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* V.D.M. PART NO. 92L0107-0098

* RELEASED 4-19-71

* 620 PIM TEST

***** 620F/620I PRIORITY INTERRUPT MODULE (PIM) TEST *****

RETURN TO EXECUTIVE

CRG 0
JMP EXECUTIVE

POWER FAIL / RESTART

CRG 040
JMPM POWER DOWN ROUTINE
JMP POWER UP ROUTINE

NOTE: THE TEST EXECUTIVE RESERVES LOCATIONS 0400 TO 0500
FOR A POINTER TABLE TO STANDARD ROUTINES, AND AS AN AREA

CC0010
CC0020
CC0030
CC0040
CC0050
CC0060
* CC0070
* CC0080
CC0090
CC0100
* CC0110
CC0120
CC0130
CC0140
CC0150
CC0160
CC0170
* CC0180
* CC0190
* CC0200
CC0210
CC0220
CC0230
CC0240
CC0250
CC0260
CC0270
CC0280
CC0290
CC0300
* CC0310
* CC0320
* CC0330

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*
* FOR EXECUTIVE DATA. ALL TEST PROGRAMS WORKING WITH THE * 000340
* EXECUTIVE MUST PRESERVE THIS BLOCK * 000350
* 000360
*-----* 000370
* * 000380
* * 000390
000400 * .CRG .0400 000400
* * 000410
* * 000420
* * POINTER TABLE FOR EXEC STANDARD ROUTINES AND DATA
* * TEST PROGRAMS USING EXECUTIVE ROUTINES WILL CALL THEM
* * INDIRECTLY THRU THIS TABLE 000430
* * 000440
* * 000450
* * 000460
* * 000470
* * 000480
* * 000490
* * 000500
000400 * OUTA .BSS .1 OUTPUT ONE CHAR ROUTINE 000510
000401 * OUTB .BSS .1 OUTPUT TWO CHAR ROUTINE 000520
000402 * OUTC .BSS .1 OUTPUT CR/LF ROUTINE 000530
000403 * OUTD .BSS .1 OUTPUT MESSAGE ROUTINE 000540
000404 * OUTE .BSS .1 OUTPUT OCTAL WORD ROUTINE 000550
000405 * OUTF .BSS .1 OUTPUT OCTAL ADDR ROUTINE 000560
000406 * OUTG .BSS .1 OUTPUT ERROR MSG ROUTINE 000570
000407 * OUTH .BSS .1 OUTPUT CONTROL CHAR TO TTY ROUTINE 000580
000410 * INPA .BSS .1 INPUT ONE CHAR ROUTINE 000590
000411 * INPB .BSS .1 INPUT AND PRINT ONE CHAR ROUTINE 000600
000412 * INPC .BSS .1 INPUT ONE CHAR EDITED ROUTINE 000610
000413 * INPD .BSS .1 INPUT ONE ALPHA CHAR ROUTINE 000620
000414 * INPE .BSS .1 INPUT TWO ALPHA CHAR ROUTINE 000630
000415 * INPF .BSS .1 INPUT COMMA/PERIOD TERMINATION ROUTINE 000640
000416 * INPG .BSS .1 INPUT OCTAL NUMBER ROUTINE 000650
000417 * TCUT .BSS .1 TIME-OUT ROUTINE 000660
000420 * TDLY .BSS .1 TIME DELAY ROUTINE 000670
000421 * SSWT .BSS .1 STANDARD SENSE SWITCH ROUTINE 000680
000422 * ELOC .BSS .1 LOWEST CORE LOCATION USED BY EXEC 000690
* 000700
* * 000710
000440 * .CRG .0440 000720
* * 000730
* * EXECUTIVE DATA TABLE 000740
* * 000750

