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PROGRAM DESCRIPTION

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Catalog No. 303013A

IDENTIFICATION: 810A Priority Interrupt Checkout Program

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ACCEPTED: 29 June 1967

PURPOSE: To verify the proper execution of the PIE PID and TOI hardware instructions. This program is designed to operate with either a "black box" to generate the interrupt or by manually applying the proper voltage to generate the interrupt.

COMPUTER CONFIGURATION: 810A Computer with teletype.

SUBROUTINES REQUIRED: None

STORAGE: Locations octal 00000 through 01375

TIMING: N/A

USE:

1. Loading Procedures
Load the program into memory by using the standard relocatable loader. The intermap references must be relocated by octal '0743. This value must be placed in the B accumulator prior to starting the load procedure.
2. Program Starting Location
The starting address of the program is location octal 00002. However, the teletype messages may be checked by starting at location octal 00036. When all messages have been output to the teletype the program will halt. (location octal 63) The program may then be initialized by entering the starting location of the program into the program counter and pressing start.

3. Console Switches

Control Switch 14

SET - The program will disable the interrupt once it has been serviced. If the interrupt occurs again without program reinitialization the conditions indicate a faulty PID instruction.

RESET - The interrupt will not be disabled after the output of the message to the teletype.

Control Switch 15

SET - The program will suppress the print out of any messages. This control switch may be set to avoid teletype output when trouble shooting a faulty interrupt.

METHOD:

This program is designed to verify that the PIE, PID and TOI instructions are functioning properly. The program is designed to test the interrupt instructions and cannot be operated with any input/output devices, nor is it intended to act as a subroutine for any other program. The power-down interrupt may be verified by turning off the power while the program is active. The program may be restarted by turning the power switch to on and pressing start on the console. The program automatically stores in location zero a branch instruction to the power up subroutine.

Teletype Output

The program will output the group and level of the interrupt which has occurred.

Interrupt Generation

Priority Interrupt Card Type 8634-2 810A

Plus voltage applied to the proper pin connector will cause a disable or no request condition. Zero voltage applied to the proper pin will cause the request latch to be set.

Priority Interrupt Card Type 8634-3 810A, 8242-1 810a

The opposite voltages indicated in the above paragraph must be applied to set the proper condition.

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0001 00000 00000000 *      810A PRIORITY INTERRUPT CHECKOUT PROGRAM  CAT. NO. 303013A
0002 00000 00000000 *      J B BOYER   JUNE 29, 1967
0003 00000 00000000      REL
0004 00000 00000000 ****
0005 00000 00000000 ****PRIORITY INTERRUPT TEST
0006 00000 00000000 ****
0007 00000 00000000 ****ENTER PROGRAM AT LOCATION '2
0008 00000 00000000 ****
0009 00000 00000000 **** ENTER TEST OF PROGRAM AT LOCATION '36
0010 00000 00000000 ****
0011 00000 00000000 **** SET CS 15 TO SUPPRESS PRINT OUT
0012 00000 00000000 ****
0013 00000 00000000 **** SET CS 14 TO DISABLE INTERRUPT AFTER
0014 00000 00000000 **** INTERRUPT SIGNAL IS GENERATED
0015 00000 00000000 ****
0016 00002 70000002      ORG '2
0017 00002 12100014      SPB PI      ENABLE ALL GROUPS AND LEVELS
0018 00003 00000000 *      WHEN THE PROGRAM IS INITIALIZED THIS SUBROUTINE
0019 00003 00000000 *      IS USED AS A LOOP UNTIL AN INTERRUPT IS GENERATED
0020 00003 02100065 BGN  LBA  DT1      '100000
0021 00004 01100066      LAA  DT2      -10000
0022 00005 03101363      STA  CHCK
0023 00006 00000003      CLA
0024 00007 14101363      IMS  CHCK
0025 00010 11100006      BRU  *-2
0026 00011 00000026      IBS
0027 00012 11100004      BRU  BGN+1
0028 00013 11100003      BRU  BGN
0029 00014 00000000 *      THIS SUBROUTINE ENABLES ALL GROUPS AND LEVELS OF PRIORITY SYSTEM
0030 00014 00000000 PI   ZZZ  **
0031 00015 00130600      PIE
0032 00016 00007777      DATA '7777      ENABLE
0033 00017 00130600      PIE
0034 00020 00017777      DATA '17777     ALL
0035 00021 00130600      PIE
0036 00022 00027777      DATA '27777     AVAILABLE
0037 00023 00130600      PIE
0038 00024 00037777      DATA '37777     INTERRUPTS
0039 00025 00130600      PIE

