


```

BBBBBBBBB      AAAAAA      SSSSSSSSS  UU      UU  DDDDDDDDD  FFFFFFFFFF  RRRRRRRR  MM      MM
BBBBBBBBB      AAAAAA      SSSSSSSSS  UU      UU  DDDDDDDDD  FFFFFFFFFF  RRRRRRRR  MM      MM
BB      BB  AA      AA  SS      SS      UU      UU  DD      DD  FF      FF      RR      RR  MMMM  MMMM
BB      BB  AA      AA  SS      SS      UU      UU  DD      DD  FF      FF      RR      RR  MMMM  MMMM
BB      BB  AA      AA  SS      SS      UU      UU  DD      DD  FF      FF      RR      RR  MM  MM  MM
BBBBBBBBB      AA      AA  SSSSSSS  UU      UU  DD      DD  FFFFFFFF  RRRRRRRR  MM      MM
BBBBBBBBB      AA      AA  SSSSSSS  UU      UU  DD      DD  FFFFFFFF  RRRRRRRR  MM      MM
BB      BB  AAAAAAAAAA      SS      UU      UU  DD      DD  FF      FF      RR  RR  MM      MM
BB      BB  AAAAAAAAAA      SS      UU      UU  DD      DD  FF      FF      RR  RR  MM      MM
BB      BB  AA      AA  SS      SS      UU      UU  DD      DD  FF      FF      RR      RR  MM      MM
BBBBBBBBB      AA      AA  SSSSSSS  UUUUUUUUU  DDDDDDDDD  FF      FF      RR      RR  MM      MM
BBBBBBBBB      AA      AA  SSSSSSS  UUUUUUUUU  DDDDDDDDD  FF      FF      RR      RR  MM      MM

```

```

LL      IIIIII      SSSSSSSSS
LL      IIIIII      SSSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSSS
LL      II      SSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLLL  IIIIII  SSSSSSSSS
LLLLLLLLLLL  IIIIII  SSSSSSSSS

