

UNIVERSAL ASSEMBLER VERSION 3.1 FEBRUARY 29, 1980 (IN-HOUSE)

## CONFIDENTIAL PROPRIETARY INFORMATION

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COMMAND LINE WAS: SNAP3 PROC14.PROCID,,,PROC144;GQPLX

INCLUSION A: PROCINC/TXT:DR0

INCLUSION B: PROC14/LIB:DR0.PMACMIC

INCLUSION C: PROC14/LIB:DR0.GMACROZ

INCLUSION D: PROC14/LIB:DR0.PROCEQUS

INCLUSION E: PROC14/LIB:DR0.BDEF1800

INCLUSION F: PROC14/LIB:DR0.MDEF1800

INCLUSION G: PROC14/LIB:DR0.PORTEQUS

INCLUSION H: PROC14/LIB:DR0.PORTASGN

INCLUSION I: PROC14/LIB:DR0.PROCP4

D 20.A

CAPIVS EQU 0

INVERTED DISPLAY SCREEN VERSION \*\*NEW\*\*

\*\*\* ERRORS: D

PROGRAM NAME: PROCID

PROGRAM ADDRESS BLOCKS:	010000	/ABSOLUTE/	SIZE=000000	(ABS)
	167400	/SYSIVR/	SIZE=000400	(ABS)
	170000	/SYSROM/	SIZE=000047	(ABS)
	000000	/PID/	SIZE=001000	(REL)

EXTERNAL REFERENCES (UNDEFINED SYMBOLS):

UDPOP	SLC	RETCC	AP4	INCX	LD6	RETURN	INFO	BFAC	SRC	INCP	INCPA
BETA	BT	SIRO	DECX	DS	ALPHA	BFSB	SRE	DECP	DECPA	DI	BCP
CCS	NOJ	DL	EI	PUSHI	BP	REGS	DLHL	POP	MIN	SIRX	STKS
SC	PUSH	MOUT	BRL	BFS	STL	JUMPC	INPUT	CALLCC	PIN	JUMP	PLR
CALL	PSR	EXADR	EXSTAT	EXDATA	EXWRITE	EXCOM1	EXCOM2	EXCOM3	EXCOM4	UDOP	BEEP

PAGE 2 PROC14/LIB:DR0.PROCID

MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS -  
SATURDAY, AUGUST 7, 1982 -- 3:52:56 PM

07AUG82 15:52

CLICK LODCF SYSTAT APS

AP7 FETCHI LDS LD7 L7S

UNUSED LABELS:

PID JMPTBL

3.

INC PROCINC

DATAPOINT CONFIDENTIAL INFORMATION - SEE PAGE 1

PAGE 4 PROC14/LIB:DR0.PROCID

MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS - 07AUG82 15:52  
. UNDEFINED UNUSED PORTS, SUBS, & BITS

14.A  
15.A  
16.A

* TYPE	SNAPOPT	X	
	EQU	4	DEFINE VERSION OF MACHINE TO BE ASSEMBLED
	INC	PROC14.PORTASGN	PORT ASSIGNMENT DISPLAY

MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS - 07AUG82 15:52  
 . THE PORT ASSIGNMENTS, ORGANIZED BY PORT - SUBPORT NUMBER IN IN/OUT PAIRS

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

```

*
.PORT
. SUB 0 1 2 3 4 5 6 7
. 0 0 LIREG LIMP BASW MODW STW LUF LUCF
. 0 I MODIN INBUS MIFIN SDLCIN ACUIN
. 0 0 IIMP DIMP COMF CHUF IMAR DMAR
. 10 I
. 1 0 OTBUS MDW LSPKR SDLCOT ACUOT SDLCMD MIFADR MIFDAT
. 0 I SRVREQ STATUS IDCODL IDCODH UCFLG MDR STEK
. 1 0 MIFSTB MIFIAK MIFSTB2 SINS SIOD CSRF CSTF SOTS
. 10 I
. 2 0 LDCH LDMAP SKCH SDLM KBSC RDLM CMPF SMR
. 0 I KBDD SNID
. 3 0 URFO
. I
. 4 0 URO (MR2XXL)
. I MARIL
. 5 0 URO (MR2XXH)
. I MARIH
. 6 0 MAROL (XX2MRL)
. I URI
. 7 0 MAROH (XX2MRH)
. I URI
.
. USER IO PORTS 4-7
. REGS 0 URA URB URC URD URE URH URL URX
. 10 PCH PCL SPH SPL PSW I35 I02 IMP
*
.SUBBITS 0 1 2 3 4 5 6 7
.
.SRVREQ: SCPMEM SCMBUS SCSDLCR SCSDLCT SCDSPNL SCONMS SCHUMS
.
.STATUS: STUSCF STIODR STPFIN STPFQU STKBKC STKBNS STKBRDY STBOTLN
.
.MODW: SWINTE SWBASD SWUSER SWSTDT SWRPT SWALBT
.
.STEK: STLA STLW STLSP
.
    
```

MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS - 07AUG82 15:52  
. THE PORT ASSIGNMENTS, ORGANIZED BY PORT - SUBPORT NUMBER IN IN/OUT PAIRS

52.H  
53.H  
54.H  
55.H  
56.H  
57.H  
58.H  
59.H  
60.H  
61.H  
62.H  
63.H  
64.H  
65.H  
66.H  
17.A  
1.I 000002  
2.I 000014  
3.I  
4.I 000004  
5.I  
6.I  
7.I  
8.I  
9.I  
10.I  
11.I

\*  
. JUMP INPUT CONDITION CODES ARE:  
. .  
.SELECT 0 1 2 3 4 5 6 7  
. .  
. CARRY ZERO MEMRDY PARITY IMPZERO IMPODD BUSRDY TRUE  
. .  
\*  
. DOUBLY NAMED (SUB)PORTS ARE:  
. .  
. URO <> MR2XXL  
. URO <> MR2XXH  
. MAROL <> XX2MRL  
. MAROH <> XX2MRH  
. .  
INC PROC14.PROCP4 INDIRECT TO PARAMETER FILE  
VER EQU 2 1800 - INFO INSTRUCTION PROCESSOR NUMBER  
REV EQU 014 INFO INST. MICRO-CODE REVISION NUMBER  
. .  
TYPE EQU 4 =0 FOR 1800 PROCESSOR (DISK, ICA)  
. =1 FOR 1871 PROCESSOR (DISK, ICA, APF/AML)  
. =2 FOR 3800 PROCESSOR (ICA)  
. =3 FOR 3802 PROCESSOR (RIM)  
. =4 FOR 38MP PROCESSOR (IMA)  
\*  
SNAPOPT X  
\*

14.I		*		
15.I		. CONDITION CODES		
16.I		.		
17.I	020002	MO	EQU F6+2	MEMORY READY
18.I	020003	MP	EQU F6+3	MEMORY FAILURE (OF ANY SORT!)
19.I	020004	IZ	EQU F6+4	IMPLICIT REGISTER ZERO
20.I	020005	IO	EQU F6+5	IMPLICIT REGISTER ODD
21.I	020006	BR	EQU F6+6	BUS READY (MICRO-BUS ONLY)
22.I		*		
23.I		. REGISTER ALLOCATION		
24.I		.		
25.I	010002	Q	EQU F5+02	NOBODY SHOULD DO WRITE'S TO Q
26.I		.		
27.I	010000	PDLNP	EQU F5+0	DISPLAY LINE POINTER
28.I	010001	KBSCNT	EQU F5+01	KEYBOARD SCAN COUNTER
29.I	010002	SCANSV	EQU F5+02	KEYBOARD SAVED SCAN NUMBER, REPEATED AI
30.I		*		
31.I		. DISKETTE CONTROL REGISTERS		
32.I		.		
33.I	010003	MADR	EQU F5+03	DISKETTE DEVICE ADDRESS
34.I	010004	MBITS	EQU F5+04	DISKETTE I/O CONTROL, FUNCTION & STATUS
35.I	010005	MBSTAT	EQU F5+05	DISKETTE STATE CONTROL LINK REGISTER
36.I	010006	MCRCH	EQU F5+06	DISKETTE CRC GENERATOR STORAGE REG.
37.I	010007	MCRCL	EQU F5+07	DISKETTE CRC GENERATOR STORAGE REG.
38.I	010010	MDSKS	EQU F5+010	DISKETTE HEADER READ SECTOR NUMBER
39.I	010011	MDSKT	EQU F5+011	DISKETTE HEADER READ TRACK NUMBER
40.I	010012	MTRAK	EQU F5+012	DISKETTE USER DESIRED TRACK NUMBER
41.I	010013	MSECT	EQU F5+013	DISKETTE USER DESIRED SECTOR NUMBER
42.I		.		* APF VERSION ABOVE 2 BYTES IN MEMORY *
43.I		*		
44.I		. HONEYWELL-APF DMA CHANNEL CONTROL REGISTERS		
45.I		.		
46.I	010013	APFRP	EQU F5+013	APF RECEIVER POINTER LSB
47.I	010014	APFRK	EQU F5+014	APF RECEIVER COUNTER LSB
48.I	010015	APFTP	EQU F5+015	APF TRANSMITTER POINTER LSB
49.I	010016	APFTK	EQU F5+016	APF TRANSMITTER COUNTER LSB
50.I		*		
51.I		. AUDIO CHANNEL CONTROL REGISTER		
52.I		.		
53.I	010015	ACD	EQU F5+015	AUDIO CHANNEL ATTEN/VALUE
54.I	010016	ACPL	EQU F5+016	
55.I	010017	ACPH	EQU F5+017	AUDIO CHANNEL CONTROL & MSB POINTER
56.I	010017	ACCTL	EQU ACPH	APF - AUDIO CHANNEL 1 BYTE CONTROL (ACPH & ACCTL SHOULD BE SAME REG.)
57.I		.		

