C906	RVSELEAV	C907
RDRVTBL	C917	MESGS	C919	MESG1A	C919	MESG1B	C91A	MESG2A	C91C
MESG2B	C925	MESG3A	C92C	MESG3B	C92F	MESG4A	C946	MESG4B	C949
MESG5A	C960	MESG5B	C963	MESG5C	C966	MESG5D	C969	MESG6	C96C
TEXTS	C989	IOTEXT1A	C989	IOTEXT1B	C98C	IOTEXT2A	C98F	IOTEXT2B	C992
IOTEXT2C	C995	IOTEXT2D	C998	IOTEXT3A	C99B	IOTEXT3B	C99E	IOTEXT3C	C9A1
IOTEXT3D	C9A4	IOTEXT4A	C9A7	IOTEXT4B	C9AA	IOTEXT4C	C9AD	IOTEXT4D	C9B0
IOTEXT5A	C9B3	IOTEXT5B	C9B6	IOTEXT5C	C9B9	IOTEXT5D	C9BC	PRTMESGS	C9BF
PRTMESG	C9E1	PRTMESG0	C9E5	GETDISKC	C9F0	GETDISKS	C9F2	DOIJMP	C9F6
RDIPL	CA0B	RDIPL2	CA4A	CHKDOS3X	CAC0	CHKRC3X	CB00	FNDOS	CB0A
NODOS	CB0D	FNDOSLEN	0005	CHKDOS43	CB0F	CHKDOS45	CB25	CHKDOS4X	CB3D
CHKRC4X	CB70	NODOSJMP	CB94	FNDOSJMP	CB97	CHKDOS41	CB9A	CHKRC41	CBD6
DOTOGGLE	CBFF	USTDOS3X	CC4B	UST3XRTN	CC6E	USTDOS41	CC6F	UST41RTN	CCA5
USTDOS4X	CCA6	UST4XRTN	CCCE	INITDAT	CCCF	DOMODOS3	CCDD	RDRWTS	CCF9
RDRWINIT	CD34	RDFORMAT	CD7C	RCRWTS	CDA6	RCRWINIT	CDDA	RCFORMAT	CE11
RDCODE3	5C00	NIBLBUFR	5C00	SECTCHK	5C00				

Symbols alphabetically sorted:

ABRTMESG	47CD	ACT1ADRH	4F5D	ACT1ADRL	4F5A	ACT2ADRH	4F63	ACT2ADRL	4F60
ADRCMD	005B	ALTCHOFF	C00E	APSNEW	D64B	ASCIFLAG	0080	ASCIIOFF	0001
ASCIMASK	007F	BASIC	E003	BELL	FF3A	BELLCHAR	0087	BITBL	5100
BITMAP	0038	BLD4.1	0046	BLD4.3	0008	BLD4.5	0006	BLDNMBR	BFF1
BLDVRSN	BFF0	BOOTADR	08FE	BOOTCODE	B600	BOOTEXIT	C080	BOOTPGS	08FF
BUFADR2Z	003E	BUFRADRZ	0026	BUFRCMD	0056	BUFRH	4F42	BUFRNDX	0008
BUILD	0006	BYT1CMD	0058	BYT2CMD	0059	BYTNCMD	005A	CALLRWTS	B7B5
CATRACK	0011	CH	0024	CHARCELL	0007	CHARTBL	5200	CHKDOS3X	CAC0
CHKDOS41	CB9A	CHKDOS43	CB0F	CHKDOS45	CB25	CHKDOS4X	CB3D	CHKRC3X	CB00

CHKRC41	CBD6	CHKRC4X	CB70	CLRCMD	0054	CLREOL	FC9C	CLREOP	FC42
CLRKEY	C010	CLRPTR	4B02	CLRROM	CFFF	CLRSCRN1	4B36	CMDMASK	000F
CMDNDX	000C	CNECTACT	0001	CNTRCMD	0055	CONTMSG	4AC6	COUNT	4F2B
COUT	FDED	CROUT	FD8E	CTRLD	0084	CTRLQ	0091	CV	0025
CVMASK	001F	CXPGOFF	0002	DARROW	008A	DATAFNDZ	002C	DATAPTR	00FA
DATPTR	00EE	DEC1CMD	005C	DEC2CMD	005D	DEC3CMD	005E	DECNCMD	005F
DECTBLH	4F99	DECTBL	4F94	DIFFMSG1	47F7	DIFFMSG2	4891	DIFFMSG3	48C3
