


```
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EEEEEEEEEEE      FFF      IIIIIII      XX      XX
PP      RR      RR      EEEEEEEEEEE      FF      IIIIIII      XX      XX
```

```
RRRRRRRR      EEEEEEEEEEE      QQQQQQ
RRRRRRRR      EEEEEEEEEEE      QQQQQQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RRRRRRRR      EEEEEEEEEEE      QQ      QQ
RRRRRRRR      EEEEEEEEEEE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EEEEEEEEEEE      QQQQ      QQ
RR      RR      EEEEEEEEEEE      QQQQ      QQ
```

Version: 'V04-000'

```

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MODULE: PREFIX.REQ

FACILITY: LINKER

ABSTRACT:

REQUIRE FILE TO DEFINE LOCALLY SOME INTERESTING GENERAL SYMBOLS, STRUCTURES AND MACROS

HISTORY:

AUTHOR: T.J. PORTER 15-DEC-76

MODIFICATIONS:

V03-001 JWT0099 Jim Teague 14-Mar-1983
 Add useful macros "sd" and "dynamic_descriptor".

--

++

FUNCTIONAL DESCRIPTION:

THIS REQUIRE FILE DEFINES SOME GENERAL, LOCAL VALUES AND MACROS WHICH CANNOT OR ARE BEST NOT DEFINED GLOBALLY.

--

MACRO

```
sd [a] = bind %name('sd_',a) = $descriptor(a)%,
dynamic_descriptor = block [dsc$c_s_bln,byte] preset ( [dsc$w_length] = 0,
                                                    [dsc$b_class] = dsc$k_class_d,
                                                    [dsc$a_pointer] = 0 )%,
```

```
SHORT = UNSIGNED(6)%,           ! SHORT LITERAL ATTRIBUTE
BYTLIT = UNSIGNED(8)%,         ! UNSIGNED BYTE ATTRIBUTE
WORDLIT = UNSIGNED(16)%,       ! UNSIGNED WORD ATTRIBUTE
```

MACRO THAT DESCRIBES A STRING

```
STRINGDESC(STRING) = %CHARCOUNT(STRING), UPLIT(%ASCII STRING)%,
```

MACRO TO GENERATE A QUADWORD STRING DESCRIPTOR

```
DESCRIPTOR(STRING) = VECTOR[2] INITIAL(STRINGDESC(STRING))%,
```

MACRO TO GENERATE A POINTER TO A COUNTED STRING

```
CSTRING(STRING) = UPLIT BYTE(%CHARCOUNT(STRING),STRING)%,
```

MACRO TO ALLOCATE AN N-CHARACTER STORAGE VECTOR

```
CH$SEQUENCE(N) = VECTOR[CH$ALLOCATION(N)]%,
```

MACRO TO INITIALIZE SUCCESSIVE LOCATIONS WITH A COUNT FOLLOWED BY A STRING

```
COUNTEDSTRING(STRING) = BYTE(%CHARCOUNT(STRING),%ASCII STRING )%;
```

Define VMS block structures

STRUCTURE

```
BBLOCK [O, P, S, E; N] =
  [N]
  (BBLOCK+O)<P,S,E>;
```

LITERAL

```
PROGRAM_REGION = %X'200',           ! DEFAULT BASE OF PROGRAM REGION
CONTROL_REGION = %X'40000000',      ! START OF CONTROL REGION
SYSTEM_SPACE = %X'80000000',        ! START OF SYSTEM SPACE
MAX_ADDRESS = %X'C0000000',         ! MAXIMUM VIRTUAL ADDRESS
FALSE = 0,                          ! THE LOGICAL VALUES TRUE
TRUE = 1;                             ! AND FALSE.
```

LINKAGE

```
JSB_3 = JSB (REGISTER = 0, REGISTER = 1, REGISTER = 2),
```

```
! JSB_2 = JSB (REGISTER = 0, REGISTER = 1),  
! JSB_1 = JSB (REGISTER = 0) : NOPRESERVE(1) PRESERVE(2,3,4,5,6,7,8,9,10,11),  
! JSB_FAST = JSB (REGISTER = 0, REGISTER = 1);
```

```
STRUCTURE  
  QUADVECTOR[1:N] = ! A VECTOR OF N QUADWORDS  
    [ N * 8 ]  
    (QUADVECTOR + 8*1);
```

Thumbnail 1	Thumbnail 2	Thumbnail 3	Thumbnail 4	Thumbnail 5	Thumbnail 6	Thumbnail 7	Thumbnail 8	Thumbnail 9	Thumbnail 10
Thumbnail 11	Thumbnail 12	Thumbnail 13	Thumbnail 14	Thumbnail 15	Thumbnail 16	Thumbnail 17	Thumbnail 18	Thumbnail 19	Thumbnail 20
Thumbnail 21	Thumbnail 22	Thumbnail 23	Thumbnail 24	Thumbnail 25	Thumbnail 26	Thumbnail 27	Thumbnail 28	Thumbnail 29	Thumbnail 30
Thumbnail 31	Thumbnail 32	Thumbnail 33	Thumbnail 34	Thumbnail 35	Thumbnail 36	Thumbnail 37	Thumbnail 38	Thumbnail 39	Thumbnail 40
Thumbnail 41	Thumbnail 42	Thumbnail 43	Thumbnail 44	Thumbnail 45	Thumbnail 46	Thumbnail 47	Thumbnail 48	Thumbnail 49	Thumbnail 50
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