

ADDRESS	LENGTH	BINARY CONTROL CARDS.	
		IDENT	DESCR
0	0	END	

ENTRY POINTS.

M.RW	-	0	D.KEY2	-	25	C.SDIR	-	0	R.UACC	-	112
M.RO	-	1	P.NWNAM	-	16	P.SDIR	-	7	T.OPTS	-	113
M.WIN	-	2	P.NWKYN	-	17	C.DDIR	-	1	CLKBUFF	-	114
L.SHP	-	13	P.OPTS	-	20	P.DDIR	-	10	RETDATA	-	121
P.WHICH	-	6	P.KEYNO	-	16	P.SPACE	-	11	T1	-	121
P.ERRCL	-	6	C.SUCCD	-	1	P.FLAG	-	10	ERRLOC	-	122
P.ERRNO	-	7	P.SUCCD	-	10	P.INCR	-	10	DNTLOL	-	123
C.DIRCT	-	0	P.NUMB	-	10	P.TAG	-	10	RETBUFF	-	10
P.DIRCT	-	7	P.OBSPC	-	11	C.PARMS	-	0	O.LOL	-	135
P.NAME	-	10	C.STNT	-	0	OL.OPS	-	3	O.SYSTM	-	136
C.KEY	-	1	P.STNT	-	7	OL.DRCT	-	4	O.SWPTM	-	137
P.KEY	-	16	C.OBJ	-	1	EF.DRCT	-	5	O.USRTM	-	140
C.SCAN	-	0	P.OBJ	-	10	C.T1	-	6	SYSEBR	-	141
P.SCAN	-	7	C.DYNT	-	0	C.T2	-	7	D.ENTRY	-	143
P.SHP	-	16	P.DYNT	-	7	DF.DRCT	-	0	D.REGS	-	145
P.SIZE	-	16	P.KN1	-	32	OP.BEAD	-	10	D.TBUF	-	165
P.ACBLK	-	17	P.OPT1	-	33	XPACK	-	34	D.STKBF	-	171
C.DOBJ	-	1	P.KN2	-	20	ERRPACK	-	54	D.BKADR	-	174
P.DOBJ	-	16	P.OPT2	-	21	IPLIST	-	74	D.BKIND	-	175
C.DIR2	-	1	C.FOBJ	-	0	RETLIST	-	104	D.BKBUF	-	176
P.DIR2	-	16	P.FOBJ	-	7	T.SLL	-	107	D.NBKPT	-	5
P.NAM2	-	17	C.SBPD	-	0	T.SPL	-	110	D.BKCAL	-	227
C.KEY2	-	2	P.SBPD	-	7	T.SCANL	-	111	L.RW	-	230

EXTERNAL SYMBOLS.

FL	ENTRY	STARTRO	ENDRO	DEBUG	SYSERR0
----	-------	---------	-------	-------	---------

```

          IDENT      DESCR
          *
          *
          *
          EXT      FL,ENTRY,STARTRO,ENDRO
          *
          *
          *
0          SYSSUBP   XTEXT          . SUBPROCESS DESCRIPTOR MACRO DEFINITIONS
0          MISCMAC   XTEXT          . (WHAT WOULD YOU EXPECT)
          * DIOPS,OPERS IS ALSO INVOKED A LITTLE LATER...

0          ORG      0          . DESCRIPTOR STARTS AT RA+0
0 000000000000000000000001      TYPE      1          . DESCRIPTOR TYPE

          * FOLLOWING ARE THE GLOBAL INITIALIZATION DIRECTORY NAMES OF:
          *
          * THE DIRECTORY SYSTEM CLASSCODE
          * THE CLASSCODE OF FATHER SUBPROCESS
          * THE INITIAL CALL OPERATION
          * THE WORKING C-LIST
          * THE SCRATCH FILE
          *
2 03035704112223312300      NAMES      CC.DIRSYS,CC.FRETRW,OP.DIRSYS,CL.DIRSYS,SF.DIRSYS

          * FOLLOWING ARE NUMBERS REPRESENTING:
          *
          * THE COMPILED MAP BUFFER SIZE
          * THE SUBPROCESS FIELD LENGTH
          * THE ENTRY POINT ADDRESS
          * THE SCRATCH FILE LENGTH
          *
7 000000000000000000000003      INTEGERS 20,FL,ENTRY,L,RW

          * NEXT COME THE MAP DESCRIPTORS:

15 23065704112223312300      M.RW      MAP      SF.DIRSYS,0,0,0+L.RW,0          . DATA AREA
20 03065704112223312300      M.RO      MAP      CF.DIRSYS,L.RW,L.RW,ENDRO,1      . CODE AREA
23 77777777777777777777      M.WIN     MAPBSS     1          . WINDOW MAP ENTRY
          MAPEND