58.I  
 59.I  
 60.I  
 61.I 030000  
 62.I 030001  
 63.I 030002  
 64.I 030001  
 65.I 030002  
 66.I  
 67.I  
 68.I  
 69.I 030003  
 70.I 030004  
 71.I 030005  
 72.I 030006  
 73.I 030007  
 74.I 030010  
 75.I 030011  
 76.I 030012  
 77.I 030013  
 78.I 030014  
 79.I 030015  
 80.I 030016  
 81.I 030017  
 82.I  
 83.I  
 84.I  
 85.I  
 86.I 010013  
 87.I 030003  
 88.I 030004  
 89.I 030005  
 90.I 030006  
 91.I 030007  
 92.I 030010  
 93.I 010014  
 94.I 030012  
 95.I 030013  
 96.I 030014  
 97.I 030015  
 98.I 030016  
 99.I 030017

\*  
 . TEMPORARIES - AVAILABLE IN ANY ROUTINE, LOST BETWEEN ROUTINES  
 .  
 LINK EQU F5+F6+00 SUBROUTINE CALL AND RETURN LINKAGE REGS  
 TEMP1 EQU F5+F6+01 PROCESSOR EMULATION TEMPORARIES  
 TEMP2 EQU F5+F6+02  
 TEMPH EQU TEMP1 H & L ONLY FOR DOUBLE H/L MACROS  
 TEMPL EQU TEMP2  
 \*  
 . COMMUNICATIONS CHANNEL CONTROL REGISTERS  
 .  
 RSTAT EQU F5+F6+03 COM RECEIVER STATUS  
 RPNTR EQU F5+F6+04 COM RECEIVER MEMORY POINTER  
 RDATA EQU F5+F6+05 COM RECEIVER DATA  
 KCRCH EQU F5+F6+06 COM RECEIVER CRC GENERATOR STORAGE AREA  
 RCRCLEQU F5+F6+07 COM RECEIVER CRC GENERATOR STORAGE AREA  
 UXPNTR EQU F5+F6+010 USER TRANSMIT BUFFER POINTER  
 COMMODE EQU F5+F6+011 COMMUNICATION MODE CONTROL REGISTER  
 URPNTR EQU F5+F6+012 USER RECEIVE BUFFER POINTER  
 XSTAT EQU F5+F6+013 COM TRANSMITTER STATUS  
 XPNTR EQU F5+F6+014 COM TRANSMITTER MEMORY POINTER  
 XDATA EQU F5+F6+015 COM TRANSMITTER DATA  
 XCRCH EQU F5+F6+016 COM TRANSMITTER CRC GENERATOR STORAGE  
 XCRCLEQU F5+F6+017 COM TRANSMITTER CRC GENERATOR STORAGE  
 \*  
 . INTERNAL MULTI-PORT ADAPTER CONTROL REGISTER  
 .  
 .COMMODE EQU F5+F6+011!!! COMMUNICATIONS MODE  
 TRNFCN EQU F5+013 TX CONTROL LINE SHADOW  
 TRNCHN EQU F5+F6+03 TRANSMITTING CHANNEL NUMBER  
 TRNDTA EQU F5+F6+04 TRANSMITTING CHANNEL DATA  
 TRNCTL EQU F5+F6+05 TRANSMITTING CHANNEL CONTROL  
 TRNSEL EQU F5+F6+06 TRANSMITTING CHANNEL SELECTION  
 RCVCTL EQU F5+F6+07 RECEIVER CONTROL REGISTER  
 RCH0C EQU F5+F6+010  
 RCH0D EQU F5+014 SWAP OUT WITH COMMODE  
 RCH1C EQU F5+F6+012  
 RCH1D EQU F5+F6+013  
 RCH2C EQU F5+F6+014 RECEIVER CHANNEL & DATA REGISTERS  
 RCH2D EQU F5+F6+015  
 RCH3C EQU F5+F6+016  
 RCH3D EQU F5+F6+017



