```
BBBBBBBBBBBB        AAAAAAAAA       SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBBBBBBBBBBB        AAAAAAAAA       SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBBBBBBBBBBB        AAAAAAAAA       SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBB          BBB   AAA         AAA  SSS          RRR         RRR       TTT        LLL
BBBBBBBBBBBB       AAA         AAA     SSSSSSSSS    RRRRRRRRRRR       TTT        LLL
BBBBBBBBBBBB       AAA         AAA     SSSSSSSSS    RRRRRRRRRRR       TTT        LLL
BBBBBBBBBBBB       AAA         AAA     SSSSSSSSS    RRRRRRRRRRR       TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR         TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR         TTT        LLL
BBB          BBB   AAAAAAAAAAAAAAA           SSS  RRR   RRR         TTT        LLL
BBB          BBB   AAA         AAA           SSS  RRR      RRR      TTT        LLL
BBB          BBB   AAA         AAA           SSS  RRR      RRR      TTT        LLL
BBB          BBB   AAA         AAA           SSS  RRR      RRR      TTT        LLL
BBBBBBBBBBBB       AAA         AAA  SSSSSSSSSSS  RRR         RRR    TTT        LLLLLLLLLLLLLLL
BBBBBBBBBBBB       AAA         AAA  SSSSSSSSSSS  RRR         RRR    TTT        LLLLLLLLLLLLLLL
BBBBBBBBBBBB       AAA         AAA  SSSSSSSSSSS  RRR         RRR    TTT        LLLLLLLLLLLLLLL
```

```
BBBBBBBB    PPPPPPPP      AAAAAA      SSSSSSSS  TTTTTTTTTT  RRRRRRRR    UU      UU    CCCCCCCC  TTTTTTTTTT
BBBBBBBB    PPPPPPPP      AAAAAA      SSSSSSSS  TTTTTTTTTT  RRRRRRRR    UU      UU    CCCCCCCC  TTTTTTTTTT
BB      BB  PP      PP   AA      AA  SS            TT      RR      RR  UU      UU  CC            TT
BB      BB  PP      PP   AA      AA  SS            TT      RR      RR  UU      UU  CC            TT
BB      BB  PP      PP   AA      AA  SS            TT      RR      RR  UU      UU  CC            TT
BB      BB  PP      PP   AA      AA  SS            TT      RR      RR  UU      UU  CC            TT
BBBBBBBB    PPPPPPPP     AA      AA    SSSSSS      TT      RRRRRRRR    UU      UU  CC            TT
BBBBBBBB    PPPPPPPP     AA      AA    SSSSSS      TT      RRRRRRRR    UU      UU  CC            TT
BB      BB  PP           AAAAAAAAAA          SS    TT      RR  RR      UU      UU  CC            TT
BB      BB  PP           AAAAAAAAAA          SS    TT      RR  RR      UU      UU  CC            TT
BB      BB  PP           AA      AA          SS    TT      RR    RR    UU      UU  CC            TT
BB      BB  PP           AA      AA          SS    TT      RR    RR    UU      UU  CC            TT
BBBBBBBB    PP           AA      AA  SSSSSSSS      TT      RR      RR  UUUUUUUUUU    CCCCCCCC      TT
BBBBBBBB    PP           AA      AA  SSSSSSSS      TT      RR      RR  UUUUUUUUUU    CCCCCCCC      TT

RRRRRRRR    EEEEEEEEEE    QQQQQQ
RRRRRRRR    EEEEEEEEEE    QQQQQQ
RR      RR  EE           QQ      QQ
RR      RR  EE           QQ      QQ
RR      RR  EE           QQ      QQ
RR      RR  EE           QQ      QQ
RRRRRRRR    EEEEEEEE     QQ      QQ
RRRRRRRR    EEEEEEEE     QQ      QQ
RR  RR      EE           QQ  QQ  QQ
RR  RR      EE           QQ  QQ  QQ
RR    RR    EE           QQ    QQ
RR    RR    EE           QQ    QQ
RR      RR  EEEEEEEEEE     QQQQ  QQ
RR      RR  EEEEEEEEEE     QQQQ  QQ
```

```
!+
! This file, BPASTRUCT.REQ, defines the data structure definition macros
! to aid people using BLISS BLOCK data structures
!-

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!****************************************************************************

! AUTHOR:       J. Ankcorn
!
! MODIFIED BY:  J. Barker
!
!       Changes to facilitate use with BLISS-32 on VAX.
!
! Edit History:
!
! 1-001 - Original, from STRUCT.R32, from ESE.  JBS 02-OCT-1979
! 1-002 - Remove the defense against requireing this file redundently.
!         JBS 02-OCT-1979
! 1-003 - Add copyright notice.  SBL 11-Mar-1980
!--
!               POSITION AND SIZE MACROS
!
!       The following macros must be used in defining field names for
!       compiler structures  to supply the position, size and extension
!       values for a BLOCK or BLOCKVECTOR structure reference.
!       The various forms are :
!
!               A               Materialized Address.
!               L               Longword.
!               W               Zero extended word.
!               B               Zero extended byte.
!               V               Zero extended bit field.
!               M               Define bit field mask.
```

```
!               SW              Sign extended word.
!               SB              Sign extended byte.
!               SV              Sign extended bit field.
!
!       The "A" forms should be used whenever the field being defined
!       is such that the only valid structure reference is one that
!       materializes the address of the field.  An example of such a
!       field is an ASCII string.
!
!       Each of the "V", "M" and "SV" forms takes one or two arguments.
!       The first parameter is the bit position within the word
!       and the second is the size of the field.  The second parameter
!       is optional; the default size is 1.
!
MACRO
        A_=             0,      0,      0 %,
        L_=             0,      32,     0 %,
        W_=             0,      16,     0 %,
        B_=             0,      8,      0 %,
        V_(P,S)=        P,      %IF %NULL(S) %THEN 1 %ELSE S %FI,       0 %,
        M_(P,S)=        1^(%IF %NULL(S) %THEN 1 %ELSE S %FI + P) - 1^P %,
        SW_=            0,      16,     1 %,
        SB_=            0,      8,      1 %,
        SV_(P,S)=       P,      %IF %NULL(S) %THEN 1 %ELSE S %FI,       1 %;
! End of file BPASTRUCT.REQ
```

BASERRMSG REQ

BASFRAME REQ

BASOPN REQ

BPAFSBDEF REQ

BPASTRUCT REQ

BPADABDEF REQ

BPAXRBDEF REQ

BPAERRDEF REQ

BPAFUNDEF REQ

BASINARG REQ

BASBUFSIZ LIS

MATRIX MAR

BASIOERR REQ

BASCB LIS

BPAFQBDEF REQ

BASRTL2 MAP

BASPAR SDL

BASLNK REQ

BPAMSGDEF REQ

BASRTL

BASRTL MAP

BASCANTYP LIS