

FFFFFFFFFFFFFFFF	111	111	XXX	XXX
FFFFFFFFFFFFFFFF	111	111	XXX	XXX
FFFFFFFFFFFFFFFF	111	111	XXX	XXX
FFF	111111	111111	XXX	XXX
FFF	111111	111111	XXX	XXX
FFF	111111	111111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFFFFFFF FFF	111	111	XXX	XXX
FFFFFFFFFFFF	111	111	XXX	XXX
FFFFFFFFFFFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	111	111	XXX	XXX
FFF	1111111111	1111111111	XXX	XXX
FFF	1111111111	1111111111	XXX	XXX
FFF	1111111111	1111111111	XXX	XXX

\_\$25  
Symb  
-----  
IOCS  
IO\_C  
IO\_C  
IO\_D  
IO\_F  
IO\_S  
KICL  
KILL  
KILL  
LB\_E  
LB\_C  
LB\_F  
LB\_H  
LB\_L  
LOCAL  
LOCK  
LOCK  
LOCK  
LOCK  
LOC\_  
LOC\_  
L\_CC  
L\_CC  
L\_DA  
L\_DA  
MAIN  
MAKE  
MAKE  
MAKE  
MAKE  
MAKE  
MAKE  
MAKE  
MAKE  
MAKE  
MAP\_  
MAP\_  
MAP  
MARI  
MARI  
MARI  
MARI

```

GGGGGGGG  TTTTTTTTTT  LL
GGGGGGGG  TTTTTTTTTT  LL
GG         TT          LL
GG         TT          LL
GG         TT          LL
GG         TT          LL
GG         TT          LL
GG  GGGGGG  TT          LL
GG  GGGGGG  TT          LL
GG         TT          LL
GG         TT          LL
GG         TT          LL
GG         TT          LL
GGGGGGG   TT          LLLLLLLLLL
GGGGGGG   TT          LLLLLLLLLL

CCCCCCCC  CCCCCCCC  AAAAAA  AAAAAA  TTTTTTTTTT
CCCCCCCC  CCCCCCCC  AA        AA    TT
CC        CC        AA        AA    TT
CC        CC        AA        AA    TT
CC        CC        AA        AA    TT
CC        CC        AA        AA    TT
CC        CC        AA        AA    TT
CC        CC        AAAAAAAAAA  TT
CC        CC        AAAAAAAAAA  TT
CC        CC        AA        AA    TT
CC        CC        AA        AA    TT
CCCCCCCC  CCCCCCCC  AA        AA    TT
CCCCCCCC  CCCCCCCC  AA        AA    TT

```

```

....
....
....
....

```

```

LL          IIIIII  SSSSSSSS
LL          IIIIII  SSSSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SSSSSS
LL          II      SSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLL IIIIII  SSSSSSSS

```

```

1 0001 0 MODULE GTLCAT (
2 0002 0
3 0003 0     LANGUAGE (BLISS32),
4 0004 0     IDENT = 'V04-000'
5 0005 1 BEGIN
6 0006 1
7 0007 1
8 0008 1 *****
9 0009 1 *
10 0010 1 *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
11 0011 1 *  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
12 0012 1 *  ALL RIGHTS RESERVED.
13 0013 1 *
14 0014 1 *  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
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17 0017 1 *  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
18 0018 1 *  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
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20 0020 1 *
21 0021 1 *  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
22 0022 1 *  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
23 0023 1 *  CORPORATION.
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25 0025 1 *  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
26 0026 1 *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
27 0027 1 *
28 0028 1 *
29 0029 1 *****
30 0030 1
31 0031 1 ++
32 0032 1
33 0033 1 FACILITY: F11ACP Structure Level 2
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1     This routine extracts the compatibility mode placement control data
38 0038 1     from the attribute list and stores it in the standard place in the FIB.
39 0039 1
40 0040 1 ENVIRONMENT:
41 0041 1
42 0042 1     STARLET operating system, including privileged system services
43 0043 1     and internal exec routines.
44 0044 1
45 0045 1 --
46 0046 1
47 0047 1
48 0048 1 AUTHOR: Andrew C. Goldstein, CREATION DATE: 8-Dec-1978 15:52
49 0049 1
50 0050 1 MODIFIED BY:
51 0051 1
52 0052 1     V03-002 LMP0256           L. Mark Pilant,           6-Jun-1984 14:24
53 0053 1     Make sure the use of the attribute count from the IRP is
54 0054 1     zero biased.
55 0055 1
56 0056 1     V03-001 CDS0001         Christian D. Saether   30-Dec-1983
57 0057 1     Use L_NORM linkage and BIND_COMMON macro.
    
```

GTL CAT  
V04-000

F 15  
16-Sep-1984 00:36:06  
14-Sep-1984 12:30:31

VAX-11 Bliss-32 V4.0-742  
DISK\$VMMASTER:[F11X.SRC]GTL CAT.B32;1 Page 2 (1)

```
: 58          0058 1  !
: 59          0059 1  !**
: 60          0060 1
: 61          0061 1
: 62          0062 1 LIBRARY 'SYSSLIBRARY:LIB.L32';
: 63          0063 1 REQUIRE 'SRC$:FCPDEF.B32';
```