DIRECT	0000	DISKMESG	48F7	DISKTBL	BFFB	DISPCMD	0052	DISPLAY	0001
DOIJMP	C9F6	DOJMP	414A	DOMODOS3	CCDD	DOSVRSN	0778	DOTOGGLE	CBFF
DRIVE	4F3D	DRIVES	4F27	DRV0TRK	0478	DRVADRH	4F58	DRVADRL	4F56
DRVENG	C08A	DRVNDX	0002	DRVTL	4F80	EOLCLR	0000	EOLMOD1	4EE5
EOLMOD2	4EE9	EOPCLR	0001	ERRNDX	000D	ESCAPE	009B	EXIT3	C0A5
FILE	4F44	FNAMCNT	4F43	FNDOS	CB0A	FNDOSJMP	CB97	FNDOSLEN	0005
FORMTCMD	0004	FRMTVAL	4BE9	GETDIGIT	4DB2	GETDISKC	C9F0	GETDISKS	C9F2
GETIOCB	03E3	GETKEY	4B1F	GETMDSLT	4269	GETRCACT	43D3	GETRCK	46BA
GETRCSLT	42BD	GETRDACT	4379	GETRDSLT	4292	GRPHMODE	0001	HEXNUM	4F46
HEXNUM2	4F48	HEXTODC2	4D9A	HEXTODEC	4D98	HIRES	C057	HOME	FC58
HOMESCRN	0001	HOOKDOS	03EA	HOOKEEXIT	C09E	IGNORACT	0002	INDIRECT	0001
INIT	FB2F	INITACT	0000	INITADR	BED9	INITDAT	CCCF	INITDOS	BFF8
INITDRIV	457E	INITPRMS	4325	INITRD	442F	INITSCRN	0000	INVFLG	0032
INVRDISP	0001	INVRMASK	007F	IOBADR	004A	IOTEXT1A	C989	IOTEXT1B	C98C
IOTEXT2A	C98F	IOTEXT2B	C992	IOTEXT2C	C995	IOTEXT2D	C998	IOTEXT3A	C99B
IOTEXT3B	C99E	IOTEXT3C	C9A1	IOTEXT3D	C9A4	IOTEXT4A	C9A7	IOTEXT4B	C9AA
IOTEXT4C	C9AD	IOTEXT4D	C9B0	IOTEXT5A	C9B3	IOTEXT5B	C9B6	IOTEXT5C	C9B9
IOTEXT5D	C9BC	KEY	C000	KWRANGE	A955	KYWRDFND	AA65	LARROW	0088
LASTRACK	0028	LASTSEC	0010	LATCH	C08C	LCRAM	04F8	LDRVNDX	0010
LOADACT	0002	LOADRD	44E4	LOC0	0000	LOWSCR	C054	LSLTNDX	000F
LV80MODE	0003	LVOLNDX	000E	MAIN	401A	MAIN1	4045	MAIN2	4064
MAIN3	407A	MAIN4	40AA	MAIN5	40AF	MAIN6	40B4	MAKENEG	4AAD
MARKER	4F39	MAXBTM	0018	MAXCH	0050	MAXWDTH	0028	MDPARMS	4F2D
MDSLOT0	4F24	MESG1A	C919	MESG1B	C91A	MESG2A	C91C	MESG2B	C925
MESG3A	C92C	MESG3B	C92F	MESG4A	C946	MESG4B	C949	MESG5A	C960
MESG5B	C963	MESG5C	C966	MESG5D	C969	MESG6	C96C	MESGCARD	0114
MESGDISK	0113	MESGS	C919	MINCV	0060	MIXCLR	C052	MNGDISK	BFF2
MODECMD	0051	MODEVAL	4BE8	MODOS3	C070	MONITOR	FF65	MOTOROFF	C088
MOTORON	C089	MSLOT	07F8	MSWAIT	4726	NAME SIZE	0018	NEGNUM	4F4A
NEGNUM2	4F4C	NEGONE	00FF	NEXTLINE	0004	NIBLBUFR	5C00	NIBLCMD	0057
NIBLMASK	000F	NIBLTBL	5096	NO	00CE	NODOS	CB0D	NODOSJMP	CB94
NOPAD	0000	NORMDISP	0000	OFFTBL	4F8C	ONTBL	4F84	OUT80COL	4BD7
