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LLOAD SIDER.L,A\$4000

*** End of Pass 1

LLOAD SIDER1.L,A\$4000

LLOAD SIDER2.L,A\$4000

LLOAD SIDER3.L,A\$4000

LLOAD SIDER4.L,A\$4000

LLOAD SIDER5.L,A\$4000

LLOAD SIDER6.L,A\$4000

LLOAD SIDER7.L,A\$4000

LLOAD SIDER.L,A\$4000

*** End of Pass 2

```
0800      1          ttl "Sider Source Code, SIDER.L"
0800      2          src "SIDER.L"
0800      3      ;
0800      4      ;
0800      5      ; SIDER.L
0800      6      ;
0800      7      ;
0800      8      ; Sider ROM 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      ;
0800     36      ; Structure and contents of a 10 MB Sider.
0800     37      ;
0800     38      ;      1 block = 256 bytes (1 sector)
0800     39      ;      1 track = 16 blocks (sectors)
0800     40      ;      1 volume = 35 tracks
0800     41      ;      1 volume = 560 blocks (sectors)
0800     42      ; 10 MB Sider = 69 volumes
0800     43      ; 10 MB Sider = 2415 tracks
0800     44      ; 10 MB Sider = 38640 blocks (sectors)
0800     45      ; pre-volume = 464 blocks (sectors)
0800     46      ;      total = 39104 blocks (sectors)
0800     47      ;
0800     48      ;
0800     49      ; block 0          - Sider boot block
0800     50      ; block 1          - Sider parameter block
0800     51      ; block 2-36       - DOS 3.3 boot image (35 blocks)
0800     52      ; block 37-84     - RAM card image (DOS) (48 blocks)
0800     53      ; block 85-135    - CP/M boot image (Pt#1) (51 blocks)
0800     54      ; block 136-183   - DOS 4.3H boot image (48 blocks)
0800     55      ; block 184-231   - DOS SPR1 boot image (48 blocks)
0800     56      ; block 232-255   - reserved for future use (24 blocks)
0800     57      ; block 256-258   - CP/M boot image (Pt#2) (3 blocks)
0800     58      ; block 259-263   - space before DOS images (5 blocks)
0800     59      ; block 264-311   - DOS 4.5L boot image (48 blocks)
0800     60      ; block 312-359   - DOS 4.5H boot image (48 blocks)
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0800      61 ; block 360-407      - DOS 4.1L boot image (48 blocks)
0800      62 ; block 408-455      - DOS 4.1H boot image (48 blocks)
0800      63 ; block 456-463      - free area (8 blocks)
0800      64 ; block 464-1023     - volume 0 (560 blocks)
0800      65 ; block 1024-39103   - volumes 1-68 (38080 blocks)
0800      66 ; block 39136        - park heads block
0800      67 ;
0800      68 ;
0800      69 ;
0800      70 ; Volume Number to DOS Version assignment.
0800      71 ;
0800      72 ; Volume   DOS Version   Blocks
0800      73 ; -----
0800      74 ;      69      DOS 4.5L      264-311
0800      75 ;      70      DOS 4.5H      312-359
0800      76 ;      71      DOS 4.3H      136-183
0800      77 ;      72      DOS 4.1L      360-407
0800      78 ;      73      DOS 4.1H      408-455
0800      79 ;      74      DOS SPR1      184-231
0800      80 ;
0800      81 ;
0800      82 ;
0800      83 ; General DCB structures and their content.
0800      84 ;
0800      85 ; DOSDCB:
0800      86 ;      byt DCBREAD      ; boot read command (0x08)
0800      87 ;
0800      88 ;      hex 00      ; ATA high address byte
0800      89 ;      hex 00      ; ATA medium address byte
0800      90 ;      hex 00      ; ATA low address byte
0800      91 ;
0800      92 ;      hex 01      ; 256-byte block count
0800      93 ;      hex 00      ; step option
0800      94 ;
0800      95 ;      adr PAGE08      ; buffer address (0x0800)
0800      96 ;
0800      97 ;
0800      98 ; STATDCB:
0800      99 ;      byt DCBSTAT      ; status command (0x03)
0800     100 ;
0800     101 ;      hex 02      ; ATA high address byte
0800     102 ;      hex 00      ; ATA medium address byte
0800     103 ;      hex 00      ; ATA low address byte
0800     104 ;
0800     105 ;      hex 00      ; 256-byte block count
0800     106 ;      hex 00      ; step option
0800     107 ;
0800     108 ;      adr STATBUF      ; buffer address (0x0130)
0800     109 ;
0800     110 ;
0800     111 ; RWTSDCB:
0800     112 ;      hex 00      ; DCB command (read, write,
0800     113 ;                      init)
0800     114 ;      hex 00      ; ATA high address
0800     115 ;      hex 00      ; ATA medium address
0800     116 ;      hex 00      ; ATA low address
0800     117 ;
0800     118 ;      hex 01      ; 256-byte block count
0800     119 ;      hex 00      ; step option
0800     120 ;
0800     121 ;      adr BUFFER      ; buffer address

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0800      122 ;
0800      123 ;
0800      124 ; PARKDCB:
0800      125 ;      byt DCBPARK      ; park command (0x0B)
0800      126 ;
0800      127 ;      hex 00      ; ATA high address
0800      128 ;      hby LASTSEC    ; ATA medium address (0x98)
0800      129 ;      byt LASTSEC    ; ATA low address (0xE0)
0800      130 ;
0800      131 ;      hex 00      ; 256-byte block count
0800      132 ;      hex 07      ; step option
0800      133 ;
0800      134 ;      hex 00      ; /buffer, not used
0800      135 ;      hex 00      ; #buffer, not used
0800      136 ;
0800      137 ;
0800      138 ;
0020      139 WNDLFT      epz $20
0021      140 WNDWDTH    epz $21
0022      141 WNDTOP     epz $22
0023      142 WNDBTM     epz $23
0024      143 CH         epz $24
0025      144 CV         epz $25
0800      145 ;
0026      146 ZPTR       epz $26
0026      147 BUFRADRZ   epz $26
002A      148 VERSION    epz $2A
002B      149 SLOT16Z    epz $2B
002C      150 ZPTR1      epz $2C
002E      151 ZPTR2      epz $2E
0800      152 ;
0031      153 MESSAGE    epz $31
0032      154 INVFLG     epz $32
003C      155 DATAPTR    epz $3C
003D      156 ROMSECTR   epz $3D
003E      157 PRNTPTR    epz $3E
0800      158 ;
004A      159 IOBADR     epz $4A
0800      160 ;
00FA      161 DATPTR     epz $FA      ; Disk Address Table pointer
00FC      162 VALUE      epz $FC
0800      163 ;
0800      164           enz
0800      165 ;
0045      166 SD.VRSN     equ $45
0005      167 SD.BLD      equ $05
0800      168 ;
0033      169 VRSN3.3     equ $33
0800      170 ;
0041      171 VRSN4.1     equ $41
0046      172 BLD4.1      equ $46
0800      173 ;
0043      174 VRSN4.3     equ $43
0008      175 BLD4.3      equ $08
0800      176 ;
0045      177 VRSN4.5     equ $45
0005      178 BLD4.5      equ $05
0800      179 ;
0001      180 READCMD     equ $01
0002      181 WRITCMD     equ $02
0004      182 FORMTCMD    equ $04

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0800      183      ;
0000      184      SLOTOFF equ $00
0001      185      ASCIIIOFF equ $01
0002      186      CXPGOFF equ $02
0003      187      SL16OFF equ $03
0800      188      ;
0001      189      SLOTNDX equ $01
0002      190      DRVNDX equ $02
0003      191      VOLNDX equ $03
0004      192      TRKNDX equ $04
0005      193      SECNDX equ $05
0008      194      BUFRNDX equ $08
000B      195      XFERNDX equ $0B
000C      196      CMDNDX equ $0C
000D      197      ERRNDX equ $0D
000E      198      LVOLNDX equ $0E
000F      199      LSLTNDX equ $0F
0010      200      LDRVNDX equ $10
0800      201      ;
0000      202      ZERO equ $00
0000      203      CNECTACT equ $00
0001      204      INITACT equ $01
0002      205      ABORTACT equ $02
0003      206      RCSTRTRK equ $03
0004      207      NEXTLINE equ $04
0007      208      CHARCELL equ $07
0007      209      SLOTMASK equ $07
000F      210      CMDMASK equ $0F
000F      211      NIBLMASK equ $0F
000F      212      PCMDMASK equ $0F
0018      213      NAMESIZE equ $18
001F      214      CVMASK equ $1F
003F      215      TRKMASK equ $3F
007F      216      INVRMASK equ $7F
007F      217      ASCIMASK equ $7F
0080      218      ASCIFLAG equ $80
00DF      219      LWRMASK equ $DF
00E0      220      LWRCASE equ $E0
00FF      221      MODBYTE equ $FF
00FF      222      NEGONE equ $FF
0800      223      ;
0004      224      STATSIZE equ 4
0008      225      DCBSIZE equ 8
0010      226      MAXSECS equ 16
0011      227      VTOCTRK equ 17
0023      228      MAXTRKS equ 35
004A      229      MAXVOLS equ 74 ; allow boot of DOS 4.3H
0800      230      ;
0040      231      DONEMASK equ $40
005C      232      ROMENTRY equ $5C
0800      233      ;
01D0      234      VOLSTRT equ 464
0230      235      VOLSIZE equ MAXTRKS*MAXSECS
98E0      236      LASTSEC equ $98E0 ; 39136
0800      237      ;
0088      238      DOS4.3H equ 136 ; 48 blocks for boot image
00B8      239      DOSSPR1 equ 184 ; 48 blocks for boot image
0108      240      DOS4.5L equ 264 ; 48 blocks for boot image
0138      241      DOS4.5H equ 312 ; 48 blocks for boot image
0168      242      DOS4.1L equ 360 ; 48 blocks for boot image
0198      243      DOS4.1H equ 408 ; 48 blocks for boot image

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0800      244      ;
0045      245      VOL4.5L      equ      69
0046      246      VOL4.5H      equ      70
0047      247      VOL4.3H      equ      71
0048      248      VOL4.1L      equ      72
0049      249      VOL4.1H      equ      73
004A      250      VOLSPR1      equ      74
0800      251      ;
0018      252      STATOK      equ      $18
007F      253      STATMASK      equ      $7F
0800      254      ;
0000      255      TEXTMODE      equ      $00
0001      256      GRPHMODE      equ      $01
0002      257      TX80MODE      equ      $02
0003      258      LV80MODE      equ      $03
0800      259      ;
0000      260      NORMDISP      equ      $00
0001      261      INVRDISP      equ      $01
0800      262      ;
0000      263      INITSCRN      equ      $00
0001      264      HOMESCRN      equ      $01
0800      265      ;
0000      266      EOLCLR      equ      $00
0001      267      EOPCLR      equ      $01
0800      268      ;
0000      269      DIRECT      equ      $00
0001      270      INDIRECT      equ      $01
0800      271      ;
0000      272      NOPAD      equ      $00
0040      273      ZEROPAD      equ      $40
0080      274      SPCPAD      equ      $80
0800      275      ;
0028      276      MAXWDTH      equ      $28
0050      277      MAXCH      equ      $50
0060      278      MINCV      equ      $60
0800      279      ;
0050      280      RTNCMD      equ      $50
0051      281      MODECMD      equ      $51
0052      282      DISPCMD      equ      $52
0053      283      SCRNCMD      equ      $53
0054      284      CLRCMD      equ      $54
0055      285      CNTRCMD      equ      $55
0056      286      BUFRCMD      equ      $56
0057      287      NIBLCMD      equ      $57
0058      288      BYT1CMD      equ      $58
0059      289      BYT2CMD      equ      $59
005A      290      BYTNCMD      equ      $5A
005B      291      ADRCMD      equ      $5B
005C      292      DEC1CMD      equ      $5C
005D      293      DEC2CMD      equ      $5D
005E      294      DEC3CMD      equ      $5E
005F      295      DECNCMD      equ      $5F
0800      296      ;
0084      297      CTRLD      equ      $84
0087      298      BELLCHAR      equ      $87
0088      299      LARROW      equ      $88
008A      300      DARROW      equ      $8A
008B      301      UARROW      equ      $8B
008D      302      RETURN      equ      $8D
0091      303      CTRLQ      equ      $91
0095      304      RARROW      equ      $95
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```
009B      305  ESCAPE      equ  $9B
00A0      306  SPACE      equ  $A0
0800      307  ;
0000      308  RWNOERR    equ  $00          ; RWTS no error
0008      309  RWINITER   equ  $08          ; RWTS initialization error
0030      310  RWSYNERR    equ  $30          ; RWTS syntax error (new)
0040      311  RWDRVERR    equ  $40          ; RWTS drive error
0800      312  ;
0000      313  DCBFLUSH    equ  $00
0003      314  DCBSTAT     equ  $03
0008      315  DCBREAD     equ  $08
000A      316  DCBWRITE    equ  $0A
000B      317  DCBPARK     equ  $0B
000C      318  DCBINIT     equ  $0C
0020      319  DCBSTOP     equ  $20
0080      320  DCBSTART    equ  $80
0800      321  ;
0100      322  PAGESIZE    equ  $100
0100      323  STACK       equ  $100
0800      324  ;
0110      325  EXITADR     equ  $110          ; 2 bytes
0800      326  ;
0112      327  LCRAM       equ  $112
0800      328  ;
0112      329  VAL10       equ  $112
0113      330  VAL01       equ  $113
0800      331  ;
0114      332  WAITCNT1    equ  $114
0115      333  WAITCNT2    equ  $115
0800      334  ;
0316      335  SAVERSTL    equ  $316          ; saved RESTART address
0317      336  SAVERSTH    equ  $317
0800      337  ;
0118      338  STKCODE     equ  $118          ; 12 bytes
0800      339  ;
03D0      340  DOSWARM     equ  $3D0
03D3      341  DOSCOLD     equ  $3D3
03EA      342  HOOKDOS     equ  $3EA
0800      343  ;
04FB      344  XMODE       equ  $4FB
0800      345  ;
0800      346  ;
0800      347  ; Public slot variables.
0800      348  ;
0478      349  SDSLOT      equ  $478          ; sider slot number
04F8      350  SDSLOT16    equ  $4F8          ; slot number * 16
0578      351  SECTOR      equ  $578          ; requested sector
05F8      352  TRACK       equ  $5F8          ; requested track
0678      353  VOLUME      equ  $678          ; requested volume
06F8      354  COMMAND     equ  $6F8          ; command to process
0778      355  SAVXREG     equ  $778          ; save X-reg value
07F8      356  SDPAGECX    equ  $7F8          ; 0xCs, s=slot (MSLOT)
0800      357  ;
0800      358  ;
0800      359  ; Private slot variables using SDSLOT for index.
0800      360  ;
0578      361  SAVEADRL    equ  $578          ; saved return address
05F8      362  SAVEADRH    equ  $5F8
0778      363  DOSVRSN     equ  $778          ; DOS version now booted
07F8      364  DOSVOLM     equ  $7F8          ; DOS volume now booted
0800      365  ;
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0800      366      ;
08FE      367      BOOTADR      equ  $8FE
08FF      368      BOOTPGS      equ  $8FF
0800      369      ;
0800      370      ;
0800      371      ; DOS 3.3 addresses
0800      372      ;
A0DA      373      SDFMOD      equ  $A0DA
AA65      374      KYWRDFND      equ  $AA65
AA66      375      VOLVAL      equ  $AA66
AD9D      376      CATHMOD1      equ  $AD9D
AE16      377      CATHMOD2      equ  $AE16
B202      378      LCDMOD      equ  $B202
B5F9      379      VOLNUMBR      equ  $B5F9
B744      380      RESTART      equ  $B744
B7B5      381      CALLRWTS      equ  $B7B5
B7EB      382      VOLEXPT      equ  $B7EB
BD00      383      RWTSENT      equ  $BD00
0800      384      ;
0800      385      ;
0800      386      ; DOS 4.1 routine addresses
0800      387      ;
BED9      388      INITADR      equ  $BED9
0800      389      ;
BFF8      390      INITDOS      equ  $BFF8
BFFB      391      DISKTBL      equ  $BFFB
0800      392      ;
0800      393      ;
0800      394      ; DOS 4.3/5 routine addresses.
0800      395      ;
BFF0      396      BLDVRSN      equ  $BFF0
BFF1      397      BLDNMBR      equ  $BFF1
0800      398      ;
BFF2      399      MNGDISK      equ  $BFF2
BFFC      400      BCFGNDX      equ  $BFFC
0800      401      ;
0800      402      ;
0800      403      PAGE08      equ  $0800
1000      404      PAGE10      equ  $1000
2000      405      PAGE20      equ  $2000
4000      406      PAGE40      equ  $4000
BF00      407      PAGEBF      equ  $BF00
C000      408      PAGEC0      equ  $C000
C800      409      PAGEC8      equ  $C800
0800      410      ;
C000      411      KEY          equ  $C000
C00C      412      VID80OFF      equ  $C00C
C00E      413      ALTCHOFF      equ  $C00E
C010      414      CLRKEY      equ  $C010
C012      415      RDLCRAM      equ  $C012
0800      416      ;
C050      417      TXTCLR      equ  $C050
C051      418      TXTSET      equ  $C051
C052      419      MIXCLR      equ  $C052
C054      420      LOWSCR      equ  $C054
C057      421      HIRES      equ  $C057
0800      422      ;
C081      423      ROM2WE      equ  $C081
C082      424      ROM2WP      equ  $C082
C089      425      ROM1WE      equ  $C089
C08A      426      ROM1WP      equ  $C08A
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```
C08B      427  RAM1WE      equ  $C08B
0800      428  ;
C080      429  SDINPUT    equ  $C080
C081      430  SDOUTPUT   equ  $C081
0800      431  ;
CFFF      432  CLRROM     equ  $CFFF
0800      433  ;
D64B      434  APSNEW     equ  $D64B
0800      435  ;
FB2F      436  INIT       equ  $FB2F
FC22      437  VTAB       equ  $FC22
FC42      438  CLREOP     equ  $FC42
FC58      439  HOME       equ  $FC58
FC9C      440  CLREOL     equ  $FC9C
FD0C      441  RDKEY      equ  $FD0C
FDE3      442  PRHEX      equ  $FDE3
FDED      443  COUT       equ  $FDED
FE84      444  SETNORM     equ  $FE84
FE89      445  SETKBD     equ  $FE89
FE93      446  SETVID     equ  $FE93
FE95      447  OUTPORT    equ  $FE95
FF3A      448  BELL       equ  $FF3A
FF65      449  MONITOR    equ  $FF65
0800      450  ;
0800      451  ;
0800      452              icl  "SIDER1.L"
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LLOAD SIDER1.L,A$4000
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0800          1          ttl "Sider Source Code, SIDER1.L"
0800          2          ;
0800          3          ;
0800          4          ; SIDER1.L
0800          5          ;
0800          6          ;
0001          7  DISPLAY equ GRPHMODE          ; graphics mode ON
0800          8          ;
0800          9          ;
4000         10          org PAGE40
4000         11          obj PAGE10
4000         12          usr
4000         13          ;
4000         14          ;
4000 D8       15          cld
4001         16          ;
4001 8D 82 C0  17          sta ROM2WP
4004         18          ;
4004 20 05 45  19          jsr PRINT
4007         20          .if DISPLAY=TEXTMODE
4007         21          byt MODECMD,TEXTMODE
4007         22          .fi
4007         23          .if DISPLAY=GRPHMODE
4007 8D       24          byt RETURN
4008 51 01     25          byt MODECMD,GRPHMODE
400A         26          .fi
400A         27          .if DISPLAY=TX80MODE
400A         28          byt MODECMD,TX80MODE
400A         29          .fi
400A 52 00     30          byt DISPCMD,NORMDISP
400C 53 00     31          byt SCRNCMD,INITSCRN
400E 53 01     32          byt SCRNCMD,HOMESCRN
4010 50        33          byt RTNCMD
4011         34          ;
4011 20 4B D6  35          jsr APSNEW
4014 20 EA 03  36          jsr HOOKDOS
4017 20 F1 44  37          jsr CLRSCRN1
401A         38          ;
401A         39          ;
401A 20 05 45  40  MAIN    jsr PRINT
401D 0A        41          hex 0A
401E D3 E9 E4  42          asc "Sider Connect Program"
4021 E5 F2 A0
4024 C3 EF EE
4027 EE E5 E3
402A F4 A0 D0
402D F2 EF E7
4030 F2 E1 ED
4033 50        43          byt RTNCMD
4034         44          ;
4034 20 EC 40  45  ^1      jsr GETSDSLT
4037 90 15     46          bcc >3
4039         47          ;
4039 20 0E 42  48          jsr ABRTMESG
403C B0 F6     49          bcs <1
403E         50          ;
403E 20 05 45  51  ^2      jsr PRINT
4041 51 00     52          byt MODECMD,TEXTMODE
4043 52 00     53          byt DISPCMD,NORMDISP
4045 53 00     54          byt SCRNCMD,INITSCRN

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4047 53 01      55      byt SCRNCMD,HOMESCRN
4049 8D        56      byt RETURN
404A 50        57      byt RTNCMD
404B          58      ;
404B 4C D0 03  59      jmp DOSWARM
404E          60      ;
404E 20 88 40  61      ^3    jsr TESTSD
4051          62      ;
4051          63      ;      bcs <1
4051 EA        64      nop
4052 EA        65      nop
4053          66      ;
4053 20 6A 41  67      ^4    jsr GETSDACT
4056 B0 DC     68      bcs <1
4058          69      ;
4058 AD E1 48  70      lda SDACT
405B C9 02     71      cmp #ABORTACT
405D D0 07     72      bne >5
405F          73      ;
405F 20 0E 42  74      jsr ABRTMSG
4062 B0 EF     75      bcs <4
4064          76      ;
4064 90 D8     77      bcc <2
4066          78      ;
4066 20 C5 41  79      ^5    jsr INITSD
4069          80      ;
4069 20 38 42  81      jsr USERMSG
406C          82      ;
406C 20 81 44  83      jsr CONTMMSG
406F          84      ;
406F 20 05 45  85      jsr PRINT
4072 51 00     86      byt MODECMD,TEXTMODE
4074 52 00     87      byt DISPCMD,NORMDISP
4076 53 00     88      byt SCRNCMD,INITSCRN
4078 53 01     89      byt SCRNCMD,HOMESCRN
407A 8D        90      byt RETURN
407B 50        91      byt RTNCMD
407C          92      ;
407C A9 00     93      lda #ZERO
407E 85 26     94      sta ZPTR
4080          95      ;
4080 AD E5 48  96      lda SDPARMS+CXPGOFF
4083 85 27     97      sta ZPTR+1
4085          98      ;
4085          99      ;      jmp DOSWARM
4085         100      ;
4085 6C 26 00 101      jmp (ZPTR)
4088         102      ;
4088         103      ;
4088 A0 00     104      TESTSD  ld y #ZERO
408A 84 26     105      sty ZPTR
408C         106      ;
408C AD E5 48 107      lda SDPARMS+CXPGOFF
408F 85 27     108      sta ZPTR+1
4091         109      ;
4091 B9 00 55 110      ^1    lda SDCODE2,Y
4094 91 26     111      sta (ZPTR),Y
4096         112      ;
4096 48        113      pha
4097 68        114      pla
4098         115      ;

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4098 D1 26      116      cmp (ZPTR),Y
409A D0 08      117      bne >2
409C           118      ;
409C C8         119      iny
409D D0 F2      120      bne <1
409F           121      ;
409F 2C FF CF   122      bit CLRROM
40A2           123      ;
40A2 18         124      clc
40A3           125      ;
40A3 60         126      rts
40A4           127      ;
40A4 2C FF CF   128      ^2 bit CLRROM
40A7           129      ;
40A7 20 05 45   130      jsr PRINT
40AA 04 72      131      hex 0472
40AC D4 E8 E9   132      asc "This is NOT a Sider Drive Slot"
40AF F3 A0 E9
40B2 F3 A0 CE
40B5 CF D4 A0
40B8 E1 A0 D3
40BB E9 E4 E5
40BE F2 A0 C4
40C1 F2 E9 F6
40C4 E5 A0 D3
40C7 EC EF F4
40CA 05 73      133      hex 0573
40CC EF F2 A0   134      asc "or the Sider is Powered OFF"
40CF F4 E8 E5
40D2 A0 D3 E9
40D5 E4 E5 F2
40D8 A0 E9 F3
40DB A0 D0 EF
40DE F7 E5 F2
40E1 E5 E4 A0
40E4 CF C6 C6
40E7 50         135      byt RTNCMD
40E8           136      ;
40E8 20 81 44   137      jsr CONTMSG
40EB           138      ;
40EB 60         139      rts
40EC           140      ;
40EC           141      ;
40EC 20 05 45   142      GETSDSLT jsr PRINT
40EF 00 66      143      hex 0066
40F1 54 01      144      byt CLRCMD,EOPCLR
40F3 D3 E9 E4   145      asc "Sider Slot:"
40F6 E5 F2 A0
40F9 D3 EC EF
40FC F4 BA
40FE 50         146      byt RTNCMD
40FF           147      ;
40FF AE DF 48   148      ldx SDSLOT0
4102 A0 B4      149      ldy #"4"
4104           150      ;
4104 20 15 41   151      jsr SELCSLOT
4107 B0 0B      152      bcs >1
4109           153      ;
4109 8E DF 48   154      stx SDSLOT0
410C           155      ;
410C A0 00      156      ldy #SDPARMS-SLTPARMS

```

```

410E A9 04      157      lda #4
4110           158      ;
4110 20 52 41   159      jsr INITPRMS
4113           160      ;
4113 18         161      clc
4114           162      ;
4114 60         163      ^1      rts
4115           164      ;
4115           165      ;
4115 8C 37 41   166      SELCSLOT sty SSMOD1+2
4118           167      ;
4118 C8         168      iny
4119 8C 3B 41   169      sty SSMOD2+2
411C           170      ;
411C C8         171      iny
411D 8C 3F 41   172      sty SSMOD3+2
4120           173      ;
4120 C8         174      iny
4121 8C 43 41   175      sty SSMOD4+2
4124           176      ;
4124 8A         177      ^1      txa
4125 29 03      178      and #3
4127 AA         179      tax
4128           180      ;
4128 BC EC 48    181      ldy SLOTADRL,X
412B BD F0 48    182      lda SLOTADRH,X
412E           183      ;
412E 20 AF 44    184      jsr SETPTR
4131           185      ;
4131 20 05 45    186      jsr PRINT
4134 11         187      hex 11
4135 52 00      188      SSMOD1 byt DISPCMD,NORMDISP
4137 B4         189      asc "4"
4138 18         190      hex 18
4139 52 00      191      SSMOD2 byt DISPCMD,NORMDISP
413B B5         192      asc "5"
413C 1F        193      hex 1F
413D 52 00      194      SSMOD3 byt DISPCMD,NORMDISP
413F B6         195      asc "6"
4140 26         196      hex 26
4141 52 00      197      SSMOD4 byt DISPCMD,NORMDISP
4143 B7         198      asc "7"
4144 52 00      199      byt DISPCMD,NORMDISP
4146 50         200      byt RTNCMD
4147           201      ;
4147 20 BD 44    202      jsr CLRPTR
414A           203      ;
414A 20 C4 44    204      jsr READKEY
414D           205      ;
414D B0 02      206      bcs >2
414F D0 D3      207      bne <1
4151           208      ;
4151 60         209      ^2      rts
4152           210      ;
4152           211      ;
4152 6D DF 48    212      INITPRMS adc SDSLOT0
4155 99 E3 48    213      sta SLTPARMS+SLOTOFF,Y
4158           214      ;
4158 09 B0       215      ora #"0"
415A 99 E4 48    216      sta SLTPARMS+ASCIIOFF,Y
415D           217      ;

