

CH
THOMPSON

Systems Engineering Laboratories

SEL 810A
Computer Maintenance Drawings
Manual

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June, 1968

This publication supersedes SEL 810A
Computer Maintenance Drawings Manual,
95001A, dated October, 1967

Computer Maintenance
Manual

LIST OF DRAWINGS

Drawing Number	Title	Drawing Number	Title
<u>CIRCUIT CARDS - SCHEMATIC & ASSEMBLY DRAWINGS</u>			
8201	Schematic & Assembly RTL Memory Interface	8217	Schematic & Assembly RTL Program Register Bits 1-5
8202	Schematic & Assembly RTL "T" Register & Instruction Register Bit Slice	8218	Schematic & Assembly RTL Program Register Bits 6-11
8203	Schematic & Assembly RTL A&B Accumulators Bit Slice (3 sheets)	8219	Schematic & Assembly RTL Program Register Bits 12-15
8204	Schematic & Assembly RTL 8 Bit Full Adder	8220	Schematic & Assembly RTL - Shift Control
8205	Schematic & Assembly RTL Operation Decoder	8221	Schematic & Assembly RTL Sense Switch Decode
8206	Schematic & Assembly RTL Augmented Operation Decoder #1	8222	Schematic & Assembly RTL Overflow & A Sign Strobe & Normalize
8207	Schematic & Assembly RTL Augmented Operation Decoder #2	8223	Schematic & Assembly RTL Indirect - 2
8208	Schematic & Assembly RTL Control Cycle Generator	8224	Schematic & Assembly RTL "B" Full Code Detector & Sign Strobe
8209	Schematic & Assembly RTL Shift Counter	8225	Schematic & Assembly I - O Instruction Timing
8210	Schematic & Assembly RTL "T" Output Gate Control	8226	Schematic & Assembly RTL Memory Data Register Load & Address Clear
8211	Schematic & Assembly RTL "B" Output & "T" Comp Output Gate Control	8227	Schematic & Assembly RTL - Adder to Memory Control & Address Register Strobe
8212	Schematic & Assembly RTL "A" Output Gates	8228	Schematic & Assembly RTL Program Register Advance Logic I
8213	Schematic & Assembly RTL "B" Register and "T" Register Strobe	8229	Schematic & Assembly RTL Program Register Advance Logic II
8214	Schematic & Assembly RTL "A" Register Strobe	8230	Schematic & Assembly RTL - Program Register Advance Logic III
8215	Schematic & Assembly RTL Carry Logic	8231	Schematic & Assembly RTL Adder Zero Det.
8216	Schematic & Assembly RTL Input/Output Instruction Decode	8232	Schematic & Assembly RTL "A" Zero Det.

Drawing Number	Title	Drawing Number	Title
<u>CIRCUIT CARDS - SCHEMATIC & ASSEMBLY DRAWINGS (Cont'd)</u>			
8234	Schematic & Assembly RTL Clock Control	8253	Schematic & Assembly RTL Program Protect Logic 1
8235	Schematic & Assembly RTL Clock Control #2	8254	Schematic & Assembly RTL Program Protect Logic 2
8236	Schematic & Assembly RTL Clock Control #3	8255	Stall Alarm Control
8237	Schematic & Assembly RTL Load/Display Memory Step Control	8256	Stall Alarm Counter
8238	Schematic & Assembly RTL Priority Interrupt Latch 1R1	8257	Schematic & Assembly RTL-Initialize Control (2 sheets)
8239	Schematic & Assembly RTL Priority Interrupt TOI & Disable Logic 1R1	8258	Schematic & Assembly RTL Cycle Control (2 sheets)
8240	Schematic & Assembly RTL PI Group Matrix 1R1	8259	Schematic & Assembly RTL Address Control (2 sheets)
8241	Schematic & Assembly RTL Priority Interrupt Address "and" Gates 1R1	8260	Schematic & Assembly RTL Load Address Control (2 sheets)
8242	Schematic & Assembly RTL Priority Interrupt 1R1 (7 sheets)	8261	Schematic & Assembly RTL BTC Data Transfer Control 1 (2 sheets)
8243	Schematic & Assembly RTL PI Unitary/Binary CONV(MSB'S)	8262	Schematic & Assembly RTL-BTC-Data Transfer Control 2 (2 sheets)
8244	Schematic & Assembly RTL Unitary/Binary CONV(LSB'S)	8263	> Schematic & Assembly RTL 5 Bit Dual Counter (3 sheets) <i>2 sheets 2 of 2</i>
8245	Schematic & Assembly RTL Power Failure Control	8264	Schematic & Assembly RTL Clock Buffers
8246	Schematic & Assembly RTL Memory Module Select Driver	8265	Schematic & Assembly RTL BPC Cycle Control
8247	Schematic & Assembly RTL 16 Bit Parity Gen/Check	8266	Schematic & Assembly RTL Protect Control
8248	Schematic & Assembly RTL Parity Control	8267	Schematic & Assembly RTL-Initial Address Control
8249	Schematic & Assembly RTL Instruction Trap	8268	Schematic & Assembly RTL-BTC Priority
8250	Schematic & Assembly RTL Variable Base Register Control	8269	Schematic & Assembly RTL Line Driver, Current Driver and Inhibit Drive Regulator
8251	Schematic & Assembly RTL Variable Base Register-Register	8270	Schematic & Assembly RTL Memory Timing #I
8252	Schematic & Assembly RTL-VBR Display Gates	8271	Schematic & Assembly RTL Memory Timing #II
		8272	Schematic & Assembly RTL Quad Data Register & Inhibit Driver

Drawing Number	Title	Drawing Number	Title
CIRCUIT CARDS - SCHEMATIC & ASSEMBLY DRAWINGS (Cont'd)			
8273	Schematic & Assembly RTL Read/Write Matrix and Line Drivers	8292	Schematic & Assembly RTL - MPY/DIV Control 8
8274	Schematic & Assembly RTL 8-Bit Memory Address Register	8293	Schematic & Assembly RTL Mask Priority Interrupt
8275	Schematic & Assembly RTL 5-Bit Memory Address Register & 8 K Control	8294	Schematic & Assembly RTL Extender Adder and TX 2 Gates
8276	Schematic & Assembly RTL Memory Parity & Protect Bit Data Registers & Inhibit Drivers	8295	Schematic & Assembly RTL Memory Access Control
8277	Schematic & Assembly RTL + 12V and Threshold Regulator	8296	Schematic & Assembly RTL Power Fail Safe
8278	Schematic & Assembly Inhibit Resistors	8297	Schematic & Assembly TI 8-Bit Ripple Adder
8279	Schematic & Assembly Memory Power Supply (2 sheets)	8298	Schematic & Assembly RTL - SPB Map Store Gates
8280	Schematic & Assembly 3.6V & 5V Power Supply (2 sheets)	8299	Program Protect Lamp Drivers
8281	Schematic & Assembly Memory Rectifiers	8543	Schematic & Assembly 2 NOR(M)
8282	Schematic & Assembly RTL - Control Panel (2 sheets)	8544	Schematic & Assembly 3 NOR(M)
8283	Schematic & Assembly RTL MPY/DIV Control 1	8545	Schematic & Assembly Inverter (M)
8284	Schematic & Assembly RTL MPY/DIV Control #2	8547	Schematic & Assembly 4 NOR(M)
8285	Schematic & Assembly RTL - MPY/DIV Control 3	8557	Schematic & Assembly 4 NOR Expander (M)
8286	Schematic & Assembly RTL - MPY/DIV Control #4	8614	Schematic & Assembly Cable Driver
8287	Schematic & Assembly RTL - MPY/DIV Control 5	8615	Schematic & Assembly Cable Terminator
8288	Schematic & Assembly RTL - MPY/DIV Control 6	8620	Schematic & Assembly Oscillator
8289	Schematic & Assembly RTL - MPY/DIV Control 7	8639	Schematic & Assembly Data Saver
8290	Schematic & Assembly RTL - MPY/DIV "T" X2 Gates	8705	Schematic & Assembly Gated Cable Driver
8291	Schematic & Assembly RTL - MPY/DIV Shifted Adder Gates	8749	Schematic & Assembly Digital Buffer (M)
		8757	Schematic & Assembly Computer Clock

Drawing Number	Title	Drawing Number	Title
<u>CIRCUIT CARDS - SCHEMATIC & ASSEMBLY DRAWINGS (Cont'd)</u>			
8959	Schematic & Assembly Dual Current Driver	53072	Wiring Diagram BTC to Unit 1, 2, 3, 4 50 Pin Connector (2 sheets)
8962	Schematic & Assembly μ A Sense Amplifier #3	53092	Wiring Diagram Basis Input/Output Cable 104 Pin 1F3-P1 Amp
		53175	Wiring Diagram Control Panel (3 sheets)
<u>LOGIC DIAGRAMS</u>			
53021	Logic Diagram BPC Address to Memory	<u>POWER SUPPLY SCHEMATICS</u>	
53022	Logic Diagram BPC Buffer-Drivers	53140	Schematic Memory Power Supply Model 222
53073	Block Diagram BTC - BTC	53141	Schematic 3.6V & 5V Power Supply Model 221
53103	Logic Diagram 8K x 18 Memory a Data Flow Timing and Reg. (5 sheets)	53142	Schematic 3.6V Power Supply Model 223
53111	Logic Diagram 4K x 18 Memory a Data Flow Timing and Reg. (4 sheets)	<u>MECHANICAL ASSEMBLY DRAWINGS</u>	
83186	Augment Control	15049	Control Panel Assembly
83187	Miscellaneous Buffer	15513	Power Supply 3.6V Assembly
		15514	Power Supply 3.6V and 5.0V Assembly
		15515	Power Supply Memory
		15517	Power Supply Panel Assembly
		15595	Primary Plane Assembly (2 sheets)
		15596	Secondary Plane Assembly
		15597	Primary Module Assembly
		15598	Memory Module Assembly
		15599	Meter Panel Assembly
		15600	Final Assembly (4 sheets)
		15601	Assembly I/O Connector Panel
		15602	Table Top Assembly
		53065	Elco 6501 Assembly Connectors
<u>WIRING DIAGRAMS</u>			
52993-1	Wiring Diagram Interconnecting Cables Memory Module #1		
52993-2	Wiring Diagram Interconnecting Cables Memory Module #2		
53019	Wiring Diagram Interconnecting Cables BPC-Memory Interface		
53039	Wiring Diagram Power Supply Model 221		
53040	Wiring Diagram Power Supply Model 222 Memory		
53041	Wiring Diagram Power Supply Model 223		
53063	Wiring Diagram DC Power Dist. 810A		
53064	Wiring Diagram AC Power Distribution 810A		

SEL 95001A

Drawings
Number

Title

CARD LOCATION DRAWINGS

52992-1 Card Layout Plane 1R1

52992-2 Card Layout Plane 1R2

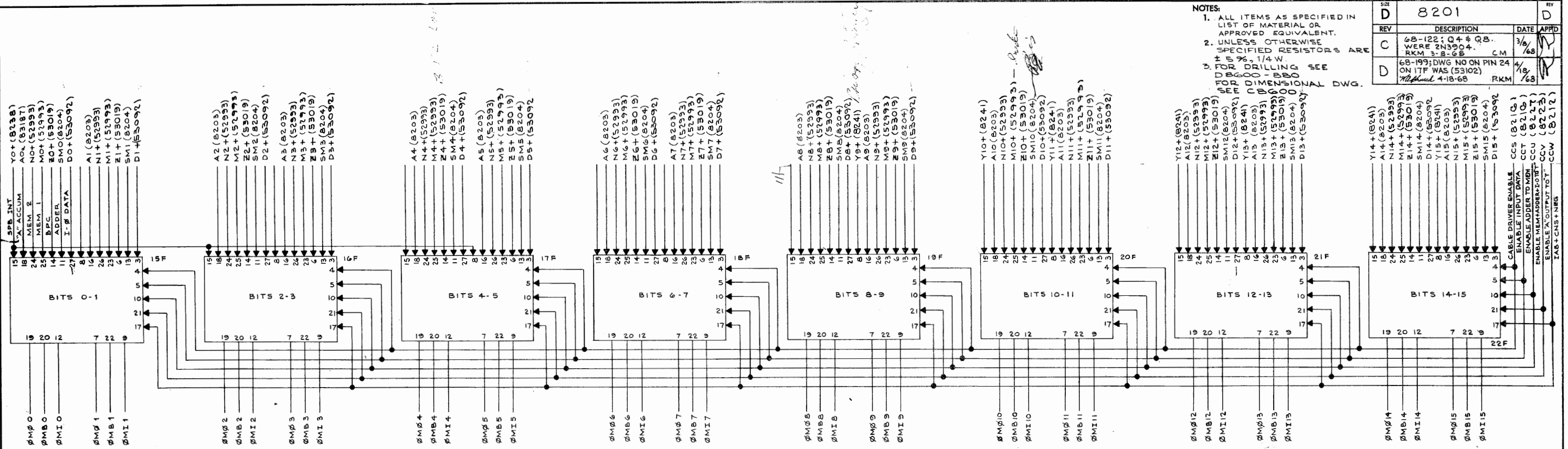
1014

Number
Drawing

CARD LAYOUT DRAWINGS

2-10-11 - Card Layout Plan - 1A

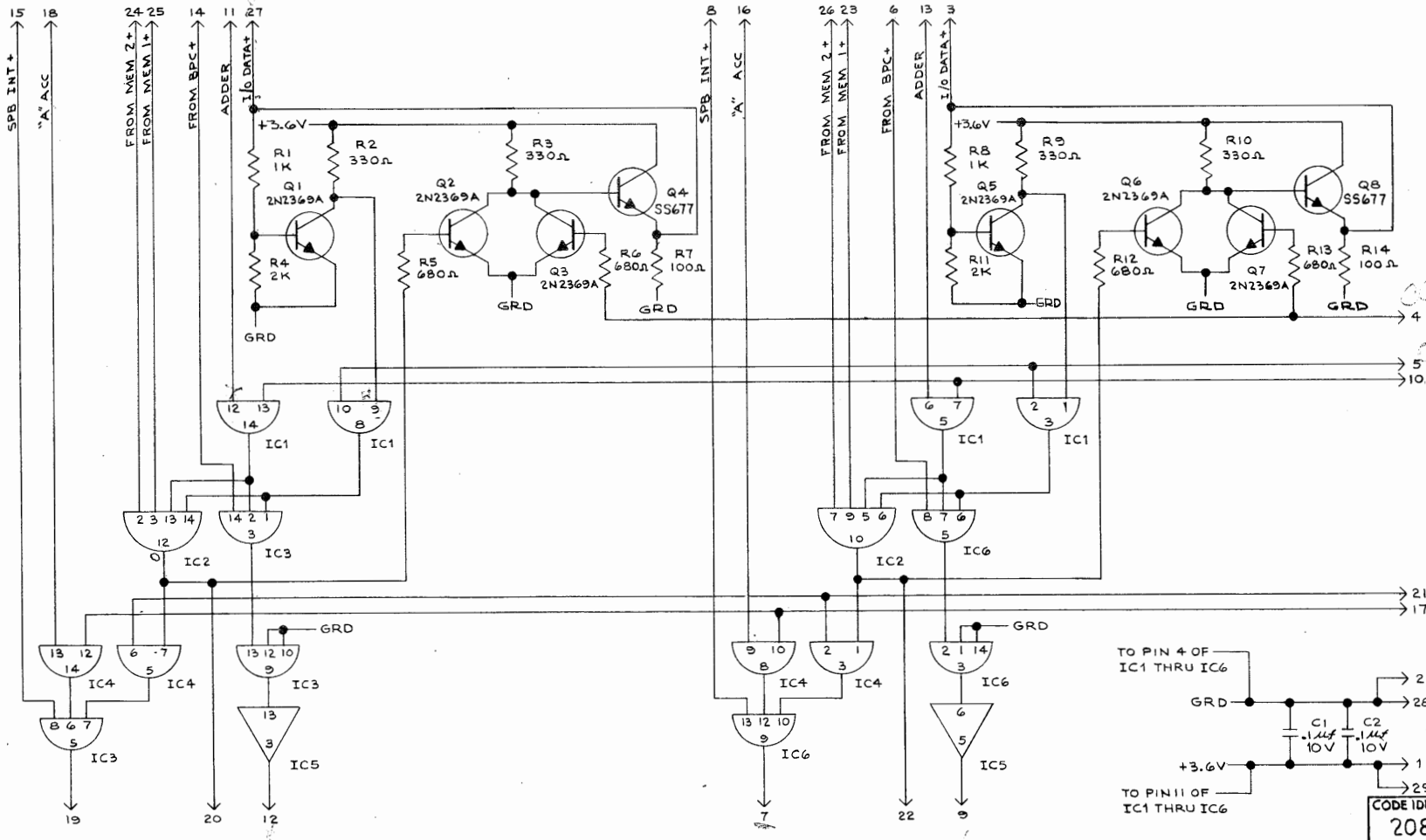
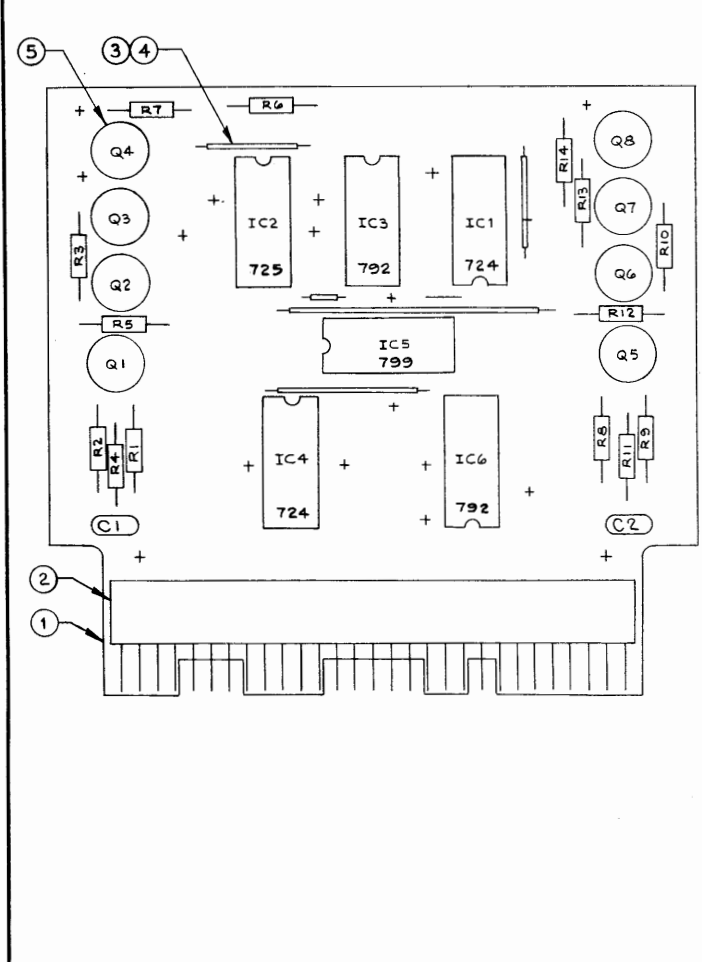
2-10-12 - Card Layout Plan - 1B



NOTES:

- ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
- UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4 W.
- FOR DRILLING DIMENSIONS SEE DIMENSIONAL DWG.

REV	DESCRIPTION	DATE	APPD
D	8201		
C	68-122; Q4 & Q8 WERE 2N3904. RKM 3-B-68	3/6/68	
B	FOR 96, 1/4 W DIMENSIONS - SEE DIMENSIONAL DWG.		
A	68-199; DWG NO ON PIN 24 ON 17F WAS (53102)	4/18/68	
D	68-199; DWG NO ON PIN 24 ON 17F WAS (53102)		



2	R14	RC07GF101J	RESISTOR-100Ω, ALLEN BRADLEY
4	R12, R5, R11	RC07GF6B1J	-680Ω, ↑ ↑ ↑
2	R4	RC07GF202J	-2K, ↑ ↑
4	R9, R10, R2, R3	RC07GF331J	-330Ω, ↑ ↑ ↑
2	R8, R1	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
2	Q8, Q4	S5677	TRANSISTOR- MOTOROLA
6	Q6, Q7, Q3, Q5, Q1, Q2	2N2369A	TRANSISTOR- FAIRCHILD
1	IC5	MC799P	INTEGRATED CIRCUIT-MOTOROLA
2	IC6, IC3	MC792P	↑ ↑ ↑
1	IC2	MC725P	↑ ↑ ↑
2	IC4, IC1	MC724P	INTEGRATED CIRCUIT-MOTOROLA
2	C2, C1	UK10-104	CAPACITOR-.1μF ±20%, 10V, CRL
8	5	B10369	UNIPAD
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL (COLOR OPT)
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 880	PRINTED CIRCUIT (FOR REV. SEE A5114-0)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

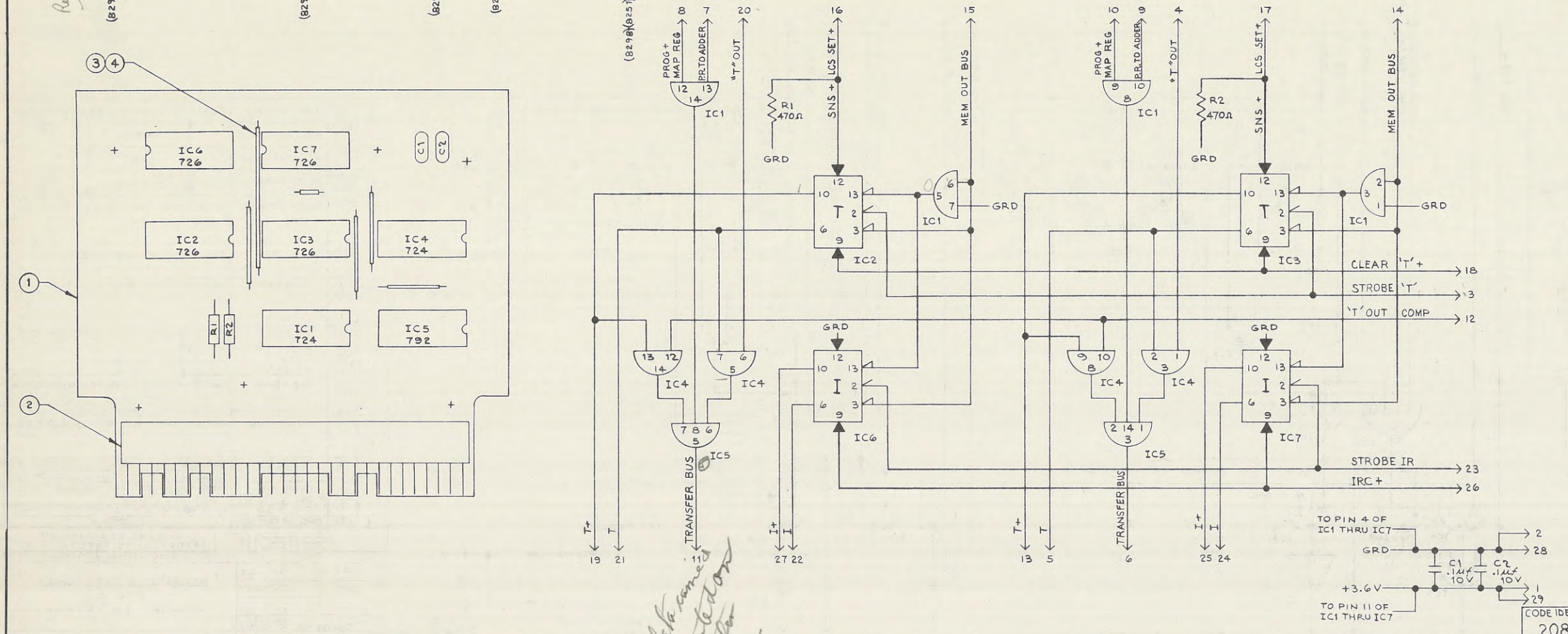
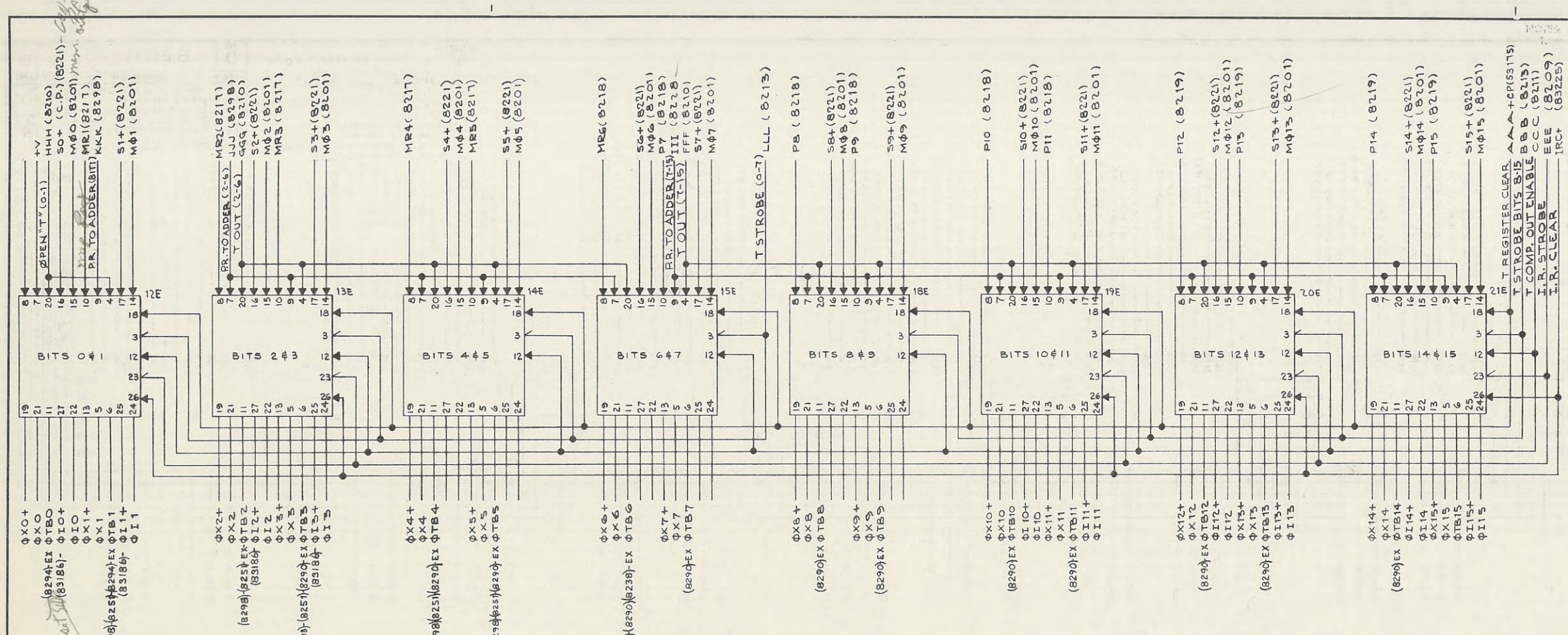
DR	RKM	1-3-67	
CC	WC	2-20-67	
ENGR	R. K. King	5/31/67	
APR	R. K. King	5/31/67	
USED ON			

CODE IDENT NO. 20886

REV	DESCRIPTION	DATE	APPD
D	8201		

SCHMATIC & ASSEMBLY
RTL RES. PROJ.
MEMORY INTERFACE

Capitol
 1000 N. W. 10th St.
 Ft. Lauderdale, FL 33304

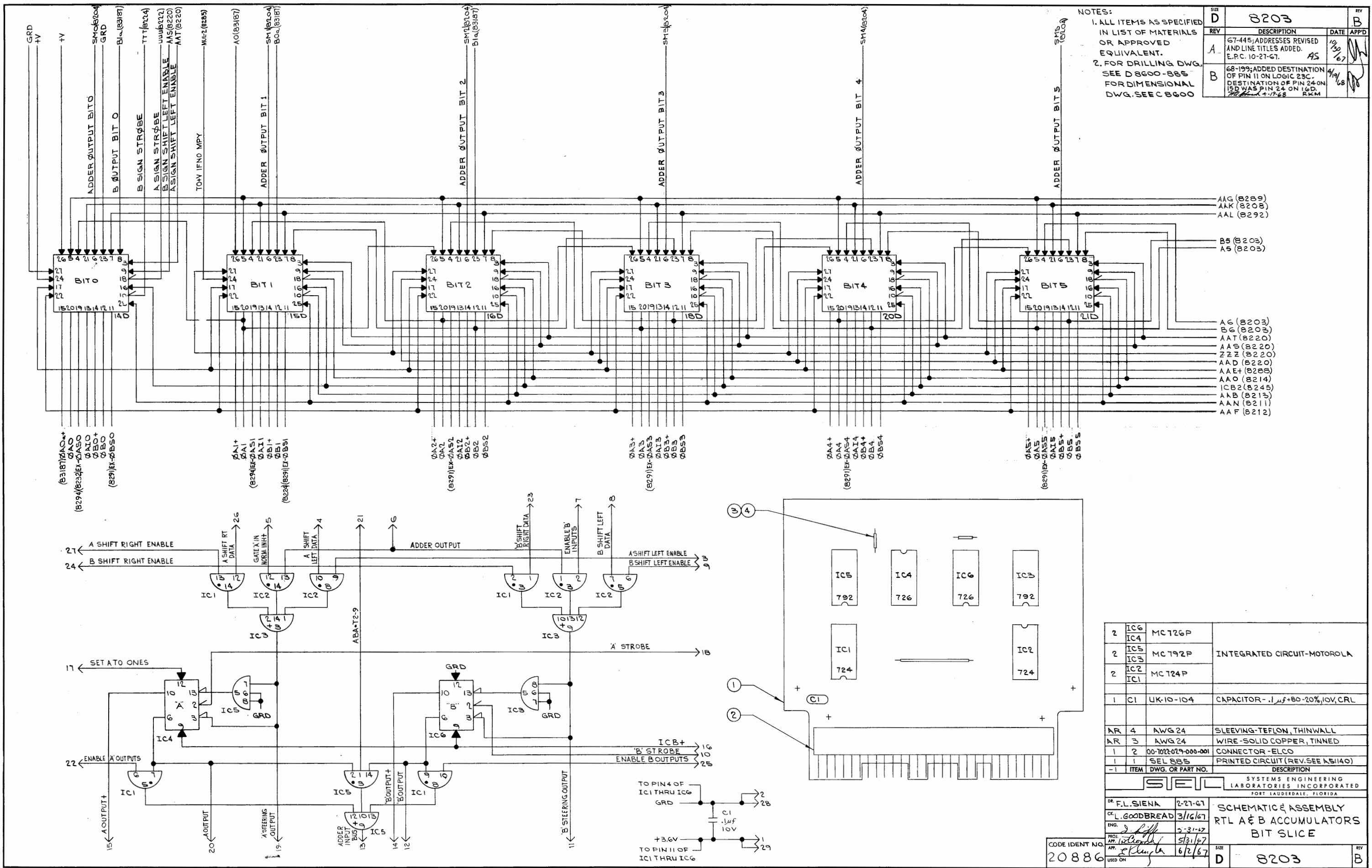


NOTES:

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- UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
- FOR DRILLING DWG SEE D8600-BB2 FOR DIMENSIONAL DWG. SEE C86600.

REV	DESCRIPTION	DATE	APPD
D	8202		
A	67-445; ADDRESSES REVISED; LINE TITLES ADDED. C.THEW 10-24-67	10/30/67	
B	68-199; DESTINATION OF PINS 26 WAS ICB3 (8202). 4/18/68	4/18/68	RKM

ITEM	DWG. OR PART NO.	DESCRIPTION
2	R2 R1	RC076F471J RESISTOR- 470 Ω , ALLEN BRADLEY
1	IC5 IC7	MC792P INTEGRATED CIRCUIT- MOTOROLA
4	IC6 IC3 IC2	MC726P INTEGRATED CIRCUIT- MOTOROLA
2	IC4 IC1	MC724P INTEGRATED CIRCUIT- MOTOROLA
2	C2 C1	UK-10-104 CAPACITOR - .1 μ f+80-20%, 10V,CRL
AR	4	AWG 24 SLEEVING- TEFLON, THINWALL
AR	3	AWG 24 WIRE- SOLID COPPER, TINNED
1	2	00-7022-029-000-001 CONNECTOR- ELCO
1	1	SEL 882 PRINTED CIRCUIT (FOR REV. SEE A51140)
-1		DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	RKM	12-19-66
CL	UC	12-30-66
ENG.	J. Piff	5-31-67
PROJ.	W. H. H.	5/21/67
APP.	J. H. H.	5/31/67
USED ON		
CODE IDENT NO.	20886	
SIZE	D	8202
REV	B	



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D 8600-885 FOR DIMENSIONAL DWG. SEE C 8600

REV	DESCRIPTION	DATE	APPD
D	8203		B
A	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-27-67.	10/31/67	AS
B	68-199; ADDED DESTINATION OF PIN 11 ON LOGIC 23C. DESTINATION OF PIN 24 ON 15D WAS PIN 24 ON 16D. 11/17/68	11/17/68	RKM

- AAG (8289)
- AAK (8208)
- AAL (8292)
- B5 (8203)
- A5 (8203)
- AG (8203)
- B6 (8203)
- AAT (8220)
- AA5 (8220)
- ZZZ (8220)
- AAD (8220)
- AAE+ (8285)
- AAO (8214)
- ICB2 (8245)
- AA8 (8213)
- AAH (8211)
- AAF (8212)

2	IC6	MC 726P	INTEGRATED CIRCUIT-MOTOROLA
	IC4		
2	IC5	MC 792P	
	IC3		
2	IC2	MC 724P	
	IC1		
1	C1	UK-10-104	CAPACITOR - .1μf +80-20%, 10V, CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 885	PRINTED CIRCUIT (REV. SEE K51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA

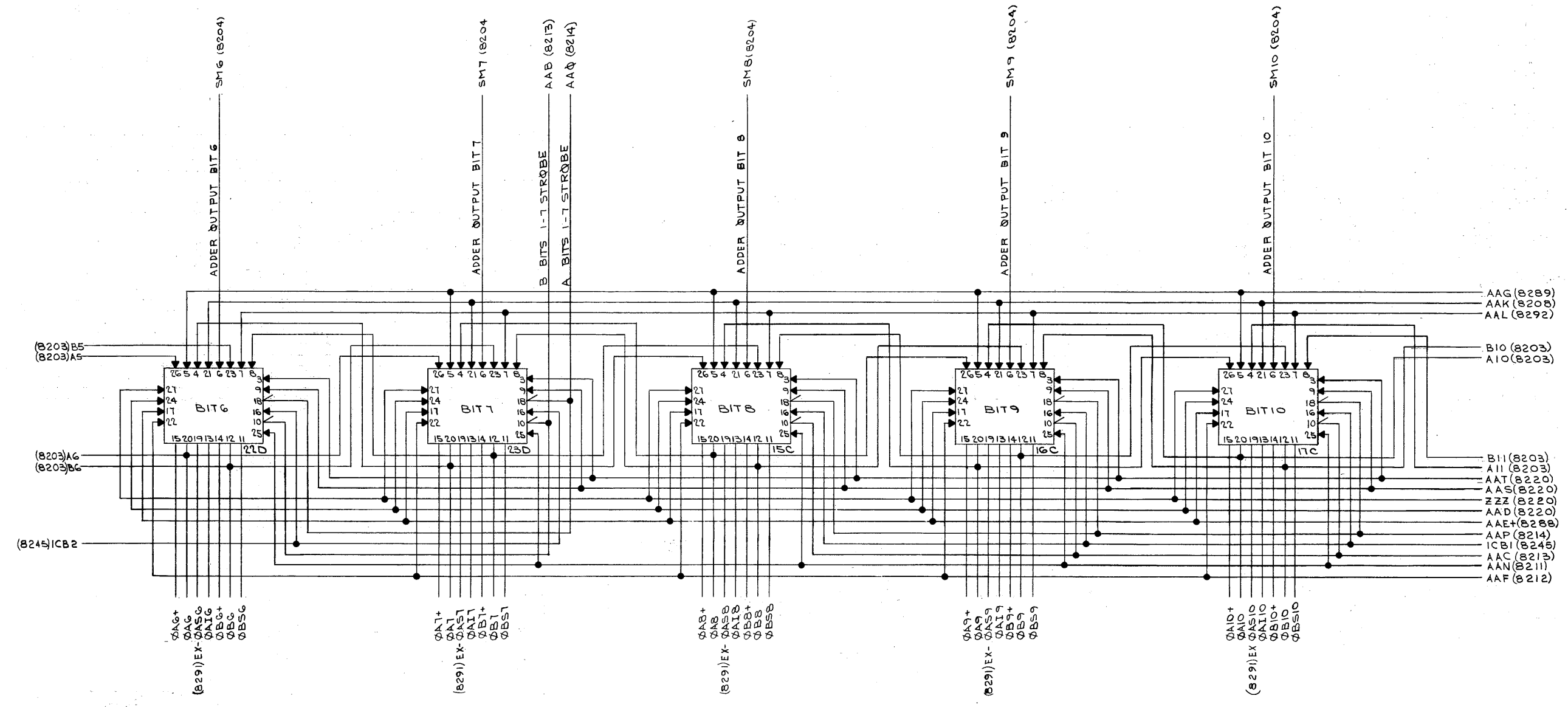
DR. F.L. SIENA 2-27-67
 CL. L. GOODREAD 3/16/67
 ENG. J. L. H. 5-31-67
 APP. [Signature] 5/31/67
 APP. [Signature] 6/2/67

SCHEMATIC & ASSEMBLY
 RTL A & B ACCUMULATORS
 BIT SLICE

CODE IDENT NO	20886	SIZE	D	8203	REV	B
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NOTES:
1. SEE SHEET 1

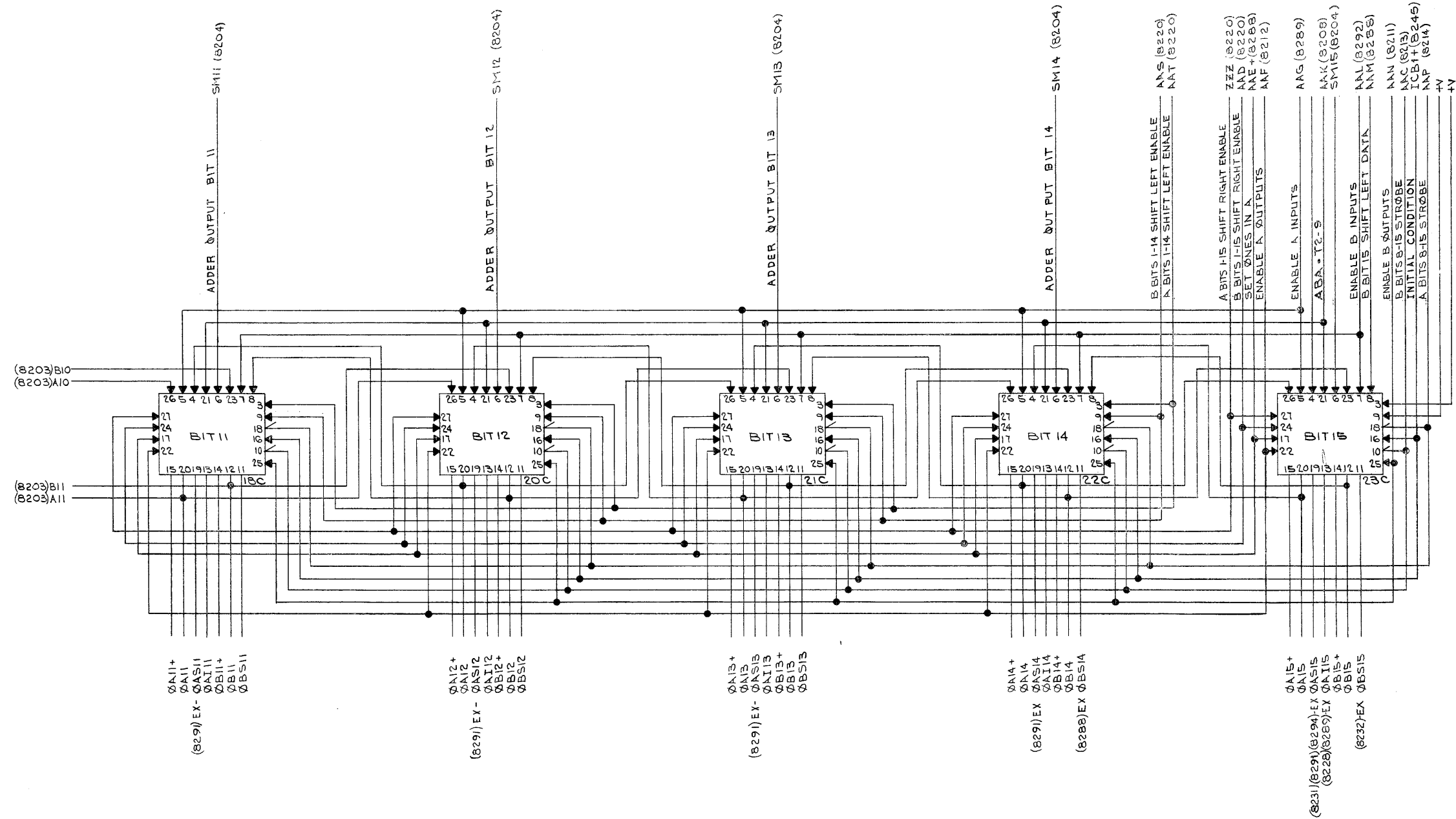
SIZE	D	8203	REV	B
REV		DESCRIPTION	DATE	APPD
		SEE SHEET 1		



ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR.	F.L. SIENA 2-27-67	SCHEMATIC & ASSEMBLY RTL A&B ACCUMULATORS BIT SLICE				
CLERK	LEOD BREAD 3/16/67					
ENG.	J. R. [Signature] 5-31-67					
APP.	[Signature] 5/31/67					
CODE IDENT NO.	20886	SIZE	D	8203	REV	B
USED ON	[Signature]	DATE	6/2/67			

NOTES:
1. SEE SHEET 1

SIZE	D	8203	REV	B
REV		DESCRIPTION	DATE	APP'D
		SEE SHEET 1		

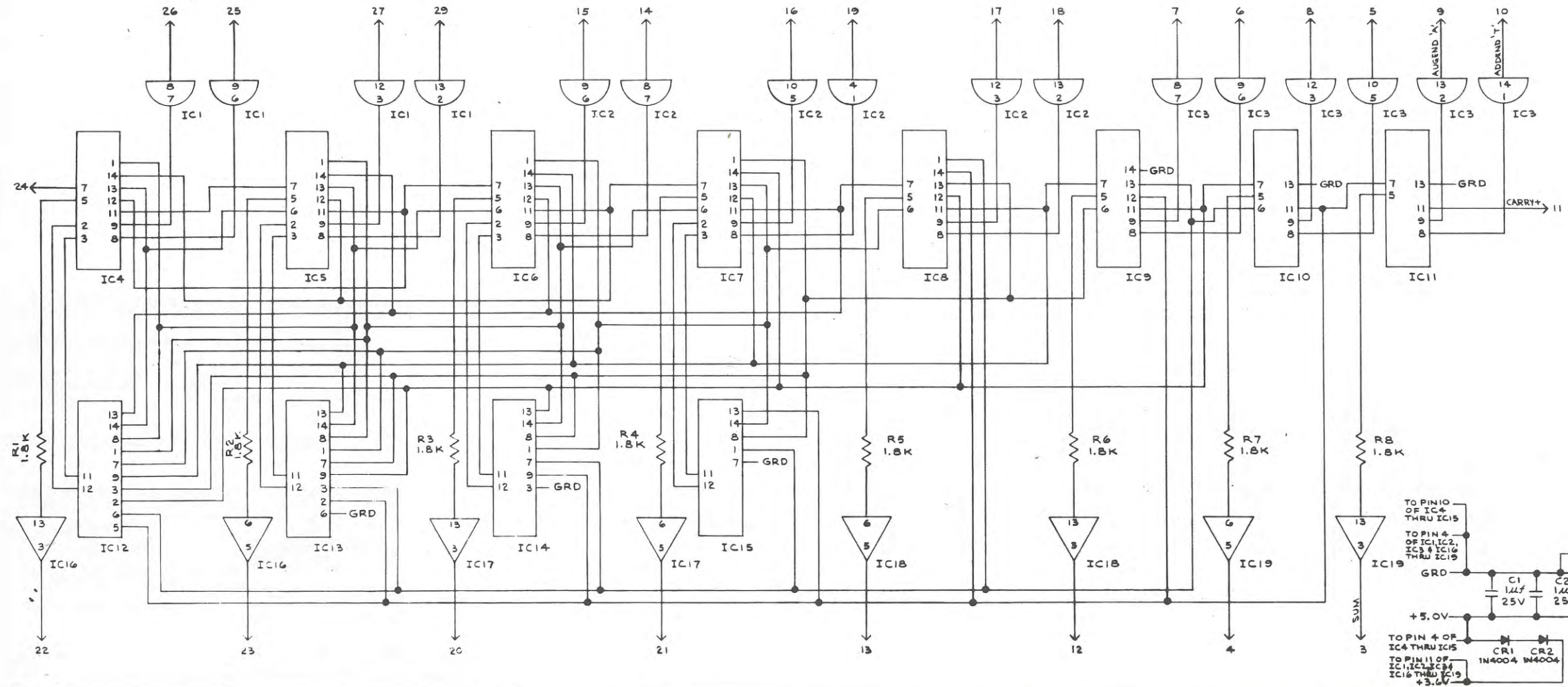
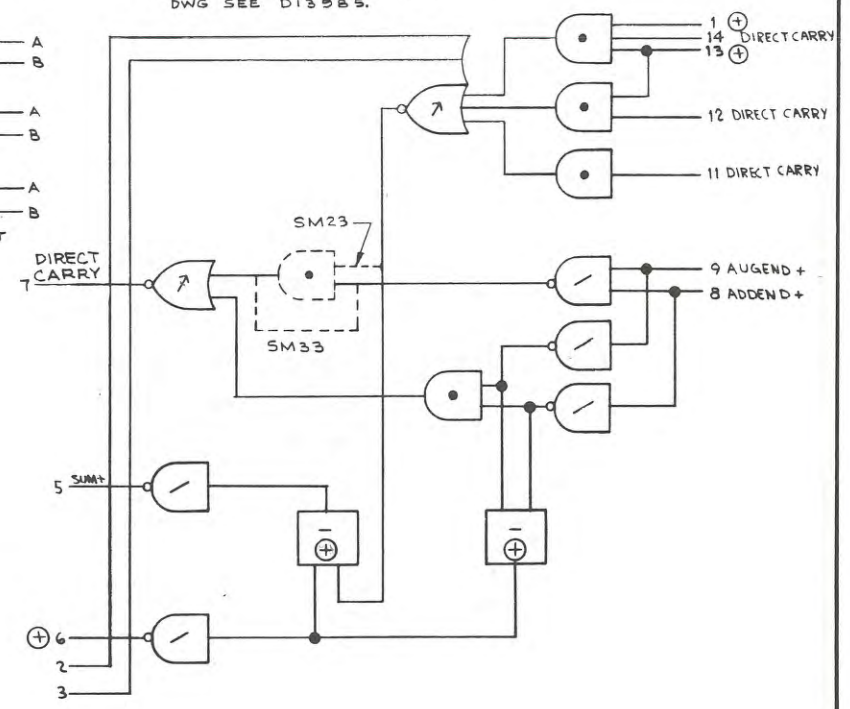
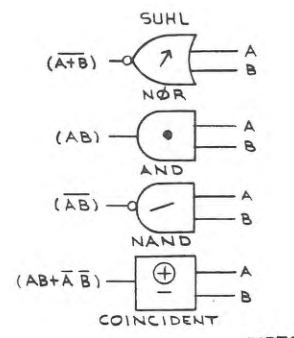
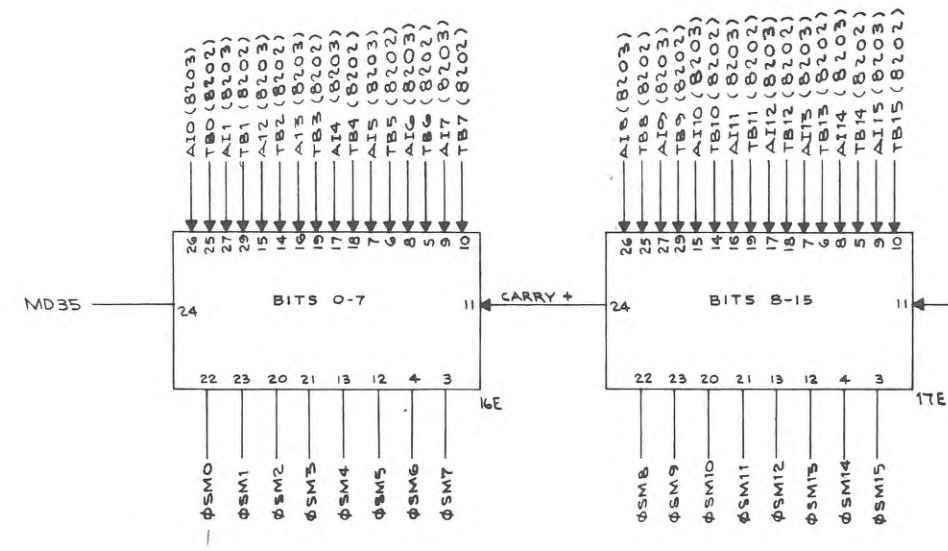
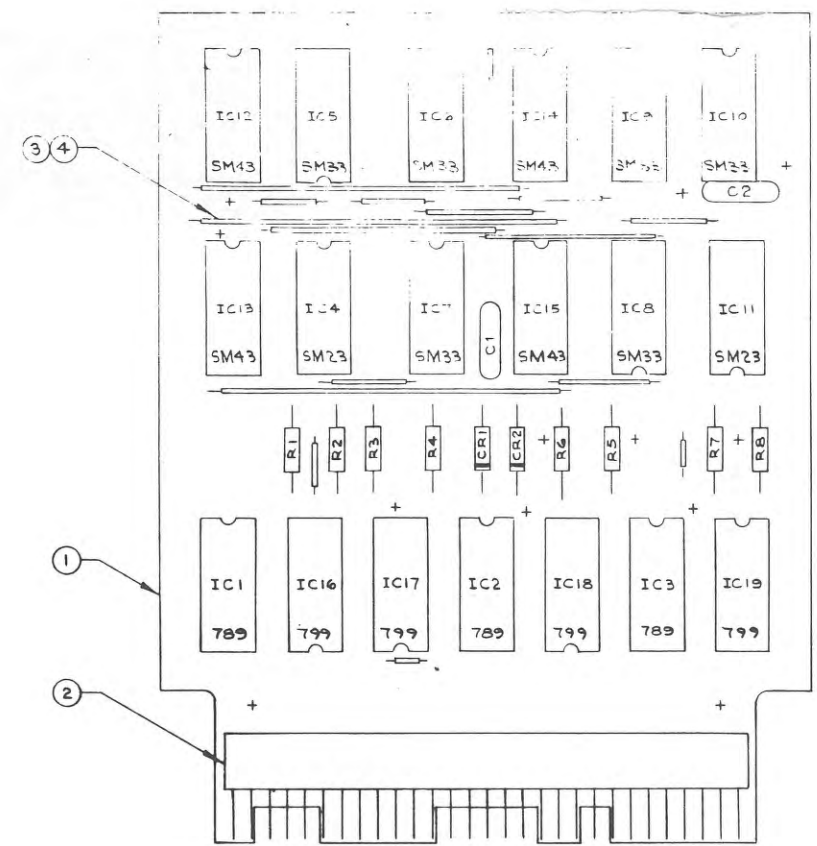


ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	F.L. SIENA	2-28-67
CL	L. GOODBREAD	3/16/67
ENG.		5-21-67
APP.		5/31/67
APPROVED	<i>[Signature]</i>	6/2/67
CODE IDENT NO	20886	
USED ON		
SIZE	D	8203
REV		B



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING & DIMENSIONAL DWG SEE D12885.

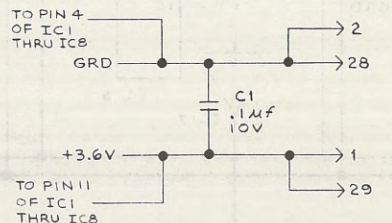
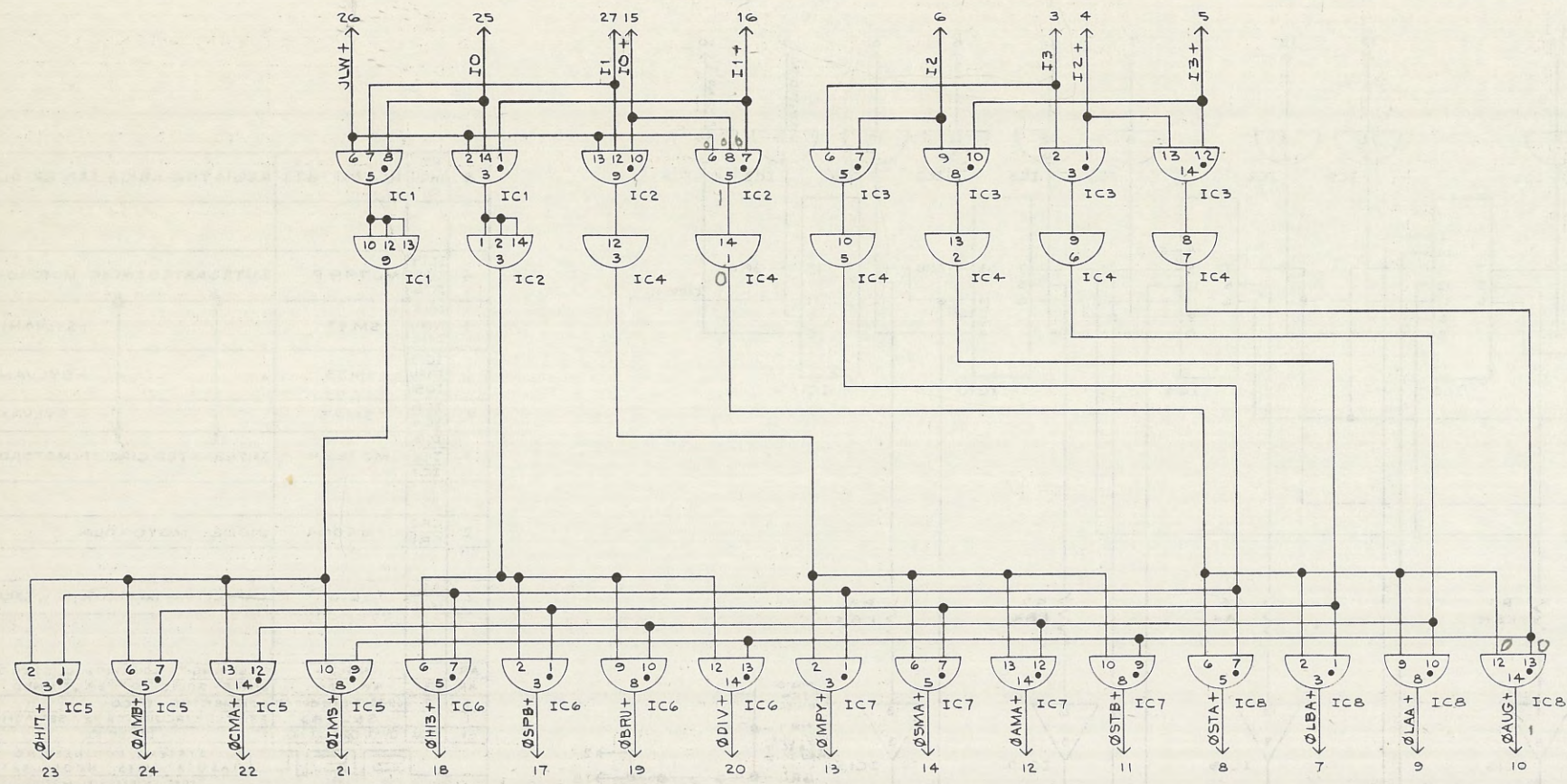
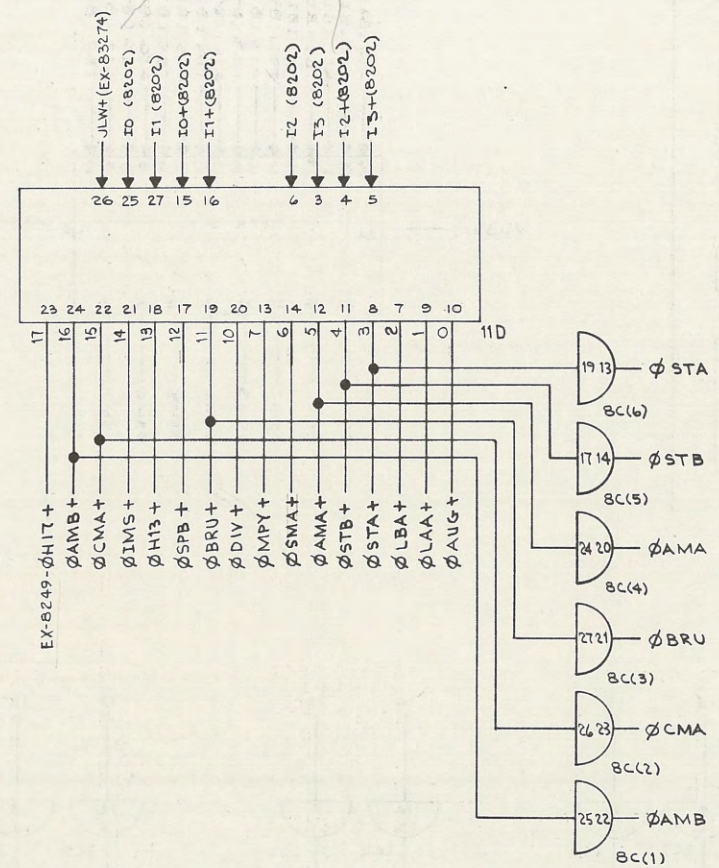
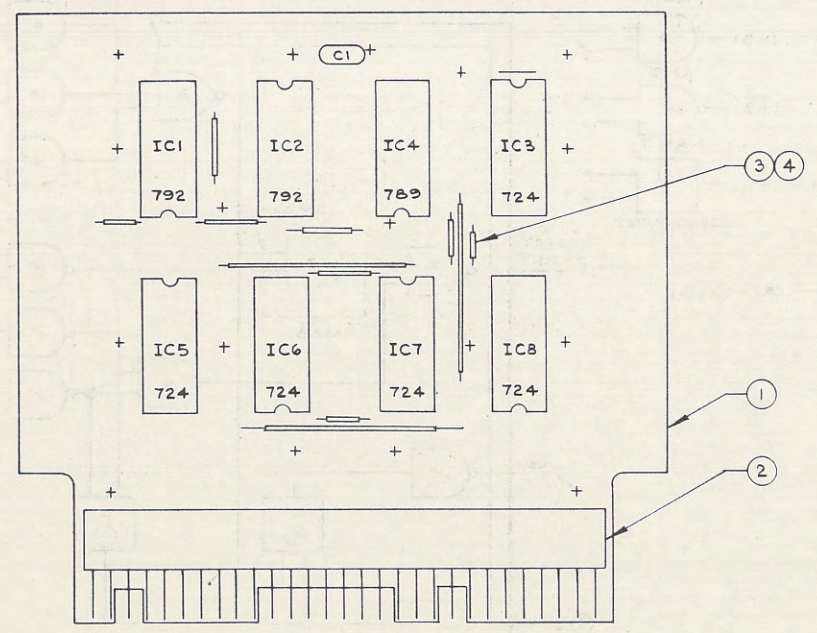
SIZE	8204		REV	A
REV	DESCRIPTION	DATE	APPD	
A	G7-445, ADDRESSES REVISED AND LINE TITLES ADDED. A.S. 10/24/67	10/27/67	[Signature]	



8	R8 THRU R1	RC076F182J	RESISTOR-1.8K, ALLEN BRADLEY	
4	IC19 THRU IC16	MC799P	INTEGRATED CIRCUIT-MOTOROLA	
4	IC15 THRU IC12	SM43	-SYLVANIA	
6	IC10 THRU IC5	SM33	-SYLVANIA	
2	IC11 IC4	SM23	-SYLVANIA	
3	IC3 IC2 IC1	MC789P	INTEGRATED CIRCUIT-MOTOROLA	
	CR2 CR1	1N4004	DIODE-MOTOROLA	
2	C2 C1	5C13	CAPACITOR-1uF $\pm 20\%$, 25V, SPRAGUE	
AR 4	AWG 24		SLEEVING-TEFLON, THINWALL (COLOR OPT.)	
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED	
1	2	00-7022-029-000-001	CONNECTOR-ELCO	
1	1	SEL 883	PRINTED CIRCUIT-FOR REV. SEE A51140	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR.	RKM	12-13-66	SCHEMATIC & ASSEMBLY RTL 8 BIT FULL ADDER	
CK.	WC	1-9-67		
ENG.				
PROJ. APP.		5/31/67		
APP.		5/31/67		
USED ON				
CODE IDENT NO.	20886		REV	A
SIZE	D	8204		

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-876.
 FOR DIMENSIONAL DWG. SEE DB600.

REV	DESCRIPTION	DATE	APPD
D	8205		C
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/11/67 RKM	9/12/67	
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-24-67 CW	10/30/67	
C	68-199; DESTINATION OF PIN 26 WAS STP+(8249). M. Manual 4-18-68 RKM	4/18/68	



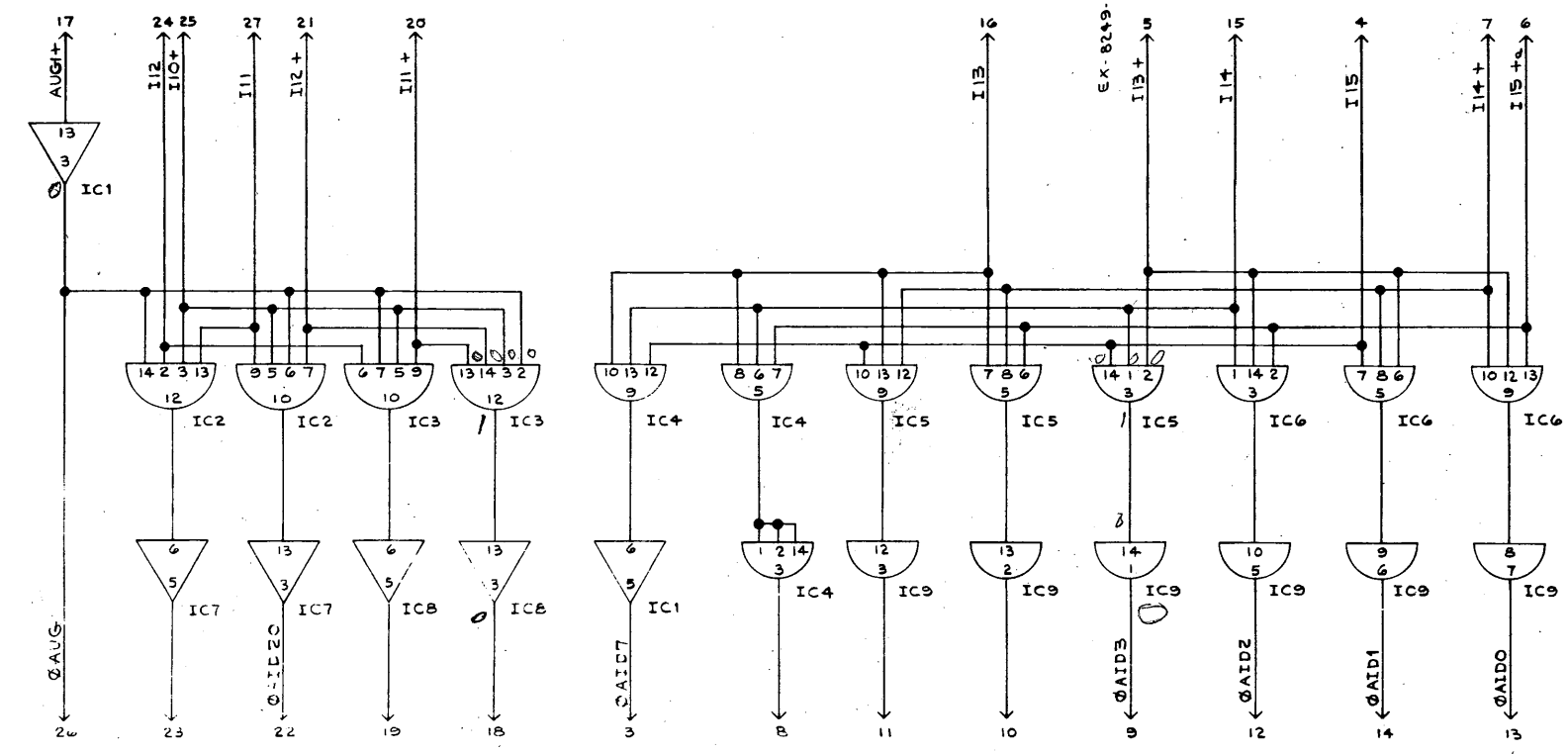
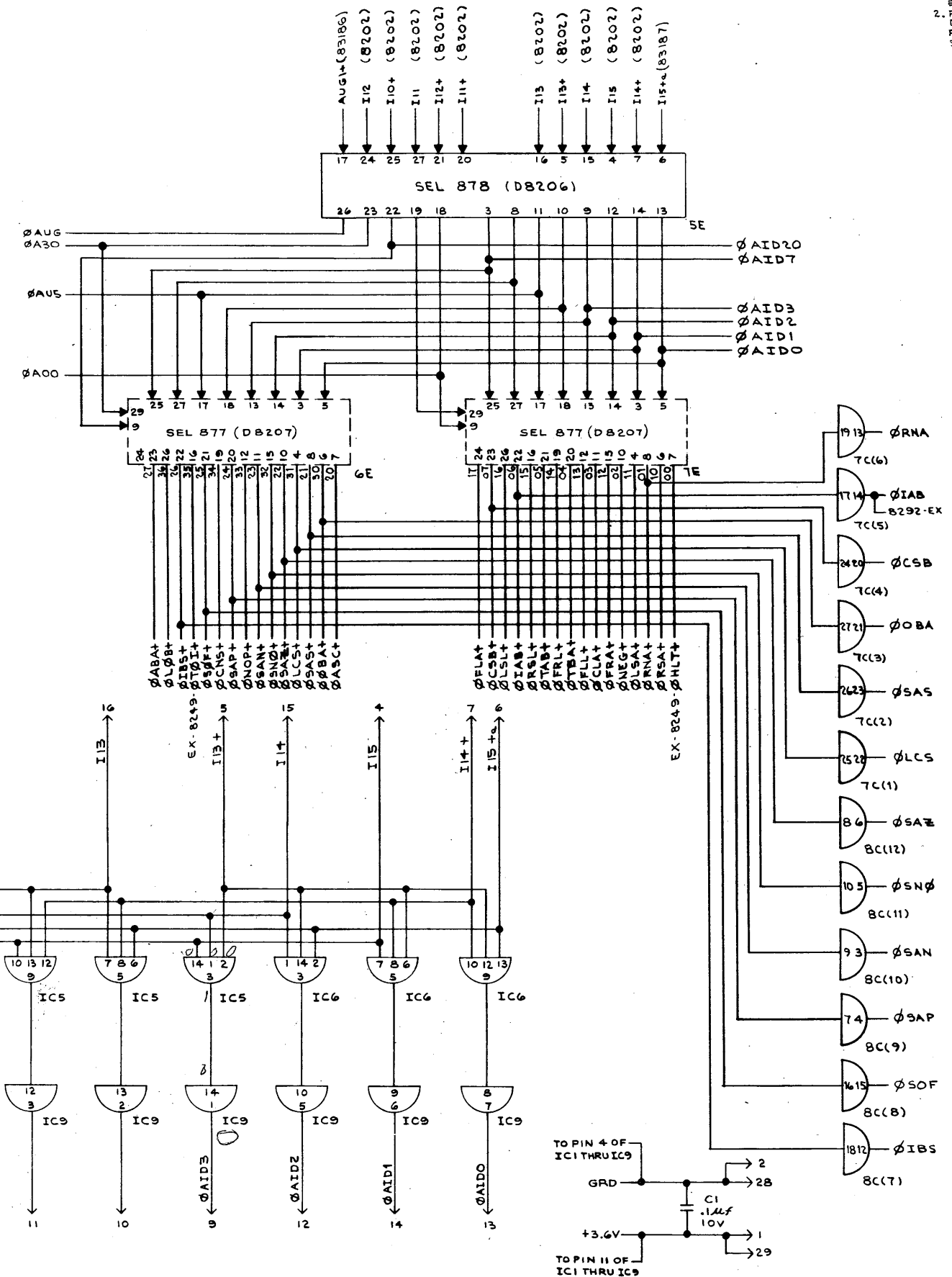
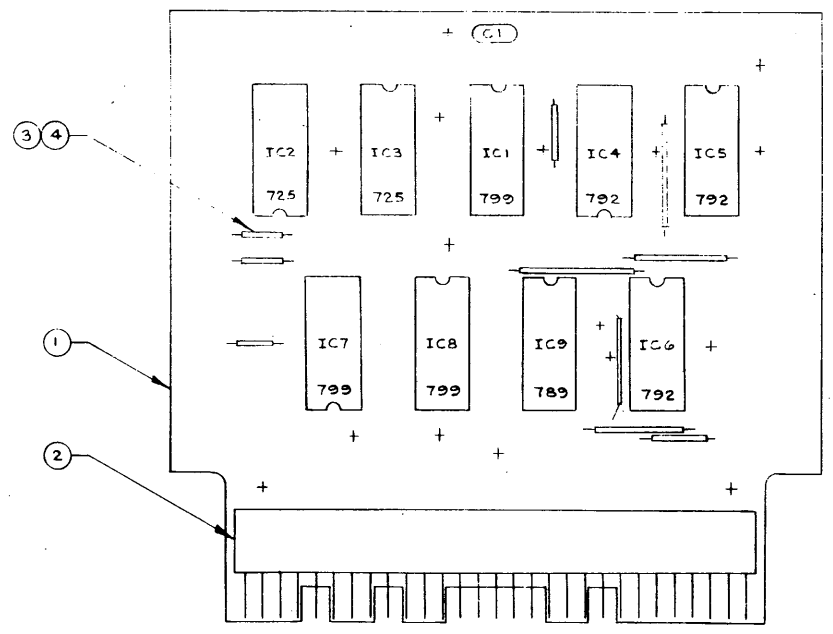
ITEM	DWG. OR PART NO.	DESCRIPTION			
1	IC4	MC792P INTEGRATED CIRCUIT-MOTOROLA			
5	IC8 IC7 IC6 IC5 IC3	MC724P INTEGRATED CIRCUIT-MOTOROLA			
2	IC2 IC1	MC792P INTEGRATED CIRCUIT-MOTOROLA			
1	C1	UK10-104 CAPACITOR-.1µF±80-20%, 10V, CRL			
AR 4	AWG 24	SLEEVING-TEFLON, THINWALL (C852A)			
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED			
1	2	00-7022-029-0000-001 CONNECTOR-ELCO			
1	1	SEL 876 PRINTED CIRCUIT-(FOR REV. SEE A51140)			
<table border="1"> <tr> <td colspan="2">SEL</td> <td>SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA</td> </tr> </table>			SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	RKM	11-3-66			
CK	UC	12-29-66			
ENG.		5-31-67			
PROJ. APP.		5/31/67			
APP.		5/31/67			
USED ON					

CODE IDENT NO.
20886

SIZE	REV
D	8205
C	

NOTES:
 1. ALL ITEMS AS SPECIFIED IS LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D3600-878.
 FOR DIMENSIONAL DWG. SEE C8275.

REV	DESCRIPTION	DATE	APPD
D	8206		
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 5/11/67	5/21/67	[Signature]
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. A.S. 10-24-67	3/29/67	[Signature]



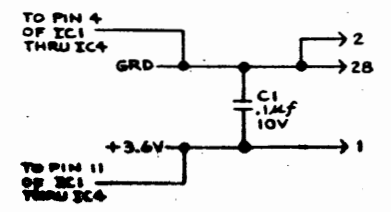
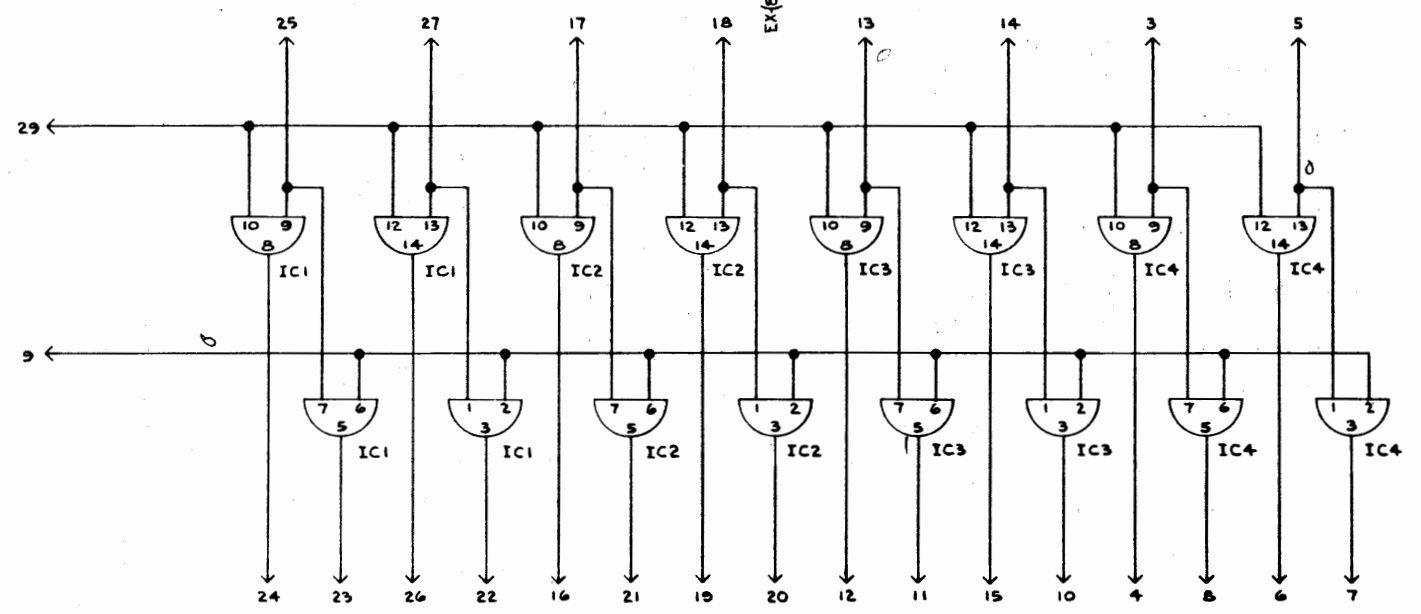
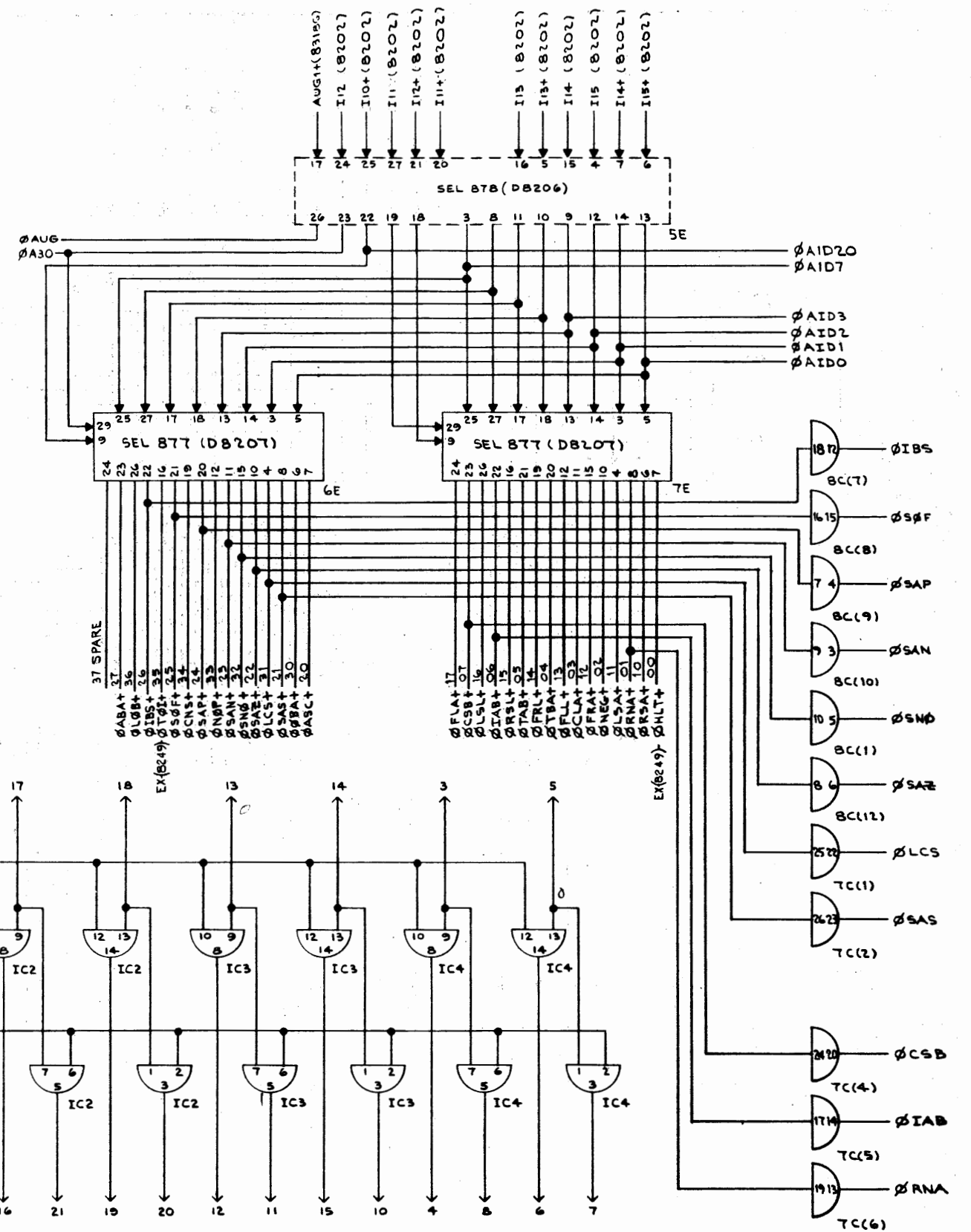
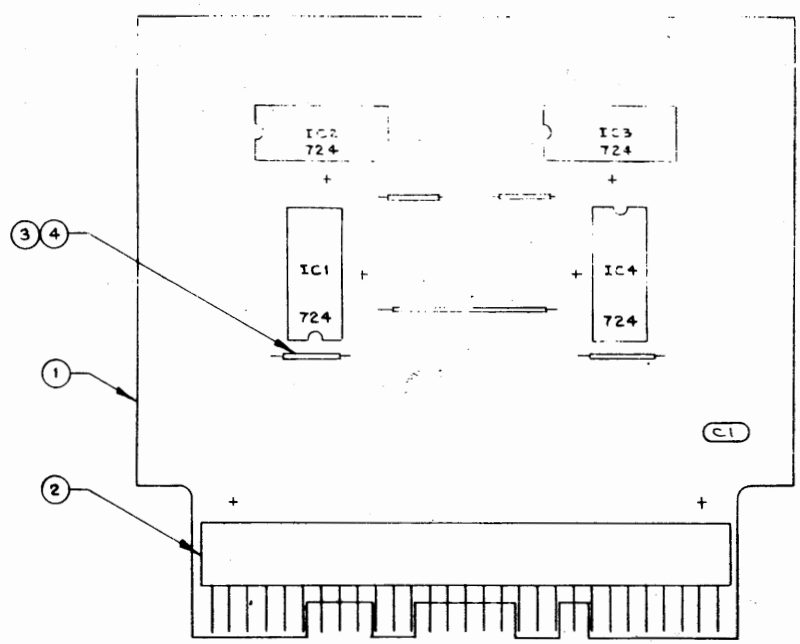
ITEM	DWG. OR PART NO.	DESCRIPTION
1	IC9	MCT89P INTEGRATED CIRCUIT-MOTOROLA
3	IC6	MC792P
	IC5	
	IC4	
2	IC3	MC725P
	IC2	
	IC8	
3	IC7	MC799P INTEGRATED CIRCUIT-MOTOROLA
	IC1	
1	C1	UK-10-104 CAPACITOR-.1μF±20%, 10V, CRL
AR	4	AWG 24 SLEEVING-TEFLON, THINWALL (COLOR OPT)
AR	3	AWG 24 WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-000 CONNECTOR-ELCO
1	1	SEL 878 PRINTED CIRCUIT (FOR REV. SEE A51140)

DR	DATE	DESCRIPTION
RKM	12-15-66	SYSTEMS ENGINEERING LABORATORIES INCORPORATED
WC	1-9-67	SCHEMATIC & ASSEMBLY
		RTL
		AUGMENTED OPERATION
		DECODER #1

CODE IDENT NO.	20886	SIZE	D	8206	REV	B
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT. FOR DRILLING DIMS. SEE DB-93-B77. FOR DIMENSIONAL DIMS SEE CS-900.

REV	DESCRIPTION	DATE	APPD
D	B207		
A	67-204 - ADDED ADDRESS ØAID20 & ØAID7. BB 6-27-67	7/13/67	RKM
B	67-445 ADDRESSES REVISED AND LINE TITLES ADDED E.R.C. 10-24-67	10/30/67	AS



ITEM	DWG. OR PART NO.	DESCRIPTION
4	IC4 IC3 IC2 IC1	MCT24P INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK-10-104 CAPACITOR-.1µF±20%, 10V, CRL
AR 4	AWG 24	SLEEVING-TEFLON, THINWALL/COLOR OPT.
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
1 2	00-7022-029-00000	CONNECTOR-ELCO
1	SEL 877	PRINTED CIRCUIT (FOR REV. SEE ASSEMBLY)
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	RKM	12-15-66
CR	WC	2-22-67
CHKD	J. P. [Signature]	5-31-67
APP'D	[Signature]	5/31/67
REV	AS	5/16/67

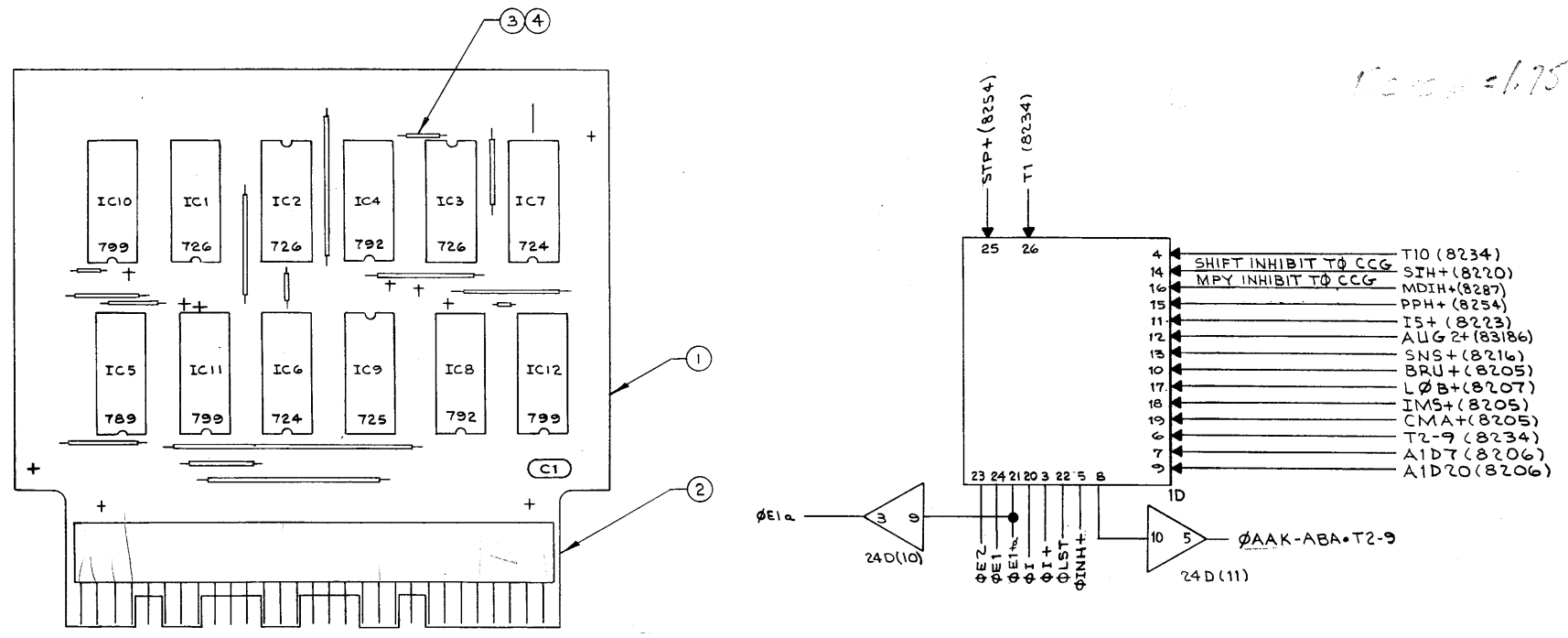
**SCHEMATIC & ASSEMBLY
RTL
AUGMENTED OPERATION
DECODER - 2**

CODE IDENT NO.
20886

D	B207	B
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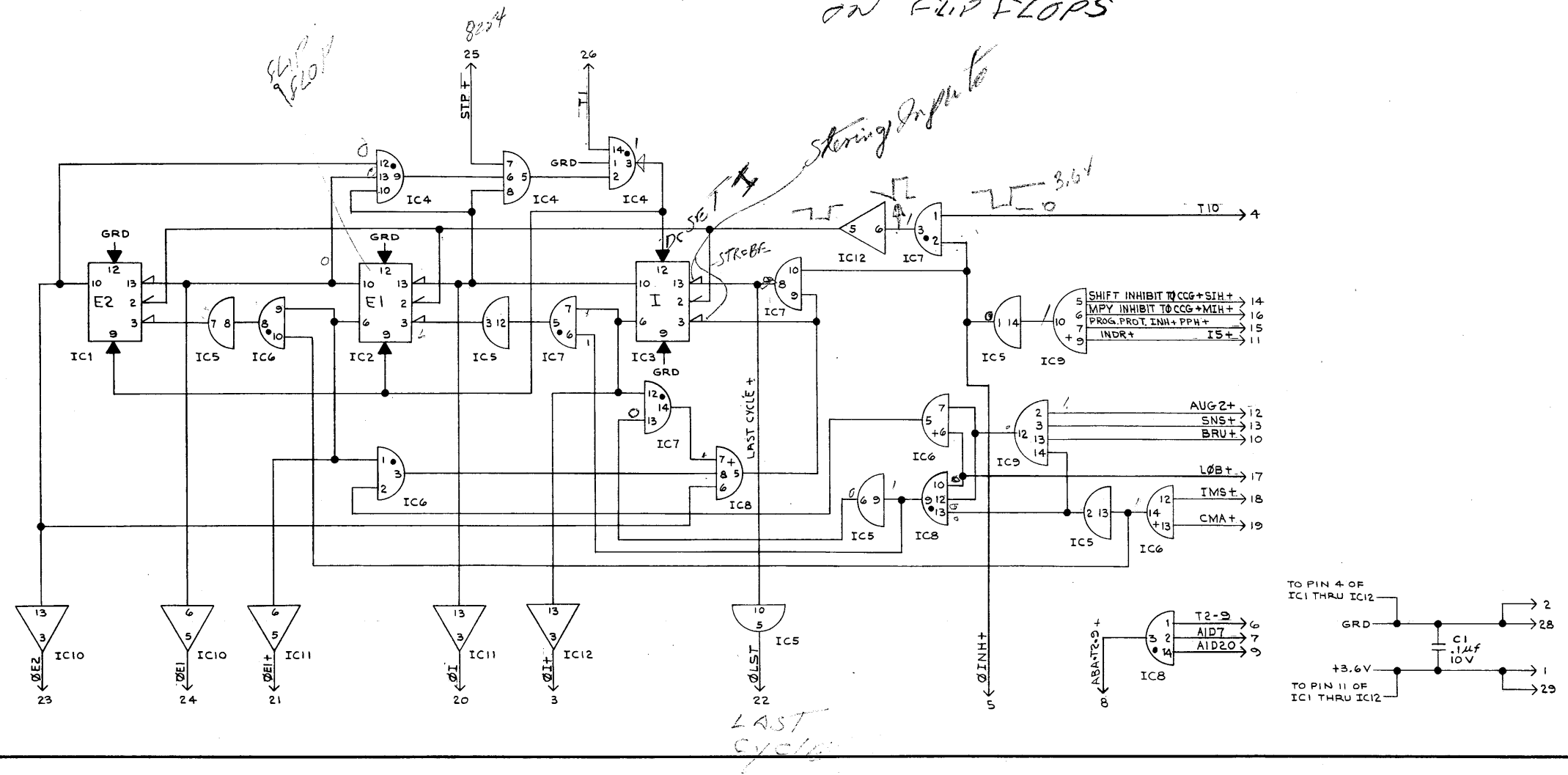
NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-BB6. FOR DIMENSIONAL DWG. SEE CB600.

REV	DESCRIPTION	DATE	APP'D
D	8208		C
A	67-940; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 5/7/67	9/2/67	
B	67-445; ADDED 24D(10), ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10/24/67	10/30/67	
C	68-199; DESTINATION OF PIN 12 WAS AUG+(8205). <i>Walt</i> 4-18-68 RKM	4/18/68	



1.75 MS

2" 0" a TOGGLE ON FLIP FLOPS

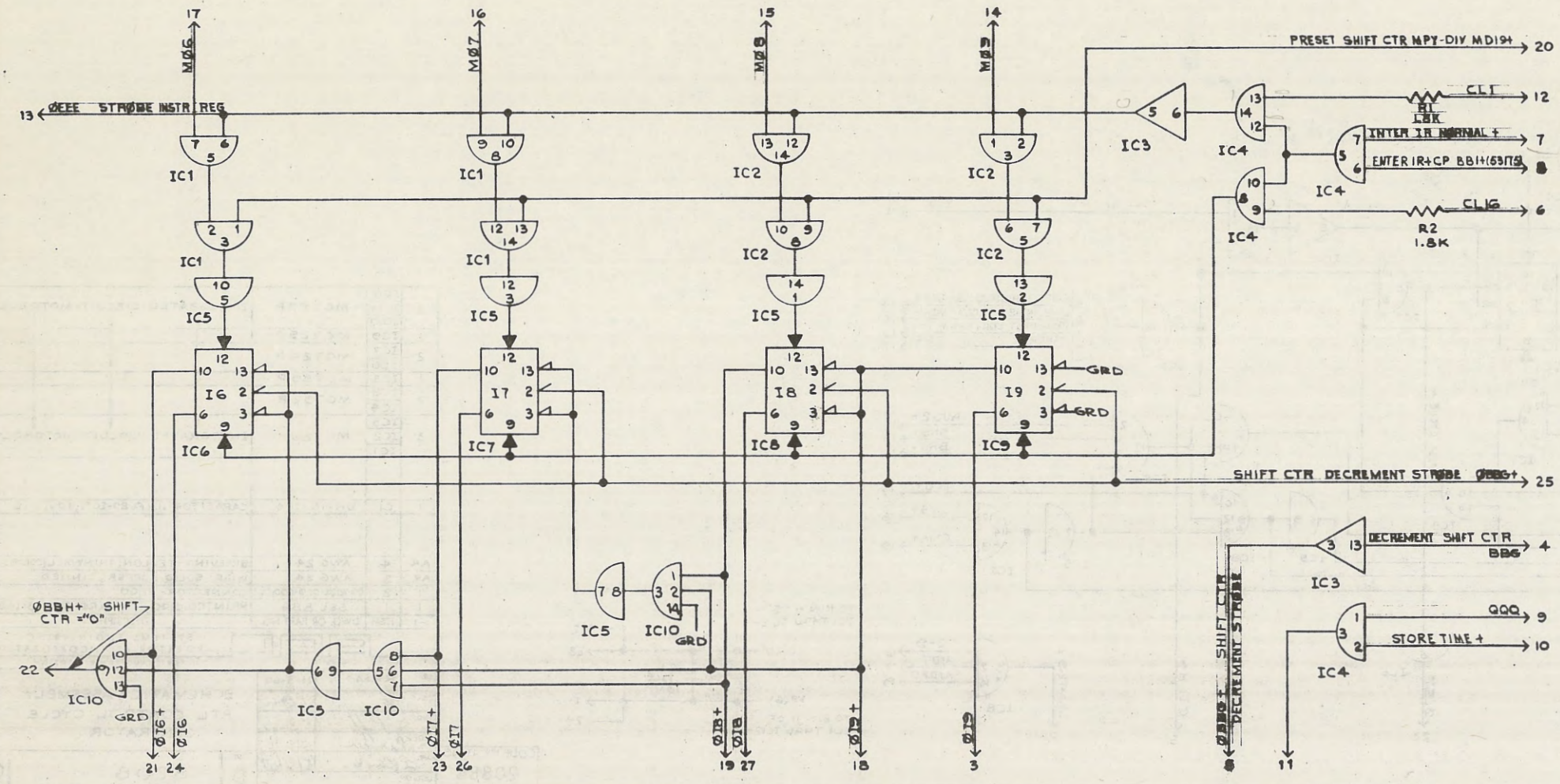
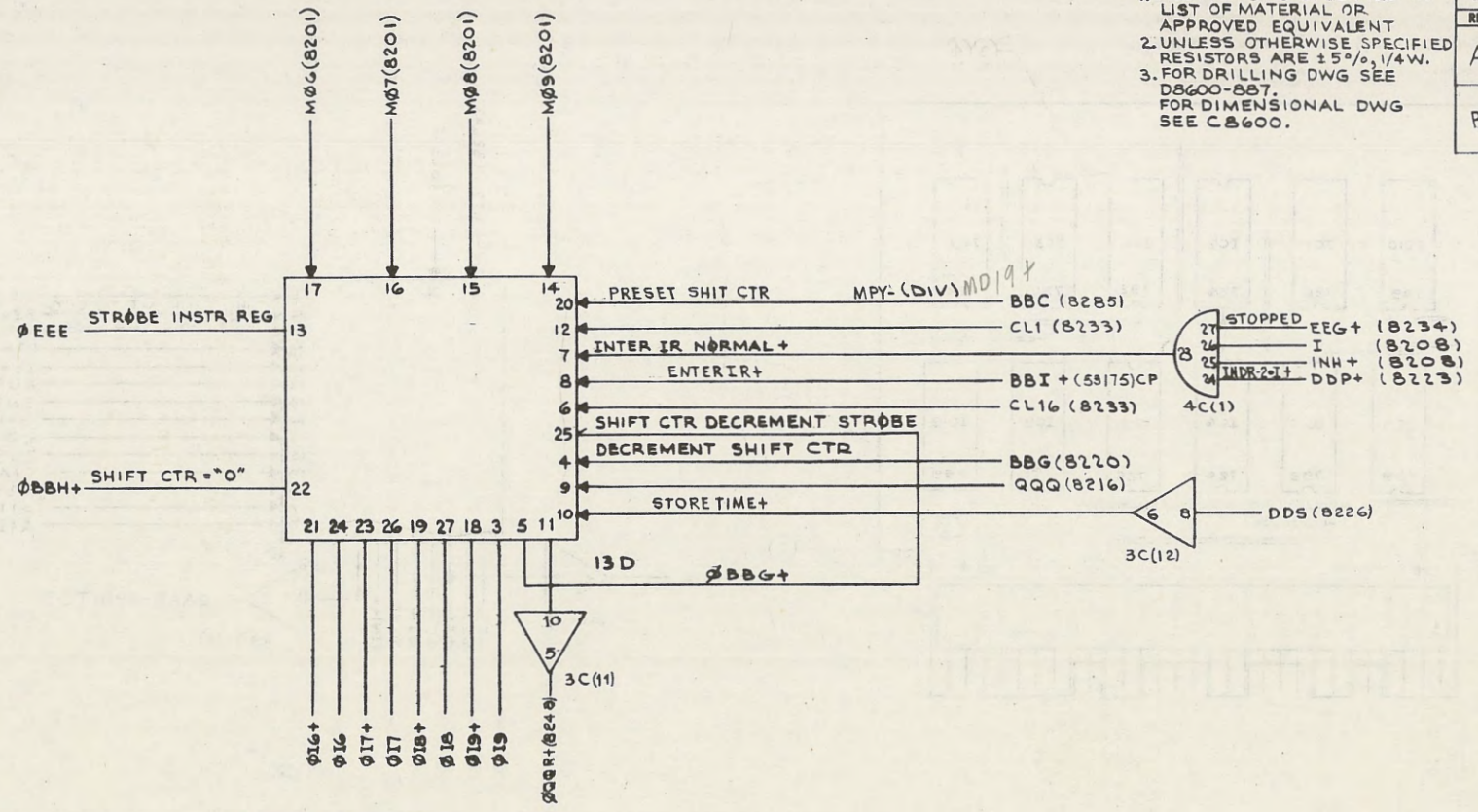
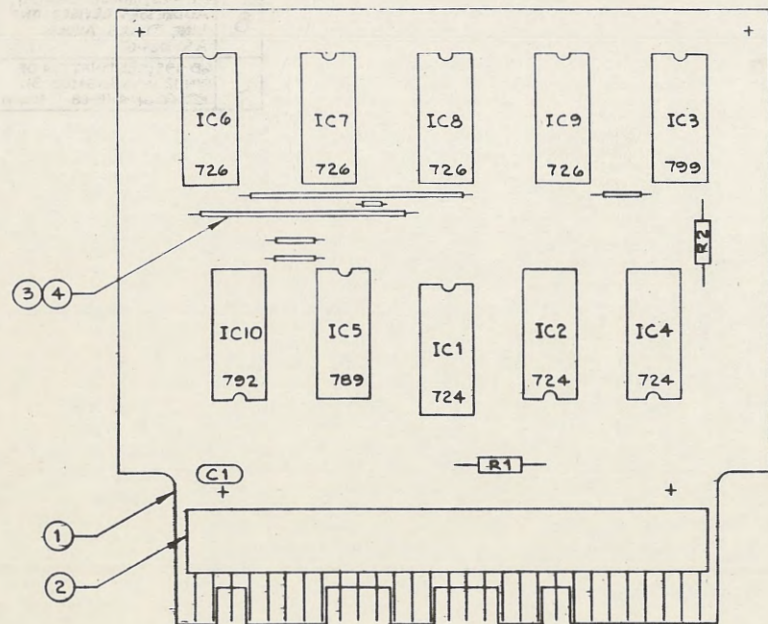


ITEM	QTY	DESCRIPTION
3	IC12, IC11, IC10	MC799P INTEGRATED CIRCUIT-MOTOROLA
1	IC9, IC7, IC6	MC725P
2	IC7, IC6	MC724P
1	IC5, IC8	MC789P
2	IC4	MC792P
3	IC3, IC2, IC1	MC726P INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK-10-104 CAPACITOR-.1µF±80-20%, 10V, CRL
AR	4	AWG 24 SLEEVING-TEFLON, THINWALL (COLOR OPT)
AR	3	AWG 24 WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001 CONNECTOR-ELCO
1	1	SEL 886 PRINTED CIRCUIT-(FOR REV. SEE A51140)
-1	1	ITEM DWG. OR PART NO. DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	RKM	11-3-66
CK.	uc	12-29-66
ENG.	<i>J. Ruff</i>	5-31-67
PROJ. APP.	<i>Walt</i>	5/31/67
APP.	<i>Walt</i>	5/31/67
USED ON		

CODE IDENT NO.	20886	SIZE	D	8208	REV	C
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING DWG SEE D8600-887.
 FOR DIMENSIONAL DWG SEE C8600.

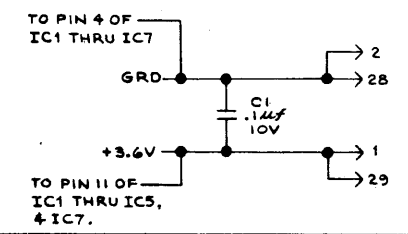
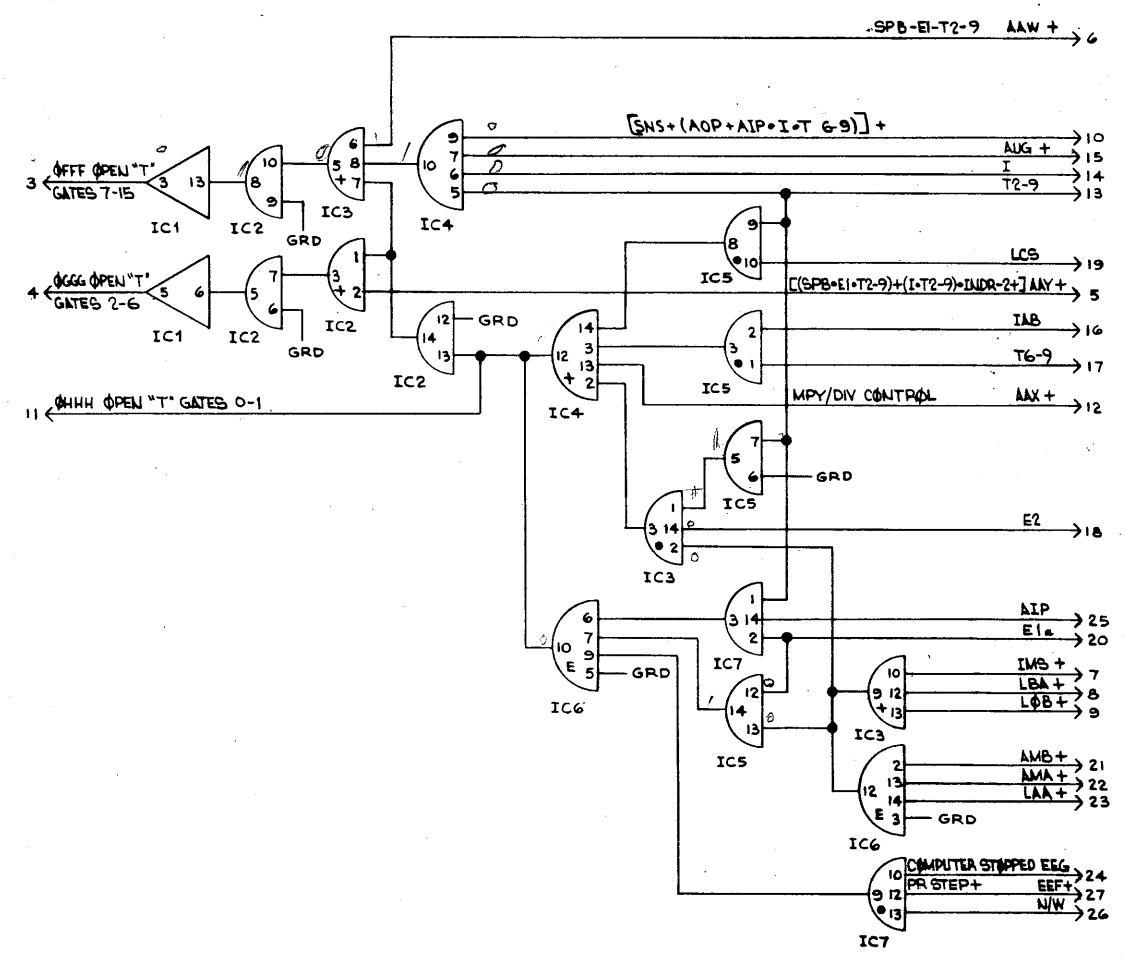
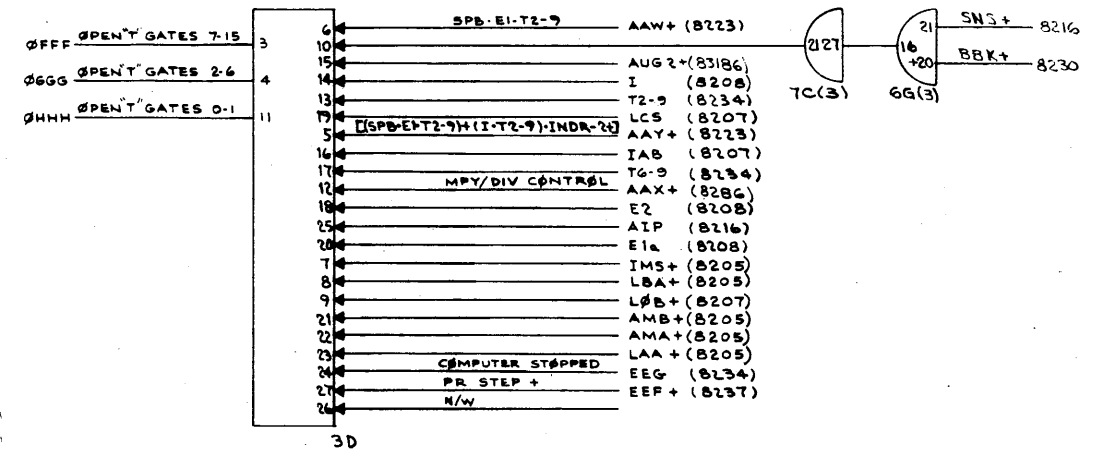
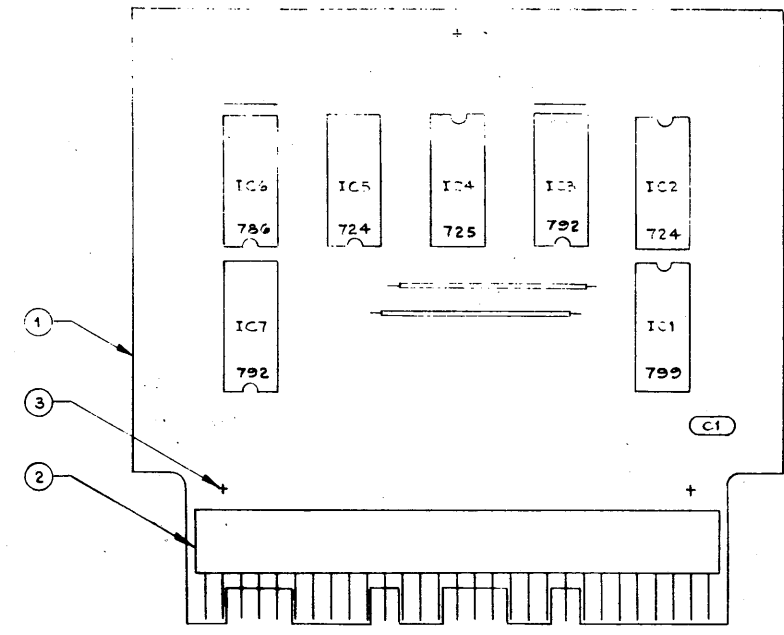
REV	DESCRIPTION	DATE	APPD
D	8209		
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/7/67 RKM	9/12/67	AK
B	67-445; ADDRESSES REVISED. ADDED 3C(11), 3C(12) AND LINE TITLES ADDED. E.P.C. 10-24-67.	10/13/67	AK



QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
2	R2 R1	RC07GF1B2J	RESISTOR-1.8K, ALLEN BRADLEY
1	IC10	MC792P	INTEGRATED CIRCUIT-MOTOROLA
4	IC8 IC9 IC7 IC6	MC726P	
1	IC5	MC789P	
1	IC3	MC799P	
3	IC4 IC2 IC1	MC724P	
1	C1	UK 10-104	CAPACITOR-.1uF+80-20%, 10V, CRL
AR 4	AWG 24		SLEEVING-TEFLON, THINWALL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-1022-079-000-001	CONNECTOR-ELCO
1	1	SEL 887	PRINTED CIRCUIT-(REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	RKM	2-1-67	SCHEMATIC & ASSEMBLY RTL SHIFT COUNTER
CL	WC	2-20-67	
ENGR.	J. K. [Signature]	5-31-67	
PROJ. APP.	[Signature]	5/1/67	
CODE IDENT NO.	20886		
SIZE	D	8209	REV B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-890.
 FOR DIMENSIONAL DWG. SEE CB600.

REV	DESCRIPTION	DATE	APPD
D	8210		
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. 9/7/67 RKM	9/12/67	
B	67-445; ADDED 6G(3), ADDRESSES REVISED AND LINE TITLES ADDED. A.S. 10/24/67	10/30/67	

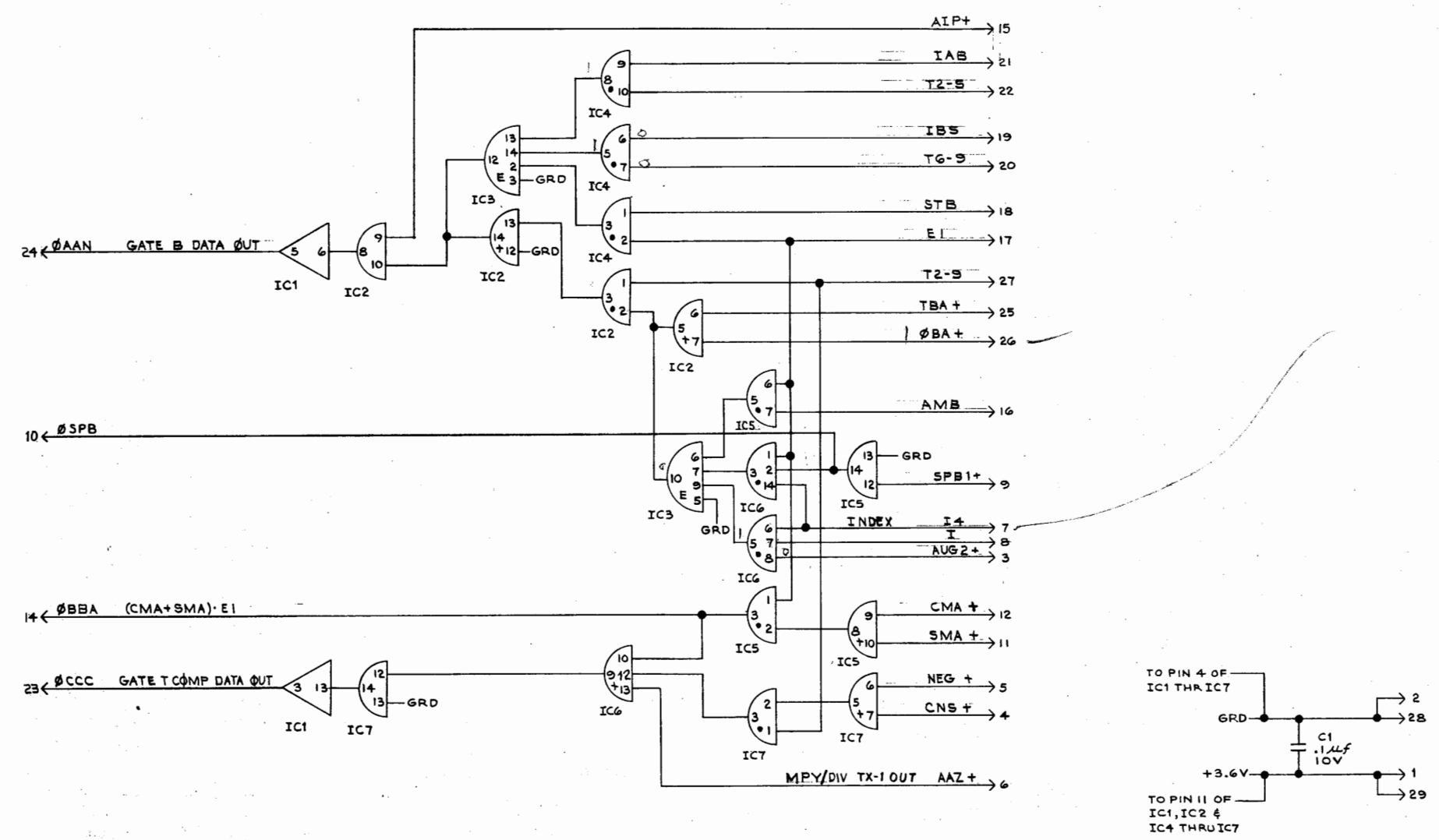
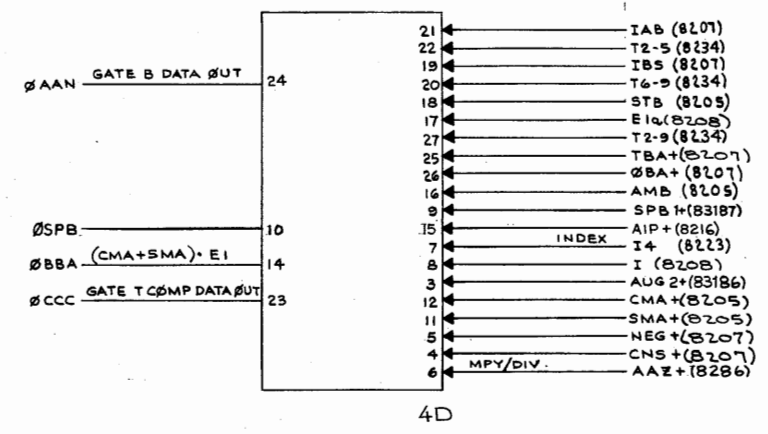
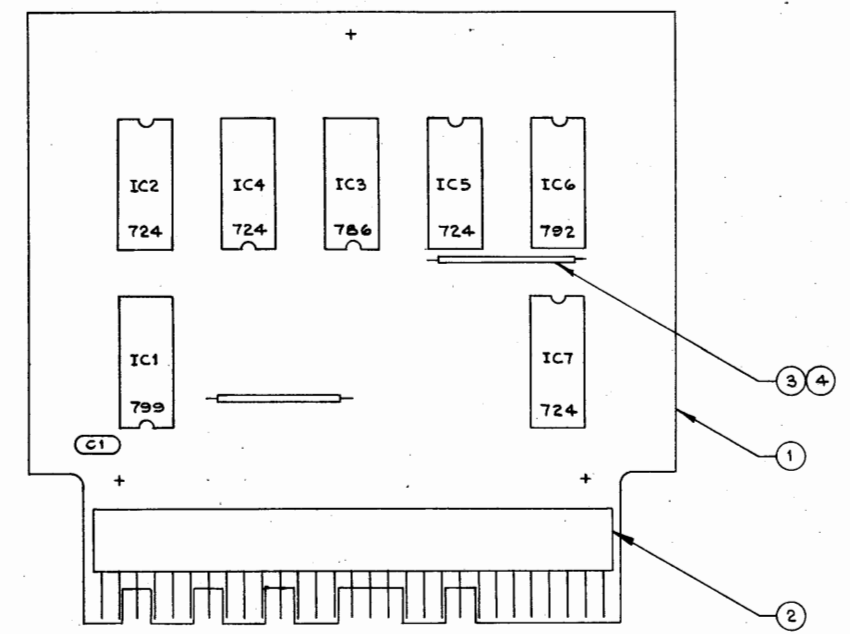


QTY	ITEM	DWG. OR PART NO.	DESCRIPTION				
1	IC6	MC786P	INTEGRATED CIRCUIT - MOTOROLA				
1	IC4	MC725P					
2	IC7	MC792P					
2	IC5	MC724P					
1	IC2	MC799P	INTEGRATED CIRCUIT - MOTOROLA				
1	IC1	MC799P	INTEGRATED CIRCUIT - MOTOROLA				
1	C1	UK-10-104	CAPACITOR - .1uF ± 20%, 10V, CRL				
AR 3	AWG 24		WIRE - SOLID COPPER, TINNED				
1	2	80-7022-029-000-001	CONNECTOR - ELCO				
1	1	SEL 890	PRINTED CIRCUIT (FOR REV. SEE A51140)				
-1	ITEM	DWG. OR PART NO.	DESCRIPTION				
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA							
DR	RKM	12-17-66	SCHEMATIC & ASSEMBLY RTL "T" OUTPUT GATE CONTROL				
CL	WC	2/22/67					
ENG.		5/12/67	<table border="1"> <tr> <td>CODE IDENT NO.</td> <td>8210</td> </tr> <tr> <td>REV</td> <td>B</td> </tr> </table>	CODE IDENT NO.	8210	REV	B
CODE IDENT NO.	8210						
REV	B						
APP.		5/12/67					
APPROVED		5/12/67					
USED ON							

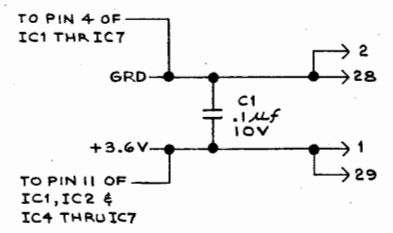
CODE IDENT NO.
20886

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-889 FOR DIMENSIONAL DWG. SEE C8600.

REV	DESCRIPTION	DATE	APPD
D	8211		
A	67-3401 DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMI 5/7/67 RKM	5/11/67	RKM
B	67-445; ADDRESSES REVISED & LINE TITLES ADDED. C.THEW 10-24-67 AS.	10/30/67	AS
C	68-269; PIN 9 IC2 WENT TO GRD. JWM 5-7-68 G+W	5/6/68	JWM



Scaling

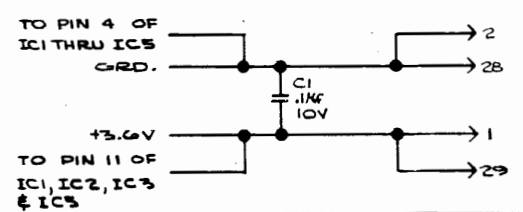
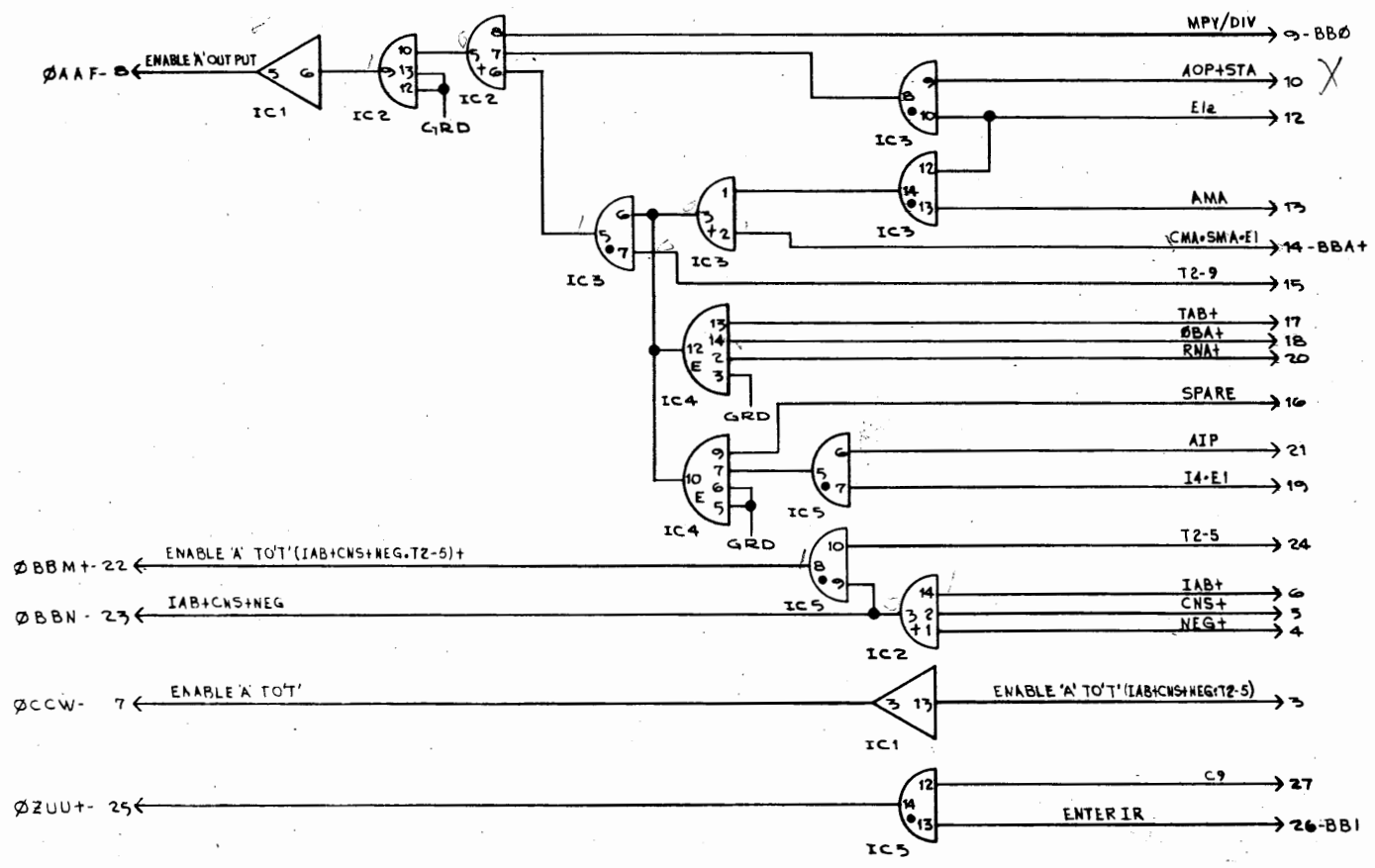
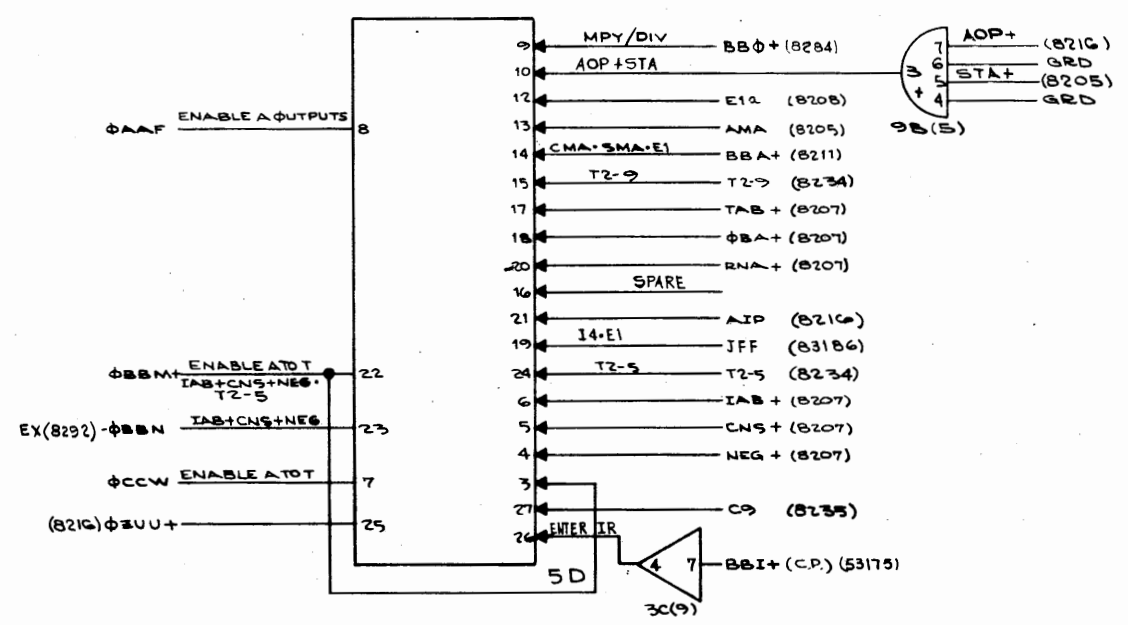
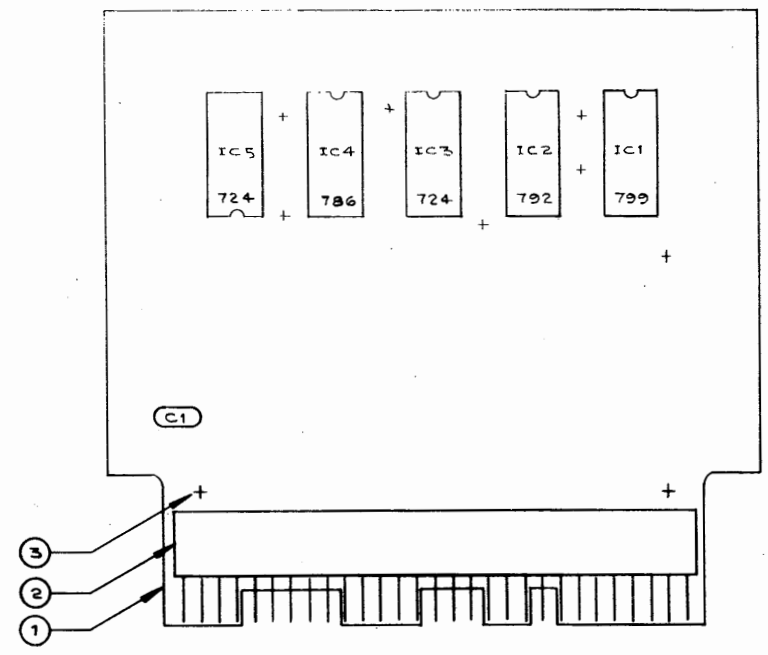


QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
1	IC6	MCT92P	INTEGRATED CIRCUIT-MOTOROLA
1	IC3	MCT86P	INTEGRATED CIRCUIT-MOTOROLA
4	IC5 IC7 IC4 IC2	MCT24P	INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MCT99P	INTEGRATED CIRCUIT-MOTOROLA
	C1	UK-10-104	CAPACITOR-.1µF±80-20%,10V,CRL
AR 4	AWG 24		SLEEVING-TEFLON,THINWALL(COLOR OPT)
AR 3	AWG 24		WIRE-SOLID COPPER,TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 889	PRINTED CIRCUIT-(FOR REV.SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	RKM	12-17-66	SCHEMATIC & ASSEMBLY RTL "B" OUTPUT & "T" COMP OUTPUT GATE CONTROL
CL.	WC	2-20-67	
ENG.	J. R. [Signature]	5-31-67	
PROF. APP.	[Signature]	5/31/67	
APP.	[Signature]	8/2/67	

CODE IDENT NO.	20886	SIZE	D	8211	REV	C
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-B01 FOR DIMENSIONAL DWG SEE C0600

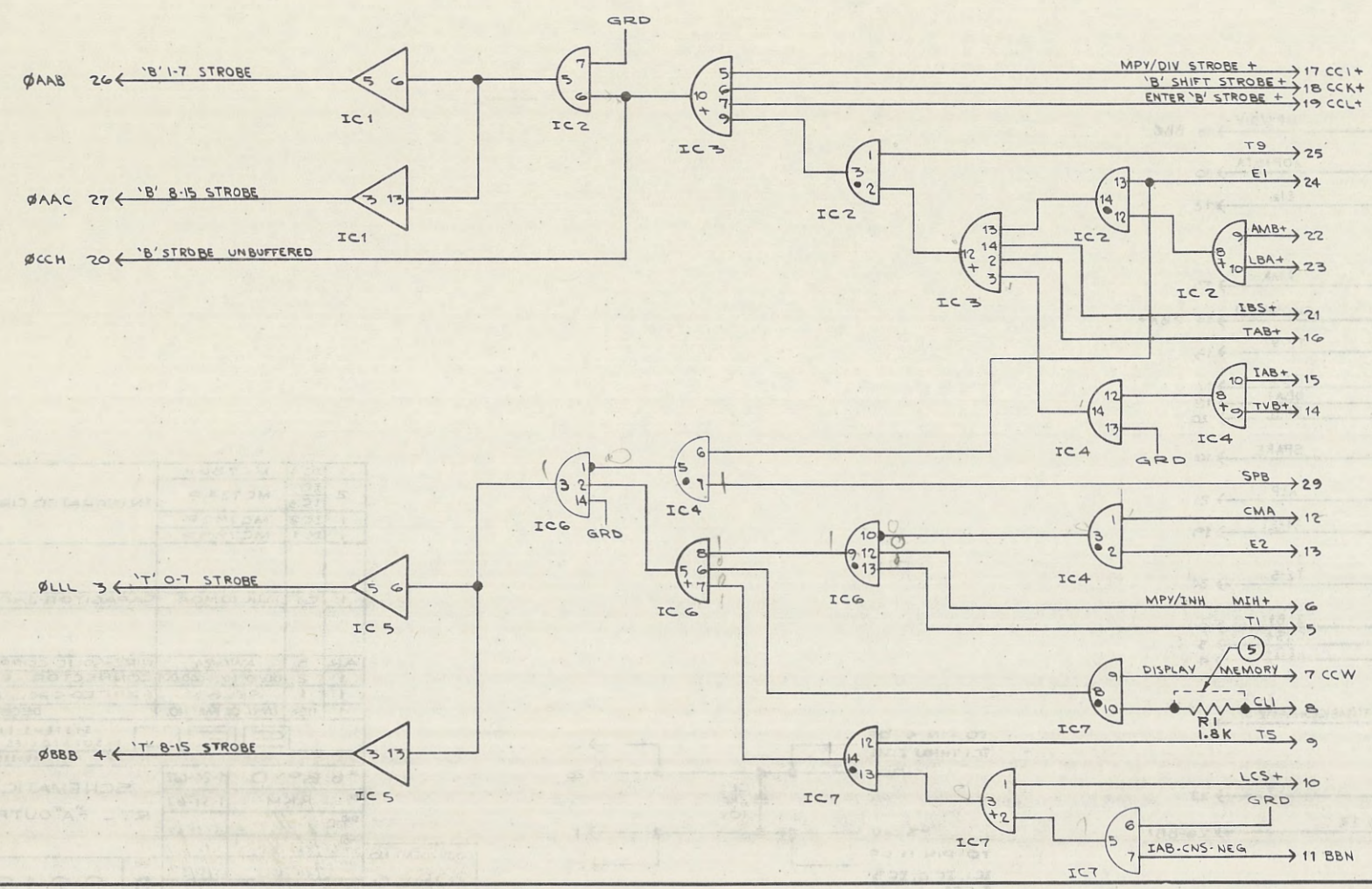
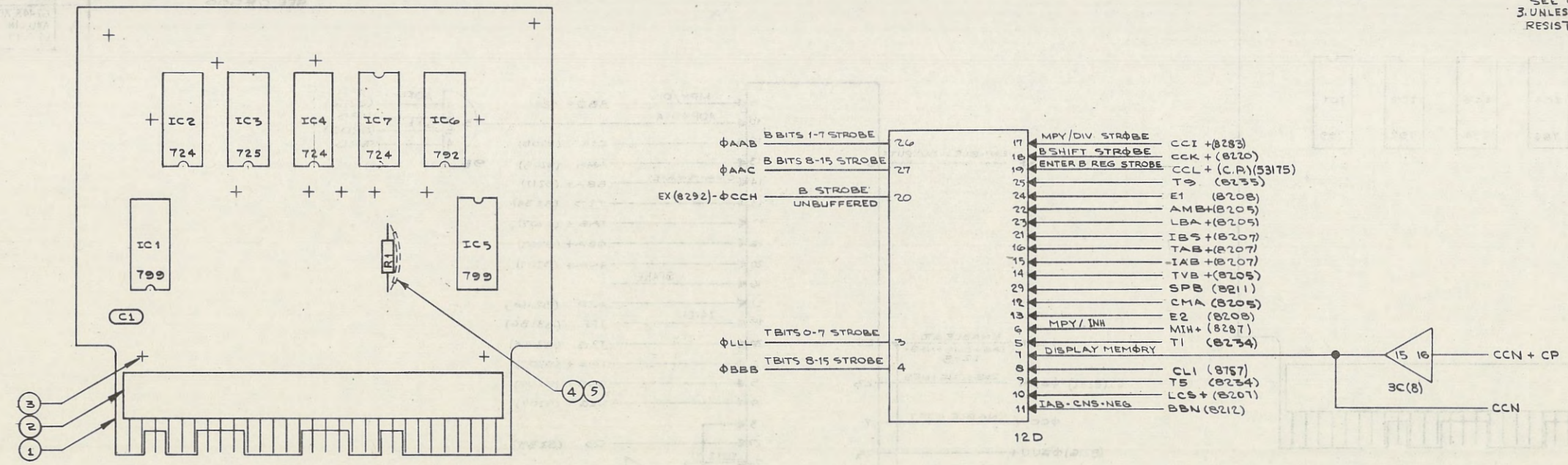
REV	DESCRIPTION	DATE	APPD
D	8212		B
A	67-204; ADDED BBK+ TO PIN 16 OF LOGIC BB 6-27-67	7/2/67	RKM
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED I.P.C. 10-24-67.	10/30/67	AS



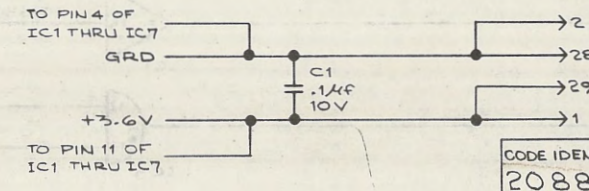
1	IC4	MCT86P	INTEGRATED CIRCUIT-MOTOROLA
2	IC5	MC724P	
1	IC2	MC792P	
1	IC1	MC799P	
1	C1	UK 10-104	
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	SELB01	PRINTED CIRCUIT(FOR REV. SEE AS140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	b. BOYD	1-24-67	SCHEMATIC & ASSEMBLY RTL "A" OUTPUT GATES
CR	RKM	1-31-67	
ENG.		5-22-67	
PROJ. APP.		2/12/67	
APP.		5/14/67	
USED ON	20886		
REV	D	8212	B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D 8600-892 FOR DIMENSIONAL DWG. SEE C 8600
 3. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 15% 1/4W.

SIZE	D	8213	REV	C
REV	A	G7-299; ADDED DASH 2. G7WOLF 8/21/67 UC	DATE	8/21/67
	B	67-445; ADDED 3C(8), ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-24-67	DATE	10/20/67
	C	68-199; ADDED (53175) TO PIN 19.	DATE	4/18/68
		4-18-68 RKM		



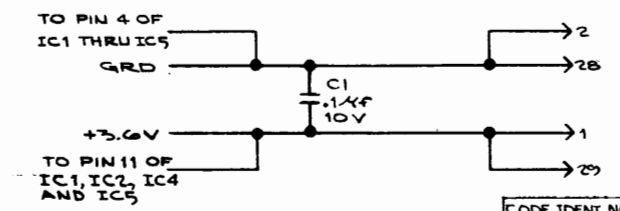
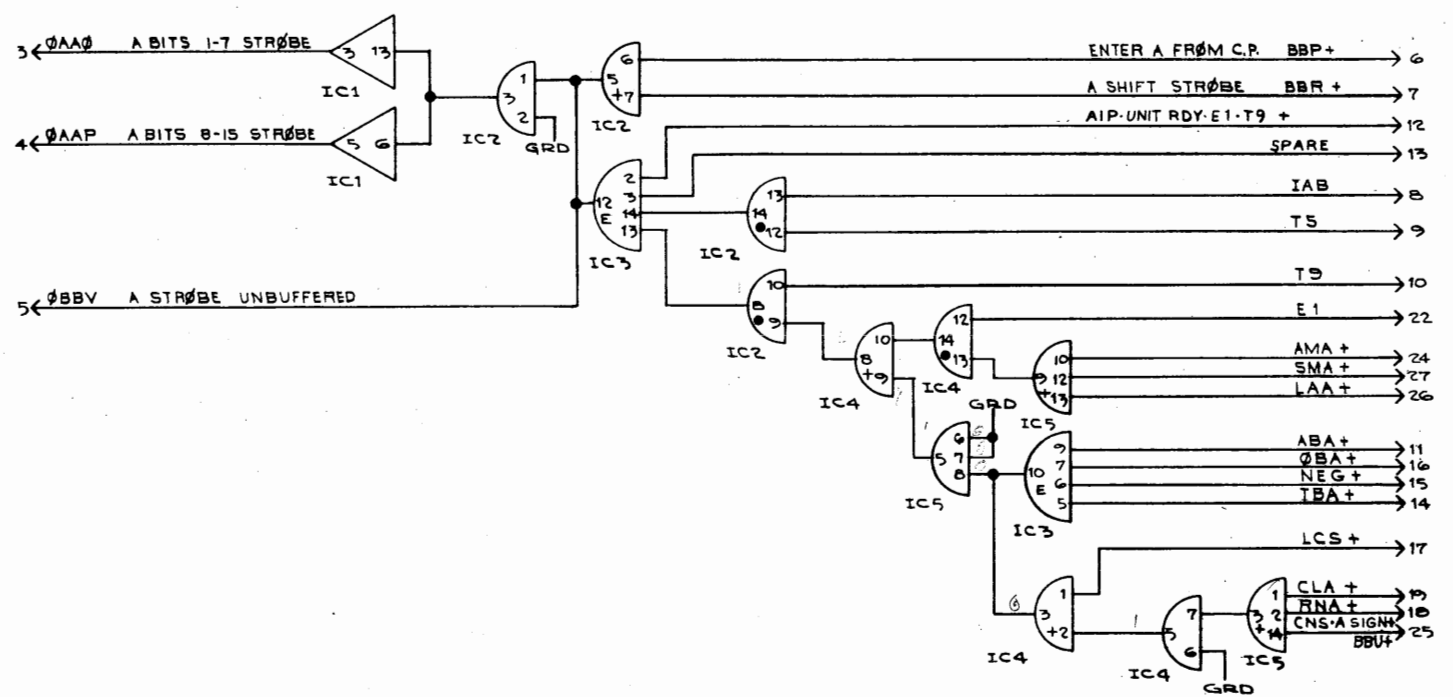
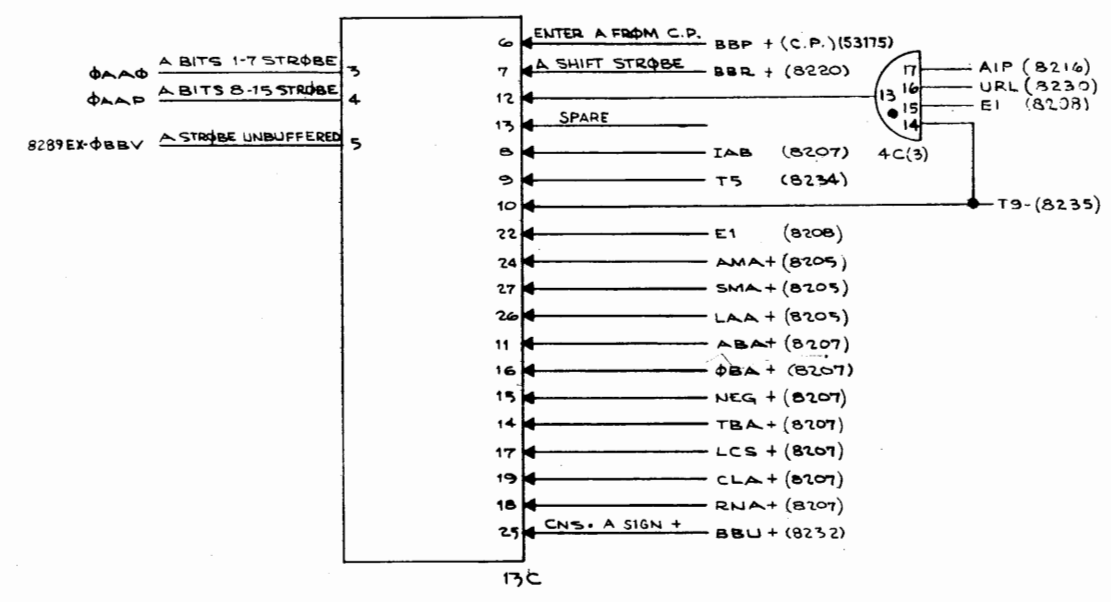
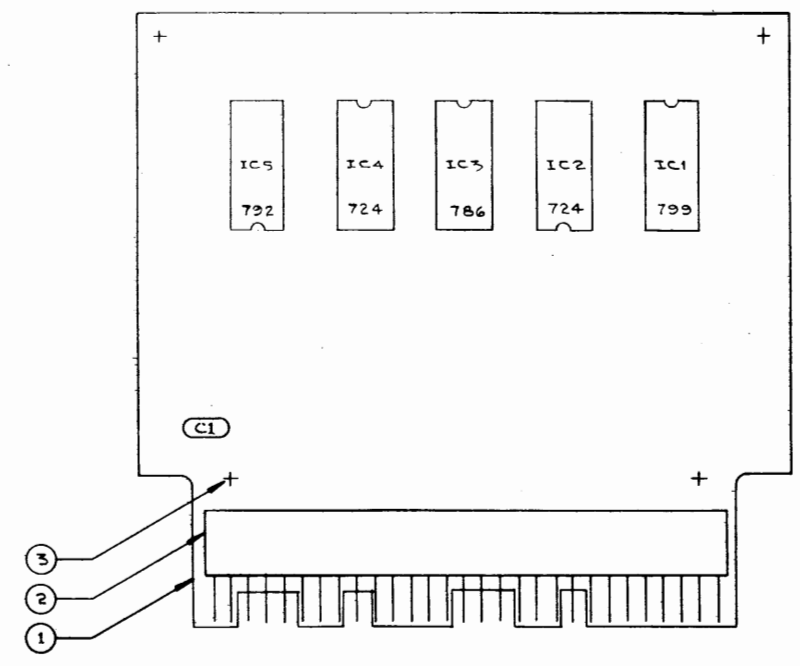
1	R1	RCOTGFI82J	RESISTOR-1.8K, ALLEN BRADLEY
1	IC6	MCT92P	
1	IC3	MCT25P	
3	IC7	MCT24P	INTEGRATED CIRCUIT-MOTOROLA
2	IC5	MCT99P	
1	C1	UK10-104	CAPACITOR-.14F+80-20%10V.CRL
1	5		JUMPER
AR	AR	4	AWG 24 SLEEVING-TEFLON, THIN WALL
AR	AR	3	AWG 24 WIRE-SOLID COPPER, TINNED
1	1	2	007022-029-000-001 CONNECTOR-ELCO
1	1	1	SEL 892 PRINTED CIRCUIT(FOR REV. SEE AS140)
-2	-1	ITEM	DWG. OR PART NO. DESCRIPTION



CODE IDENT NO	20886	SIZE	D	8213	REV	C
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE DBG00-B93 FOR DIMENSIONAL DWG. SEE CBG00.

