

```

1
2      ;*****
3      ;*
4      ;*          BDGT SECTOR FOR IBM PC
5      ;*
6      ;*****
7
8      00A0      min_mem          equ      160      ;minimum memory in K
9      2600      load_track_segment equ      2600H   ;at 152K mark
10
11      ;Check for at least 160K being present in the IBM PC.
12      ;Use last 8K of 150K minimum memory for loader.
13      ;Since track is 4K we have 4K extra past the Loader for
14      ;disk buffer space and other uninitialized storage
15      ;used by the Loader.
16
17      ;Note: that wherever it is decided to place the loader, the IBM PC
18      ;cannot read over a 64K page boundary.
19
20      ;the command:
21      ;GENCMD BDGT 8080
22      ;is used for this module
23
24      8000      bw_video_ram      equ      0b000h   ;where to print an
25      8800      color_video_ram   equ      0b800h   ;error message
26
27      2620      cseg      load_track_segment + 20H   ;add 20H to get to sector 2
28      loader:   ;where the Loader starts
29
30      0000      cseg      0
31      org      0
32
33      ;The IBM ROM sets up
34      ;SS=30H and SP is 80H: stack is in
35      ;the interrupt vectors.
36      ;get memory size
37      0000 C012      int 12H
38      0002 3DA000      cmp ax,min_mem
39      0005 7302      0009      jnb get_track_0
40      0007 EB18      0024      jmps mem_error
41
42      get_track_0:
43      0009 330B      xor bx,bx
44      000B 880026      mov ax,load_track_segment ;set up call to ROM diskette read
45      000E 8EC0      mov es,ax
46      0010 880802      mov ax,0208h
47      0013 890100      mov cx,0001h
48      0016 BA0000      mov dx,0000h
49      0019 CD13      int 13H
50      001B 7302      001F      jnc track_ok
51      001D EB00      002C      jmps track_error
52
53      track_ok:
54      001F EA00002026      jmpf loader
55
56      mem_error:

```

CCP/M-86 2.0 V.2
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54
55      0024 B92400      mov cx,length mem_msg
56      0027 BE5000      mov si,offset mem_msg
57      002A E806      0032      jmps prt_msg
58
59      track_error:
60      002C B91500      mov cx,length trk_msg
61      002F BE7400      mov si,offset trk_msg
62                          jmps prt_msg
63
64      prt_msg:
65      0032 B800B0      mov ax,bw_video_ram
66      0035 CD11      int 11H      ;get equipment information
67      0037 2430      and al,00110000b      ;get video bits
68      0039 3C30      cmp al,30H
69      003B 7403      je do_msg
70      003D B800B8      mov ax,color_video_ram
71      do_msg:
72      0040 8EC0      mov es,ax
73      0042 8CC8      mov ax,cs
74      0044 8E08      mov ds,ax
75      0046 33FF      xor di,di
76      0048 B407      mov ah,07H      ;normal display attribute
77      prt_loop:
78      004A AC      lodsb
79      004B AB      stosw
80      004C E2FC      004A      loop prt_loop
81      004E FA      cli
82      004F F4      hlt
83
84
85      0050      last_code_offset      equ      offset $
86      dseg
87      org      last_code_offset
88
89      0050 4E6F7420656E      mem_msg      db      "Not enough memory present for loader"
90      6F756768206D
91      656D66727920
92      70726573656E
93      742066667220
94      6C6F61646572
95      0074 43616E277420      trk_msg      db      "Can't read boot track"
96      726561642062
97      6F6F74207472
98      616368
99
100      org      512 - 1      db      0      ;force even sector size
101      01FF 00
102
103
104      END OF ASSEMBLY.  NUMBER OF ERRORS:  0.  USE FACTOR:  1%

```

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CP/M ASM86 1.1 SOURCE: BOOT.A36

BWVIDEORAM	8000 N	24#	65	
COLORVIDEORAM	8800 N	25#	70	
CS	SREG V	73		
DOMSG	0040 L	69	71#	
DS	SREG V	74		
ES	SREG V	42	72	
GETTRACK0	0009 L	36	39#	
LASTCODEOFFSET	0050 N	85#	87	
LOADER	0000 L	28#	51	
LOADTRACKSEGMENT	2600 N	9#	27	41
MEMERR0R	0024 L	37	53#	
MEMMSG	0050 V	55	56	89#
MINMEM	00A0 N	8#	35	
PKTL00P	004A L	77#	80	
PRMSG	0032 L	57	64#	
SS	SREG V			
TRACKERR0R	002C L	48	59#	
TRACK0K	001F L	47	50#	
TRKMSG	0074 V	60	61	95#

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