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0040	00026	00047777	DATA	'47777	T0
0041	00027	00130600	PIE		
0042	00030	00057777	DATA	'57777	TEST
0043	00031	00130600	PIE		
0044	00032	00067777	DATA	'67777	COMPUTER
0045	00033	00130600	PIE		
0046	00034	00077777	DATA	'77777	
0047	00035	11300014	BRU*	PI	
0048	00036	00000000	*		
0049	00036	00000000	*		
0050	00036	00000000	*		
0051	00036	01100067	TEST LAA	DT3	TEST OF PROGRAM '41000
0052	00037	03100046	STA	L0C	DATA
0053	00040	01100070	LAA	DI4	'41100
0054	00041	03100056	STA	LC0	
0055	00042	01100071	LAA	DT5	-60
0056	00043	03100064	STA	TEMP	
0057	00044	12300046	TES1	SPB*	**+2
0058	00045	11100047	BRU	**+2	
0059	00046	00000000	L0C	ZZZ	**
0060	00047	14100046	IMS	L0C	
0061	00050	14100064	IMS	TEMP	
0062	00051	11100044	BRU	TES1	
0063	00052	01100071	LAA	DT5	-60
0064	00053	03100064	STA	TEMP	
0065	00054	12300056	TES2	SPB*	**+2
0066	00055	11100057	BRU	**+2	
0067	00056	00000000	L0C	ZZZ	**
0068	00057	14100056	IMS	LC0	
0069	00060	14100064	IMS	TEMP	
0070	00061	11100054	BRU	TES2	
0071	00062	00000000	HLT		
0072	00063	11100036	BRU	TEST	
0073	00064	00000001	TEMP	BSS	1
0074	00065	00100000	DT1	DATA	'100000
0075	00066	00154360	DT2	DATA	-10000
0076	00067	00041000	DT3	DATA	'41000
0077	00070	00041100	DT4	DATA	'41100
0078	00071	00177720	DT5	DATA	-'60
0079	00072	00000000	*		POWER DOWN ROUTINE

0080	00072	00000000	PDR1	ZZZ	**
0081	00073	01100134		LAA	FLAG
0082	00074	00000022		SAZ	
0083	00075	11100102		BRU	**5
0084	00076	01100072		LAA	PDR1
0085	00077	03100135		STA	RTN
0086	00100	01101371		LAA	ONE
0087	00101	03100134		STA	FLAG
0088	00102	04100104		STB	PDR2
0089	00103	11100105		BRU	**2
0090	00104	00000000	PDR2	ZZZ	**
0091	00105	00000033		NØP	
0092	00106	04100110		STB	PDR3
0093	00107	11100111		BRU	**2
0094	00110	00000000	PDR3	ZZZ	**
0095	00111	03100113		STA	PDR4
0096	00112	11100114		BRU	**2
0097	00113	00000000	PDR4	ZZZ	**
0098	00114	01100121		LAA	LØB
0099	00115	03000000		STA	0
0100	00116	01100122		LAA	DAC
0101	00117	03000001		STA	1
0102	00120	00000000	HLT	HLT	
0103	00121	00000036	LØB	LØB	
0104	00122	35400123	DAC	DAC	PDR5
0105	00123	01100113	PDR5	LAA	PDR4
0106	00124	02100110		LBA	PDR3
0107	00125	00000033		NØP	
0108	00126	02100104		LBA	PDR2
0109	00127	12100014		SPB	PI
0110	00130	00000003		CLA	
0111	00131	03100134		STA	FLAG
0112	00132	00000035		TØI	
0113	00133	11300135		BRU*	RTN
0114	00134	00000000	FLAG	DATA	0
0115	00135	00000001	RTN	BSS	1
0116	00136	00000000	STAL	***	**
0117	00137	04101367		STB	TMPB
0118	00140	00000031		LCS	
0119	00141	00001713		FLL	15

B ACC.
TVB CHANGE '43

VBR

A ACC.

TBV CHANGE '42

IF CS 15 IS
SET

Line	Code	Address	Label	Operation	Value
0120	00142	00000024	SAP		
0121	00143	11100152	BRU	ST2	
0122	00144	02077772	LBA	=-6	
0123	00145	01501236	ST1	LAA	M5+6.1
0124	00146	12101324	SPB	TYPE	
0125	00147	00000026	IBS		
0126	00150	11100145	BRU	ST1	
0127	00151	12101330	SPB	CRLF	
0128	00152	02101367	ST2	LBA	TMPB
0129	00153	00000035	T01		
0130	00154	11300136	BRU*	STAL	
0131	00155	00000000	ZE1	*** **	0.1
0132	00156	12101236	SPB	MESS	
0133	00157	00000001	DATA	'1	
0134	00160	11300155	BRU*	ZE1	
0135	00161	00000000	ZE2	*** **	0.2
0136	00162	12101236	SPB	MESS	
0137	00163	00000002	DATA	'2	
0138	00164	11300161	BRU*	ZE2	
0139	00165	00000000	ZE3	*** **	0.3
0140	00166	12101236	SPB	MESS	
0141	00167	00000003	DATA	'3	
0142	00170	11300165	BRU*	ZE3	
0143	00171	00000000	ZE4	*** **	0.4
0144	00172	12101236	SPB	MESS	
0145	00173	00000004	DATA	'4	
0146	00174	11300171	BRU*	ZE4	
0147	00175	00000000	ZE5	*** **	0.5
0148	00176	12101236	SPB	MESS	
0149	00177	00000005	DATA	'5	
0150	00200	11300175	BRU*	ZE5	
0151	00201	00000000	ZE6	*** **	0.6
0152	00202	12101236	SPB	MESS	
0153	00203	00000006	DATA	'6	
0154	00204	11300201	BRU*	ZE6	
0155	00205	00000000	ZE7	*** **	0.7
0156	00206	12101236	SPB	MESS	
0157	00207	00000007	DATA	'7	
0158	00210	11300205	BRU*	ZE7	
0159	00211	00000000	ZE8	*** **	0.8