```



```
1 0001 0 MODULE BAS$$UDF_RM (
2 0002 0 IDENT = '1-005'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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24 0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1 ++
30 0030 1 FACILITY:
31 0031 1
32 0032 1 BASIC support library - not user callable
33 0033 1
34 0034 1 ABSTRACT:
35 0035 1
36 0036 1 Implement UDF level of abstraction - element transmitter for READ.
37 0037 1
38 0038 1
39 0039 1 ENVIRONMENT:
40 0040 1
41 0041 1
42 0042 1 User access mode - AST reentrant
43 0043 1
44 0044 1 AUTHOR: Donald G. Petersen, CREATION DATE: 19-Dec-78
45 0045 1
46 0046 1 MODIFIED BY:
47 0047 1
48 0048 1 DGP 19-Dec-78, : VERSION 1-001
49 0049 1 1-001 - original. DGP 19-Dec-78
50 0050 1 1-002 - Make all routines global. DGP 20-Dec-78
51 0051 1 1-003 - Put code in proper PSECT. JBS 21-DEC-78
52 0052 1 1-004 - Change prefix for stack frame names to BSF$. JBS 08-FEB-1979
53 0053 1 1-005 - Change ISB$L_MAJ_F_PTR to ISB$A_MAJ_F_PTR. JBS 24-JUL-1979
54 0054 1 --
55 0055 1
56 0056 1 !<BLF/PAGE>
```

```
58 0057 1 |
59 0058 1 | SWITCHES
60 0059 1 |
61 0060 1 |
62 0061 1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
63 0062 1 |
64 0063 1 |
65 0064 1 | LINKAGES
66 0065 1 |
67 0066 1 |
68 0067 1 REQUIRE 'RTLIN:OTSLNK'; ! define all linkages
69 0496 1 |
70 0497 1 |
71 0498 1 | TABLE OF CONTENTS:
72 0499 1 |
73 0500 1 |
74 0501 1 FORWARD ROUTINE
75 0502 1     BAS$SUDF_RMFO : JSB_UDFO NOVALUE, ! Initialize READ memory
76 0503 1     BAS$SUDF_RMF1 : CALL_CCB NOVALUE, ! element transmitter
77 0504 1     BAS$SUDF_RMF9 : JSB_UDF9 NOVALUE; ! end of memory READ
78 0505 1 |
79 0506 1 |
80 0507 1 | INCLUDE FILES:
81 0508 1 |
82 0509 1 |
83 0510 1 REQUIRE 'RTLML:OTSLUB'; ! Logical unit block offsets
84 0650 1 |
85 0651 1 REQUIRE 'RTLML:OTSISB'; ! I/O statement block offsets
86 0819 1 |
87 0820 1 REQUIRE 'RTLIN:BASFRAME'; ! Basic frame offsets from R11
88 1023 1 |
89 1024 1 REQUIRE 'RTLIN:RTLPSECT'; ! Declare psects macros
90 1119 1 |
91 1120 1 LIBRARY 'RTLSTARLE';
92 1121 1 |
93 1122 1 |
94 1123 1 | MACROS:
95 1124 1 |
96 1125 1 |     NONE
97 1126 1 |
98 1127 1 | EQUATED SYMBOLS:
99 1128 1 |
100 1129 1 |     NONE
101 1130 1 |
102 1131 1 | PSECTS:
103 1132 1 |
104 1133 1 DECLARE_PSECTS (BAS); ! Declare PSECTs for BAS facility
105 1134 1 |
106 1135 1 | OWN STORAGE:
107 1136 1 |
108 1137 1 |     NONE
109 1138 1 |
110 1139 1 | EXTERNAL REFERENCES:
111 1140 1 |
112 1141 1 |
113 1142 1 EXTERNAL ROUTINE
114 1143 1     BAS$SUDF_RL1 : CALL_CCB NOVALUE,
```


BAS\$\$UDF_RM
1-005

H 15
16-Sep-1984 01:22:19
14-Sep-1984 11:56:43

VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASUDFRM.B32;1

Page 3
(2)

:	115	1144	1	BAS\$\$REC_RMFO :	JSB_REC0	NOVALUE,
:	116	1145	1	BAS\$\$REC_RMFI :	JSB_REC1	NOVALUE,
:	117	1146	1	BAS\$\$REC_RMFI :	JSB_REC1	NOVALUE,
:	118	1147	1	BAS\$\$REC_RMFI :	JSB_REC9	NOVALUE;

```
1148 1 GLOBAL ROUTINE BAS$$UDF_RMFO (FORMAT_ADR) : JSB_UDFO NOVALUE = !
1149 1
1150 1 ++
1151 1 FUNCTIONAL DESCRIPTION:
1152 1
1153 1 Call REC level of initialization to get all of the buffer pointers set
1154 1 up.
1155 1
1156 1
1157 1 FORMAL PARAMETERS:
1158 1
1159 1 FORMAT_ADR.rl.r not used
1160 1
1161 1 IMPLICIT INPUTS:
1162 1
1163 1 NONE
1164 1
1165 1 IMPLICIT OUTPUTS:
1166 1
1167 1 NONE
1168 1
1169 1 ROUTINE VALUE:
1170 1
1171 1 NONE
1172 1
1173 1 SIDE EFFECTS:
1174 1
1175 1 NONE
1176 1
1177 1 --
1178 1
1179 2 BEGIN
1180 2
1181 2 EXTERNAL REGISTER
1182 2 CCB = K_CCB_REG : REF BLOCK [0, BYTE];
1183 2
1184 2 ++
1185 2 Call record level routine to initialize the various buffer pointers in
1186 2 the ISB.
1187 2 --
1188 2
1189 2 BAS$$REC_RMFO ();
1190 2 RETURN;
1191 1 END;
```

