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1           page 41,132
2           ;
3           ;-----
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17          ;-----
17          0000 dosver segment
18          005C org 5Ch
19          005C fcb1 label byte
20
21          0080 org 80h
22          0080 parms label byte
23
24          0100 org 100h
25          assume cs:dosver,ds:dosver
26          0100 BE 0207 R start: mov si,offset parm
27          0103 BF 005C R mov di,offset fcb1
28          0106 33 C0 xor ax,ax
29          0108 AE scasb
30          0109 B9 0008 mov cx,8
31          010C F3/ A6 repe cmpsb
32          010E 75 31 jne getver
33          0110 B4 04 mov ah,04h ;try to set date from CMOS
34          0112 CD 1A int 1Ah ;get date
35          0114 72 2B jc getver ;if not supported, then skip
36
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37          ; convert bcd date to binary format
38      0116  B8 0004          mov     ax,4
39      0119  86 C1           xchg   al,cl ;get year in bcd
40      011B  E8 0179 R       call   bcd2bin
41      011E  8B D8           mov     bx,ax
42      0120  8A C5           mov     al,ch ;get century
43      0122  E8 0179 R       call   bcd2bin
44      0125  B4 64           mov     ah,100
45      0127  F6 E4           mul    ah
46      0129  03 D8           add    bx,ax ;bx has year in bin
47      012B  8A C2           mov     al,dl ;get day in bcd
48      012D  B4 00           mov     ah,0
49      012F  E8 0179 R       call   bcd2bin
50      0132  8A D0           mov     dl,al
51      0134  8A C6           mov     al,dh ;get month
52      0136  E8 0179 R       call   bcd2bin
53      0139  8A F0           mov     dh,al
54      013B  8B CB           mov     cx,bx
55      013D  B4 2B           mov     ah,2bh
56      013F  CD 21           int    21h ;set date in DOS
57
58          ; Get DOS version
59      0141  B8 3000       getver: mov   ax,3000h
60      0144  CD 21           int    21h ;get DOS version
61      0146  84 C0           test   al,al
62      0148  74 36           jz     examin ;Command.com may be examined
63      014A  8A CC           mov     cl,ah
64      014C  D4 0A           aam
65      014E  0D 3030        or     ax,'00'
66      0151  A2 01DA R       mov     major+1,al
67      0154  80 FC 30        cmp     ah,'0'
68      0157  74 04           je     do_min
69      0159  88 26 01D9 R    mov     major,ah
70      015D  8A C1           do_min: mov   al,cl
71      015F  D4 0A           aam
72      0161  0D 3030        or     ax,'00'
```

```
73      0164  A2 01DC R          mov     minor,al
74      0167  80 FC 30          cmp     ah,'0'
75      016A  74 05              je      print
76      016C  86 C4              xchg   al,ah
77      016E  A3 01DC R          mov     word ptr minor,ax
78      0171  BA 01CE R      print:  mov     dx,offset msg
79      0174  B4 09              mov     ah,9h
80      0176  CD 21              int     21h
81      0178  C3                  ret
82
83      0179              bcd2bin proc     near
84      0179  D3 E0              shl     ax,cl     ;unpack packed BCD
85      017B  D2 E8              shr     al,cl
86      017D  D5 0A              aad                     ;al now has bcd AX value in binary, ah=0
87      017F  C3                  ret
88      0180              bcd2bin endp
89
90      ; If DOS version call fails, examine COMMAND.COM for info
91      0180  BA 01FB R      examin:  mov     dx,offset FCB
92      0183  B4 0F              mov     ah,0Fh     ;open file
93      0185  CD 21              int     21h
94      0187  84 C0              test    al,al
95      0189  75 E6              jnz     print
96      018B  BB 0300 R          mov     bx,offset buffer
97      018E  87 DA              xchg   bx,dx
98      0190  C7 47 0E 0200      mov     word ptr [bx+14],512 ;set record size
99      0195  C6 47 20 01      mov     byte ptr [bx+32],1   ;point at second sector in file
100     0199  B4 1A              mov     ah,1Ah     ;set disk transfer address
101     019B  CD 21              int     21h
102     019D  87 DA              xchg   bx,dx
103     019F  B4 14              mov     ah,14h     ;read sector into buffer
104     01A1  CD 21              int     21h
105     01A3  84 C0              test    al,al
106     01A5  75 CA              jnz     print
107     01A7  B4 10              mov     ah,10h     ;close file
108     01A9  CD 21              int     21h
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```
109      01AB  BF 01D2 R          mov     di,offset version
110      01AE  8D B7 01D6         lea     si,[bx+1D6h] ;location of Version tekst for DOS 1.10
111      01B2  B9 0007         mov     cx,7
112      01B5  F3/ A6          repe   cmpsb
113      01B7  74 0E           je      found
114      01B9  BF 01D2 R          mov     di,offset version
115      01BC  8D B7 01D9         lea     si,[bx+1D9h] ;location of Version tekst for DOS 1.00
116      01C0  B9 0007         mov     cx,7
117      01C3  F3/ A6          repe   cmpsb
118      01C5  75 AA           jne     print
119      01C7  B9 0005         found: mov     cx,5
120      01CA  F3/ A4          rep    movsb
121      01CC  EB A3           jmp     print
122
123      01CE  44 4F 53 20       msg     db      'DOS '
124      01D2  56 65 72 73 69 6F  version db      'Version'
125      6E
126      01D9  20 31 2E         major  db      ' 1.'
127      01DC  3F 20 0A 43 6F 70  minor  db      '? ',0Ah,'Copyright (C) 2010 Ton Daas$'
128      79 72 69 67 68 74
129      20 28 43 29 20 32
130      30 31 30 20 54 6F
131      6E 20 44 61 61 73
132      24
133      01FB  00 43 4F 4D 4D 41  FCB     db      0,'COMMAND COM'
134      4E 44 20 43 4F 4D
135      0207  53 45 54 44 41 54  parm     db      'SETDATE '
136      45 20
137      0300          org     300h
138      0300          buffer label byte
139      0300          dosver ends
140          end     start
```