0160	00212	12101236		SPB	MESS	
0161	00213	00000010		DATA	'10	
0162	00214	11300211		BRU*	ZE8	
0163	00215	00000000	ZE9	***	**	0,9
0164	00216	12101236		SPB	MESS	
0165	00217	00000011		DATA	'11	
0166	00220	11300215		BRU*	ZE9	
0167	00221	00000000	ZE10	***	**	0,10
0168	00222	12101236		SPB	MESS	
0169	00223	00000012		DATA	'12	
0170	00224	11300221		BRU*	ZE10	
0171	00225	00000000	ZE11	***	**	0,11
0172	00226	12101236		SPB	MESS	
0173	00227	00000013		DATA	'13	
0174	00230	11300225		BRU*	ZE11	
0175	00231	00000000	ZE12	***	**	0,12
0176	00232	12101236		SPB	MESS	
0177	00233	00000014		DATA	'14	
0178	00234	11300231		BRU*	ZE12	
0179	00235	00000000	ØN1	***	**	1,1
0180	00236	12101236		SPB	MESS	
0181	00237	00010001		DATA	'10001	
0182	00240	11300235		BRU*	ØN1	
0183	00241	00000000	ØN2	***	**	1,2
0184	00242	12101236		SPB	MESS	
0185	00243	00010002		DATA	'10002	
0186	00244	11300241		BRU*	ØN2	
0187	00245	00000000	ØN3	***	**	1,3
0188	00246	12101236		SPB	MESS	
0189	00247	00010003		DATA	'10003	
0190	00250	11300245		BRU*	ØN3	
0191	00251	00000000	ØN4	***	**	1,4
0192	00252	12101236		SPB	MESS	
0193	00253	00010004		DATA	'10004	
0194	00254	11300251		BRU*	ØN4	
0195	00255	00000000	ØN5	***	**	1,5
0196	00256	12101236		SPB	MESS	
0197	00257	00010005		DATA	'10005	
0198	00260	11300255		BRU*	ØN5	
0199	00261	00000000	ØN6	***	**	1,6

0200	00262	12101236		SPB	MESS	
0201	00263	00010006		DATA	'10006	
0202	00264	11300261		BRU*	ØN6	
0203	00265	00000000	ØN7	***	**	1,7
0204	00266	12101236		SPB	MESS	
0205	00267	00010007		DATA	'10007	
0206	00270	11300265		BRU*	ØN7	
0207	00271	00000000	ØN8	***	**	1,8
0208	00272	12101236		SPB	MESS	
0209	00273	00010010		DATA	'10010	
0210	00274	11300271		BRU*	ØN8	
0211	00275	00000000	ØN9	***	**	1,9
0212	00276	12101236		SPB	MESS	
0213	00277	00010011		DATA	'10011	
0214	00300	11300275		BRU*	ØN9	
0215	00301	00000000	ØN10	***	**	1,10
0216	00302	12101236		SPB	MESS	
0217	00303	00010012		DATA	'10012	
0218	00304	11300301		BRU*	ØN10	
0219	00305	00000000	ØN11	***	**	1,11
0220	00306	12101236		SPB	MESS	
0221	00307	00010013		DATA	'10013	
0222	00310	11300305		BRU*	ØN11	
0223	00311	00000000	ØN12	***	**	1,12
0224	00312	12101236		SPB	MESS	
0225	00313	00010014		DATA	'10014	
0226	00314	11300311		BRU*	ØN12	
0227	00315	00000000	TW1	***	**	2,1
0228	00316	12101236		SPB	MESS	
0229	00317	00020001		DATA	'20001	
0230	00320	11300315		BRU*	TW1	
0231	00321	00000000	TW2	***	**	2,2
0232	00322	12101236		SPB	MESS	
0233	00323	00020002		DATA	'20002	
0234	00324	11300321		BRU*	TW2	
0235	00325	00000000	TW3	***	**	2,3
0236	00326	12101236		SPB	MESS	
0237	00327	00020003		DATA	'20003	
0238	00330	11300325		BRU*	TW3	
0239	00331	00000000	TW4	***	**	2,4