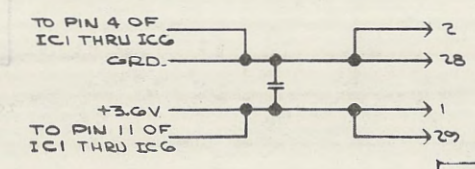
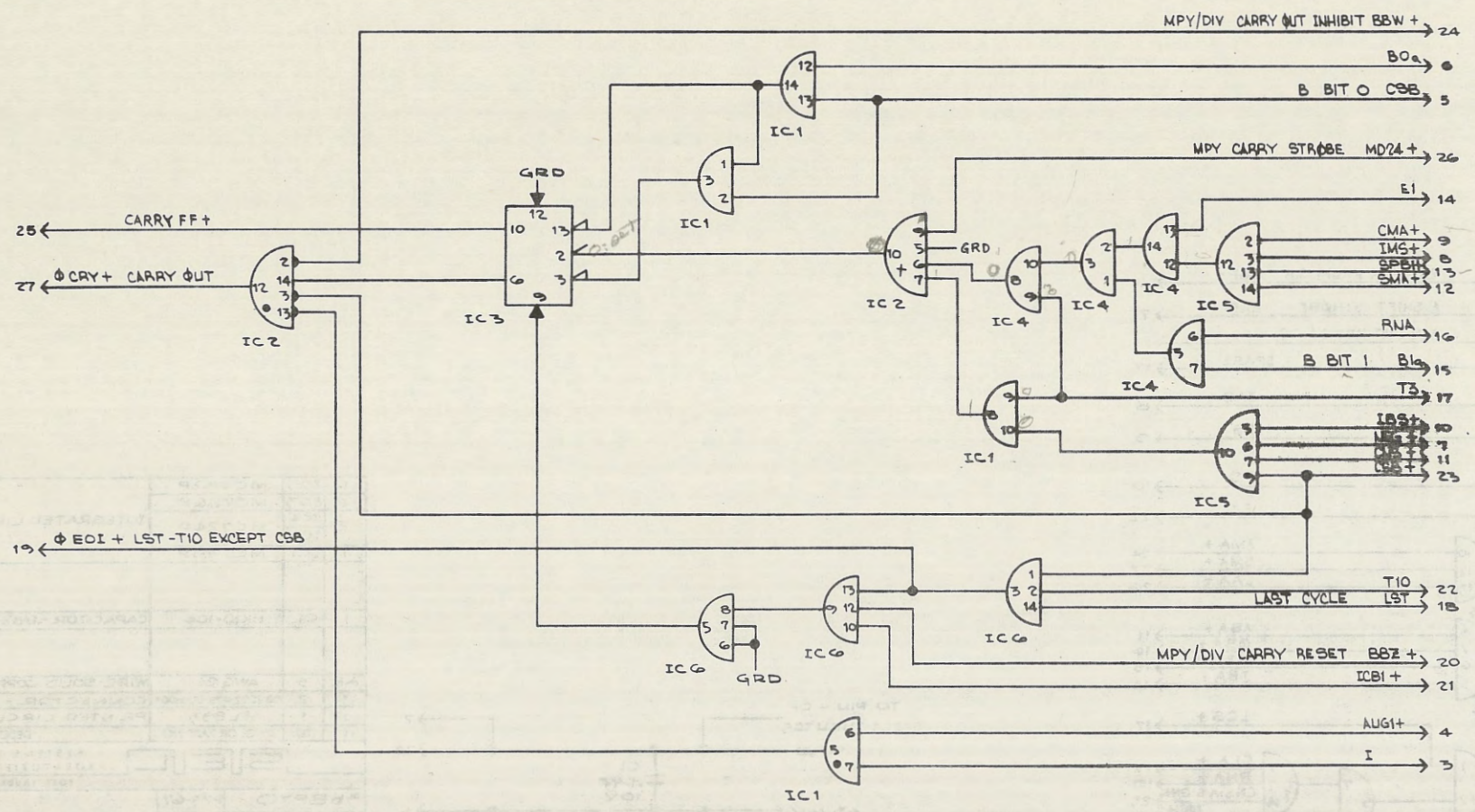
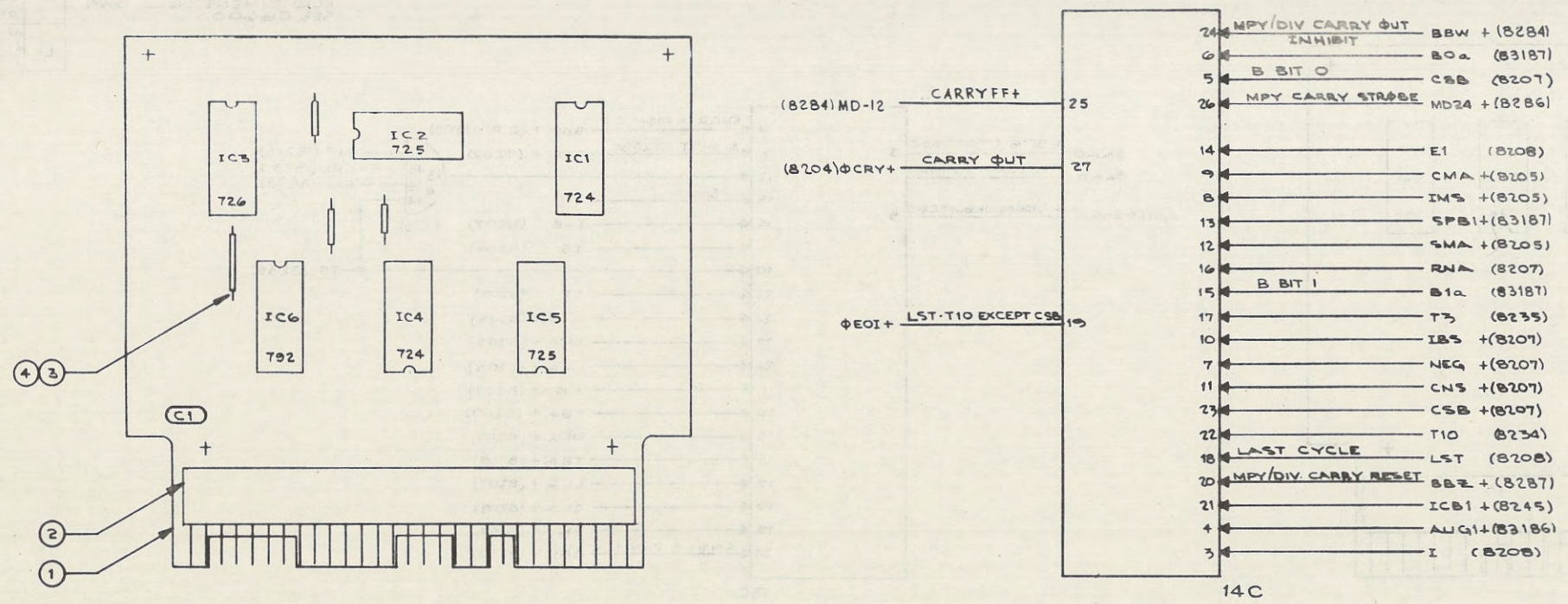
REV	DESCRIPTION	DATE	APPD
D	B 2 1 4		
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 8/7/67 RKM	8/12/67	OW
B	67-445; ADDRESSES REVISED & LINE TITLES ADDED. C.THEW 10-24-67 C/TW	10/23/67	OW



1	IC5	MC792P		
1	IC3	MC786P		
2	IC4	MC724P	INTEGRATED CIRCUIT-MOTOROLA	
1	IC2	MC724P		
1	IC1	MC799P		
1	C1	UK10-104	CAPACITOR-.144F±20%,10V,CRL	
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED	
1	2	00-7022-029-000-001	CONNECTOR - ELCO	
1	1	SEL 893	PRINTED CIRCUIT (FOR REV. SEE AS140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR	b6BYD	1-23-67	SCHEMATIC & ASSEMBLY RT L "A" REGISTER STROBE	
CR	RKM	1-28-67		
ENGR	J. Kelly	5-31-67		
PROJ	210-C	5/31/67		
CODE IDENT NO	20886		SIZE	D 8214
REV			REV	B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-894 FOR DIMENSIONAL DWG. SEE CB600

REV	D	8215	REV	B
REV	A	67-340: DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. R2 9/7/67 RKM	DATE	9/12/67
REV	B	67-445: ADDRESSES REVISED AND LINE TITLE ADDED E.P.C. 10-24-67. AS	DATE	10/30/67

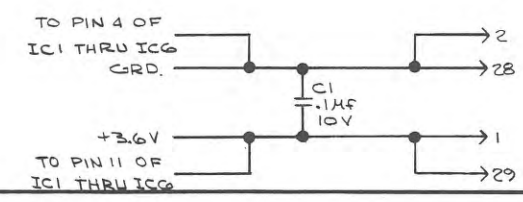
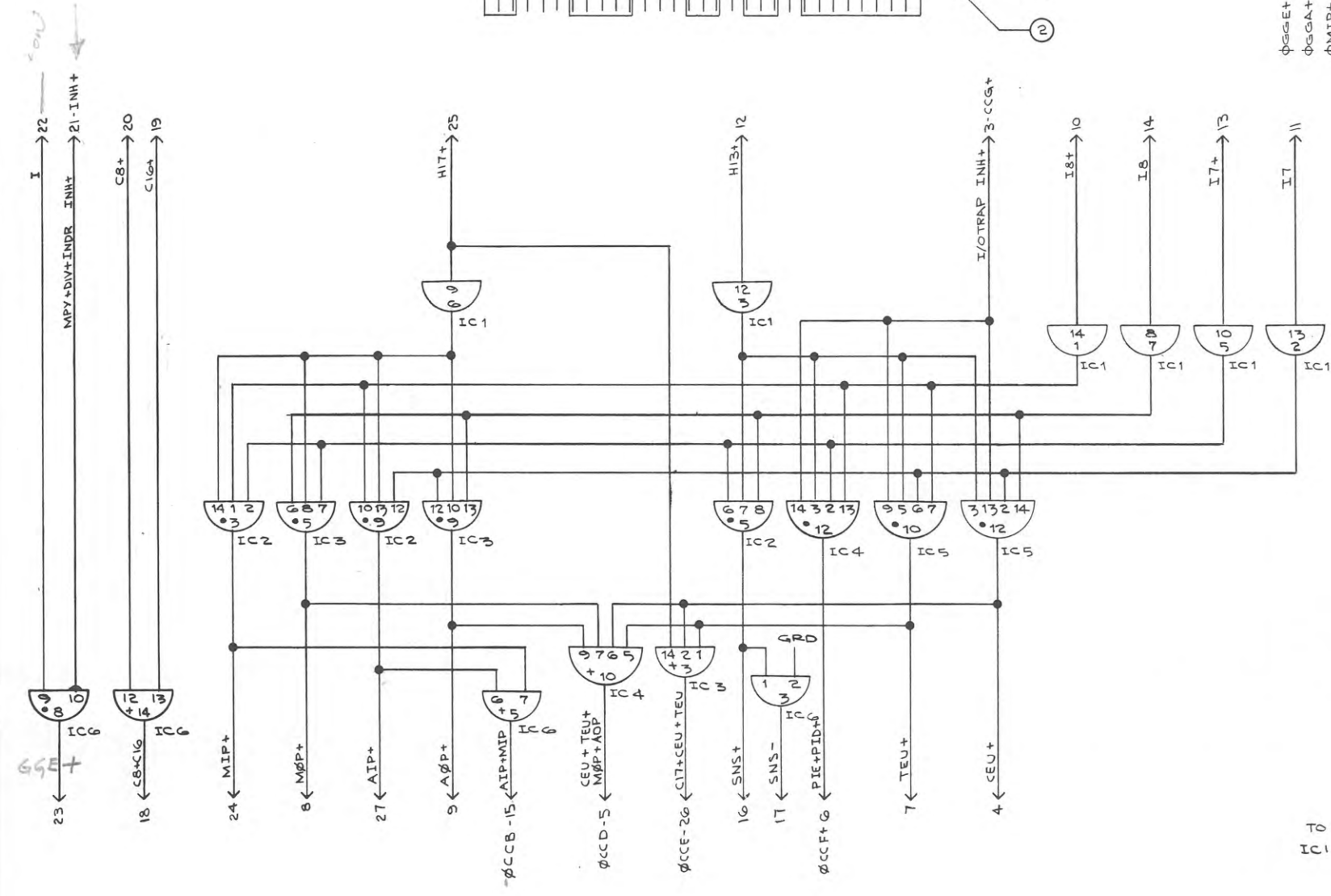
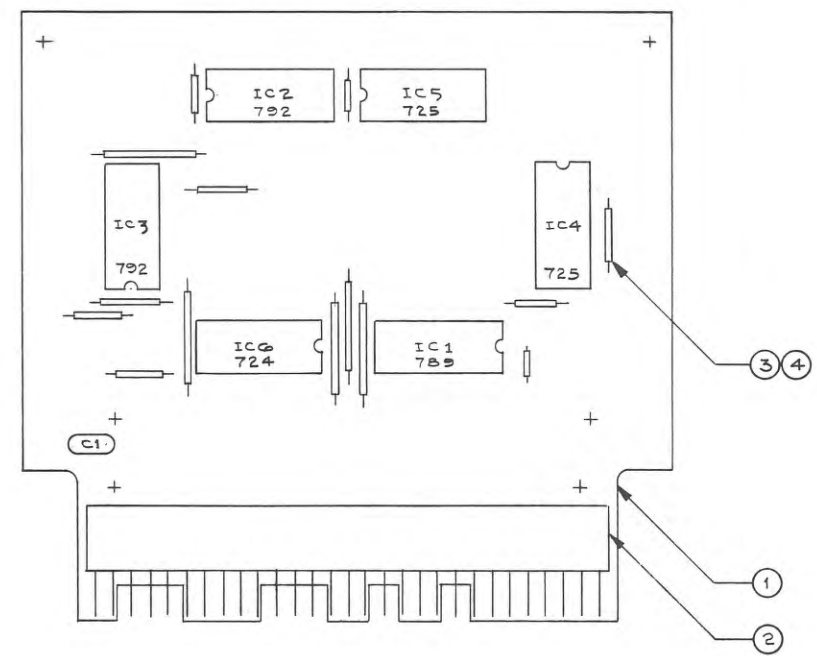
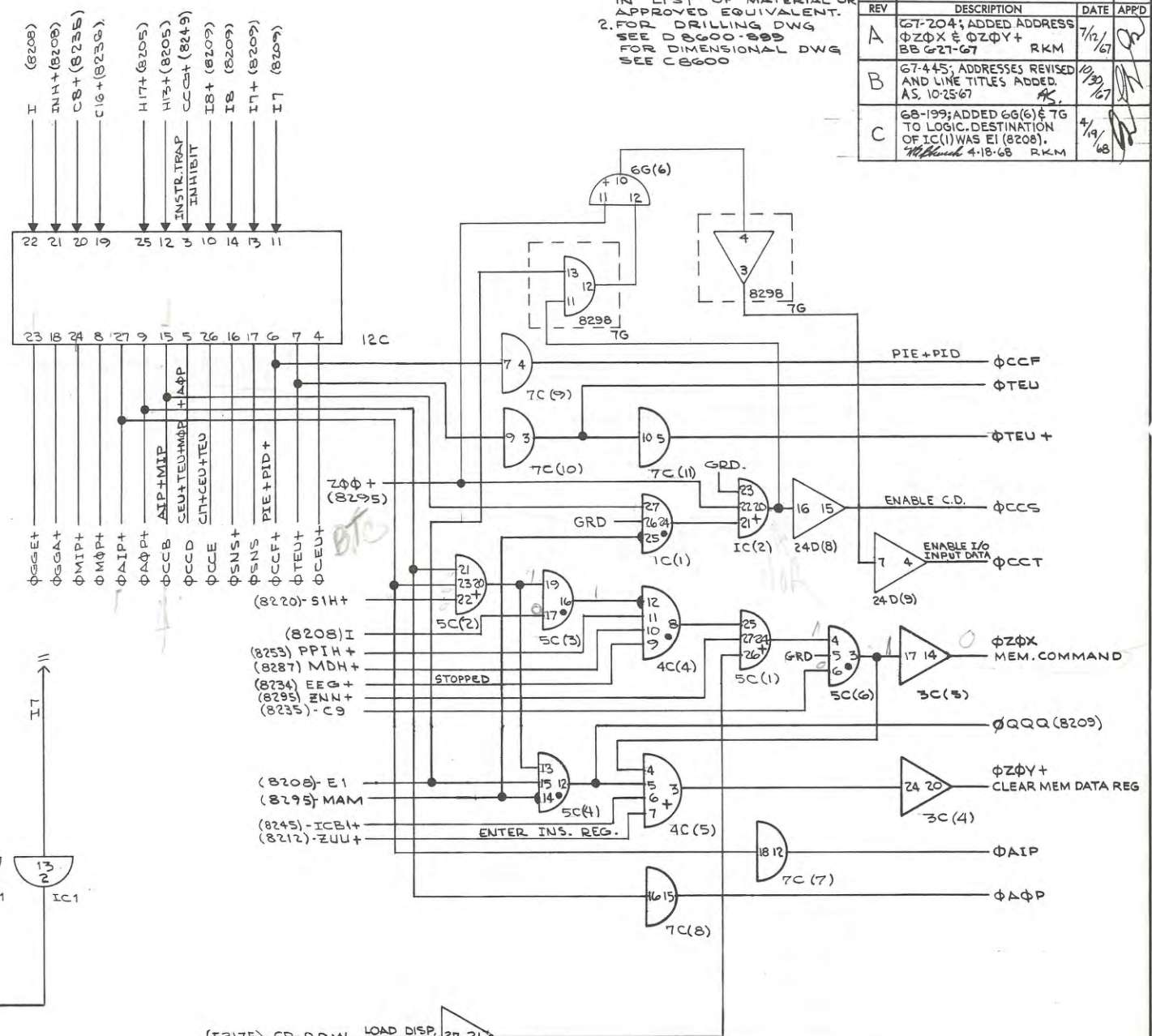


1	IC6	MC792P	
1	IC3	MC726P	
2	IC5	MC725P	INTEGRATED CIRCUIT-MOTOROLA
2	IC4	MC724P	
1	C1	UK10-104	CAPACITOR-.1uF+80-20%,10V,CRL.
AR	4	AWG 24	SLEEVING-TIFLON, THINWALL (COLOR OPT)
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022029000-001	CONNECTOR - E L C O
1	1	SEL 894	PRINTED CIRCUIT (FOR REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEI		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR	b. BOYD	1-25-67	
CK	RKM	1-27-67	
ENGR.	<i>[Signature]</i>	5/31/67	
APP.	<i>[Signature]</i>	5/31/67	
CODE IDENT NO.	20886	SIZE	D
USED ON		REV	B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE D 8600-889 FOR DIMENSIONAL DWG SEE C 8600

REV	DESCRIPTION	DATE	APPD
D	8216		C
A	G7-204; ADDED ADDRESS $\phi Z\phi X$ & $\phi Z\phi Y$ + BB G27-67	7/12/67	RKM
B	G7-445; ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-25-67	10/30/67	RKM
C	G8-199; ADDED GG(6) & TG TO LOGIC. DESTINATION OF IC(1) WAS EI (8208). <i>Revised</i> 4-18-68 RKM	4/19/68	RKM



ITEM	DWG. OR PART NO.	DESCRIPTION
1	IC6	MC724P
2	IC5	MC725P
INTEGRATED CIRCUIT-MOTOROLA		
2	IC3	MC782P
1	IC1	MC789P
1	C1	UK10-104 CAPACITOR-1.4K+80-20%OV,CRL
AR	4	AWG 24 SLEEVING-TIFLON, THIN WALL (C-2108)
AR	3	AWG 24 WIRE-SOLID COPPER, TINNED
1	2	00-7072-029,000-001 CONNECTOR - E LCO
1	1	SEL899 PRINTED CIRCUIT (FOR REV. SEE AS140)

DR	DATE	DESCRIPTION
b. BOYD	1-17-67	SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
CC	RKM	1-20-67
ENG.	J. Kelly	5-27-62
APP.	J. Kelly	5/31/67

CODE IDENT NO 20886

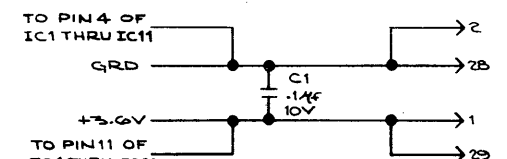
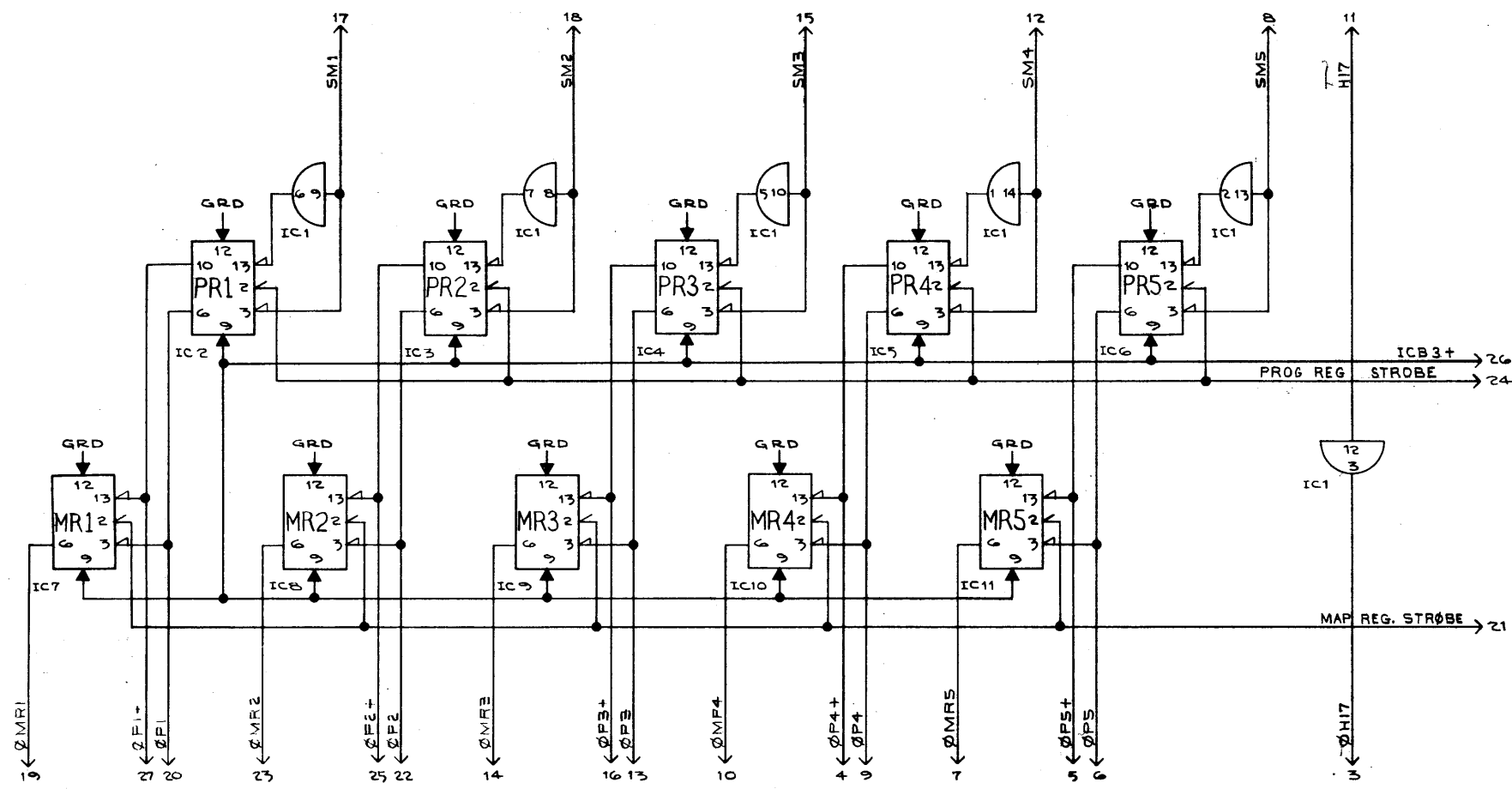
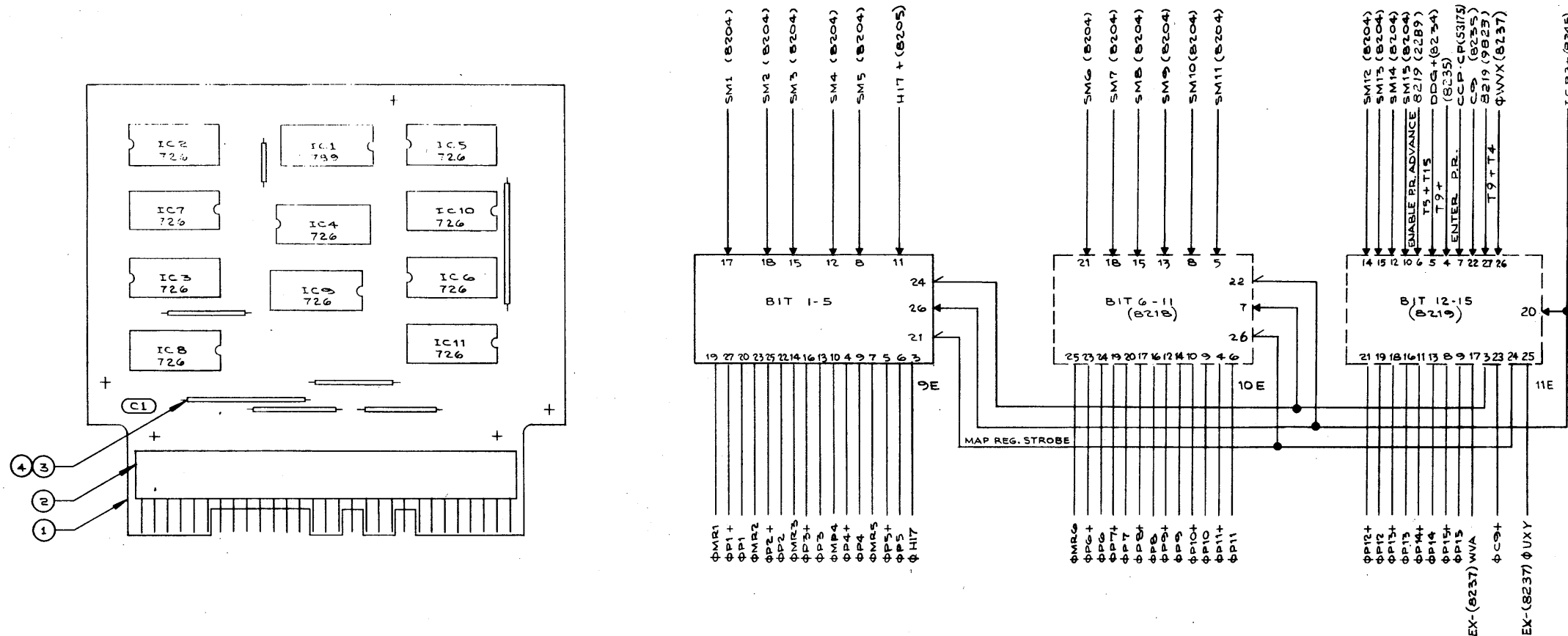
SIZE D 8216

REV C

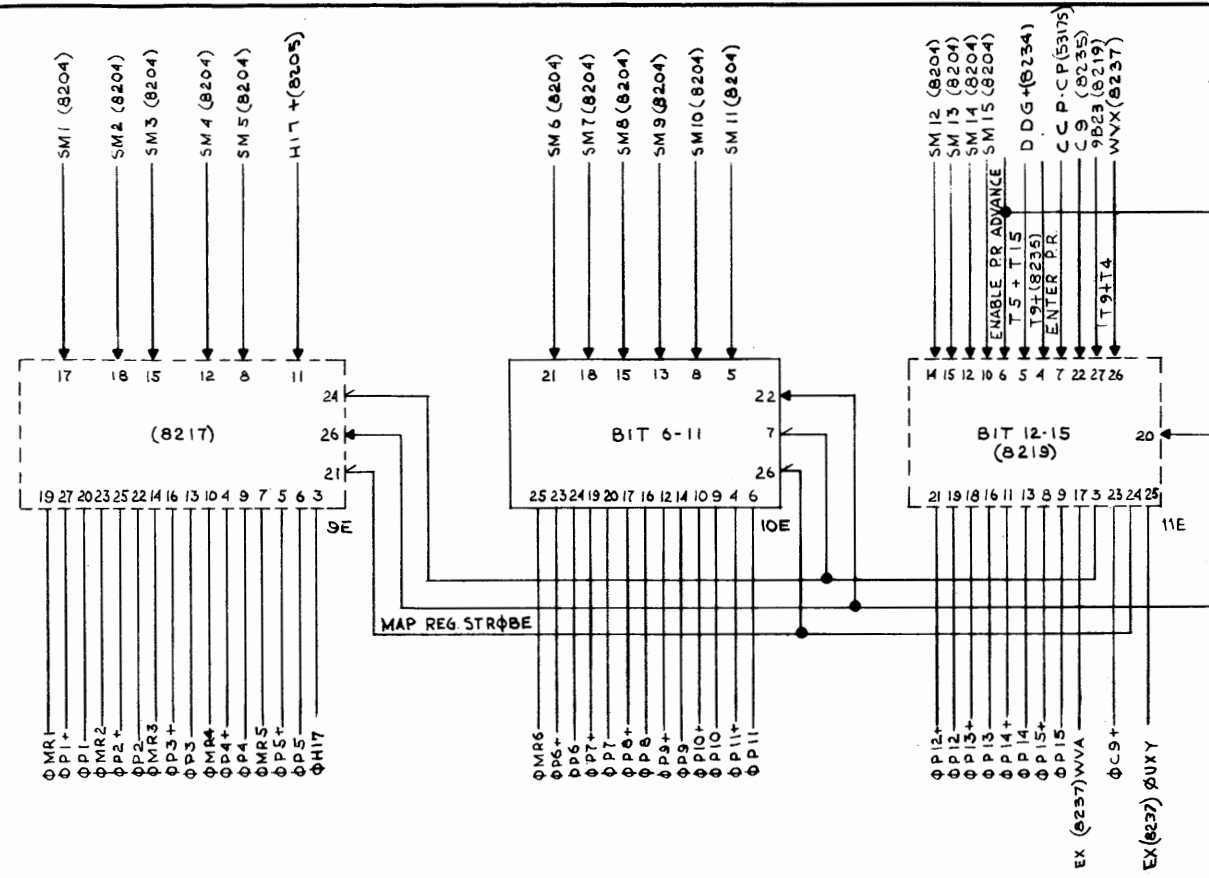
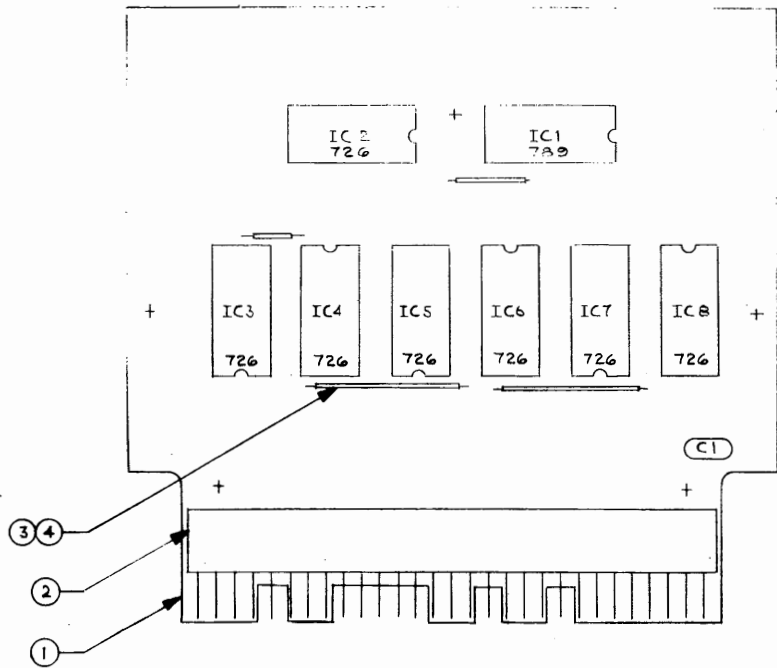
SHEET 1 OF 1

REV	DESCRIPTION	DATE	APPD
D	8217		
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/7/67 RKM	9/12/67	
B	67-445; DELETED 8G(7), 1C(4), 8G(6), 8G(2), 8G(8), ADDRESS REVISED & LINE TITLES ADDED C.THEW 10-25-67	10/30/67	

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D 8600-895 FOR DIMENSIONAL DWG. SEE C 8600.

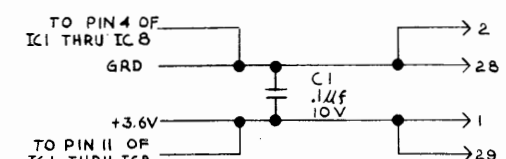
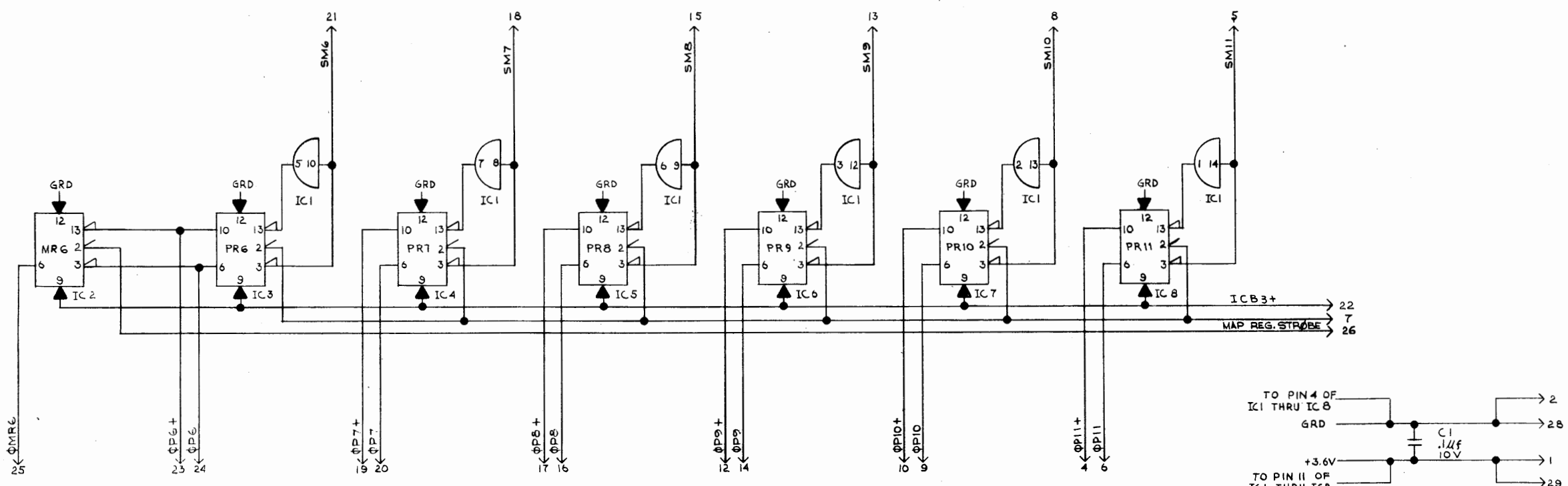


10	IC11 THRU IC2	MCT26P	INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MC7805P	
1	C1	UK10-104	CAPACITOR-1X4+80-20%,10V,CRL
AR 4	AWG 24		SLEEVING-TIFLON, THINWALL (CSL)
AR 3	AWG 24		WIRE SOLID COPPER, TINNED
1	2	00-7072-029-000-001	CONNECTOR - ELCO
1	1	SEL 895	PRINTED CIRCUIT (FOR REV. SEE 5114D)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	D. BOYD	1-24-67	SCHEMATIC & ASSEMBLY RTL PROGRAM REGISTER BITS 1-5
CC.	RKM	1-28-67	
ENG.	J. P. [Signature]	5-31-67	
PROJ.	[Signature]	5/31/67	
APP.	[Signature]	5/31/67	
CODE IDENT NO	20886		
USED ON			
SIZE	D	8217	REV B



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE DB600-896 FOR DIMENSIONAL DWG SEE C8600

REV	DESCRIPTION	DATE	APP'D
D	8218		
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. R. HUGHES 9/7/67 RKM	9/12/67	[Signature]
B	67-445; DELETED 8G(7) IC(4), 8G(6), 8G(2), 8G(8) ADDRESSES REVISED AND LINE TITLES ADDED E.P.C. 10-25-67	10/13/67	[Signature]



ITEM	DWG. OR PART NO.	DESCRIPTION
7	IC8 THRU IC2	MC 726 P INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MC 789 P INTEGRATED CIRCUIT-MOTOROLA
1	C1	WK 10-104 CAPACITOR-.1uF +80-20% 10V, CRL
AR 4	AWG 24	SLEEVING-TEFLON, THINWALL
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2 00-7022-029-000-001	CONNECTOR-ELCO
1	1 SEL 896	PRINTED CIRCUIT (FOR REV SEE AS140)
-1	ITEM	DESCRIPTION

DR. R.H.S. 2-7-67
 CC. R.K.M. 2-28-67
 ENG. [Signature] 5-31-67
 APP. [Signature] 5/12/67
 USED ON 20886

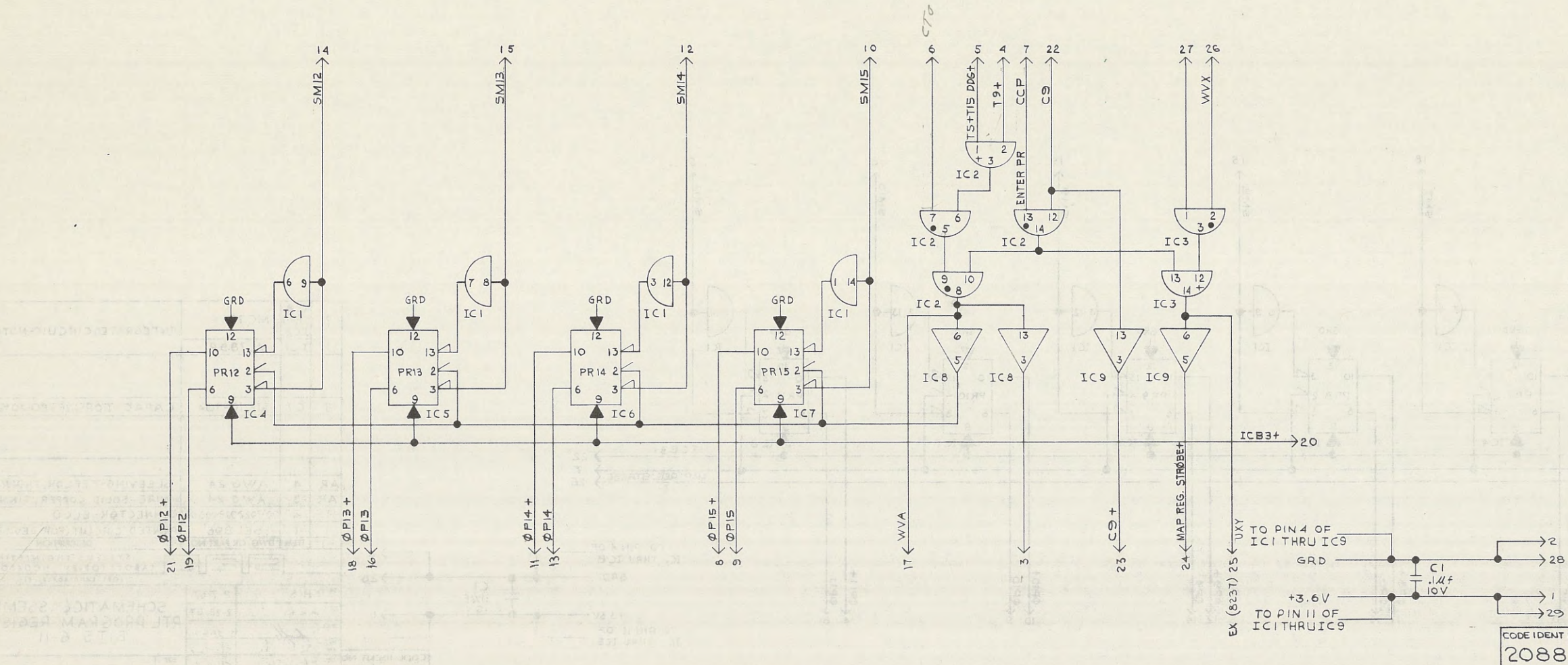
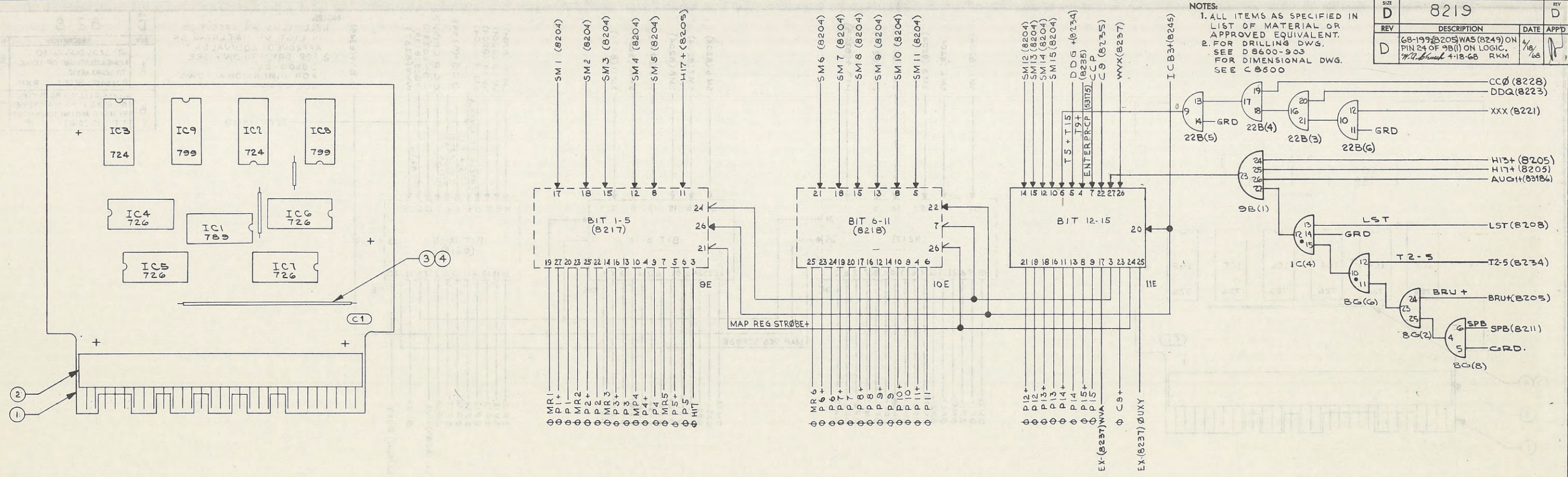
SYSTEMS ENGINEERING LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

SCHEMATIC & ASSEMBLY
 RTL PROGRAM REGISTER
 BITS 6-11

CODE IDENT NO. 20886
 SIZE D 8218
 REV B

SIZE	D	8219	REV	D
REV	D	DESCRIPTION	DATE	APPD
D	68-199	8205 WAS (8249) ON PIN 24 OF 9B(1) ON LOGIC.	4/18/68	RKM
		PRINTED CIRCUIT (FOR REV SEE A51140)		

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-903 FOR DIMENSIONAL DWG. SEE C.0500



2	IC9	MC 799 P	INTEGRATED CIRCUIT-MOTOROLA
4	IC7 THRU IC4	MC 726 P	
2	IC3	MC 724 P	
1	IC1	MC 789 P	
1	C1	UK10-104	CAPACITOR-.1µf+80-20%,10V,CRL
AR	4	AWG 24	SLEEVING-TEFLON-THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	SEL 903	PRINTED CIRCUIT (FOR REV SEE A51140)
-	ITEM	DWG. OR PART NO.	DESCRIPTION

SYSTEMS ENGINEERING
 LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

DR. R. SANBORNE 2-12-67
 CC RKM 2-23-67
 ENG. J. P. [Signature] 5-31-67
 APP. [Signature] 5/31/67
 USED ON [Signature] 5/31/67

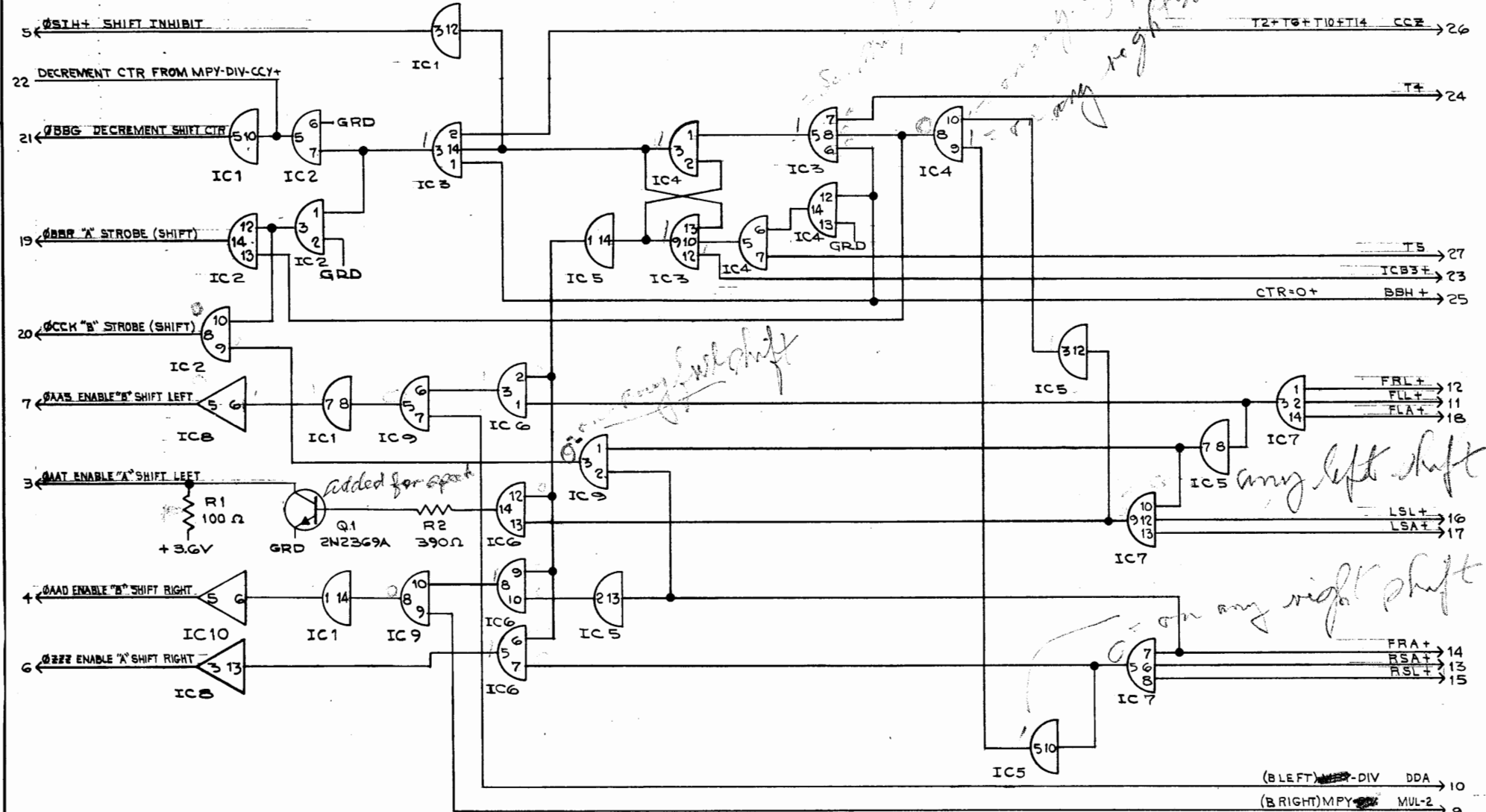
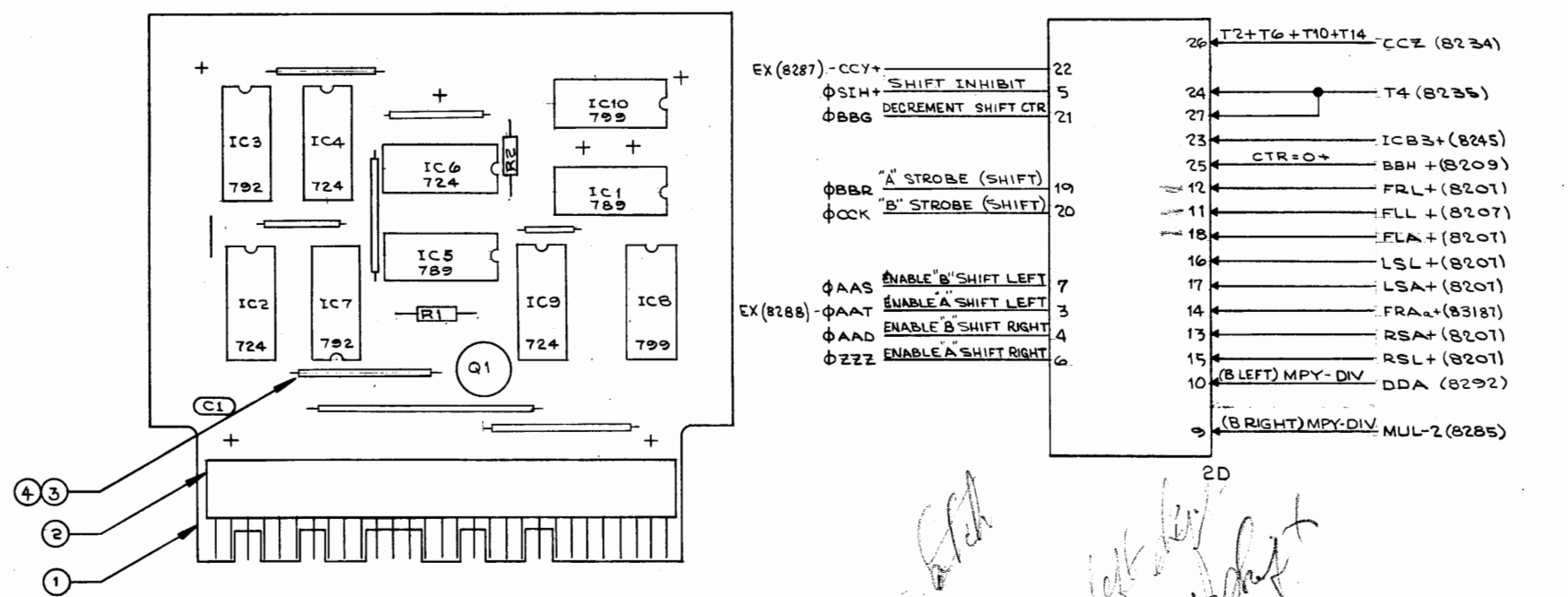
CODE IDENT NO. 20886

SIZE D 8219

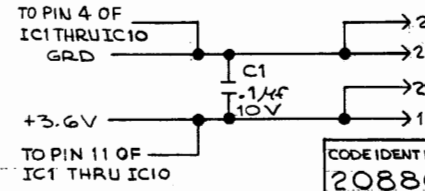
REV D

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. FOR DRILLING DWG SEE D8600-898.
 FOR DIMENSIONAL DWG SEE C8600.

REV	DESCRIPTION	DATE	APPD
D	8220		D
A	67-204; REVISED LOGIC ON PINS 8, 9 & 10. BB 6-27-67 RKM	7/12/67	
B	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 3/11/67 RKM	3/12/67	
C	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-25-67	10/25/67	
D	68-199; DESTINATION OF PIN 21 ON LOGIC NOW SAME AS PIN 24. <i>Michael</i> 4-18-68 RKM	4/18/68	



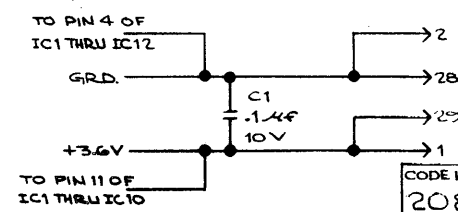
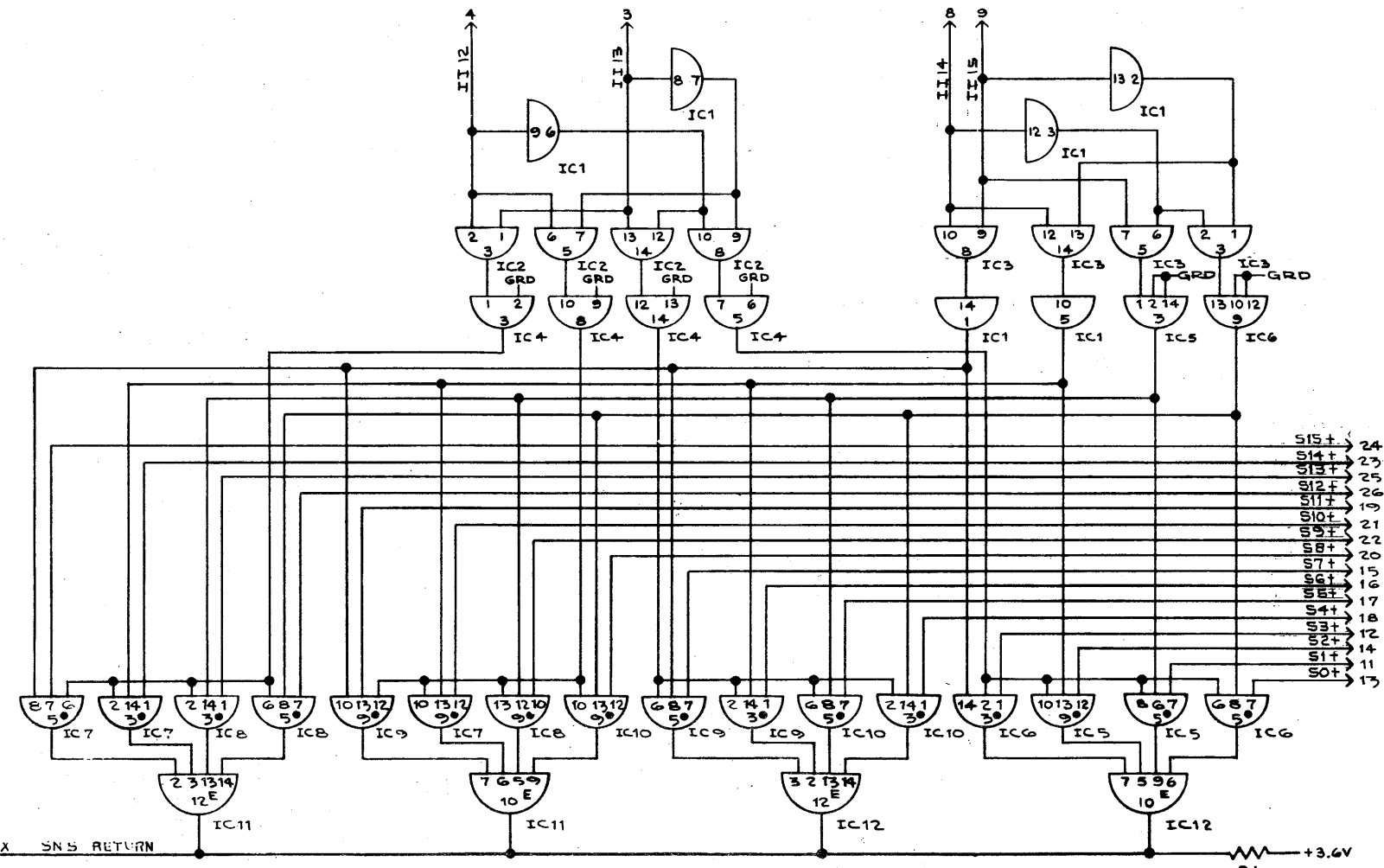
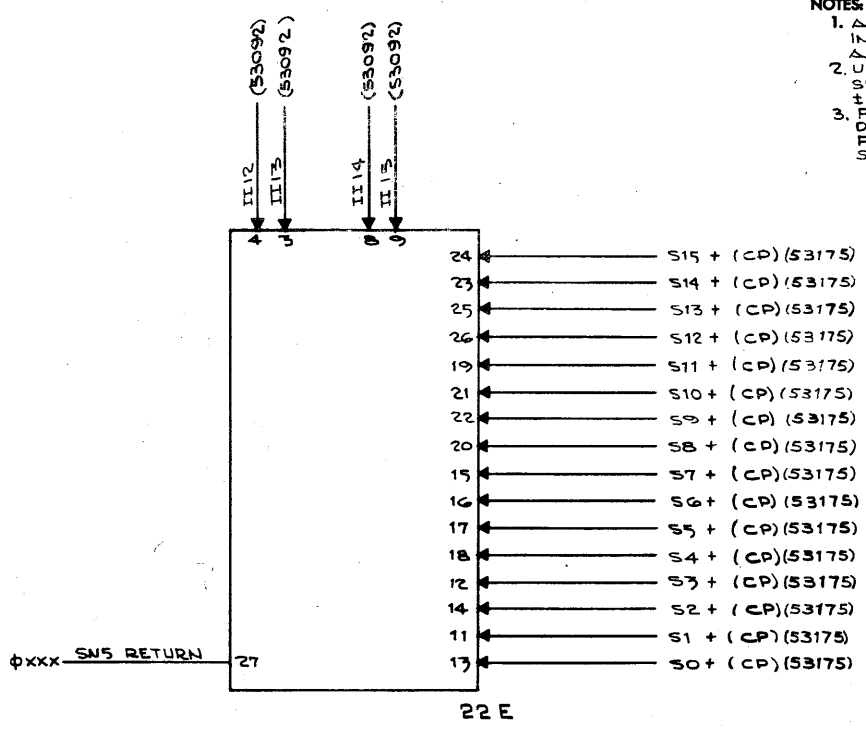
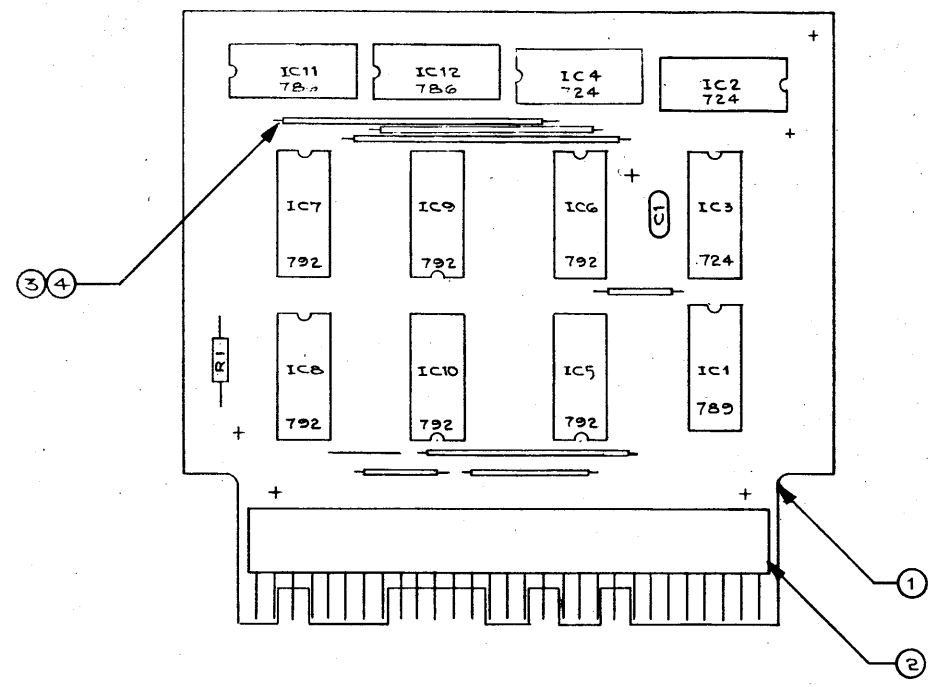
QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
1	Q1	2N2369A	TRANSISTOR-FAIRCHILD
1	R2	RC07GF391J	RESISTOR-390 Ω , ALLEN BRADLEY
1	R1	RC07GF101J	RESISTOR-100 Ω , ALLEN BRADLEY
2	IC10	MC799P	INTEGRATED CIRCUIT MOTOROLA
2	IC8	MC792P	
2	IC3	MC792P	
4	IC9	MC724P	
2	IC7	MC789P	
2	IC1	MC789P	
1	C1	UK10-104	CAPACITOR-1/4" x 80-20% 10V, CRL
AR 4	AWG 24		SLEEVING-TEFLON, THIN WALL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1 2	00-7022-029-000-000		CONNECTOR-ELCO
1	1	SEL898	PRINTED CIRCUIT (REV SEE AS140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION



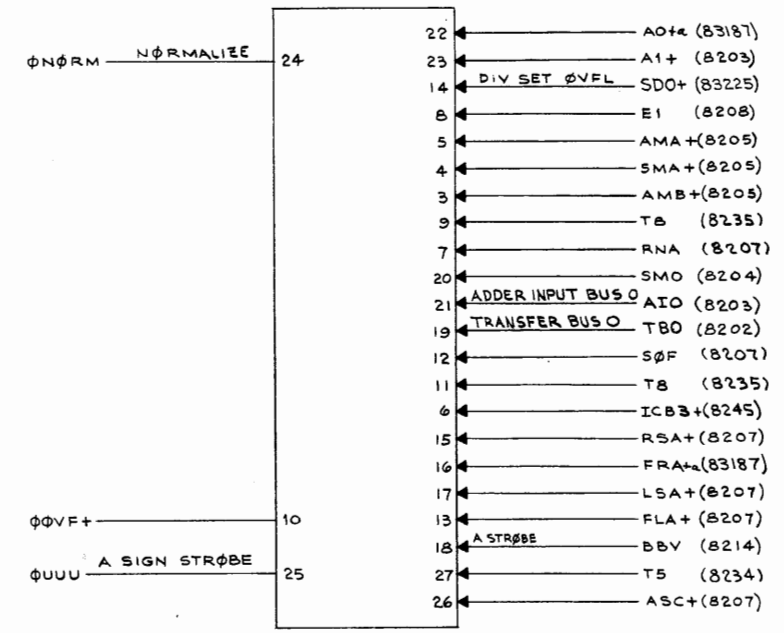
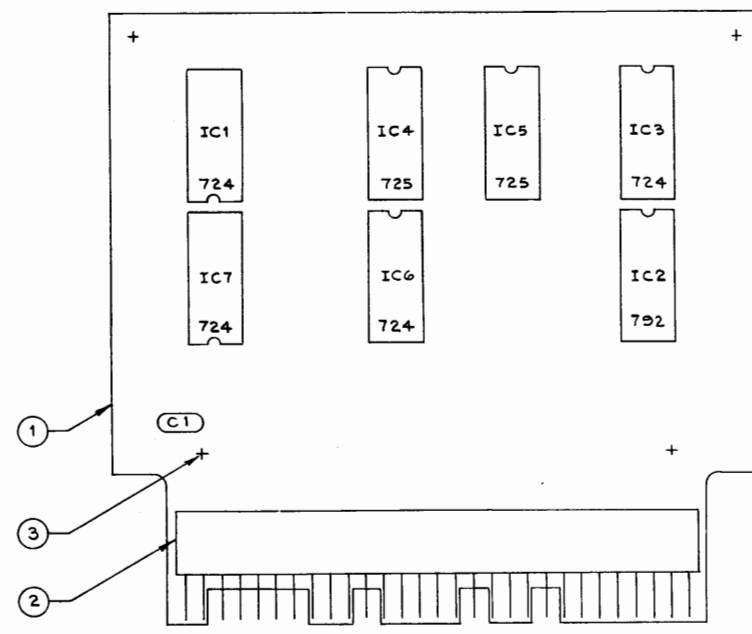
CODE IDENT NO	REV	DATE	APPD
20886	D	8220	D

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT UNLESS OTHERWISE SPECIFIED. RESISTORS ARE $\pm 5\%$, 1/4W.
 2. FOR DRILLING DWG SEE DB600-237.
 3. FOR DIMENSIONAL DWG SEE CB600.

SIZE	D	3221	REV	B
REV	A	DESCRIPTION	DATE	APPD
		67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/8/67 RKM	9/12/67	[Signature]
	B	67-445; ADDRESSES REVISED C. THEW 10-25-67	10/15/67	[Signature]

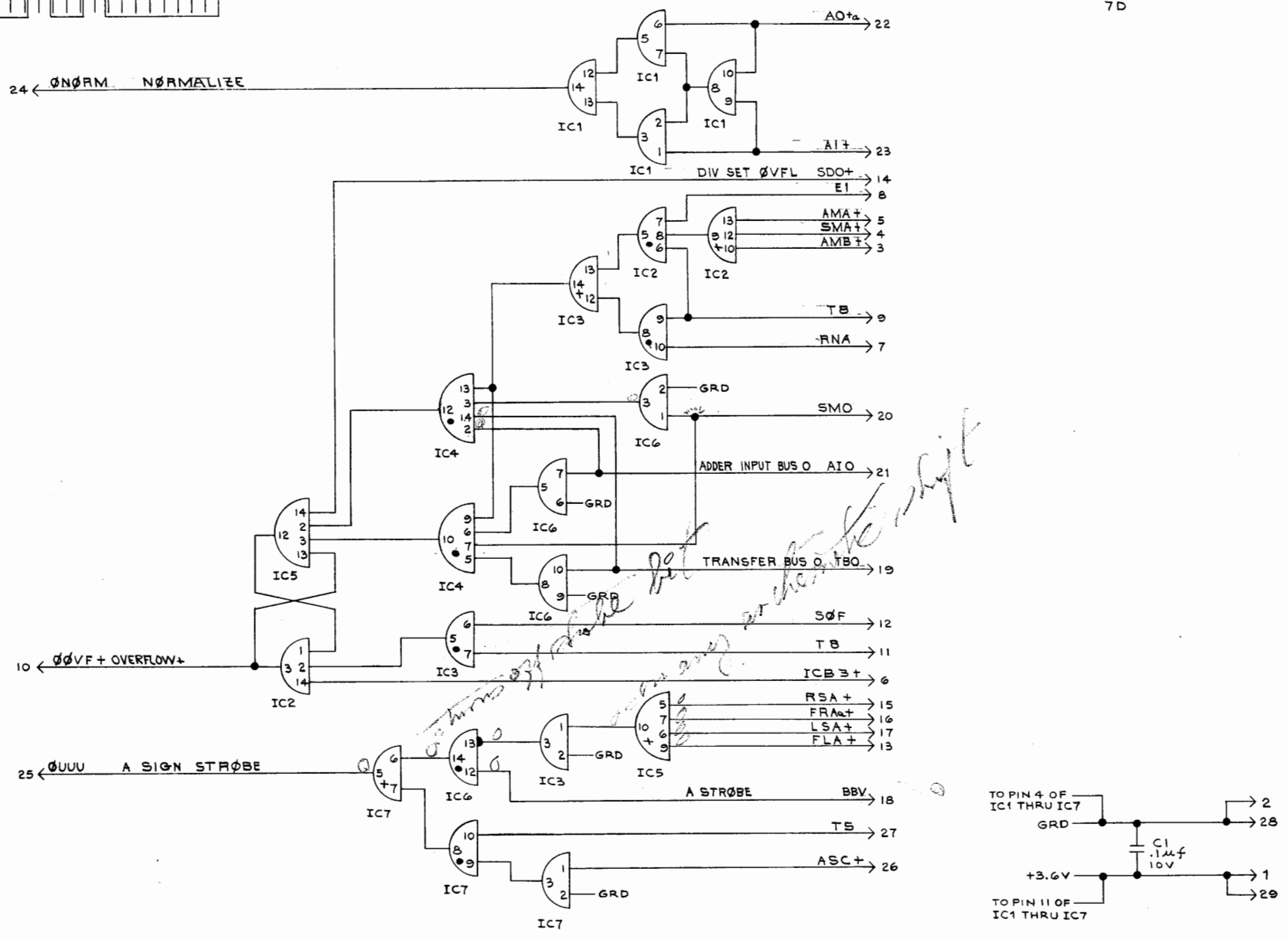


1	R1	RC07GF561J	RESISTOR-560Ω, ALLEN BRADLEY				
2	IC12 IC11	MC786P					
6	IC10 THRU IC5	MC792P	INTEGRATED CIRCUIT-MOTOROLA				
3	IC3 IC2	MC724P					
1	IC1	MC789P					
1	C1	UK10-104	CAPACITOR-.1μF±20%, 10V, CRL				
AR 4		AWG 24	SLEEVING-TIFLON, THINWALL, COLOR OPT				
AR 3		AWG 24	WIRE-SOLID COPPER, TINNED				
1	2	00-1072-029-000-001	CONNECTOR-ELCO				
1	1	SEL597	PRINTED CIRCUIT (FOR REV SEE AS1140)				
-1	ITEM	DWG. OR PART NO.	DESCRIPTION				
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA							
DR	b. BOYD	1-19-67	SCHEMATIC & ASSEMBLY RTL SENSE SWITCH DECODE				
CK	RKM	1-23-67					
ENG.	[Signature]	5-31-67					
PROJ. APP. U.C.	[Signature]	5/31/67					
CODE IDENT NO	20886		SIZE	D	8221	REV	B



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE DB600-908.
 3. FOR DIMENSIONAL DWG SEE CB600.

REV	DESCRIPTION	DATE	APPD
D	8222		C
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/7/67 RKM	9/12/67	
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-25-67	10/30/67	
C	68-199; DESTINATION OF PIN 14 WAS CCK+(8288) <i>W.R. Hunt</i> 4-18-68 RKM	4/18/68	



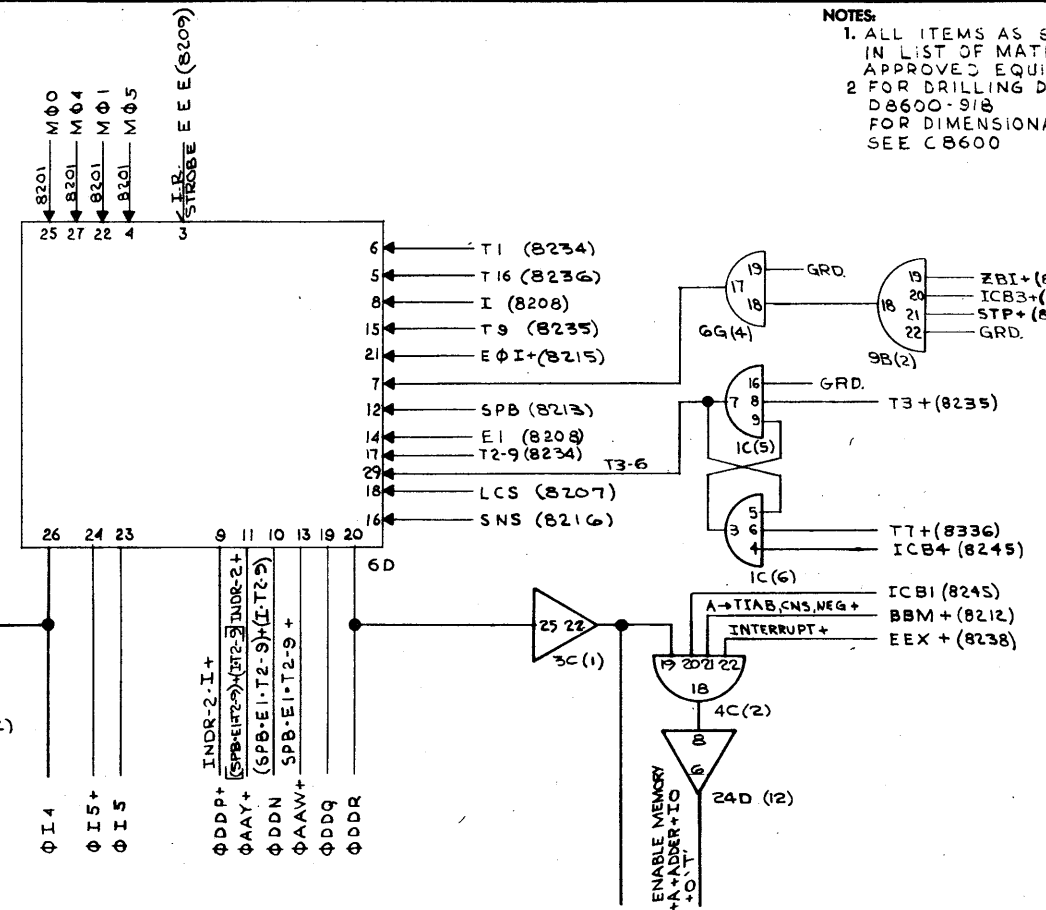
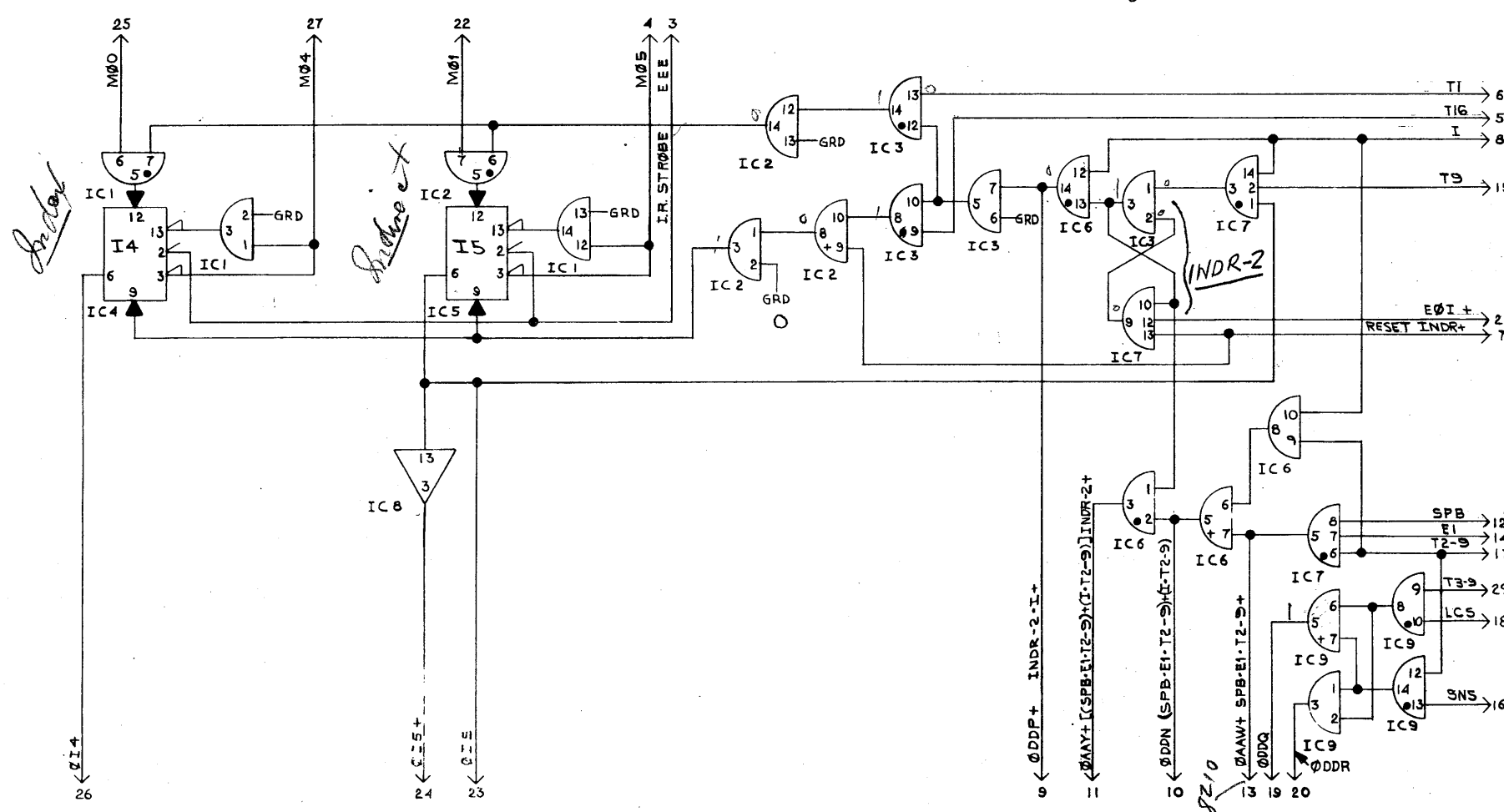
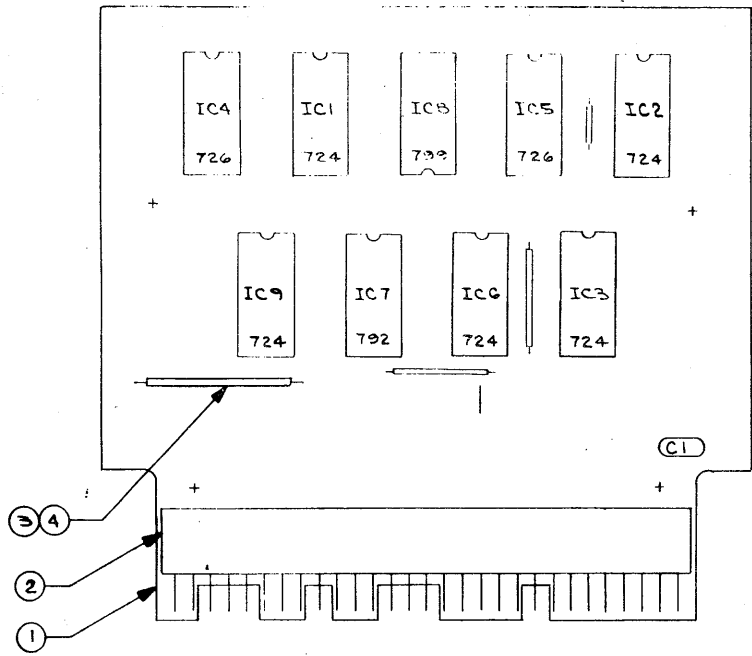
QTY	IC	PART NO.	DESCRIPTION
2	IC5	MC725P	INTEGRATED CIRCUIT-MOTOROLA
1	IC4	MC792P	
1	IC2	MC792P	
4	IC7, IC6, IC3, IC1	MC724P	
1	C1	UK10-104	CAPACITOR-.1uF+80-20%, 10V, CRL
AR	3	AWG 24	WIRE, SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 908	PRINTED CIRCUIT (FOR REV SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SYSTEMS ENGINEERING
 LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

DR. RKM 1-23-67
 CL. WC 2-20-67
 ENG. J. R. H. 5-2-67
 PROJ. APP. 8/31/67
 20886

SCHEMATIC & ASSEMBLY
 RTL OVERFLOW &
 A SIGN STROBE &
 NORMALIZE

SIZE	D	8222	REV	C
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
 2. FOR DRILLING DWG SEE D8600-918 FOR DIMENSIONAL DWG SEE C8600

REV	DESCRIPTION	DATE	APPD
D	8223		
A	67-196; ADDED LATCH TO PIN 17 OF LOGIC. RMT 6/22/67 RKM	6/20/67	
B	67-235; PIN 29 WAS +3.6V; PIN 10 OF IC9 WENT TO PIN 17. LG 7/13/67 GFW7/13/67	7/13/67	
C	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/11/67 RKM	9/11/67	
D	67-445; ADDED 6G(4), 9B(2), ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-25-67	10/30/67	

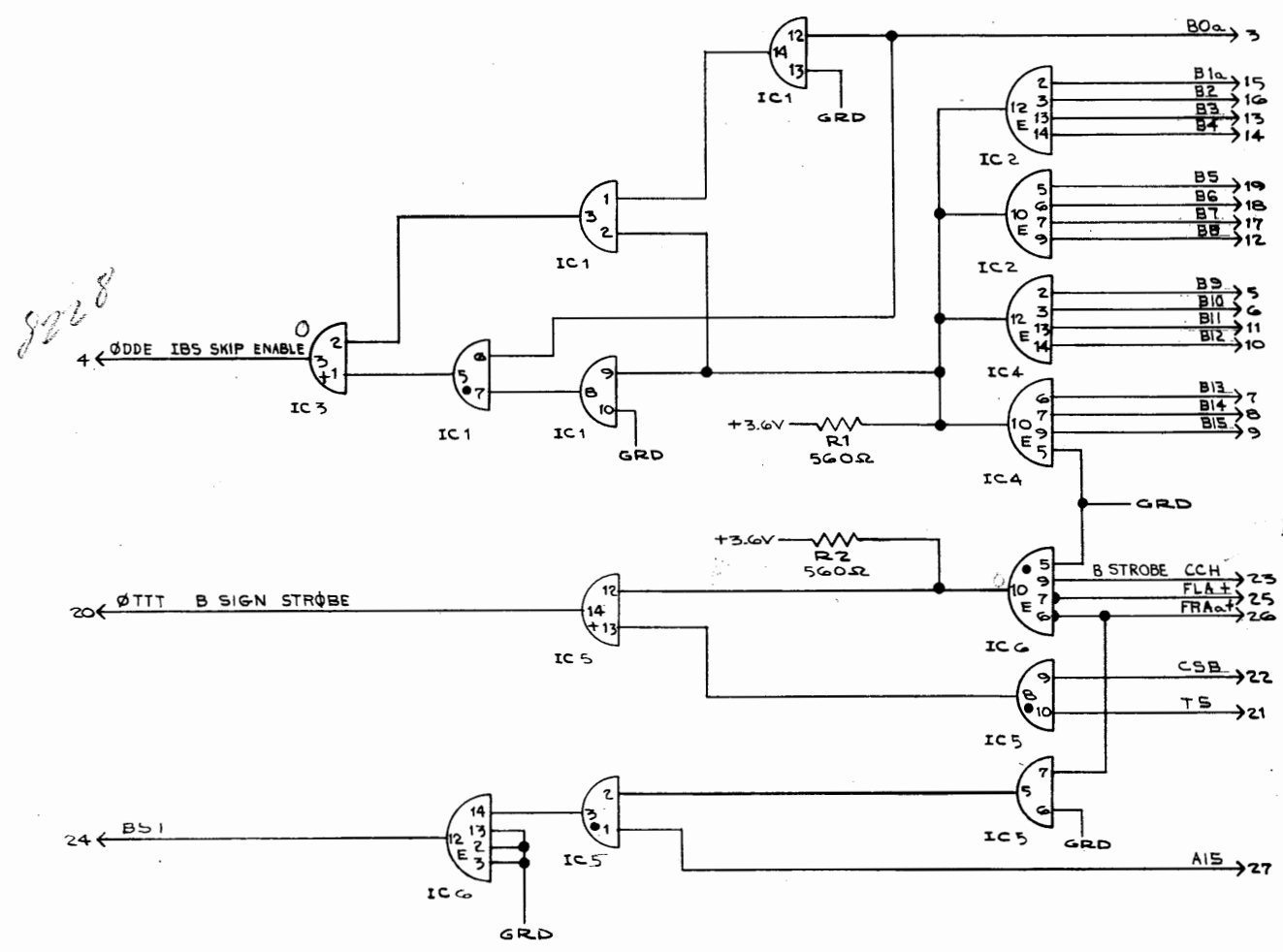
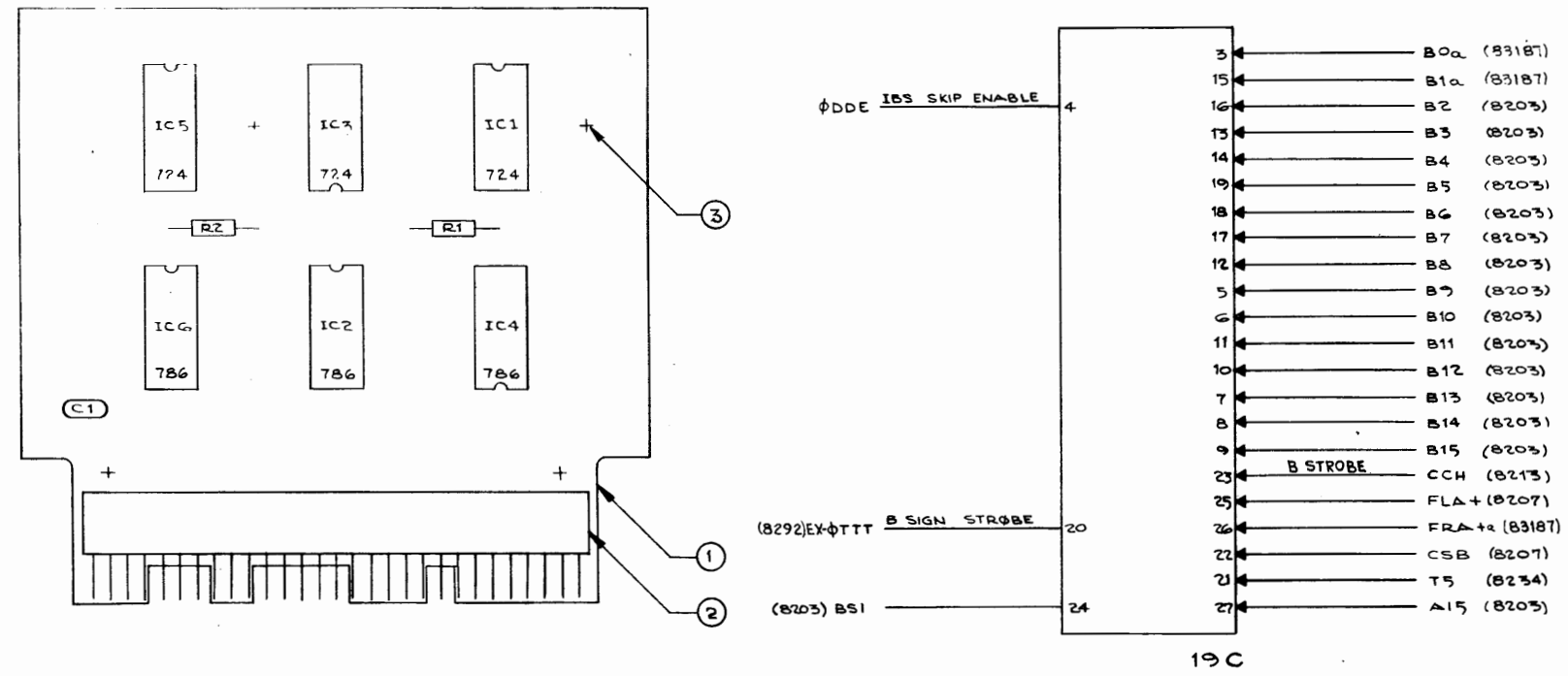
MASTER CLEAR

ITEM	DWG. OR PART NO.	DESCRIPTION
1	IC8	MC 799P
1	IC7	MC 792P
2	IC4	MC 726P
5	IC9, IC3, IC6, IC2, IC1	MC 724P
1	C1	UK 10-104 (1) CAPACITOR-1.0uF+80-20%, 10V, CRL
AR 4	AWG 24	SLEEVING-TEFLON, THINWALL
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001 CONNECTOR-ELCO
1	1	SEL 918 PRINTED CIRCUIT(FOR REV SEE AS1140)

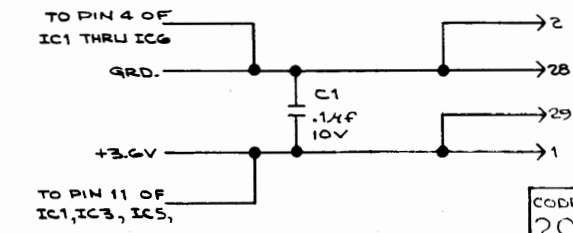
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. R. SANBORNE	2-13-67
CK. RKM	2-23-67
ENG. [Signature]	5-31-67
APP. [Signature]	5-31-67
CODE IDENT NO. 20886	SIZE D
USED ON	REV D

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING DWG. SEE D8600-912 FOR DIMENSIONAL DWG. SEE C 8600.

REV	DESCRIPTION	DATE	APPD
D	8 2 2 4		B
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/11/67	9/12/67	RKM
B	67-448; ADDRESSES REVISED AND LINE TITLES ADDED E.P.C. 10-25-67	10/29/67	RKM



Boards having pin 20 to 24

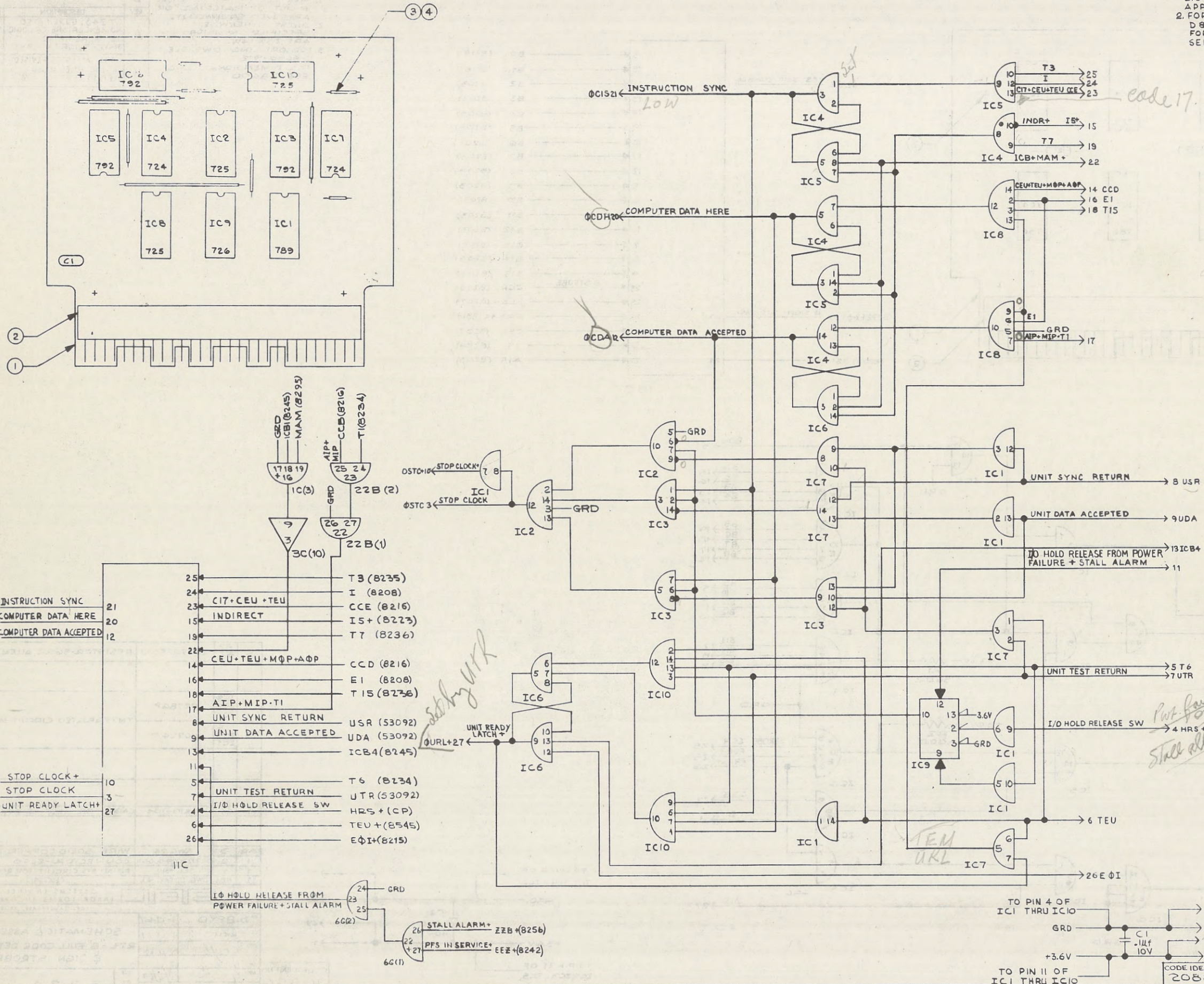


ITEM	DWG. OR PART NO.	DESCRIPTION
2	R2 R1	RC07GF561J RESISTOR-560Ω, ALLEN BRADLEY
3	IC6 IC4 IC2	MC786P INTEGRATED CIRCUIT-MOTOROLA
3	IC5 IC3 IC1	MC724P INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK10-104 CAPACITOR-.14F±20%,10V CRL
AR	3	AWG 24 WIRE SOLID COPPER TINNED.
1	2	00-1022029-000001 CONNECTOR-ELCO
1	1	SEL 912 PRINTED CIRCUIT (FOR REV. SEE AS1140)
-1		ITEM DWG. OR PART NO. DESCRIPTION

SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. b. BOYD	1-17-67
CE. RKM	1-21-67
ENG. [Signature]	5-21-67
APP. [Signature]	5/21/67
CODE IDENT NO. 20886	USED ON
SIZE D	8 2 2 4
REV B	

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-888.
 FOR DIMENSIONAL DWG. SEE C8600.

REV	DESCRIPTION	DATE	APP'D
D	8225		BY E
A	67-190: PIN 3 OF IC8 WAS CONNECTED TO PINS OF IC8. DC 6-21-67	4/21/67	[Signature]
B	67-445; ADDED 66(2) & 66(1) ADDRESSES REVISED & LINE TITLES ADDED C.THEW 10-25-67	10/25/67	[Signature]



code 17 any 3/0 instr.
70. Cable drivers & commutators loc. on 53092

CIS	INSTRUCTION SYNC	21
CDH	COMPUTER DATA HERE	20
CDA	COMPUTER DATA ACCEPTED	12
OSTC+	STOP CLOCK+	10
OSTC	STOP CLOCK	3
PURL+	UNIT READY LATCH+	27

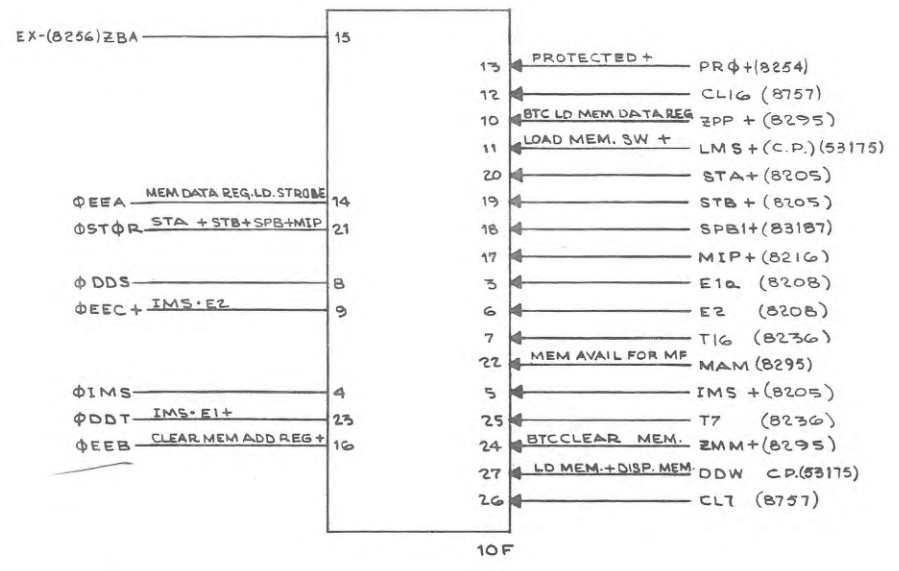
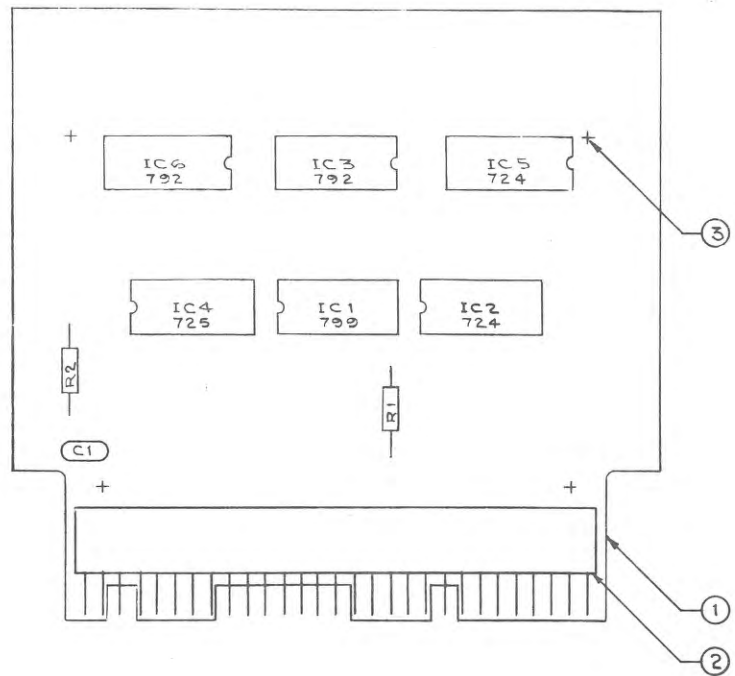
1	IC9	MC 726P	INTEGRATED CIRCUIT-MOTOROLA
2	IC7	MC 724P	
3	IC6	MC 792P	
	IC5		
	IC10		
3	IC8	MC 725P	
	IC2		
1	IC1	MC 789P	

1	C1	UK 10-104	CAPACITOR-.1uF+80-20%,10V,CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE- OLID COPPER, TINNED
1	2	00-7022-029-300-001	CONNECTOR-ELCO
1	1	SEL 888	PRINTED CIRCUIT(REV SEE A51140)

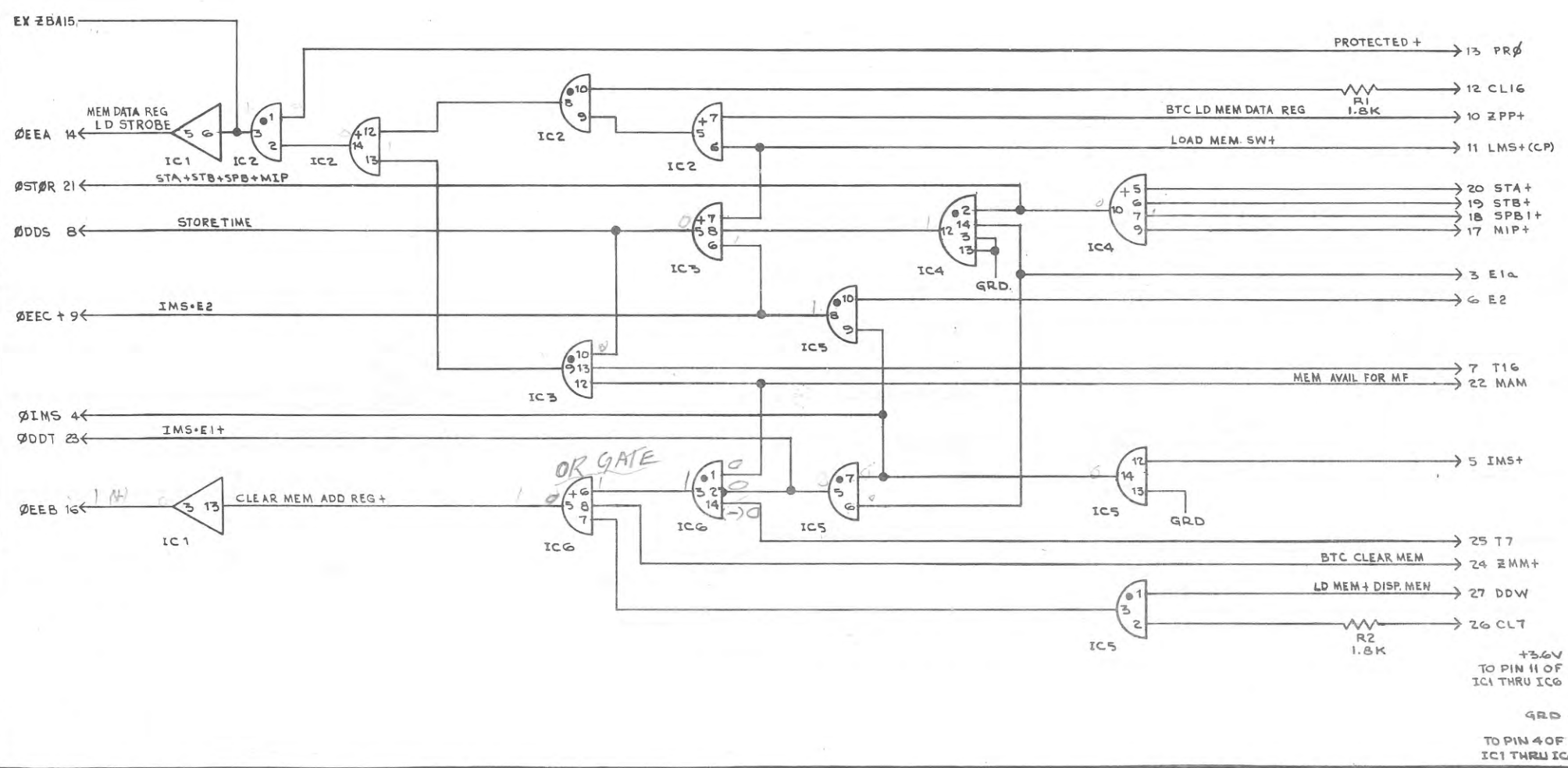
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. R. SANBORNE	2-17-67
CE. RKM	2-24-67
ENG. [Signature]	5-31-67
PROJ. APP. [Signature]	5-31-67
APP. [Signature]	5/11/67
CODE IDENT NO. 20886	
USED ON	
SIZE D	8225
REV B	

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4$ W.
 3. FOR DRILLING DIMS SEE DB 600-211.
 FOR DIMENSIONAL DIMS SEE CB 677.

REV	DESCRIPTION	DATE	APPD
D	8226		B
A	67-2G3; ADDED PIN 15. LG 8/3/67 uc	8/3/67	UC
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. EPC 10-25 67	10/30/67	AS



52993



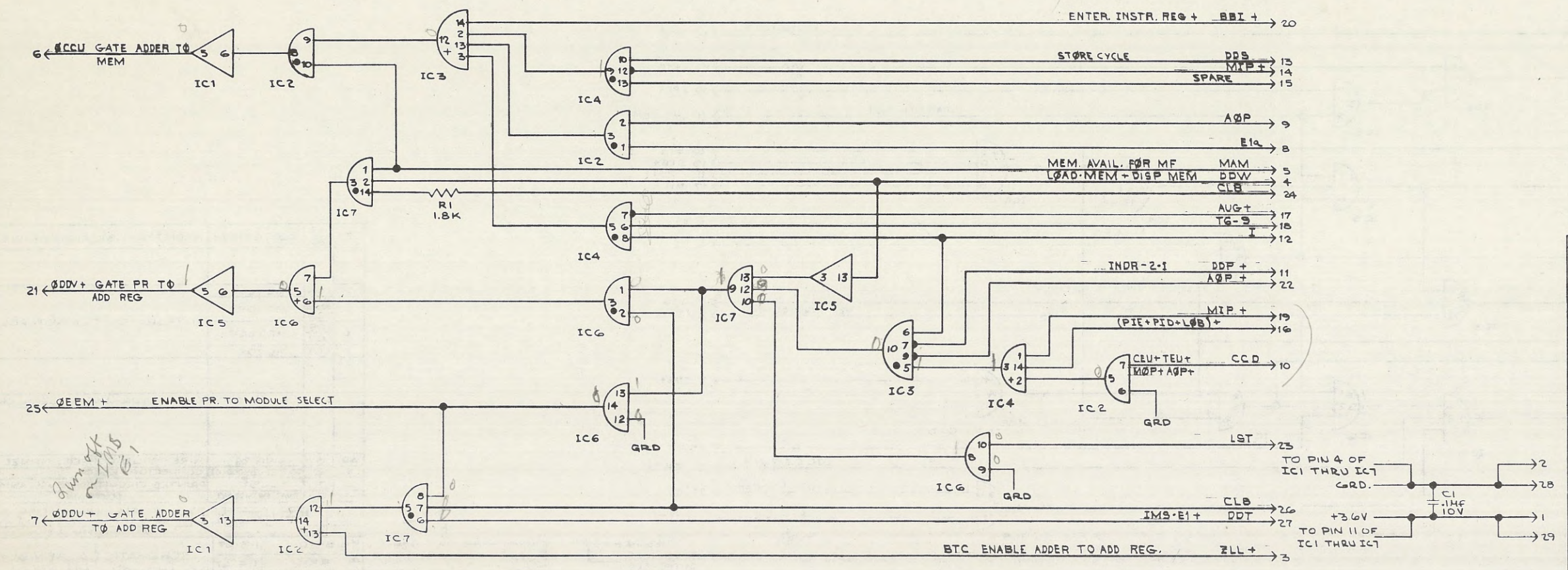
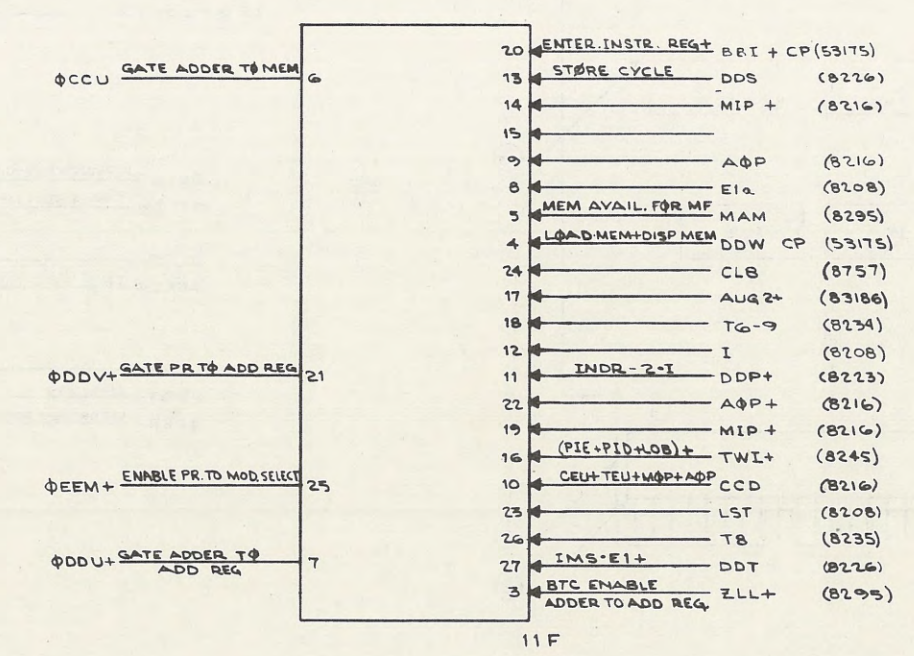
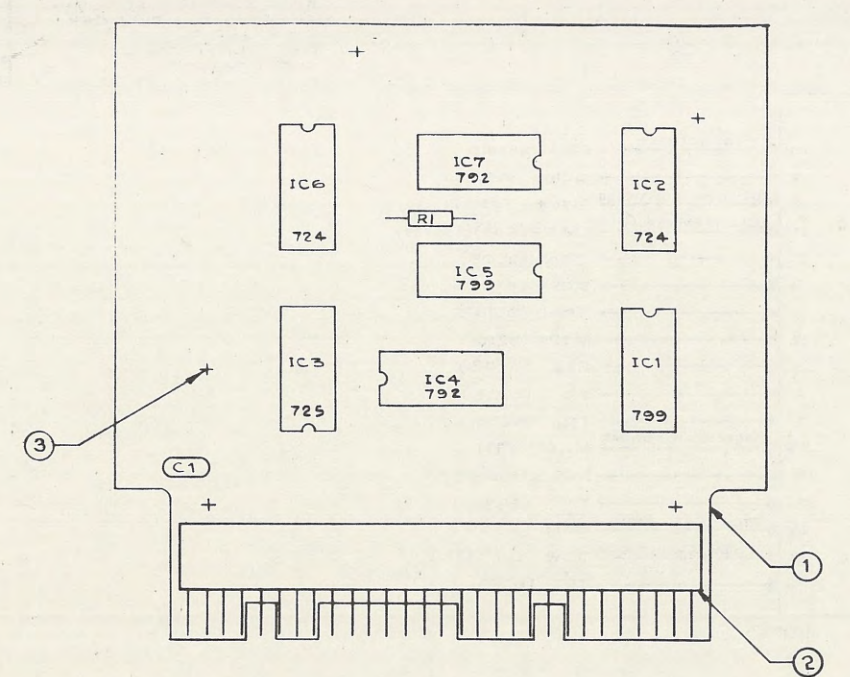
QTY	REF	DESCRIPTION	VALUE
2	R2 R1	RC07GF182J	RESISTOR-1.8K, ALLEN BRADLEY
1	IC4	MC725P	INTEGRATED CKT.-MOTOROLA
2	IC6 IC3	MC792P	
2	IC5 IC2	MC724P	
1	IC1	MC799P	
1	C1	UK-10-104	CAPACITOR-.1uF+80-20% 10V, CRL.
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	2	007022-029-000001	CONNECTOR - ELCO
1	1	SEL 511	PRINTED CIRCUIT (FOR REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

NO.	DATE	DESCRIPTION
DR. B. BOYD	1-3-67	SCHEMATIC & ASSEMBLY
CC. RKM	1-4-67	RTL MEMORY DATA REGISTER
ENG. J. D. H.	5-31-67	LOAD & ADDRESS CLEAR
PROJ. APP. W. P. S.	8-1-67	

CODE IDENT NO	20886	SIZE	D	8226	REV	B
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED, REF. STOPS ARE 1/8", 1/4", 1/2".
 3. FOR DRILLING DIMS SEE D 8400-010.
 FOR DIMENSIONAL DWG SEE C 8600.

REV	DESCRIPTION	DATE	APPD
D	8227		
A	G7-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/11/67 RVM	9/11/67	CH
B	G7-445; DELETED 10G(6), 8G(1), ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10/25/67	10/30/67	CH



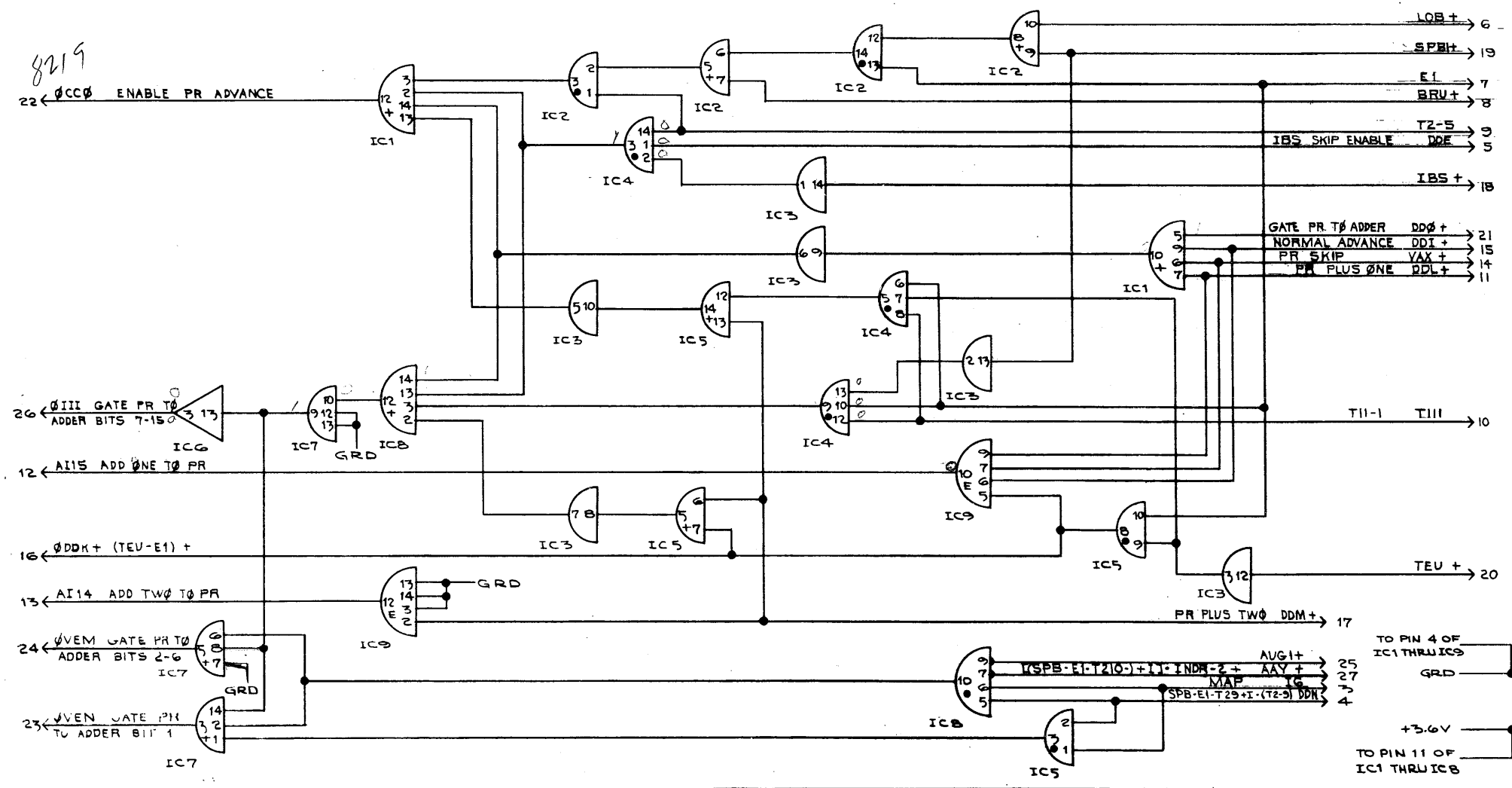
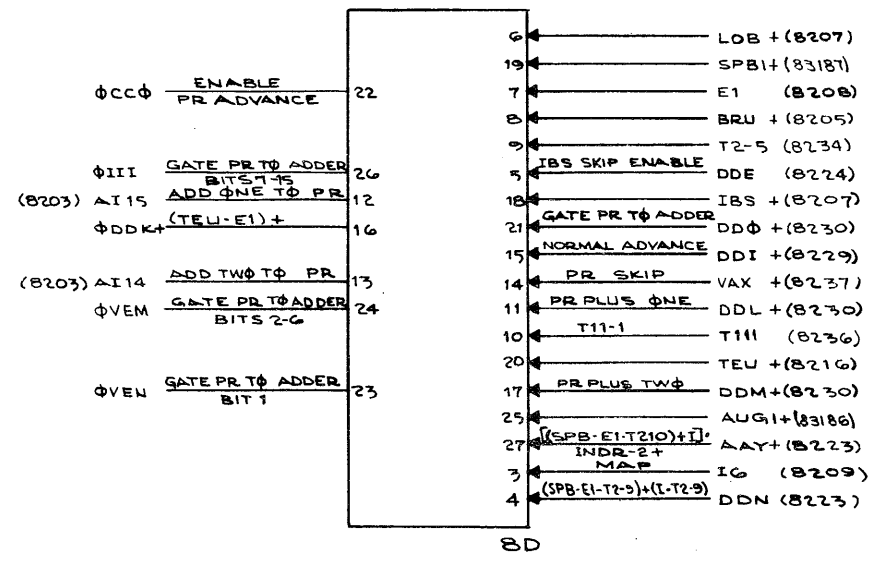
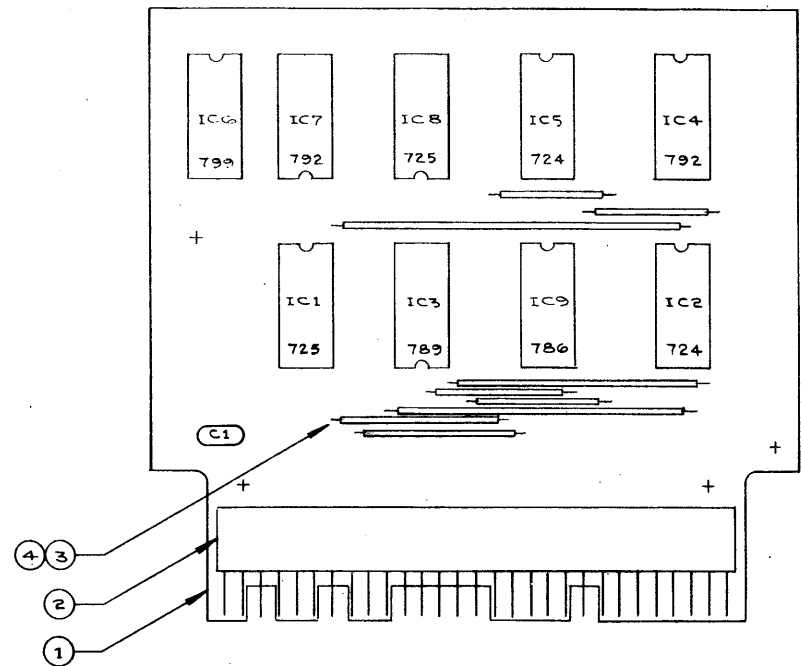
ITEM	DWG. OR PART NO.	DESCRIPTION
1	R1	RC07GF18ZJ RESISTOR - 1.8K, ALLEN BRADLEY
2	IC7	MC792P
1	IC4	MC725P
2	IC6	MC724P
2	IC3	MC725P
2	IC2	MC724P
2	IC5	MC799P
1	IC1	MC799P
1	C1	UK-10-104 CAPACITOR - .14UF+80-20%, 10V, CRL
AR	3	AWG 24 WIRE - SOLID COPPER, TINNED
1	2	007022-029-000-001 CONNECTOR - ELCO
1	1	SEL910 PRINTED CIRCUIT (FOR REV. SEE A51140)
-1	ITEM	DWG. OR PART NO. DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DE	b. BOYD	1-5-67
CC	RKM	1-14-67
ENG.		5-21-67
DRG.		5/21/67
APP.		5/31/67
USED ON		

CODE IDENT NO
20866

SIZE	REV
D	8227
B	

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-913 FOR DIMENSIONAL DWG. SEE C8600

REV	DESCRIPTION	DATE	APPD
D	8228		B
A	GT-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/11/67 RKM	9/12/67	
B	GT-445; ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10/25/67	10/30/67	



QTY	IC	PART NO.	DESCRIPTION
1	IC9	MC786P	INTEGRATED CIRCUIT-MOTOROLA
1	IC6	MC795P	
2	IC7	MC792P	
1	IC3	MC789P	
2	IC5	MC724P	
2	IC2	MC724P	
2	IC8	MC725P	
2	IC1	MC725P	
1	C1	UK10-104	
AR 4	AWG 24		SLEEVING-TIFLON THINWALL (3.25)
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-7022029-000-001	CONNECTOR-ELCO
1	1	SEL 913	PRINTED CIRCUIT (FOR REV SEE ASIN)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

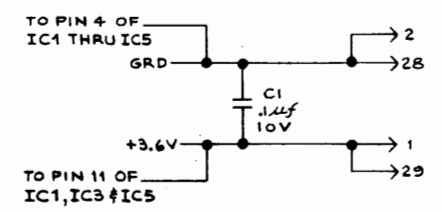
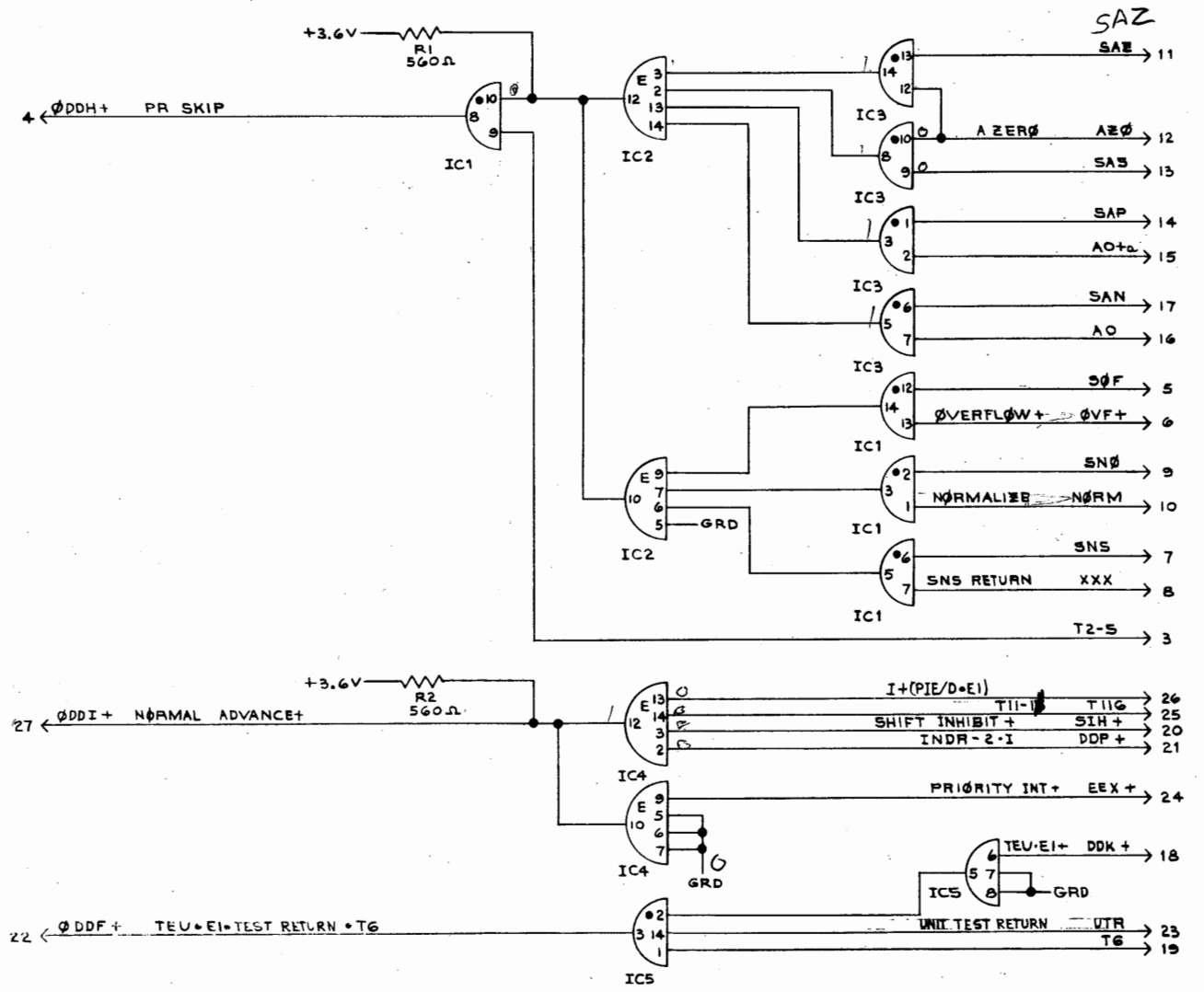
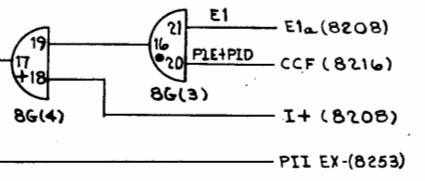
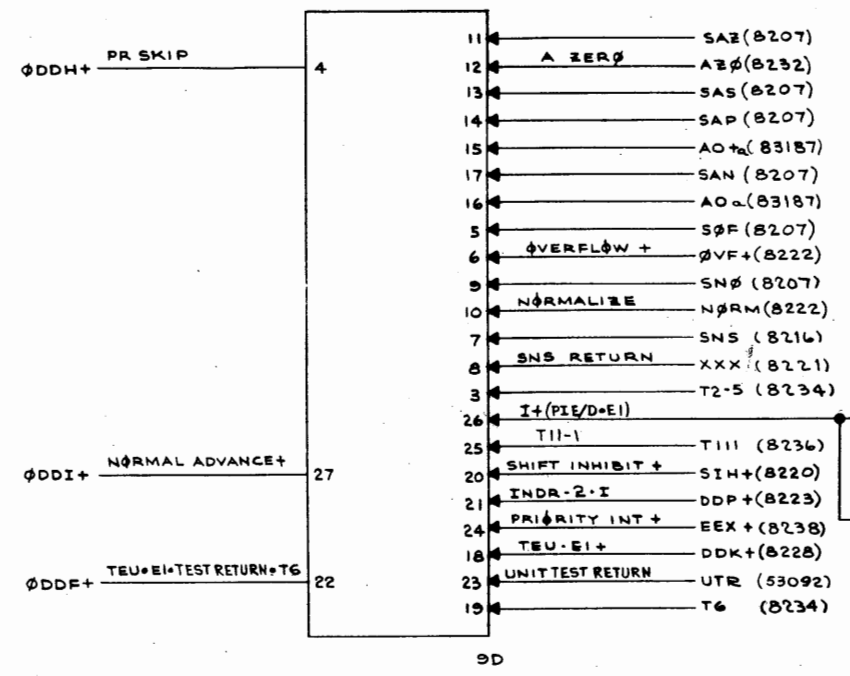
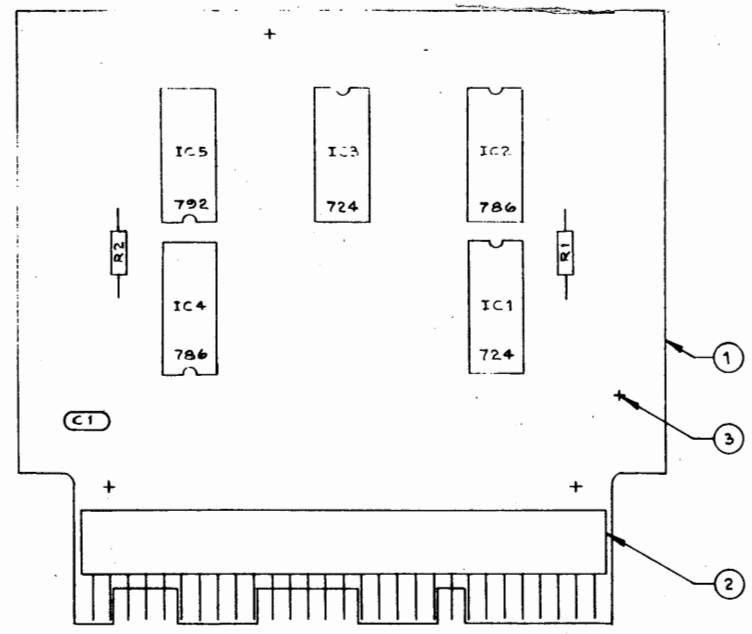
DR.	D. BOYD	1-23-67
ENGR.	RKM	1-26-67
APP.	R. W. G.	5-8-67
APP.	R. W. G.	5/21/67
APP.	R. W. G.	5/11/67

CODE IDENT NO	20886
USED ON	

SIZE	D 8228	REV	B
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 25%, 1/4W.
 3. FOR DRILLING DWG SEE DB600-914.
 FOR DIMENSIONAL DWG SEE CB600.

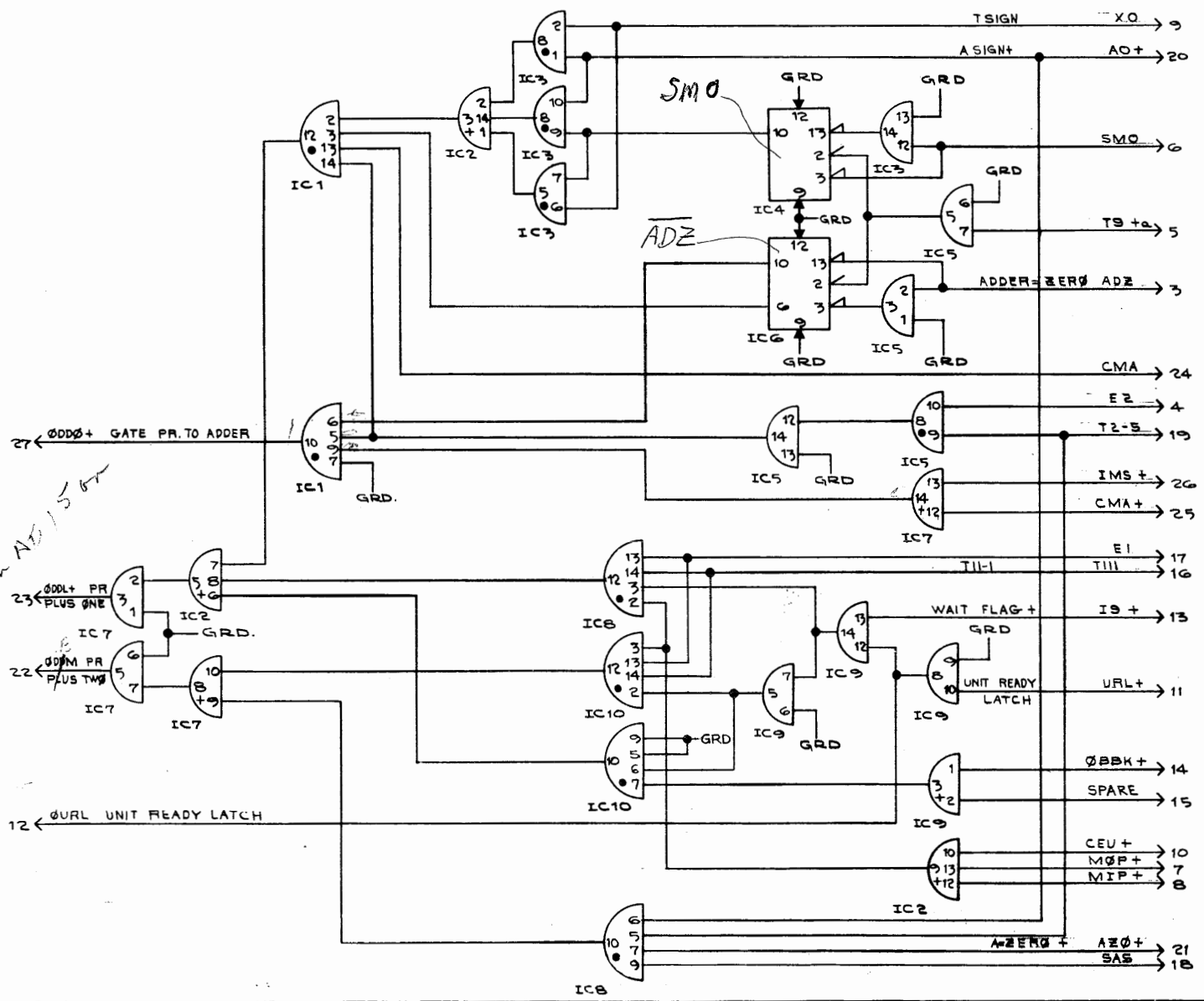
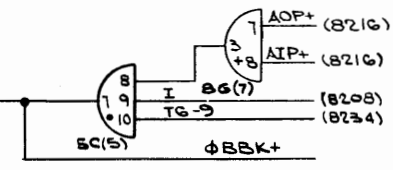
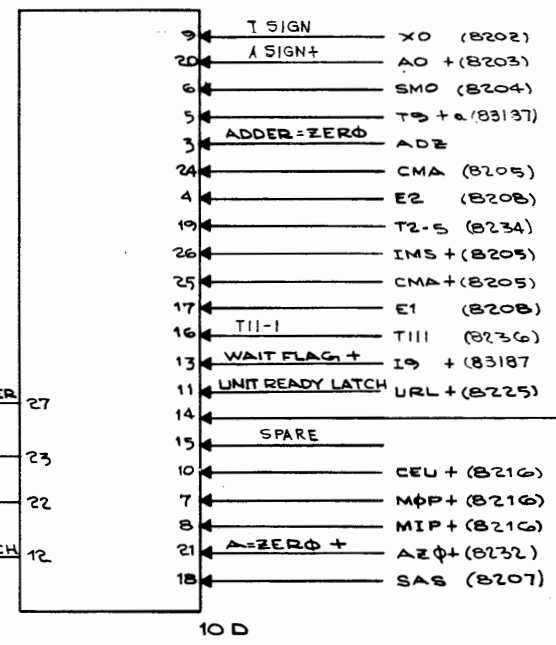
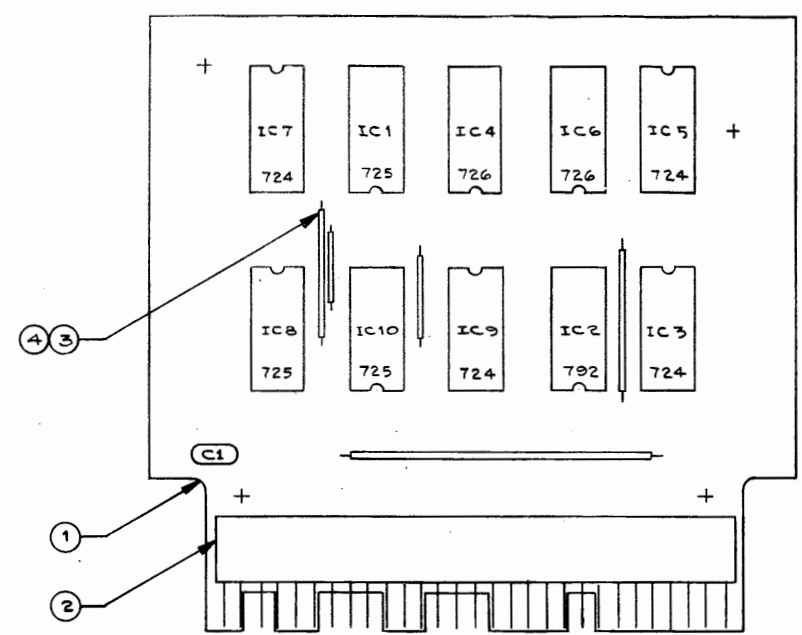
REV	D	8229	REV	B
REV	A	DESCRIPTION	DATE	APPD
	A	GT-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/8/67 RKM	9/11/67	[Signature]
	B	GT-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-25-67	10/15/67	[Signature]



2	R2	RC07GF561J	RESISTOR - 560Ω, ALLEN BRADLEY	
1	IC5	MC792P	INTEGRATED CIRCUIT-MOTOROLA	
2	IC4	MC786P		
2	IC3	MC724P		
1	C1	UK10-104	CAPACITOR - .1µf ± 20%, 10V, CRL	
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED	
1	2	00-7022-329-000-001	CONNECTOR - ELCO	
1	1	SEL 914	PRINTED CIRCUIT (FOR REV. SEE NS1140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR	RKM	1-21-67	SCHEMATIC & ASSEMBLY RTL PROGRAM REGISTER ADVANCE LOGIC II	
CK	WC	2-20-67		
ENG	[Signature]	5-31-67		
APP	[Signature]	5/31/67		
CODE IDENTIFY	20886			
SIZE	D	8229	REV	B

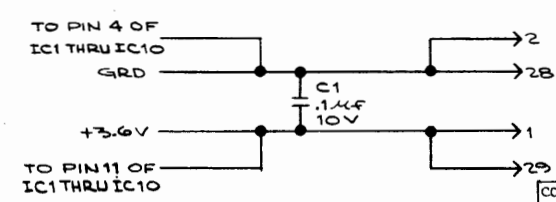
NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE DB600-915 FOR DIMENSIONAL DWG. SEE C8600.

REV	DESCRIPTION	DATE	APP'D
D	8230		B
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/8/67 P.K.M.	9/12/67	[Signature]
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED E.P.C. 10-25-67	12/30/67	[Signature]

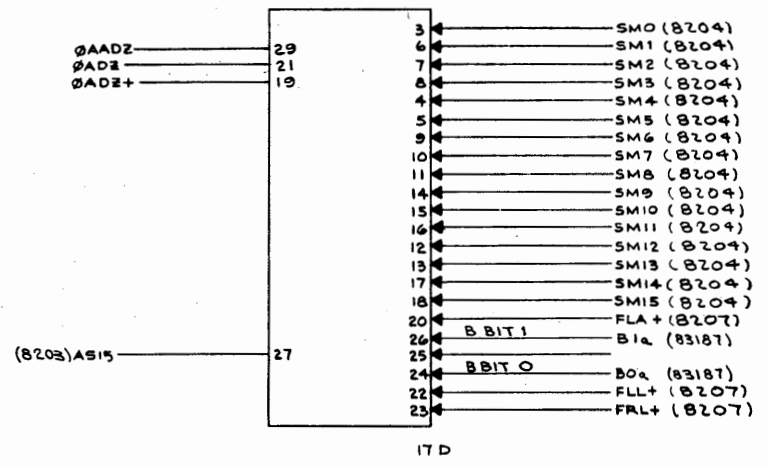
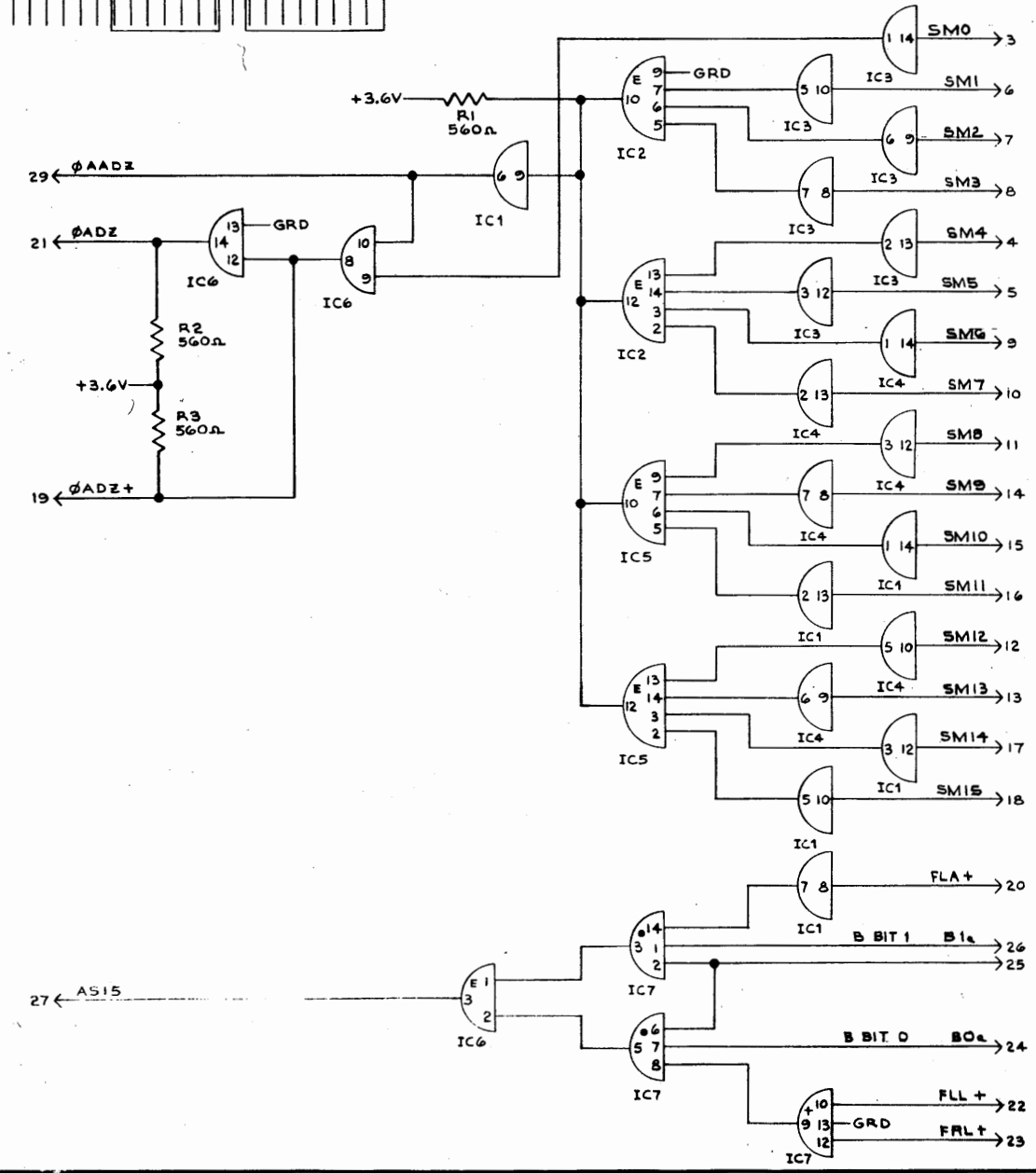
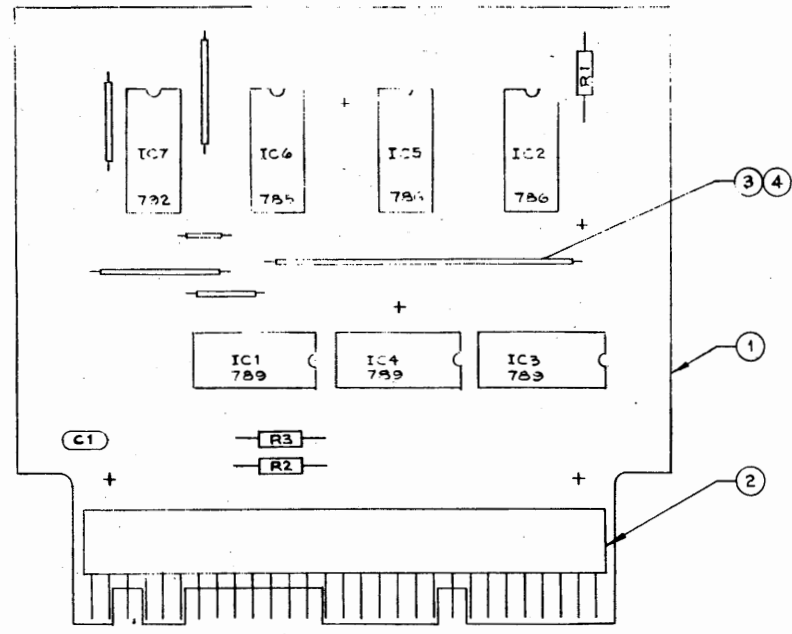


*1/4F
Ball Mounted each
to Time*

Join A215 to



QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
2	IC6 IC4	MC726P	INTEGRATED CIRCUIT-MOTOROLA
4	IC7 IC5 IC3	MC724P	
1	IC2	MC792P	
3	IC10 IC8 IC1	MC725P	
1	C1	UK10-104	CAPACITOR-.1uF±20%,10V,CRL
AR 4	AWG 24		SLEEVING-TEFLON, THIN WALL (S-25)
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-702209-000-001	CONNECTOR ELCO
1	1	SEL915	PRINTED CIRCUIT-(FOR REV SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	b BOYD	1-19-67	SCHEMATIC & ASSEMBLY RTL - PROGRAM REGISTER ADVANCE LOGIC III
CC	RKN	1-23-67	
ENG	[Signature]	5/11/67	
REV	[Signature]	5/11/67	
APR	[Signature]	5/11/67	
USED ON			
CODE IDENT NO	20886		
SIZE	D	8230	REV B



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING DWG SEE DB400-926.
 FOR DIMENSIONAL DWG SEE C8600.

REV	DESCRIPTION	DATE	APPD
D	8231		
A	GT-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/8/67 RKM	9/11/67	[Signature]
B	GT-413; ADDED ITEM 4, R2, R3 & 2 MORE CIRCUITS OF IC6. PIN 29 WAS +3.6V. RKM 10-11-67 UC	10/11/67	[Signature]
C	GT-445; ADDRESSES REVISED AS. 10-25-67	11/5/67	[Signature]

QTY	REF	DESCRIPTION	VALUE
3	R3, R2, R1	RC07GF561J	RESISTOR-560Ω, ALLEN BRADLEY
1	IC7	MCT92P	INTEGRATED CIRCUIT-MOTOROLA
1	IC6	MCT85P	INTEGRATED CIRCUIT-MOTOROLA
2	IC5, IC2	MCT86P	INTEGRATED CIRCUIT-MOTOROLA
3	IC4, IC3, IC1	MCT89P	INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK-10-104	CAPACITOR-.1μf±80-20%, 10V, CRL
AR 4	AWG		SLEEVING-TEFLON, THINWALL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 926	PRINTED CIRCUIT-FOR REV SEE A51140

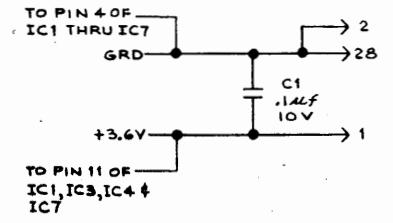
DE	RKM	1-5-67
CE	WC	2-22-67
ENG.	[Signature]	5-31-67
APP.	[Signature]	5-31-67
APP.	[Signature]	5-31-67

SYSTEMS ENGINEERING LABORATORIES, INCORPORATED
 FORT LAUDERDALE, FLORIDA

SCHEMATIC & ASSEMBLY
 RTL
 ADDER ZERO DET.

