INTERRUPT EXTENSION TO 8CU10

I. PURPOSE

To trap all unexpected interrupts and to identify the source of such interrupts by means of a separate typeout in each interrupt routine while running 8CU10.

II. METHOD OF TEST

For each possible interrupt there will be a different routine such that when an interrupt occurs the associated routine will be executed. The function of each interrupt routine will be to give a typeout identifying the corresponding interrupt that occurred.

1. Sections of the test

There are a total of 14 interrupt routines in the test, one for each of the following associated interrupts:

250, 251, 252, 253, 40, 41, 44, 45, 46, 47, 21, 23, 22, 20.

This program replaces the first instruction in 8CU10 with the instruction TR 071004. Starting at 71004 the program will set up all the interrupt words with the proper addresses and status. The replaced instruction is then executed and transfer is made to the second instruction in 8CU10.

III. MEMORY LOCATION

071004 to 072079 8CU10I proper
000000 to 000129 The memory position for the first and second cards of 8CU10 with the first instruction on the first card replaced with TR 071004.

IV. LOADING PROCEDURE

1. Cards

First load 8CU10. After 8CU10 has been loaded, load this program with standard load program 8LD01 with cards in the following order:

8LD01	2 cards
8CU10I	24 cards
8TR02	1 card
Blanks	3 cards

IV. LOADING PROCEDURE (cont.)

2. Tape
Update 8CU10 on the 8TR06 generated tape with 8CU10I program cards using 8ED01 as the update program.

V. ALTERATION SWITCHES

911 ON - Bypass typeouts and halts
913 ON - Stop on Error

Other alteration switches not used in 8CU10I. The other alteration switches should be set according to definitions in 8CU10 write up.

VI. NORMAL TYPEOUTS

None

VII. ERROR TYPEOUTS

An unexpected interrupt from anyone of the following channels;
40, 41, 44, 45, 46, 47, 21, 23, 22, 20
will cause a typeout as follows;
"INT CH XX", where XX stands for one of the channel numbers above. For example, "INT CH 44" means that an unexpected interrupt occured on channel 44 while running 8CU10. "INT NS 250" means that an unexpected non-stop interrupt occured while running 8CU10.

"INT CI 251", "INT CI 253" and "INT 252" are typeouts for unexpected interrupts 251, 253, and 252 respectively.

VIII. ERROR HALTS

For all unexpected channel interrupts error halts which will occur only if 913 is on will have the address "3XX00" where XX stands for the channel number. For example "HLT 34100" signifies that channel 41 was the channel where the unexpected interrupt occurred.

For non-stop and all the console interrupts the halts will have the address "30XX0" where 'xx0' stands for the interrupt number. For example "HLT 30250" signifies that the unexpected interrupt was interrupt 250. In all cases to continue, hit START.

IX. COMMENTS

It is to be noted that this program is to be run only with 8CU10.

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PROGRAM 8CU10 CARD# 001

MEM ADDRESS	OP	CODE	ASU	I. ADDRESS	IMAGE
000004	1	TR		071004	1A00M
000009	R	WR		000095	R0095
000014	J	HLT		001111	J1111
000019	3	EEM	14	000000	30&-0
000024	3	CHR	13	000000	30&#0
000029	,	LIM	07	000000	,0#&0
000034	3	CHR	13	000000	30&#0
000039	0	TRS	09	000044	00-U4
000044	0	TRS	10	000049	00-M9
000049	0	TRS	11	000054	00-E4
000054	0	TRS	12	000059	00&59
000059	0	TRS	13	000064	00&U4
000064	0	TRS	14	000069	00&09

PROGRAM 8CU10 CARD# 002

MEM ADDRESS	OP	CODE	ASU	I. ADDRESS	IMAGE
000069	0	TRS	15	000074	00&G4
000074	1	TRA		000079	10079
000079	3	LEM	15	000000	30&&0
000084	1	TR		000404	10404
000089	J	HLT		000000	J0000
000094	1	TR		000404	10404
000099	9	TMT	01	080110	900,
000104	1	TR	04	091031	1, 2,
000109		CONSTANTS			3, 4
000114		CONSTANTS			, 5
000119	T	SGN	06	066079	TO PR
000124	0	TRS	11	077914	OGRAM
000129		CONSTANTS			□