0240	00332	12101236		SPB	MESS	
0241	00333	00020004		DATA	'20004	
0242	00334	11300331		BRU*	TW4	
0243	00335	00000000	TW5	***	**	2,5
0244	00336	12101236		SPB	MESS	
0245	00337	00020005		DATA	'20005	
0246	00340	11300335		BRU*	TW5	
0247	00341	00000000	TW6	***	**	2,6
0248	00342	12101236		SPB	MESS	
0249	00343	00020006		DATA	'20006	
0250	00344	11300341		BRU*	TW6	
0251	00345	00000000	TW7	***	**	2,7
0252	00346	12101236		SPB	MESS	
0253	00347	00020007		DATA	'20007	
0254	00350	11300345		BRU*	TW7	
0255	00351	00000000	TW8	***	**	2,8
0256	00352	12101236		SPB	MESS	
0257	00353	00020010		DATA	'20010	
0258	00354	11300351		BRU*	TW8	
0259	00355	00000000	TW9	***	**	2,9
0260	00356	12101236		SPB	MESS	
0261	00357	00020011		DATA	'20011	
0262	00360	11300355		BRU*	TW9	
0263	00361	00000000	TW10	***	**	2,10
0264	00362	12101236		SPB	MESS	
0265	00363	00020012		DATA	'20012	
0266	00364	11300361		BRU*	TW10	
0267	00365	00000000	TW11	***	**	2,11
0268	00366	12101236		SPB	MESS	
0269	00367	00020013		DATA	'20013	
0270	00370	11300365		BRU*	TW11	
0271	00371	00000000	TW12	***	**	2,12
0272	00372	12101236		SPB	MESS	
0273	00373	00020014		DATA	'20014	
0274	00374	11300371		BRU*	TW12	
0275	00375	00000000	TH1	***	**	3,1
0276	00376	12101236		SPB	MESS	
0277	00377	00030001		DATA	'30001	
0278	00400	11300375		BRU*	TH1	
0279	00401	00000000	TH2	***	**	3,2

0280	00402	12101236		SPB	MESS	
0281	00403	00030002		DATA	'30002	
0282	00404	11300401		BRU*	TH2	
0283	00405	00000000	TH3	***	**	3,3
0284	00406	12101236		SPB	MESS	
0285	00407	00030003		DATA	'30003	
0286	00410	11300405		BRU*	TH3	
0287	00411	00000000	TH4	***	**	3,4
0288	00412	12101236		SPB	MESS	
0289	00413	00030004		DATA	'30004	
0290	00414	11300411		BRU*	TH4	
0291	00415	00000000	TH5	***	**	3,5
0292	00416	12101236		SPB	MESS	
0293	00417	00030005		DATA	'30005	
0294	00420	11300415		BRU*	TH5	
0295	00421	00000000	TH6	***	**	3,6
0296	00422	12101236		SPB	MESS	
0297	00423	00030006		DATA	'30006	
0298	00424	11300421		BRU*	TH6	
0299	00425	00000000	TH7	***	**	3,7
0300	00426	12101236		SPB	MESS	
0301	00427	00030007		DATA	'30007	
0302	00430	11300425		BRU*	TH7	
0303	00431	00000000	TH8	***	**	3,8
0304	00432	12101236		SPB	MESS	
0305	00433	00030010		DATA	'30010	
0306	00434	11300431		BRU*	TH8	
0307	00435	00000000	TH9	***	**	3,9
0308	00436	12101236		SPB	MESS	
0309	00437	00030011		DATA	'30011	
0310	00440	11300435		BRU*	TH9	
0311	00441	00000000	TH10	***	**	3,10
0312	00442	12101236		SPB	MESS	
0313	00443	00030012		DATA	'30012	
0314	00444	11300441		BRU*	TH10	
0315	00445	00000000	TH11	***	**	3,11
0316	00446	12101236		SPB	MESS	
0317	00447	00030013		DATA	'30013	
0318	00450	11300445		BRU*	TH11	
0319	00451	00000000	TH12	***	**	3,12

0320	00452	12101236		SPB	MESS	
0321	00453	00030014		DATA	'30014	
0322	00454	11300451		BRU*	TH12	
0323	00455	00000000	F01	***	**	4,1
0324	00456	12101236		SPB	MESS	
0325	00457	00040001		DATA	'40001	
0326	00460	11300455		BRU*	F01	
0327	00461	00000000	F02	***	**	4,2
0328	00462	12101236		SPB	MESS	
0329	00463	00040002		DATA	'40002	
0330	00464	11300461		BRU*	F02	
0331	00465	00000000	F03	***	**	4,3
0332	00466	12101236		SPB	MESS	
0333	00467	00040003		DATA	'40003	
0334	00470	11300465		BRU*	F03	
0335	00471	00000000	F04	***	**	4,4
0336	00472	12101236		SPB	MESS	
0337	00473	00040004		DATA	'40004	
0338	00474	11300471		BRU*	F04	
0339	00475	00000000	F05	***	**	4,5
0340	00476	12101236		SPB	MESS	
0341	00477	00040005		DATA	'40005	
0342	00500	11300475		BRU*	F05	
0343	00501	00000000	F06	***	**	4,6
0344	00502	12101236		SPB	MESS	
0345	00503	00040006		DATA	'40006	
0346	00504	11300501		BRU*	F06	
0347	00505	00000000	F07	***	**	4,7
0348	00506	12101236		SPB	MESS	
0349	00507	00040007		DATA	'40007	
0350	00510	11300505		BRU*	F07	
0351	00511	00000000	F08	***	**	4,8
0352	00512	12101236		SPB	MESS	
0353	00513	00040010		DATA	'40010	
0354	00514	11300511		BRU*	F08	
0355	00515	00000000	F09	***	**	4,9
0356	00516	12101236		SPB	MESS	
0357	00517	00040011		DATA	'40011	
0358	00520	11300515		BRU*	F09	
0359	00521	00000000	F010	***	**	4,10