```

```

415D 49 70      218      eor #$70
415F 99 E5 48   219      sta SLTPARMS+CXPGOFF,Y
4162           220      ;
4162 0A         221      asl
4163 0A         222      asl
4164 0A         223      asl
4165 0A         224      asl
4166           225      ;
4166 99 E6 48   226      sta SLTPARMS+SL16OFF,Y
4169           227      ;
4169 60         228      rts
416A           229      ;
416A           230      ;
416A 20 05 45   231  GETSDACT jsr PRINT
416D 05 6C      232      hex 056C
416F 54 01      233      byt CLRCMD,EOPCLR
4171 D3 E9 E4   234      asc "Sider:"
4174 E5 F2 BA
4177 50         235      byt RTNCMD
4178           236      ;
4178 AE E1 48   237      ldx SDACT
417B           238      ;
417B 20 82 41   239      jsr SELCACT
417E           240      ;
417E 8E E1 48   241      stx SDACT
4181           242      ;
4181 60         243      rts
4182           244      ;
4182           245      ;
4182 BC F4 48   246  SELCACT ldy ACTADRL,X
4185 BD F7 48   247      lda ACTADRH,X
4188           248      ;
4188 20 AF 44   249      jsr SETPTR
418B           250      ;
418B 20 05 45   251      jsr PRINT
418E 0F         252      hex 0F
418F 52 00      253  SAMOD1 byt DISPCMD,NORMDISP
4191 D2 E5 E3   254      asc "Reconnect"
4194 EF EE EE
4197 E5 E3 F4
419A 1B         255      hex 1B
419B 52 00      256  SAMOD2 byt DISPCMD,NORMDISP
419D C9 EE E9   257      asc "Init"
41A0 F4
41A1 22         258      hex 22
41A2 52 00      259  SAMOD3 byt DISPCMD,NORMDISP
41A4 C1 E2 EF   260      asc "Abort"
41A7 F2 F4
41A9 52 00      261      byt DISPCMD,NORMDISP
41AB 50         262      byt RTNCMD
41AC           263      ;
41AC 20 BD 44   264      jsr CLRPTR
41AF           265      ;
41AF 20 C4 44   266      jsr READKEY
41B2           267      ;
41B2 B0 10      268      bcs >2
41B4 F0 0E      269      beq >2
41B6           270      ;
41B6 8A         271      txa
41B7 10 02      272      bpl >1
41B9           273      ;

```

```

41B9 A2 02      274      ldx #ABORTACT
41BB           275      ;
41BB C9 03      276      ^1      cmp #3
41BD D0 C3      277      bne SELCACT
41BF           278      ;
41BF A2 00      279      ldx #CNECTACT
41C1           280      ;
41C1 4C 82 41   281      jmp SELCACT
41C4           282      ;
41C4 60         283      ^2      rts
41C5           284      ;
41C5           285      ;
41C5 18         286      INITSD   clc
41C6           287      ;
41C6 A9 00      288      lda #ZERO
41C8 20 08 42   289      jsr HOOKDISK
41CB           290      ;
41CB C0 F6      291      cpy #SDRWTS
41CD D0 05      292      bne >1
41CF           293      ;
41CF CD E5 48   294      cmp SDPARMS+CXPGOFF
41D2 F0 09      295      beq >2
41D4           296      ;
41D4 38         297      ^1      sec
41D5           298      ;
41D5 A0 F6      299      ld y #SDRWTS
41D7 AD E5 48   300      lda SDPARMS+CXPGOFF
41DA           301      ;
41DA 20 08 42   302      jsr HOOKDISK
41DD           303      ;
41DD AD E5 48   304      ^2      lda SDPARMS+CXPGOFF
41E0 8D F5 41   305      sta ISDMOD+2
41E3           306      ;
41E3 A0 00      307      ld y #ZERO
41E5           308      ;
41E5 84 2C      309      sty ZPTR1
41E7 84 2E      310      sty ZPTR2
41E9           311      ;
41E9 A9 4E      312      lda /SDCODE1
41EB 85 2D      313      sta ZPTR1+1
41ED           314      ;
41ED A9 C8      315      lda /PAGEC8
41EF 85 2F      316      sta ZPTR2+1
41F1           317      ;
41F1 A2 08      318      ld x /SDCODE3-SDCODE1
41F3           319      ;
41F3 2C 00 00   320      ISDMOD   bit *-*
41F6           321      ;
41F6 B1 2C      322      ^3      lda (ZPTR1),Y
41F8 91 2E      323      sta (ZPTR2),Y
41FA           324      ;
41FA C8         325      iny
41FB D0 F9      326      bne <3
41FD           327      ;
41FD E6 2D      328      inc ZPTR1+1
41FF E6 2F      329      inc ZPTR2+1
4201           330      ;
4201 CA         331      dex
4202 D0 F2      332      bne <3
4204           333      ;
4204 2C FF CF   334      bit CLRROM

```

```
4207          335 ;
4207 60        336      rts
4208          337 ;
4208          338 ;
4208 AE E3 48   339 HOOKDISK ldx SDPARMS+SLOTOFF
420B          340 ;
420B 6C F2 BF   341      jmp (MNGDISK)
420E          342 ;
420E          343 ;
```

```
BSAVE SEG01,A$1000,B,L$020E
```

```
420E          344      usr SEG01
420E          345 ;
420E          346 ;
420E          347      icl "SIDER2.L"
```

```
LLOAD SIDER2.L,A$4000
```



```
420E          1          ttl "Sider Source Code, SIDER2.L"
420E          2          ;
420E          3          ;
420E          4          ; SIDER2.L
420E          5          ;
420E          6          ;
420E          7          obj PAGE10
420E          8          usr
420E          9          ;
420E         10          ;
420E 20 3A FF      11  ABRTMESG jsr BELL
4211          12          ;
4211 20 05 45      13          jsr PRINT
4214 07 76         14          hex 0776
4216 52 01         15          byt DISPCMD,INVRDISP
4218 D0 F2 E5      16          asc "Press ESC to Cancel ABORT"
421B F3 F3 A0
421E C5 D3 C3
4221 A0 F4 EF
4224 A0 C3 E1
4227 EE E3 E5
422A EC A0 C1
422D C2 CF D2
4230 D4
4231 52 00         17          byt DISPCMD,NORMDISP
4233 50            18          byt RTNCMD
4234             19          ;
4234 20 DA 44      20          jsr GETKEY
4237             21          ;
4237 60            22          rts
4238             23          ;
4238             24          ;
4238 20 05 45      25  USERMESG jsr PRINT
423B 53 01         26          byt SCRNCMD,HOMESCRN
423D 55            27          byt CNTRCMD
423E D5 F3 E5      28          asc "Useful Entry Points"
4241 E6 F5 EC
4244 A0 C5 EE
4247 F4 F2 F9
424A A0 D0 EF
424D E9 EE F4
4250 F3
4251 15 63         29          hex 1563
4253 D4 F9 F0      30          asc "Type From"
4256 E5 A0 C6
4259 F2 EF ED
425C 1F           31          hex 1F
425D D4 F9 F0      32          asc "Type From"
4260 E5 A0 C6
4263 F2 EF ED
4266 15 64         33          hex 1564
4268 C1 F0 F0      34          asc "Applesoft"
426B EC E5 F3
426E EF E6 F4
4271 20           35          hex 20
4272 CD EF EE      36          asc "Monitor"
4275 E9 F4 EF
4278 F2
4279 50            37          byt RTNCMD
427A             38          ;
```

```

427A          39 ;
427A          40 ; Show Sider DOS 4.3H Boot entry point.
427A          41 ;
427A A9 00     42         lda #BOOTHRR
427C 20 68 44  43         jsr MAKENEG
427F          44 ;
427F 20 05 45  45         jsr PRINT
4282 01 66     46         hex 0166
4284 C4 CF D3  47         asc "DOS 4.5H Boot:"
4287 A0 B4 AE
428A B5 C8 A0
428D C2 EF EF
4290 F4 BA
4292 14        48         hex 14
4293 C3 C1 CC  49         asc "CALL -"
4296 CC A0 AD
4299 5F 00     50         byt DECNCMD,NOPAD
429B EA 48     51         adr NEGNUM
429D 21        52         hex 21
429E 59        53         byt BYT2CMD
429F E8 48     54         adr HEXNUM
42A1 C7        55         asc "G"
42A2 50        56         byt RTNCMD
42A3          57 ;
42A3          58 ;
42A3          59 ; Show Connect Sider RWTS to DOS.
42A3          60 ;
42A3 A9 10     61         lda #ROMHOOK
42A5 20 68 44  62         jsr MAKENEG
42A8          63 ;
42A8 20 05 45  64         jsr PRINT
42AB 01 67     65         hex 0167
42AD C4 CF D3  66         asc "DOS Connect:"
42B0 A0 C3 EF
42B3 EE EE E5
42B6 E3 F4 BA
42B9 14        67         hex 14
42BA C3 C1 CC  68         asc "CALL -"
42BD CC A0 AD
42C0 5F 00     69         byt DECNCMD,NOPAD
42C2 EA 48     70         adr NEGNUM
42C4 21        71         hex 21
42C5 59        72         byt BYT2CMD
42C6 E8 48     73         adr HEXNUM
42C8 C7        74         asc "G"
42C9 50        75         byt RTNCMD
42CA          76 ;
42CA          77 ;
42CA          78 ; Show Disconnect Sider RWTS from DOS.
42CA          79 ;
42CA A9 18     80         lda #ROMUHOOK
42CC 20 68 44  81         jsr MAKENEG
42CF          82 ;
42CF 20 05 45  83         jsr PRINT
42D2 01 68     84         hex 0168
42D4 C4 CF D3  85         asc "DOS Disconnect:"
42D7 A0 C4 E9
42DA F3 E3 EF
42DD EE EE E5
42E0 E3 F4 BA
42E3 14        86         hex 14

```

```

42E4 C3 C1 CC      87          asc "CALL -"
42E7 CC A0 AD
42EA 5F 00      88          byt DECNCMD,NOPAD
42EC EA 48      89          adr NEGNUM
42EE 21          90          hex 21
42EF 59          91          byt BYT2CMD
42F0 E8 48      92          adr HEXNUM
42F2 C7          93          asc "G"
42F3 50          94          byt RTNCMD
42F4          95          ;
42F4          96          ;
42F4          97          ; Show Sider DOS 4.5L Boot entry point.
42F4          98          ;
42F4 A9 20      99          lda #SDOS4.5L
42F6 20 68 44   100         jsr MAKENEG
42F9          101         ;
42F9 20 05 45   102         jsr PRINT
42FC 01 69      103         hex 0169
42FE C4 CF D3   104         asc "DOS 4.5L Boot:"
4301 A0 B4 AE
4304 B5 CC A0
4307 C2 EF EF
430A F4 BA
430C 14          105         hex 14
430D C3 C1 CC   106         asc "CALL -"
4310 CC A0 AD
4313 5F 00      107         byt DECNCMD,NOPAD
4315 EA 48      108         adr NEGNUM
4317 21          109         hex 21
4318 59          110         byt BYT2CMD
4319 E8 48      111         adr HEXNUM
431B C7          112         asc "G"
431C 50          113         byt RTNCMD
431D          114         ;
431D          115         ;
431D          116         ; Show Sider DOS 4.5H Boot entry point.
431D          117         ;
431D A9 28      118         lda #SDOS4.5H
431F 20 68 44   119         jsr MAKENEG
4322          120         ;
4322 20 05 45   121         jsr PRINT
4325 01 6A      122         hex 016A
4327 C4 CF D3   123         asc "DOS 4.5H Boot:"
432A A0 B4 AE
432D B5 C8 A0
4330 C2 EF EF
4333 F4 BA
4335 14          124         hex 14
4336 C3 C1 CC   125         asc "CALL -"
4339 CC A0 AD
433C 5F 00      126         byt DECNCMD,NOPAD
433E EA 48      127         adr NEGNUM
4340 21          128         hex 21
4341 59          129         byt BYT2CMD
4342 E8 48      130         adr HEXNUM
4344 C7          131         asc "G"
4345 50          132         byt RTNCMD
4346          133         ;
4346          134         ;
4346          135         ; Show Sider Volume Boot entry point.
4346          136         ;

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```
4346 A9 40      137      lda #BOOTVOL
4348 20 68 44    138      jsr MAKENEG
434B           139      ;
434B 20 05 45    140      jsr PRINT
434E 01 6B      141      hex 016B
4350 C4 CF D3    142      asc "DOS Volume Boot:"
4353 A0 D6 EF
4356 EC F5 ED
4359 E5 A0 C2
435C EF EF F4
435F BA
4360 14          143      hex 14
4361 C3 C1 CC    144      asc "CALL -"
4364 CC A0 AD
4367 5F 00      145      byt DECNCMD,NOPAD
4369 EA 48      146      adr NEGNUM
436B 21          147      hex 21
436C 59          148      byt BYT2CMD
436D E8 48      149      adr HEXNUM
436F C7          150      asc "G"
4370 50          151      byt RTNCMD
4371           152      ;
4371           153      ;
4371           154      ; Show Sider Park Heads entry point.
4371           155      ;
4371 A9 50      156      lda #PARK
4373 20 68 44    157      jsr MAKENEG
4376           158      ;
4376 20 05 45    159      jsr PRINT
4379 01 6D      160      hex 016D
437B D0 E1 F2    161      asc "Park Heads:"
437E EB A0 C8
4381 E5 E1 E4
4384 F3 BA
4386 14          162      hex 14
4387 C3 C1 CC    163      asc "CALL -"
438A CC A0 AD
438D 5F 00      164      byt DECNCMD,NOPAD
438F EA 48      165      adr NEGNUM
4391 21          166      hex 21
4392 59          167      byt BYT2CMD
4393 E8 48      168      adr HEXNUM
4395 C7          169      asc "G"
4396 50          170      byt RTNCMD
4397           171      ;
4397           172      ;
4397           173      ; Show Sider DOS 3.3 RWTS entry point.
4397           174      ;
4397 A9 70      175      lda #SDRWTS3
4399 20 68 44    176      jsr MAKENEG
439C           177      ;
439C 20 05 45    178      jsr PRINT
439F 01 6F      179      hex 016F
43A1 C4 CF D3    180      asc "DOS 3.3 RWTS:"
43A4 A0 B3 AE
43A7 B3 A0 D2
43AA D7 D4 D3
43AD BA
43AE 14          181      hex 14
43AF C3 C1 CC    182      asc "CALL -"
43B2 CC A0 AD
```

```

43B5 5F 00      183      byt DECNCMD,NOPAD
43B7 EA 48      184      adr NEGNUM
43B9 21         185      hex 21
43BA 59         186      byt BYT2CMD
43BB E8 48      187      adr HEXNUM
43BD C7         188      asc "G"
43BE 50         189      byt RTNCMD
43BF           190      ;
43BF           191      ;
43BF           192      ; Show Sider DOS 4.5 RWTS entry point.
43BF           193      ;
43BF A9 80      194      lda #SDRWTS4
43C1 20 68 44   195      jsr MAKENEG
43C4           196      ;
43C4 20 05 45   197      jsr PRINT
43C7 01 70      198      hex 0170
43C9 C4 CF D3   199      asc "DOS 4.5 RWTS:"
43CC A0 B4 AE
43CF B5 A0 D2
43D2 D7 D4 D3
43D5 BA
43D6 14         200      hex 14
43D7 C3 C1 CC   201      asc "CALL -"
43DA CC A0 AD
43DD 5F 00      202      byt DECNCMD,NOPAD
43DF EA 48      203      adr NEGNUM
43E1 21         204      hex 21
43E2 59         205      byt BYT2CMD
43E3 E8 48      206      adr HEXNUM
43E5 C7         207      asc "G"
43E6 50         208      byt RTNCMD
43E7           209      ;
43E7           210      ;
43E7           211      ; Show Sider Driver entry point.
43E7           212      ;
43E7 A9 A0      213      lda #DRIVER
43E9 20 68 44   214      jsr MAKENEG
43EC           215      ;
43EC 20 05 45   216      jsr PRINT
43EF 01 72      217      hex 0172
43F1 D3 E9 E4   218      asc "Sider DCB Driver:"
43F4 E5 F2 A0
43F7 C4 C3 C2
43FA A0 C4 F2
43FD E9 F6 E5
4400 F2 BA
4402 14         219      hex 14
4403 C3 C1 CC   220      asc "CALL -"
4406 CC A0 AD
4409 5F 00      221      byt DECNCMD,NOPAD
440B EA 48      222      adr NEGNUM
440D 21         223      hex 21
440E 59         224      byt BYT2CMD
440F E8 48      225      adr HEXNUM
4411 C7         226      asc "G"
4412 50         227      byt RTNCMD
4413           228      ;
4413           229      ;
4413           230      ; Show Sider Get Status entry point.
4413           231      ;
4413 A9 C0      232      lda #GETSTAT

```

```

4415 20 68 44      233      jsr MAKENEG
4418              234      ;
4418 20 05 45      235      jsr PRINT
441B 01 73          236      hex 0173
441D D2 E5 F1      237      asc "Request Status:"
4420 F5 E5 F3
4423 F4 A0 D3
4426 F4 E1 F4
4429 F5 F3 BA
442C 14            238      hex 14
442D C3 C1 CC      239      asc "CALL -"
4430 CC A0 AD
4433 5F 00          240      byt DECNCMD,NOPAD
4435 EA 48          241      adr NEGNUM
4437 21            242      hex 21
4438 59            243      byt BYT2CMD
4439 E8 48          244      adr HEXNUM
443B C7            245      asc "G"
443C 50            246      byt RTNCMD
443D              247      ;
443D              248      ;
443D              249      ; Show Sider Read Status entry point.
443D              250      ;
443D A9 D0          251      lda #READSTAT
443F 20 68 44      252      jsr MAKENEG
4442              253      ;
4442 20 05 45      254      jsr PRINT
4445 01 74          255      hex 0174
4447 D2 E5 E3      256      asc "Receive Status:"
444A E5 E9 F6
444D E5 A0 D3
4450 F4 E1 F4
4453 F5 F3 BA
4456 14            257      hex 14
4457 C3 C1 CC      258      asc "CALL -"
445A CC A0 AD
445D 5F 00          259      byt DECNCMD,NOPAD
445F EA 48          260      adr NEGNUM
4461 21            261      hex 21
4462 59            262      byt BYT2CMD
4463 E8 48          263      adr HEXNUM
4465 C7            264      asc "G"
4466 50            265      byt RTNCMD
4467              266      ;
4467 60            267      rts
4468              268      ;
4468              269      ;
4468 18            270      MAKENEG clc
4469              271      ;
4469 8D E9 48      272      sta HEXNUM+1
446C 49 FF          273      eor #NEGONE
446E              274      ;
446E 69 01          275      adc #1
4470 8D EB 48      276      sta NEGNUM+1
4473              277      ;
4473 AD E5 48      278      lda SDPARMS+CXPGOFF
4476              279      ;
4476 8D E8 48      280      sta HEXNUM
4479 49 FF          281      eor #NEGONE
447B              282      ;
447B 69 00          283      adc #ZERO

```

```

447D 8D EA 48      284      sta NEGNUM
4480              285      ;
4480 60              286      rts
4481              287      ;
4481              288      ;
4481 20 3A FF      289  CONTMESG jsr BELL
4484              290      ;
4484 20 05 45      291      jsr PRINT
4487 00 77          292      hex 0077
4489 54 00          293      byt CLRCMD,EOLCLR
448B 07              294      hex 07
448C 52 01          295      byt DISPCMD,INVRDISP
448E D0 F2 E5      296      asc "Press Any Key to Continue"
4491 F3 F3 A0
4494 C1 EE F9
4497 A0 CB E5
449A F9 A0 F4
449D EF A0 C3
44A0 EF EE F4
44A3 E9 EE F5
44A6 E5
44A7 52 00          297      byt DISPCMD,NORMDISP
44A9 50              298      byt RTNCMD
44AA              299      ;
44AA 20 DA 44      300      jsr GETKEY
44AD              301      ;
44AD 38              302      sec
44AE              303      ;
44AE 60              304      rts
44AF              305      ;
44AF              306      ;
44AF 8E E7 48      307  SETPTR stx MARKER
44B2              308      ;
44B2 84 26          309      sty ZPTR
44B4 85 27          310      sta ZPTR+1
44B6              311      ;
44B6 A0 01          312      ldy #1
44B8              313      ;
44B8 A9 01          314      lda #INVRDISP
44BA 91 26          315      sta (ZPTR),Y
44BC              316      ;
44BC 60              317      rts
44BD              318      ;
44BD              319      ;
44BD A0 01          320  CLRPTR ldy #1
44BF              321      ;
44BF A9 00          322      lda #NORMDISP
44C1 91 26          323      sta (ZPTR),Y
44C3              324      ;
44C3 60              325      rts
44C4              326      ;
44C4              327      ;
44C4 20 DA 44      328  READKEY jsr GETKEY
44C7              329      ;
44C7 AE E7 48      330      ldx MARKER
44CA              331      ;
44CA B0 0D          332      bcs >3
44CC              333      ;
44CC C9 88          334      cmp #LARROW
44CE D0 01          335      bne >1
44D0              336      ;

```

```
44D0 CA          337          dex
44D1             338          ;
44D1 C9 95       339          ^1      cmp #RARROW
44D3 D0 01       340          bne >2
44D5             341          ;
44D5 E8          342          inx
44D6             343          ;
44D6 C9 8D       344          ^2      cmp #RETURN
44D8             345          ;
44D8 18          346          clc
44D9             347          ;
44D9 60          348          ^3      rts
44DA             349          ;
44DA             350          ;
44DA 2C 10 C0    351 GETKEY    bit CLRKEY
44DD             352          ;
44DD AD 00 C0    353          ^1      lda KEY
44E0 10 FB       354          bpl <1
44E2             355          ;
44E2 2C 10 C0    356          bit CLRKEY
44E5             357          ;
44E5 C9 E0       358          cmp #E0
44E7 90 02       359          bcc >2
44E9             360          ;
44E9 49 20       361          eor #20
44EB             362          ;
44EB C9 9B       363          ^2      cmp #ESCAPE
44ED F0 01       364          beq >3
44EF             365          ;
44EF 18          366          clc
44F0             367          ;
44F0 60          368          ^3      rts
44F1             369          ;
44F1             370          ;
44F1 A0 00       371 CLRSCRN1 ldy #ZERO
44F3 84 3C       372          sty DATAPTR
44F5             373          ;
44F5 A2 20       374          ldx /PAGE20
44F7 86 3D       375          stx DATAPTR+1
44F9             376          ;
44F9 98          377          tya
44FA             378          ;
44FA 91 3C       379          ^1      sta (DATAPTR),Y
44FC             380          ;
44FC C8          381          iny
44FD D0 FB       382          bne <1
44FF             383          ;
44FF E6 3D       384          inc DATAPTR+1
4501             385          ;
4501 CA          386          dex
4502 D0 F6       387          bne <1
4504             388          ;
4504 60          389          rts
4505             390          ;
4505             391          ;
```

BSAVE SEG02,A\$1000,B,L\$02F7

```
4505             392          usr SEG02
4505             393          ;
4505             394          ;
```


4505 395 icl "SIDER3.L"

LLOAD SIDER3.L,A\$4000

```

4505          1          ttl "Sider Source Code, SIDER3.L"
4505          2          ;
4505          3          ;
4505          4          ; SIDER3.L
4505          5          ;
4505          6          ;
4505          7          obj PAGE10
4505          8          usr
4505          9          ;
4505         10          ;
4505 8D E5 45    11 PRINT      sta PRNTSAVA+1
4508 8E E3 45    12          stx PRNTSAVX+1
450B 8C E1 45    13          sty PRNTSAVY+1
450E          14          ;
450E 68         15          pla
450F 85 3E       16          sta PRNTPTR
4511          17          ;
4511 68         18          pla
4512 85 3F       19          sta PRNTPTR+1
4514          20          ;
4514 E6 3E       21 PRNTLOOP inc PRNTPTR
4516 D0 02       22          bne >1
4518          23          ;
4518 E6 3F       24          inc PRNTPTR+1
451A          25          ;
451A A0 00       26 ^1      ldy #ZERO
451C          27          ;
451C B1 3E       28          lda (PRNTPTR),Y
451E 10 10       29          bpl >3
4520          30          ;
4520 C9 A0       31          cmp #SPACE
4522 90 06       32          bcc >2
4524          33          ;
4524 20 7F 45    34          jsr PRNTOUT
4527          35          ;
4527 4C 14 45    36          jmp PRNTLOOP
452A          37          ;
452A 20 83 45    38 ^2      jsr PRNTOUT2
452D          39          ;
452D 4C 14 45    40          jmp PRNTLOOP
4530          41          ;
4530 C9 50       42 ^3      cmp #MAXCH
4532 B0 04       43          bcs >4
4534          44          ;
4534 85 24       45          sta CH
4536          46          ;
4536 90 DC       47          bcc PRNTLOOP
4538          48          ;
4538 C9 60       49 ^4      cmp #MINCV
453A 90 0A       50          bcc >5
453C          51          ;
453C 29 1F       52          and #CVMASK
453E 85 25       53          sta CV
4540          54          ;
4540 20 22 FC     55 PRNTMOD1 jsr VTAB
4543          56          ;
4543 4C 14 45    57          jmp PRNTLOOP
4546          58          ;
4546 29 0F       59 ^5      and #PCMDMASK
4548 AA         60          tax

```

```

4549          61 ;
4549 BD A5 45 62          lda PRNTBL,X
454C 8D 5C 45 63          sta PRNTMOD2+1
454F          64 ;
454F BD B5 45 65          lda PRNTBLL,X
4552 8D 7A 45 66          sta PRNTMOD3+1
4555          67 ;
4555 BD C5 45 68          lda PRNTBLH,X
4558 8D 7B 45 69          sta PRNTMOD3+2
455B          70 ;
455B 90 19    71 PRNTMOD2 bcc PRNTBR4
455D          72 ;
455D C8       73 PRNTBR1 iny
455E          74 ;
455E B1 3E    75          lda (PRNTPTR),Y
4560 8D A4 45 76          sta FRMTVAL
4563          77 ;
4563 C8       78 PRNTBR2 iny
4564          79 ;
4564 B1 3E    80          lda (PRNTPTR),Y
4566 85 3C    81          sta DATAPTR
4568          82 ;
4568 C8       83 PRNTBR3 iny
4569          84 ;
4569 B1 3E    85          lda (PRNTPTR),Y
456B 85 3D    86          sta DATAPTR+1
456D          87 ;
456D 98       88          tya
456E          89 ;
456E 65 3E    90          adc PRNTPTR
4570 85 3E    91          sta PRNTPTR
4572 90 02    92          bcc PRNTBR4
4574          93 ;
4574 E6 3F    94          inc PRNTPTR+1
4576          95 ;
4576 18       96 PRNTBR4 clc
4577          97 ;
4577 A0 00    98          ldy #ZERO
4579          99 ;
4579 20 00 00 100 PRNTMOD3 jsr *-*
457C          101 ;
457C 4C 14 45 102          jmp PRNTLOOP
457F          103 ;
457F          104 ;
457F          105 PRNTOUT:
457F 09 00    106 OUTMOD1 ora #ZERO
4581 49 00    107 OUTMOD2 eor #ZERO
4583          108 ;
4583 4C ED FD 109 PRNTOUT2 jmp COUT
4586          110 ;
4586          111 ;
4586          112 ; Notes on DISPCMD as index
4586          113 ;
4586          114 ; 0 - Normal display
4586          115 ; 1 - Inverse display
4586          116 ;
4586 00 40    117 OUTTBL1 hex 0040          ; TEXT
4588 00 00    118          hex 0000          ; GRPH
458A 00 00    119          hex 0000          ; TX80
458C          120 ;
458C 00 C0    121 OUTTBL2 hex 00C0