OUTADRS	4BDF	OUTMOD1	4BC4	OUTMOD2	4BC6	OUTPORT	FE95	OUTTBL1	4BCB
OUTTBL2	4BD1	PAGE	4F45	PAGE08	0800	PAGE20	2000	PAGE40	4000
PAGEC0	C000	PAGEC9	C900	PAGES	4F2C	PAGESIZE	0100	PCMDMASK	000F
PDTBLH	4F6B	PDTBL	4F66	PHASEOFF	C080	PRBYTE	FDDA	PRINT	4B4A
PRINTRTN	4C2C	PRNT1BYT	4D09	PRNT1DEC	4D30	PRNT2BYT	4D0C	PRNT2DEC	4D36
PRNT3DEC	4D43	PRNTADR	4D18	PRNTBL	4BEA	PRNTBLH	4C0A	PRNTBL	4BFA
PRNTBR1	4BA2	PRNTBR2	4BA8	PRNTBR3	4BAD	PRNTBR4	4BBB	PRNTBUFR	4CE5
PRNTBYT	4D0E	PRNTBYTE	4D82	PRNTCLR	4CB8	PRNTCNTR	4CD3	PRNTDEC	4D39
PRNTDISP	4C78	PRNTGRPH	4DD1	PRNTHX	4D8B	PRNTHX2	4D8D	PRNTLOOP	4B59
PRNTMOD1	4B85	PRNTMOD2	4BA0	PRNTMOD3	4BBE	PRNTMODE	4C2D	PRNTNBYT	4D05
PRNTNDEC	4D4D	PRNTNIBL	4D00	PRNTNUM	4BE6	PRNTOUT	4BC4	PRNTOUT2	4BC8
PRNTPTR	00FC	PRNTRTN	4C1A	PRNTSAV	4BE5	PRNTSAVA	4C29	PRNTSAVX	4C27
PRNTSAVY	4C25	PRNTSCRN	4C97	PRTMESG	C9E1	PRTMESG0	C9E5	PRTMESGS	C9BF
PTR	001E	PTR1	0006	PTR2	0008	RAM1WE	C08B	RAM1WP	C088
RAM2WE	C083	RAM2WP	C080	RAMCARD	C084	RARROW	0095	RACT	4F29
RCBYPASS	4F2A	RCCMD	05F8	RCENTRY	C050	RCENTRY2	C054	RCEXIT	C087
RCEXIT2	C089	RCFORMAT	CE11	RCFORMT	C0D2	RCLSTRK	0020	RCLSTRK2	0040
RCOFF	0000	RCON	0080	RCPARMS	4F35	RCRDWRT	C0AC	RCRWINIT	CDDA
RCRWTS	CDA6	RCSLOT	C904	RCSLOT0	4F26	RCSLOT16	C902	RCSTATE	C906
RCSTRTRK	0003	RCWINDOW	C800	RDACT	4F28	RDADR	4829	RDBANK	0478
RDBANK2	C011	RDBOOT	C000	RDBOOT2	C04B	RDCMD	0578	RDCODE1	5500
RDCODE2	5600	RDCODE3	5C00	RDDR	0678	RDDR1	0000	RDDR2	0010

RDENTRY	C040	RDENTRY2	C044	RDENTRY3	C020	RDERR	488F	RDEXIT	C090
RDFORMAT	CD7C	RDIJMP	0110	RDIPL	CA0B	RDIPL2	CA4A	RDLCRAM	C012
RDMOD1	4618	RDMOD2	4637	RDMOD3	4642	RDMOD4	465F	RDMOD5	4661
RDMOD6	46B5	RDPAGECX	C900	RDPARMS	4F31	RDRVTLBL	C917	RDRWINIT	CD34
RDRWTS	CCF9	RDSECTR	C080	RDSLOT	C903	RDSLOT0	4F25	RDSLOT16	C901
RDSTATE	C905	RDTRACK	C081	RDWAIT	0028	RDWINDOW	C800	READCMD	0001
READISK	45FA	READKEY	4B09	READSECT	4731	RESTART	B744	RETURN	008D
ROM1WE	C089	ROM1WP	C08A	ROM2WE	C081	ROM2WP	C082	ROMBOOT	C05C
ROMENTRY	005C	ROMHOOK	C010	ROMSECTR	003D	ROMUHOOK	C018	RSEXIT	47CB
RSMOD1	4759	RSMOD2	476D	RSMOD3	4785	RSMOD4	479D	RSMOD5	47B3