0360	00522	12101236		SPB	MESS	
0361	00523	00040012		DATA	'40012	
0362	00524	11300521		BRU*	F010	
0363	00525	00000000	F011	***	**	4,11
0364	00526	12101236		SPB	MESS	
0365	00527	00040013		DATA	'40013	
0366	00530	11300525		BRU*	F011	
0367	00531	00000000	F012	***	**	4,12
0368	00532	12101236		SPB	MESS	
0369	00533	00040014		DATA	'40014	
0370	00534	11300531		BRU*	F012	
0371	00535	00000000	F11	***	**	5,1
0372	00536	12101236		SPB	MESS	
0373	00537	00050001		DATA	'50001	
0374	00540	11300535		BRU*	F11	
0375	00541	00000000	F12	***	**	5,2
0376	00542	12101236		SPB	MESS	
0377	00543	00050002		DATA	'50002	
0378	00544	11300541		BRU*	F12	
0379	00545	00000000	F13	***	**	5,3
0380	00546	12101236		SPB	MESS	
0381	00547	00050003		DATA	'50003	
0382	00550	11300545		BRU*	F13	
0383	00551	00000000	F14	***	**	5,4
0384	00552	12101236		SPB	MESS	
0385	00553	00050004		DATA	'50004	
0386	00554	11300551		BRU*	F14	
0387	00555	00000000	F15	***	**	5,5
0388	00556	12101236		SPB	MESS	
0389	00557	00050005		DATA	'50005	
0390	00560	11300555		BRU*	F15	
0391	00561	00000000	F16	***	**	5,6
0392	00562	12101236		SPB	MESS	
0393	00563	00050006		DATA	'50006	
0394	00564	11300561		BRU*	F16	
0395	00565	00000000	F17	***	**	5,7
0396	00566	12101236		SPB	MESS	
0397	00567	00050007		DATA	'50007	
0398	00570	11300565		BRU*	F17	
0399	00571	00000000	F18	***	**	5,8

0400	00572	12101236		SPB	MESS	
0401	00573	00050010		DATA	'50010	
0402	00574	11300571		BRU*	FI8	
0403	00575	00000000	FI9	***	**	5,9
0404	00576	12101236		SPB	MESS	
0405	00577	00050011		DATA	'50011	
0406	00600	11300575		BRU*	FI9	
0407	00601	00000000	FI10	***	**	5,10
0408	00602	12101236		SPB	MESS	
0409	00603	00050012		DATA	'50012	
0410	00604	11300601		BRU*	FI10	
0411	00605	00000000	FI11	***	**	5,11
0412	00606	12101236		SPB	MESS	
0413	00607	00050013		DATA	'50013	
0414	00610	11300605		BRU*	FI11	
0415	00611	00000000	FI12	***	**	5,12
0416	00612	12101236		SPB	MESS	
0417	00613	00050014		DATA	'50014	
0418	00614	11300611		BRU*	FI12	
0419	00615	00000000	SI1	***	**	6,1
0420	00616	12101236		SPB	MESS	
0421	00617	00060001		DATA	'60001	
0422	00620	11300615		BRU*	SI1	
0423	00621	00000000	SI2	***	**	6,2
0424	00622	12101236		SPB	MESS	
0425	00623	00060002		DATA	'60002	
0426	00624	11300621		BRU*	SI2	
0427	00625	00000000	SI3	***	**	6,3
0428	00626	12101236		SPB	MESS	
0429	00627	00060003		DATA	'60003	
0430	00630	11300625		BRU*	SI3	
0431	00631	00000000	SI4	***	**	6,4
0432	00632	12101236		SPB	MESS	
0433	00633	00060004		DATA	'60004	
0434	00634	11300631		BRU*	SI4	
0435	00635	00000000	SI5	***	**	6,5
0436	00636	12101236		SPB	MESS	
0437	00637	00060005		DATA	'60005	
0438	00640	11300635		BRU*	SI5	
0439	00641	00000000	SI6	***	**	6,6