.100.I  
 .101.I  
 .102.I  
 .103.I  
 .104.I  
 .105.I  
 .106.I  
 .107.I  
 .108.I  
 .109.I  
 .110.I  
 .111.I  
 .112.I  
 .113.I  
 .114.I  
 .115.I 000000  
 .116.I 000002  
 .117.I 000000  
 .118.I 000000  
 .119.I 000000  
 .120.I 000000  
 .121.I 000100  
 .122.I 000000  
 .123.I  
 .124.I  
 .125.I 000102  
 .126.I  
 .127.I  
 .128.I  
 .129.I 000000  
 .130.I 002000  
 .131.I 004000  
 .132.I 006000  
 .133.I 007000  
 .134.I  
 .135.I 000000  
 .18.A 000111  
 .19.A  
 D .20.A 000000  
 .21.A  
 4.

\*  
 . CAPABILITY BITS:  
 . THESE BITS DEFINE THE VERSION OF THE 1800/3800 PROCESSOR THAT THIS IS FOR  
 .  
 . XX XXX XXX  
 . 0 --- MICRO I/O BUS AVAILABLE  
 . 1 ---- 1500 SINGLE DENSITY DISKETTE DRIVE AVAILABLE  
 . 2 ----- 1800 SINGLE/DOUBLE DISKETTE DRIVE AVAILABLE  
 . 3 ----- APF SPECIAL MICRO-BUS INTERFACE AVAILABLE  
 . 4 ----- INTERNAL MULTIPOINT ADAPTER AVAILABLE  
 . 5 ----- INBOARD RIM AVAILABLE  
 . 6 ----- 5500 I/O BUS AVAILIABLE  
 . 7 ----- COMMUNICATIONS INTERFACE AVAILABLE (ASYNCO, BISYNCO, & SDLC)  
 .  
 . \*PROCESSOR\*  

			1800	1871	3800	3802	38MP
CAPMICR	EQU	0<0	YES	YES			
CAPIMA	EQU	1<1					YES
CAPBLUE	EQU	0<2	YES	YES			
CAPAPF	EQU	0<3		YES			
CAPDMP10	EQU	0<4				YES	
CAPRIM	EQU	0<5				YES	
CAP5510	EQU	1<6	YES	YES	YES		YES
CAPCOM	EQU	0<7	YES	YES	YES		

  
 . \*TYPE\*  

			0	1	2	3	4
CAPABILI	EQU	CAPCOM+CAP5510+CAPRIM+CAPDMP10+CAPAPF+CAPBLUE+CAPIMA+CAPMICR					

  
 . LOCATION OF THE CODE IN ROMS IS A FOLLOWS (MSB & LSB OF COURSE)  
 .  

PROC	EQU	00<9	EMULATION SUPPORT CODE IN ROMS 0 & 1
PROD	EQU	02<9	EMULATION SUPPORT CODE IN ROMS 2 & 3
FLEX	EQU	04<9	MICRO-BUS CODE IN ROMS 4 & 5
CDOX	EQU	06<9	COMM TRANSMIT CODE IN ROM 6
CDOR	EQU	07<9	COMM RECEIVE CODE IN ROM 7

  
 .  