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000440	SFLG	.BSS	.1	LOOP ON ERROR FLAG, 0=DON'T LCCP 1=ECOP	CC0760
000441	S MEM	.BSS	.1	MEMORY SIZE (HIGHEST AVAIL CORE)	CC0770
000442	SCON	.BSS	.1	0=CONSOLE MODE 1=TTY MODE	CC0780
000443		.BSS	.22		CC0790
000471	TS04	.BSS	.1	DIGIT COUNTER FOR INPG	CC0800
	*				CC0810
	*****				CC0820
	*				CC0830
	*****				CC0840
	*				CC0850
	*				CC0860
	*				CC0870
	* 620F/620I PRIORITY INTERRUPT MODULE (PIM) TEST				CC0880
	*				CC0890
000504	IAQR	.BEGI	.0504		CC0900
000520	LTOR	.BEGI	.0520		CC0910
	*				CC0920
000500		.CRG	.0500		CC0930
000500	001000	.JMP	.PIMT		CC0940
000501	000600 R				
000502	001000	.JMP	.PIMI		CC0950
000503	000746 R				
	*				CC0960
000600		.CRG	.0600		CC0970
	*				CC0980
000600	010442	PIMT	.LDA	.SCON	CONSOLE MODE?
000601	001010		.JAZ	.PIMI	CC0990
000602	000746 R				CC1000
000603	030520		.LDX	.MS1	CC1010
000604	005001		.TZA	.	CC1020
000605	051527		.STA	.CC	CC1030
000606	002000		.CALL*	.OUTD	PRINT *PIM TEST?
000607	100403 R				CC1040
000610	001400	PIMA	.JSS3	.PIMH	CC1050
000611	000741 R				
000612	030521	PIMB	.LDX	.MS2	CC1060
000613	002000		.CALL*	.OUTD	REQUEST PIM DEVICE ADDRESS
000614	100403 R				CC1070
000615	002000		.CALL*	.INPG	CC1080
000616	100416 R				
000617	001000		.JMP	.PIMT	TERMINATE
000620	000600 R				CC1090

000621	001000		.JMP	.PIMB	ABORT	CC1100	
000622	000612	R					
000623	001000		.JMP	.**+2		CC1110	
000624	000625	R					
000625	051536		.STA	.PIM		CC1120	
000626	002000		.CALL*	.OUTC		CC1130	
000627	100402	R					
000630	030522		PIMC	.LIX	.=MS3	CC1140	
000631	002000		.CALL*	.OUTD	REQUEST ORIGIN OF TRAP ADDRESS	CC1150	
000632	100403	R					
000633	002000		.CALL*	.INFG		CC1160	
000634	100416	R					
000635	001000		.JMP	.PIMT	TERMINATE	CC1170	
000636	000600	R					
000637	001000		.JMP	.PIMC	ABORT	CC1180	
000640	000630	R					
000641	001000		.JMP	.**+2		CC1190	
000642	000643	R					
000643	051532		.STA	.PADR		CC1200	
000644	002000		.CALL*	.OUTC		CC1210	
000645	100402	R					
000646	002000		PIMD	.CALL	.PLCW	SAVE CONTENTS OF PART OF INTERRUPT AREA	CC1220
000647	001276	R					
000650	002000		.CALL	.PMOD	CONSTRUCT PIM I/O INSTRUCTIONS	CC1230	
000651	001337	R					
000652	002000		.CALL	.POVL	MODIFY INTERRUPT ADDRESS LOCATIONS	CC1240	
000653	001307	R					
000654	010442		PIME	.LBA	.SCCN	CONSOLE MODE?	CC1250
000655	100500			.EXC	.0500	B CC1255	
000656	001010			.JAZ	.**+4	CC1260	
000657	000662	R					
000660	001000		.JMP	.PIMF	NO	CC1270	
000661	000672	R					
000662	005001		.TZA	.		CC1280	
000663	005002		.TZB	.		CC1290	
000664	005004		.TZX	.		CC1300	
000665	000002		.HLT	.02	ENTER TEST NUMBER, CYCLE COUNT	CC1310	
000666	051544		.STA	.TCNT		CC1320	
000667	061530		.STB	.CYCL		CC1330	
000670	001000		.JMP	.PIMG		CC1340	
000671	000710	R					
000672	030523		PIMF	.LIX	.=MS4	CC1350	

000673	002000		.CALL*	.OUTD	PRINT 'ENTER TEST NUMBER'	CC1360
000674	100403	R				
000675	002000		.CALL*	.INPG		CC1370
000676	100416	R				
000677	001000		.JMP	.PTER	TERMINATE	CC1380
000700	000724	R				
000701	001000		.JMP	.PIMF	ABORT	CC1390
000702	000672	R				
000703	001000		.JMP	.*+2		CC1400
000704	000705	R				
000705	051544		.STA	.TCAT		CC1410
000706	002000		.CALL*	.OUTC		CC1420
000707	100402	R				
000710	011544	PIMG	.LDA	.TCNT		CC1430
000711	001004		.JAN	.PIME		CC1440
000712	000654	R				
000713	001010		.JAZ	.PIME		CC1450
000714	000654	R				
000715	140524		.SUB	.=5		CC1460
000716	001002		.JAP	.PIME		CC1470
000717	000654	R				
000720	005001		.TZA	.		CC1480
000721	051531		.STA	.IFLG	RESET INTERRUPT FLAG	CC1490
000722	001000		.JMP	.PIMJ	SELECT TEST	CC1500
000723	000757	R				
			* TERMINATE TEST			CC1510
						CC1520
						CC1530
000724	010525	PTER	.LDA	.=01000		CC1540
000725	050000		.STA	.0		CC1550
000726	050042		.STA	.042		CC1560
000727	010526		.LDA	.=02000	RESTORE ORIGINAL CCNSOLE INTERRUPT.	CC1570
000730	050040		.STA	.040		CC1580
000731	011533		.LDA	.PD1	POWER FAIL/RESTART TRANSFER VECTORS	CC1590
000732	050001		.STA	.1		CC1600
000733	011534		.LDA	.PD41		CC1610
000734	050041		.STA	.041		CC1620
000735	011535		.LDA	.PD43		CC1630
000736	050043		.STA	.043		CC1640
000737	001000		.JMP	.PIMT	GO TO BEGINNING OF TEST	CC1650
000740	000600	R				CC1660

