

CCCCCCCCCCCC	LLL	IIIIIIIIII	UUU	UUU	TTTTTTTTTTTTTTTT	LLL
CCCCCCCCCCCC	LLL	IIIIIIIIII	UUU	UUU	TTTTTTTTTTTTTTTT	LLL
CCCCCCCCCCCC	LLL	IIIIIIIIII	UUU	UUU	TTTTTTTTTTTTTTTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCC	LLL	III	UUU	UUU	TTT	LLL
CCCCCCCCCCCC	LLLLLLLLLLLLLLLL	IIIIIIIIII	UUUUUUUUUUUUUUUU	UUUUUUUUUUUUUUUU	TTTT	LLLLLLLLLLLLLLLL
CCCCCCCCCCCC	LLLLLLLLLLLLLLLL	IIIIIIIIII	UUUUUUUUUUUUUUUU	UUUUUUUUUUUUUUUU	TTTT	LLLLLLLLLLLLLLLL
CCCCCCCCCCCC	LLLLLLLLLLLLLLLL	IIIIIIIIII	UUUUUUUUUUUUUUUU	UUUUUUUUUUUUUUUU	TTTT	LLLLLLLLLLLLLLLL

```

CCCCCCCC LL      IIIIII MM      MM      AAAAAA CCCCCCCC
CCCCCCCC LL      IIIIII MM      MM      AAAAAA CCCCCCCC
CC        LL      II     MMMM  MMMM  AA      AA  CC
CC        LL      II     MMMM  MMMM  AA      AA  CC
CC        LL      II     MM   MM   MM   AA      AA  CC
CC        LL      II     MM   MM   MM   AA      AA  CC
CC        LL      II     MM   MM   MM   AA      AA  CC
CC        LL      II     MM   MM   MM   AA      AA  CC
CC        LL      II     MM   MM   MM   AA      AA  CC
CC        LL      II     MM   MM   MM   AA      AA  CC
CCCCCCCC LLLLLLLLLL IIIIII MM      MM      AAAAAA CCCCCCCC
CCCCCCCC LLLLLLLLLL IIIIII MM      MM      AAAAAA CCCCCCCC

```

```

MM      MM      AAAAAA RRRRRRRR
MM      MM      AAAAAA RRRRRRRR
MMMM  MMMM  AA      AA  RR      RR
MMMM  MMMM  AA      AA  RR      RR
MM   MM   MM   AA      AA  RR      RR
MM   MM   MM   AA      AA  RRRRRRRR
MM      MM   AA      AA  RRRRRRRR
MM      MM   AAAAAAAAAA RR   RR
MM      MM   AAAAAAAAAA RR   RR
MM      MM   AA      AA  RR      RR
MM      MM   AA      AA  RR      RR
MM      MM   AA      AA  RR      RR
MM      MM   AA      AA  RR      RR

```

Version 'V04-000'

```
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```
*****
:  INTERNAL MACRO TO ALLOCATE SPACE FOR A STRUCTURE
:
```

```
    .MACRO $CLIALO SIZE
$CLI. = .
    .BLKB  SIZE
$CLI.. = .
    .ENDM
```

```
:  MACRO TO END THE STRUCTURE-RESTORE LOCATION BEYOND THE END
:
```

```
    .MACRO $CLIEND
    . = $CLI..
    .ENDM
```

```
:  MACRO TO GENERATE A MASK FROM A LIST OF BITS
:
```

```
    .MACRO $MASK  LIST,TYPE=BYTE,?L1
$$$ = 0
    .IF NB <LIST>
    .IRP  $$$ <LIST>
    $$$ = $$$.!<1@$$$>
    .ENDR
    .ENDC
    .TYPE $$$
    .ENDM
```

```
:  MACRO TO LOAD A VALUE INTO A STRUCTURE
:
```

```
    .MACRO $CLISSET SYM,VAL,TYPE=B,IDX
```

```

    .IF NB <VAL>
      .IF B <IDX>
        . = $CLI.+CLIS'TYPE'SYM
        .IFF
        . = $CLI.+CLIS'IDX'SYM
        .ENDC
      .IF IDN <TYPE><B>
        .BYTE VAL
        .IFF
        .IF IDN <TYPE><A>
          .LONG <VAL-$CLI.>
          .IFF
        .IF IDN <TYPE><W>
          .WORD VAL
          .IFF
        .IF IDN <TYPE><M>
          .SMASK <VAL>
          .IFF
          .IF IDN <TYPE><L>
            .LONG VAL
            .IFF
            .ERROR ; INVALID DATA TYPE;
          .ENDC
        .ENDC
      .ENDC
    .ENDC
  .ENDC
.ENDC
.ENDM