CAPIVS	EQU	0	
PRE	EQU	'1'	RELEASE LEVEL (FINAL IS BINARY ZERO)

  
 .  

CAPIVS	EQU	0	INVERTED DISPLAY SCREEN VERSION **NEW**
			0 = NORMAL, 1 = INVERTED (PURE RASTER!)

  
 . 2.14.I HJS 2 APR 80 UPDATE TO ALL (0..4) VERSIONS OF MACHINE

MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS - 07AUG82 15:52  
. EXTENDED CONDITIONS, AND SYSTEM REGISTER DEFINITIONS

- 5. \*
- 6. . 2.13.B HJS 7 FEB 79 ALLOW COMM ON 3800'S (AFTER V13)
- 7. \*
- 8. . 2.12.C HJS 13 OCT 78 DELETE CHECKING OF CORRECT VERSION/REV
- 9. \*
- 10. . 2.9.K HJS 18 APR 78 CHANGE FOR RELOCATABLE LINK & CORRECT LODCF NAME
- 11. . 2.9.J HJS 20 MAR 78 SETUP FOR 1800/3800 DIFFERENCES
- 12. . 2.9.A HJS 14 NOV 77 ADD NEW SYSTAT INSTRUCTION
- 13. \*
- 14. . 2.8.A HJS 16 SEP 77 DUE TO UPDATE OF OTHER FILES
- 15. \*
- 16. . 2.7. HJS 7 SEP 77 FINAL ADDRESSING SETUP FOR RELEASE
- 17. \*
- 18. . 2.5.C HJS 18 AUG 77 CHANGE /EPT FILE FOR VERSION CONTROL
- 19. . 2.5.A HJS 13 JULY 77 BRING UP TO VRP FORMAT FOR THE FILE
- 20. \*
- 21. 00 0000 PID ORG 0
- 22. 00 0000 PID USE PID

DATAPOINT CONFIDENTIAL INFORMATION - SEE PAGE 1

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MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS - 07AUG82 15:52  
 . EMULATOR JUMP TABLE FOR 1800/3800 AND ALL VARIATIONS.

25.	000000						
26.	>000000	000	000	DA	*UDPOP	000	HALT
27.	>000002	000	000	DA	*UDPOP	001	HALT
28.	>000004	000	000	DA	*SLC	002	SHIFT LEFT
29.	>000006	000	000	DA	*RETCC	003	RFC
30.	>000010	000	000	DA	*AP4	004	IMM ADD
31.	>000012	000	000	DA	*INCX	005	INCREMENT INDEX <RP> OR MEM
32.	>000014	000	000	DA	*LD6	006	IMM LA
33.	>000016	000	000	DA	*RETURN	007	SUBROUTINE RETURN
34.				*			
35.	>000020	000	000	DA	*INFO	010	INFORMATION PLEASE
36.	>000022	000	000	DA	*BFAC	011	BINARY FIELD ADD
37.	>000024	000	000	DA	*SRC	012	SHIFT RIGHT
38.	>000026	000	000	DA	*RETCC	013	RFZ
39.	>000030	000	000	DA	*AP4	014	IMM ADD WITH CARRY
40.	>000032	000	000	DA	*INCP	015	INCR REG PAIR (BY 1 OR 2)
41.	>000034	000	000	DA	*LD6	016	IMM LB
42.	>000036	000	000	DA	*INCPA	017	INCR REG PAIR BY REG A
43.				*			
44.	>000040	000	000	DA	*BETA	020	SWITCH MODES
45.	>000042	000	000	DA	*BT	021	BLOCK TRANSFER & TRANSLATE
46.	>000044	000	000	DA	*SIRO	022	SELECT XA PAIR
47.	>000046	000	000	DA	*RETCC	023	RFS
48.	>000050	000	000	DA	*AP4	024	IMM SUB
49.	>000052	000	000	DA	*DECX	025	DECREMENT INDEX <RP> OR MEM
50.	>000054	000	000	DA	*LD6	026	IMM LC
51.	>000056	000	000	DA	*DS	027	DOUBLE STORE
52.				*			
53.	>000060	000	000	DA	*ALPHA	030	SWITCH MODES
54.	>000062	000	000	DA	*BFSB	031	BINARY FIELD SUBTRACT
55.	>000064	000	000	DA	*SRE	032	SHIFT RIGHT EXTENDED
56.	>000066	000	000	DA	*RETCC	033	RFP
57.	>000070	000	000	DA	*AP4	034	IMM SUB WITH CARRY
58.	>000072	000	000	DA	*DECP	035	DECCR REG PAIR
59.	>000074	000	000	DA	*LD6	036	IMM LD
60.	>000076	000	000	DA	*DECPA	037	DECR PAIR USING A