```

```

458E 00 80      122      hex 0080
4590 00 00      123      hex 0000
4592            124      ;
4592 FF 3F      125      OUT80COL hex FF3F
4594            126      ;
4594            127      ;
4594 22 FC      128      VTABADRS adr VTAB
4596 E7 45      129      adr PRINTRTN
4598 22 FC      130      adr VTAB
459A            131      ;
459A            132      ;
459A ED FD      133      OUTADRS  adr COUT
459C 8C 47      134      adr PRNTGRPH
459E ED FD      135      adr COUT
45A0            136      ;
45A0 00          137      PRNTSAV  hex 00
45A1 00 00      138      PRNTNUM  hex 0000
45A3            139      ;
45A3            140      ;
45A3            141      ; Notes on MODEVAL and FRMTVAL
45A3            142      ;
45A3            143      ; 0 - 40 column TEXT mode
45A3            144      ; 1 - GRAPHICS mode
45A3            145      ; 2 - 80 column TEXT mode
45A3            146      ; 3 - exit 80 TEXT, enter 40 TEXT
45A3            147      ;
45A3            148      ; $00 - no left padding
45A3            149      ; $40 - zero left padding
45A3            150      ; $80 - space left padding
45A3            151      ;
45A3 00          152      MODEVAL  hex 00
45A4 00          153      FRMTVAL  hex 00
45A5            154      ;
45A5            155      ;
45A5            156      ; Branch table of command routines.
45A5            157      ;
45A5            158      PRNTBL:
45A5 19          159      byt PRNTBR4-PRNTBR1 ; 50
45A6 0B          160      byt PRNTBR3-PRNTBR1 ; 51
45A7 0B          161      byt PRNTBR3-PRNTBR1 ; 52
45A8 0B          162      byt PRNTBR3-PRNTBR1 ; 53
45A9 0B          163      byt PRNTBR3-PRNTBR1 ; 54
45AA 19          164      byt PRNTBR4-PRNTBR1 ; 55
45AB 00          165      byt PRNTBR1-PRNTBR1 ; 56
45AC 06          166      byt PRNTBR2-PRNTBR1 ; 57
45AD 06          167      byt PRNTBR2-PRNTBR1 ; 58
45AE 06          168      byt PRNTBR2-PRNTBR1 ; 59
45AF 00          169      byt PRNTBR1-PRNTBR1 ; 5A
45B0 00          170      byt PRNTBR1-PRNTBR1 ; 5B
45B1 06          171      byt PRNTBR2-PRNTBR1 ; 5C
45B2 06          172      byt PRNTBR2-PRNTBR1 ; 5D
45B3 06          173      byt PRNTBR2-PRNTBR1 ; 5E
45B4 00          174      byt PRNTBR1-PRNTBR1 ; 5F
45B5            175      ;
45B5            176      ;
45B5            177      ; Address tables of command routines.
45B5            178      ;
45B5            179      PRNTBLL:
45B5 D5          180      byt PRNTRTN      ; 50
45B6 E8          181      byt PRNTMODE     ; 51
45B7 33          182      byt PRNTDISP     ; 52

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```

45B8 52          183          byt PRNTSCRN          ; 53
45B9 73          184          byt PRNTCLR           ; 54
45BA 8E          185          byt PRNTCNTR          ; 55
45BB A0          186          byt PRNTBUFR          ; 56
45BC BB          187          byt PRNTNIBL          ; 57
45BD C4          188          byt PRNT1BYT          ; 58
45BE C7          189          byt PRNT2BYT          ; 59
45BF C0          190          byt PRNTNBYT          ; 5A
45C0 D3          191          byt PRNTADR           ; 5B
45C1 EB          192          byt PRNT1DEC          ; 5C
45C2 F1          193          byt PRNT2DEC          ; 5D
45C3 F7          194          byt PRNT3DEC          ; 5E
45C4 08          195          byt PRNTNDEC          ; 5F
45C5             196          ;
45C5             197          PRNTBLH:
45C5 45          198          hby PRNTRTN           ; 50
45C6 45          199          hby PRNTMODE          ; 51
45C7 46          200          hby PRNTDISP          ; 52
45C8 46          201          hby PRNTSCRN          ; 53
45C9 46          202          hby PRNTCLR           ; 54
45CA 46          203          hby PRNTCNTR          ; 55
45CB 46          204          hby PRNTBUFR          ; 56
45CC 46          205          hby PRNTNIBL          ; 57
45CD 46          206          hby PRNT1BYT          ; 58
45CE 46          207          hby PRNT2BYT          ; 59
45CF 46          208          hby PRNTNBYT          ; 5A
45D0 46          209          hby PRNTADR           ; 5B
45D1 46          210          hby PRNT1DEC          ; 5C
45D2 46          211          hby PRNT2DEC          ; 5D
45D3 46          212          hby PRNT3DEC          ; 5E
45D4 47          213          hby PRNTNDEC          ; 5F
45D5             214          ;
45D5             215          ;
45D5             216          ; RTNCMD ($50)
45D5             217          ;
45D5 BA          218          PRNTRTN tsx
45D6             219          ;
45D6 A5 3E       220          lda PRNTPTR
45D8 9D 01 01    221          sta STACK+1,X
45DB             222          ;
45DB A5 3F       223          lda PRNTPTR+1
45DD 9D 02 01    224          sta STACK+2,X
45E0             225          ;
45E0 A0 00       226          PRNTSAVY ldy #ZERO
45E2 A2 00       227          PRNTSAVX ldx #ZERO
45E4 A9 00       228          PRNTSAVA lda #ZERO
45E6             229          ;
45E6 18          230          clc
45E7             231          ;
45E7 60          232          PRINTRTN rts
45E8             233          ;
45E8             234          ;
45E8             235          ; MODECMD ($51)
45E8             236          ;
45E8             237          ; 0 - 40 column TEXT mode
45E8             238          ; 1 - GRAPHICS mode
45E8             239          ; 2 - 80 column TEXT mode
45E8             240          ; 3 - exit 80 TEXT, enter 40 TEXT
45E8             241          ;
45E8 A5 3D       242          PRNTMODE lda DATAPTR+1
45EA 29 03       243          and #3

```

```

45EC          244 ;
45EC C9 02     245      cmp #TX80MODE
45EE D0 09     246      bne >1
45F0          247 ;
45F0 A9 03     248      lda #3
45F2 20 95 FE  249      jsr OUTPORT
45F5          250 ;
45F5 A9 02     251      lda #TX80MODE
45F7 D0 1A     252      bne >2
45F9          253 ;
45F9 C9 03     254      ^1 cmp #LV80MODE
45FB D0 16     255      bne >2
45FD          256 ;
45FD AD 92 45  257      lda OUT80COL
4600 85 32     258      sta INVFLG
4602          259 ;
4602 A9 9B     260      lda #ESCAPE
4604 20 ED FD  261      jsr COUT
4607          262 ;
4607 A9 91     263      lda #CTRLQ
4609 20 ED FD  264      jsr COUT
460C          265 ;
460C A9 00     266      lda #ZERO
460E 20 95 FE  267      jsr OUTPORT
4611          268 ;
4611 A9 00     269      lda #TEXTMODE
4613          270 ;
4613 8D A3 45  271      ^2 sta MODEVAL
4616          272 ;
4616 0A        273      asl
4617 A8        274      tay
4618          275 ;
4618 B9 94 45  276      lda VTABADRS,Y
461B 8D 41 45  277      sta PRNTMOD1+1
461E          278 ;
461E B9 95 45  279      lda VTABADRS+1,Y
4621 8D 42 45  280      sta PRNTMOD1+2
4624          281 ;
4624 B9 9A 45  282      lda OUTADRS,Y
4627 8D 84 45  283      sta PRNTOUT2+1
462A          284 ;
462A B9 9B 45  285      lda OUTADRS+1,Y
462D 8D 85 45  286      sta PRNTOUT2+2
4630          287 ;
4630 4C EA 03  288      jmp HOOKDOS
4633          289 ;
4633          290 ;
4633          291 ; DISPCMD ($52)
4633          292 ;
4633          293 ; 0 - Normal display
4633          294 ; 1 - Inverse display
4633          295 ;
4633 A4 3D     296 PRNTDISP ldy DATAPTR+1
4635          297 ;
4635 AD A3 45  298      lda MODEVAL
4638 C9 02     299      cmp #TX80MODE
463A D0 05     300      bne >1
463C          301 ;
463C BE 92 45  302      ldx OUT80COL,Y
463F 86 32     303      stx INVFLG
4641          304 ;

```

```

4641 0A          305 ^1      asl
4642 65 3D      306      adc DATAPTR+1
4644           307      ;
4644 A8          308      tay
4645           309      ;
4645 B9 86 45    310      lda OUTTBL1,Y
4648 8D 80 45    311      sta OUTMOD1+1
464B           312      ;
464B B9 8C 45    313      lda OUTTBL2,Y
464E 8D 82 45    314      sta OUTMOD2+1
4651           315      ;
4651 60          316      rts
4652           317      ;
4652           318      ;
4652           319      ; SCRNCMD ($53)
4652           320      ;
4652           321      ; 0 - INIT
4652           322      ; 1 - HOME
4652           323      ;
4652 2C 54 C0    324 PRNTSCRN bit LOWSCR
4655           325      ;
4655           326      .if DISPLAY=GRPHMODE
4655           327      ;
4655 AD A3 45     328      lda MODEVAL
4658 C9 01       329      cmp #GRPHMODE
465A D0 0A       330      bne >2
465C           331      ;
465C A5 3D       332      lda DATAPTR+1
465E D0 03       333      bne >1
4660           334      ;
4660 4C 23 48     335      jmp SCRNNINIT
4663           336      ;
4663 4C B6 48     337 ^1      jmp SCRNHOME
4666           338      ;
4666           339      .fi
4666           340      ;
4666 A5 3D       341 ^2      lda DATAPTR+1
4668 D0 06       342      bne >3
466A           343      ;
466A 2C 51 C0    344      bit TXTSET
466D           345      ;
466D 4C 2F FB    346      jmp INIT
4670           347      ;
4670 4C 58 FC    348 ^3      jmp HOME
4673           349      ;
4673           350      ;
4673           351      ; CLRCMD ($54)
4673           352      ;
4673           353      ; 0 - EOL
4673           354      ; 1 - EOP
4673           355      ;
4673           356 PRNTCLR:
4673           357      .if DISPLAY=GRPHMODE
4673           358      ;
4673 AD A3 45     359      lda MODEVAL
4676 C9 01       360      cmp #GRPHMODE
4678 D0 0A       361      bne >2
467A           362      ;
467A A5 3D       363      lda DATAPTR+1
467C D0 03       364      bne >1
467E           365      ;

```

```
467E 4C 8C 48      366      jmp SCRNEOL
4681              367      ;
4681 4C BE 48      368      ^1      jmp SCRNEOP
4684              369      ;
4684              370      .fi
4684              371      ;
4684 A5 3D          372      ^2      lda DATAPTR+1
4686 D0 03          373      bne >3
4688              374      ;
4688 4C 9C FC      375      jmp CLREOL
468B              376      ;
468B 4C 42 FC      377      ^3      jmp CLREOP
468E              378      ;
468E              379      ;
468E              380      ; CNTRCMD ($55)
468E              381      ;
468E A9 9F          382      PRNTCNTR lda #SPACE-1
4690              383      ;
4690 C8             384      ^1      iny
4691              385      ;
4691 D1 3E          386      cmp (PRNTPTR),Y
4693 90 FB          387      bcc <1
4695              388      ;
4695 98             389      tya
4696              390      ;
4696 49 FF          391      eor #NEGONE
4698 65 21          392      adc WNDWDTH
469A              393      ;
469A 4A            394      lsr
469B              395      ;
469B 65 20          396      adc WNDLFT
469D 85 24          397      sta CH
469F              398      ;
469F 60            399      rts
46A0              400      ;
46A0              401      ;
46A0              402      ; BUFRCMD ($56)
46A0              403      ;
46A0              404      ; 0 - direct address
46A0              405      ; 1 - indirect address
46A0              406      ;
46A0 AD A4 45      407      PRNTBUFR lda FRMTVAL
46A3 F0 0B          408      beq >1
46A5              409      ;
46A5 B1 3C          410      lda (DATAPTR),Y
46A7 AA            411      tax
46A8              412      ;
46A8 C8            413      iny
46A9              414      ;
46A9 B1 3C          415      lda (DATAPTR),Y
46AB              416      ;
46AB 86 3C          417      stx DATAPTR
46AD 85 3D          418      sta DATAPTR+1
46AF              419      ;
46AF 88            420      dey
46B0              421      ;
46B0 B1 3C          422      ^1      lda (DATAPTR),Y
46B2 F0 06          423      beq >2
46B4              424      ;
46B4 20 7F 45      425      jsr PRNTOUT
46B7              426      ;
```



```

46B7 C8          427          iny
46B8 D0 F6      428          bne <1
46BA           429          ;
46BA 60         430          ^2      rts
46BB           431          ;
46BB           432          ;
46BB           433          ; NIBLCMD ($57)
46BB           434          ;
46BB B1 3C      435 PRNTNIBL lda (DATAPTR),Y
46BD           436          ;
46BD 4C 46 47   437          jmp PRNTHX
46C0           438          ;
46C0           439          ;
46C0           440          ; BYT1CMD ($58)
46C0           441          ; BYT2CMD ($59)
46C0           442          ; BYTNCMD ($5A)
46C0           443          ;
46C0 AE A4 45   444 PRNTNBYT ldx FRMTVAL
46C3           445          ;
46C3 2C 00 00   446          bit *-*
46C6           447          dfs !-2
46C4           448          ;
46C4 A2 01      449 PRNT1BYT ldx #1
46C6           450          ;
46C6 2C 00 00   451          bit *-*
46C9           452          dfs !-2
46C7           453          ;
46C7 A2 02      454 PRNT2BYT ldx #2
46C9           455          ;
46C9 B1 3C      456 PRNTBYT  lda (DATAPTR),Y
46CB           457          ;
46CB 20 3D 47   458          jsr PRNTBYTE
46CE           459          ;
46CE C8         460          iny
46CF           461          ;
46CF CA         462          dex
46D0 D0 F7      463          bne PRNTBYT
46D2           464          ;
46D2 60         465          rts
46D3           466          ;
46D3           467          ;
46D3           468          ; ADRCMD ($5B)
46D3           469          ;
46D3           470          ; 0 - direct address
46D3           471          ; 1 - indirect address
46D3           472          ;
46D3 AD A4 45   473 PRNTADR  lda FRMTVAL
46D6 D0 06      474          bne >1
46D8           475          ;
46D8 A6 3C      476          ldx DATAPTR
46DA A5 3D      477          lda DATAPTR+1
46DC           478          ;
46DC 90 06      479          bcc >2          ; always taken
46DE           480          ;
46DE B1 3C      481          ^1      lda (DATAPTR),Y
46E0 AA         482          tax
46E1           483          ;
46E1 C8         484          iny
46E2           485          ;
46E2 B1 3C      486          lda (DATAPTR),Y
46E4           487          ;

```

```

46E4 20 3D 47      488  ^2      jsr PRNTBYTE
46E7              489  ;
46E7 8A           490              txa
46E8              491  ;
46E8 4C 3D 47      492              jmp PRNTBYTE
46EB              493  ;
46EB              494  ;
46EB              495  ; DEC1CMD ($5C)
46EB              496  ;
46EB 20 53 47      497 PRNT1DEC jsr HEXTODEC
46EE              498  ;
46EE 4C 46 47      499              jmp PRNTHX
46F1              500  ;
46F1              501  ;
46F1              502  ; DEC2CMD ($5D)
46F1              503  ;
46F1 20 53 47      504 PRNT2DEC jsr HEXTODEC
46F4              505  ;
46F4 4C FE 46      506              jmp PRNTDEC
46F7              507  ;
46F7              508  ;
46F7              509  ; DEC3CMD ($5E)
46F7              510  ;
46F7              511 PRNT3DEC:
46F7 20 53 47      512              jsr HEXTODEC
46FA              513  ;
46FA 98           514              tya
46FB              515  ;
46FB 20 46 47      516              jsr PRNTHX
46FE              517  ;
46FE              518  ;
46FE 8A           519 PRNTDEC  txa
46FF 20 46 47      520              jsr PRNTHX
4702              521  ;
4702 AD A0 45      522              lda PRNTSAV
4705              523  ;
4705 4C 46 47      524              jmp PRNTHX
4708              525  ;
4708              526  ;
4708              527 ; DECNCMD ($5F)
4708              528  ;
4708              529 ; $00 - no left padding
4708              530 ; $40 - zero left padding
4708              531 ; $80 - space left padding
4708              532  ;
4708              533 ; data in high/low order
4708              534  ;
4708 B1 3C         535 PRNTNDEC lda (DATAPTR),Y
470A 8D A2 45      536              sta PRNTNUM+1
470D              537  ;
470D C8           538              iny
470E              539  ;
470E B1 3C         540              lda (DATAPTR),Y
4710 8D A1 45      541              sta PRNTNUM
4713              542  ;
4713 A2 03         543              ldx #3
4715              544  ;
4715 2C A4 45      545              bit FRMTVAL
4718 70 18         546              bvs >4
471A              547  ;
471A 20 6D 47      548 ^1      jsr GETDIGIT

```

```

471D D0 16      549      bne >5
471F           550      ;
471F 2C A4 45   551      bit FRMTVAL
4722 10 05      552      bpl >2
4724           553      ;
4724 A9 A0      554      lda #SPACE
4726 20 7F 45   555      jsr PRNTOUT
4729           556      ;
4729 CA        557      ^2      dex
472A 10 EE      558      bpl <1
472C           559      ;
472C AD A1 45   560      ^3      lda PRNTNUM
472F           561      ;
472F 4C 46 47   562      jmp PRNTHEx
4732           563      ;
4732 20 6D 47   564      ^4      jsr GETDIGIT
4735           565      ;
4735 20 46 47   566      ^5      jsr PRNTHEx
4738           567      ;
4738 CA        568      dex
4739 10 F7      569      bpl <4
473B           570      ;
473B 30 EF      571      bmi <3      ; always taken
473D           572      ;
473D           573      ;
473D 48        574      PRNTBYTE pha
473E           575      ;
473E 4A        576      lsr
473F 4A        577      lsr
4740 4A        578      lsr
4741 4A        579      lsr
4742           580      ;
4742 20 48 47   581      jsr PRNTHEx2
4745           582      ;
4745 68        583      pla
4746           584      ;
4746           585      ;
4746 29 0F      586      PRNTHEx and #NIBLMASK
4748           587      ;
4748 09 B0      588      PRNTHEx2 ora #"0"
474A           589      ;
474A C9 BA      590      cmp #"9"+1
474C 90 02      591      bcc >1
474E           592      ;
474E 69 06      593      adc #6
4750           594      ;
4750 4C 7F 45   595      ^1      jmp PRNTOUT
4753           596      ;
4753           597      ;
4753 B1 3C      598      HEXTODEC lda (DATAPTR),Y
4755           599      ;
4755 A2 00      600      HEXTODC2 ldx #ZERO
4757           601      ;
4757 C9 64      602      ^1      cmp #100
4759 90 05      603      bcc >2
475B           604      ;
475B E9 64      605      sbc #100
475D           606      ;
475D C8        607      iny
475E D0 F7      608      bne <1
4760           609      ;

```

```

4760 C9 0A      610  ^2      cmp #10
4762 90 05      611          bcc >3
4764           612  ;
4764 E9 0A      613          sbc #10
4766           614  ;
4766 E8         615          inx
4767 D0 F7      616          bne <2
4769           617  ;
4769 8D A0 45    618  ^3      sta PRNTSAV
476C           619  ;
476C 60         620          rts
476D           621  ;
476D           622  ;
476D A0 00      623 GETDIGIT ldy #ZERO
476F           624  ;
476F 38         625  ^1      sec
4770           626  ;
4770 AD A1 45    627          lda PRNTNUM
4773 FD 05 49    628          sbc DECTBLL+1,X
4776 48         629          pha
4777           630  ;
4777 AD A2 45    631          lda PRNTNUM+1
477A FD 0A 49    632          sbc DECTBLH+1,X
477D 90 0A      633          bcc >2
477F           634  ;
477F 8D A2 45    635          sta PRNTNUM+1
4782           636  ;
4782 68         637          pla
4783 8D A1 45    638          sta PRNTNUM
4786           639  ;
4786 C8         640          iny
4787 D0 E6      641          bne <1
4789           642  ;
4789 68         643  ^2      pla
478A           644  ;
478A 98         645          tya
478B           646  ;
478B 60         647          rts
478C           648  ;
478C           649  ;
478C           650 PRNTGRPH:
478C           651          .if DISPLAY=GRPHMODE
478C           652  ;
478C C9 A0      653          cmp #SPACE
478E B0 37      654          bcs >3
4790           655  ;
4790 C9 80      656          cmp #ASCIFLAG
4792 90 33      657          bcc >3
4794           658  ;
4794 C9 87      659          cmp #BELLCHAR
4796 D0 03      660          bne >1
4798           661  ;
4798 4C 3A FF    662          jmp BELL
479B           663  ;
479B C9 8D      664  ^1      cmp #RETURN
479D F0 19      665          beq >2
479F           666  ;
479F C9 88      667          cmp #LARROW
47A1 D0 02      668          bne >1
47A3           669  ;
47A3 C6 24      670          dec CH

```

```

47A5          671 ;
47A5 C9 8A    672 ^1    cmp #DARROW
47A7 D0 02    673      bne >1
47A9          674 ;
47A9 E6 25    675      inc CV
47AB          676 ;
47AB C9 8B    677 ^1    cmp #UARROW
47AD D0 02    678      bne >1
47AF          679 ;
47AF C6 25    680      dec CV
47B1          681 ;
47B1 C9 95    682 ^1    cmp #RARROW
47B3 D0 02    683      bne >1
47B5          684 ;
47B5 E6 24    685      inc CH
47B7          686 ;
47B7 60       687 ^1    rts
47B8          688 ;
47B8 A5 20    689 ^2    lda WNDLFT
47BA 85 24    690      sta CH
47BC          691 ;
47BC E6 25    692      inc CV
47BE          693 ;
47BE A5 25    694      lda CV
47C0 C5 23    695      cmp WNDBTM
47C2 90 5E    696      bcc >8
47C4          697 ;
47C4 4C 3B 48 698      jmp SCROLL
47C7          699 ;
47C7 8E 21 48 700 ^3    stx SCRNSAVX+1
47CA 8C 1F 48 701      sty SCRNSAVY+1
47CD          702 ;
47CD A2 4B    703      ldx /CHARTBL
47CF          704 ;
47CF A0 00    705      ldy #ZERO
47D1          706 ;
47D1 0A       707      asl
47D2 B0 03    708      bcs >4
47D4          709 ;
47D4 A0 7F    710      ldy #INVRMASK
47D6          711 ;
47D6 38       712      sec
47D7          713 ;
47D7 8C 08 48 714 ^4    sty SCRNMOD2+1
47DA          715 ;
47DA E9 40    716      sbc #$40
47DC          717 ;
47DC 0A       718      asl
47DD 90 02    719      bcc >5
47DF          720 ;
47DF A2 4D    721      ldx /CHARTBL+$200
47E1          722 ;
47E1 0A       723 ^5    asl
47E2 90 02    724      bcc >6
47E4          725 ;
47E4 E8       726      inx
47E5          727 ;
47E5 18       728      clc
47E6          729 ;
47E6 69 00    730 ^6    adc #CHARTBL
47E8 8D 05 48 731      sta SCRNMOD1+1

```

```

47EB 90 01      732      bcc >7
47ED           733      ;
47ED E8         734      inx
47EE           735      ;
47EE 8E 06 48   736      ^7      stx SCRNMOD1+2
47F1           737      ;
47F1 18         738      clc
47F2           739      ;
47F2 A6 25      740      ldx CV
47F4           741      ;
47F4 BD 0E 49   742      lda YBASELO,X
47F7 8D 0A 48   743      sta SCRNMOD3+1
47FA           744      ;
47FA BD 26 49   745      lda YBASEHI,X
47FD 8D 0B 48   746      sta SCRNMOD3+2
4800           747      ;
4800 A4 24      748      ldy CH
4802 A2 07      749      ldx #CHARCELL
4804           750      ;
4804 BD 00 00   751      SCRNMOD1 lda *-,X
4807           752      ;
4807 49 00      753      SCRNMOD2 eor #ZERO
4809           754      ;
4809 99 00 00   755      SCRNMOD3 sta *-,Y
480C           756      ;
480C AD 0B 48   757      lda SCRNMOD3+2
480F 69 04      758      adc #NEXTLINE
4811 8D 0B 48   759      sta SCRNMOD3+2
4814           760      ;
4814 CA         761      dex
4815 10 ED      762      bpl SCRNMOD1
4817           763      ;
4817 C8         764      iny
4818           765      ;
4818 C0 28      766      SCRNMOD4 cpy #MAXWDTH
481A B0 9C      767      bcs <2
481C           768      ;
481C 84 24      769      sty CH
481E           770      ;
481E A0 00      771      SCRNSAVY ldy #ZERO
4820 A2 00      772      SCRNSAVX ldx #ZERO
4822           773      ;
4822 60         774      ^8      rts
4823           775      ;
4823           776      ;
4823 2C 57 C0   777      SCRNNIT bit HIRES
4826 2C 52 C0   778      bit MIXCLR
4829 2C 50 C0   779      bit TXTCLR
482C           780      ;
482C 18         781      clc
482D           782      ;
482D A9 28      783      lda #MAXWDTH
482F 65 20      784      adc WNDLFT
4831 8D 19 48   785      sta SCRNMOD4+1
4834 8D A1 48   786      sta EOLMOD1+1
4837 8D 70 48   787      sta SCRLMOD3+1
483A           788      ;
483A 60         789      rts
483B           790      ;
483B           791      ;
483B A5 20      792      SCROLL  lda WNDLFT

```

```

483D 85 24      793      sta CH
483F           794      ;
483F A6 23      795      ldx WNDBTM
4841 CA         796      dex
4842 8E 89 48   797      stx SCRLMOD4+1
4845           798      ;
4845 A6 22      799      ldx WNDBTM
4847 86 25      800      stx CV
4849           801      ;
4849 BD 0E 49   802      ^1  lda YBASELO,X
484C 8D 6C 48   803      sta SCRLMOD2+1
484F           804      ;
484F BD 26 49   805      lda YBASEHI,X
4852 8D 6D 48   806      sta SCRLMOD2+2
4855           807      ;
4855 E8         808      inx
4856 86 25      809      stx CV
4858           810      ;
4858 BD 0E 49   811      lda YBASELO,X
485B 8D 69 48   812      sta SCRLMOD1+1
485E           813      ;
485E BD 26 49   814      lda YBASEHI,X
4861 8D 6A 48   815      sta SCRLMOD1+2
4864           816      ;
4864 A2 07      817      ldx #CHARCELL
4866           818      ;
4866 A4 24      819      ^2  ldy CH
4868           820      ;
4868 B9 00 00   821      SCRLMOD1 lda *-,Y
486B 99 00 00   822      SCRLMOD2 sta *-,Y
486E           823      ;
486E C8         824      iny
486F           825      ;
486F C0 28      826      SCRLMOD3 cpy #MAXWDTH
4871 90 F5      827      bcc SCRLMOD1
4873           828      ;
4873 AD 6A 48   829      lda SCRLMOD1+2
4876 69 03      830      adc #NEXTLINE-1
4878 8D 6A 48   831      sta SCRLMOD1+2
487B           832      ;
487B AD 6D 48   833      lda SCRLMOD2+2
487E 69 04      834      adc #NEXTLINE
4880 8D 6D 48   835      sta SCRLMOD2+2
4883           836      ;
4883 CA         837      dex
4884 10 E0      838      bpl <2
4886           839      ;
4886 A6 25      840      ldx CV
4888           841      ;
4888 E0 00      842      SCRLMOD4 cpx #ZERO
488A D0 BD      843      bne <1
488C           844      ;
488C           845      ;
488C A6 25      846      SCRNEOL ldx CV
488E           847      ;
488E BD 0E 49   848      lda YBASELO,X
4891 8D A5 48   849      sta EOLMOD2+1
4894           850      ;
4894 BD 26 49   851      lda YBASEHI,X
4897 8D A6 48   852      sta EOLMOD2+2
489A           853      ;

```

```

489A A2 07      854      ldx #CHARCELL
489C           855      ;
489C A4 24      856      ^1      ldy CH
489E           857      ;
489E A9 00      858      lda #ZERO
48A0           859      ;
48A0 C0 28      860      EOLMOD1  cpy #MAXWDTH
48A2 B0 06      861      bcs >2
48A4           862      ;
48A4 99 00 00   863      EOLMOD2  sta *-*,Y
48A7           864      ;
48A7 C8         865      iny
48A8 D0 F6      866      bne EOLMOD1
48AA           867      ;
48AA AD A6 48   868      ^2      lda EOLMOD2+2
48AD 69 03      869      adc #NEXTLINE-1
48AF 8D A6 48   870      sta EOLMOD2+2
48B2           871      ;
48B2 CA         872      dex
48B3 10 E7      873      bpl <1
48B5           874      ;
48B5 60         875      rts
48B6           876      ;
48B6           877      ;
48B6 A5 20      878      SCRNHOM  lda WNDLFT
48B8 85 24      879      sta CH
48BA           880      ;
48BA A5 22      881      lda WNDTOP
48BC 85 25      882      sta CV
48BE           883      ;
48BE           884      ;
48BE 20 8C 48   885      SCRNEOP  jsr SCRNEOL
48C1           886      ;
48C1 A5 24      887      lda CH
48C3 48         888      pha
48C4           889      ;
48C4 A5 25      890      lda CV
48C6 48         891      pha
48C7           892      ;
48C7 A5 20      893      lda WNDLFT
48C9 85 24      894      sta CH
48CB           895      ;
48CB E6 25      896      ^1      inc CV
48CD           897      ;
48CD A5 25      898      lda CV
48CF C5 23      899      cmp WNDBTM
48D1 B0 05      900      bcs >2
48D3           901      ;
48D3 20 8C 48   902      jsr SCRNEOL
48D6 30 F3      903      bmi <1
48D8           904      ;
48D8 68         905      ^2      pla
48D9 85 25      906      sta CV
48DB           907      ;
48DB 68         908      pla
48DC 85 24      909      sta CH
48DE           910      ;
48DE 60         911      rts
48DF           912      ;
48DF           913      ;
48DF           914      .fi