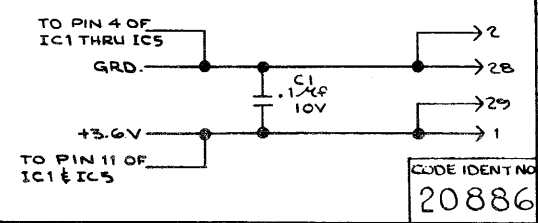
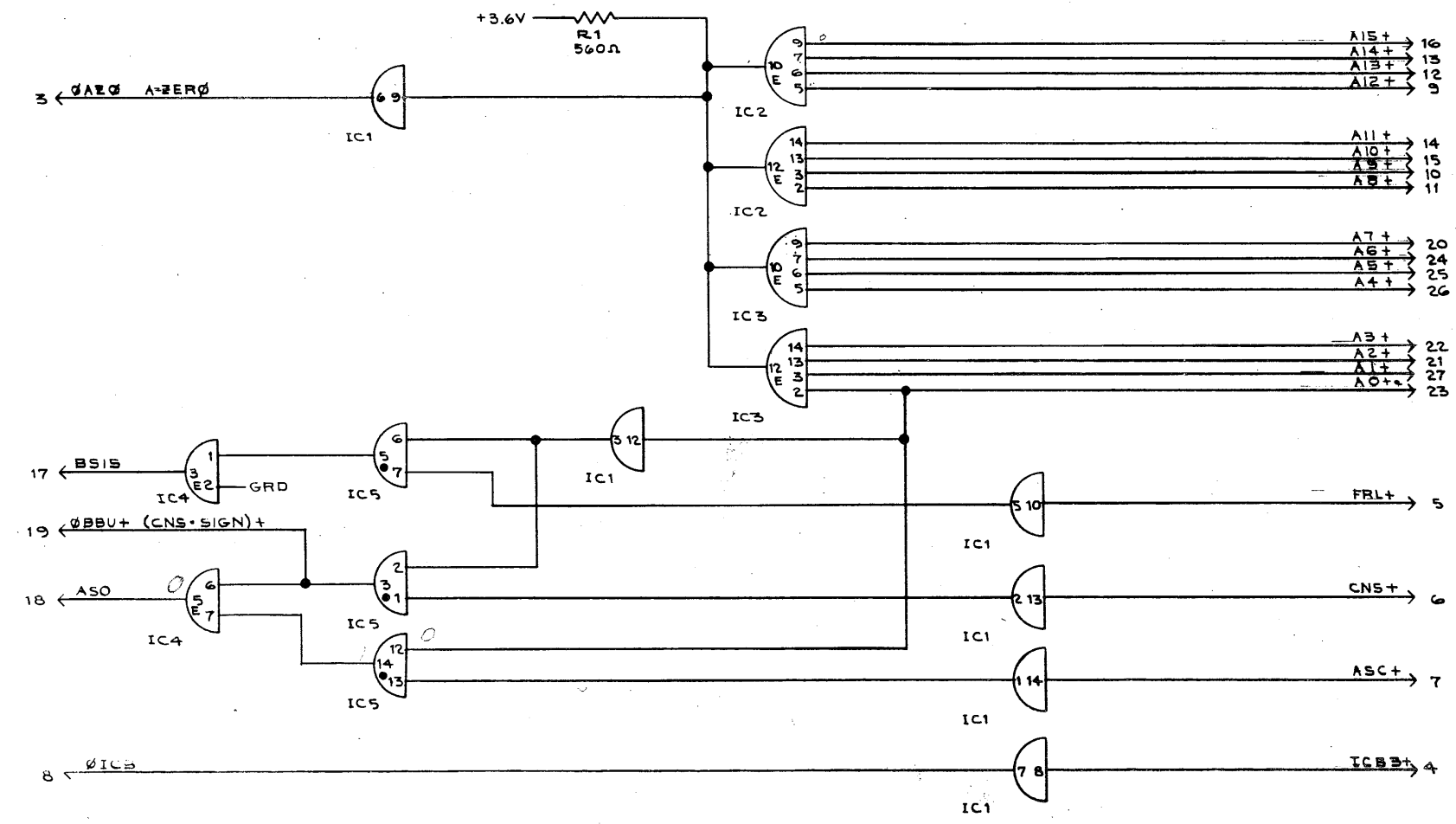
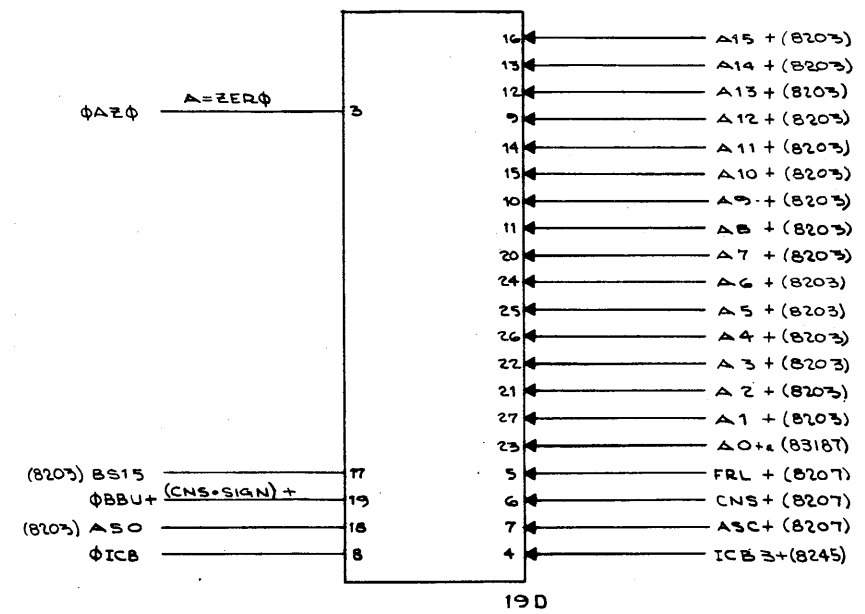
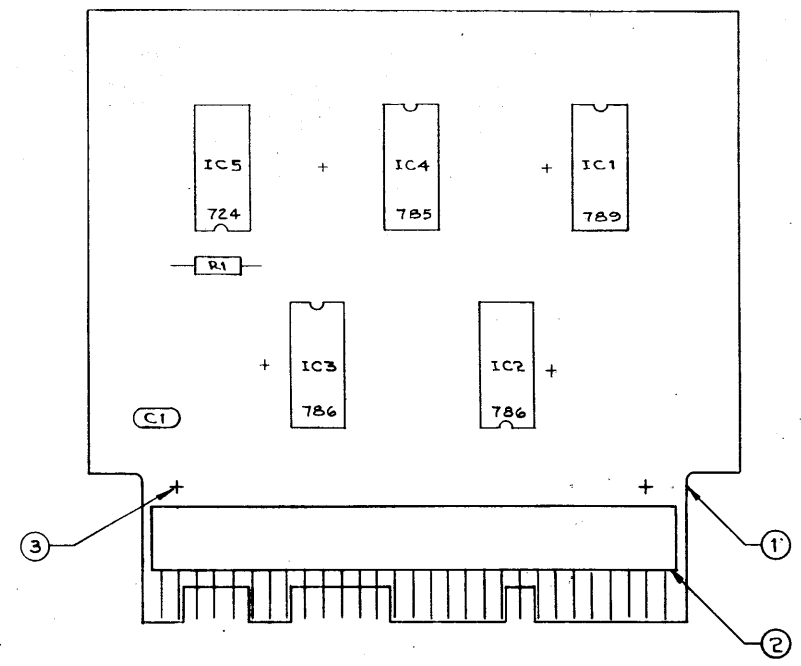
CODE IDENT NO. 20886

SIZE	D	8231
REV	C	



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING DWG SEE DB600-927 FOR DIMENSIONAL DWG SEE CB600

REV	DESCRIPTION	DATE	APPD
D	8232		B
A	GT-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 3/8/67 RKM	2/13/67	ON
B	GT-445; DELETED 24D(10), ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-2567	10/30/67	AS



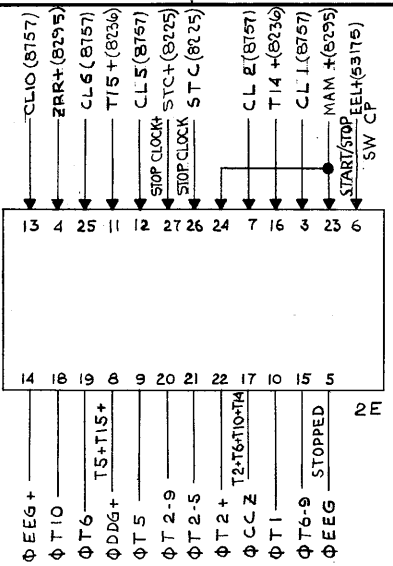
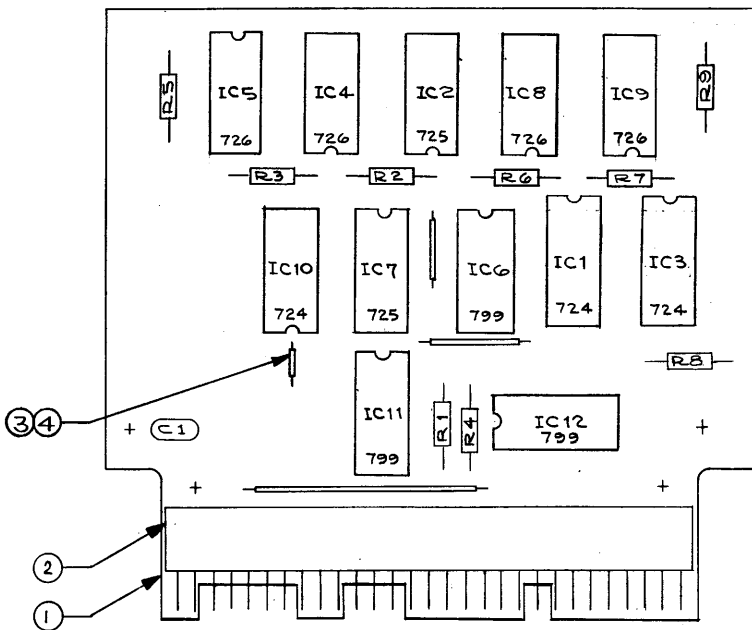
ITEM	QTY	DESCRIPTION
1	R1	RC07GF561J RESISTOR - 560Ω, ALLEN BRADLEY
1	IC5	MC724P
1	IC4	MC785P
2	IC3	MC786P
1	IC1	MC789P
1	C1	UK-10-104 CAPACITOR .1μF±20%, 10V, CRL
AR	3	AWG 24 WIRE - SOLID COPPER, TINNED
1	2	007072-029-000001 CONNECTOR - ELCO
1	1	SEL927 PRINTED CIRCUIT (FOR REV SEE AS1140)
-1	ITEM	DWG. OR PART NO. DESCRIPTION

DR.	D. BOYD	1-5-67	SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
CR.	RKM	1-13-67	
ENGR.	RKM	2-21-67	
APP.	RKM	5/21/67	
USED ON	RKM	5/11/67	

CODE IDENT NO.	20886
SIZE	D 8232
REV	B

SIZE	D	8234	REV	C
REV	DESCRIPTION		DATE	APP'D
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/8/67 RKM		9/12/67	[Signature]
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED E.P.C. 10-25-67. CLW		10/30/67	[Signature]
C	68-82; REMOVED BUFFERED OUTPUTS ON PINS 15, 20, & 21. W.D. 2-13-68 G.T.W.		2/4/68	[Signature]

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 5%, 1/4W
 3. FOR DRILLING DWG SEE DB600-928
 FOR DIMENSIONAL DWG SEE C8600.

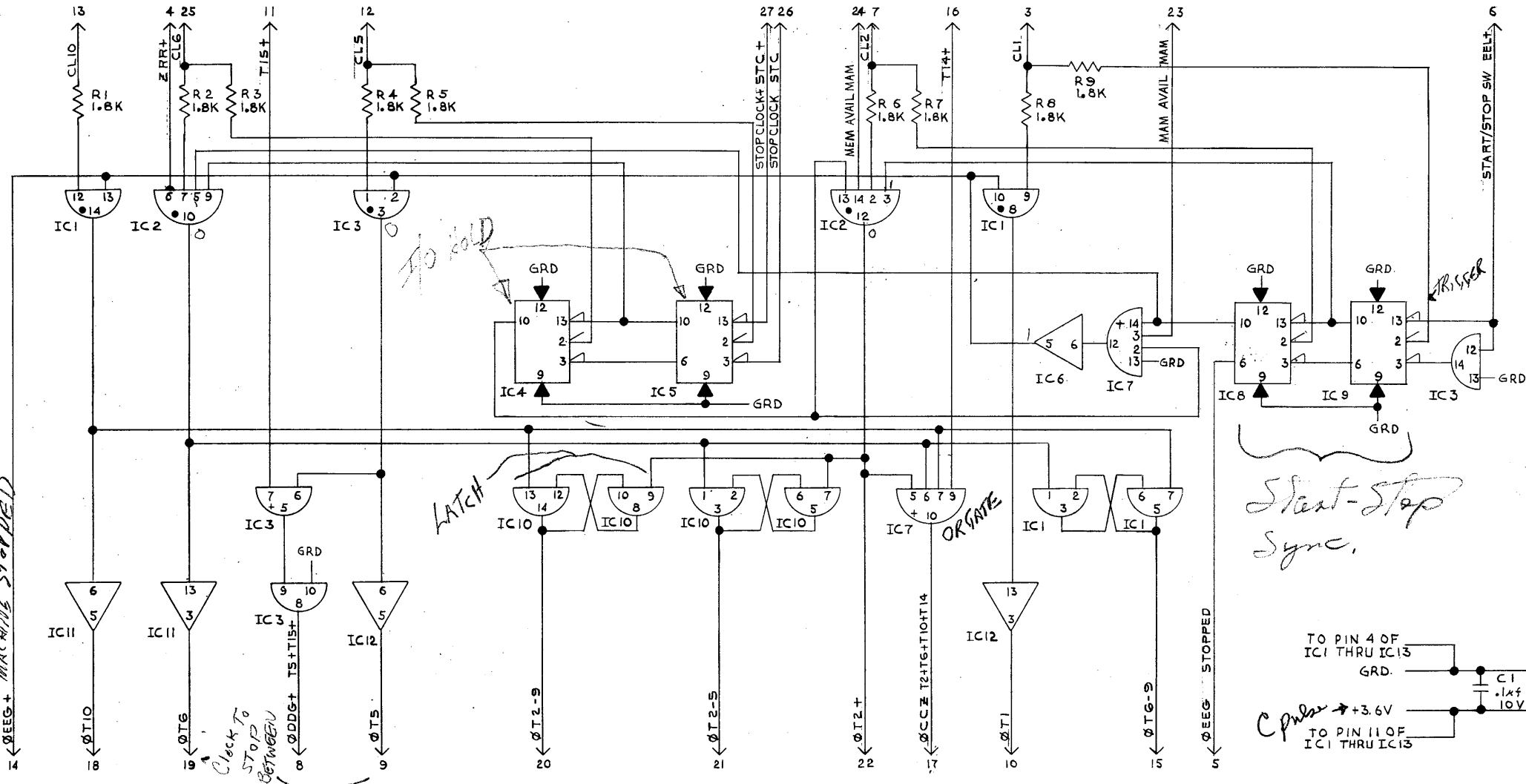


Stop due to I/O det.

RTL

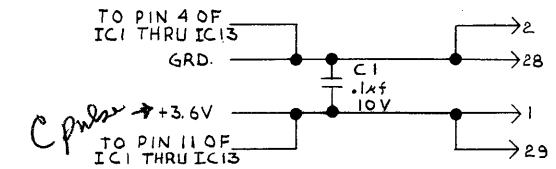
RTL

ground to keep computer running



To All other T Pubs
 MACHINE STOPPED

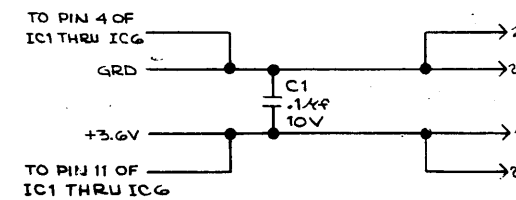
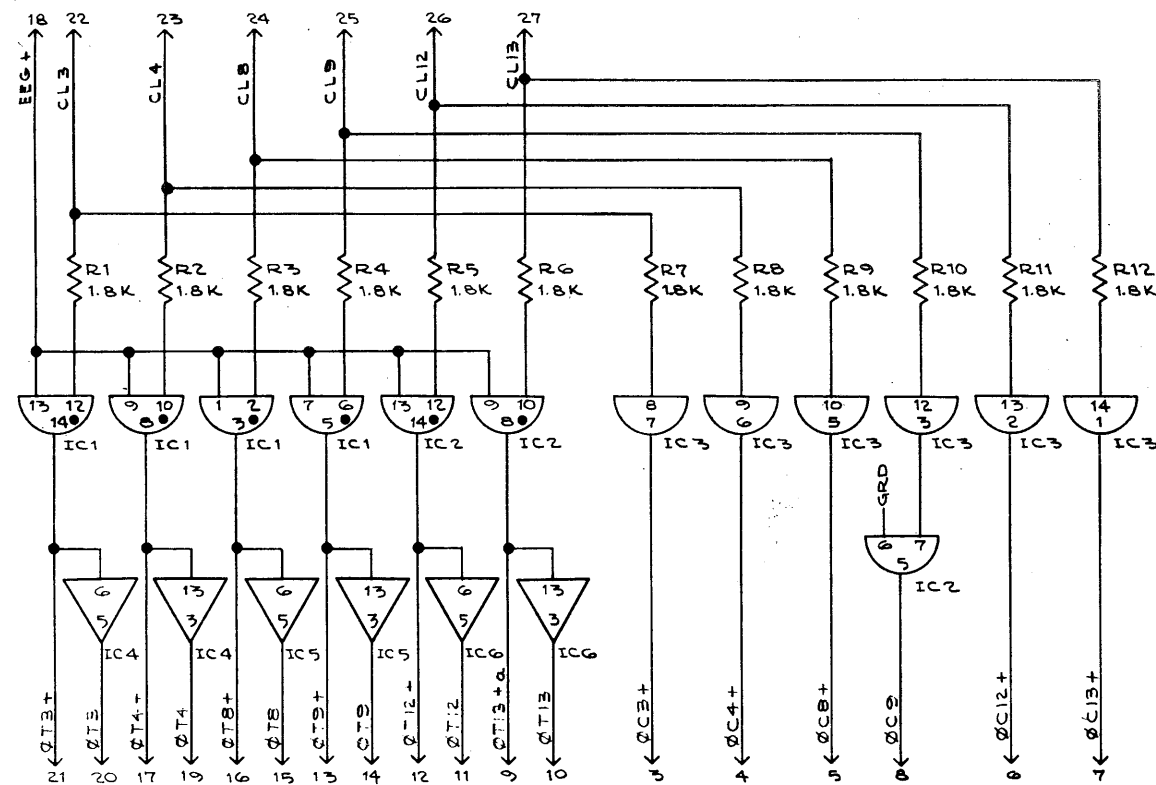
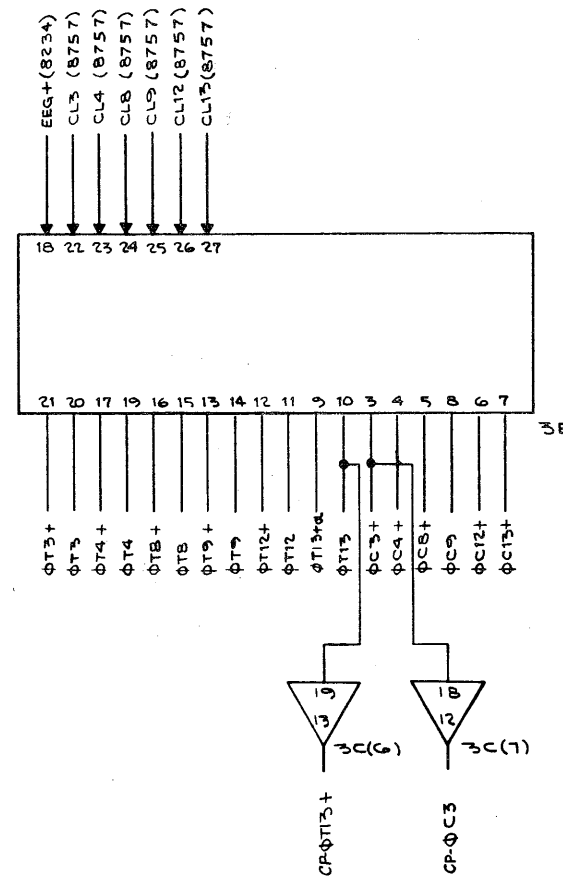
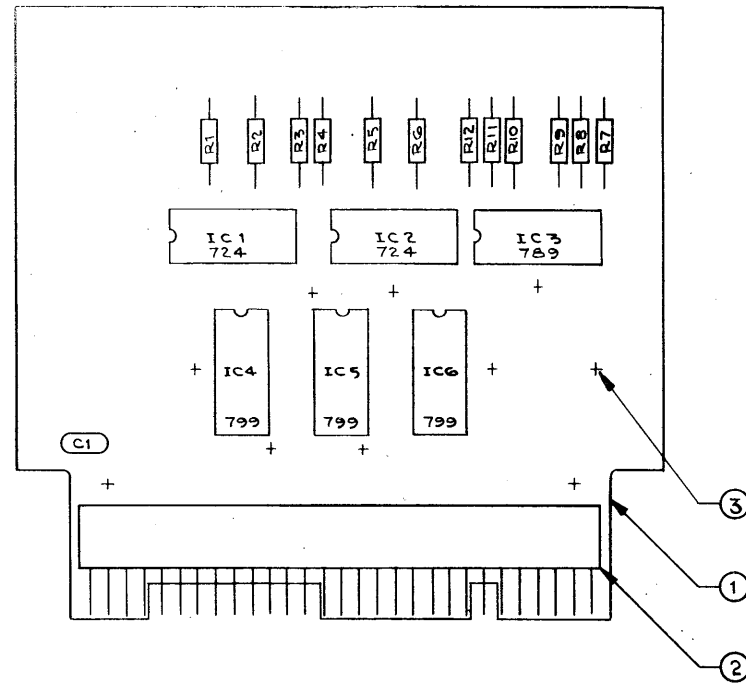
Clock to STOP BETWEEN



9	R9 THRU R1	RC07GF182J	RESISTOR-1.8K, ALLEN BRADLEY
3	IC12 IC11	MC799P	INTEGRATED CIRCUIT-MOTOROLA
4	IC8 IC5 IC4	MC726P	
2	IC7 IC2	MC725P	
3	IC10 IC3 IC1	MC724P	
1	C1	UK 10-104	CAPACITOR; 10µf ± 20%, 10V, CRL
AR	4	AWG 24	SLEEVING-TEFLON, THIN WALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 928	PRINTED CIRCUIT (REV SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING & LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR. R. SANBORNE		2-13-67	SCHEMATIC & ASSEMBLY RTL CLOCK CONTROL #1
CC	RKM	3-1-67	
ENG.	[Signature]	5/31/67	CODE IDENT NO 20886
APP.	[Signature]	5/31/67	
USED ON			SIZE D
			8234
			REV C

- NOTES:
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$ 1/4 W.
 3. FOR DRILLING DWG. SEE D8600-929 FOR DIMENSIONAL DWG.

REV	DESCRIPTION	DATE	APPD
D	8235		B
A	67-240; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. PMT 3/8/67 RYM	3/12/67	AS
B	67-445; ADDRESSES REVISED (LINE TITLES ADDED) C.THEW 10-25-67 AS	10/29/67	AS



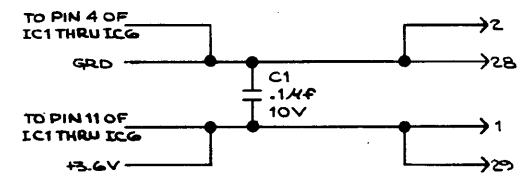
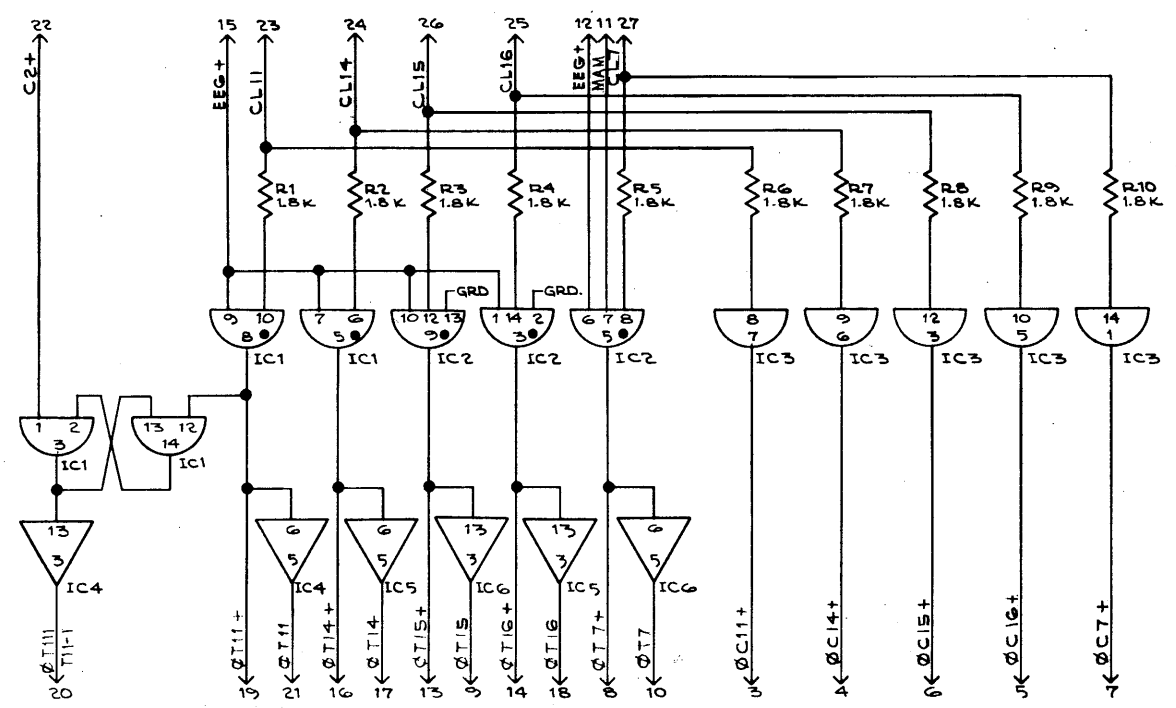
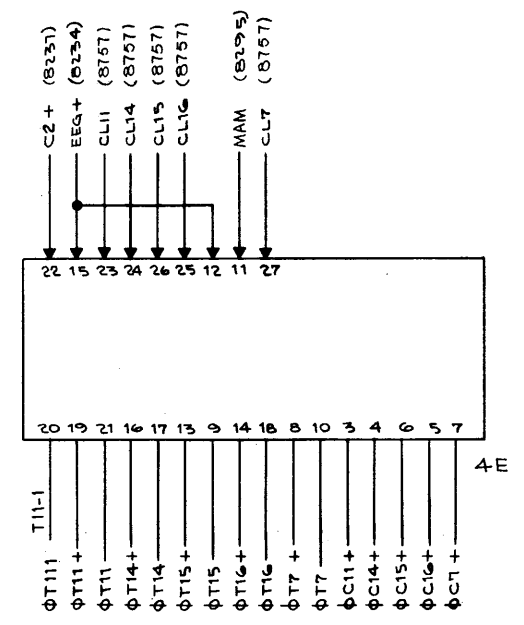
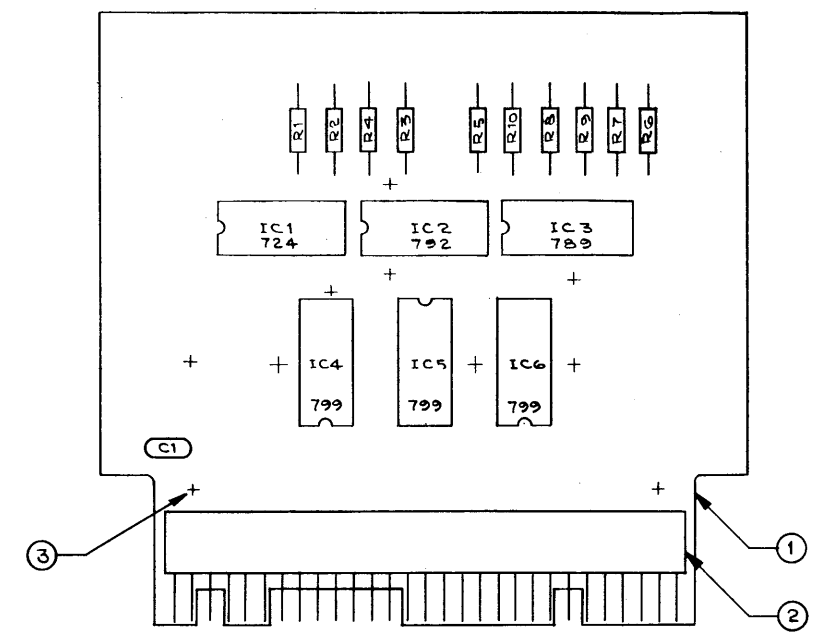
12	R12 THRU R1	RC07GF182J	RESISTOR-18K ALLEN BRADLEY
3	IC6 IC5 IC4	MC799P	INTEGRATED CIRCUIT-MOTOROLA
1	IC3	MC789P	INTEGRATED CIRCUIT-MOTOROLA
2	IC2 IC1	MC724P	INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK10-104	CAPACITOR .1uF+80-20% 10V CRL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED.
1 2	00-1012029-000-001		CONNECTOR - ELCO
1 1	SEL 929		PRINTED CIRCUIT (FOR REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	B. BOYD	1-9-67	SCHEMATIC & ASSEMBLY RTL CLOCK CONTROL #2
CR.	R.K.M.	1-15-67	
ENG.			
PROJ. NO.			
APP.			
USED ON			

CODE IDENT NO. 20886

SIZE	D 8235	REV	B
------	--------	-----	---

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING DWG. SEE D8600-030.
 FOR DIMENSIONAL DWG. SEE C8600

REV	DESCRIPTION	DATE	APPD
D	8236		
A	G7-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 5/8/67 RKM	5/12/67	[Signature]
B	G7-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-25-67	10/28/67	[Signature]

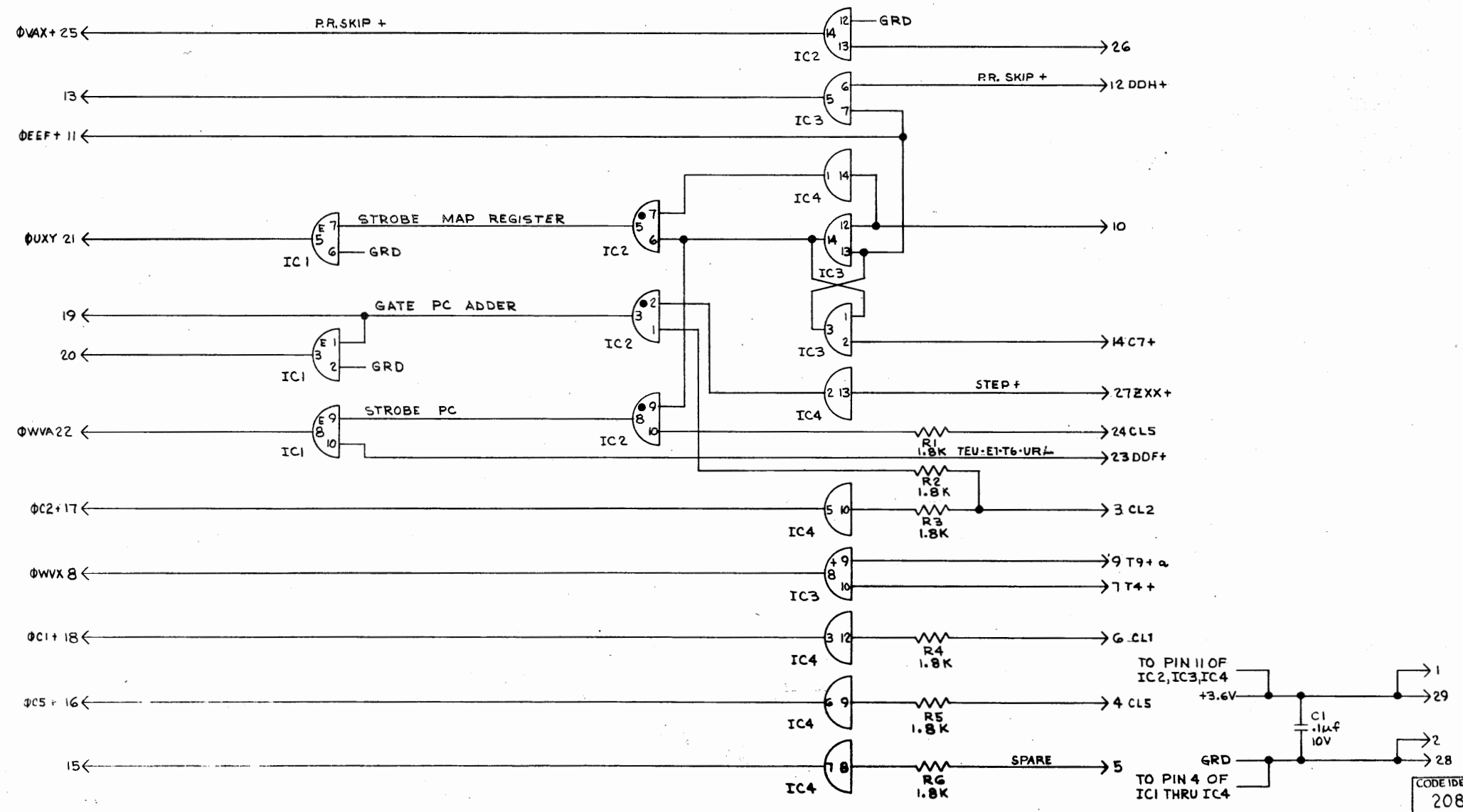
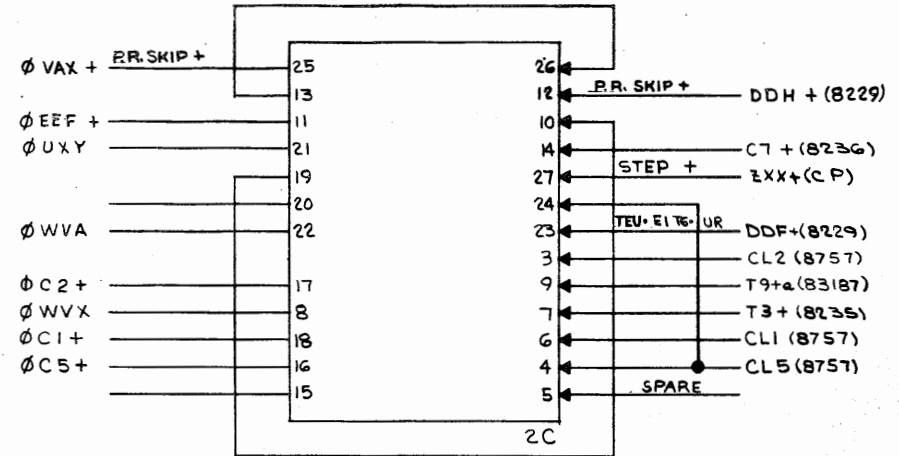
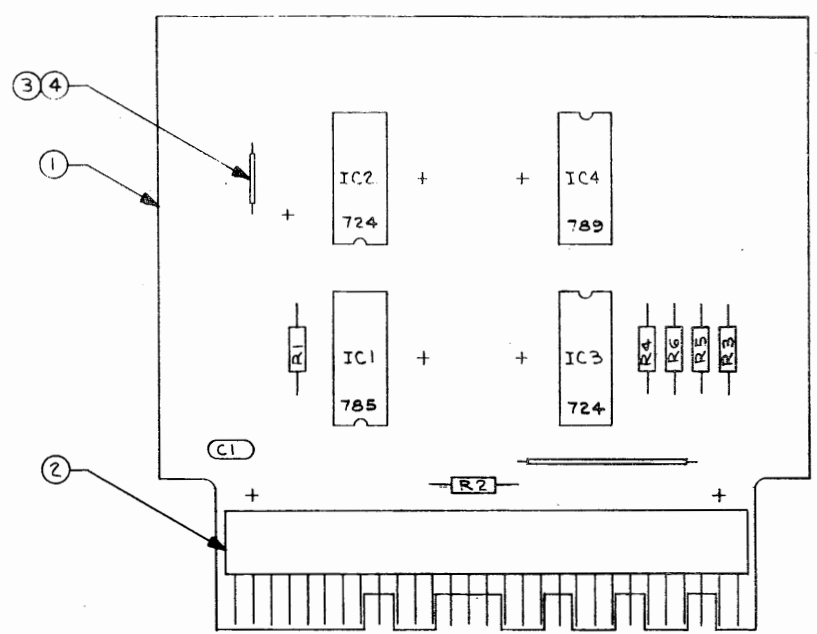


QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
10	R10 THRU R1	RC07GF182J	RESISTOR-1.8K, ALLEN BRADLEY
3	IC6, IC5, IC4	MC799P	INTEGRATED CIRCUIT-MOTOROLA
1	IC3	MC789P	
1	IC2	MC792P	
1	IC1	MC724P	
1	C1	UK10-104	CAPACITOR-.14F+80-20%10V CRL
AR 3	AWG 24		WIRE - SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	SEL 930	PRINTED CIRCUIT (FOR REV SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEL		SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA	
DR	b BOYD	1-9-67	
CR	RKM	1-12-67	
ENG.	[Signature]	5-31-67	
APP.	[Signature]	5/31/67	
USED ON			
CODE IDENT NO	20886	SIZE	D 8236
		REV	B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4$ W.
 3. FOR DRILLING DWG SEE D8600-975.
 FOR DIMENSIONAL DWG SEE C8600.

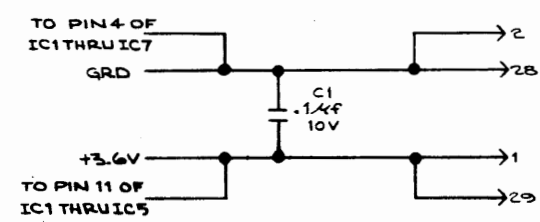
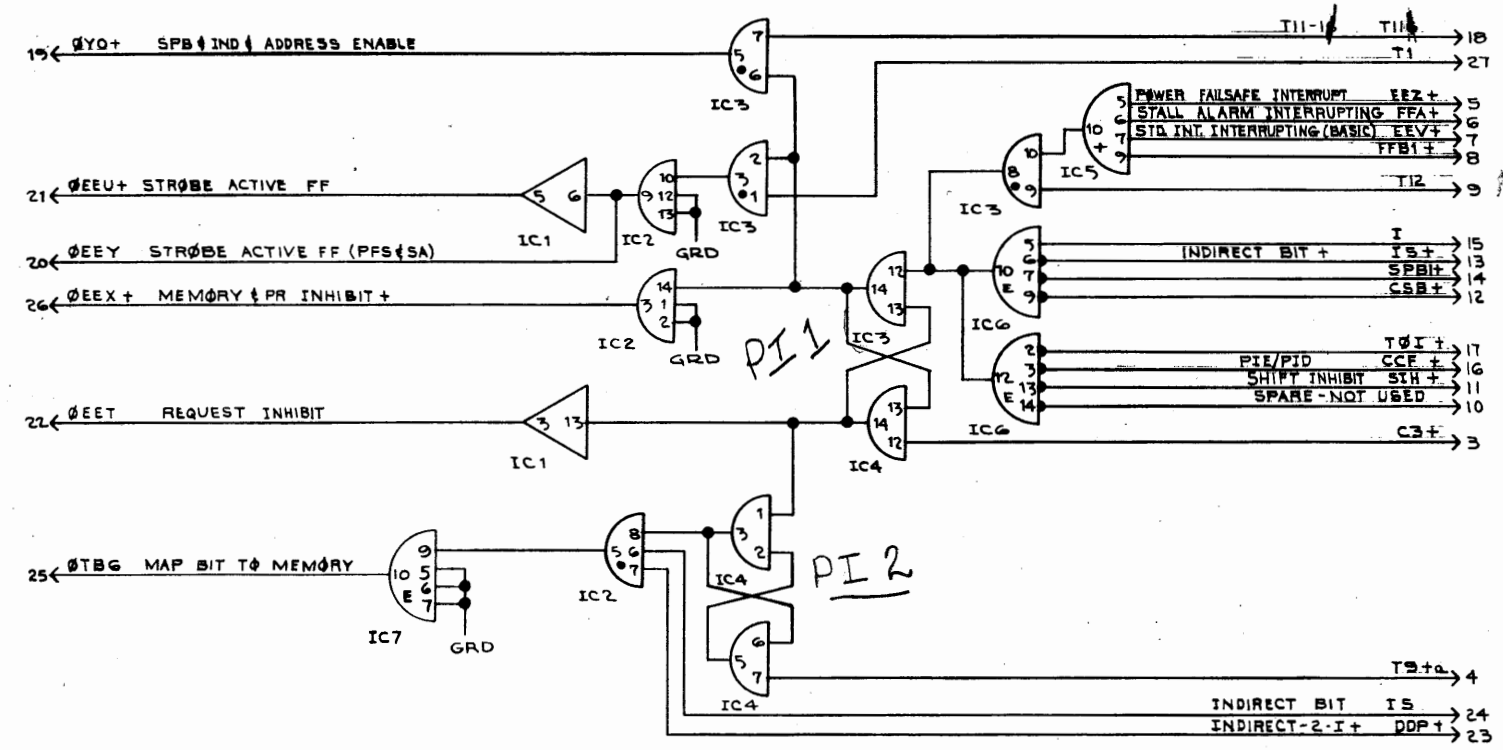
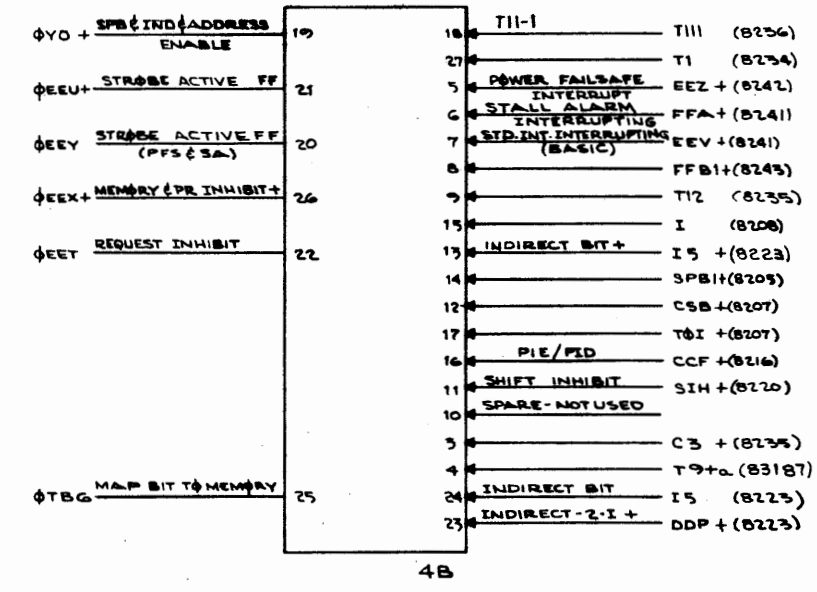
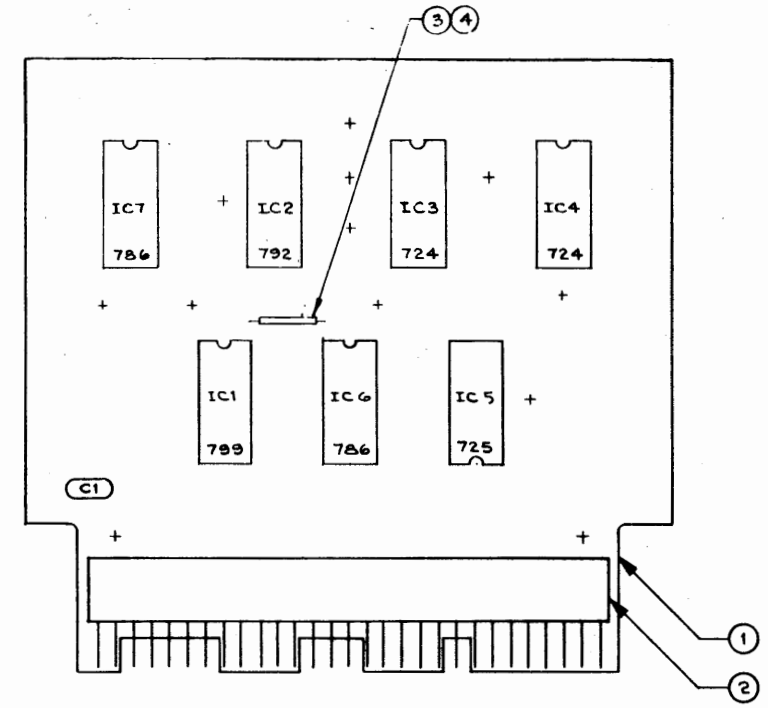
REV	D	8237	DATE	APPROV
REV	A	67-245; ADDRESS ON PIN 1 OF LOGIC WAST 34, CEM 7/26/67	7/26/67	RKM
REV	B	67-445; ADDRESSES REVISED & LINE TITLES ADDED. E.THEW 10-25-67	10/27/67	ET



G	R6		
	R5		
	R4	RC07GF182J	RESISTOR-1.8K, ALLEN BRADLEY
	R3		
	R2		
	R1		
1	IC4	MC 789P	
2	IC3	MC 724P	INTEGRATED CIRCUIT-MOTOROLA
	IC2		
1	IC1	MC 785P	
1	C1	UK-10-104	CAPACITOR-.1 μ f +80-20%, 10V, SPRAGUE
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 975	PRINTED CIRCUIT (REV. SEE A51M0)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	L. GOODBREAD	3/27/67	SCHEMATIC & ASSEMBLY RTL LOAD / DISPLAY MEMORY STEP CONTROL
CL	RKM	3-27-67	
DWG.			
APP.			
USED ON			
CODE IDENT NO	20886	SIZE	D
			8237

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-919 FOR DIMENSIONAL DWG. SEE C8600

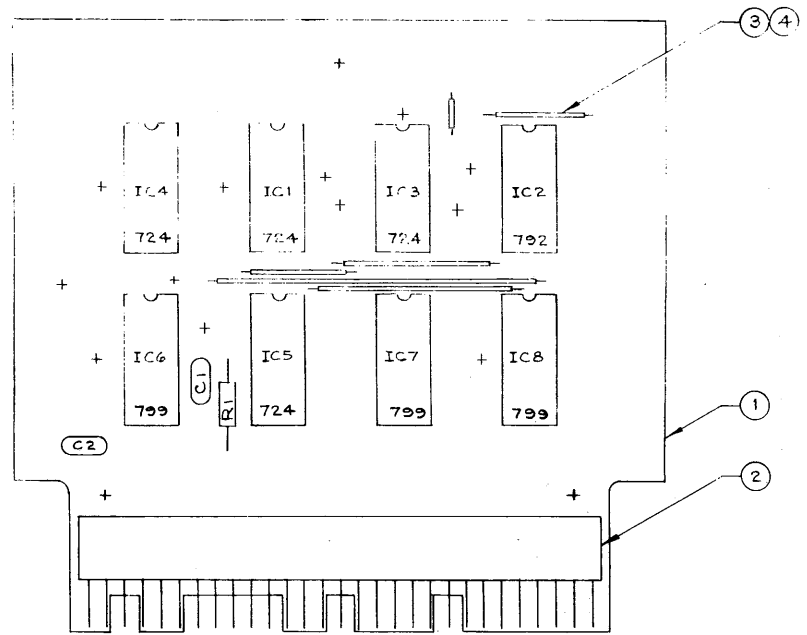
REV	DESCRIPTION	DATE	APP'D
A	G7-340- DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/13/67	9/13/67	[Signature]
B	G7-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-25-67	10/25/67	[Signature]



2	IC7	MCT86P	
1	IC6	MCT86P	
1	IC5	MCT25P	
2	IC4	MCT24P	INTEGRATED CIRCUIT-MOTOROLA
2	IC3	MCT24P	
1	IC2	MCT92P	
1	IC1	MCT99P	
1	C1	UK10-104	CAPACITOR .1uF+50-20% 10V, CBL.
AR	4	AWG 24	SLEEVING-TEFLON THINWALL (COP)
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-1021-019-000-001	CONNECTOR - ELCO
1	1	SEL 919	PRINTED CIRCUIT-(FOR REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	b. BOYD	1-11-67	
CC	RKM	1-12-67	SCHMATIC & ASSEMBLY
ENGR.	C. Mc...	5-5-67	RTL PRIORITY INTERRUPT LATCH
APP.	[Signature]	6/6/67	IRI
USED ON	[Signature]	6/5/67	

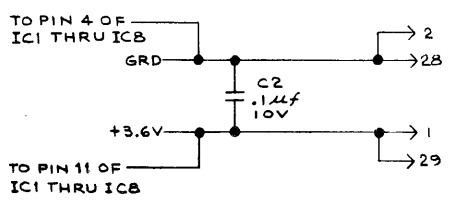
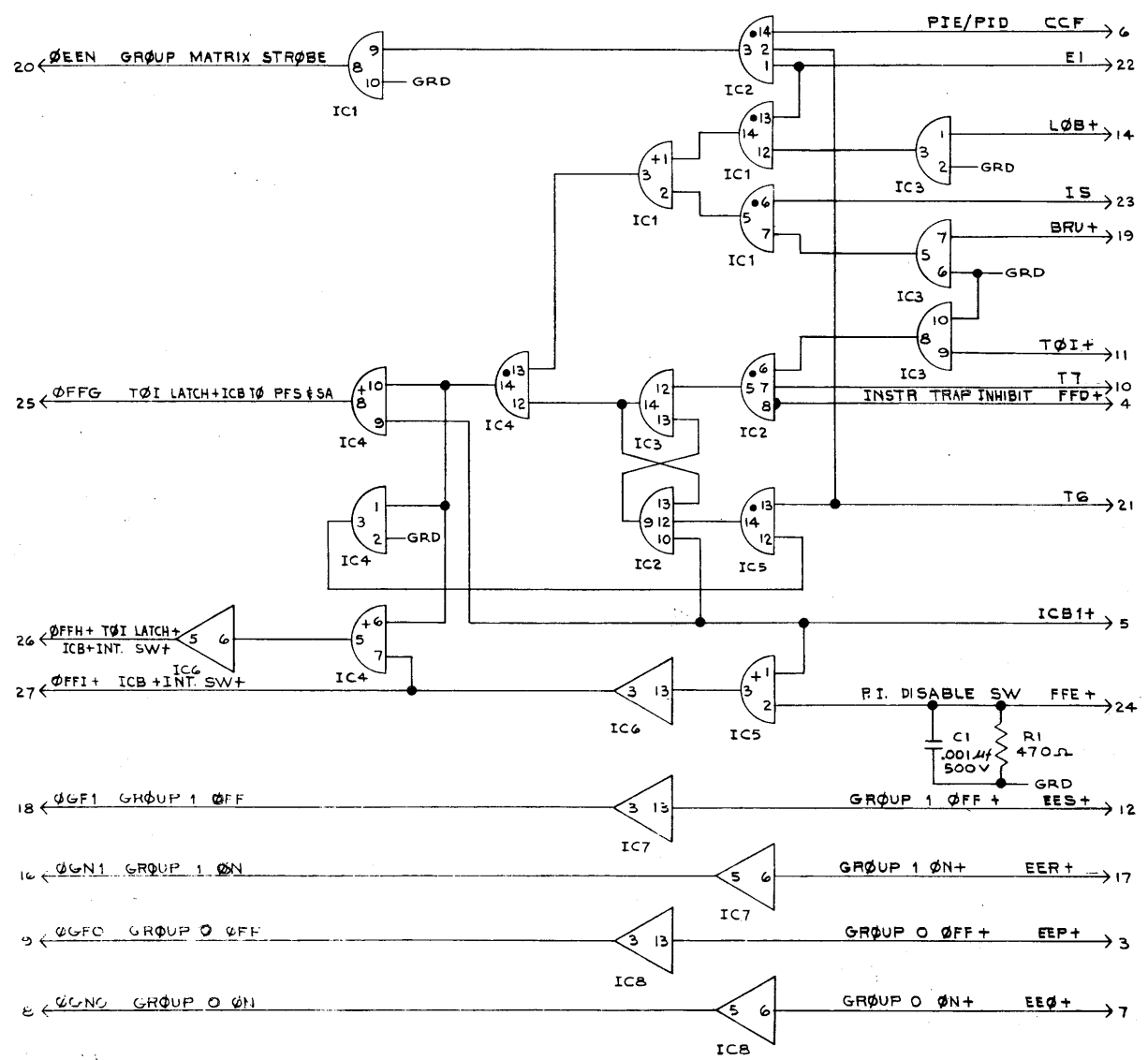
CODE IDENT NO
20886

SIZE	D	8 2 3 8	REV	B
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- ØEEN GROUP MATRIX STRØBE 20
- ØFFG TØI LATCH+ICB TØ PFS+SA 25
- ØFFH+ TØI LATCH+ICB+INT SWH 26
- ØFFI+ ICB+INT SW+ 27
- ØGF1 GROUP 1 ØFF 18
- ØGN1 GROUP 1 ØN 16
- ØGF0 GROUP 0 ØFF 9
- ØGN0 GROUP 0 ØN 8

- 6 PIE/PID CCF (8216)
- 22 EI (8208)
- 14 LØB+(8207)
- 23 IS (8223)
- 19 BRU+(8205)
- 11 TØI+(8207)
- 10 T7 (8236)
- 4 INSTR TRAP INHIBIT FFD+(8239)
- 21 T6 (8234)
- 5 ICB+(8245)
- 24 PI DISABLE SW FFE+(C.P.)
- 12 GROUP 1 ØFF+ EES+(8240)
- 17 GROUP 1 ØN+ EER+(8240)
- 3 GROUP 0 ØFF+ EEP+(8240)
- 7 GROUP 0 ØN+ EEØ+(8240)



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 5% ± 1/4 W.
 3. FOR DRILLING DWG SEE D8600-921.
 FOR DIMENSIONAL DWG SEE C8600.

REV	DESCRIPTION	DATE	APPD
D	8239		B
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RKM	9/27/67	[Signature]
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED E.P.C. 10-25-67	9/29/67	[Signature]

QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
1	R1	RC07GF471J	RESISTOR-470Ω, ALLEN BRADLEY
3	IC8 IC7 IC6	MC799P	INTEGRATED CIRCUIT-MOTOROLA
1	IC2	MC792P	INTEGRATED CIRCUIT-MOTOROLA
4	IC5 IC4 IC3 IC1	MC724P	INTEGRATED CIRCUIT-MOTOROLA
1	C2	UK-10-104	CAPACITOR-10K500P20V, 10V, CER.
1	C1	TD102	CAPACITOR-201/2F, 10V, 500V, CER.
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL (COLOR OPT.)
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
I	2	00-7022-029-000-001	CONNECTOR-ELCO
I	1	SEL 921	PRINTED CIRCUIT-(FOR REV. SEE A51140)

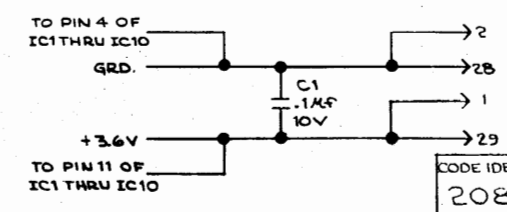
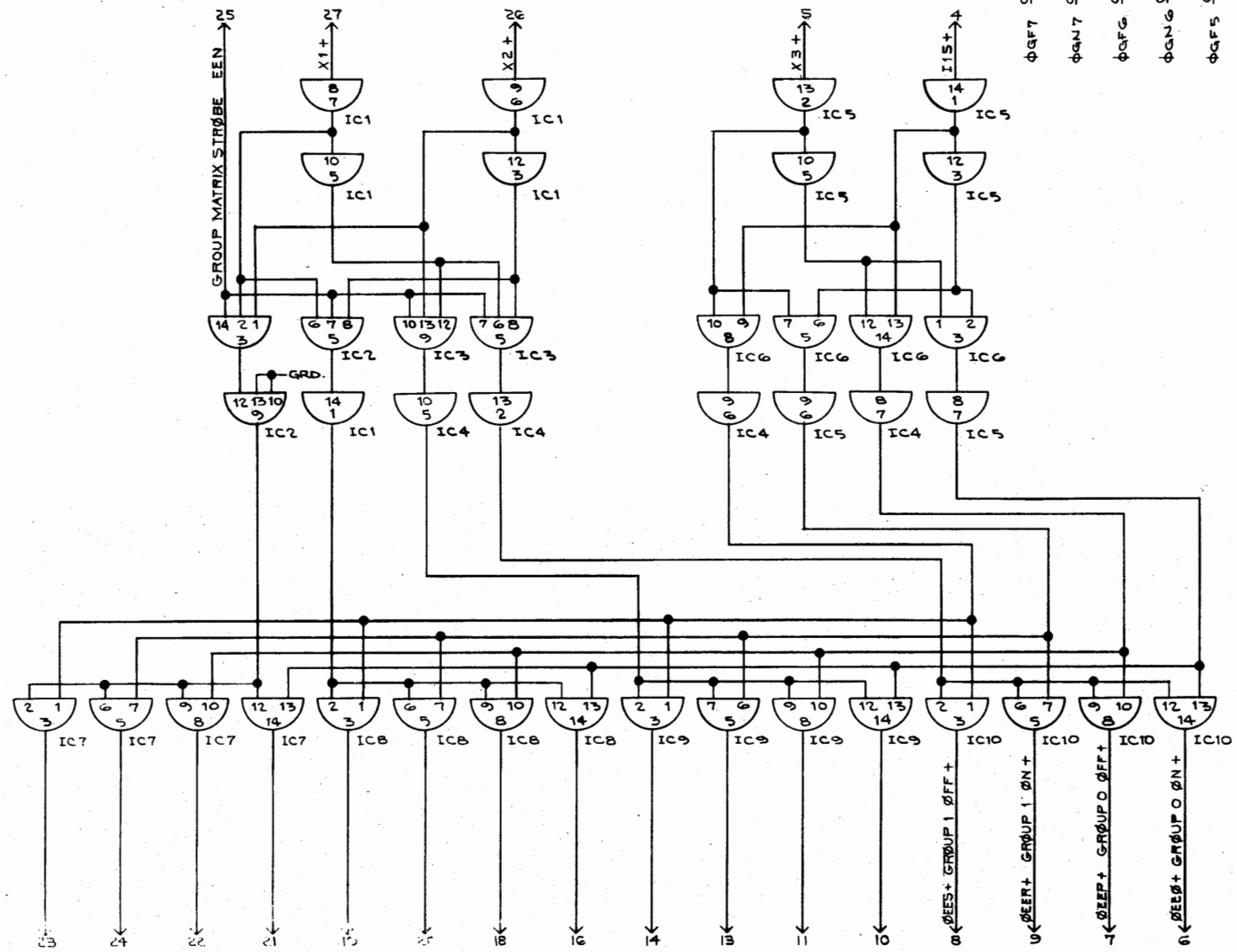
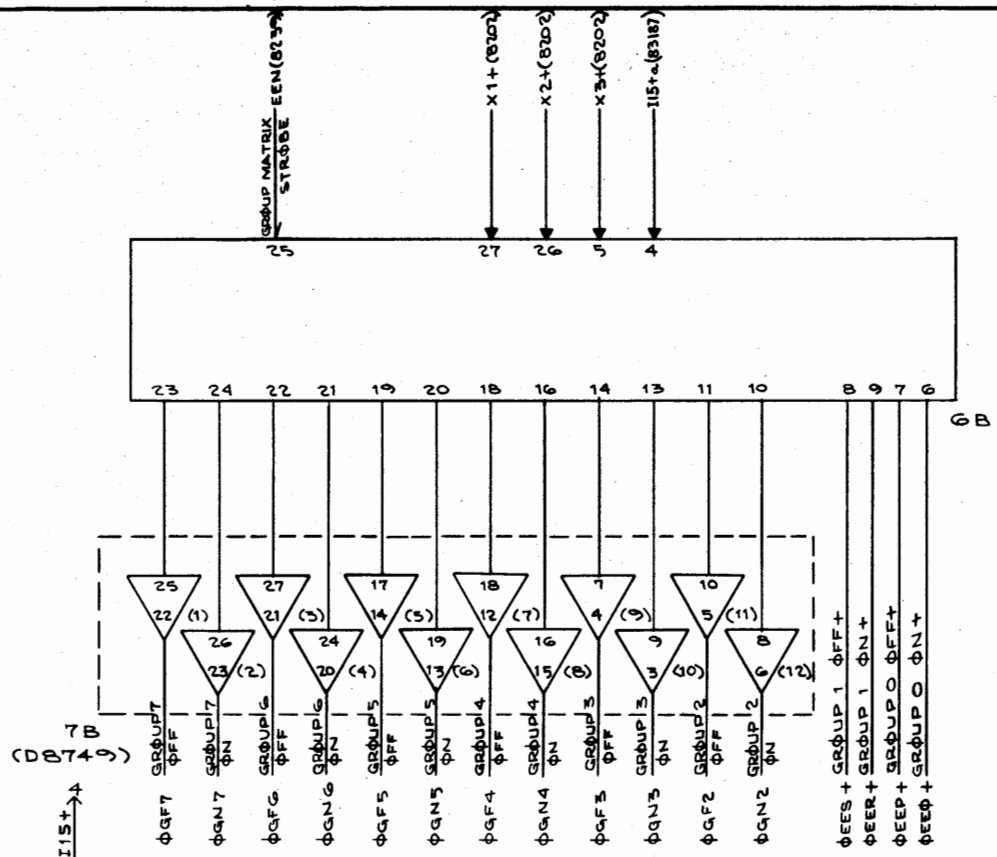
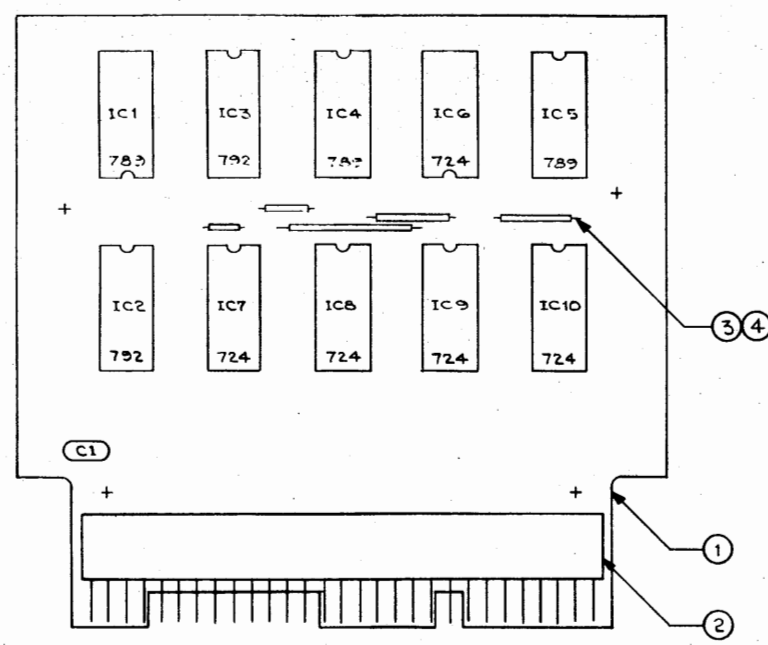
DR.	RKM	1-9-67	SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
CL.	WC	1/1/67	
ENG.	[Signature]	6-5-67	
PROJ.	[Signature]	6/6/67	
APP.	[Signature]	6/7/67	

CODE IDENT NO. 20886

SIZE	D	8239	REV	B
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REV	D	8240	REV	B
REV	DESCRIPTION		DATE	APPD
A	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/8/67 RKM		9/17/67	[Signature]
B	67-445; ADDRESSES REVISED C.THEW 10/25/67		10/25/67	[Signature]

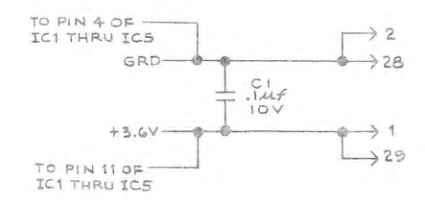
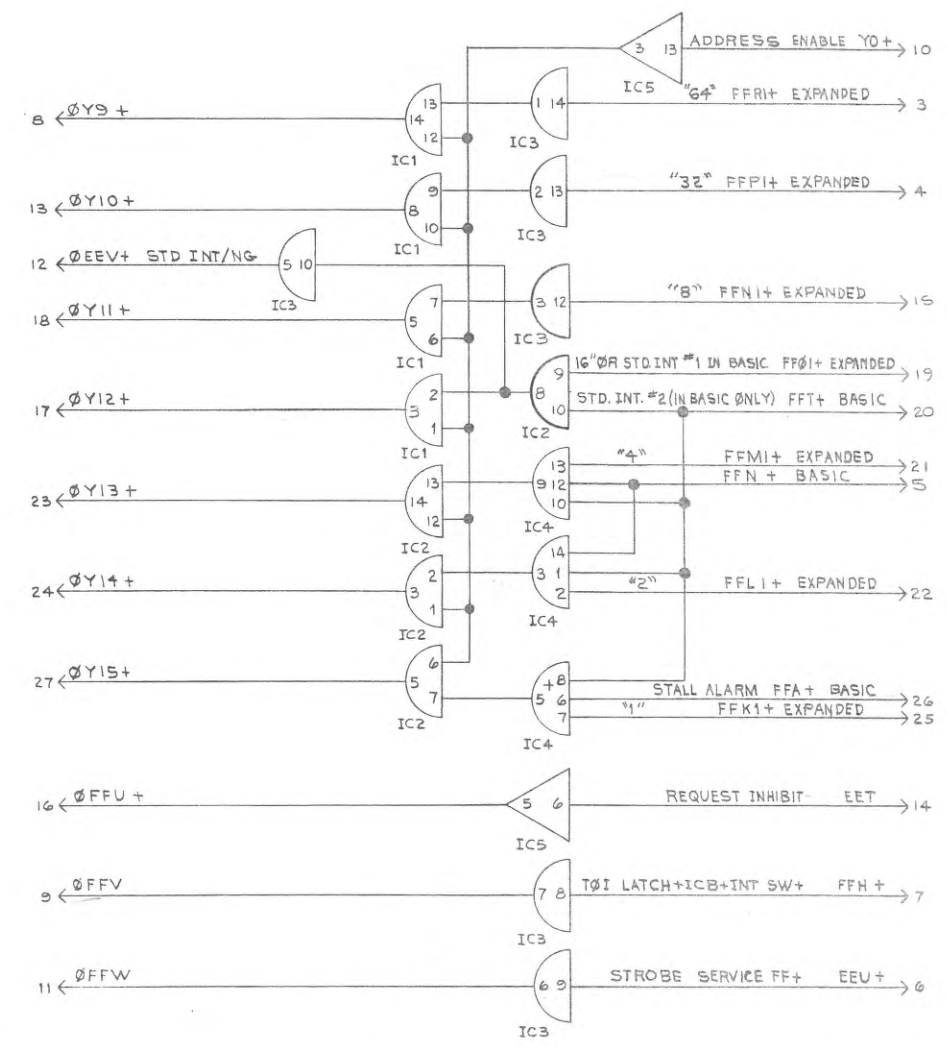
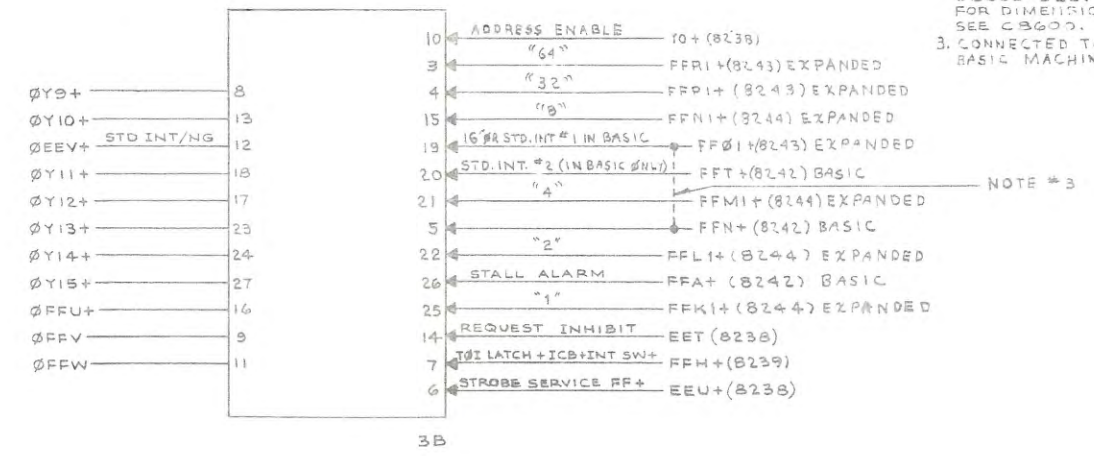
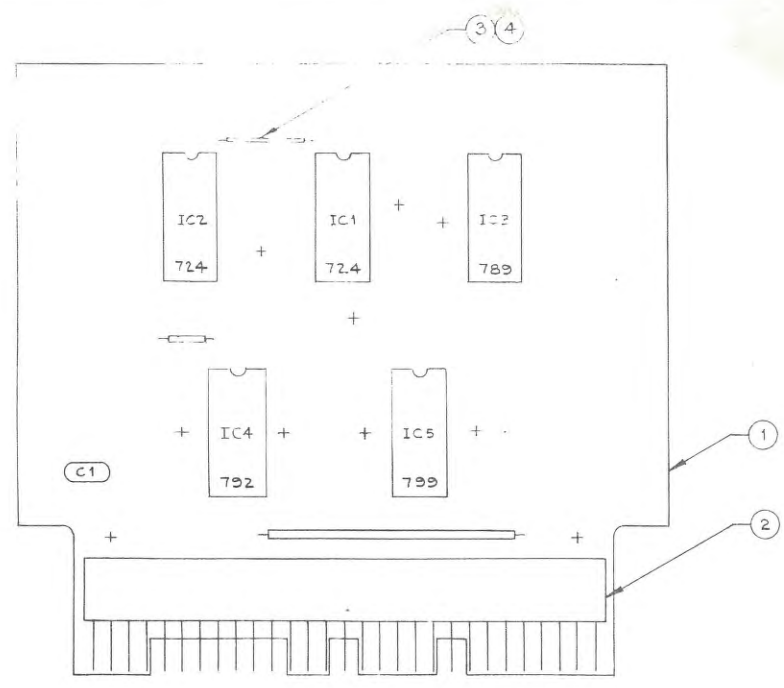
NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE: D8600-925
 FOR DIMENSIONAL DWG. SEE C.8600



5	IC10 THRU IC6	MC724P	INTEGRATED CIRCUIT-MOTOROLA
2	IC3 IC2	MC792P	
3	IC5 IC4 IC1	MC789P	
1	C1	UK10-104	CAPACITOR-.1μF±80-20%, 10V, CRL
AR 4	AWG 24	SLEEVING-TEFLON, THIN WALL	SCHEMATIC & ASSEMBLY
AR 3	AWG 24	WIRE-SOLID COPPER, TINTED	RTL PI GROUP MATRIX
1 2	00-7022-029-000001	CONNECTOR-ELCO	IRI
1 1	SEL 925	PRINTED CIRCUIT (FOR REV. SEE AS1140)	
-1	ITEM DWG. OR PART NO.	DESCRIPTION	
SEL			SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
DR	b. BOYD	1-10-67	SCHEMATIC & ASSEMBLY
CK	RKM	1-12-67	
ENG.	C.M.C. (Signature)	6-5-67	RTL PI GROUP MATRIX
APP.	(Signature)	6/6/67	
CODE IDENT NO	20886	SIZE	D 8240
REV			B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D3600-920. FOR DIMENSIONAL DWG. SEE C900.
 3. CONNECTED TOGETHER IN BASIC MACHINE ONLY.

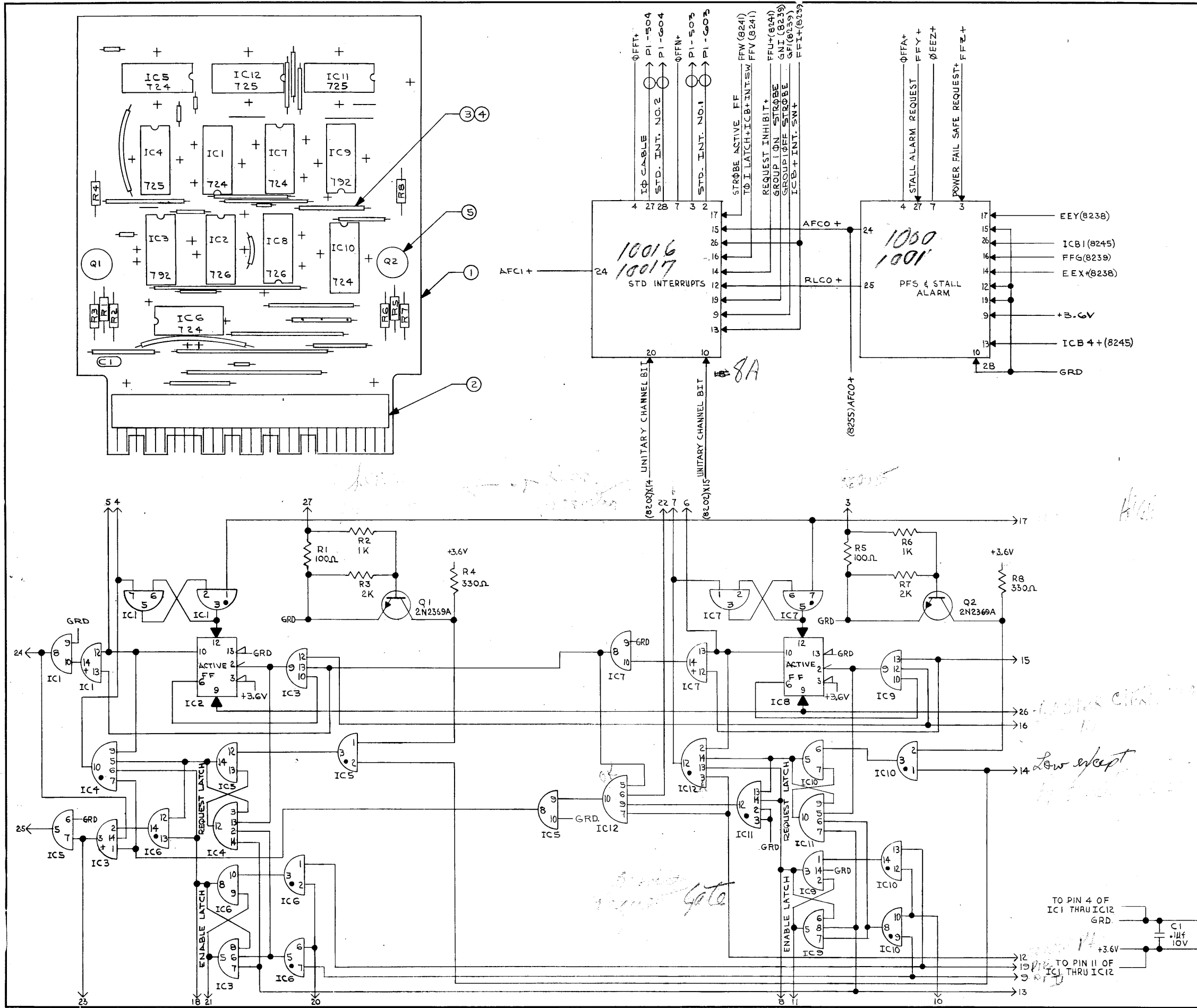
SIZE	D	3241	REV	A
REV	A	DESCRIPTION	DATE	APP'D
		GT-3401 DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC.	3/12/67	
		RMT 9/11/67 RKM		



1	IC5	MC799P	INTEGRATED CIRCUIT- MOTOROLA
1	IC4	MC792P	
1	IC3	MC789P	
2	IC2	MC724P	INTEGRATED CIRCUIT- MOTOROLA
1	IC1		
1	C1	UK-10-104	CAPACITOR-.100uf+80-20%, 10V, CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL (COLOR OPT.)
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR- ELCO
1	1	SEL 920	PRINTED CIRCUIT (FOR REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

		SYSTEMS ENGINEERING LABORATORIES, INCORPORATED, FORT LAUDERDALE, FLORIDA	
DR.	RKM	1-7-67	SCHEMATIC ASSEMBLY RTL PRIORITY INTERRUPT ADDRESS AND GATES IRI
CK.	WC	1-11-67	
ENG.	C. McQuinn	6-5-67	
PROJ. APP.	R. Kimp	6/6/67	
APP.	R. Kimp	6/5/67	
CODE IDENT NO.	20886	SIZE	D
		8241	REV
			A





NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING DWG. SEE D8600-901.
 FOR DIMENSIONAL DWG. SEE CB600.

REV	DESCRIPTION	DATE	APPD
D	8242		C
A	67-258; UPDATED SHEETS 1 THRU 7 TO AGREE WITH LATEST P.C. REVISION. RMT 8/15/67 RKM	8/15/67	
B	67-445; ADDRESSES, CARD NOS. & LINE TITLES REVISED ON SH. 1, 2 AND 4. C. THEW 10-25-67 AS.	10/30/67	
C	68-199; ADDRESS ON 2B, LOGIC PIN 26 WAS (8225), ADDED (8245) ON PIN 13. W. H. H. 4-19-68 RKM	4/19/68	

2	R8	RC07GF331J	RESISTOR-330 Ω , ALLEN BRADLEY
2	R4	RC07GF202J	2K,
2	R7	RC07GF102J	1K,
2	R6	RC07GF101J	RESISTOR-100 Ω , ALLEN BRADLEY
2	R5	RC07GF101J	RESISTOR-100 Ω , ALLEN BRADLEY
2	R1	RC07GF101J	RESISTOR-100 Ω , ALLEN BRADLEY
2	Q2	2N2369A	TRANSISTOR-FAIRCHILD
2	Q1	2N2369A	TRANSISTOR-FAIRCHILD
3	IC12	MCT25P	INTEGRATED CIRCUIT-MOTOROLA
3	IC11	MCT25P	
3	IC4	MCT25P	
2	IC9	MCT92P	
2	IC3	MCT92P	
2	IC8	MCT26P	
2	IC2	MCT26P	
2	IC10	MCT26P	
5	IC7	MCT24P	
5	IC6	MCT24P	
5	IC5	MCT24P	
5	IC1	MCT24P	
1	C1	UK10-104	CAPACITOR-.1 μ f+80-20%, 10V, CRL
2	5	B 10369	UNIPAD
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 901	PRINTED CIRCUIT-(REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SYSTEMS ENGINEERING LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

DR. R. SANBORNE 2-28-67
 CL. GOODBREAD 3/17/67
 ENG. C. McDaniel 6-5-67
 PROJ. APP. W. H. H. 6/6/67
 USED ON 6/5/67

CODE IDENT NO. 20886
 SIZE D 8242
 SHEET 1 OF 7

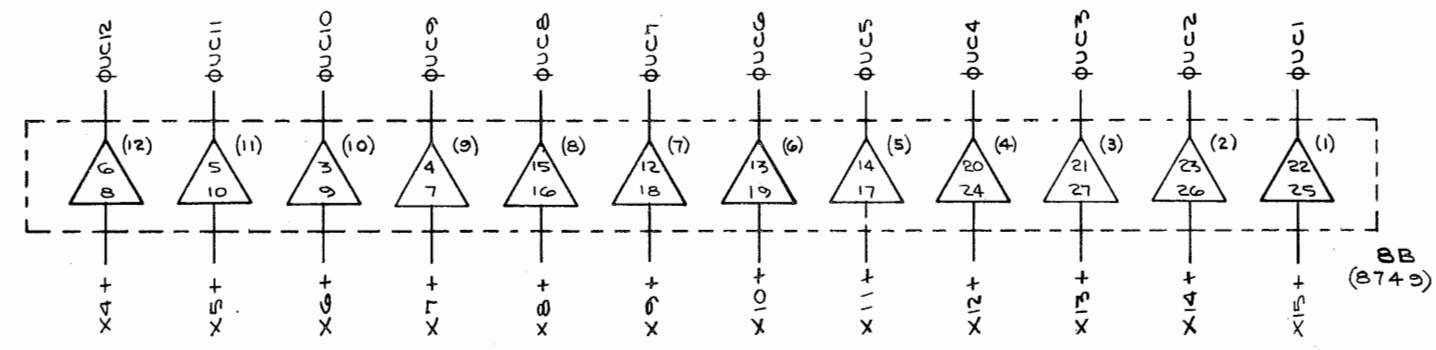
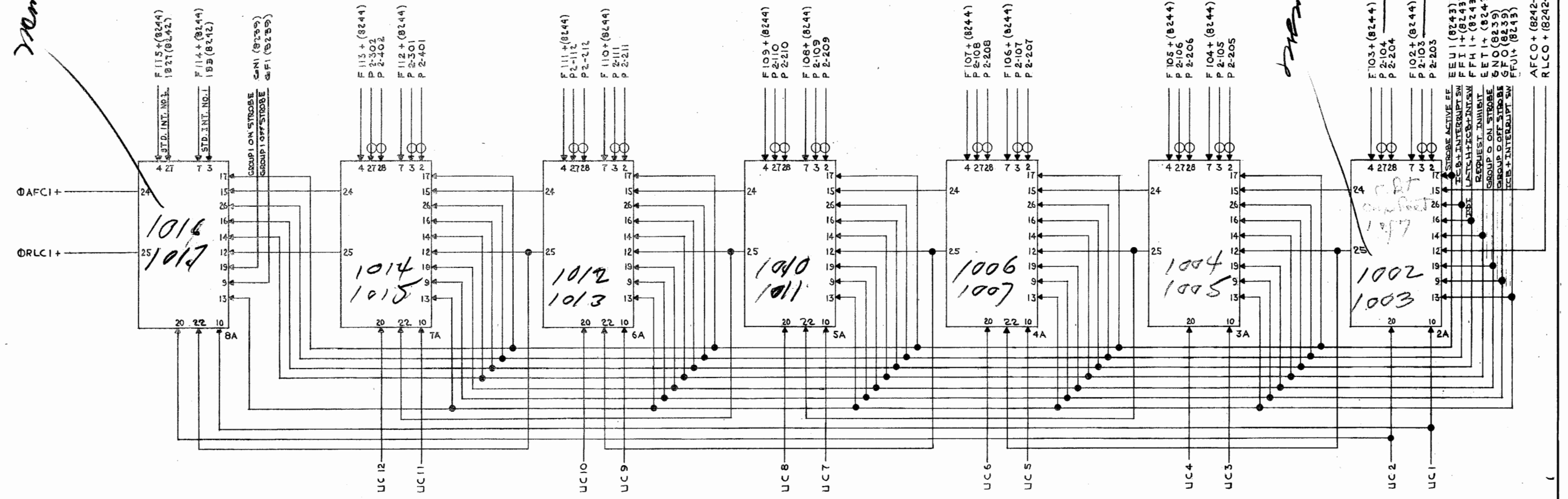
NOTES:
1. SEE SHEET 1.

SIZE	D	8242	REV	C
DESCRIPTION	SEE SHEET 1.		DATE	APPD

Mem. location

*AD to 8242
for copy*

mem loc. — int. loc.



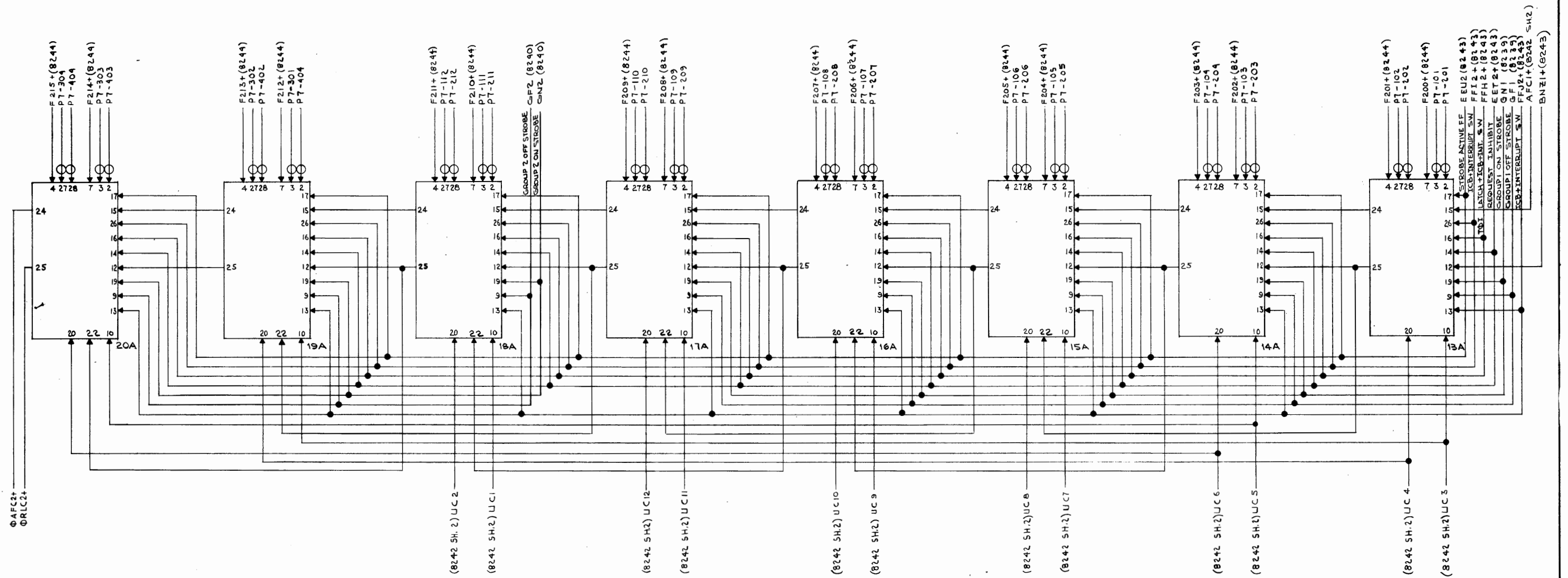
ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR. R. SANBORNE	3-1-67	SCHEMATIC ASSEMBLY RTL PRIORITY INTERRUPT MODULE 1 IR1
CL. L. GOODBREAD	3/17/67	
ENGR. M. D. [unclear]	6-5-67	
PROJ. APP. [unclear]	6/6/67	
APPROVED BY [unclear]	6/5/67	

CODE IDENT NO.
20886

SIZE	D	8242	REV	C
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NOTES:
1. SEE SH.1

REV	DESCRIPTION	DATE	APP'D
D	8242		C
SEE SHEET.1			

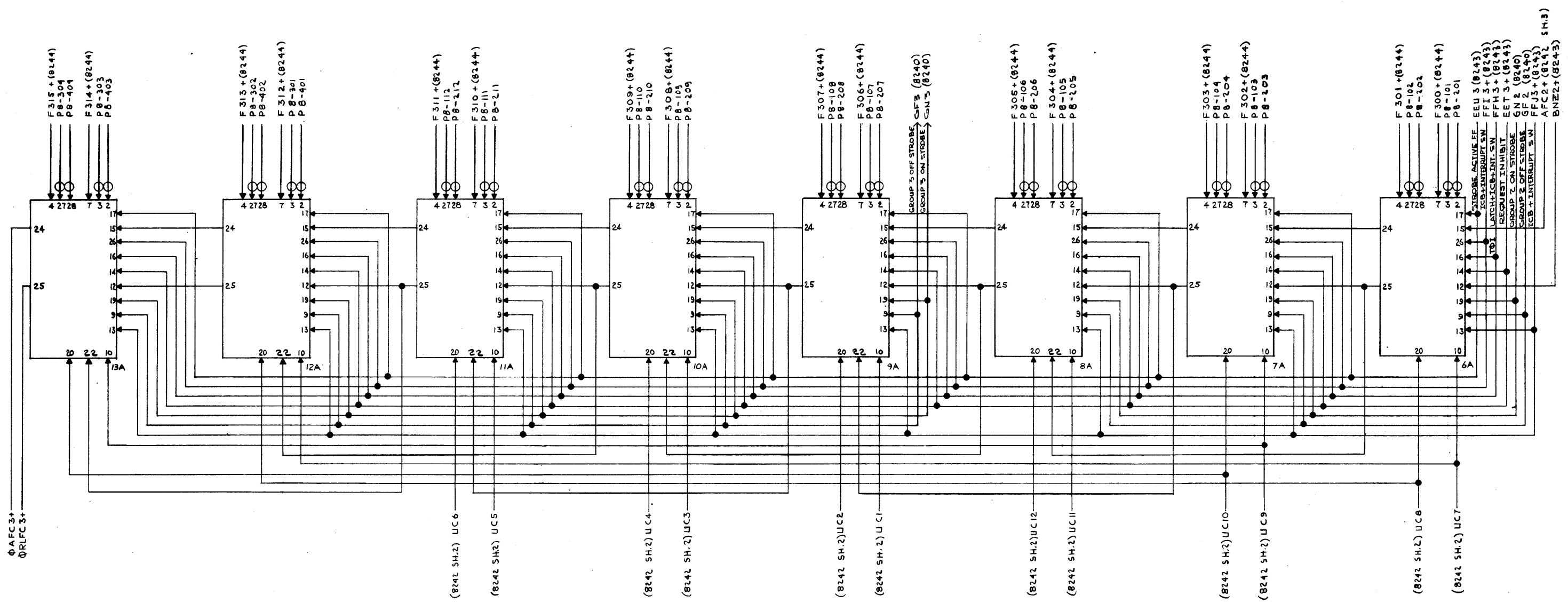


Handwritten note:
Approved by [Signature]

ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA						
DR.	RSANBORNE 3-1-67	SCHEMATIC & ASSEMBLY RTL PRIORITY INTERRUPT MODULE 2 IR1				
CL.	L.GOODLEAD 3/17/67					
ENG.	C. McDermott 6-5-67					
PROJ. APP.	[Signature] 4/7/67					
CODE IDENT NO.	20886	SIZE	D	8242	REV	C

NOTES:
1. SEE SH.1

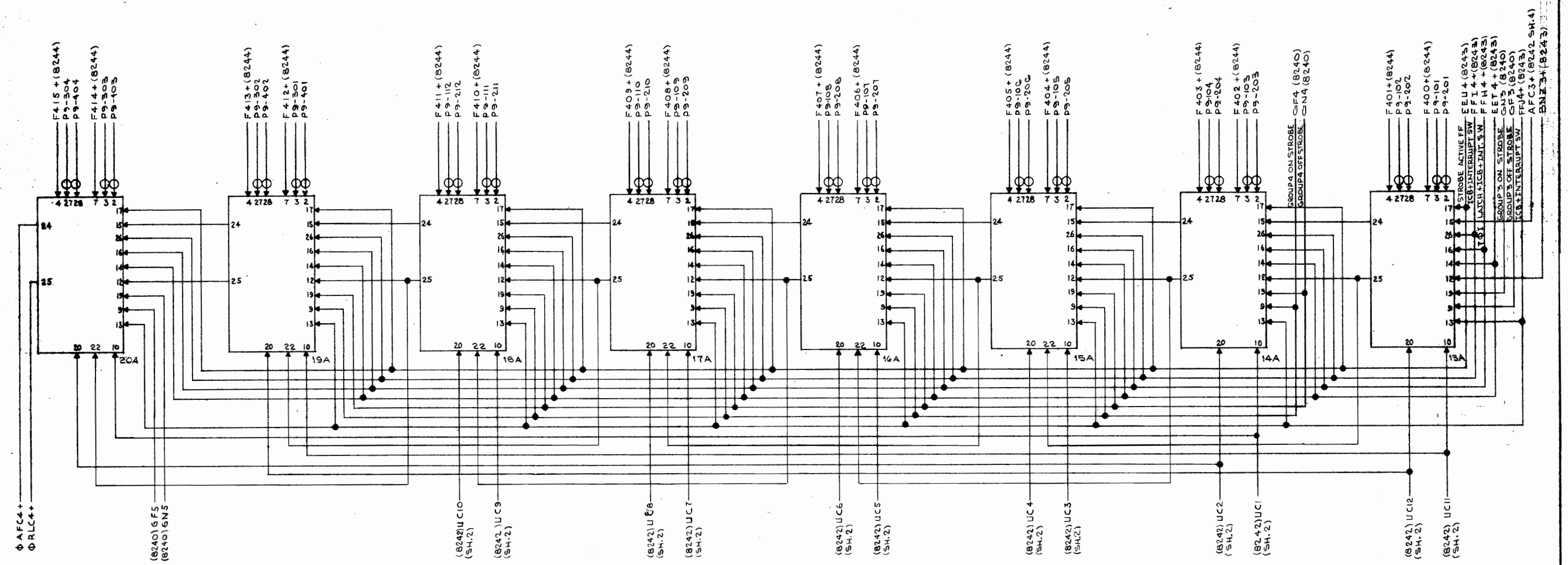
REV	DESCRIPTION	DATE	APP'D
D	8242		C
SEE SHEET 1.			



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	R.SANBORNE 3-1-67	SCHEMATIC & ASSEMBLY RTL PRIORITY INTERRUPT MODULE 3 IR2
CL.	L.GOODBREAD 3/17/67	
ENG.	<i>McDonald</i> 6-5-67	
PROJ.	<i>W.C. ...</i> 6/6/67	
APP.	<i>W.C. ...</i> 6/5/67	
CODE IDENT NO.	20886	SIZE
USED ON		D
		8242
		C

NOTES:
1. SEE SH.1

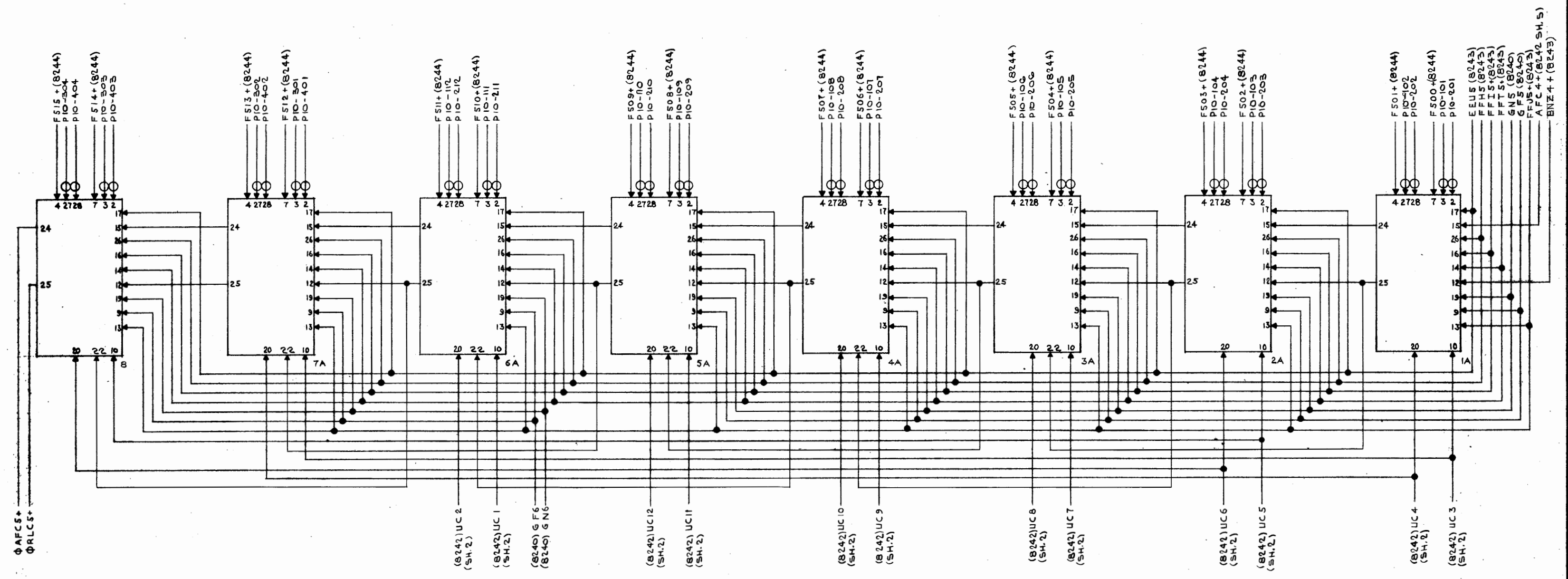
REV	DESCRIPTION	DATE	APP
D	8242		
SEE SHEET 1.			



ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL						
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA						
DR.	R.SANBORNE 3-1-67	SCHEMATIC & ASSEMBLY RTL PRIORITY INTERRUPT MODULE 4 1R2				
CL.	L.GOODBREAD 3/17/67					
ENGR.	<i>[Signature]</i> 6-5-67					
PROJ. APP.	<i>[Signature]</i> 6/6/67					
CODE IDENT NO.	20886	SIZE	D	8242	REV	C
USED ON						

NOTES:
1. SEE SH.1

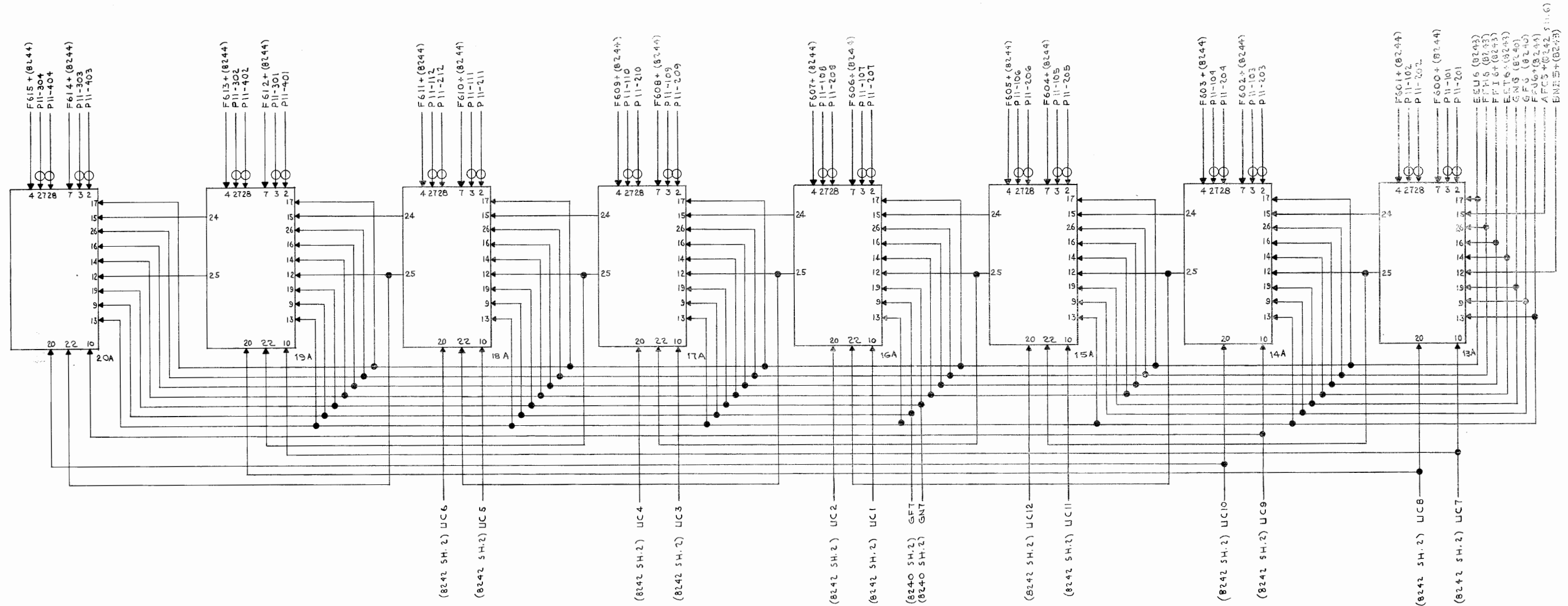
REV	D	DESCRIPTION	DATE	APP'D
SEE SHEET 1				



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	R. SANBORNE 3-1-67	SCHEMATIC & ASSEMBLY RTL PRIORITY INTERRUPT MODULE 5 2R1
CL	L. GOODBREAD 3/17/67	
CHK	C. McQuinn 6-5-67	
APP	J. Kimpel 6/5/67	
CODE IDENT NO.	20886	SIZE
USED ON		D
		8242

NOTES:
1. SEE SH.1

REV	DESCRIPTION	DATE	APP'D
D	8242		C
SEE SHEET 1.			

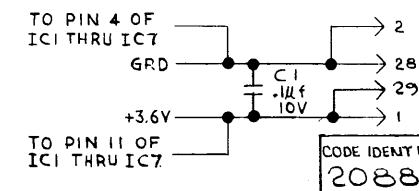
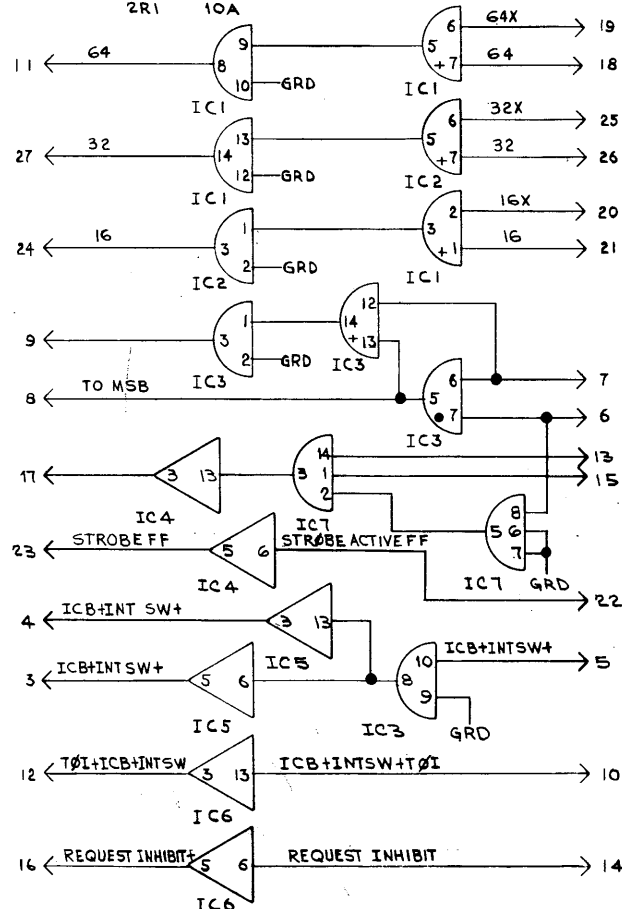
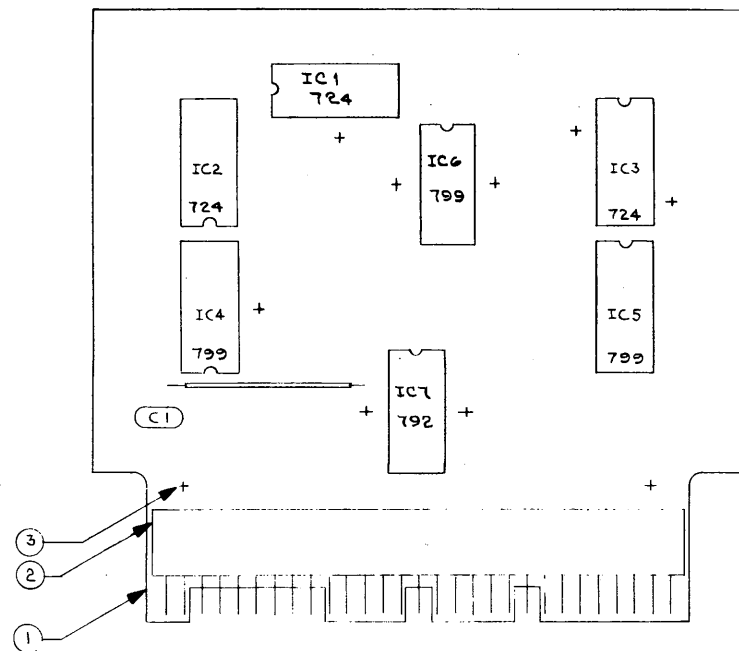
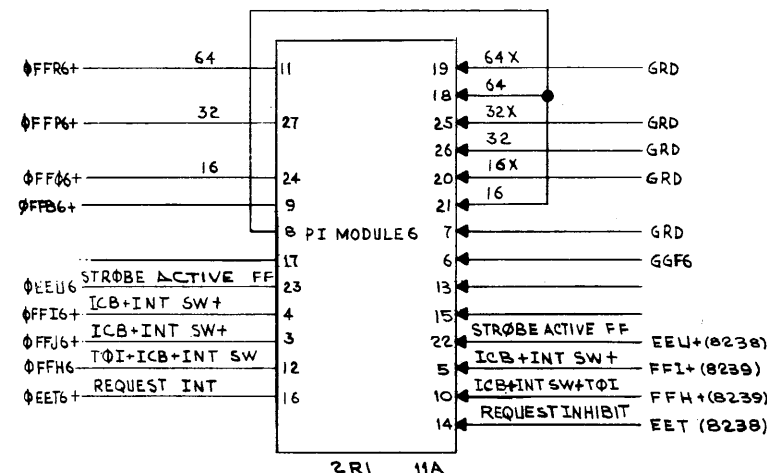
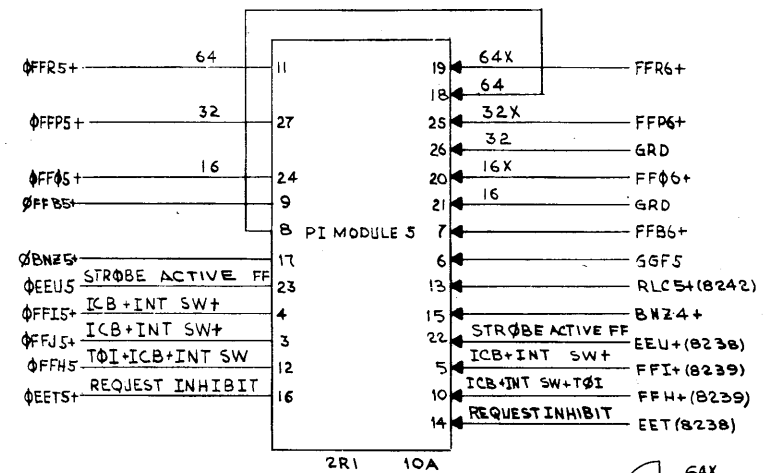
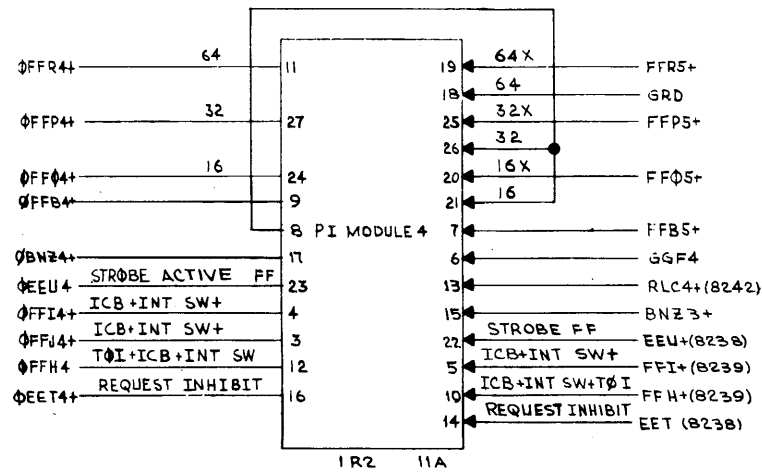
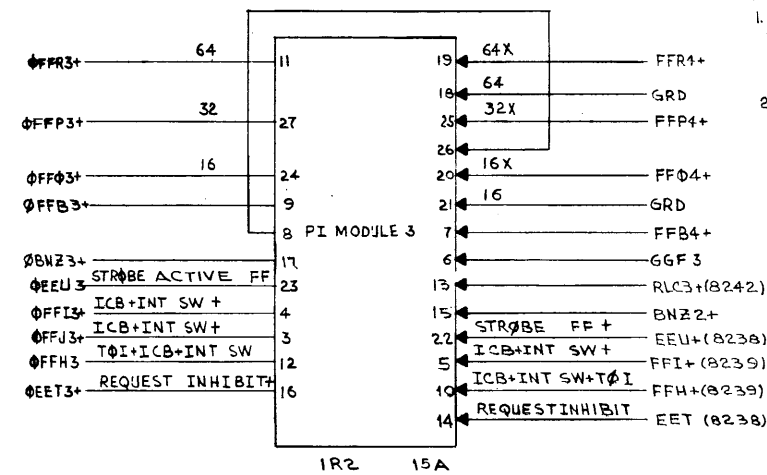
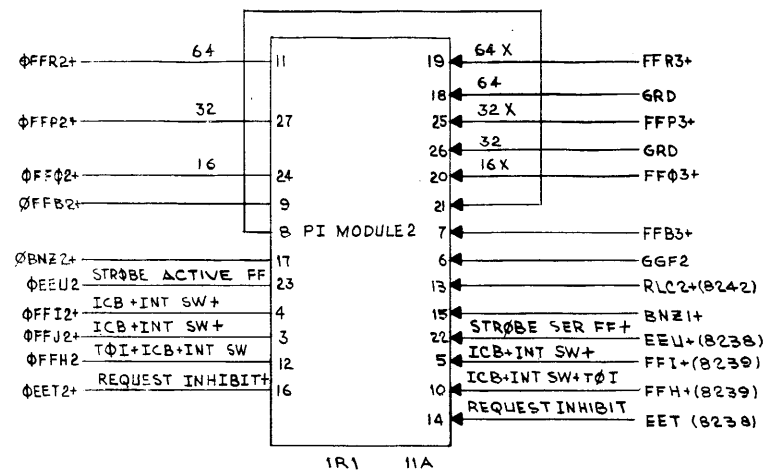
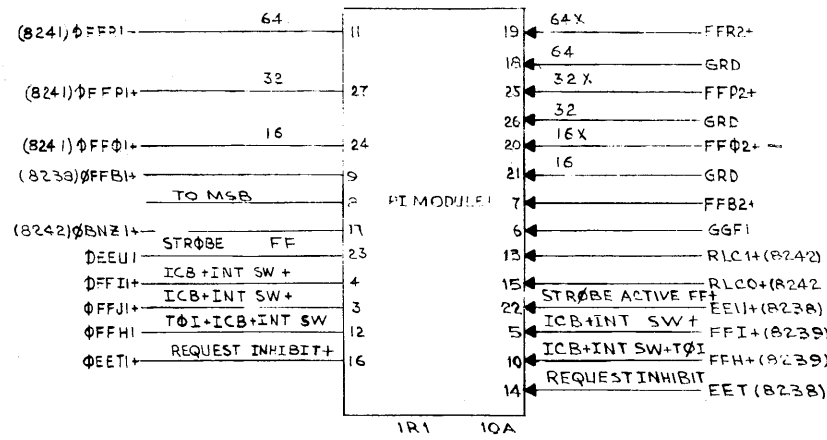


ITEM	DWG. OR PART NO.	DESCRIPTION	
		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR.	RSANBORNE 3-1-67	SCHEMATIC & ASSEMBLY RTL PRIORITY INTERRUPT MODULE 6 2R1	
CL.	L.GOODBREAD 3/17/67		
ENR.	<i>meDowel</i> 6-5-67		
PROJ.	<i>meDowel</i> 6/6/67		
APP.	<i>meDowel</i> 6/5/67	SIZE	D
CODE IDENT NO.	20886	REV	C
USED ON			



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE DB600-924 FOR DIMENSIONAL DWG SEE C8600

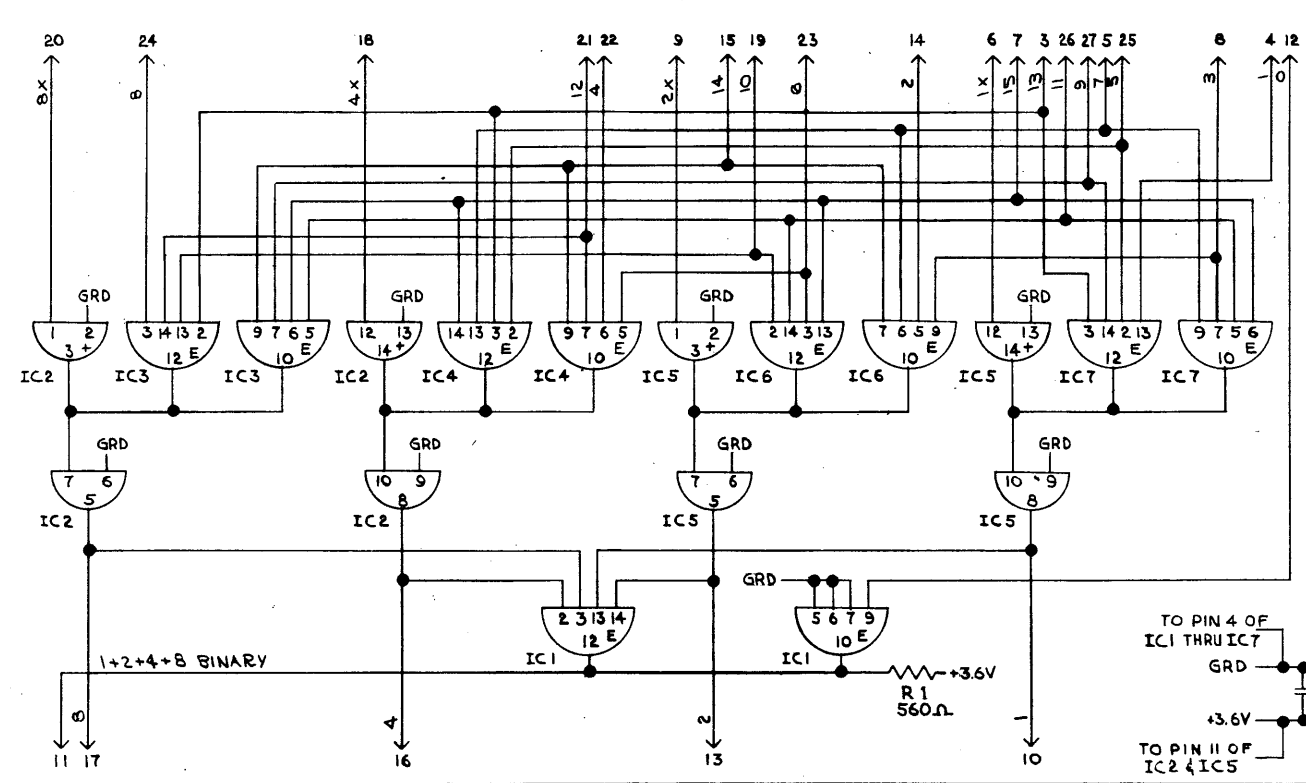
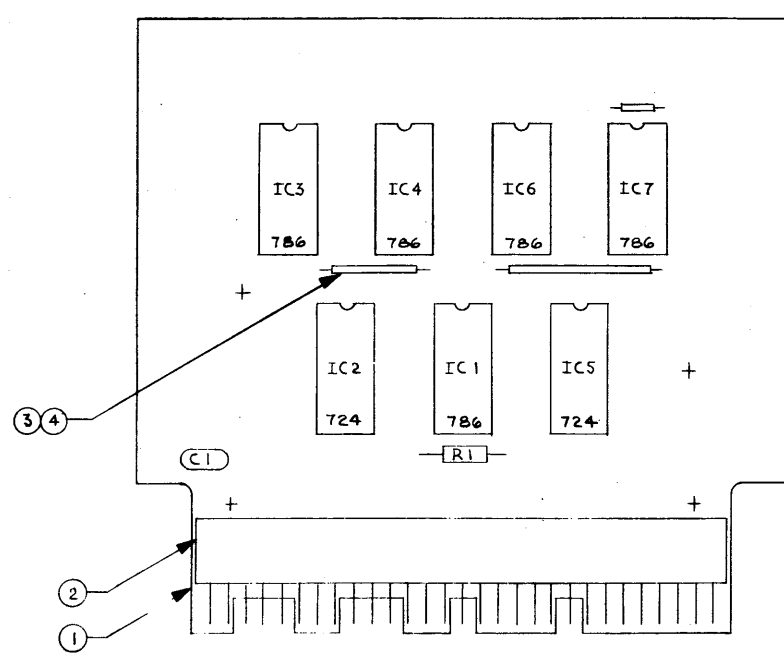
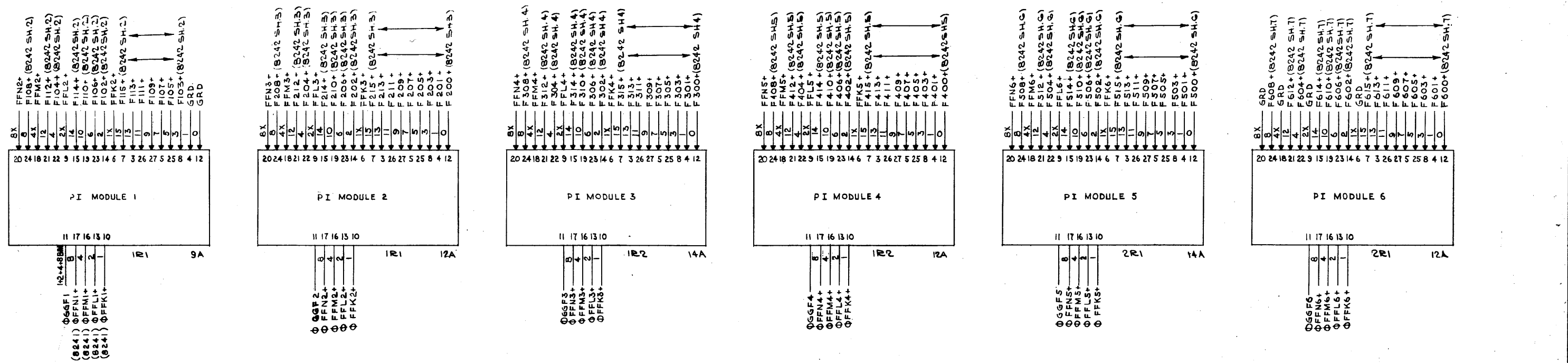
REV	DESCRIPTION	DATE	APPD
A	67-259; ADDED I.C. & REVISED SCHEMATIC, ASSEMBLY LOGIC TO AGREE WITH LATEST P.C. BACKGROUND. C.R. 83-67 RKM	8/3/67	[Signature]
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-25-67	10/30/67	[Signature]



1	IC7	MC792P	
3	IC6 THRU IC4	MC799P	INTEGRATED CIRCUIT- MOTOROLA
3	IC3 THRU IC1	MC724P	
1	C1	UK10-104	CAPACITOR-.10f-80-20%,10V, CRL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	DC-7022-C28-000-101	CONNECTOR- ELCO
1	1	SEL 924	PRINTED CIRCUIT(REV SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SEL			
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR. R. SANBORNE	2-20-67	SCHEMATIC ASSEMBLY	
CL. GOODREAD	3/16/67	RTL PI	
PROJ. M. S. D. ...	6/5/67	UNITARY/BINARY	
APP. W. ...	6/6/67	CONV(MSB'S)	
USED ON	6/5/67		
CODE IDENTY NO.	20886	SIZE	D
		8243	REV B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. FOR DRILLING DWG SEE D8600-922 FOR DIMENSIONAL DWG SEE C8600

REV	DESCRIPTION	DATE	APP'D
D	8244		
A	6T-259; 12AWAS 17A ON LOGIC. C.P.B-3-67 RKM	8/3/67	[Signature]
B	6T-445; REVISED CARD NUMBERS & LINE TITLES ADDED. AS 10-25-67 AS	10/30/67	[Signature]



1	R1	RC07GFS6J	RESISTOR-560Ω, ALLEN BRADLEY
2	IC5	MC724P	INTEGRATED CIRCUIT-MOTOROLA
	IC2	MC724P	
	IC7		
	IC6		
	IC4		
5	IC4	MC786P	
	IC3		
	IC1		
1	C1	UK10-104	CAPACITOR-.1μf+80-20%, 10V, CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 922	PRINTED CIRCUIT (REV SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEI SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA

DR. R. SANBORNE 2-22-67
 CC RKM 3-2-67
 ENG. [Signature] 6-5-67
 PROJ. APP. [Signature] 6/6/67

SCHEMATIC ASSEMBLY
 RTL
 UNITARY CONV. (LSB'S)

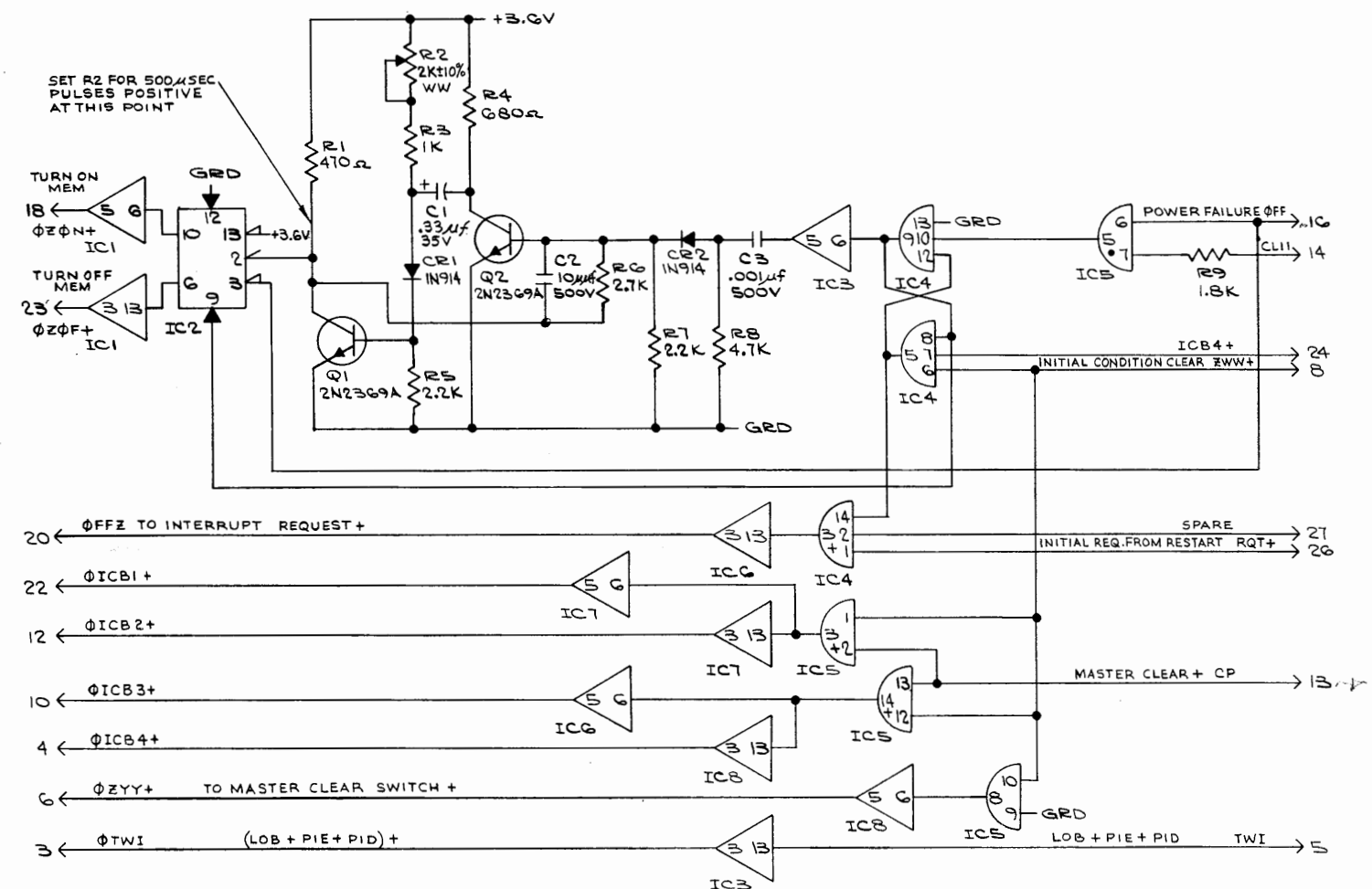
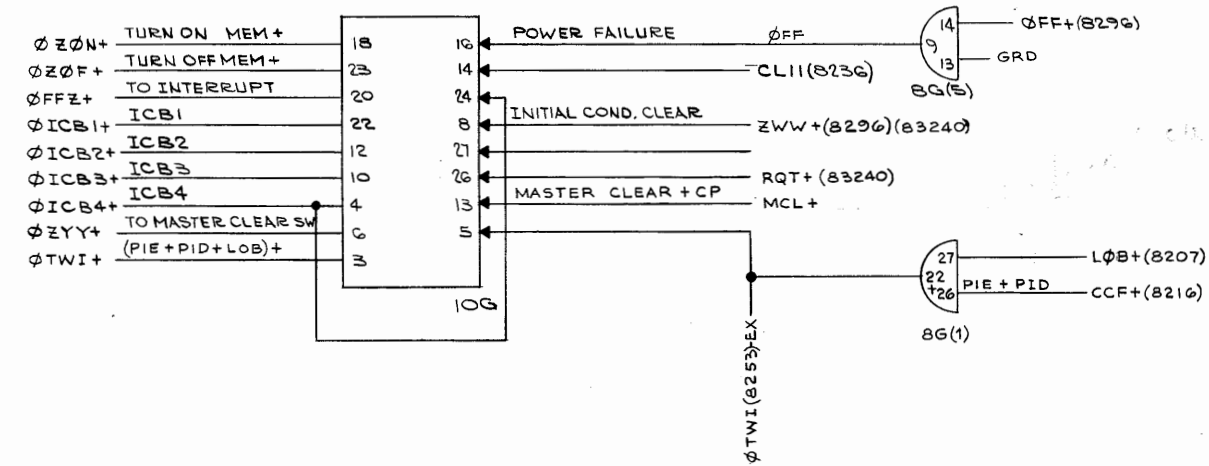
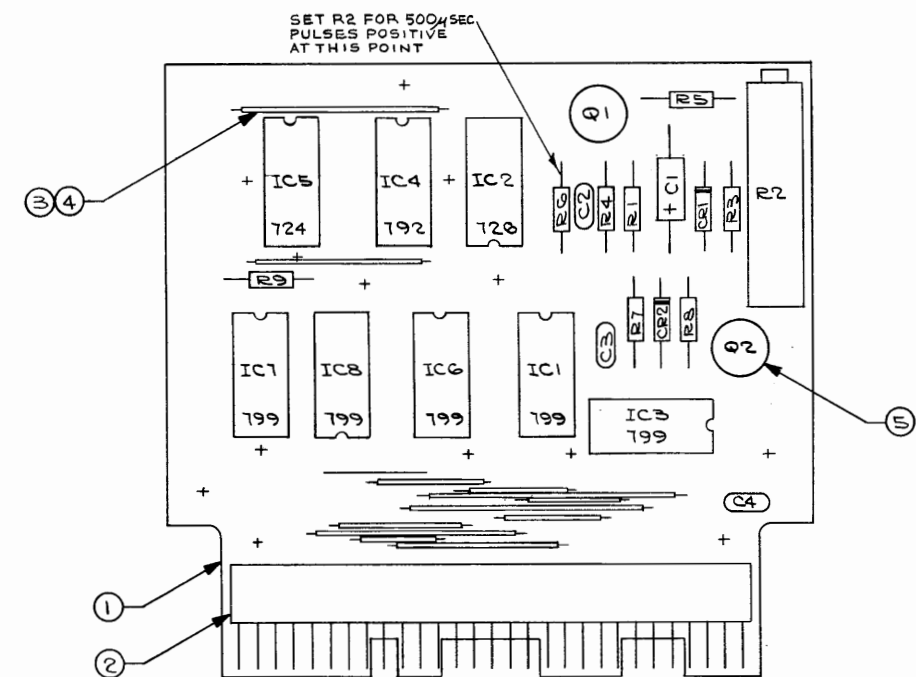
CODE IDENTIFY 2088G
 UNDO ON

REV	DESCRIPTION	DATE	APP'D
D	8244		

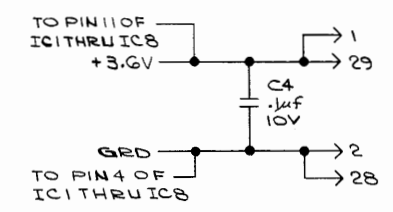
SIZE	D	8245	REV.	B
REV.	A	DESCRIPTION	DATE	APRD
		67-445; ADDED VALUE FOR C1. ADDED LINE DESIGNATIONS & NOTES FOR SETTING POT RKM 10-25-67	10/25/67	
	B	68-199; (83240) ON PINS 8 & 26 OF LOGIC WAS (83185) FLP 4-18-68	4/18/68	

3. FOR DRILLING DWG. SEE D8600-972. FOR DIMENSIONAL DWG SEE C8600.

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.



1	R9	RCOTGF182J	RESISTOR - 1.8K,	ALLEN BRADLEY
1	R8	RCOTGF472J	RESISTOR - 4.7K,	ALLEN BRADLEY
1	R6	RCOTGF272J	RESISTOR - 2.7K,	ALLEN BRADLEY
2	R5	RCOTGF222J	RESISTOR - 2.2K,	ALLEN BRADLEY
1	R4	RCOTGF681J	RESISTOR - 680 Ω ,	ALLEN BRADLEY
1	R3	RCOTGF102J	RESISTOR - 1K,	ALLEN BRADLEY
1	R2	200P-1-202	POTENTIOMETER - 2K $\pm 10\%$, $1/4W$,	BOURNS
1	R1	RCOTGF411J	RESISTOR - 470 Ω ,	ALLEN BRADLEY
2	Q2	2N2369A	TRANSISTOR - FAIRCHILD	
1	IC8	MC724P	INTEGRATED CIRCUIT - MOTOROLA	
1	IC4	MC192P		
1	IC2	MC726P		
5	IC9	MC799P		
5	IC3	MC799P		
2	CR2	IN914	DIODE - CLEVITE	
1	C4	UK-10-104	CAPACITOR - .1 μ f $\pm 20\%$, 10V, CRL	
1	C3	ID-102	CAPACITOR - .001 μ f $\pm 10\%$, 500V, CRL	
1	C2	ID-100	CAPACITOR - .01 μ f $\pm 10\%$, 500V, CRL	
1	C1	150D334X0035A2	CAPACITOR - .33 μ f $\pm 20\%$, 35V, CRL	
2	S	B10369	UNIPAD	
AR	4	AWG 24	SLEEVING - TEFLON, THINWALL	
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED	
1	2	00-1022-029-000-001	CONNECTOR - ELCO	
1	1	SEL 972	PRINTED CIRCUIT (REV. SEE AS1140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	



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 8501 West Sunrise Blvd., Fort Lauderdale, Florida 33310

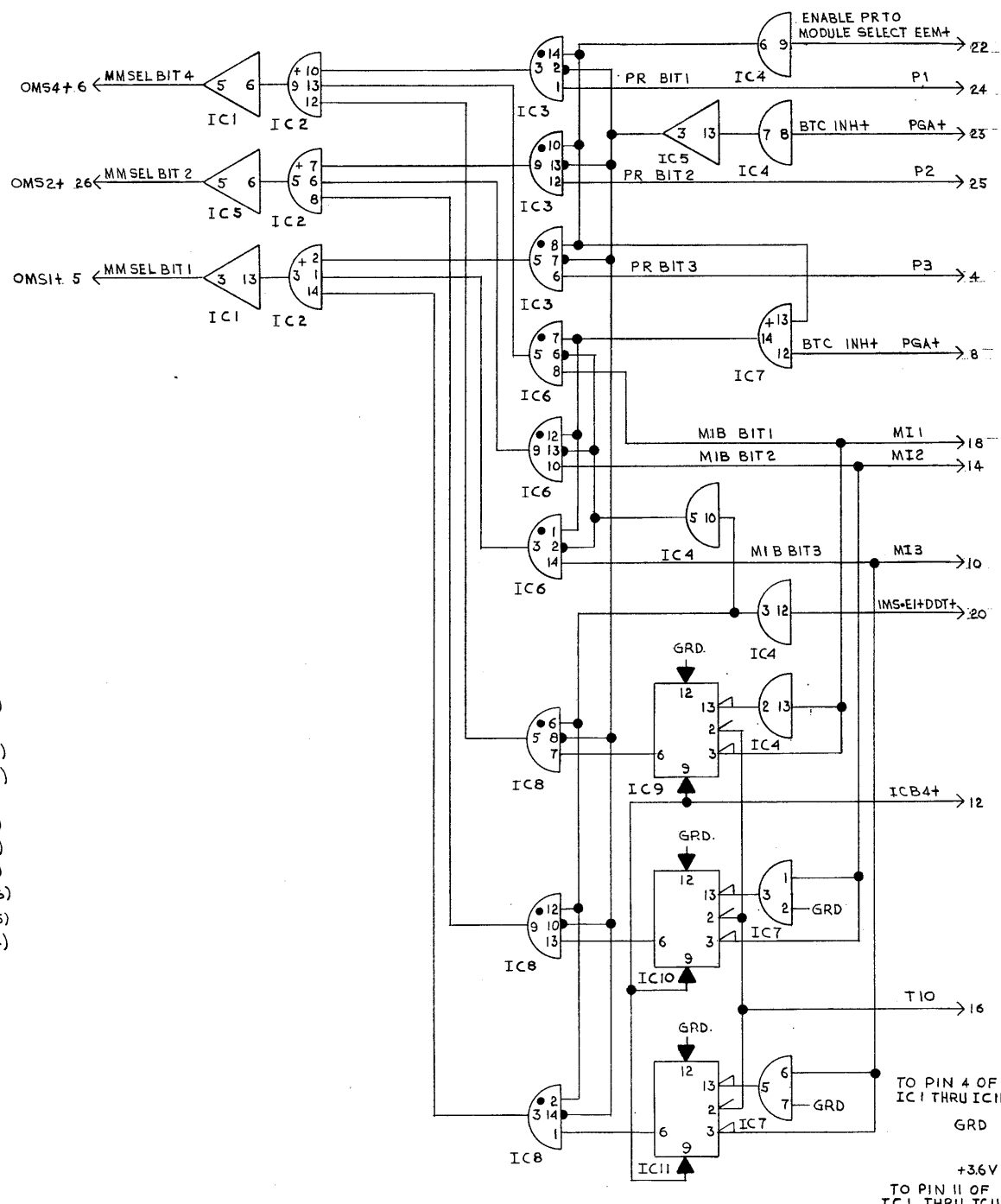
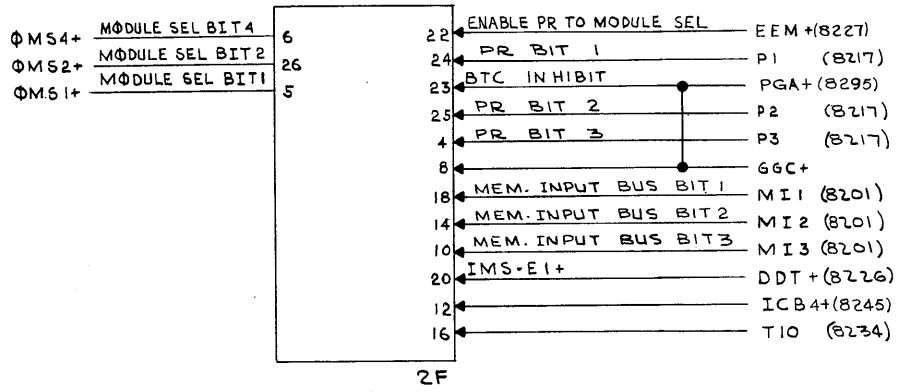
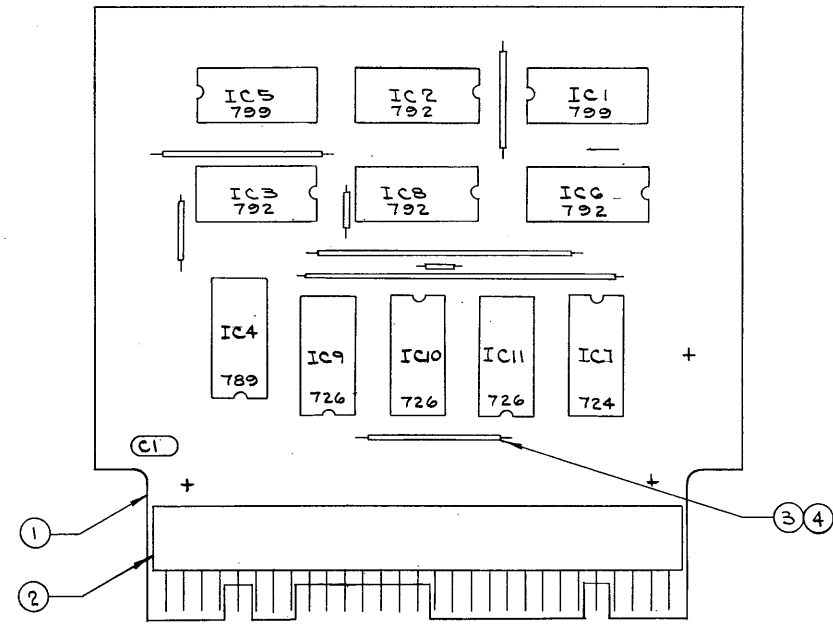
DR	<i>[Signature]</i>	6-2-67	SCHEMATIC & ASSEMBLY RTL POWER FAILURE CONTROL
CHK	RKM	6-6-67	
ENGR	<i>[Signature]</i>	6-5-67	
PROJ	<i>[Signature]</i>	6/8/67	
APPD	<i>[Signature]</i>	6/9/67	

NEXT ASSY

CODE IDENT NO.	SIZE	REV.
20886	D	B

SIZE	D	8246	REV	B
REV	A	G7-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-25-67	DATE	10/30/67
REV	B	G8-199; DESIGNATION ON PIN 25 OF SCHEMATIC WAS P1 JWM 4-18-68	DATE	4/18/68

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-934.
 FOR DIMENSIONAL DWG SEE C8600.



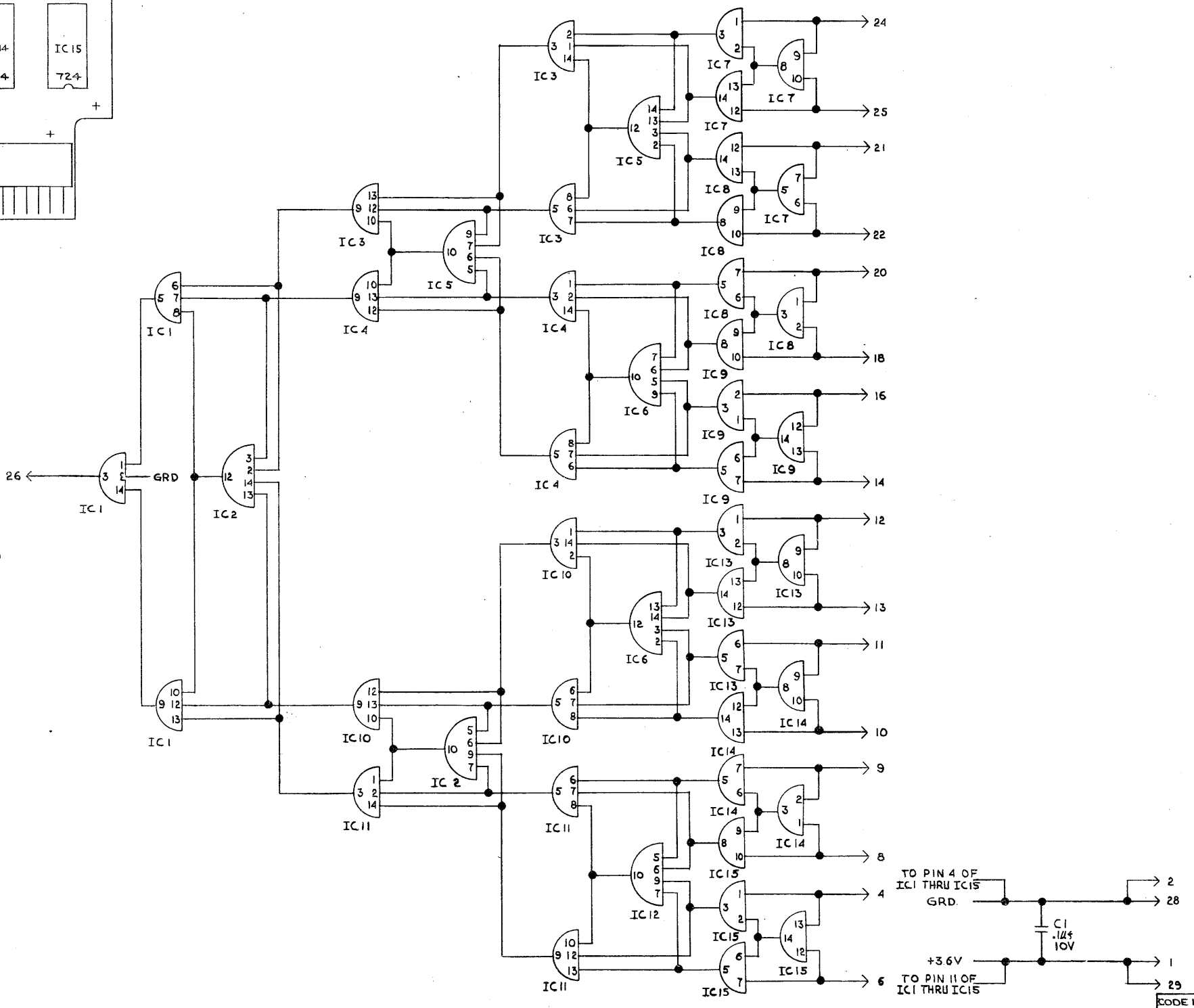
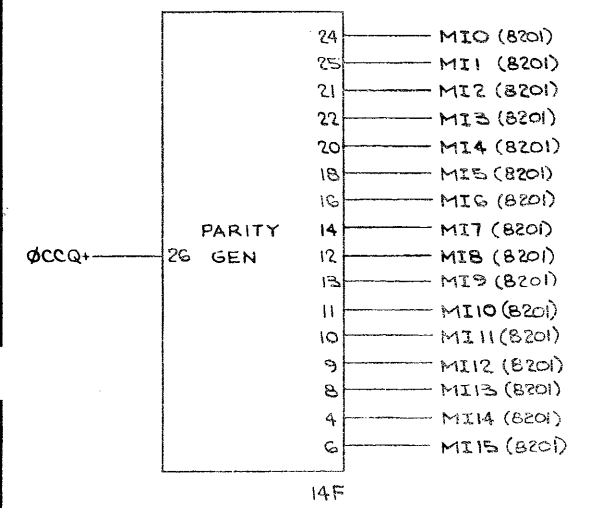
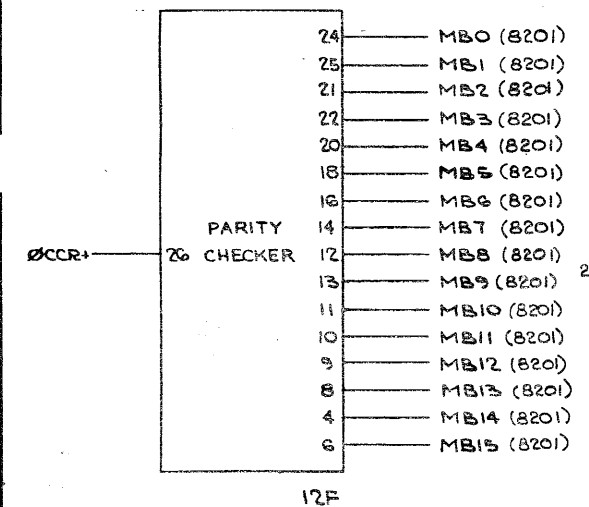
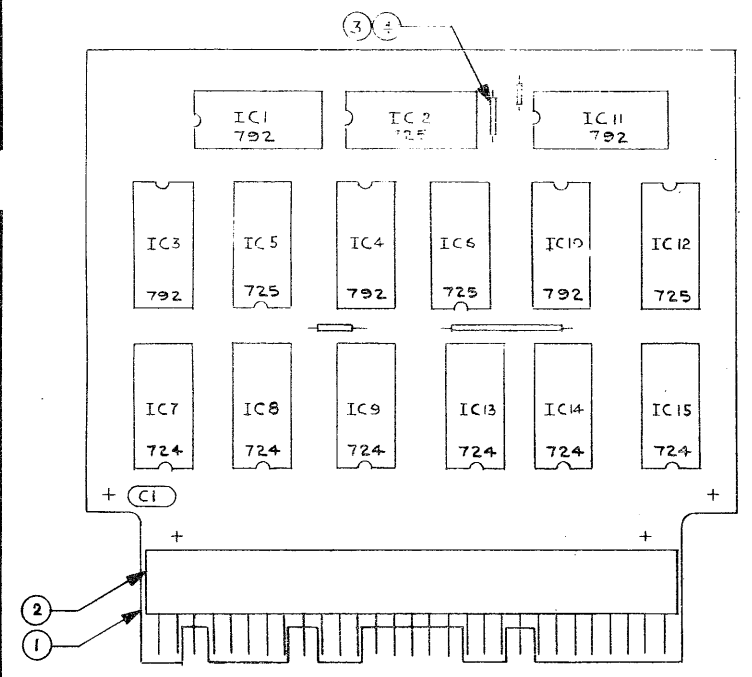
3	IC11	MC 724 P	INTEGRATED CIRCUIT-MOTOROLA	
	IC10	MC 726 P		
1	IC7	MC 724 P		
1	IC4	MC 789 P		
4	IC8	MC 792 P		
	IC6	MC 792 P		
	IC3	MC 792 P		
2	IC5	MC 799 P		
	IC1	MC 799 P		
1	C1	UK10-104		CAPACITOR-.1uF+80-20%,10V,CRL
AR	4	AWG 24		SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED	
1	2	00-7022-029-000-001	CONNECTOR-ELCO	
1	1	SEL 934	PRINTED CIRCUIT (REV. SEE AS1140)	

SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. R SANBORNE	2-15-67
CL. RKM	2-24-67
ENG. C. Villanti	6-8-67
APP. R. Smith	6-18-67
CODE IDENT NO	20886
SIZE	D
REV	B

SCHMATIC & ASSEMBLY
 RTL MEMORY MODULE
 SELECT DRIVER

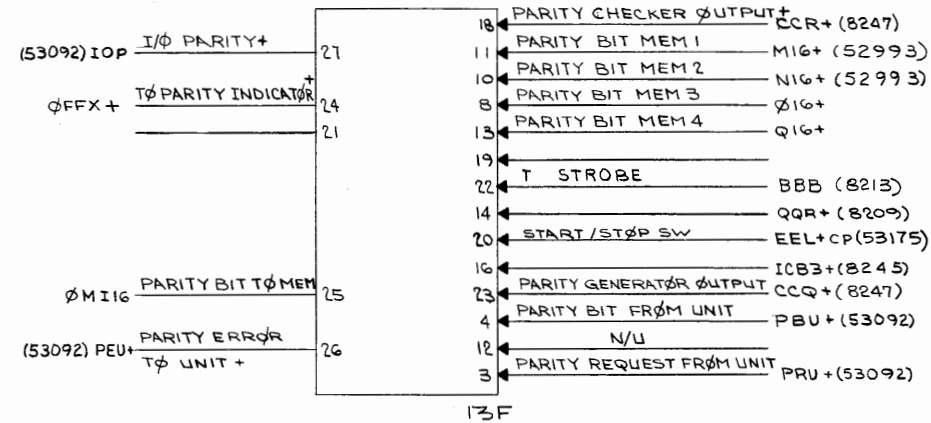
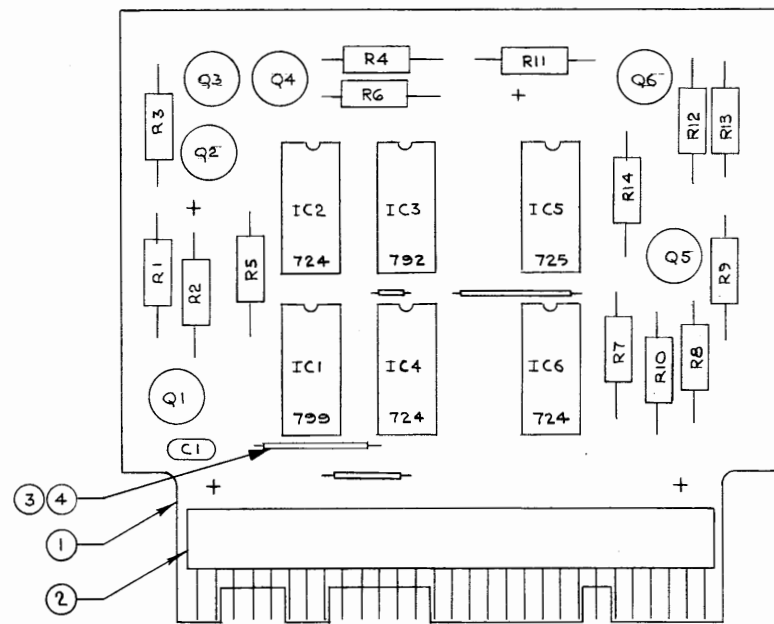
NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
 2. FOR DRILLING DWG SEE D8600-B79 FOR DIMENSIONAL DWG SEE C 8600.