61.					
62.	>000100	000	000	DA	*DI 040 DISABLE INTERRUPTS
63.	>000102	000	000	DA	*BCP 041 BLOCK COMPARE, DECIMAL FIELD ADD & SUBTRACT
64.	>000104	000	000	DA	*CCS 042 CONDITION CODE SAVE
65.	>000106	000	000	DA	*RETCC 043 RTC
66.	>000110	000	000	DA	*AP4 044 IMM AND
67.	>000112	000	000	DA	*NOJ 045 NON-JUMP NO-OP
68.	>000114	000	000	DA	*LD6 046 IMM LE
69.	>000116	000	000	DA	*DL 047 DOUBLE LOAD
70.					
71.	>000120	000	000	DA	*EI 050 ENABLE INTERRUPTS, AND JUMP & RETURN
72.	>000122	000	000	DA	*PUSHI 051 PUSH IMMEDIATE
73.	>000124	000	000	DA	*BP 052 BREAKPOINT
74.	>000126	000	000	DA	*RETCC 053 RTZ
75.	>000130	000	000	DA	*AP4 054 IMM EXCLUSIVE OR
76.	>000132	000	000	DA	*REGS 055 REGISTER SAVE & LOAD
77.	>000134	000	000	DA	*LD6 056 IMM LH
78.	>000136	000	000	DA	*DLHL 057 DOUBLE LOAD HL USING (HL)
79.					
80.	>000140	000	000	DA	*POP 060 POP FROM STACK
81.	>000142	000	000	DA	*MIN 061 MULTIPLE INPUT
82.	>000144	000	000	DA	*SIRX 062 SELECT C OR BC PAIR
83.	>000146	000	000	DA	*RETCC 063 RTS
84.	>000150	000	000	DA	*AP4 064 IMM INCLUSIVE OR
85.	>000152	000	000	DA	*STKS 065 STACK SAVE, LOAD & MOVE
86.	>000154	000	000	DA	*LD6 066 IMM LL
87.	>000156	000	000	DA	*SC 067 SYSTEM CALL
88.					
89.	>000160	000	000	DA	*PUSH 070 PUSH FROM STACK
90.	>000162	000	000	DA	*MOUT 071 MULTIPLE OUTPUT
91.	>000164	000	000	DA	*BRL 072 BASE REGISTER LOAD
92.	>000166	000	000	DA	*RETCC 073 RTP
93.	>000170	000	000	DA	*AP4 074 IMM COMPARE
94.	>000172	000	000	DA	*BFS 075 BINARY FIELD SHIFT LEFT & RIGHT
95.	>000174	000	000	DA	*LD6 076 IMM LX
96.	>000176	000	000	DA	*STL 077 SECTOR TABLE LOAD