!End of BAS\$\$UDF_RM0

```
.TITLE BAS$$UDF_RM
.IDENT \1-005\
```

```
.EXTRN BAS$$UDF_RL1, BAS$$REC_RMFO
.EXTRN BAS$$REC_RMFO1, BAS$$REC_RMFO9
```

```
.PSECT _BAS$CODE, NOWRT, SHR, PIC, 2
```

00000000G 00 17 00000 BAS\$\$UDF_RMFO::

JMP BAS\$\$REC_RMFO

; 1189

BASS\$UDF_RM
1-005

J 15
16-Sep-1984 01:22:19
14-Sep-1984 11:56:43

VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASUDFRM.B32;1

Page 5
(3)

; Routine Size: 6 bytes, Routine Base: _BASS\$CODE + 0000

; 164 1192 1

```
166 1193 1 GLOBAL ROUTINE BASS$UDF_RMF1 (ELEM_TYPE, ELEM_SIZE, ELEM_ADR, FORMAT) : CALL_CCB NOVALUE = !
167 1194 1
168 1195 1 !++
169 1196 1 FUNCTIONAL DESCRIPTION:
170 1197 1
171 1198 1 Call BASS$UDF_RL1. Then update CUR_DATA in the last major frame upon
172 1199 1 return. This done on each element transmitter rather than at the end
173 1200 1 because there could be an embedded function in the element list which
174 1201 1 does a READ.
175 1202 1
176 1203 1
177 1204 1 FORMAL PARAMETERS:
178 1205 1
179 1206 1 ELEM_TYPE.rlu.v Type code of user I/O list element
180 1207 1 ELEM_SIZE.rlu.v Size of list element
181 1208 1 ELEM_ADR.rlu.r Adr of where to store the element
182 1209 1 Points to a descriptor for a string
183 1210 1 FORMAT.rlu.v Format character following a Prompt string
184 1211 1
185 1212 1 IMPLICIT INPUTS:
186 1213 1
187 1214 1 ISB$A_MAJ_F_PTR pointer to last major frame
188 1215 1 LUB$A_BUF_PTR pointer in input buffer
189 1216 1
190 1217 1 IMPLICIT OUTPUTS:
191 1218 1
192 1219 1 BSF$A_CUR_DTA pointer to current location in DATA area in last
193 1220 1 major frame
194 1221 1
195 1222 1 ROUTINE VALUE:
196 1223 1
197 1224 1 NONE
198 1225 1
199 1226 1 SIDE EFFECTS:
200 1227 1
201 1228 1 NONE
202 1229 1
203 1230 1 --
204 1231 1
205 1232 2 BEGIN
206 1233 2
207 1234 2 EXTERNAL REGISTER
208 1235 2 CCB = K_CCB_REG : REF BLOCK [0, BYTE];
209 1236 2
210 1237 2 LOCAL
211 1238 2 BMF : REF BLOCK [0, BYTE] FIELD (BSF$MAJOR_FRAME);
212 1239 2
213 1240 2 !+
214 1241 2 Pick up R11 which points into the last major frame from ISB. Call
215 1242 2 BASS$UDF_RL1 to do the actual element transmit. Update CUR_DATA in the
216 1243 2 frame. Return.
217 1244 2 !-
218 1245 2
219 1246 2 BMF = .CCB [ISB$A_MAJ_F_PTR];
220 1247 2 BASS$UDF_RL1 (.ELEM_TYPE, .ELEM_SIZE, .ELEM_ADR, .FORMAT);
221 1248 2
222 1249 2 !+
```


BASS\$UDF_RM
1-005

L 15
16-Sep-1984 01:22:19 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 11:56:43 [BASRTL.SRC]BASUDFRM.B32;1