RTNCMD	0050	RVSELEAV	C907	RWINITER	0008	RWNOERR	0000	RWSELC	C08E
RWSYNERR	0030	RWTS	03D9	RWTSENT	BD00	SAMOD1	4399	SAMOD2	43A0
SAMOD3	43AA	SAVEADRH	05F8	SAVEADRL	0578	SBMOD1	43F3	SBMOD2	43FA
SBMOD3	4404	SCRLMOD1	4EAD	SCRLMOD2	4EB0	SCRLMOD3	4EB4	SCRLMOD4	4ECD
SCRNCMD	0053	SCRNEOL	4ED1	SCRNEOP	4F03	SCRNHOME	4EFB	SCRNINIT	4E68
SCRNMOD1	4E49	SCRNMOD2	4E4C	SCRNMOD3	4E4E	SCRNMOD4	4E5D	SCRNSAVX	4E65
SCRNSAVY	4E63	SCROLL	4E80	SDMOD1	4361	SDMOD2	4365	SECFNDZ	002D
SECNDX	0005	SECTCHK	5C00	SECTCNT	4F41	SECTOR	4F3C	SEEKABS	46CF
SEEKABS1	4718	SEEKABS2	471B	SELCDRV	433E	SELCSLOT	42E8	SETKBD	FE89
SETNORM	FE84	SETPTR	4AF4	SETVID	FE93	SKEWTBL	4F70	SL16OFF	0003
SLOT	4F3E	SLOT16Z	002B	SLOTADRH	4F52	SLOTADRL	4F4E	SLOTNDX	0001
SLOTOFF	0000	SLTPARMS	4F2D	SPACE	00A0	SPCPAD	0080	SSMOD1	4308
SSMOD2	430C	SSMOD3	4310	SSMOD4	4314	STACK	0100	TABV	FB5B
TESTMD	414D	TESTRC	421C	TESTRD	41AD	TEXTMODE	0000	TEXTS	C989
TOGGLE	C066	TRACK	4F3B	TRACKS	4F3F	TRCKCNT	4F40	TRKFNDZ	002E
TRKMASK	003F	TRKNDX	0004	TX80MODE	0002	TXTCLR	C050	TXTSET	C051
UARROW	008B	USERMMSG	4971	UST3XRTN	CC6E	UST41RTN	CCA5	UST4XRTN	CCCE
USTDOS3X	CC4B	USTDOS41	CC6F	USTDOS4X	CCA6	VERSION	0005	VID80OFF	C00C
VOLEXPT	B7EB	VOLFNDZ	002F	VOLNDX	0003	VOLNUMBR	B5F9	VOLVAL	AA66
VRSN	0112	VRSN3.3	0033	VRSN4.1	0041	VRSN4.3	0043	VRSN4.5	0045
VTAB	FC22	VTABADRS	4BD9	WAIT	FCA8	WAITIME	0030	WNBDM	0023
WNDLFT	0020	WNDTOP	0022	WNDWDTH	0021	WRITCMD	0002	XFERNDX	000B
XMODE	04FB	YBASEHI	4FB6	YBASELO	4F9E	YES	00D9	ZERO	0000
ZEROPAD	0040	ZSECTOR	002B	ZTRACK	002A				

Symbols numerically sorted:

ZERO	0000	TEXTMODE	0000	SLOTOFF	0000	RWNOERR	0000	RDRV1	0000
RCOFF	0000	NORMDISP	0000	NOPAD	0000	LOC0	0000	INITSCRN	0000
INITACT	0000	EOLCLR	0000	DIRECT	0000	SLOTNDX	0001	READCMD	0001
INVRDISP	0001	INDIRECT	0001	HOMESCRN	0001	GRPHMODE	0001	EOPCLR	0001
DISPLAY	0001	CNECTACT	0001	ASCIIOFF	0001	WRITCMD	0002	TX80MODE	0002
LOADACT	0002	IGNORACT	0002	DRVNDX	0002	CXPGOFF	0002	VOLNDX	0003
SL16OFF	0003	RCSTRTRK	0003	LV80MODE	0003	TRKNDX	0004	NEXTLINE	0004
FORMTCMD	0004	VERSION	0005	SECNDX	0005	FNDOSLEN	0005	PTR1	0006