97.					
98.	>000200	000	000	DA	*JUMPCC 100 JFC
99.	>000202	000	000	DA	*INPUT 101 INPUT FROM 5500 I/O BUS
100.	>000204	000	000	DA	*CALLCC 102 CFC, USER MODE RETURN (102-172 BY 10'S)
101.	>000206	000	000	DA	*PIN 103 PARITY CHECKING INPUT
102.	>000210	000	000	DA	*JUMP 104 JUMP UNCONDITIONAL
103.	>000212	000	000	DA	*PLR 105 PL A,
104.	>000214	000	000	DA	*CALL 106 CALL UNCONDITIONAL
105.	>000216	000	000	DA	*PSR 107 PS A,
106.				*	
107.	>000220	000	000	DA	*JUMPCC 110 JFZ
108.	>000222	000	000	DA	*SIRX 111 SELECT B
109.	>000224	000	000	DA	*CALLCC 112 CFZ
110.	>000226	000	000	DA	*SIRX 113 SELECT D
111.	>000230	000	000	DA	*PLR 114 PL B,
112.	>000232	000	000	DA	*SIRX 115 SELECT H
113.	>000234	000	000	DA	*PSR 116 PS B,
114.	>000236	000	000	DA	*SIRX 117 SELECT X
115.				*	
116.	>000240	000	000	DA	*JUMPCC 120 JFS
117.	>000242	000	000	DA	*EXADR 121 EX ADR
118.	>000244	000	000	DA	*CALLCC 122 CFS
119.	>000246	000	000	DA	*EXSTAT 123 EX STATUS
120.	>000250	000	000	DA	*PLR 124 PL C, & DPL BC,
121.	>000252	000	000	DA	*EXDATA 125 EX DATA
122.	>000254	000	000	DA	*PSR 126 PS C, & DPS BC,
123.	>000256	000	000	DA	*EXWRITE 127 EX WRITE
124.				*	
125.	>000260	000	000	DA	*JUMPCC 130 JFP
126.	>000262	000	000	DA	*EXCOM1 131 EX COM1
127.	>000264	000	000	DA	*CALLCC 132 CFP
128.	>000266	000	000	DA	*EXCOM2 133 EX COM2
129.	>000270	000	000	DA	*PLR 134 PL D,
130.	>000272	000	000	DA	*EXCOM3 135 EX COM3
131.	>000274	000	000	DA	*PSR 136 PS D,
132.	>000276	000	000	DA	*EXCOM4 137 EX COM4

DATAPOINT CONFIDENTIAL INFORMATION - SEE PAGE 1

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MICRO-PROCESSOR INSTRUCTION DECODE ROM - HJS - 07AUG82 15:52  
 . EMULATOR JUMP TABLE FOR 1800/3800 AND ALL VARIATIONS.

133.					
134.	>000300	000	000	+	DA *JUMPCC 140 JTC
135.					IFS CAPMICR ** DISKETTE - 1800, 1871 **
141.					XIF
142.					IFS CAPDMPIO ** DMP BUS INTERFACE - 3802 **
148.					XIF
149.					IFC CAPMICR+CAPDMPIO ** NON-DISKETTE - 3800 & 38MP **
150.	>000302	000	000		DA *UDOP 141 FXIO - FLOPPY SUBSYSTEM INSTRUCTIONS
151.	>000304	000	000		DA *CALLCC 142 CTC
152.	>000306	000	000		DA *UDOP 143 EXSTAT - FLOPPY SUBSYSTEM STATUS
153.	>000310	000	000		DA *PLR 144 PL E, & DPL DE,
154.	>000312	000	000		DA *UDOP 145 MXIO - MICRO-BUS INTERFACE INSTRUCTIONS
155.					XIF
156.	>000314	000	000		DA *PSR 146 PS E, & DPS DE,
157.					IFS CAPAPF ** HONEYWELL - 1871 **
159.					XIF
160.					IFS CAPDMPIO ** DMP BUS INTERFACE - 3802 **
162.					XIF
163.					IFC CAPAPF+CAPDMPIO
164.	>000316	000	000		DA *UDOP 147 DECK I/O
165.					XIF
166.				*	
167.	>000320	000	000		DA *JUMPCC 150 JTZ
168.	>000322	000	000		DA *BEEP 151 EX BEEP
169.	>000324	000	000		DA *CALLCC 152 CTZ
170.	>000326	000	000		DA *CLICK 153 EX CLICK
171.	>000330	000	000		DA *PLR 154 PL E,
172.	>000332	000	000		DA *LODCF 155 LOAD CHARACTER FONT - EX DECK1
173.	>000334	000	000		DA *PSR 156 PS E,
174.	>000336	000	000		DA *SYSTAT 157 SYSTEM STATUS
175.				*	
176.	>000340	000	000		DA *JUMPCC 160 JTS
177.					IFS CAPCOM ** ICA - 1800, 1871, 3800 **
185.					XIF
186.					IFC CAPCOM ** NON-ICA - 3802, 38MP **
187.	>000342	000	000		DA *UDOP 161 MODEM-ACU CONTROL-STATUS I/O
188.	>000344	000	000		DA *CALLCC 162 CTS
189.	>000346	000	000		DA *UDOP 163 INPUT BY UNLOADING RECEIVE BUFFER
190.	>000350	000	000		DA *PLR 164 PL L, & DPL HL,
191.	>000352	000	000		DA *UDOP 165 START COMMUNICATIONS
192.	>000354	000	000		DA *PSR 166 PS L, & DPS HL,
193.	>000356	000	000		DA *UDOP 167 OUTPUT TO LOAD TRANSMIT BUFFER
194.					XIF