```

ENTRY I.SHP

* ASSEMBLY PARAMETERS:

6	PARAREA	EQU	6	. ADDRESS OF FIRST SUBPROCESS-CALL PARAMETER
10	L.IPL	EQU	8	. MAX NUMBER OF INPUT PARAMETERS TO OPERATIONS CALLED BY DIRECTORY SYSTEM
12	L.LOL	EQU	10	. LENGTH OF DYNAMIC NAME TAG LOCAL OPEN LIST

* RESERVATION MACRO DEFINITIONS:

*
oe

RESERVE A WORD IN THE PARAMETER AREA

```
MACRO CELL,NAME,LENGTH
ENTRY NAME
NAME EQU IP:
IP: SET IP: + LENGTH
ENDM
```

*
oe

RESERVE A CAPABILITY SLOT IN THE PARAMETER AREA

```
MACRO CLENT,NAME,LENGTH
ENTRY NAME
NAME EQU IC:
IC: SET IC: + LENGTH
ENDM
```

*
*
*

* DECLARATION MACRO DEFINITIONS [CALLED BY THE -DIOPS- XTEXT.]

```
OPGROUP MACRO PREFIX
ENDM
```

*
oe

MACRO TO INITIALIZE COUNTERS

```
MACRO ACTION,NAME,NO:PS
IP: SET PS,WHICH+1
IC: SET 0
ENDM
```

*
oe

HERE FOLLOW SEVERAL MACROS TO DESCRIBE VARIOUS TYPES OF PARAMETERS.

```
MACRO CAP,NAME,TYPE,OPTIONS
CLENT T
CELL T
ENDM
```

POSTFIX MICRO 1,3,/:->PREFIX/

+
USE JUMPEC
JP =X-NAME+POSTFIX
USE *

*
* DEFINE ACTION JUMP THEN ORIGIN.
USE JUMPEVC
TR = XENIT
JUMPEVC DESS 0
USE *

3		MACRO	CAPEQU,L,NCAP	SYSSURP	1
3	CAPEND	MACRO		SYSSURP	1
3	NAME	MACRO	PARAM	SYSSURP	1
3	INTEGER	MACRO	PARAM	SYSSURP	1

Line	Address	Symbol	Segment	Value	Description
24		C.PARMS	CAPBSS	NEXT.C	. RESERVE SPACE FOR PARAMETER CAPABILITIES
		*			
		*			
27	03145717200522230000	CL.OPS	CAP	CL.OPERS	. THE OPERATIONS C-LIST
30	03145704220324233123	CL.DRCT	CAP	CL.DRCTS	. THE GLOBAL DIRECTORY GOODIES C-LIST
31		EF.DRCT	CAPBSS	1	. ECS INCARNATION OF DF.DRCT
32		C.T1	CAPBSS	2	. TEMPS
		C.T2	CAPEQU	C.T1+1	. C.T2 MUST EQUAL C.T1+1
		DF.DRCT	CAPEQU	C.DIRCT	. THIS MUST BE
		* THE FOLLOWING CAPABILITY IS AROUND FOR DEBUGGING PURPOSES.			
34	03175706011305070200	OP.BEAD	CAP	CO.FAKEGB	. FAKE READ GHOST
		*			
35	77777777777777777777		CAPEND		
		*			
36		L.UNINIT	BSS	0	. LENGTH OF SUBPROCESS DESCRIPTOR

* FOLLOWING THE PARAMETER AREA [WHICH ENDS AT (NEXT.P-1)] COMES THE DATA
 * AREA, BUT CELLS NEEDING AN INITIAL VALUE MUST BE AT AN ADDRESS
 * NOT LESS THAN L.UNINIT, FOR OBVIOUS REASONS.