IN  
VO

```

: 65      1054 1 GLOBAL ROUTINE GET_LOC_ATTR (ABD, FIB) : L_NORM NOVALUE =
: 66      1055 1
: 67      1056 1 !++
: 68      1057 1
: 69      1058 1 FUNCTIONAL DESCRIPTION:
: 70      1059 1
: 71      1060 1     This routine extracts the compatibility mode placement control data
: 72      1061 1     from the attribute list and stores it in the standard format in the FIB.
: 73      1062 1
: 74      1063 1
: 75      1064 1 CALLING SEQUENCE:
: 76      1065 1     GET_LOC_ATTR (ARG1, ARG2)
: 77      1066 1
: 78      1067 1 INPUT PARAMETERS:
: 79      1068 1     ARG1: address of buffer descriptor vector
: 80      1069 1
: 81      1070 1 IMPLICIT INPUTS:
: 82      1071 1     IO_PACKET: address of I/O packet
: 83      1072 1
: 84      1073 1 OUTPUT PARAMETERS:
: 85      1074 1     ARG2: address of user FIB
: 86      1075 1
: 87      1076 1 IMPLICIT OUTPUTS:
: 88      1077 1     NONE
: 89      1078 1
: 90      1079 1 ROUTINE VALUE:
: 91      1080 1     NONE
: 92      1081 1
: 93      1082 1 SIDE EFFECTS:
: 94      1083 1     NONE
: 95      1084 1
: 96      1085 1 !--
: 97      1086 1
: 98      1087 2 BEGIN
: 99      1088 2
: 100     1089 2 MAP
: 101     1090 2     ABD           : REF BBLOCKVECTOR [,ABD$C_LENGTH],
: 102     1091 2             ! descriptor vector arg
: 103     1092 2     FIB           : REF BBLOCK;      ! FIB arg
: 104     1093 2
: 105     1094 2 ! Format of compatibility mode attribute data.
: 106     1095 2 !
: 107     1096 2
: 108     1097 2 MACRO
: 109     1098 2     LOC_CODE      = 0, 0, 8, 0%, ! attribute code byte
: 110     1099 2     LOC_CTRL      = 1, 0, 8, 0%, ! placement control bits
: 111     1100 2     LOC_VBN       = 1, 0, 1, 0%, ! VBN format
: 112     1101 2     LOC_APPROX    = 1, 1, 1, 0%, ! use approximate placement
: 113     1102 2     LOC_LBNx     = 1, 2, 1, 0%, ! LBN format
: 114     1103 2     LOC_CYL      = 1, 3, 1, 0%, ! cylinder format
: 115     1104 2     LOC_RVNx     = 2, 0, 8, 0%, ! relative volume number
: 116     1105 2     LOC_ADDR     = 3, 0, 32, 0%, ! address value
: 117     1106 2
: 118     1107 2 ! Format conversion table. This table is indexed into by the control bits.
: 119     1108 2 !
: 120     1109 2
: 121     1110 2 BIND

```

```

122      1111 2      ALIGN_TABLE      = UPLIT BYTE      (0
123      1112 2      FIBSC_VBN,
124      1113 2      0
125      1114 2      FIBSC_VBN,
126      1115 2      FIBSC_LBN,
127      1116 2      FIBSC_VBN,
128      1117 2      FIBSC_LBN,
129      1118 2      FIBSC_VBN,
130      1119 2      FIBSC_CYL,
131      1120 2      0
132      1121 2      FIBSC_CYL,
133      1122 2      0
134      1123 2      FIBSC_CYL,
135      1124 2      0
136      1125 2      FIBSC_CYL
137      1126 2      ) : VECTOR [,BYTE];
138
139      1128 2      LOCAL
140      1129 2      P      : REF BBLOCK;      ! pointer to attribute text
141      1130 2
142      1131 2      BIND_COMMON;
143      1132 2
144      1133 2      ! Loop, scanning the attribute list entries for the placement attribute code.
145      1134 2      ! when found, reformat the data into the FIB.
146      1135 2      !
147      1136 2
148      1137 2      INCR J FROM ABD$C_ATTRIB TO .IO_PACKET[IRP$W_BCNT]-1
149      1138 2      DO
150      1139 2      BEGIN
151      1140 3      P = .ABD[.J, ABD$W_TEXT] + ABD[.J, ABD$W_TEXT];
152      1141 3      IF .P[LOC_CODE] EQ[ ATR$C_ALCONTROL
153      1142 3      THEN
154      1143 4      BEGIN
155      1144 4      IF .ABD[.J, ABD$W_COUNT] LSSU 6
156      1145 4      THEN ERR_EXIT (SS$BADPARAM);
157      1146 4
158      1147 4      IF .P[LOC_CTRL] GTRU 14
159      1148 4      THEN ERR_EXIT (SS$BADPARAM);
160      1149 4      FIB[FIB$B_ALALIGN] = .ALIGN_TABLE[.P[LOC_CTRL]];
161      1150 4      IF .FIB[FIB$B_ALALIGN] EQL 0
162      1151 4      THEN ERR_EXIT (SS$BADPARAM);
163      1152 4
164      1153 4      FIB[FIB$W_LOC_RVN] = .P[LOC_RVNx];
165      1154 4      FIB[FIB$L_LOC_ADDR] = ROT (.P[LOC_ADDR], 16);
166      1155 4
167      1156 4      IF .P[LOC_CYL]
168      1157 4      THEN FIB[FIB$V_ONCYL] = 1;
169      1158 4      IF NOT .P[LOC_APPROX]
170      1159 4      THEN FIB[FIB$V_EXACT] = 1;
171      1160 4      RETURN;
172      1161 3      END;
173      1162 3
174      1163 2      END;      ! end of attribute scan loop
175      1164 2
176      1165 1      END;      ! end of routine GET_LOC_ATTR