195.  
 196. >000360 000 000  
 197.  
 201.  
 202.  
 203. >000362 000 000  
 204. >000364 000 000  
 205. >000366 000 000  
 206.  
 207. >000370 000 000  
 208. >000372 000 000  
 209. >000374 000 000  
 210.  
 211. >000376 000 000  
 212.  
 213.  
 215.  
 216.

\*  
 DA \*JUMPC 170 JTP  
 IFS CAPDMP10 \*\* DMP-BUS - 3802 \*\*  
 XIF  
 IFC CAPDMP10 \*\* DMP-BUS - 3802 \*\*  
 DA \*UDOP 171 EX SF  
 DA \*CALLCC 172 CTP  
 DA \*UDOP 173 EX SB  
 XIF  
 DA \*SIRX 174 SELECT E OR DE PAIR  
 DA \*UDOP 175 EX REWIND  
 DA \*SIRX 176 SELECT L  
 IFC CAPAPF  
 DA \*UDOP 177 EX TSTOP  
 XIF  
 IFS CAPAPF  
 XIF







010017	ACCTL	*56:I							
010015	ACD	*53:I							
010017	ACPH	*55:I	56:I						
010016	ACPL	*54:I							
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	AP7	235							
010014	APFRK	*47:I							
010013	APFRP	*46:I							
010016	APFTK	*49:I							
010015	APFTP	*48:I							
	APS	235							
	BCP	63							
	BEEP	168							
	BETA	44							
	BFAC	36							
	BFS	94							
	BFSB	54							
	BP	73							
020006	BR	*21:I							
	BRL	91							
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000100	CAP55IO	*121:I	125:I						
000102	CAPABILI	*125:I							
000000	CAPAPF	*118:I	125:I	157	163	210	213		
000000	CAPBLUE	*117:I	125:I						
000000	CAPCOM	*122:I	125:I	177	186				
000000	CAPDMP10	*119:I	125:I	142	149	160	163	197	202
000002	CAPIMA	*116:I	125:I						
000000	CAPIVS	*135:I	*20:A						
000000	CAPMICR	*115:I	125:I	135	149				
000000	CAPRIM	*120:I	125:I						
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007000	CDOR	*133:I							
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030011	COMMODE	*75:I							
	DECP	58							
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	EXCOM2	128							
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	EXSTAT	119							
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	INCPA	42							
	INCX	31							
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020005	IO	*20:I							
020004	IZ	*19:I							
000000	JMPTBL	*25							
	JUMP	102							
	JUMPCC	98	107	116	125	134	167	176	196
010001	KBSCNT	*28:I							
	L7S	247							
	LD6	32	41	50	59	68	77	86	95
	LD7	238	239	240	241	242	243	246	
	LDS	238	239	240	241	242	243	244	
030000	LINK	*61:I							
	LODCF	172							
010003	MADR	*33:I							
010004	MBITS	*34:I							
010005	MBSTAT	*35:I							
010006	MCRCH	*36:I							
010007	MCRCL	*37:I							
010010	MDSKS	*38:I							
010011	MDSKT	*39:I							
	MIN	81							
020002	MO	*17:I							
	MOUT	90							
020003	MP	*18:I							
010013	MSECT	*41:I							
010012	MTRAK	*40:I							
	NOJ	67							
010000	PDLNP	*27:I							
000000	PID	*22							
	PIN	101							
	PLR	103	111	120	129	153	171	190	
	POP	80							
000111	PRE	*18:A							
000000	PROC	*129:I							
002000	PROD	*130:I							
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010002	Q	*25:I							
030010	RCHOC	*92:I							
010014	RCHOD	*93:I							
030012	RCHIC	*94:I							
030013	RCHID	*95:I							