```



```
48DF          915  ;
48DF          916  ;
```

```
BSAVE SEG03,A$1000,B,L$03DA
```

```
48DF          917          usr SEG03
48DF          918  ;
48DF          919  ;
48DF          920          icl "SIDER4.L"
```

```
LLOAD SIDER4.L,A$4000
```

```
48DF      1          ttl "Sider Source Code, SIDER4.L"
48DF      2      ;
48DF      3      ;
48DF      4      ; SIDER4.L
48DF      5      ;
48DF      6      ;
48DF      7          obj PAGE10
48DF      8          usr
48DF      9      ;
48DF     10      ;
48DF     11      SDSLOT0  dfs 1,3
48E0     12      DRIVES   dfs 1,1
48E1     13      SDACT    dfs 1,1
48E2     14      ;
48E2     15      SAVVAL   dfs 1,0
48E3     16      ;
48E3     17      ;
48E3     18      ; The following parameters are Slot number (06), ASCII
48E3     19      ; slot number (B6), CXpage (C6), and Slot*16 (60).
48E3     20      ;
48E3     21      SLTPARMS:
48E3     22      ;
48E3     23      SDPARMS  dfs 4,MODBYTE
48E7     24      ;
48E7     25      ;
48E7     26      MARKER   dfs 1,MODBYTE
48E8     27      HEXNUM    dfs 2,MODBYTE
48EA     28      NEGNUM    dfs 2,MODBYTE
48EC     29      ;
48EC     30      ;
48EC     31      SLOTADRL:
48EC 35     32          byt SSMOD1
48ED 39     33          byt SSMOD2
48EE 3D     34          byt SSMOD3
48EF 41     35          byt SSMOD4
48F0     36      ;
48F0     37      SLOTADRH:
48F0 41     38          hby SSMOD1
48F1 41     39          hby SSMOD2
48F2 41     40          hby SSMOD3
48F3 41     41          hby SSMOD4
48F4     42      ;
48F4     43      ;
48F4     44      ACTADRL:
48F4 8F     45          byt SAMOD1
48F5 9B     46          byt SAMOD2
48F6 A2     47          byt SAMOD3
48F7     48      ;
48F7     49      ACTADRH:
48F7 41     50          hby SAMOD1
48F8 41     51          hby SAMOD2
48F9 41     52          hby SAMOD3
48FA     53      ;
48FA     54      ;
48FA     55      PDTBLL:
48FA 10     56          byt 10000
48FB E8     57          byt 1000
48FC 64     58          byt 100
48FD 0A     59          byt 10
48FE 01     60          byt 1
```

```
48FF      61 ;
48FF      62 PDTBLH:
48FF 27    63      hby 10000
4900 03    64      hby 1000
4901 00    65      hby 100
4902 00    66      hby 10
4903 00    67      hby 1
4904      68 ;
4904      69 ;
4904 01 0A 64 70 DECTBL  byt 1,10,100,1000,10000
4907 E8 10
4909 00 00 00 71 DECTBLH hby 1,10,100,1000,10000
490C 03 27
490E      72 ;
490E      73 ;
490E      74      .if DISPLAY=GRPHMODE
490E      75 ;
490E      76 YBASELO:
490E 00 80 00 77      hex 0080008000800080
4911 80 00 80
4914 00 80
4916 28 A8 28 78      hex 28A828A828A828A8
4919 A8 28 A8
491C 28 A8
491E 50 D0 50 79      hex 50D050D050D050D0
4921 D0 50 D0
4924 50 D0
4926      80 ;
4926      81 YBASEHI:
4926 20 20 21 82      hex 2020212122222323
4929 21 22 22
492C 23 23
492E 20 20 21 83      hex 2020212122222323
4931 21 22 22
4934 23 23
4936 20 20 21 84      hex 2020212122222323
4939 21 22 22
493C 23 23
493E      85 ;
493E      86      .fi
493E      87 ;
493E      88 ;
493E      89      dfs $96-*)&NEGONE,ZERO
4996      90 ;
4996      91 ;
4996      92 NIBLTBL:
4996 00 04 00 93      hex 00040000080C0010
4999 00 08 0C
499C 00 10
499E 14 18 00 94      hex 1418000000000000
49A1 00 00 00
49A4 00 00
49A6 1C 20 00 95      hex 1C2000000024282C
49A9 00 00 24
49AC 28 2C
49AE 30 34 00 96      hex 30340000383C4044
49B1 00 38 3C
49B4 40 44
49B6      97 ;
49B6 48 4C 00 98      hex 484C005054585C60
49B9 50 54 58
```

```
49BC 5C 60
49BE 64 68 00    99      hex 6468000000000000
49C1 00 00 00
49C4 00 00
49C6 00 00 00    100     hex 000000000006C0070
49C9 00 00 6C
49CC 00 70
49CE 74 78 00    101     hex 747800000007C0000
49D1 00 00 7C
49D4 00 00
49D6              102     ;
49D6 80 84 00    103     hex 808400888C909498
49D9 88 8C 90
49DC 94 98
49DE 9C A0 00    104     hex 9CA00000000000A4
49E1 00 00 00
49E4 00 A4
49E6 A8 AC 00    105     hex A8AC00B0B4B8BCC0
49E9 B0 B4 B8
49EC BC C0
49EE C4 C8 00    106     hex C4C80000CCD0D4D8
49F1 00 CC D0
49F4 D4 D8
49F6              107     ;
49F6 DC E0 00    108     hex DCE000E4E8ECF0F4
49F9 E4 E8 EC
49FC F0 F4
49FE F8 FC        109     hex F8FC
4A00              110     ;
4A00              111     BITBL:
4A00 00 00 00    112     hex 0000000002000000
4A03 00 02 00
4A06 00 00
4A08 01 00 00    113     hex 0100000003000000
4A0B 00 03 00
4A0E 00 00
4A10 00 02 00    114     hex 0002000002020000
4A13 00 02 02
4A16 00 00
4A18 01 02 00    115     hex 0102000003020000
4A1B 00 03 02
4A1E 00 00
4A20              116     ;
4A20 00 01 00    117     hex 0001000002010000
4A23 00 02 01
4A26 00 00
4A28 01 01 00    118     hex 0101000003010000
4A2B 00 03 01
4A2E 00 00
4A30 00 03 00    119     hex 0003000002030000
4A33 00 02 03
4A36 00 00
4A38 01 03 00    120     hex 0103000003030000
4A3B 00 03 03
4A3E 00 00
4A40              121     ;
4A40 00 00 02    122     hex 0000020002000200
4A43 00 02 00
4A46 02 00
4A48 01 00 02    123     hex 0100020003000200
4A4B 00 03 00
```

```
4A4E 02 00
4A50 00 02 02    124          hex 0002020002020200
4A53 00 02 02
4A56 02 00
4A58 01 02 02    125          hex 0102020003020200
4A5B 00 03 02
4A5E 02 00
4A60          126 ;
4A60 00 01 02    127          hex 0001020002010200
4A63 00 02 01
4A66 02 00
4A68 01 01 02    128          hex 0101020003010200
4A6B 00 03 01
4A6E 02 00
4A70 00 03 02    129          hex 0003020002030200
4A73 00 02 03
4A76 02 00
4A78 01 03 02    130          hex 0103020003030200
4A7B 00 03 03
4A7E 02 00
4A80          131 ;
4A80 00 00 01    132          hex 0000010002000100
4A83 00 02 00
4A86 01 00
4A88 01 00 01    133          hex 0100010003000100
4A8B 00 03 00
4A8E 01 00
4A90 00 02 01    134          hex 0002010002020100
4A93 00 02 02
4A96 01 00
4A98 01 02 01    135          hex 0102010003020100
4A9B 00 03 02
4A9E 01 00
4AA0          136 ;
4AA0 00 01 01    137          hex 0001010002010100
4AA3 00 02 01
4AA6 01 00
4AA8 01 01 01    138          hex 0101010003010100
4AAB 00 03 01
4AAE 01 00
4AB0 00 03 01    139          hex 0003010002030100
4AB3 00 02 03
4AB6 01 00
4AB8 01 03 01    140          hex 0103010003030100
4ABB 00 03 03
4ABE 01 00
4AC0          141 ;
4AC0 00 00 03    142          hex 0000030002000300
4AC3 00 02 00
4AC6 03 00
4AC8 01 00 03    143          hex 0100030003000300
4ACB 00 03 00
4ACE 03 00
4AD0 00 02 03    144          hex 0002030002020300
4AD3 00 02 02
4AD6 03 00
4AD8 01 02 03    145          hex 0102030003020300
4ADB 00 03 02
4ADE 03 00
4AE0          146 ;
4AE0 00 01 03    147          hex 0001030002010300
```

```

4AE3 00 02 01
4AE6 03 00
4AE8 01 01 03      148      hex 0101030003010300
4AEB 00 03 01
4AEE 03 00
4AF0 00 03 03      149      hex 0003030002030300
4AF3 00 02 03
4AF6 03 00
4AF8 01 03 03      150      hex 0103030003030300
4AFB 00 03 03
4AFE 03 00
4B00      151      ;
4B00      152      ;
4B00      153      .if DISPLAY=GRPHMODE
4B00      154      ;
4B00      155      CHARTBL:
4B00 00 00 00      156      hex 0000000000000000 ;
4B03 00 00 00
4B06 00 00
4B08 00 08 00      157      hex 0008000808080808 ; !
4B0B 08 08 08
4B0E 08 08
4B10 00 00 00      158      hex 0000000000141414 ; "
4B13 00 00 14
4B16 14 14
4B18 00 14 14      159      hex 0014143E143E1414 ; #
4B1B 3E 14 3E
4B1E 14 14
4B20 00 08 1E      160      hex 00081E281C0A3C08 ; $
4B23 28 1C 0A
4B26 3C 08
4B28 00 30 32      161      hex 0030320408102606 ; %
4B2B 04 08 10
4B2E 26 06
4B30 00 2C 12      162      hex 002C122A040A0A04 ; &
4B33 2A 04 0A
4B36 0A 04
4B38 00 00 00      163      hex 0000000000080808 ; ´
4B3B 00 00 08
4B3E 08 08
4B40 00 10 08      164      hex 0010088484840810 ; (
4B43 84 84 84
4B46 08 10
4B48 00 04 08      165      hex 0004088888880804 ; )
4B4B 88 88 88
4B4E 08 04
4B50 00 08 2A      166      hex 00082A1C081C2A08 ; *
4B53 1C 08 1C
4B56 2A 08
4B58 00 00 08      167      hex 000008083E080800 ; +
4B5B 08 3E 08
4B5E 08 00
4B60 04 08 08      168      hex 0408080000000000 ; ,
4B63 00 00 00
4B66 00 00
4B68 00 00 00      169      hex 000000003E000000 ; -
4B6B 00 3E 00
4B6E 00 00
4B70 00 08 00      170      hex 0008000000000000 ; .
4B73 00 00 00
4B76 00 00

```

```
4B78 00 00 02    171      hex 0000020408102000 ; /
4B7B 04 08 10
4B7E 20 00
4B80          172 ;
4B80 00 1C 22    173      hex 001C22262A32221C ; 0
4B83 26 2A 32
4B86 22 1C
4B88 00 1C 08    174      hex 001C080808080C08 ; 1
4B8B 08 08 08
4B8E 0C 08
4B90 00 3E 02    175      hex 003E02041820221C ; 2
4B93 04 18 20
4B96 22 1C
4B98 00 1C 22    176      hex 001C22201810203E ; 3
4B9B 20 18 10
4B9E 20 3E
4BA0 00 10 10    177      hex 0010103E12141810 ; 4
4BA3 3E 12 14
4BA6 18 10
4BA8 00 1C 22    178      hex 001C2220201E023E ; 5
4BAB 20 20 1E
4BAE 02 3E
4BB0 00 1C 22    179      hex 001C22221E020438 ; 6
4BB3 22 1E 02
4BB6 04 38
4BB8 00 04 04    180      hex 000404040810203E ; 7
4BBB 04 08 10
4BBE 20 3E
4BC0 00 1C 22    181      hex 001C22221C22221C ; 8
4BC3 22 1C 22
4BC6 22 1C
4BC8 00 0E 10    182      hex 000E10203C22221C ; 9
4BCB 20 3C 22
4BCE 22 1C
4BD0 00 00 08    183      hex 0000080008000000 ; :
4BD3 00 08 00
4BD6 00 00
4BD8 04 08 08    184      hex 0408080008000000 ; ;
4BDB 00 08 00
4BDE 00 00
4BE0 00 90 88    185      hex 0090888482848890 ; <
4BE3 84 82 84
4BE6 88 90
4BE8 00 00 00    186      hex 0000003E003E0000 ; =
4BEB 3E 00 3E
4BEE 00 00
4BF0 00 82 84    187      hex 0082848890888482 ; >
4BF3 88 90 88
4BF6 84 82
4BF8 00 08 00    188      hex 000800089820221C ; ?
4BFB 08 98 20
4BFE 22 1C
4C00          189 ;
4C00 00 3C 02    190      hex 003C021A2A3A221C ; @
4C03 1A 2A 3A
4C06 22 1C
4C08 00 22 22    191      hex 0022223E22221408 ; A
4C0B 3E 22 22
4C0E 14 08
4C10 00 1E 22    192      hex 001E22221E22221E ; B
4C13 22 1E 22
```

```
4C16 22 1E
4C18 00 1C 22    193      hex 001C22020202221C ; C
4C1B 02 02 02
4C1E 22 1C
4C20 00 1E 22    194      hex 001E22222222221E ; D
4C23 22 22 22
4C26 22 1E
4C28 00 3E 02    195      hex 003E02021E02023E ; E
4C2B 02 1E 02
4C2E 02 3E
4C30 00 02 02    196      hex 000202021E02023E ; F
4C33 02 1E 02
4C36 02 3E
4C38 00 3C 22    197      hex 003C22320202023C ; G
4C3B 32 02 02
4C3E 02 3C
4C40 00 22 22    198      hex 002222223E222222 ; H
4C43 22 3E 22
4C46 22 22
4C48 00 1C 08    199      hex 001C08080808081C ; I
4C4B 08 08 08
4C4E 08 1C
4C50 00 1C 22    200      hex 001C222020202020 ; J
4C53 20 20 20
4C56 20 20
4C58 00 22 12    201      hex 0022120A060A1222 ; K
4C5B 0A 06 0A
4C5E 12 22
4C60 00 3E 02    202      hex 003E020202020202 ; L
4C63 02 02 02
4C66 02 02
4C68 00 22 22    203      hex 002222222A2A3622 ; M
4C6B 22 2A 2A
4C6E 36 22
4C70 00 22 22    204      hex 002222322A262222 ; N
4C73 32 2A 26
4C76 22 22
4C78 00 1C 22    205      hex 001C22222222221C ; O
4C7B 22 22 22
4C7E 22 1C
4C80                206 ;
4C80 00 02 02    207      hex 000202021E22221E ; P
4C83 02 1E 22
4C86 22 1E
4C88 00 2C 12    208      hex 002C122A2222221C ; Q
4C8B 2A 22 22
4C8E 22 1C
4C90 00 22 12    209      hex 0022120A1E22221E ; R
4C93 0A 1E 22
4C96 22 1E
4C98 00 1C 22    210      hex 001C22201C02221C ; S
4C9B 20 1C 02
4C9E 22 1C
4CA0 00 08 08    211      hex 000808080808083E ; T
4CA3 08 08 08
4CA6 08 3E
4CA8 00 1C 22    212      hex 001C222222222222 ; U
4CAB 22 22 22
4CAE 22 22
4CB0 00 08 14    213      hex 0008142222222222 ; V
4CB3 22 22 22
```



```
4CB6 22 22
4CB8 00 22 36      214      hex 0022362A2A222222 ; W
4CBB 2A 2A 22
4CBE 22 22
4CC0 00 22 22      215      hex 0022221408142222 ; X
4CC3 14 08 14
4CC6 22 22
4CC8 00 08 08      216      hex 0008080808142222 ; Y
4CCB 08 08 14
4CCE 22 22
4CD0 00 3E 02      217      hex 003E02040810203E ; Z
4CD3 04 08 10
4CD6 20 3E
4CD8 00 1C 04      218      hex 001C04040404041C ; [
4CDB 04 04 04
4CDE 04 1C
4CE0 00 00 20      219      hex 0000201008040200 ; \
4CE3 10 08 04
4CE6 02 00
4CE8 00 1C 10      220      hex 001C10101010101C ; ]
4CEB 10 10 10
4CEE 10 1C
4CF0 00 00 00      221      hex 0000002214080000 ; ^
4CF3 22 14 08
4CF6 00 00
4CF8 7F 00 00      222      hex 7F00000000000000 ; _
4CFB 00 00 00
4CFE 00 00
4D00      223      ;
4D00 00 00 00      224      hex 0000000000100804 ; `
4D03 00 00 10
4D06 08 04
4D08 00 3C 22      225      hex 003C223C201C0000 ; a
4D0B 3C 20 1C
4D0E 00 00
4D10 00 1E 22      226      hex 001E2222221E0202 ; b
4D13 22 22 1E
4D16 02 02
4D18 00 3C 02      227      hex 003C0202023C0000 ; c
4D1B 02 02 3C
4D1E 00 00
4D20 00 3C 22      228      hex 003C2222223C2020 ; d
4D23 22 22 3C
4D26 20 20
4D28 00 3C 02      229      hex 003C023E221C0000 ; e
4D2B 3E 22 1C
4D2E 00 00
4D30 00 04 04      230      hex 000404041E042418 ; f
4D33 04 1E 04
4D36 24 18
4D38 1C 20 3C      231      hex 1C203C22221C0000 ; g
4D3B 22 22 1C
4D3E 00 00
4D40 00 22 22      232      hex 00222222221E0202 ; h
4D43 22 22 1E
4D46 02 02
4D48 00 1C 08      233      hex 001C0808080C0008 ; i
4D4B 08 08 0C
4D4E 00 08
4D50 0C 12 10      234      hex 0C12101010180010 ; j
4D53 10 10 18
```

```
4D56 00 10
4D58 00 22 12    235      hex 0022120E12220202 ; k
4D5B 0E 12 22
4D5E 02 02
4D60 00 1C 08    236      hex 001C08080808080C ; l
4D63 08 08 08
4D66 08 0C
4D68 00 22 2A    237      hex 00222A2A2A360000 ; m
4D6B 2A 2A 36
4D6E 00 00
4D70 00 22 22    238      hex 00222222221E0000 ; n
4D73 22 22 1E
4D76 00 00
4D78 00 1C 22    239      hex 001C2222221C0000 ; o
4D7B 22 22 1C
4D7E 00 00
4D80              240      ;
4D80 02 02 1E    241      hex 02021E22221E0000 ; p
4D83 22 22 1E
4D86 00 00
4D88 20 20 3C    242      hex 20203C22223C0000 ; q
4D8B 22 22 3C
4D8E 00 00
4D90 00 02 02    243      hex 00020202063A0000 ; r
4D93 02 06 3A
4D96 00 00
4D98 00 1E 20    244      hex 001E201C023C0000 ; s
4D9B 1C 02 3C
4D9E 00 00
4DA0 00 18 24    245      hex 00182404041E0404 ; t
4DA3 04 04 1E
4DA6 04 04
4DA8 00 2C 32    246      hex 002C322222220000 ; u
4DAB 22 22 22
4DAE 00 00
4DB0 00 08 14    247      hex 0008142222220000 ; v
4DB3 22 22 22
4DB6 00 00
4DB8 00 36 2A    248      hex 00362A2A22220000 ; w
4DBB 2A 22 22
4DBE 00 00
4DC0 00 22 14    249      hex 0022140814220000 ; x
4DC3 08 14 22
4DC6 00 00
4DC8 1C 20 3C    250      hex 1C203C2222220000 ; y
4DCB 22 22 22
4DCE 00 00
4DD0 00 3E 04    251      hex 003E0408103E0000 ; z
4DD3 08 10 3E
4DD6 00 00
4DD8 00 98 84    252      hex 0098848482848498 ; {
4DDB 84 82 84
4DDE 84 98
4DE0 08 08 08    253      hex 0808080808080808 ; |
4DE3 08 08 08
4DE6 08 08
4DE8 00 86 88    254      hex 0086888890888886 ; }
4DEB 88 90 88
4DEE 88 86
4DF0 00 00 00    255      hex 0000000000001A2C ; ~
4DF3 00 00 00
```

```
4DF6 1A 2C
4DF8 7F 7F 7F    256      hex 7F7F7F7F7F7F7F7F ;
4DFB 7F 7F 7F
4DFE 7F 7F
4E00          257  ;
4E00          258      .fi
4E00          259  ;
4E00          260  ;
```

```
BSAVE SEG04,A$1000,B,L$0521
```

```
4E00          261      usr SEG04
4E00          262  ;
4E00          263  ;
4E00          264      icl "SIDER5.L"
```

```
LLOAD SIDER5.L,A$4000
```

```

4E00          1          ttl "Sider Source Code, SIDER5.L"
4E00          2          ;
4E00          3          ;
4E00          4          ; SIDER5.L
4E00          5          ;
4E00          6          ;
4E00          7          obj PAGE10
4E00          8          usr
4E00          9          ;
4E00         10          ;
4E00         11          SDCODE1:
4E00         12          phs PAGEC8
C800         13          ;
C800         14          ;
C800         15          ; Clear DCB and copy EXIT code to the stack.  Extract slot
C800         16          ; page from the stack.  Exit with SLOT*16 in A-reg.
C800         17          ; Preserve Y-reg.
C800         18          ;
C800 84 4A     19          GETSLOT2 sty IOBADR
C802 85 4B     20          sta IOBADR+1
C804          21          ;
C804 A2 0B     22          GETSLOT  ldx #EXITLEN-1
C806          23          ;
C806 BD 28 C8  24          ^1      lda EXIT,X
C809 9D 18 01  25          sta STKCODE,X
C80C          26          ;
C80C A9 00     27          lda #ZERO
C80E 9D 24 01  28          sta DCB,X
C811          29          ;
C811 CA       30          dex
C812 10 F2     31          bpl <1
C814          32          ;
C814 BA       33          tsx                      ; get stack pointer
C815          34          ;
C815 BD 02 01  35          lda STACK+2,X
C818 8D F8 07  36          sta SDPAGECX
C81B          37          ;
C81B 29 07     38          and #SLOTMASK
C81D 8D 78 04  39          sta SDSLOT
C820          40          ;
C820 0A       41          asl
C821 0A       42          asl
C822 0A       43          asl
C823 0A       44          asl
C824          45          ;
C824 8D F8 04  46          sta SDSLOT16
C827          47          ;
C827 60       48          rts                      ; C-flag is clear
C828          49          ;
C828          50          ;
C828          51          ; Exit routines that are copied to the stack.
C828          52          ;
C828          53          EXIT      phs STKCODE
0118          54          ;
0118          55          ;
0118          56          EXITBGN:
0118          57          ;
0118          58          ;
0118          59          ; Code to exit Sider to a specific address.
0118          60          ;

```

```

0118 58          61 EXIT1      cli
0119          62 ;
0119 2C FF CF    63 EXIT2      bit CLRROM
011C          64 ;
011C 6C 10 01    65          jmp (EXITADR)
011F          66 ;
011F          67 ;
011F          68 ; Code to exit Sider and return to the caller.
011F          69 ;
011F 58          70 EXIT3      cli
0120          71 ;
0120 2C FF CF    72 EXIT4      bit CLRROM
0123          73 ;
0123 60          74          rts
0124          75 ;
0124          76 ;
000C          77 EXITLEN     equ *-EXITBGN
0124          78 ;
0124          79 ;
0124          80 ; General DCB location on Page 0x01.
0124          81 ;
0124          82 DCB         equ *
0124          83 ;
0124          84 DCBCMD      equ DCB          ; DCB command
0124          85 ;
0125          86 DCBATAH     equ DCB+1        ; ATA high address
0126          87 DCBATAM     equ DCB+2        ; ATA medium address
0127          88 DCBATAL     equ DCB+3        ; ATA low address
0124          89 ;
0128          90 DCBLOCK     equ DCB+4        ; block count
0129          91 DCBSTEP     equ DCB+5        ; step option
0124          92 ;
012A          93 DCBADR      equ DCB+6        ; buffer address
0124          94 ;
0124          95 ;
0124          96 ; Status buffer location on Page 0x01.
0124          97 ;
012C          98 STATBUF     equ DCB+8        ; STATSIZE bytes
0124          99 ;
0124         100 ;
0124         101          phs EXIT+EXITLEN
C834         102 ;
C834         103 ;
C834         104 ; Reverse sector interleave order.
C834         105 ;
C834 00 07 0E    106 RVSELEAV hex 00070E060D050C04
C837 06 0D 05
C83A 0C 04
C83C 0B 03 0A    107          hex 0B030A020901080F
C83F 02 09 01
C842 08 0F
C844         108 ;
C844         109 ;
C844         110 ; Call the DOS 4.X Disk Address Table manager.
C844         111 ;
C844 18          112 GETDISKC  clc
C845         113 ;
C845 B0 00        114          bcs GETDISKS+1
C847         115          dfs !-1
C846         116 ;
C846 38          117 GETDISKS  sec

```

```

C847      118 ;
C847 6C F2 BF 119      jmp (MNGDISK)
C84A      120 ;
C84A      121 ;
C84A      122 ; Sider volume boot handler.
C84A      123 ;
C84A D8      124 SDANYVOL cld
C84B      125 ;
C84B 8D 82 C0 126      sta ROM2WP
C84E      127 ;
C84E A0 4C      128 ^1      ldy #MESG6-MESGS
C850 20 70 CD 129      jsr PRTMESG
C853      130 ;
C853 20 C9 CC 131      jsr GETVOL
C856 90 0D      132      bcc >3
C858      133 ;
C858 A0 65      134 ^2      ldy #MONITOR
C85A A9 FF      135      lda /MONITOR
C85C      136 ;
C85C 8C 10 01 137      sty EXITADR
C85F 8D 11 01 138      sta EXITADR+1
C862      139 ;
C862 4C 18 01 140      jmp EXIT1
C865      141 ;
C865 A5 FC      142 ^3      lda VALUE
C867 C9 4A      143      cmp #MAXVOLS
C869 B0 E3      144      bcs <1
C86B      145 ;
C86B 8D 78 06 146      sta VOLUME
C86E      147 ;
C86E      148 ;
C86E      149 ; Entry point for DOS images.
C86E      150 ;
C86E D8      151 SDBOOT cld
C86F      152 ;
C86F AD 12 C0 153      lda RDLGRAM
C872 8D 12 01 154      sta LGRAM
C875      155 ;
C875 8D 82 C0 156      sta ROM2WP
C878      157 ;
C878 A2 FF      158      ldx #NEGONE
C87A      159 ;
C87A 8E FB 04 160      stx XMODE
C87D 8E 0C C0 161      stx VID80OFF
C880 8E 0E C0 162      stx ALTCHOFF
C883      163 ;
C883 20 84 FE 164      jsr SETNORM
C886 20 2F FB 165      jsr INIT
C889 20 93 FE 166      jsr SETVID
C88C 20 89 FE 167      jsr SETKBD
C88F      168 ;
C88F A9 00      169      lda #ZERO
C891      170 ;
C891 85 26      171      sta BUFRADRZ
C893 85 3D      172      sta ROMSECTR
C895 8D F8 05 173      sta TRACK
C898      174 ;
C898 AE 78 04 175      ldx SDSLOT
C89B      176 ;
C89B 9D F8 05 177      sta SAVEADRH,X
C89E 9D 78 07 178      sta DOSVRSN,X

```

```

C8A1      179 ;
C8A1 AD 78 06 180      lda VOLUME
C8A4 9D F8 07 181      sta DOSVOLM,X
C8A7      182 ;
C8A7 A9 08 183      lda /PAGE08
C8A9 85 27 184      sta BUFRADRZ+1
C8AB      185 ;
C8AB D0 06 186      bne >0 ; always taken
C8AD      187 ;
C8AD      188 ;
C8AD      189 ; Continue Boot Stage 1.
C8AD      190 ;
C8AD AD 12 C0 191 SDBOOT2  lda RDLGRAM
C8B0 8D 12 01 192      sta LGRAM
C8B3      193 ;
C8B3 A4 26 194 ^0      ldy BUFRADRZ
C8B5 A5 27 195      lda BUFRADRZ+1
C8B7      196 ;
C8B7 8C 2A 01 197      sty DCBADR
C8BA 8D 2B 01 198      sta DCBADR+1
C8BD      199 ;
C8BD A4 3D 200      ldy ROMSECTR
C8BF      201 ;
C8BF B9 34 C8 202      lda RVSELEAV,Y
C8C2 8D 78 05 203      sta SECTOR
C8C5      204 ;
C8C5 A9 08 205      lda #DCBREAD
C8C7 20 B2 CB 206      jsr BUILDCB
C8CA      207 ;
C8CA 20 EB CB 208      jsr SDRIVER
C8CD 90 05 209      bcc >1
C8CF      210 ;
C8CF 20 90 CC 211      jsr SDSTAT
C8D2 B0 84 212      bcs <2
C8D4      213 ;
C8D4 AD FF 08 214 ^1      lda BOOTPGS
C8D7 10 46 215      bpl >4
C8D9      216 ;
C8D9      217 ;
C8D9      218 ; DOS 4.X.L Boot Stage 1 load RWTS from 0xB900 to 0xBFFF.
C8D9      219 ; DOS 4.X.H Boot Stage 1 load RWTS from 0xD000 to 0xDFFF.
C8D9      220 ;
C8D9      221 ; Check for DOS 4.X RWTS.
C8D9      222 ;
C8D9 20 96 C9 223      jsr CHKDOS45
C8DC 90 0A 224      bcc >1
C8DE      225 ;
C8DE 20 82 C9 226      jsr CHKDOS43
C8E1 90 05 227      bcc >1
C8E3      228 ;
C8E3 20 CF C9 229      jsr CHKDOS41
C8E6 B0 0B 230      bcs >2
C8E8      231 ;
C8E8 AC FC BF 232 ^1      ldy BCFGNDX
C8EB      233 ;
C8EB AD 78 06 234      lda VOLUME
C8EE 99 01 BF 235      sta PAGEBF+1,Y
C8F1      236 ;
C8F1 90 2C 237      bcc >4 ; always taken
C8F3      238 ;
C8F3      239 ;