BUILD	0006	BLD4.5	0006	CHARCELL	0007	RWINITER	0008	PTR2	0008
BUFRNDX	0008	BLD4.3	0008	XFERNDX	000B	CMDNDX	000C	ERRNDX	000D
LVOLNDX	000E	PCMDMASK	000F	NIBLMASK	000F	LSLTNDX	000F	CMDMASK	000F
RDRV2	0010	LDRVNDX	0010	LASTSEC	0010	CATRACK	0011	NAMESIZE	0018
MAXBTM	0018	PTR	001E	CVMASK	001F	WNDLFT	0020	RCLSTRK	0020
WNDWDTH	0021	WNDTOP	0022	WNBDM	0023	CH	0024	CV	0025
BUFRADRZ	0026	RDWAIT	0028	MAXWDTH	0028	LASTRACK	0028	ZTRACK	002A
ZSECTOR	002B	SLOT16Z	002B	DATAFNDZ	002C	SECFNDZ	002D	TRKFNDZ	002E
VOLFNDZ	002F	WAITIME	0030	RWSYNERR	0030	INVFLG	0032	VRSN3.3	0033
BITMAP	0038	ROMSECTR	003D	BUFADR2Z	003E	TRKMASK	003F	ZEROPAD	0040
RCLSTRK2	0040	VRSN4.1	0041	VRSN4.3	0043	VRSN4.5	0045	BLD4.1	0046
IOBADR	004A	RTNCMD	0050	MAXCH	0050	MODECMD	0051	DISPCMD	0052
SCRNCMD	0053	CLRCMD	0054	CNTRCMD	0055	BUFRCMD	0056	NIBLCMD	0057
BYT1CMD	0058	BYT2CMD	0059	BYTNCMD	005A	ADRCMD	005B	ROMENTRY	005C
DEC1CMD	005C	DEC2CMD	005D	DEC3CMD	005E	DECNCMD	005F	MINCV	0060

INVRMASK	007F	ASCIMASK	007F	SPCPAD	0080	RCON	0080	ASCIFLAG	0080
CTRLD	0084	BELLCHAR	0087	LARROW	0088	DARROW	008A	UARROW	008B
RETURN	008D	CTRLQ	0091	RARROW	0095	ESCAPE	009B	SPACE	00A0
NO	00CE	YES	00D9	DATPTR	00EE	DATAPTR	00FA	PRNTPTR	00FC
NEGONE	00FF	STACK	0100	PAGESIZE	0100	RDJMP	0110	VRSN	0112
MESGDISK	0113	MESGCARD	0114	RWTS	03D9	GETIOCB	03E3	HOOKDOS	03EA
RDBANK	0478	DRV0TRK	0478	LCRAM	04F8	XMODE	04FB	SAVEADRL	0578
RDCMD	0578	SAVEADRH	05F8	RCCMD	05F8	RDDR	0678	DOSVRSN	0778
MSLOT	07F8	PAGE08	0800	BOOTADR	08FE	BOOTPGS	08FF	PAGE20	2000
PAGE40	4000	MAIN	401A	MAIN1	4045	MAIN2	4064	MAIN3	407A
MAIN4	40AA	MAIN5	40AF	MAIN6	40B4	DOJMP	414A	TESTMD	414D
TESTRD	41AD	TESTRC	421C	GETMDSLT	4269	GETRDSLT	4292	GETRCSLT	42BD
SELCSLOT	42E8	SSMOD1	4308	SSMOD2	430C	SSMOD3	4310	SSMOD4	4314
INITPRMS	4325	SELCDRV	433E	SDMOD1	4361	SDMOD2	4365	GETRDACT	4379
SAMOD1	4399	SAMOD2	43A0	SAMOD3	43AA	GETRCACT	43D3	SBMOD1	43F3
SBMOD2	43FA	SBMOD3	4404	INITRD	442F	LOADRD	44E4	INITDRIV	457E
READISK	45FA	RDMOD1	4618	RDMOD2	4637	RDMOD3	4642	RDMOD4	465F
RDMOD5	4661	RDMOD6	46B5	GETRCK	46BA	SEEKABS	46CF	SEEKABS1	4718