SIZE	D	8247	REV	DESCRIPTION	DATE	APP'D
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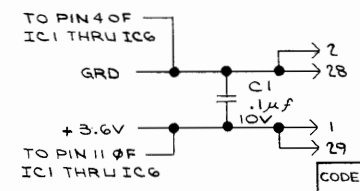
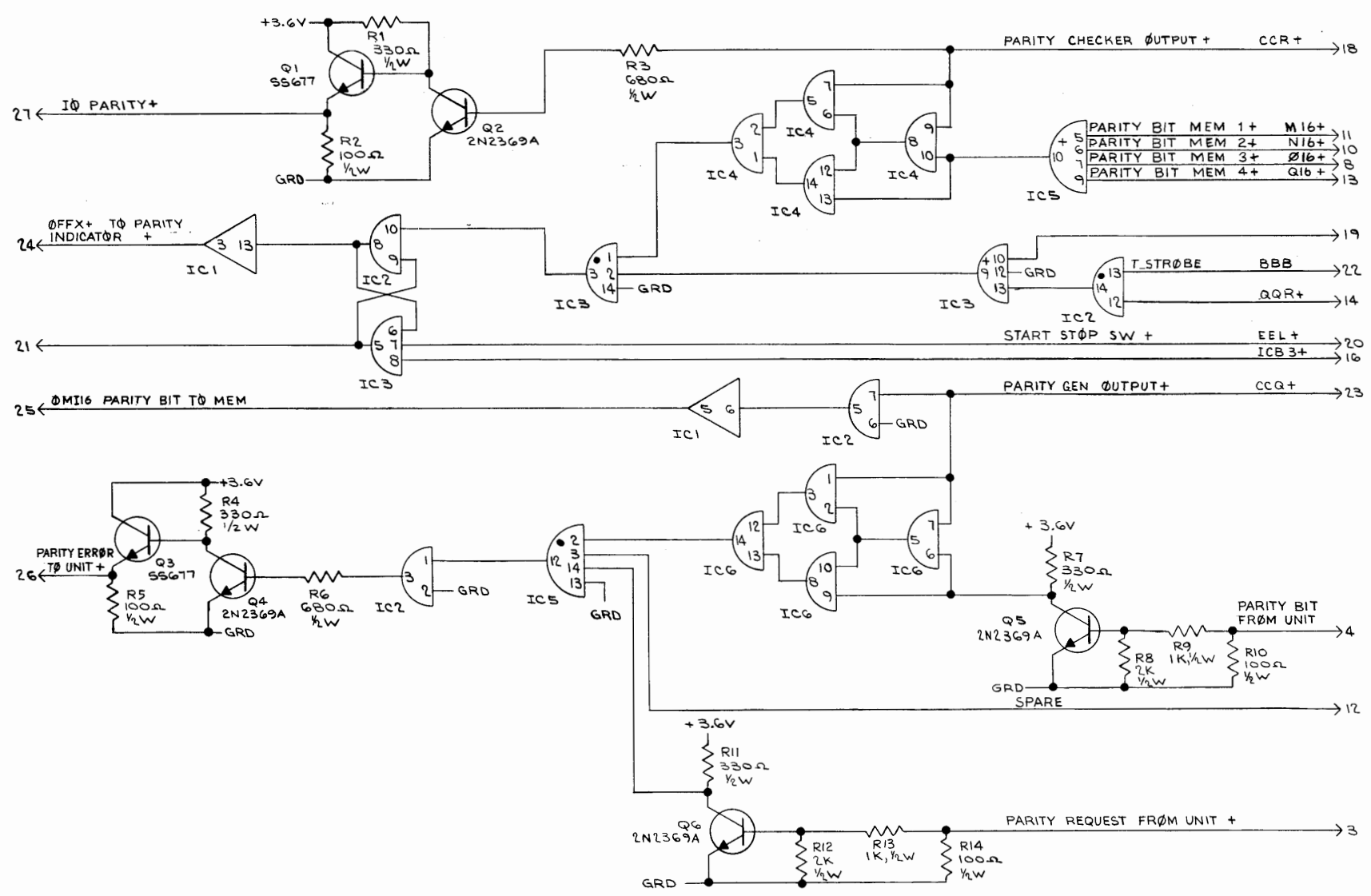
6	IC15 IC14 IC13 IC9 IC8 IC7	MC 724P	INTEGRATED CIRCUIT-MOTOROLA
4	IC12 IC6 IC5 IC2	MC725P	
5	IC11 IC10 IC4 IC1	MC 792P	
1	C1	UK 10-104	
AR	4	AGW 24	SLEEVING-TEFLON,THINWALL
AR	3	AGW 24	WIRE-SOLID COPPER,TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 879	PRINTED CIRCUIT(REV SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SEL			SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA
DR	R SANBORNE	2-13-67	SCHEMATIC & ASSEMBLY RTL16 BIT PARITY GEN / CHECK
CL	R K M	2-28-67	
ENGR.	E Villanti	6/7/67	
PROJ. APP.	E. King	4/7/67	CODE IDENT NO. 20886
APP.	E. King	4/7/67	SIZE D
USED ON			REV 8247

APPROVED BY: [Signature]
 DATE: [Date]
 DESIGNED BY: [Signature]
 DATE: [Date]



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. FOR DRILLING DWG SEE D8500-931 FOR DIMENSIONAL DWG SEE C 8600

REV	DESCRIPTION	DATE	APPD
D	8248		
A	G7-204; REVISED LOGIC ON PINS 21 & 24 BB G-27-67	7/12/67	RKM
B	67-445; ADDRESSES REVISED & LINE TITLES ADDED C.THEW 10-25-67	10/16/67	cau
C	68-122; Q1 & Q3 WERE 2N3904. CEM 3/18/68	3/13/68	F.L.P.

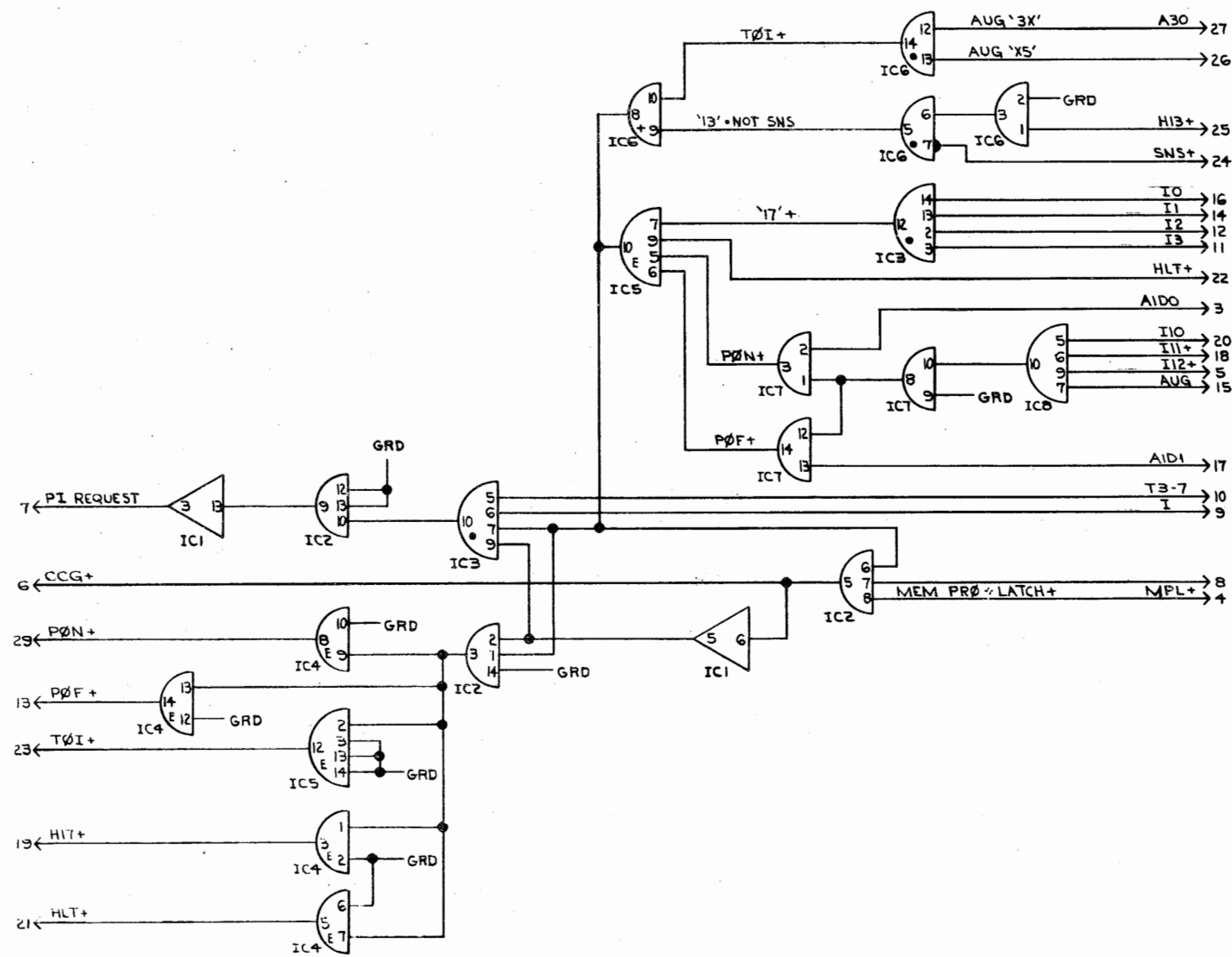
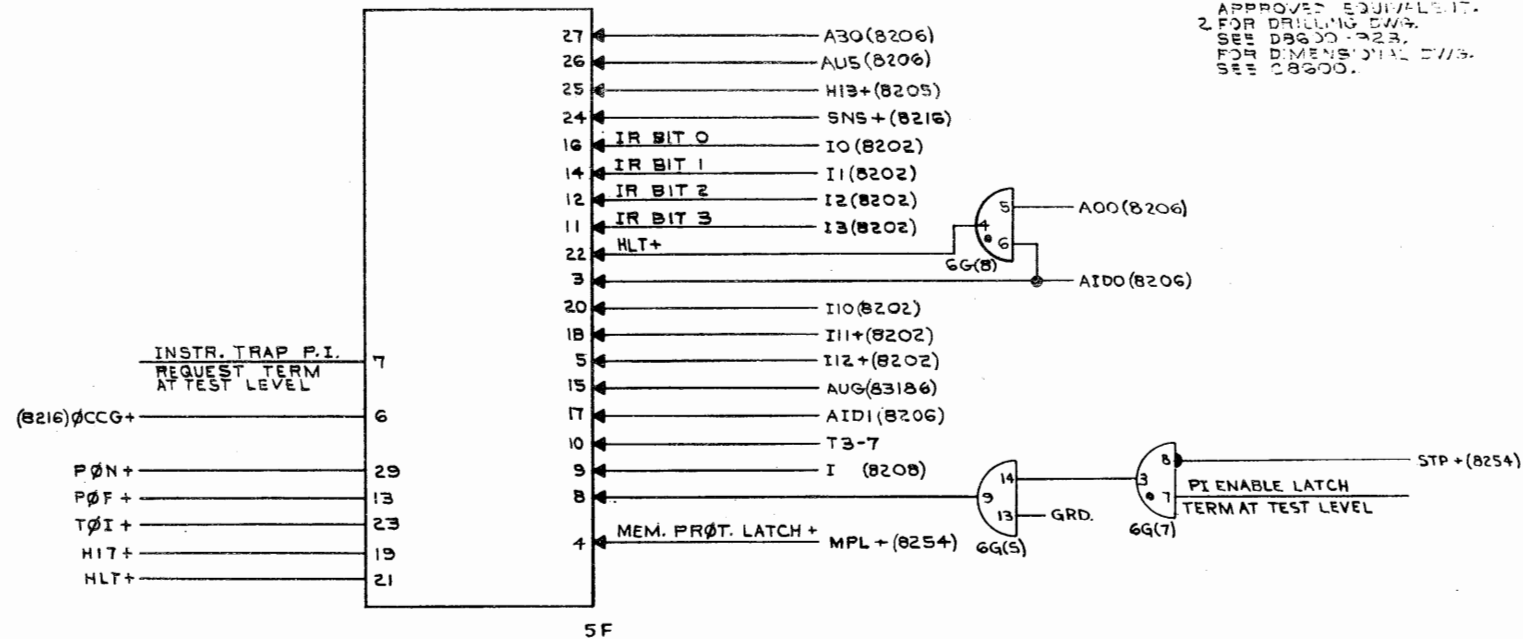
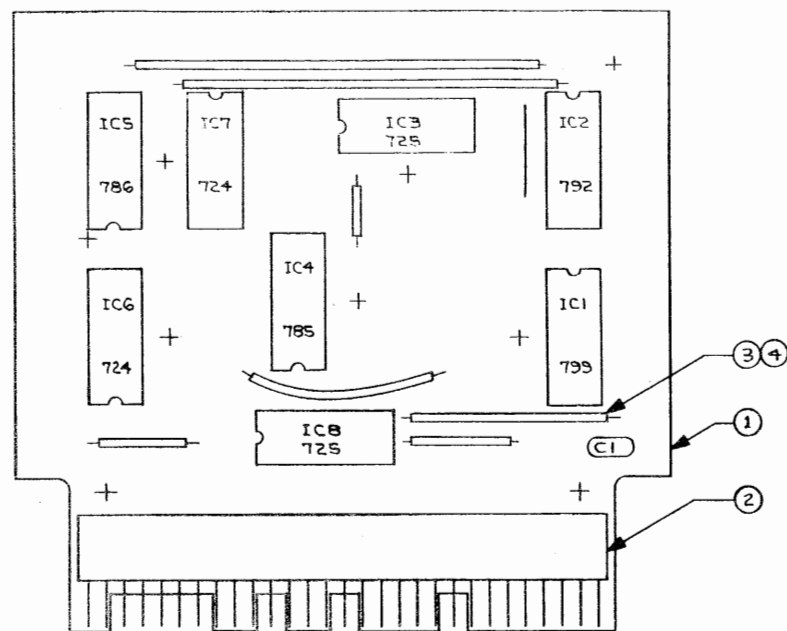


2	R13 R9	RC20GF102J	RESISTOR-1K, 1/2W, ALLEN BRADLEY
2	R12 R8	RC20GF202J	-2K, 1/2W,
2	R6 R3	RC20GF681J	-680Ω, 1/2W,
4	R14 R10 R5 R2	RC20GF101J	-100Ω, 1/2W,
4	R11 R7 R4 R1	RC20GF331J	RESISTOR-330Ω, 1/2W, ALLEN BRADLEY
4	Q6 Q5 Q4 Q2	2N2369A	TRANSISTOR - FAIRCHILD
2	Q3 Q1	55677	TRANSISTOR - MOTOROLA
1	IC5 IC3	MC 725P MC 792P	
3	IC4 IC2 IC1	MC 724P MC 799P	
1	C1	UK10-104	CAPACITOR - .1µf - 80% - 20% 10V, CRL
AR	4	AWG 24	SLEEVING - TEFLON, THINWALL
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	2	00-1022-019-000-001	CONNECTOR - ELCO
1	1	SEL931	PRINTED CIRCUIT - (REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEI		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR.	F.L. SIENA	2-15-67	
CK.	RKM	2-28-67	
ENG.	E. Villanti		
PROJ.	cau	6/7/67	
APP.	E. Klingman	6/7/67	
CODE IDENT NO	20886	USED ON	
SIZE	D	8248	REV C

SIZE	D	REV.	A
REV.	DESCRIPTION	DATE	APPD
A	6T-445; ADDED 6G(S) & 6G(7) ADDRESSES REVISED AND LINE TITLES ADDED. AC. 10-25-67	1/11/67	W

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DATA, SEE DB600-223.
 3. FOR DIMENSIONAL DATA, SEE 28600.



2	IC7	MC724P	INTEGRATED CIRCUIT - MOTOROLA
	IC6	MC786P	
1	IC5	MC785P	
1	IC4	MC725P	
2	IC3	MC792P	
1	IC2	MC799P	
1	C1	UK-10-104	CAPACITOR-.1uF+80-20%,10V,CRL
AR	4	AWG 24	SLEEVING - TEFLON, THINWALL
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	2	00-7022-023-000-X1	CONNECTOR - ELCO
1	1	923	PRINTED CIRCUIT (FOR REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

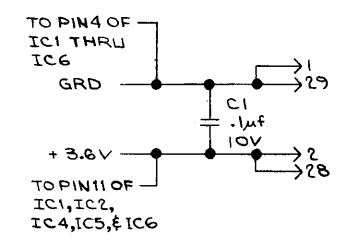
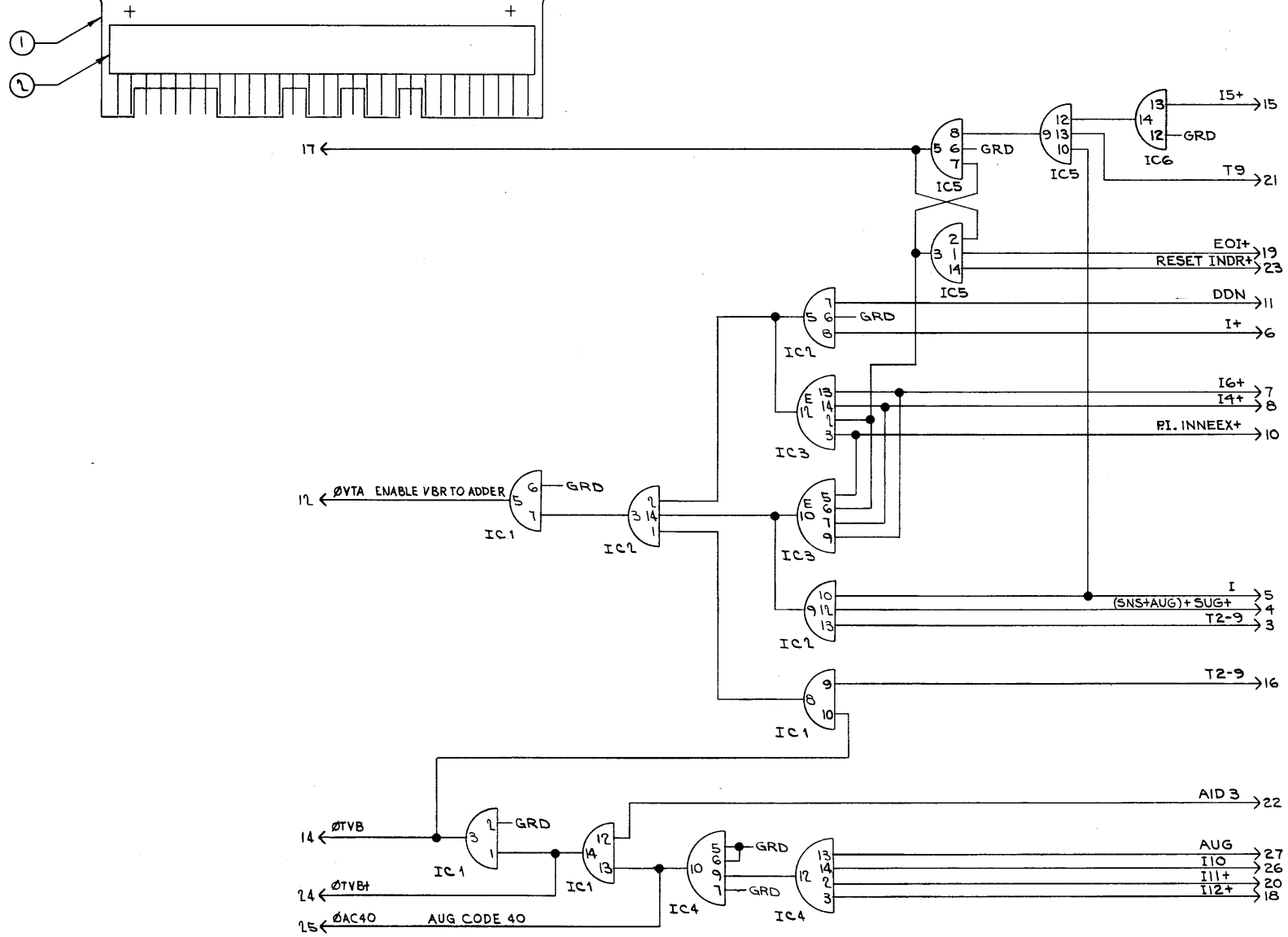
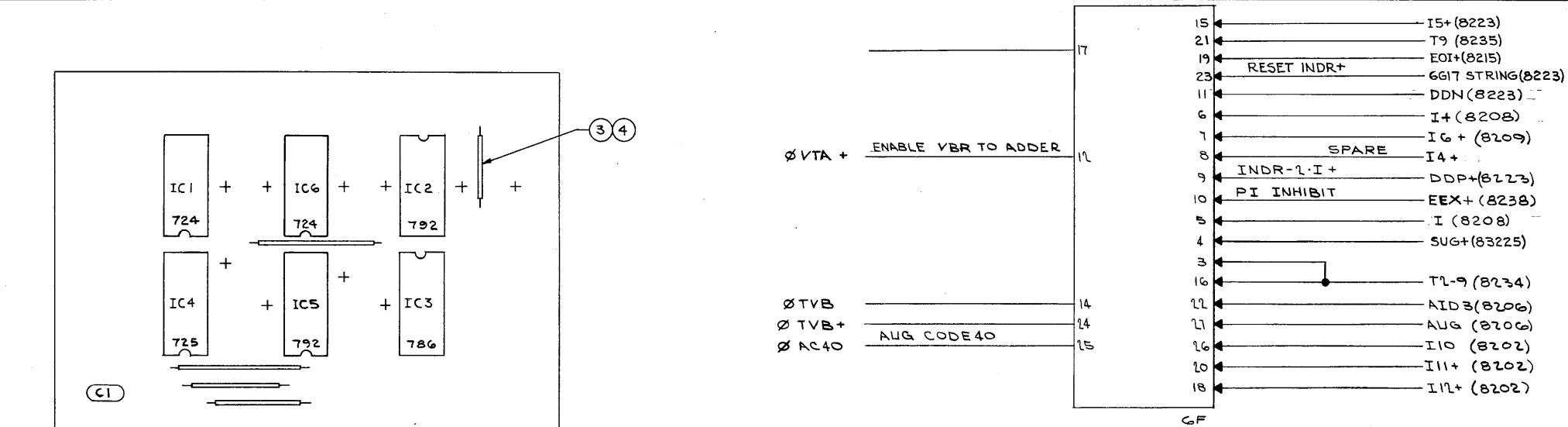
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DR h.m.t.p.s. 9-1-67
 CHK RKM 9-5-67
 ENGR J. Villant 9-27-67
 PROJ 6-11-67

APPD [Signature] 10-2-67
 NEXT ASSY

CODE IDENT NO. 20886
 SIZE D
 8249
 REV. A



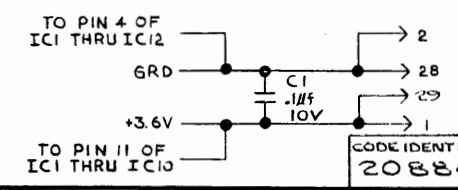
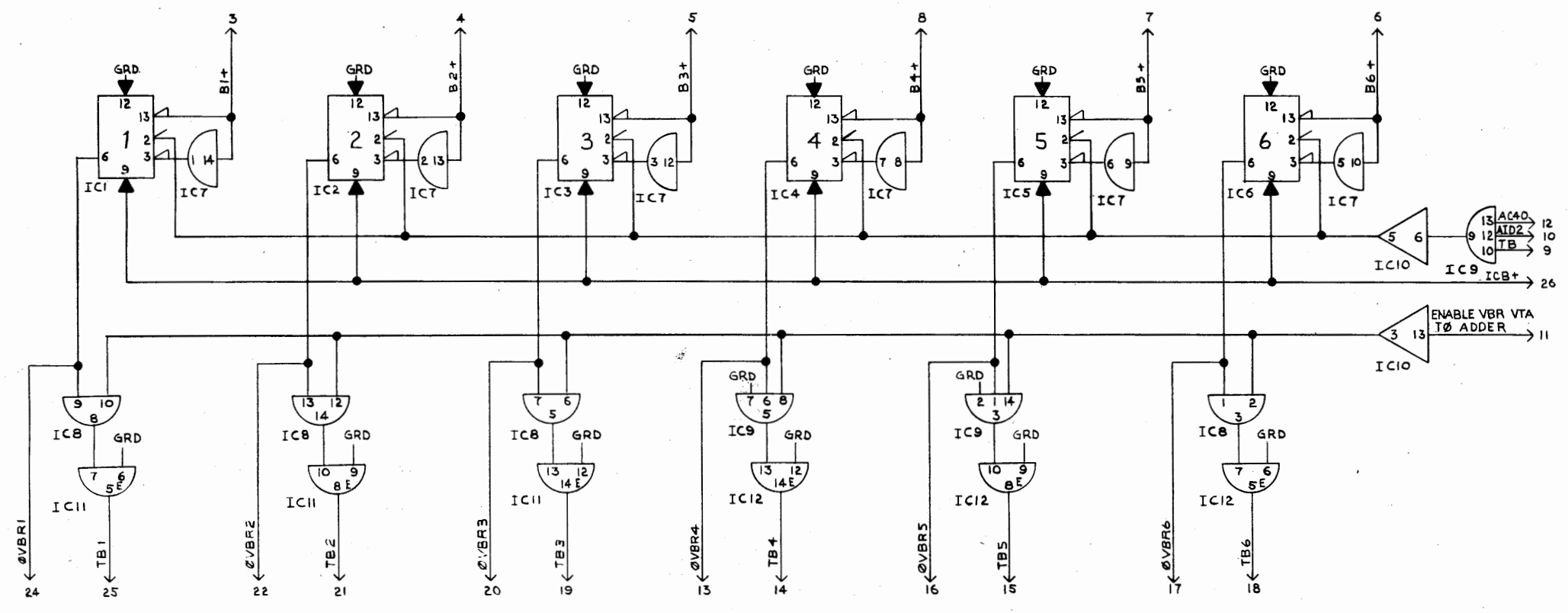
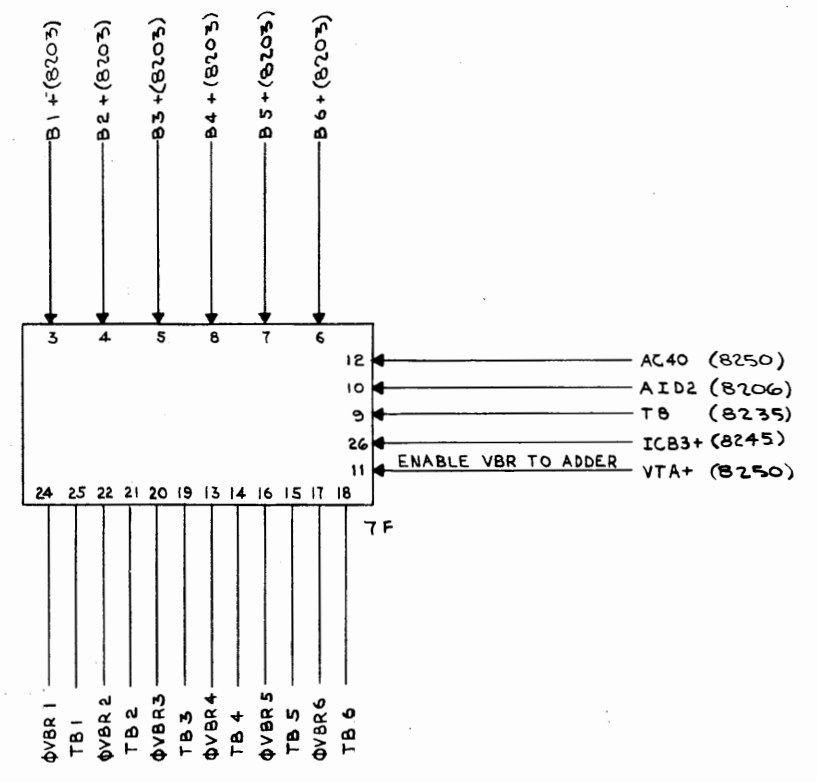
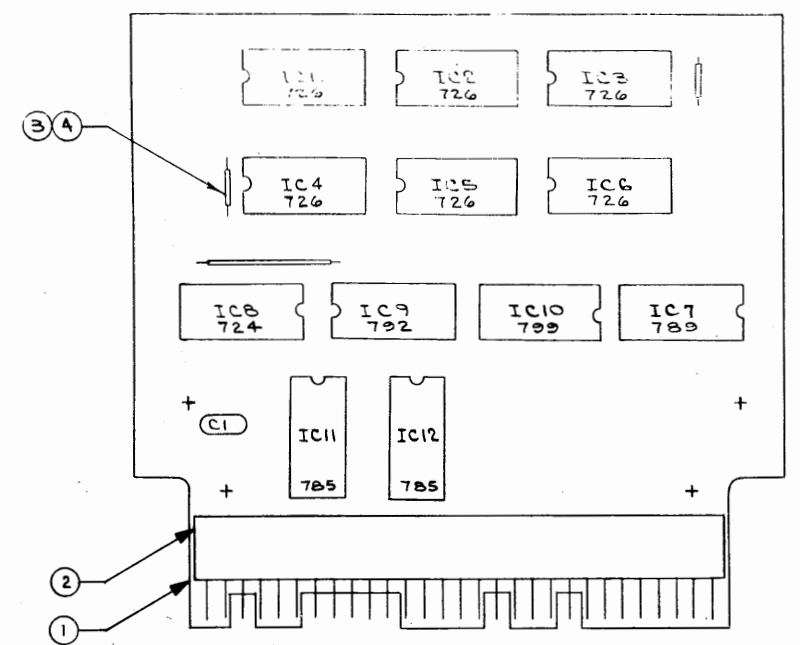
NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
 2. FOR DRILLING DWG SEE DB600-904.
 FOR DIMENSIONAL DWG SEE C8600

REV	DESCRIPTION	DATE	APPD
D	8250		C
A	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-25-67	10/13/67	Caw
B	68-220; ADDED IC5 AND IC6. <i>W.P. Smith</i> 4-17-68 RKM	4/18/68	
C	68-199; DESTINATION OF PIN 4 ON LOGIC WAS AUG2+(83186) <i>W.P. Smith</i> 4-17-68 RKM	4/19/68	

1	IC4	MCT25P	
1	IC3	MCT86P	
2	IC5	MCT92P	INTEGRATED CIRCUIT-MOTOROLA
	IC2	MCT92P	
2	IC6	MCT24P	
	IC1	MCT24P	
1	C1	UK10-104	CAPACITOR - .1µf +80-20%, 10V, CRL
AR 4	AWG 24		SLEEVING-TEFLON, THINWALL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-1012-029-000-001	CONNECTOR - ELCO
1	1	SEL 904	PRINTED CIRCUIT (REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	F.L. SIENA	2-13-67	SCHEMATIC & ASSEMBLY RTL VARIABLE BASE REGISTER CONTROL
CL.	RKM	2-28-67	
ENG.	<i>C. Villanti</i>		
PROJ. APP.	<i>W.P. Smith</i>	4/7/67	
CODE IDENT NO.	20886		
USED ON			
SIZE	D	8250	REV C

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE 08600-906
 FOR DIMENSIONAL DWG SEE C8600.

REV	DESCRIPTION	DATE	APP'D
D	8251		REV A
A	67-445; ADDRESSES REVISED & LINE TITLES ADDED. C.THEW 10-26-67	10/25/67	

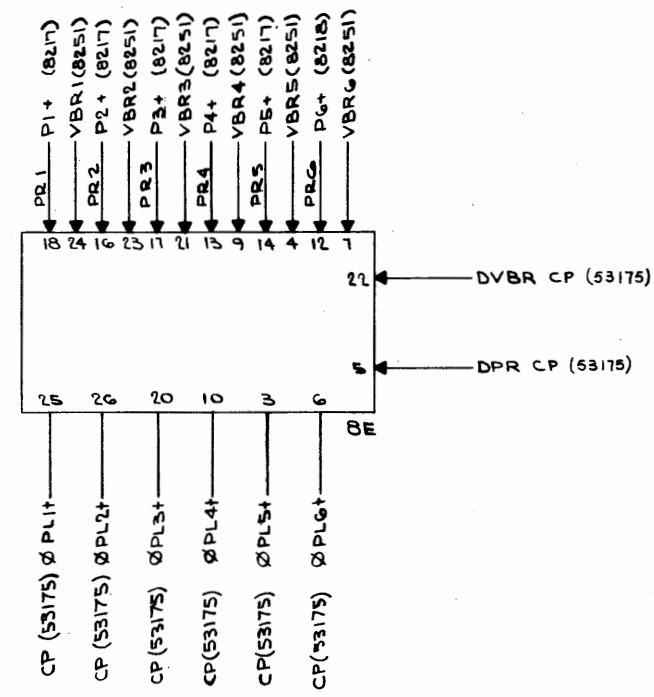
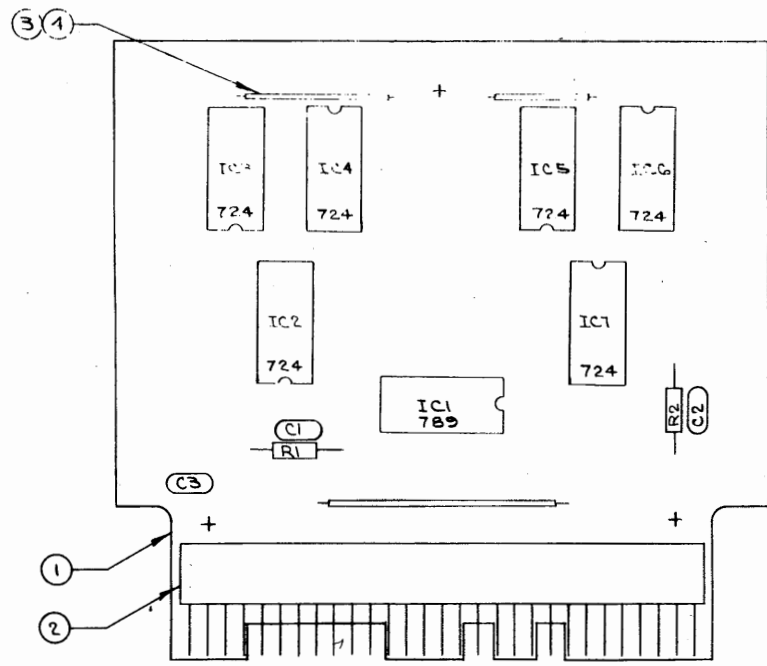


ITEM	DWG. OR PART NO.	DESCRIPTION
2	IC12	MC 785P
1	IC11	MC 799P
1	IC9	MC 792P
1	IC8	MC 724P
1	IC7	MC 789P
6	THRU IC1	MC 726P
1	C1	UK10-104 CAPACITOR-.1μf+80-20%,10V,CRL
AR	4	AWG 24 SLEEVING-TEFLON, THINWALL
AR	3	AWG 24 WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001 CONNECTOR-ELCO
1	1	SEL 906 PRINTED CIRCUIT(REV SEE A51140)

DR	R.SANBORNE	2-16-67
CK	RKM	3-1-67
ENG.	E. V. [Signature]	
PROJ. APP.	[Signature]	6/7/67
APP.	[Signature]	6/7/67

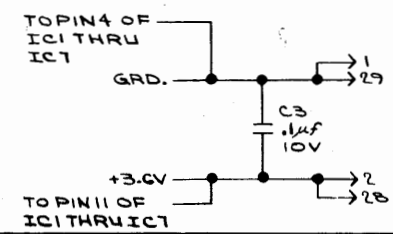
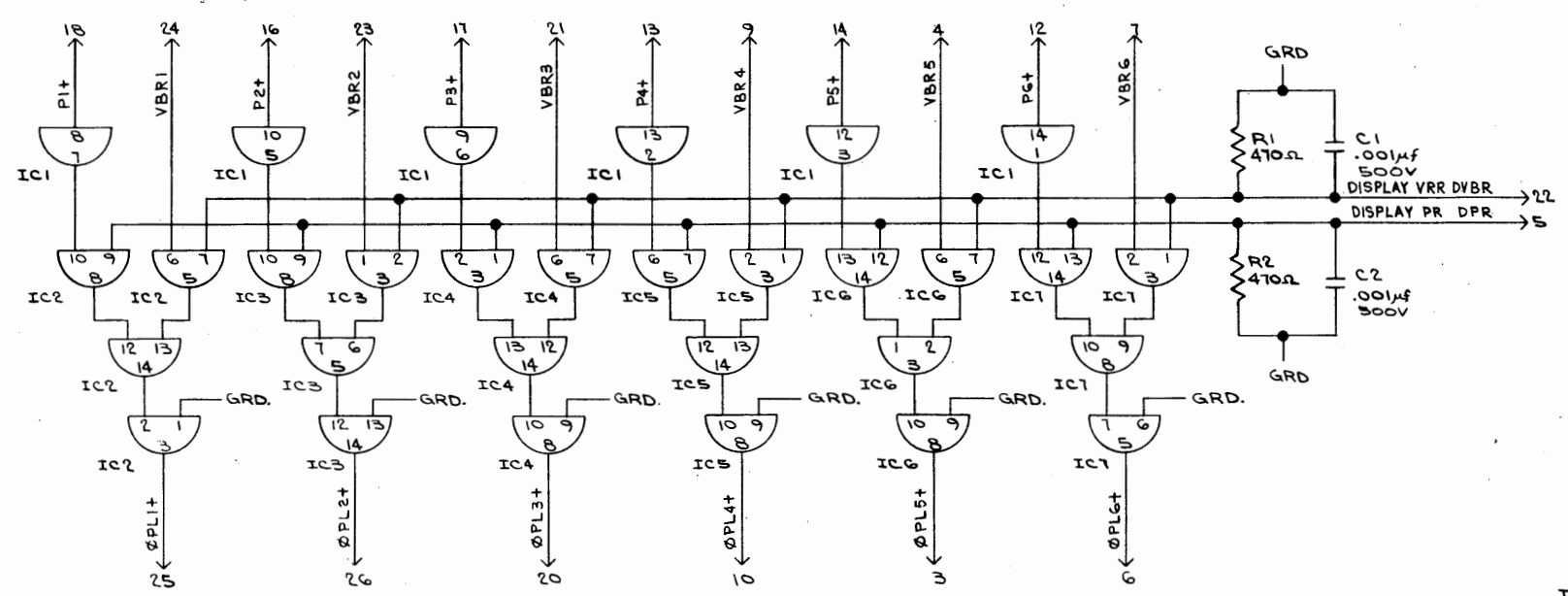
CODE IDENT. NO.	20826
USED ON	

SIZE	D	8251	REV	A
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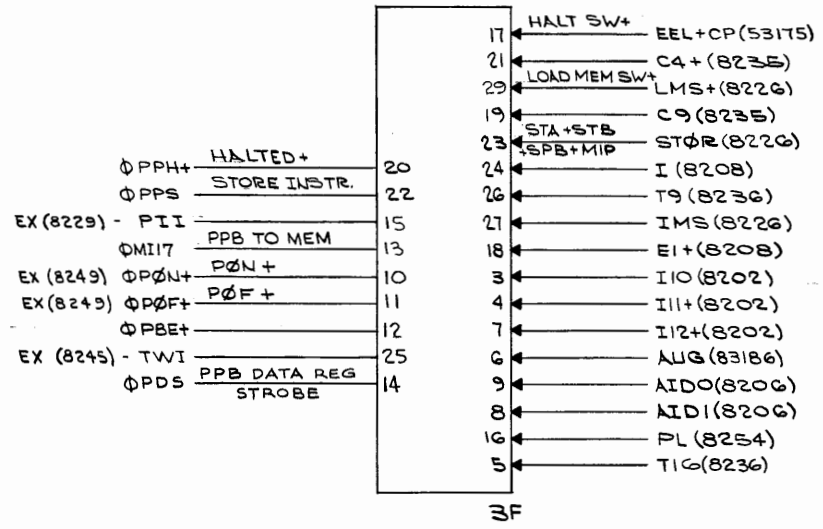
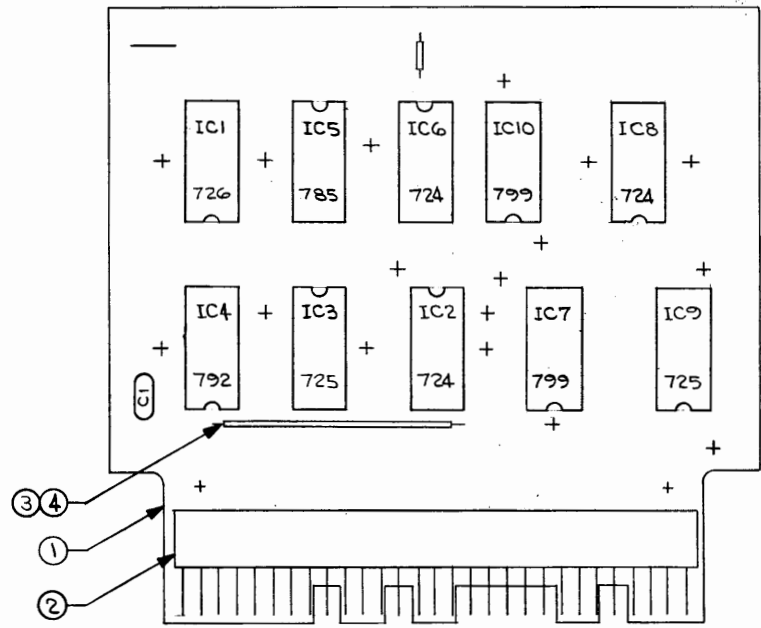


- NOTES:**
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $\frac{1}{4}W$.
 3. FOR DRILLING DWG. SEE D 8600-905 FOR DIMENSIONAL DWG. SEE C 8600
 4. ADD: 8E25 TO 8E18
8E 24 TO 8E 16
8E 20 TO 8E 17
8E 10 TO 8E 13
8E 3 TO 8E 14
8E 6 TO 8E 12
WHEN NO VBR INSTALLED

REV	DESCRIPTION	DATE	APPD
D	8252		
A	67-445 ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-26-67	10/30/67	JN

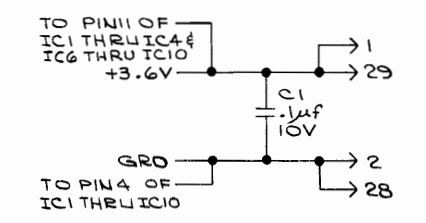
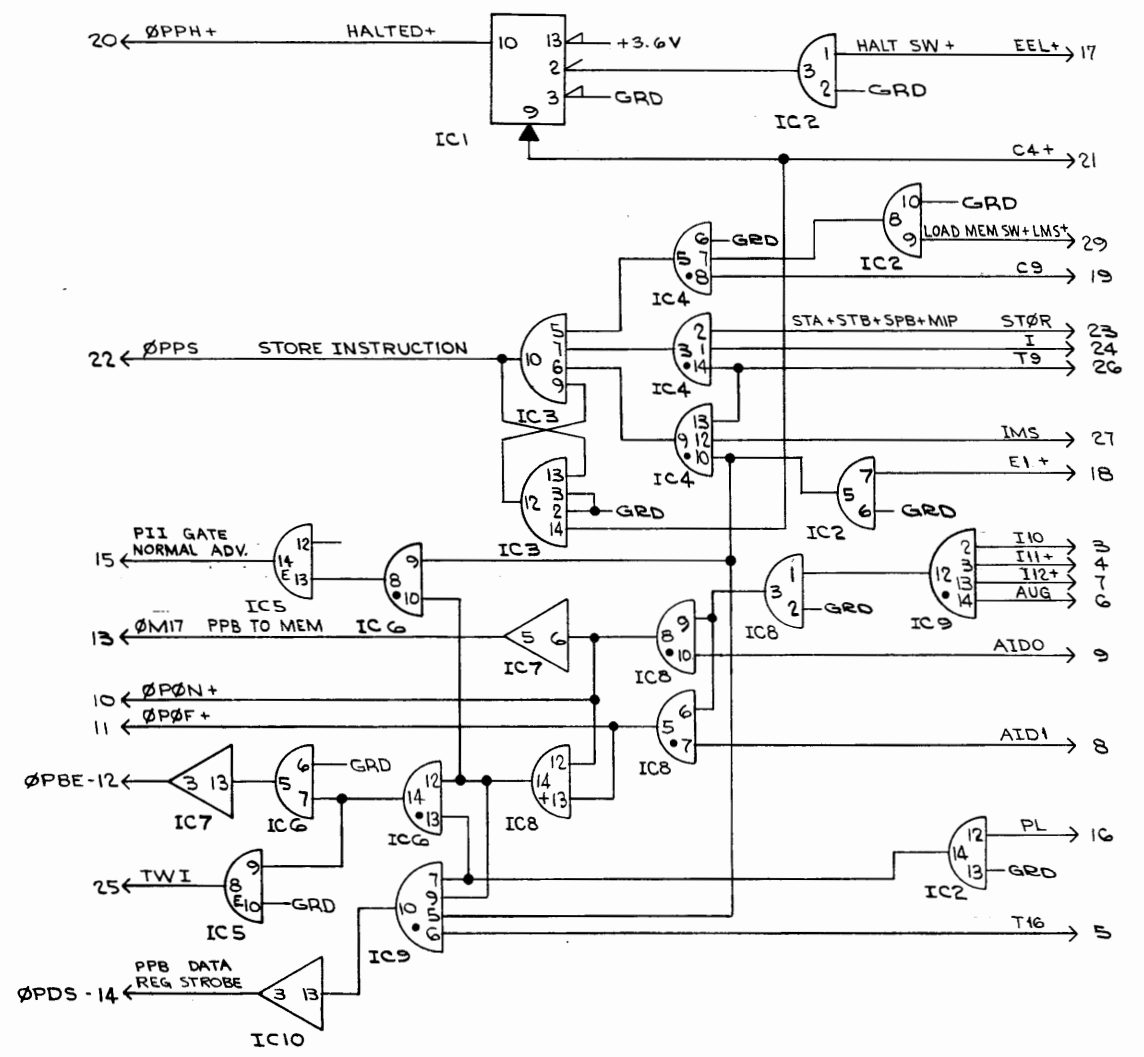


2	R2	RC01GF471J	RESISTOR-470Ω, ALLEN BRADLEY
	R1		
6	IC1	MC 724P	INTEGRATED CIRCUIT-MOTOROLA
	IC6		
	IC5		
	IC4		
	IC3		
	IC2		
1	IC1	MC 789P	
1	C3	UK10-104	CAPACITOR-.1µf±80-10%,10V,CRL
2	C2	1D102	CAPACITOR-.001µf±10%,500V,CRL
	C1		
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, FINNED
1	2	00-1021-019-000-001	CONNECTOR-ELCO
1	1	SEL 905	PRINTED CIRCUIT-(REV.SEE A511A0)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
 SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	F.L.SIENA	2-16-67	SCHEMATIC & ASSEMBLY RTL-VBR DISPLAY GATES
CL	RKM	3-2-67	
ENG.	J. Villart		
PROJ. APP.	Allen D.	6/7/67	
CODE IDENT NO	20886	REV	A
USED ON		SIZE	D
		8252	



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D 8600-967.
 FOR DIMENSIONAL DWG. SEE C 8600

REV.	DESCRIPTION	DATE	APPD.
D	8253		
A	67-445; ADDRESSES REVISED AND LINE TITLES ADDED AS. 10-26-67	10/30/67	RKM
B	68-199; ADDED DESTINATION ON PIN 5. <i>W.D. Smith</i> 4-18-68 RKM	4/18/68	RKM



QTY	IC	DESCRIPTION
2	IC10	MC799P
1	IC7	MC785P
1	IC5	MC725P
1	IC4	MC724P
2	IC9	MC725P
1	IC3	MC725P
3	IC6	MC724P
1	IC2	MC726P
1	IC1	MC726P
1	C1	10µF-10V
1	R1	10K

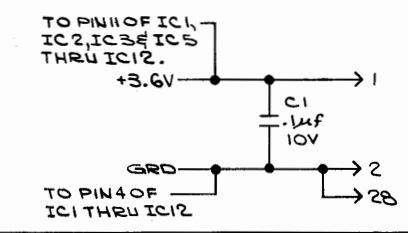
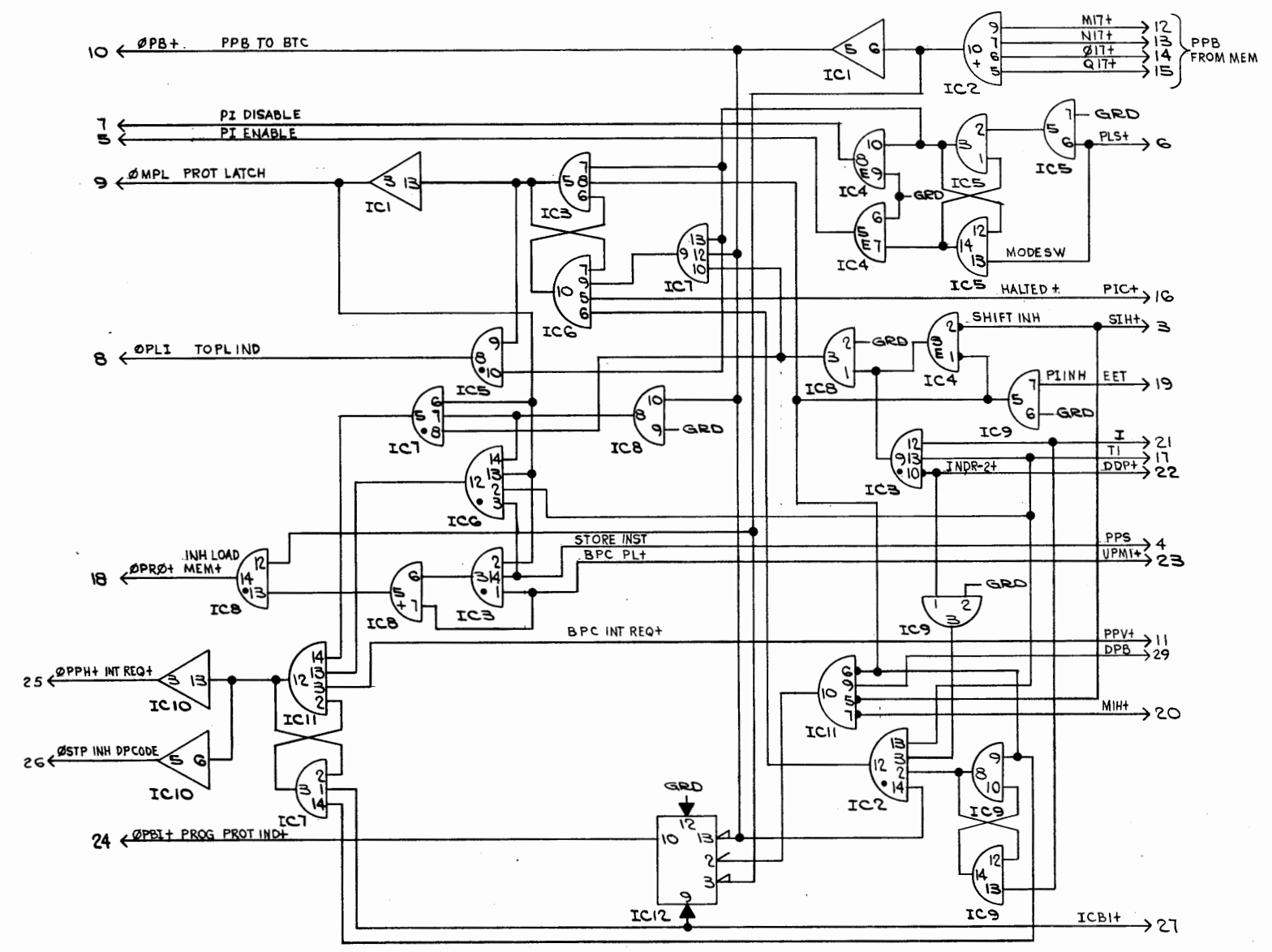
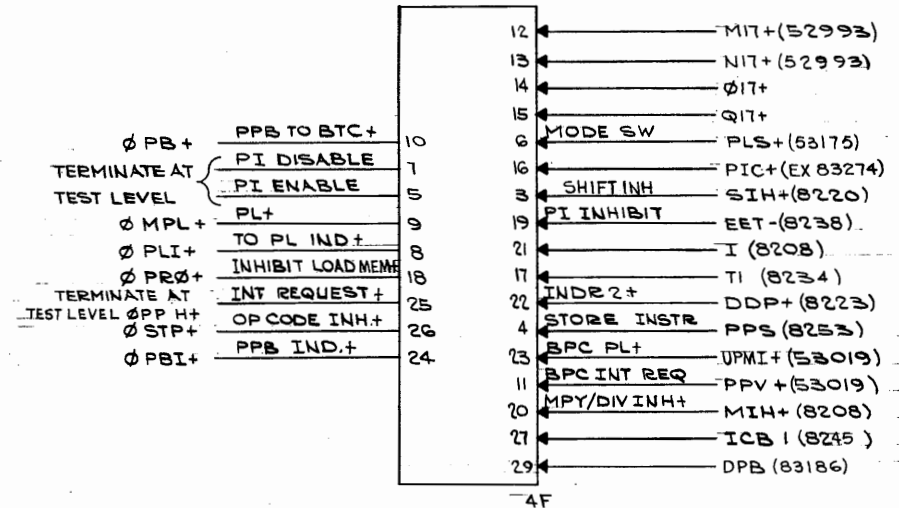
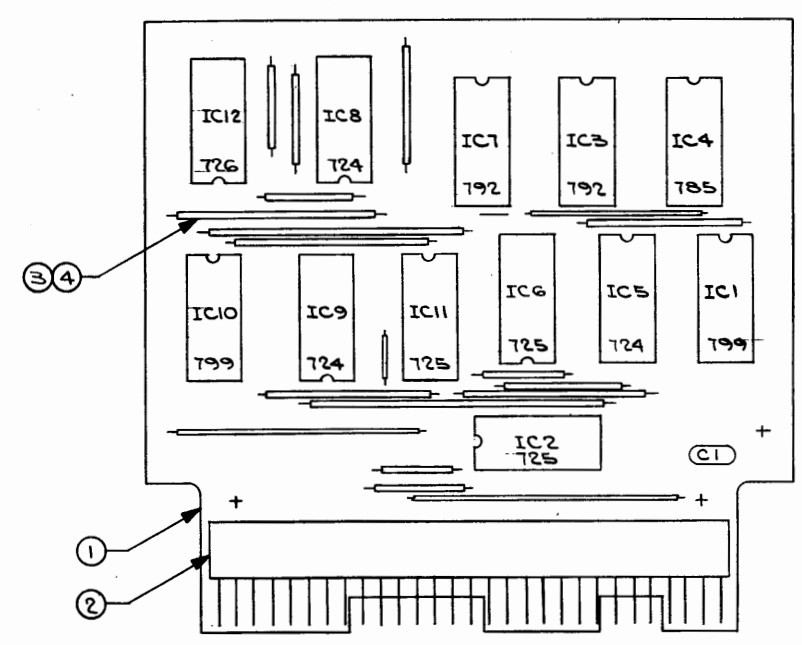
ITEM	DWG. OR PART NO.	DESCRIPTION
AR 4	AWG 24	SLEEVING-TEFLON, THIN WALL
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-1022-029-000-001 CONNECTOR-ELCO
1	1	SEL 967 PRINTED CIRCUIT (REV. SEE A51140)
-1		ITEM DWG. OR PART NO. DESCRIPTION

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Systems Engineering Laboratories			
6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310			
DR	<i>R. R. Smith</i>	6-1-67	
CHK	RKM	7-14-67	
ENGR	<i>R. W. Smith</i>	7-7-67	
PROJ	<i>R. W. Smith</i>	7/7/67	
APPD	<i>R. W. Smith</i>	7/10/67	
NEXT ASSY			
CODE IDENT NO.	SIZE	REV.	
20886	D	8253	B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D 8600-968.
 FOR DIMENSIONAL DWG. SEE C 8600.

SIZE	REV.	DESCRIPTION	DATE	APPD	REV.
D		8254			B
A		67-445; ADDRESSES REVISED AND LINE TITLES ADDED E.P.C. 10-26-67	10/16/67		
B		68-199; DESTINATION OF PIN 16 ON LOGIC & SCHEMATIC WAS PPH+(8253)	4/19/68		

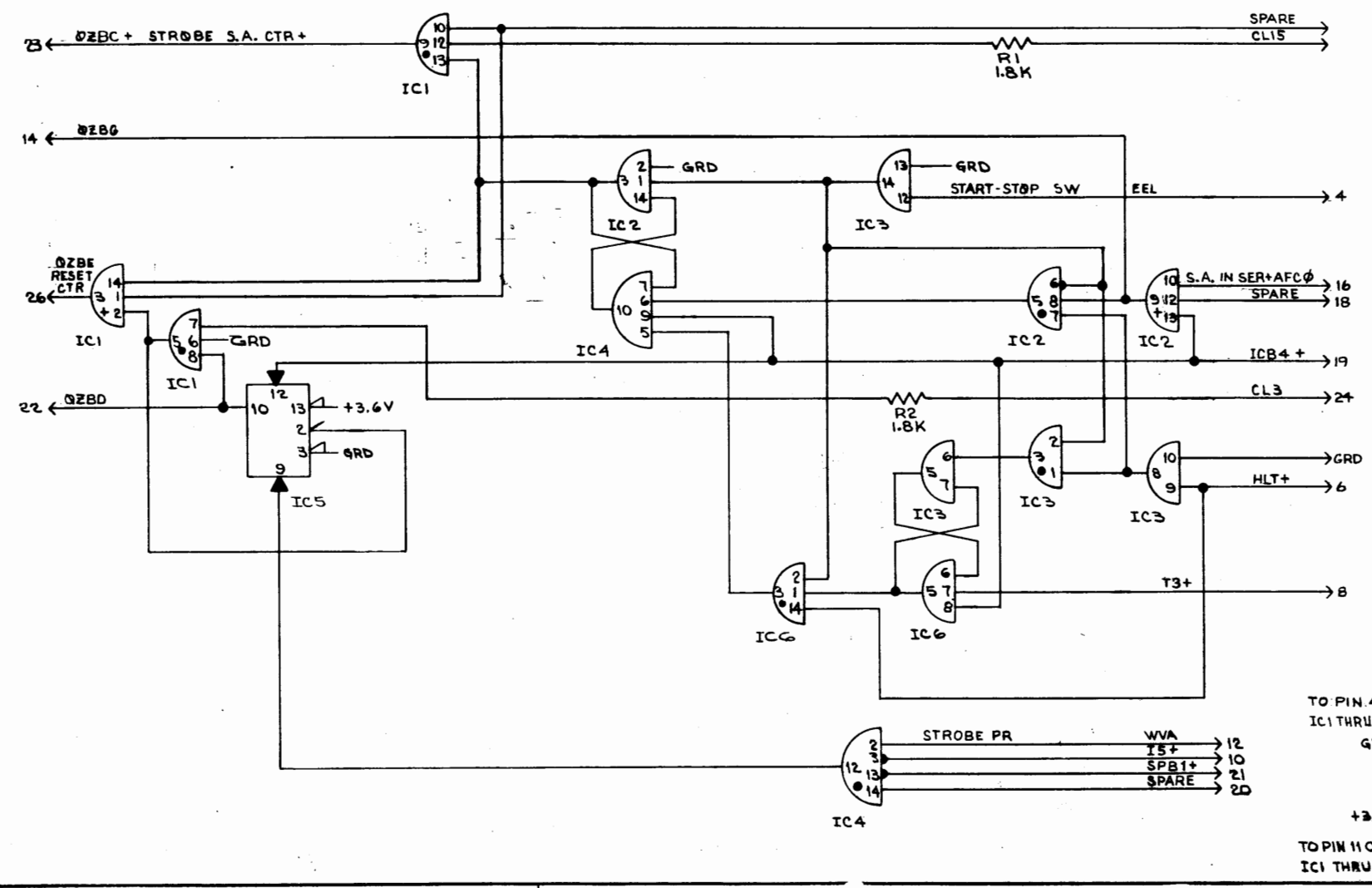
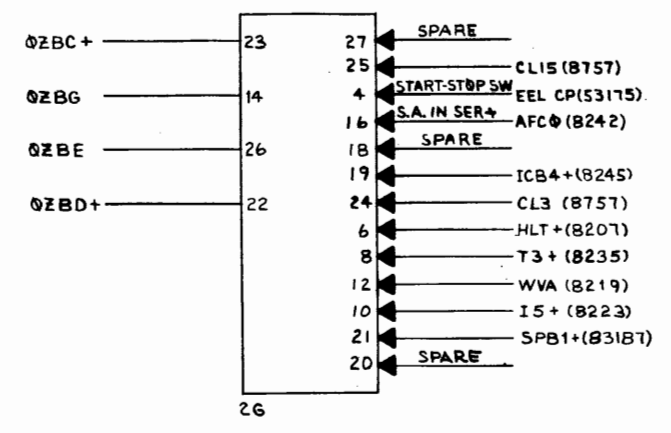
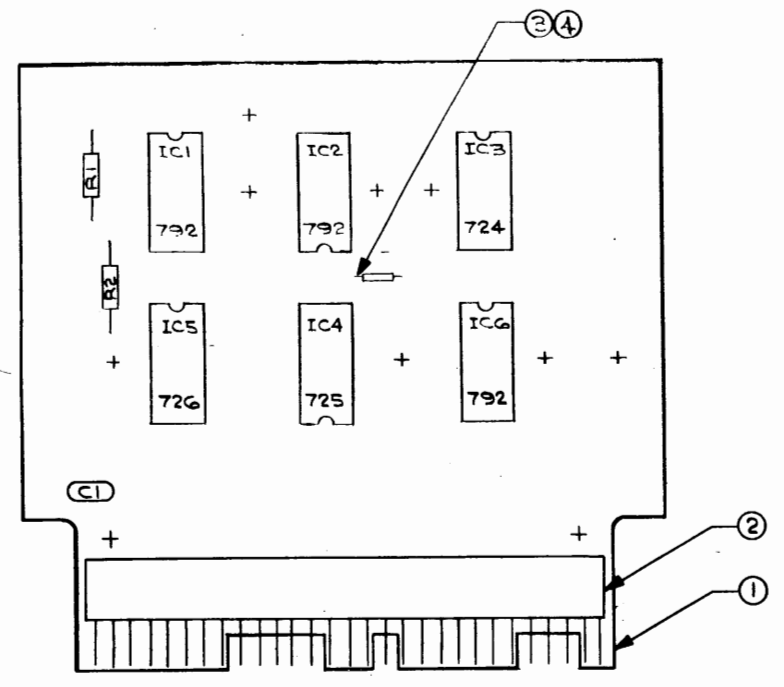


QTY	IC	DESCRIPTION	DESCRIPTION	
1	IC12	MCT26P	INTEGRATED CIRCUIT-MOTOROLA	
3	IC8	MCT24P		
	IC5			
1	IC4	MCT85P		
2	IC7	MCT92P		
	IC11			
3	IC6	MCT25P		
	IC2			
2	IC10	MCT99P		
	IC1			
1	C1	UK-10-104		CAPACITOR-.1uF;80-20%,10V,CERL
AR	4	AWG 24		SLEEVING-TEFLON, THIN WALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED	
1	2	DD-1022-029-000-001	CONNECTOR-ELCO	
1	1	SEL 968	PRINTED CIRCUIT (REV. SEE A51140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	

Systems Engineering Laboratories			
8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310			
DR	<i>[Signature]</i>	5-31-67	SCHEMATIC ASSEMBLY RTL PROGRAM PROTECT LOGIC 2
CHK	RKM	6-2-67	
ENGR	<i>[Signature]</i>	6/19/67	
PROJ	<i>[Signature]</i>	6/19/67	
APPD	<i>[Signature]</i>	4/28/67	
NEXT ASSY			
CODE IDENT NO.	20886	SIZE	D
		8254	REV. B

SIZE	D	8255	REV.	A
REV.		DESCRIPTION	DATE	APPD
A		67-445; 2R & LINE TITLES ADDED. C.THEW 10-26-67	11/11	[Signature]

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING & DIM. DWG SEE. D8600-327



2	R1,2	RC07GF182J	RESISTOR - 1.8K ALLEN BRADLEY
1	IC5	MC 726 P	INTEGRATED CIRCUIT - MOTOROLA
1	IC4	MC 725 P	
1	IC3	MC 724 P	
3	IC2	MC 792 P	
	IC1		
1	C1	UK 10 - 104	
AR	4	AWG 24	SLEEVING - TEFLON, THIN WALL
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	SEL 327	PRINTED CIRCUIT (REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

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Systems Engineering Laboratories
 6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

DR. C. PRUNA 5-11-67
 CHK. RKM 7-24-67
 ENGR. [Signature]
 PROJ. [Signature]
 APPD. [Signature]

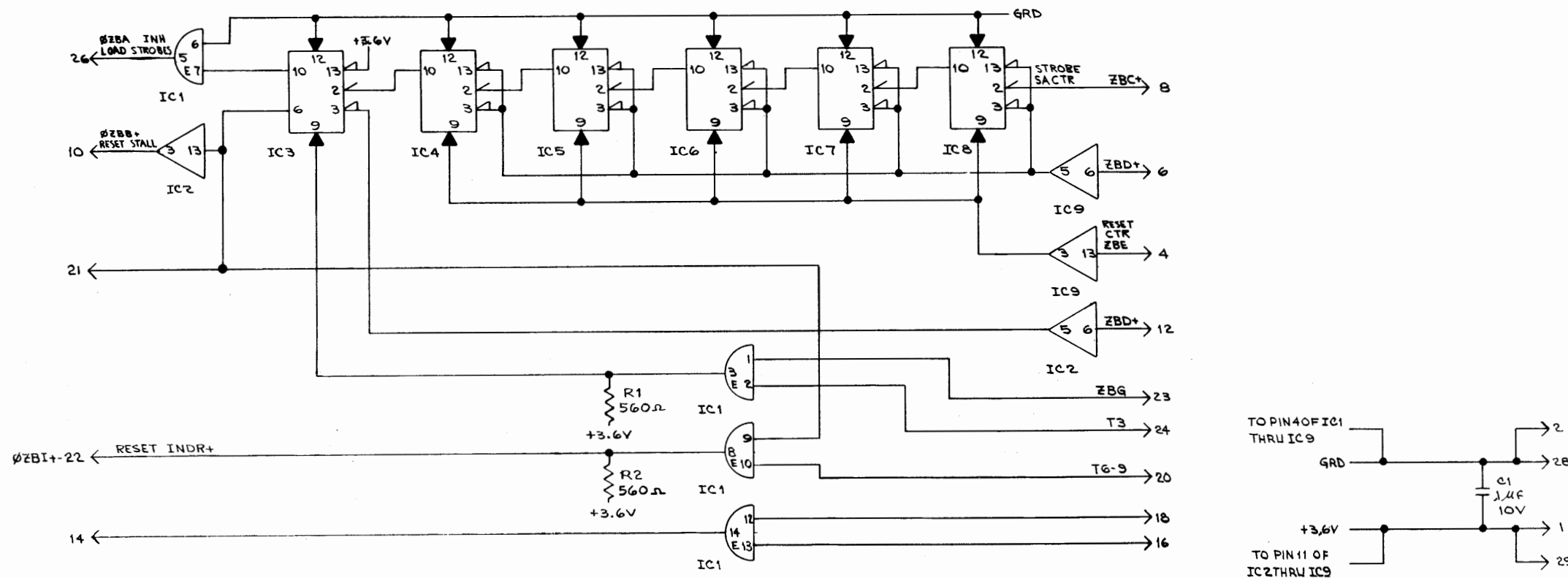
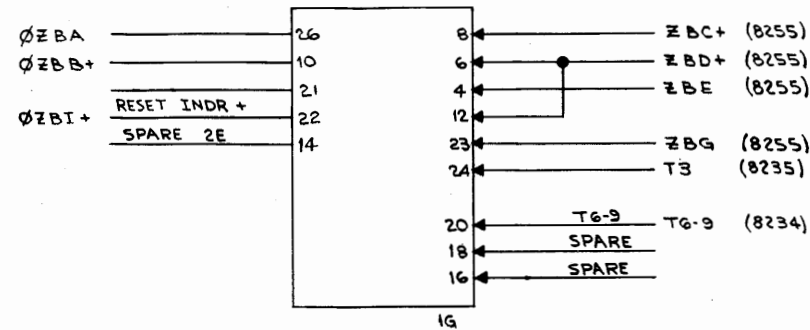
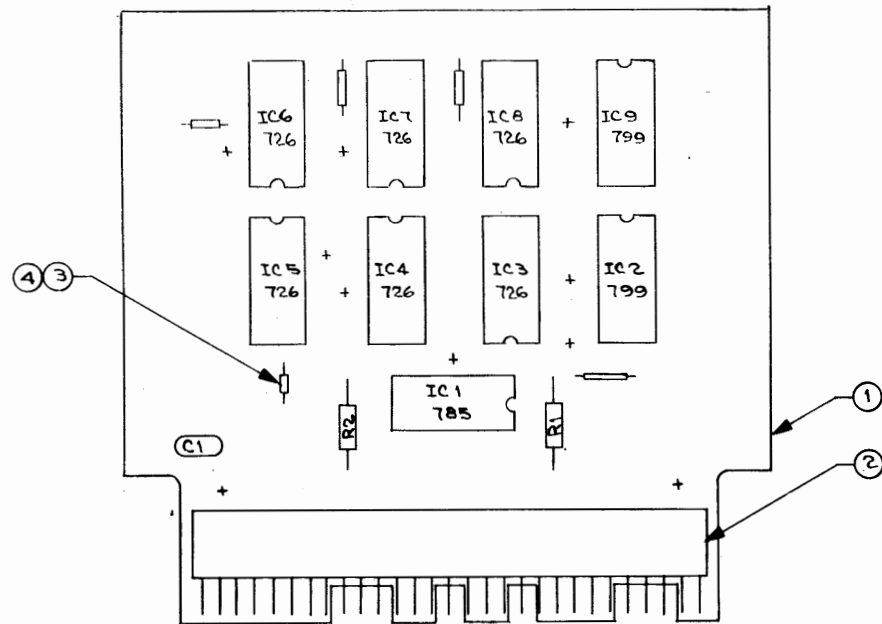
SCHEMATIC & ASSEMBLY
 RTL STALL ALARM CONTROL

CODE IDENT NO. 20886 SIZE D 8255 REV. A

NEXT ASSY

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$ 1/4 W.
 3. FOR DRILLING & DIMENSIONAL DWG SEE D8600-328.

SIZE	D	8256	REV.	A
REV.	A	DESCRIPTION	DATE	APPD
		67-445; ADDRESSES REVISED, LINE TITLES AND CARD NUMBERS ADDED. AS. 10-26-67	10/30/67	[Signature]

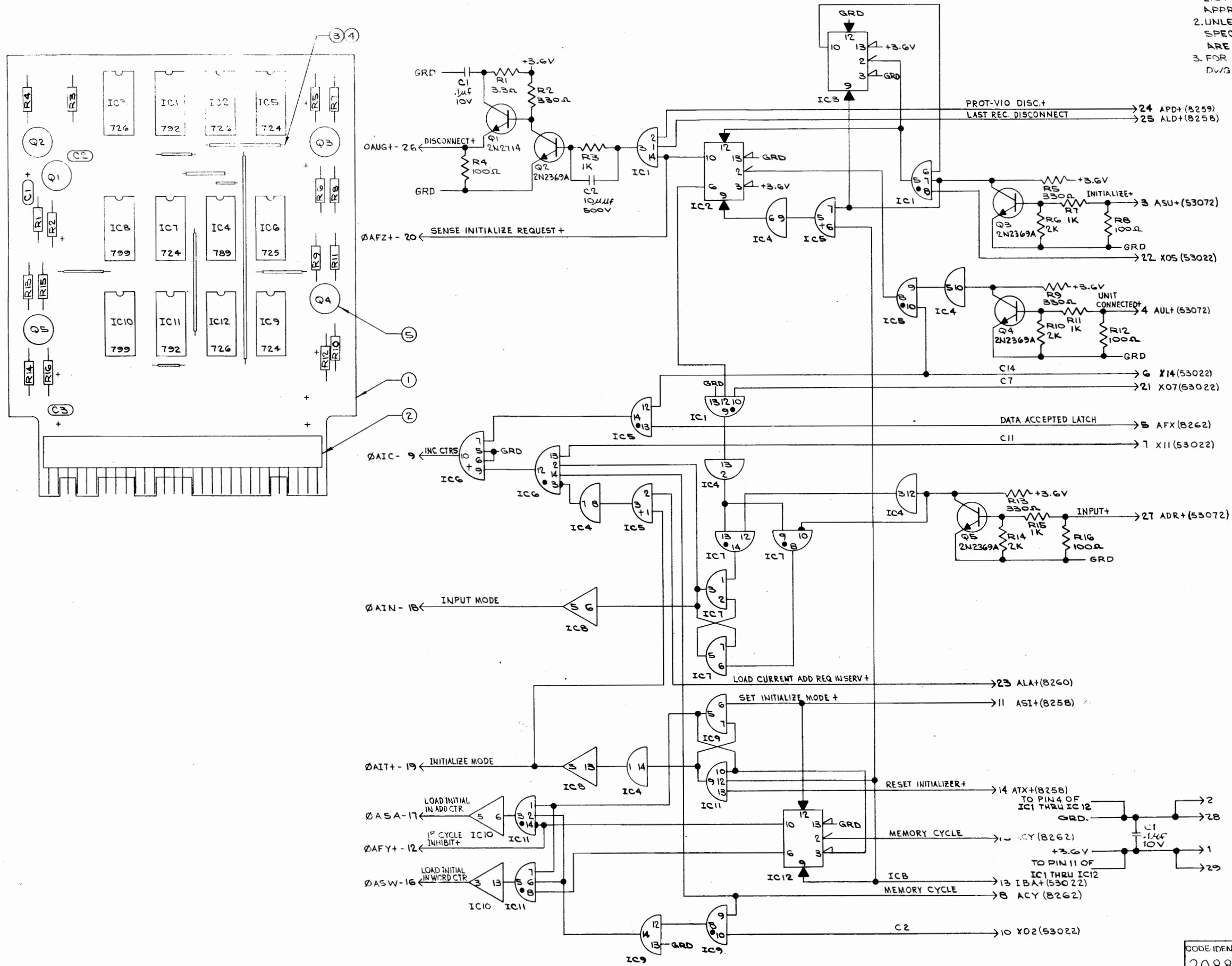


2	R2	RC07GF561J	RESISTOR- 560Ω, ALLEN BRADLEY
6	ICB ICT IC6 ICS IC4 IC3	MC726P	INTEGRATED CIRCUIT-MOTOROLA
2	IC9 IC2	MC799P	
1	IC1	MC785P	
1	C1	UK-10-104	CAPACITOR-.1μf+80-20%10V CRL
AR	4	AWG 24	SLEEVING-TEFLON, THIN WALL
AR	3	AWG 24	WIRE-SOLIDCOPPER, TINNED
1	2	00-1022-029-000-001	CONNECTOR - ELCO
1	1	SEL 328	PRINTED CIRCUIT (REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

Systems Engineering Laboratories 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310			
DR. PRUNA	7-17-67	SCHEMATIC & ASSEMBLY	
CHK RKM	7-19-67	RTL STALL ALARM COUNTER	
ENGR [Signature]	3-15-67	CODE IDENT NO.	SIZE
PROJ [Signature]	4-1-67	20886	D 8256
APPD [Signature]			REV. A
NEXT ASSY			

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $\frac{1}{4}W$.
 3. FOR DRILLING & DIMENSIONAL DWG SEE D15466

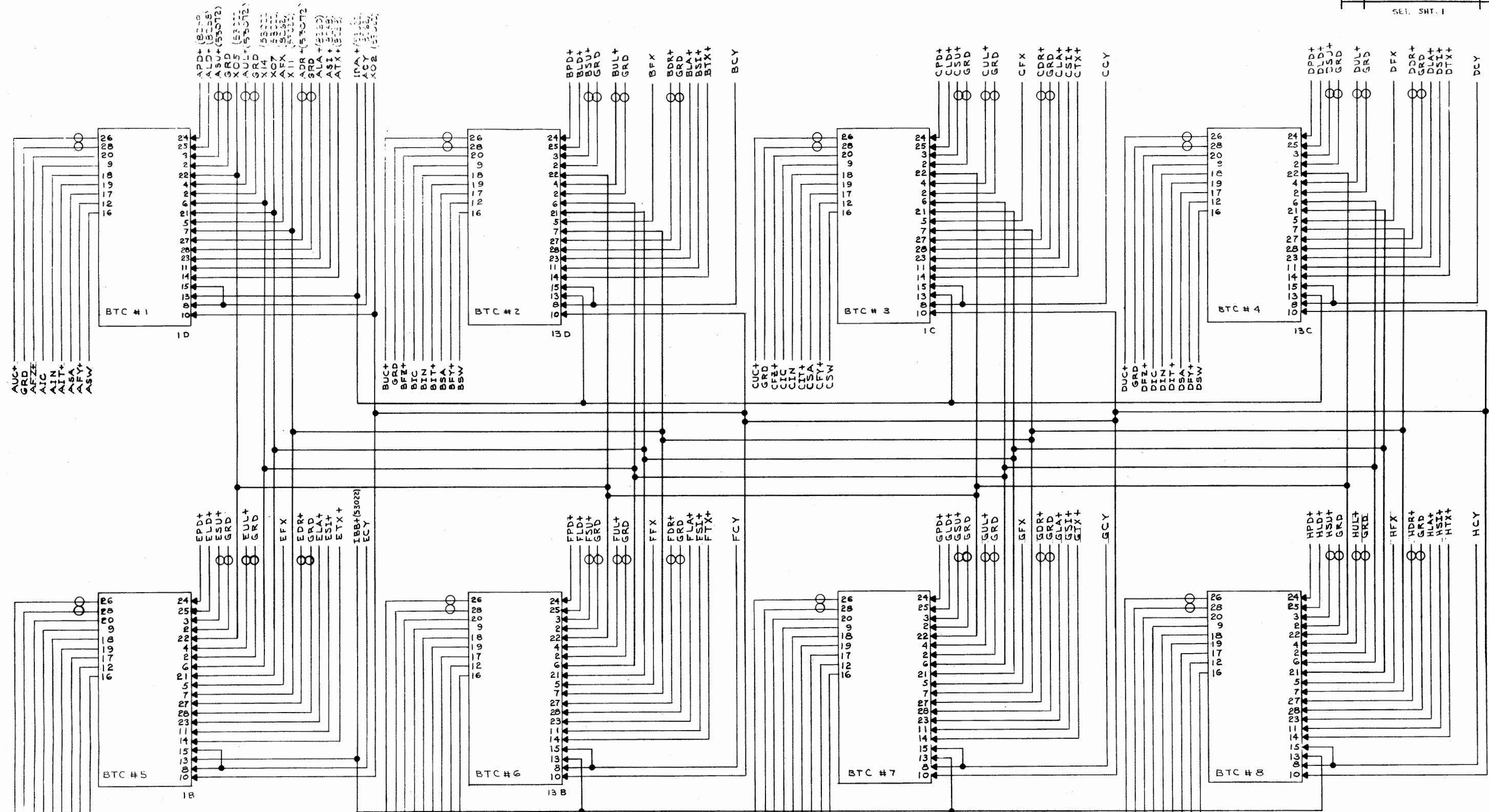
REV	DESCRIPTION	DATE	APP'D
D	8257		
A	G1445; ADDRESSES & LINE THICKS ALDED. SHT. 2 REVISED CAPD. LOCATIONS E.P.C. 10-26-67	12/29/67	[Signature]



3	R14 R10 R6	RC07GF202J	RESISTOR-2K, ALLEN BRADLEY
4	R12 R8 R4	RC07GF101J	100 Ω ,
4	R15 R11 R7 R3	RC07GF102J	1K,
4	R13 R9 R5 R2	RC07GF331J	330 Ω ,
1	R1	RC07GF332J	RESISTOR-3.3 Ω , ALLEN BRADLEY
4	Q5 Q4 Q3 Q2	2N2369A	TRANSISTOR-FAIRCHILD
1	Q1	2N2714	TRANSISTOR-G.E.
2	IC10 IC8	MC1799P	INTEGRATED CIRCUIT-MOTOROLA
1	IC9	MC125P	
3	IC7 IC5	MC124P	
1	IC4	MC1789P	
3	IC3 IC2	MC126P	
2	IC11 IC1	MC1792P	
1	C2	ID100	CAPACITOR-10 μ F \pm 10%, 500V, CRL
2	C3 C1	UK-10-104	CAPACITOR-.1 μ F \pm 20%, 10V, CRL
5	5	B10369	UNIPAD
AR	4	AWG 2A	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 941	PRINTED CIRCUIT (REV. SEE A5140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	F.L. SIENA	3-15-67	SCHEMATIC ASSEMBLY RTL-INITIALIZE CONTROL 1R2
CR.	RKN1	3-27-67	
ENG.	[Signature]		
PROJ. APP.	[Signature]		CODE IDENT NO 20886
APP.	[Signature]		SIZE D
USED ON			8257
			REV A

NOTES:
1. SEE P. 1.

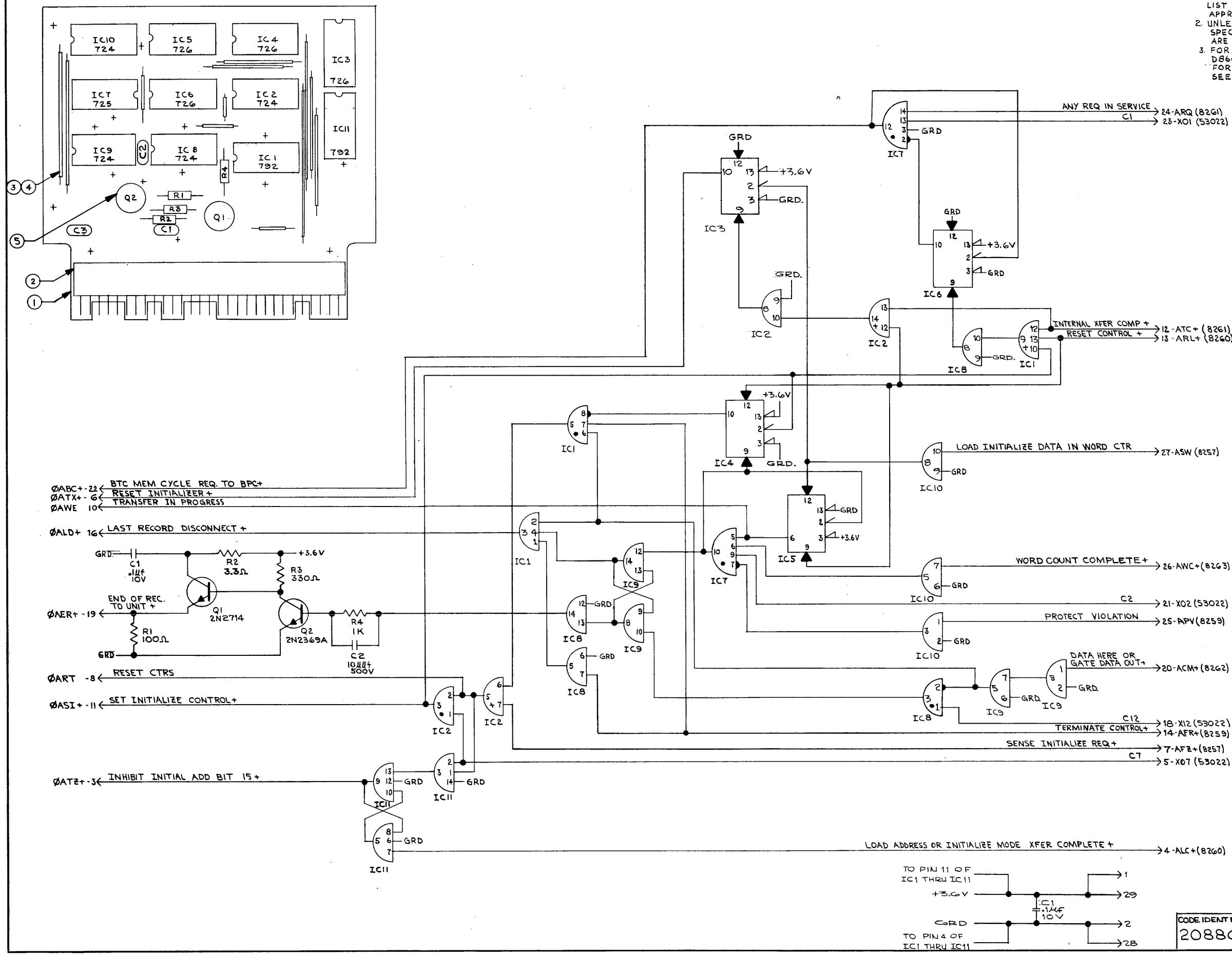
REV	D	8257	REV	A
DESCRIPTION	DATE		APP'D	
SEL. SHT. 1				



ITEM	DWG. OR PART NO.	DESCRIPTION			
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA					
DR.	F.L.SIENA 3-16-67	SCHEMATIC & ASSEMBLY RTL-INITIALIZE CONTROL 1R2			
CK.	RKM 3-27-67				
ENG.	<i>[Signature]</i> 4/1/67				
REV.	<i>[Signature]</i> 4/1/67				
APP.	<i>[Signature]</i> 4/1/67				
CODE IDENT NO	20886	SIZE	D	REV	A
		8257			

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING DWG SEE D8600-942.
 FOR DIMENSIONAL DWG SEE C8600.

REV	DESCRIPTION	DATE	APP'D
D	8258		
A	6T-445; ADDRESSES AND LINE TITLES ADDED. SHT. 2-CARD LOCATIONS REVISED. AS. 10-26-67	10/30/67	[Signature]
B	68-199; DESIGNATION ON PIN 26 WAS UNIT DATA REQ. +. <i>Revised 4-19-68</i> RKM	4/19/68	[Signature]



ITEM	DWG. OR PART NO.	DESCRIPTION
1	R4 RC07GF102J	RESISTOR - 1K, ALLEN BRADLEY
1	R3 RC07GF331J	- 330Ω
1	R2 RC07GF3R3J	- 3.3Ω
1	R1 RC07GF101J	RESISTOR - 100Ω, ALLEN BRADLEY
1	Q2 2N2369A	TRANSISTOR-FAIRCHILD
1	Q1 2N2714	TRANSISTOR-GE
1	IC7 MC725P	INTEGRATED CIRCUIT-MOTOROLA
4	IC6 MC726P	
4	IC5 MC726P	
4	IC4 MC726P	
4	IC3 MC726P	
4	IC9 MC724P	
2	IC11 MC792P	INTEGRATED CIRCUIT-MOTOROLA
1	C2 ID100	CAPACITOR-10μF±10%, 500V, CRL
2	C3 UK10-104	CAPACITOR-1μF±20%, 10V, CRL
2	5 B10369	UNIPAD
AR	4 AWG 24	SLEEVING-TEFLON, THINWALL
AR	3 AWG 24	WIRE-SOLID COPPER, TINNED
1	2 00-7022-029-000-001	CONNECTOR-ELCO
1	1 SEL 942	PRINTED CIRCUIT (REV. SEE A51140)

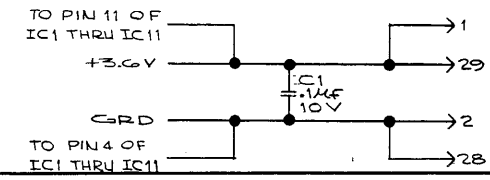
ITEM		DESCRIPTION	
DR.	R. SANBORNE	3-16-67	
CK.	RKM	3-24-67	
ENG.	E. W. [Signature]	6-8-67	
PROJ. APP.	[Signature]	6/8/67	
APP.	[Signature]	6/8/67	
USED ON			

SYSTEMS ENGINEERING LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

SCHEMATIC ASSEMBLY
 RTL CYCLE CONTROL
 1R2

CODE IDENT NO. 20886

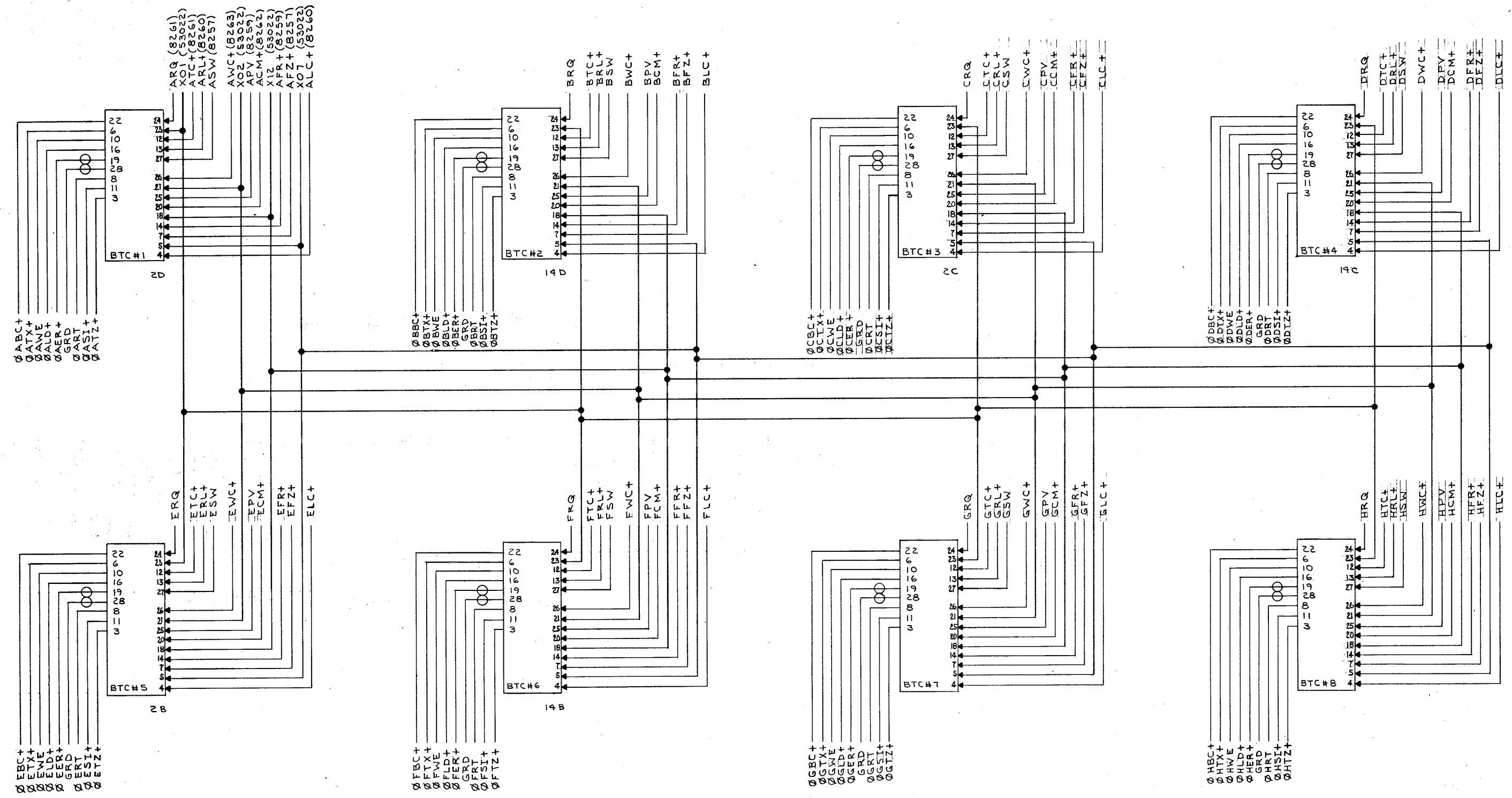
SIZE D 8258



NOTES:
1. SEE SH. 1

REV	DESCRIPTION	DATE	APP'D
D	8258		B

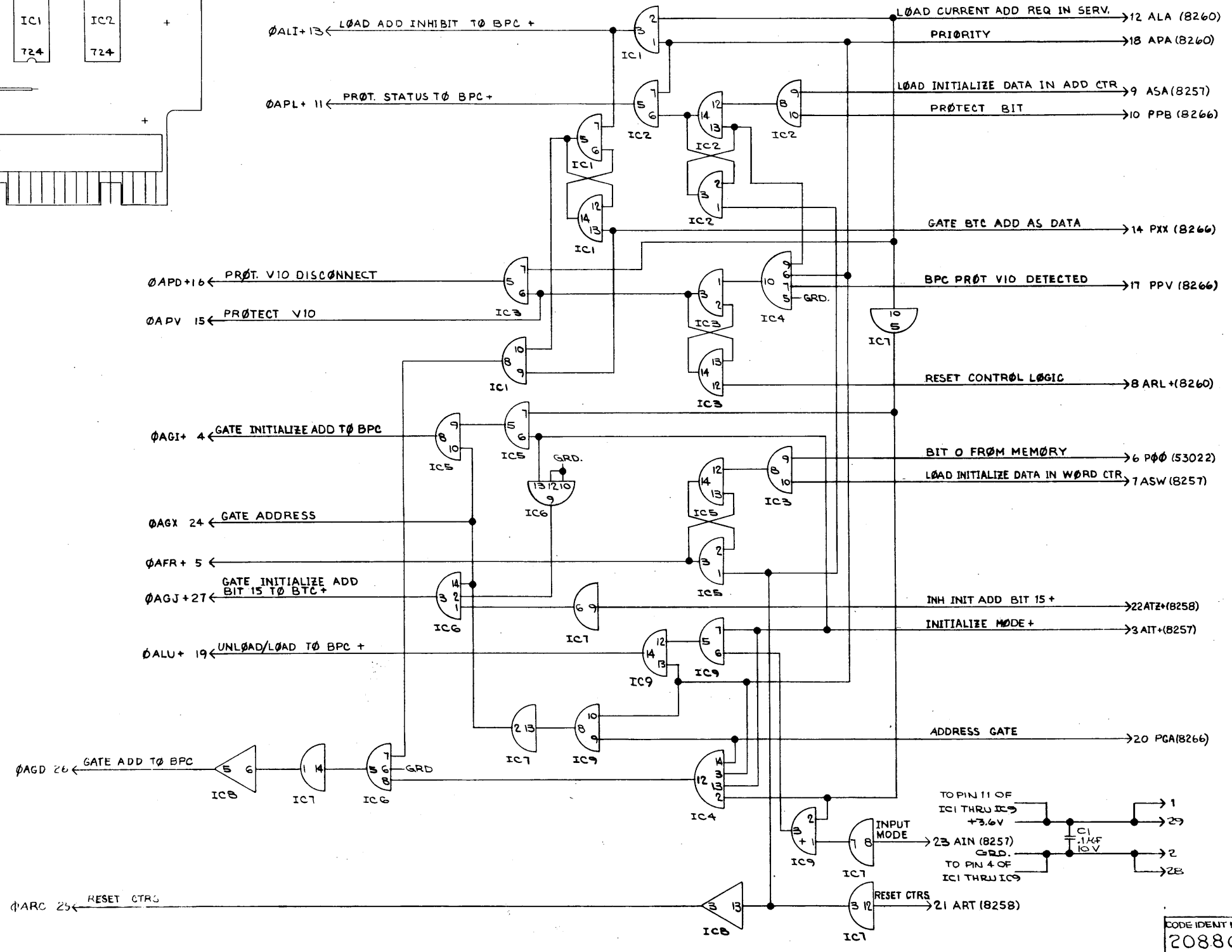
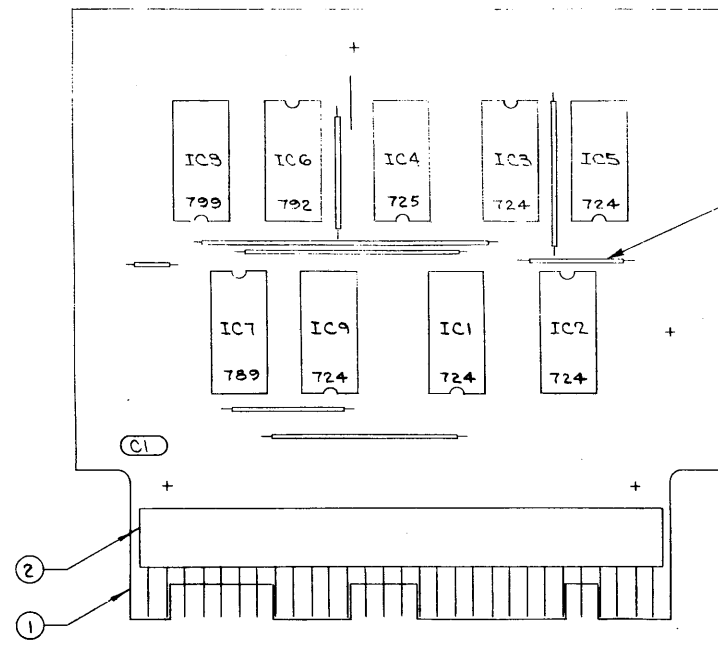
SEE SH. 1



ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR. R. SANBORNE	3-19-67	SCHEMATIC & ASSEMBLY RTL CYCLE CONTROL IR2				
CK. RKM	3-24-67					
ENG. <i>E. Villanti</i>	6-8-67					
PROJ. APP. <i>W. Villanti</i>	6/8/67					
CODE IDENT NO.	20886	SIZE	D	8258	REV	B
USED ON						

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-943.
 FOR DIMENSIONAL DWG. SEE C8600.

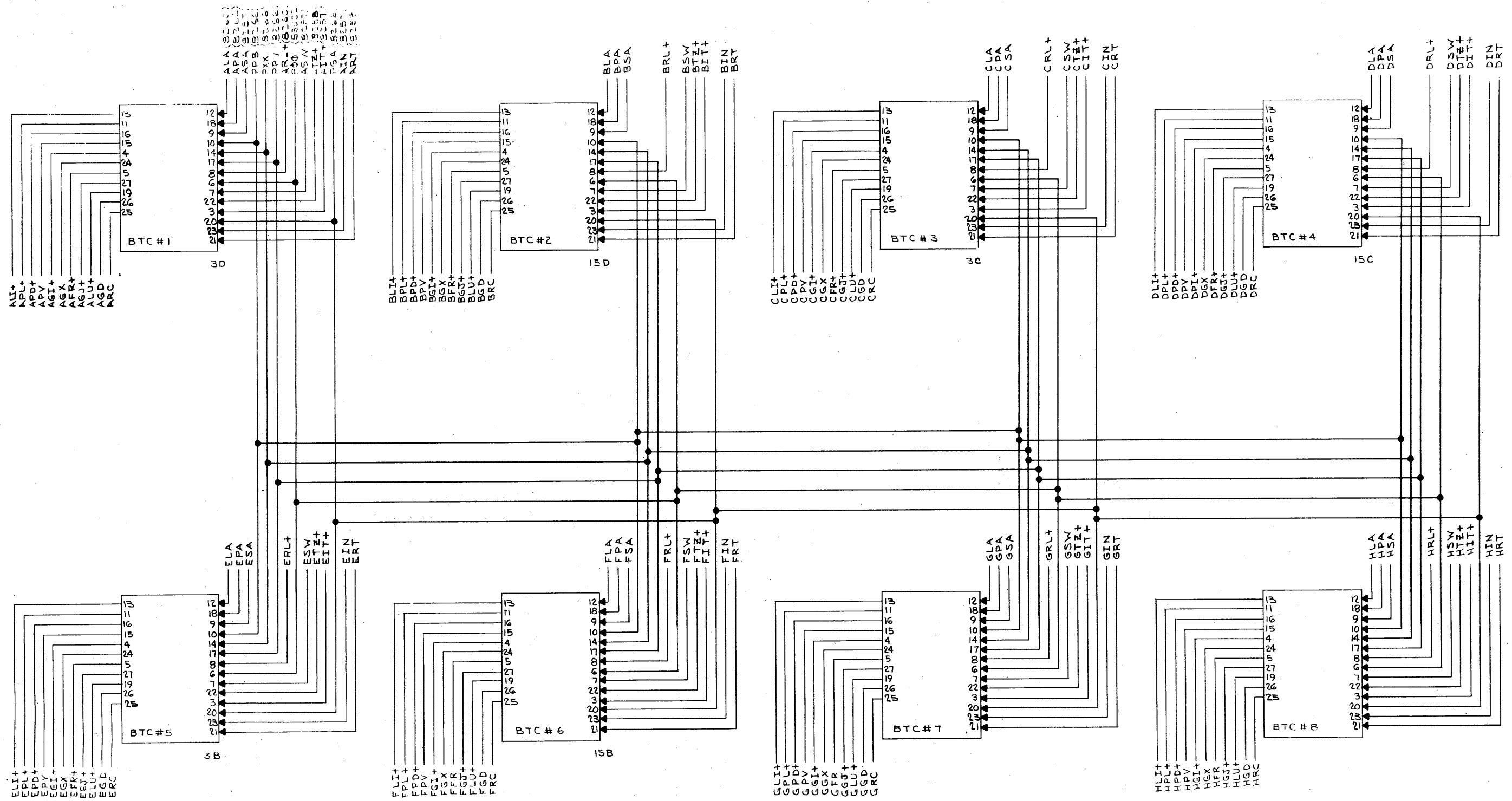
REV	DESCRIPTION	DATE	APP'D
D	8259		
A	67-310; CONNECTED PIN 13 ON IC2 TO PIN 9 ON IC4. PIN 2 ON IC2 WAS CONNECTED TO PIN 9 ON IC4 BY B-8/31/67 RKM	8/31/67	[Signature]
B	67-445; ADDRESSES AND LINE TITLES ADDED. SH72, REVISED CARD LOCATIONS. C.THEW 10-26-67	10/30/67	[Signature]



1	IC6	MC 799P	INTEGRATED CIRCUIT-MOTOROLA
1	IC7	MC 789P	
1	IC6	MC 792P	
1	IC4	MC 725P	
5	IC9 IC3 IC2 IC1	MC 724P	
1	C1	UK-10-104	CAPACITOR-.1uF+80-20%, 10V, CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 943	PRINTED CIRCUIT (REV. SEE AS1140)
1	ITEM	DWG. OR PART NO.	DESCRIPTION
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	F.L.SIENK	3-17-67	SCHEMATIC & ASSEMBLY RTL ADDRESS CONTROL IR 2
CC	RKM	3-21-67	
ENG.	E. Villetto	6/1/67	
CODE IDENT NO	20886	REV. 2/24/66	DATE 6/1/67
SIZE	D	8259	REV B

NOTES:
1. SEE S.P.1

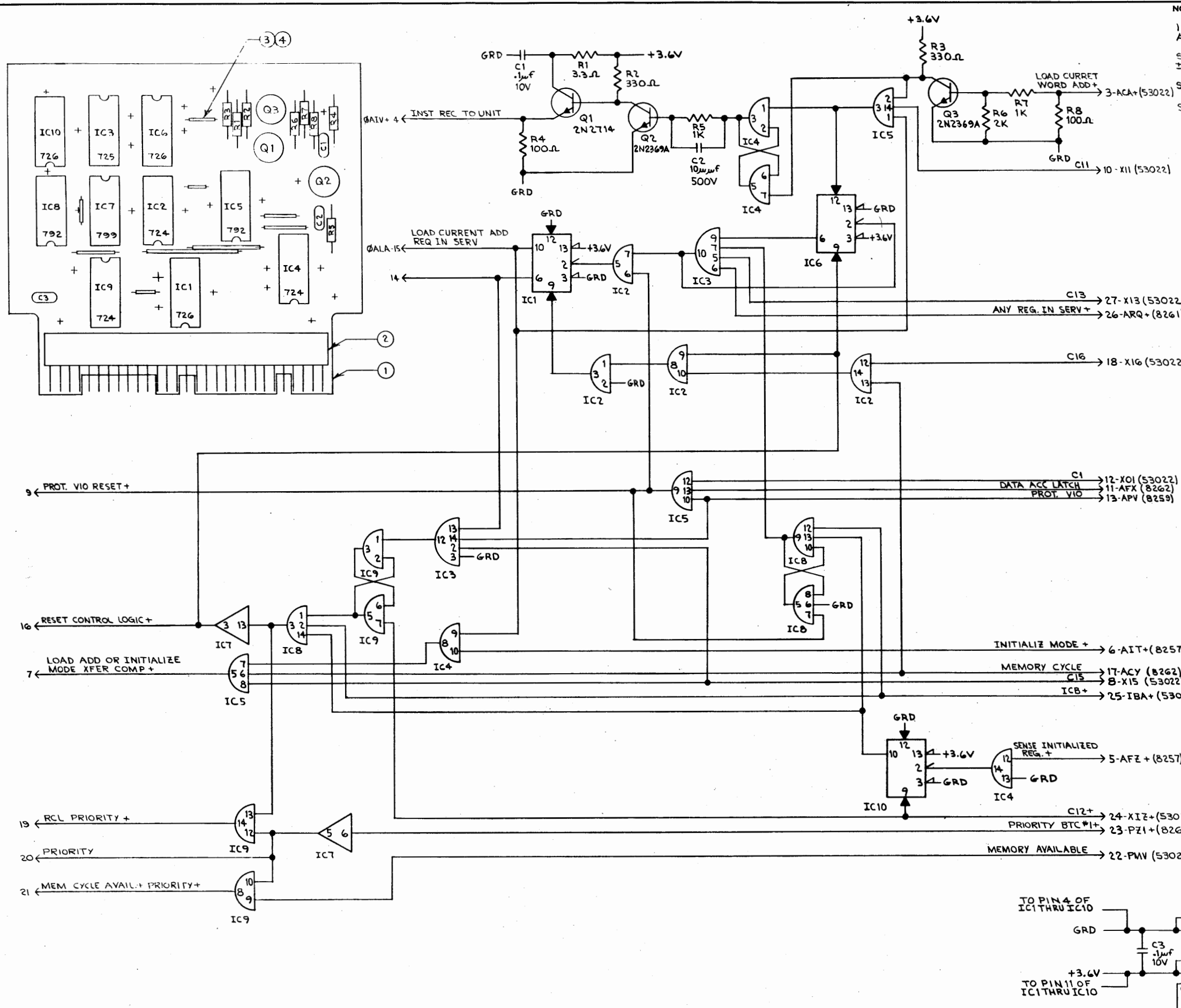
REV	D	DESCRIPTION	DATE	APP'D	BY
		SEE SH.1			B



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	F.L.SIENA 3-17-67	SCHEMATIC & ASSEMBLY RTL ADDRESS CONTROL IR2
CR	RKM 3-21-67	
ENGR.	E. Pellaio	
PROJ. MGR.	B. Pellaio	
APP'D	B. Pellaio	
USED ON	6/1/67	

CODE IDENT NO
20886

SIZE	D	REV	B
		8259	



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING DRAWING SEE D8600-944 FOR DIMENSIONAL DWG. SEE C8600.

REV	DESCRIPTION	DATE	APP'D
D	8260		
A	65-313; PINS 2 & 5 OF IC3 WERE CONNECTED. E.J.B. 8/3/67 RKM	9/1/67	
B	67-427; R1 WAS 3.3K IN LIST OF MATERIAL. RKM 10-12-67	10/13/67	
C	67-445; ADDRESSES AND LINE TITLES ADDED. SMT. 2-CARD NUMBERS REVISED. AS. 10-26-67	11/26/67	

1	R6	RCOTGF202J	RESISTOR-2K, ALLEN BRADLEY	
2	R7	RCOTGF102J	RESISTOR-1K, ALLEN BRADLEY	
2	R8 R4	RCOTGF101J	RESISTOR-100Ω, ALLEN BRADLEY	
2	R3 R2	RCOTGF331J	RESISTOR-330Ω, ALLEN BRADLEY	
1	R1	RCOTGF3R3J	RESISTOR-3.3Ω, ALLEN BRADLEY	
2	Q3	2N2369A	TRANSISTOR-FAIRCHILD	
1	Q1	2N2714	TRANSISTOR-G.E.	
1	IC7	MCT99P	INTEGRATED CIRCUIT-MOTOROLA	
2	IC8	MCT92P		
2	IC5	MCT92P		
1	IC3	MCT25P		
3	IC9 IC4	MCT24P		
3	IC2 IC10	MCT26P		
3	IC6 IC1	MCT26P		
1	C2	ID100		CAPACITOR-10μmf ±10%, 500V, CRL
2	C3 C1	UK-10-104		CAPACITOR-.1μf ±80-20%, 10V, CRL
AR 4	AWG 24			SLEEVING-TEFLON, THINWALL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED	
1 2	00-7022029-000-001		CONNECTOR-ELCO	
1 1	SEL 944		PRINTED CIRCUIT (REV. SEE A51140)	

ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	RL WENNELL	3/27/67
CK	JRKM	5-29-67
ENG.	F. Villanelli	6-1-67
PROJ. APP.	W. Villanelli	6/8/67
APP.	J. Villanelli	6/17/67
USED ON		

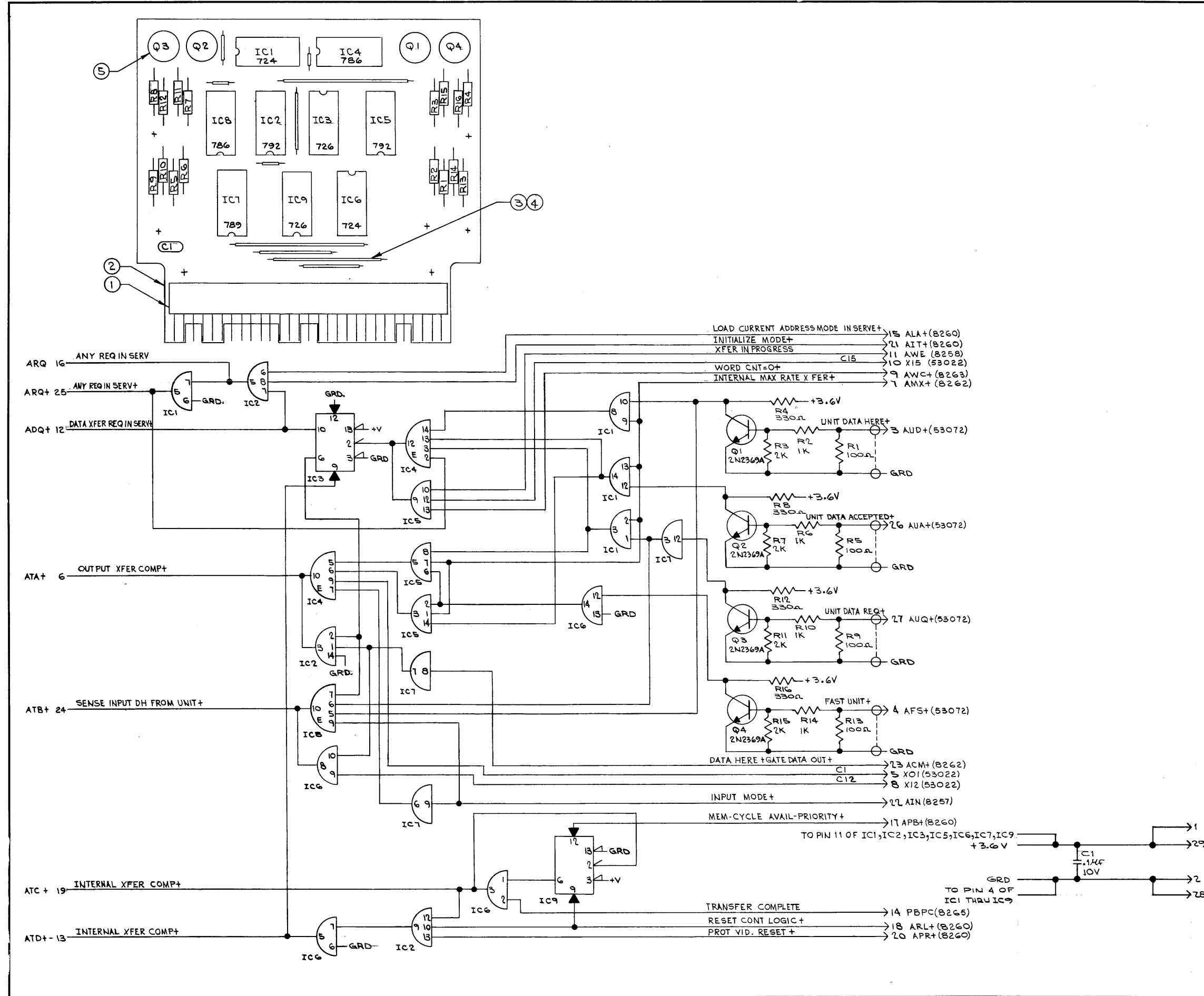
SCHEMATIC & ASSEMBLY
 RTL LOAD ADDRESS CONTROL
 IR2

CODE IDENT NO.
 20886

REV	DESCRIPTION	DATE	APP'D
D	8260		

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE #5%, 1/4W.
 3. FOR DRILLING DWG. SEE D8600-945.
 FOR DIMENSIONAL DWG. SEE C8600.

REV	DESCRIPTION	DATE	APPR
D	8261		B
A	67-445; ADDRESSES & LINE TITLES ADDED. SHT 2-REVISED CARD NUMBERS. E.P.C. 10-26-67.	10/26/67	AW
B	68-199; DESTINATION OF PIN 26 ON SCHEMATIC WAS UNIT DATA HERE+.	4/19/68	RKM



REV	ITEM	DESCRIPTION	QUANTITY	UNIT	MANUFACTURER
4	R16, R12, R8, R4	RCOTGF33IJ		RESISTOR - 330Ω	ALLEN BRADLEY
4	R15, R11, R7, R3	RCOTGF202J		-2K	
4	R14, R10, R6, R2	RCOTGF102J		-1K	
4	R13, R9, R5, R1	RCOTGF10IJ		RESISTOR - 100Ω	ALLEN BRADLEY
4	Q4, Q3, Q2, Q1	2N2369A		TRANSISTOR - FAIRCHILD	
1	IC7	MC 789P			
2	IC8, IC4	MC 786P			
2	IC9, IC3	MC 726P		INTEGRATED CIRCUIT - MOTOROLA	
2	IC5, IC2	MC 792P			
2	IC6, IC1	MC 724P			
-1	C1	UK-10-104		CAPACITOR - .1μf ± 80-20%, 10V, CRL	
4	S	B10369		UNIPAD	
AR 4	AWG 24			SLEEVING - TEFLON - THINWALL	
AR 3	AWG 24			WIRE - SOLID COPPER, TINNED	
1	2	00-1022-029-000-001		CONNECTOR - ELCO	
-1	1	SEL 945		PRINTED CIRCUIT (REV. SEE A51140)	
-1	ITEM	DWG. OR PART NO.		DESCRIPTION	

REV	DESCRIPTION	DATE	APPR
DR F.L.SIENA		3-7-66	
CL L.GOODBREAD		3/14/67	
ENG. E. Villanti		6-8-67	
PROJ. APP. [Signature]		6/8/67	
APP. [Signature]		6/9/67	

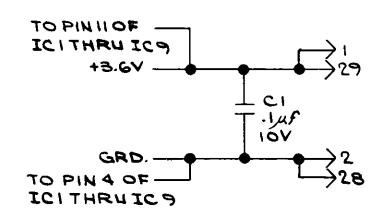
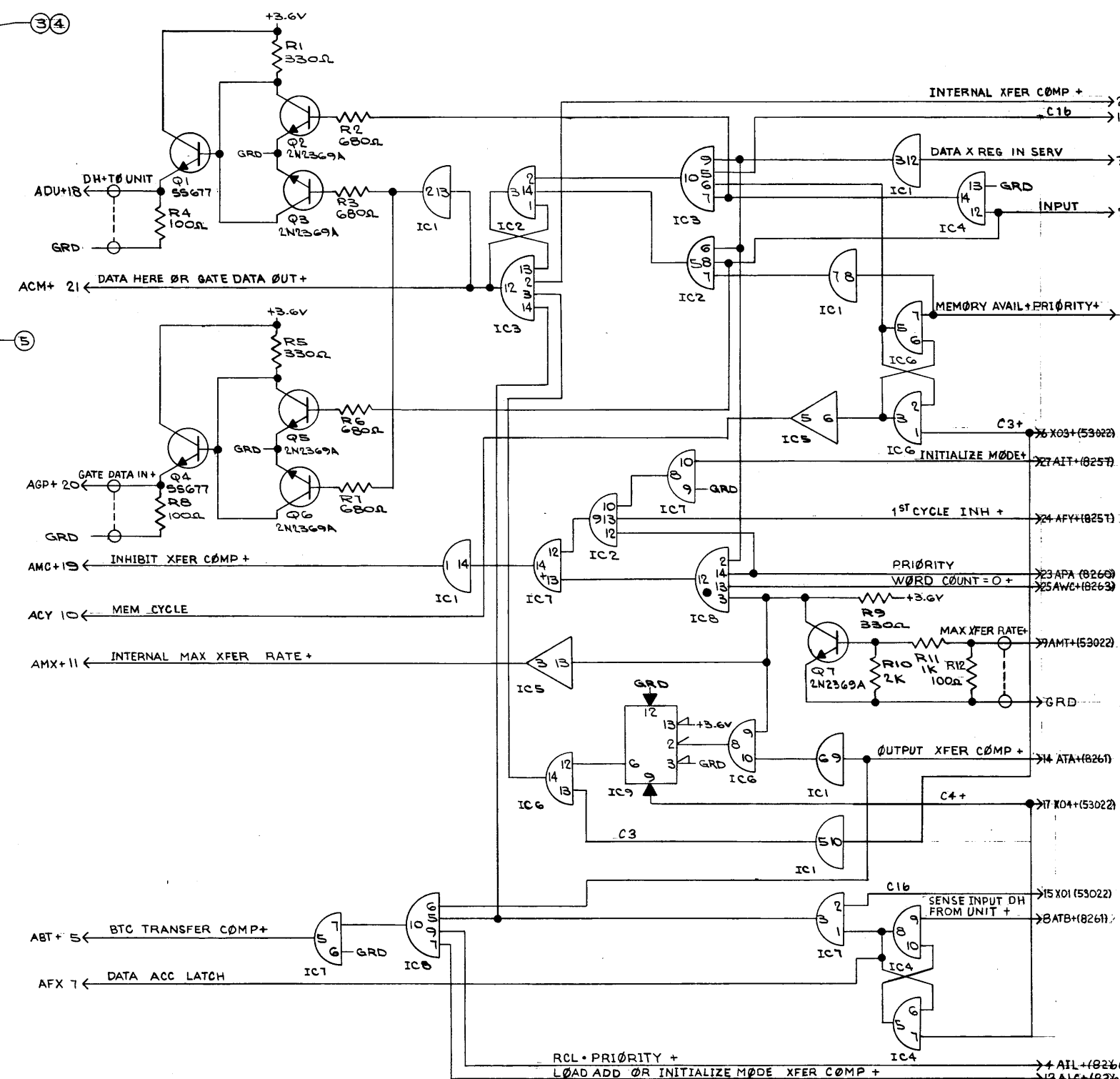
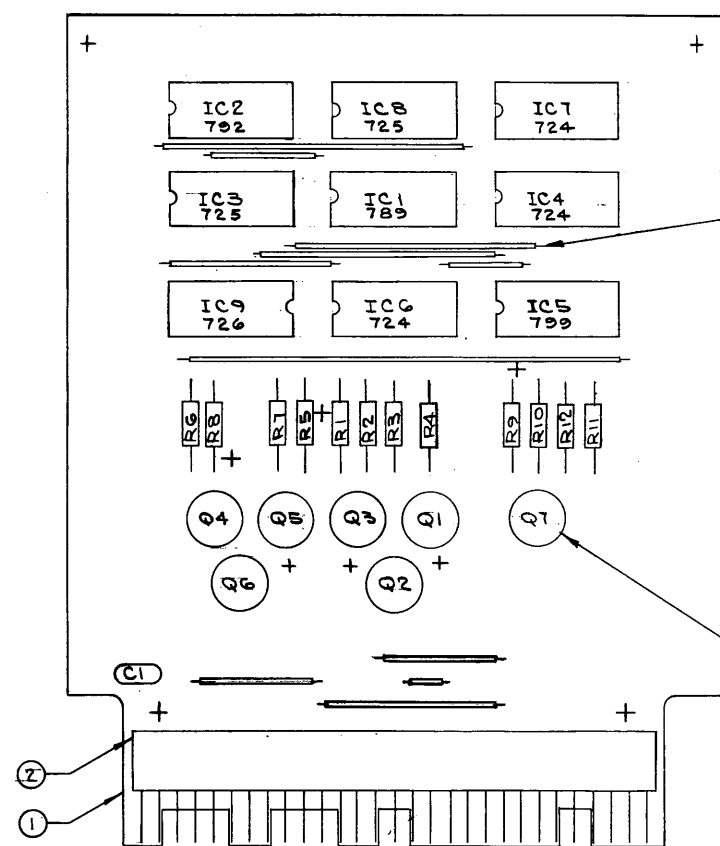
SCHEMATIC & ASSEMBLY
 RTL BTC DATA
 TRANSFER CONTROL
 1R2

CODE IDENT NO
 20886

REV	DESCRIPTION	DATE	APPR
D	8261		B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE ±5%, 1/4W.
 3. FOR DRILLING & DIMENSIONAL DWG. SEE DIS450.

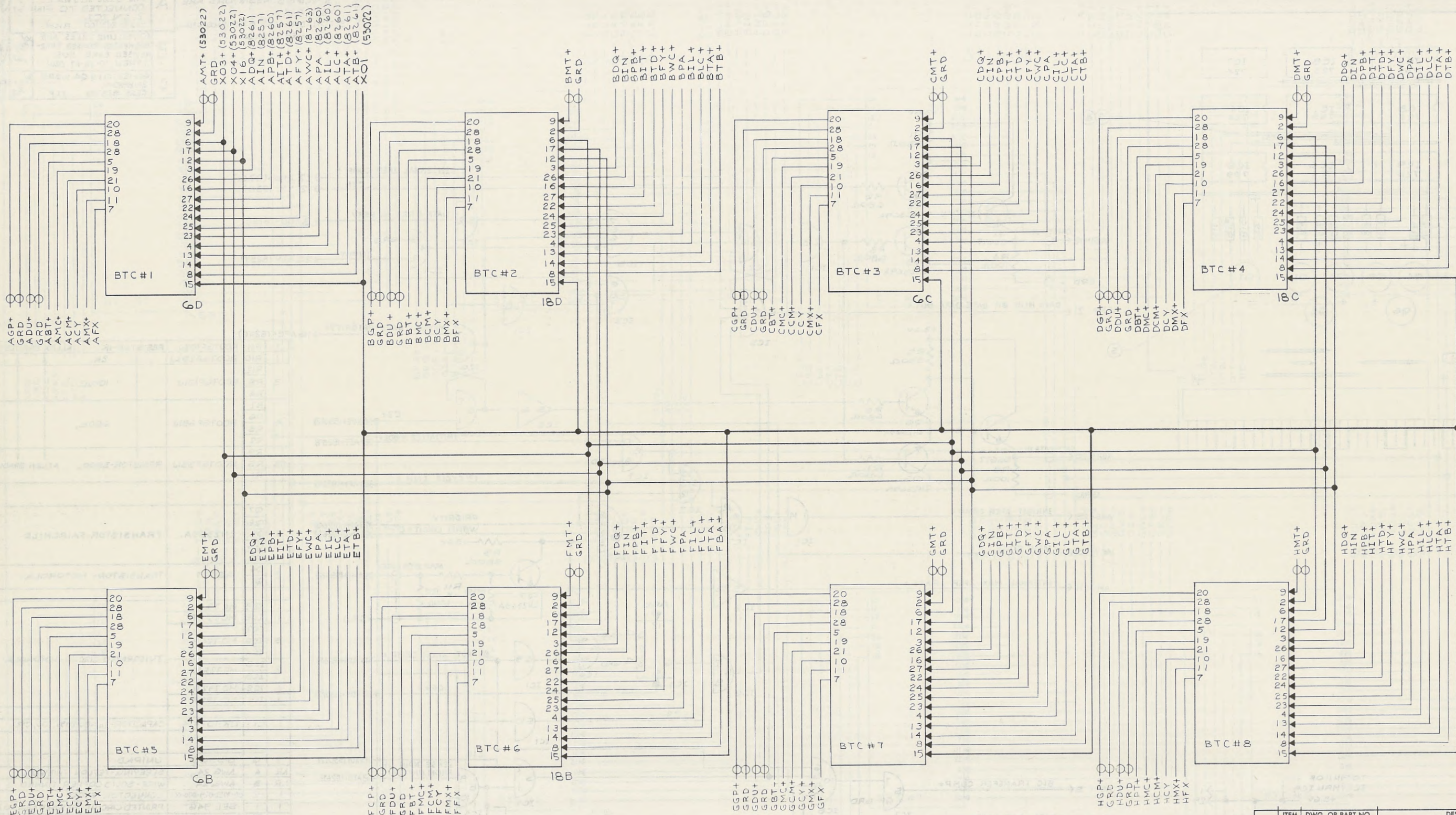
REV	DESCRIPTION	DATE	APP'D
D	8262		
A	67-314; ADDED PIN 15 ON SCHEMATIC & LOGIC PIN 5 ON IC3 WAS CONNECTED TO PIN 2 ON IC7.	6/1/67	
B	67-445; LINE TITLES AND ADDRESSES REVISED. SHT2- REVISED CARD NOS. C.THEW 10-26-67 (CM)	10/12/67	
C	68-122; Q1 & Q4 WERE 2N2369A. CEM 5/8/68 FLP	5/8/68	



QTY	REF	DESCRIPTION	MANUFACTURER
1	R11	RC07GF102J	RESISTOR-1K ALLEN BRADLEY
1	R10	RC07GF202J	2K.
3	R8, R4, R7	RC07GF101J	100Ω.
4	R6, R3, R2	RC07GF681J	680Ω.
3	R5, R1	RC07GF331J	RESISTOR-330Ω, ALLEN BRADLEY
5	Q5, Q6, Q3, Q2	2N2369A	TRANSISTOR-FAIRCHILD
2	Q4, Q1	2N2369A	TRANSISTOR-FAIRCHILD
1	Q7	2N2369A	TRANSISTOR-FAIRCHILD
1	Q1	2N2369A	TRANSISTOR-FAIRCHILD
1	Q2	2N2369A	TRANSISTOR-FAIRCHILD
1	Q3	2N2369A	TRANSISTOR-FAIRCHILD
1	Q4	2N2369A	TRANSISTOR-FAIRCHILD
1	Q5	2N2369A	TRANSISTOR-FAIRCHILD
1	Q6	2N2369A	TRANSISTOR-FAIRCHILD
1	Q7	2N2369A	TRANSISTOR-FAIRCHILD
1	IC9	MC726P	INTEGRATED CIRCUIT-MOTOROLA
1	IC5	MC799P	INTEGRATED CIRCUIT-MOTOROLA
3	IC7, IC6, IC4	MC724P	INTEGRATED CIRCUIT-MOTOROLA
2	IC8, IC3	MC725P	INTEGRATED CIRCUIT-MOTOROLA
1	IC2	MC792P	INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MC789P	INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK-10-104	CAPACITOR-.1μf-80-20%, 10V, CRL
1	S	B10369	UNIPAD
AR	4	AWG 24	SLEEVING-TEFLON-TINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-1021-019-000-001	CONNECTOR-ELCO
1	1	SEL 946	PRINTED CIRCUIT-(REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	F.L. SIENK	3-13-67	SCHEMATIC & ASSEMBLY RTL-BTC- DATA TRANSFER CONTROL 2 1R2
ENGR.	C. GOODREAD	3/14/67	
CHKD.	E. Villanti	6-8-67	
APP'D.	W. G. ...	6/19/67	
APP'D.	R. ...	6/19/67	
CODE IDENT NO	20886		
USED ON	D	8262	

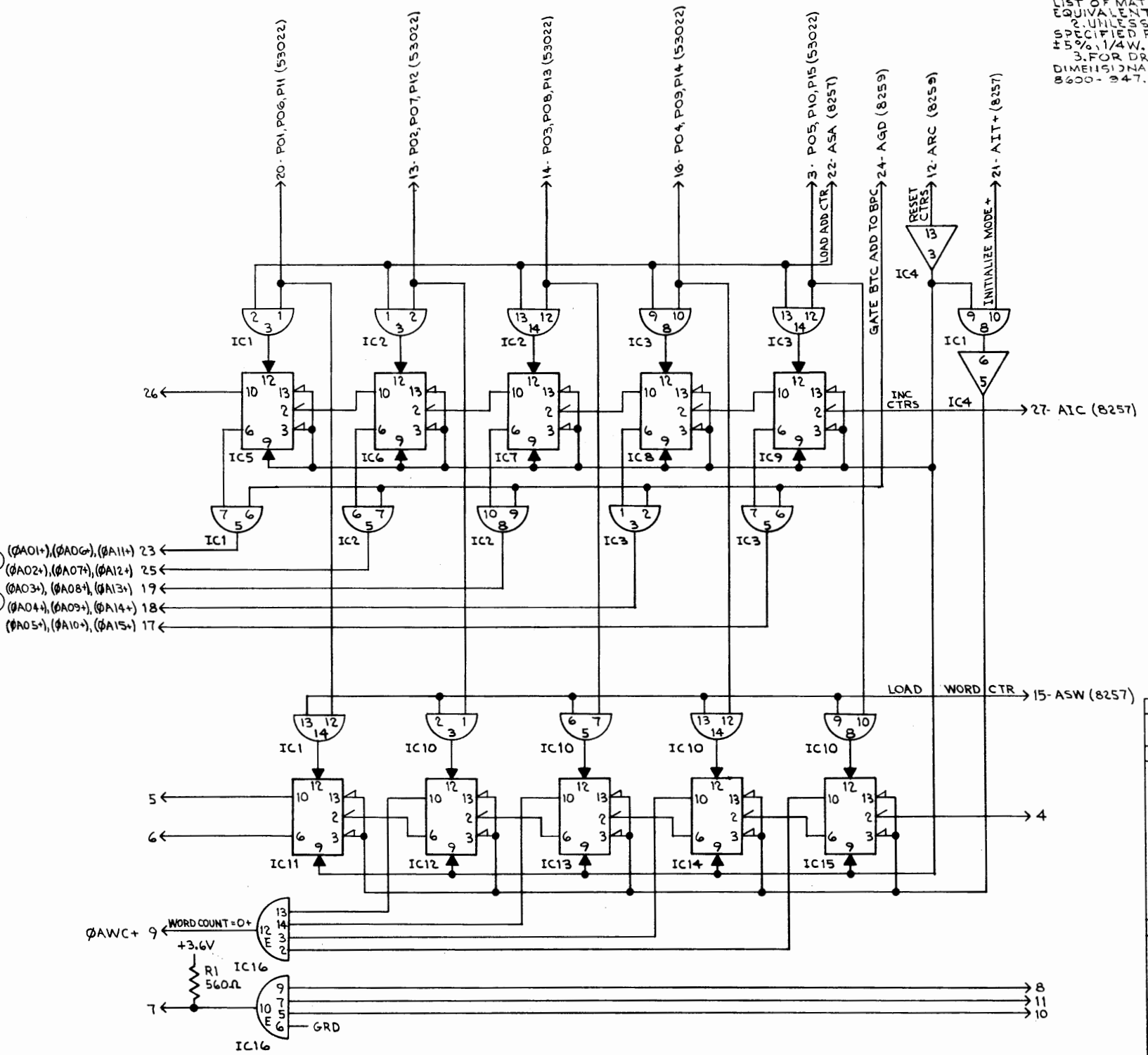
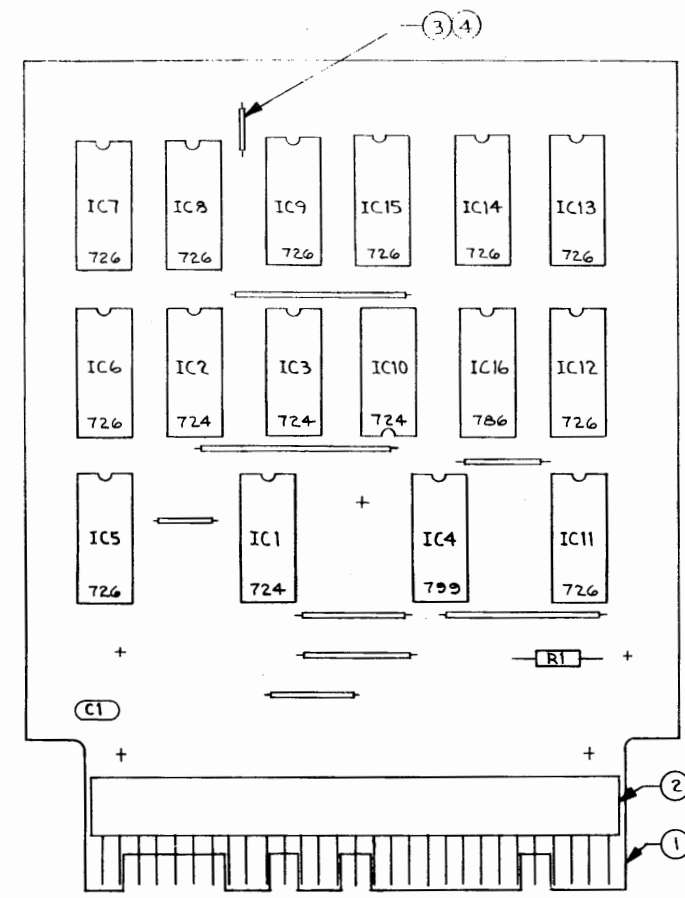
NOTES:
1. SEE SH. 1

REV	DESCRIPTION	DATE	APP'D
D	8262		C
SEE SH. 1			

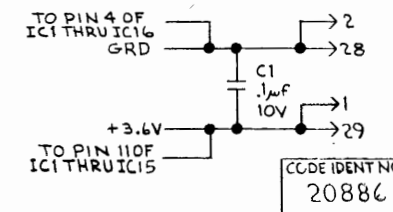


REV	D	8263	REV	A
DESCRIPTION	67-445; ADDRESSES AND LINE TITLES ADDED.		DATE	12/19/67
APP'D	AS 10/26/67		DATE	12/19/67

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE #5% 1/4W.
 3. FOR DRILLING AND DIMENSIONAL DWG SEE 8600-947.



1	R1	RC07GF561J	RESISTOR-560Ω, ALLEN BRADLEY	
1	IC16	MCT86P	INTEGRATED CIRCUIT-MOTOROLA	
10	IC15 IC14 IC13 IC12 IC11 IC9 IC8 IC7 IC6 IC5	MCT726P		
1	IC4	MCT799P		
4	IC10 IC3 IC2 IC1	MCT24P		
1	C1	UK-10-104		CAPACITOR-.1μF±80-20%, 10V, CRL
AR	4	AWG 24		SLEEVING-TEFLON, THINWALL
AR	3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001		CONNECTOR-ELCO
1	1	SEL 947		PRINTED CIRCUIT (REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.		DESCRIPTION

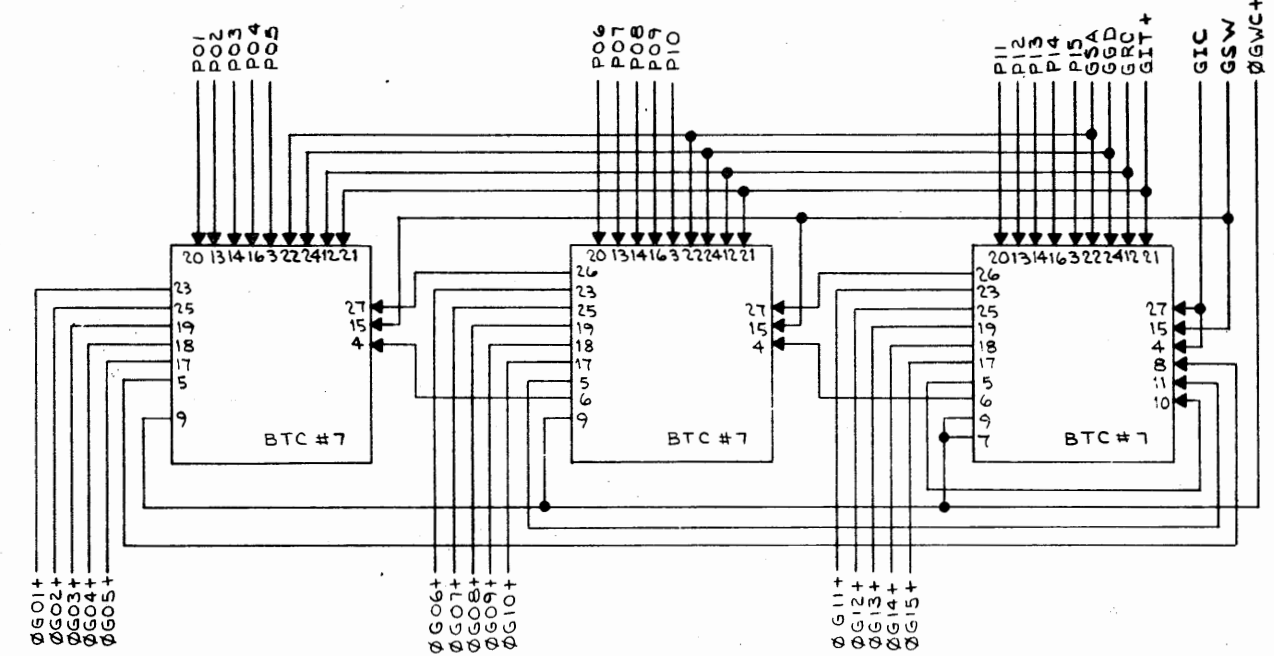
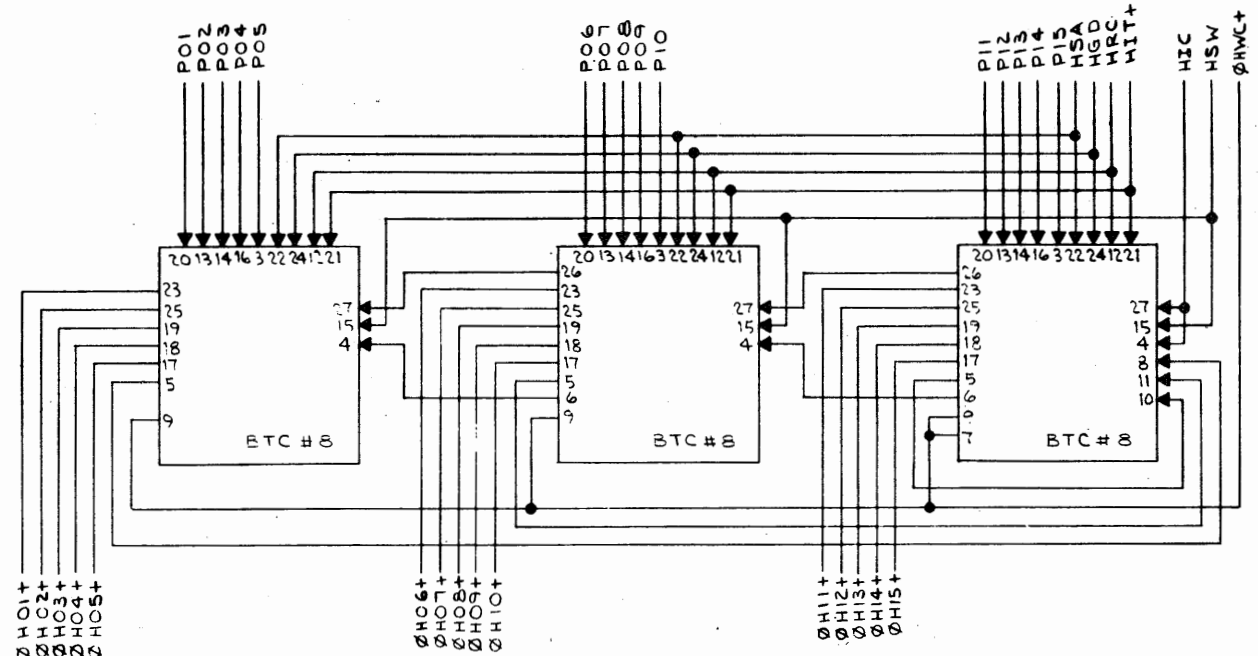
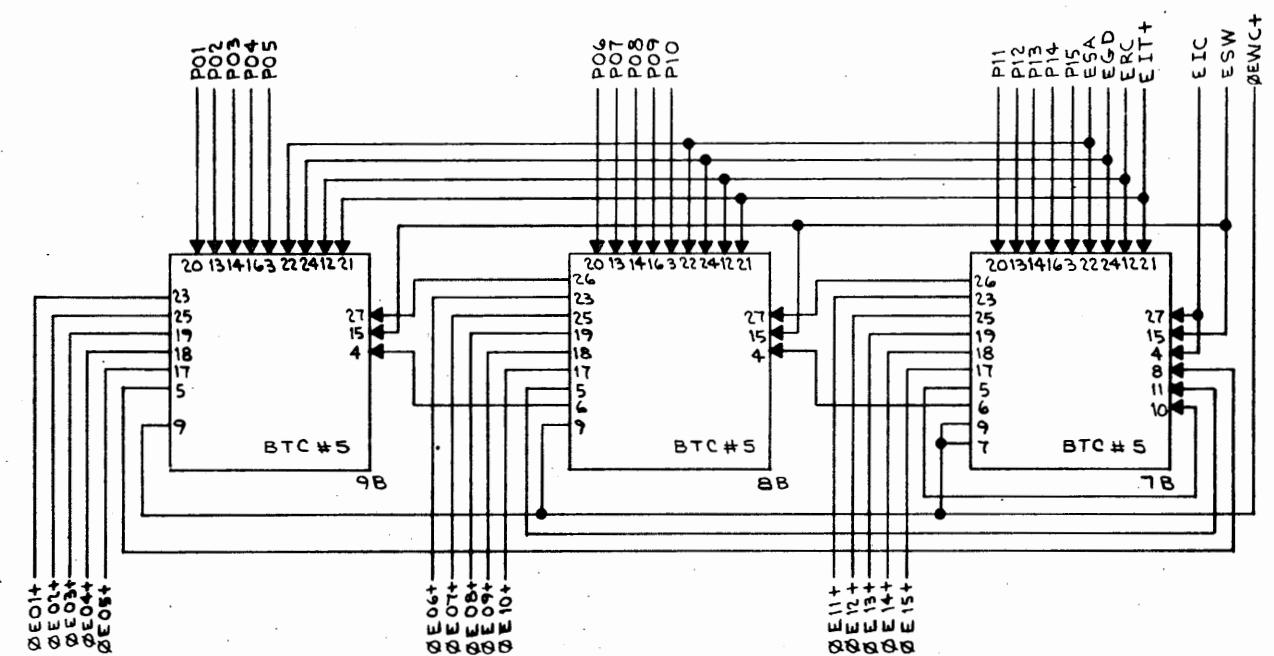
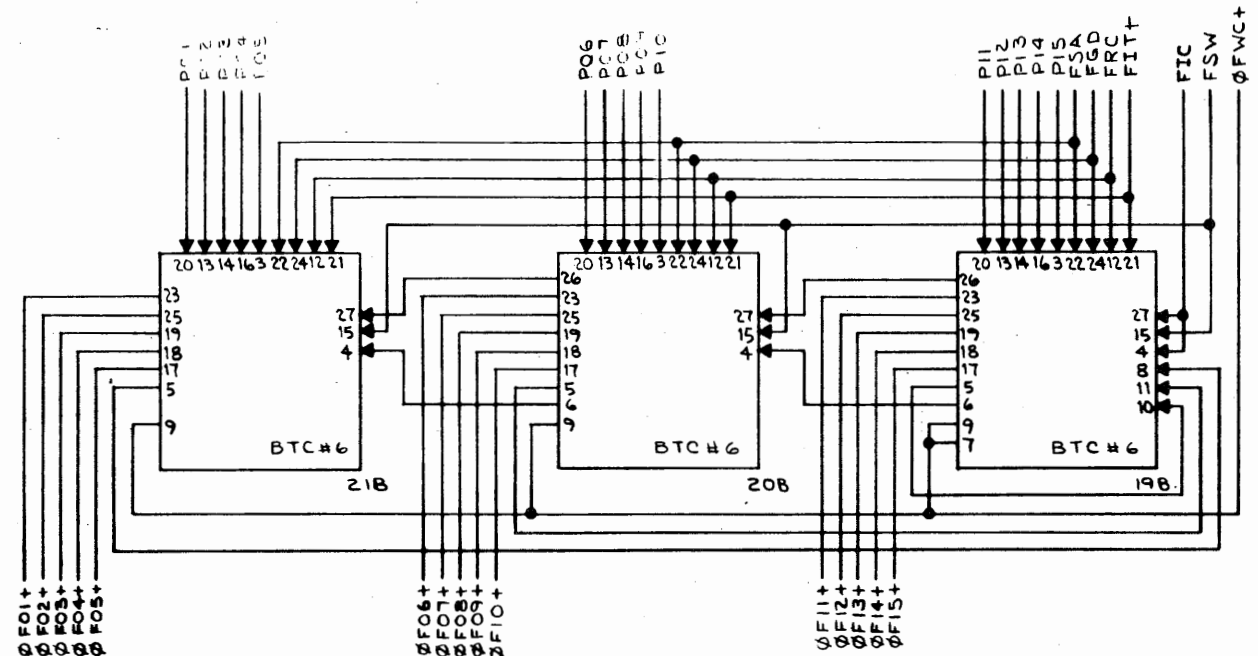


DR	RLWENNEL	3/19/67	SCHEMATIC & ASSEMBLY RTL 5 BIT DUAL COUNTER 1R2
CL	RKM	3-30-67	
ENG.	E. L. WENNEL	6/1/67	SIZE D 8263
PROJ. APP.	W. L. WENNEL	6/1/67	
CCODE IDENT NO.	20886	USED ON	REV A

NOTES:
1. SEE SHEET 1.