```

```

C8F3      240    ; Check for DOS 3.X Boot Stage 1.
C8F3      241    ;
C8F3 20 42 C9  242    ^2      jsr CHKDOS3X
C8F6 B0 22     243          bcs >3
C8F8      244    ;
C8F8 AE 78 04  245          ldx SDSLOT
C8FB      246    ;
C8FB AD 78 06  247          lda VOLUME
C8FE 8D EB B7  248          sta VOLEXPT
C901      249    ;
C901 AC 48 B7  250          ld y RESTART+4
C904 AD 49 B7  251          lda RESTART+5
C907      252    ;
C907 8C 16 03  253          sty SAVERSTL
C90A 8D 17 03  254          sta SAVERSTH
C90D      255    ;
C90D A0 F0     256          ld y #MODOS3
C90F AD F8 07  257          lda SDPAGECX
C912      258    ;
C912 8C 48 B7  259          sty RESTART+4
C915 8D 49 B7  260          sta RESTART+5
C918      261    ;
C918 90 05     262          bcc >4                ; always taken
C91A      263    ;
C91A      264    ;
C91A      265    ; Unable to connect Sider and DOS.
C91A      266    ;
C91A A2 03     267    ^3      ld x #IOTEXT1B-TEXTS
C91C 20 4E CD  268          jsr PRTMESGS
C91F      269    ;
C91F      270    ;
C91F      271    ; Continue to next sector.
C91F      272    ;
C91F      273    ; The design of DOS 4.3 is flawed at the start of STAGE 2.
C91F      274    ; DOS 4.3 requires Language Card memory to be re-enabled
C91F      275    ; before STAGE 2 can begin properly. DOS 4.1 and DOS 4.5
C91F      276    ; both enable Language Card memory properly before RWTS is
C91F      277    ; called. Enabling Language Card memory does not affect
C91F      278    ; the booting of either DOS 4.1 or DOS 4.5.
C91F      279    ;
C91F E6 27     280    ^4      inc BUFRADRZ+1
C921 E6 3D     281          inc ROMSECTR
C923      282    ;
C923 2C 12 01  283          bit LCRAM
C926 10 06     284          bpl >5
C928      285    ;
C928 2C 8B C0  286          bit RAM1WE
C92B 2C 8B C0  287          bit RAM1WE
C92E      288    ;
C92E A0 01     289    ^5      ld y #PAGE08+1
C930 A9 08     290          lda /PAGE08+1
C932      291    ;
C932 8C 10 01  292          sty EXITADR
C935 8D 11 01  293          sta EXITADR+1
C938      294    ;
C938 A5 3D     295          lda ROMSECTR
C93A      296    ;
C93A AE F8 04  297          ld x SDSLOT16
C93D 86 2B     298          stx SLOT16Z
C93F      299    ;
C93F 4C 18 01  300          jmp EXIT1

```



```

C942          301 ;
C942          302 ;
C942          303 ; Check for DOS 3.X CALLRWTS routine.
C942          304 ;
C942 A0 04     305 CHKDOS3X ldy #FNDOSLEN-1
C944          306 ;
C944 B9 BD B7  307 ^1      lda CALLRWTS+8,Y
C947 D9 7D C9  308          cmp FNDOS,Y
C94A D0 34     309          bne NODOS
C94C          310 ;
C94C 88        311          dey
C94D 10 F5     312          bpl <1
C94F          313 ;
C94F          314 ;
C94F          315 ; Connect the Sider to DOS 3.X.
C94F          316 ;
C94F AE 78 04  317          ldx SDSLOT
C952          318 ;
C952 AC B8 B7  319          ldy CALLRWTS+3
C955 AD B9 B7  320          lda CALLRWTS+4
C958          321 ;
C958 C0 70     322          cpy #SDRWTS3
C95A D0 05     323          bne >2
C95C          324 ;
C95C CD F8 07  325          cmp SDPAGECX
C95F F0 1C     326          beq FNDOS
C961          327 ;
C961 9D F8 05  328 ^2      sta SAVEADRH,X
C964          329 ;
C964 98        330          tya
C965 9D 78 05  331          sta SAVEADRL,X
C968          332 ;
C968 A0 70     333          ldy #SDRWTS3
C96A AD F8 07  334          lda SDPAGECX
C96D          335 ;
C96D 8C B8 B7  336          sty CALLRWTS+3
C970 8D B9 B7  337          sta CALLRWTS+4
C973          338 ;
C973 A9 33     339          lda #VRSN3.3
C975 9D 78 07  340          sta DOSVRSN,X
C978          341 ;
C978 A2 12     342          ldx #IOTEXT3A-TEXTS
C97A          343 ;
C97A 4C 4E CD  344          jmp PRTMESGS
C97D          345 ;
C97D          346 ;
C97D          347 ; Code extract from DOS 3.X CALLRWTS.
C97D          348 ;
C97D 18        349 FNDOS    clc
C97E 60        350          rts
C97F          351 ;
C97F 28        352          plp
C980          353 ;
C980 38        354 NODOS    sec
C981 60        355          rts
C982          356 ;
0005          357 FNDOSLEN equ *-FNDOS
C982          358 ;
C982          359 ;
C982          360 ; Check for DOS 4.3 initialization values.
C982          361 ;

```

```

C982 AD F0 BF      362  CHKDOS43 lda BLDVRSN
C985 C9 43         363          cmp #VRSN4.3
C987 D0 F7         364          bne NODOS
C989              365  ;
C989 AD F1 BF      366          lda BLDNMBR
C98C C9 08         367          cmp #BLD4.3
C98E D0 F0         368          bne NODOS
C990              369  ;
C990 A2 18         370          ldx #IOTEXT3C-TEXTS
C992              371  ;
C992 A9 43         372          lda #VRSN4.3
C994 D0 12         373          bne CHKDOS4X
C996              374  ;
C996              375  ;
C996              376  ; Check for DOS 4.5 initialization values.
C996              377  ;
C996 AD F0 BF      378  CHKDOS45 lda BLDVRSN
C999 C9 45         379          cmp #VRSN4.5
C99B D0 E3         380          bne NODOS
C99D              381  ;
C99D AD F1 BF      382          lda BLDNMBR
C9A0 C9 05         383          cmp #BLD4.5
C9A2 D0 DC         384          bne NODOS
C9A4              385  ;
C9A4 A2 1B         386          ldx #IOTEXT3D-TEXTS
C9A6 A9 45         387          lda #VRSN4.5
C9A8              388  ;
C9A8              389  ;
C9A8              390  ; Check if the Sider is already connected to the DOS 4.X
C9A8              391  ; Disk Address Table. Carry flag will be set so MNGDISK
C9A8              392  ; will return current entry address when A-reg is zero.
C9A8              393  ;
C9A8 86 31         394  CHKDOS4X stx MESSAGE
C9AA 85 2A         395          sta VERSION
C9AC              396  ;
C9AC A9 00         397          lda #ZERO
C9AE              398  ;
C9AE AE 78 04      399          ldx SDSLOT
C9B1 20 46 C8      400          jsr GETDISKS
C9B4              401  ;
C9B4 C0 80         402          cpy #SDRWTS4
C9B6 D0 05         403          bne >1
C9B8              404  ;
C9B8 CD F8 07      405          cmp SDPAGECX
C9BB F0 C0         406          beq FNDOS
C9BD              407  ;
C9BD              408  ;
C9BD              409  ; Add the Sider entry to the DOS 4.3/5 Disk Address Table.
C9BD              410  ;
C9BD A0 80         411  ^1      ldy #SDRWTS4
C9BF AD F8 07      412          lda SDPAGECX
C9C2              413  ;
C9C2 20 46 C8      414          jsr GETDISKS
C9C5              415  ;
C9C5 A5 2A         416          lda VERSION
C9C7 9D 78 07      417          sta DOSVRSN,X
C9CA              418  ;
C9CA              419  ;
C9CA              420  ; Able to connect Sider and DOS 4.3/5.
C9CA              421  ;
C9CA A6 31         422          ldx MESSAGE

```

```

C9CC      423 ;
C9CC 4C 4E CD 424      jmp PRTMESGS
C9CF      425 ;
C9CF      426 ;
C9CF      427 ; Check for DOS 4.1 initialization values.
C9CF      428 ;
C9CF AD F8 BF 429 CHKDOS41 lda INITDOS
C9D2 C9 D9   430      cmp #INITADR
C9D4 D0 AA   431      bne NODOS
C9D6      432 ;
C9D6 AD F9 BF 433      lda INITDOS+1
C9D9 C9 BE   434      cmp /INITADR
C9DB D0 A3   435      bne NODOS
C9DD      436 ;
C9DD      437 ;
C9DD      438 ; Connect the Sider to the DOS 4.1 Disk Address Table.
C9DD      439 ;
C9DD 20 6F CA 440      jsr INITDAT
C9E0      441 ;
C9E0 B1 FA   442      lda (DATPTR),Y
C9E2 CD F8 07 443      cmp SDPAGECX
C9E5 F0 96   444      beq FNDOS
C9E7      445 ;
C9E7 9D F8 05 446      sta SAVEADRH,X
C9EA      447 ;
C9EA AD F8 07 448      lda SDPAGECX
C9ED 91 FA   449      sta (DATPTR),Y
C9EF      450 ;
C9EF 88      451      dey
C9F0      452 ;
C9F0 B1 FA   453      lda (DATPTR),Y
C9F2 9D 78 05 454      sta SAVEADRL,X
C9F5      455 ;
C9F5 A9 70   456      lda #SDRWTS3
C9F7 91 FA   457      sta (DATPTR),Y
C9F9      458 ;
C9F9 A9 41   459      lda #VRSN4.1
C9FB 9D 78 07 460      sta DOSVRSN,X
C9FE      461 ;
C9FE      462 ;
C9FE      463 ; Able to connect Sider and DOS 4.1.
C9FE      464 ;
C9FE A2 15   465      ldx #IOTEXT3B-TEXTS
CA00      466 ;
CA00 4C 4E CD 467      jmp PRTMESGS
CA03      468 ;
CA03      469 ;
CA03      470 ; Connect or disconnect the Sider to DOS based on the
CA03      471 ; value in the Y-reg. Verify the connection.
CA03      472 ;
CA03 98      473 DOTOGGLE tya
CA04 D0 18   474      bne UHOOKROM
CA06      475 ;
CA06 20 96 C9 476      jsr CHKDOS45
CA09 90 41   477      bcc >4
CA0B      478 ;
CA0B 20 82 C9 479      jsr CHKDOS43
CA0E 90 3C   480      bcc >4
CA10      481 ;
CA10 20 CF C9 482      jsr CHKDOS41
CA13 90 37   483      bcc >4

```

```

CA15          484 ;
CA15 20 42 C9 485      jsr CHKDOS3X
CA18 90 32     486      bcc >4
CA1A          487 ;
CA1A          488 ;
CA1A          489 ; Unable to connect Sider and DOS.
CA1A          490 ;
CA1A A2 03     491      ldx #IOTEXT1B-TEXTS
CA1C B0 2B     492      bcs >3                      ; always taken
CA1E          493 ;
CA1E          494 ;
CA1E          495 ; Attempt to disconnect Sider and DOS.
CA1E          496 ;
CA1E          497 UHOOKROM:
CA1E AE 78 04  498      ldx SDSLOT
CA21          499 ;
CA21 BC 78 07  500      ldy DOSVRSN,X
CA24 F0 26     501      beq >4
CA26          502 ;
CA26 A9 00     503      lda #ZERO
CA28 9D 78 07  504      sta DOSVRSN,X
CA2B          505 ;
CA2B C0 33     506      cpy #VRSN3.3
CA2D F0 30     507      beq USTDOS33
CA2F          508 ;
CA2F C0 41     509      cpy #VRSN4.1
CA31 F0 1A     510      beq USTDOS41
CA33          511 ;
CA33 A9 0C     512      lda #IOTEXT2C-TEXTS
CA35          513 ;
CA35 C0 43     514      cpy #VRSN4.3
CA37 F0 06     515      beq USTDOS4X
CA39          516 ;
CA39 A9 0F     517      lda #IOTEXT2D-TEXTS
CA3B          518 ;
CA3B C0 45     519      cpy #VRSN4.5
CA3D D0 08     520      bne >2
CA3F          521 ;
CA3F          522 ;
CA3F          523 ; Disconnect the Sider from DOS 4.3/5.
CA3F          524 ;
CA3F 85 31     525 USTDOS4X sta MESSAGE
CA41          526 ;
CA41 20 44 C8  527      jsr GETDISKC
CA44          528 ;
CA44          529 ;
CA44          530 ; Able to disconnect Sider and DOS 4.3/5.
CA44          531 ;
CA44 A6 31     532      ldx MESSAGE
CA46          533 ;
CA46 2C 00 00  534      bit *-*
CA49          535      dfs !-2
CA47          536 ;
CA47          537 ;
CA47          538 ; Unable to disconnect Sider and DOS.
CA47          539 ;
CA47 A2 00     540 ^2      ldx #IOTEXT1A-TEXTS
CA49          541 ;
CA49 20 4E CD  542 ^3      jsr PRTMESGS
CA4C          543 ;
CA4C 60        544 ^4      rts

```

```

CA4D      545 ;
CA4D      546 ;
CA4D      547 ; Disconnect the Sider from DOS 4.1.
CA4D      548 ;
CA4D 20 6F CA 549 USTDOS41 jsr INITDAT
CA50      550 ;
CA50 BD F8 05 551         lda SAVEADRH,X
CA53 91 FA    552         sta (DATPTR),Y
CA55      553 ;
CA55 88      554         dey
CA56      555 ;
CA56 BD 78 05 556         lda SAVEADRL,X
CA59 91 FA    557         sta (DATPTR),Y
CA5B      558 ;
CA5B      559 ;
CA5B      560 ; Able to disconnect Sider and DOS 4.1.
CA5B      561 ;
CA5B A2 09    562         ldx #IOTEXT2B-TEXTS
CA5D D0 EA    563         bne <3
CA5F      564 ;
CA5F      565 ;
CA5F      566 ; Disconnect the Sider from DOS 3.X.
CA5F      567 ;
CA5F BC 78 05 568 USTDOS33 ldy SAVEADRL,X
CA62 BD F8 05 569         lda SAVEADRH,X
CA65      570 ;
CA65 8C B8 B7 571         sty CALLRWTS+3
CA68 8D B9 B7 572         sta CALLRWTS+4
CA6B      573 ;
CA6B      574 ;
CA6B      575 ; Able to disconnect Sider and DOS 3.X.
CA6B      576 ;
CA6B A2 06    577         ldx #IOTEXT2A-TEXTS
CA6D D0 DA    578         bne <3 ; always taken
CA6F      579 ;
CA6F      580 ;
CA6F      581 ; Initialize a pointer to the slot index of DOS 4.1
CA6F      582 ; Disk Address Table.
CA6F      583 ;
CA6F AE 78 04 584 INITDAT ldx SDSLOT
CA72      585 ;
CA72 AC FB BF 586         ldy DISKTBL
CA75 A9 BF    587         lda /DISKTBL
CA77      588 ;
CA77 84 FA    589         sty DATPTR
CA79 85 FB    590         sta DATPTR+1
CA7B      591 ;
CA7B 8A      592         txa
CA7C 0A      593         asl
CA7D      594 ;
CA7D A8      595         tay
CA7E C8      596         iny
CA7F      597 ;
CA7F 60      598         rts
CA80      599 ;
CA80      600 ;
CA80      601 ; Patch DOS 3.X to support the Sider environment.
CA80      602 ;
CA80 AE 78 04 603 DOMODOS3 ldx SDSLOT
CA83      604 ;
CA83 BD F8 07 605         lda DOSVOLM,X

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```

CA86          606 ;
CA86 8D 66 AA 607      sta VOLVAL
CA89 8D EB B7 608      sta VOLEXPT
CA8C          609 ;
CA8C A9 65      610      lda #KYWRDFND
CA8E 8D DB A0 611      sta SDFMOD+1
CA91          612 ;
CA91 A9 FE      613      lda #VOLNUMBR+5
CA93 8D 9E AD 614      sta CATHMOD1+1
CA96          615 ;
CA96 A0 17      616      ldy #NAME SIZE-1
CA98 8C 17 AE 617      sty CATHMOD2+1
CA9B          618 ;
CA9B C8          619      iny
CA9C          620 ;
CA9C 8C 03 B2 621      sty LCDMOD+1
CA9F          622 ;
CA9F AC 16 03 623      ldy SAVERSTL
CAA2 AD 17 03 624      lda SAVERSTH
CAA5          625 ;
CAA5 8C 48 B7 626      sty RESTART+4
CAA8 8D 49 B7 627      sta RESTART+5
CAAB          628 ;
CAAB 8C 10 01 629      sty EXITADR
CAAE 8D 11 01 630      sta EXITADR+1
CAB1          631 ;
CAB1 4C 19 01 632      jmp EXIT2
CAB4          633 ;
CAB4          634 ;
CAB4          635 ; Redirect DOS 3.X RWTS to saved address.
CAB4          636 ;
CAB4 AE 78 04 637      ENTRDOS ldx SDSLOT
CAB7          638 ;
CAB7 BC 78 05 639      ldy SAVEADRL,X
CABA          640 ;
CABA BD F8 05 641      lda SAVEADRH,X
CABD D0 04      642      bne >1
CABF          643 ;
CABF A0 00      644      ldy #RWTSSENT
CAC1 A9 BD      645      lda /RWTSSENT
CAC3          646 ;
CAC3 8C 10 01 647      ^1 sty EXITADR
CAC6 8D 11 01 648      sta EXITADR+1
CAC9          649 ;
CAC9 A4 4A      650      ldy IOBADR
CACB A5 4B      651      lda IOBADR+1
CACD          652 ;
CACD 4C 19 01 653      jmp EXIT2
CAD0          654 ;
CAD0          655 ;

BSAVE SEG05,A$1000,B,L$02D0

CAD0          656      usr SEG05
CAD0          657 ;
CAD0          658 ;
CAD0          659      icl "SIDER6.L"

LLOAD SIDER6.L,A$4000

```

```

CAD0          1          ttl "Sider Source Code, SIDER6.L"
CAD0          2          ;
CAD0          3          ;
CAD0          4          ; SIDER6.L
CAD0          5          ;
CAD0          6          ;
CAD0          7          obj PAGE10
CAD0          8          usr
CAD0          9          ;
CAD0         10          ;
CAD0         11          ; Disconnect Sider from DOS and park the heads over an
CAD0         12          ; unused disk area.
CAD0         13          ;
CAD0 20 1E CA 14 SDPARK   jsr UHOOKROM
CAD3         15          ;
CAD3 A9 0B    16          lda #DCBPARK
CAD5 8D 24 01 17          sta DCBCMD
CAD8         18          ;
CAD8 A9 E0    19          lda #LASTSEC
CADA 8D 27 01 20          sta DCBATAL
CADD         21          ;
CADD A9 98    22          lda /LASTSEC
CADF 8D 26 01 23          sta DCBATAM
CAE2         24          ;
CAE2 A9 07    25          lda #7
CAE4 8D 29 01 26          sta DCBSTEP
CAE7         27          ;
CAE7 20 EB CB 28          jsr SDRIVER
CAEA         29          ;
CAEA A2 1E    30          ldx #IOTEXT4A-TEXTS
CAEC         31          ;
CAEC B0 02    32          bcs >1
CAEE         33          ;
CAEE A2 21    34          ldx #IOTEXT4B-TEXTS
CAF0         35          ;
CAF0 20 4E CD 36 ^1      jsr PRTMESGS
CAF3         37          ;
CAF3 4C 20 01 38          jmp EXIT4
CAF6         39          ;
CAF6         40          ;
CAF6         41          ; Sider RWTS handler.
CAF6         42          ;
CAF6 A0 05    43 SDRWTS   ldy #SECNDX
CAF8         44          ;
CAF8 B1 4A    45          lda (IOBADR),Y
CAFA C9 10    46          cmp #MAXSECS
CAFC B0 53    47          bcs >4
CAFE         48          ;
CAFE 8D 78 05 49          sta SECTOR
CB01         50          ;
CB01 A0 04    51          ldy #TRKNDX
CB03         52          ;
CB03 B1 4A    53          lda (IOBADR),Y
CB05 29 3F    54          and #TRKMASK
CB07         55          ;
CB07 C9 23    56          cmp #MAXTRKS
CB09 B0 46    57          bcs >4
CB0B         58          ;
CB0B 8D F8 05 59          sta TRACK
CB0E         60          ;

```

```

CB0E          61 ;
CB0E          62 ; A boot sequence is complete when the DOS requests the
CB0E          63 ; VTOC to be read. If the volume number is equal to 0x45
CB0E          64 ; or greater and TRACK number is 0x11, exit to DOSCOLD.
CB0E          65 ;
CB0E A0 03     66         ldy #VOLNDX
CB10          67 ;
CB10 B1 4A     68         lda (IOBADR),Y
CB12 C9 4A     69         cmp #MAXVOLS
CB14 B0 3B     70         bcs >4
CB16          71 ;
CB16 8D 78 06  72         sta VOLUME
CB19          73 ;
CB19 C9 45     74         cmp #VOL4.5L
CB1B 90 07     75         bcc >2
CB1D          76 ;
CB1D AC F8 05  77         ldy TRACK
CB20 C0 11     78         cpy #VTOCTRK
CB22 F0 30     79         beq >6
CB24          80 ;
CB24 A0 0E     81         ^2 ldy #LVOLNDX
CB26          82 ;
CB26 91 4A     83         sta (IOBADR),Y
CB28          84 ;
CB28 A0 10     85         ldy #LDRVNDX
CB2A          86 ;
CB2A A9 01     87         lda #1
CB2C 91 4A     88         sta (IOBADR),Y
CB2E          89 ;
CB2E A0 08     90         ldy #BUFRNDX
CB30          91 ;
CB30 B1 4A     92         lda (IOBADR),Y
CB32 8D 2A 01  93         sta DCBADR
CB35          94 ;
CB35 C8        95         iny
CB36          96 ;
CB36 B1 4A     97         lda (IOBADR),Y
CB38 8D 2B 01  98         sta DCBADR+1
CB3B          99 ;
CB3B A0 0C    100         ldy #CMDNDX
CB3D          101 ;
CB3D B1 4A    102         lda (IOBADR),Y
CB3F F0 12    103         beq >5
CB41          104 ;
CB41 C9 01    105         cmp #READCMD
CB43 F0 1C    106         beq SDREAD
CB45          107 ;
CB45 C9 02    108         cmp #WRITCMD
CB47 F0 1B    109         beq SDWRITE
CB49          110 ;
CB49 C9 04    111         cmp #FORMTCMD
CB4B F0 2C    112         beq SDFORMAT
CB4D          113 ;
CB4D 38       114         sec
CB4E          115 ;
CB4E A9 30    116         lda #RWSYNERR
CB50          117 ;
CB50 60       118         rts
CB51          119 ;
CB51 A9 08    120         ^4 lda #RWINITER
CB53          121 ;

```



```

CB53 60          122 ^5      rts
CB54            123 ;
CB54 A0 D3      124 ^6      ldy #DOSCOLD
CB56 A9 03      125          lda /DOSCOLD
CB58            126 ;
CB58 8C 10 01   127          sty EXITADR
CB5B 8D 11 01   128          sta EXITADR+1
CB5E            129 ;
CB5E 4C 18 01   130          jmp EXIT1
CB61            131 ;
CB61            132 ;
CB61            133 ; Sider RWTS read function.
CB61            134 ;
CB61 A9 08      135 SDREAD   lda #DCBREAD
CB63            136 ;
CB63 2C 00 00   137          bit *-*
CB66            138          dfs !-2
CB64            139 ;
CB64            140 ;
CB64            141 ; Sider RWTS write function.
CB64            142 ;
CB64 A9 0A      143 SDWRITE   lda #DCBWRITE
CB66            144 ;
CB66 20 B2 CB   145          jsr BUILD CB
CB69            146 ;
CB69 20 EB CB   147          jsr SDRIVER
CB6C 90 05      148          bcc >1
CB6E            149 ;
CB6E 20 90 CC   150          jsr SDSTAT
CB71 B0 03      151          bcs >2
CB73            152 ;
CB73 A9 00      153 ^1      lda #RWNOERR
CB75            154 ;
CB75 60          155          rts
CB76            156 ;
CB76 A9 40      157 ^2      lda #RWDRVERR
CB78            158 ;
CB78 60          159          rts
CB79            160 ;
CB79            161 ;
CB79            162 ; Sider RWTS format function. Set track and sector to
CB79            163 ; zero. Initialize every sector in the volume to zero.
CB79            164 ;
CB79 A9 00      165 SDFORMAT lda #ZERO
CB7B            166 ;
CB7B 8D 78 05   167          sta SECTOR
CB7E 8D F8 05   168          sta TRACK
CB81            169 ;
CB81 A9 0C      170          lda #DCBINIT
CB83 20 B2 CB   171          jsr BUILD CB
CB86            172 ;
CB86            173 ;
CB86            174 ; The variables SECTOR and TRACK as utilized as counters
CB86            175 ; and are not used to calculate the next ATA address.
CB86            176 ;
CB86 A9 23      177          lda #MAXTRKS
CB88 8D F8 05   178          sta TRACK
CB8B            179 ;
CB8B A9 10      180 ^1      lda #MAXSECS
CB8D 8D 78 05   181          sta SECTOR
CB90            182 ;

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CB90 20 EB CB      183  ^2      jsr SDRIVER
CB93 90 05          184          bcc >3
CB95              185  ;
CB95 20 90 CC      186          jsr SDSTAT
CB98 B0 15          187          bcs >5
CB9A              188  ;
CB9A EE 27 01      189  ^3      inc DCBATAL
CB9D D0 03          190          bne >4
CB9F              191  ;
CB9F EE 26 01      192          inc DCBATAM
CBA2              193  ;
CBA2 CE 78 05      194  ^4      dec SECTOR
CBA5 D0 E9          195          bne <2
CBA7              196  ;
CBA7 CE F8 05      197          dec TRACK
CBAA D0 DF          198          bne <1
CBAC              199  ;
CBAC A9 00          200          lda #RWNOERR
CBAE              201  ;
CBAE 60            202          rts
CBAF              203  ;
CBAF A9 40          204  ^5      lda #RWDRVERR
CBB1              205  ;
CBB1 60            206          rts
CBB2              207  ;
CBB2              208  ;
CBB2              209  ; Build the DCB using the SECTOR, TRACK, and VOLUME values
CBB2              210  ; from the RWTS Input/Output Context Block. Enter with
CBB2              211  ; the DCB command in A-reg. DCBSTEP is already zero.
CBB2              212  ;
CBB2 8D 24 01      213 BUILDDCB sta DCBCMD
CBB5              214  ;
CBB5 A9 01          215          lda #1
CBB7 8D 28 01      216          sta DCBLOCK
CBBA              217  ;
CBBA AD 78 05      218          lda SECTOR
CBBD AE F8 05      219          ldx TRACK
CBC0 AC 78 06      220          ld y VOLUME
CBC3              221  ;
CBC3 18            222          clc
CBC4              223  ;
CBC4 1D 24 CE      224          ora TRKTBLL,X
CBC7 79 6A CE      225          adc VOLTBLL,Y
CBCA 8D 27 01      226          sta DCBATAL
CBCD              227  ;
CBCD BD 47 CE      228          lda TRKTBLLH,X
CBD0 79 B5 CE      229          adc VOLTBLLH,Y
CBD3 8D 26 01      230          sta DCBATAM
CBD6              231  ;
CBD6 60            232          rts
CBD7              233  ;
CBD7              234  ;
CBD7              235  ; Sider status read function. Request a 4 byte status to
CBD7              236  ; STATBUF. Only the first status byte is of interest.
CBD7              237  ; Fall into SDRIVER.
CBD7              238  ;
CBD7 A9 03          239 RDSTAT  lda #DCBSTAT
CBD9 8D 24 01      240          sta DCBCMD
CBDC              241  ;
CBDC A9 02          242          lda #2
CBDE 8D 25 01      243          sta DCBATAH

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```

CBE1      244 ;
CBE1 A9 2C 245      lda #STATBUF
CBE3 8D 2A 01 246      sta DCBADR
CBE6      247 ;
CBE6 A9 01 248      lda /STATBUF
CBE8 8D 2B 01 249      sta DCBADR+1
CBEB      250 ;
CBEB      251 ;
CBEB      252 ; Sider read or write sector handler.  Replace the DCBINIT
CBEB      253 ; command with a DCBWRITE command.
CBEB      254 ;
CBEB AD 24 01 255 SDRIVER  lda DCBCMD
CBEE 8D F8 06 256      sta COMMAND
CBF1      257 ;
CBF1 C9 0C 258      cmp #DCBINIT
CBF3 D0 05 259      bne >1
CBF5      260 ;
CBF5 A9 0A 261      lda #DCBWRITE
CBF7 8D 24 01 262      sta DCBCMD
CBFA      263 ;
CBFA AE F8 04 264 ^1      ldx SDSLOT16
CBFD      265 ;
CBFD A9 01 266      lda #1                      ; drive 1
CBFF 9D 80 C0 267      sta SDINPUT,X
CC02      268 ;
CC02 A9 80 269      lda #DCBSTART          ; start command
CC04 9D 81 C0 270      sta SDOUTPUT,X
CC07      271 ;
CC07 A9 00 272      lda #DCBFLUSH          ; flush the output
CC09 9D 81 C0 273      sta SDOUTPUT,X
CC0C      274 ;
CC0C 20 9E CC 275      jsr WAIT01          ; wait for ready
CC0F B0 74 276      bcs >7
CC11      277 ;
CC11      278 ;
CC11      279 ; Send the first six bytes of the DCB to the Sider.
CC11      280 ;
CC11 A0 00 281      ldy #ZERO
CC13      282 ;
CC13 B9 24 01 283 ^3      lda DCB,Y
CC16 9D 80 C0 284      sta SDINPUT,X
CC19      285 ;
CC19 C8 286      iny
CC1A      287 ;
CC1A C0 06 288      cpy #DCBSIZE-2
CC1C D0 F5 289      bne <3
CC1E      290 ;
CC1E      291 ;
CC1E      292 ; Restore the DCBCMD and wait for Sider ready.
CC1E      293 ;
CC1E AD F8 06 294      lda COMMAND
CC21 8D 24 01 295      sta DCBCMD
CC24      296 ;
CC24 20 A1 CC 297      jsr WAIT15
CC27 B0 5C 298      bcs >7
CC29      299 ;
CC29 29 40 300      and #DONEMASK
CC2B D0 46 301      bne >5
CC2D      302 ;
CC2D      303 ;
CC2D      304 ; Initialize the page zero buffer pointer.