0440	00642	12101236		SPB	MESS	
0441	00643	00060006		DATA	'60006	
0442	00644	11300641		BRU*	SI6	
0443	00645	00000000	SI7	***	**	6,7
0444	00646	12101236		SPB	MESS	
0445	00647	00060007		DATA	'60007	
0446	00650	11300645		BRU*	SI7	
0447	00651	00000000	SI8	***	**	6,8
0448	00652	12101236		SPB	MESS	
0449	00653	00060010		DATA	'60010	
0450	00654	11300651		BRU*	SI8	
0451	00655	00000000	SI9	***	**	6,9
0452	00656	12101236		SPB	MESS	
0453	00657	00060011		DATA	'60011	
0454	00660	11300655		BRU*	SI9	
0455	00661	00000000	SI10	***	**	6,10
0456	00662	12101236		SPB	MESS	
0457	00663	00060012		DATA	'60012	
0458	00664	11300661		BRU*	SI10	
0459	00665	00000000	SI11	***	**	6,11
0460	00666	12101236		SPB	MESS	
0461	00667	00060013		DATA	'60013	
0462	00670	11300665		BRU*	SI11	
0463	00671	00000000	SI12	***	**	6,12
0464	00672	12101236		SPB	MESS	
0465	00673	00060014		DATA	'60014	
0466	00674	11300671		BRU*	SI12	
0467	00675	00000000	SE1	***	**	7,1
0468	00676	12101236		SPB	MESS	
0469	00677	00070001		DATA	'70001	
0470	00700	11300675		BRU*	SE1	
0471	00701	00000000	SE2	***	**	7,2
0472	00702	12101236		SPB	MESS	
0473	00703	00070002		DATA	'70002	
0474	00704	11300701		BRU*	SE2	
0475	00705	00000000	SE3	***	**	7,3
0476	00706	12101236		SPB	MESS	
0477	00707	00070003		DATA	'70003	
0478	00710	11300705		BRU*	SE3	
0479	00711	00000000	SE4	***	**	7,4

0480	00712	12101236	SPB	MESS	
0481	00713	00070004	DATA	'70004	
0482	00714	11300711	BRU*	SE4	
0483	00715	00000000	SE5	*** **	7,5
0484	00716	12101236	SPB	MESS	
0485	00717	00070005	DATA	'70005	
0486	00720	11300715	BRU*	SE5	
0487	00721	00000000	SE6	*** **	7,6
0488	00722	12101236	SPB	MESS	
0489	00723	00070006	DATA	'70006	
0490	00724	11300721	BRU*	SE6	
0491	00725	00000000	SE7	*** **	7,7
0492	00726	12101236	SPB	MESS	
0493	00727	00070007	DATA	'70007	
0494	00730	11300725	BRU*	SE7	
0495	00731	00000000	SE8	*** **	7,8
0496	00732	12101236	SPB	MESS	
0497	00733	00070010	DATA	'70010	
0498	00734	11300731	BRU*	SE8	
0499	00735	00000000	SE9	*** **	7,9
0500	00736	12101236	SPB	MESS	
0501	00737	00070011	DATA	'70011	
0502	00740	11300735	BRU*	SE9	
0503	00741	00000000	SE10	*** **	7,10
0504	00742	12101236	SPB	MESS	
0505	00743	00070012	DATA	'70012	
0506	00744	11300741	BRU*	SE10	
0507	00745	00000000	*	THE FOLLOWING DAC LOCATIONS SHOW THE SYMBOLIC TAG ASSOCIATED	
0508	00745	00000000	*	WITH EACH INTERRUPT LOCATION.	
0509	00745	00000000	*	WHenever an interrupt is received the program branches to the	
0510	00745	00000000	*	LOCATION SPECIFIED.	
0511	01000	70001000	ORG	'1000	
0512	01000	35400072	DAC	PDR1	POWER DOWN
0513	01001	35400136	DAC	STAL	STALL ALARM
0514	01002	35400135	DAC	ZE1	0,1
0515	01003	35400161	DAC	ZE2	0,2
0516	01004	35400165	DAC	ZE3	0,3
0517	01005	35400171	DAC	ZE4	0,4
0518	01006	35400175	DAC	ZE5	0,5
0519	01007	35400201	DAC	ZE6	0,6