SEEKABS2	471B	MSWAIT	4726	READSECT	4731	RSMOD1	4759	RSMOD2	476D
RSMOD3	4785	RSMOD4	479D	RSMOD5	47B3	RSEXIT	47CB	ABRTMSG	47CD
DIFFMSG1	47F7	RDADR	4829	RDERR	488F	DIFFMSG2	4891	DIFFMSG3	48C3
DISKMESG	48F7	USERMESG	4971	MAKENEG	4AAD	CONTMESG	4AC6	SETPTR	4AF4
CLRPTR	4B02	READKEY	4B09	GETKEY	4B1F	CLRSCRN1	4B36	PRINT	4B4A
PRNTLOOP	4B59	PRNTMOD1	4B85	PRNTMOD2	4BA0	PRNTBR1	4BA2	PRNTBR2	4BA8
PRNTBR3	4BAD	PRNTBR4	4BBB	PRNTMOD3	4BBE	PRNTOUT	4BC4	OUTMOD1	4BC4
OUTMOD2	4BC6	PRNTOUT2	4BC8	OUTTBL1	4BCB	OUTTBL2	4BD1	OUT80COL	4BD7
VTABADRS	4BD9	OUTADRS	4BDF	PRNTSAV	4BE5	PRNTNUM	4BE6	MODEVAL	4BE8
FRMTVAL	4BE9	PRNTBL	4BEA	PRNTBLL	4BFA	PRNTBLH	4C0A	PRNTRTN	4C1A
PRNTSAVY	4C25	PRNTSAVX	4C27	PRNTSAVA	4C29	PRNTRTN	4C2C	PRNTMODE	4C2D
PRNTDISP	4C78	PRNTSCRN	4C97	PRNTCLR	4CB8	PRNTCNTR	4CD3	PRNTBUFR	4CE5
PRNTNIBL	4D00	PRNTNBYT	4D05	PRNT1BYT	4D09	PRNT2BYT	4D0C	PRNTBYT	4D0E
PRNTADR	4D18	PRNT1DEC	4D30	PRNT2DEC	4D36	PRNTDEC	4D39	PRNT3DEC	4D43
PRNTNDEC	4D4D	PRNTBYTE	4D82	PRNTHX	4D8B	PRNTHX2	4D8D	HEXTODEC	4D98
HEXTODC2	4D9A	GETDIGIT	4DB2	PRNTGRPH	4DD1	SCRNMOD1	4E49	SCRNMOD2	4E4C
SCRNMOD3	4E4E	SCRNMOD4	4E5D	SCRNSAVY	4E63	SCRNSAVX	4E65	SCRNINIT	4E68
SCROLL	4E80	SCRNMOD1	4EAD	SCRNMOD2	4EB0	SCRNMOD3	4EB4	SCRNMOD4	4ECD
SCRNEOL	4ED1	EOLMOD1	4EE5	EOLMOD2	4EE9	SCRNHOME	4EFB	SCRNEOP	4F03
MDSLOT0	4F24	RDSLOT0	4F25	RCSLOT0	4F26	DRIVES	4F27	RDACT	4F28
RCACT	4F29	RCBYPASS	4F2A	COUNT	4F2B	PAGES	4F2C	SLTPARMS	4F2D
MDPARMS	4F2D	RDPARMS	4F31	RCPARMS	4F35	MARKER	4F39	TRACK	4F3B
SECTOR	4F3C	DRIVE	4F3D	SLOT	4F3E	TRACKS	4F3F	TRCKCNT	4F40
SECTCNT	4F41	BUFRH	4F42	FNAMCNT	4F43	FILE	4F44	PAGE	4F45
HEXNUM	4F46	HEXNUM2	4F48	NEGNUM	4F4A	NEGNUM2	4F4C	SLOTADRL	4F4E
SLOTADRH	4F52	DRVADRL	4F56	DRVADRH	4F58	ACT1ADRL	4F5A	ACT1ADRH	4F5D
ACT2ADRL	4F60	ACT2ADRH	4F63	PDTBLL	4F66	PDTBLH	4F6B	SKEWTBL	4F70
DRVTL	4F80	ONTBL	4F84	OFFTBL	4F8C	DECTBLL	4F94	DECTBLH	4F99
YBASELO	4F9E	YBASEHI	4FB6	NIBLTBL	5096	BITBL	5100	CHARTBL	5200
RDCODE1	5500	RDCODE2	5600	SECTCHK	5C00	RDCODE3	5C00	NIBLBUFR	5C00
KWRANGE	A955	KYWRDFND	AA65	VOLVAL	AA66	VOLNUMBR	B5F9	BOOTCODE	B600