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	002005	2070
[illegible]	[illegible]	[illegible]	[illegible]	071840	[illegible]
071029	9	SPC		002004	2004
[illegible]	[illegible]	LFC	02	071864	AIOM

PROGRAM 8CUIO CARD# 877

MEM ADDRESS	OP CODE	ASU	I ADDRESS	IMAGE
071054	LFC	02	071879	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LFC	[illegible]	071863	[illegible]
071069	SPC		002300	,2300
071074	LFC	02	071884	,A8QM
071079	SPC		002304	[illegible]
[illegible]	LFC	02	[illegible]	,A8RR
071139	SPC		002524	,2524
071144	LFC	02	071864	,A8OM
071149	SPC		002530	,2530

[illegible]	,	LFC	02	071804	,A9-M
071159	,	SRC		002534	,2534
071164	,	LFC	02	071864	,A80M
071169	,	SPC		004000	,4000
071174	,	LFC	02	071909	,A9-R
071229	,	SPC		004500	,4500
071234	,	LFC	02	071924	,A9KM
071239	,	SPC		004504	,4504
071244	,	LFC	02	071864	,A80M
071249	,	SPC		[illegible]	[illegible]

PROGRAM 8CU10 CARD# 881

MEM ADDRESS	OP CODE	ASU	I ADDRESS	IMAGE
071254	LFC	02	071929	,ADKR
071259	SPC		004[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
071269	SPC		004700	[illegible]
071274	LFC	02	071934	,A9LM
071279	SPC		004704	,4704
[illegible]	LFC	[illegible]	[illegible]	[illegible]

[illegible]	LIP	15	000009	,0669
071344	I TRA	01	071374	IA3XM
071349	Z SEL		000500	20500

[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
071359	[illegible]	[illegible]		071369	[illegible]
071364	[illegible]	R		071374	1A37M
071369	J	HLT		032100	JB100
071374	[illegible]	TEEM	14	000000	306-0
[illegible]	[illegible]	[illegible]		000009	0669

071434	R	WR		071965	RA96[illegible]
071439	I	TRA	03	071449	1A4DR
071444	1	TR		071454	1A45M
071447	[illegible]	HLT		032300	JB300

PROGRAM 8CU10 CARD# 885

MEM ADDRESS	OP CODE		ASU	I ADDRESS	IMAGE
071454	3	EEM	14	000000	306-0
[illegible]	[illegible]	LI[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	01	07[illegible]	[illegible]
071469	2	SPE		000500	20500
071474	R	WR		071975	RA97N
071479	1	TRA	09	071489	IA4HR
[illegible]	[illegible]	[illegible]	[illegible]	07[illegible]	[illegible]
071539	1	LIP	15	000009	10669
071544	1	TRA	01	071374	IA5XM
071549	2	ISEL	[illegible]	000500	20500

[illegible] ADDRESS	[illegible] CODE	[illegible]	[illegible] ADDRESS	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
071559	[illegible]	03	071569	IA5FR
071564	I TR		071574	IA57M
071569	J HLT		030252	J6252
071574	3 EEM	14	000000	306-0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

071634	[illegible]	WR		072010	RBD1[illegible]
071639	I	TRA	03	071649	IA6DR
071644	I	TR		071654	IA65[illegible]
[illegible]	[illegible]	HL[illegible]	[illegible]	[illegible]	[illegible]

PROGRAM 8CU10 CARD# 889

MEM ADDRESS	OP CODE	ASU	I ADDRESS	IMAGE
071654	3 EEM	14	000000	306-0
[illegible]	[illegible] LIP	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] TRA	[illegible]	[illegible]	[illegible]
071669	2 SEL		000500	20500
071674	R WR		072026	RB020
071679	I TRA	03	[illegible]	IA8HR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
071739	LIP	14	000009	0669
071744	I TRA	01	071774	IA7XM
071749	2 SEL		000500	20500

MEM ADDRESS	OP CODE	[illegible]	ADDRESS	IMAGE
071754	[illegible]	WR	072065	RB040
071759	I	TRA	03	071769	IA7FR
071764	1	TR		071774	1A77M
071769	J	HLT		034500	JD500
071774	3	EEM	14	000000	306-0
[illegible]	[illegible]	TR		[illegible]	[illegible]