```

```

:
: MACRO TO SET UP VARIABLE LENGHT BIT LIST
:
:

```

```

: .MACRO SBITLST LIST,?L1
: . = $CLI..
: .IF B <LIST>
: .BYTE 0
: .IFF
: .BYTE L1-.-1
: .IRP $$$,<LIST>
: .BYTE $$$
: .ENDR
L1:
: .ENDC
$CLI.. =
: .ENDM

```

```

:
: MACRO TO GENERATE A CLI CALL BACK REQUEST DESCRIPTOR
:
:

```

```
.MACRO $CLIREQDESC RQTYPE,BITNUM,RQFLGS,ERRACT,RQSIZE,RQADR,-
          QUALST,PRSACT,ABSACT
```

```
.NLIST
$CLIDEF                                ; DEFINE VALUES FOR CLI
.LIST
```

```
$CLIALO CLISC_REQDESC
```

```
$CLISSET _RQTYPE,RQTYPE
$CLISSET _BITNUM,BITNUM
$CLISSET _RQFLGS,<RQFLGS>,M,B
$CLISSET _ERRACT,ERRACT,A
$CLISSET _RQSIZE,RQSIZE,W
$CLISSET _RQADR,RQADR,A
$CLISSET _QUALST,QUALST,A
$CLISSET _PRSACT,PRSACT,A
$CLISSET _ABSACT,ABSACT,A
```

```
$CLIEND
.ENDM
```

```
*** TEMP *** OLD NAME OF MACRO
```

```
.MACRO $CLIQUALDEF QDCODE,QDFLGS,TRUACT,FLSACT,TSTLST,SETLST,CLRLST
$CLIQUALDESC QDCODE,QDFLGS,TRUACT,FLSACT,TSTLST,SETLST,CLRLST
.ENDM
```

```
MACRO TO GENERATE A QUALIFIER DESCRIPTOR
```

```
.MACRO $CLIQUALDESC QDCODE,QDFLGS,TRUACT,FLSACT,TSTLST,SETLST,CLRLST,?Z
```

```
.IF IDN <QDCODE><END_LIST>
```

```
.BYTE 0
```

```
.IFF
```

```
$CLIALO CLISC_QUALDEF
```

```
$CLISSET _QDBLKSIZ,<Z-.>
$CLISSET _QDCODE,QDCODE
$CLISSET _QDFLGS,<QDFLGS>,M,B
$CLISSET _TRUACT,TRUACT,A
$CLISSET _FLSACT,FLSACT,A
$BITLST <TSTLST>
$BITLST <SETLST>
$BITLST <CLRLST>
```

```
$CLIEND
```

```
.ENDC
.ENDM
```

```
MACRO TO GENERATED A COUNTED STRING FOR THE MATCHKEY SUBROUTINE
```

```
.MACRO $KEYWORD ST,?L1
```

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L1: .BYTE L1--1  
.ASCII \ST\  
.ENDM

BCPRSDEF REQ	CONCLTAB LIS	INFO LIS
SHODEVDEF REQ	CHRSUB LIS	CONCLINUM LIS
CLTMAC MAR	CONCLIFRM LIS	DIGRAMS LIS
CALCMAX LIS	CUTTINE LIS	BCOMPERS LIS
CLTUTLMAC MAR	CREATE LIS	