```

```

CC2D          305 ;
CC2D AD 2A 01 306      lda DCBADR
CC30 85 26    307      sta BUFRADRZ
CC32          308 ;
CC32 AD 2B 01 309      lda DCBADR+1
CC35 85 27    310      sta BUFRADRZ+1
CC37          311 ;
CC37 A0 00    312      ldy #ZERO
CC39          313 ;
CC39          314 ;
CC39          315 ; Execute the DCB command.
CC39          316 ;
CC39 AD 24 01 317      lda DCBCMD
CC3C C9 03    318      cmp #DCBSTAT
CC3E F0 15    319      beq DOSTAT
CC40          320 ;
CC40 C9 08    321      cmp #DCBREAD
CC42 F0 1D    322      beq DOREAD
CC44          323 ;
CC44 C9 0A    324      cmp #DCBWRITE
CC46 F0 23    325      beq DOWRITE
CC48          326 ;
CC48 C9 0C    327      cmp #DCBINIT
CC4A D0 38    328      bne >6
CC4C          329 ;
CC4C          330 ;
CC4C          331 ; DOINIT. Initialize this sector to zero.
CC4C          332 ;
CC4C 98       333      tya
CC4D          334 ;
CC4D 9D 80 C0 335      ^4 sta SDINPUT,X
CC50          336 ;
CC50 C8       337      iny
CC51 D0 FA    338      bne <4
CC53          339 ;
CC53 F0 1E    340      beq >5 ; always taken
CC55          341 ;
CC55          342 ;
CC55 BD 81 C0 343 DOSTAT lda SDOUTPUT,X
CC58 91 26    344      sta (BUFRADRZ),Y
CC5A          345 ;
CC5A C8       346      iny
CC5B          347 ;
CC5B C0 04    348      cpy #STATSIZE
CC5D D0 F6    349      bne DOSTAT
CC5F          350 ;
CC5F F0 12    351      beq >5 ; always taken
CC61          352 ;
CC61          353 ;
CC61 BD 81 C0 354 DOREAD lda SDOUTPUT,X
CC64 91 26    355      sta (BUFRADRZ),Y
CC66          356 ;
CC66 C8       357      iny
CC67 D0 F8    358      bne DOREAD
CC69          359 ;
CC69 F0 08    360      beq >5
CC6B          361 ;
CC6B          362 ;
CC6B B1 26    363 DOWRITE lda (BUFRADRZ),Y
CC6D 9D 80 C0 364      sta SDINPUT,X
CC70          365 ;

```

```

CC70 C8          366          iny
CC71 D0 F8      367          bne DOWRITE
CC73           368          ;
CC73           369          ;
CC73           370          ; Put the Sider in idle and exit.
CC73           371          ;
CC73 20 A4 CC   372 ^5      jsr WAIT45
CC76 B0 0D      373          bcs >7
CC78           374          ;
CC78 BD 81 C0   375          lda SDOUTPUT,X
CC7B           376          ;
CC7B 20 A1 CC   377          jsr WAIT15
CC7E B0 05      378          bcs >7
CC80           379          ;
CC80 BD 81 C0   380          lda SDOUTPUT,X
CC83           381          ;
CC83 60         382          rts
CC84           383          ;
CC84           384          ;
CC84           385          ; An error has occurred so stop the Sider and flush the
CC84           386          ; output.
CC84           387          ;
CC84 38         388 ^6      sec
CC85           389          ;
CC85 A9 20      390 ^7      lda #DCBSTOP          ; stop command
CC87 9D 81 C0   391          sta SDOUTPUT,X
CC8A           392          ;
CC8A A9 00      393          lda #DCBFLUSH          ; flush the output
CC8C 9D 81 C0   394          sta SDOUTPUT,X
CC8F           395          ;
CC8F 60         396          rts
CC90           397          ;
CC90           398          ;
CC90           399          ; Sider status check function. Request the Sider status
CC90           400          ; and check the first status byte.
CC90           401          ;
CC90 20 D7 CB   402 SDSTAT   jsr RDSTAT
CC93           403          ;
CC93 AD 2C 01   404          lda STATBUF
CC96 29 7F      405          and #STATMASK
CC98           406          ;
CC98 C9 18      407          cmp #STATOK
CC9A F0 2B      408          beq RTNCLC
CC9C           409          ;
CC9C 38         410          sec
CC9D           411          ;
CC9D 60         412          rts
CC9E           413          ;
CC9E           414          ;
CC9E           415          ; Sider wait for ready routine. Enter with loop count
CC9E           416          ; in the Y-reg.
CC9E           417          ;
CC9E A0 01      418 WAIT01   ldy #1
CCA0           419          ;
CCA0 2C 00 00   420          bit *-*
CCA3           421          dfs !-2
CCA1           422          ;
CCA1 A0 0F      423 WAIT15   ldy #15
CCA3           424          ;
CCA3 2C 00 00   425          bit *-*
CCA6           426          dfs !-2

```

```

CCA4          427 ;
CCA4 A0 2D    428 WAIT45 ldy #45
CCA6          429 ;
CCA6 BD 80 C0 430 lda SDINPUT,X
CCA9 30 1C    431 bmi RTNCLC
CCAB          432 ;
CCAB A9 00    433 lda #ZERO
CCAD 8D 14 01 434 sta WAITCNT1
CCB0 8D 15 01 435 sta WAITCNT2
CCB3          436 ;
CCB3 BD 80 C0 437 ^1 lda SDINPUT,X
CCB6 30 0F    438 bmi RTNCLC
CCB8          439 ;
CCB8 EE 14 01 440 inc WAITCNT1
CCBB D0 F6    441 bne <1
CCBD          442 ;
CCBD EE 15 01 443 inc WAITCNT2
CCC0 D0 F1    444 bne <1
CCC2          445 ;
CCC2 88       446 dey
CCC3 D0 EE    447 bne <1
CCC5          448 ;
CCC5 38       449 sec
CCC6          450 ;
CCC6 60       451 rts
CCC7          452 ;
CCC7 18       453 RTNCLC clc
CCC8          454 ;
CCC8 60       455 rts
CCC9          456 ;
CCC9          457 ;
CCC9 A9 00    458 GETVOL lda #ZERO
CCCB          459 ;
CCCB 8D 12 01 460 sta VAL10
CCCE 8D 13 01 461 sta VAL01
CCD1          462 ;
CCD1 20 31 CD 463 ^1 jsr GETNUM
CCD4 90 06    464 bcc >2
CCD6          465 ;
CCD6 C9 8D    466 cmp #RETURN
CCD8 F0 47    467 beq >6
CCDA          468 ;
CCDA D0 F5    469 bne <1
CCDC          470 ;
CCDC 20 ED FD 471 ^2 jsr COUT
CCDF          472 ;
CCDF 29 0F    473 and #NIBLMASK
CCE1 8D 13 01 474 sta VAL01
CCE4          475 ;
CCE4 20 31 CD 476 ^3 jsr GETNUM
CCE7 90 0C    477 bcc >4
CCE9          478 ;
CCE9 C9 8D    479 cmp #RETURN
CCEB F0 34    480 beq >6
CCED          481 ;
CCED C6 24    482 dec CH
CCEF          483 ;
CCEF 20 9C FC 484 jsr CLREOL
CCF2          485 ;
CCF2 4C C9 CC 486 jmp GETVOL
CCF5          487 ;

```

```

CCF5 48          488  ^4      pha
CCF6            489  ;
CCF6 AD 13 01    490          lda VAL01
CCF9 8D 12 01    491          sta VAL10
CCFC            492  ;
CCFC 68          493          pla
CCFD 20 ED FD    494          jsr COUT
CD00            495  ;
CD00 29 0F       496          and #NIBLMASK
CD02 8D 13 01    497          sta VAL01
CD05            498  ;
CD05 20 31 CD    499  ^5      jsr GETNUM
CD08 90 FB       500          bcc <5
CD0A            501  ;
CD0A C9 8D       502          cmp #RETURN
CD0C F0 13       503          beq >6
CD0E            504  ;
CD0E AD 12 01    505          lda VAL10
CD11 8D 13 01    506          sta VAL01
CD14            507  ;
CD14 A9 00       508          lda #ZERO
CD16 8D 12 01    509          sta VAL10
CD19            510  ;
CD19 C6 24       511          dec CH
CD1B            512  ;
CD1B 20 9C FC    513          jsr CLREOL
CD1E            514  ;
CD1E 4C E4 CC    515          jmp <3
CD21            516  ;
CD21 AD 12 01    517  ^6      lda VAL10
CD24            518  ;
CD24 0A          519          asl
CD25 85 FD       520          sta VALUE+1
CD27            521  ;
CD27 0A          522          asl
CD28 0A          523          asl
CD29            524  ;
CD29 65 FD       525          adc VALUE+1
CD2B            526  ;
CD2B 6D 13 01    527          adc VAL01
CD2E 85 FC       528          sta VALUE
CD30            529  ;
CD30 60          530          rts
CD31            531  ;
CD31            532  ;
CD31 20 0C FD    533  GETNUM  jsr RDKEY
CD34            534  ;
CD34 C9 9B       535          cmp #ESCAPE
CD36 F0 12       536          beq >2
CD38            537  ;
CD38 C9 8D       538          cmp #RETURN
CD3A F0 0D       539          beq >1
CD3C            540  ;
CD3C C9 88       541          cmp #LARROW
CD3E F0 09       542          beq >1
CD40            543  ;
CD40 C9 B0       544          cmp #"0"
CD42 90 ED       545          bcc GETNUM
CD44            546  ;
CD44 C9 BA       547          cmp #"9"+1
CD46 B0 E9       548          bcs GETNUM

```

```

CD48          549 ;
CD48 18       550      clc
CD49          551 ;
CD49 60       552 ^1    rts
CD4A          553 ;
CD4A 68       554 ^2    pla
CD4B 68       555      pla
CD4C          556 ;
CD4C 38       557      sec
CD4D          558 ;
CD4D 60       559      rts
CD4E          560 ;
CD4E          561 ;
CD4E 8D 82 C0 562 PRTMESGS sta ROM2WP
CD51          563 ;
CD51 A0 01    564      ldy #MSG1B-MESGS
CD53 20 70 CD 565      jsr PRTMSG
CD56          566 ;
CD56 BC E9 CD 567      ldy TEXTS,X
CD59 20 70 CD 568      jsr PRTMSG
CD5C          569 ;
CD5C A9 20    570      lda #SPACE&ASCIMASK
CD5E          571 ;
CD5E BC EA CD 572      ldy TEXTS+1,X
CD61 20 74 CD 573      jsr PRTMSG0
CD64          574 ;
CD64 A9 20    575      lda #SPACE&ASCIMASK
CD66          576 ;
CD66 BC EB CD 577      ldy TEXTS+2,X
CD69 F0 03    578      beq >1
CD6B          579 ;
CD6B 20 74 CD 580      jsr PRTMSG0
CD6E          581 ;
CD6E A0 00    582 ^1    ldy #MSG1A-MESGS
CD70          583 ;
CD70          584 ;
CD70 B9 7F CD 585 PRTMSG  lda MSGS,Y
CD73          586 ;
CD73 C8       587      iny
CD74          588 ;
CD74 48       589 PRTMSG0 pha
CD75          590 ;
CD75 09 80    591      ora #ASCIFLAG
CD77          592 ;
CD77 20 ED FD 593      jsr COUT
CD7A          594 ;
CD7A 68       595      pla
CD7B 10 F3    596      bpl PRTMSG
CD7D          597 ;
CD7D 18       598      clc
CD7E          599 ;
CD7E 60       600      rts
CD7F          601 ;
CD7F          602 ;
CD7F          603 MSGS:
CD7F          604 ;
CD7F 2E       605 MSG1A  asc '.'
CD80          606 ;
CD80 0D       607 MSG1B  hex 0D
CD81          608 ;
CD81 8D       609 MSG1C  hex 8D

```



```

CD82          610 ;
CD82          611 ;
CD82          612 ; Information messages.
CD82          613 ;
CD82 55 6E 61 614 MSG2A dci 'Unable to'
CD85 62 6C 65
CD88 20 74 EF
CD8B          615 ;
CD8B 41 62 6C 616 MSG2B dci 'Able to'
CD8E 65 20 74
CD91 EF
CD92          617 ;
CD92          618 ;
CD92          619 ; Sider messages.
CD92          620 ;
CD92 64 69 73 621 MSG3A asc 'dis'
CD95          622 ;
CD95 63 6F 6E 623 MSG3B dci 'connect Sider and DOS'
CD98 6E 65 63
CD9B 74 20 53
CD9E 69 64 65
CDA1 72 20 61
CDA4 6E 64 20
CDA7 44 4F D3
CDAA          624 ;
CDAA          625 ;
CDAA          626 ; DOS versions.
CDAA          627 ;
CDAA 33 2E B3 628 MSG4A dci '3.3'
CDAD          629 ;
CDAD 34 2E B1 630 MSG4B dci '4.1'
CDB0          631 ;
CDB0 34 2E B3 632 MSG4C dci '4.3'
CDB3          633 ;
CDB3 34 2E B5 634 MSG4D dci '4.5'
CDB6          635 ;
CDB6          636 ;
CDB6          637 ; User messages.
CDB6          638 ;
CDB6 70 61 72 639 MSG5 dci 'park Sider Disk Heads'
CDB9 6B 20 53
CDBC 69 64 65
CDBF 72 20 44
CDC2 69 73 6B
CDC5 20 48 65
CDC8 61 64 F3
CDCB          640 ;
CDCB 0D          641 MSG6 hex 0D
CDCC 45 6E 74 642 dci 'Enter volume number (0-73): '
CDCF 65 72 20
CDD2 76 6F 6C
CDD5 75 6D 65
CDD8 20 6E 75
Cddb 6D 62 65
CDDE 72 20 28
CDE1 30 2D 37
CDE4 33 29 3A
CDE7 20 A0
CDE9          643 ;
CDE9          644 ;
CDE9          645 TEXTS:

```

```

CDE9          646 ;
CDE9          647 ; Information messages.
CDE9          648 ;
CDE9          649 ; Unable to disconnect Sider and DOS.
CDE9 03 13 00 650 IOTEXT1A byt MSG2A-MESGS,MSG3A-MESGS,ZERO
CDEC          651 ;
CDEC          652 ; Unable to connect Sider and DOS.
CDEC 03 16 00 653 IOTEXT1B byt MSG2A-MESGS,MSG3B-MESGS,ZERO
CDEF          654 ;
CDEF          655 ;
CDEF          656 ; Disconnect messages for Sider.
CDEF          657 ;
CDEF          658 ; Able to disconnect Sider and DOS 3.3.
CDEF 0C 13 2B 659 IOTEXT2A byt MSG2B-MESGS,MSG3A-MESGS,MSG4A-MESGS
CDF2          660 ;
CDF2          661 ; Able to disconnect Sider and DOS 4.1.
CDF2 0C 13 2E 662 IOTEXT2B byt MSG2B-MESGS,MSG3A-MESGS,MSG4B-MESGS
CDF5          663 ;
CDF5          664 ; Able to disconnect Sider and DOS 4.3.
CDF5 0C 13 31 665 IOTEXT2C byt MSG2B-MESGS,MSG3A-MESGS,MSG4C-MESGS
CDF8          666 ;
CDF8          667 ; Able to disconnect Sider and DOS 4.5.
CDF8 0C 13 34 668 IOTEXT2D byt MSG2B-MESGS,MSG3A-MESGS,MSG4D-MESGS
CDFB          669 ;
CDFB          670 ;
CDFB          671 ; Connect messages for Sider.
CDFB          672 ;
CDFB          673 ; Able to connect Sider and DOS 3.3.
CDFB 0C 16 2B 674 IOTEXT3A byt MSG2B-MESGS,MSG3B-MESGS,MSG4A-MESGS
CDFE          675 ;
CDFE          676 ; Able to connect Sider and DOS 4.1.
CDFE 0C 16 2E 677 IOTEXT3B byt MSG2B-MESGS,MSG3B-MESGS,MSG4B-MESGS
CE01          678 ;
CE01          679 ; Able to connect Sider and DOS 4.3.
CE01 0C 16 31 680 IOTEXT3C byt MSG2B-MESGS,MSG3B-MESGS,MSG4C-MESGS
CE04          681 ;
CE04          682 ; Able to connect Sider and DOS 4.5.
CE04 0C 16 34 683 IOTEXT3D byt MSG2B-MESGS,MSG3B-MESGS,MSG4D-MESGS
CE07          684 ;
CE07          685 ;
CE07          686 ; Park disk head messages for Sider.
CE07          687 ;
CE07          688 ; Unable to park Sider Disk Heads.
CE07 03 37 00 689 IOTEXT4A byt MSG2A-MESGS,MSG5-MESGS,ZERO
CE0A          690 ;
CE0A          691 ; Able to park Sider Disk Heads.
CE0A 0C 37 00 692 IOTEXT4B byt MSG2B-MESGS,MSG5-MESGS,ZERO
CE0D          693 ;
CE0D          694 ;
CE0D          695 ;           dfs $CE24-*,NEGONE
CE24          696 ;
CE24          697 ;

```

```
BSAVE SEG06,A$1000,B,L$0354
```

```

CE24          698          usr SEG06
CE24          699 ;
CE24          700 ;
CE24          701          icl "SIDER7.L"