34 ORG NEXT.P . SKIP PARAMETER AREA

* DECLARE NORMAL AND ERROR EXCHANGE JUMP PACKAGES *De*

34 XPACK DBSS 16
 54 ~~ERRPACK DBSS 16~~

* DECLARE STANDARD INPUT-PARAMETER LIST AREA

74 IPLIST DBSS L.IPL

* DECLARE IPLIST FOR RETURN ACTIONS (RTRN, FRET, RPAR, RERR)

104 RETLIST DBSS 3 . IPO + 2 PARAMETERS

* FOLLOWING ARE SOME TEMPORARIES, WHICH COULD PROBABLY BE
 * PARTIALLY COALESCED.

107	T.SLL	DBSS	1	. USED TO HOLD SOFTLINK CHAIN LENGTH
110	T.SPL	DBSS	1	. USED TO HOLD SUCCESSOR CHAIN LENGTH
111	T.SCANI	DBSS	1	. USED TO HOLD SCANLIST INDEX
112	R.UACC	DBSS	1	. USED TO HOLD SPECIAL FAILURE RETURN FROM ↑UACC↑
113	T.OPTS	DBSS	1	. USED BY ↑ODN2↑
114	CLKBUFF	DBSS	1	. HOLDS INITIAL CLOCK READINGS
121	RETDATA	DBSS	1	. USED FOR RETURN DATUMS AND OTHER THINGS
	T1	DEQU	RETDATA	
122	ERRLOC	DATA	1	. HOLDS ADDRESS OF CURRENTLY RELEVANT ERROR PROCESSING CODE
123	DNTLOL	DBSS	L.LOL	. DYNAMIC NAME TAG LOCAL OPEN LIST
	RETBUFF	DEQU	P.ERRNO+1	. USED BY DR:DSPN (DISPLAY DIRECTORY ENTRY) AND BY DSTRY (IN -SUBRS-)
		IFGT	RETBUFF+11, NEXT.P.1	

L.RETBUFF DEQU 11

BUFF2 DEQU P.WDCNT+1 . USED BY THE MULTIPLE-entry LDR action
L.BUFF2 DEQU 10
IFGT BUFF2 + L.BUFF2, NEXT.P
err overflow off BUFF2
endif

move to initialized area

retbuff: 1
next.p: 1

```

                                IFLT      *.L.UNINIT,1
135                                O.LOL      DBSS      0
135 00000123000012000000      VFD      6/0,18/DNTLOL,18/1.LOL,18/0  . LOCAL OPEN LIST DESCRIPTOR
136 00000000000000000000      O.SYSTM     DDATA      0      . ACCUMULATED SYSTEM TIME
137 00000000000000000000      O.SWPTM     DDATA      0      . ACCUMULATED SWAP TIME
140 00000000000000000000      O.USRTM     DDATA      0      . ACCUMULATED USER TIME
*
*
***** DATA AREA FOR DEBUGGER, HOPEFULLY TO GO AWAY SOMETIME *****
*
141                                SYSERR     DBSS      1      . SYSTEM ERROR ENTRY POINT
142 0200000000 x                JP      =XSYSERRQ . GO TO DEBUGGER
143                                D.ENTRY     DBSS      1      . BREAKPOINT ENTRY POINT
144 0200000000 x                JP      =XDEBUG   . GO TO ACTUAL DEBUGGER CODE
145                                D.REGS      DBSS      16     . HOLDS DIRSYS REGISTERS
165                                D.TBUF      DBSS      4      . TTY BUFFER
171                                D.STKBF     DBSS      3      . USED TO VIEW STACK ENTRY
174 00000000000000000000      D.BKADR     DDATA      0      . ADDRESS TO SET BREAKPOINT AT
175 00000000000000000000      D.BKIND     DDATA      0      . INDEX OF NEXT BREAKPOINT
176                                1          NUM      SET      TRA
                                D.BKBUF     DBSS      1000000 . NUMBER OF DYNAMIC BREAKPOINTS
                                D.NBKPT     DEQU      D.NBKPT
                                DUP      1
                                BSSZ      1
                                +          RJ      D.ENTRY
                                +          VFD      42/OLDYNAMIC,6/NUM,12/0
                                BSSZ      1      . SAVED WORD
                                +          JP      *-4
                                NUM      SET      NUM+1
                                END
227                                D.BKCAL     DATA      1      . TEMP
*
*
***** END OF DEBUGGER DATA *****
*
230                                L.RW       DBSS      0      . LENGTH OF DATA AREA
0
                                END

```


DESCR : SUBPROCESS DESCRIPTOR AND DATA DECLARATIONS
INITIALIZED DATA AREA

COMPASS - VER 2.