U520	01010	35400205	DAC	ZE7	0,7
U521	01011	35400211	DAC	ZE8	0,8
U522	01012	35400215	DAC	ZE9	0,9
U523	01013	35400221	DAC	ZE10	0,10
U524	01014	35400225	DAC	ZE11	0,11
U525	01015	35400231	DAC	ZE12	0,12
U526	01016	35400235	DAC	ZN1	1,1
U527	01017	35400241	DAC	ZN2	1,2
U528	01020	35400245	DAC	ZN3	1,3
U529	01021	35400251	DAC	ZN4	1,4
U530	01022	35400255	DAC	ZN5	1,5
U531	01023	35400261	DAC	ZN6	1,6
U532	01024	35400265	DAC	ZN7	1,7
U533	01025	35400271	DAC	ZN8	1,8
U534	01026	35400275	DAC	ZN9	1,9
U535	01027	35400301	DAC	ZN10	1,10
U536	01030	35400305	DAC	ZN11	1,11
U537	01031	35400311	DAC	ZN12	1,12
U538	01032	35400315	DAC	TW1	2,1
U539	01033	35400321	DAC	TW2	2,2
U540	01034	35400325	DAC	TW3	2,3
U541	01035	35400331	DAC	TW4	2,4
U542	01036	35400335	DAC	TW5	2,5
U543	01037	35400341	DAC	TW6	2,6
U544	01040	35400345	DAC	TW7	2,7
U545	01041	35400351	DAC	TW8	2,8
U546	01042	35400355	DAC	TW9	2,9
U547	01043	35400361	DAC	TW10	2,10
U548	01044	35400365	DAC	TW11	2,11
U549	01045	35400371	DAC	TW12	2,12
U550	01046	35400375	DAC	TH1	3,1
U551	01047	35400401	DAC	TH2	3,2
U552	01050	35400405	DAC	TH3	3,3
U553	01051	35400411	DAC	TH4	3,4
U554	01052	35400415	DAC	TH5	3,5
U555	01053	35400421	DAC	TH6	3,6
U556	01054	35400425	DAC	TH7	3,7
U557	01055	35400431	DAC	TH8	3,8
U558	01056	35400435	DAC	TH9	3,9
U559	01057	35400441	DAC	TH10	3,10

0560	01100	70001100	WRG	*1100	
0561	01100	35400445	JAC	TH11	3,11
0562	01101	35400451	JAC	TH12	3,12
0563	01102	35400455	JAC	F01	4,1
0564	01103	35400461	JAC	F02	4,2
0565	01104	35400465	JAC	F03	4,3
0566	01105	35400471	JAC	F04	4,4
0567	01106	35400475	JAC	F05	4,5
0568	01107	35400501	JAC	F06	4,6
0569	01110	35400505	JAC	F07	4,7
0570	01111	35400511	JAC	F08	4,8
0571	01112	35400515	JAC	F09	4,9
0572	01113	35400521	JAC	F010	4,10
0573	01114	35400525	JAC	F011	4,11
0574	01115	35400531	JAC	F012	4,12
0575	01116	35400535	JAC	F11	5,1
0576	01117	35400541	JAC	F12	5,2
0577	01120	35400545	JAC	F13	5,3
0578	01121	35400551	JAC	F14	5,4
0579	01122	35400555	JAC	F15	5,5
0580	01123	35400561	JAC	F16	5,6
0581	01124	35400565	JAC	F17	5,7
0582	01125	35400571	JAC	F18	5,8
0583	01126	35400575	JAC	F19	5,9
0584	01127	35400581	JAC	F110	5,10
0585	01130	35400605	JAC	F111	5,11
0586	01131	35400611	JAC	F112	5,12
0587	01132	35400615	JAC	S11	6,1
0588	01133	35400621	JAC	S12	6,2
0589	01134	35400625	JAC	S13	6,3
0590	01135	35400631	JAC	S14	6,4
0591	01136	35400635	JAC	S15	6,5
0592	01137	35400641	JAC	S16	6,6
0593	01140	35400645	JAC	S17	6,7
0594	01141	35400651	JAC	S18	6,8
0595	01142	35400655	JAC	S19	6,9
0596	01143	35400661	JAC	S110	6,10
0597	01144	35400665	JAC	S111	6,11
0598	01145	35400671	JAC	S112	6,12
0599	01146	35400675	JAC	SE1	7,1

0600	01147	35400701	JAC	SE2	7,2
0601	01150	35400705	JAC	SE3	7,3
0602	01151	35400711	JAC	SE4	7,4
0603	01152	35400715	JAC	SE5	7,5
0604	01153	35400721	JAC	SE6	7,6
0605	01154	35400725	JAC	SE7	7,7
0606	01155	35400731	JAC	SE8	7,8
0607	01156	35400735	JAC	SE9	7,9
0608	01157	35400741	JAC	SE10	7,10
0609	01200	70001200	ORG	'1200	
0610	01200	00000000	****		
0611	01200	00000000	****		
0612	01200	00000307	M1	DATA	'307,'322,'317,'325,'320,'240
0612	01201	00000322			
0612	01202	00000317			
0612	01203	00000325			
0612	01204	00000320			
0612	01205	00000240			
0613	01206	00000000	****		
0614	01206	00000314	M2	DATA	'314,'305,'326,'305,'314,'240
0614	01207	00000305			
0614	01210	00000326			
0614	01211	00000305			
0614	01212	00000314			
0614	01213	00000240			
0615	01214	00000000	****		
0616	01214	00000000	****		
0617	01214	00000260	M3	DATA	'260,'261,'262,'263,'264,'265,'266,'267,'270,'271
0617	01215	00000261			
0617	01216	00000262			
0617	01217	00000263			
0617	01220	00000264			
0617	01221	00000265			
0617	01222	00000266			
0617	01223	00000267			
0617	01224	00000270			
0617	01225	00000271			
0618	01226	00000215	M4	DATA	'215,'212
0618	01227	00000212			
0619	01230	00000000	****		