000741	030527	PIMH	.LCX	.=MSS		CC1670
000742	002000		.CALL*	.CUTD	PRINT 'RESET SSW3'	CC1680
000743	100403	R				
000744	001000		.JMP	.PIMA		CC1690
000745	000610	R				
		*				CC1700
		*				CC1710
000746	005001	PIMI	.TZA	.		CC1720
000747	050442		.STA	.SCON		CC1730
000750	005002		.TZA	.		CC1740
000751	005004		.TEX	.		CC1750
000752	000001		.HLT	.01	ENTER DEVICE ADDRESS, INTERRUPT ADDRESS	CC1760
000753	051536		.STA	.PIY		CC1770
000754	061532		.STB	.PADR		CC1780
000755	001000		.JMP	.PIMD		CC1790
000756	000646	R				
		*				CC1800
		*				CC1810
		*	SELECT SUBTEST			CC1820
		*				CC1830
000757	011544	PIMJ	.LCA	.TCNT		CC1840
000760	005311		.DAR	.		CC1850
000761	001010		.JAZ	.PIAA		CC1860
000762	000776	R				
000763	005311		.DAR	.		CC1870
000764	001010		.JAZ	.PIBA		CC1880
000765	001002	R				
000766	005311		.DAR	.		CC1890
000767	001010		.JAZ	.PICA		CC1900
000770	001040	R				
000771	005311		.DAR	.		CC1910
000772	001010		.JAZ	.PIDA		CC1920
000773	001045	R				
000774	001000		.JMP	.PIME		CC1930
000775	000654	R				
		*				CC1940
		*	TEST 1			CC1950
		*				CC1960
000776	103000	PIAA	.CME	.0.PIZZ	DISABLE MASK REGISTER	CC1970
000777	001540	R				
001000	001000		.JMP	.PIAB		CC1980
001001	001055	R				

Address	Label	Op	Op2	Op3	Description	CC
	* TEST 2					CC1990
001002	PIBA	.CME	.0.PIZY		ENABLE MASK REGISTER	CC2000
001003						CC2010
001004		.EXC	.0500		CLEAR INTERRUPT REGISTER AND DISABLE PIM	CC2030
001005	PIB2	.LDA	.0CCN		CONSOLE MODE?	CC2040
001006		.JAZ	.PIB3		YES	CC2050
001007						CC2060
001010		.LDX	.MS6			CC2070
001011		.CALL*	.CUTD			CC2080
001012						CC2090
001013		.CALL*	.INPG			CC2100
001014					TERMINATE	CC2110
001015		.JMP	.PTER			CC2120
001016					ABORT	CC2130
001017		.JMP	.PIB2			CC2140
001020						CC2150
001021		.JMP	.*+2			CC2160
001022						CC2170
001023		.JAN	.PIB2			CC2180
001024						CC2190
001025		.JAZ	.*+4			CC2200
001026						CC2210
001027		.JMP	.*+3			CC2220
001030						CC2230
001031		.CPA	.			CC2240
001032		.STA	.CYCL			CC2250
001033		.CALL*	.OUTC			CC2260
001034						CC2270
001035	PIB3	.EXC	.0200		ENABLE PIM	CC2280
001036		.JMP	.PIAD			CC2290
001037						CC2300
	* TEST 3					CC2310
001040	PICA	.CME	.0.PIZY		ENABLE MASK REGISTER	CC2320
001041						CC2330
001042		.EXC	.0400		DISABLE PIM	CC2340
001043		.JMP	.PIAC			CC2350
001044						CC2360