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6600 ASSEMBLY

6.937 SECONDS

134 REFERENCES

3 TYPE ERROR

DUPLICATE MACRO DEFINITION. NEW ONE OVERRIDES.

OCCURRED ON PAGES

3,

4,

5

DESCR : SUBPROCESS DESCRIPTOR AND DATA DECLARATIONS
SYMBOLIC REFERENCE TABLE.

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CAPX	11		2/36 D	6/02	6/05	6/06	6/07	6/08	6/14
			6/02	6/05	6/06	6/07	6/08	6/14	6/15
			6/02 D	6/05 D	6/06 D	6/07 D	6/08 D	6/14 D	
CLKBUFF	114		7/28 L						
CL.DRCT	4		6/06 D						
CL.OPS	3		6/05 D						
C.DIRECT	0		6/09						
C.PARMS	0		6/02 D						
C.T1	6		6/08 D	6/08					
C.T2	7		6/08 D						
DEBUG	0	EXTERNAL*	8/18						
DF.DRCT	0		6/09 D						
DNTLOL	123		7/33 L	8/04					
D.BKADR	174		8/26 L						
D.BKBUF	176		8/31 L						
D.BKCAL	227		8/42 L						
D.BKIND	175		8/28 L						
D.ENTRY	143		8/17 L	8/41	8/41	8/41	8/41	8/41	
D.NBKPT	5		8/32 D	8/33					
D.REGS	145		8/20 L						
D.STKBF	171		8/24 L						
D.TBUF	165		8/22 L						
EF.DRCT	5		6/07 D						
ENDRO	0	EXTERNAL*	2/41						
ENTRY	0	EXTERNAL*	2/36						
ERRLOC	122		7/31 L						
ERRPACK	54		7/10 L						
FL	0	EXTERNAL*	2/36						
IPLIST	74		7/14 L						
L.IPL	10		3/07 D	7/14					
L.LOL	12		3/10 D	7/33	8/04				
L.RW	230		2/36	2/40	2/41	2/41	8/49 L		
L.SHP	13		3/01 E						
L.UNINIT	36		6/17 L						
L:CLIST	11		2/36	6/15 D					
L:LMAP	3		2/35	2/42 D					
MAPX	3		2/36 D	2/40	2/40	2/41	2/41	2/41	
			2/40	2/40 D	2/41	2/41 D	2/41 D	2/42	
M.RO	1		2/41 D						
M.RW	0		2/40 D						
M.WIN	2		2/41 D						
NEXT.C	3		4/39 D	6/01	6/02				
NEXT.P	34		4/38 D	7/05					
NUM	6		8/30 D	8/41 D	8/41	8/41	8/41 D	8/41	8/41 D
			8/41	8/41	8/41 D	8/41	8/41 D	8/41	8/41
OP.BEAD	10		6/14 D						
O.LOL	135		8/03 L						
O.SWPTM	137		8/07 L						
O.SYSTM	136		8/06 L						
O.USRTM	140		8/08 L						
PARAREA	6		3/05 D	4/34	4/35	4/36			
P.ERRCL	6		4/35 D						
P.ERRNO	7		4/36 D	7/34					

DESCR : SUBPROCESS DESCRIPTOR AND DATA DECLARATIONS
SYMBOLIC REFERENCE TABLE.

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P.WHICH	6		4/34 D	4/38
RETBUFF	10		7/34 D	
RETDATA	121		7/29 L	7/30
RETLIST	104		7/18 L	
R.UACC	112		7/26 L	
STARTRO	0	EXTERNAL*		
SYSERR	141		8/14 L	
SYSERRQ	0	EXTERNAL*	8/15	
T1	121		7/30 D	
T.OPTS	113		7/27 L	
T.SCANL	111		7/25 L	
T.SLL	107		7/23 L	
T.SPL	110		7/24 L	
XPACK	34		7/09 L	