REV	D	DESCRIPTION	DATE	APP'D	REV	A

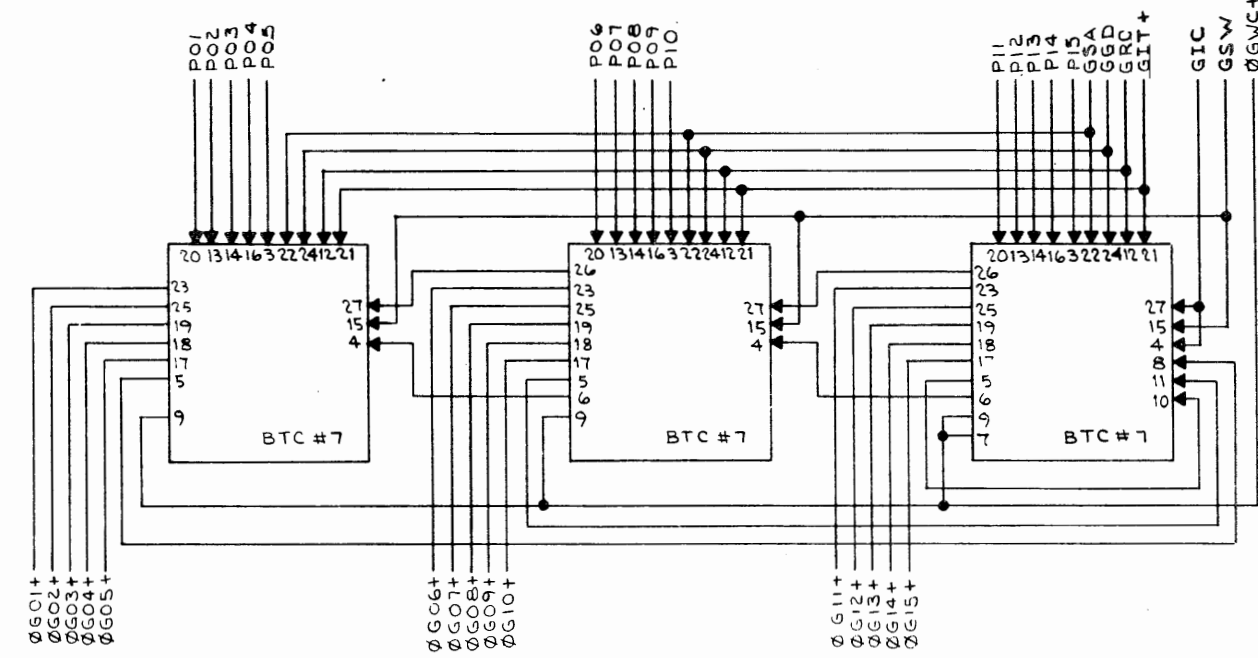
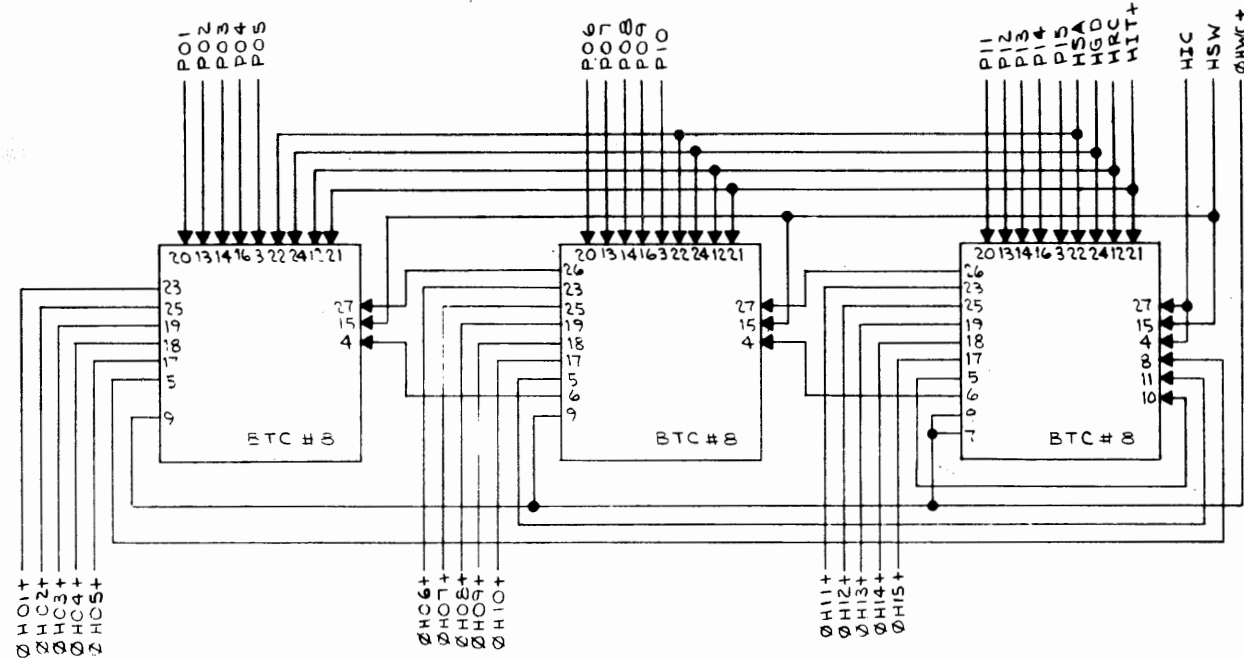
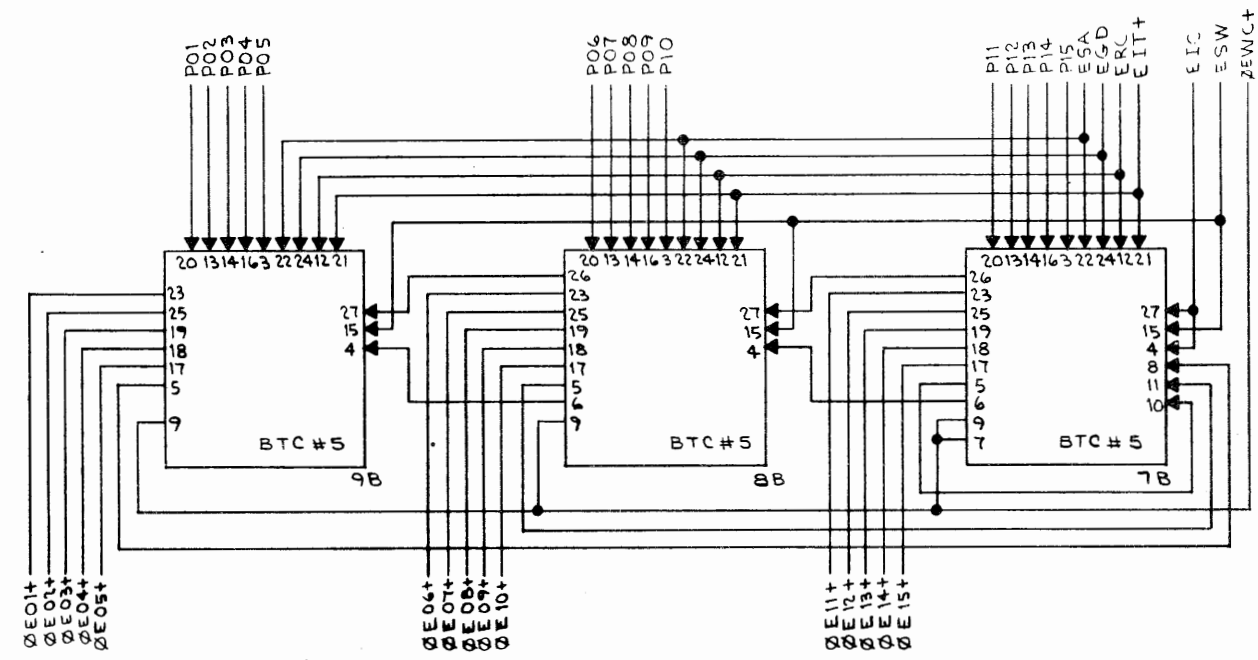
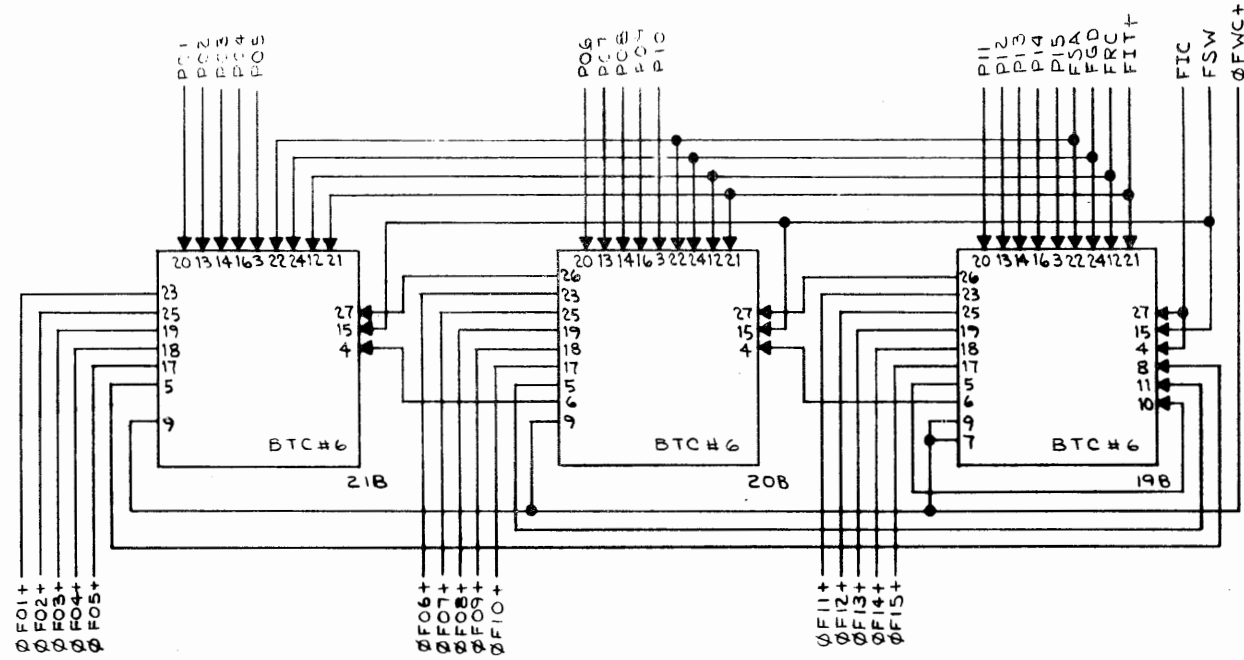
SEE SHT. 1



ITEM	DWG. OR PART NO.	DESCRIPTION			
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	R.L. WENNELL 3/30/67	SCHEMATIC & ASSEMBLY RTL 5 BIT DUAL COUNTER IR2			
CK.	R.M.				
ENG.	A. Volante 6/5/67				
PROJ. APP.					
CODE IDENT. NO.	20886	SIZE	D	REV	A
USED ON					

NOTES:
1. SEE SHEET 1.

REV	DESCRIPTION	DATE	APP'D
D	8263		A
SEE SHT. 1			

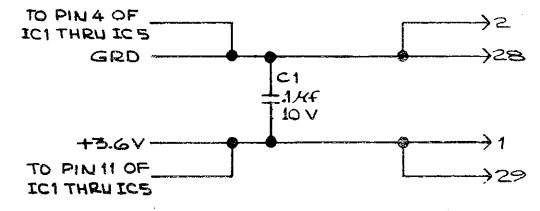
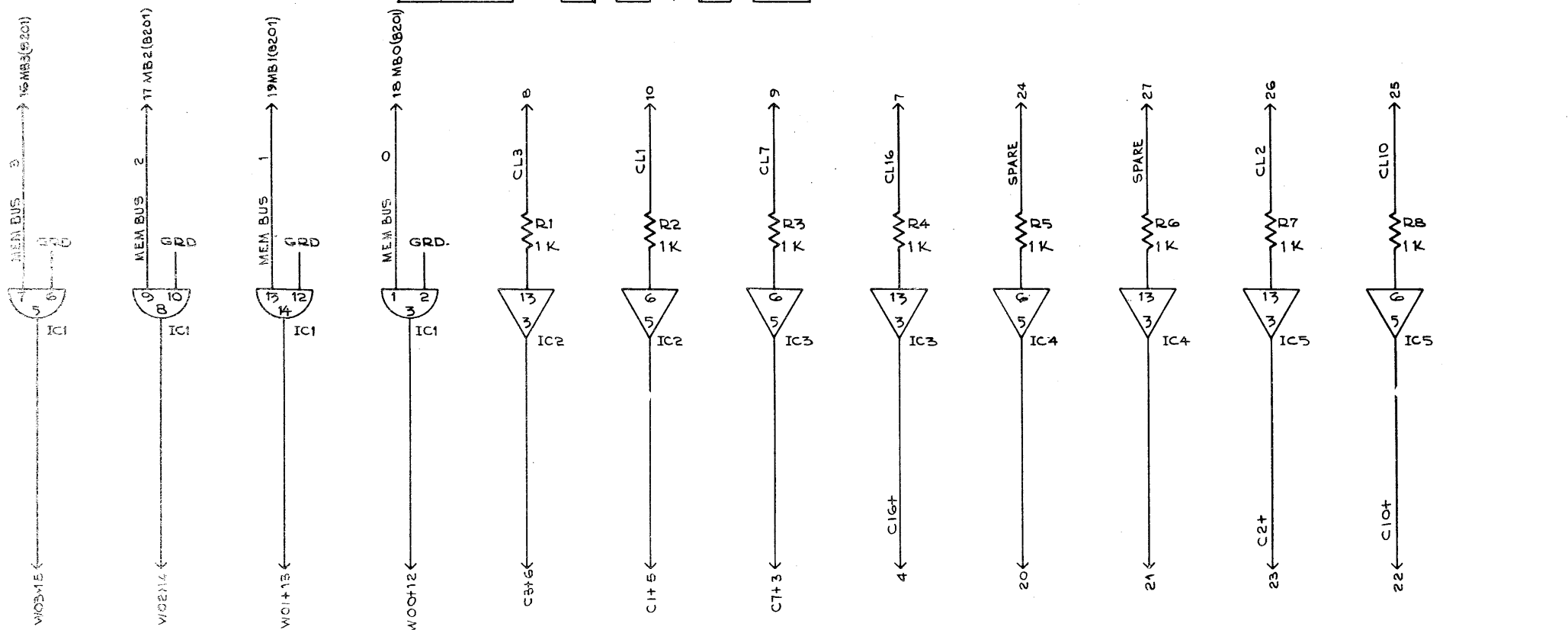
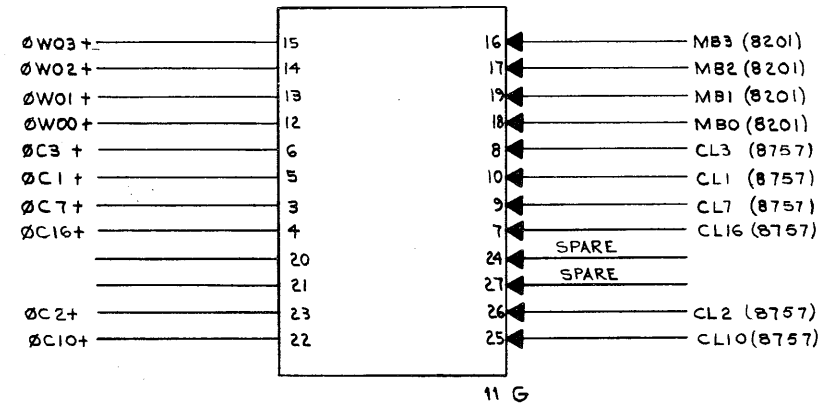
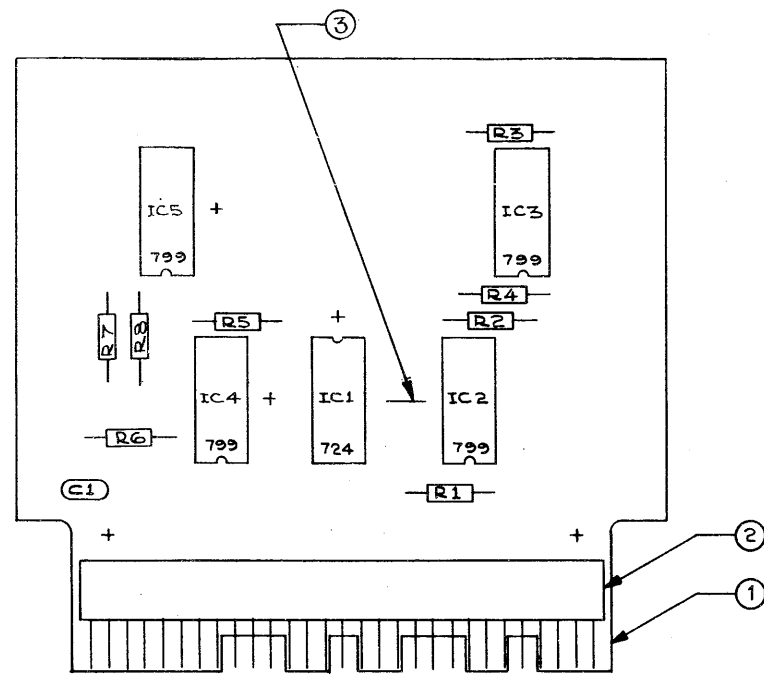


ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA						
DR.	RLWENNEL 3/30/67	SCHEMATIC & ASSEMBLY RTL 5 BIT SERIAL COUNTER IR2				
CK.	R.F.N. 5-1					
ENG.	A. Valenti 6/5/67					
PROJ. APP.	6/5/67					
APP.	6/5/67	SIZE	D	8263	REV	A
USED ON						

CODE IDENT NO.
20886

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING DWG. SEE D 8600-987.
 FOR DIMENSIONAL DWG. SEE C 8600

REV	DESCRIPTION	DATE	APP'D
D	8264		
A	67-197; ADDED LOGIC REPRESENTATION. RMT 6/20/67 RKM	6/20/67	[Signature]
B	67-415; ADDRESSES REVISED. LINE TITLES ADDED & CARD FIG. WAS 24 G. E.P.C. 10-25-67	10/30/67	[Signature]



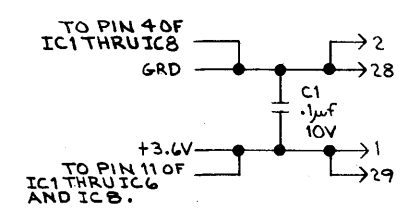
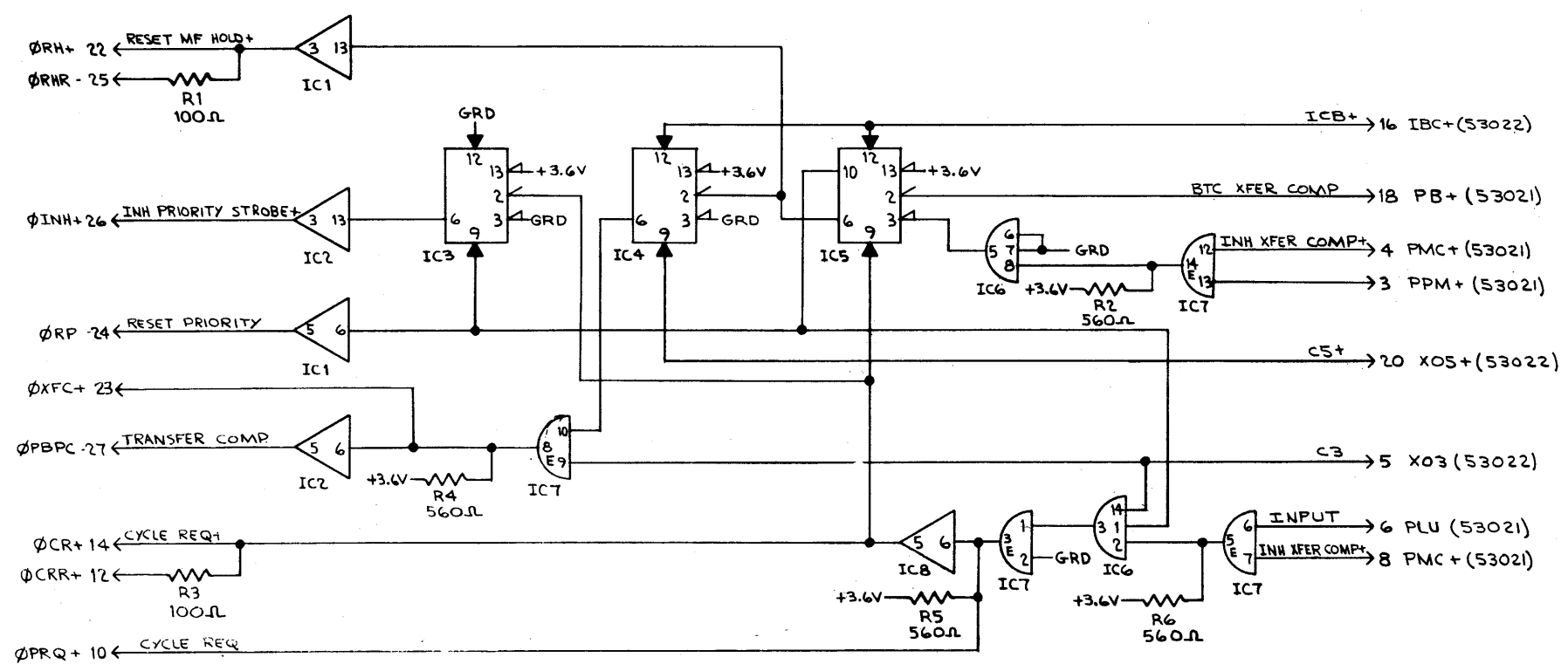
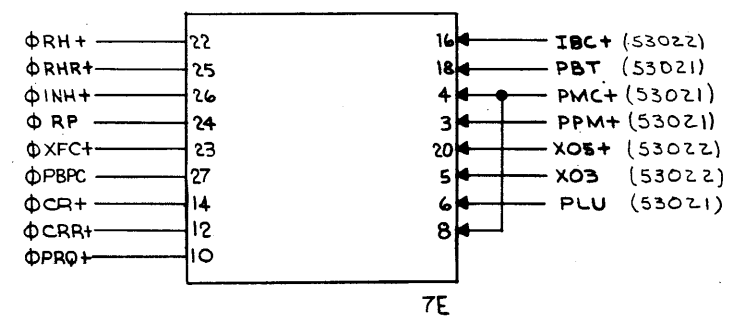
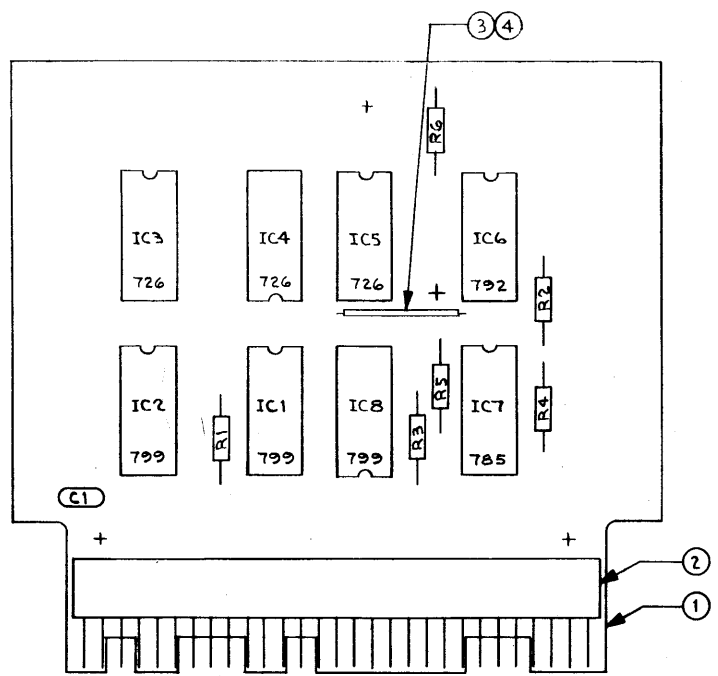
8	R8 THRU R1	RC07GF102J	RESISTOR - 1K, ALLEN BRADLEY
4	IC5 THRU IC2	MC799P	INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MC724P	
1	C1	UK10-104	CAPACITOR - .1 μ F +80-20%, 10V, CRL.
AR	3	AWG. 24	WIRE - SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	SEL 987	PRINTED CIRCUIT (REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	b. B. Y. D.	3-31-67	SCHEMATIC & ASSEMBLY RTL CLOCK BUFFERS
CHK	RKM	4-3-67	
ENG.	[Signature]	6/5/67	
PROJ. APP.	[Signature]	6/16/67	
APP.	[Signature]	6/15/67	
USED ON			

CODE IDENT NO
 20886

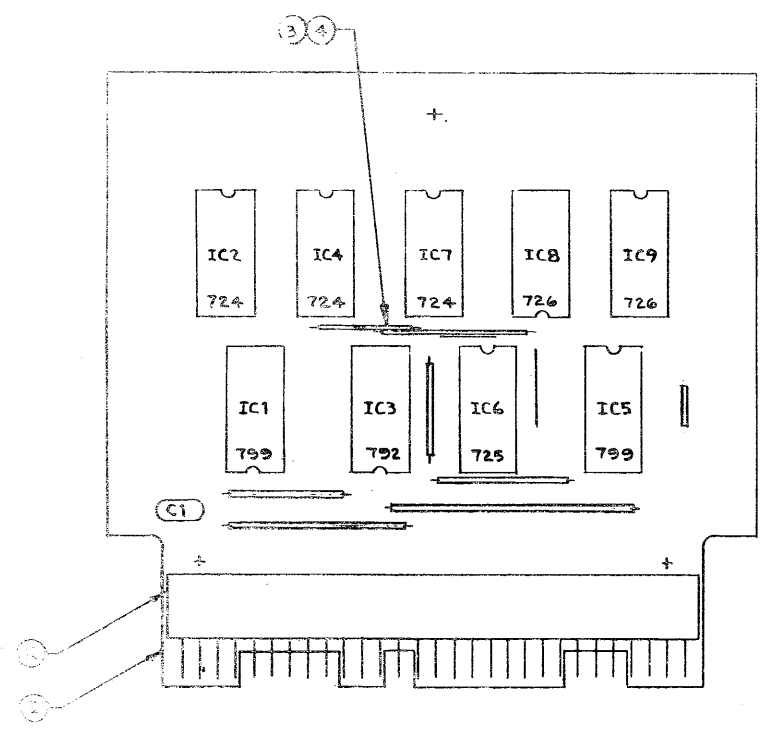
SIZE
 D 8264

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING DRAWING SEE D 8600-963, FOR DIMENSIONAL DWG SEE C 8600.

REV	DESCRIPTION	DATE	APP'D
D	8265		C
A	67-204; ADDED Φ TO LOGIC OUTPUTS. BB 6-21-67 RKM	7/1/67	
B	67-312; ADDED OUTPUT PIN 23 TO SCHEMATIC & LOGIC. 5.1.B. 8-31-67 RKM	8/31/67	
C	67-445; ADDRESSES AND LINE TITLES ADDED. CARD NUMBER REVISED. AS. 10-26-67 CWW	10/26/67	

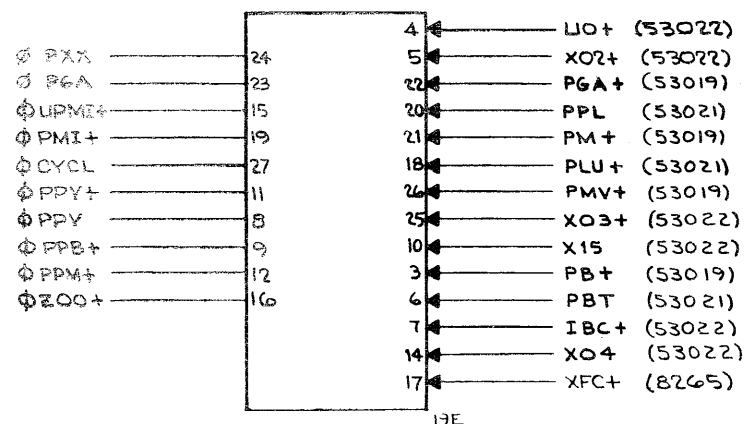
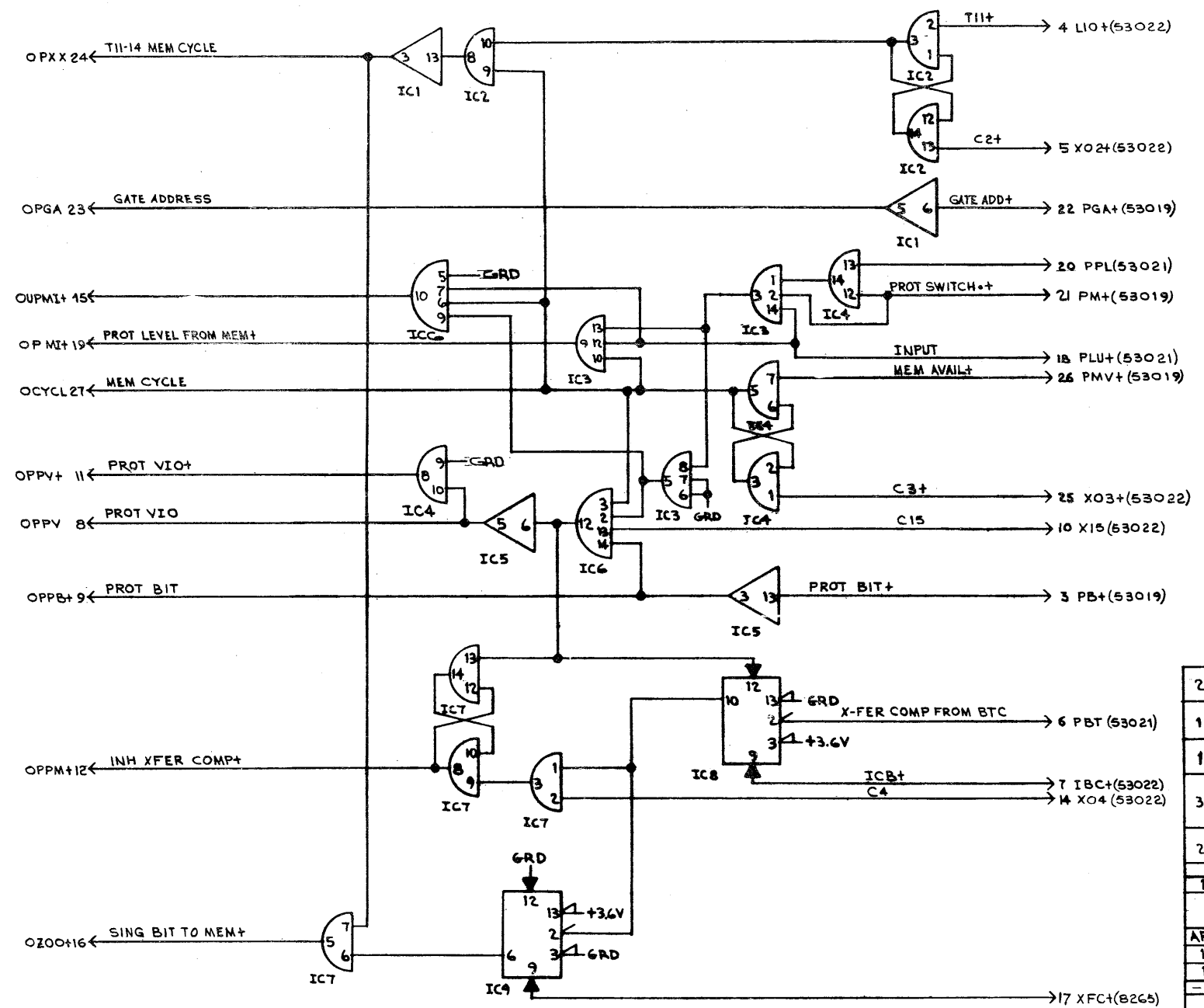


QTY	REF	DESCRIPTION	UNIT
4	R6, R5, R4, R2	RCOTGF561J	RESISTOR-560 Ω , ALLEN BRADLEY
2	R3, R1	RCOTGF101J	RESISTOR-100 Ω , ALLEN BRADLEY
1	IC7	MCT85P	INTEGRATED CIRCUIT-MOTOROLA
1	IC6	MCT92P	
3	IC5, IC4, IC3	MCT26P	
3	IC8, IC2, IC1	MCT99P	
1	C1	UK-10-104	CAPACITOR-1 μ F \pm 80-20% 10V CRL
AR	4	AWG 24	SLEEVING-TEFLON, THIN WALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	007022-029-000-001	CONNECTOR-ELCO
1	1	SEL 963	PRINTED CIRCUIT (REV. SEE A5140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	RL WENNEL	3/30/67	SCHEMATIC & ASSEMBLY RTL BPC CYCLE CONTROL IR2
CK	RKM	4-3-67	
ENG	C. Vilianti	6-1-67	
APP	W. W. ...	6/9/67	
CODE IDENT NO.	20886	REV	C
SIZE	D	8265	

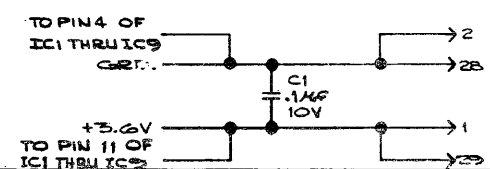


NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4 W.
 3. FOR DRILLING DWG SEE DB600-962 FOR DIMENSIONAL DWG SEE CB600

REV	D	8266	REV	B
REV	DESCRIPTION	DATE	APPD	
A	GT-311; ADDED PINS 15 & 17 AND PINS 5, 6, 7, 10 OF IC6. RELOCATED BS10 OF IC4. ON LOGIC PIN 14 WAS L11. b.i.b. 8/31/67	7/1/67		
B	GT-445; ADDRESSES & LINES TITLES ADDED. CARD NUMBER REVISED E.P.C. 10-25-67	10/1/67		

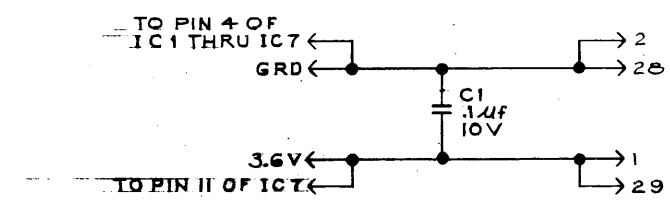
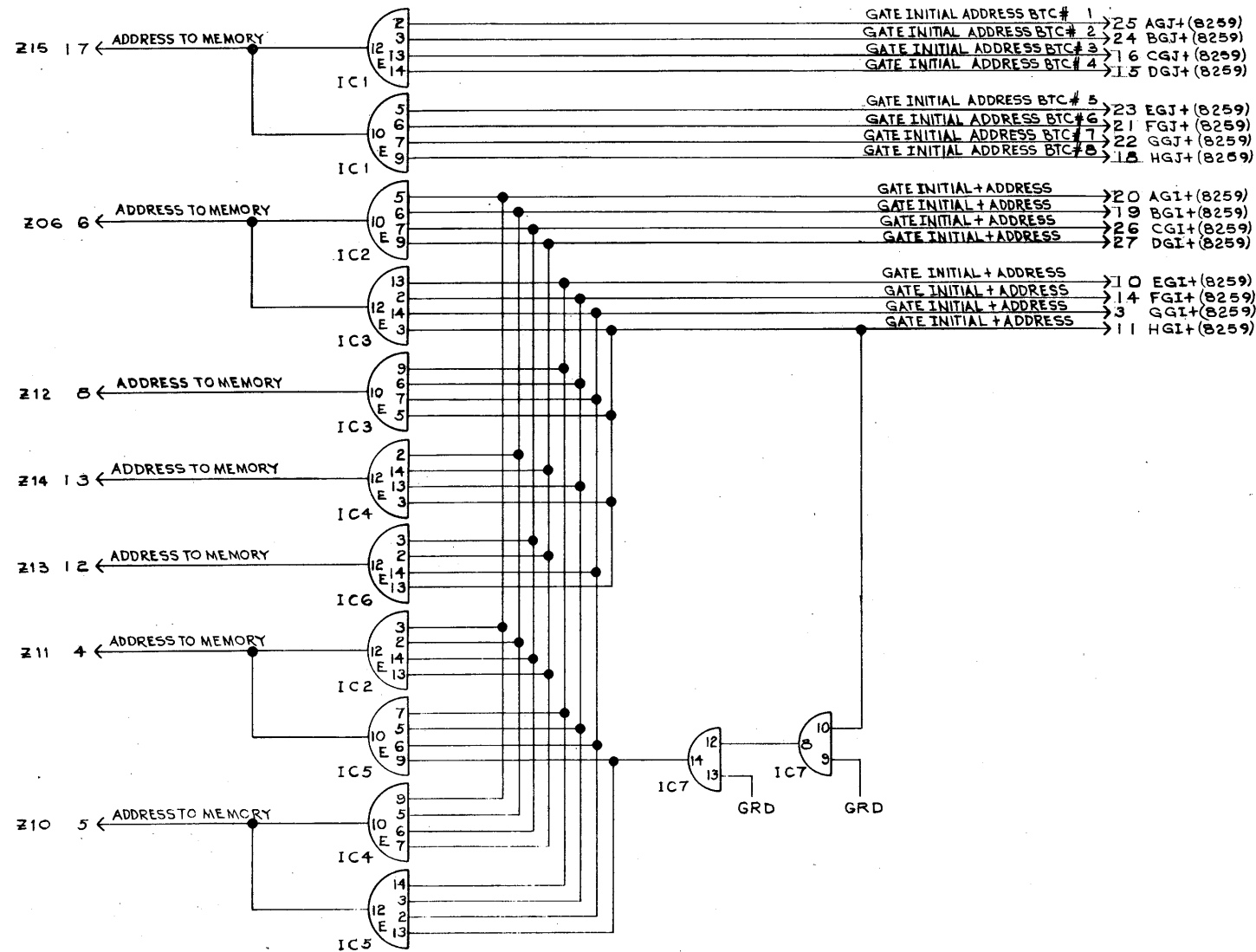
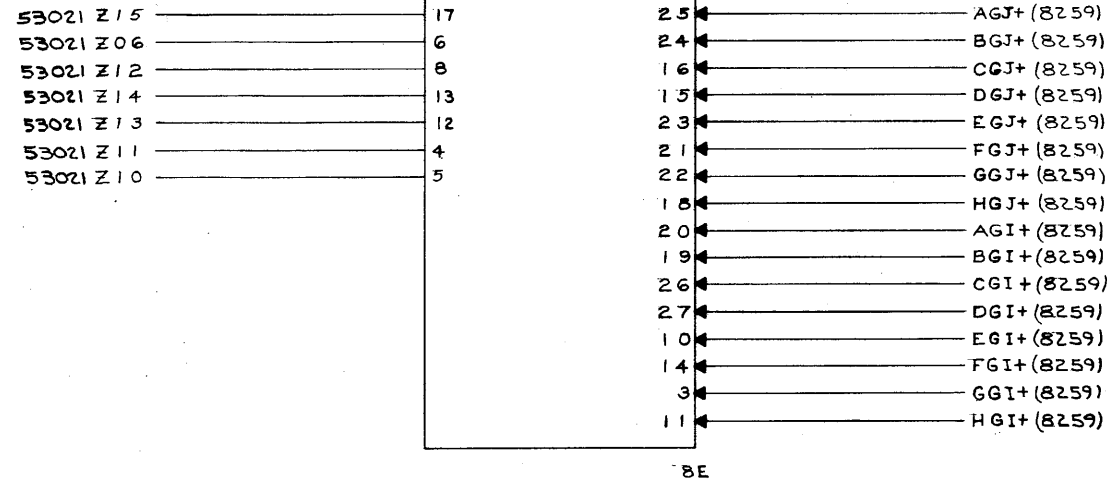
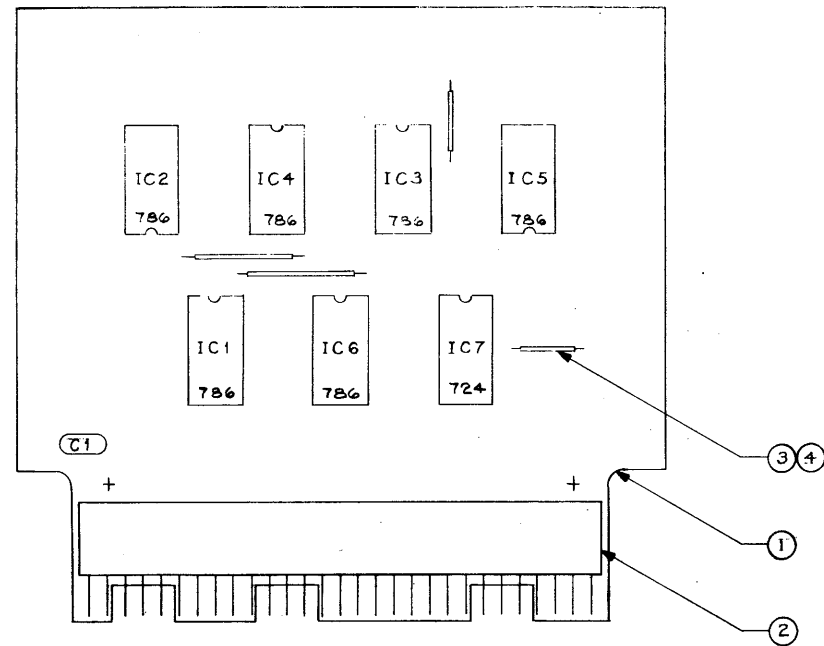


2	IC9 IC8	MCT26P	INTEGRATED CIRCUIT-MOTOROLA
1	IC6	MCT25P	
1	IC3	MCT92P	
3	IC7 IC4 IC2	MCT24P	
2	IC5 IC1	MCT99P	
1	C1	UK-10-104	
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED	
1 2	00-1022-029-000-001	CONNECTOR - ELCO	
1 1	SEL 962	PRINTED CIRCUIT (FOR REV SEE A5140)	
-1	ITEM DWG. OR PART NO.	DESCRIPTION	
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR	R SANBORNE	3-20-67	
CC	RKM	3-24-67	SCHMATIC & ASSEMBLY
ENG.	E. Villanti	4-8-67	RTL PROTECT CONTROL
PROJ. APP.	R. Sanborne	6/8/67	1R2
APP.	E. K. Siple	6/1/67	
CODE IDENT NO	20886	SIZE	D
USED ON		REV	B



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING & DIMENSIONAL DWG SEE 8200-961.

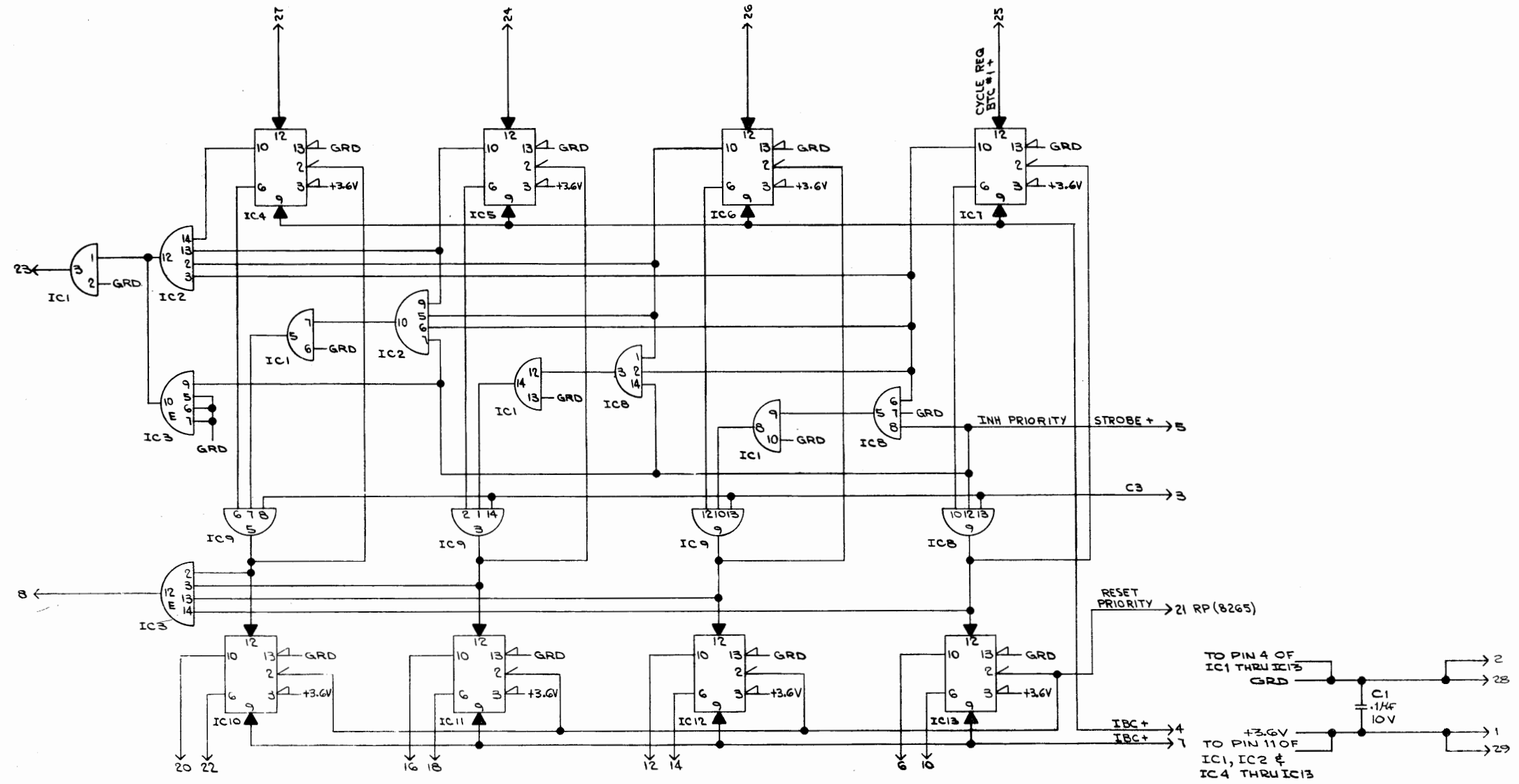
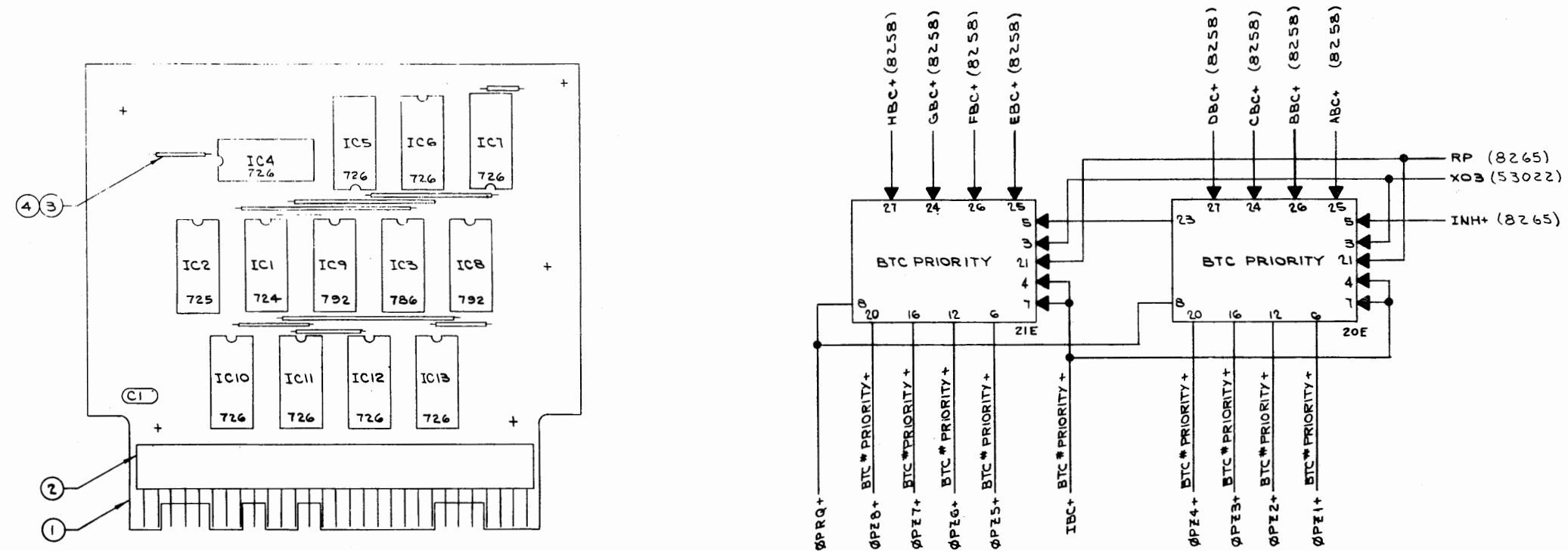
REV	D	8267	REV	A
DESCRIPTION	DATE	APP'D		
A	67-4451 ADDRESSES & LINE TITLES ADDED, CARD NUMBER REVISED. E.P.C. 10-25-67. <i>AW</i>	10/26/67	<i>[Signature]</i>	



1	IC7	MC 724 P	INTEGRATED CIRCUIT-MOTOROLA	
6	THRU IC1	MCT 86 P	INTEGRATED CIRCUIT-MOTOROLA	
2	C1	UK10-104	CAPACITOR-1.1uF, ±20%, 10V, CRL	
AR 4	AWG 24	SLEEVING-TEFLON, THIN WALL (COLOR OPT)		
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED		
1	2	00-7022-029-000-00	CONNECTOR- ELCO	
1	1	SEL 961	PRINTED CIRCUIT (FOR REV. SEE AS140)	
-1		ITEM DWG. OR PART NO.	DESCRIPTION	
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR.	M. RICHARDS	3-30-67	SCHEMATIC ASSEMBLY RTL-INITIAL ADDRESS CONTROL 1R2	
CK.	RKM	3-31-67		
ENG.	E. Villanti	6-3-67		
PROJ. MGR.	<i>[Signature]</i>	6/8/67		
APP.	<i>[Signature]</i>	6/1/67		
CODE IDENT NO.	20886		REV	A
SIZE	D		8267	

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-964.
 FOR DIMENSIONAL DWG. SEE C8600.

SIZE	D	8268	REV	B
REV	A	DESCRIPTION	DATE	APPD
	B	67-445; LINE TITLES ADDED AND CARD NUMBERS REVISED. AS 10-26-67	10/16/67	



2	IC9 IC8	MC792P	INTEGRATED CIRCUIT - MOTOROLA	
	IC13 IC12 IC11 IC10			
8	IC7 IC6 IC5 IC4	MC726P		
1	IC3	MC786P		
1	IC2	MC725P		
1	IC1	MC724P		
1	C1	UK-10-104		CAPACITOR - .1uF ± 20%, 10V, CRL
AR	4	AWG 24		SLEEVING - TEFLON, THINWALL
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED	
1	2	00-1022-019-000-000	CONNECTOR - ELCO	
1	1	SEL 964	PRINTED CIRCUIT (REV. SEE A81140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	

SYSTEMS ENGINEERING
 LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

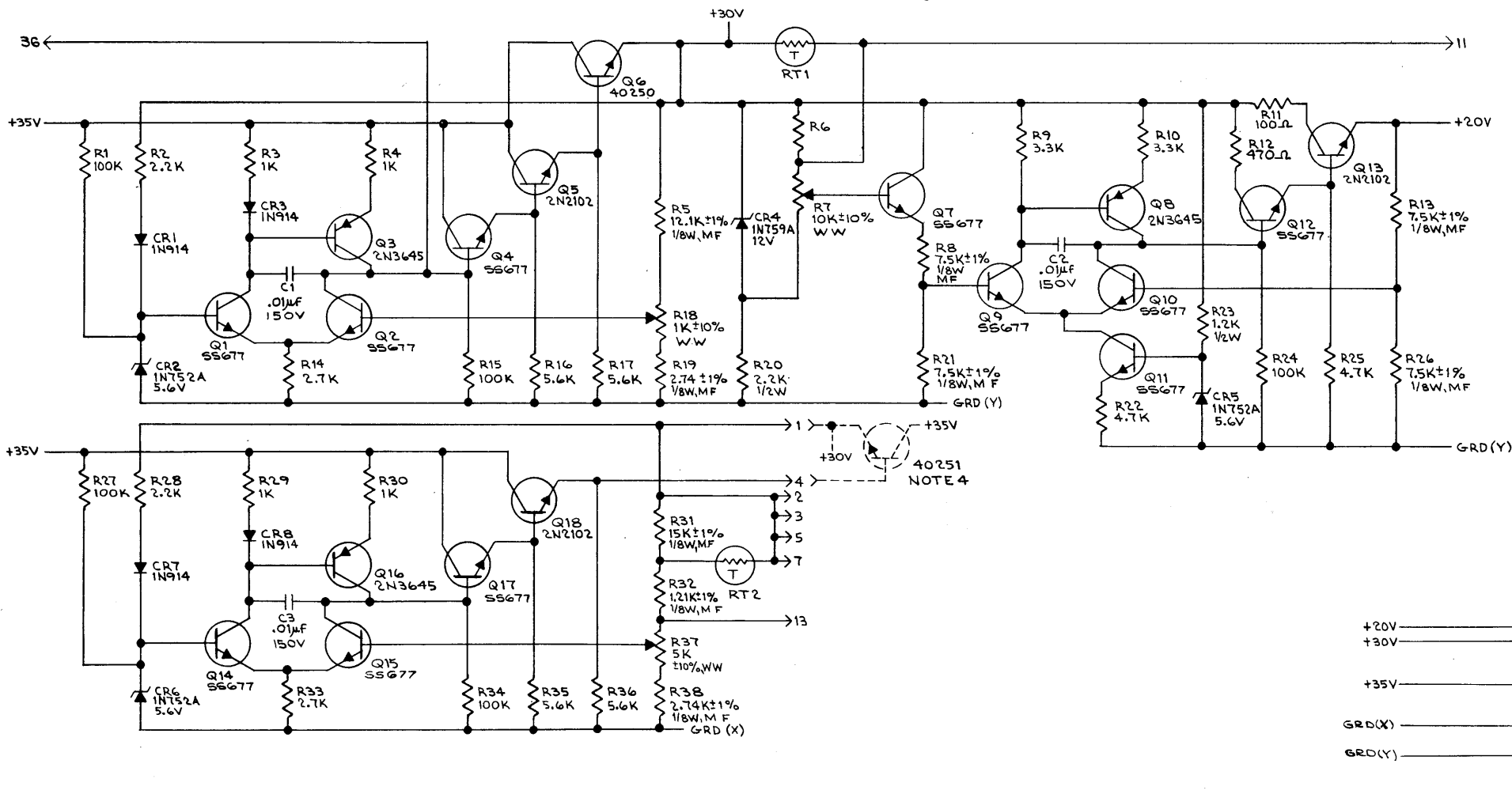
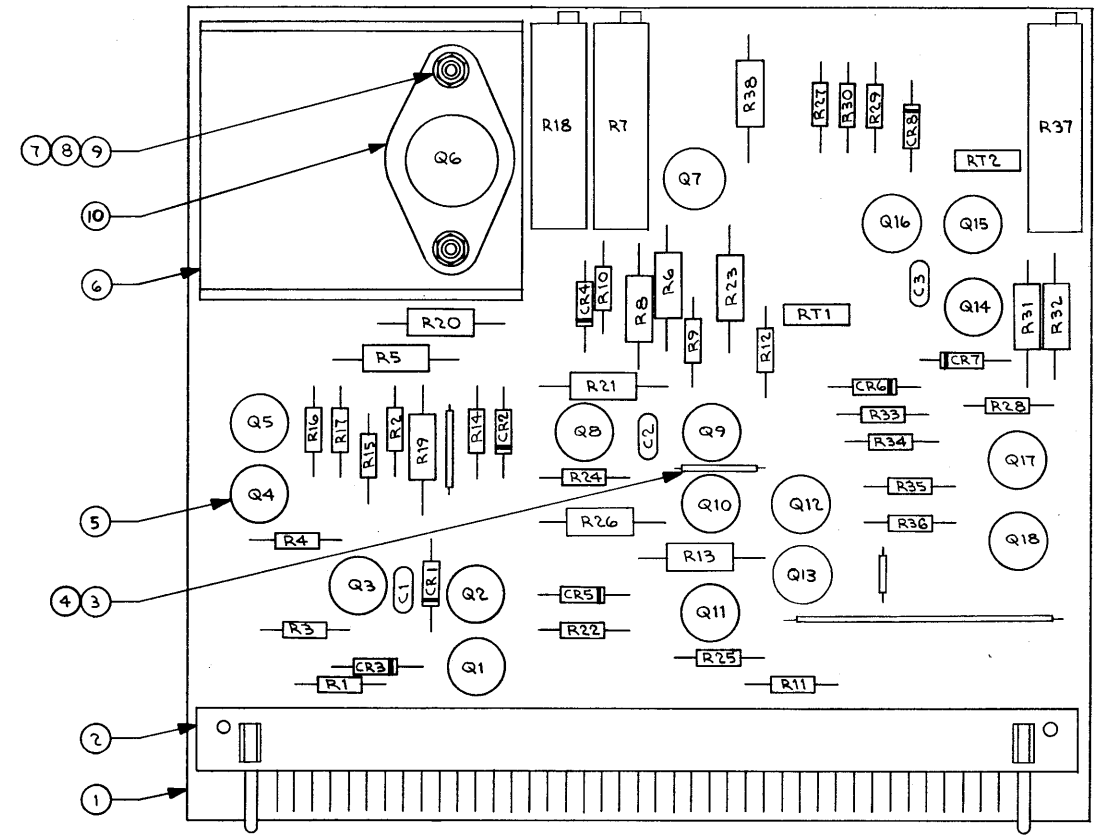
DR. F.L. SIENA 3-6-67
 CL. GOODBREAD 3/14/67
 ENG. E. Kellens 5-5-67
 PROJ. APP. 12/20/67 6/16/67
 USED ON

SCHEMATIC & ASSEMBLY
 RTL-BTC PRIORITY

CODE IDENT NO	20886	SIZE	D	8268	REV	B
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 5% 1/4W.
 3. FOR DRILLING & DIMENSIONAL DWG SEE C 15 213.
 4. MOUNTED EXTERNALLY TO BOARD.

REV	DESCRIPTION	DATE	APPRD
D	8269		
A	67-469; REVISED ASSY TO AGREE WITH LATEST PC. CHANGE, FLIP II-7-67 WC	11/2/67	
B	68-12; ADDED -2, RT2 WAS 5.74K RKM 1-13-68 GFW	1/5/68	
C	68-122; Q1,2,4,7,9,10,11,12,14,15 & RT WERE 2N3904, CEM 3/8/68 FLP	3/13/68	

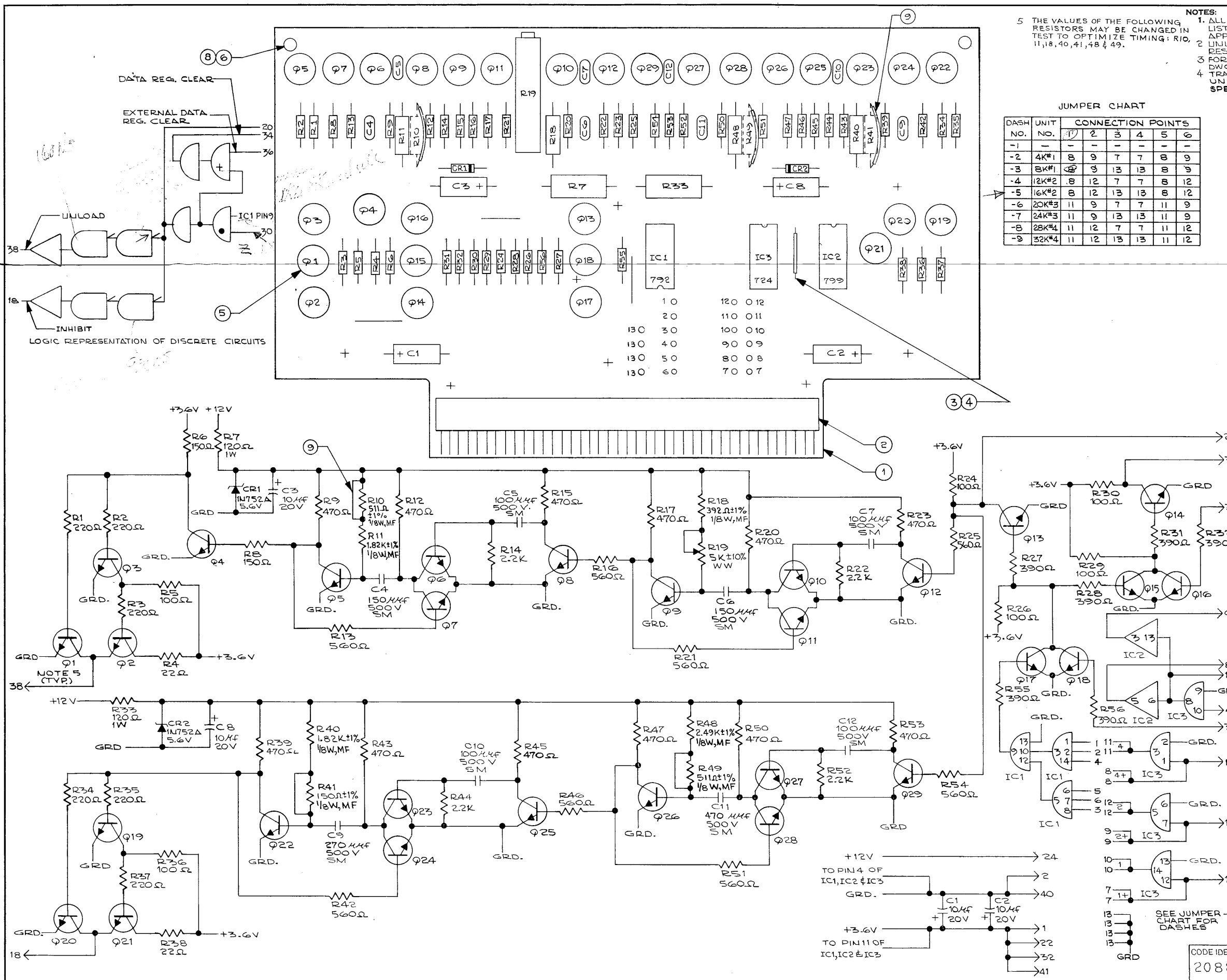


QTY	REF	DESCRIPTION	VALUE	MANUFACTURER
1	1	RT2	RL 2651	THERMISTOR-57.4K±10%, Ø37.8%, KEYSTONE
1	1	RT1	RL 28E1	THERMISTOR-25.7K±10%, Ø37.8%, KEYSTONE
1	1	R6	RN60	RESISTOR-41.9K±1%, 1/8W, 50PPM/°C, MF, WL
1	1	R37	200P-1-502	POTENTIOMETER-5K, 10%, WW, BOURNS
1	1	R32	RN60	RESISTOR-1.2K±1%, 1/8W, 50PPM/°C, MF, WL
1	1	R31	RN60	RESISTOR-15 K±1%, 1/8W, 50PPM/°C, MF, WL
1	1	R23	RC20GF122J	RESISTOR-12K, 1/2W, ALLEN BRADLEY
2	2	R27,25	RCOTGF472J	RESISTOR-4.7K, ALLEN BRADLEY
1	1	R20	RC20GF222J	RESISTOR-2.2K, 1/2W, ALLEN BRADLEY
2	2	R19,38	RN60	RESISTOR-2.74K±1%, 1/8W, 50PPM/°C, MF, WL
1	1	R18	200P-1-102	POTENTIOMETER-1K ±10%, WW, BOURNS
4	4	R35,36, R16,17	RCOTGF562J	RESISTOR-5.6K, ALLEN BRADLEY
2	2	R4,33	RCOTGF272J	RESISTOR-2.7K
1	1	R12	RCOTGF471J	RESISTOR-470Ω
1	1	R11	RCOTGF101J	RESISTOR-100Ω
2	2	R9,10	RCOTGF332J	RESISTOR-3.3K, ALLEN BRADLEY
4	4	R21,26, R8,13	RN60	RESISTOR-7.5K±1%, 1/8W, 50PPM/°C, MF, WARD LEONARD
1	1	RT	200P-1-103	POTENTIOMETER-10K 10%, WW, BOURNS
1	1	R6	RN60	RESISTOR-49.9K±1%, 1/8W, 50PPM/°C, MF, WL
1	1	R5	RN60	RESISTOR-12.1K±1%, 1/8W, 100PPM/°C, MF, WL
4	4	R29,30, R3,4	RCOTGF102J	RESISTOR-1K, ALLEN BRADLEY
2	2	R28, R2	RCOTGF222J	RESISTOR-2.2K, ALLEN BRADLEY
5	5	R34, R24,27, R1,15	RCOTGF104J	RESISTOR-100K, ALLEN BRADLEY
1	1	Q6	40250	TRANSISTOR- RCA
3	3	Q18, Q5,13	2N2102	TRANSISTOR- RCA
3	3	Q16, Q3,8	2N3645	TRANSISTOR- FAIRCHILD
11	11	Q15,17, Q12,14, Q11, Q9,10, Q4,7, Q1,2	SS677	TRANSISTOR- MOTOROLA
1	1	CR4	1N759A	DIODE-12V ZENER, MOTOROLA
4	4	CR7,8, CR1,3	1N914	DIODE-CLEVITE
3	3	CR6, CR2,5	1N752A	DIODE-56V ZENER, MOTOROLA
3	3	C3, C1,2	DDM103	CAPACITOR-.01µf±20%, 150V, CRL
1	1	10		WASHER- INSULATED, MICA
2	2	9		NUT-#4-32, ESNA
2	2	8		SCREW-#4-32x3/8, RD HD, S/S
2	2	7		WASHER-#4, SHAKE PROOF, INT. TOOTH
1	1	6	B13426	HEAT SINK
17	17	5	B10369	UNIPAD
AR	AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	1	2	00-7023-041-000-001	CONNECTOR-ELCO
1	1	1	SEL 966	PRINTED CIRCUIT (REV. SEE A51140)
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

RESISTOR
 TRANSISTOR
 LOGIC

CODE IDENT NO.
 20886

DR. R. L. WENNEL	5/10/67	SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	SCHEMATIC & ASSEMBLY RTL LINE DRIVER, CURRENT DRIVER AND INHIBIT DRIVER REGULATOR
CK. RKM	5-22-67		
ENG. H. M. H.	6-5-67		
PROJ. APP. W. C. C.	6/6/67		
APR. J. K. K.	6/5/67	SIZE	D
USED ON		REV	C



5 THE VALUES OF THE FOLLOWING RESISTORS MAY BE CHANGED IN TEST TO OPTIMIZE TIMING: R10, R11, R18, R40, R41, R48 & R49.

- NOTES:
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$ 1/4W.
 3. FOR DRILLING & DIMENSIONAL DWG. SEE C1518B.
 4. TRANSISTORS ARE 2N2369A UNLESS OTHERWISE SPECIFIED.

REV	DESCRIPTION	DATE	APP'D
D	8 2 7 0		
C	67-465; ADDED INVERTER TO PIN 34 ON LOGIC REP. RKM 10-31-67 UC	11/27	
D	68-13; ADDED ITEM 9 & NOTES DELETED R10, R4 & R49 ON DASH 1. R11 WAS 1K, R48 WAS 1.8K. RKM 1-13-68 97W	1/15/68	

JUMPER CHART

DASH NO.	UNIT NO.	CONNECTION POINTS			
1	2	3	4	5	6
-1	-	-	-	-	-
-2	4K#1	8	9	7	8
-3	8K#1	8	9	13	8
-4	12K#2	8	12	7	8
-5	16K#2	8	12	13	8
-6	20K#3	11	9	7	11
-7	24K#3	11	9	13	11
-8	28K#4	11	12	7	11
-9	32K#4	11	12	13	11

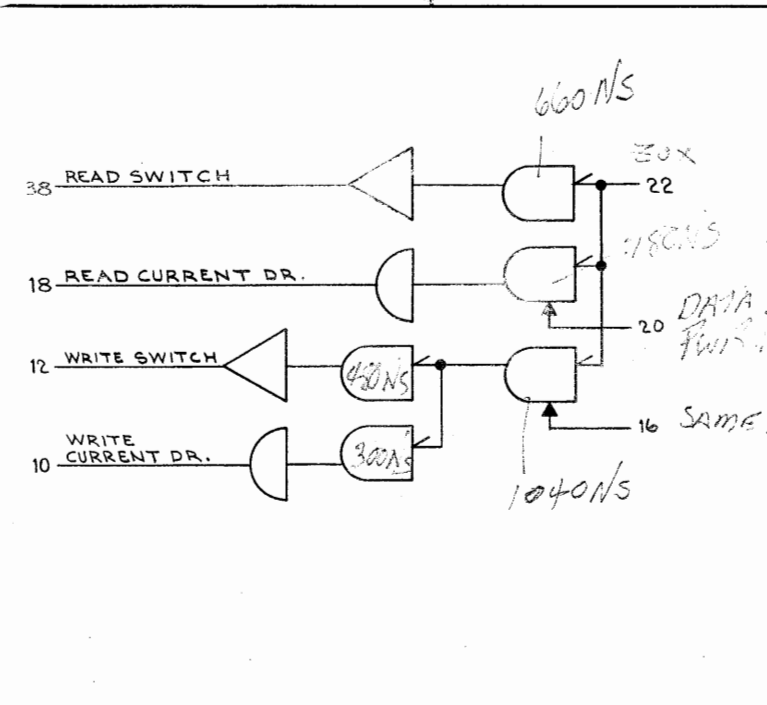
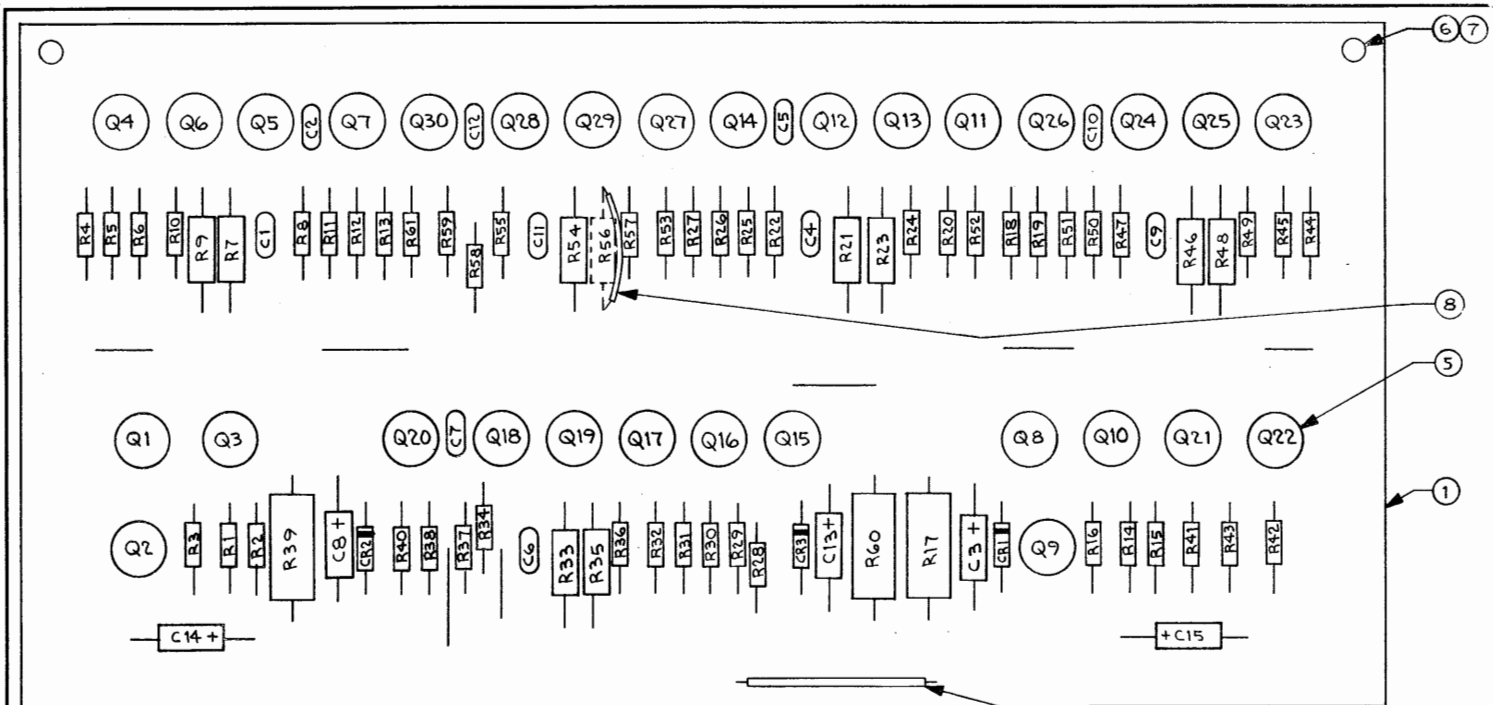
ITEM	DWG. OR PART NO.	DESCRIPTION
1	R48 RN 60	RESISTOR-2.49K $\pm 1\%$ 1/8W ± 50 PPM/C,MF,WL
1	R41 RN 60	RESISTOR-150 $\Omega \pm 1\%$ 1/8W ± 50 PPM/C,MF,WL
6	R23,32 RC07GF391J	RESISTOR-390 Ω , ALLEN BRADLEY
1	R19 Z00P-1-502	POTENTIOMETER-5K $\pm 10\%$ WW, BOURNIS
1	R18 RN 60	RESISTOR-392 $\Omega \pm 1\%$ 1/8W ± 50 PPM/C,MF,WL
4	R44,52 R42,22 RC07GF222J	RESISTOR-2.2K, ALLEN BRADLEY
8	R51,54 R24,26 R21,25 R13,16 RC07GF561J	RESISTOR-560 Ω , ALLEN BRADLEY
2	R11,40 RN 60	RESISTOR-1.82K $\pm 1\%$ 1/8W ± 50 PPM/C,MF,WL
2	R10,49 RN 60	RESISTOR-510 $\Omega \pm 1\%$ 1/8W ± 50 PPM/C,MF,WL
12	R50,53 R45,47 R39,43 R20,23 R15,17 R9,12 RC07GF471J	RESISTOR-470 Ω , ALLEN BRADLEY
2	R17,33 RC32GF121J	-120 Ω , 1W
2	R6,8 RC07GF151J	-150 Ω ,
6	R30,36 R26,29 R5,24 RC07GF101J	-100 Ω ,
2	R4,38 RC07GF220J	-22 Ω ,
6	R33,34 R1,2 RC07GF221J	RESISTOR-220 Ω , ALLEN BRADLEY
29	THRU Q1	2N2369A TRANSISTOR - FAIRCHILD.
1	IC3	MC724P
1	IC2	MC799P
1	IC1	MC792P
2	CR1,2	1N752A DIODE-5.6V, ZENER, MOTOROLA.
1	C11	DM-19-471J CAPACITOR-470 μ F $\pm 5\%$ 500V, SM, ARCO
1	C9	DM-19-271J CAPACITOR-270 μ F $\pm 5\%$ 500V, SM, ARCO
4	C10,12 C5,7	DM-19-101J CAPACITOR-100 μ F $\pm 5\%$ 500V, SM, ARCO
2	C4,6	DM-19-151J CAPACITOR-150 μ F $\pm 5\%$ 500V, SM, ARCO
4	C3,8 C1,2	150D106X0020B2 CAPACITOR-10 μ F $\pm 20\%$ 20V SPRAGUE
3	9	JUMPER
2	8	SPACER-#4-40, NYLON
AR	7	SEE CHART JUMPER
2	6	SCREW-#6-32x1/2, NYLON
29	5	BIO-369 UNIPAD
AR	4	AWG 24 SLEEVING-TEFLON, THINWALL
AR	3	AWG 24 WIRE-SOLID COPPER TINNED
1	2	007022-041-000-001 CONNECTOR - ELCO
1	1	SEL956 PRINTED CIRCUIT (FOR REV. A51140)

REV	DATE	DESCRIPTION
DR. B. BOYD	4-11-67	
CK. RKM	4-19-67	
ENG. R. III	6-5-67	
PROJ. APP. [Signature]	6/6/67	
APP. [Signature]	6/15/67	
USED ON		

CODE IDENT NO. 20886

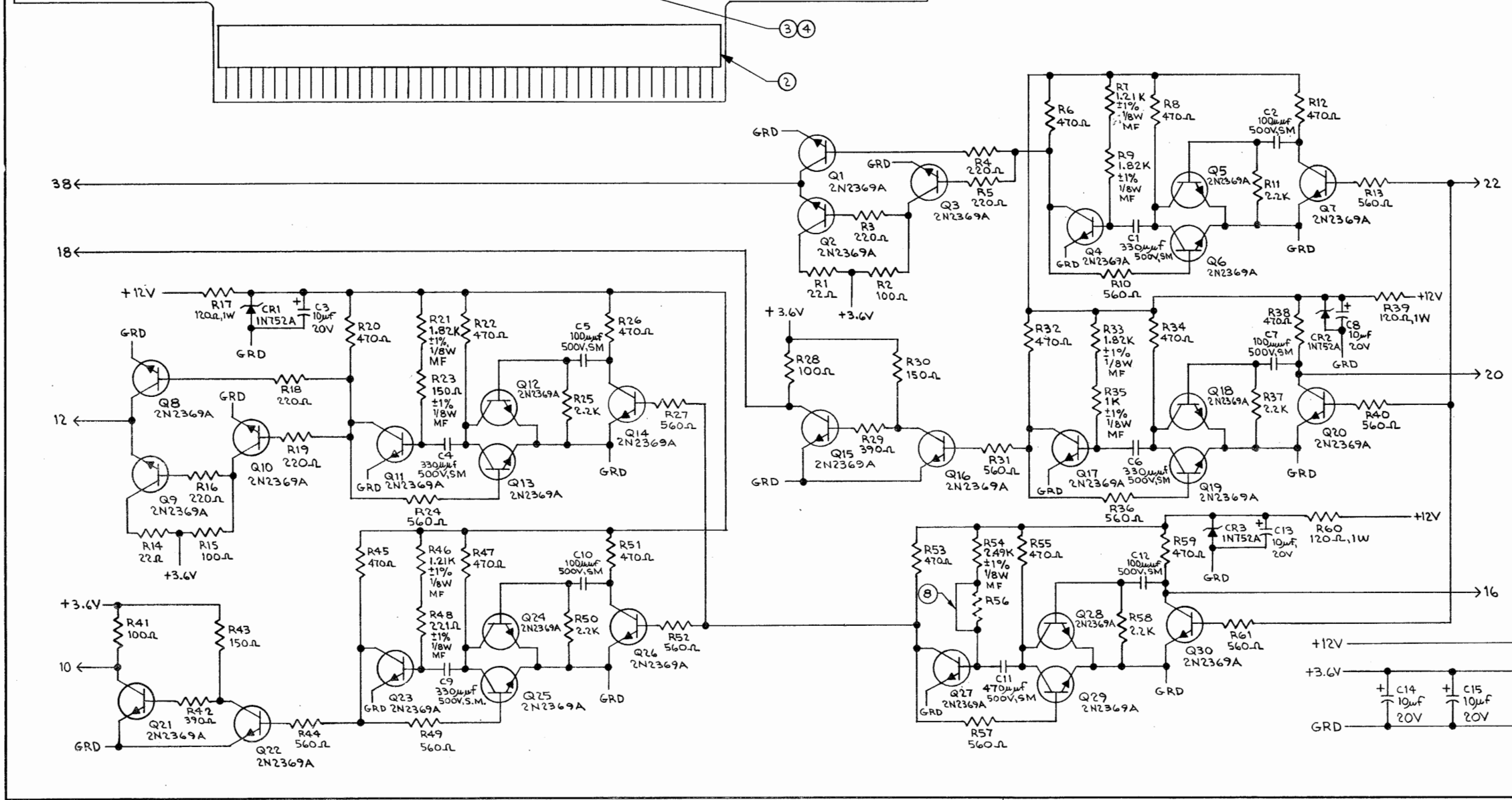
SIZE D 8 2 7 0

SHEET 1 OF 1



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. FOR DRILLING & DIMENSIONAL DRAWING SEE C15189.
 4. THE VALUES OF THE FOLLOWING RESISTORS MAY BE CHANGED IN TEST TO OPTIMIZE TIMING: R7, R9, R21, R23, R33, R35, R46, R48, R54 & R56.

REV	DESCRIPTION	DATE	APP'D
D	8271		
A	67-411; ADDED ITEM 7, ITEM 6 WAS 1165 BUMPER RKM 10-9-67 uc	10/19/67	DR
B	68-14; ADDED ITEM 8 & NOTE 4. DELETED R56 IN DASH 1. R7 WAS 2.49K, R9 WAS 150 Ω , R35 WAS 1.21K, R46 WAS 1K, RKM 1-15-68	1/16/68	DR



ITEM	DWG. OR PART NO.	DESCRIPTION
1	R56	RESISTOR-22 Ω ±1%, 1/8W±50PPM/°C, MF, W.L.
1	R48	RESISTOR-2.49K±1%, 1/8W±50PPM/°C, MF, W.L.
2	R30,49	RCOTGF151J RESISTOR-150 Ω , ALLEN BRADLEY
2	R29,42	RCOTGF391J RESISTOR-390 Ω , ALLEN BRADLEY
3	R40	RESISTOR-120 Ω , 1W, ALLEN BRADLEY
5	R58	RESISTOR-2.2K, ALLEN BRADLEY
12	R40,44	RCOTGF561J RESISTOR-560 Ω , ALLEN BRADLEY
1	R54	RESISTOR-2.49K±1%, 1/8W±50PPM/°C, MF, W.L.
1	R35	RESISTOR-1K±1%, 1/8W±50PPM/°C, MF, W.L.
1	R23	RESISTOR-150 Ω ±1%, 1/8W±50PPM/°C, MF, W.L.
3	R33	RESISTOR-1.82K±1%, 1/8W±50PPM/°C, MF, W.L.
2	R7,46	RESISTOR-1.21K±1%, 1/8W±50PPM/°C, MF, W.L.
15	R59	RESISTOR-470 Ω , ALLEN BRADLEY
6	R5,16	RESISTOR-220 Ω , ALLEN BRADLEY
4	R28,41	RESISTOR-100 Ω , ALLEN BRADLEY
2	R1,14	RESISTOR-22 Ω , ALLEN BRADLEY
30	Q30	TRANSISTOR - FAIRCHILD
3	CR3	DIODE-5.6V, ZENER, MOTOROLA
1	C11	CAPACITOR-470 μ F±5%, 500V, SM, ARCO
5	C13,14	CAPACITOR-10 μ F±20%, 20V, SPRAGUE
5	C7,10	CAPACITOR-100 μ F±5%, 500V, SM, ARCO
4	C6,9	CAPACITOR-330 μ F±5%, 500V, SM, ARCO
1	8	JUMPER
2	7	SPACER-#4-40 NYLON
2	6	SCREW-#6-32x1/2, NYLON
30	5	UNIPAD-
AR	4	AWG 24 SLEEVING-TEFLON, THINWALL
AR	3	AWG 24 WIRE-SOLID COPPER, TINNED
1	2	CONNECTOR-ELCO
1	1	SEL 957 PRINTED CIRCUIT (REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.

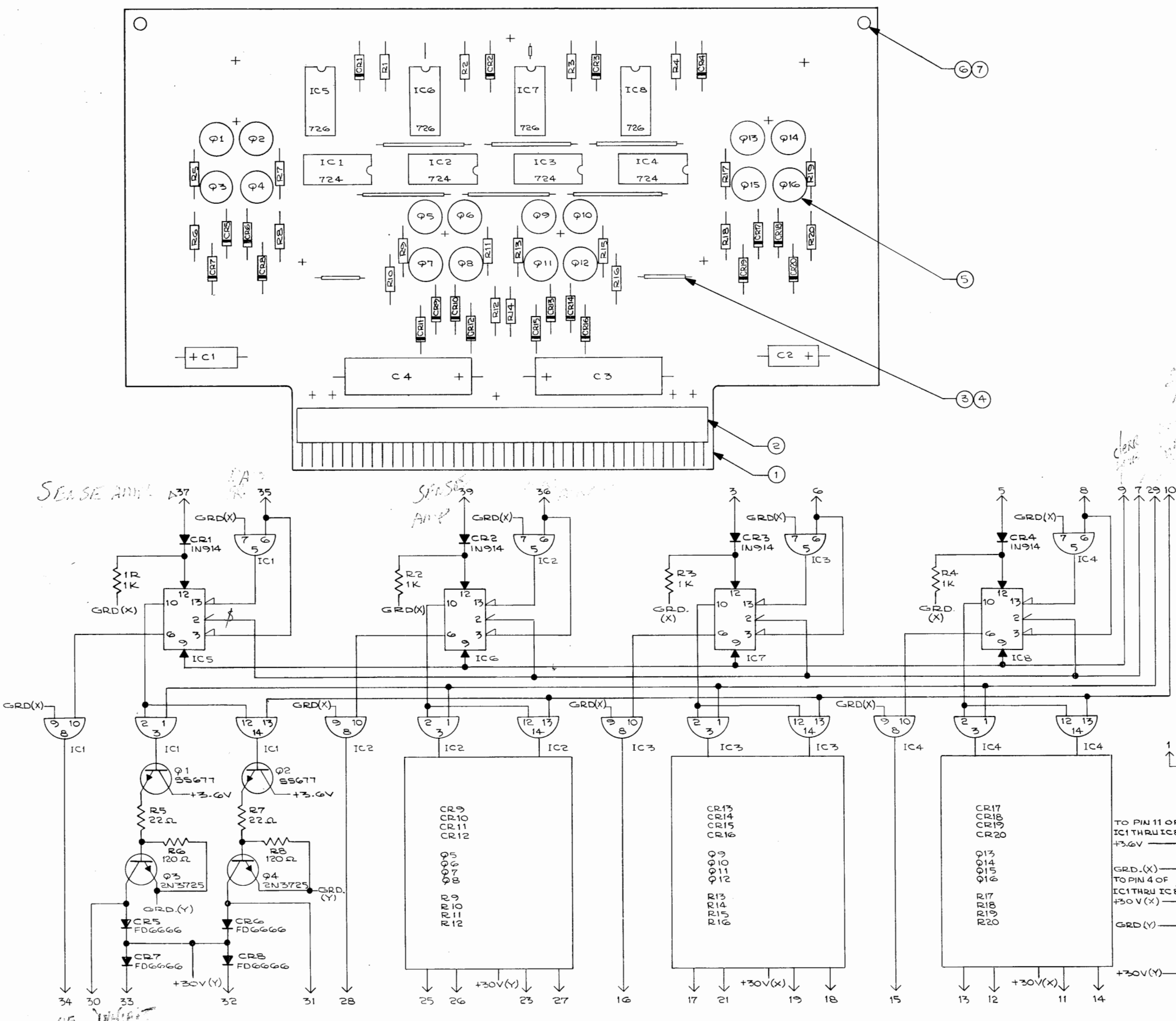
DR.	DATE	REV
RLWENNEL	4/12/67	
RKM	4-19-67	
R. Hill	6-5-67	
APR	6/6/67	
APR	4/5/67	

CODE IDENT NO. 20886

SCHEMATIC & ASSEMBLY
 RTL MEMORY
 TIMING # II

NOTES:
 1. ALL ITEMS AS SPECIFIED. IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4W.
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE C15176.

REV	DESCRIPTION	DATE	APPR
D	8272		
A	67-399; ADDED - B. RKM 10/2/67 GFW	10/2/67	
B	67-411; ADDED ITEMS 6 & 7. RKM 10-9-67 W	10/9/67	
C	67-513; DELETED CR5 THRU CR16 ON DASH 2 WAC 11-21-67 RKM	11/21/67	
D	68-122; Q1, 2, 5, 6, 9, 10, 13 & 14 WERE 2N3904. CEM 3/8/68 FLP	3/8/68	



QTY	REF	DESCRIPTION
1	R20	
1	R18	
1	R16	
1	R14	
1	R12	
1	R10	
1	R8	
1	R6	
1	R4	
1	R2	
1	R1	
1	R19	
1	R17	
1	R15	
1	R13	
1	R11	
1	R9	
1	R7	
1	R5	
1	R3	
2	R12	
1	Q16	
1	Q15	
1	Q12	
1	Q11	
1	Q8	
1	Q7	
1	Q4	
1	Q3	
1	Q13	
1	Q10	
1	Q9	
1	Q6	
1	Q5	
1	Q2	
1	Q1	
1	IC8	
1	IC7	
3	IC6	
1	IC5	
1	IC4	
3	IC3	
1	IC2	
1	IC1	
2	CR18	
2	CR17	
2	CR16	
2	CR15	
2	CR12	
2	CR11	
2	CR6	
2	CR5	
1	CR4	
2	CR3	
1	CR1	
1	C4	
1	C3	
1	C2	
1	C1	
2	7	
2	6	
8	4	
4	5	
AR	AR	
AR	AR	
1	1	
1	1	
-3	-2	
-1	ITEM	

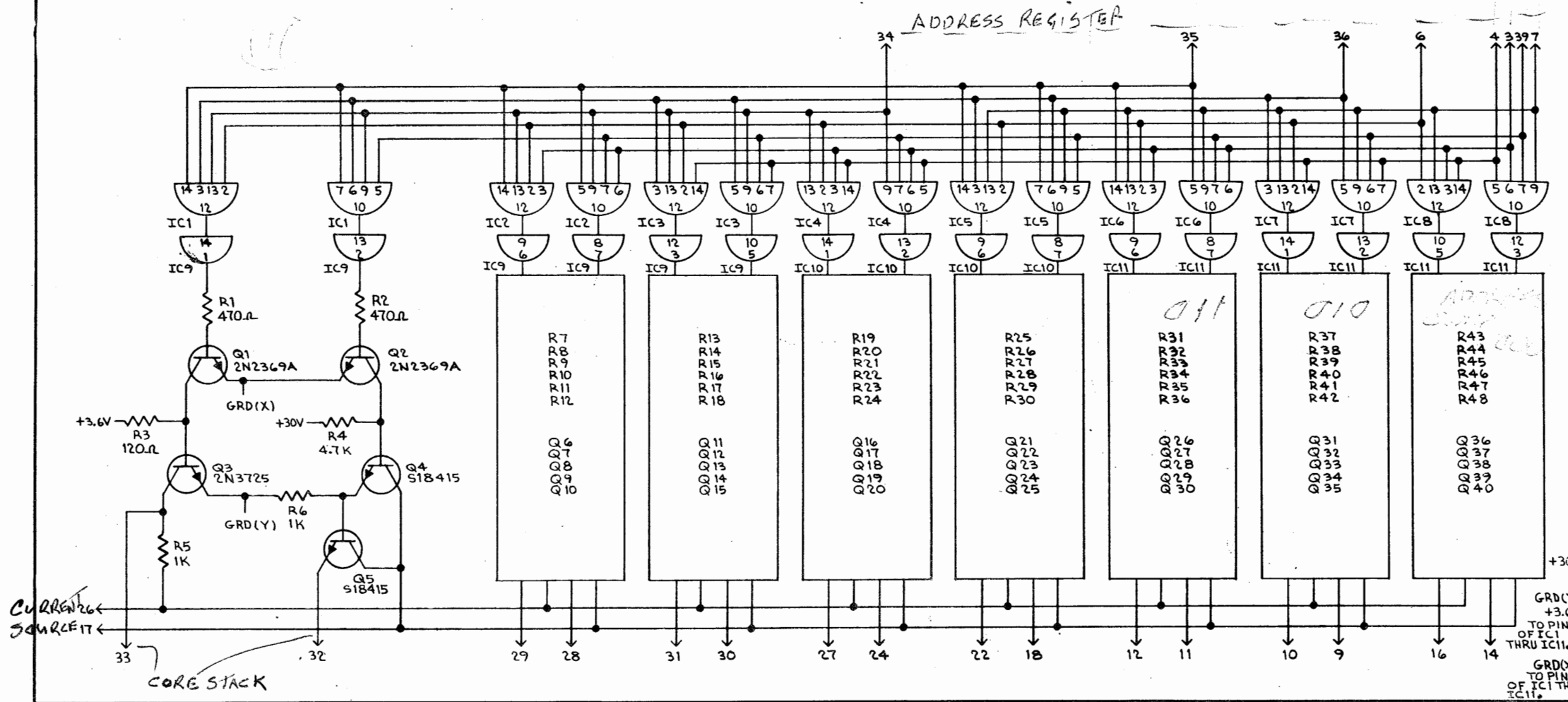
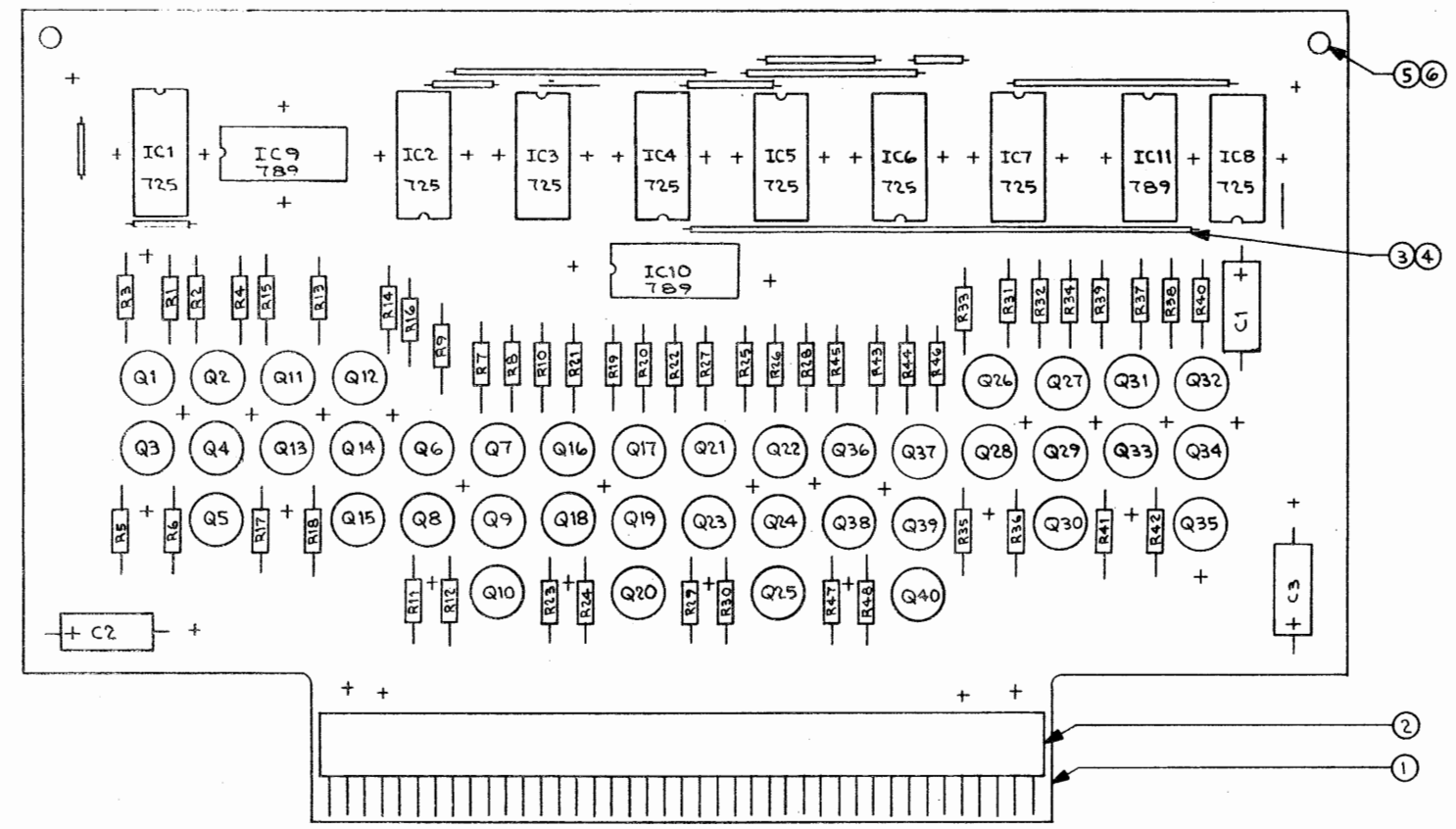
ITEM	DWG. OR PART NO.	DESCRIPTION
1	C4	TE1306 CAPACITOR-35/44±20% 50V SPRAGUE
1	C3	TE1306 CAPACITOR-35/44±20% 20V SPRAGUE
1	C2	150D10GX0020B2 CAPACITOR-10µf±20% 20V SPRAGUE
1	C1	150D10GX0020B2 CAPACITOR-10µf±20% 20V SPRAGUE
2	7	SPACER-#4-40, NYLON
2	6	SCREW-#6-32 X 1/2, NYLON
8	4	B10369 UNIPAD -
AR	AR	AWG 24 SLEEVING-TIFLON, THINWALL
AR	AR	AWG 24 WIRE-SOLID COPPER, TINNED
1	1	2 00-7022-041-000-001 CONNECTOR - ELCO
1	1	1 SEL955 PRINTED CIRCUIT (SEE REV. A31140)

CODE IDENT NO
20886

SYSTEMS ENGINEERING
 LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA
 DR. B. J. BOYD 4-24-67
 CC RKM 5-3-67
 ENG. [Signature] 6-5-67
 APP. [Signature] 6/6/67
 USED ON 4/5/67
 SCHEMATIC & ASSEMBLY
 RTL QUAD DATA REGISTER
 & INHIBIT DRIVER
 SIZE D 8272

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE CIB175.

REV	D	8273	REV	A
DESCRIPTION			DATE	APP'D
A		67-411; ADDED ITEMS 5 & 6; RKM 10-6-67 MC	10/9/67	[Signature]



16	R4748 R4182 R3536 R2930 R2324 R1718 R1112 R56	RCOTGF102J	RESISTOR-1K, ALLEN BRADLEY
8	R4044 R2834 R1672 R410	RCOTGF472J	RESISTOR-4.7K
8	R3745 R2733 R1521 R37	RCOTGF121J	RESISTOR-120Ω
16	R4344 R3738 R3132 R2526 R1920 R1314 R78 R12	RCOTGF471J	RESISTOR-470Ω, ALLEN BRADLEY
16	Q3940 Q3435 Q2930 Q2425 Q1920 Q1415 Q910 Q45	S18415	TRANSISTOR-FAIRCHILD
8	Q3328 Q2823 Q1318 Q88	2N3725	TRANSISTOR-FAIRCHILD
16	Q3437 Q3132 Q2627 Q2122 Q1617 Q1112 Q67 Q12	2N2369A	TRANSISTOR-FAIRCHILD
3	IC11 IC910	MCT89P	INTEGRATED CIRCUIT-MOTOROLA
8	IC78 IC56 IC34 IC12	MCT25P	INTEGRATED CIRCUIT-MOTOROLA
2	C2,3	150D106X0020B2	CAPACITOR-10μF±20%, 20V, SPRAGUE
1	C1	150D45X0050B2	CAPACITOR-4.7μF±20%, 50V, SPRAGUE
2	6		SPACER-#4-40, NYLON
2	5		SCREW-#6-32X1/2, NYLON
AR	4	AWG-24	SLEEVING-TEFLON, THINWALL
AR	3	AWG-24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-041-000-001	CONNECTOR-ELCO
1	1	SEL 954	PRINTED CIRCUIT (REV. SEE A5114-0)

DR.	R.L. WENHILL	4/14/67
CK.	RKM	4-19-67
ENGR.	[Signature]	6/3/67
PROJ. APP.	[Signature]	6/16/67
APP'D.	[Signature]	6/17/67
USED ON		

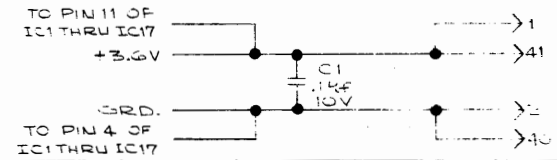
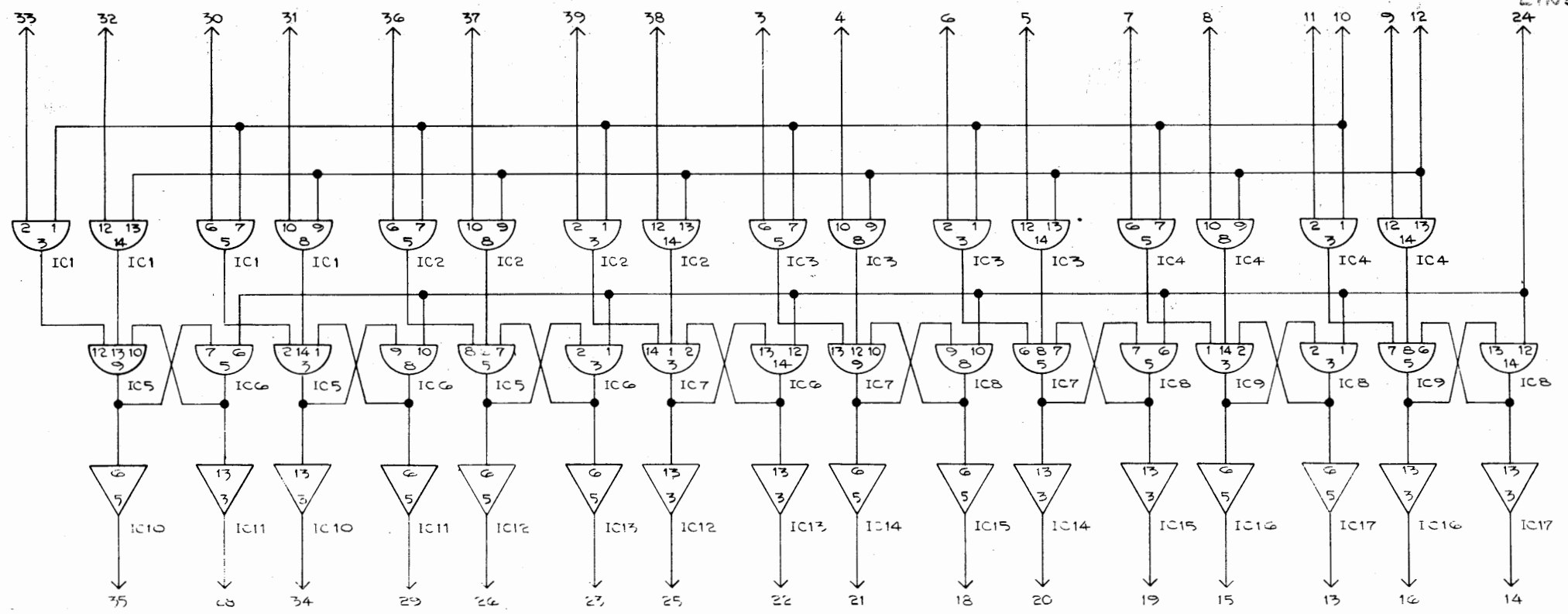
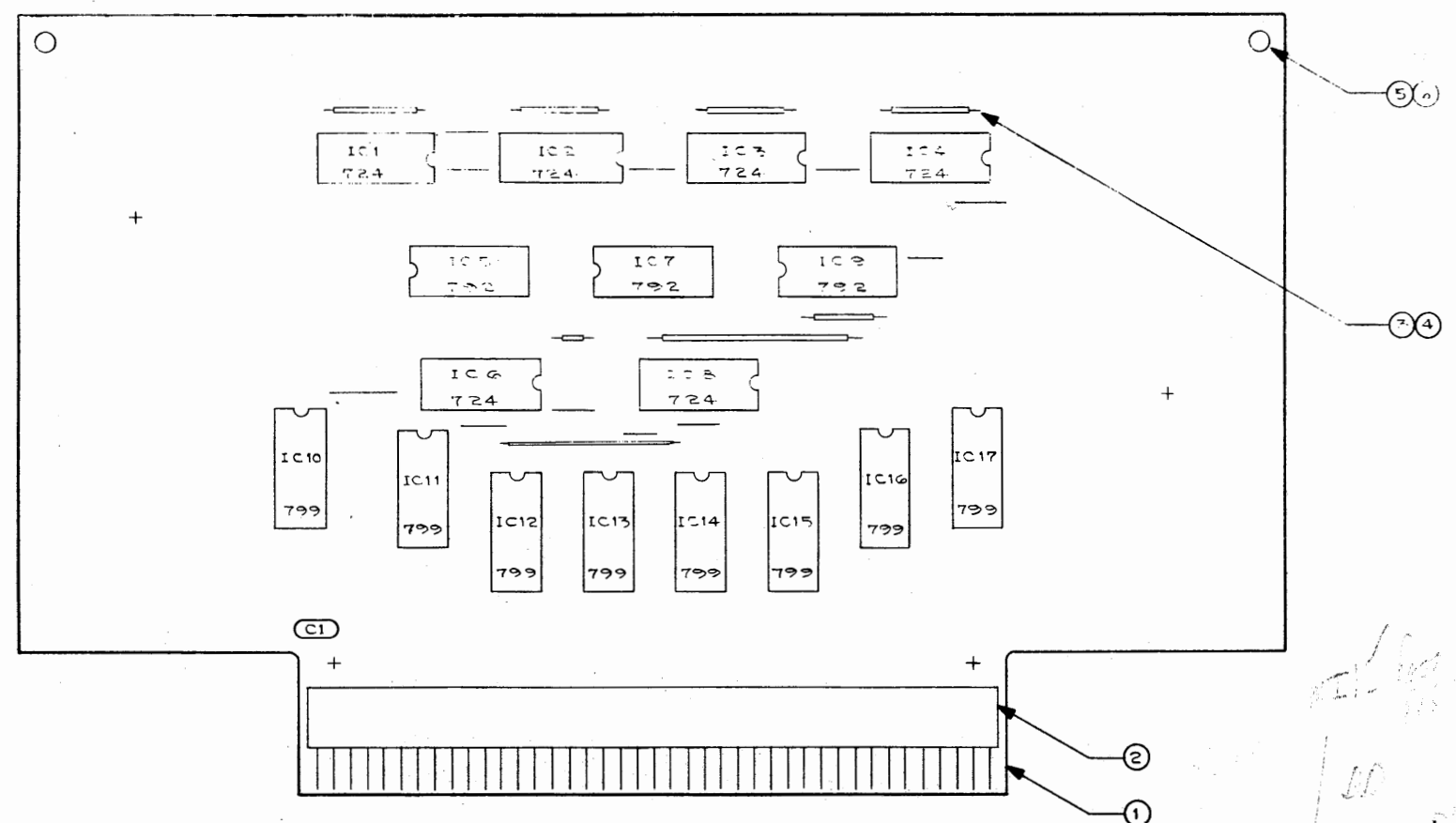
CODE IDENT. NO. 20886

SIZE D 8273

REVISION A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT.
 2. FOR TOLERANCE & DIMENSIONAL DATA, SEE D 15174

REV	DESCRIPTION	DATE	APP'D
D	8 2 7 4		B
A	67-411; ADDED ITEMS 586, RKM 10-6-67 UC	10/9/67	[Signature]
B	67-467; CHG'D ASSY TO ASSEE WITH LATEST PC BACKGROUND, SEL953B; TB 11-2-67 F.L.R.	11/6/67	[Signature]



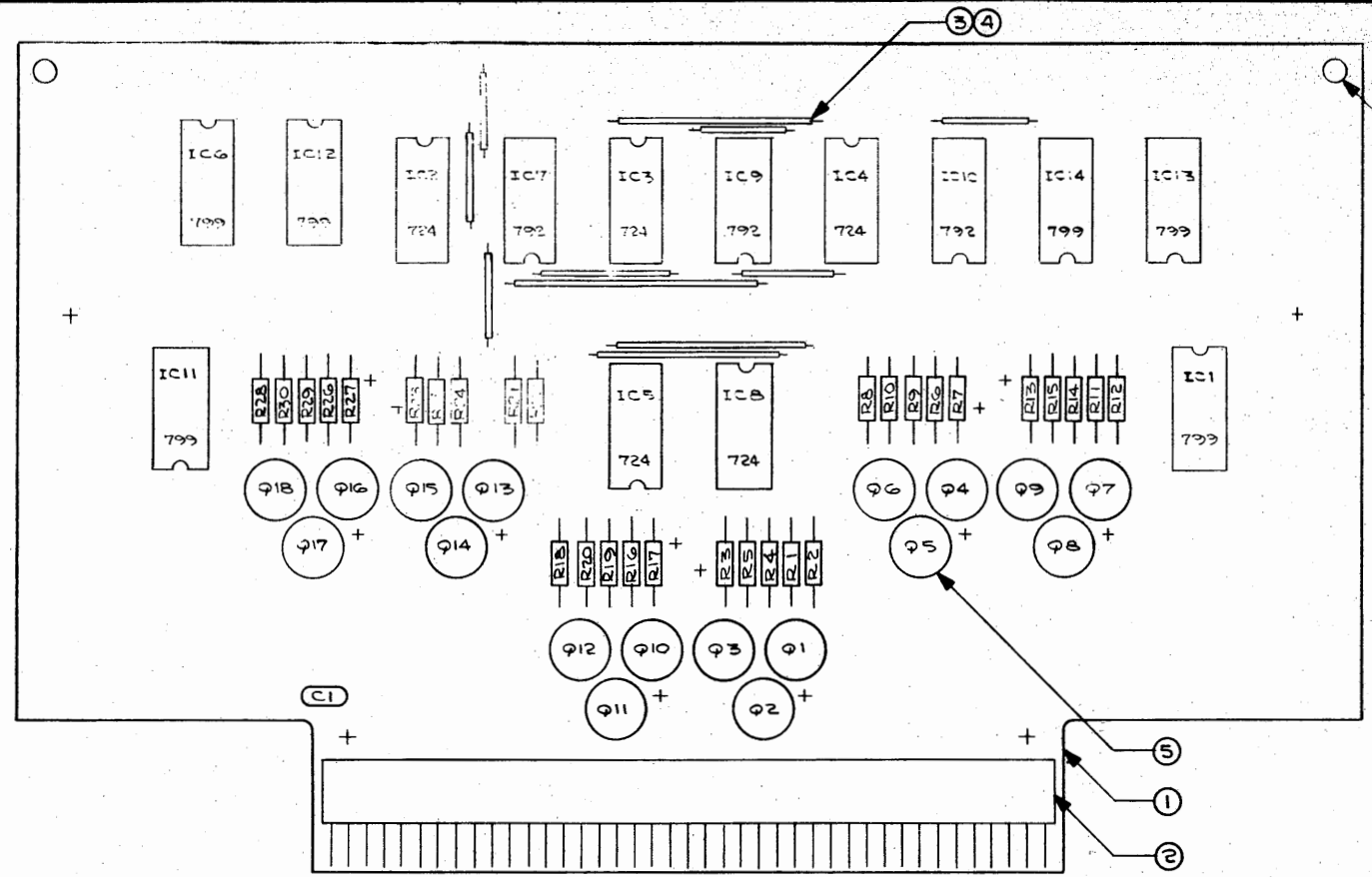
ITEM	DWG. OR PART NO.	DESCRIPTION
8	IC17 THRU IC10	MC799P
3	IC9, IC7, IC5, IC6, IC3, IC12	MC792P INTEGRATED CIRCUIT-MOTOROLA
6	IC1, IC2, IC3, IC4, IC5, IC6, IC7, IC8, IC9, IC10, IC11, IC12, IC13, IC14, IC15, IC16, IC17	MC724P
1	C1	UK-10-104 CAPACITOR .1µF+80-20%, 10V, CRL.
2	6	SPACER-#4-40, NYLON
5	5	SCREW-#6-32X1/2, NYLON
AK	4	AWG. 24 SLEEVING-TEFLON, THINWALL.
AK	3	AWG. 24 WIRE-SOLID COPPER, TINNED.
1	2	007022-041-00000 CONNECTOR - ELCO
1	1	SEL953 PRINTED CIRCUIT (REV SEE A51140)

DR.	DATE	DESCRIPTION
D. BOYD	4-20-67	SCHEMATIC & ASSEMBLY
CK	4-24-67	RTL 8 BIT MEMORY ADDRESS REGISTER
ENG.	[Signature]	
PROJ. APP.	[Signature]	
APPROVED	[Signature]	

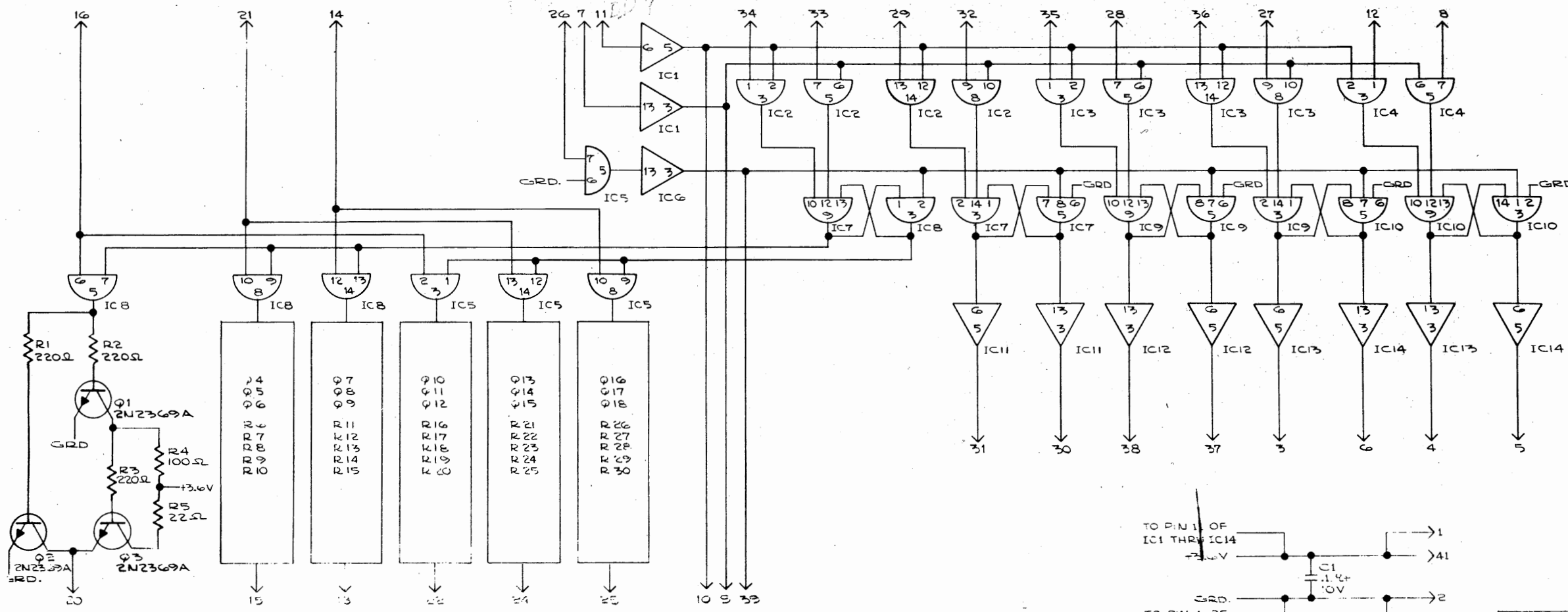
SIZE	REV
D	B

NOTES:
 1. ALL ITEMS AS SPECIFIED UNLESS OTHERWISE APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. FOR DRILLING DIMENSIONS SEE CIS173

REV	DESCRIPTION	DATE	APP'D
D	8275		
A	67-411; ADDED ITEM 7. ITEM 6 WAS 1165 BUMPER RKM 10-6-67	11/6/67	
B	67-468; CHG'D ASSY TO AGREE WITH LATEST P.C. BACKGROUND, SEL 952B; JWM 11-3-67	11/6/67	



bits 3-7



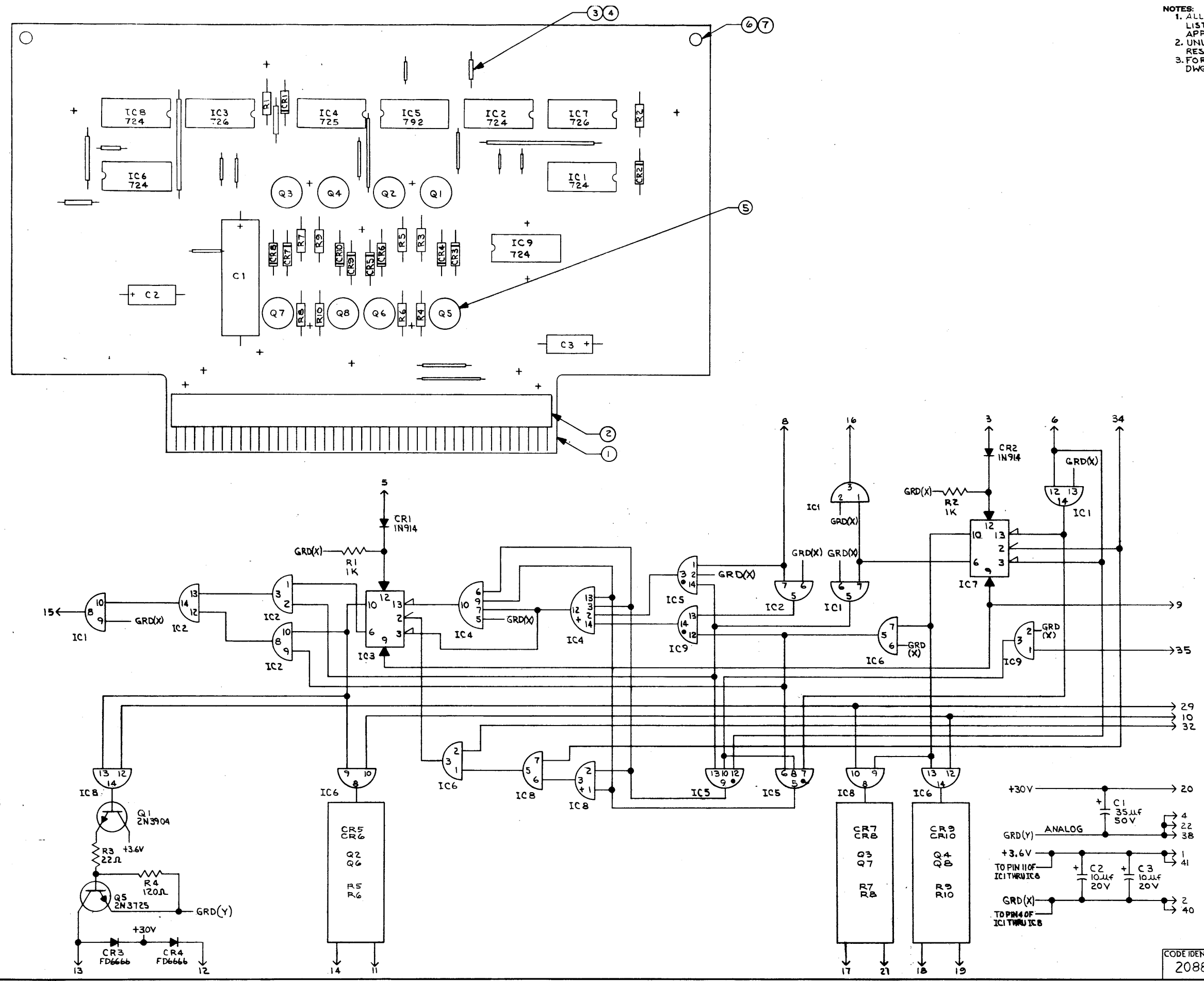
6	R15, R19, R24, R4, R27, R28, R29, R21, R22, R7, R18, R3, R12	RC07GF220J	RESISTOR-22 Ω , ALLEN BRADLEY
6	R14, R9	RC07GF101J	RESISTOR-100 Ω , ALLEN BRADLEY
18	R23, R11, R7, R3, R12	RC07GF222J	RESISTOR-220 Ω , ALLEN BRADLEY
18	Q18, Q1	2N2369A	TRANSISTOR - FAIRCHILD.
3	IC10, IC9, IC7	MC792P	INTEGRATED CIRCUIT-MOTOROLA
5	IC4, IC5, IC2, IC3	MC724P	INTEGRATED CIRCUIT-MOTOROLA
6	IC13, IC11, IC16	MC799P	INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK-10-104	CAPACITOR-.1 μ F+80-20%10V, CRL.
2	7		SPACER-#4-40, NYLON
2	6		SCREW-#6-32X1/2, NYLON
18	5	B10369	UNIPAD
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-041-000-000	CONNECTOR-ELCO
1	1	SEL 952	PRINTED CIRCUIT- (REV SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	bj. BOYD	4-28-67	SCHMATIC & ASSEMBLY
CR.	RKM	5-3-67	RTL 5BIT MEMORY ADDRESS REGISTER & 8K CONTROL
ENGR.	R. J. ...	6/6/67	
APPROVED	
CODE IDENT NO.	20886	SIZE	D 8275
REV		REV	B

Location 137

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE C15200.

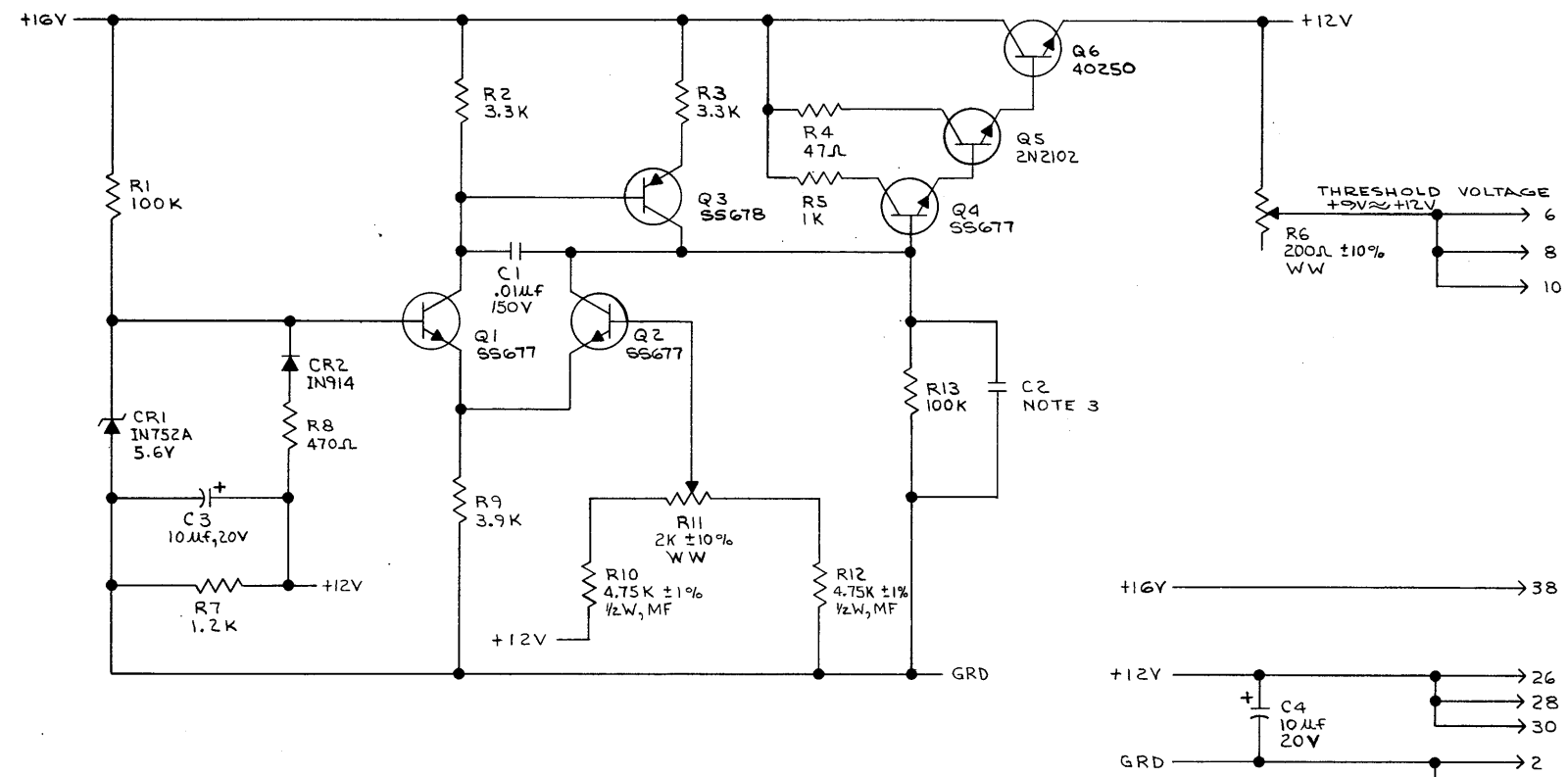
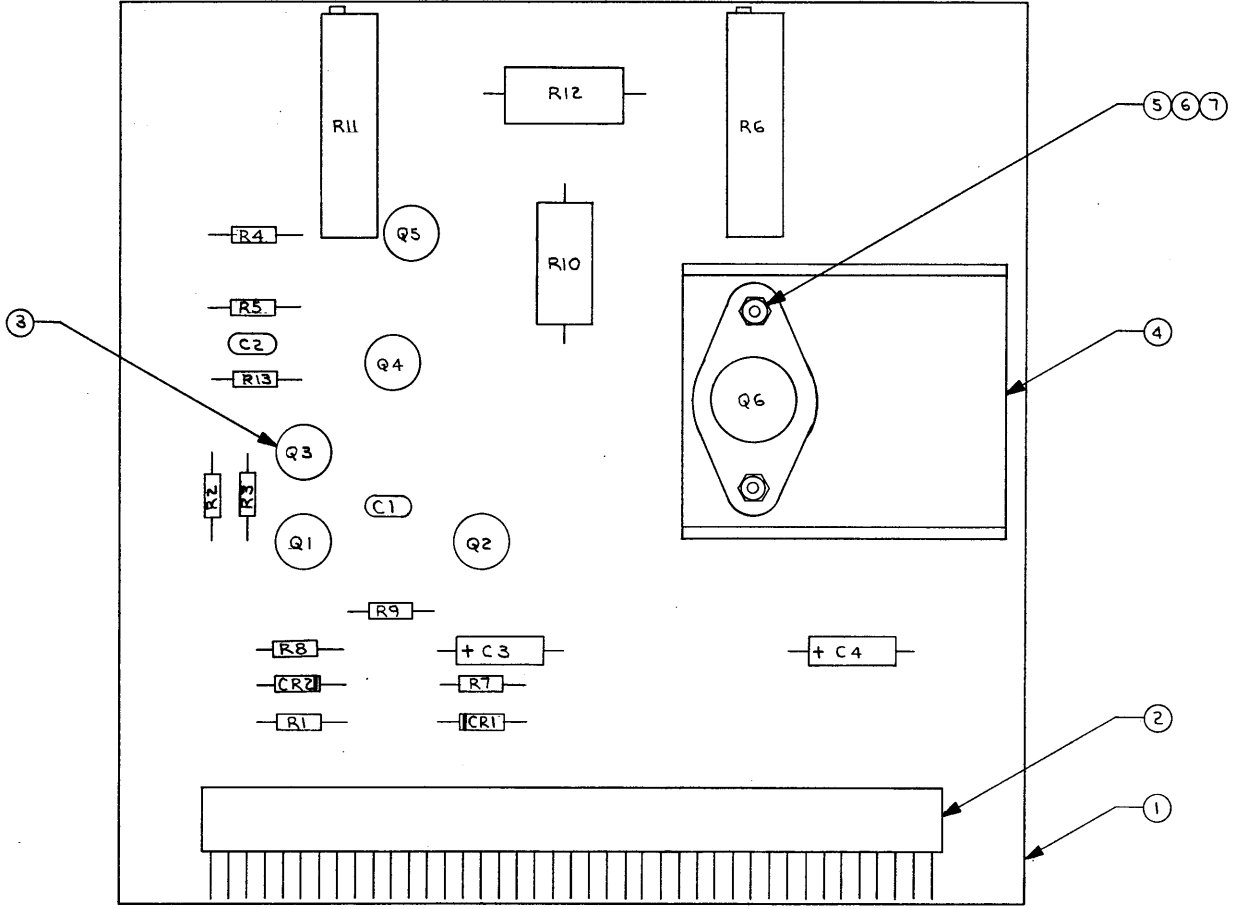
REV	DESCRIPTION	DATE	APP'D
D	8276		
A	67-411; ADDED ITEM 7. ITEM 6 WAS 1165 BUMPER RKM 10-6-67 LCC	10/9/67	[Signature]



4	R10 R6 R4	RC07GF121J	RESISTOR-120 Ω , ALLEN BRADLEY
4	R7 R5 R3	RC07GF220J	RESISTOR-22 Ω , ALLEN BRADLEY
2	R2 R1	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
4	Q8 Q7 Q6 Q5	2N3725	TRANSISTOR- FAIRCHILD
4	Q4 Q3 Q2 Q1	2N3904	TRANSISTOR- MOTOROLA
1	IC5	MC792P	INTEGRATED CIRCUIT-MOTOROLA
1	IC4	MC725P	INTEGRATED CIRCUIT-MOTOROLA
2	IC7 IC3	MC724P	INTEGRATED CIRCUIT-MOTOROLA
5	IC9 IC8 IC6 IC2 IC1	MC724P	INTEGRATED CIRCUIT-MOTOROLA
8	CR10 CR9 CR8 CR7 CR6 CR5 CR4 CR3	FD6666	DIODE- FAIRCHILD
2	CR2 CR1	IN914	DIODE-CLEVITE
2	C3 C2	150D10GX0020B2	CAPACITOR-10 μ F $\pm 20\%$, 20V, SPRAGUE
1	C1	TE-1306	CAPACITOR-35 μ F $\pm 20\%$, 50V, SPRAGUE
2	7		SPACER-#4-40, NYLON
2	6		SCREW-#6-32x1/2, NYLON
8	5	B10369	UNIPAD-
AR	4	AWG24	SLEEVEING- TEFLON, THINWALL
AR	3	AWG24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-041-000-001	CONNECTOR-ELCO
1	1	SEL 959	PRINTED CIRCUIT (FOR REV SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	B. HALL	4-14-67	SCHEMATIC & ASSEMBLY
CC.	RKM	4-25-67	RTL MEMORY PARITY &
ENG.	C. HALL	9-7-67	PROTECT BIT DATA
PROJ. MGR.	[Signature]	9/7/67	REGISTERS & INHIBIT DRIVERS
APP.	[Signature]	9/8/67	
USED ON			
CODE IDENT NO.	20886	SIZE	8276
		REV	A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. SELECT AT TEST.
 4. FOR DRILLING AND DIMENSIONAL SEE C15212

REV	D	8277	APPD	A
REV	A	DESCRIPTION	DATE	APPD
		68-122; Q1, 2 & 4 WERE 2N3904, Q3 WAS 2N3906	3/13/68	N
		CEM 3/8/68	FLP	

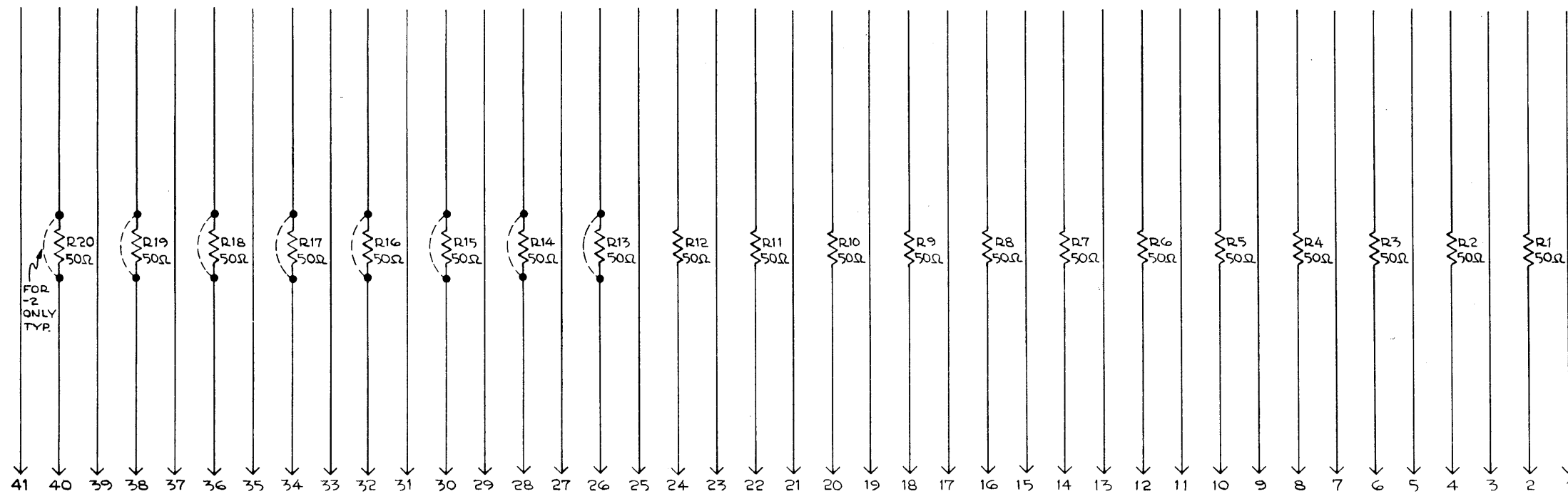
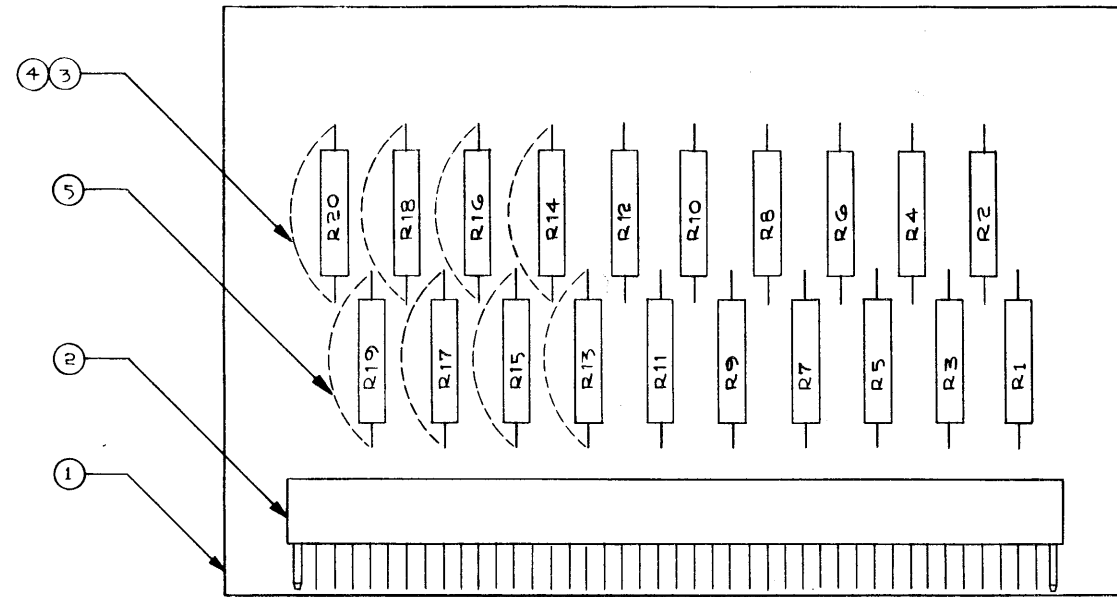


1	R11	200P-1-202	POTENTIOMETER-2K $\pm 10\%$, WW, BOURNS
2	R12	RN70	RESISTOR-4.75K $\pm 1\%$, $1/2W$, ± 150 PPM/C M.F., WARD LEONARD
	R10		
1	R9	RC07GF392J	RESISTOR-3.9K, ALLEN BRADLEY
1	R8	RC07GF471J	RESISTOR-470 Ω , ALLEN BRADLEY
1	R7	RC07GF122J	RESISTOR-1.2K, ALLEN BRADLEY
1	R6	200P-1-201	POTENTIOMETER-200 Ω $\pm 10\%$, WW, BOURNS
1	R5	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
1	R4	RC07GF470J	RESISTOR-47 Ω , ALLEN BRADLEY
2	R3	RC07GF332J	RESISTOR-3.3K, ALLEN BRADLEY
2	R2		
2	R1	RC07GF104J	RESISTOR-100K, ALLEN BRADLEY
1	Q6	40250	TRANSISTOR-RCA
1	Q5	2N2102	TRANSISTOR-RCA
1	Q3	SS678	TRANSISTOR-MOTOROLA
1	Q4		
3	Q2	SS677	TRANSISTOR-MOTOROLA
	Q1		
1	CR2	1N914	DIODE-CLEVITE
1	CR1	1N752A	DIODE-5.6V, ZENER, MOTOROLA
2	C4		
2	C3	150D106X0020B2	CAPACITOR-10 μ F $\pm 20\%$, 20V, SPRAGUE
1	C2	NOTE 3	CAPACITOR-NOTE 3
1	C1	DDM103	CAPACITOR-.01 μ F, $\pm 40-60\%$, 150V, RLL
2	7		NUT-# 4-40, ESNA
4	6		WASHER-# 4, SHAKE PROOF, INT. TOOTH
2	5		SCREW-#4-40X9/16, RD HD, S/S
1	4	B13426A	HEAT SINK
5	3	B10369	UNIPAD
1	2	00-7022-021-000-001	CONNECTOR-ELCO
1	1	SEL 965	PRINTED CIRCUIT (FOR REV SEE AS1140)

		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR.	B. HALL	4-10-66	SCHEMATIC & ASSEMBLY RTL+12V AND THRESHOLD REGULATOR
CK.	RKM	4-19-67	
ENG.	R. Hill	6-5-67	
PROJ.	W. C. ...	6-16-67	
APP.	J. K. ...	6-15-67	
CODE IDENT NO.	20886	SIZE	D
USED ON			8277

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING AND DIMENSIONAL DWG. SEE C-15401.
 3. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 1\%$, 3W.

REV	D	8278	DATE	APP'D
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8	R20 THRU R13	N 3	RESISTOR-50Ω, OMTRONICS
12	R12 THRU R1	N 3	
8	5		JUMPER
AR	4	AWG. 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG. 24	WIRE-SOLID COPPER, TINNED
1	1	2	00-7023-041-000-001 CONNECTOR - ELCO
1	1	1	SEL 979 PRINTED CIRCUIT (FOR REV. A51140)
-2	-1	ITEM	DWG. OR PART NO. DESCRIPTION

SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. B. BOYD	3-10-67
CL. GOODREAD	3/14/67
ENGR. P. J. Jell	3-27-67
PROJ. APP. J. C. ...	3/27/67
APP. J. C. ...	3/27/67
USED ON	

SCHEMATIC & ASSEMBLY
 INHIBIT RESISTORS

REV	D	8278
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C

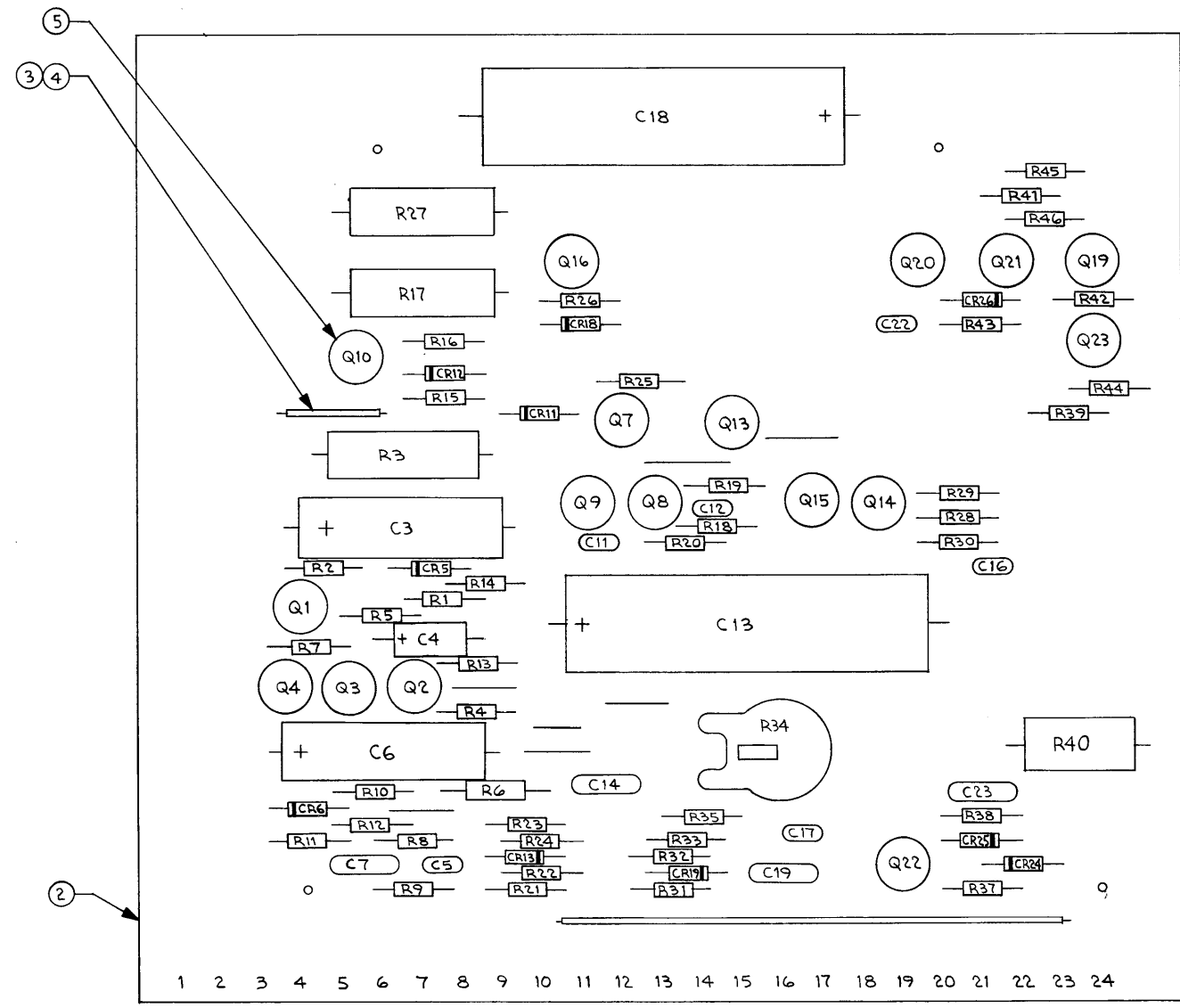
C

C

4. 1N971B MAY BE USED IN PLACE OF 1N4750.
5. SCHEMATIC ALSO SHOWN ON D53140.