RESTART	B744	CALLRWTS	B7B5	VOLEXPT	B7EB	RWTSENT	BD00	INITADR	BED9
BLDVRSN	BFF0	BLDNMBR	BFF1	MNGDISK	BFF2	INITDOS	BFF8	DISKTBL	BFFB
RDBOOT	C000	PAGEC0	C000	KEY	C000	VID80OFF	C00C	ALTCHOFF	C00E
ROMHOOK	C010	CLRKEY	C010	RDBANK2	C011	RDLGRAM	C012	ROMUHOOK	C018
RDENTRY3	C020	RDENTRY	C040	RDENTRY2	C044	RDBOOT2	C04B	TXTCLR	C050
RCENTRY	C050	TXTSET	C051	MIXCLR	C052	RCENTRY2	C054	LOWSCR	C054
HIRES	C057	ROMBOOT	C05C	TOGGLE	C066	MODOS3	C070	RDSECTR	C080
RAM2WP	C080	PHASEOFF	C080	BOOTEXIT	C080	ROM2WE	C081	RDTRACK	C081
ROM2WP	C082	RAM2WE	C083	RAMCARD	C084	RCEXIT	C087	RAM1WP	C088
MOTOROFF	C088	ROM1WE	C089	RCEXIT2	C089	MOTORON	C089	ROM1WP	C08A
DRVENG	C08A	RAM1WE	C08B	LATCH	C08C	RWSEL	C08E	RDEXIT	C090
HOOKEEXIT	C09E	EXIT3	C0A5	RCRDWRT	C0AC	RCFORMT	C0D2	RDWINDOW	C800

RCWINDOW	C800	RDPAGECX	C900	PAGEC9	C900	RDSLOT16	C901	RCSLOT16	C902
RDSLOT	C903	RCSLOT	C904	RDSTATE	C905	RCSTATE	C906	RVSELEAV	C907
RDRVTL	C917	MESGS	C919	MESG1A	C919	MESG1B	C91A	MESG2A	C91C
MESG2B	C925	MESG3A	C92C	MESG3B	C92F	MESG4A	C946	MESG4B	C949
MESG5A	C960	MESG5B	C963	MESG5C	C966	MESG5D	C969	MESG6	C96C
TEXTS	C989	IOTEXT1A	C989	IOTEXT1B	C98C	IOTEXT2A	C98F	IOTEXT2B	C992
IOTEXT2C	C995	IOTEXT2D	C998	IOTEXT3A	C99B	IOTEXT3B	C99E	IOTEXT3C	C9A1
IOTEXT3D	C9A4	IOTEXT4A	C9A7	IOTEXT4B	C9AA	IOTEXT4C	C9AD	IOTEXT4D	C9B0
IOTEXT5A	C9B3	IOTEXT5B	C9B6	IOTEXT5C	C9B9	IOTEXT5D	C9BC	PRTMESGS	C9BF
PRTMSG	C9E1	PRTMSG0	C9E5	GETDISKC	C9F0	GETDISKS	C9F2	DOIJMP	C9F6
RDIPL	CA0B	RDIPL2	CA4A	CHKDOS3X	CAC0	CHKRC3X	CB00	FNDOS	CB0A
NODOS	CB0D	CHKDOS43	CB0F	CHKDOS45	CB25	CHKDOS4X	CB3D	CHKRC4X	CB70
NODOSJMP	CB94	FNDOSJMP	CB97	CHKDOS41	CB9A	CHKRC41	CBD6	DOTOGGLE	CBFF
USTDOS3X	CC4B	UST3XRTN	CC6E	USTDOS41	CC6F	UST41RTN	CCA5	USTDOS4X	CCA6
UST4XRTN	CCCE	INITDAT	CCCF	DOMODOS3	CCDD	RDRWTS	CCF9	RDRWINIT	CD34
RDFORMAT	CD7C	RCRWTS	CDA6	RCRWINIT	CDDA	RCFORMAT	CE11	CLRROM	CFFF
APSNEW	D64B	BASIC	E003	INIT	FB2F	TABV	FB5B	VTAB	FC22
CLREOP	FC42	HOME	FC58	CLREOL	FC9C	WAIT	FCA8	CROUT	FD8E
PRBYTE	FDDA	COUT	FDED	SETNORM	FE84	SETKBD	FE89	SETVID	FE93
OUTPORT	FE95	BELL	FF3A	MONITOR	FF65				