0620	01230	00000323	M5	DATA	'323,'324,'301,'314,'314,'240
0620	01231	00000324			
0620	01232	00000301			
0620	01233	00000314			
0620	01234	00000314			
0620	01235	00000240			
0621	01236	00000000	*		TELETYPE MESSAGE OUTPUT SUBROUTINE
0622	01236	00000000	MESS	***	**
0623	01237	03101366		STA	TMPA
0624	01240	04101367		STB	TMPB
0625	01241	00000031		LCS	
0626	01242	00001613		FLL	14
0627	01243	00000024		SAP	
0628	01244	11101336		BRU	DABL
0629	01245	00000031		LCS	IF CS IS IS
0630	01246	00001713		FLL	15
0631	01247	00000024		SAP	
0632	01250	11101320		BRU	MESS
0633	01251	01301236	LA	LAA*	MESS
0634	01252	02101370		LBA	ZER0
0635	01253	00000414		FRL	4
0636	01254	04101364		STB	S1
0637	01255	01301236		LAA*	MESS
0638	01256	02101372		LBA	MSK1
0639	01257	00000027		ABA	
0640	01260	03101365		STA	S2
0641	01261	14101236		IMS	MESS
0642	01262	02077772		LBA	=-6
0643	01263	01501206	MESS1	LAA	M1+0,1
0644	01264	12101324		SPB	TYPE
0645	01265	00000026		IMS	
0646	01266	11101263		BRU	MESS1
0647	01267	02101364		LBA	S1
0648	01270	01501214	MESS2	LAA	M3,1
0649	01271	12101324		SPB	TYPE
0650	01272	01000240		LAA	=*240
0651	01273	12101324		SPB	TYPE
0652	01274	01000240		LAA	=*240
0653	01275	12101324		SPB	TYPE
0654	01276	02077772		LBA	=-5

OUTPUT

PRINT 'BRAND'

PRINT NUMBER

TYPE TWO
SPACES

0655	01277	01501214	MES3	LAA	M2+0.1	PRINT 'LEVEL'
0656	01300	12101324		SPB	TYPE	
0657	01301	00000026		IPS		
0658	01302	11101277		BRU	MES3	
0659	01303	01101365		LAA	S2	
0660	01304	15000012		CMA	=10	
0661	01305	11101314		BRU	MES4	
0662	01306	00000033		WOP		
0663	01307	06000012		SMA	=10	
0664	01310	03101365		STA	S2	
0665	01311	01101215		LAA	M3+1	PRINT '1'
0666	01312	12101324		SPB	TYPE	
0667	01313	01101365		LAA	S2	
0668	01314	00000005	MES4	TAB		
0669	01315	01501214		LAA	M3.1	PRINT SECOND DIGIT
0670	01316	12101324		SPB	TYPE	
0671	01317	12101330		SPB	CRLF	
0672	01320	02101367	MES3	LBA	TMPB	
0673	01321	01101366		LAA	TMPA	
0674	01322	00000035		T01		
0675	01323	11301236		BRU*	MES3	
0676	01324	00000000	TYPE	***	**	
0677	01325	00001016		LSL	8	
0678	01326	00170101		A0P	1,W	
0679	01327	11301324		BRU*	TYPE	
0680	01330	00000000	CRLF	***	**	CARRIAGE RETURN AND LINE FEED
0681	01331	01101226		LAA	M4	
0682	01332	12101324		SPB	TYPE	
0683	01333	01101227		LAA	M4+1	
0684	01334	12101324		SPB	TYPE	
0685	01335	11301330		BRU*	CRLF	
0686	01336	01301236	DABL	LAA*	MES3	
0687	01337	02101373		LBA	M5K2	'70000
0688	01340	00000027		ABA		
0689	01341	03101374		STA	AAA	
0690	01342	01301236		LAA*	MES3	
0691	01343	02101372		LBA	M5K1	'17
0692	01344	00000027		ABA		
0693	01345	00000002		NEG		
0694	01346	00000005		TAB		

0695	01347	01101371		LAA	ONE
0696	01350	00000026	IBS	IBS	
0697	01351	11101353		BRU	**2
0698	01352	11101355		BRU	**3
0699	01353	00000116		LSL	1
0700	01354	11101350		BRU	IBS
0701	01355	02101374		LBA	AAA
0702	01356	00000030		ZBA	
0703	01357	03101361		STA	**2
0704	01360	00130601		PIU	0
0705	01361	00000000		DATA	0
0706	01362	11101251		BRU	LA
0707	01363	00000001	CHCK	BSS	1
0708	01364	00000001	S1	BSS	1
0709	01365	00000001	S2	BSS	1
0710	01366	00000001	TMPA	BSS	1
0711	01367	00000001	TMPb	BSS	1
0712	01370	00000000	ZERO	DATA	0
0713	01371	00000001	ONE	DATA	1
0714	01372	00000017	MSK1	DATA	'17
0715	01373	00070000	MSK2	DATA	'/0000
0716	01374	00000001	AAA	BSS	1
0717	01375	70400000		END	