NOTES:
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4 W.
3. FOR DRILLING & DIM DWG SEE C15473

REV	DESCRIPTION	DATE	APP'D
D	8279		E
C	67-388; VALUE OF C22 WAS .022 μ F, 150V. RKM 10-5-67 GFW	10/15/67	
D	67-436; Q20 & Q21 WERE SHOWN AS NPN'S. RKM 10-19-67 JG	10/19/67	
E	67-520; R27 WAS .2 Ω . WAC 11-21-67 RKM	11/21/67	



1	Q23	2N3645	TRANSISTOR-FAIRCHILD
1	Q22	2N2102	TRANSISTOR-RCA
9	Q16 Q1415 Q9,10 Q4,8 Q2,3	SS677	TRANSISTOR-MOTOROLA
6	Q21 Q1920 Q7,13 Q1	SS678	TRANSISTOR-MOTOROLA
1	CR26	1N753A	DIODE-6.2V, ZENER, MOTOROLA
2	CR425	1N4004	DIODE-MOTOROLA
2	CR1319	1N759A	DIODE-12V, ZENER, MOTOROLA
2	CR1218	1N914	DIODE-CLEVITE
1	CR11	1N749A	DIODE-4.3V, ZENER, MOTOROLA
1	CR6	1N966B	DIODE-16V, ZENER, MOTOROLA
1	CR5	1N4750 NOTE 4	DIODE-27V, ZENER, MOTOROLA
2	C1318	39D507G030FLO	CAPACITOR-500 μ F, 30V, SPRAGUE
1	C22	1D203	CAPACITOR-.022 μ F $\pm 10\%$, 500V, CRL
4	C1923 C714	5C13	CAPACITOR-1 μ F $\pm 20\%$, 25V, SPRAGUE
1	C4	150D475X0050B2	CAPACITOR-4.7 μ F $\pm 20\%$, 50V, SPRAGUE
2	C3,6	TE-1306	CAPACITOR-35 μ F-10 $\pm 5\%$, 50V, SPRAGUE
5	C17 C1216 C5,11	DDM103	CAPACITOR-.01 μ F $\pm 60\%$ -40% ± 150 V, CRL
17	5	B10369	UNIPAD
AR	4	AWG 24	SLEEVING-TEFLON, THIN WALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	SEL 982	PRINTED CIRCUIT-(REV. SEE A51140)

ITEM	DWG. OR PART NO.	DESCRIPTION
1	R40	BWH RESISTOR-1 Ω , 2W, WW, IRC
1	R37	RC07GF270J RESISTOR-27 Ω , ALLEN BRADLEY
1	R34	MTC-4 POTENTIOMETER-1K $\pm 30\%$, MALLORY
1	R33	RC07GF272J RESISTOR-2.7K, ALLEN BRADLEY
1	R29	RC07GF152J RESISTOR-1.5K
4	R32,25 R22,23	RC07GF222J -2.2K
4	R44 R21,31	RC07GF472J -4.7K
1	R19	RC07GF561J -560 Ω , ALLEN BRADLEY
1	R17	PWS -2 Ω $\pm 10\%$, 5W, IRC
2	R25 R15	RC07GF821J -820 Ω , ALLEN BRADLEY
2	R43 R13	RC07GF562J -5.6K, ALLEN BRADLEY
1	R13	RC07GF182J RESISTOR-1.8K, ALLEN BRADLEY
-1	ITEM	DWG. OR PART NO. DESCRIPTION

ITEM	DWG. OR PART NO.	DESCRIPTION
2	R1245	RC07GF392J RESISTOR-3.9K, ALLEN BRADLEY
3	R44 R10,11	RC07GF332J -3.3K, ALLEN BRADLEY
1	R9	RC07GF682J -6.8K, ALLEN BRADLEY
4	R3043 R8,20	RC07GF100J -10 Ω , ALLEN BRADLEY
1	R6	RC20GF222J -2.2K, 1/2W, ALLEN BRADLEY
9	R39,41 R24,28 R18,24 R7,16 R5	RC07GF102J -1K, ALLEN BRADLEY
1	R4	RC07GF101J -100 Ω , ALLEN BRADLEY
2	R3,27	PWS -1 Ω $\pm 10\%$, 5 W, IRC
1	R2	RC07GF122J -1.2K, ALLEN BRADLEY
1	R1	RC07GF471J RESISTOR-470 Ω , ALLEN BRADLEY
-1	ITEM	DWG. OR PART NO. DESCRIPTION

CODE IDENT NO
20886

DR. RL WENNELL 4/24/67
CK RKM 4-28-67
ENG. JTB 5/24/67
APP. M. Leonard 5/24/67
USED ON

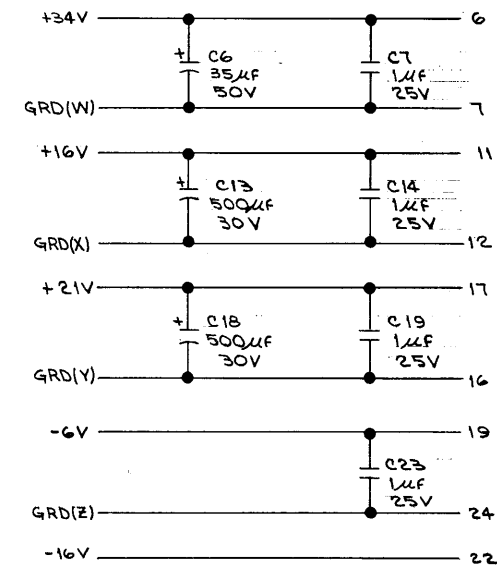
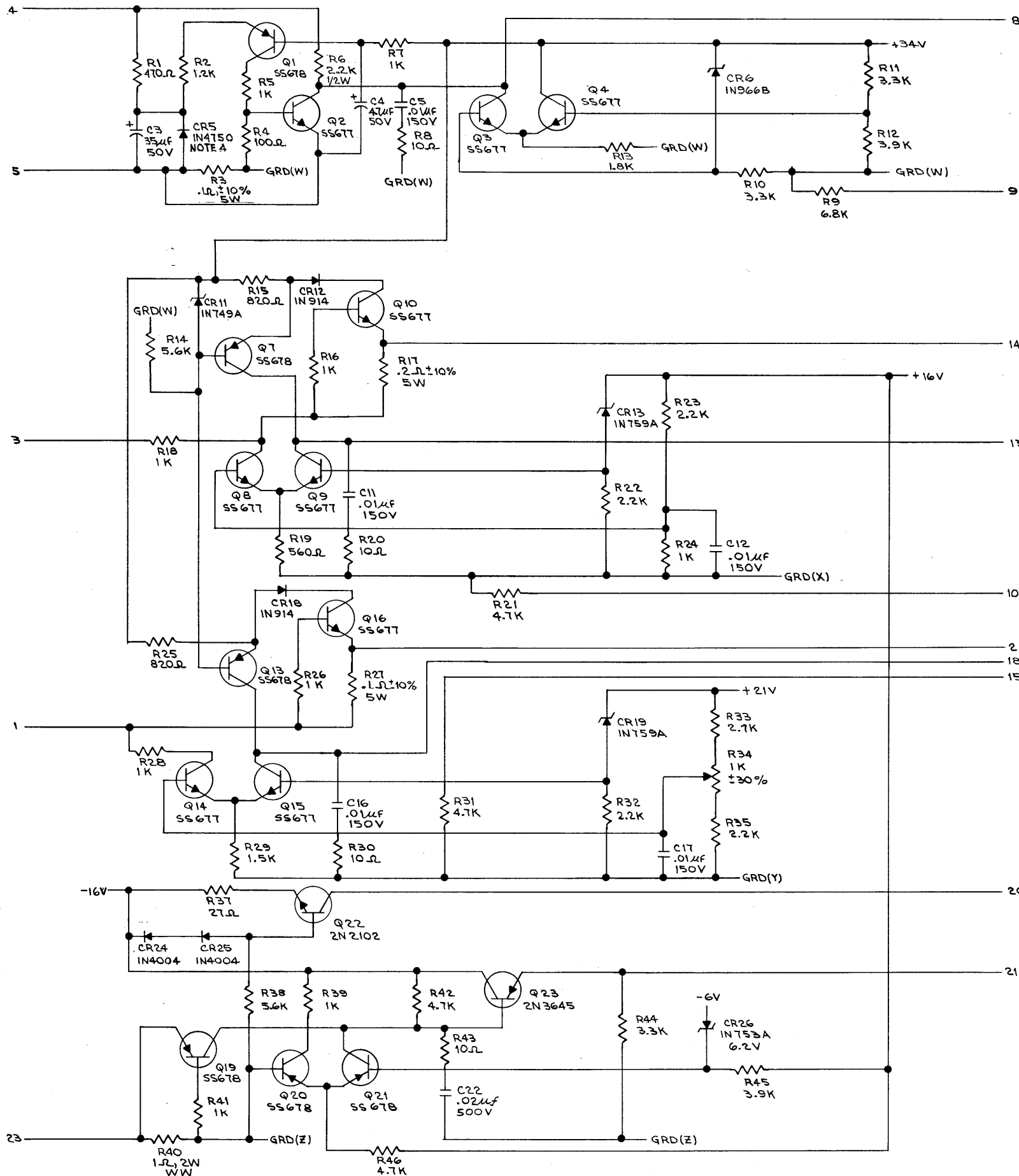
SEI SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA

SCHMETIC & ASSEMBLY MEMORY POWER SUPPLY

SIZE D 8279

NOTES:
1. SEE SH.1

SIZE	D	8279	REV.	E
REV.		DESCRIPTION	DATE	APPD
		SEE SH.1		

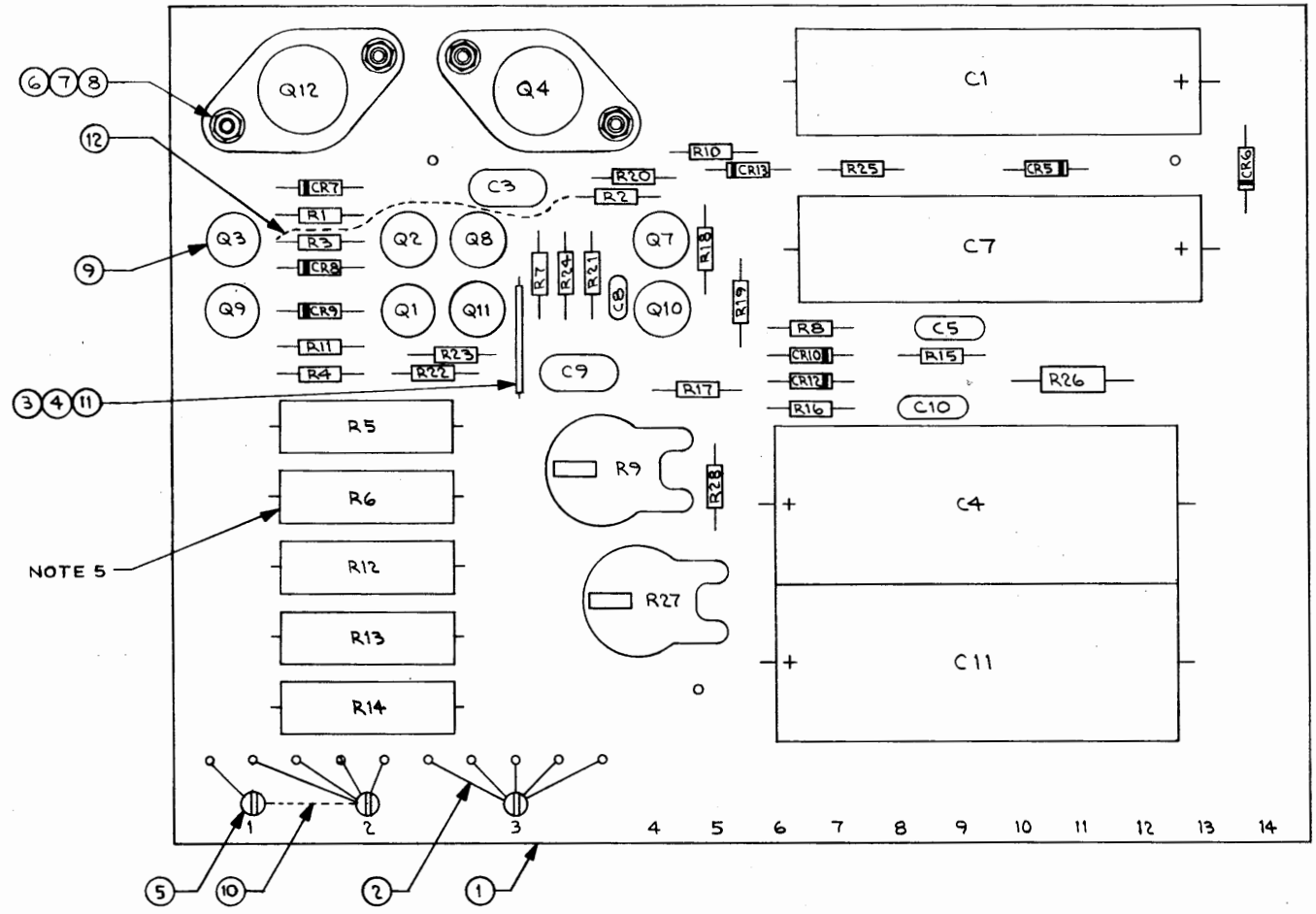


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	Systems Engineering Laboratories 6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
	DR RLW	4-19-67	SCHEMATIC & ASSEMBLY MEMORY POWER SUPPLY
	CHK RKM	4-28-67	
ENGR GEB	5-24-67		
PROJ W.CROWDER	5-24-67	CODE IDENT NO.	SIZE
APPD L.KLINGER	5-24-67	20886	D
NEXT ASSY		8279	REV. E

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING AND DIMENSIONAL DRAWING SEE C 15471.
 4.

REV	D	8280	REV	A
REV	DESCRIPTION	DATE	APP'D	
A	67-243; DELETED NOTE 4 & ALL COMPONENTS NOT CONNECTED TO CARD.	7/24/67	RKM	

5. R5, R6, R12, R13 & R14 ARE TO BE MOUNTED WITH SPACE BETWEEN COMPONENT & BOARD.



1	1	Q12	40250	TRANSISTOR - RCA
1	1	Q4		
3	3	Q10, Q9, Q8, Q3, Q2	55677	TRANSISTOR-MOTOROLA
1	1	Q1	55678	TRANSISTOR-MOTOROLA
1	1	CR13	1N752A	DIODE-5.6V, ZENER, MOTOROLA
1	1	CR12	1N754A	DIODE-6.8V, ZENER, MOTOROLA
1	1	CR9	1N914	DIODE-CLEVITE
1	1	CR7	1N749A	DIODE-4.3V, ZENER, MOTOROLA
2	2	CR56	1N4004	DIODE-MOTOROLA
1	1	C8	UK10-104	CAPACITOR-.1 μ F \pm 80%-20%, 10V, CRL
1	1	C10	5C13	CAPACITOR-1 μ F \pm 20%, 25V, SPRAGUE
1	1	C5	39D2586010G14	CAPACITOR-2500 μ F, 10V, SPRAGUE
1	1	C4	601PE	CAPACITOR-.033 μ F \pm 20% 50V, MYLAR GOODALL
1	1	C3		
2	2	C17	39D5076030FL4	CAPACITOR-500 μ F, 30V, SPRAGUE
1	1	12		JUMPER
1	1	11		JUMPER
1	1	10		JUMPER
4	8	9	B10369	UNIPAD
2	4	8		NUT- #4-40 ESNA
4	8	7		WASHER- #4, SHAKE PROOF, INT. TOOTH
2	4	6		SCREW- #4-40X7/16, RD HD, S/S
3	3	5	1785-2	TERMINAL-CTC
AR	AR	4	AWG 24	SLEEVING-TEFLON, THIN WALL
AR	AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
AR	AR	2	AWG 20	WIRE-SOLID COPPER, TINNED
1	1	1	SEL 983	PRINTED CIRCUIT (REV SEE A51140)
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

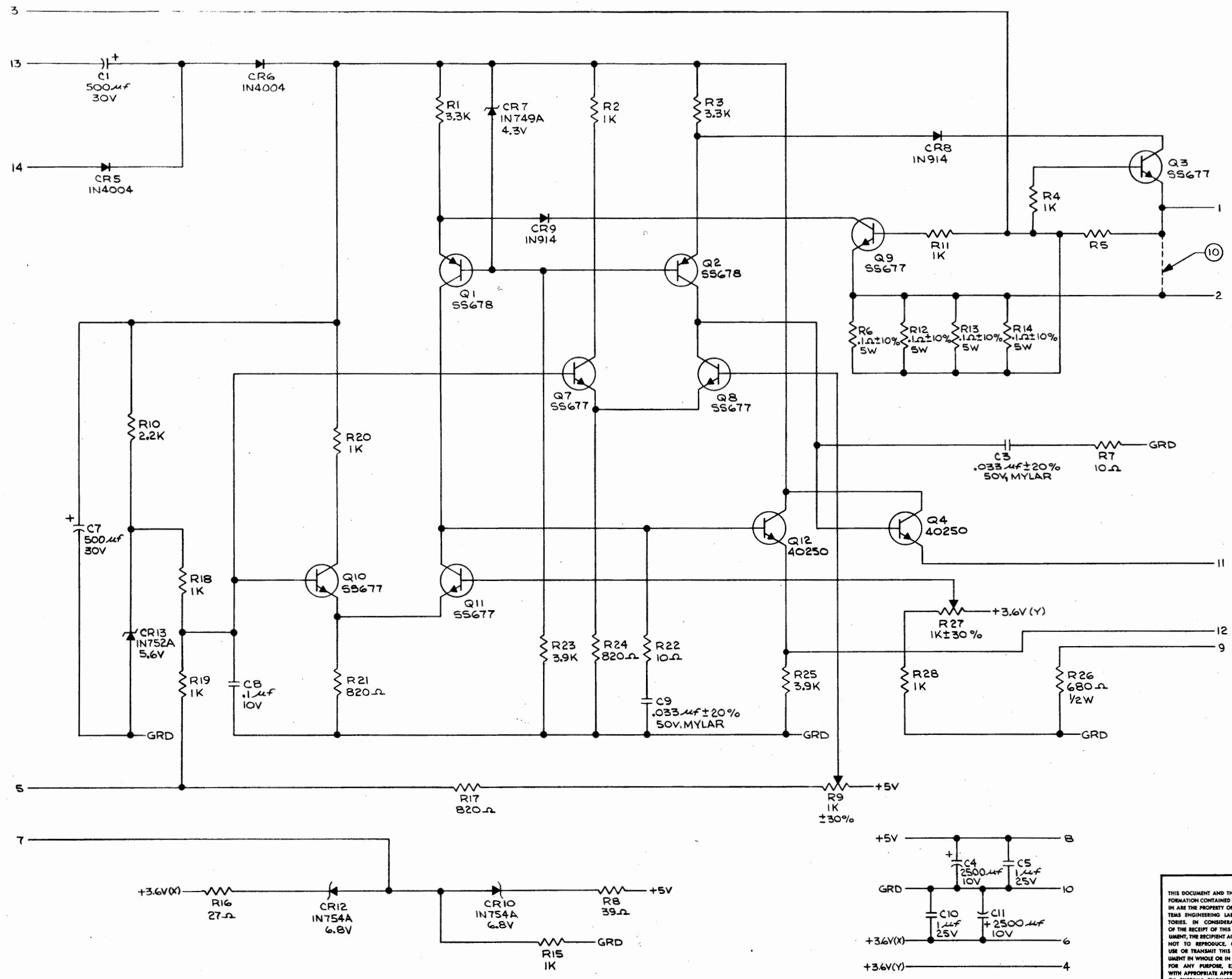
1	1	R26	RC20GF481J	RESISTOR-680 Ω , 1/2W, ALLEN BRADLEY
2	2	R23, 25	RC07GF392J	RESISTOR-3.9K
1	1	R24		
1	1	R21	RC07GF821J	RESISTOR-820 Ω
1	1	R17		
1	1	R16	RC07GF270J	RESISTOR-27 Ω
1	1	R10	RC07G222J	RESISTOR-2.2K, ALLEN BRADLEY
1	1	R27	MTC-4	POTENTIOMETER-1K \pm 30%, MALLORY
1	1	R9		
1	1	R8	RC07GF390J	RESISTOR-39 Ω , ALLEN BRADLEY
1	1	R22	RC07GF100J	RESISTOR-10 Ω , ALLEN BRADLEY
1	1	R7		
4	4	R13, 14, R6, 12	PWS NOTE 5	RESISTOR-.1 Ω \pm 10%, 5W, IRC
1	1	R5	PWS NOTE 5	RESISTOR-.2 Ω \pm 10%, 5W, IRC
6	6	R20, 28, R18, 19, R11, 15	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
2	2	R24		
1	1	R3	RC07GF332J	RESISTOR-33K, ALLEN BRADLEY
1	1	R1		
-2	-1	ITEM	DWG OR PART NO.	DESCRIPTION

CODE IDENT NO. 20886

DR. R. WENNEL	5/2/67	SCHEMATIC & ASSEMBLY 3.0V & 5V POWER SUPPLY	REV A
CC RKM	5-8-67		
ENG. RKB	5/24/67		
PROJ. APP. [Signature]	5/24/67		
APP. [Signature]	5/24/67		
SIZE	D	8280	

NOTES
1. SEE SH. 1

SIZE D	8280	REV. A
REV.	DESCRIPTION	DATE APPD
	SEE SH. 1	

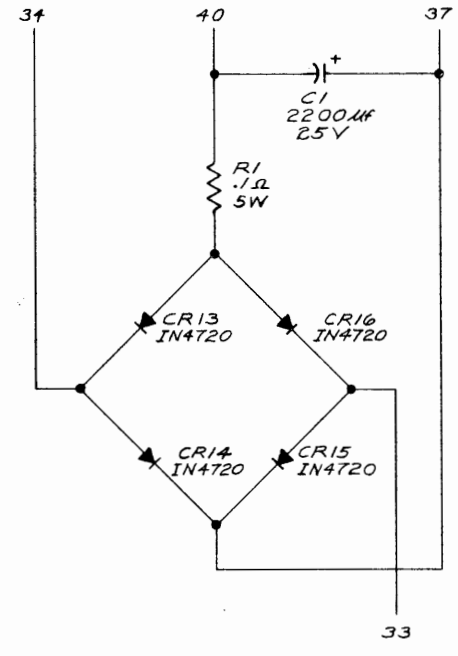
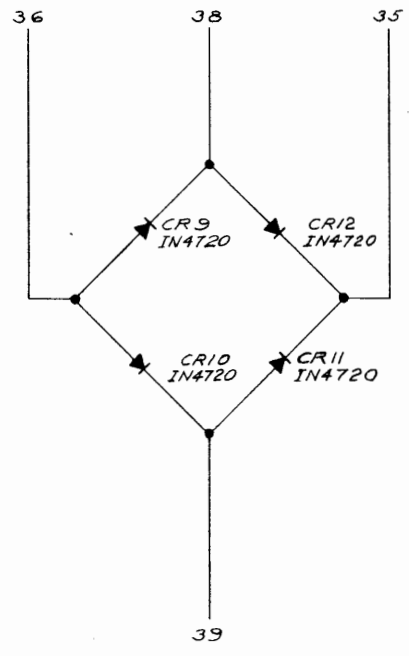
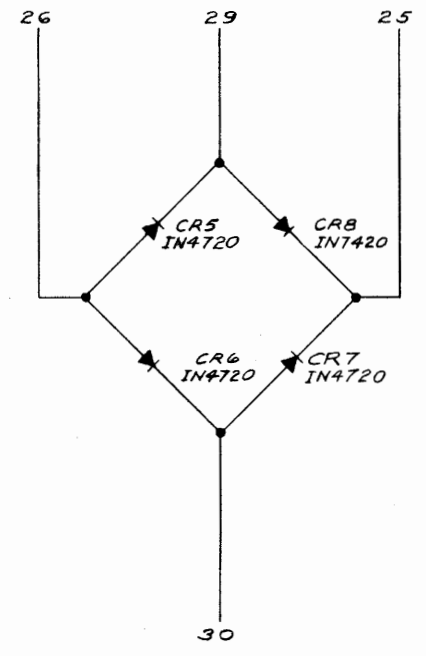
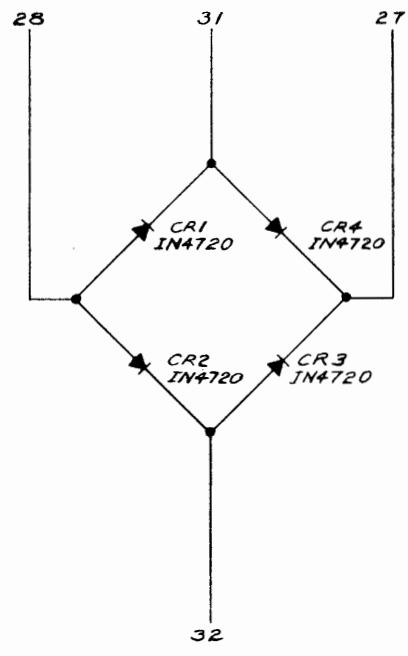
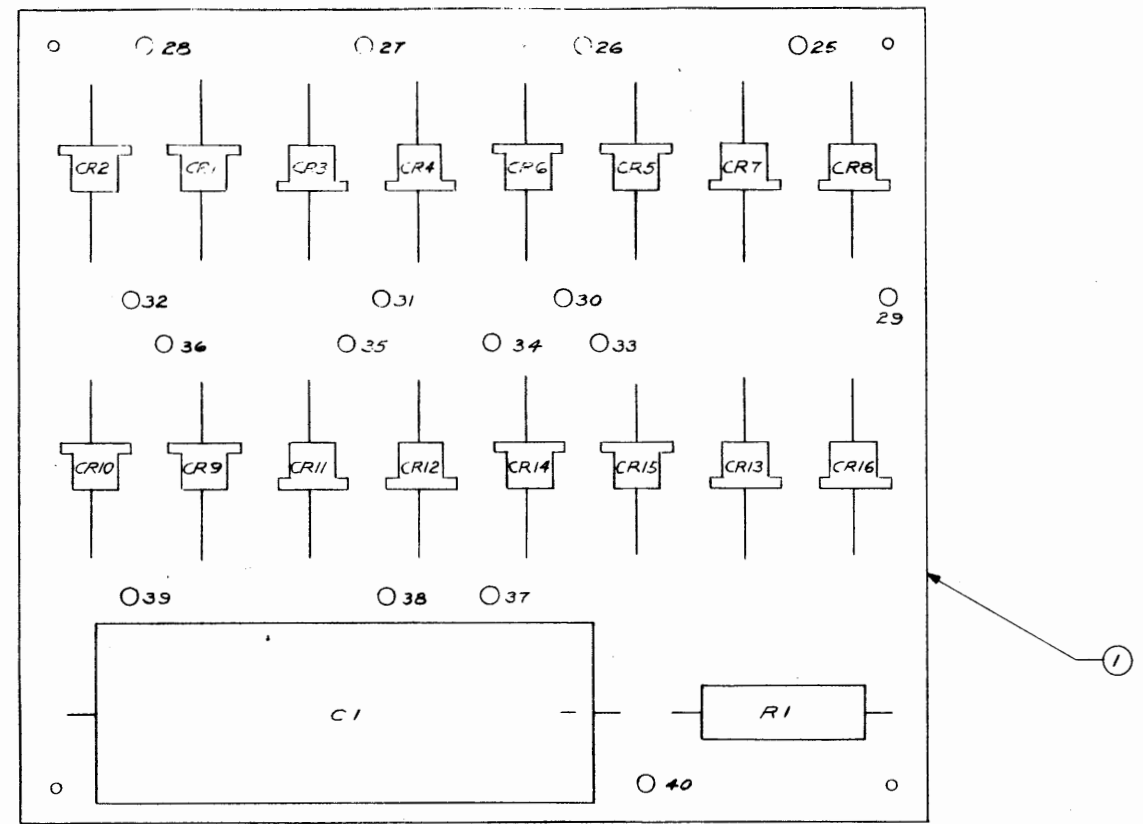


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ITEM	DWG. OR PART NO.	DESCRIPTION
Systems Engineering Laboratories		
8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DR R.L.WENNELL	4/27/67	SCHEMATIC & ASSEMBLY 3.6V & 5V POWER SUPPLY
CHK R.K.M.	5/8/67	
ENGR G.E.B.	5/24/67	
PROJ.W.CROWDER	5/24/67	
APPDL KLINGLER	5/24/67	
NEXT ASSY		
CODE IDENT NO.	SIZE	REV.
20886	D	8280 A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE C15474
 4. FOR COMPLETE SCHEMATIC OF POWER SUPPLY MODEL 222 SEE D53124

REV	DESCRIPTION	DATE	APP'D
D	8281		



1	R1	PWS	RESISTOR-.1Ω, 5W, WW, IRC
16	CR16 THRU CR1	IN4720	DIODE- IRC
1	C1	39D22B6025H40	CAPACITOR-2200µF, 25V, SPRAGUE
1	1	SEL984	PRINTED CIRCUIT (REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. M. RICHARDS	4-4-67	SCHEMATIC & ASSEMBLY MEMORY RECTIFIERS	
CL. RKM	4-5-67		
ENGR. <i>W. L. ...</i>	6/22/67		
PROJ. <i>W. L. ...</i>	6/22/67		
AV. <i>W. L. ...</i>	6/23/67	SIZE	D

CODE IDENT NO.
20886

8281

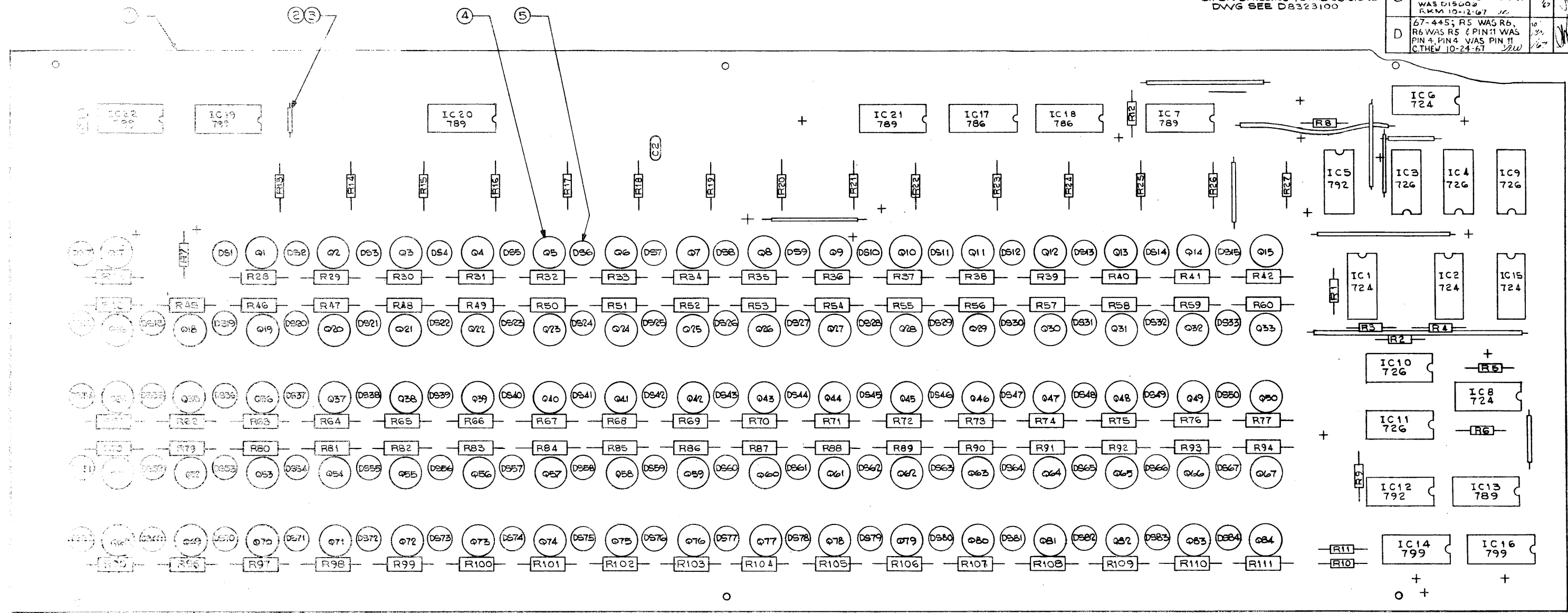
NOTE:
 1. ALL PARTS TO BE LISTED IN THE BILL OF MATERIALS SHOULD BE SPECIFIED BY PART NUMBER AND QUANTITY.
 2. ALL PARTS TO BE LISTED IN THE BILL OF MATERIALS SHOULD BE SPECIFIED BY PART NUMBER AND QUANTITY.
 3. ALL PARTS TO BE LISTED IN THE BILL OF MATERIALS SHOULD BE SPECIFIED BY PART NUMBER AND QUANTITY.
 4. ALL PARTS TO BE LISTED IN THE BILL OF MATERIALS SHOULD BE SPECIFIED BY PART NUMBER AND QUANTITY.
 5. ALL PARTS TO BE LISTED IN THE BILL OF MATERIALS SHOULD BE SPECIFIED BY PART NUMBER AND QUANTITY.



858	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS $\pm 5\%$, 1/4 W.
 3. FOR DRILLING & DIMENSIONAL DWG SEE D8323100

SIZE	D	8282	REV.	D
REV.	C	DESCRIPTION	DATE	APPD
		67-428: PC NO. WAS SEL. 320 C DRILLING & DIMENSIONAL DWG. NO. WAS D15009 RKM 10-12-67	10/12/67	
	D	67-445: R5 WAS R6, R6 WAS R5 & PIN 11 WAS PIN 4, PIN 4 WAS PIN 11 C.THEW 10-24-67	10/25/67	



ITEM	DWG. OR PART NO.	DESCRIPTION
84	Q84 THRU Q1	SS677 TRANSISTOR-MOTOROLA
84	R111 THRU R28	RC20GF122J RESISTOR-1.2K 1/2 W, ALLEN BRADLEY
1	R12	RC07GF561J RESISTOR-560 Ω
2	R11 THRU R10	RC07GF104J RESISTOR-100 Ω
24	R27 THRU R1	RC07GF47J RESISTOR-470 Ω , ALLEN BRADLEY

ITEM	DWG. OR PART NO.	DESCRIPTION
2	IC18 THRU IC17	MCT86P
4	IC22 THRU IC14	MCT99P
4	IC21 THRU IC13	MCT89P
2	IC12 THRU IC5	MCT92P
5	IC9 THRU IC3	MCT26P
5	IC15 THRU IC1	MCT24P

ITEM	DWG. OR PART NO.	DESCRIPTION
84	DS84 THRU DS1	334 LAMP-GENERAL ELECTRIC
2	C2 C1	UK-10-104 CAPACITOR-.1UF+80-20%, 10V, CRL
84	5	25-35-XPI2 LAMP SOCKET-LEECRAFT
84	4	B 10369 UNIPAD
A R	3	24 AWG SLEEVING-TEFLON, THINWALL
A R	2	24 AWG WIRE-SOLID COPPER, TINNED
1	1	3231 PRINTED CIRCUIT (FOR REV SEE A53107)

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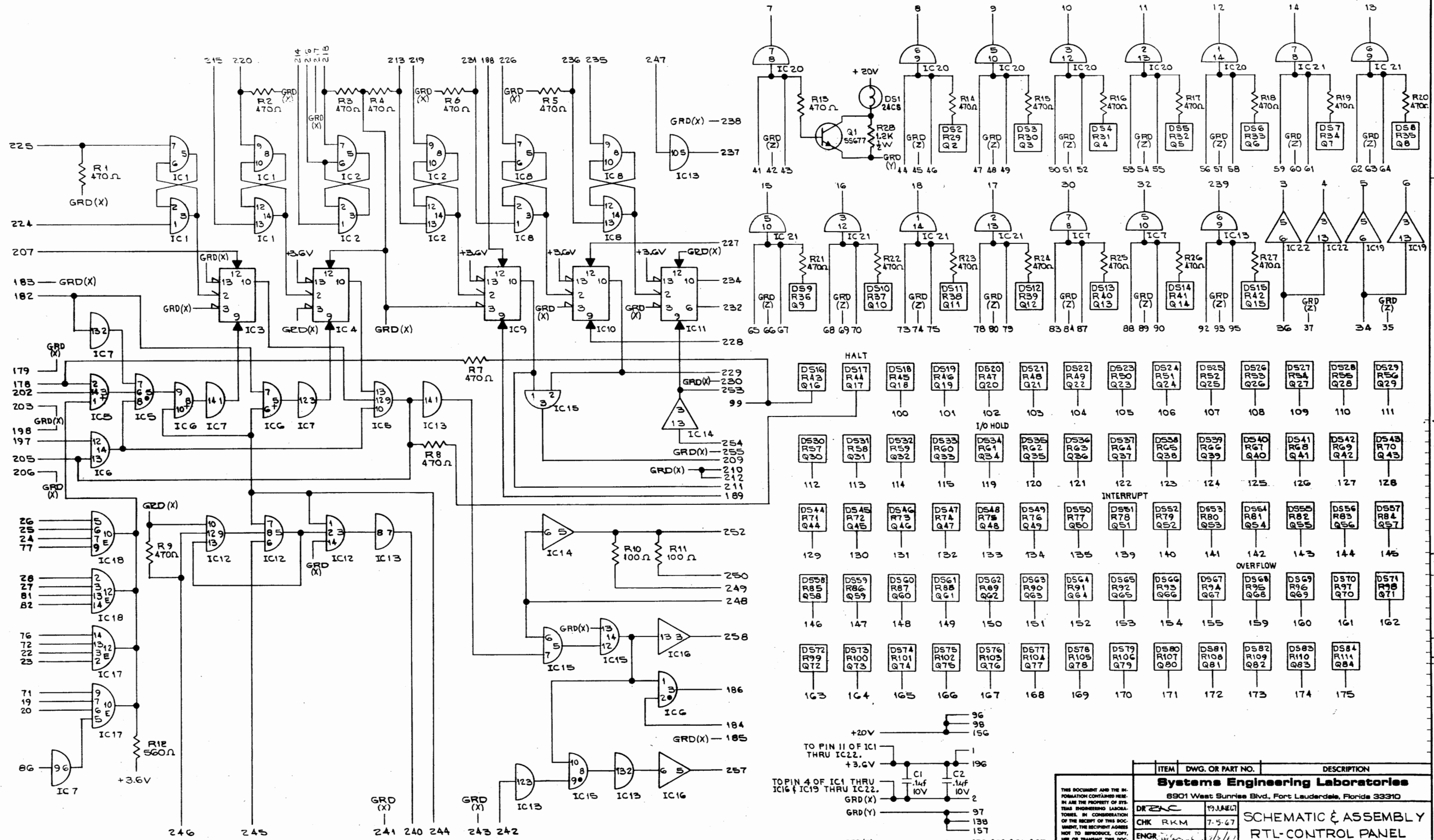
DR: RKM 19 JUNE 67
 CHK: RKM 7-5-67
 ENGR: [Signature]
 PROJ: [Signature]
 APPD: [Signature]
 NEXT ASSY: [Signature]

SCHEMATIC & ASSEMBLY
 RTL-CONTROL PANEL

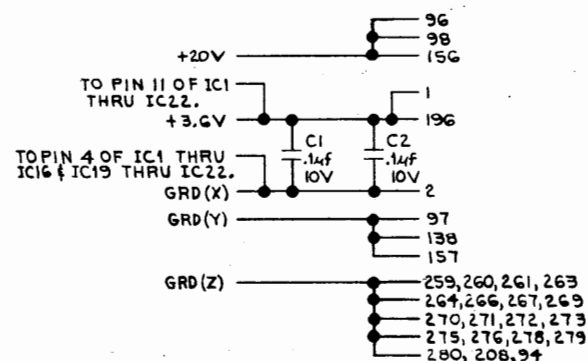
CODE IDENT NO. 20886 SIZE D 8282 REV. D

NOTES:
1. SEE SHEET 1.

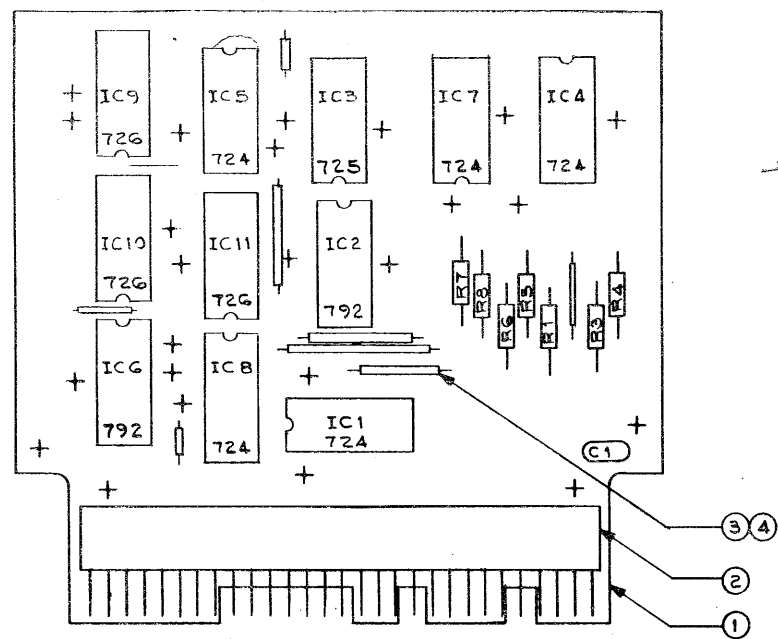
SIZE	D	8282	REV.	D
REV.		DESCRIPTION	DATE	APPD
		SEE SHT. 1		



DS16 R43 Q16	DS17 R44 Q17	DS18 R45 Q18	DS19 R46 Q19	DS20 R47 Q20	DS21 R48 Q21	DS22 R49 Q22	DS23 R50 Q23	DS24 R51 Q24	DS25 R52 Q25	DS26 R53 Q26	DS27 R54 Q27	DS28 R55 Q28	DS29 R56 Q29
DS30 R57 Q30	DS31 R58 Q31	DS32 R59 Q32	DS33 R60 Q33	DS34 R61 Q34	DS35 R62 Q35	DS36 R63 Q36	DS37 R64 Q37	DS38 R65 Q38	DS39 R66 Q39	DS40 R67 Q40	DS41 R68 Q41	DS42 R69 Q42	DS43 R70 Q43
DS44 R71 Q44	DS45 R72 Q45	DS46 R73 Q46	DS47 R74 Q47	DS48 R75 Q48	DS49 R76 Q49	DS50 R77 Q50	DS51 R78 Q51	DS52 R79 Q52	DS53 R80 Q53	DS54 R81 Q54	DS55 R82 Q55	DS56 R83 Q56	DS57 R84 Q57
DS58 R85 Q58	DS59 R86 Q59	DS60 R87 Q60	DS61 R88 Q61	DS62 R89 Q62	DS63 R90 Q63	DS64 R91 Q64	DS65 R92 Q65	DS66 R93 Q66	DS67 R94 Q67	DS68 R95 Q68	DS69 R96 Q69	DS70 R97 Q70	DS71 R98 Q71



ITEM	DWG. OR PART NO.	DESCRIPTION
Systems Engineering Laboratories		
8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DR	RAC	19JAN67
CHK	RKM	7-5-67
ENGR		7/5/67
PROJ		7/5/67
APPD		7/5/67
NEXT ASSY		
CODE IDENT NO.	SIZE	REV.
20886	D 8282	D

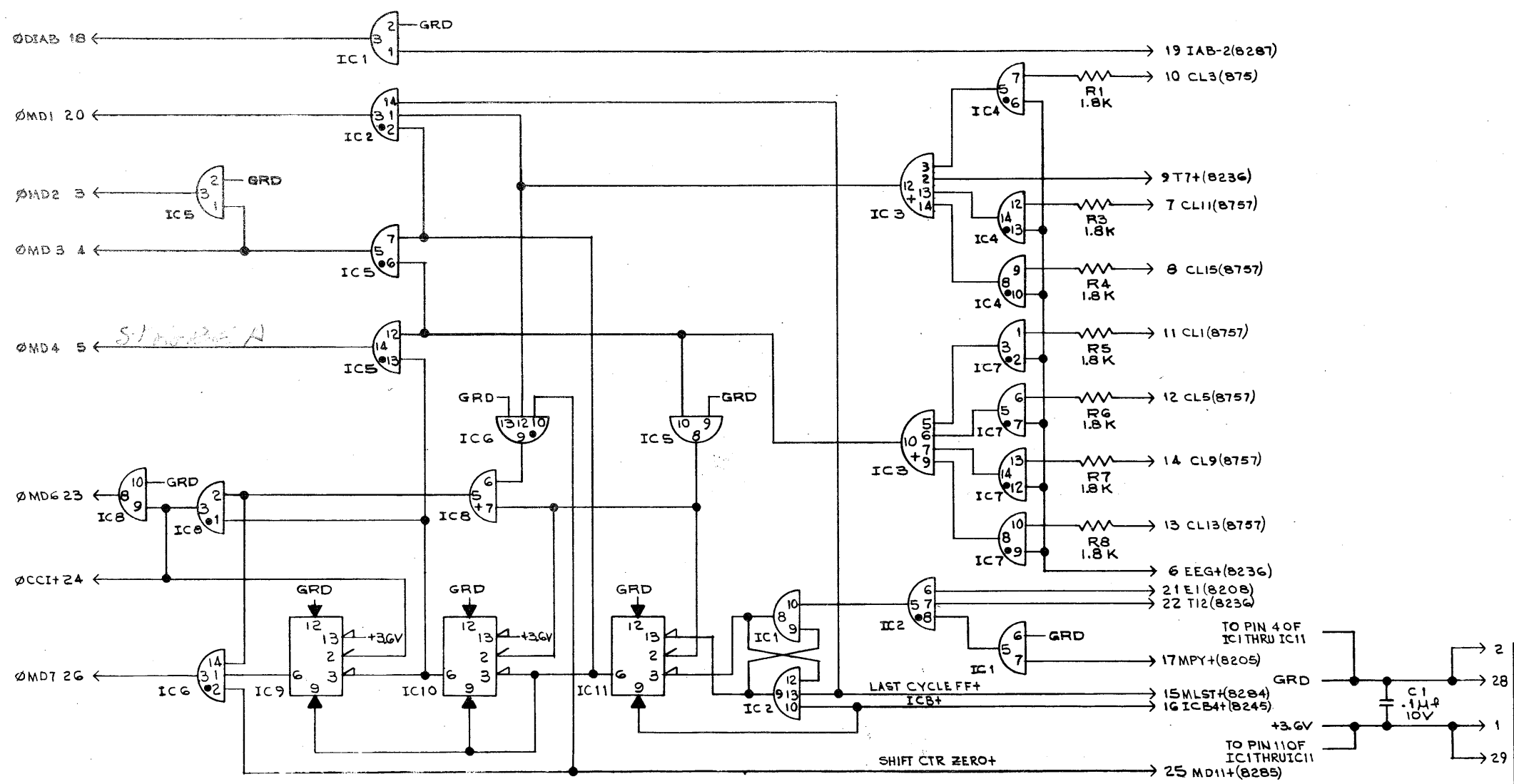


- DIAB+ DIVIAB+
- MD1 MI&M15 STROBE
- MD2 X1&X2 STROBE
- MD3 "A" STROBE
- MD6
- CC1+
- MD7 SHIFT CTR DECREMENT

- 19 IAB-2(8287)
- 10 CL3(8757)
- 9 T7+(8236)
- 7 CL11(8757)
- 8 CL15(8757)
- 11 CL1(8757)
- 12 CL5(8757)
- 14 CL9(8757)
- 13 CL13(8757)
- 6 EEG+(8236)
- 21 E1(8208)
- 22 T12(8236)
- 17 MPY+(8205)
- 15 LAST CYCLE FF+ MLST+(8284)
- 16 ICB+ ICB4(8245)
- 25 SHIFT CTR ZERO+ MD11+(8285)

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4 W.
 3. FOR DRILLING DWG SEE D 8600-990.
 FOR DIMENSIONAL DWG SEE C8600.

REV.	DESCRIPTION	DATE	APPD	REV. C
D	8283			
A	G7-200; DELETED PIN 27. L.G. 6/20/67	6/21/67		
B	G7-316; DELETED R2 AND PINS 1, 2 & 3 OF IC4. LOGIC ON PIN 9 WAS CLT. G7W 8-29-67	8/30/67		
C	G7-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-26-67.	10/30/67		



7	R8 R7 R6 R5 R4 R3 R1	RC07GF182J	RESISTOR - 1.8K, ALLEN BRADLEY
3	IC11 IC10 IC9	MC 726 P	INTEGRATED CIRCUIT-MOTOROLA
1	IC6	MC 725 P	
2	IC3 IC2	MC 792 P	
5	IC8 IC7 IC5 IC4 IC1	MC 724 P	
1	C1	UK10-104	
AR 4	AWG 24		SLEEVEING-TEFLON, THINWALL (COLOR)
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1 2	00-7022-029-000-001		CONNECTOR - ELCO
1 1	SEL 990		PRINTED CIRCUIT(FOR REV SEE ASHW)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

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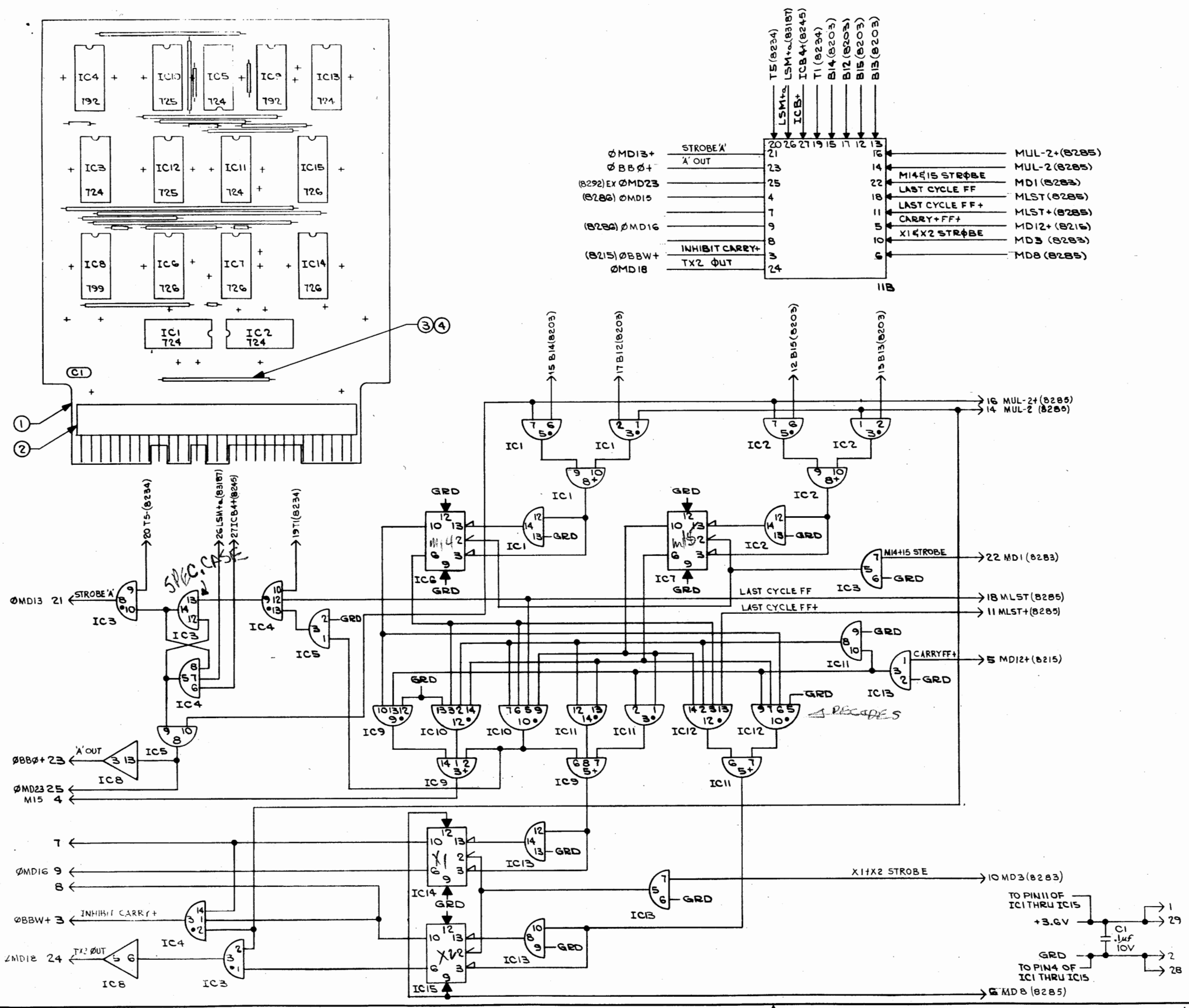
DR	RKM	19MAY67
CHK	RKM	5-24-67
ENGR	W. K. ...	6/1/67
PROJ	...	3/8/67
APPD	...	6/8/67
NEXT ASSY		

SCHEMATIC & ASSEMBLY
 RTL MPY/DIV CONTROL 1

CODE IDENT NO.	SIZE	REV.
20886	D	8283 C

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING & DIMENSIONAL DWG. SEE D15387.

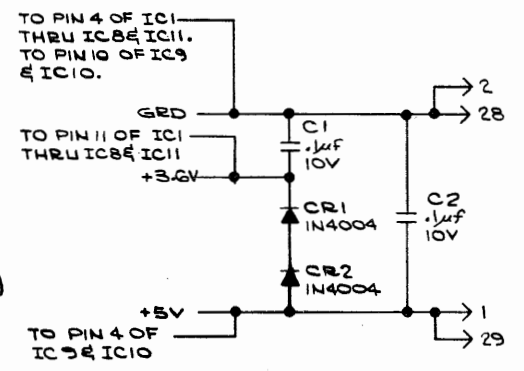
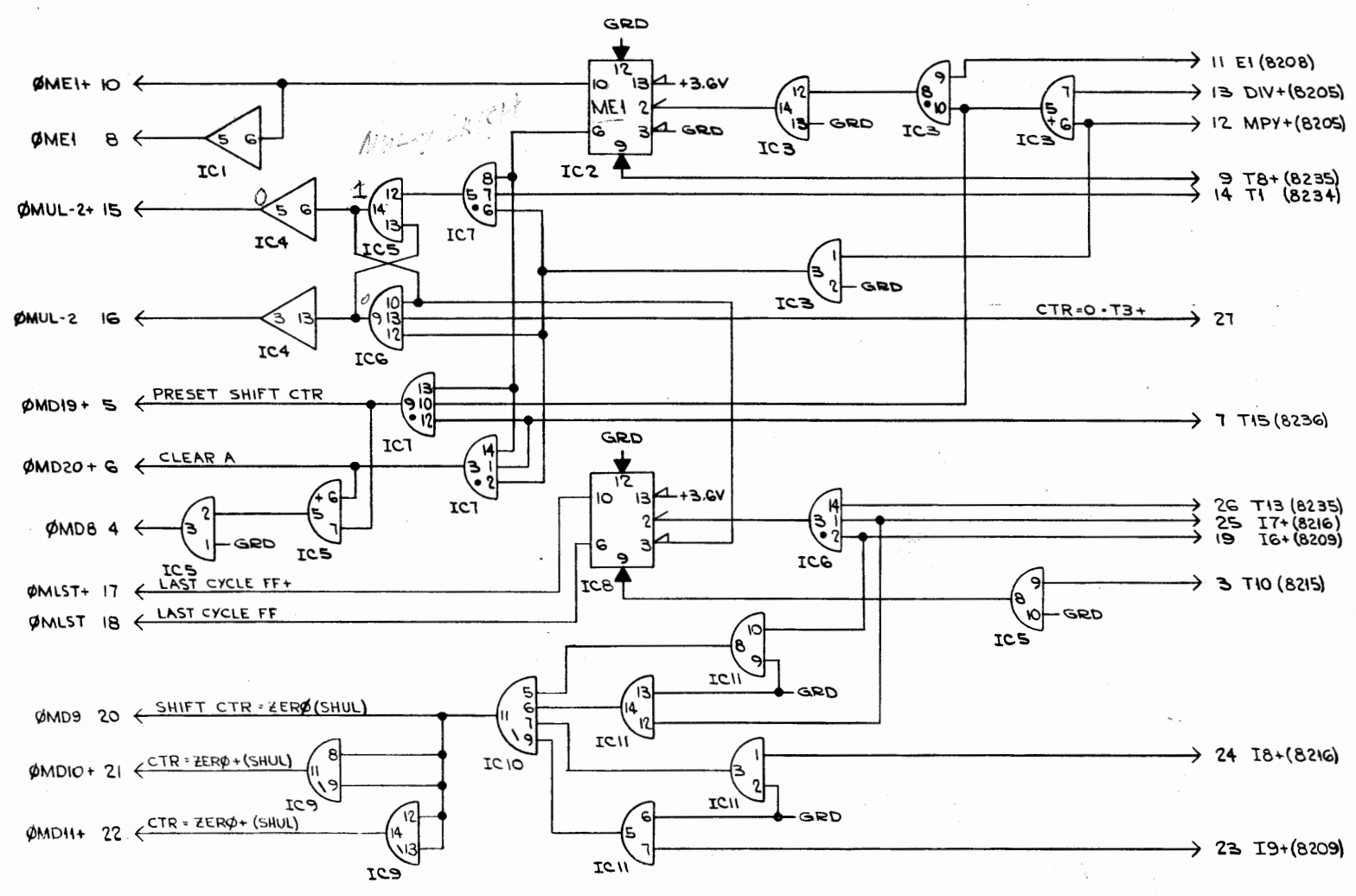
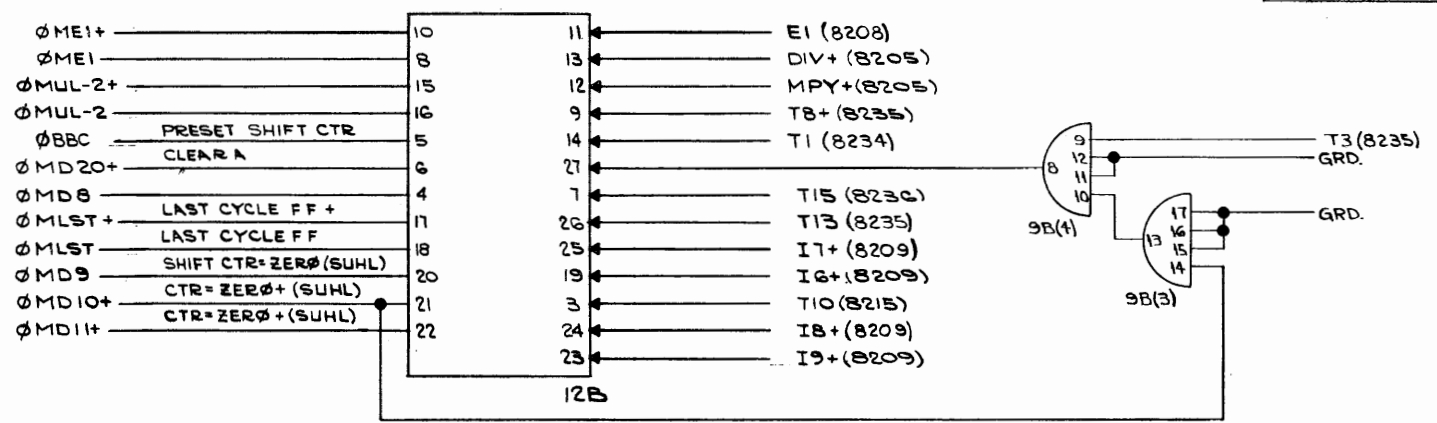
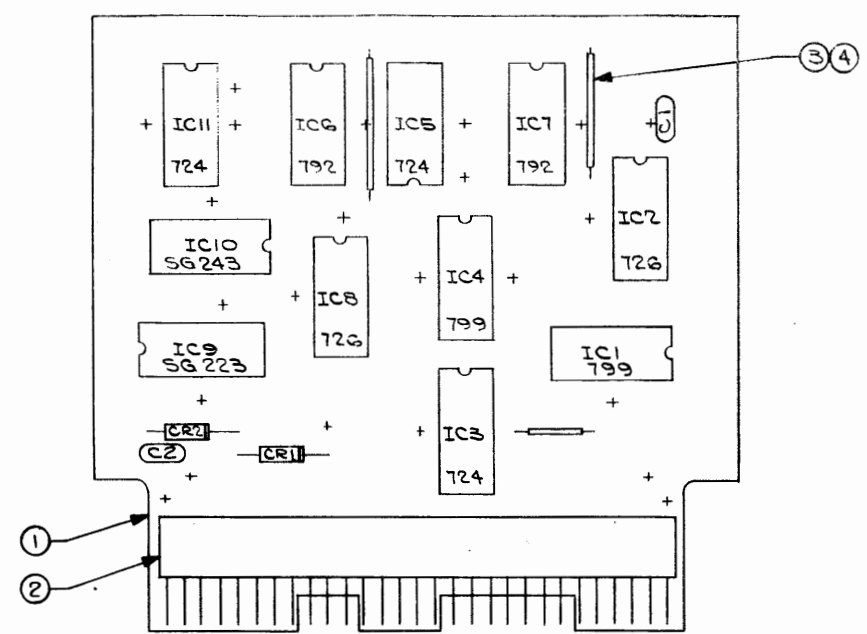
REV	D	DESCRIPTION	DATE	APP'D
A		67-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-27-67	10/27/67	[Signature]



QTY	REF	PART NO.	DESCRIPTION			
2	IC12	MC725P	INTEGRATED CIRCUIT-MOTOROLA			
1	IC10	MC725P				
1	IC8	MC799P				
4	IC14	MC726P				
	IC7	MC726P				
	IC6	MC726P				
2	IC9	MC792P				
	IC4	MC792P				
6	IC11	MC724P				
	IC5	MC724P				
	IC3	MC724P				
	IC2	MC724P				
	IC1	MC724P				
1	C1	UK-10-104		CAPACITOR-1uf-80-20%,10V,CRL		
AR	4	AWG 24		SLEEVING-TEFLON, THINWALL		
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED			
1	2	00-1022-079-000-001	CONNECTOR-ELCO			
1	1	SEL 976	PRINTED CIRCUIT (REV. SEE A51140)			
-1	ITEM	DWG. OR PART NO.	DESCRIPTION			
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA						
DR	[Signature]	5-18-67	SCHEMATIC & ASSEMBLY RTL MPY/DIV CONTROL #2			
CE	RKM	5-22-67				
ENGR	[Signature]	6-1-67				
PROJ. APP.	[Signature]	1/1/67				
APP.	[Signature]	2/5/67				
CODE IDENT. NO.	20886	SIZE	D	8284	REV	A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DIMS SEE D 8600-9TT.
 FOR DIMENSIONAL DWG SEE C 8600.

REV.	DESCRIPTION	DATE	APPD.
D	8285		
A	67-204; REVISED LOGIC OF PINS 10, 11, 14 & 26. BB. 6-27-67 RKM	7/12/67	[Signature]
B	67-445; ADDED 9B(3), 9B(4) ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-27-67	11/29/67	[Signature]



QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
1	IC10	SG 243	INTEGRATED CIRCUIT-SYLVANIA
1	IC9	SG 223	INTEGRATED CIRCUIT-SYLVANIA
2	IC7	MC 792P	INTEGRATED CIRCUIT-MOTOROLA
3	IC5	MC 724P	
3	IC3	MC 724P	
2	IC8	MC 726P	
2	IC4	MC 799P	
2	CR2	IN4004	DIODE-MOTOROLA
2	CR1	IN4004	DIODE-MOTOROLA
2	C2	UK-10-104	CAPACITOR-.1µf±80-20%,10V,CRL
1	C1	UK-10-104	CAPACITOR-.1µf±80-20%,10V,CRL
AR 4	AWG 24		SLEEVING-TEFLON, THINWALL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1 2	DD-7072-029-000-001		CONNECTOR-ELCO
1	1	SEL 917	PRINTED CIRCUIT (REV. SEE AS1140)

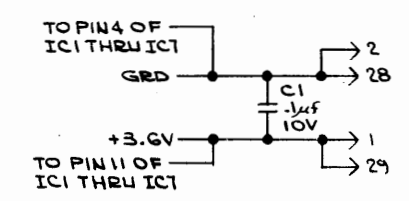
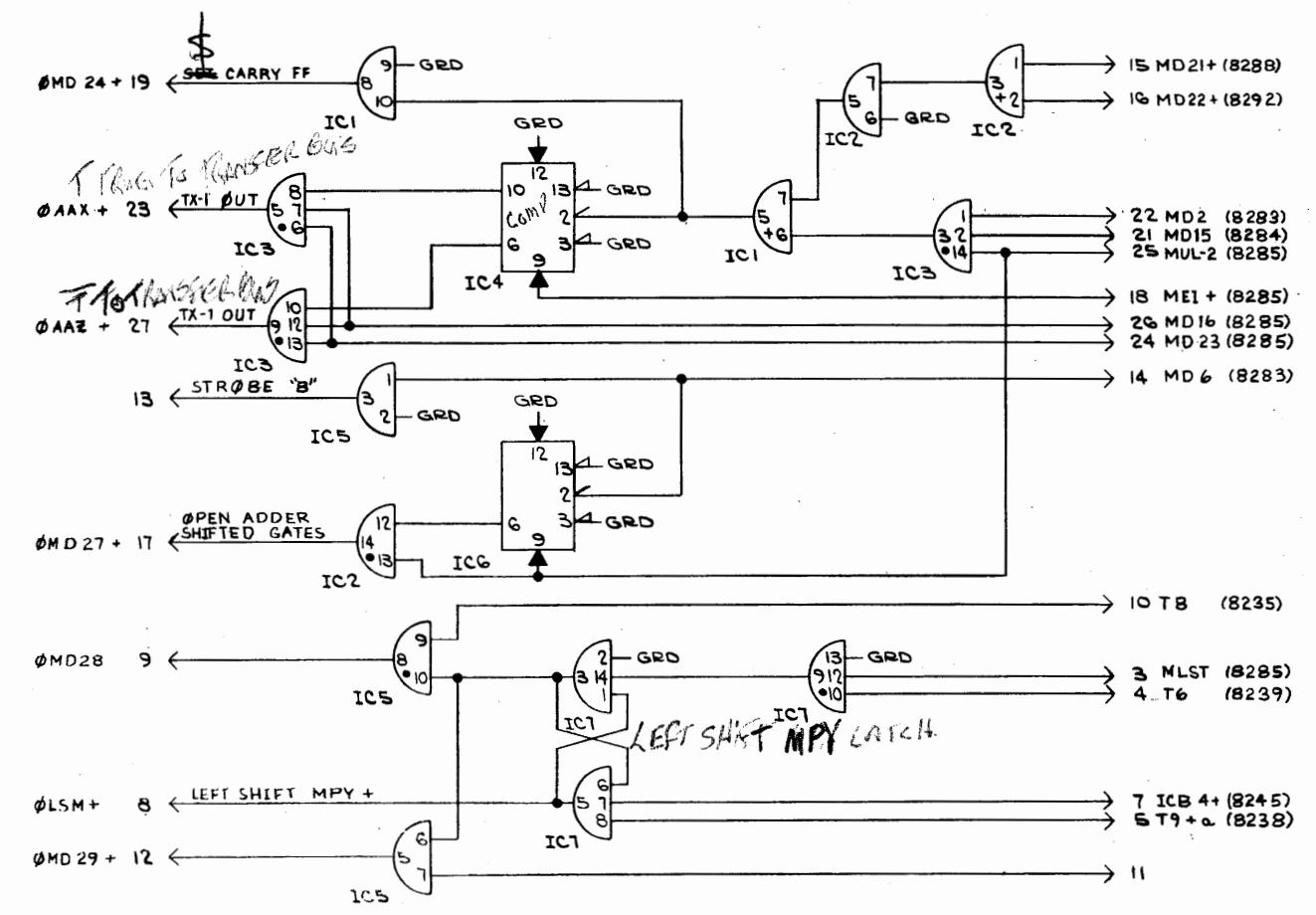
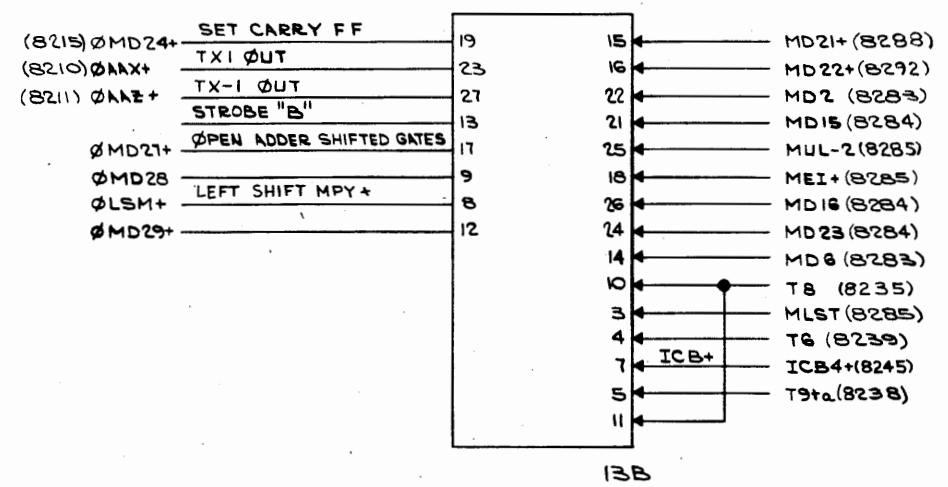
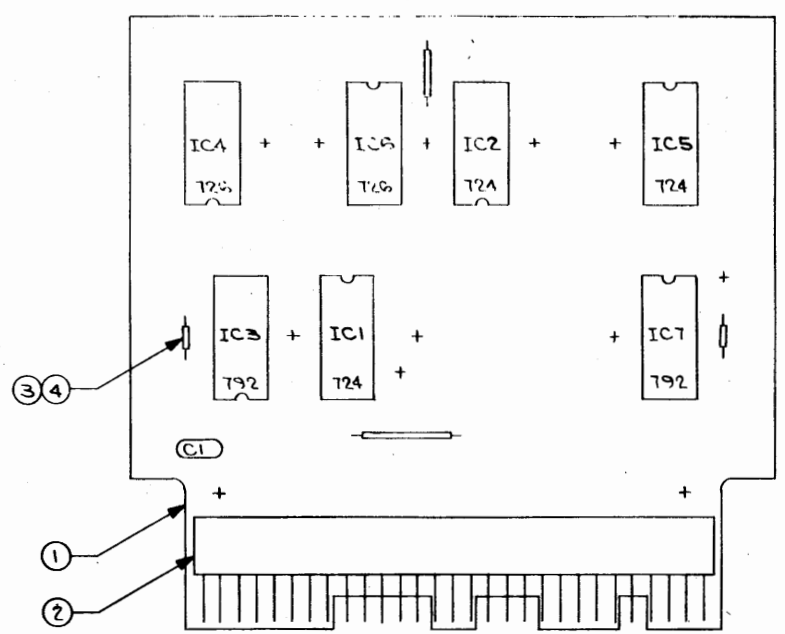
Systems Engineering Laboratories
 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

DR [Signature]	5-19-67	SCHEMATIC & ASSEMBLY RTL-MPY/DIV CONTROL 3
CHK RKM	5-23-67	
ENGR [Signature]	6-1-67	
PROJ [Signature]	6/7/67	
APPD [Signature]	6/3/67	

CODE IDENT NO. 20886 SIZE D 8285 REV. B

SIZE	D	8286	REV.	A
REV.	A	DESCRIPTION	DATE	APPD
		67-445; ADDRESSES REVISED & LINE TITLES ADDED.	10/29/67	JW
		C. THEW 10-27-67		

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D8600-978.
 FOR DIMENSIONAL DWG. SEE C8600.



2	IC6	MC726P	INTEGRATED CIRCUIT-MOTOROLA
2	IC7	MC792P	
3	IC3	MC724P	
1	C1	UK-10-104	CAPACITOR-.1uF±80-20%,10V,CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 978	PRINTED CIRCUIT (REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

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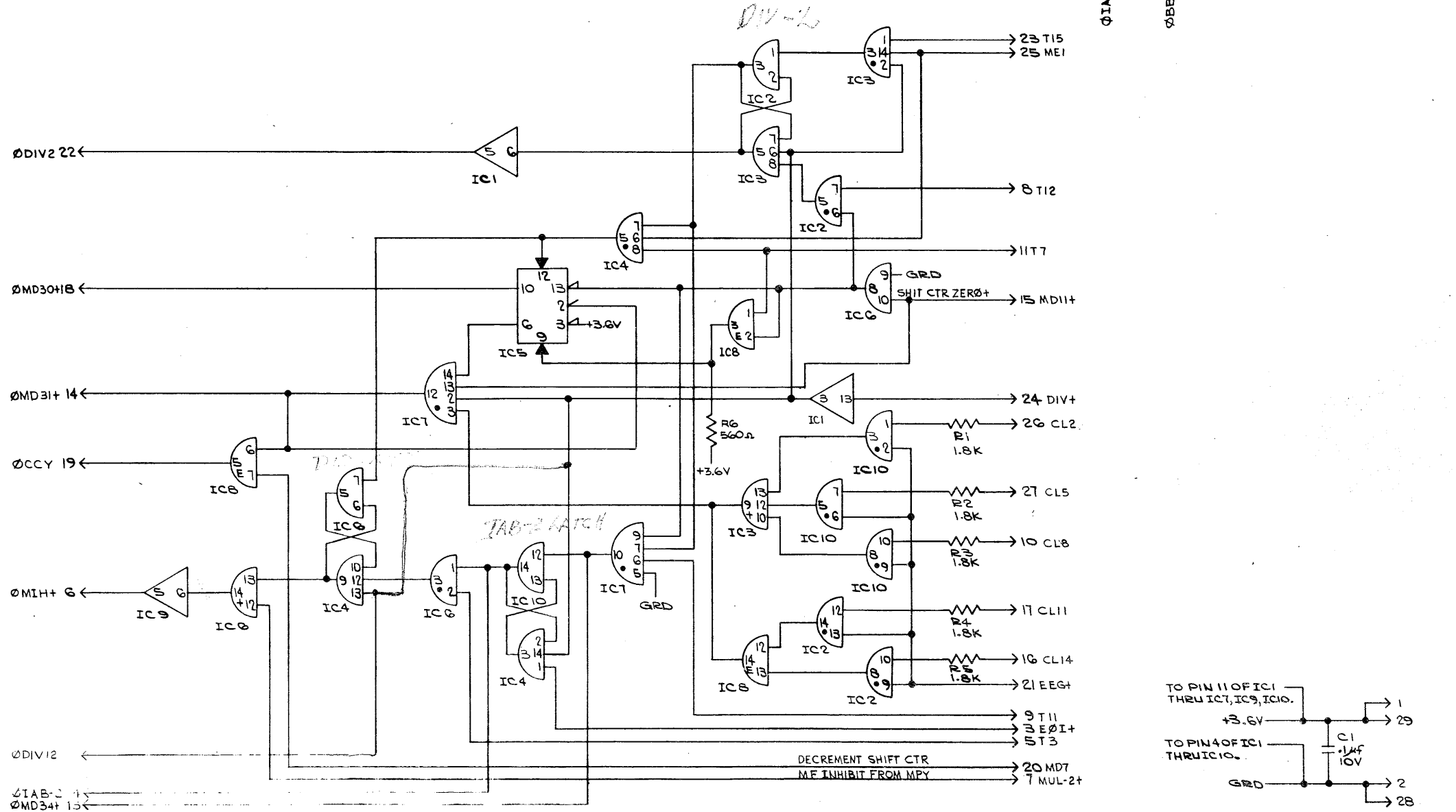
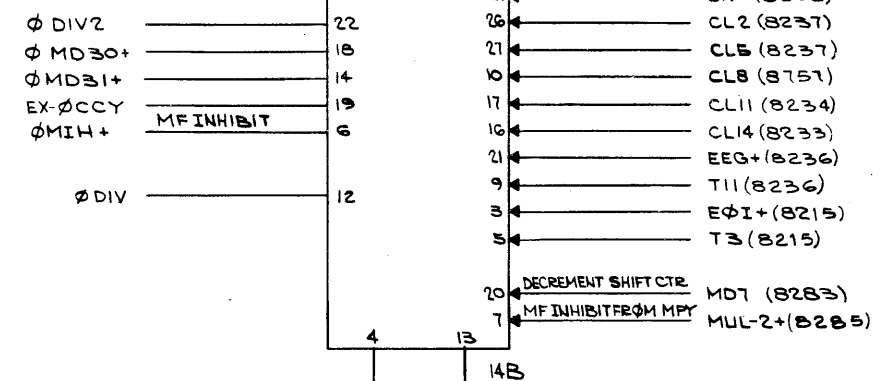
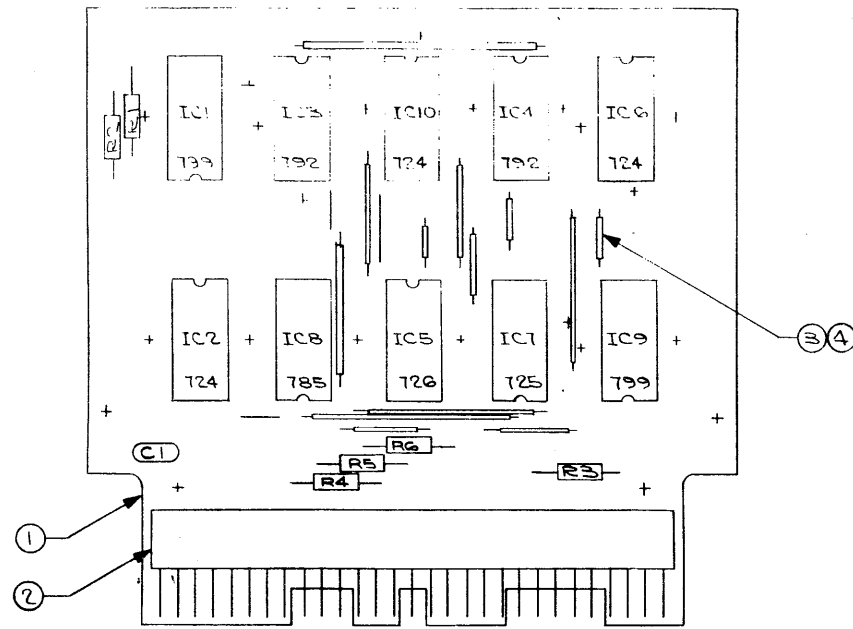
Systems Engineering Laboratories
 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

DR	5-20-67	SCHEMATIC & ASSEMBLY RTL-MPY/DIV CONTROL #4
CHK	RKM 5-23-67	
ENGR	6/3/67	
APPD	6/8/67	
NEXT ASSY		

CODE IDENT NO.	SIZE	REV.
20886	D	8286
		A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4W.
 3. FOR DRILLING DWG. SEE D 8000-991.
 FOR DIMENSIONAL DWG. SEE C8600.

SIZE	REV.	DESCRIPTION	DATE	APPD
D	3287			
A	67-288; ADDED R6 - REV. TO LATEST PC CHANGE. R. HUGHES 8/15/67 GW	8/15/67		
B	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-27-67. GW	10/30/67		

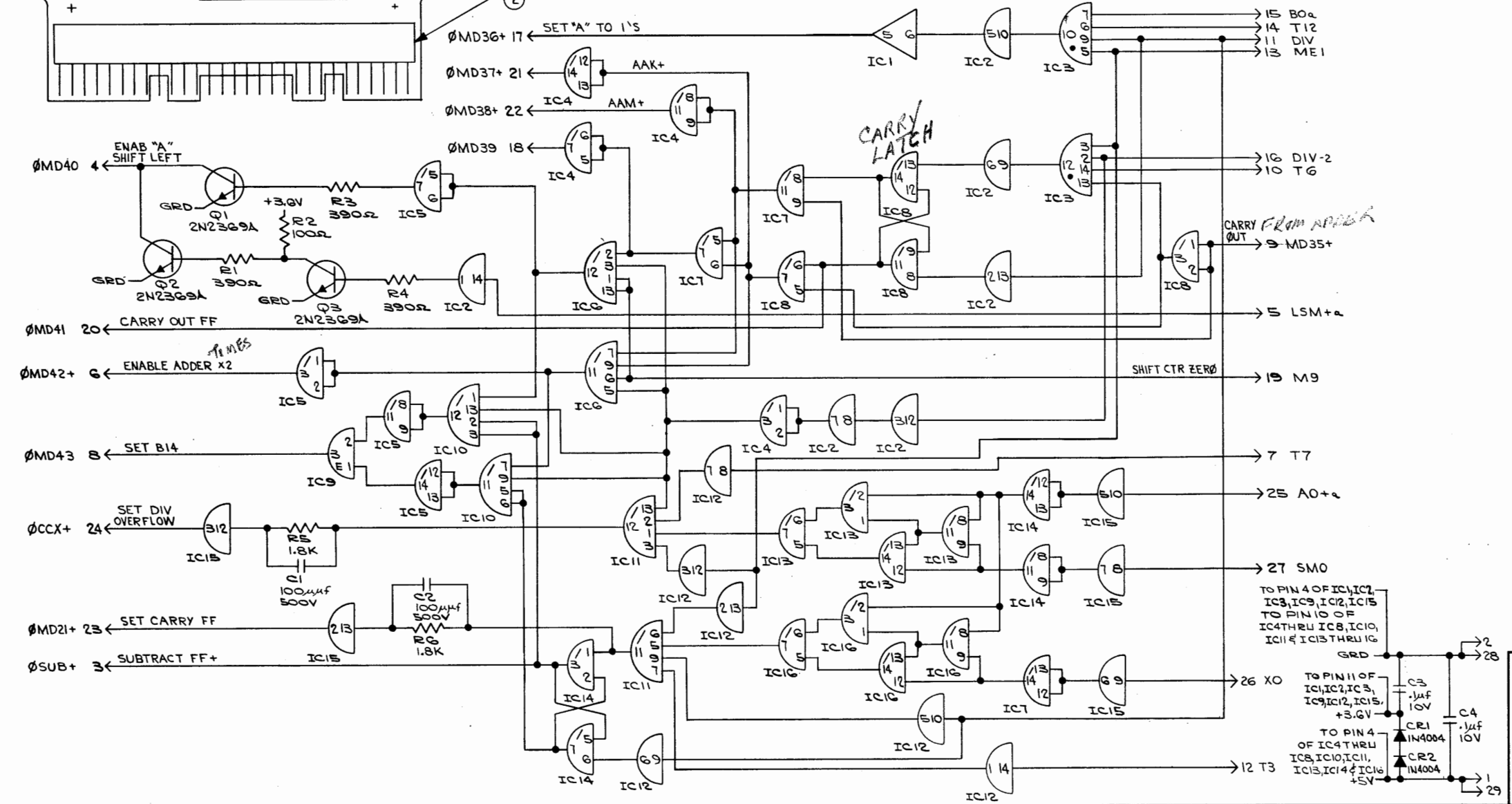
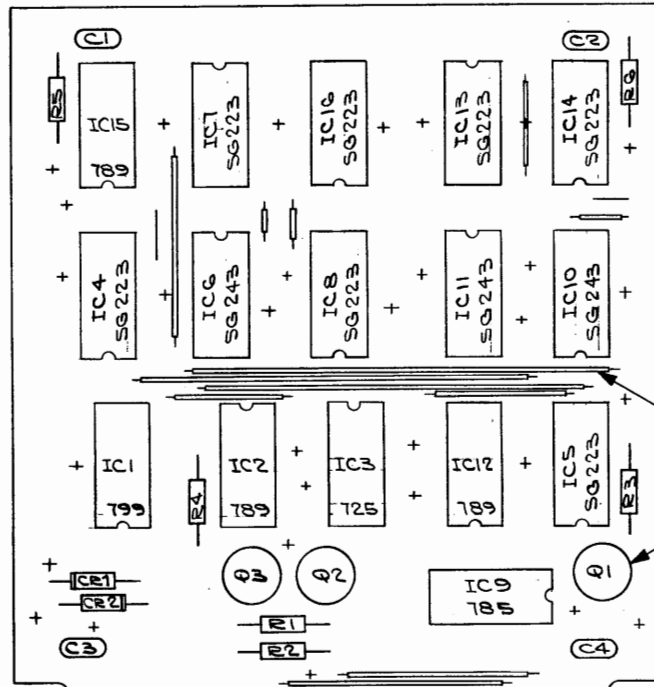
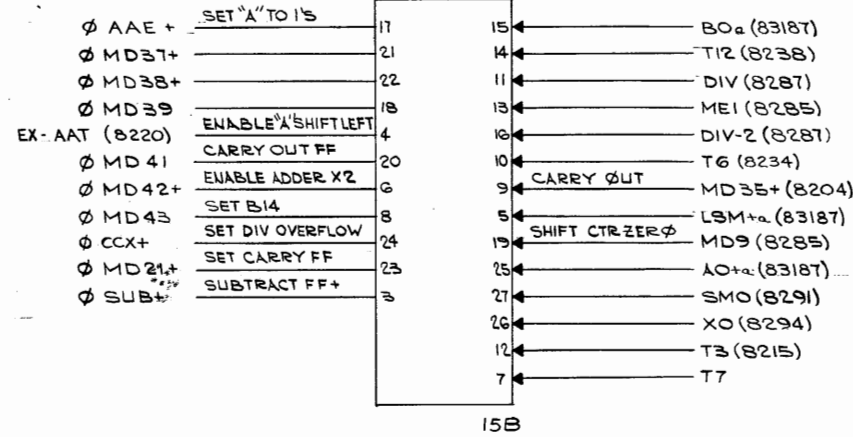


QTY	REF	DESCRIPTION	MANUFACTURER	
1	R6	RCOTGF561J	RESISTOR-560 Ω , ALLEN BRADLEY	
5	R5 THRU R1	RCOTGF182J	RESISTOR-1.8K, ALLEN BRADLEY	
1	IC8	MCT85P	INTEGRATED CIRCUIT-MOTOROLA	
1	IC7	MC725P		
1	IC5	MC726P		
2	IC4	MCT92P		
3	IC10	MC724P		
2	IC9	MC799P		
1	C1	UK-10-104		CAPACITOR-.1 μ F+80-20%, 10V, CRL
AR	4	AWG24		SLEEVING-TEFLON-THINWALL
AR	3	AWG24		WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001		CONNECTOR-ELCO
1	1	SEL991	PRINTED CIRCUIT (REV. SEE AS1140)	
-1		DWG. OR PART NO.	DESCRIPTION	

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DR	6-6-61	SCHEMATIC & ASSEMBLY	
CHK	RKM	RTL-MPY/DIV CONTROL 5	
ENGR	6/15/67		
PROJ	6/1/67		
APPD	6/15/67	CODE IDENT NO.	SIZE
NEXT ASSY		20886	D 8287
			REV. B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4W$.
 3. FOR DRILLING DIMENSIONAL DWG. SEE DISS24.

REV.	DESCRIPTION	DATE	APPD
D	8288		C
A	67-445; ADDRESSES REVISED AND LINE TITLES ADDED AS 10-27-67	10/27/67	
B	68-85; REMOVED OUTPUT FROM IC14 PIN7, DISCONNECTED IC12 PIN 8 FROM IC3 PIN 14. 2-14-68 F.L.P. GFW	2/16/68	
C	68-199; ADDED (8234) ON PIN 10, DELETED (8203) ON PIN 24 OF LOGIC. <i>Handwritten: 4-18-68</i>	4/18/68	RKM



QTY	REF	DESCRIPTION	MANUFACTURER
2	R6	RC07GF182J	RESISTOR-1.8K, ALLEN BRADLEY
1	R5	RC07GF101J	RESISTOR-100R, ALLEN BRADLEY
3	R4	RC07GF391J	RESISTOR-390R, ALLEN BRADLEY
3	Q3	2N2369A	TRANSISTOR-FAIRCHILD
1	IC9	MC785P	INTEGRATED CIRCUIT-MOTOROLA
3	IC11	SG243	INTEGRATED CIRCUIT-SYLVANIA
7	IC16	SG223	INTEGRATED CIRCUIT-SYLVANIA
1	IC3	MCT25P	INTEGRATED CIRCUIT-MOTOROLA
3	IC15	MC789P	INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MC799P	INTEGRATED CIRCUIT-MOTOROLA
2	CR2	IN4004	DIODE-MOTOROLA
2	C4	UK-10-104	CAPACITOR-.1uF+80-20%,10V,CRL
2	C2	10101	CAPACITOR-100uF+10%,500V,CRL
3	S	B10369	LINIPAD
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL992	PRINTED CIRCUIT (REV. SEE A.51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

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DR: *[Signature]* 6-7-67
 CHK: RKM 6-8-67
 ENGR: *[Signature]* 6-15-67
 PROJ: *[Signature]* 6/15/67
 APPD: *[Signature]* 6/15/67
 NEXT ASSY

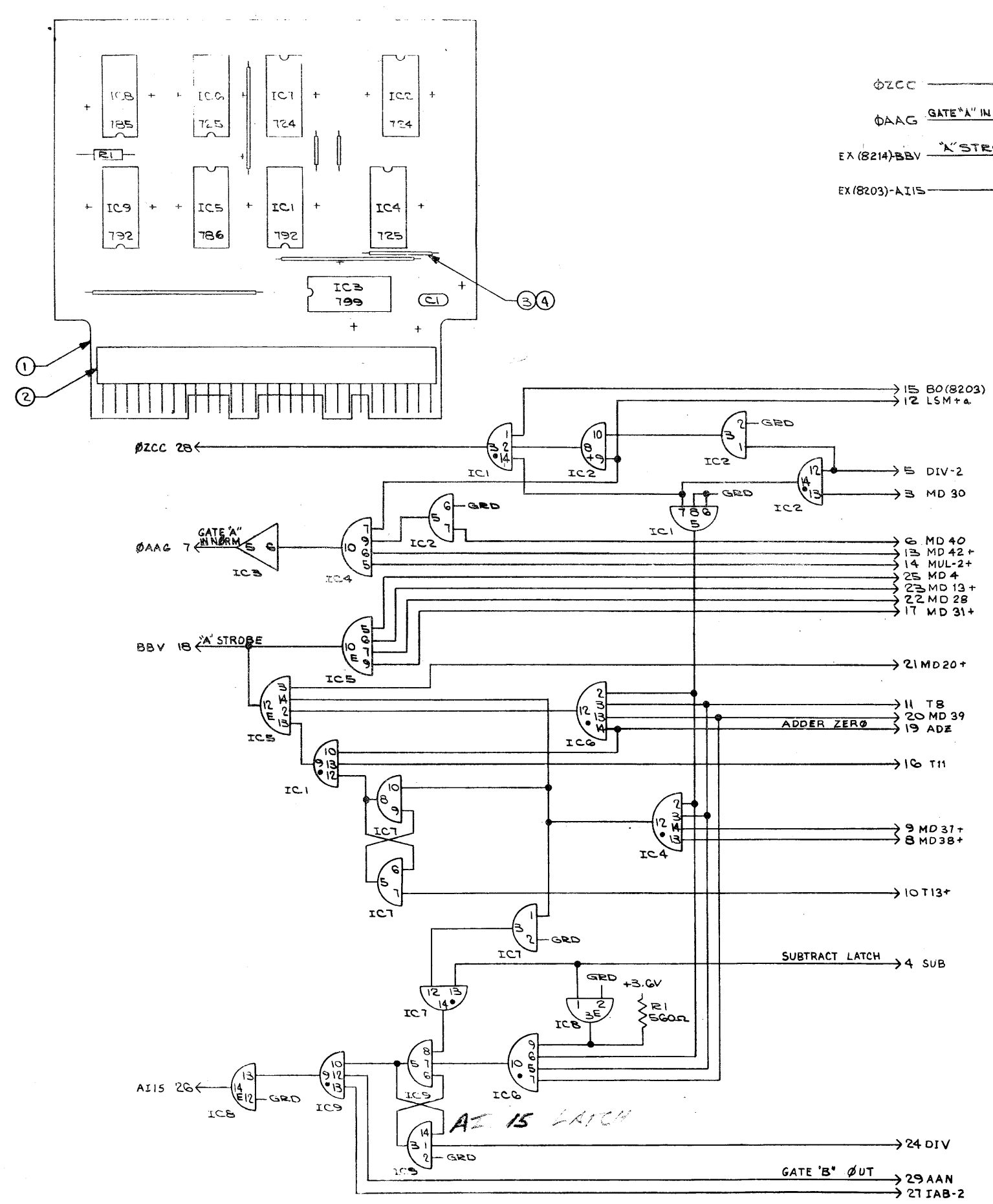
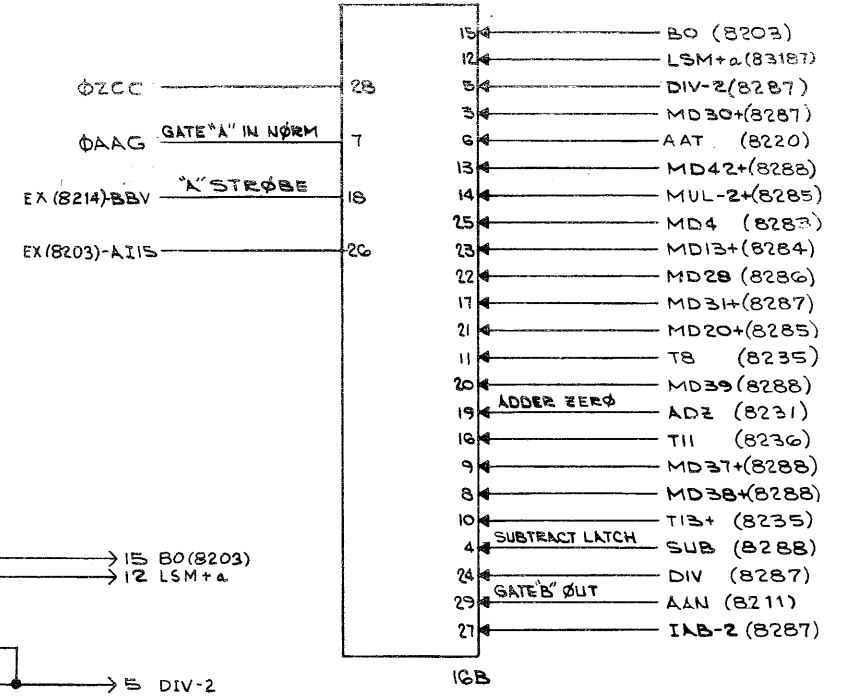
SCHMATIC & ASSEMBLY
RTL-MPY/DIV
CONTROL G

CODE IDENT NO. SIZE
 20886 D 8288

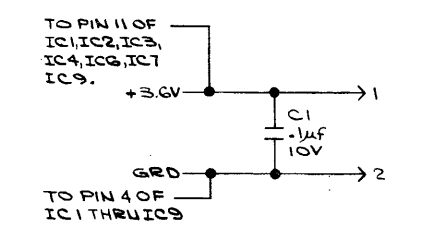
REV. C

SIZE	D	8289	REV.	A
REV.		DESCRIPTION	DATE	APPD
A		67-445; ADDRESSES REVISED & LINE TITLES ADDED. C.THEW 10-27-67	10/30/67	JN

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS, OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/4W, 5%.
 3. FOR DRILLING DWG. SEE D8600-998.
 FOR DIMENSIONAL DWG. SEE C8600.



1	R1	RC07GF56U	RESISTOR-500Ω, ALLENBRADLEY	
1	IC8	MCT85P	INTEGRATED CIRCUIT-MOTOROLA	
1	IC5	MC786P		
2	IC6	MCT25P		
1	IC3	MCT99P		
2	IC7	MC724P		
2	IC9	MC792P		
1	C1	UK-10-104		CAPACITOR-.1μf+80-20,10V,CBL
AR	4	AWG 24		SLEEVING-TEFLON, THINWALL
AR	3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001		CONNECTOR-ELCO
1	1	SEL998	PRINTED CIRCUIT (REV. SEE A51140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	

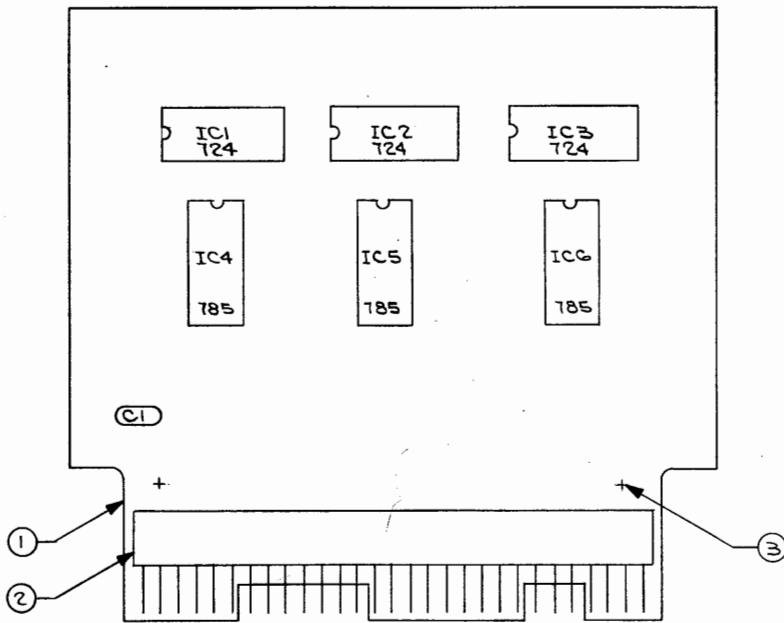


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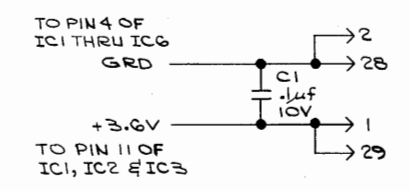
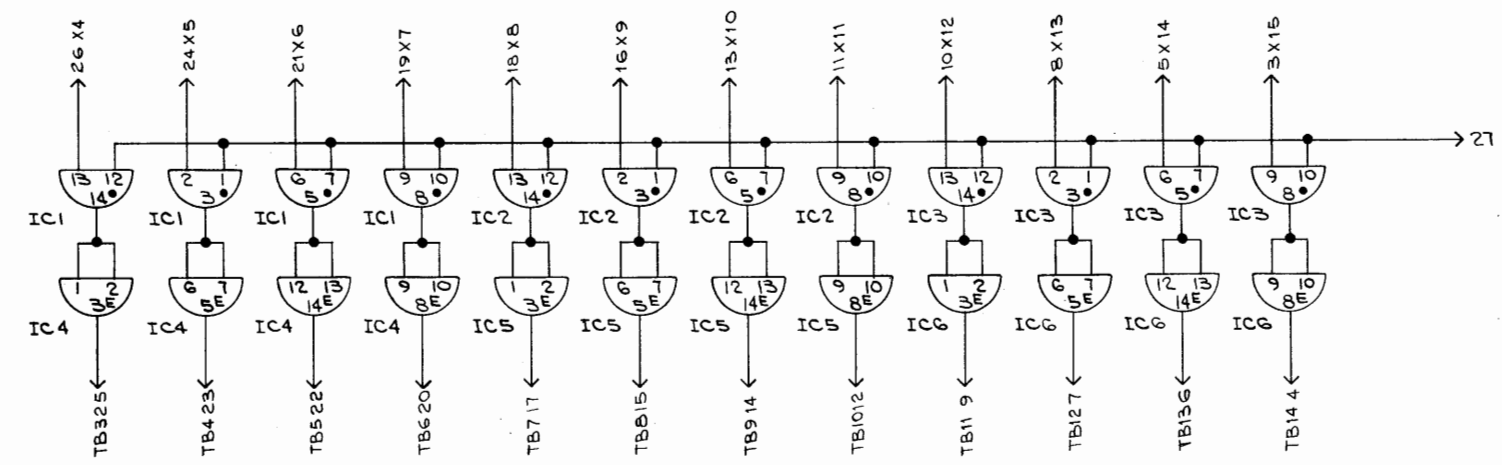
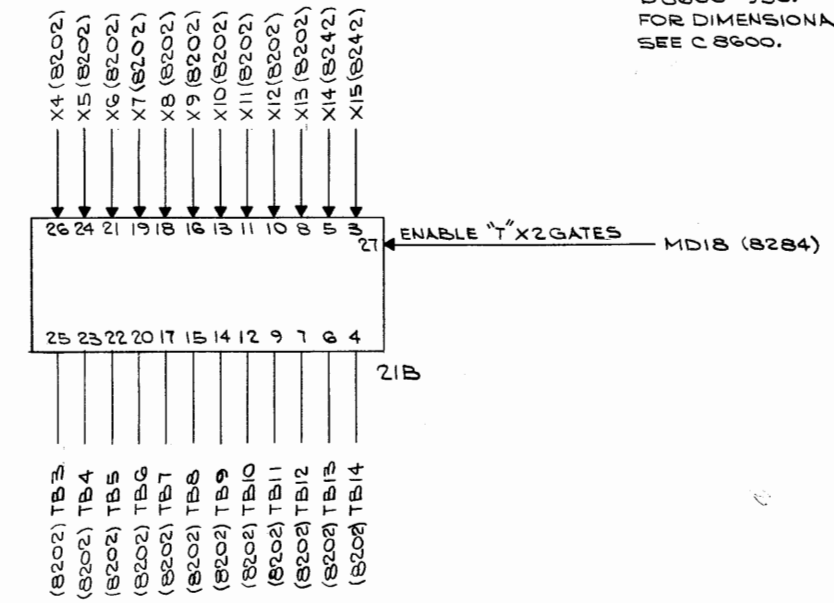
DR	6-9-67	SCHEMATIC & ASSEMBLY RTL-MPY/DIV CONTROL 7
CHK	6-24-67	
ENGR	6-27-67	
PROJ	6-27-67	
APPD	6-27-67	
NEXT ASSY		

CODE IDENT NO.	SIZE	REV.
20886	D	8289
		A



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB600-950.
 FOR DIMENSIONAL DWG. SEE C 8600.

REV.	DESCRIPTION	DATE	APPD	REV.
D	8290			B
A	67-445; ADDRESSES REVISED + ADDED. E.P.C. 10-27-67.	10/30/67		
B	68-199; (8202) ON PIN 15 OF LOGIC WAS (8203) JWM 4-18-68	4/18/68	RKM	



3	IC6 IC5 IC4	MC785P	INTEGRATED CIRCUIT-MOTOROLA
3	IC3 IC2 IC1	MC724P	
1	C1	UK-10-104	CAPACITOR-.1uF+80-20%, 10V, CRL
AR 3	AWG 24		WIRE-SOLID COPPER, TINNED
1	2	00-7021-029-000-001	CONNECTOR-ELCO
1	1	SEL 950	PRINTED CIRCUIT (REV. SEE A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

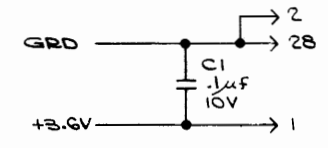
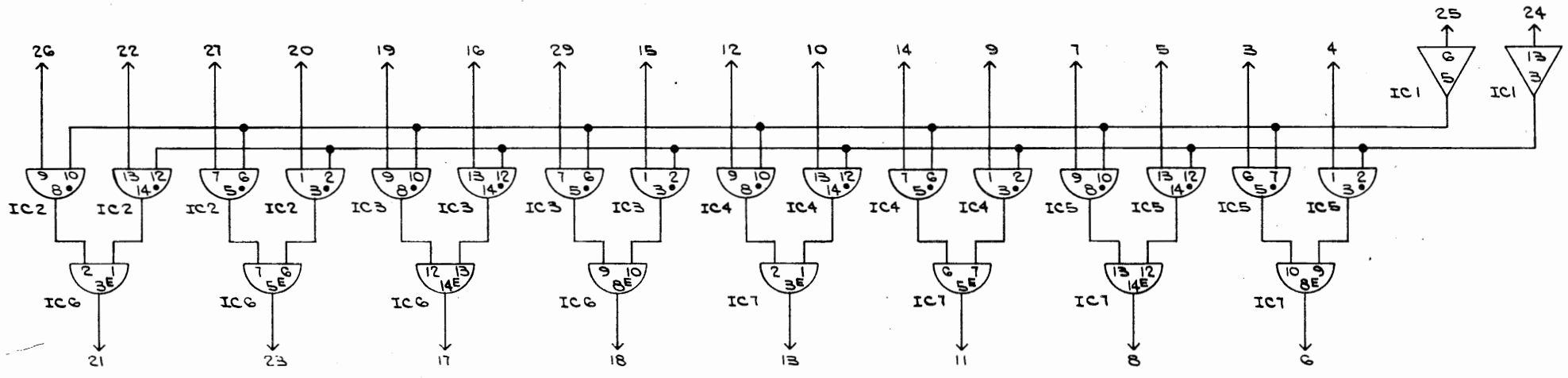
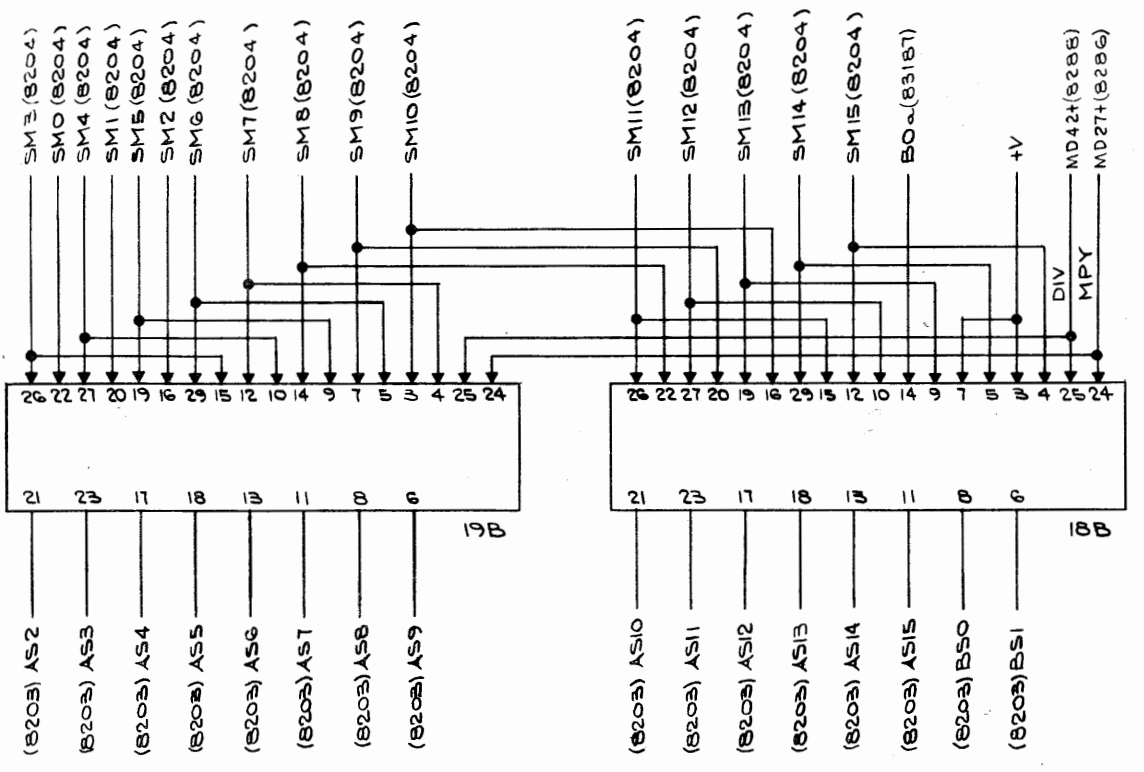
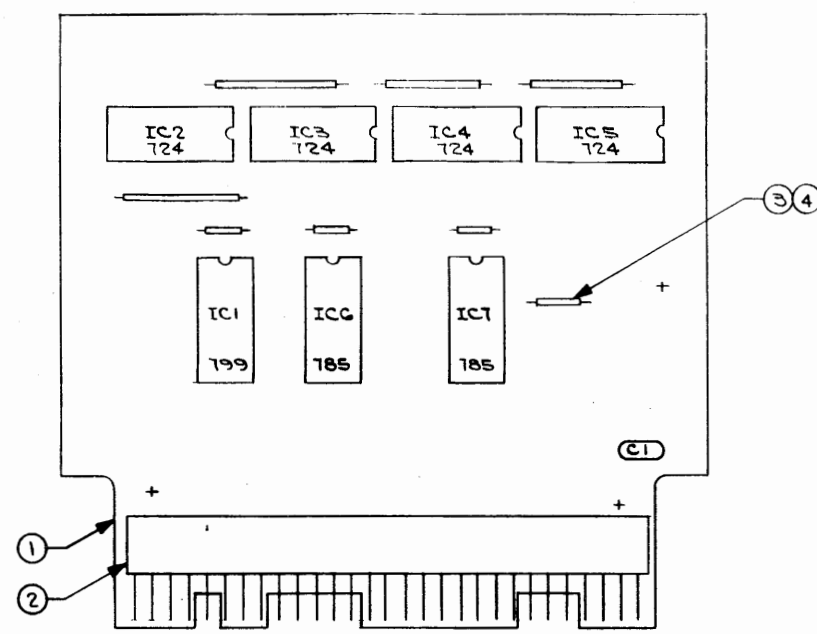
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DR <i>[Signature]</i>	5-24-67	SCHEMATIC ASSEMBLY RTL-MPY/DIV "T" X2 GATES
CHK RKM	6-1-67	
ENGR <i>[Signature]</i>	6-8-67	
PROJ <i>[Signature]</i>	6/18/67	
APPD <i>[Signature]</i>	6/18/67	
NEXT ASSY		

CODE IDENT NO.	SIZE	REV.
20886	D	B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE DB800-951.
 FOR DIMENSIONAL DWG. SEE C8600.

SIZE	D	REV.	A
REV.	DESCRIPTION	DATE	APPD
A	67-415; ADDRESSES REVISED. E.P.C. 10-27-67.	1/10	[Signature]



2	IC1 IC6	MC185P	
4	IC5 IC4 IC3 IC2	MC124P	INTEGRATED CIRCUIT-MOTOROLA
1	IC1	MC199P	
1	C1	UK-10-104	CAPACITOR-.1uF+80-20%,10V,CRL
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL 951	PRINTED CIRCUIT (REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

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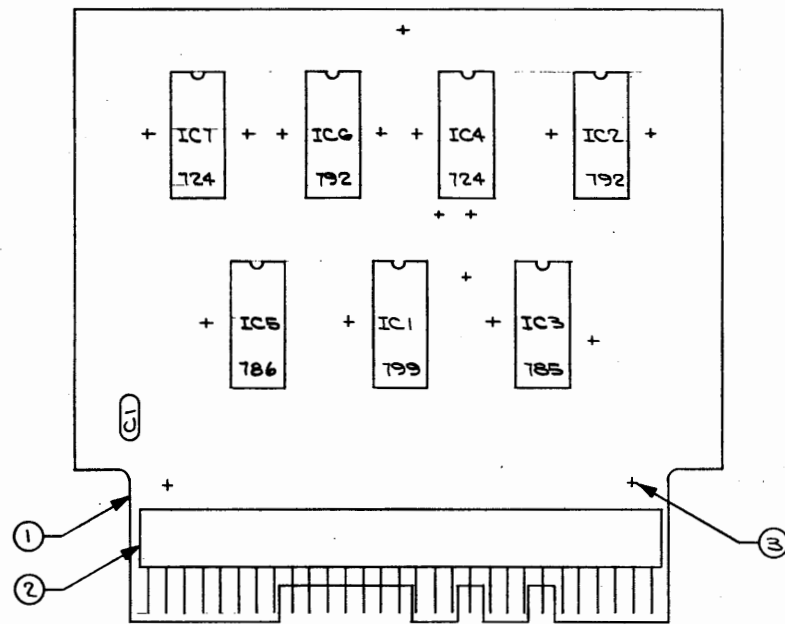
Systems Engineering Laboratories
 6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

DR	[Signature]	5-24-67	SCHEMATIC ASSEMBLY RTL-MPY/DIV SHIFTED ADDER GATES
CHK	RKM	5-31-67	
ENGR	[Signature]	6/8/67	
PROJ	[Signature]	6/8/67	
APPD	[Signature]	6/10/67	

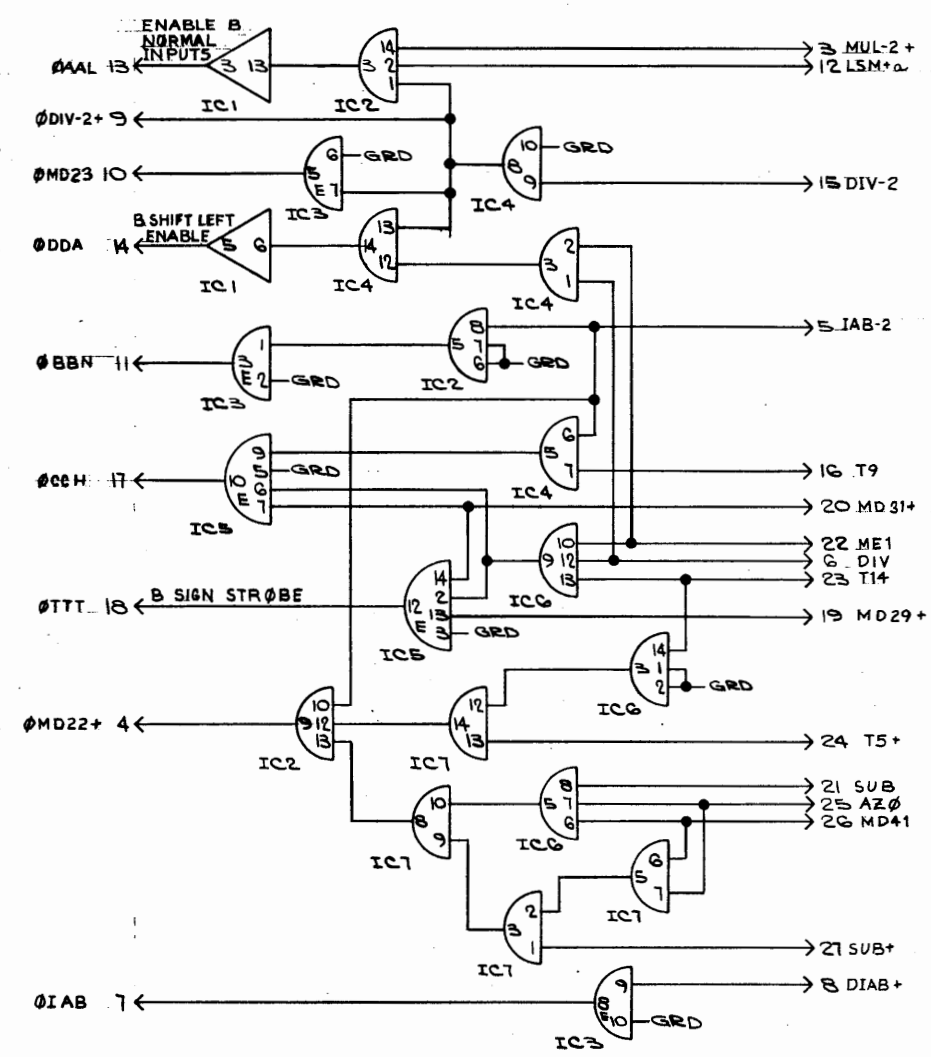
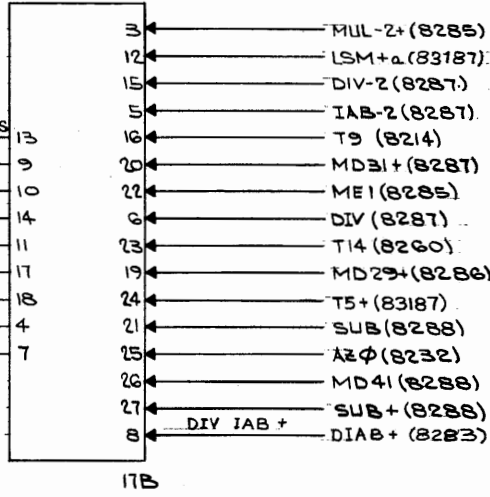
CODE IDENT NO. 20886 SIZE D 8291 REV. A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE D 8800-994.
 3. FOR DIMENSIONAL DWG. SEE C 8800.

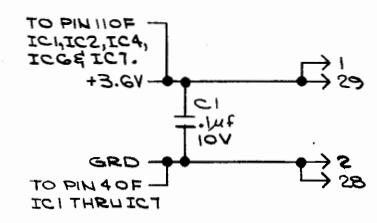
REV.	DESCRIPTION	DATE	APPD.
D	8292		C
A	67-704; ADDED ϕ DDA TO PIN 14 ON LOGIC BB 6-27-67 RKM	7/12/67	
B	67-445; ADDRESSES REVISED. ELINE TITLES ADDED. C.THEW 10-27-67	10/30/67	
C	68-199; DESTINATION OF PIN 24 WAS T7+(8237) JWM 4-18-68 RKM	7/18/68	



- ϕ ALL ENABLE B NORMAL INPUTS
- EX(8284) - ϕ DIV-2+
- ϕ MD23
- EX(8212)-5D23 ϕ DDA
- EX(8213)- ϕ BBN
- EX(8224)- ϕ CCH
- ϕ TTT
- EX(8206)- ϕ MD22+
- ϕ IAB



1	IC5	MCT86P	INTEGRATED CIRCUIT - MOTOROLA
2	IC7	MCT24P	
1	IC3	MCT86P	
2	IC6	MCT92P	
1	IC1	MCT99P	
1	C1	UK-10-104	CAPACITOR-.1uF-80-20%,10V,CRL
AW	3	AWG24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001	CONNECTOR-ELCO
1	1	SEL994	PRINTED CIRCUIT (REV. SEE A.51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION



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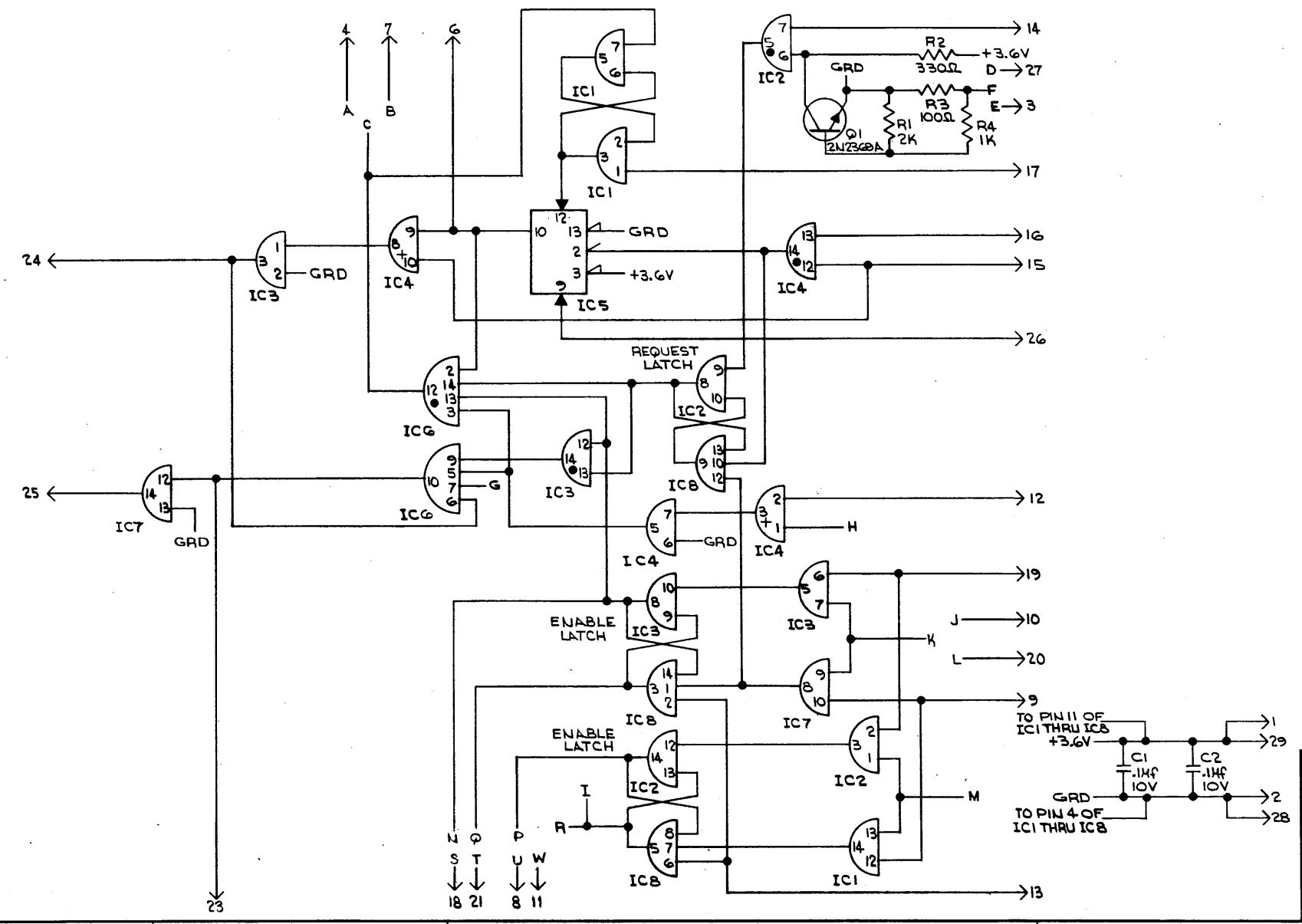
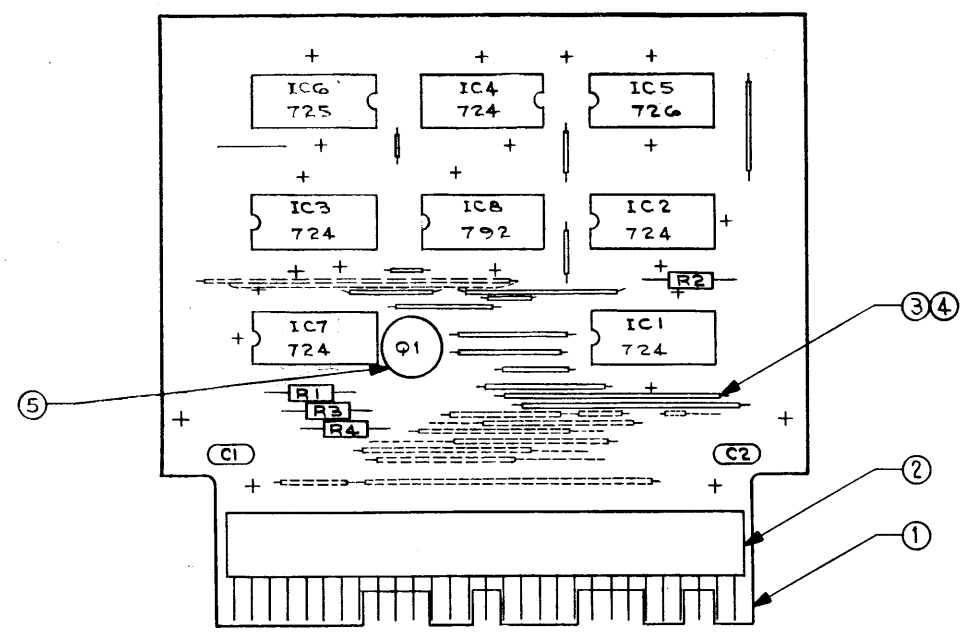
DR. <i>[Signature]</i>	6-8-67
CHK RKM	6-9-67
ENGR <i>[Signature]</i>	6-15-67
PROJ <i>[Signature]</i>	6-15-67
APPD <i>[Signature]</i>	6-15-67
NEXT ASSY	

SCHEMATIC & ASSEMBLY
RTL MPY/DIV
CONTROL B

CODE IDENT NO.	SIZE	REV.
20886	D	8292

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING & DIMENSIONAL DWG. SEE DB600-32G

SIZE	D	8293	REV.
REV.		DESCRIPTION	DATE APPD



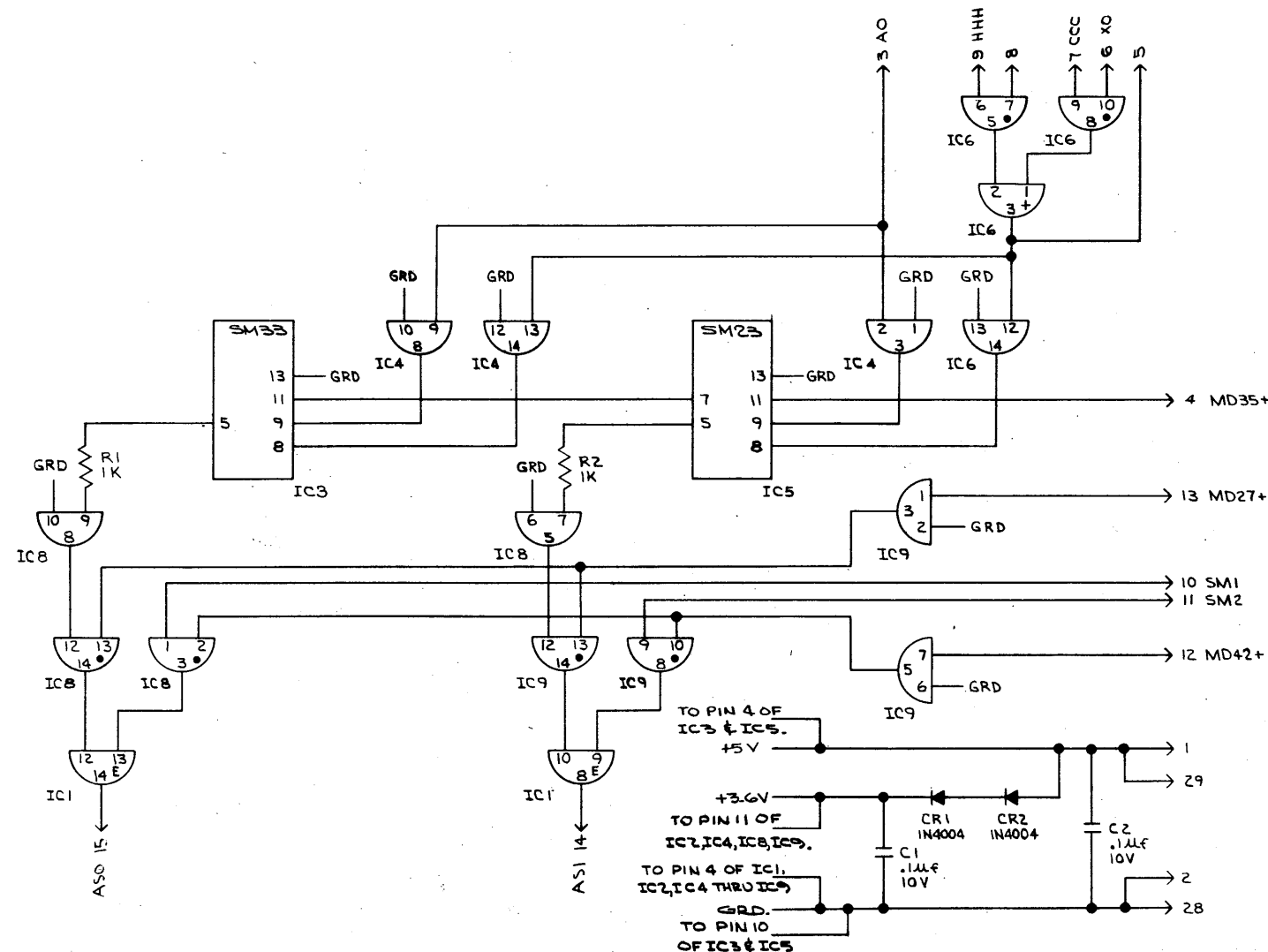
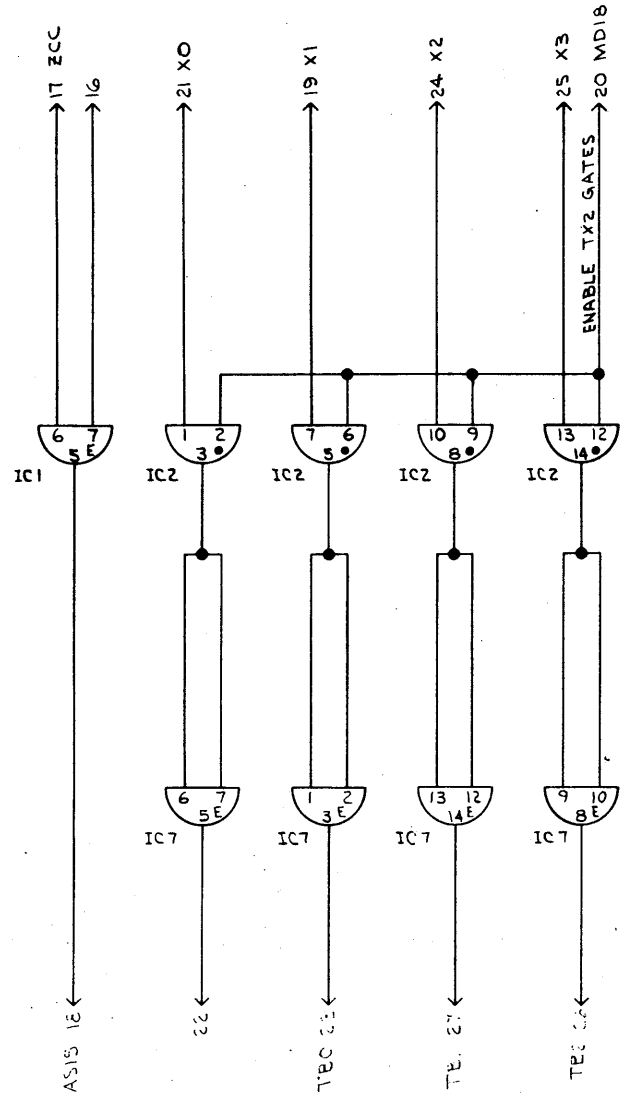
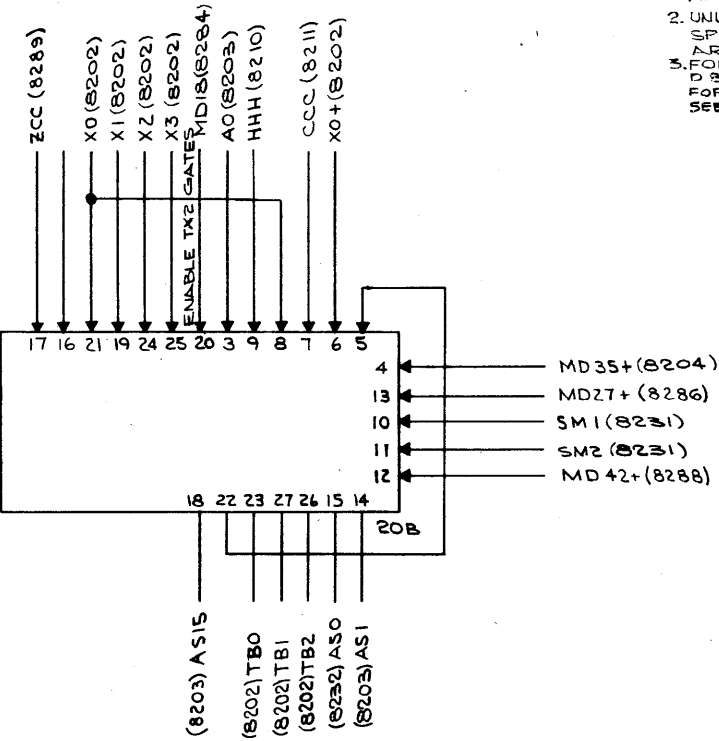
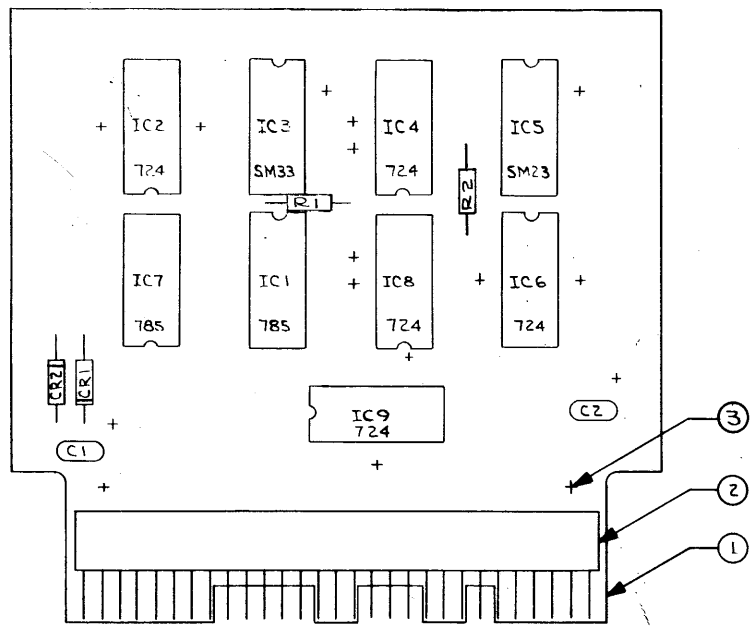
1	1	R4	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
1	1	R3	RC07GF101J	RESISTOR-100Ω, ALLEN BRADLEY
1	1	R2	RC07GF331J	RESISTOR-330Ω, ALLEN BRADLEY
1	1	R1	RC07GF202J	RESISTOR-2K, ALLEN BRADLEY
1	1	Q1	2N2369A	TRANSISTOR-FAIRCHILD
1	1	IC8	MC792P	INTEGRATED CIRCUIT- MOTOROLA
1	1	IC6	MC725P	
1	1	IC5	MC726P	
5	5	IC3,4,IC1,2	MC724P	
2	2	C2, C1	UK-10-104	CAPACITOR-.1μF*80-20V, CARL.
1	1	24	U TO N	JUMPER
1	1	23	S TO N	
1	1	22	Q TO W	
1	1	21	Q TO T	
1	1	19	S TO P	
1	1	18	U TO P	
1	1	17	T TO R	
1	1	16	W TO R	
1	1	15	L TO M	
1	1	14	J TO M	
1	1	13	J TO K	
1	1	12	L TO K	
1	1	11	I TO G	
1	1	10	I TO H	
1	1	9	E TO F	
1	1	8	D TO F	
1	1	7	B TO C	
1	1	6	A TO C	
1	1	5	B10369	UNIPAD
AR	AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	1	SEL326	PRINTED CIRCUIT (FOR REV. A.51140)
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

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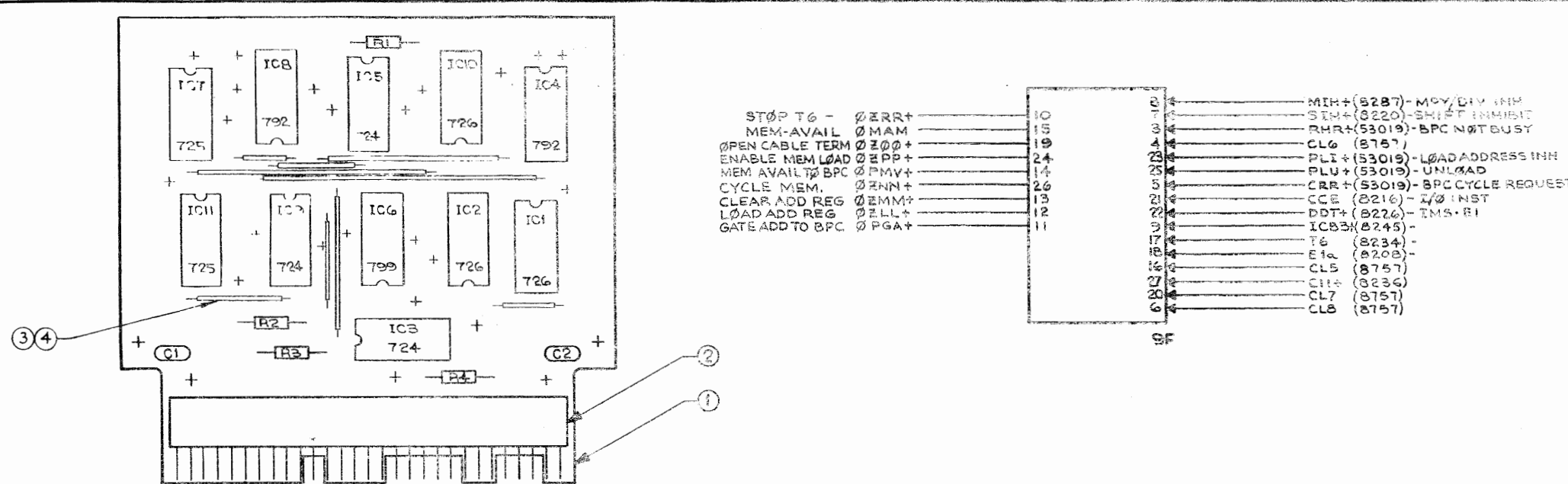
Systems Engineering Laboratories		
8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DRB	BYD	7-5-67
CHK	RKM	7-18-67
ENGR	<i>[Signature]</i>	9-27
PROJ	<i>[Signature]</i>	9-27
APPD	<i>[Signature]</i>	9/27/67
NEXT ASSY		
SCHEMATIC & ASSEMBLY		REV.
RTL MASK PRIORITY INTERRUPT		
CODE IDENT NO.	SIZE	
20886	D	8293

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4W.
 3. FOR DRILLING DWG SEE D 8400-293.
 FOR DIMENSIONAL DWG SEE C8600.

REV	DESCRIPTION	DATE	APPD
D	8294		A
A	61-445; ADDRESSES REVISED AND LINE TITLES ADDED.	10/27/67	(initials)

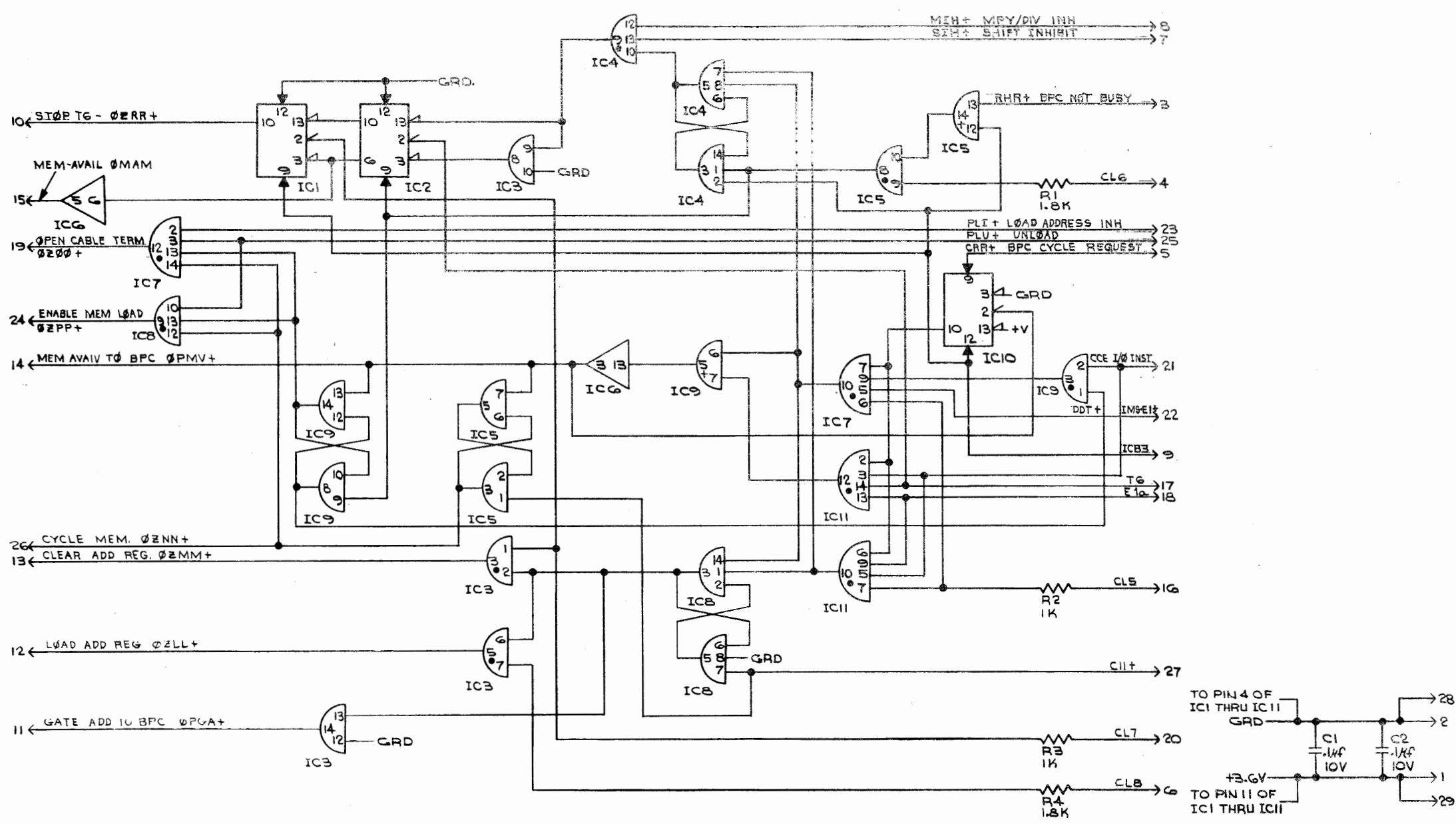


2	R2 R1	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY	
1	IC5	SM23	INTEGRATED CIRCUIT-SYLVANIA	
1	IC3	SM33	INTEGRATED CIRCUIT-SYLVANIA	
5	IC9 IC8 IC6 IC24	MC724P	INTEGRATED CIRCUIT- MOTOROLA	
2	IC7 IC1	MC785P	INTEGRATED CIRCUIT-MOTOROLA	
2	CR2 CR1	1N4004	DIODE - MOTOROLA	
2	C2 C1	UK-10-104	CAPACITOR-.1uF+80-20%,10V,CRL.	
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED	
1	2	00-7022-029-000-001	CONNECTOR-ELCO	
1	1	SEL 993	PRINTED CIRCUIT (FOR REV SEE ASI40)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR	B. HALL	4-20-67	SCHEMATIC & ASSEMBLY RTL EXTENDER ADDER AND TX2 GATES	
CE	RKM	5-3-67		
ENG.	(initials)	6-1-67		
PROJ. APP.	(initials)	6-1-67		
CODE IDENT NO.	20886		SIZE	D
REV	8294		REV	A



NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING & DIMENSIONAL DWG. SEE DIS556.