		* TEST 4				CC2270
		*				CC2280
001045	103000	PIBA	.CME	.0.PIZY	ENABLE MASK REGISTER	CC2290
001046	001537	R				
001047	100500		.EXC	.0500	CLEAR INTERRUPT REG AND DISABLE INTERRUPTS	CC2300
001050	002000		.CALL	.PIC	PRINT *SET INTERRUPTS*	CC2310
001051	001402	R				
001052	100300		.EXC	.0300	CLEAR INTERRUPT REG AND ENABLE INTERRUPTS	CC2320
001053	001000		.JMP	.PIAD		CC2330
001054	001060	R				
		*				CC2340
001055	100200	PIAB	.EXC	.0200	ENABLE PIM	CC2350
001056	002000	PIAC	.CALL	.PIO	PRINT *SET INTERRUPTS*	CC2360
001057	001402	R				
001060	005001	PIAD	.TZA	.		CC2370
001061	010531	PIAE	.LDA	.#16		CC2380
001062	030532	PIAJ	.LDX	.#32767		CC2390
001063	002000		.CALL*	.TDEY	DELAY LOOP	CC2400
001064	100420	R				
001065	001010		.JAZ	.PIAK		CC2410
001066	001072	R				
001067	005311		.DAR	.		CC2420
001070	001000		.JMP	.PIAJ		CC2430
001071	001062	R				
001072	011530	PIAK	.LDA	.CYCL		CC2440
001073	001004		.JAN	.PIAI		CC2450
001074	001126	R				
001075	005311		.DAR	.		CC2460
001076	001010		.JAZ	.PIAF	END OF TEST	CC2470
001077	001103	R				
001100	051530		.STA	.CYCL		CC2480
001101	001000		.JMP	.PIAE	RECYCLE	CC2490
001102	001061	R				
001103	010442	PIAF	.LDA	.SCCN	CONSOLE MODE?	CC2500
001104	001010		.JAZ	.PIAL		CC2510
001105	001122	R				
001106	011531		.LDA	.IFLG	INTERRUPT FLAG SET?	CC2520
001107	001010		.JAZ	.PIAG	NO	CC2530
001110	001113	R				
001111	001000		.JMP	.PIAH		CC2540
001112	001116	R				
001113	030533	PIAG	.LDX	.#MS7		CC2550

001114	002000		.CALL*	.CLTD	PRINT *NO INTERRUPTS*	002560
001115	100403	R				
001116	002000		PIAF	.CALL*	.CLTC	002570
001117	100402	R				
001120	001000			.JMP	.PIFE	002580
001121	000654	R				
			*			002590
001122	011531		PIAL	.LDA	.IFLG	002600
001123	000005			.HLT	.05	002610
001124	001000			.JMP	.PIFE	002620
001125	000654	R				
			*			002630
001126	002000		PIAI	.CALL*	.SSWT	002640
001127	100421	R				
001130	005011			.MERC	.011	002650
001131	000000			.DATA	.0	002660
001132	000724	R		.DATA	.PTER	002670
001133	001134	R		.DATA	.*+1	002680
001134	001000			.JMP	.PIAE	002690
001135	001061	R				
			*			002700
			*			002710
			*			002720
001136	000000		PIN1	.ENTR	.	002730
001137	002000			.CALL	.PSAV	002740
001140	001445	R				
001141	010534			.LDA	.#0261	002750
001142	002000			.CALL	.TT20	002760
001143	001353	R				
001144	002000			.CALL	.PRES	002770
001145	001453	R				
001146	041531			.INR	.IFLG	002780
001147	100200			.EXC	.0200	002790
001150	001000			.JMP*	.PIN1	002800
001151	101136	R				
			*			002810
001152	000000		PIN2	.ENTR	.	002820
001153	002000			.CALL	.PSAV	002830
001154	001445	R				
001155	010535			.LDA	.#0262	002840
001156	002000			.CALL	.TT20	002850
001157	001353	R				

001160	002000		.CALL	.PRES	RESTORE REGISTERS	CC2860
001161	001453	R				
001162	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC2870
001163	100200		.EXC	.0200	ENABLE INTERRUPTS	CC2880
001164	001000		.JMP*	.PIN2	RETURN	CC2890
001165	101152	R				
			* PIN3			CC2900
001166	000000		.ENTR	.		CC2910
001167	002000		.CALL	.PSAV	SAVE REGISTERS	CC2920
001170	001445	R				
001171	010536		.LDA	.#0263		CC2930
001172	002000		.CALL	.TT20	PRINT LINE NUMBER	CC2940
001173	001353	R				
001174	002000		.CALL	.PRES	RESTORE REGISTERS	CC2950
001175	001453	R				
001176	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC2960
001177	100200		.EXC	.0200	ENABLE INTERRUPTS	CC2970
001200	001000		.JMP*	.PIN3		CC2980
001201	101166	R				
			* PIN4			CC2990
001202	000000		.ENTR	.		CC3000
001203	002000		.CALL	.PSAV	SAVE REGISTERS	CC3010
001204	001445	R				
001205	010537		.LDA	.#0264		CC3020
001206	002000		.CALL	.TT20	PRINT LINE NUMBER	CC3030
001207	001353	R				
001210	002000		.CALL	.PRES	RESTORE REGISTERS	CC3040
001211	001453	R				
001212	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC3050
001213	100200		.EXC	.0200	ENABLE INTERRUPTS	CC3060
001214	001000		.JMP*	.PIN4		CC3070
001215	101202	R				
			* PIN5			CC3080
001216	000000		.ENTR	.		CC3090
001217	002000		.CALL	.PSAV	SAVE REGISTERS	CC3100
001220	001445	R				
001221	010540		.LDA	.#0265		CC3110
001222	002000		.CALL	.TT20	PRINT LINE NUMBER	CC3120
001223	001353	R				
001224	002000		.CALL	.PRES	RESTORE REGISTERS	CC3130
001225	001453	R				
001226	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC3140