07182[illegible]	2	[illegible]		[illegible]	[illegible]
071834	R	WR		072066	RB060
071839	I	TRA	03	071849	IA8DR
071844	1	TR		071854	1A85M
071849	J	HLT		[illegible]	[illegible]

PROGRAM 8CU10 CARD# 893

MEM ADDRESS	OP CODE	ASU	I ADDRESS	IMAGE
071854	3 EEM	14	000000	3CE-0

071869	CONSTANTS	ADM
071874	CONSTANTS	A2M
071879	CONSTANTS	A3M
[illegible]	CONSTANTS	[illegible]

071939	CONSTANTS	INT C
071944	CONSTANTS	H 20¤
071949	CONSTANTS	INT C

071954	CONSTANTS	H 21
071959	CONSTANTS	INT C
071964	CONSTANTS	H 22¤
071969	CONSTANTS	INT C
071974	CONSTANTS	H 23¤
072029	CONSTANTS	¤INT
072034	CONSTANTS	CH 41
072039	CONSTANTS	¤INT
072044	CONSTANTS	CH 44
072049	CONSTANTS	¤INT

PROGRAM 8CU10 CARD# 897

MEM ADDRESS	OP CODE	ASU	I ADDRESS	IMAGE
072054			CONSTANTS	CH 45
[illegible]			[illegible]	[illegible]
[illegible]			[illegible]	[illegible]
072069			CONSTANTS	¤INT
072074			CONSTANTS	CH 47
072079			CONSTANTS	¤

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INDX	LOC	OPN		SU	ADDRESS		COMMENTS 8CU10 10-24-63	REF
AA01	073000	LASN						
AA02		ENT80						
A02		ENT80						
AA03		TITLE					ROUTINE 500- ADDITION TO 8CU10B	
AA04	073004	TAE	I	5	053804	TY#M	TEST SET BIT REDUNDANT	
AA05	073009	SET	B		000006	0006	USING 1,2,4,8,BLK,DASH	
AA06	073014	LOD	8		073160	C16-	CHK THAT 901 COMES ON	AA36
AA07	073019	UNL	7		073166	C160	WHEN REDUNDANCIES ARE	AA37
AA08	073024	SET	B	4	000001	0#01	CORRECTED.	
AA09	073029	LOD	8	4	073172	C/7K		AA41
AA10	073034	LDA	#		073154	C15M		AA35
AA11	073039	ULA	*		073064	C06M		AA16
AA12	073044	TMC	O	11	073049	C-DR		
AA13	073049	SET	B		000000	0000		
AA14	073054	SET	B		000006	0006		
AA15	073059	SET	B	1	000001	00#1		
AA16	073064	LOD	8	1	073161	C1WJ		AA37
AA17	073069	UNL	7	1	073171	C1XJ		AA40
AA18	073074	SBR	%	8	073171	CJ7J		AA40
AA19	073079	TMC	O	11	073114	CJAM		AA26
AA20	073084	SBR	%	8	073171	CJ7J		AA40
AA21	073089	TMC	O	11	073099	C-IR		
AA22	073094	TR	1		073114	C11M		AA26
AA23	073099	AAM	@	4	073064	C#6M		AA16
AA24	073104	NTR	X		073064	C06M		AA16
AA25	073109	TR	1		073144	C14M		AA32
AA26	073114	TAA	I	1	073144	C1UM	ERROR ROUTINE	AA32
AA27	073119	SEL	2		000500	0500		
AA28	073124	WR	R		073167	C16P		AA39
AA29	073129	TAC	I	3	073139	C1CR		
AA30	073134	TR	1		073144	C14M		
AA31	073139	HLT	J		000500	0500		
AA32	073144	TAB	I	2	073009	C0-R		AA05
AA33	073149	TR	1		053804	T80M		
AA34		TITLE					CONSTANTS & WORK AREA	
AA35	073154	ADCON	A		073161	C16J		AA37
AA36	073160	CON		06	1248 -			
AA37	073161	CON		01	1			
AA38	073166	CON		05	248 -			
AA39	073170	CON		04	500¤			
AA40	073171	CON		01				
AA41	073172	CON		01	1			