```

.TITLE GTLCAT  
.IDENT \V04-000\

.PSECT \$CODE\$,NOWRT,2

01 00 01 00 01 00 01 03 02 03 02 03 00 03 00 0000 P.AAA: .BYTE J, 3, 0, 3, 2, 3, 2, 3, 1, 0, 1, 0, 1, 0, - ;  
1

ALIGN\_TABLE= P.AAA

				001C 00000	.ENTRY GET LOC ATTR, Save R2,R3,R4	: 1054
	50	90	AA	D0 00002	MOVL -112(BASE), R0	: 1137
	54	32	A0	3C 00006	MOVZWL 50(R0), R4	:
	53		04	D0 0000A	MOVL #4, J	:
			64	11 0000D	BRB 5\$	:
	50	04	BC43	7E 0000F 1\$:	MOVAQ @ABDE[J], R0	: 1140
	51		60	3C 00014	MOVZWL (R0), P	:
	51		50	C0 00017	ADDL2 R0, P	:
	0E		61	91 0001A	CMPB (P), #14	: 1141
			54	12 0001D	BNEQ 5\$	:
	06	02	A0	B1 0001F	CMPW 2(R0), #6	: 1144
			1D	1F 00023	BLSSU 2\$	:
	0E	01	A1	91 00025	CMPB 1(P), #14	: 1147
			17	1A 00029	BGTRU 2\$	:
	52	08	AC	D0 0002B	MOVL FIB, R2	: 1149
	50	01	A1	9A 0002F	MOVZBL 1(P), R0	:
	21	A2	BA AF40	90 00033	MOVB ALIGN_TABLE[R0], 33(R2)	:
	50		08	AC D0 00039	MOVL FIB, R0	: 1150
		21	A0	95 0003D	TSTB 33(R0)	:
			03	12 00040	BNEQ 3\$	:
			14	BF 00042 2\$:	CHMU #20	: 1151
			04	00044	RET	:
	50	08	AC	D0 00045 3\$:	MOVL FIB, R0	: 1153
	26	A0	02	A1 9B 00049	MOVZBW 2(P), 38(R0)	:
	50		08	AC D0 0004E	MOVL FIB, R0	: 1154
	28	A0	03	A1 10 9C 00052	ROTL #16, 3(P), 40(R0)	:
	08	01	A1	03 E1 00058	BBC #3, 1(P), 4\$	: 1156
	50		08	AC D0 0005D	MOVL FIB, R0	: 1157
	20	A0	02	88 00061	BISB2 #2, 32(R0)	:
	0D	01	A1	01 E0 00065 4\$:	BBS #1, 1(P), 6\$	: 1158
	50		08	AC D0 0006A	MOVL FIB, R0	: 1159
	20	A0	01	88 0006E	BISB2 #1, 32(R0)	:
			04	00072	RET	: 1143
	98	53	54	F2 00073 5\$:	AOBLSS R4, J, 1\$	: 1137
			04	00077 6\$:	RET	: 1165

; Routine Size: 120 bytes, Routine Base: \$CODE\$ + 000F

: 177 1166 1  
: 178 1167 1 END  
: 179 1168 0 ELUDOM

PSECT SUMMARY

```
:  
: Name Bytes Attributes  
: $CODE$ 135 NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
```

Library Statistics

```
:  
: File Total Symbols Loaded Percent Pages Mapped Processing Time  
: _$255$DUA28:[SYSLIB]LIB.L32;1 18619 32 0 1000 00:01.9
```

COMMAND QUALIFIERS

```
:  
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:GTLCAT/OBJ=OBJ$:GTLCAT MSRC$:GTLCAT/UPDATE=(ENH$:GTLCAT)
```

```
: Size: 120 code + 15 data bytes  
: Run Time: 00:16.5  
: Elapsed Time: 00:33.9  
: Lines/CPU Min: 4247  
: Lexemes/CPU-Min: 53018  
: Memory Used: 209 pages  
: Compilation Complete
```