001227	100200		.EXC	.0200	ENABLE INTERRUPTS	CC3150
001230	001000		.JMP*	.PIN5		CC3160
001231	101216	R				
			* PIN6			CC3170
001232	000000		.ENTR	.		CC3180
001233	002000		.CALL	.PSAV	SAVE REGISTERS	CC3190
001234	001445	R				
001235	010541		.LDA	.#0266		CC3200
001236	002000		.CALL	.TT20	PRINT LINE NUMBER	CC3210
001237	001353	R				
001240	002000		.CALL	.PRES	RESTORE REGISTERS	CC3220
001241	001453	R				
001242	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC3230
001243	100200		.EXC	.0200	ENABLE INTERRUPTS	CC3240
001244	001000		.JMP*	.PIN6		CC3250
001245	101232	R				
			* PIN7			CC3260
001246	000000		.ENTR	.		CC3270
001247	002000		.CALL	.PSAV	SAVE REGISTERS	CC3280
001250	001445	R				
001251	010542		.LDA	.#0267		CC3290
001252	002000		.CALL	.TT20	PRINT LINE NUMBER	CC3300
001253	001353	R				
001254	002000		.CALL	.PRES	RESTORE REGISTERS	CC3310
001255	001453	R				
001256	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC3320
001257	100200		.EXC	.0200	ENABLE INTERRUPTS	CC3330
001260	001000		.JMP*	.PIN7		CC3340
001261	101246	R				
			* PIN8			CC3350
001262	000000		.ENTR	.		CC3360
001263	002000		.CALL	.PSAV	SAVE REGISTERS	CC3370
001264	001445	R				
001265	010543		.LDA	.#0270		CC3380
001266	002000		.CALL	.TT20	PRINT LINE NUMBER	CC3390
001267	001353	R				
001270	002000		.CALL	.PRES	RESTORE REGISTERS	CC3400
001271	001453	R				
001272	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC3410
001273	100200		.EXC	.0200	ENABLE INTERRUPTS	CC3420
001274	001000		.JMP*	.PIN8		CC3430
001275	101262	R				

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*
*
* SAVE ORIGINAL TRANSFER VECTORS WHICH GET OVERLAID
*
001276 000000 PLOW  .ENTR  .
001277 010001      .LDA    .1
001300 051533      .STA    .PD1      SAVE CONSOLE INTERRUPT,
001301 010041      .LDA    .C41
001302 051534      .STA    .PD41     POWER UP/DOWN ADDRESSES
001303 010043      .LDA    .043
001304 051535      .STA    .PD43
001305 001000      .JMP*   .PLCW
001306 101276 R

*
*
* FILL INTERRUPT AREA WITH ENTRIES TO INTERRUPT ROUTINES
*
001307 000000 POVL  .ENTR  .
001310 005004      .TZX   .
001311 020544      .LDB   .#128
001312 010526 POV2  .LDA   .#02000
001313 055000      .STA   .0.1      FILL INTERRUPT AREA
001314 005144      .IXR   .          WITH JUMP AND MARK TO
001315 010545      .LDA   .#PINX    ERROR ROUTINE
001316 055000      .STA   .0.1
001317 005144      .IXR   .
001320 005322      .DBR   .
001321 001020      .JEB   .PCV3
001322 001325 R      .JMP   .PCV2
001323 001000
001324 001312 R
001325 031532 POV3  .LDX   .PADR
001326 020546      .LDB   .#PTAB    MOVE INTERRUPT TRANSFER VECTORS
001327 016000 POV4  .LDA   .0.2
001330 001010      .JAZ*  .PCVL
001331 101307 R
001332 055000      .STA   .0.1      TO ADDRESS BLOCK TO BE TESTED
001333 005122      .IBR   .
001334 005144      .IXR   .
001335 001000      .JMP   .PCV4
001336 001327 R