```

```
LLOAD SIDER7.L,A$4000
```

```
CE24      1          ttl "Sider Source Code, SIDER7.L"
CE24      2      ;
CE24      3      ;
CE24      4      ; SIDER7.L
CE24      5      ;
CE24      6      ;
CE24      7          obj PAGE10
CE24      8          usr
CE24      9      ;
CE24     10      ;
CE24     11      TRKTBLL:
CE24 00     12          byt MAXSECS*0          ; track 0
CE25 10     13          byt MAXSECS*1
CE26 20     14          byt MAXSECS*2
CE27 30     15          byt MAXSECS*3
CE28 40     16          byt MAXSECS*4
CE29 50     17          byt MAXSECS*5
CE2A 60     18          byt MAXSECS*6
CE2B 70     19          byt MAXSECS*7
CE2C 80     20          byt MAXSECS*8
CE2D 90     21          byt MAXSECS*9
CE2E A0     22          byt MAXSECS*10
CE2F B0     23          byt MAXSECS*11
CE30 C0     24          byt MAXSECS*12
CE31 D0     25          byt MAXSECS*13
CE32 E0     26          byt MAXSECS*14
CE33 F0     27          byt MAXSECS*15
CE34 00     28          byt MAXSECS*16
CE35 10     29          byt MAXSECS*17
CE36 20     30          byt MAXSECS*18
CE37 30     31          byt MAXSECS*19
CE38 40     32          byt MAXSECS*20
CE39 50     33          byt MAXSECS*21
CE3A 60     34          byt MAXSECS*22
CE3B 70     35          byt MAXSECS*23
CE3C 80     36          byt MAXSECS*24
CE3D 90     37          byt MAXSECS*25
CE3E A0     38          byt MAXSECS*26
CE3F B0     39          byt MAXSECS*27
CE40 C0     40          byt MAXSECS*28
CE41 D0     41          byt MAXSECS*29
CE42 E0     42          byt MAXSECS*30
CE43 F0     43          byt MAXSECS*31
CE44 00     44          byt MAXSECS*32
CE45 10     45          byt MAXSECS*33
CE46 20     46          byt MAXSECS*34          ; track 34
CE47      47      ;
CE47      48      TRKTBLLH:
CE47 00     49          hby MAXSECS*0          ; track 0
CE48 00     50          hby MAXSECS*1
CE49 00     51          hby MAXSECS*2
CE4A 00     52          hby MAXSECS*3
CE4B 00     53          hby MAXSECS*4
CE4C 00     54          hby MAXSECS*5
CE4D 00     55          hby MAXSECS*6
CE4E 00     56          hby MAXSECS*7
CE4F 00     57          hby MAXSECS*8
CE50 00     58          hby MAXSECS*9
CE51 00     59          hby MAXSECS*10
CE52 00     60          hby MAXSECS*11
```

```
CE53 00      61      hby MAXSECS*12
CE54 00      62      hby MAXSECS*13
CE55 00      63      hby MAXSECS*14
CE56 00      64      hby MAXSECS*15
CE57 01      65      hby MAXSECS*16
CE58 01      66      hby MAXSECS*17
CE59 01      67      hby MAXSECS*18
CE5A 01      68      hby MAXSECS*19
CE5B 01      69      hby MAXSECS*20
CE5C 01      70      hby MAXSECS*21
CE5D 01      71      hby MAXSECS*22
CE5E 01      72      hby MAXSECS*23
CE5F 01      73      hby MAXSECS*24
CE60 01      74      hby MAXSECS*25
CE61 01      75      hby MAXSECS*26
CE62 01      76      hby MAXSECS*27
CE63 01      77      hby MAXSECS*28
CE64 01      78      hby MAXSECS*29
CE65 01      79      hby MAXSECS*30
CE66 01      80      hby MAXSECS*31
CE67 02      81      hby MAXSECS*32
CE68 02      82      hby MAXSECS*33
CE69 02      83      hby MAXSECS*34      ; track 34
CE6A      84      ;
CE6A      85      ;
CE6A      86      VOLTBL:
CE6A D0      87      byt VOLSTR+VOLSIZE*0 ; volume 0
CE6B 00      88      byt VOLSTR+VOLSIZE*1
CE6C 30      89      byt VOLSTR+VOLSIZE*2
CE6D 60      90      byt VOLSTR+VOLSIZE*3
CE6E 90      91      byt VOLSTR+VOLSIZE*4
CE6F C0      92      byt VOLSTR+VOLSIZE*5
CE70 F0      93      byt VOLSTR+VOLSIZE*6
CE71 20      94      byt VOLSTR+VOLSIZE*7
CE72 50      95      byt VOLSTR+VOLSIZE*8
CE73 80      96      byt VOLSTR+VOLSIZE*9
CE74 B0      97      byt VOLSTR+VOLSIZE*10
CE75 E0      98      byt VOLSTR+VOLSIZE*11
CE76 10      99      byt VOLSTR+VOLSIZE*12
CE77 40     100      byt VOLSTR+VOLSIZE*13
CE78 70     101      byt VOLSTR+VOLSIZE*14
CE79 A0     102      byt VOLSTR+VOLSIZE*15
CE7A D0     103      byt VOLSTR+VOLSIZE*16
CE7B 00     104      byt VOLSTR+VOLSIZE*17
CE7C 30     105      byt VOLSTR+VOLSIZE*18
CE7D 60     106      byt VOLSTR+VOLSIZE*19
CE7E 90     107      byt VOLSTR+VOLSIZE*20
CE7F C0     108      byt VOLSTR+VOLSIZE*21
CE80 F0     109      byt VOLSTR+VOLSIZE*22
CE81 20     110      byt VOLSTR+VOLSIZE*23
CE82 50     111      byt VOLSTR+VOLSIZE*24
CE83 80     112      byt VOLSTR+VOLSIZE*25
CE84 B0     113      byt VOLSTR+VOLSIZE*26
CE85 E0     114      byt VOLSTR+VOLSIZE*27
CE86 10     115      byt VOLSTR+VOLSIZE*28
CE87 40     116      byt VOLSTR+VOLSIZE*29
CE88 70     117      byt VOLSTR+VOLSIZE*30
CE89 A0     118      byt VOLSTR+VOLSIZE*31
CE8A D0     119      byt VOLSTR+VOLSIZE*32
CE8B 00     120      byt VOLSTR+VOLSIZE*33
CE8C 30     121      byt VOLSTR+VOLSIZE*34
```

```
CE8D 60      122      byt VOLSTRT+VOLSIZE*35
CE8E 90      123      byt VOLSTRT+VOLSIZE*36
CE8F C0      124      byt VOLSTRT+VOLSIZE*37
CE90 F0      125      byt VOLSTRT+VOLSIZE*38
CE91 20      126      byt VOLSTRT+VOLSIZE*39
CE92 50      127      byt VOLSTRT+VOLSIZE*40
CE93 80      128      byt VOLSTRT+VOLSIZE*41
CE94 B0      129      byt VOLSTRT+VOLSIZE*42
CE95 E0      130      byt VOLSTRT+VOLSIZE*43
CE96 10      131      byt VOLSTRT+VOLSIZE*44
CE97 40      132      byt VOLSTRT+VOLSIZE*45
CE98 70      133      byt VOLSTRT+VOLSIZE*46
CE99 A0      134      byt VOLSTRT+VOLSIZE*47
CE9A D0      135      byt VOLSTRT+VOLSIZE*48
CE9B 00      136      byt VOLSTRT+VOLSIZE*49
CE9C 30      137      byt VOLSTRT+VOLSIZE*50
CE9D 60      138      byt VOLSTRT+VOLSIZE*51
CE9E 90      139      byt VOLSTRT+VOLSIZE*52
CE9F C0      140      byt VOLSTRT+VOLSIZE*53
CEA0 F0      141      byt VOLSTRT+VOLSIZE*54
CEA1 20      142      byt VOLSTRT+VOLSIZE*55
CEA2 50      143      byt VOLSTRT+VOLSIZE*56
CEA3 80      144      byt VOLSTRT+VOLSIZE*57
CEA4 B0      145      byt VOLSTRT+VOLSIZE*58
CEA5 E0      146      byt VOLSTRT+VOLSIZE*59
CEA6 10      147      byt VOLSTRT+VOLSIZE*60
CEA7 40      148      byt VOLSTRT+VOLSIZE*61
CEA8 70      149      byt VOLSTRT+VOLSIZE*62
CEA9 A0      150      byt VOLSTRT+VOLSIZE*63
CEAA D0      151      byt VOLSTRT+VOLSIZE*64
CEAB 00      152      byt VOLSTRT+VOLSIZE*65
CEAC 30      153      byt VOLSTRT+VOLSIZE*66
CEAD 60      154      byt VOLSTRT+VOLSIZE*67
CEAE 90      155      byt VOLSTRT+VOLSIZE*68 ; volume 68
CEAF        156      ;
CEAF 08      157      byt DOS4.5L          ; DOS 4.5L volume 69
CEB0 38      158      byt DOS4.5H          ; DOS 4.5H volume 70
CEB1 88      159      byt DOS4.3H          ; DOS 4.3H volume 71
CEB2 68      160      byt DOS4.1L          ; DOS 4.1L volume 72
CEB3 98      161      byt DOS4.1H          ; DOS 4.1H volume 73
CEB4 B8      162      byt DOSSPR1          ; DOS SPR1 volume 74
CEB5        163      ;
CEB5        164      VOLTBLH:
CEB5 01      165      hby VOLSTRT+VOLSIZE*0 ; volume 0
CEB6 04      166      hby VOLSTRT+VOLSIZE*1
CEB7 06      167      hby VOLSTRT+VOLSIZE*2
CEB8 08      168      hby VOLSTRT+VOLSIZE*3
CEB9 0A      169      hby VOLSTRT+VOLSIZE*4
CEBA 0C      170      hby VOLSTRT+VOLSIZE*5
CEBB 0E      171      hby VOLSTRT+VOLSIZE*6
CEBC 11      172      hby VOLSTRT+VOLSIZE*7
CEBD 13      173      hby VOLSTRT+VOLSIZE*8
CEBE 15      174      hby VOLSTRT+VOLSIZE*9
CEBF 17      175      hby VOLSTRT+VOLSIZE*10
CEC0 19      176      hby VOLSTRT+VOLSIZE*11
CEC1 1C      177      hby VOLSTRT+VOLSIZE*12
CEC2 1E      178      hby VOLSTRT+VOLSIZE*13
CEC3 20      179      hby VOLSTRT+VOLSIZE*14
CEC4 22      180      hby VOLSTRT+VOLSIZE*15
CEC5 24      181      hby VOLSTRT+VOLSIZE*16
CEC6 27      182      hby VOLSTRT+VOLSIZE*17
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| | | | | |
|---------|-------|-----|--------------------------------|--|
| CEC7 29 | 183 | hby | VOLSTRT+VOLSIZE*18 | |
| CEC8 2B | 184 | hby | VOLSTRT+VOLSIZE*19 | |
| CEC9 2D | 185 | hby | VOLSTRT+VOLSIZE*20 | |
| CECA 2F | 186 | hby | VOLSTRT+VOLSIZE*21 | |
| CECB 31 | 187 | hby | VOLSTRT+VOLSIZE*22 | |
| CECC 34 | 188 | hby | VOLSTRT+VOLSIZE*23 | |
| CECD 36 | 189 | hby | VOLSTRT+VOLSIZE*24 | |
| CECE 38 | 190 | hby | VOLSTRT+VOLSIZE*25 | |
| CECF 3A | 191 | hby | VOLSTRT+VOLSIZE*26 | |
| CED0 3C | 192 | hby | VOLSTRT+VOLSIZE*27 | |
| CED1 3F | 193 | hby | VOLSTRT+VOLSIZE*28 | |
| CED2 41 | 194 | hby | VOLSTRT+VOLSIZE*29 | |
| CED3 43 | 195 | hby | VOLSTRT+VOLSIZE*30 | |
| CED4 45 | 196 | hby | VOLSTRT+VOLSIZE*31 | |
| CED5 47 | 197 | hby | VOLSTRT+VOLSIZE*32 | |
| CED6 4A | 198 | hby | VOLSTRT+VOLSIZE*33 | |
| CED7 4C | 199 | hby | VOLSTRT+VOLSIZE*34 | |
| CED8 4E | 200 | hby | VOLSTRT+VOLSIZE*35 | |
| CED9 50 | 201 | hby | VOLSTRT+VOLSIZE*36 | |
| CEDA 52 | 202 | hby | VOLSTRT+VOLSIZE*37 | |
| CEDB 54 | 203 | hby | VOLSTRT+VOLSIZE*38 | |
| CEDC 57 | 204 | hby | VOLSTRT+VOLSIZE*39 | |
| CEDD 59 | 205 | hby | VOLSTRT+VOLSIZE*40 | |
| CEDE 5B | 206 | hby | VOLSTRT+VOLSIZE*41 | |
| CEDF 5D | 207 | hby | VOLSTRT+VOLSIZE*42 | |
| CEE0 5F | 208 | hby | VOLSTRT+VOLSIZE*43 | |
| CEE1 62 | 209 | hby | VOLSTRT+VOLSIZE*44 | |
| CEE2 64 | 210 | hby | VOLSTRT+VOLSIZE*45 | |
| CEE3 66 | 211 | hby | VOLSTRT+VOLSIZE*46 | |
| CEE4 68 | 212 | hby | VOLSTRT+VOLSIZE*47 | |
| CEE5 6A | 213 | hby | VOLSTRT+VOLSIZE*48 | |
| CEE6 6D | 214 | hby | VOLSTRT+VOLSIZE*49 | |
| CEE7 6F | 215 | hby | VOLSTRT+VOLSIZE*50 | |
| CEE8 71 | 216 | hby | VOLSTRT+VOLSIZE*51 | |
| CEE9 73 | 217 | hby | VOLSTRT+VOLSIZE*52 | |
| CEEA 75 | 218 | hby | VOLSTRT+VOLSIZE*53 | |
| CEEB 77 | 219 | hby | VOLSTRT+VOLSIZE*54 | |
| CEEC 7A | 220 | hby | VOLSTRT+VOLSIZE*55 | |
| CEED 7C | 221 | hby | VOLSTRT+VOLSIZE*56 | |
| EEEE 7E | 222 | hby | VOLSTRT+VOLSIZE*57 | |
| CEEF 80 | 223 | hby | VOLSTRT+VOLSIZE*58 | |
| CEF0 82 | 224 | hby | VOLSTRT+VOLSIZE*59 | |
| CEF1 85 | 225 | hby | VOLSTRT+VOLSIZE*60 | |
| CEF2 87 | 226 | hby | VOLSTRT+VOLSIZE*61 | |
| CEF3 89 | 227 | hby | VOLSTRT+VOLSIZE*62 | |
| CEF4 8B | 228 | hby | VOLSTRT+VOLSIZE*63 | |
| CEF5 8D | 229 | hby | VOLSTRT+VOLSIZE*64 | |
| CEF6 90 | 230 | hby | VOLSTRT+VOLSIZE*65 | |
| CEF7 92 | 231 | hby | VOLSTRT+VOLSIZE*66 | |
| CEF8 94 | 232 | hby | VOLSTRT+VOLSIZE*67 | |
| CEF9 96 | 233 | hby | VOLSTRT+VOLSIZE*68 ; volume 68 | |
| CEFA | 234 ; | | | |
| CEFA 01 | 235 | hby | DOS4.5L ; DOS 4.5L volume 69 | |
| CEFB 01 | 236 | hby | DOS4.5H ; DOS 4.5H volume 70 | |
| CEFC 00 | 237 | hby | DOS4.3H ; DOS 4.3H volume 71 | |
| CEFD 01 | 238 | hby | DOS4.1L ; DOS 4.1L volume 72 | |
| CEFE 01 | 239 | hby | DOS4.1H ; DOS 4.1H volume 73 | |
| CEFF 00 | 240 | hby | DOSSPR1 ; DOS SPR1 volume 74 | |
| CF00 | 241 ; | | | |
| CF00 | 242 ; | | | |
| CF00 | 243 | phs | SDCODE1+*-PAGEC8 | |

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5500          244 ;
5500          245 ;
5500          246 SDCODE2:
5500          247 ;
5500          248 ;
5500          249          phs PAGEC0
C000          250 ;
C000          251 ;
C000          252 ; Boot into the Sider.  Load DOS 4.5H and initialize.
C000          253 ;
C000 29 20      254 BOOTHRR    and #$20
C002 A0 00      255          ldy #$00
C004 A2 03      256          ldx #$03
C006 86 3C      257          stx $3C
C008          258 ;
C008 2C FF CF   259          bit CLRROM
C00B          260 ;
C00B 78         261          sei
C00C          262 ;
C00C A9 46      263          lda #VOL4.5H
C00E D0 1E      264          bne BOOTDOS          ; always taken
C010          265 ;
C010          266 ;
C010          267 ; Connect Sider RWTS to DOS.
C010          268 ;
C010 2C FF CF   269 ROMHOOK    bit CLRROM
C013          270 ;
C013 EA         271          nop
C014          272 ;
C014 A0 00      273          ldy #ZERO
C016 F0 1F      274          beq TOGGLE          ; always taken
C018          275 ;
C018          276 ;
C018          277 ; Disconnect Sider RWTS from DOS.
C018          278 ;
C018 2C FF CF   279 ROMUHOOK    bit CLRROM
C01B          280 ;
C01B EA         281          nop
C01C          282 ;
C01C A0 FF      283          ldy #NEGONE
C01E D0 17      284          bne TOGGLE          ; always taken
C020          285 ;
C020          286 ;
C020          287 ; Boot DOS 4.5L from the Sider.
C020          288 ;
C020 2C FF CF   289 SDOS4.5L    bit CLRROM
C023          290 ;
C023 78         291          sei
C024          292 ;
C024 A9 45      293          lda #VOL4.5L
C026 D0 06      294          bne BOOTDOS          ; always taken
C028          295 ;
C028          296 ;
C028          297 ; Boot DOS 4.5H from the Sider.
C028          298 ;
C028 2C FF CF   299 SDOS4.5H    bit CLRROM
C02B          300 ;
C02B 78         301          sei
C02C          302 ;
C02C A9 46      303          lda #VOL4.5H
C02E          304 ;

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```
C02E      305 ;
C02E 8D 78 06 306 BOOTDOS  sta VOLUME
C031      307 ;
C031 20 04 C8 308          jsr GETSLOT
C034      309 ;
C034 4C 6E C8 310          jmp SDBOOT
C037      311 ;
C037      312 ;
C037 20 04 C8 313 TOGGLE  jsr GETSLOT
C03A      314 ;
C03A 20 03 CA 315          jsr DOTOGGLE
C03D      316 ;
C03D 4C 20 01 317          jmp EXIT4
C040      318 ;
C040      319 ;
C040      320 ; Boot any Sider volume.
C040      321 ;
C040 2C FF CF 322 BOOTVOL  bit CLRROM
C043      323 ;
C043 78      324          sei
C044      325 ;
C044 20 04 C8 326          jsr GETSLOT
C047      327 ;
C047 4C 4A C8 328          jmp SDANYVOL
C04A      329 ;
C04A      330 ;
C04A      331          dfs $50-*)&NEGONE,ZERO
C050      332 ;
C050      333 ;
C050      334 ; Disconnect from DOS and park the Sider disk heads over
C050      335 ; an unused disk area.
C050      336 ;
C050 2C FF CF 337 PARK      bit CLRROM
C053      338 ;
C053 78      339          sei
C054      340 ;
C054 20 04 C8 341          jsr GETSLOT
C057      342 ;
C057 4C D0 CA 343          jmp SDPARK
C05A      344 ;
C05A      345 ;
C05A      346          dfs ROMENTRY-*)&NEGONE,ZERO
C05C      347 ;
C05C      348 ;
C05C      349 ; Continue DOS Boot Stage 1.
C05C      350 ;
C05C 78      351 ROMBOOT  sei
C05D      352 ;
C05D 2C FF CF 353          bit CLRROM
C060      354 ;
C060 EA      355          nop
C061      356 ;
C061 4C AD C8 357          jmp SDBOOT2
C064      358 ;
C064      359 ;
C064      360          dfs $70-*)&NEGONE,ZERO
C070      361 ;
C070      362 ;
C070      363 ; DOS 3.X RWTS entry.
C070      364 ;
C070      365 ; On entry Y-reg and A-reg point to the IOCB.
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C070          366 ;
C070 2C FF CF 367 SDRWTS3 bit CLRROM
C073          368 ;
C073 EA      369 nop
C074          370 ;
C074 20 00 C8 371 jsr GETSLOT2
C077          372 ;
C077 A0 01    373 ldy #SLOTNDX
C079          374 ;
C079 D1 4A    375 cmp (IOBADR),Y
C07B F0 0A    376 beq SDRWTS4A
C07D          377 ;
C07D 4C B4 CA 378 jmp ENTRDOS
C080          379 ;
C080          380 ;
C080          381 ; DOS 4.X RWTS entry.
C080          382 ;
C080          383 ; On entry Y-reg and A-reg point to the IOCB.
C080          384 ; It is not necessary to verify the slot number.
C080          385 ;
C080 2C FF CF 386 SDRWTS4 bit CLRROM
C083          387 ;
C083 EA      388 nop
C084          389 ;
C084 20 00 C8 390 jsr GETSLOT2
C087          391 ;
C087 20 F6 CA 392 SDRWTS4A jsr SDRWTS
C08A          393 ;
C08A A0 0D    394 ldy #ERRNDX
C08C          395 ;
C08C 91 4A    396 sta (IOBADR),Y
C08E          397 ;
C08E 4C 20 01 398 jmp EXIT4
C091          399 ;
C091          400 ;
C091          401 dfs $A0-*)&NEGONE,ZERO
C0A0          402 ;
C0A0          403 ;
C0A0          404 ; Read or write a Sider sector. On entry the Y-reg and
C0A0          405 ; A-reg point to an 8-byte DCB.
C0A0          406 ;
C0A0 2C FF CF 407 DRIVER bit CLRROM
C0A3          408 ;
C0A3 78      409 sei
C0A4          410 ;
C0A4 84 3C    411 sty DATAPTR
C0A6 85 3D    412 sta DATAPTR+1
C0A8          413 ;
C0A8 20 04 C8 414 jsr GETSLOT
C0AB          415 ;
C0AB A0 07    416 ldy #DCBSIZE-1
C0AD          417 ;
C0AD B1 3C    418 ^1 lda (DATAPTR),Y
C0AF 99 24 01 419 sta DCB,Y
C0B2          420 ;
C0B2 88      421 dey
C0B3 10 F8    422 bpl <1
C0B5          423 ;
C0B5 20 EB CB 424 jsr SDriver
C0B8          425 ;
C0B8 4C 1F 01 426 jmp EXIT3

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C0BB          427 ;
C0BB          428 ;
C0BB          429         dfs $C0-*)&NEGONE,ZERO
C0C0          430 ;
C0C0          431 ;
C0C0          432 ; Get the Sider status in the C-flag.
C0C0          433 ;
C0C0 2C FF CF 434 GETSTAT bit CLRROM
C0C3          435 ;
C0C3 EA       436         nop
C0C4          437 ;
C0C4 20 04 C8 438         jsr GETSLOT
C0C7 20 90 CC 439         jsr SDSTAT
C0CA          440 ;
C0CA 4C 20 01 441         jmp EXIT4
C0CD          442 ;
C0CD          443 ;
C0CD          444         dfs $D0-*)&NEGONE,ZERO
C0D0          445 ;
C0D0          446 ;
C0D0          447 ; Read the Sider status. On entry the X-reg and A-reg
C0D0          448 ; point to a 4 byte status buffer.
C0D0          449 ;
C0D0 2C FF CF 450 READSTAT bit CLRROM
C0D3          451 ;
C0D3 EA       452         nop
C0D4          453 ;
C0D4 86 3C     454         stx DATAPTR
C0D6 85 3D     455         sta DATAPTR+1
C0D8          456 ;
C0D8 20 04 C8 457         jsr GETSLOT
C0DB 20 D7 CB 458         jsr RDSTAT
C0DE          459 ;
C0DE 48        460         pha
C0DF          461 ;
C0DF A0 03     462         ldy #STATSIZE-1
C0E1          463 ;
C0E1 B9 2C 01 464 ^1     lda STATBUF,Y
C0E4 91 3C     465         sta (DATAPTR),Y
C0E6          466 ;
C0E6 88        467         dey
C0E7 10 F8     468         bpl <1
C0E9          469 ;
C0E9 68        470         pla
C0EA          471 ;
C0EA 4C 20 01 472         jmp EXIT4
C0ED          473 ;
C0ED          474 ;
C0ED          475         dfs $F0-*)&NEGONE,ZERO
C0F0          476 ;
C0F0          477 ;
C0F0          478 ; Patch DOS 3.3 after Boot Stage 2.
C0F0          479 ;
C0F0 2C FF CF 480 MODOS3 bit CLRROM
C0F3          481 ;
C0F3 EA       482         nop
C0F4          483 ;
C0F4 20 04 C8 484         jsr GETSLOT
C0F7          485 ;
C0F7 4C 80 CA 486         jmp DOMODOS3
C0FA          487 ;

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```
C0FA          488 ;
C0FA          489      dfs $FE-*)&NEGONE,ZERO
C0FE          490 ;
C0FE          491 ;
C0FE 45       492      byt SD.VRSN
C0FF 05       493      byt SD.BLD
C100          494 ;
C100          495 ;
C100          496      phs SDCODE2+PAGESIZE
5600          497 ;
5600          498 ;
5600          499 SDCODE3:
5600          500 ;
5600          501 ;

BSAVE SEG07,A$1000,B,L$01DC

5600          502      usr SEG07
5600          503 ;
5600          504 ;
5600          505      stt "Sider Symbol Table"
5600          506 ;
5600          507 ;
5600          508      end 111

*** End of Assembly
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Symbol List starts at 0x7800, ends at 0x8A66, used 0x1266, remaining 0x2B72

Symbols unsorted:

| | | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|----------|------|
| WNDLFT | 0020 | WNDWDTH | 0021 | WNDTOP | 0022 | WNDBTM | 0023 | CH | 0024 |
| CV | 0025 | ZPTR | 0026 | BUFRADRZ | 0026 | VERSION | 002A | SLOT16Z | 002B |
| ZPTR1 | 002C | ZPTR2 | 002E | MESSAGE | 0031 | INVFLG | 0032 | DATAPTR | 003C |
| ROMSECTR | 003D | PRNTPTR | 003E | IOBADR | 004A | DATPTR | 00FA | VALUE | 00FC |
| SD.VRSN | 0045 | SD.BLD | 0005 | VRSN3.3 | 0033 | VRSN4.1 | 0041 | BLD4.1 | 0046 |
| VRSN4.3 | 0043 | BLD4.3 | 0008 | VRSN4.5 | 0045 | BLD4.5 | 0005 | READCMD | 0001 |
| WRITCMD | 0002 | FORMTCMD | 0004 | 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 | CNECTACT | 0000 |
| INITACT | 0001 | ABORTACT | 0002 | RCSTRTRK | 0003 | NEXTLINE | 0004 | CHARCELL | 0007 |
| SLOTMASK | 0007 | CMDMASK | 000F | NIBLMASK | 000F | PCMDMASK | 000F | NAMESIZE | 0018 |
| CVMASK | 001F | TRKMASK | 003F | INVRMASK | 007F | ASCIMASK | 007F | ASCIFLAG | 0080 |
| LWRMASK | 00DF | LWRCASE | 00E0 | MODBYTE | 00FF | NEGONE | 00FF | STATSIZE | 0004 |
| DCBSIZE | 0008 | MAXSECS | 0010 | VTOCTRK | 0011 | MAXTRKS | 0023 | MAXVOLS | 004A |
| DONEMASK | 0040 | ROMENTRY | 005C | VOLSTRT | 01D0 | VOLSIZE | 0230 | LASTSEC | 98E0 |
| DOS4.3H | 0088 | DOSSPR1 | 00B8 | DOS4.5L | 0108 | DOS4.5H | 0138 | DOS4.1L | 0168 |
| DOS4.1H | 0198 | VOL4.5L | 0045 | VOL4.5H | 0046 | VOL4.3H | 0047 | VOL4.1L | 0048 |
| VOL4.1H | 0049 | VOLSPR1 | 004A | STATOK | 0018 | STATMASK | 007F | 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 | RWDRVERR | 0040 | DCBFLUSH | 0000 | DCBSTAT | 0003 | DCBREAD | 0008 |
| DCBWRITE | 000A | DCBPARK | 000B | DCBINIT | 000C | DCBSTOP | 0020 | DCBSTART | 0080 |
| PAGESIZE | 0100 | STACK | 0100 | EXITADR | 0110 | LCRAM | 0112 | VAL10 | 0112 |
| VAL01 | 0113 | WAITCNT1 | 0114 | WAITCNT2 | 0115 | SAVERSTL | 0316 | SAVERSTH | 0317 |
| STKCODE | 0118 | DOSWARM | 03D0 | DOSCOLD | 03D3 | HOOKDOS | 03EA | XMODE | 04FB |
| SDSLOT | 0478 | SDSLOT16 | 04F8 | SECTOR | 0578 | TRACK | 05F8 | VOLUME | 0678 |
| COMMAND | 06F8 | SAVXREG | 0778 | SDPAGECX | 07F8 | SAVEADRL | 0578 | SAVEADRH | 05F8 |
| DOSVRSN | 0778 | DOSVOLM | 07F8 | BOOTADR | 08FE | BOOTPGS | 08FF | SDFMOD | A0DA |
| KYWRDFND | AA65 | VOLVAL | AA66 | CATHMOD1 | AD9D | CATHMOD2 | AE16 | LCDMOD | B202 |
| VOLNUMBR | B5F9 | RESTART | B744 | CALLRWTS | B7B5 | VOLEXPT | B7EB | RWTSENT | BD00 |
| INITADR | BED9 | INITDOS | BFF8 | DISKTBL | BFFB | BLDVRSN | BFF0 | BLDNMBR | BFF1 |
| MNGDISK | BFF2 | BCFGNDX | BFFC | PAGE08 | 0800 | PAGE10 | 1000 | PAGE20 | 2000 |