REV.	DESCRIPTION	DATE	APPD
D	8295		
A	67-276 - REDRAWN TO AGREE WITH LATEST P.C. CHANGES BY B.821-G RKM	8/28/67	[Signature]
B	67-340; DUPLICATED NOMENCLATURE OF LOGIC TO SCHEMATIC. RMT 9/11/67 RKM	9/11/67	[Signature]
C	67-445-ADDRESSES REVISED AND LINE TITLES ADDED. E.P.C. 10-27-67. AL	10/29/67	[Signature]



2	R3	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY	
2	R4	RC07GF182J	RESISTOR-1.8K, ALLEN BRADLEY	
2	IC11	MC725P	INTEGRATED CIRCUIT-MOTOROLA	
1	IC6	MC799P		
2	IC8	MC792P		
3	IC9	MC724P		
3	IC3			
3	IC10			
3	IC2	MC726P		
3	IC1			
2	C2	UK 10-104		CAPACITOR-.1uF+80-20%, 10V, CRL-
AR	4	AWG 24		SLEEVING-TEFLON, THIN WALL
AR	3	AWG 24	WIPE-SOLID COPPER, TINNED	
1	2	007022029-000-000	CONNECTOR-ELCO	
1	1	SEL 970	PRINTED CIRCUIT (REV. SEE 15140)	
-1	ITEM	DWG. OR PART NO.	DESCRIPTION	

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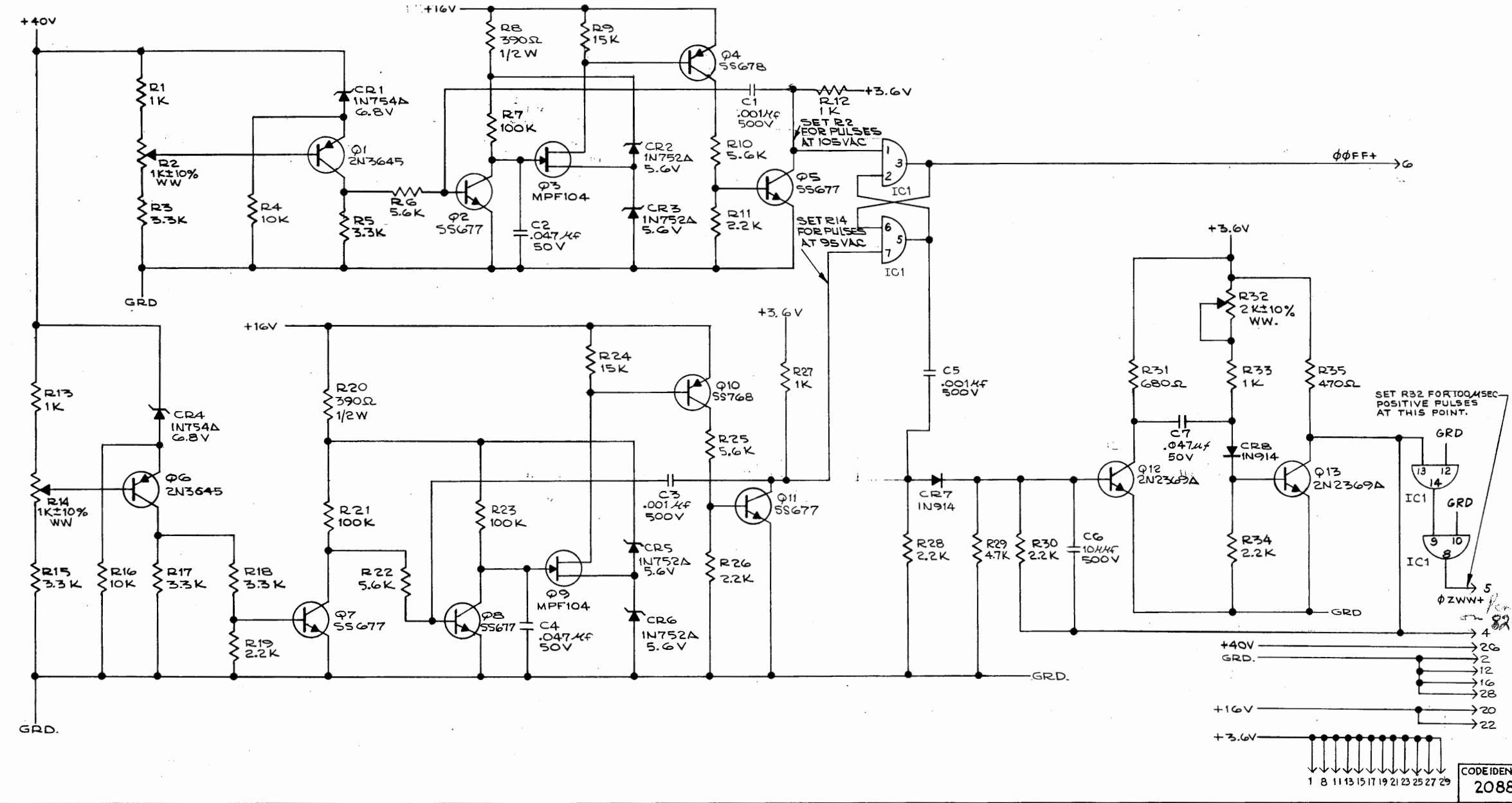
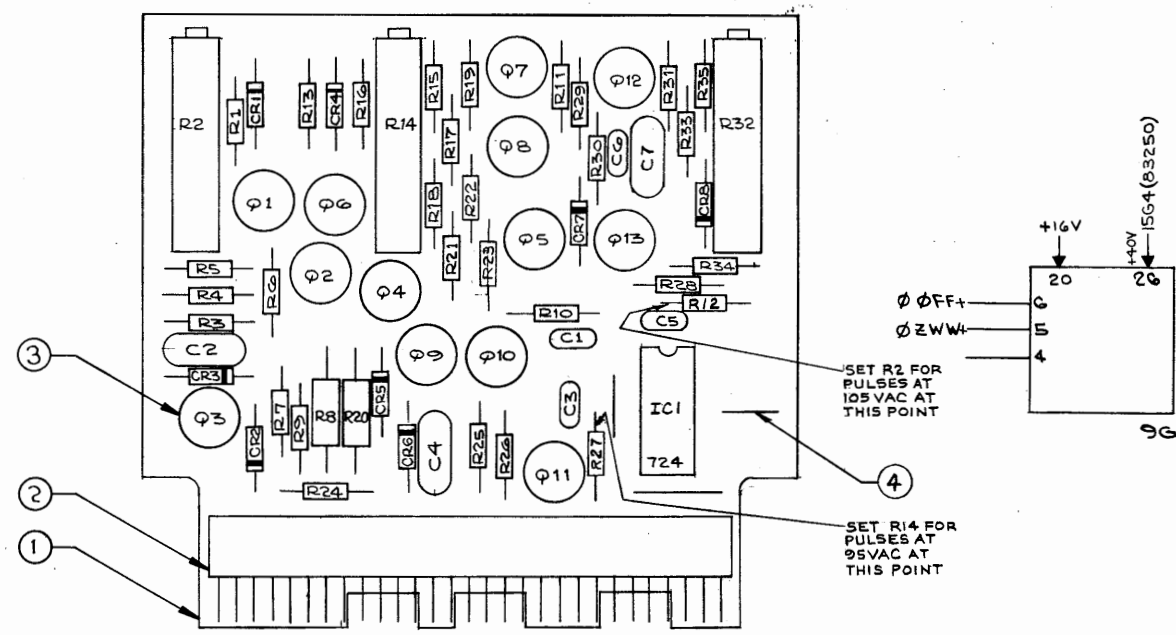
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DR. SANBORN	3-8-67	SCHEMATIC & ASSEMBLY RTL MEMORY ACCESS CONTROL
CHKL. GOODBREAD	3-9-67	
ENGR. VILLANTI	6-22-67	
PROJ. W. CROWDER	6-22-67	
APPDL. KLINGLER	6-22-67	
NEXT ASSY		

CODE IDENT NO. 20886 SIZE D 8295 REV. C

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 2. FOR DRILLING AND DIMENSIONAL DWG. SEE C 8600-974.

REV	DESCRIPTION	DATE	APP'D
D	8 2 9 6		B
A	67-445; C7 WAS 100uf, 25V. ADDED LINE DESIGNATIONS & POTENTIOMETER NOTES. RKM 10-23-67	10/25/67	
B	68-199; DESTINATION OF PIN 26 WAS +40V. RKM 4/19/68	4/19/68	

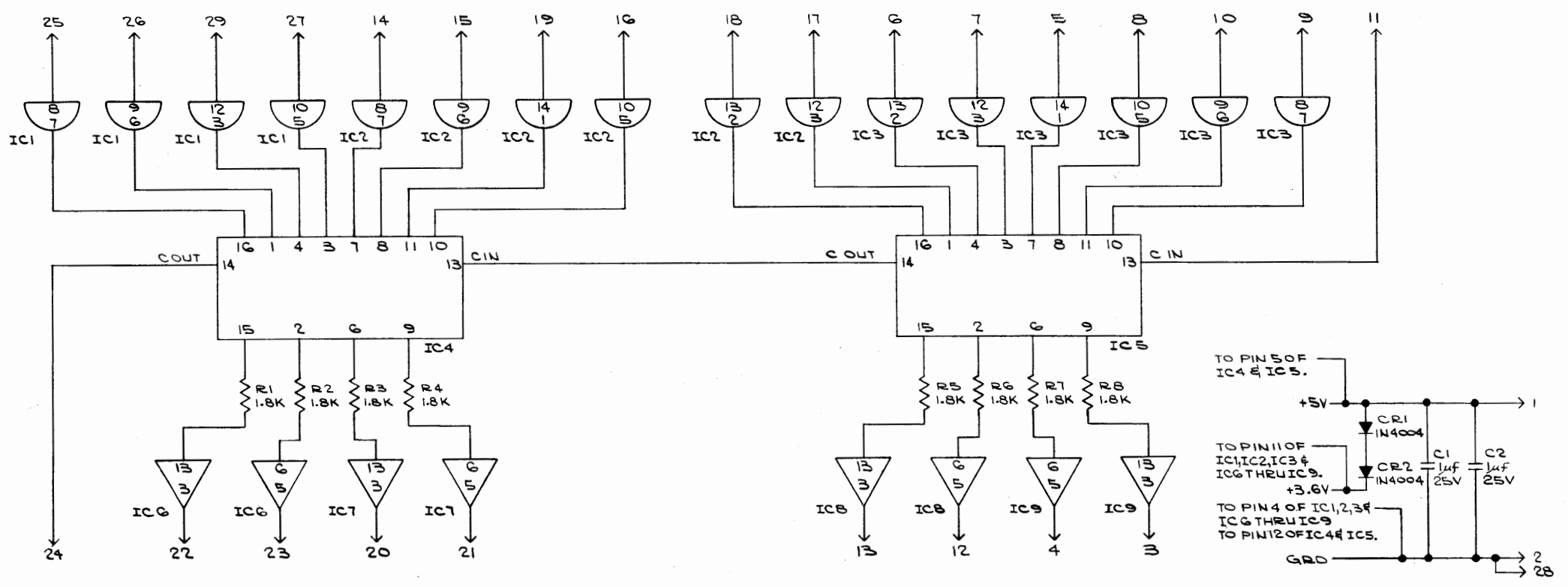
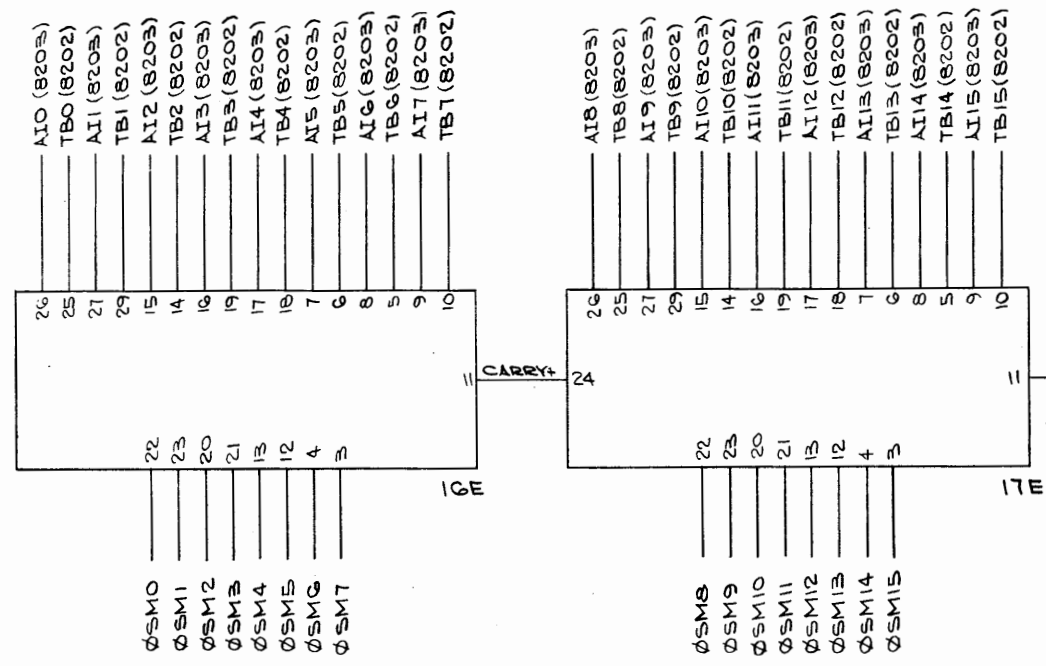
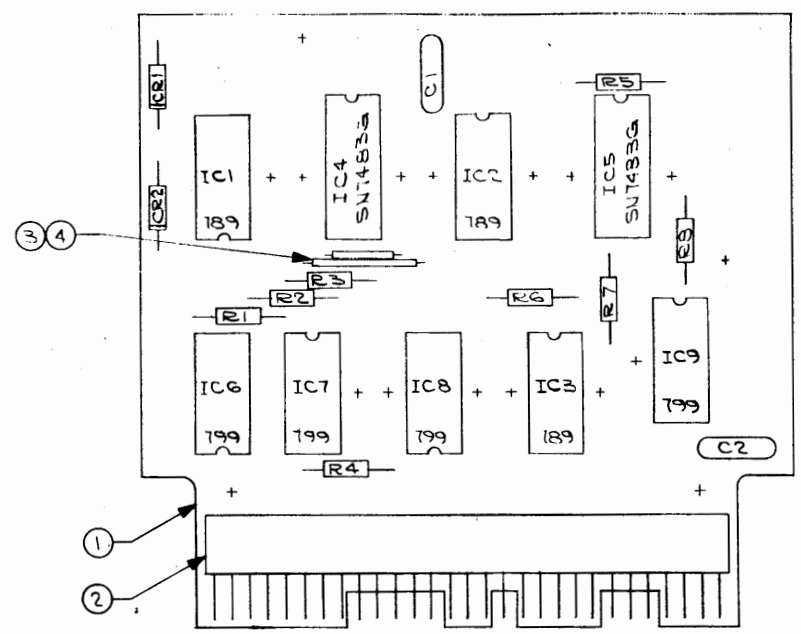


2	Q12,13	2N2369A	TRANSISTOR - FAIRCHILD
2	Q4,10	5S678	- MOTOROLA
2	Q3,9	MPF104	- MOTOROLA
5	Q5,7	5S677	- MOTOROLA
2	Q1,6	2N3645	TRANSISTOR - FAIRCHILD
1	R35	RC07GF471J	RESISTOR-470Ω ALLEN BRADLEY
1	R32	200P-1-202	POTENTIOMETER-2K±10% WW BOURNS
1	R31	RC07GF681J	RESISTOR-680Ω ALLEN BRADLEY
1	R29	RC07GF472J	4.7K,
6	R30,24	RC07GF222J	-2.2K,
2	R24	RC07GF153J	-15 K,
2	R8,20	RC20GF391J	-390Ω, 1/2W,
3	R23	RC07GF104J	-100 K,
4	R22,25	RC07GF562J	-5.6K,
2	R4,16	RC07GF103J	-10 K,
5	R15,17	RC07GF332J	RESISTOR-33K, ALLEN BRADLEY
2	R24	200P-1-102	POTENTIOMETER-1K, ±10% WW, BOURNS
5	R13,27	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
1	IC1	MC724P	INTEGRATED CIRCUIT-MOTOROLA
2	CR8	IN914	DIODE - CLEVITE
4	CR5	IN752A	- 5.6V, ZENER, MOTOROLA
2	CR4	IN754A	DIODE - 6.8V, ZENER, MOTOROLA
1	C6	1D100	CAPACITOR-100uf±10%, 500V, CRL
3	C4	601PE	-0.047uf±20%, 50V, MYLAR, GOODALL
3	C5	1D102	CAPACITOR-.001uf±10%, 500V, CRL
AR	4	AWG 24	WIRE-SOLID COPPER, TINNED
13	3	BIO369	UNIPAD
1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	SEL 974	PRINTED CIRCUIT (FOR REV. 51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. B. BOYD	3-7-67
CL. RKM	3-22-67
ENG. E. VILLANTI	6-8-67
PROJ. M. COLEMAN	6/6/67
APP. E. COLEMAN	6/8/67
USED ON	
CODE IDENT NO. 20886	
DR. B. BOYD	3-7-67
CL. RKM	3-22-67
ENG. E. VILLANTI	6-8-67
PROJ. M. COLEMAN	6/6/67
APP. E. COLEMAN	6/8/67
USED ON	
DESCRIPTION	SCHMATIC & ASSEMBLY
	RTL POWER FAIL SAFE
SIZE	D 8 2 9 6
REV	B

SIZE	D	REV.	
REV.	8297	DATE	APPD

- NOTES
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $\frac{1}{4}W$.
 3. FOR DRILLING DWG. SEE DB800-971. FOR DIMENSIONAL DWG. SEE CB800.
 4. THIS CARD USED IN PLACE OF DB204 WHEN NO MPY/DIV USED.



8	R8		
	R7		
	R6		
	R5		
	R4	RCOTG F182J	RESISTOR-1.8K, ALLEN BRADLEY
	R3		
	R2		
	R1		
4	IC9		
	IC8	MCT199P	INTEGRATED CIRCUIT-MOTOROLA
	IC7		
	IC6		
2	IC5	SN7483G	INTEGRATED CIRCUIT-TI
	IC4		
	IC3		
3	IC2	MC789P	INTEGRATED CIRCUIT-MOTOROLA
	IC1		
2	CR2	1N4004	DIODE - MOTOROLA
	CR1		
2	C2	5C13	CAPACITOR- $\frac{1}{2}f \pm 20\%$, 25V, SPRAGUE
	C1		
	AR 4	AWG 24	SLEEVING-TEFLON, THIN WALL
	AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
	1	2	00-7072-029-000-001
	1	1	SEL 971
	1	1	PRINTED CIRCUIT (REV. SEE AS114C)
	-1	ITEM	DWG. OR PART NO.
			DESCRIPTION

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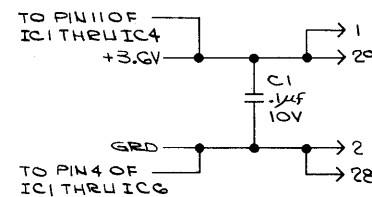
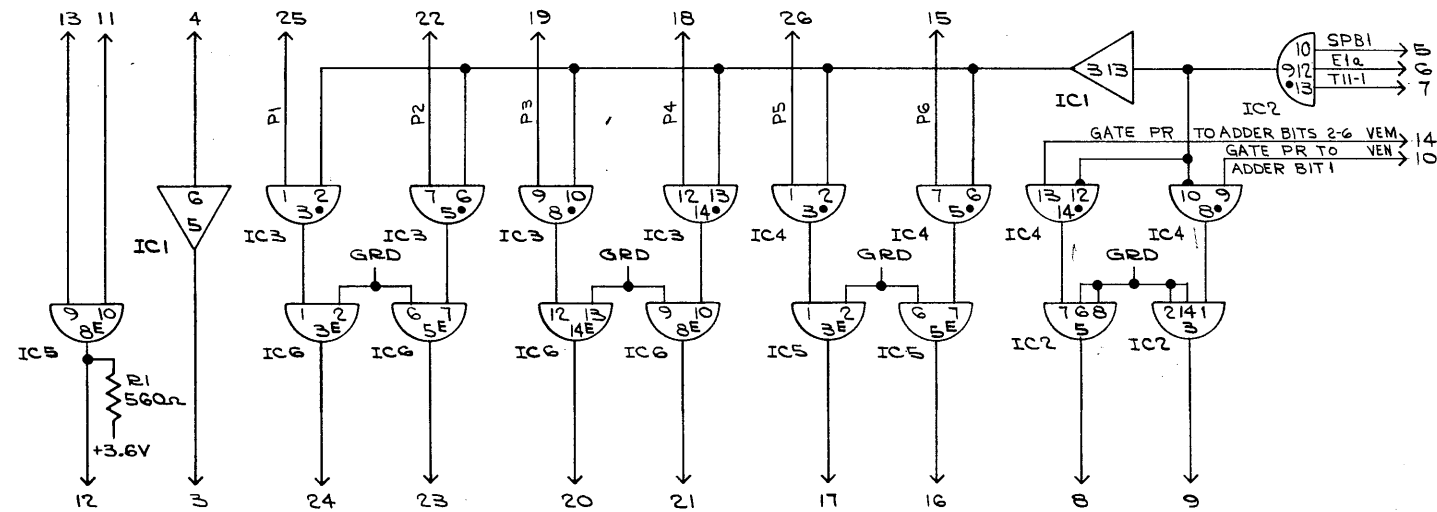
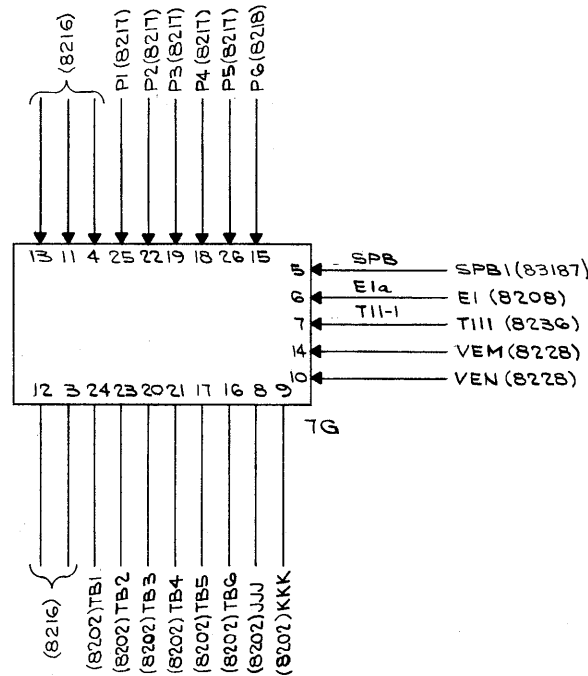
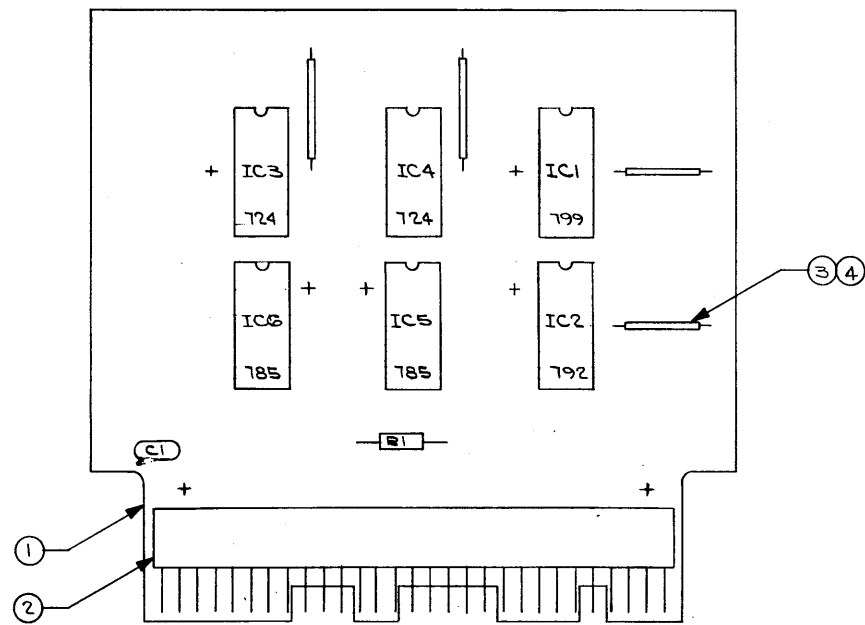
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DR	<i>[Signature]</i>	5-25-67	
CHK	RKM	6-1-67	SCHEMATIC ASSEMBLY
ENGR	<i>[Signature]</i>	6-3-67	TI 8BIT RIPPLE ADDER
PROJ	<i>[Signature]</i>	6/3/67	
APPD	<i>[Signature]</i>	6/3/67	
NEXT ASSY			

CODE IDENT NO.	20886	SIZE	D
			8297

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPEC'D. RESISTORS ARE ±5%, 1/4W.
 3. FOR DRILLING DWG. SEE D 8600-981.
 FOR DIMENSIONAL DWG. SEE C 8600.

REV.	DESCRIPTION	DATE	APPD	REV.
D	8298			B
A	67-445; ADDRESSES REVISED AND LINE TITLES ADDED. AS 10-27-67	10/27/67		
B	68-199; PINS 3, 11, 12, & 13 WERE SPARES. JWM 4-18-68 RKM	4/18/68		

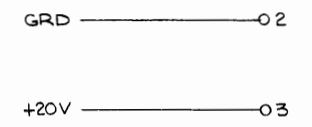
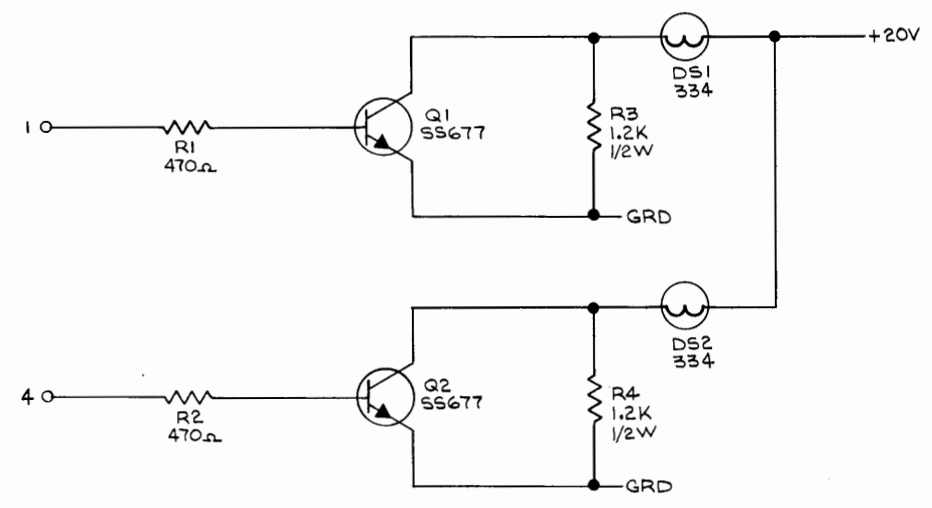
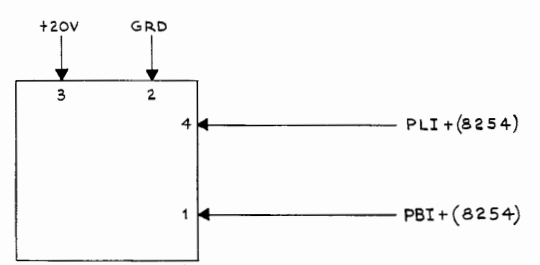
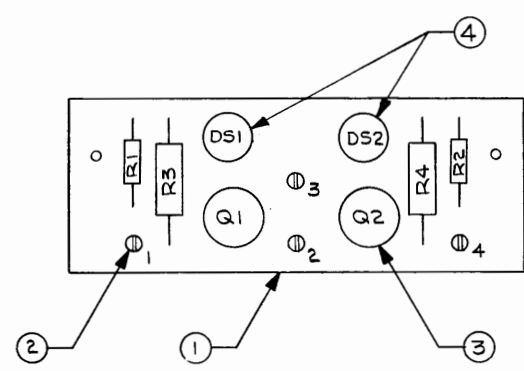


QTY	REF	DESCRIPTION	MANUFACTURER
1	R1	RC07GF561J	RESISTOR-560Ω, ALLEN BRADLEY
2	IC6 IC5	MCT85P	INTEGRATED CIRCUIT-MOTOROLA
2	IC4 IC3	MC724P	
1	IC2	MCT92P	
1	IC1	MCT99P	
1	C1	UK-10-104	CAPACITOR-.1µF±80-20%, 10V, CBL
AR 4	AWG.24	SLEEVING-TEFLON, THINWALL	
AR 3	AWG.24	WIRE-SOLID COPPER, TINNED	
1	2	00-1022-079-000-001	CONNECTOR-ELCO
1	1	SEL 981	PRINTED CIRCUIT (REV. SEE AS1140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

Systems Engineering Laboratories			
8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310			
DR	R. L. Rasmussen	5-25-67	
CHK	RKM	6-1-67	SCHMATIC & ASSEMBLY
ENGR	E. Villalobos	6-8-67	RTL-SPB MAP STORE GATES
PROJ	extension	6/8/67	
APPD	Rasmussen	6/8/67	
NEXT ASSY			
CODE IDENT NO.	20886	SIZE	D
		8298	REV. B

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, 1/4W.
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE B16103

REV.	DESCRIPTION	DATE	APPD
D	8299		
A	67-391; D 4 D DWG NO. IN NOTE 3 WAS B15874-RKM 10-18-67 UC	10/20/67	[Signature]
B	67-445; ADDED LOGIC. RKM 10-25-67 UC	10/25/67	[Signature]
C	68-83; DELETED P1 FROM LOGIC RKM 2-14-68	2/14/68	[Signature]



2	R4	RC20GF122J	RESISTOR-1.2K, 1/2W, ALLEN BRADLEY
2	R2	RC07GF471J	RESISTOR-470Ω, ALLEN BRADLEY
2	Q2	SS677	TRANSISTOR-MOTOROLA
2	DS2	334	LAMP-GENERAL ELECTRIC
2	DS1	334	LAMP-GENERAL ELECTRIC
2	4	25-35-XP11	LAMP SOCKET-LEECRAFT
2	3	B10369	UNIPAD
4	2	1785-2	TERMINAL-CTC
1	1	SEL 329	PRINTED CIRCUIT (SEE REV. A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

Systems Engineering Laboratories
 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

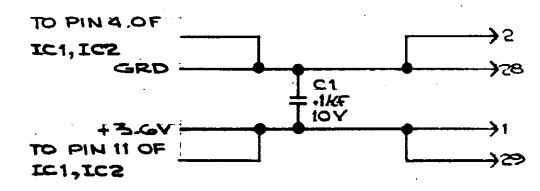
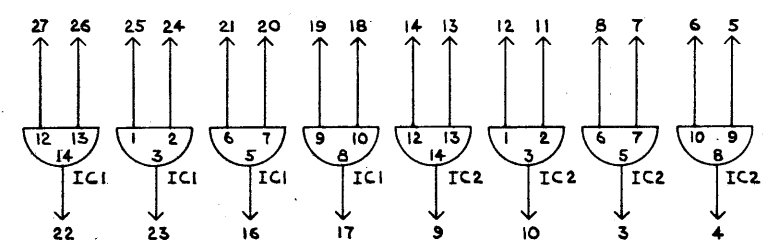
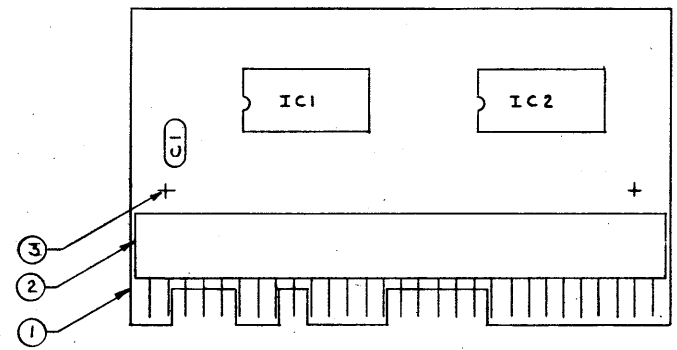
DR	C.E.M.	8/3/67
CHK	RKM	8-4-67
ENGR	[Signature]	8-15-67
PROJ	[Signature]	8/15/67
APPD	[Signature]	8/15/67
NEXT ASSY		

SCHMATIC & ASSEMBLY PROGRAM PROTECT LAMP DRIVERS

CODE IDENT NO.	SIZE	REV.
20886	D	8299
		C

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG SEE C8500-743.
 FOR DIMENSIONAL DWG SEE C8500.

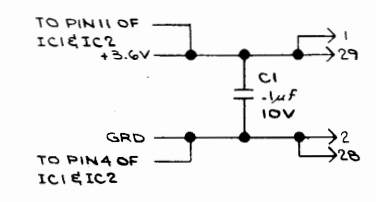
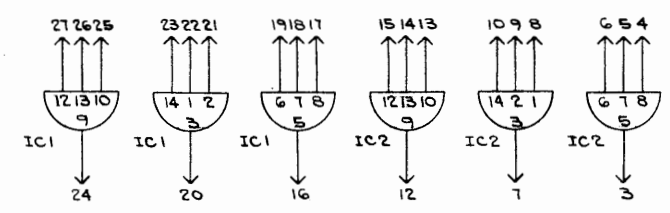
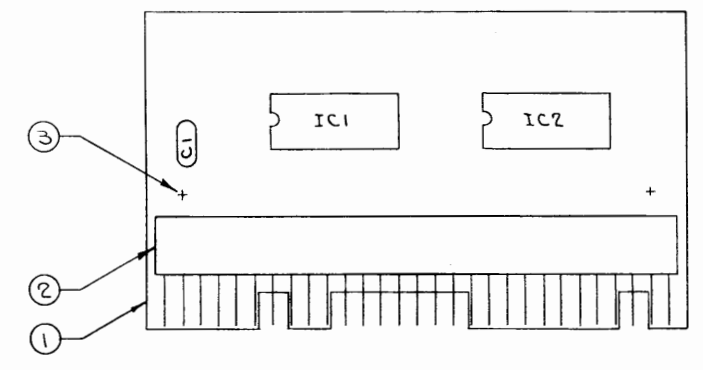
REV	D	8543	DATE	APP'D
REV		DESCRIPTION		



2	IC2 IC1	MC724P	INTEGRATED CIRCUIT-MOTOROLA	
1	C1	UK10-104	CAPACITOR-.1µF +80-20%, 10V, CRL	
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED	
I	2	00-7022-029-000 001	CONNECTOR-ELCO	
I	1	SEL 743	PRINTED CIRCUIT (REV. SEE A51860)	
-I	ITEM	DWG. OR PART NO.	DESCRIPTION	
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR.	R. SANBORNE	3-13-67	SCHEMATIC ASSEMBLY 2 NOR(M)	
CL.	L. GOODBREAD	3/14/67		
DRG.	<i>W. L. ...</i>	4/20/67		
APP.	<i>W. L. ...</i>	4/20/67		
CODE IDENT NO.	20886	REV	D	8543

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE C8500-744.
 FOR DIMENSIONAL DWG. SEE C8500.

REV	DESCRIPTION	DATE	APPD
D	8544		

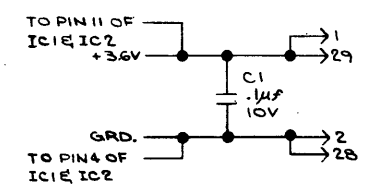
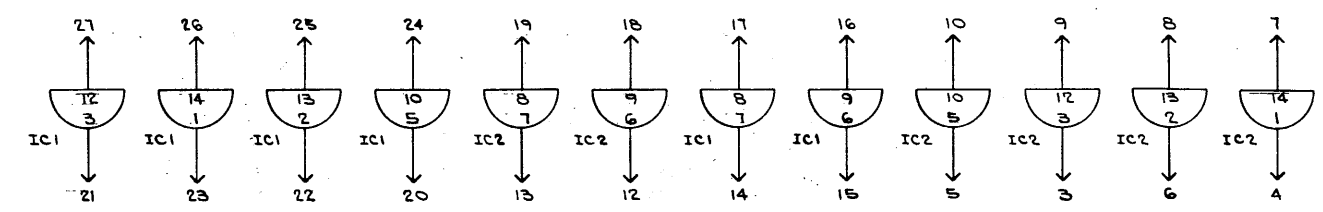
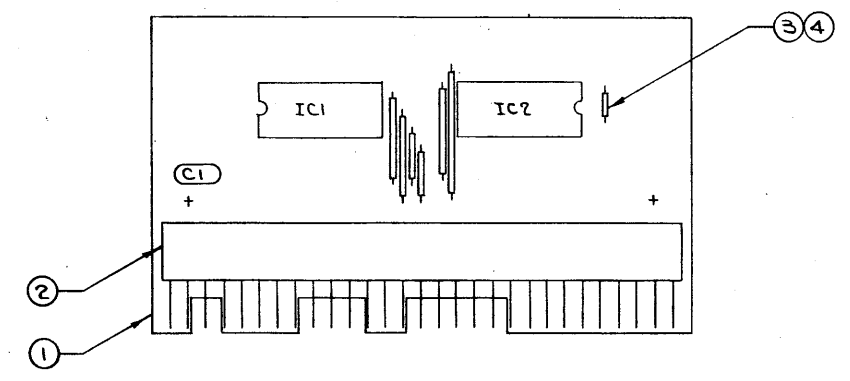


2	IC2	MC 792P	INTEGRATED CIRCUIT-MOTOROLA
	IC1		
1	C1	LJK-10-104	CAPACITOR-.1uF-80-20%,10V,CRL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-1021-029-000-001	CONNECTOR-ELCO
1	1	SEL 744	PRINTED CIRCUIT (REV. SEE A51860)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEI SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR F.L.SIENA	3-1-67
CL L.GOODBREAD	3/20/67
ENG. <i>[Signature]</i>	4/20/67
APP. <i>[Signature]</i>	4/20/67
UNSP CH	4/20/67
CODE IDENT NO. 20886	SIZE D
	8544

NOTES:
 1. ALL ITEMS AS SPECIFIED
 IN LIST OF MATERIAL OR
 APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE
 C8500-745.
 FOR DIMENSIONAL DWG. SEE
 C8500.

REV	DESCRIPTION	DATE	APPD
D	8545		



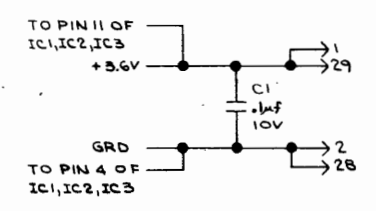
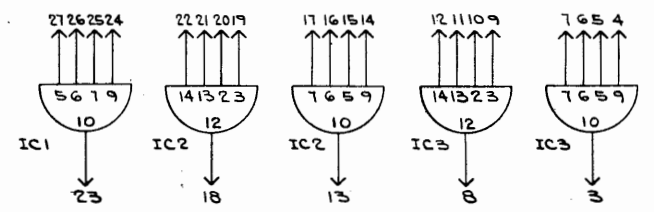
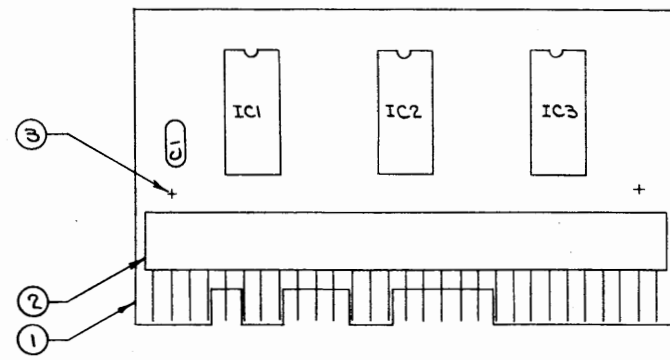
2	IC2	MC 789P	INTEGRATED CIRCUIT - MOTOROLA
	IC1		
1	C1	LIK 10-104	CAPACITOR - .1uF 80-20% 10V CRL
AR	4	AWG. 24	SLEEVING - TEFLON, THINWALL
AR	3	AWG. 24	WIRE - SOLID COPPER, TINNED
	1	60-1022-029-000-001	CONNECTOR - ELCO
	1	SEL 745	PRINTED CIRCUIT (REV. SEE A51860)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR	F.L. SIENA	3-1-67	SCHEMATIC & ASSEMBLY INVERTER (M)
CC	G.F. Wolfe	3-6-67	
ENGR	W.C. [Signature]	4/20/67	
PROJ. APP.	[Signature]	4/20/67	
CODE IDENT NO	20886	SIZE	D
			8545

SEL FORM 658A

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING DWG. SEE C 8500-747.
 FOR DIMENSIONAL DWG. SEE C 8500.

REV	D	8547	DATE	APPD
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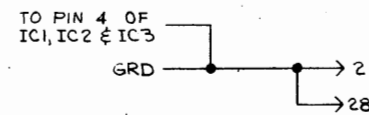
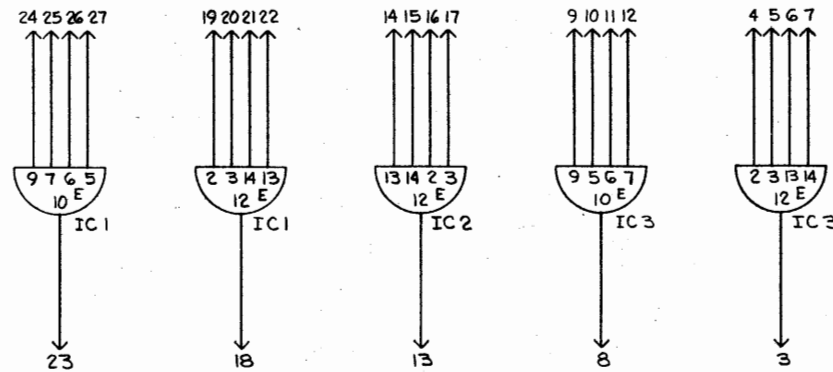
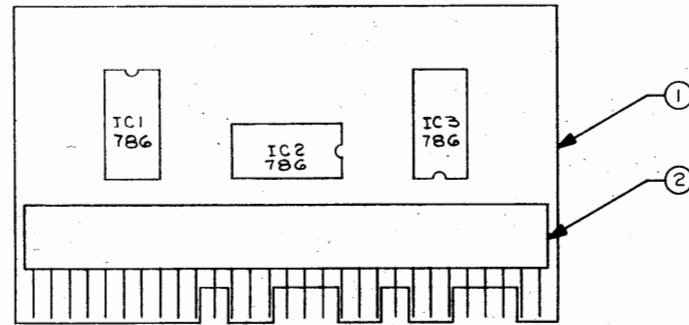


3	IC3		
	IC2	MC725P	INTEGRATED CIRCUIT - MOTOROLA
	IC1		
1	C1	UK10-104	CAPACITOR - .1µf ±80-20%, 10V, CRL
AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	2	90-1022-019-000-001	CONNECTOR - ELCO
1	1	SEL 747	PRINTED CIRCUIT - (REV. SEE A51860)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
		DR. F.L. SIENA	3-1-67	SCHEMATIC & ASSEMBLY 4 NOR (M)
CC	RKM	3-27-67		
ENGR.	<i>W. L. ...</i>	4/20/67		
PROJ. NO.	<i>...</i>			
APP.	<i>...</i>			
CODE IDENT NO	20886	SIZE	D	8547

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING & DIMENSIONAL DWG SEE 08500.

REV	D	8557	DATE	APP'D
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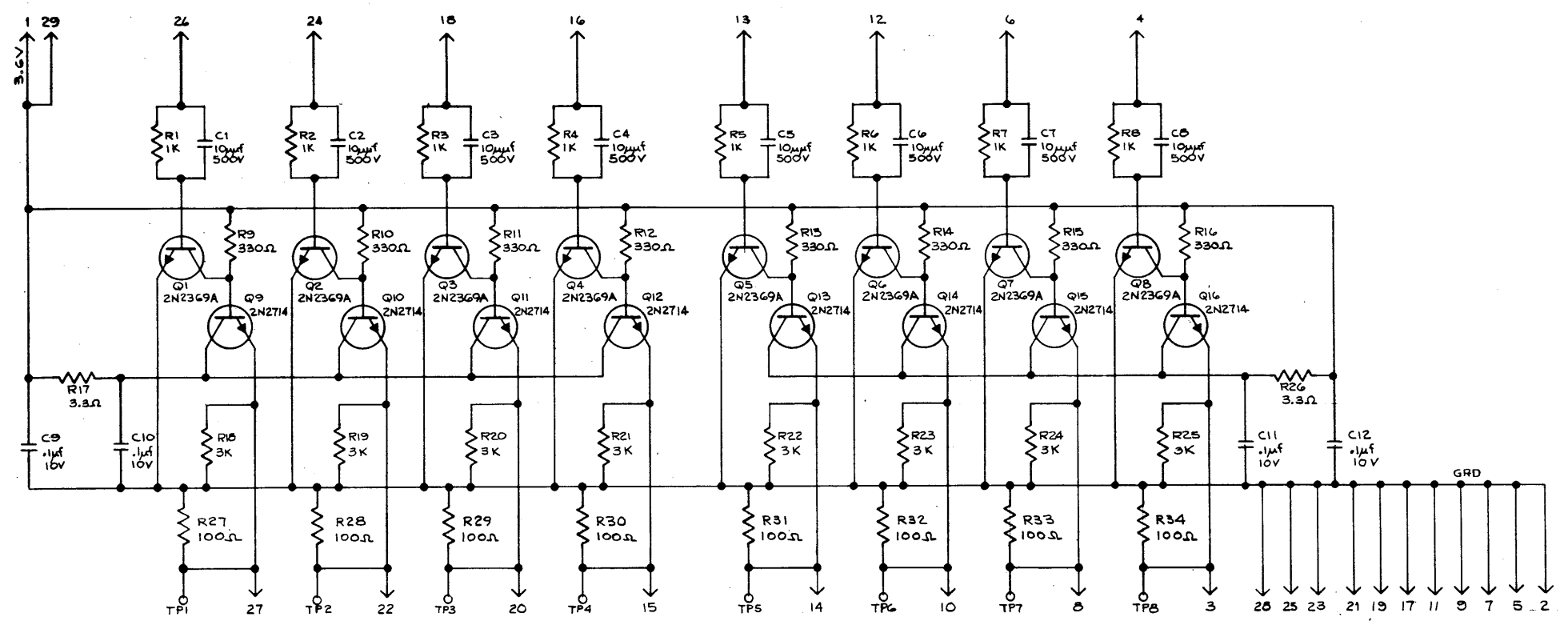
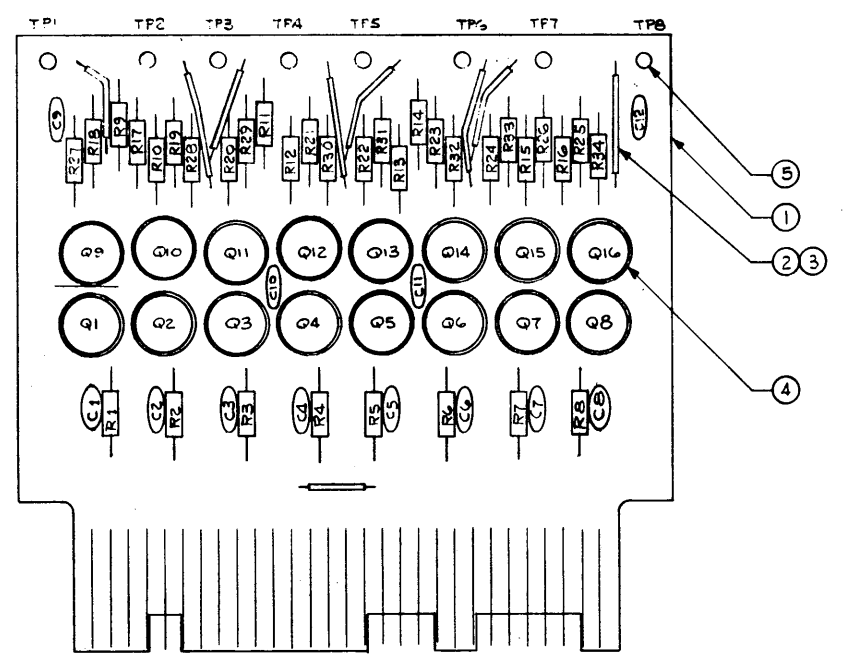


3	IC3		
	IC2	MC 786P	INTEGRATED CIRCUIT - MOTOROLA
	IC1		
1	2	00-7077-029-000-000	CONNECTOR - ELCO
1	1	SEL 757	PRINTED CIRCUIT (FOR REV. SEE A51860)
1	ITEM DWG. OR PART NO.		DESCRIPTION
 SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	L. GOODREAD	5/11/67	
CR.	R.M.M.	5-10-67	SCHEMATIC & ASSEMBLY
ENGR.			4 NOR EXPANDER (M)
INCL. APP.			
AV.			
USED ON			

CODE IDENT NO.	20886	SIZE	D	8557	REV
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIALS OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE $\pm 5\%$, $\frac{1}{4}$ W.
 3. FOR DRILLING DIMENSIONS C.A. DWG SEE CBS00-575

REV	DESCRIPTION	DATE	APPD
D	8614		E
A	65-183; REVISED TO LATEST PC SEL 575B. AXCEL NOTE B 67W046 7/23/65	7/27/65	
B	66-57 REVISED TO LATEST PC SEL 575C. KJ 7/2/66	7/2/66	
C	66-755; ADDED DASH 2. WIFE 7/15/66	7/15/66	
D	66-276; R27 THRU R34, 100 Ω WAS R26 THRU R33, 100 Ω . L.G. 8/2/66	8/2/66	
E	67-106; Q1 THRU Q8 WERE 2N709. LG 3/28/67	3/31/67	



8	8	R34 THRU R27	RC07GF101J	RESISTOR-100 Ω , ALLEN BRADLEY
8	5	R25 THRU R18	RC07GF302J	RESISTOR - 3K - ALLEN BRADLEY
2	2	R26 R17	RC07GF3R3J	RESISTOR - 3.3 Ω - ALLEN BRADLEY
8	8	R16 THRU R9	RC07GF331J	RESISTOR - 330 Ω - ALLEN BRADLEY
8	8	R8 THRU R1	RC07GF102J	RESISTOR - 1K - ALLEN BRADLEY
8	8	Q16 THRU Q9	2N2714	TRANSISTOR - G.E.
8	8	Q8 THRU Q1	2N2369A	TRANSISTOR - FAIRCHILD
4	4	C12 C11 C10 C9	UK-10-104	CAPACITOR - .1 μ f, $\pm 10\%$, 10V - CRL
8	8	C8 THRU C1	ID-100	CAPACITOR - 10 μ f, $\pm 10\%$, 500V - CRL
8	8	5	2043B	TERMINAL - CTC
16	16	4	B10369	UNIPAD
AR	AR	3	AWG 24	SLEEVING - TEFLON, THINWALL
AR	AR	2	AWG 24	WIRE - SOLID COPPER, TINNED
1	1	1	SEL-575	PRINTED CIRCUIT (FOR REV. SEE AS1140)
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

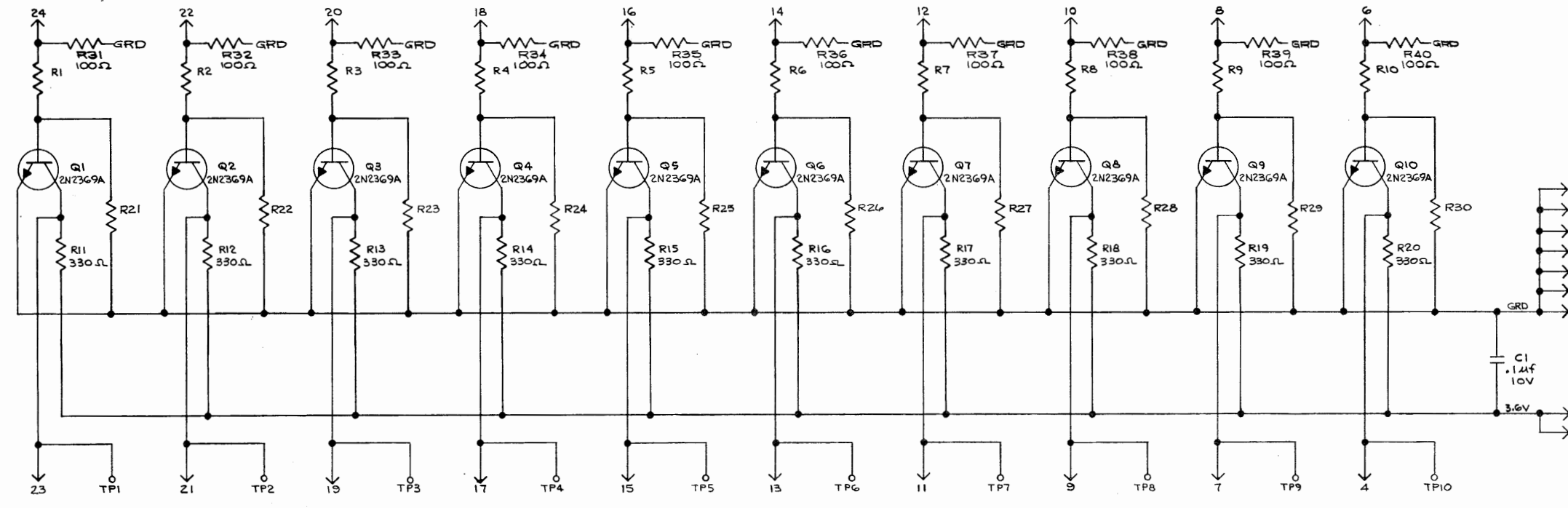
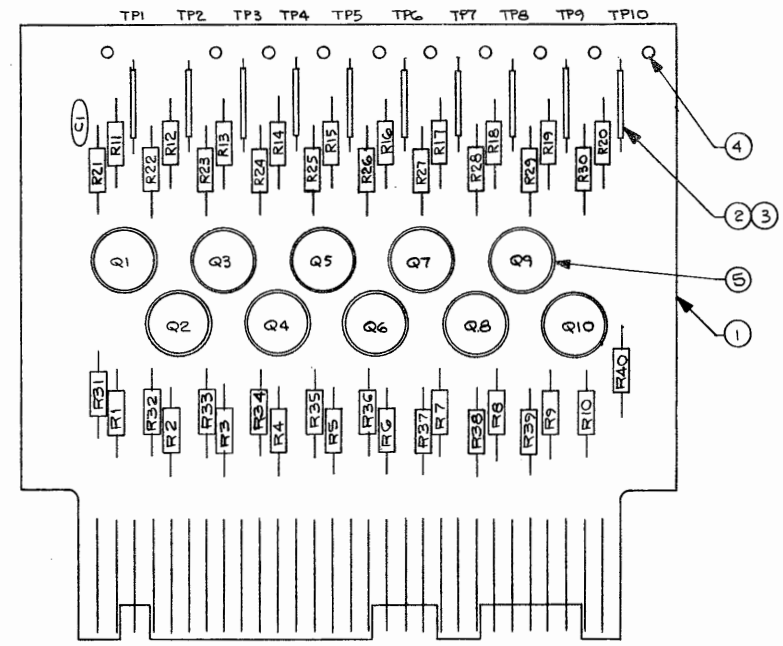
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED	
FORT LAUDERDALE, FLORIDA			
DR	E.J. SCHEICK	5-11-65	
CE	W.R. FREY	5-13-65	
ENG	<i>[Signature]</i>	7/12/65	
PROJ. APP.	<i>[Signature]</i>	7/12/65	
USED ON			

CODE IDENT NO.
20886

REV	DESCRIPTION	DATE	APPD
D	8614		E

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $\frac{1}{4}W$.
 3. FOR DRILLING AND DIMENSIONAL DWG SEE C8600-576.

REV	DESCRIPTION	DATE	APPD
D	8615		E
A	65-162; ADDED NOTE 3 M.D.WOLSKI 7-6-65	7/1/65	
B	66-133; ADDED DASH 2, RICOUE 3-28GG RKM	4/1/66	
C	67-106; Q1 THRU Q10 WERE 2N709. LG 3/28/67 RKM	3/31/67	
D	68-73; ADDED DASH 3 W.A. Bland 2-9-68 RKM	2/2/68	
E	68-121; ADDED DASH 4 W.A. B. 3-5-68 RKM	3/1/68	



10				R30	RC07GF102J	RESISTOR-1.8K, ALLEN BRADLEY
				R21	RC07GF472J	RESISTOR-4.7K, ALLEN BRADLEY
10				R10	RC07GF101J	RESISTOR-100Ω, ALLEN BRADLEY
				R31	RC07GF202J	RESISTOR-2K, ALLEN BRADLEY
10				R30	RC07GF331J	RESISTOR-330Ω, ALLEN BRADLEY
				R20	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
10				R10	2N2369A	TRANSISTOR- FAIRCHILD
				Q1		
1	1	1	1	C1	UK10-104	CAPACITOR-.1μf±80-20%, 10V, CRL
10	10	10	10	5	B10369	UNIPAD-
10	10	10	10	4	2043B	TERMINAL- CTC
AR	AR	AR	AR	3	AWG 24	SLEEVING- TEFLON , THINWALL
AR	AR	AR	AR	2	AWG 24	WIRE- SOLID COPPER, TINNED
1	1	1	1	1	SEL 576	PRINTED CIRCUIT (FOR REV. SEE A51140)
-4	-3	-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEI SYSTEMS ENGINEERING LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

DR. *R. Wolfe* 4-30-65
 CK. R.K.M. 5-10-65
 ENG. *R. K. M.* 5-14-65
 PROJ. *R. K. M.* 5-14-65
 APP. *R. K. M.* 5/1/65
 USED ON

CODE IDENT NO. 20886

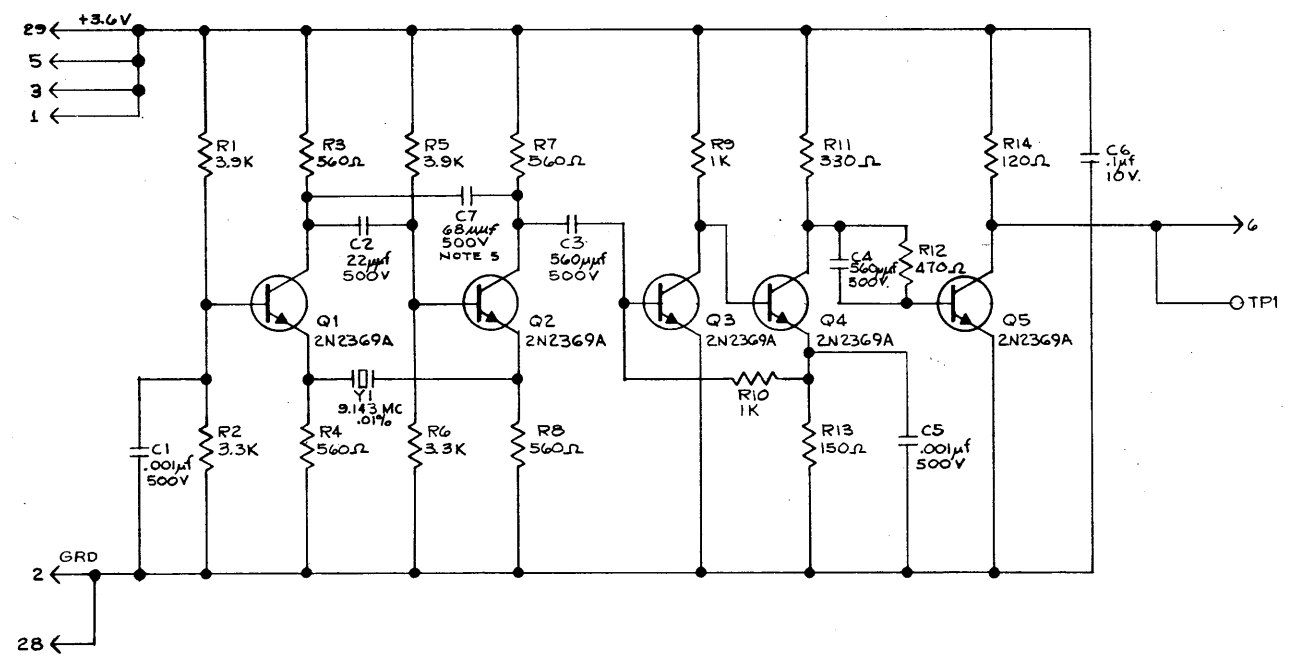
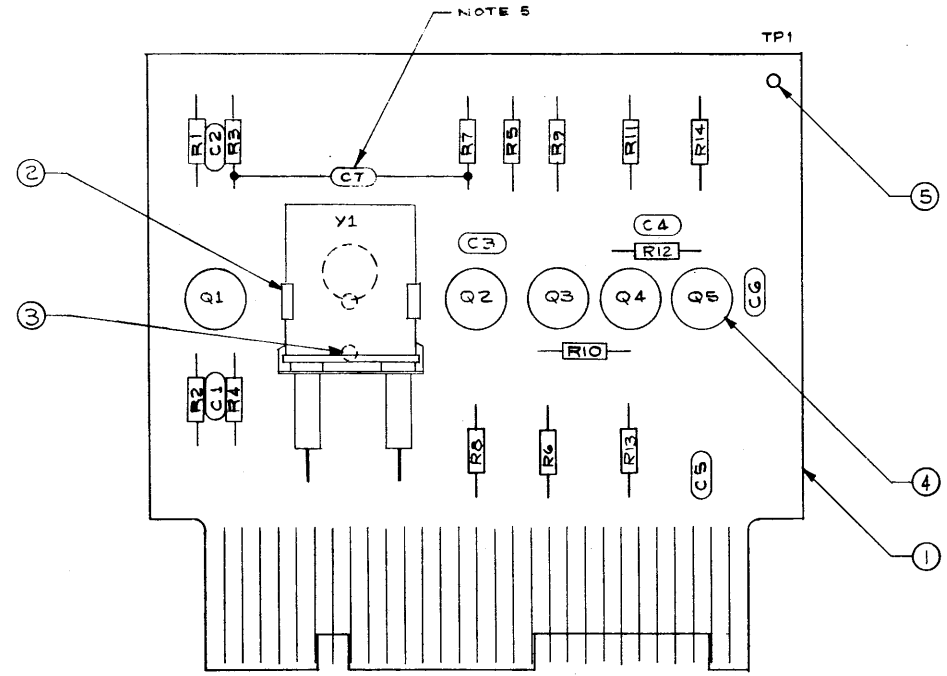
SIZE D 8615

REV E

SCHEMATIC & ASSEMBLY
 CABLE TERMINATOR

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL, OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 15%, 1/4W.
 3. FOR DRILLING & DIMENSIONAL DWG. SEE C8600-570.
 4. Y1 MAY BE SUBSTITUTED WITH G4-41 MONITOR.
 5. DASH 2 FOR 5MHz OPERATION ONLY.

REV	DESCRIPTION	DATE	APPD
D	8620		
A	65-179 ADDED NOTE 3 E.J.SCHEICK 7-22-65	7/22/65	[Signature]
B	66-205; ADDED NOTE 4, & ITEMS 2 AND 3. Y1 WAS #G4-41, MONITOR. REVISED TO AGREE WITH LATEST P.C. BACKGROUND. RAC 8-3-66 RKM	8/4/66	[Signature]
C	66-406; TITLE WAS "10MC OSCILLATOR" RKM 11-10-66 UC	11/10/66	[Signature]
D	67-1; ADDED DASH 2 & NOTE 5. RKM 1-4-67 UC	1/5/67	[Signature]
E	67-105; TRANSISTORS WERE 2N709; Y1 WAS 9.148 MC. LG 3/28/67 RKM	3/31/67	[Signature]



QTY	REF	DESCRIPTION	VALUE	MANUFACTURER
1	Y1	HC-G/U NOTE 4	CRYSTAL - 9.143 MC, .01%, PIEZO	
4	R8, R7, R4, R3	RC07GFS61J	RESISTOR - 560Ω - ALLEN BRADLEY	
2	R10, R9	RC07GF102J	1K	
2	R6, R2	RC07GF332J	3.3K	
2	R5, R1	RC07GF392J	3.9K	
1	R14	RC07GF121J	120Ω	
1	R13	RC07GF151J	150Ω	
1	R12	RC07GF471J	470Ω	
1	R11	RC07GF331J	REISISTOR - 330Ω - ALLEN BRADLEY	
5	Q5 THRU Q1	2N2369A	TRANSISTOR - FAIRCHILD	
1	C7	1D-680	CAPACITOR - 68μf ±10%, 500V - CRL	
2	C5, C1	1D-102	CAPACITOR - .001μf ±10%, 500V - CRL	
2	C4, C3	1D-561	CAPACITOR - 560μf ±10%, 500V - CRL	
1	C2	1D-220	CAPACITOR - 22μf ±10%, 500V - CRL	
1	C6	UK-10-104	CAPACITOR - .1μf ±20%, 10V - CRL	
1	5	2043B	TERMINAL - CTC	
5	4	B10369	UNIPAD	
2	3	A877-1	EYELET - STIMPSON	
1	2	B000-DG2	CLIP - AUGAT	
1	1	SEL-570	PRINTED CIRCUIT (FOR REV SEE AS1140)	
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEL
 SYSTEMS ENGINEERING
 LABORATORIES, INCORPORATED
 FORT LAUDERDALE, FLORIDA

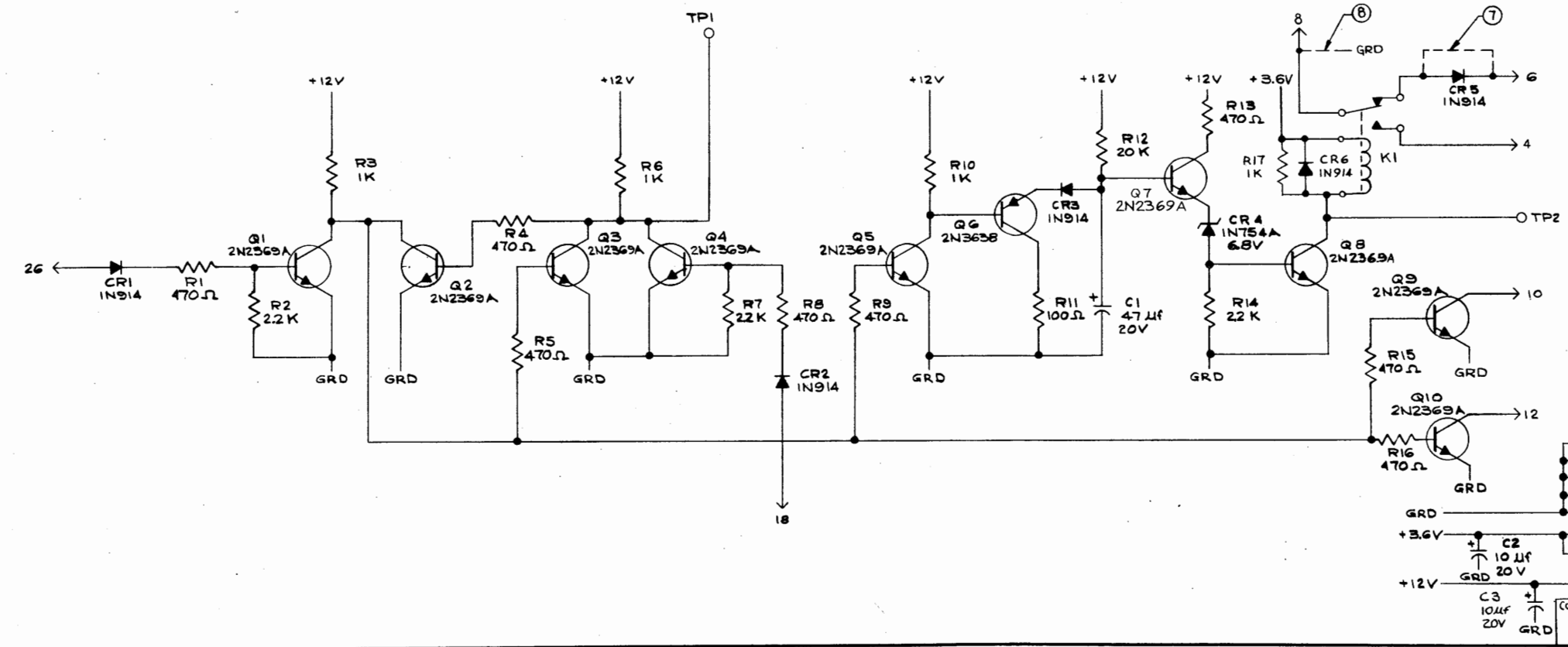
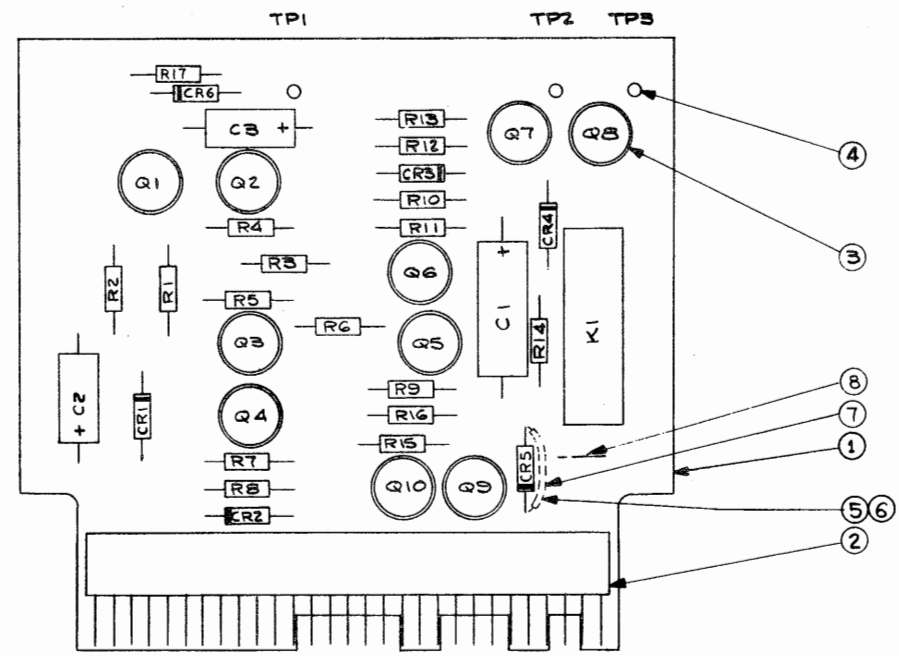
DR. E.J. SCHEICK	5-4-65
CK. W. R. FREY	5-11-65
ENG. [Signature]	7-15-65
PROJ. MGR. [Signature]	7-15-65
APP. [Signature]	7/15/65

**SCHEMATIC & ASSEMBLY
 OSCILLATOR**

CODE IDENT NO. 20886	SIZE D	REV E
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NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $\frac{1}{4}$ W.
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE C 8600-617.

REV	DESCRIPTION	DATE	APPD
D	8639		C
A	65-467, ADDED R17 & CR6, Q8 WAS 2N2102. PMM 12-30-65 RKM	12/30/65	[Signature]
B	66-347; C1 WAS 120UF. E. MARCUM 10-12-66 RKM	10/13/66	[Signature]
C	67-111; C1 WAS 10V M.H.R. 3-30-67 RKM	3/31/67	[Signature]



1	1	R12	RC07GF20BJ	RESISTOR-20K, ALLEN BRADLEY
1	1	R11	RC07GF101J	RESISTOR-100.0, ALLEN BRADLEY
4	4	R17 R10 R3,6	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY
3	3	R14 R2	RC07GF222J	RESISTOR-22K, ALLEN BRADLEY
8	8	R16 R15 R13 R9 R8 R5 R4 R1	RC07GF471J	RESISTOR-470.0, ALLEN BRADLEY
1	1	Q6	2N3638	TRANSISTOR-FAIRCHILD
9	9	Q10 Q7,8 Q3,4 Q1	2N2369A	TRANSISTOR-FAIRCHILD
1	1	K1	C1C	RELAY-MC1
1	1	CR4	1N754A	DIODE-6.8V, ZENER, MOTOROLA
4	4	CR5 CR6 CR3 CR2	1N914	DIODE-CLEVITE
2	2	C3 C2	150D106X0020B2	CAPACITOR-10.0uf $\pm 20\%$, 20V, SPRAGUE
1	1	C1	150D47K0020R2	CAPACITOR-47.0uf $\pm 20\%$, 20V, SPRAGUE
1	1	B		JUMPER
1	1	T		JUMPER
AR	6		AWG 24	SLEEVING-TEFLON, THINWALL (COLOR OPT)
AR	5		AWG 24	WIRE-SOLID COPPER, TINNED
3	3	4	2043B	TERMINAL-CTC
10	10	3	B10369	UNIPAD
1	1	2	90-7022-029-000-001	CONNECTOR-ELCO
1	1	1	SEL G17	PRINTED CIRCUIT (FOR REV 58E-MS14)
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SYSTEMS ENGINEERING
 LABORATORIES INCORPORATED
 FORT LAUDERDALE, FLORIDA

SCHEMATIC & ASSEMBLY
 DATA SAVER

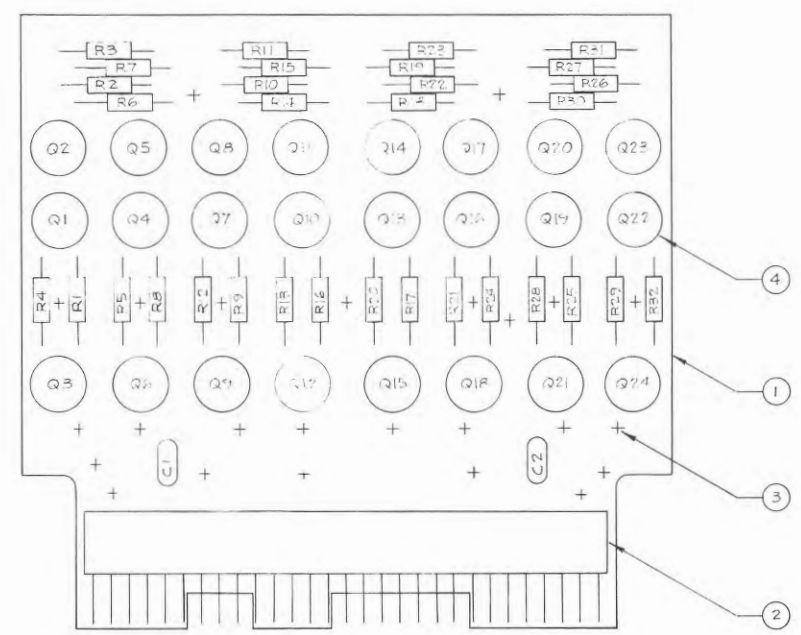
DATE: 11-18-65
 CL: R.K.M.
 ENG: J. J. Doughty
 APP: [Signature]
 PROJ. NO.: [Blank]
 CODE IDENT NO.: 2088E

SIZE: D 8639 C

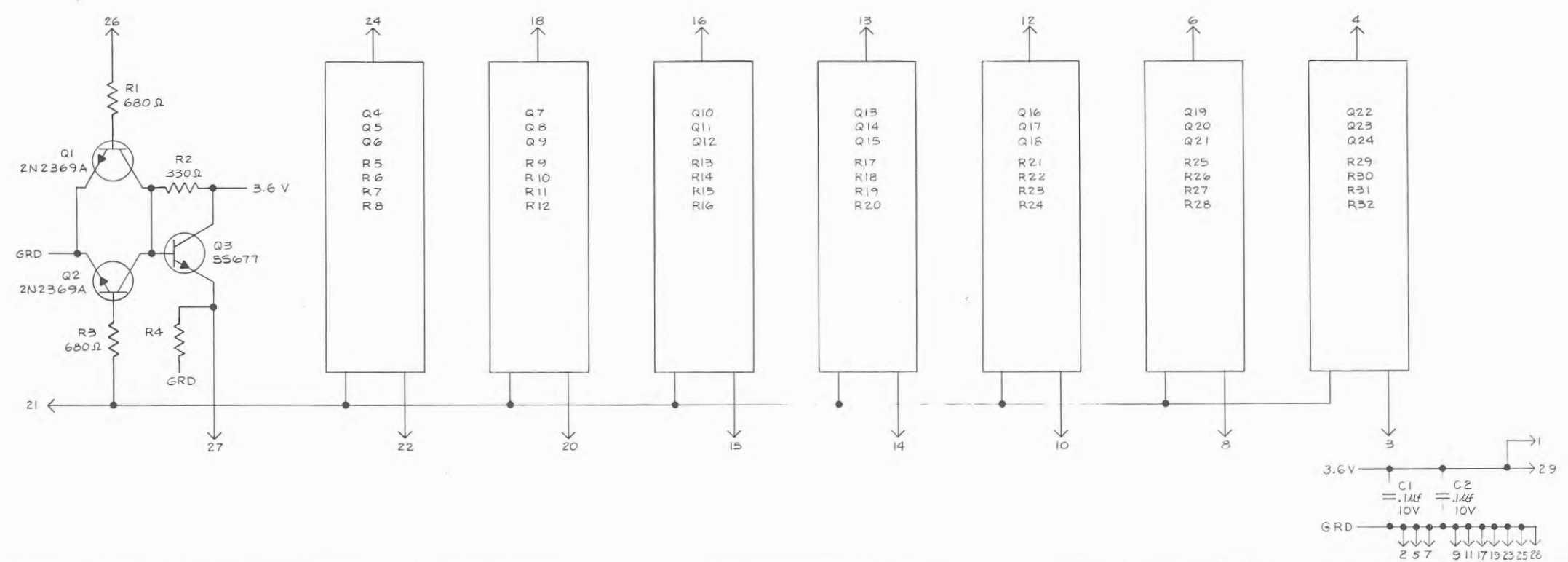
NOTES:

1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $1/4$ W.
3. FOR DRILLING DRAWING SEE DRAWING 812. FOR DIMENSIONAL DRAWING SEE 0163A1.

SIZE	D	8705	REV	C
REV	A	DESCRIPTION	DATE	APPD
		6T-52; ADDED -2 R.H.S. 2-20-67 RKM	4/19/67	[Signature]
	B	6B-122; Q3, 6, 9, 12, 15, 18, 21 & Q24 WERE 2N3904. CEM 3/8/68 RKM	3/13/68	[Signature]
	C	6B-262; NOTE 3 WAS: FOR DRILLING & DIM. DWG. SEE CB699. RKM 5-13-68 670	5/20/68	[Signature]



8	8	R32 R28 R24 R20 R16 R12 R8 R4	RC07GF101J	RESISTOR-100Ω, ALLEN BRADLEY
8	8	R32 R28 R24 R20 R16 R12 R8 R4	RC07GF302J	RESISTOR-3K, ALLEN BRADLEY
8	8	R30 R26 R22 R18 R14 R10 R6 R2	RC07GF331J	RESISTOR-330Ω, ALLEN BRADLEY
16	16	R31 R29 R27 R25 R23 R21 R19 R17 R15 R13 R11 R9 R7 R5 R3 R1	RC07GF681J	RESISTOR-680Ω, ALLEN BRADLEY
8	8	Q24 Q21 Q18 Q15 Q12 Q9 Q6 Q3	55677	TRANSISTOR - MOTOROLA
16	16	Q23 Q22 Q20 Q19 Q17 Q16 Q14 Q13 Q11 Q10 Q8 Q7 Q5 Q4 Q2 Q1	2N2369A	TRANSISTOR - FAIRCHILD
2	2	C2 C1	UK10-104	CAPACITOR-1.0μF±20%, 10V, CRL
24	24	4	B10369	UNIPAD-
AR	AR	3	AWG 24	WIRE - SOLID COPPER, TINNED
1	1	2	00-7022-029-000-001	CONNECTOR - ELCO
1	1	1	SEL 812	PRINTED CIRCUIT (FOR REV SEE A51140)
-2	-1	ITEM	DWG. OR PART NO.	DESCRIPTION



DR.	JIM MAY	26 APR 66
CK.	RKM	4-27-66
ENG.	[Signature]	5/6/66
PROJ.		
APP.		
USED ON		

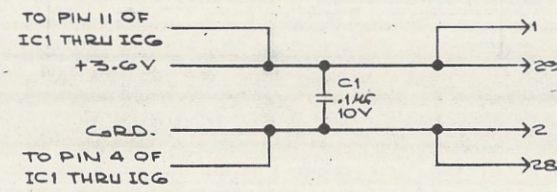
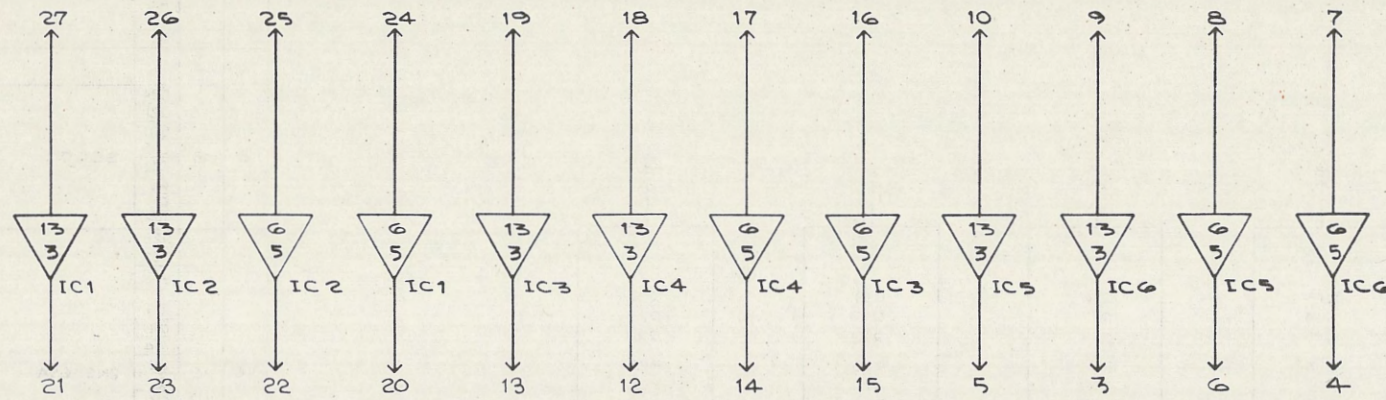
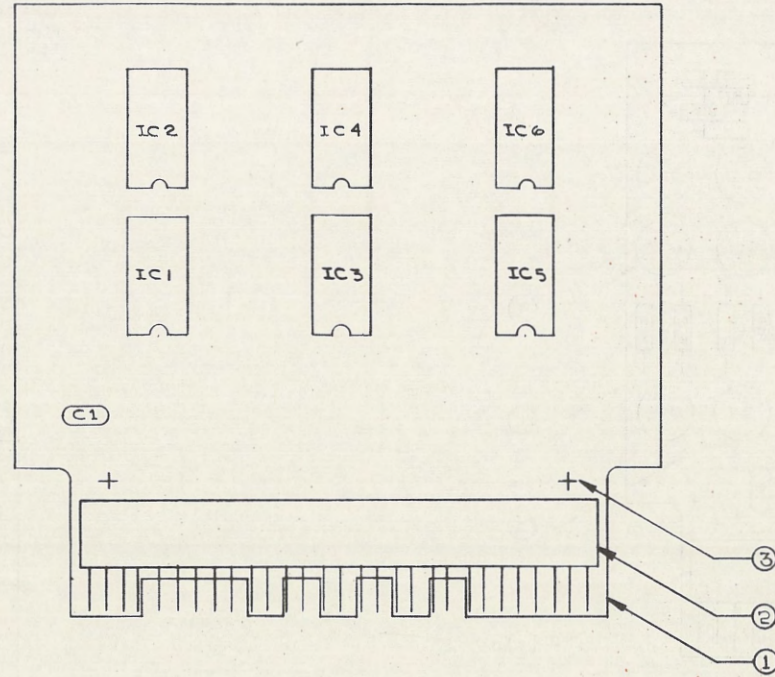
CODE IDENT NO. 20886

SIZE D 8705

NOTES:

1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT
2. FOR DRILLING DWG. SEE DB600-900 FOR DIMENSIONAL DWG. SEE C 8600

REV	D	8749	DATE	APP'D
DESCRIPTION				

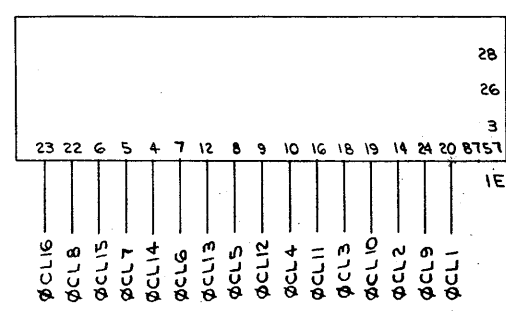
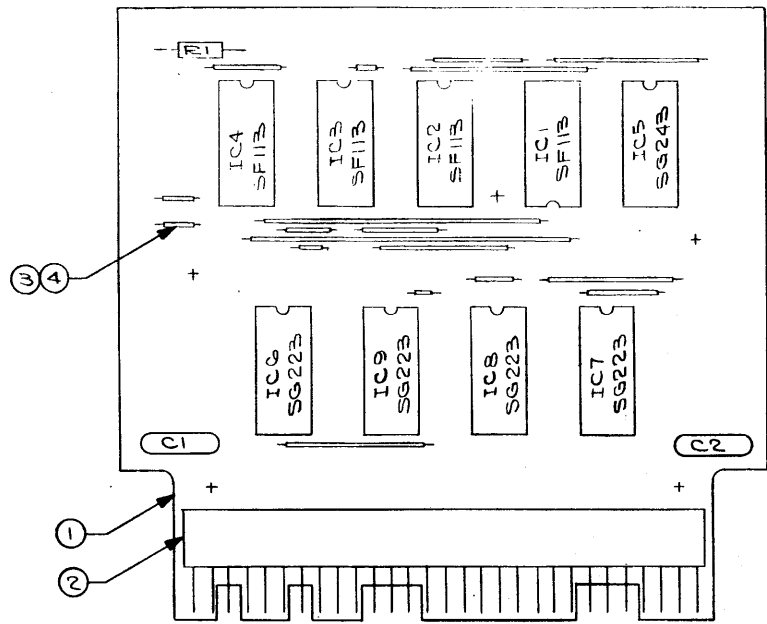


6	IC6 THRU IC1	MC799P	INTEGRATED CIRCUIT-MOTOROLA
1	C1	UK10-104	CAPACITOR-1/4x100-20%,10V CRL
AR	3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	007022029-000001	CONNECTOR - ELCO
1	1	SEL 900	PRINTED CIRCUIT (FOR REV. A51140)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

SEL		SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA	
DR	b. BYRD	2-28-67	
CC	RKM	3-1-67	SCHMATIC & ASSEMBLY
ENG.	W. C. [Signature]	A 20/67	DIGITAL BUFFER (M)
PROJ.	W. C. [Signature]	A 20/67	
APP.	[Signature]	[Signature]	
USE/ON			

CODE IDENT NO
20886

SIZE	D	8749	REV	
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110 NS

9.143 MHz
I
0190
139

To 8234

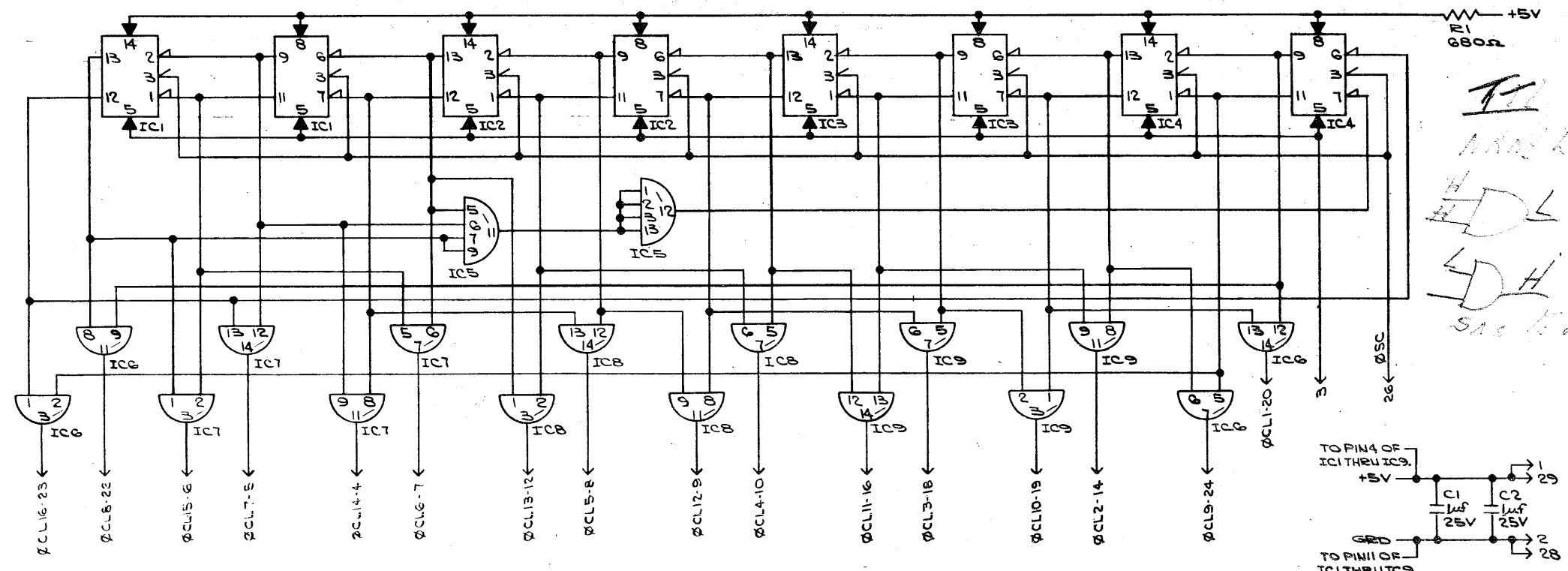
TTL

16 signals at 110NS each

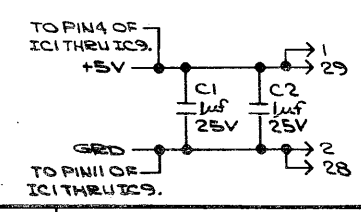
Normal 810A
TTL
LDH
HDL
15NS TO OPERATE

- NOTES:
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 5\%$, $\frac{1}{4}$ W.
 3. FOR DRILLING DWG. SEE DB800-980.
- FOR DIMENSIONAL DWG. SEE CB800

REV	DESCRIPTION	DATE	APPD
A	6T-251; IC1 THRU IC4 WERE SG113 ON LIST OF MATERIAL. C.P. 7-20-67	7/20/67	RKM
B	6T-252; IC5 WAS SF243 ON PARTS LIST. C.P. 7-24-67	7/24/67	RKM
C	6T-445; ADDED 8757 & 86201 ADDRESSES REVISED AND LINE TITLES ADDED. AS. 10-25-67	10/25/67	AS



TTL
NAND Logic
LDH
HDL
5NS TO OPERATE



ITEM	DWG. OR PART NO.	DESCRIPTION
1	R1	RCOTGFGBJW RESISTOR-680 Ω , ALLEN BRADLEY
4	IC9 IC8 IC7 IC6	SG223
1	IC5	SG243 INTEGRATED CIRCUIT-SYLVANIA
4	IC4 IC3 IC2 IC1	SF113
2	C2 C1	5C13 CAPACITOR- μ F \pm 20%, 25V, SPRAGUE
AR 4	AWG 24	SLEEVING-TEFLON, THINWALL
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001 CONNECTOR-ELCO
1	1	SEL 960 PRINTED CIRCUIT (REV. SEE AS1140)

Systems Engineering Laboratories
8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

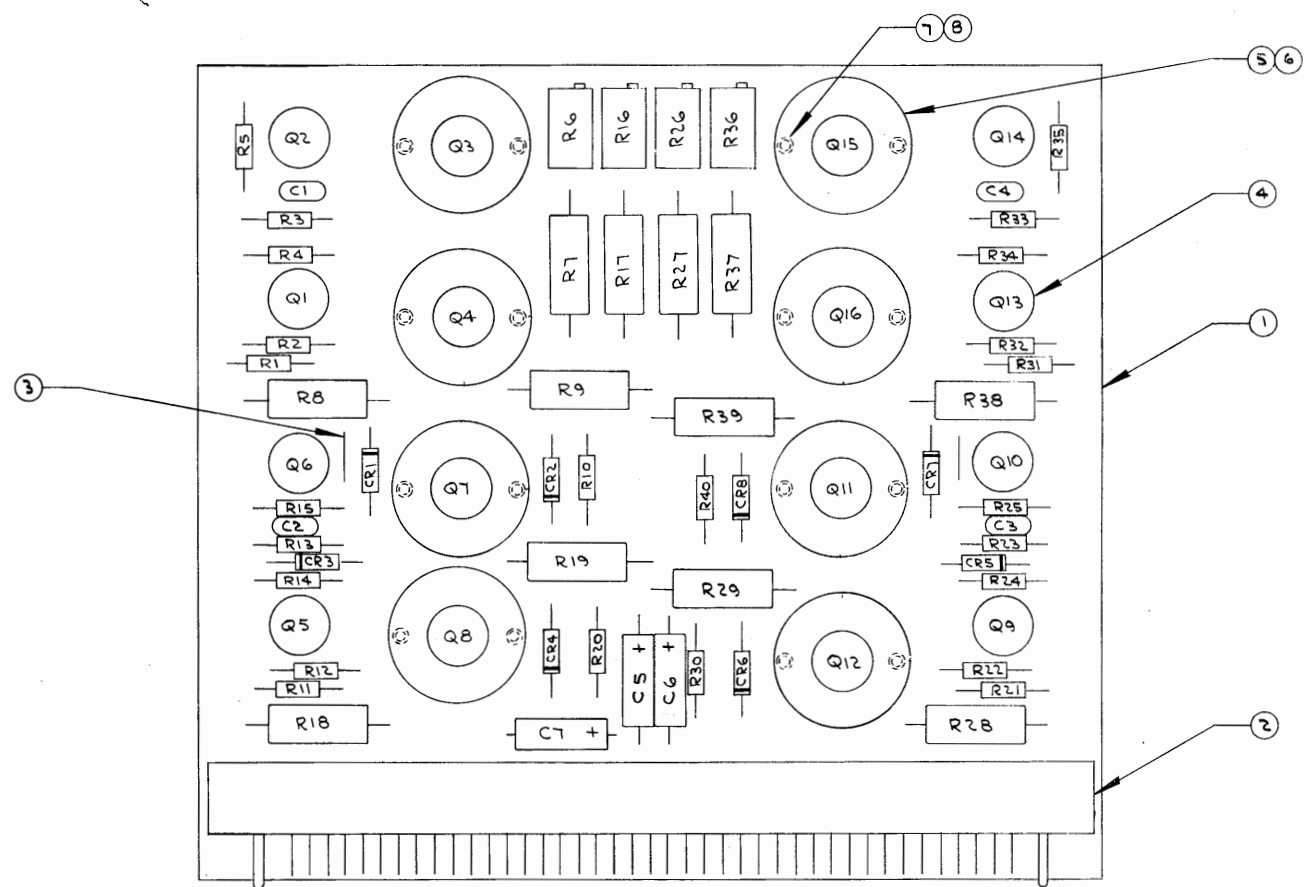
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CHK	RKM	6-22-67
ENGR	Yelland	
PROJ	Systems	
APPD	RKM	6/29/67
NEXT ASSY		

SCHEMATIC ASSEMBLY
COMPUTER CLOCK
(SUHL)

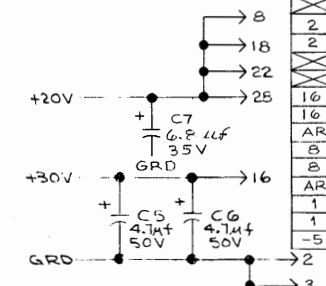
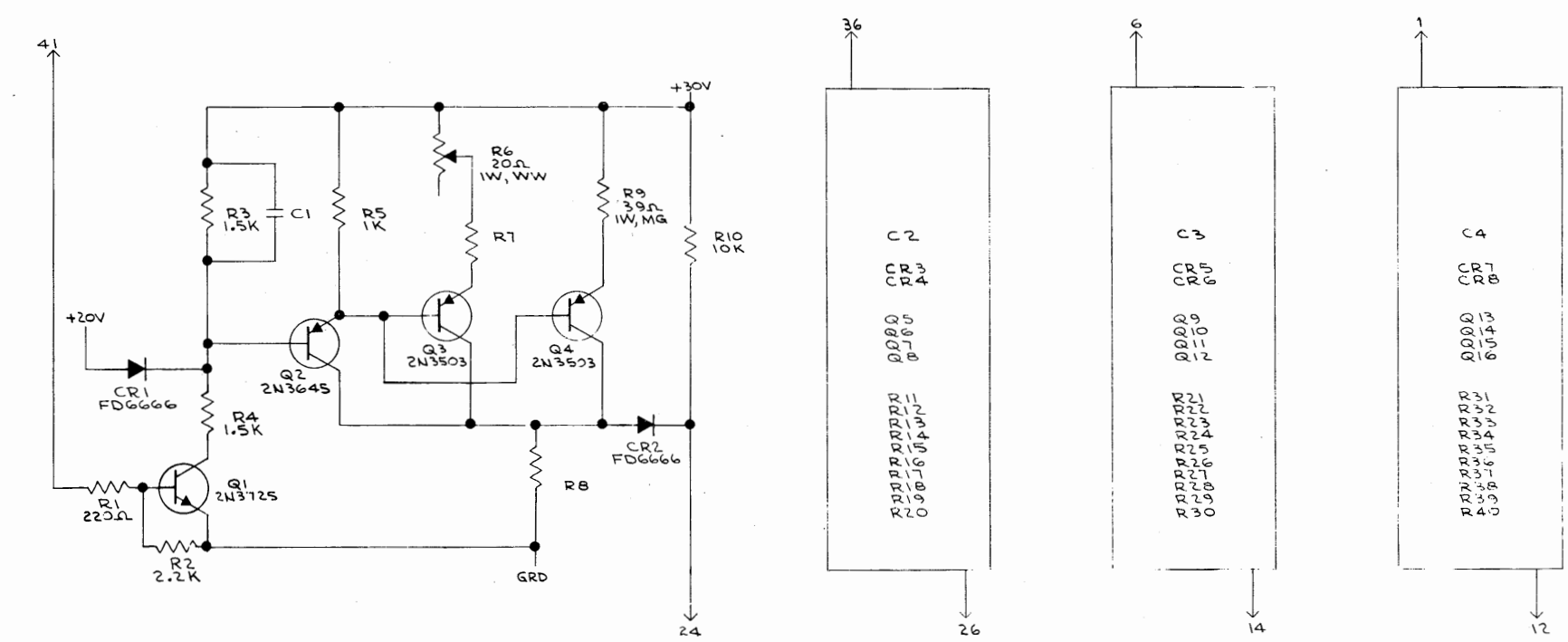
CODE IDENT NO.	SIZE	REV.
20886	D	8757

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 5%, 1/4W.
 3. FOR DRILLING AND DIMENSIONAL DWG. SEE C13975.
 4. SELECT AT TEST.

REV	DESCRIPTION	DATE	APP'D
A	66-43B; ADDED DASH 2	12/20/66	[Signature]
B	67-39B; ADDED-3,4,5 RKM 10-2-67 G7W	10/26/67	[Signature]
C	67-512; VALUE OF R7 WAS 27Ω ON DASH 3,4,5 WAC 11-21-67 RKM	11/21/67	[Signature]



QTY	REF	DESCRIPTION	ALLEN BRADLEY			
1	R28	RC32GF121J	RESISTOR-120Ω, 1W, ALLEN BRADLEY			
1	R38	RC32GF820J	RESISTOR-82Ω, 1W, ALLEN BRADLEY			
1	R18	RC32GF121J	RESISTOR-120Ω, 1W, ALLEN BRADLEY			
1	R38	RC32GF121J	RESISTOR-120Ω, 1W, ALLEN BRADLEY			
1	R28	RL42AD510J	RESISTOR-51Ω, 2W, ±200PPM/°C, MG, IRC			
1	R18	RL42AD560J	RESISTOR-56Ω, 2W, ±200PPM/°C, MG, IRC			
4	R30, R40, R10, R20	RC07GF103J	RESISTOR-10K, ALLEN BRADLEY			
1	R8	RC32GF151J	RESISTOR-150Ω, 1W, ALLEN BRADLEY			
1	R3	RC32GF181J	RESISTOR-180Ω, 1W, ALLEN BRADLEY			
4	R2, R3, R8, R18	NOTE 4	RESISTOR - NOTE 4			
4	R29, R39, R9, R19	RL32AD390J	RESISTOR-39Ω, 1W, ±200PPM/°C, MG, IRC			
1	R7	RL32AD270J	RESISTOR-27Ω, 1W, ±200PPM/°C, MG, IRC			
4	R26, R36, R6, R16, R25, R35, R5, R15	325EW-66-200	POTENTIOMETER-20Ω, 1W, WW, BOURNS			
4	R2, R3, R8, R18	RC07GF102J	RESISTOR-1K, ALLEN BRADLEY			
8	R23, R34, R13, R14, R3, R4	RC07GF152J	RESISTOR-1.5K, ALLEN BRADLEY			
4	R22, R32, R2, R12	RC07GF222J	RESISTOR-2.2K, ALLEN BRADLEY			
4	R21, R31, R1, R11	RC07GF221J	RESISTOR-220Ω, ALLEN BRADLEY			
8	Q15, Q16, Q11, Q12, Q1, Q8, Q3, Q4	2N3503	TRANSISTOR- FAIRCHILD			
4	Q10, Q11, Q1, Q6	2N3645	TRANSISTOR- FAIRCHILD			
4	Q9, Q13, Q1, Q5	2N3725	TRANSISTOR- FAIRCHILD			
8	CR8, CR1	FD6666	DIODE- FAIRCHILD			
1	C7	150D665X035B2	CAPACITOR-6.8μf ±20%, 35V, SPRAGUE			
2	C5, C6	150D475X050B2	4.7μf ±20%, 50V, SPRAGUE			
1	C3	NOTE 4	- NOTE 4			
1	C3	ID151	- 150μf ±10%, 500V, CRL			
1	C3	ID750	- 75μf ±10%, 500V, CRL			
2	C2, C4	NOTE 4	- NOTE 4			
2	C1, C3	ID271	- 270μf ±10%, 500V, CRL			
1	C1	ID101	- 100μf ±10%, 500V, CRL			
1	C1	NOTE 4	CAPACITOR - NOTE 4			
16	WASHER	#3 FLAT, S.S.				
16	SCREW	#3-48x3/16 PHILIPS FLAT HD, S5				
8	GREASE	2209A THERMAL-OTE GREASE-THERMALLOY				
8	HEAT SINK	B10369 HEAT SINK-THERMALLOY				
8	WIRE	AVWG24 WIRE-SOLID COPPER, TINNED				
1	CONNECTOR	30-7023-041-002 UNIPAD				
1	PCB	SEL 241 PRINTED CIRCUIT (FOR REV. SEE A51140)				
-5	-4	-3	-2	-1	ITEM	DESCRIPTION



SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA

DR. E. MARCINA 10-10-66
 CK. J.S.N. 1-17-67
 ENG. [Signature]
 PRO. [Signature]
 APP. [Signature]

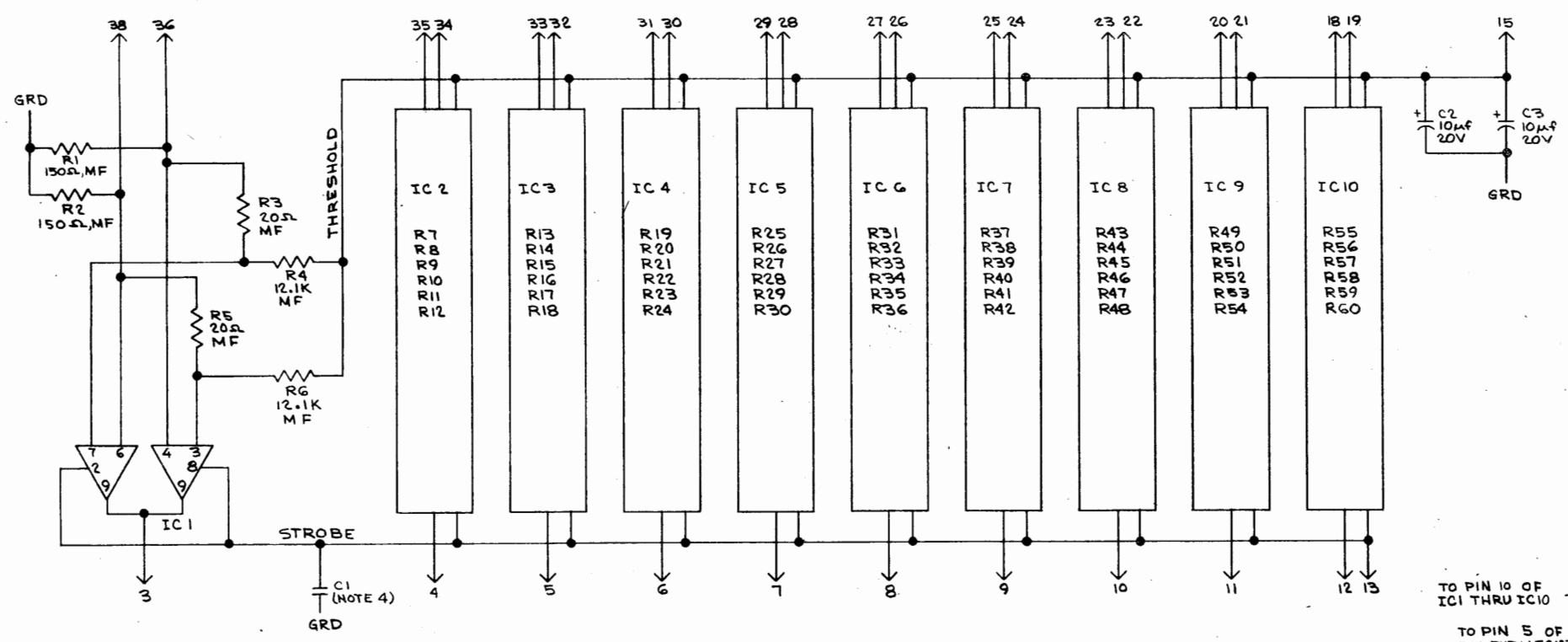
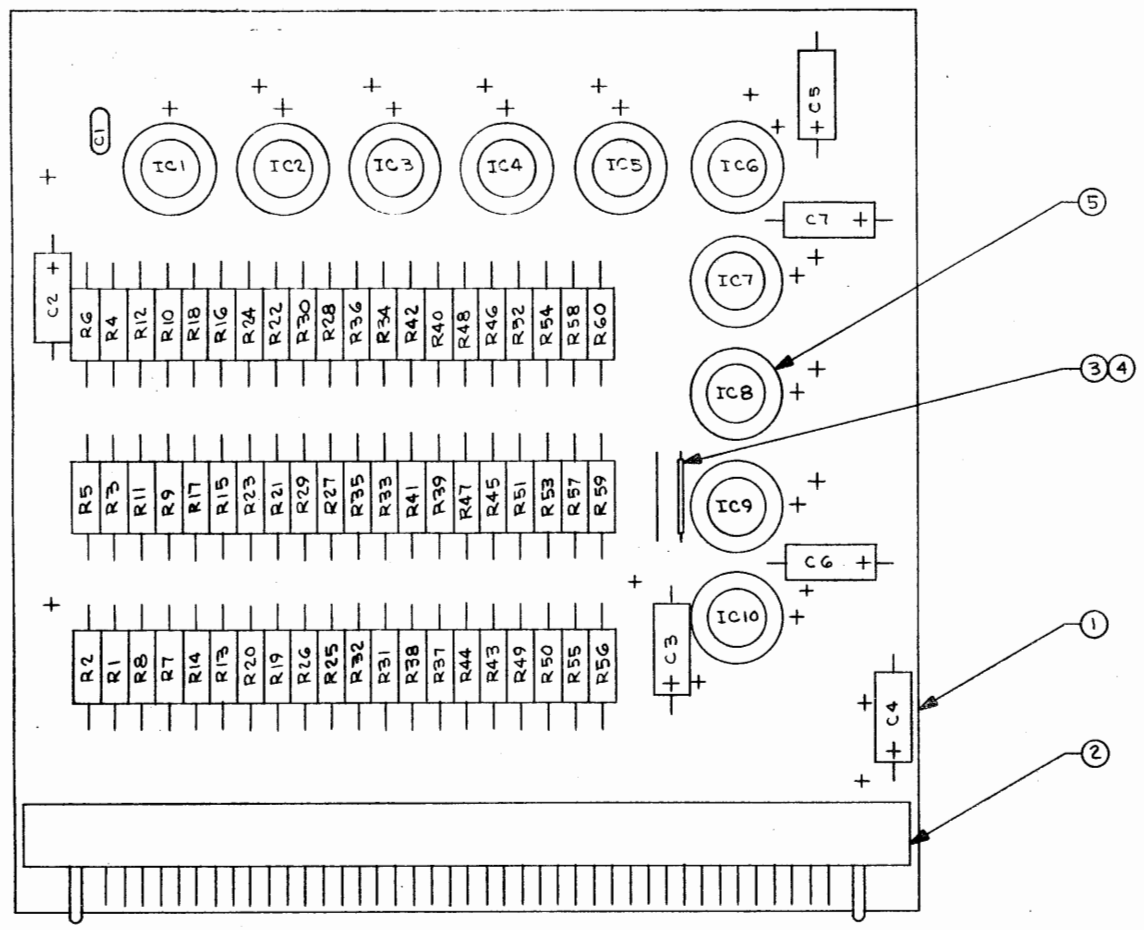
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SIZE D 8959 REV C

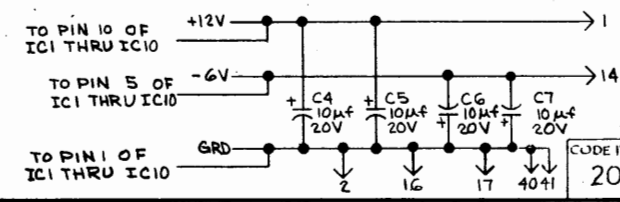
SCHEMATIC & ASSEMBLY DUAL CURRENT DRIVER

- NOTES:
1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE $\pm 1\%$, $1/8$ W.
 3. FOR DRILLING & DIMENSIONAL DWG SEE D13981.
 4. SELECT AT TEST.

REV	D	8962	DATE	APPD
REV		DESCRIPTION	DATE	APPD



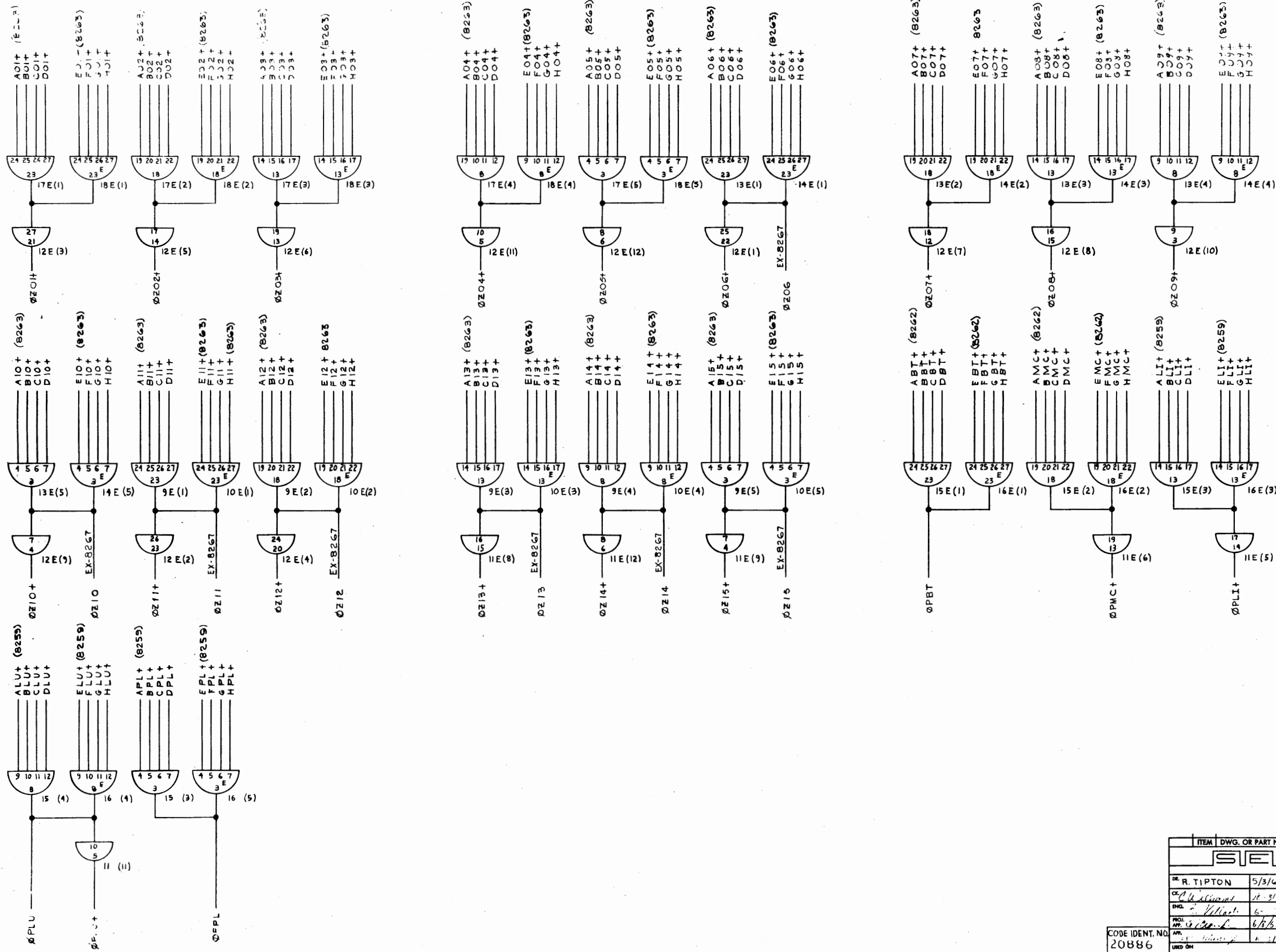
QTY	REF	DESCRIPTION	UNIT
2	R58,60	RES-2.0K ± 50PPM/°C, MF, WL	
2	R52,54	RES-2.0K ± 50PPM/°C, MF, WL	
2	R48,49	RES-2.0K ± 50PPM/°C, MF, WL	
2	R40,41	RES-2.0K ± 50PPM/°C, MF, WL	
2	R34,35	RES-2.0K ± 50PPM/°C, MF, WL	
2	R28,29	RES-2.0K ± 50PPM/°C, MF, WL	
2	R22,23	RES-2.0K ± 50PPM/°C, MF, WL	
2	R16,17	RES-2.0K ± 50PPM/°C, MF, WL	
2	R10,11	RES-2.0K ± 50PPM/°C, MF, WL	
2	R4,5	RES-2.0K ± 50PPM/°C, MF, WL	
2	R51,52	RES-2.0K ± 50PPM/°C, MF, WL	
2	R45,46	RES-2.0K ± 50PPM/°C, MF, WL	
2	R39,40	RES-2.0K ± 50PPM/°C, MF, WL	
2	R33,34	RES-2.0K ± 50PPM/°C, MF, WL	
2	R27,28	RES-2.0K ± 50PPM/°C, MF, WL	
2	R21,22	RES-2.0K ± 50PPM/°C, MF, WL	
2	R15,16	RES-2.0K ± 50PPM/°C, MF, WL	
2	R9,10	RES-2.0K ± 50PPM/°C, MF, WL	
2	R3,4	RES-2.0K ± 50PPM/°C, MF, WL	
2	R55,56	RES-2.0K ± 50PPM/°C, MF, WL	
2	R49,50	RES-2.0K ± 50PPM/°C, MF, WL	
2	R43,44	RES-2.0K ± 50PPM/°C, MF, WL	
2	R37,38	RES-2.0K ± 50PPM/°C, MF, WL	
2	R31,32	RES-2.0K ± 50PPM/°C, MF, WL	
2	R25,26	RES-2.0K ± 50PPM/°C, MF, WL	
2	R19,20	RES-2.0K ± 50PPM/°C, MF, WL	
2	R13,14	RES-2.0K ± 50PPM/°C, MF, WL	
2	R7,8	RES-2.0K ± 50PPM/°C, MF, WL	
2	R1,2	RES-2.0K ± 50PPM/°C, MF, WL	
1	IC10	INTEGRATED CIRCUIT - FC	
1	IC9	INTEGRATED CIRCUIT - FC	
1	IC8	INTEGRATED CIRCUIT - FC	
1	IC7	INTEGRATED CIRCUIT - FC	
1	IC6	INTEGRATED CIRCUIT - FC	
1	IC5	INTEGRATED CIRCUIT - FC	
1	IC4	INTEGRATED CIRCUIT - FC	
1	IC3	INTEGRATED CIRCUIT - FC	
1	IC2	INTEGRATED CIRCUIT - FC	
1	IC1	INTEGRATED CIRCUIT - FC	
6	C7	150DIOGX0020B2 CAPACITOR-10μf ± 20%, 20V, SPRAGUE	
6	C6	150DIOGX0020B2 CAPACITOR-10μf ± 20%, 20V, SPRAGUE	
6	C5	150DIOGX0020B2 CAPACITOR-10μf ± 20%, 20V, SPRAGUE	
6	C4	150DIOGX0020B2 CAPACITOR-10μf ± 20%, 20V, SPRAGUE	
6	C3	150DIOGX0020B2 CAPACITOR-10μf ± 20%, 20V, SPRAGUE	
6	C2	150DIOGX0020B2 CAPACITOR-10μf ± 20%, 20V, SPRAGUE	
1	C1	NOTE 4 CAPACITOR- NOTE 4	
10	AR	UNIPAD	
AR	AR	SLEEVING-TEFLON, THIN WALL (COLOR OPT.)	
AR	AR	AWG 24	
AR	AR	AWG 24	
AR	AR	WIRE - SOLID COPPER, TINNED	
AR	AR	CONNECTOR - ELCO	
AR	AR	PRINTED CIRCUIT (FOR REV. SEE AS1140)	
10	-9	ITEM	DWG. OR PART NO.



DR	L. GOODREAD	10/21/66	REV	D	8962
CK	R.M.M.	10-21-66	DESCRIPTION	SCHEMATIC & ASSEMBLY	
ENG	J. J. ...	10-21-66	DESCRIPTION	MA SENSE AMPLIFIER	
PROJ	R. ...	10-21-66	DESCRIPTION	# 3	
APP	E. ...	10/21/66	DESCRIPTION	CODE IDENT NO.	
USED ON			DESCRIPTION	20886	

REV	DESCRIPTION	DATE	APP'D
D	53021		B
A	67-192 UPDATED TO LATEST CHANGES C. PRUNA 6/20/67	12/29/67	[Signature]
B	67-415 ADDRESSES AND CARD LOCATIONS NUMBERS REVISED E.P.C. 12-30-67	10/30/67	[Signature]

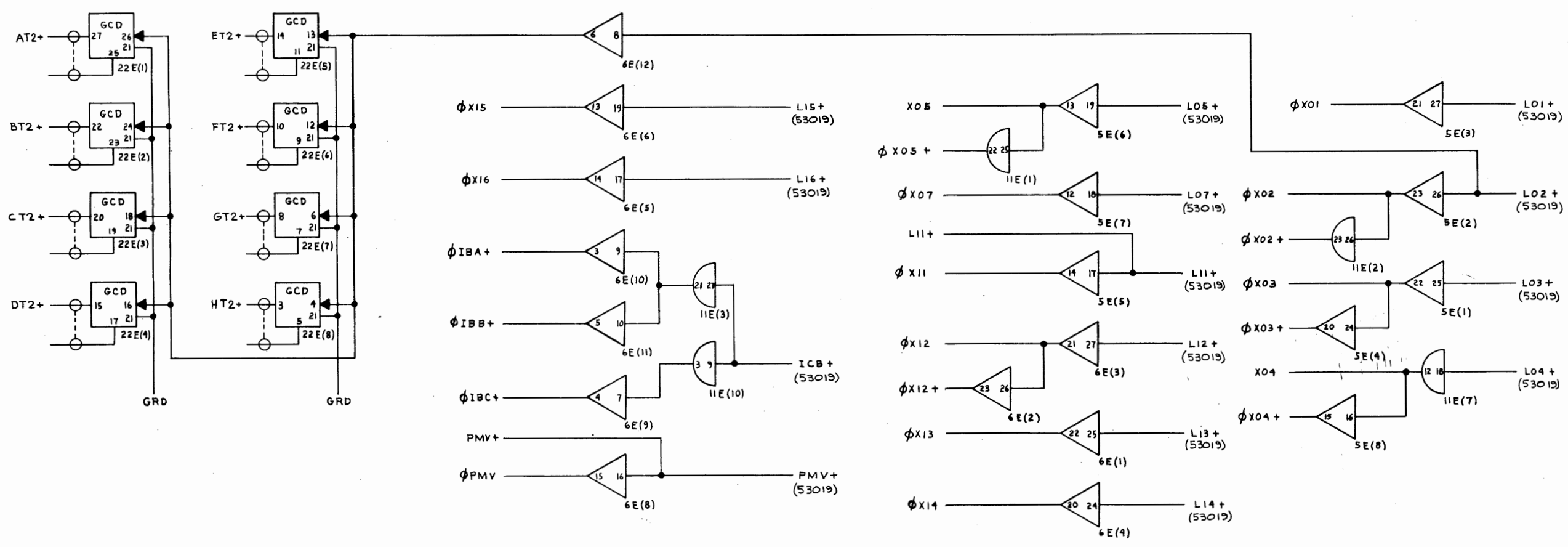
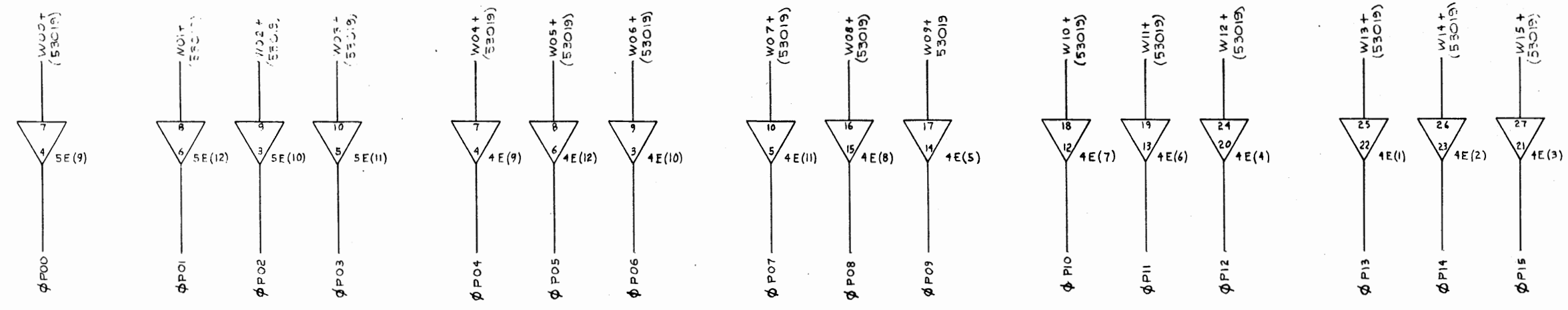
NOTES:
1.



ITEM	DWG. OR PART NO.	DESCRIPTION			
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	R. TIPTON 5/3/67	LOGIC DIAGRAM BPC ADDRESS TO MEMORY IR2			
ENGR.	[Signature] 12/31/67				
PROJ. MGR.	[Signature] 6/8/67				
APP'D.	[Signature] 1/1/68				
CODE IDENT. NO.	20886	SIZE	D	REV	B
		53021			

NOTES:
1.

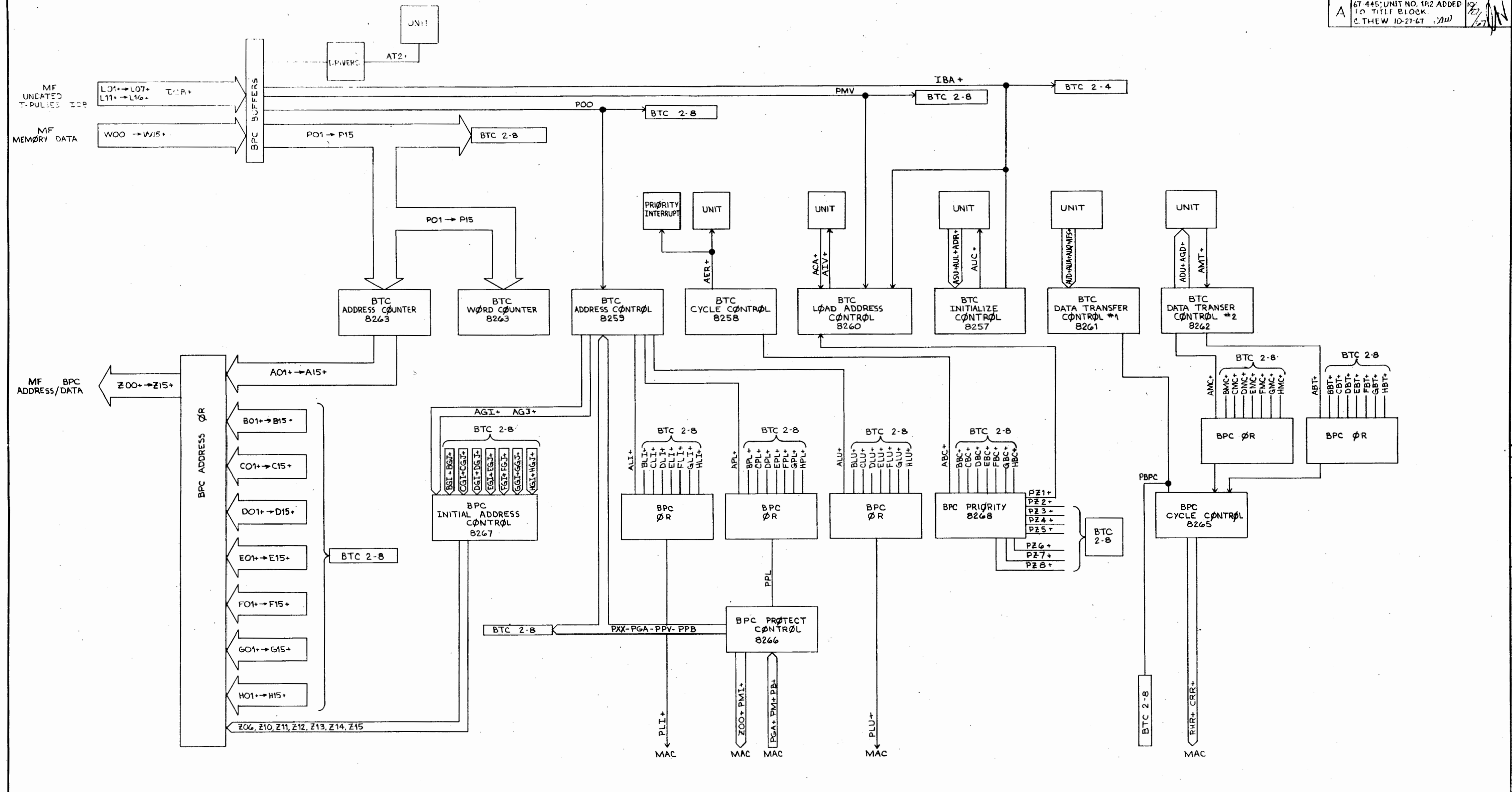
REV	DESCRIPTION	DATE	APP'D
D	53022		
A	67-198 UPDATED TO LATEST CHANGES C. PRUNA 6/20/67	6/20/67	[Signature]
B	67-445; CARD LOCATION LETTERS WERE F. AS 10-27-67	10/29/67	[Signature]



ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR	R. TIPTON 5/3/67	LOGIC DIAGRAM BPC BUFFER-DRIVERS IR2				
CK	C. Williams 10/31/67					
ENG.	[Signature]					
PROJ. APP.	[Signature] 6/16/67					
CODE IDENT NO.	20886	SIZE	D	53022	REV	B
UNID CH	9126					

NOTES:
1.

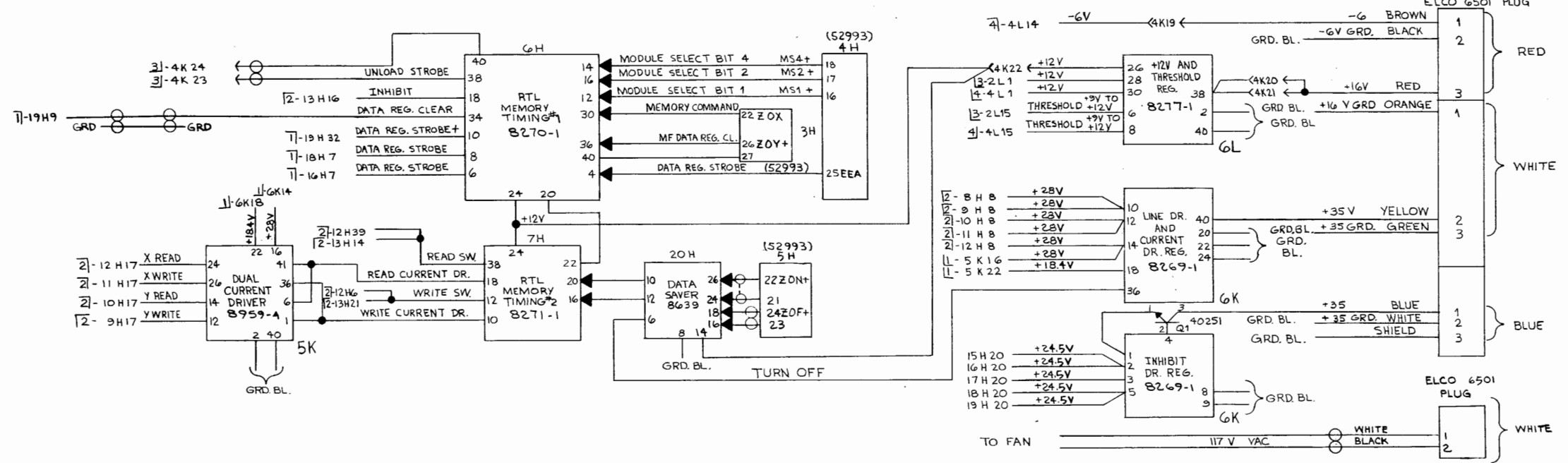
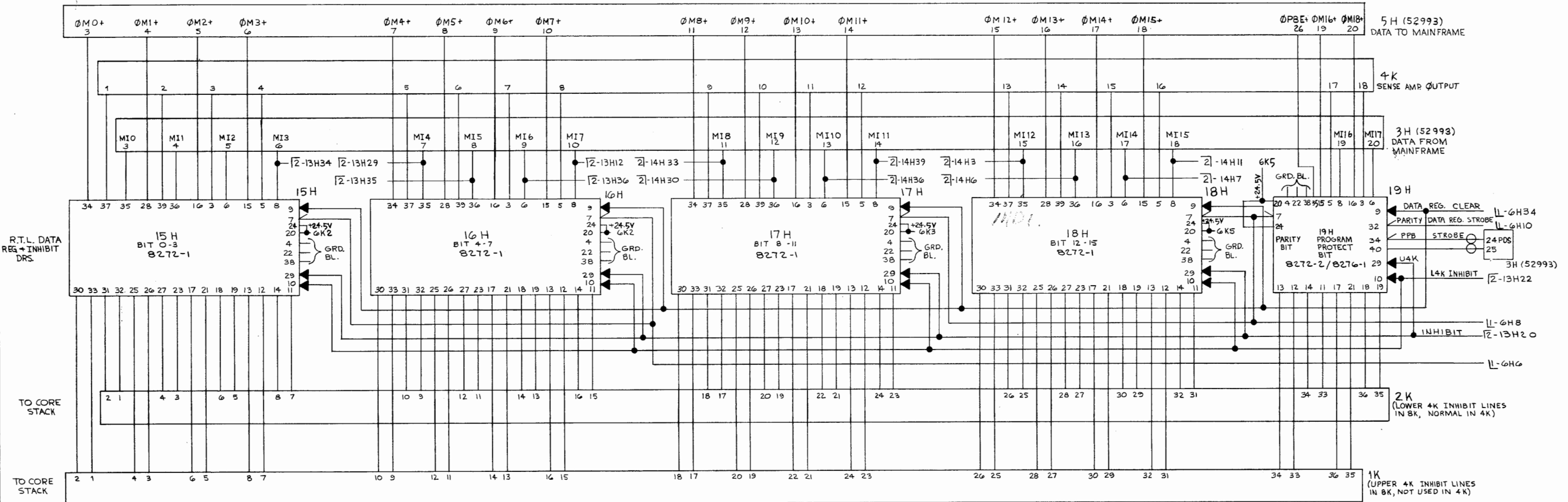
REV	D	53073	REV	A
DESCRIPTION	67 445 UNIT NO. 1R2 ADDED TO TITLE BLOCK.		DATE	10/27/67
APP'D	C. THEW 10-27-67		DATE	10/27/67



ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA						
DR. AL SCHECKLER	10-31-67	BLOCK DIAGRAM BTC - BPC 1R2				
ENGR. C. Williams	9/20/67					
PROJ. [Signature]	9/20/67					
APP. [Signature]	9/20/67					
CODE IDENT NO.	20886	SIZE	D	53073	REV	A

NOTES:
1.

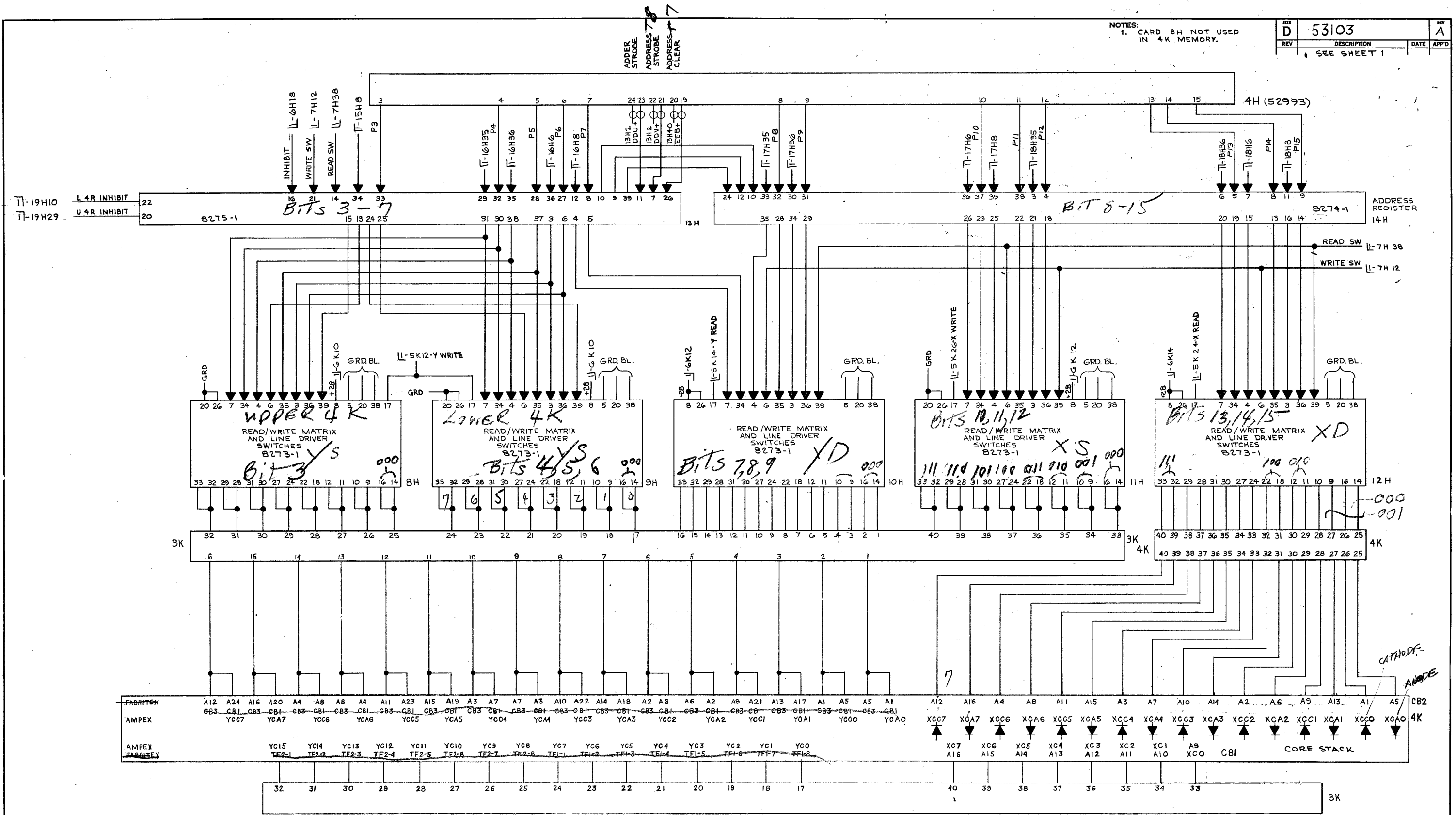
REV	D	53103	REV	B
DESCRIPTION	DATE	APP'D		
A 67-445; ADDRESSES REVISED LINE TITLES ADDED SH. 142 C. THEW 10-27-67	10/27/67	[Signature]		
B 68-199; DELETED CONNECTION BETWEEN PIN 40 ON 6H & PIN 21 ON 3H. R. H. HAN 4-19-68 RKM	4/19/68	[Signature]		



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
LOGIC DIAGRAM 8Kx18 MEMORY a DATA FLOW TIMING AND REG.		
DR. AL SCHECKLER	4-13-67	
C. C. Williams	10-31-67	
ENG. [Signature]	9/20/67	
PROJ. APP. [Signature]	9/20/67	
APP. [Signature]	9-25-	
USED QM		
REV	D	53103
REV	B	

NOTES:
1. CARD 8H NOT USED
IN 4K MEMORY.

REV	D	DESCRIPTION	DATE	APP'D
		53103		A
		SEE SHEET 1		

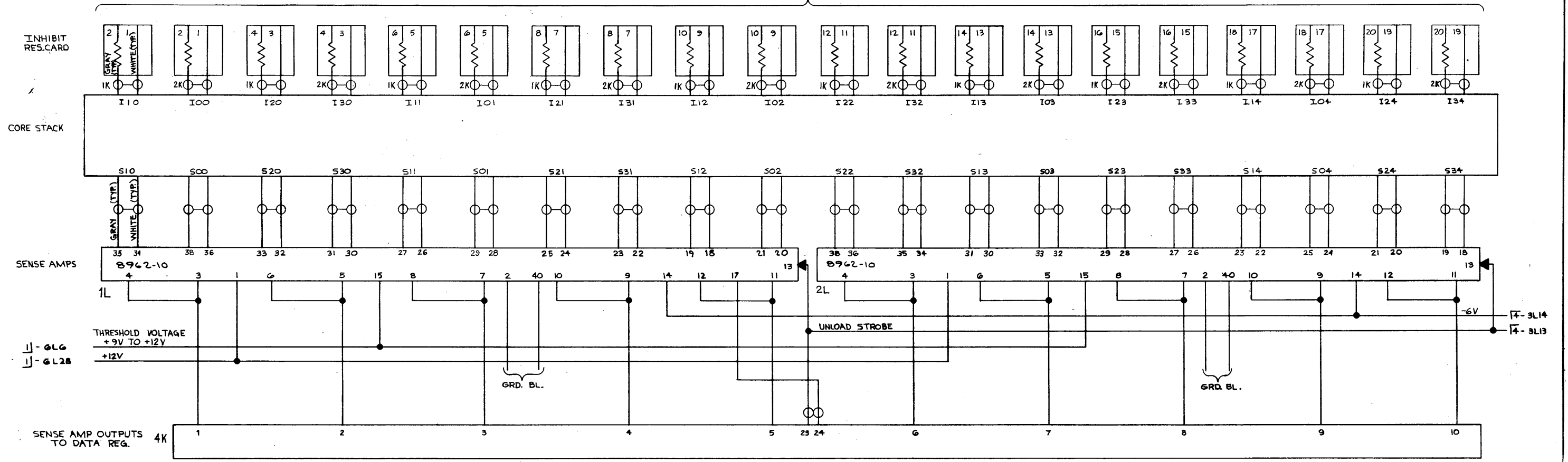


ITEM	DWG. OR PART NO.	DESCRIPTION		
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	AL SCHECKLER 4-11-67	LOGIC DIAGRAM 8Kx18 MEMORY ADDRESSING		
ENGR.	C. Williams 10-31-67			
PROJ. APP.	W. J. Williams 9-20-67			
APP'D.	W. J. Williams 9-25-67			
REV	D	DESCRIPTION	DATE	APP'D
		53103		A

NOTES:
 1. ALL RESISTORS ARE 50% 1%
 NON-INDUCTIVE 3 WATT WIRE-
 WOUND RESISTORS, OMTRONICS
 TYPE N-3.

REV	D	DESCRIPTION	DATE	APP'D

FROM R.T.L. DATA REG + INHIBIT DR.

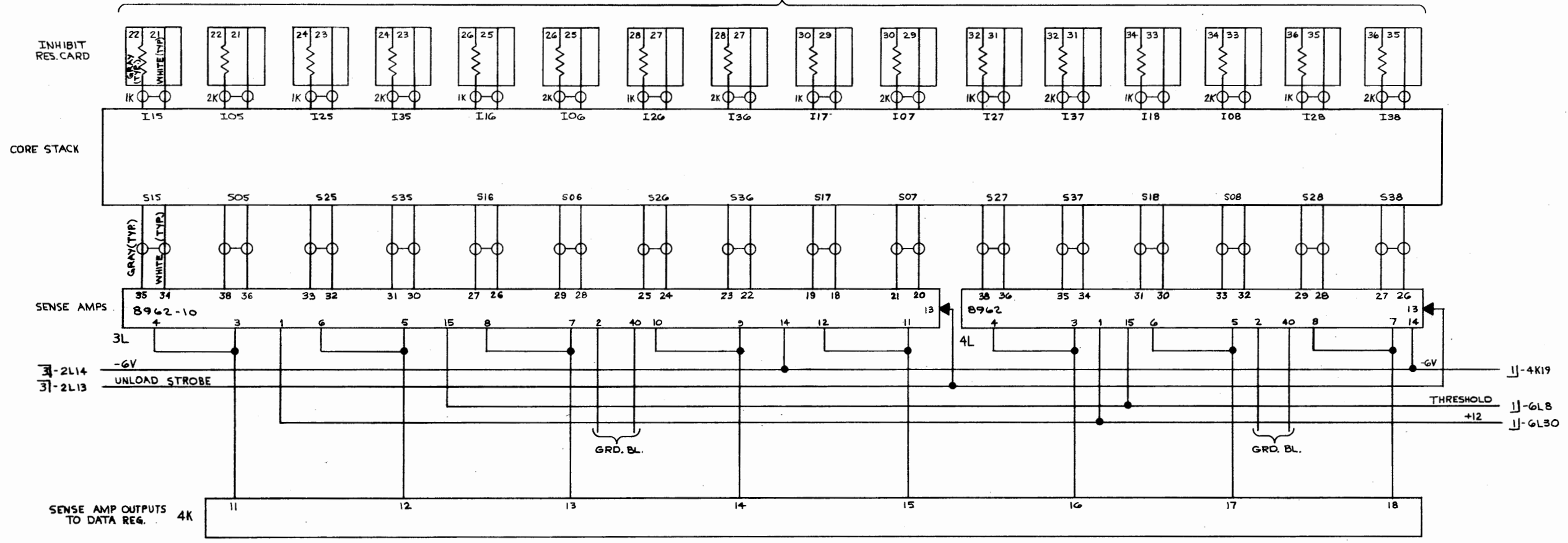


ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA
DR. AL SCHECKLER	4-11-67	LOGIC DIAGRAM CORE STACK WIRING 8KX18MEM a
CK		
ENG. <i>W. J. ...</i>	9/20/67	
APP. <i>W. J. ...</i>	9/20/67	
REV	D	SIZE 53103

NOTES:
 1. ALL RESISTORS ARE 50Ω,
 1% NON-INDUCTIVE 3 WATT
 WIRE WOUND RESISTORS,
 OMRONICS TYPE N-3.