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003440
 003450
 003460
 003470
 003480
 003490
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 003700
 003710

 003720

 003730
 003740
 003750
 003760

 003770
 003780
 003790
 003800

```

*
*
* ADD DEVICE ADDRESS TO PIM I/O INSTRUCTIONS
*
001337 000000 PMOD .ENTR .
001340 030547 .LTX .=PPOP
001341 025000 PMO2 .LDB .0.1 GET POINTER
001342 001020 .JBZ* .PMCD END OF TABLE
001343 101337 R .LDA .0.2 GET INSTRUCTION
001344 016000 .ANA .=0177700 ADD PIM DEVICE ADDRESS
001345 150550 .CRA .PIM
001346 111536 .STA .0.2
001347 056000 .IXR .
001350 005144 .JMP .PMO2
001351 001000
001352 001341 R

*
*
001353 000000 TT20 .ENTR .
001354 020442 .LDB .$CCN CONSOLE MODE?
001355 001020 .JBZ .**4
001356 001361 R .JMP .TT21
001357 001000
001360 001365 R .ANA .=017 YES
001361 150551 .HLT .06 DISPLAY INTERRUPT LINE NUMBER
001362 000006 .JMP* .TT20
001363 001000
001364 101353 R TT21 .CALL* .CUTA
001365 002000
001366 100400 R .INR .CC
001367 041527 .LDA .CC
001370 011527 .SUB .=70 CHAR COUNT EXCEEDED?
001371 140552 .JAN* .TT20 NO
001372 001004
001373 101353 R .CALL* .CUTC YES. PRINT CR/LF
001374 002000
001375 100402 R .TZA .
001376 005001 .STA .CC
001377 051527 .JMP* .TT20
001400 001000
001401 101353 R

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CC3810
CC3820
CC3830
CC3840
CC3850
CC3860
CC3870
CC3880
CC3890
CC3900
CC3910
CC3920
CC3930
CC3940
CC3950
CC3960
CC3970
CC3980
CC3990
CC4000
CC4010
CC4020
CC4030
CC4040
CC4050
CC4060
CC4070
CC4080
CC4090
CC4100
CC4110
CC4120
CC4130

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001402	000000	* PIO	.ENTR	.		CC4140
001403	010553		.LDA	.=1		CC4150
001404	051530		.STA	.CYCL		CC4160
001405	010442		.LDA	.SCCN	CONSOLE MODE?	CC4170
001406	001010		.JAZ	.PIC2	YES	CC4180
001407	001423	R				CC4190
001410	030554		.LDX	.=MS8		CC4200
001411	002000		.CALL*	.CUTD	PRINT *SET INTERRUPTS*	CC4210
001412	100403	R				
001413	002000		.CALL*	.INPB		CC4220
001414	100411	R				
001415	001000		.JMP	.PTER	TERMINATE	CC4230
001416	000724	R				
001417	002000		.CALL*	.CUTC		CC4240
001420	100402	R				
001421	001000		.JMP*	.PIC		CC4250
001422	101402	R				
001423	000003	PIO2	.HLT	.03	SET INTERRUPTS	CC4260
001424	001000		.JMP*	.PIC		CC4270
001425	101402	R				
		* *				CC4280
		* PINX	.ENTR	.		CC4290
001426	000000		.CALL	.PSAV		CC4300
001427	002000					CC4310
001430	001445	R				
001431	002000		.CALL*	.SSWT		CC4320
001432	100421	R				
001433	000004		.HLT	.04	INVALID INTERRUPTS	CC4330
001434	001712	R	.DATA	.MS9		CC4340
001435	000724	R	.DATA	.PTER		CC4350
001436	001437	R	.DATA	.++1		CC4360
001437	002000		.CALL	.PRES	RESTORE REGISTERS	CC4370
001440	001453	R				
001441	041531		.INR	.IFLG	SET INTERRUPT FLAG	CC4380
001442	100200	PINI	.EXC	.0200	ENABLE INTERRUPTS	CC4390
001443	001000		.JMP*	.PINX		CC4400
001444	101426	R				
		* *				CC4410
		* *				CC4420
		* SAVE/RESTORE REGISTERS				CC4430
		* *				CC4440

001445	000000	PSAV	.ENTR	.	CC4450
001446	051541		.STA	.SAVA	CC4460
001447	061542		.STB	.SAVB	CC4470
001450	071543		.STX	.SAVX	CC4480
001451	001000		.JMP*	.PSAV	CC4490
001452	101445	R			
		*			
001453	000000	PRES	.ENTR	.	CC4500