Page 7
(4)

```
: 223      1250  2      ! Add one to the current buffer pointer because of the general algorithm
: 224      1251  2      ! INPUT uses.
: 225      1252  2      !-
: 226      1253  2
: 227      1254  2      BMF [BSFSA_CUR_DTA] = .CCB [LUBSA_BUF_PTR] + 1;
: 228      1255  2      RETURN;
: 229      1256  1      END;
                                !End of BASS$UDF_RMF1
```

```
                                0004 00000
                                52      FF48  CB  D0 00002
                                7E      0C   AC  7D 00007
                                7E      04   AC  7D 0000B
                                00      04   FB 0000F
0087  C2 00000000G 00      01  C1 00016
                                AB      04 0001D
```

```
.ENTRY BASS$UDF_RMF1, Save R2
MOVL   -184(CCB), BMF
MOVQ   ELEM_ADR, -(SP)
MOVQ   ELEM_TYPE, -(SP)
CALLS  #4, BASS$UDF_RL1
ADDL3  #1, -80(CCB), 135(BMF)
RET
```

```
: 1193
: 1246
: 1247
:
: 1254
: 1256
```

; Routine Size: 30 bytes, Routine Base: _BASS\$CODE + 0006

; 230 1257 1

BASS\$UDF_RM
1-005

M 15
16-Sep-1984 01:22:19
14-Sep-1984 11:56:43

VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASUDFRM.B32;1

Page 8
(5)

```
: 232      1258 1 GLOBAL ROUTINE BASS$UDF_RMF9 : JSB_UDF9 NOVALUE =      !
: 233      1259 1
: 234      1260 1 !++
: 235      1261 1 FUNCTIONAL DESCRIPTION:
: 236      1262 1
: 237      1263 1      Call REC level to waste time.
: 238      1264 1
: 239      1265 1
: 240      1266 1 FORMAL PARAMETERS:
: 241      1267 1
: 242      1268 1      NONE
: 243      1269 1
: 244      1270 1 IMPLICIT INPUTS:
: 245      1271 1
: 246      1272 1      NONE
: 247      1273 1
: 248      1274 1 IMPLICIT OUTPUTS:
: 249      1275 1
: 250      1276 1      NONE
: 251      1277 1
: 252      1278 1 ROUTINE VALUE:
: 253      1279 1
: 254      1280 1      NONE
: 255      1281 1
: 256      1282 1 SIDE EFFECTS:
: 257      1283 1
: 258      1284 1      NONE
: 259      1285 1
: 260      1286 1 !--
: 261      1287 1
: 262      1288 2 BEGIN
: 263      1289 2
: 264      1290 2 EXTERNAL REGISTER
: 265      1291 2      CCB = K_CCB_REG : REF BLOCK [0, BYTE];
: 266      1292 2
: 267      1293 2 !+
: 268      1294 2 ! Call record level
: 269      1295 2 !-
: 270      1296 2
: 271      1297 2 BASS$REC_RMF9 ();
: 272      1298 2 RETURN;
: 273      1299 1 END;                                     !End of BASS$UDF_RMF9
```

00000000G 00 17 00000 BASS\$UDF_RMF9::
JMP BASS\$REC_RMF9

: 1297

: Routine Size: 6 bytes, Routine Base: _BAS\$CODE + 0024

```
: 274      1300 1
: 275      1301 1 END                                     !End of module BASS$UDF_RM
: 276      1302 1
: 277      1303 0 ELUDOM
```


PSECT SUMMARY

Name	Bytes	Attributes
_BASS\$CODE	42	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	0	0	581	00:01.2

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:BASUDFRM/OBJ=OBJ\$:BASUDFRM MSRC\$:BASUDFRM/UPDATE=(ENH\$:BASUDFRM)

; Size: 42 code + 0 data bytes
; Run Time: 00:09.6
; Elapsed Time: 00:21.7
; Lines/CPU Min: 8135
; Lexemes/CPU-Min: 42199
; Memory Used: 115 pages
; Compilation Complete

0032 AH-BT13A-SE
VAX/VMS V4.0

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