| PAGE40 | 4000 | PAGEBF | BF00 | PAGEC0 | C000 | PAGEC8 | C800 | KEY | C000 |
| VID80OFF | C00C | ALTCHOFF | C00E | CLRKEY | C010 | RDLCRAM | C012 | TXTCLR | C050 |
| TXTSET | C051 | MIXCLR | C052 | LOWSCR | C054 | HIRES | C057 | ROM2WE | C081 |
| ROM2WP | C082 | ROM1WE | C089 | ROM1WP | C08A | RAM1WE | C08B | SDINPUT | C080 |
| SDOUTPUT | C081 | CLRROM | CFFF | APSNEW | D64B | INIT | FB2F | VTAB | FC22 |
| CLREOP | FC42 | HOME | FC58 | CLREOL | FC9C | RDKEY | FD0C | PRHEX | FDE3 |
| COUT | FDED | SETNORM | FE84 | SETKBD | FE89 | SETVID | FE93 | OUTPORT | FE95 |
| BELL | FF3A | MONITOR | FF65 | DISPLAY | 0001 | MAIN | 401A | TESTSD | 4088 |
| GETSDSLT | 40EC | SELCSLOT | 4115 | SSMOD1 | 4135 | SSMOD2 | 4139 | SSMOD3 | 413D |
| SSMOD4 | 4141 | INITPRMS | 4152 | GETSDACT | 416A | SELCACT | 4182 | SAMOD1 | 418F |
| SAMOD2 | 419B | SAMOD3 | 41A2 | INITSD | 41C5 | ISDMOD | 41F3 | HOOKDISK | 4208 |
| ABRTMSG | 420E | USERMSG | 4238 | MAKENEG | 4468 | CONTMSG | 4481 | SETPTR | 44AF |
| CLRPTR | 44BD | READKEY | 44C4 | GETKEY | 44DA | CLRSCRN1 | 44F1 | PRINT | 4505 |
| PRNTLOOP | 4514 | PRNTMOD1 | 4540 | PRNTMOD2 | 455B | PRNTBR1 | 455D | PRNTBR2 | 4563 |
| PRNTBR3 | 4568 | PRNTBR4 | 4576 | PRNTMOD3 | 4579 | PRNTOUT | 457F | OUTMOD1 | 457F |
| OUTMOD2 | 4581 | PRNTOUT2 | 4583 | OUTTBL1 | 4586 | OUTTBL2 | 458C | OUT80COL | 4592 |

| | | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|----------|------|
| VTABADRS | 4594 | OUTADRS | 459A | PRNTSAV | 45A0 | PRNTNUM | 45A1 | MODEVAL | 45A3 |
| FRMTVAL | 45A4 | PRNTBL | 45A5 | PRNTBLL | 45B5 | PRNTBLH | 45C5 | PRNTRTN | 45D5 |
| PRNTSAVY | 45E0 | PRNTSAVX | 45E2 | PRNTSAVA | 45E4 | PRINTRTN | 45E7 | PRNTMODE | 45E8 |
| PRNTDISP | 4633 | PRNTSCRN | 4652 | PRNTCLR | 4673 | PRNTCNTR | 468E | PRNTBUFR | 46A0 |
| PRNTNIBL | 46BB | PRNTNBYT | 46C0 | PRNT1BYT | 46C4 | PRNT2BYT | 46C7 | PRNTBYT | 46C9 |
| PRNTADR | 46D3 | PRNT1DEC | 46EB | PRNT2DEC | 46F1 | PRNT3DEC | 46F7 | PRNTDEC | 46FE |
| PRNTNDEC | 4708 | PRNTBYTE | 473D | PRNTHX | 4746 | PRNTHX2 | 4748 | HEXTODEC | 4753 |
| HEXTODC2 | 4755 | GETDIGIT | 476D | PRNTGRPH | 478C | SCRNMOD1 | 4804 | SCRNMOD2 | 4807 |
| SCRNMOD3 | 4809 | SCRNMOD4 | 4818 | SCRNSAVY | 481E | SCRNSAVX | 4820 | SCRNINIT | 4823 |
| SCROLL | 483B | SCRLMOD1 | 4868 | SCRLMOD2 | 486B | SCRLMOD3 | 486F | SCRLMOD4 | 4888 |
| SCRNEOL | 488C | EOLMOD1 | 48A0 | EOLMOD2 | 48A4 | SCRNHOME | 48B6 | SCRNEOP | 48BE |
| SDSLOT0 | 48DF | DRIVES | 48E0 | SDACT | 48E1 | SAVVAL | 48E2 | SLTPARMS | 48E3 |
| SDPARMS | 48E3 | MARKER | 48E7 | HEXNUM | 48E8 | NEGNUM | 48EA | SLOTADRL | 48EC |
| SLOTADRH | 48F0 | ACTADRL | 48F4 | ACTADRH | 48F7 | PDTBLL | 48FA | PDTBLH | 48FF |
| DECTBLL | 4904 | DECTBLH | 4909 | YBASELO | 490E | YBASEHI | 4926 | NIBLTBL | 4996 |
| BITBL | 4A00 | CHARTBL | 4B00 | SDCODE1 | 4E00 | GETSLOT2 | C800 | GETSLOT | C804 |
| EXIT | C828 | EXITBGN | 0118 | EXIT1 | 0118 | EXIT2 | 0119 | EXIT3 | 011F |
| EXIT4 | 0120 | EXITLEN | 000C | DCB | 0124 | DCBCMD | 0124 | DCBATAH | 0125 |
| DCBATAM | 0126 | DCBATAL | 0127 | DCBLOCK | 0128 | DCBSTEP | 0129 | DCBADR | 012A |
| STATBUF | 012C | RVSELEAV | C834 | GETDISKC | C844 | GETDISKS | C846 | SDANYVOL | C84A |
| SDBOOT | C86E | SDBOOT2 | C8AD | CHKDOS3X | C942 | FNDOS | C97D | NODOS | C980 |
| FNDOSLEN | 0005 | CHKDOS43 | C982 | CHKDOS45 | C996 | CHKDOS4X | C9A8 | CHKDOS41 | C9CF |
| DOTOGGLE | CA03 | UHOOKROM | CA1E | USTDOS4X | CA3F | USTDOS41 | CA4D | USTDOS33 | CA5F |
| INITDAT | CA6F | DOMODOS3 | CA80 | ENTRDOS | CAB4 | SDPARK | CAD0 | SDRWTS | CAF6 |
| SDREAD | CB61 | SDWRITE | CB64 | SDFORMAT | CB79 | BUILDCB | CBB2 | RDSTAT | CBD7 |
| SDRIVER | CBEB | DOSTAT | CC55 | DOREAD | CC61 | DOWRITE | CC6B | SDSTAT | CC90 |
| WAIT01 | CC9E | WAIT15 | CCA1 | WAIT45 | CCA4 | RTNCLC | CCC7 | GETVOL | CCC9 |
| GETNUM | CD31 | PRTMESGS | CD4E | PRTMSG | CD70 | PRTMSG0 | CD74 | MESGS | CD7F |
| MESG1A | CD7F | MESG1B | CD80 | MESG1C | CD81 | MESG2A | CD82 | MESG2B | CD8B |
| MESG3A | CD92 | MESG3B | CD95 | MESG4A | CDA4 | MESG4B | CDAD | MESG4C | CDB0 |
| MESG4D | CDB3 | MESG5 | CDB6 | MESG6 | CDCB | TEXTS | CDE9 | IOTEXT1A | CDE9 |
| IOTEXT1B | CDEC | IOTEXT2A | CDEF | IOTEXT2B | CDF2 | IOTEXT2C | CDF5 | IOTEXT2D | CDF8 |
| IOTEXT3A | CDFB | IOTEXT3B | CDFE | IOTEXT3C | CE01 | IOTEXT3D | CE04 | IOTEXT4A | CE07 |
| IOTEXT4B | CE0A | TRKTBLL | CE24 | TRKTBLLH | CE47 | VOLTBLL | CE6A | VOLTBLLH | CEB5 |
| SDCODE2 | 5500 | BOOTHR | C000 | ROMHOOK | C010 | ROMUHOOK | C018 | SDOS4.5L | C020 |
| SDOS4.5H | C028 | BOOTDOS | C02E | TOGGLE | C037 | BOOTVOL | C040 | PARK | C050 |
| ROMBOOT | C05C | SDRWTS3 | C070 | SDRWTS4 | C080 | SDRWTS4A | C087 | DRIVER | C0A0 |
| GETSTAT | C0C0 | READSTAT | C0D0 | MODOS3 | C0F0 | SDCODE3 | 5600 | | |

Symbols alphabetically sorted:

| | | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|----------|------|
| ABORTACT | 0002 | ABRTMSG | 420E | ACTADRH | 48F7 | ACTADRL | 48F4 | ADRCMD | 005B |
| ALTCHOFF | C00E | APSNEW | D64B | ASCIFLAG | 0080 | ASCIIOFF | 0001 | ASCIMASK | 007F |
| BCFGNDX | BFFC | BELL | FF3A | BELLCHAR | 0087 | BITBL | 4A00 | BLD4.1 | 0046 |
| BLD4.3 | 0008 | BLD4.5 | 0005 | BLDNMBR | BFF1 | BLDVRSN | BFF0 | BOOTADR | 08FE |
| BOOTDOS | C02E | BOOTHR | C000 | BOOTPGS | 08FF | BOOTVOL | C040 | BUFRADRZ | 0026 |
| BUFRCMD | 0056 | BUFRNDX | 0008 | BUILDCB | CBB2 | BYT1CMD | 0058 | BYT2CMD | 0059 |
| BYTNCMD | 005A | CALLRWTS | B7B5 | CATHMOD1 | AD9D | CATHMOD2 | AE16 | CH | 0024 |
| CHARCELL | 0007 | CHARTBL | 4B00 | CHKDOS3X | C942 | CHKDOS41 | C9CF | CHKDOS43 | C982 |
| CHKDOS45 | C996 | CHKDOS4X | C9A8 | CLRCMD | 0054 | CLREOL | FC9C | CLREOP | FC42 |
| CLRKEY | C010 | CLRPTR | 44BD | CLRROM | CFFF | CLRSCRN1 | 44F1 | CMDMASK | 000F |
| CMDNDX | 000C | CNECTACT | 0000 | CNTRCMD | 0055 | COMMAND | 06F8 | CONTMSG | 4481 |
| COUT | FDED | CTRLD | 0084 | CTRLQ | 0091 | CV | 0025 | CVMASK | 001F |
| CXPGOFF | 0002 | DARROW | 008A | DATAPTR | 003C | DATPTR | 00FA | DCB | 0124 |
| DCBADR | 012A | DCBATAH | 0125 | DCBATAL | 0127 | DCBATAM | 0126 | DCBCMD | 0124 |
| DCBFLUSH | 0000 | DCBINIT | 000C | DCBLOCK | 0128 | DCBPARK | 000B | DCBREAD | 0008 |
| DCBSIZE | 0008 | DCBSTART | 0080 | DCBSTAT | 0003 | DCBSTEP | 0129 | DCBSTOP | 0020 |
| DCBWRITE | 000A | DEC1CMD | 005C | DEC2CMD | 005D | DEC3CMD | 005E | DECNCMD | 005F |
| DECTBLH | 4909 | DECTBLL | 4904 | DIRECT | 0000 | DISKTBL | BFFB | DISPCMD | 0052 |
| DISPLAY | 0001 | DOMODOS3 | CA80 | DONEMASK | 0040 | DOREAD | CC61 | DOS4.1H | 0198 |

| | | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|----------|------|
| DOS4.1L | 0168 | DOS4.3H | 0088 | DOS4.5H | 0138 | DOS4.5L | 0108 | DOSCOLD | 03D3 |
| DOSSPR1 | 00B8 | DOSTAT | CC55 | DOSVOLM | 07F8 | DOSVRSN | 0778 | DOSWARM | 03D0 |
| DOTOGGLE | CA03 | DOWRITE | CC6B | DRIVER | C0A0 | DRIVES | 48E0 | DRVNDX | 0002 |
| ENTRDOS | CAB4 | EOLCLR | 0000 | EOLMOD1 | 48A0 | EOLMOD2 | 48A4 | EOPCLR | 0001 |
| ERRNDX | 000D | ESCAPE | 009B | EXIT | C828 | EXIT1 | 0118 | EXIT2 | 0119 |
| EXIT3 | 011F | EXIT4 | 0120 | EXITADR | 0110 | EXITBGN | 0118 | EXITLEN | 000C |
| FNDOS | C97D | FNDOSLEN | 0005 | FORMTCMD | 0004 | FRMTVAL | 45A4 | GETDIGIT | 476D |
| GETDISKC | C844 | GETDISKS | C846 | GETKEY | 44DA | GETNUM | CD31 | GETSDACT | 416A |
| GETSDSLT | 40EC | GETSLOT | C804 | GETSLOT2 | C800 | GETSTAT | C0C0 | GETVOL | CCC9 |
| GRPHMODE | 0001 | HEXNUM | 48E8 | HEXTODC2 | 4755 | HEXTODEC | 4753 | HIRES | C057 |
| HOME | FC58 | HOMESCRN | 0001 | HOOKDISK | 4208 | HOOKDOS | 03EA | INDIRECT | 0001 |
| INIT | FB2F | INITACT | 0001 | INITADR | BED9 | INITDAT | CA6F | INITDOS | BFF8 |
| INITPRMS | 4152 | INITSCRN | 0000 | INITSD | 41C5 | INVFLG | 0032 | INVRDISP | 0001 |
| INVRMASK | 007F | IOBADR | 004A | IOTEXT1A | CDE9 | IOTEXT1B | CDEC | IOTEXT2A | CDEF |
| IOTEXT2B | CDF2 | IOTEXT2C | CDF5 | IOTEXT2D | CDF8 | IOTEXT3A | CDFB | IOTEXT3B | CDFE |
| IOTEXT3C | CE01 | IOTEXT3D | CE04 | IOTEXT4A | CE07 | IOTEXT4B | CE0A | ISDMOD | 41F3 |
| KEY | C000 | KYWRDFND | AA65 | LARROW | 0088 | LASTSEC | 98E0 | LCDMOD | B202 |
| LCRAM | 0112 | LDRVNDX | 0010 | LOWSCR | C054 | LSLTNDX | 000F | LV80MODE | 0003 |
| LVOLNDX | 000E | LWRCASE | 00E0 | LWRMASK | 00DF | MAIN | 401A | MAKENEG | 4468 |
| MARKER | 48E7 | MAXCH | 0050 | MAXSECS | 0010 | MAXTRKS | 0023 | MAXVOLS | 004A |
| MAXWDTH | 0028 | MESG1A | CD7F | MESG1B | CD80 | MESG1C | CD81 | MESG2A | CD82 |
| MESG2B | CD8B | MESG3A | CD92 | MESG3B | CD95 | MESG4A | CDAA | MESG4B | CDAD |
| MESG4C | CDB0 | MESG4D | CDB3 | MESG5 | CDB6 | MESG6 | CDCB | MESGS | CD7F |
| MESSAGE | 0031 | MINCV | 0060 | MIXCLR | C052 | MNGDISK | BFF2 | MODBYTE | 00FF |
| MODECMD | 0051 | MODEVAL | 45A3 | MODOS3 | C0F0 | MONITOR | FF65 | NAMESIZE | 0018 |
| NEGNUM | 48EA | NEGONE | 00FF | NEXTLINE | 0004 | NIBLCMD | 0057 | NIBLMASK | 000F |
| NIBLTBL | 4996 | NODOS | C980 | NOPAD | 0000 | NORMDISP | 0000 | OUT80COL | 4592 |
| OUTADRS | 459A | OUTMOD1 | 457F | OUTMOD2 | 4581 | OUTPORT | FE95 | OUTTBL1 | 4586 |
| OUTTBL2 | 458C | PAGE08 | 0800 | PAGE10 | 1000 | PAGE20 | 2000 | PAGE40 | 4000 |
| PAGEBF | BF00 | PAGEC0 | C000 | PAGEC8 | C800 | PAGESIZE | 0100 | PARK | C050 |
| PCMDMASK | 000F | PDTBLH | 48FF | PDTBLL | 48FA | PRHEX | FDE3 | PRINT | 4505 |
| PRINTRTN | 45E7 | PRNT1BYT | 46C4 | PRNT1DEC | 46EB | PRNT2BYT | 46C7 | PRNT2DEC | 46F1 |
| PRNT3DEC | 46F7 | PRNTADR | 46D3 | PRNTBL | 45A5 | PRNTBLH | 45C5 | PRNTBLL | 45B5 |
| PRNTBR1 | 455D | PRNTBR2 | 4563 | PRNTBR3 | 4568 | PRNTBR4 | 4576 | PRNTBUFR | 46A0 |
| PRNTBYT | 46C9 | PRNTBYTE | 473D | PRNTCLR | 4673 | PRNTCNTR | 468E | PRNTDEC | 46FE |
| PRNTDISP | 4633 | PRNTGRPH | 478C | PRNTHEx | 4746 | PRNTHEx2 | 4748 | PRNTLOOP | 4514 |
| PRNTMOD1 | 4540 | PRNTMOD2 | 455B | PRNTMOD3 | 4579 | PRNTMODE | 45E8 | PRNTNBYT | 46C0 |
| PRNTNDEC | 4708 | PRNTNIBL | 46BB | PRNTNUM | 45A1 | PRNTOUT | 457F | PRNTOUT2 | 4583 |
| PRNTPTR | 003E | PRNTRTN | 45D5 | PRNTSAV | 45A0 | PRNTSAVA | 45E4 | PRNTSAVX | 45E2 |
| PRNTSAVY | 45E0 | PRNTSCRN | 4652 | PRTMESG | CD70 | PRTMESG0 | CD74 | PRTMESGS | CD4E |
| RAM1WE | C08B | RARROW | 0095 | RCSTRTRK | 0003 | RDKEY | FD0C | RDLGRAM | C012 |
| RDSTAT | CBD7 | READCMD | 0001 | READKEY | 44C4 | READSTAT | C0D0 | RESTART | B744 |
| RETURN | 008D | ROM1WE | C089 | ROM1WP | C08A | ROM2WE | C081 | ROM2WP | C082 |
| ROMBOOT | C05C | ROMENTRY | 005C | ROMHOOK | C010 | ROMSECTR | 003D | ROMUHOOK | C018 |
| RTNCLC | CCC7 | RTNCMD | 0050 | RVSELEAV | C834 | RWDRVERR | 0040 | RWINITER | 0008 |
| RWNOERR | 0000 | RWSYNERR | 0030 | RWTSENT | BD00 | SAMOD1 | 418F | SAMOD2 | 419B |
| SAMOD3 | 41A2 | SAVEADRH | 05F8 | SAVEADRL | 0578 | SAVERSTH | 0317 | SAVERSTL | 0316 |
| SAVVAL | 48E2 | SAVXREG | 0778 | SCRLMOD1 | 4868 | SCRLMOD2 | 486B | SCRLMOD3 | 486F |
| SCRLMOD4 | 4888 | SCRNCMD | 0053 | SCRNEOL | 488C | SCRNEOP | 48BE | SCRNHOME | 48B6 |
| SCRNINIT | 4823 | SCRNMOD1 | 4804 | SCRNMOD2 | 4807 | SCRNMOD3 | 4809 | SCRNMOD4 | 4818 |
| SCRNSAVX | 4820 | SCRNSAVY | 481E | SCROLL | 483B | SD.BLD | 0005 | SD.VRSN | 0045 |
| SDACT | 48E1 | SDANYVOL | C84A | SDBOOT | C86E | SDBOOT2 | C8AD | SDCODE1 | 4E00 |
| SDCODE2 | 5500 | SDCODE3 | 5600 | SDFMOD | A0DA | SDFORMAT | CB79 | SDINPUT | C080 |
| SDOS4.5H | C028 | SDOS4.5L | C020 | SDOUTPUT | C081 | SDPAGECX | 07F8 | SDPARK | CAD0 |
| SDPARMS | 48E3 | SDREAD | CB61 | SDRIVER | CBEB | SDRWTS | CAF6 | SDRWTS3 | C070 |
| SDRWTS4 | C080 | SDRWTS4A | C087 | SDSLOT | 0478 | SDSLOT0 | 48DF | SDSLOT16 | 04F8 |
| SDSTAT | CC90 | SDWRITE | CB64 | SECNDX | 0005 | SECTOR | 0578 | SELCACT | 4182 |
| SELCSLOT | 4115 | SETKBD | FE89 | SETNORM | FE84 | SETPTR | 44AF | SETVID | FE93 |
| SL16OFF | 0003 | SLOT16Z | 002B | SLOTADRH | 48F0 | SLOTADRL | 48EC | SLOTMASK | 0007 |
| SLOTNDX | 0001 | SLOTOFF | 0000 | SLTPARMS | 48E3 | SPACE | 00A0 | SPCPAD | 0080 |
| SSMOD1 | 4135 | SSMOD2 | 4139 | SSMOD3 | 413D | SSMOD4 | 4141 | STACK | 0100 |

| | | | | | | | | | |
|----------|------|----------|------|----------|------|----------|------|----------|------|
| STATBUF | 012C | STATMASK | 007F | STATOK | 0018 | STATSIZE | 0004 | STKCODE | 0118 |
| TESTSD | 4088 | TEXTMODE | 0000 | TEXTS | CDE9 | TOGGLE | C037 | TRACK | 05F8 |
| TRKMASK | 003F | TRKNDX | 0004 | TRKTBLH | CE47 | TRKTBLL | CE24 | TX80MODE | 0002 |
| TXTCLR | C050 | TXTSET | C051 | UARROW | 008B | UHOOKROM | CA1E | USERMESG | 4238 |
| USTDOS33 | CA5F | USTDOS41 | CA4D | USTDOS4X | CA3F | VAL01 | 0113 | VAL10 | 0112 |
| VALUE | 00FC | VERSION | 002A | VID80OFF | C00C | VOL4.1H | 0049 | VOL4.1L | 0048 |
| VOL4.3H | 0047 | VOL4.5H | 0046 | VOL4.5L | 0045 | VOLEXPT | B7EB | VOLNDX | 0003 |
| VOLNUMBR | B5F9 | VOLSIZE | 0230 | VOLSPR1 | 004A | VOLSTRT | 01D0 | VOLTBLH | CEB5 |
| VOLTBLL | CE6A | VOLUME | 0678 | VOLVAL | AA66 | VRSN3.3 | 0033 | VRSN4.1 | 0041 |
| VRSN4.3 | 0043 | VRSN4.5 | 0045 | VTAB | FC22 | VTABADRS | 4594 | VTOCTRK | 0011 |
| WAIT01 | CC9E | WAIT15 | CCA1 | WAIT45 | CCA4 | WAITCNT1 | 0114 | WAITCNT2 | 0115 |
| WNCBTM | 0023 | WNDLFT | 0020 | WNDTOP | 0022 | WNDWDTH | 0021 | WRITCMD | 0002 |
| XFERNDX | 000B | XMODE | 04FB | YBASEHI | 4926 | YBASELO | 490E | ZERO | 0000 |
| ZEROPAD | 0040 | ZPTR | 0026 | ZPTR1 | 002C | ZPTR2 | 002E | | |

Symbols numerically sorted:

| | | | | | | | | | |
|-----------|------|----------|------|-----------|------|----------|------|----------|------|
| ZERO | 0000 | TEXTMODE | 0000 | SLOTOFF | 0000 | RWNOERR | 0000 | NORMDISP | 0000 |
| NOPAD | 0000 | INITSCRN | 0000 | EOLCLR | 0000 | DIRECT | 0000 | DCBFLUSH | 0000 |
| CNECTACT | 0000 | SLOTNDX | 0001 | READCMD | 0001 | INVRDISP | 0001 | INITACT | 0001 |
| INDIRECT | 0001 | HOMESCRN | 0001 | GRPHMODE | 0001 | EOPCLR | 0001 | DISPLAY | 0001 |
| ASCIIIOFF | 0001 | WRITCMD | 0002 | TX80MODE | 0002 | DRVNDX | 0002 | CXPGOFF | 0002 |
| ABORTACT | 0002 | VOLNDX | 0003 | SL16OFF | 0003 | RCSTRTRK | 0003 | LV80MODE | 0003 |
| DCBSTAT | 0003 | TRKNDX | 0004 | STATSIZE | 0004 | NEXTLINE | 0004 | FORMTCMD | 0004 |
| SECNDX | 0005 | SD.BLD | 0005 | FNDOSLEN | 0005 | BLD4.5 | 0005 | SLOTMASK | 0007 |
| CHARCELL | 0007 | RWINITER | 0008 | DCBSIZE | 0008 | DCBREAD | 0008 | BUFRNDX | 0008 |
| BLD4.3 | 0008 | DCBWRITE | 000A | XFERNDX | 000B | DCBPARK | 000B | EXITLEN | 000C |
| DCBINIT | 000C | CMDNDX | 000C | ERRNDX | 000D | LVOLNDX | 000E | PCMDMASK | 000F |
| NIBLMASK | 000F | LSTLNDX | 000F | CMDMASK | 000F | MAXSECS | 0010 | LDRVNDX | 0010 |
| VTOCTRK | 0011 | STATOK | 0018 | NAME SIZE | 0018 | CVMASK | 001F | WNDLFT | 0020 |
| DCBSTOP | 0020 | WNDWDTH | 0021 | WNDTOP | 0022 | WNCBTM | 0023 | MAXTRKS | 0023 |
| CH | 0024 | CV | 0025 | ZPTR | 0026 | BUFRADRZ | 0026 | MAXWDTH | 0028 |
| VERSION | 002A | SLOT16Z | 002B | ZPTR1 | 002C | ZPTR2 | 002E | RWSYNERR | 0030 |
| MESSAGE | 0031 | INVFLG | 0032 | VRSN3.3 | 0033 | DATAPTR | 003C | ROMSECTR | 003D |
| PRNTPTR | 003E | TRKMASK | 003F | ZEROPAD | 0040 | RWDRVERR | 0040 | DONEMASK | 0040 |
| VRSN4.1 | 0041 | VRSN4.3 | 0043 | VRSN4.5 | 0045 | VOL4.5L | 0045 | SD.VRSN | 0045 |
| VOL4.5H | 0046 | BLD4.1 | 0046 | VOL4.3H | 0047 | VOL4.1L | 0048 | VOL4.1H | 0049 |
| VOLSPR1 | 004A | MAXVOLS | 004A | 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 | STATMASK | 007F | INVRMASK | 007F | ASCIMASK | 007F |
| SPCPAD | 0080 | DCBSTART | 0080 | ASCIFLAG | 0080 | CTRLD | 0084 | BELLCHAR | 0087 |
| LARROW | 0088 | DOS4.3H | 0088 | DARROW | 008A | UARROW | 008B | RETURN | 008D |
| CTRLQ | 0091 | RARROW | 0095 | ESCAPE | 009B | SPACE | 00A0 | DOSSPR1 | 00B8 |
| LWRMASK | 00DF | LWRCASE | 00E0 | DATPTR | 00FA | VALUE | 00FC | NEGONE | 00FF |
| MODBYTE | 00FF | STACK | 0100 | PAGESIZE | 0100 | DOS4.5L | 0108 | EXITADR | 0110 |
| VAL10 | 0112 | LCRAM | 0112 | VAL01 | 0113 | WAITCNT1 | 0114 | WAITCNT2 | 0115 |
| STKCODE | 0118 | EXITBGN | 0118 | EXIT1 | 0118 | EXIT2 | 0119 | EXIT3 | 011F |
| EXIT4 | 0120 | DCBCMD | 0124 | DCB | 0124 | DCBATAH | 0125 | DCBATAM | 0126 |
| DCBATAL | 0127 | DCBLOCK | 0128 | DCBSTEP | 0129 | DCBADR | 012A | STATBUF | 012C |
| DOS4.5H | 0138 | DOS4.1L | 0168 | DOS4.1H | 0198 | VOLSTRT | 01D0 | VOLSIZE | 0230 |
| SAVERSTL | 0316 | SAVERSTH | 0317 | DOSWARM | 03D0 | DOSCOLD | 03D3 | HOOKDOS | 03EA |
| SDSLOT | 0478 | SDSLOT16 | 04F8 | XMODE | 04FB | SECTOR | 0578 | SAVEADRL | 0578 |
| TRACK | 05F8 | SAVEADRH | 05F8 | VOLUME | 0678 | COMMAND | 06F8 | SAVXREG | 0778 |
| DOSVRSN | 0778 | SDPAGECX | 07F8 | DOSVOLM | 07F8 | PAGE08 | 0800 | BOOTADR | 08FE |
| BOOTPGS | 08FF | PAGE10 | 1000 | PAGE20 | 2000 | PAGE40 | 4000 | MAIN | 401A |
| TESTSD | 4088 | GETSDSLT | 40EC | SELCSLOT | 4115 | SSMOD1 | 4135 | SSMOD2 | 4139 |
| SSMOD3 | 413D | SSMOD4 | 4141 | INITPRMS | 4152 | GETSDACT | 416A | SELCACT | 4182 |
| SAMOD1 | 418F | SAMOD2 | 419B | SAMOD3 | 41A2 | INITSD | 41C5 | ISDMOD | 41F3 |

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|----------|------|----------|------|----------|------|----------|------|----------|------|
| HOOKDISK | 4208 | ABRTMSG | 420E | USERMSG | 4238 | MAKENEG | 4468 | CONTMESG | 4481 |
| SETPTR | 44AF | CLRPTR | 44BD | READKEY | 44C4 | GETKEY | 44DA | CLRSCRN1 | 44F1 |
| PRINT | 4505 | PRNTLOOP | 4514 | PRNTMOD1 | 4540 | PRNTMOD2 | 455B | PRNTBR1 | 455D |
| PRNTBR2 | 4563 | PRNTBR3 | 4568 | PRNTBR4 | 4576 | PRNTMOD3 | 4579 | PRNTOUT | 457F |
| OUTMOD1 | 457F | OUTMOD2 | 4581 | PRNTOUT2 | 4583 | OUTTBL1 | 4586 | OUTTBL2 | 458C |
| OUT80COL | 4592 | VTABADRS | 4594 | OUTADRS | 459A | PRNTSAV | 45A0 | PRNTNUM | 45A1 |
| MODEVAL | 45A3 | FRMTVAL | 45A4 | PRNTBL | 45A5 | PRNTBLL | 45B5 | PRNTBLH | 45C5 |
| PRNTRTN | 45D5 | PRNTSAVY | 45E0 | PRNTSAVX | 45E2 | PRNTSAVA | 45E4 | PRINTRTN | 45E7 |
| PRNTMODE | 45E8 | PRNTDISP | 4633 | PRNTSCRN | 4652 | PRNTCLR | 4673 | PRNTCNTR | 468E |
| PRNTBUFR | 46A0 | PRNTNIBL | 46BB | PRNTNBYT | 46C0 | PRNT1BYT | 46C4 | PRNT2BYT | 46C7 |
| PRNTBYT | 46C9 | PRNTADR | 46D3 | PRNT1DEC | 46EB | PRNT2DEC | 46F1 | PRNT3DEC | 46F7 |
| PRNTDEC | 46FE | PRNTNDEC | 4708 | PRNTBYTE | 473D | PRNTHex | 4746 | PRNTHex2 | 4748 |
| HEXTODEC | 4753 | HEXTODC2 | 4755 | GETDIGIT | 476D | PRNTGRPH | 478C | SCRNMOD1 | 4804 |
| SCRNMOD2 | 4807 | SCRNMOD3 | 4809 | SCRNMOD4 | 4818 | SCRNSAVY | 481E | SCRNSAVX | 4820 |
| SCRNINIT | 4823 | SCROLL | 483B | SCRLMOD1 | 4868 | SCRLMOD2 | 486B | SCRLMOD3 | 486F |
| SCRLMOD4 | 4888 | SCRNEOL | 488C | EOLMOD1 | 48A0 | EOLMOD2 | 48A4 | SCRNHOME | 48B6 |
| SCRNEOP | 48BE | SDSLOT0 | 48DF | DRIVES | 48E0 | SDACT | 48E1 | SAVVAL | 48E2 |
| SLTPARMS | 48E3 | SDPARMS | 48E3 | MARKER | 48E7 | HEXNUM | 48E8 | NEGNUM | 48EA |
| SLOTADRL | 48EC | SLOTADRH | 48F0 | ACTADRL | 48F4 | ACTADRH | 48F7 | PDTBLL | 48FA |
| PDTBLH | 48FF | DECTBLL | 4904 | DECTBLH | 4909 | YBASELO | 490E | YBASEHI | 4926 |
| NIBLTBL | 4996 | BITBL | 4A00 | CHARTBL | 4B00 | SDCODE1 | 4E00 | SDCODE2 | 5500 |
| SDCODE3 | 5600 | LASTSEC | 98E0 | SDFMOD | A0DA | KYWRDFND | AA65 | VOLVAL | AA66 |
| CATHMOD1 | AD9D | CATHMOD2 | AE16 | LCDMOD | B202 | VOLNUMBR | B5F9 | RESTART | B744 |
| CALLRWTS | B7B5 | VOLEXPT | B7EB | RWTSENT | BD00 | INITADR | BED9 | PAGEBF | BF00 |
| BLDVRSN | BFF0 | BLDNMBR | BFF1 | MNGDISK | BFF2 | INITDOS | BFF8 | DISKTBL | BFFB |
| BCFGNDX | BFFC | PAGEC0 | C000 | KEY | C000 | BOOTHR | C000 | VID80OFF | C00C |
| ALTCHOFF | C00E | ROMHOOK | C010 | CLRKEY | C010 | RDLGRAM | C012 | ROMUHOOK | C018 |
| SDOS4.5L | C020 | SDOS4.5H | C028 | BOOTDOS | C02E | TOGGLE | C037 | BOOTVOL | C040 |
| TXTCLR | C050 | PARK | C050 | TXTSET | C051 | MIXCLR | C052 | LOWSCR | C054 |
| HIRES | C057 | ROMBOOT | C05C | SDRWTS3 | C070 | SDRWTS4 | C080 | SDINPUT | C080 |
| SDOUTPUT | C081 | ROM2WE | C081 | ROM2WP | C082 | SDRWTS4A | C087 | ROM1WE | C089 |
| ROM1WP | C08A | RAM1WE | C08B | DRIVER | C0A0 | GETSTAT | C0C0 | READSTAT | C0D0 |
| MODOS3 | C0F0 | PAGEC8 | C800 | GETSLOT2 | C800 | GETSLOT | C804 | EXIT | C828 |
| RVSELEAV | C834 | GETDISKC | C844 | GETDISKS | C846 | SDANYVOL | C84A | SDBOOT | C86E |
| SDBOOT2 | C8AD | CHKDOS3X | C942 | FNDOS | C97D | NODOS | C980 | CHKDOS43 | C982 |
| CHKDOS45 | C996 | CHKDOS4X | C9A8 | CHKDOS41 | C9CF | DOTOGGLE | CA03 | UHOOKROM | CA1E |
| USTDOS4X | CA3F | USTDOS41 | CA4D | USTDOS33 | CA5F | INITDAT | CA6F | DOMODOS3 | CA80 |
| ENTRDOS | CAB4 | SDPARK | CAD0 | SDRWTS | CAF6 | SDREAD | CB61 | SDWRITE | CB64 |
| SDFORMAT | CB79 | BUILDCB | CBB2 | RDSTAT | CBD7 | SDRIVER | CBEB | DOSTAT | CC55 |
| DOREAD | CC61 | DOWRITE | CC6B | SDSTAT | CC90 | WAIT01 | CC9E | WAIT15 | CCA1 |
| WAIT45 | CCA4 | RTNCLC | CCC7 | GETVOL | CCC9 | GETNUM | CD31 | PRTMESGS | CD4E |
| PRTMSG | CD70 | PRTMSG0 | CD74 | MSGs | CD7F | MSG1A | CD7F | MSG1B | CD80 |
| MESG1C | CD81 | MESG2A | CD82 | MESG2B | CD8B | MESG3A | CD92 | MESG3B | CD95 |
| MESG4A | CDAA | MESG4B | CDAD | MESG4C | CDB0 | MESG4D | CDB3 | MESG5 | CDB6 |
| MESG6 | CDCB | TEXTS | CDE9 | IOTEXT1A | CDE9 | IOTEXT1B | CDEC | IOTEXT2A | CDEF |
| IOTEXT2B | CDF2 | IOTEXT2C | CDF5 | IOTEXT2D | CDF8 | IOTEXT3A | CDFB | IOTEXT3B | CDFE |
| IOTEXT3C | CE01 | IOTEXT3D | CE04 | IOTEXT4A | CE07 | IOTEXT4B | CE0A | TRKTBL | CE24 |
| TRKTBLH | CE47 | VOLTBL | CE6A | VOLTBLH | CEB5 | CLRROM | CFFF | APSNEW | D64B |
| INIT | FB2F | VTAB | FC22 | CLREOP | FC42 | HOME | FC58 | CLREOL | FC9C |
| RDKEY | FD0C | PRHEX | FDE3 | COUT | FDED | SETNORM | FE84 | SETKBD | FE89 |
| SETVID | FE93 | OUTPORT | FE95 | BELL | FF3A | MONITOR | FF65 | | |