001454	011541		.LBA	.SAVA	CC4510
001455	021542		.LBB	.SAVB	CC4520
001456	031543		.LDB	.SAVB	CC4530
001457	001000		.LDX	.SAVX	CC4540
001460	101453	R	.JMP*	.PRES	CC4550
		*			
		*			
		*			
001461	002000	PTAB	.JMPM	.PIN1	CC4560
001462	001136	R			CC4570
001463	002000		.JMPM	.PIN2	CC4580
001464	001152	R			CC4590
001465	002000		.JMPM	.PIN3	CC4600
001466	001166	R			CC4610
001467	002000		.JMPM	.PIN4	CC4620
001470	001202	R			CC4630
001471	002000		.JMPM	.PIN5	CC4640
001472	001216	R			CC4650
001473	002000		.JMPM	.PIN6	CC4660
001474	001232	R			CC4670
001475	002000		.JMPM	.PIN7	CC4680
001476	001246	R			CC4690
001477	002000		.JMPM	.PIN8	CC4700
001500	001262	R			CC4710
001501	000000		.DATA	.0	CC4720
		*			
001502	000776	R	PPOP	.PIAA	CC4730
001503	000655	R		.PIME+1	CC4740
001504	001040	R		.PICA	CC4750
001505	001042	R		.PICA+2	CC4760
001506	001045	R		.PIDA	CC4770
001507	001047	R		.PIDA+2	CC4780
001510	001052	R		.PIDA+5	CC4790
001511	001055	R		.PIAB	CC4750

B

001512	001002	R	.DATA	.PIB	CC4760
001513	001004	R	.DATA	.PIB+2	CC4770
001514	001035	R	.DATA	.PIB3	CC4780
001515	001147	R	.DATA	.PIN1+9	CC4790
001516	001163	R	.DATA	.PIN2+9	CC4800
001517	001177	R	.DATA	.PIN3+9	CC4810
001520	001213	R	.DATA	.PIN4+9	CC4820
001521	001227	R	.DATA	.PIN5+9	CC4830
001522	001243	R	.DATA	.PIN6+9	CC4840
001523	001257	R	.DATA	.PIN7+9	CC4850
001524	001273	R	.DATA	.PIN8+9	CC4860
001525	001442	R	.DATA	.PIN1	CC4870
001526	000000		.DATA	.0	CC4880
		*			CC4890
		*			CC4900
001527	000000	CC	.DATA	.0	CC4910
001530	000000	CYCL	.DATA	.0	CC4920
001531	000000	IFLG	.DATA	.0	CC4930
001532	000000	PADR	.DATA	.0	CC4940
001533	000000	PD1	.DATA	.0	CC4950
001534	000000	PD41	.DATA	.0	CC4960
001535	000000	PD43	.DATA	.0	CC4970
001536	000000	PIM	.DATA	.0	CC4980
001537	000000	PIZY	.DATA	.0	CC4990
001540	177777	PIZZ	.DATA	.0177777	CC5000
001541	000000	SAVA	.DATA	.0	CC5010
001542	000000	SAVE	.DATA	.0	CC5020
001543	000000	SAVX	.DATA	.0	CC5030
001544	000000	TCNT	.DATA	.0	CC5040
		*			CC5050
		*			CC5060
001545	106612	MS1	.DATA	.0106612.*PIM TEST*.0106612.0	CC5070
001546	150311				
001547	146640				
001550	152305				
001551	151724				
001552	106612				
001553	000000				
001554	106612	MS2	.DATA	.0106612.*ENTER PIM DEVICE ADDRESS *.0	CC5080
001555	142716				
001556	152305				
001557	151240				

001560 150311
001561 146640
001562 142305
001563 153311
001564 141705
001565 120301
001566 142304
001567 151305
001570 151723
001571 120240
001572 000000
001573 106612
001574 142716
001575 152305
001576 151240
001577 147722
001600 144707
001601 144716
001602 120317
001603 143240
001604 152322
001605 140720
001606 120301
001607 142304
001610 151305
001611 151723
001612 142723
001613 120240
001614 000000
001615 106612
001616 142716
001617 152305
001620 151240
001621 151725
001622 141324
001623 142723
001624 152240
001625 147325
001626 146702
001627 142722
001630 120240
001631 000000

MS3 .DATA .0106612. ENTER ORIGIN OF TRAP ADDRESSES .P.C

C05090

MS4 .DATA .0106612. ENTER SUBTEST NUMBER .P.C

C05100

001632	151305	MS5	.DATA	.'RESET SENSE SWITCH 3'.0106612.0	CC5110
001633	151705				
001634	152240				
001635	151705				
001636	147323				
001637	142640				
001640	151727				
