


```

1      TITLE    BIOSLB Routine to interf
2      ;
3      ;
4      ;       Anyone may use this (or
5      ;       for whatever purpose the
6      ;       H.R.Moran Jr. 1/31/80
7      ;
8      ;++ *****
9      ;
10     ; TO USE THIS ROUTINE:
11     ;
12     ;       M80 BIOSLB,BIOSLB=BIOSLB
13     ;       L80 BIOSYB,BIOSLB/N/E
14     ;       REN BIOS.CRL=BIOS.COM
15     ;
16     ;       BIOS.CRL WILL BE A 'BDS
17     ;       WHICH CAN BE REQUESTED A
18     ;       INTO YOUR LIBRARY WITH C
19     ;
20     ;       'BDS C' calling sequence
21     ;
22     ;#define WARMBOOT 0
23     ;#define CONST 1
24     ;#define CONIN 2
25     ;#define CONOUT 3
26     ;#define LIST 4
27     ;#define PUNCH 5
28     ;#define READER 6
29     ;#define HOME 7
30     ;#define SELECT_DISK 8
31     ;#define SET_TRACK 9
32     ;#define SET_SECTOR 10
33     ;#define SET_DMA 11
34     ;#define READ_SECTOR 12
35     ;#define WRITE_SECTOR 13
36     ;
37     ;
38     ;char *dma_address;
39     ;char c;
40     ;int bios(); /* both B and C re
41     ;             /*           A re
42     ;int track,sector;
43     ;           .
44     ;           .
45     ;           .
46     ; bios(SELECT_DISK,disk-'A');

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47      ; bios (SET_TRACK, track);
48      ; bios (SET_SECTOR, sector);
49      ; bios (SET_DMA, dma_address);
50      ;
51      ;
52      ;     if( (c=bios (READ_SECTOR,
53      ;         exit (puts ("\nError in
54      ;         .
55      ;         .
56      ;         .
57      ;
58      ;     while(1) {
59      ;         if( (c=bios (CONST, DUMM
60      ;             break;
61      ;         .
62      ;         .
63      ;         .
64      ;     } /* end while */
65      ;     c = bios (CONIN, DUMMY_PAR
66      ;     if( c >= ' ' )
67      ;         bios (CONOUT, c);
68      ;     else {
69      ;         bios (CONOUT, '^');
70      ;         bios (CONOUT, c + 'A');
71      ;     }
72      ;
73      ;
74      ;
75      ; -- *****
76      ;
77      03F7          MAGIC EQU      3F7H          ; 'BDS C'
78      ;
79      0000'        ASEG
80      ;
81      ;
82      ;
83      0000 42 49 4F D3      ZERO: DC      'BIOS'          ;MODULE
84      0004 0205            DW      BIOSHEAD          ;LOCATIO
85      0006 80              DB      80H              ;END OF
86      0007 022A            DW      FINIS - 100H      ;POINTER
87      0009              DS      (512 - ($-ZERO))    ;PAD RES
88      0200              DS      5                  ;RESERVE
89      ;
90      ; .DEPHASE
91      ;
92      ; PAGE

```

```

93      0305
94
95          ;
96          ; THE BIOS() CODE HEADER ENTRY
97          ;
98          .PHASE    $-100H
99          ;
100         BIOSHEAD:
101         0205      00          DB      0          ;NO EXTE
102         0206      001E      DW      BIOSSTOP-BIOS ;LENGTH
103         ;
104         .DEPHASE
105         ;
106         ; THE BODY OF BIOS()
107         ;
108         .PHASE    0
109         ;
110         BIOS:    PUSH      B          ;SAVE TH
111         0001      21 0019      LXI      H,BIOSBACK ;INTERME
112         0004      E5          PUSH     H          ;STACK I
113         0005      2A 03F9      LHLD    MAGIC + 2    ;HL = PA
114         0008      44          MOV     B,H
115         0009      4D          MOV     C,L          ;BC = PA
116         000A      3A 03F7      LDA     MAGIC        ; A = FU
117         000D      57          MOV     D,A
118         000E      87          ADD     A
119         000F      82          ADD     D          ; A = (F
120         0010      2A 0001      LHLD    1          ; HL = .
121         0013      85          ADD     L
122         0014      6F          MOV     L,A
123         0015      8C          ADC     H
124         0016      95          SUB     L
125         0017      67          MOV     H,A          ; HL = (
126         0018      E9          PCHL                    ; GO TO
127         ;
128         BIOSBACK:
129         0019      26 00      MVI     H,0
130         001B      6F          MOV     L,A
131         001C      C1          POP     B          ;RESTORE
132         001D      C9          RET                    ;TO THE
133         ;
134         BIOSSTOP:
135         ;
136         ; RELOCATION PARAMETERS
137         ;
138         001E      0001      DW      1

```

BIOSLB Routine to interface 'C' to 'BIOS'

MACRO-80 3.31 29-Jun-79

138 0020 0002
139
140

DW BIOS + 2
.DEPHASE
FINIS: END ZERO

BIOSLB Routine to interface 'C' to 'BIOS'

MACRO-80 3.31

29-Jun-79

Macros:

Symbols:

BIOS	0000	BIOSBA	0019	BIOSHE	0205	BIOSST	001E
FINIS	032A	MAGIC	03F7	ZERO	0000		

No Fatal error(s)

BIOS	101	109#	138
BIOSBA	110	127#	
BIOSHE	84	99#	
BIOSST	101	133#	
FINIS	86	140#	
MAGIC	77#	112	115
ZERO	83#	87	140

→ ADDRESS NEEDING RELOC
139