001641	144724				
001642	141710				
001643	120263				
001644	106612				
001645	000000				
001646	142716	MS6	.DATA	.'ENTER NUMBER OF 5 SECOND INTERVALS '.0	CC5120
001647	152305				
001650	151240				
001651	147325				
001652	146702				
001653	142722				
001654	120317				
001655	143240				
001656	132640				
001657	151705				
001660	141717				
001661	147304				
001662	120311				
001663	147324				
001664	142722				
001665	153301				
001666	146323				
001667	120240				
001670	000000				
001671	147317	MS7	.DATA	.'NO INTERRUPTS'.0	CC5130
001672	120311				
001673	147324				
001674	142722				
001675	151325				
001676	150324				
001677	151640				
001700	000000				
001701	151705	MS8	.DATA	.'SET INTERRUPTS '.0	CC5140
001702	152240				
001703	144716				

001704 152305
 001705 151322
 001706 152720
 001707 152323
 001710 120240
 001711 000000
 001712 144716
 001713 153301
 001714 146311
 001715 142240
 001716 144716
 001717 152305
 001720 151322
 001721 152720
 001722 152240
 001723 106612
 001724 000000

MS9 .DATA .INVALID INTERRUPT,0106612.0

CC5150

000600 R

.END .PIMT

CC5160

LITERALS

000520 001545
 000521 001554
 000522 001573
 000523 001615
 000524 000005
 000525 001000
 000526 002000
 000527 001632
 000530 001646
 000531 000020
 000532 077777
 000533 001671
 000534 000261
 000535 000262
 000536 000263
 000537 000264
 000540 000265
 000541 000266
 000542 000267
 000543 000270
 000544 000200
 000545 001426

000546	001461
000547	001502
000550	177700
000551	000017
000552	000106
000553	000001
000554	001701

POINTERS

SYMBOLS

1	001712	R	MS9
1	001701	R	MS8
1	001671	R	MS7
1	001646	R	MS6
1	001632	R	MS5
1	001615	R	MS4
1	001573	R	MS3
1	001554	R	MS2
1	001545	R	MS1
1	001544	R	TCNT
1	001543	R	SAVX
1	001542	R	SAVE
1	001541	R	SAVA
1	001540	R	PIZZ
1	001537	R	PIZY
1	001536	R	PIM
1	001535	R	PD43
1	001534	R	PD41
1	001533	R	PD1
1	001532	R	PADR
1	001531	R	IFLG
1	001530	R	CYCL
1	001527	R	CC
1	001502	R	PPOF
1	001461	R	PTAB
1	001453	R	PRES
1	001445	R	PSAV
1	001442	R	PINI
1	001426	R	PINX

1 001423 R PI02
1 001402 R PI0
1 001365 R TT21
1 001353 R TT20
1 001341 R PM02
1 001337 R PM0E
1 001327 R POV4
1 001325 R POV3
1 001312 R POV2
1 001307 R POVL
1 001276 R PLOW
1 001262 R PIN8
1 001246 R PIN7
1 001232 R PIN6
1 001216 R PIN5
1 001202 R PIN4
1 001166 R PIN3
1 001152 R PIN2
1 001136 R PIN1
1 001126 R PIAI
1 001122 R PIAL
1 001116 R PIAH
1 001113 R PIAG
1 001103 R PIAF
1 001072 R PIAK
1 001062 R PIAJ
1 001061 R PIAE
1 001060 R PIAE
1 001056 R PIAC
1 001055 R PIAB
1 001045 R PIDA
1 001040 R PICA
1 001035 R PIB3
1 001005 R PIB2
1 001002 R PIBA
1 000776 R PIAA
1 000757 R PIMJ
1 000746 R PIMI
1 000741 R PIMH
1 000724 R PTER
1 000710 R PIMG
1 000672 R PIMF

1	000654	R	PIME
1	000646	R	PIME
1	000630	R	PIMC
1	000612	R	PIME
1	000610	R	PIMA
1	000600	R	PIMT
0	000471	R	TS04
1	000442	R	\$CON
0	000441	R	\$MEM
0	000440	R	\$FLG
0	000422	R	ELOC
1	000421	R	SSWT
1	000420	R	TDLY
0	000417	R	TOUT
1	000416	R	INPG
0	000415	R	INPF
0	000414	R	INPE
0	000413	R	INPD
0	000412	R	INPC
1	000411	R	INPB
0	000410	R	INPA
0	000407	R	OUTH
0	000406	R	OUTG
0	000405	R	OUTF
0	000404	R	OUTE
1	000403	R	OUTD
1	000402	R	OUTC
0	000401	R	OUTB
1	000400	R	OUTA