REV	D	53103	DATE	APP'D
-----	---	-------	------	-------

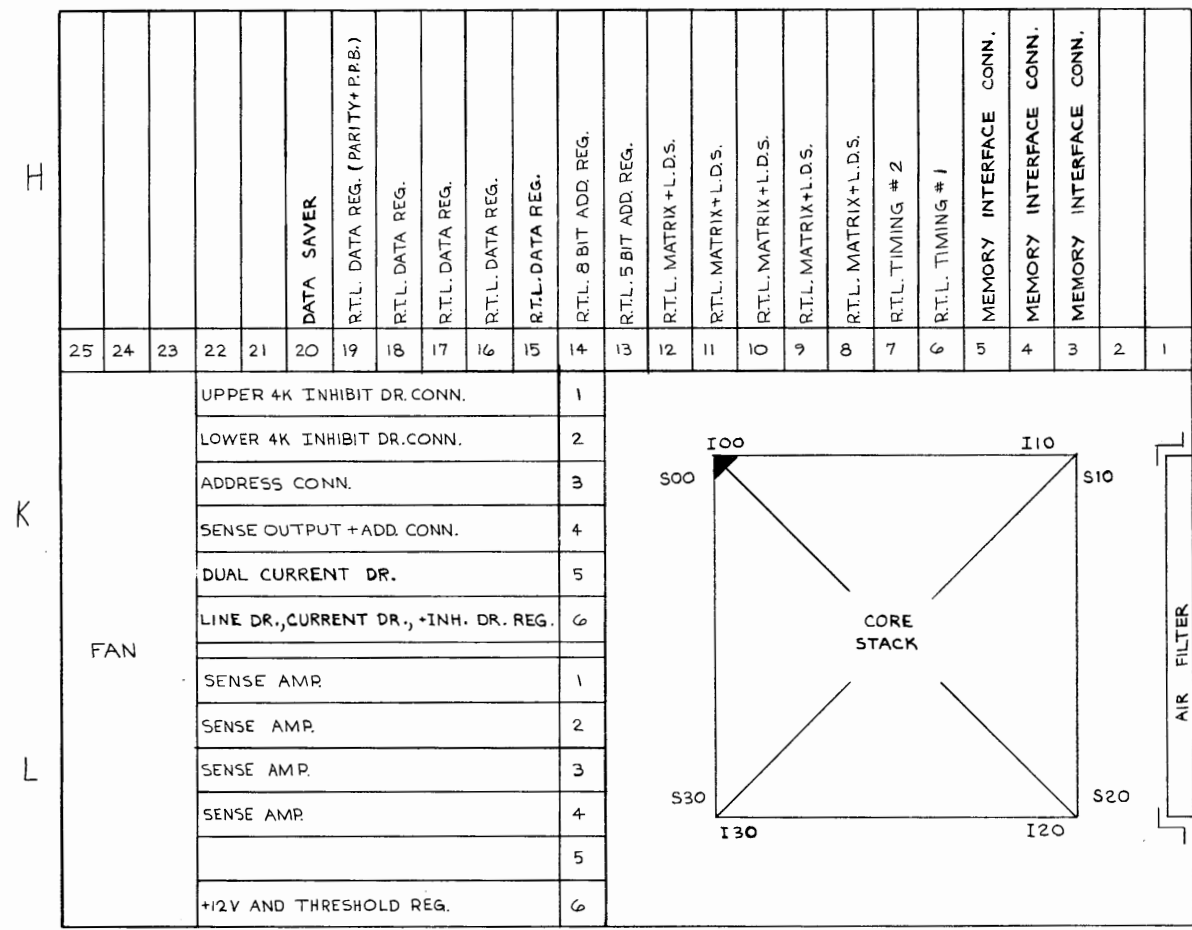
FROM R.T.L. DATA REG 4 INHIBIT DR.



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR. AL SCHECKLER	4-12-67	LOGIC DIAGRAM CORE STACK WIRING 8Kx18 MEM a
CC		
ENG. <i>[Signature]</i>	9/20/67	
PROJ. <i>[Signature]</i>	9/20/67	
APP. <i>[Signature]</i>		
USED ON		REV D 53103

NOTES:
 1. S09, S19, S29, & S39 ARE TERMINATED INDIVIDUALLY TO FOUR RESISTORS (330Ω, 1/4W).
 2. I09, I19, I29, & I39 ARE TERMINATED INDIVIDUALLY TO FOUR RESISTORS (47Ω, 1/4W).

REV	D	53103	REV	A
REV	A	68-199; ADDED NOTES 1 & 2.	DATE	4/19/68
		APPROVED		RKM



CARD SIDE VIEW

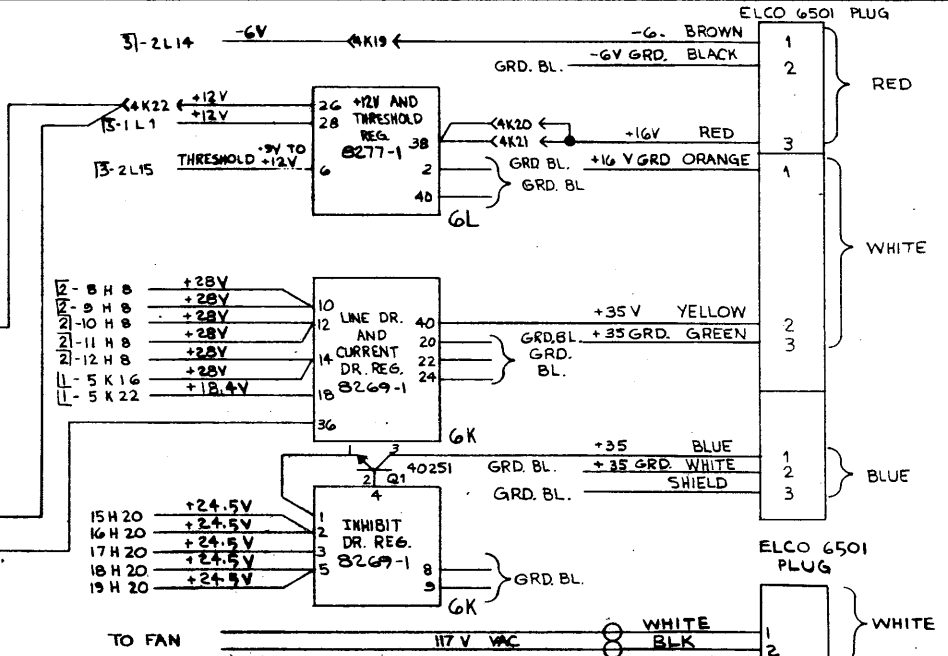
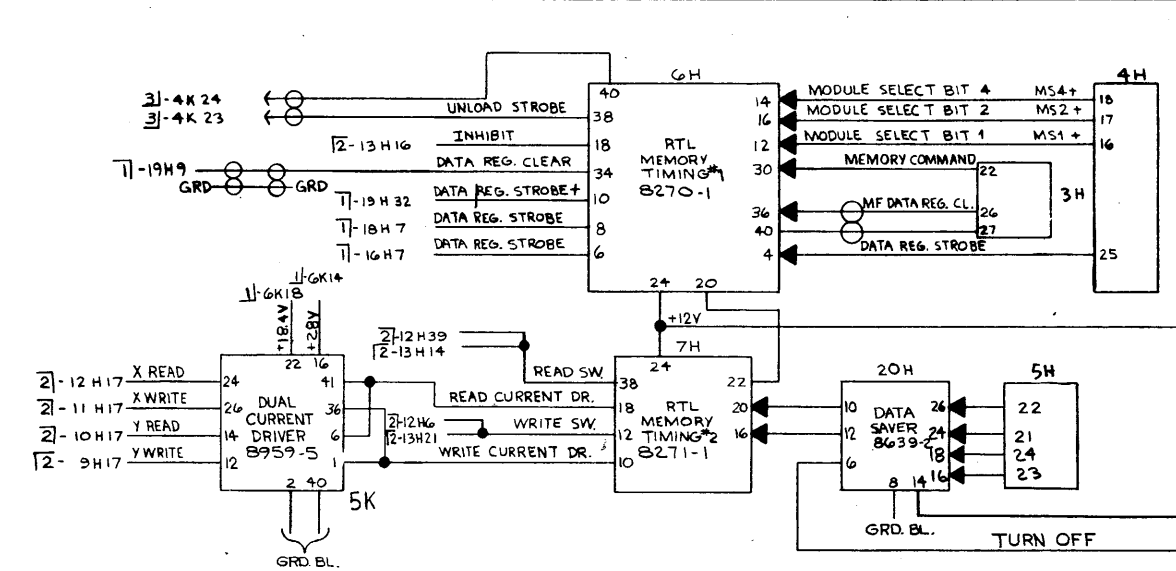
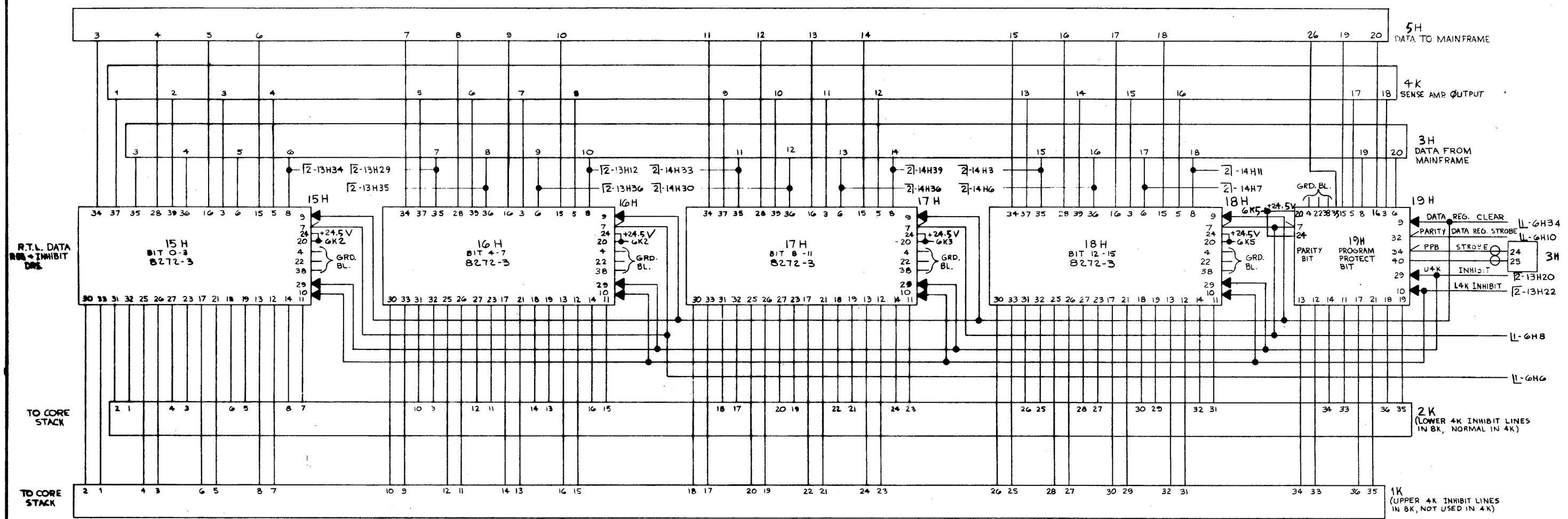
CARD NAME	CARD LOCATION	CARD TYPE	8Kx16	8Kx16 + PARITY	8Kx16 + PARITY + MEMORY PROTECT
R.T.L. MEMORY TIMING #1	6H	8270-1	1	1	1
R.T.L. MEMORY TIMING #2	7H	8271-1	1	1	1
R.T.L. READ/WRITE MATRIX AND LINE DR. SW.	8H THRU 12H	8273-1	5	5	5
R.T.L. 5 BIT ADDRESS REG. + 8K CONTROL	13H	8275-1	1	1	1
R.T.L. 8 BIT ADDRESS	14H	8274-1	1	1	1
R.T.L. DATA REGISTER AND INHIBIT DR.	15H THRU 18H	8272-1	4	4	4
R.T.L. DATA REGISTER AND INHIBIT DR.	19H	8272-2	0	1	0
R.T.L. PARITY PROTECT DATA REG. + INHIBIT DR.	19H	8276-1	0	0	1
DATA SAVER	20H	8639-2	1	1	1
INHIBIT RESISTOR CARD	1K AND 2K	8278-1	2	2	2
CORE STACK CONNECTOR CARD	3K AND 4K	8960-1	2	2	2
DUAL CURRENT DRIVER	5K	8959-4	1	1	1
LINE DR. AND CURRENT DR. REG.	6K	8269-1	1	1	1
U.A. SENSE AMP	1L THRU 3L	8962-10	3	3	3
U.A. SENSE AMP	4L	8962-2	1	0	0
U.A. SENSE AMP	4L	8962-4	0	1	0
U.A. SENSE AMP	4L	8962-6	0	0	1
+12V AND THRESHOLD REG.	6L	8277-1	1	1	1

ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	AL SCHECKLER 5-8-67	CARD LAYOUT & USAGE CHART
CK.		a
ENG.	<i>[Signature]</i> 9/20/67	8K x 18 MEMORY
PROJ. APP.	<i>[Signature]</i> 9/20/67	
APP.	<i>[Signature]</i> 9-25-	
USED ON		
SIZE	D	53103
REV		A



NOTES:
1.

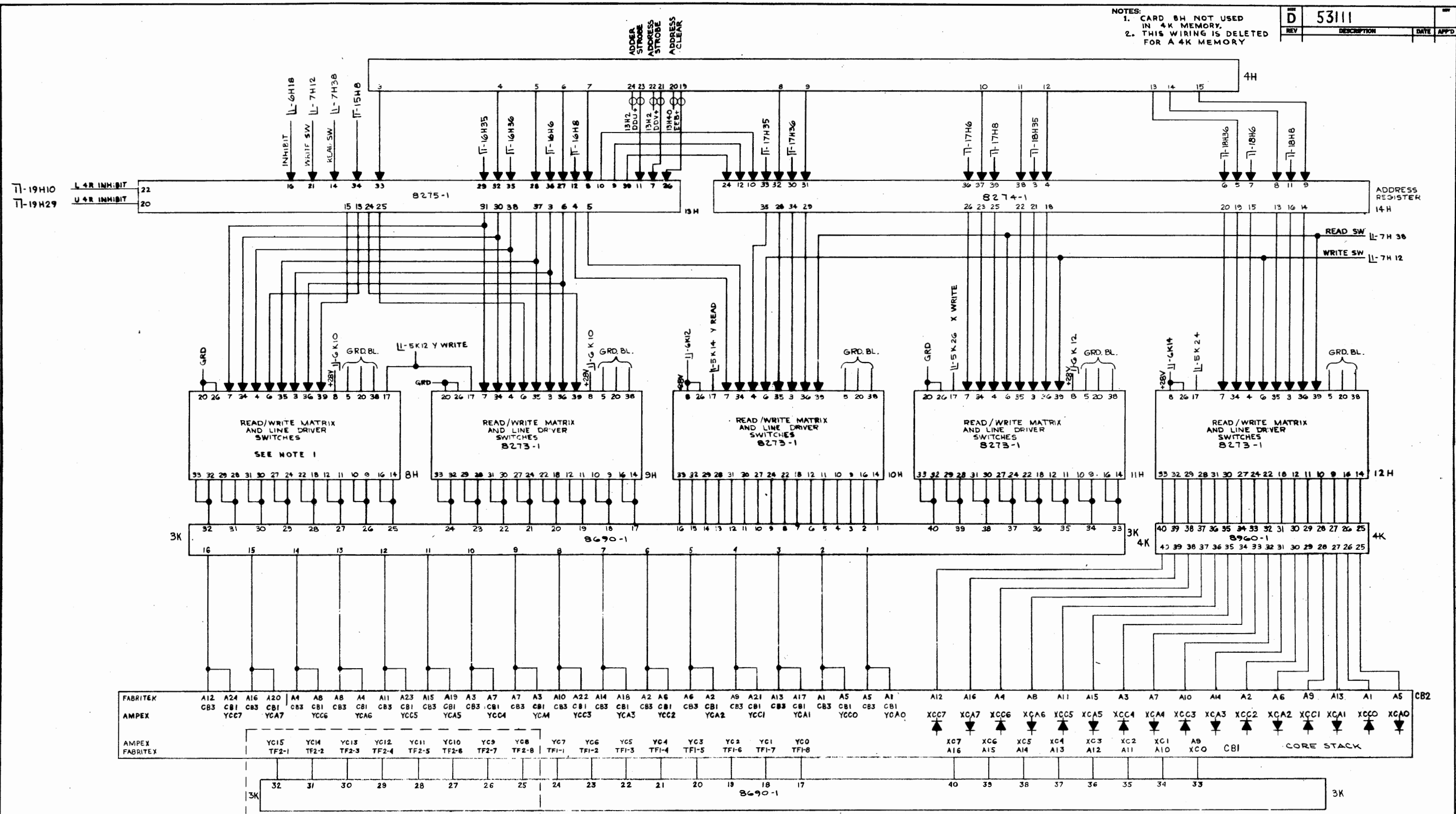
REV	DESCRIPTION	DATE	APP'D
D	53111		



ITEM	DWG. OR PART NO.	DESCRIPTION	
SEL			
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA			
DR. AL SCHECKLER	4-13-67	LOGIC DIAGRAM 4Kx18 MEMORY a DATA FLOW, TIMING AND REG.	
CK			
ENG.			
APP.			
USED ON	9126	SIZE	
		D	53111

NOTES:
 1. CARD 8H NOT USED IN 4K MEMORY.
 2. THIS WIRING IS DELETED FOR A 4K MEMORY

REV	D	53111	DATE	APPD
REV				



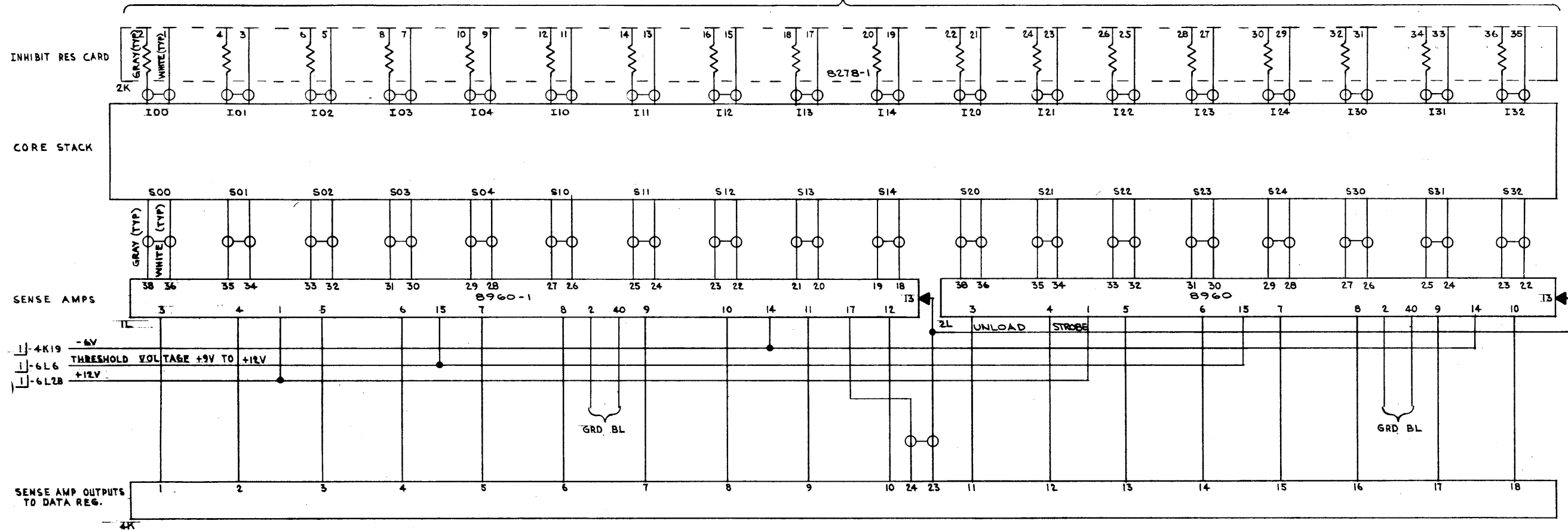
SEE NOTE 2

ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR. AL SCHECKLER	4-11-67	LOGIC DIAGRAM 4Kx18 MEMORY ADDRESSING
CK		
ENR. (C. H. ...)	(M. A. ...)	
PROJ. APP. (H. ...)	(M. ...)	
APR. (S. ...)	9-2-67	SIZE
USED ON	9126	D 53111

NOTES:
 1. ALL RESISTORS ARE 50Ω
 17% NON-INDUCTIVE 3WATT
 WIRE WOUND RESISTORS,
 OMRONICS TYPE N-3.

SIZE	D	53111	REV.
REV.	DESCRIPTION	DATE	APPD

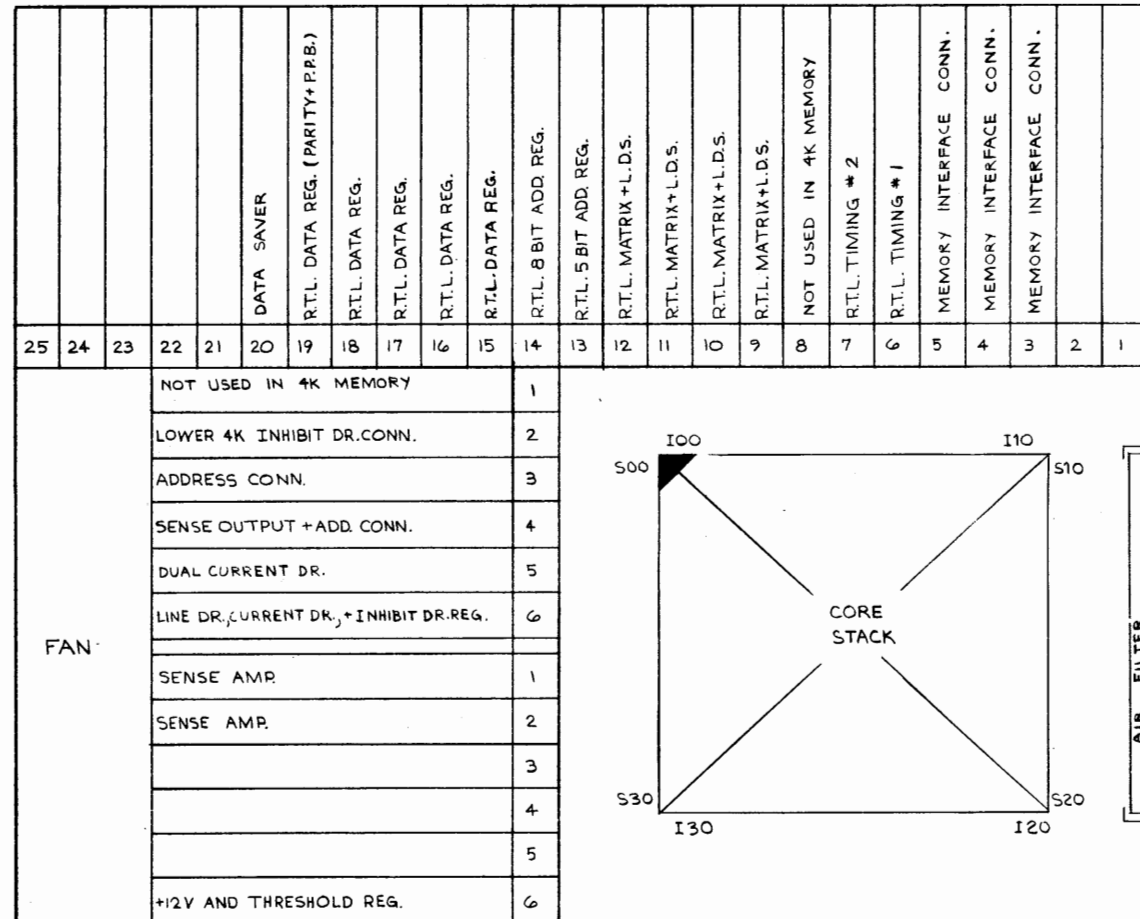
FROM R.T.L. DATA REG AND INHIBIT DR



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	Systems Engineering Laboratories 6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
	DR.R. SANBORNE	5-24-67	LOGIC DIAGRAM
	CHK		4Kx18 MEMORY a
	ENG. [Signature]	8/20/67	CORE STACK WIRING
PROJ. [Signature]	8/20/67		
APPD. [Signature]	8/20/67		
NEXT ASSY			
CODE IDENT NO.	SIZE	REV.	
20886	D	53111	

NOTES:
 1. S33 & S34 ARE TERMINATED INDIVIDUALLY TO TWO RESISTORS (330Ω, 1/4W)
 2. I33 & I34 ARE TERMINATED INDIVIDUALLY TO TWO RESISTORS (470Ω, 1/4W)

REV	D	53111	REV	B
REV	A	DESCRIPTION	DATE	APP'D
		68-199; ADDED NOTES 1 & 2	4/4/68	
		Michael 4-19-68 RKM		
	B	68-309; DUAL CURRENT DR WAS 8959-5. ADDED SENSE AMP RESISTOR TERM 83282-1. J. PINEDO. 6-7-68 W	6/1/68	

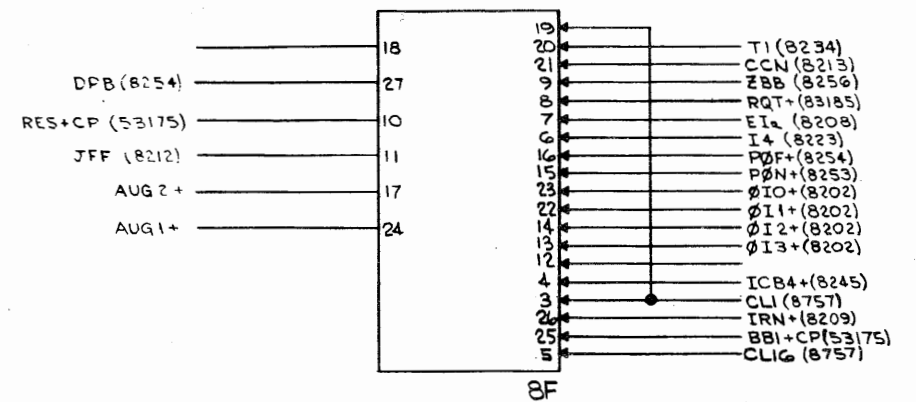
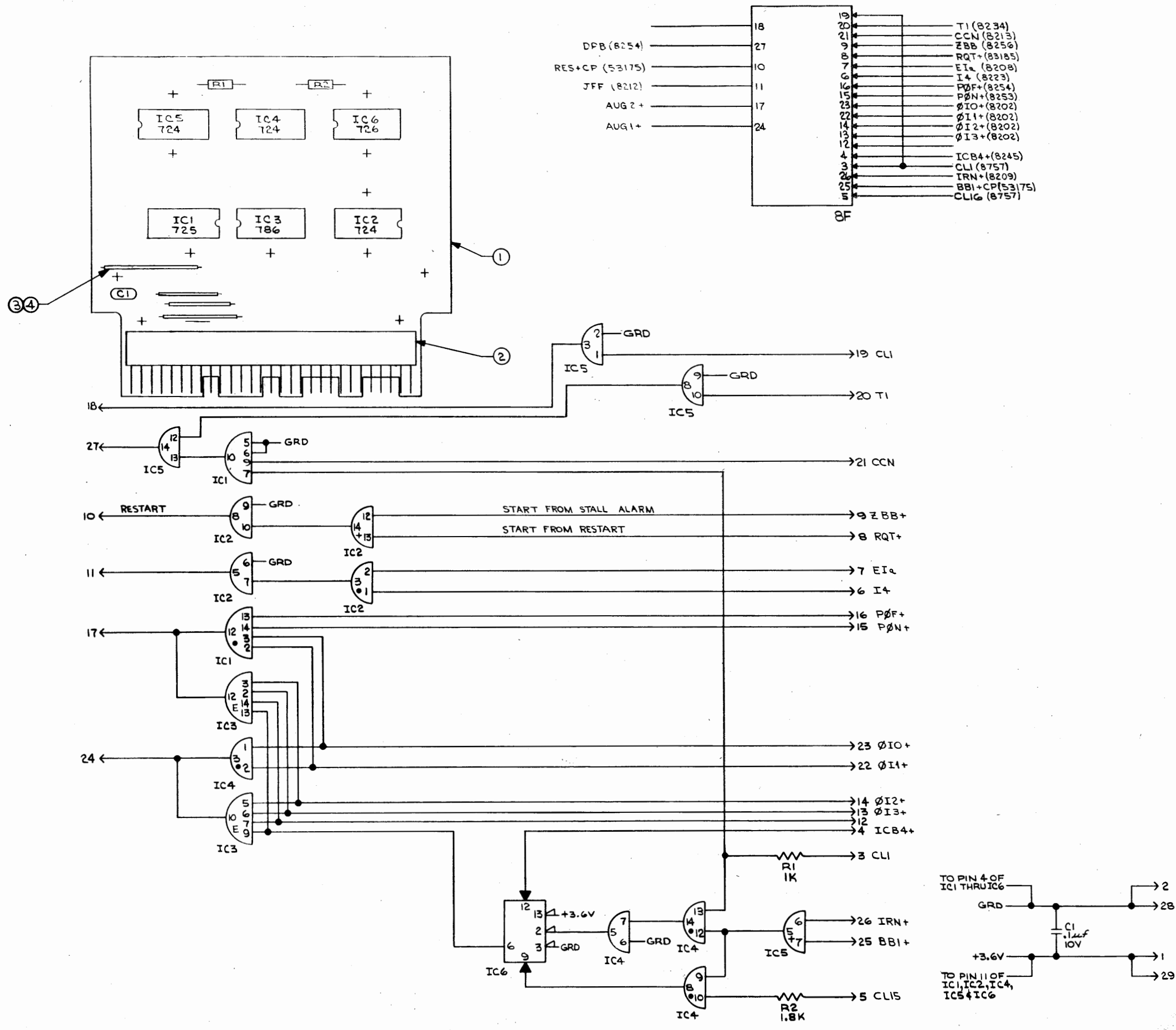


CARD NAME	CARD LOCATION	CARD TYPE	4Kx16	4Kx16 + PARITY	4Kx16 + PARITY + MEMORY PROTECT
R.T.L. MEMORY TIMING #1	6H	8270-1	1	1	1
R.T.L. MEMORY TIMING #2	7H	8271-1	1	1	1
R.T.L. READ/WRITE MATRIX AND LINE DR. SW.	9H THRU 12H	8273-1	4	4	4
R.T.L. 5 BIT ADDRESS REG. + 8K CONTROL	13H	8275-1	1	1	1
R.T.L. 8 BIT ADDRESS	14H	8274-1	1	1	1
R.T.L. DATA REGISTER AND INHIBIT DR.	15H THRU 18H	8272-3	4	4	4
R.T.L. DATA REGISTER AND INHIBIT DR.	19H	8272-2	0	1	0
R.T.L. PARITY PROTECT DATA REG. + INHIBIT DR.	19H	8276-1	0	0	1
DATA SAVER	20H	8639-2	1	1	1
INHIBIT RESISTOR CARD	2K	8278-1	1	1	1
CORE STACK CONNECTOR CARD	3K AND 4K	8960-1	2	2	2
DUAL CURRENT DRIVER	5K	8959-4	1	1	1
LINE DR. AND CURRENT DR. REG.	6K	8269-1	1	1	1
U.A. SENSE AMP	1L	8962-10	1	1	1
U.A. SENSE AMP	2L	8962-8	0	0	1
U.A. SENSE AMP	2L	8962-7	0	1	0
U.A. SENSE AMP	2L	8962-6	1	0	0
+12V AND THRESHOLD REG.	6L	8277-1	1	1	1
SENSE AMP RESISTOR TERMINATOR	4K	83282-1	1	1	1

ITEM	DWG. OR PART NO.	DESCRIPTION
		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
DR.	AL SCHECKLER 5-8-67	CARD LAYOUT & USAGE CHART
ENGR.	9/20/67	
PROJ. MGR.	9/20/67	
APR.	10-30-	
USED ON	9126	
REV	D	53111
REV	B	

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/4W.
 3. FOR DRILLING AND DIMENSIONAL SEE D 8318600

SIZE	D	83186	REV.	B
REV.		DESCRIPTION	DATE	APPD
A		GT-315, REVISED TO AGREE WITH LATEST P.C. BACKGROUND. RI WAS 1.8K. ADDED LOGIC RF. EJP 8/31/67 RKM	8/31/67	[Signature]
B		GT-445, ADDRESSES REVISED AND LINE TITLES ADDED. AS 10/27/67	10/29/67	[Signature]



QTY	ITEM	DESCRIPTION
1	R2	RC07GF182J RESISTOR-1.8K, ALLEN BRADLEY
1	R1	RC07GF102J RESISTOR-1K, ALLEN BRADLEY
1	IC6	MC 726 P INTEGRATED CIRCUIT-MOTOROLA
1	IC3	MC 786 P
3	IC5	MC 724 P
1	IC4	MC 724 P
1	IC2	MC 724 P
1	IC1	MC 725 P
1	C1	UK-10-104 CAPACITOR-.1uF +80%, -20%, 10V, CRL.
AR 4	AWG 24	SLEEVING-TEFLON, THINWALL
AR 3	AWG 24	WIRE-SOLID COPPER, TINNED
1	2	00-7022-029-000-001 CONNECTOR-ELCO
1	1	3186 PRINTED CIRCUIT (FOR REV. SEE A53107)
-1	ITEM	DWG. OR PART NO. DESCRIPTION

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 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

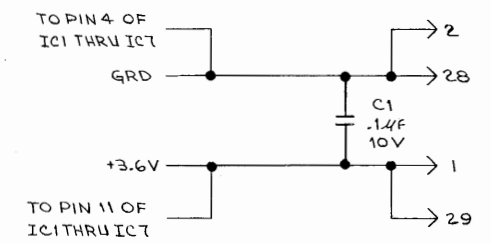
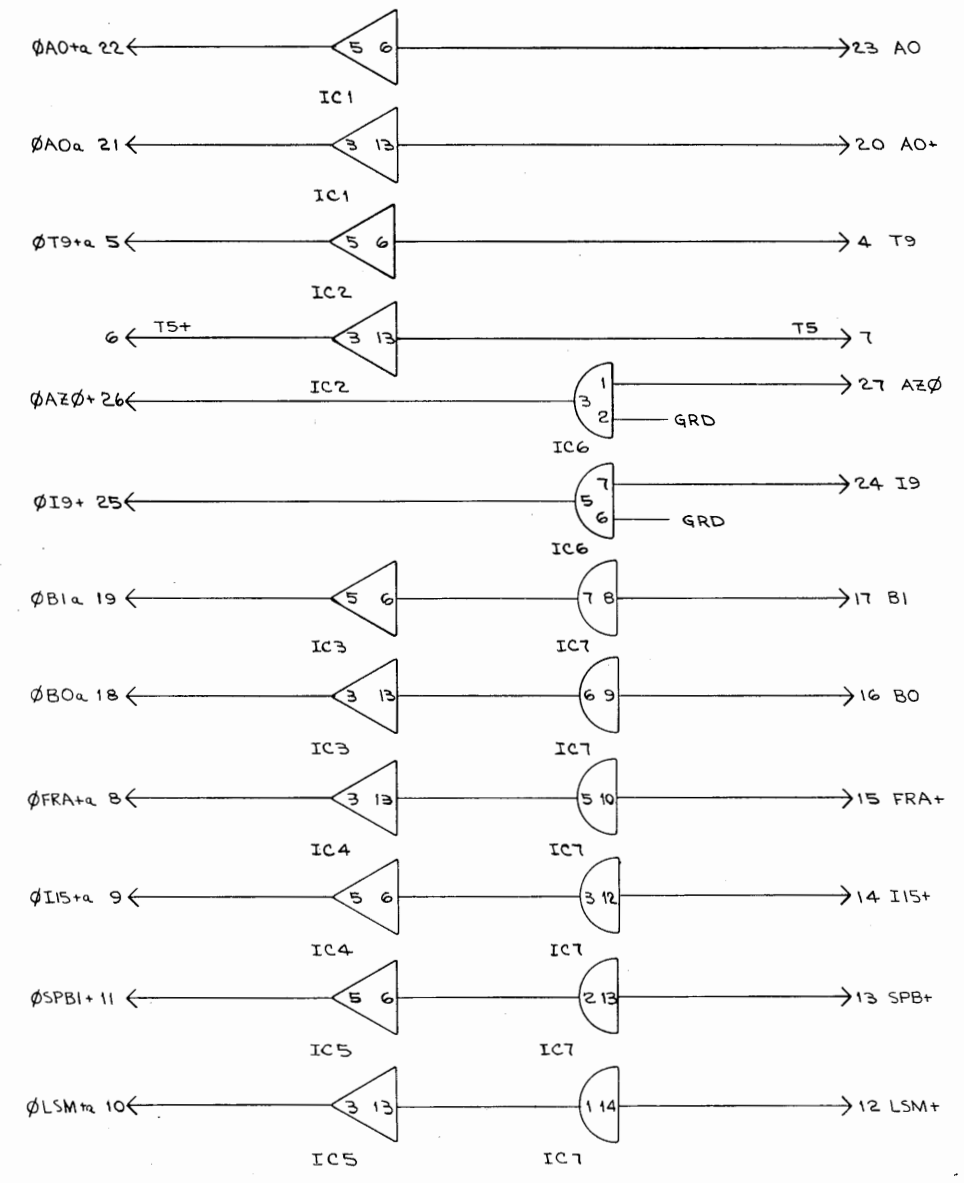
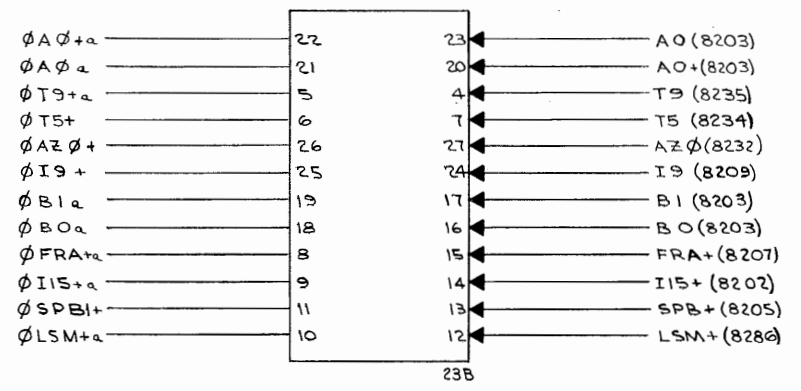
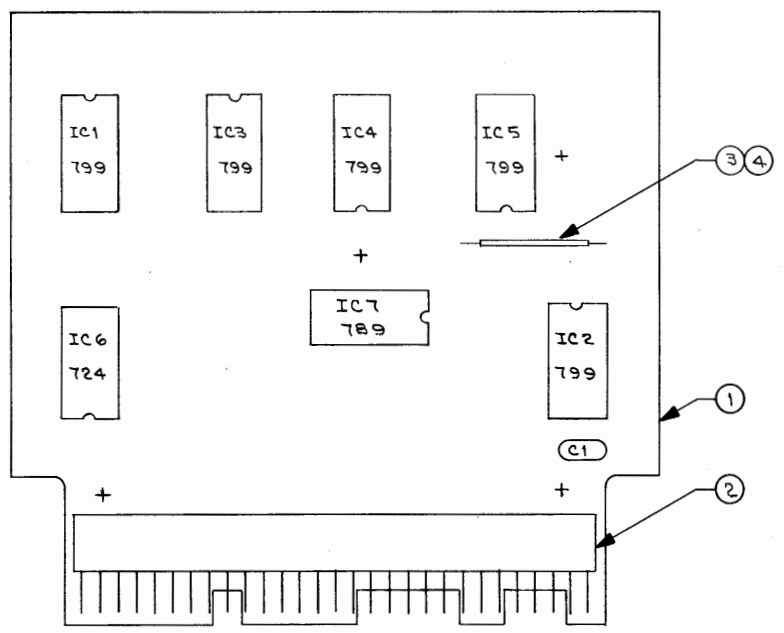
DR C.E.M. 8/4/67
 CHR RKM 8-7-67
 ENGR [Signature] 8-15-67
 PROJ [Signature]
 APPD [Signature]
 NEXT ASSY

SCHEMATIC & ASSEMBLY
 RTL AUGMENT
 CONTROL

CODE IDENT NO.	SIZE	83186	REV.	B
20886	D			

SIZE	D	83187	REV.	B
REV.		DESCRIPTION	DATE	APPD
A		67-445; ADDRESSES REVISED, LINE TITLES ADDED AND CARD NUMBERS ADDED. AS. 10-27-67	10/27/67	[Signature]
B		68-199; PINS 6&7 WERE SPARE. <i>W/changed 4-18-68</i>	4/18/68	[Signature]

NOTES:
 1. ALL ITEMS AS SPECIFIED IN LIST OF MATERIAL OR APPROVED EQUIVALENT.
 2. FOR DRILLING AND DIMENSIONAL DWG SEE D8318700.

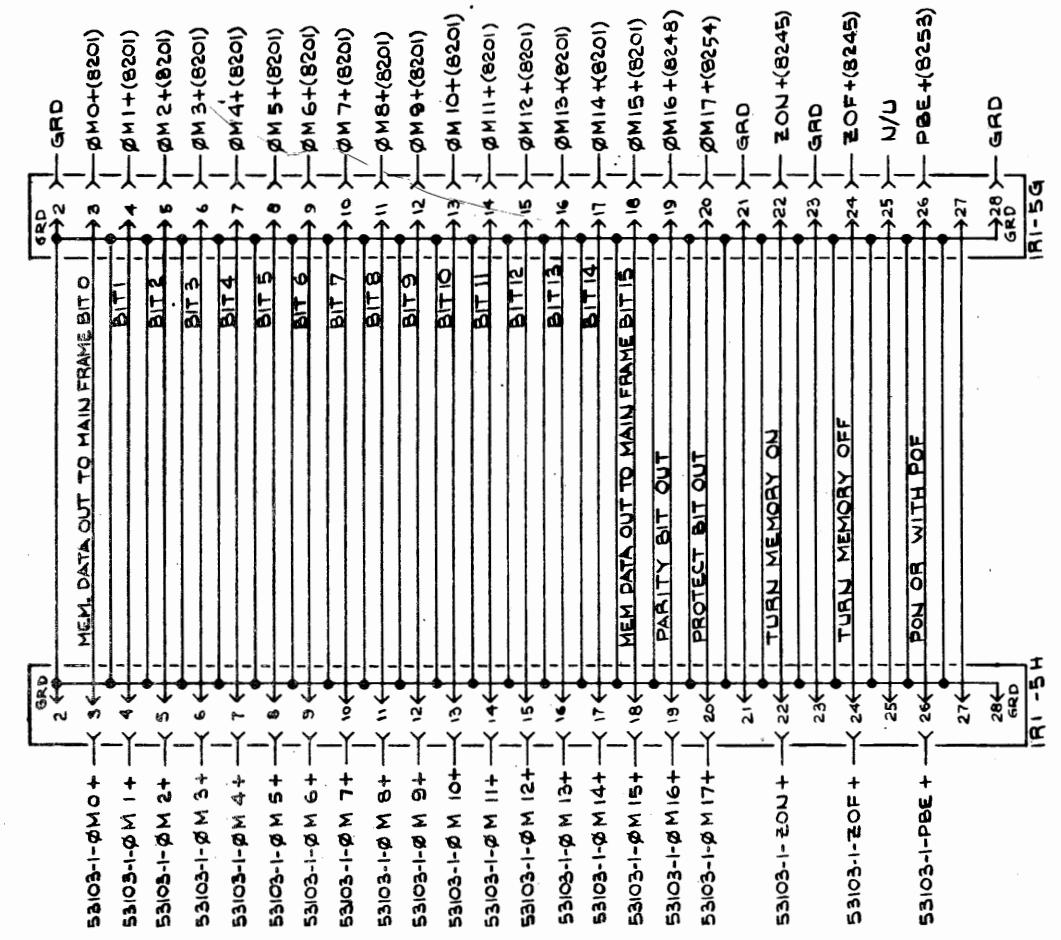
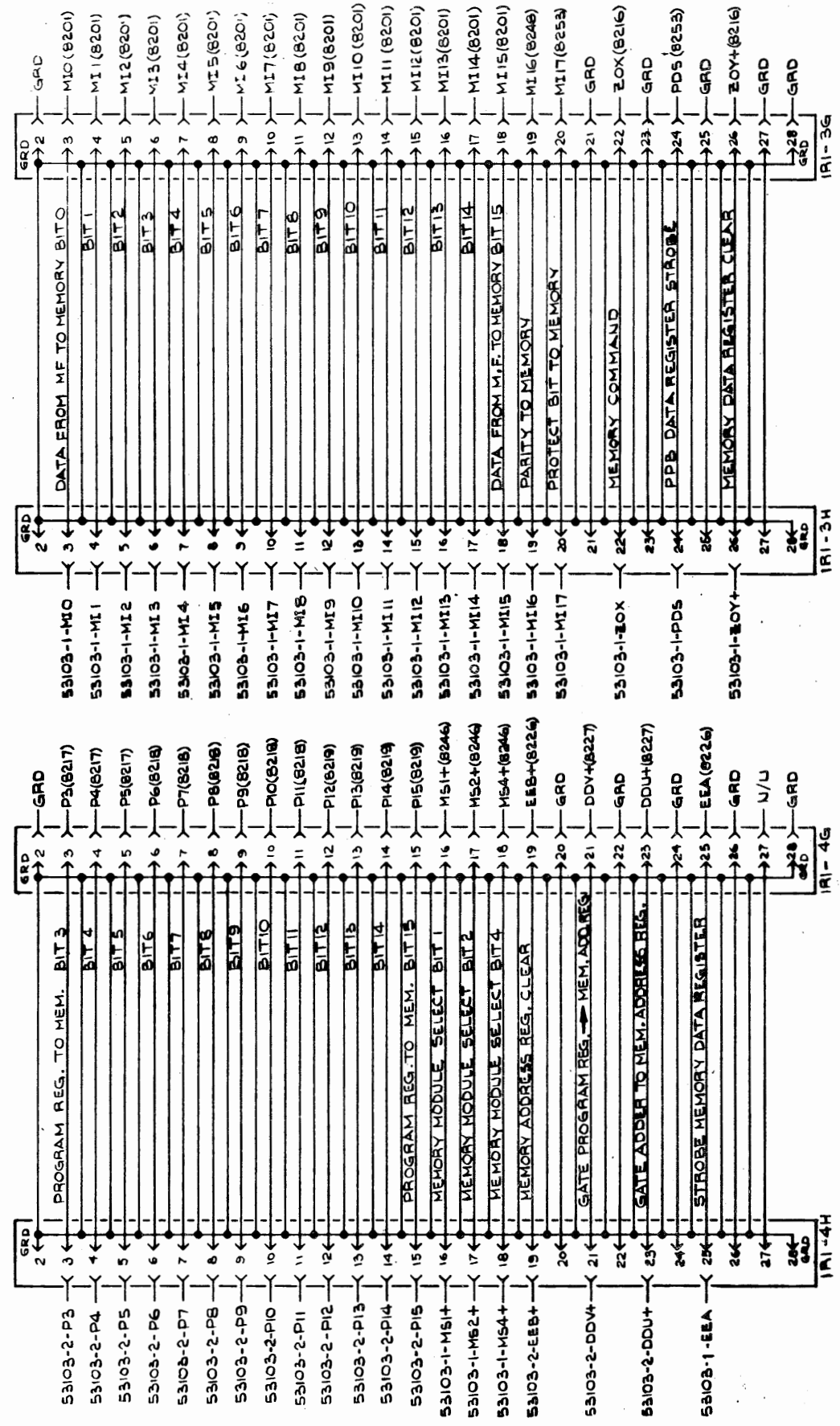


1	IC7	MC789P	
1	IC6	MC724P	
5	IC5	MC799P	INTEGRATED CIRCUIT - MOTOROLA
	IC4		
	IC3		
	IC2		
	IC1		
1	C1	UK10-104	CAPACITOR-.14F+80-20%, 10VCR
AR	4	AWG 24	SLEEVING-TEFLON, THINWALL
AR	3	AWG 24	WIRE- SOLID COPPER, TINNED.
1	1	00-7022-029-000-001	CONNECTOR- ELCO
1	1	3187	PRINTED CIRCUIT-(FOR REV. SEE A53170)
-1	ITEM	DWG. OR PART NO.	DESCRIPTION

Systems Engineering Laboratories 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310			
DRC. PRUNA	8-2-67	SCHEMATIC & ASSEMBLY	
CHK RKM	8-3-67	RTL MISC. BUFFERS	
ENGR. <i>[Signature]</i>	8-15-67		
PROJ. <i>[Signature]</i>	8-15-67		
APPD. <i>[Signature]</i>	8-17-67		
NEXT ASSY		CODE IDENT NO.	SIZE
		20886	D 83187
			REV. B

NOTES:
1.

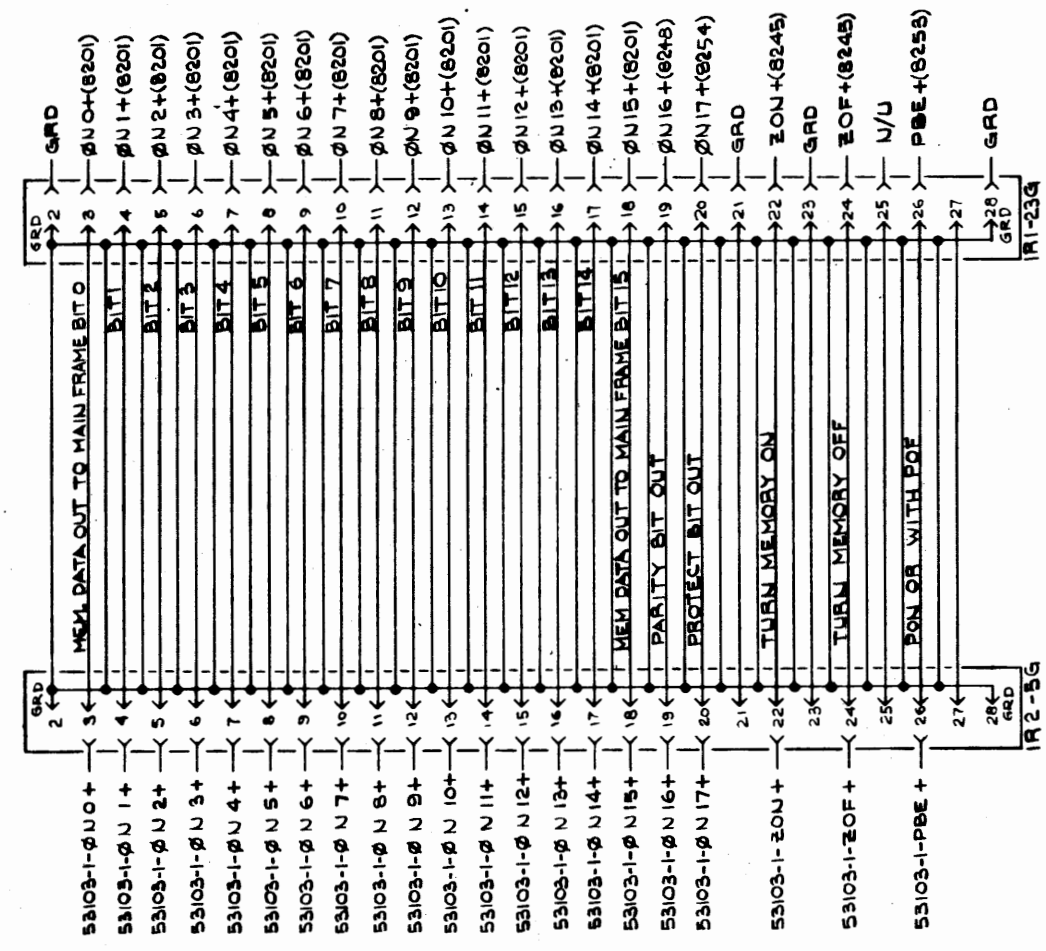
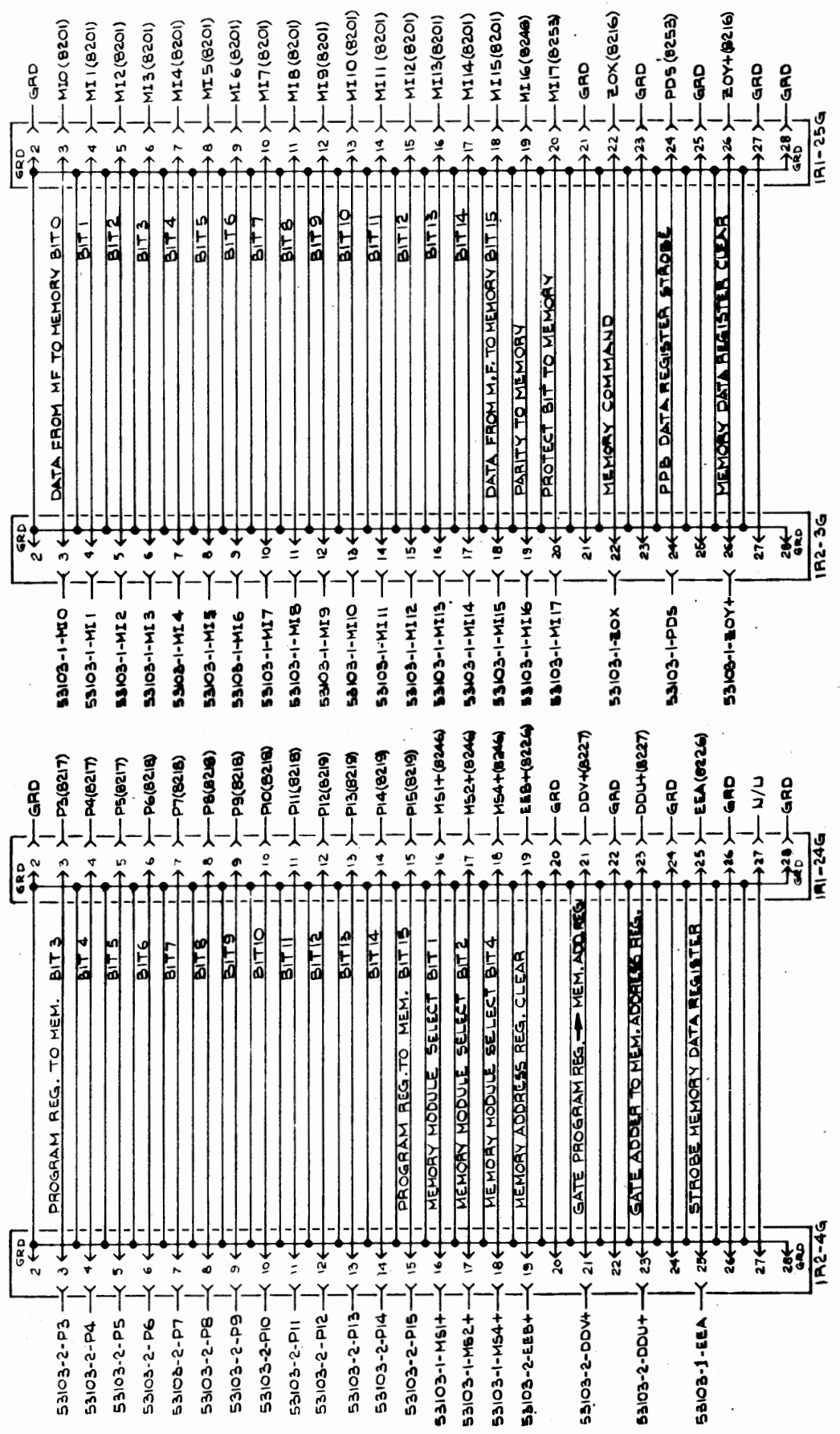
REV	DESCRIPTION	DATE	APPD
A	67-445-UPDATED TO LATEST CHANGES. ADDED SHEET 2 J. PINEDO, 10-27-67 ML	10/27/67	[Signature]



ITEM	DWG. OR PART NO.	DESCRIPTION
1	52993	WIRING DIAGRAM INTERCONNECTING CABLES MEMORY MODULE # 1
DR	J. PINEDO	
CL		
ENG.		
PRO. APP.		
USED ON	D	52993

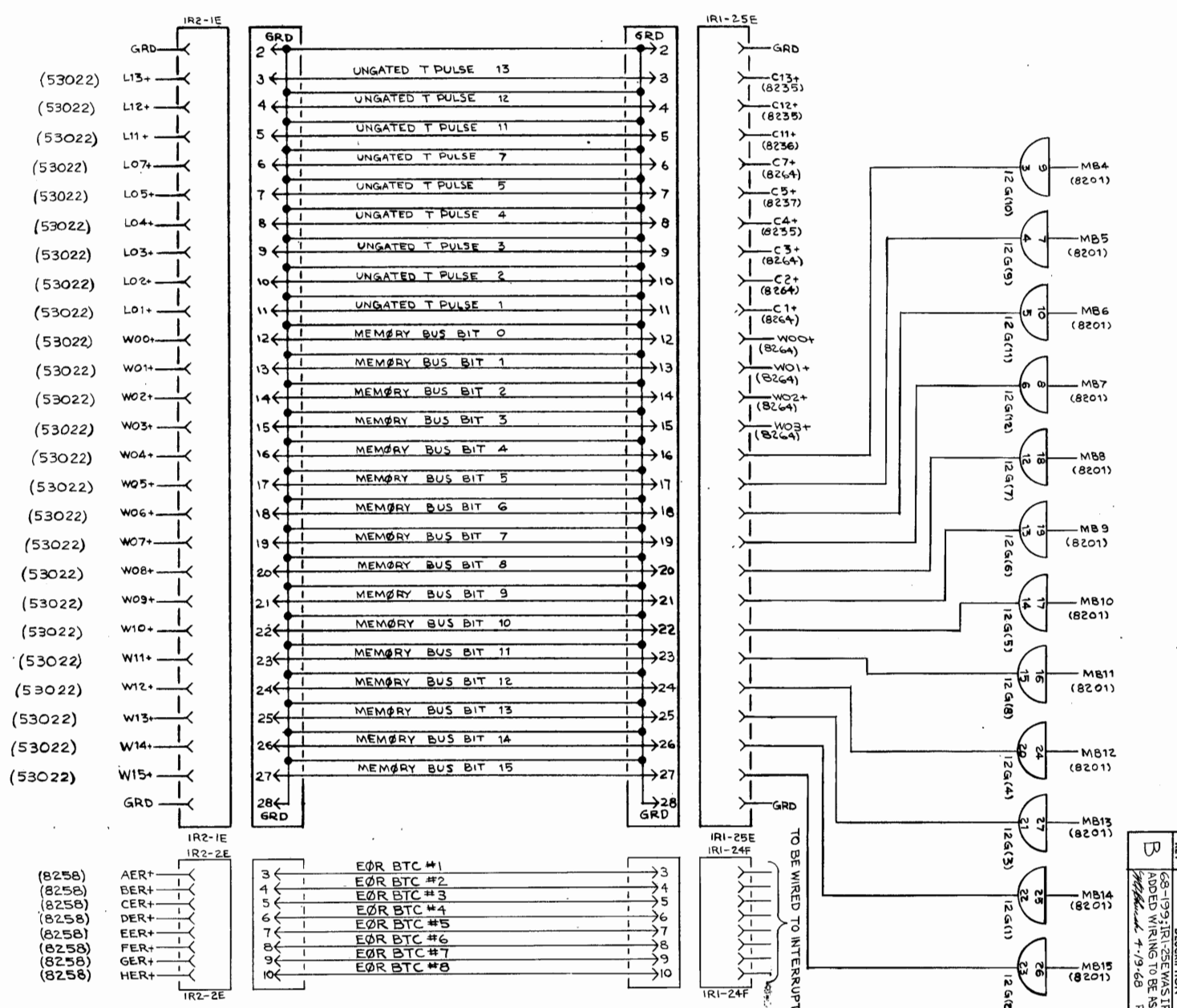
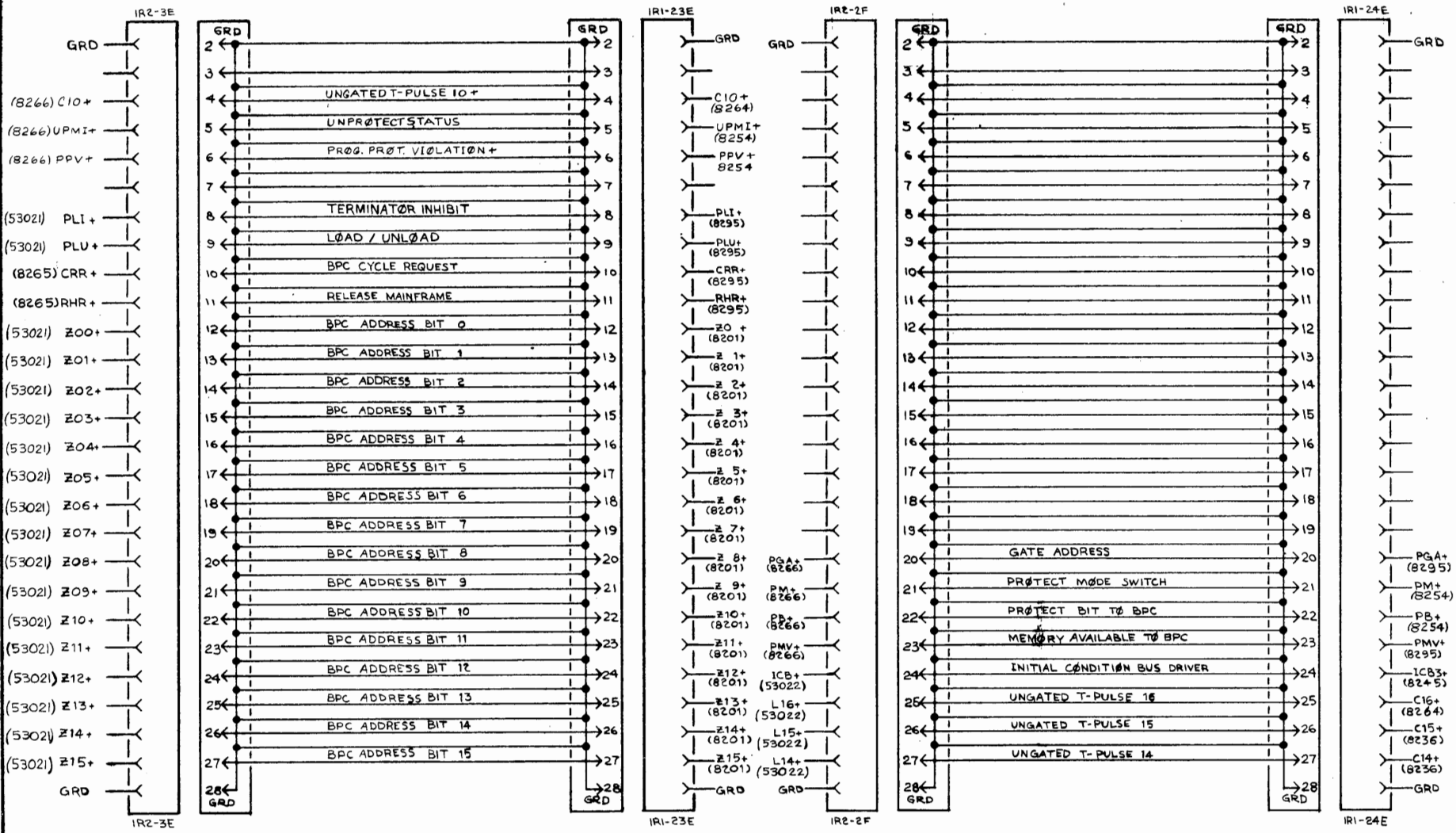
NOTES:
1.

REV	D	52993	A
DESCRIPTION	DATE	BY	APP
67-445: THIS SHEET ADDED J. PINEDO, 10-27-67 M.L.	10/27/67	J.P.	



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	J. PINEDO	10-27-67
CHK	W. L. ...	10-31-67
ENG	...	11-1-67
PROJ. MGR.	...	11-21-67
APP.	...	11-21-67
USED ON	D	52993
REV	A	

**WIRING DIAGRAM
INTERCONNECTING CABLES
MEMORY MODULE # 2**



WIRING DIAGRAM
INTERCONNECTING CABLES
BPC-MEMORY INTERFACE

DATE: 5/31/67
 BY: J. PINEDO
 CHECKED: [Signature]
 APPROVED: [Signature]

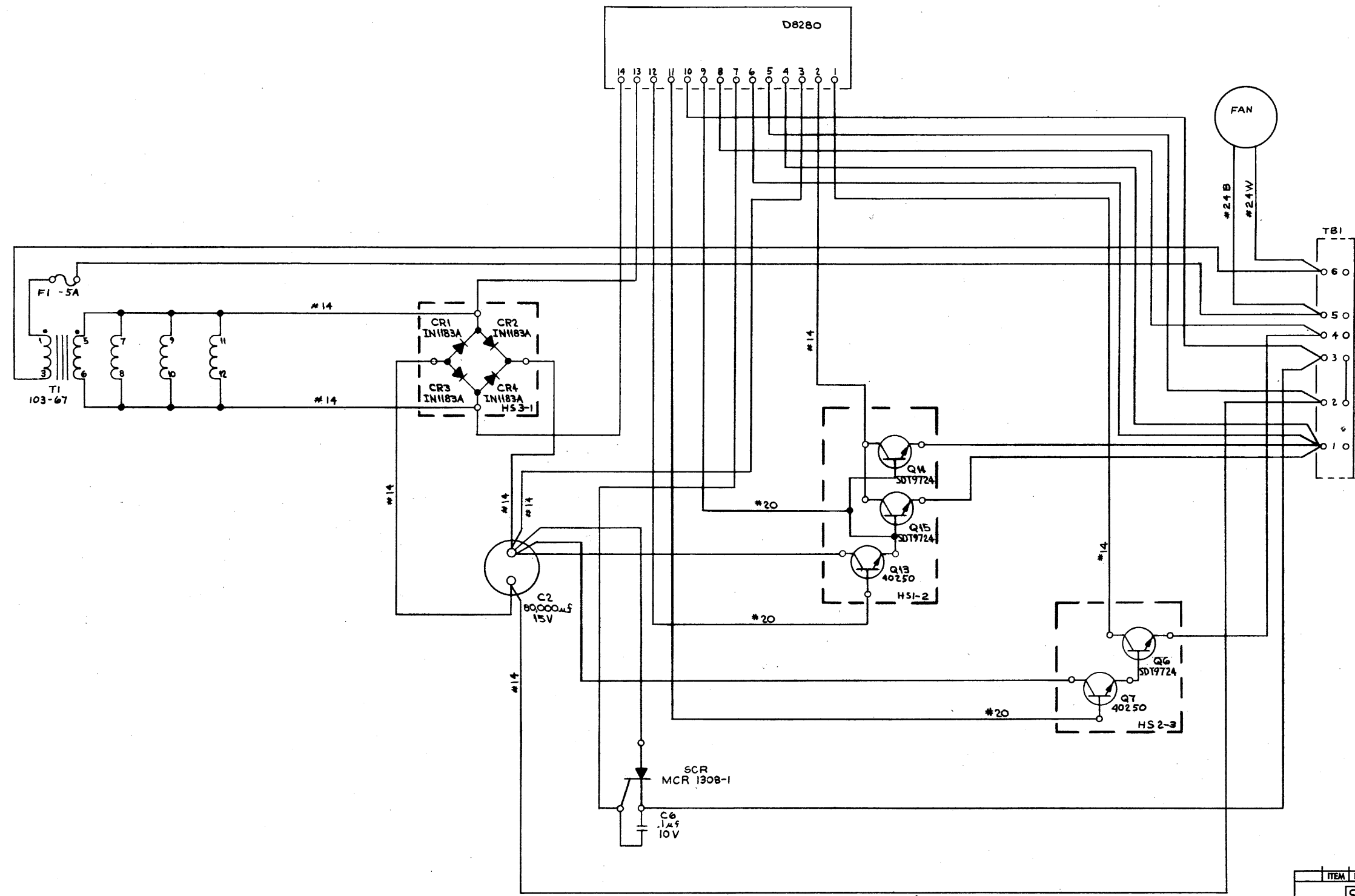
53019

REV	DESCRIPTION	DATE	APPD
B	68-199: IRI-25E WAS IRI-25F ADDED WIRING TO BE ASSIGNED 7-19-68 RKM	7/1/68	[Signature]

NOTES
1.

NOTES:
1. ALL WIRES UNLESS OTHERWISE SPECIFIED TO BE 1/8 GA. WHITE.

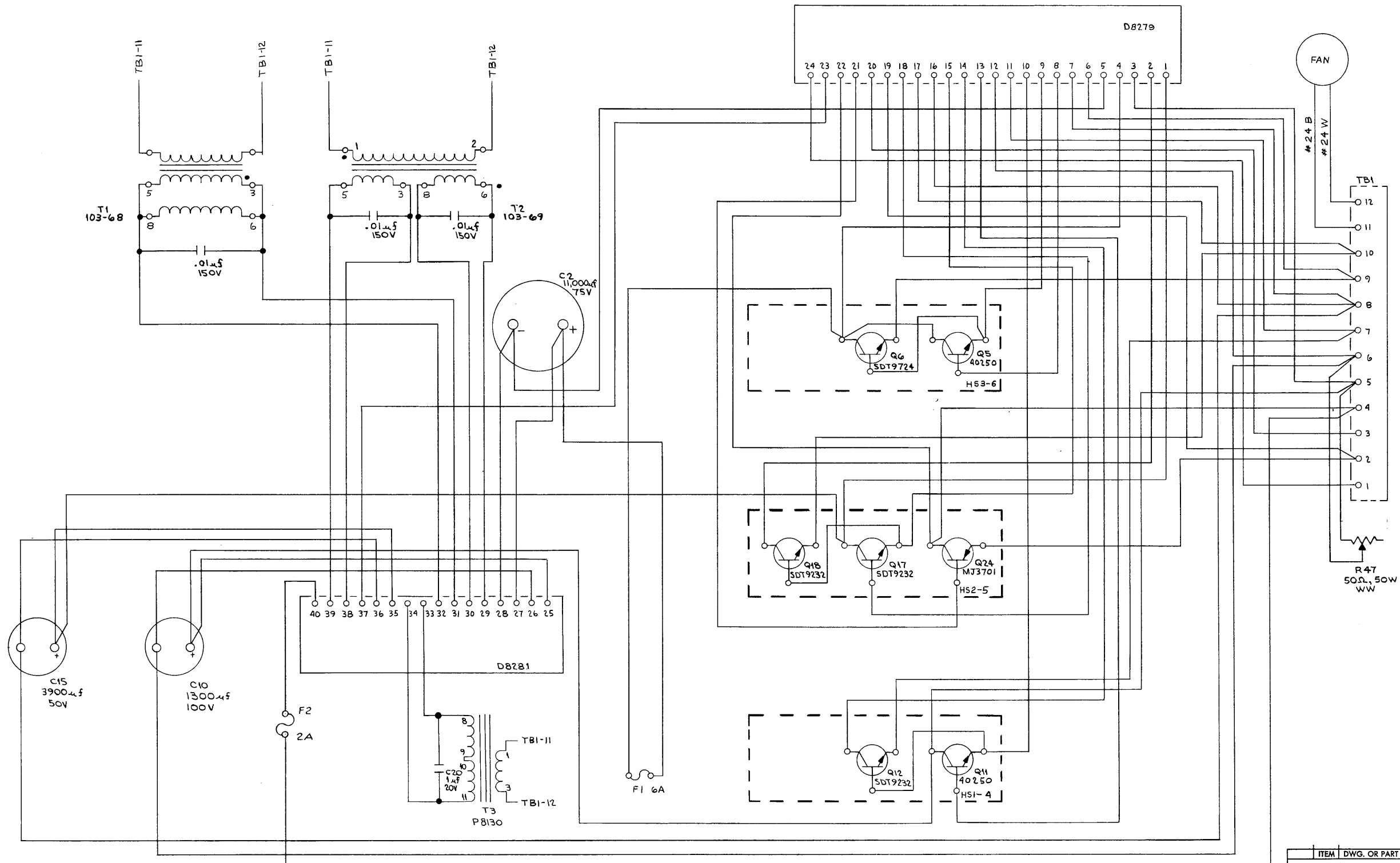
REV	DESCRIPTION	DATE	APP'D
D	53039		



ITEM	DWG. OR PART NO.	DESCRIPTION		
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR	R. WHITE 3-31-67	WIRING DIAGRAM POWER SUPPLY MODEL 221		
ENGR.	<i>[Signature]</i> 4/20/67			
PROJ. MGR.	<i>[Signature]</i> 4/20/67			
APP'D	<i>[Signature]</i> 5-25			
CODE IDENT NO	20886	SIZE	D	53039

NOTES:
1. FOR SCHEMATIC SEE D53140.

REV	D	53040	DATE	APP'D
REV	A	67-436; ADDED R47, C10 WAS 3900 μ f, 50V. RKM 10-19-67 ul	11/20/67	OK
REV	B	67-475; ADDED F2, A2 FUSE TO -16V SUPPLY CIRCUIT H.R.L. 11-2-67 CRAWLEY	11/3/67	OK

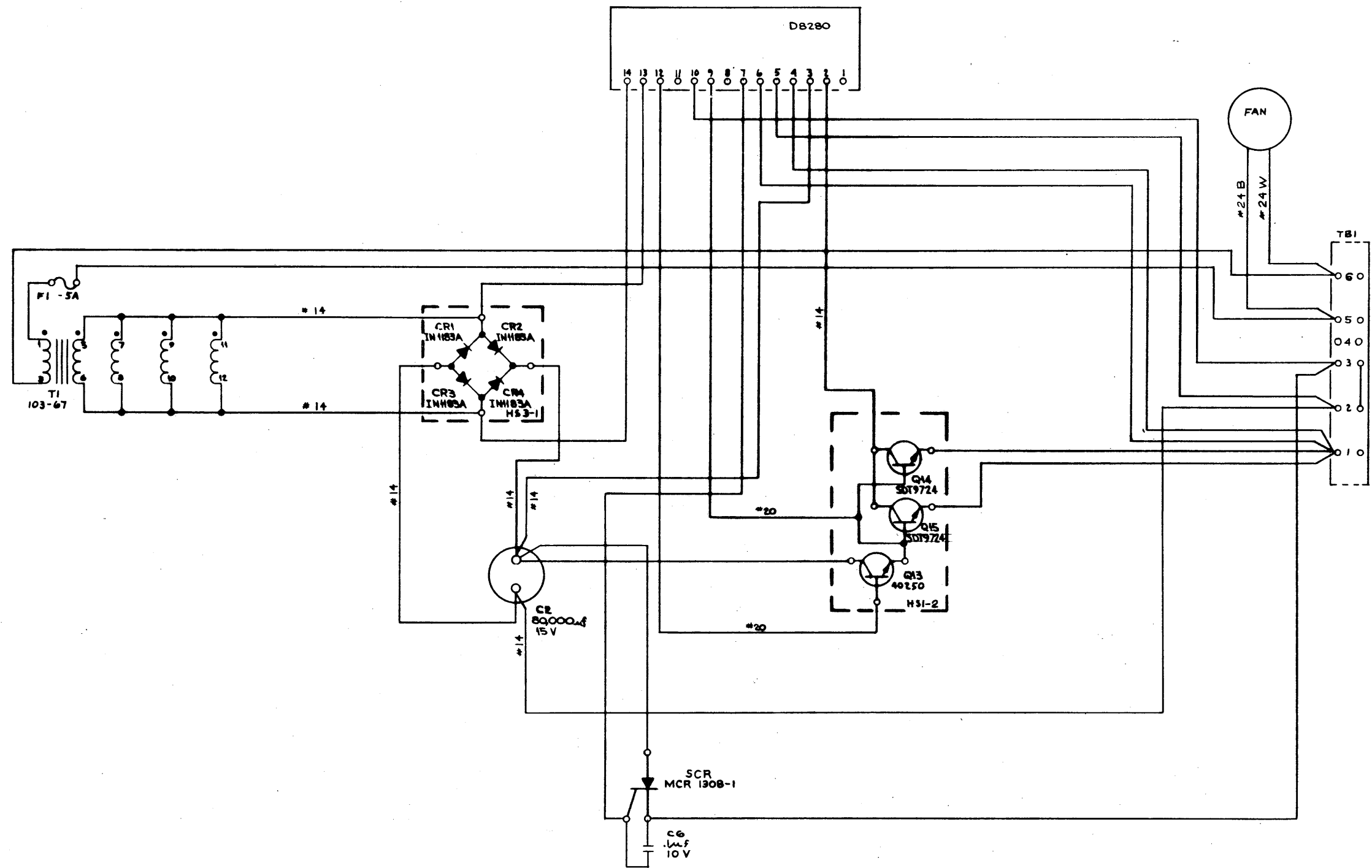


ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	R. WHITE 3-30-67	WIRING DIAGRAM POWER SUPPLY MODEL 222 MEMORY
CK.		
ENG.	<i>W. White</i> 9/20/67	
PROJ. APP.	<i>W. White</i> 8/20/67	
APP.	<i>W. White</i> 8/20/67	

CODE IDENT NO	20886	SIZE	D	53040	REV	B
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NOTES:
1.

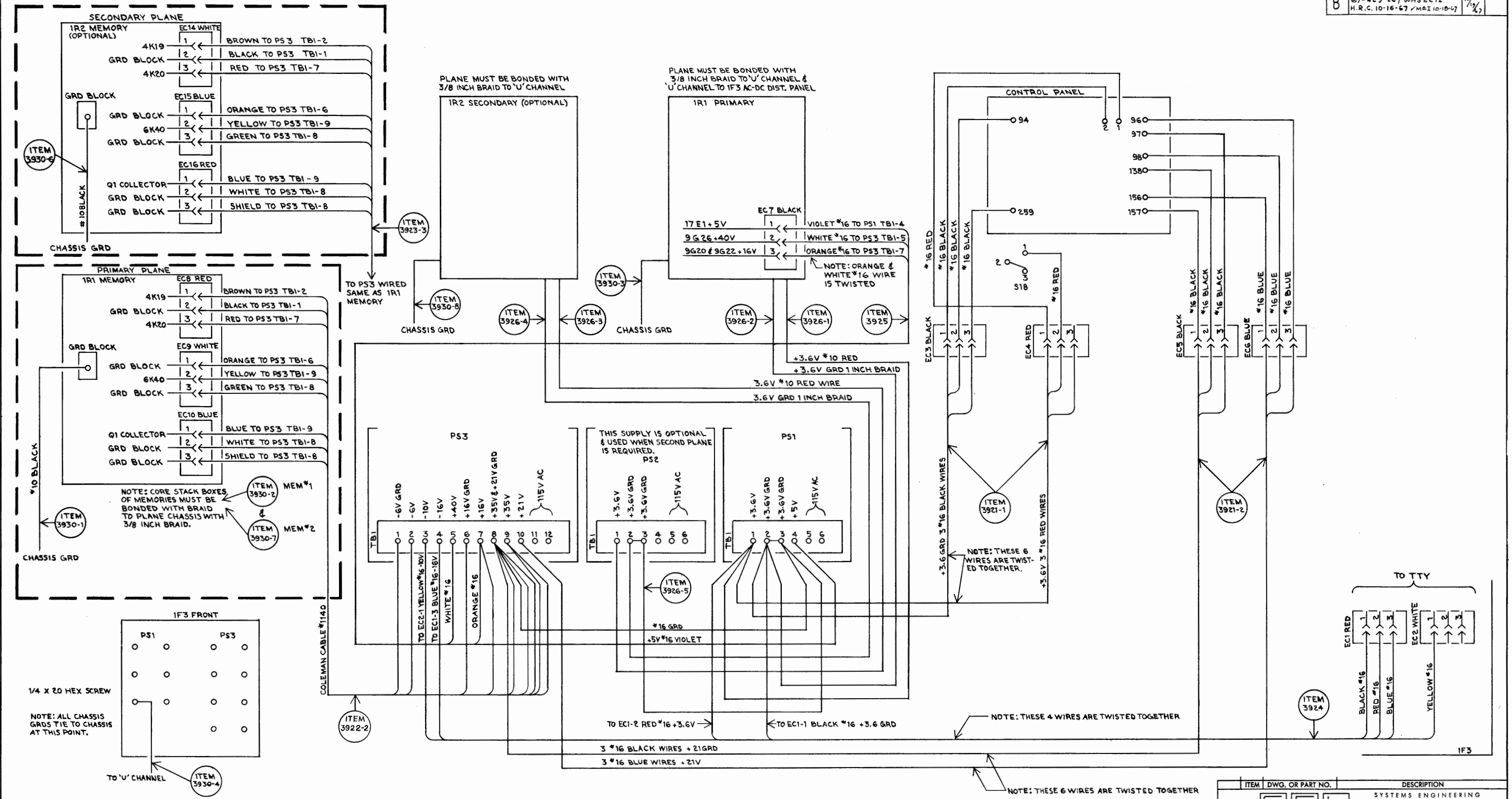
REV	D	53041
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ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA				
DR	R.WHITE 3-31-67	WIRING DIAGRAM POWER SUPPLY MODEL 223				
CC						
ENG.						
PROJ. APP.						
CODE IDENT NO	20886	SIZE	D	53041	REV	
USED ON						

NOTES:
1.

REV	DESCRIPTION	DATE	APP'D
D	53063		B
A	67-324: ITEM 3926-3 WAS 3926-2 H.R.C. 9-7-67 V.H.R.C. 9-7-67	9/8/67	[Signature]
B	67-429 EC7 WRS EC12 H.R.C. 10-16-67 / MBI 10-16-67	10/2/67	[Signature]

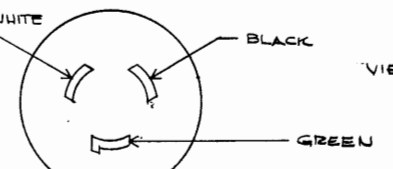
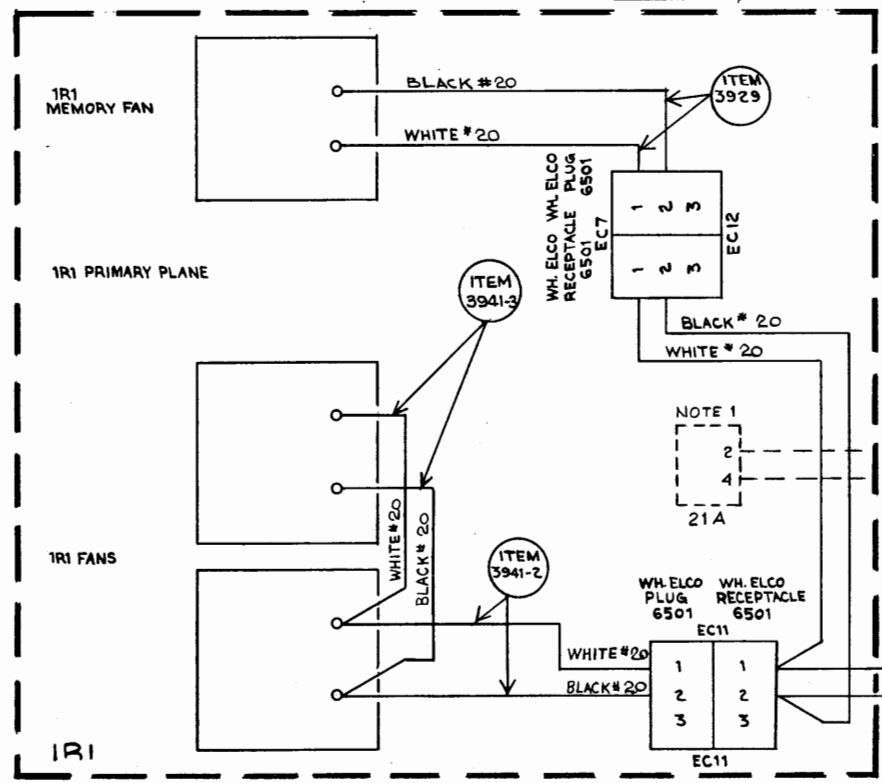
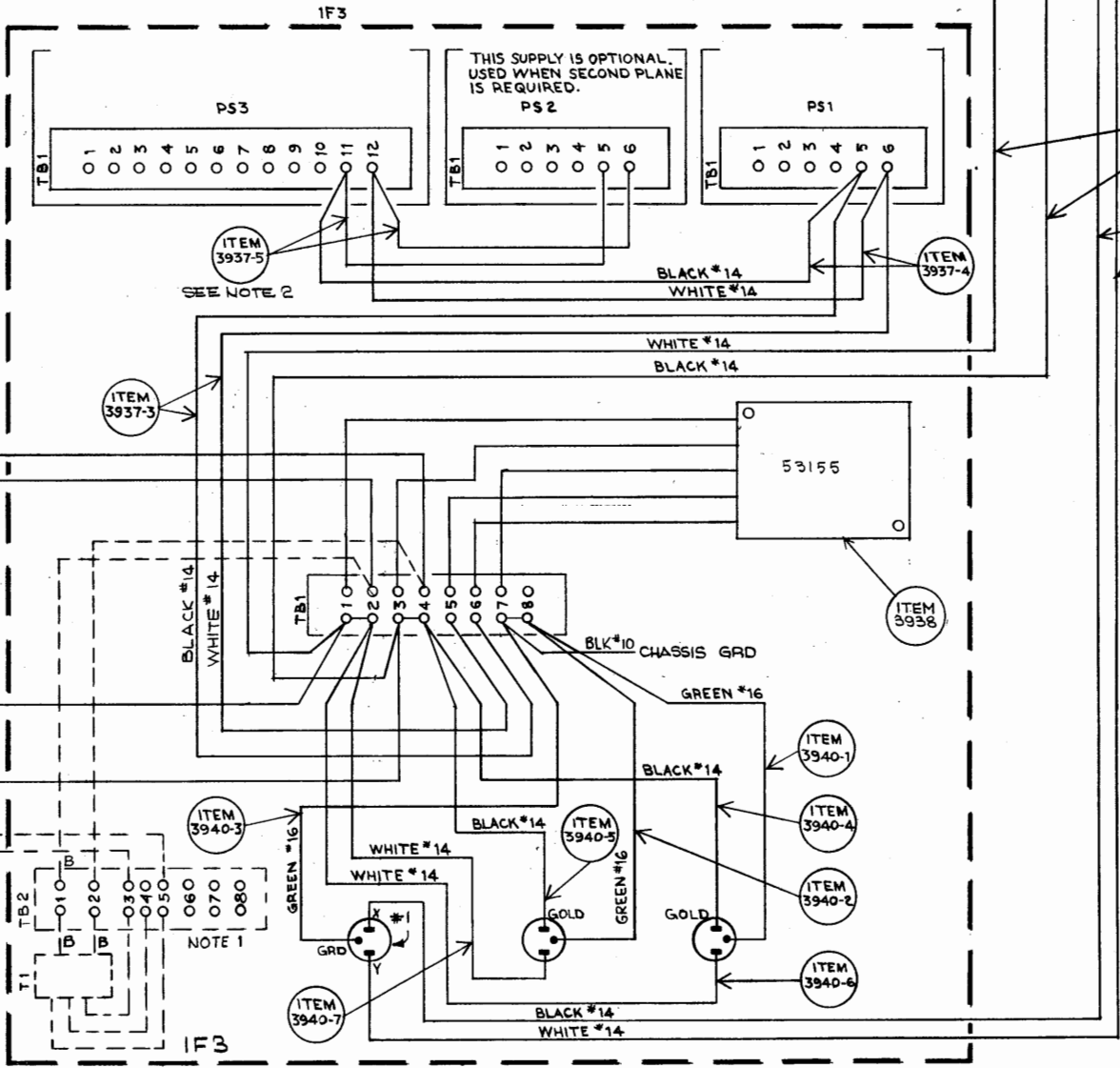
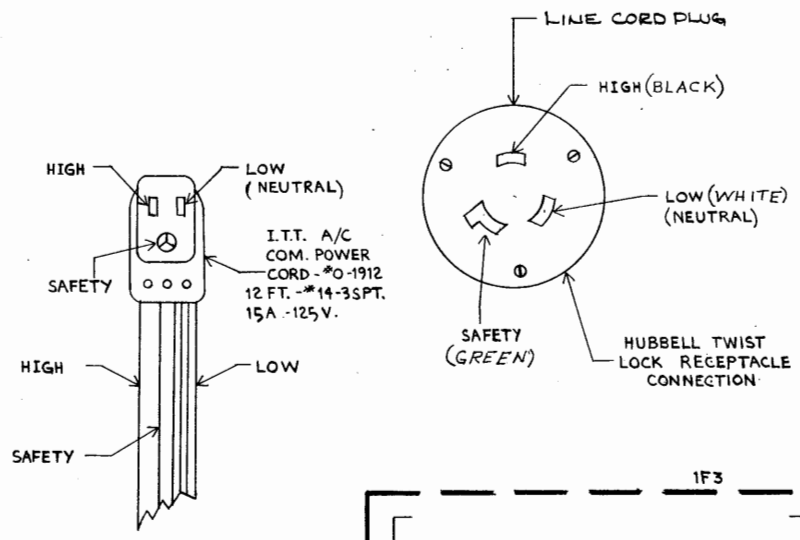
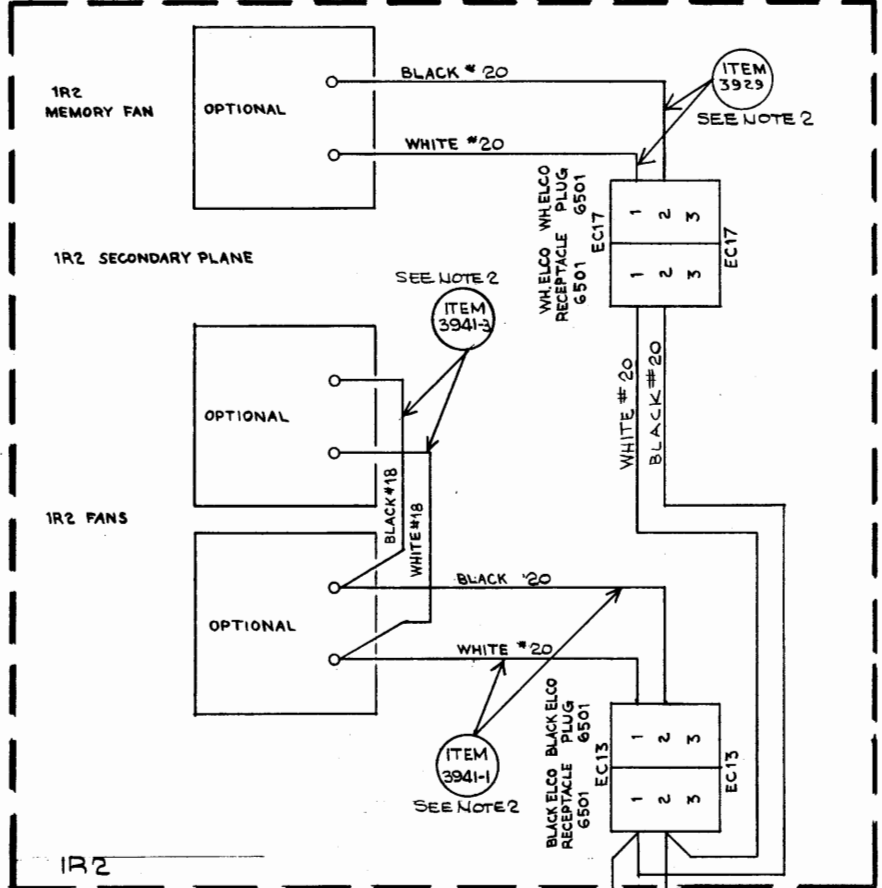


ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	D. LLOYD	5-20-67
CC.		
ENG.	W. L. Meringer	6-22-67
PROJ. APP.	[Signature]	6/22/67
CODE IDENT NO	20886	SIZE
USED ON		D
		53063
		B

NOTES:
 1. ADD TRANSFORMER & TERMINAL STRIP FOR 60 HZ CLOCK OPTION (T1 & TB2)
 2. ALL OPTIONS USED ON SEC. PLANE OR SINGLE P/S.

REV.	DESCRIPTION	DATE	APPD
D	53064		F
A	67-240; UPDATED TO LATEST CHANGES. M. CASE 7-14-67	7/14/67	AW
B	67-279; UPDATED TO LATEST CHANGES. J. PINEDO. 8-10-67	8/10/67	AW
C	67-324; ADDED WIRE COLOR CODE TO HUBBEL TWIST LOCK CONNECTOR HEL 9-7-67/HRC3-7-67	9/7/67	AW
D	67-429; EC12 WRSEC7 H.R.C. 10-16-67 / MSI 10-18-67	10/18/67	AW
E	68-97 - ADDED T1; TB2 & 21A. WIRING TBI-A TO TB2-2 TO T1 PRIMARY; TB2-3 TO T1 SECONDARY TO IR121A, TB1-2 TO TB2-1 TO T1 PRIMARY; TB2-4 TO T1 SECONDARY; TB2-5 TO T1 SECONDARY TO IR121A. ADDED NOTE 1 LAUCK 2-22-68 CRAWLEY	2/23/68	AW
F	68-312; UPDATED TO INCLUDE LATEST CHANGES J. PINEDO, 6-7-68	6/7/68	AW

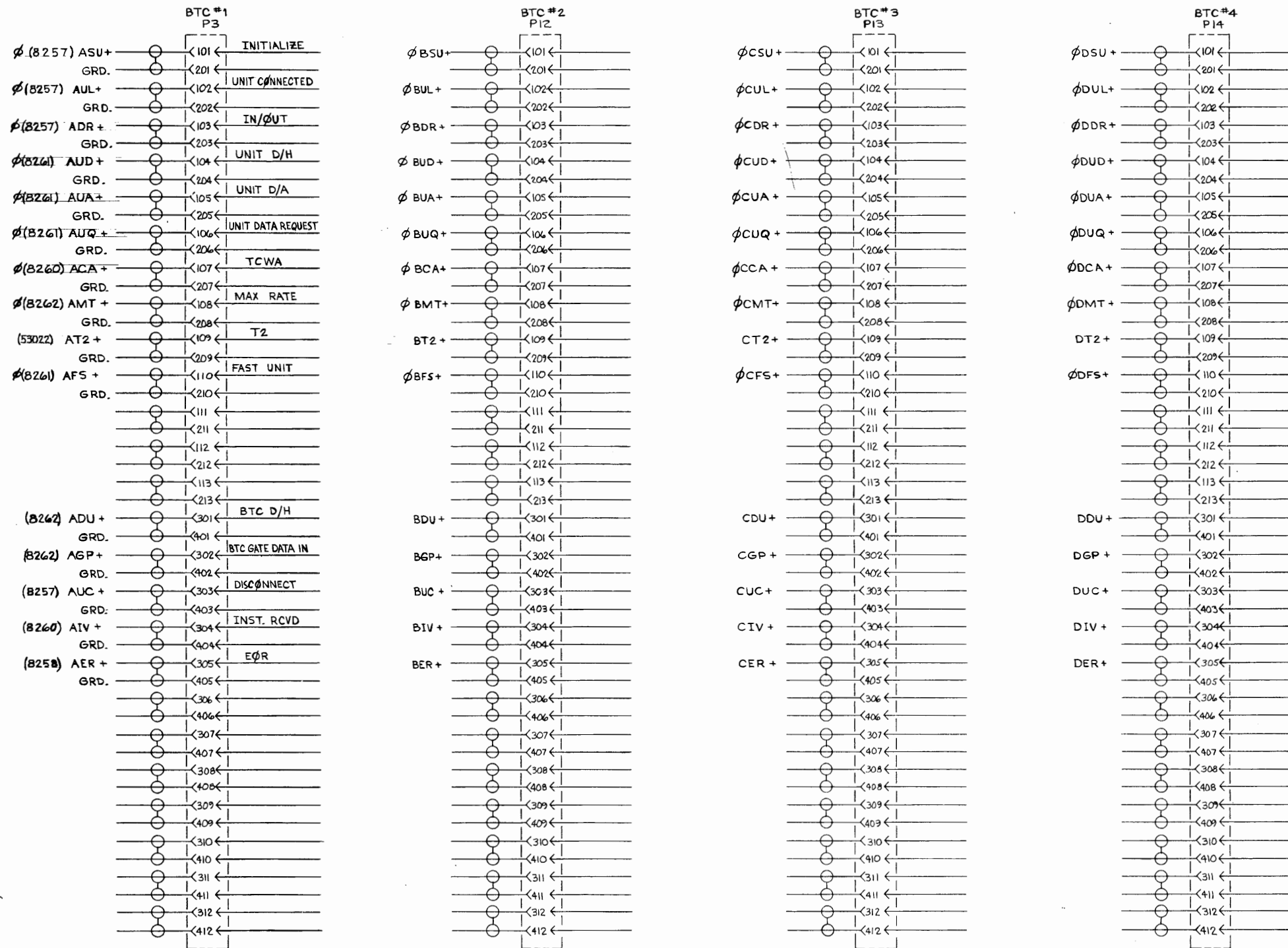
ALL BLACK & WHITE AC WIRING SHOULD BE TWISTED.



ITEM	DWG. OR PART NO.	DESCRIPTION
Systems Engineering Laboratories 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DR D. LLOYD	5-23-67	WIRING DIAGRAM
CHK C. Williams	10-31-67	AC POWER DISTRIBUTION 810a
ENGR J. L. Manning	6-23-67	
PROJ W. C. ...	10-23-67	
APPD J. ...	10-31	
NEXT ASSY		

NOTES:
1. #22 RED/BLACK TWISTED SOLID WIRE.

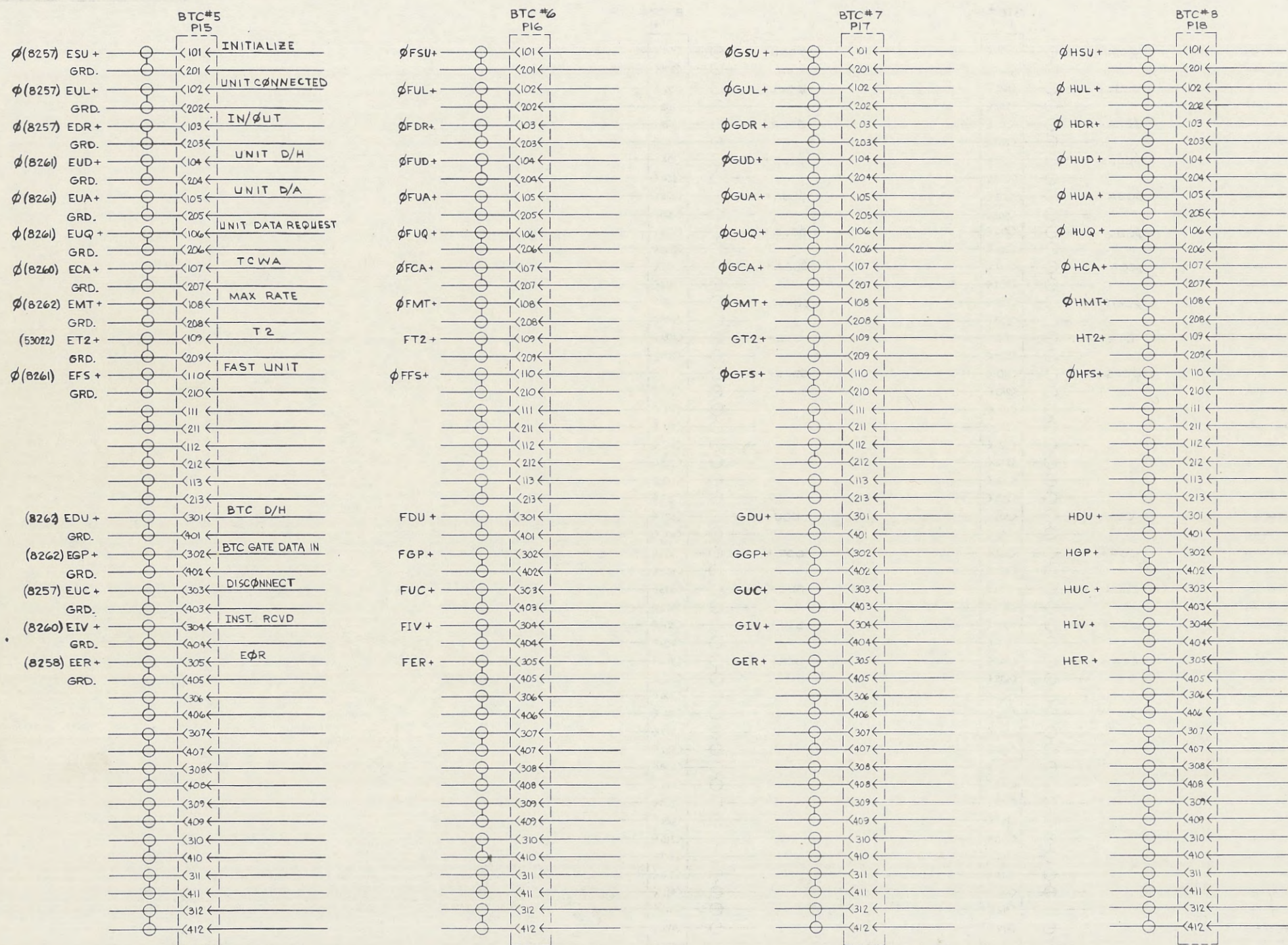
REV	DESCRIPTION	DATE	APP'D
D	53072		
A	67-198 UPDATED TO LATEST CHANGES C. PRUNA 6-19-67 CAW.	6/23/67	[Signature]
B	68-199; P12 WAS P14, P13 WAS P15, & P14 WAS P16 R. K. M. 4-19-68 RKM	4/19/68	[Signature]



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA
DR. AL SCHECKLER	4-26-67	WIRING DIAGRAM BTC TO UNIT 1,2,3,4
CK.		
ENG. P. Villanti	6/18/67	SOPIN CONNECTOR
PROJ. APP. [Signature]	6/14/67	
CODE IDENT NO. 20886	USED ON 9126	SIZE D
		REV B

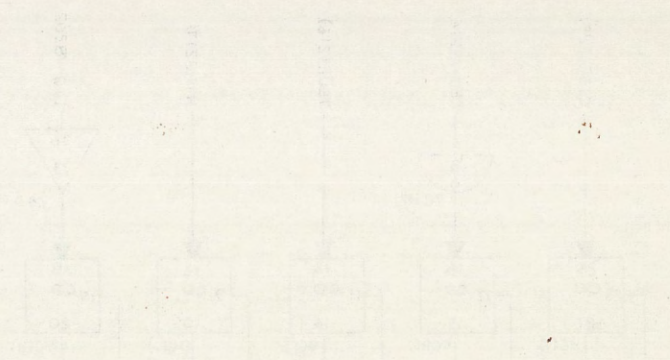
NOTES:
1. #22 RED/BLACK TWISTED
SOLID WIRE.

REV	DESCRIPTION	DATE	APP'D
D	53072		B
A	67-198 UPDATED TO LATEST CHANGES C.PRUNA 6-20-67 CAW	4/23/67	[Signature]
B	68-199; PIS WAS PIT, PIG WAS PIB, PIT WAS PI9, PIB WAS P20 W. Bland 4-19-68 RKM	4/9/68	[Signature]



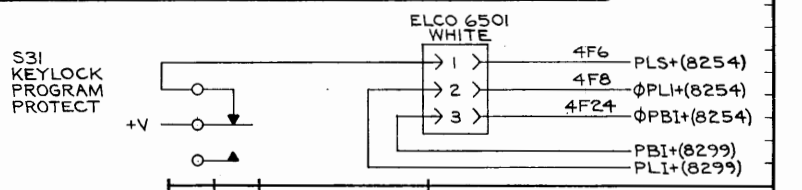
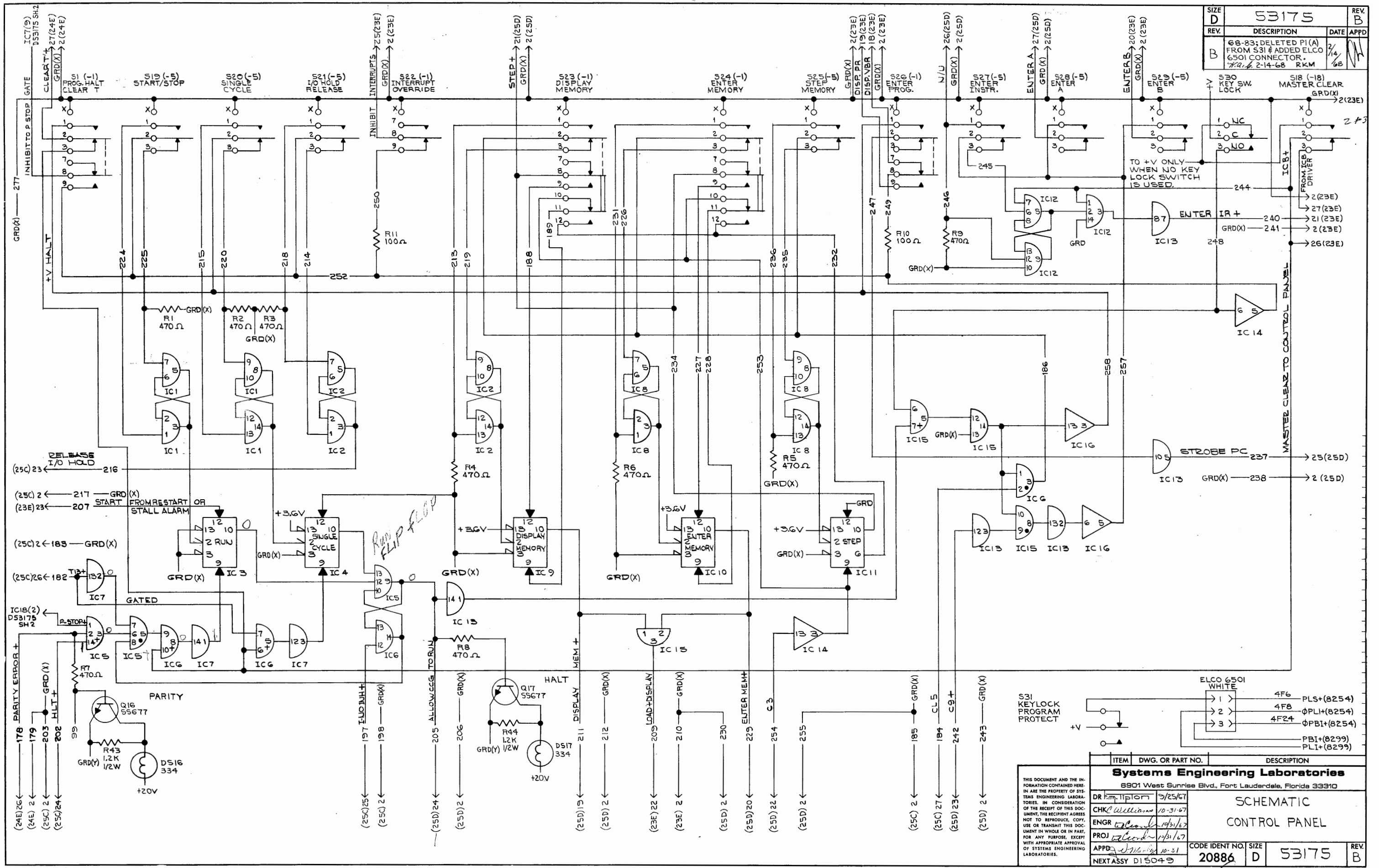
ITEM	DWG. OR PART NO.	DESCRIPTION
DR. AL SCHECKLER	4-26-67	WIRING DIAGRAM BTC TO UNIT #5,6,7,8 50 PIN CONNECTOR
CK.		
ENG. C. V. W. [Signature]	4/8/67	
PROJ. APP. [Signature]	6/18/67	
CODE IDENT NO. 20886	USED ON 9126	SIZE D 53072
		REV B

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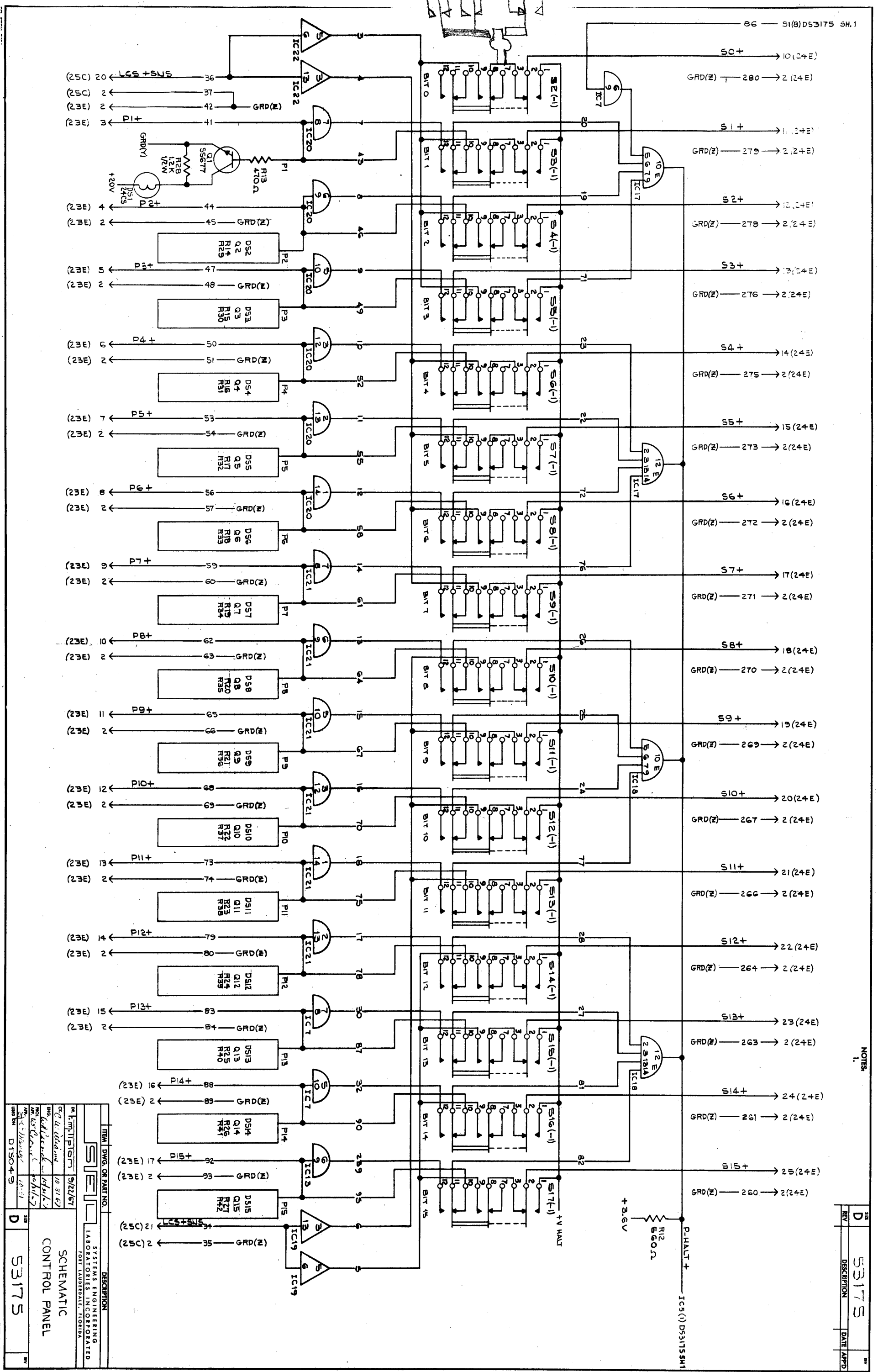
SIZE	D	53175	REV.	B
REV.	B	DESCRIPTION	DATE	APPD
		68-83; DELETED P1(A) FROM 531 & ADDED ELCO 6501 CONNECTOR. 7/9/68 2-14-68 RKM	2/14/68	



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DR	W. M. Ippolito	9/25/67	SCHEMATIC CONTROL PANEL
CHK	William	10-31-67	
ENGR	W. M. Ippolito	10/31/67	
PROJ	W. M. Ippolito	10/31/67	
APPD	W. M. Ippolito	10-31-67	
NEXT ASSY	DI 5049		
CODE IDENT NO.	20886	SIZE	D
		53175	REV. B

See 53175 for parts location

1 SHEET OF 3



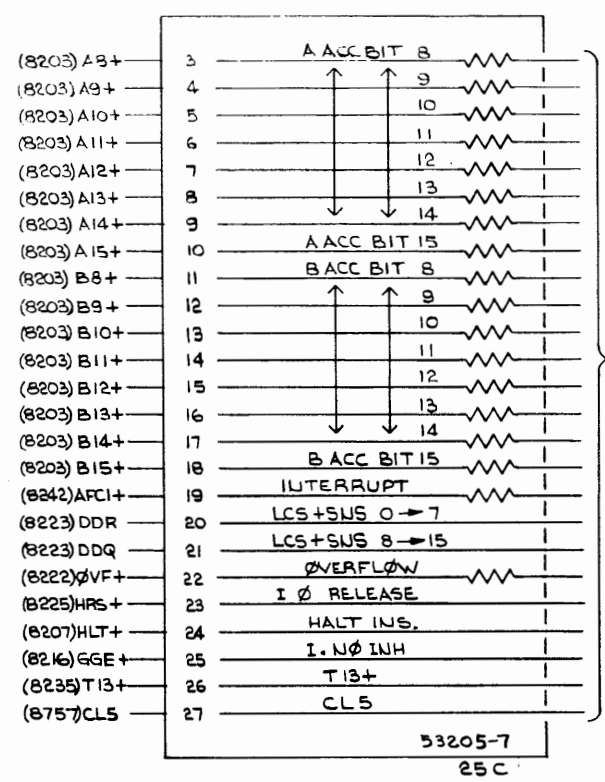
NOTES
1.

REV	D	53175	DATE	APPD
DESCRIPTION				

ITEM	QTY	DESCR	OR PART NO.
SCHEMATIC CONTROL PANEL			
SYSTEMS ENGINEERING LABORATORY INCORPORATED FORT LAUDERDALE, FLORIDA			
DATE	9/22/67	BY	W. J. HARRIS
REV	1	DATE	10/31/67
REV	2	DATE	11/1/67
REV	3	DATE	11/1/67
REV	4	DATE	11/1/67
REV	5	DATE	11/1/67
REV	6	DATE	11/1/67
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REV	9	DATE	11/1/67
REV	10	DATE	11/1/67
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REV	100	DATE	11/1/67

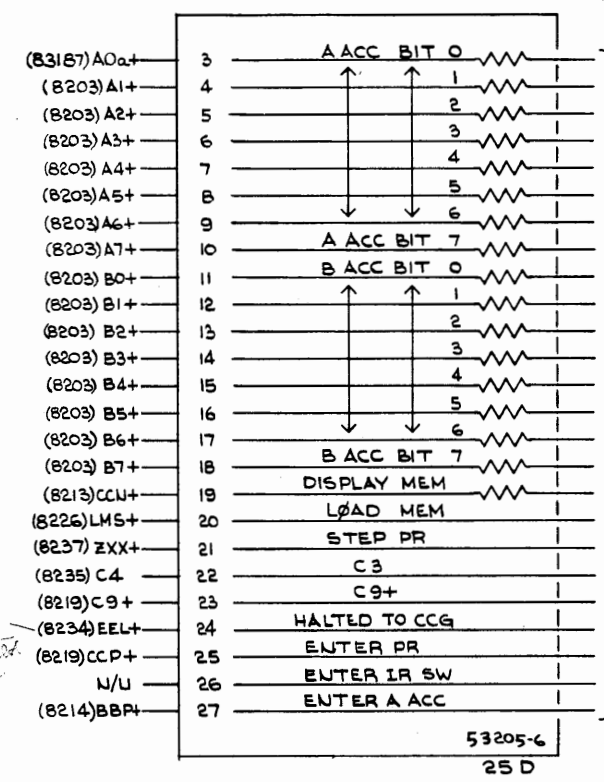
NOTES:
 1. ALL RESISTORS 470Ω 1/4W
 2. REFER TO A1002 FOR SWITCH DETAIL

SIZE	D	53175	REV.	
REV.		DESCRIPTION	DATE	APPD

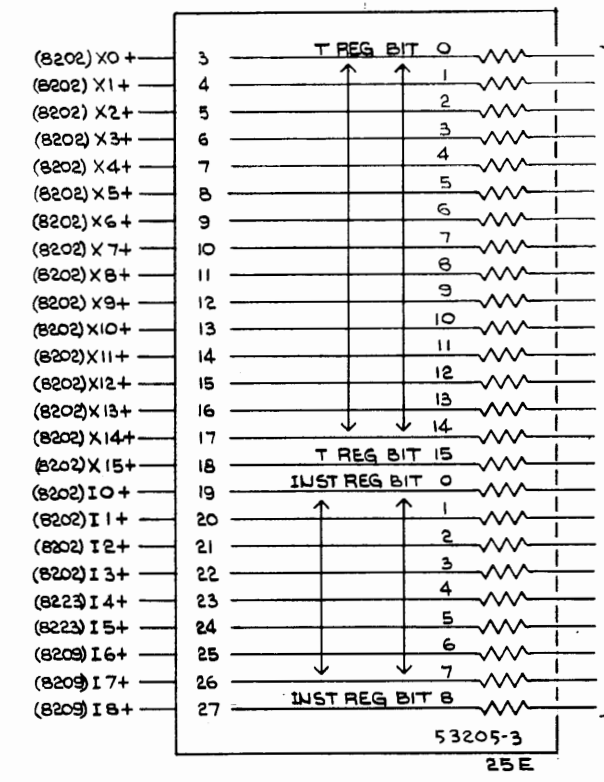


TO CONTROL PANEL DB282

Level when hardware is running

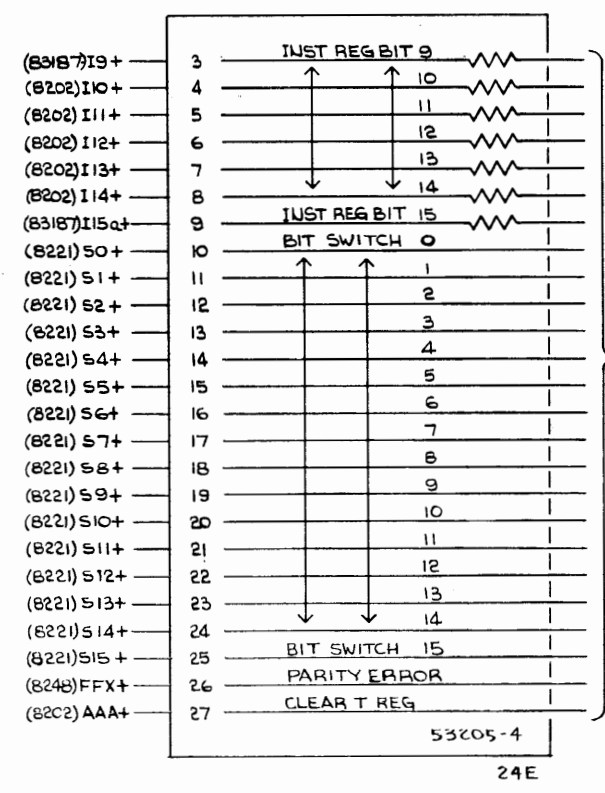


TO CONTROL PANEL DB282

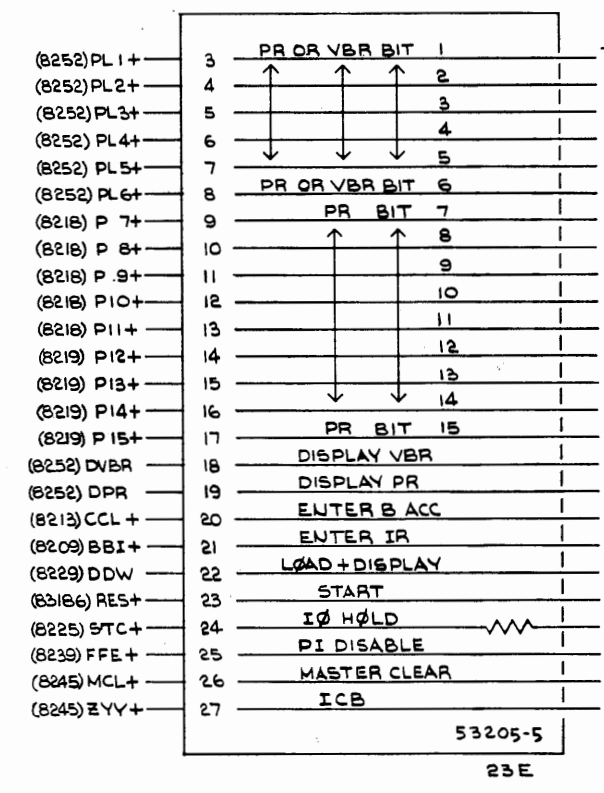


TO CONTROL PANEL DB282

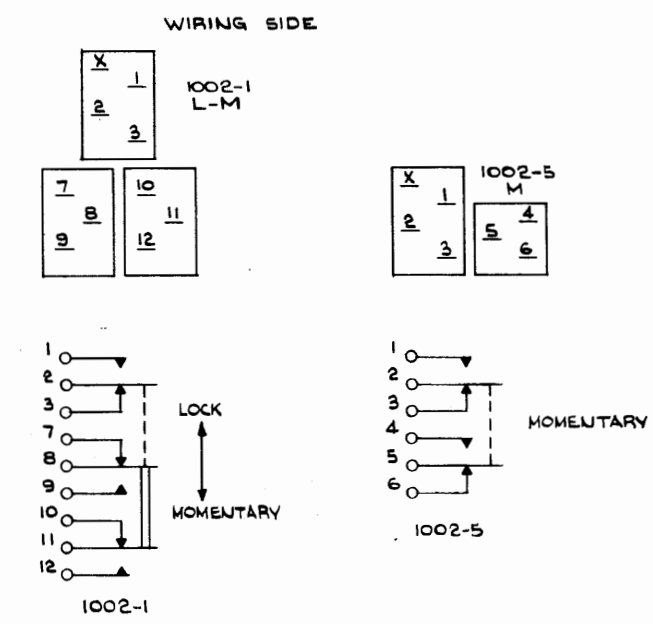
Physical layout of components 5282



TO CONTROL PANEL DB282



TO CONTROL PANEL DB282



ITEM	DWG. OR PART NO.	DESCRIPTION
Systems Engineering Laboratories 8901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DR J. PINEDO	10-30-67	WIRING DIAGRAM
ENGR [Signature]	10/31/67	RIBBON CONNECTORS CONTROL PANEL
PROJ [Signature]	11/16/67	
APPD [Signature]	11/21/67	
NEXT ASSY		

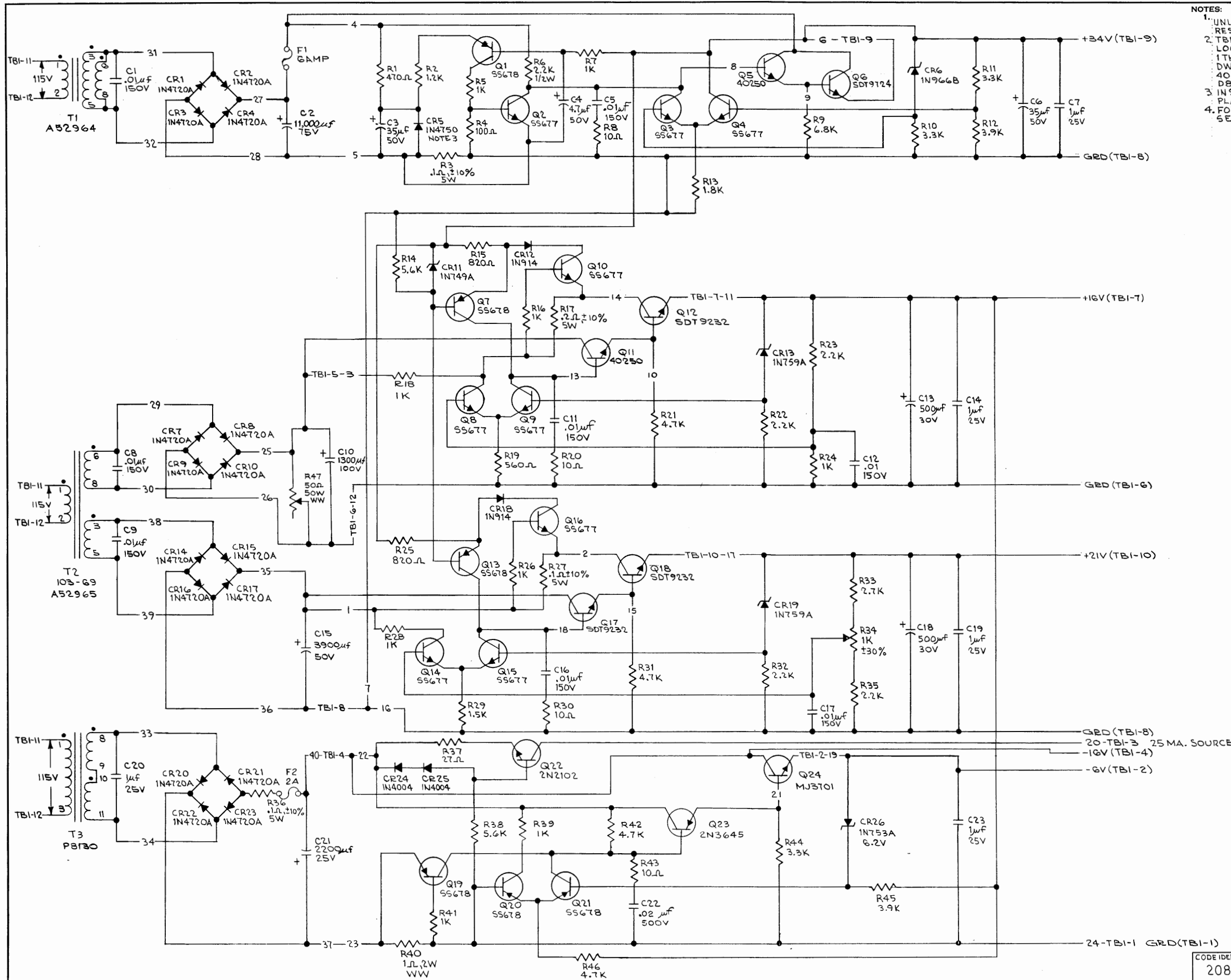
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CODE IDENT NO.	20886	SIZE	D	53175	REV.	
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- NOTES:
- UNLESS OTHERWISE SPECIFIED RESISTORS ARE 5% 1/4 W.
 - TBI-1 THRU TBI-10 ARE LOCATED ON CHASSIS. POINTS 1 THRU 24 ARE LOCATED ON DWG D8279. POINTS 25 THRU 40 ARE LOCATED ON DWG D8281.
 - IN 971B MAY BE USED IN PLACE OF IN4750.
 - FOR WIRING DIAGRAM SEE D53040.

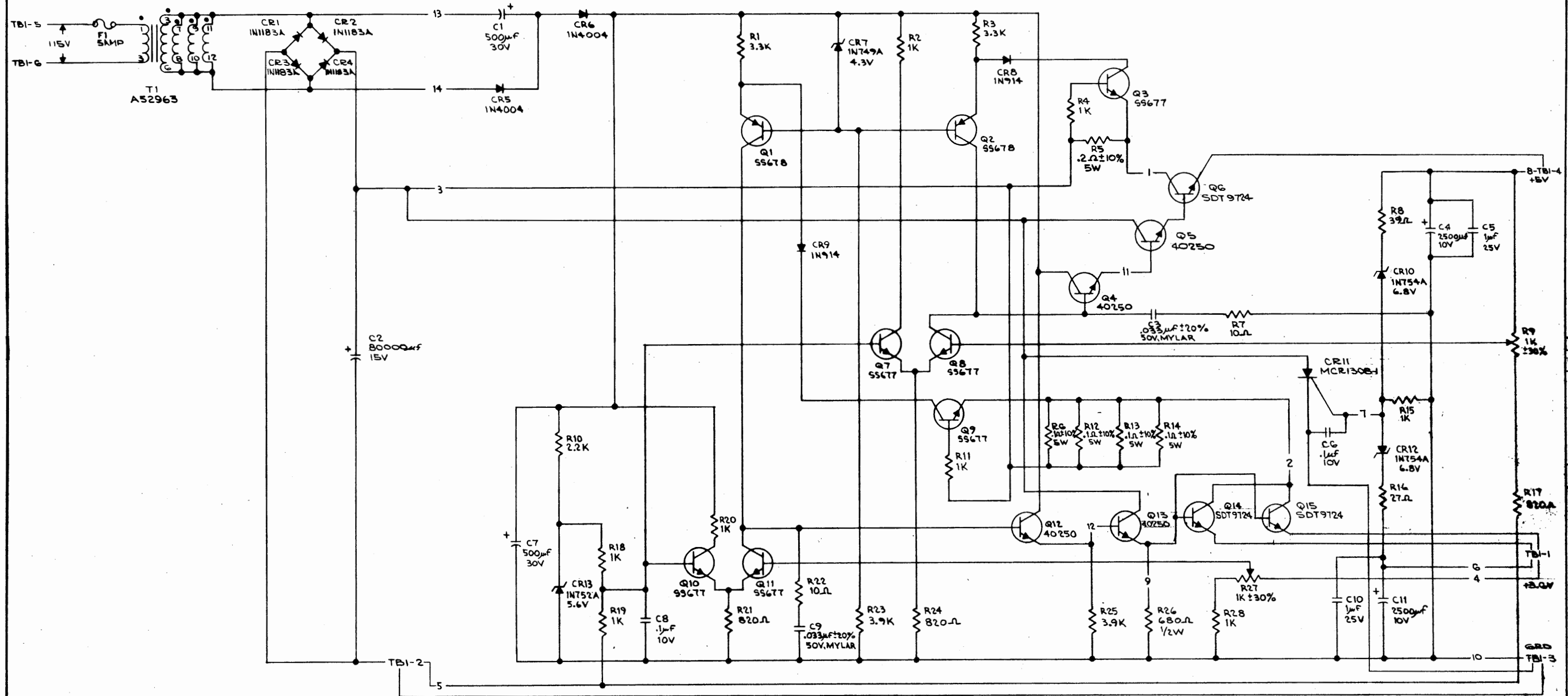
REV	DESCRIPTION	DATE	APP'D
D	53140		
A	67-388; VALUE OF C22 WAS .022 μ F, 1000V. RKM 9-28-67 GHD	10/5/67	RKM
B	67-436 C10 WAS 3900 μ F, 50V, ADDED R47 (50 Ω 50W TYPE ADA TUBULAR ADJUST POWER RESISTOR) BETWEEN TBI-5 & TBI-6, CHANGED Q20 & Q21 SYMBOLS FROM NPN TO PNP, ADDED 25 MA. SOURCE TO 20-TBI-3 & ADDED LINE TO -16V (TBI-4) IGLHEACT 10-18-67 RKM	10/19/67	RKM
C	67-475; ADDED 2 AMP FUSE TO SUPPLY (+16V) CIRCUIT. C2 WAS 1,100 μ F CRAWLEY H.R. LAUCK 11-2-67	11/3/67	RKM
D	67-520; R27 WAS .2 Ω WAC 11-21-67 RKM	11/21/67	RKM

ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	RLW/C.P.	7/19/67
CC.	RKM	7-24-67
ENG.	<i>[Signature]</i>	9/20/67
PROJ. APP.	<i>[Signature]</i>	9/20/67
APP.	<i>[Signature]</i>	9/20/67
USED ON		

CODE IDENT NO	20886
SIZE	D
DESCRIPTION	SCHEMATIC MEMORY SUPPLY MODEL 222
REV	D

NOTES:
 1. UNLESS OTHERWISE SPECIFIED
 RESISTORS ARE $\pm 5\%$, 1/4 W.
 2. TBI-1 THRU TBI-4 ARE
 LOCATED ON CHASSIS, POINTS
 1 THRU 14 ARE LOCATED ON
 DWG. D 8280

D	53141		
REV	DESCRIPTION	DATE	APP'D



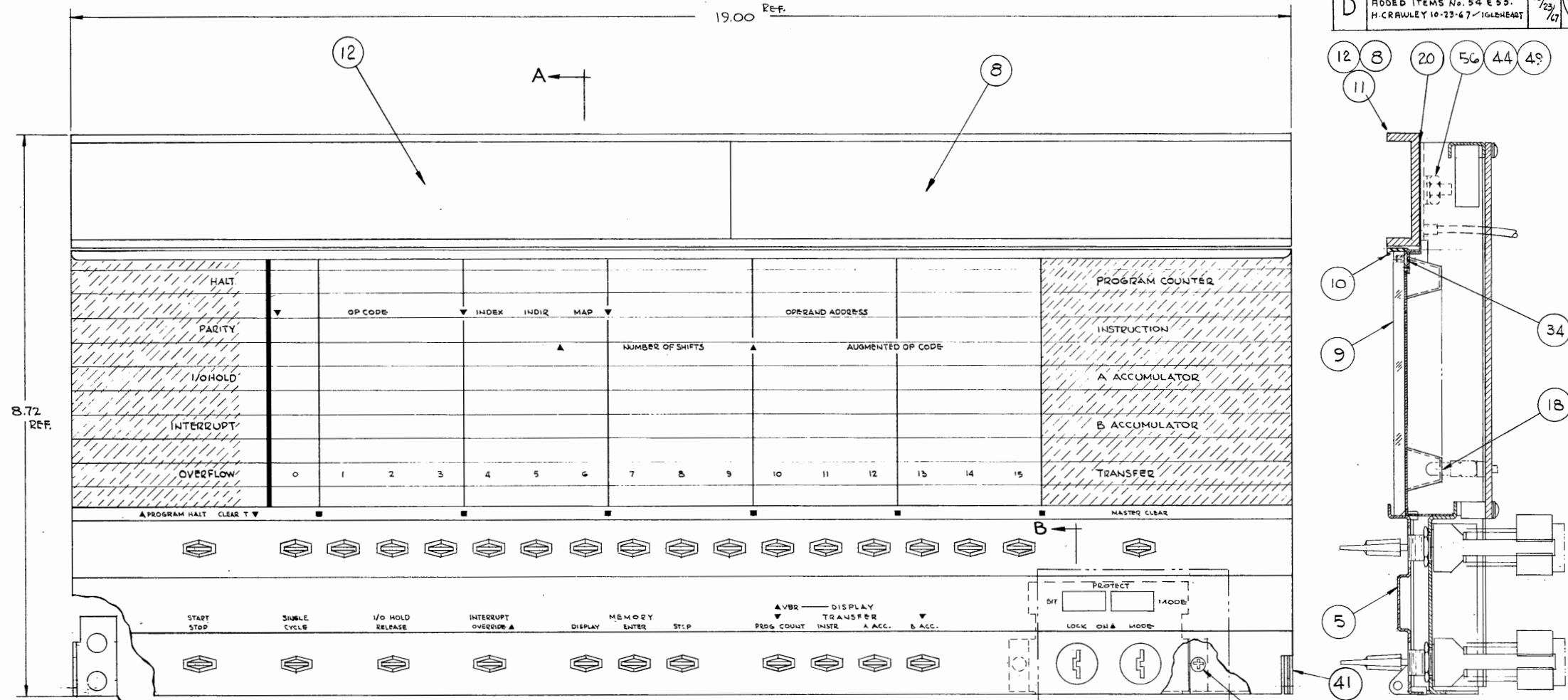
ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR.	C. MAGNUSON	7/18/67
CK.	RICKM	1-21-67
ENG.
APP.
USED ON:		

CODE IDENT. NO.	20886	SIZE	D
			53141

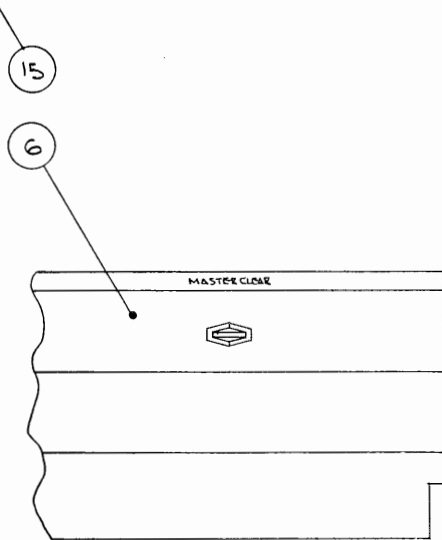


REV.	DESCRIPTION	DATE	APPD.	REV.	DESCRIPTION	DATE	APPD.	REV.	DESCRIPTION	DATE	APPD.
H	68-150: DELETED; INDEX A LAUCK 3-19-68	3/20/68		E	67-44B ITEM 30 LENGTH WAS 3/16, ADD PICTORIAL REPRESENTATION OF LAMP & SOCKET TO SEC. A-A IGLEHEART 10-24-67 CRAWLEY	10/24/67		B	67-35G: QTY ITEM #2 WAS 20 ITEM #47 WAS (8-6-10) ADDED ITEMS 40, 27 & 21 TO LOR. REVISED DWG TO SHOW HDW & NEW HINGE CONFIGURATION H.R. LAUCK 9-12-67 CRAWLEY	9/13/67	
				F	67-45S DELETED ITEMS 2, 3, 4 & 8; ITEM 30 WAS 7/4 SPACER 1/4 LG. ALUM. IGLEHEART 10-30-67 CRAWLEY	10/30/67		C	67-372: ADDED -101 TO ITEM 15; ITEM 8 WAS PANEL GLASS; ADDED ITEM 41, 45 & 57; ITEM 35 WAS 1/16 LG. H.R. LAUCK 9-20-67 CRAWLEY	9/22/67	
				G	68-46: ITEM 12 WAS D1012-101 LOGO SEL. ADDED DASH 10170 PART NO. C15400 ADDED ITEM 8 LAUCK 2-8-68 CRAWLEY	2/14/68		D	67-441 ITEM No. 29 DELETED ADDED ITEMS No. 54 & 55. H.CRAWLEY 10-23-67 IGLEHEART	10/23/67	

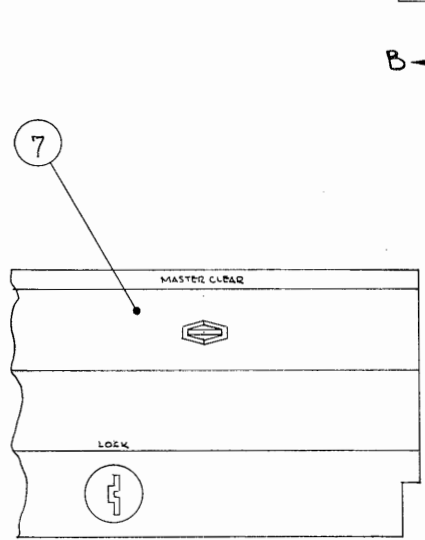
REV.	DESCRIPTION	DATE	APPD.
A	67-317 REVISED RED DRAWING IGLEHEART 8-25-67 RML 95-67	8/25/67	



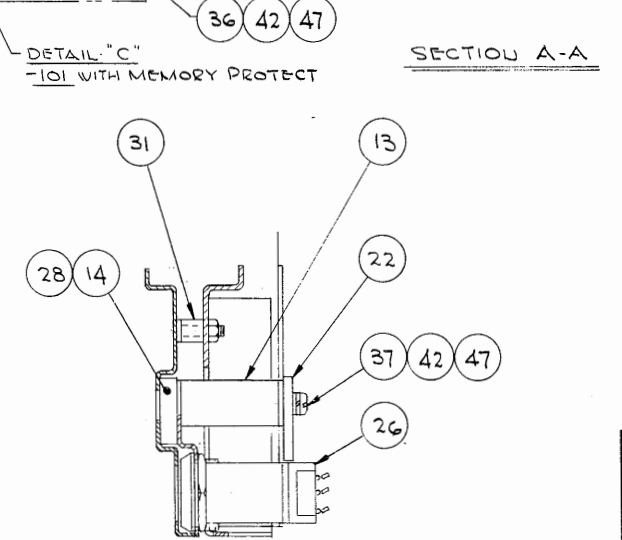
REF.	REF.	REF.	REF.	57	D 53175	SCHEMATIC
2	2	2	56			* B-32 HEXNUT
2	2	2	55		TR-1	CABLE - ANCHOR PANDUIT.
2	2	2	54		SST-1	CABLE - TIE PANDUIT.
6	6	6	53			* 6 ESUA
8	8	8	52			* 4 ESUA
			51			
			50			
2	2	2	49			* 8 FLAT WASHER
8	8	8	48			* 6 FLAT WASHER
12	10	14	47			* 4 FLAT WASHER
			46			
2	2	2	45		B16102	PLATE, SHIM
2	2	2	44			* 8 SPLIT LOCK WASHER
2	2	2	43			* 6 SPLIT LOCK WASHER
8	6	10	42			* 4 SPLIT LOCK WASHER
1	1	1	41		B15892-102	PIVOT, CONTROL PANEL
4	4	4	40			* 4-40 X 3/16 SCREW 55 100° FH. PHILLIPS
2	2	2	39			* 6 SCREW - SELF TAPPING, PH 3/8 LG.
2	2	2	38			* 6-32 X 1/2 SCREW SS P/H PHILLIPS
5	3	5	37			* 4-40 X 3/16 SCREW SS P/H PHILLIPS
2	2	2	36			* 4-40 X 1/4 SCREW SS P/H PHILLIPS
4	4	4	35			* 4-40 X 1/2 SCREW SS 100° FH PHILLIPS
4	4	4	34			* 4-40 X 3/16 SCREW SS 100° FH PHILLIPS
2	2	2	33			* 6 NYLON WASHER
6	6	6	32			* 4 NYLON WASHER
4	4	4	31		# B501	* 6 SPACER, ALUM., 250 LG. (H.H. SMITH)
3	3	3	30		9724-SS-0440-7	STANDOFF, MALE-FEMALE (AMATOM)
			29			
			28		# 732	RTV (DOW CORNING)
1	1	1	27		B16054-102	HINGE
1	1	1	26		* 3492-5 SPDT	SWITCH-LOCK (CHICAGO)
8	8	8	25		* A-1002-5	SWITCH (SWITCHCRAFT)
21	21	21	24		* A-1002-1	SWITCH (SWITCHCRAFT)
1	1	1	23		D 8282	P.C. BOARD-ASSY.
			22		D 8299	P.C. BOARD-LAMP DRIVER ASSY.
1	1	1	21		B16054-101	HINGE
1	1	1	20		C15954	SUPPORT - REFLECTOR
2	2	2	19		* 9765	MAGNETIC CATCH (AMEROCK)
1	1	1	18		D15843	LAMP REFLECTOR & PARTITION
1	1	1	17		B15396	BRACKET - CABLE CLAMP
1	1	1	16		C15926	STOP - PANEL
1	1	1	15		B15892-101	PIVOT, CONTROL PANEL
			14		B15931	GLASS, MEMORY PROTECT
1	1	1	13		C16009	BRACKET, MEMORY PROTECT
1	1	1	12		D16370-101	SEL LOGO NAMEPLATE
1	1	1	11		C15400-1	CHANNEL - LOGO
1	1	1	10		D15743	PANEL - GRIPPER
1	1	1	9		D15742	PANEL-CONTROL SILK SCREENING
1	1	1	8		D16372-101	MODEL DESIGNATION NAMEPLATE
1	1	1	7		D15812-103	PANEL-MARKING (SWITCH COVER)
			6		D15812-102	PANEL-MARKING (SWITCH COVER)
			5		D15812-101	PANEL-MARKING (SWITCH COVER)
			4			
			3			
			2			
1	1	1	1		D16004	CONTROL PANEL WELDMENT



DETAIL "D"
-102 WITHOUT MEMORY PROTECT



DETAIL "E"
-103 WITHOUT MEMORY PROTECT WITH LOCK ONLY



SECTION B-B

WITHOUT MEMORY PROTECT - LOCK ONLY
WITHOUT MEMORY PROTECT
WITH MEMORY PROTECT

103-102 101 ITEM DWG. OR PART NO. DESCRIPTION

Systems Engineering Laboratories
6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310

DR IGLEHEART 8-4-67
CHK Ed. P. 8-25-67
ENGR 8/26/67
APPD 8/26/67
NEXT ASSY D15600

CONTROL PANEL ASSEMBLY

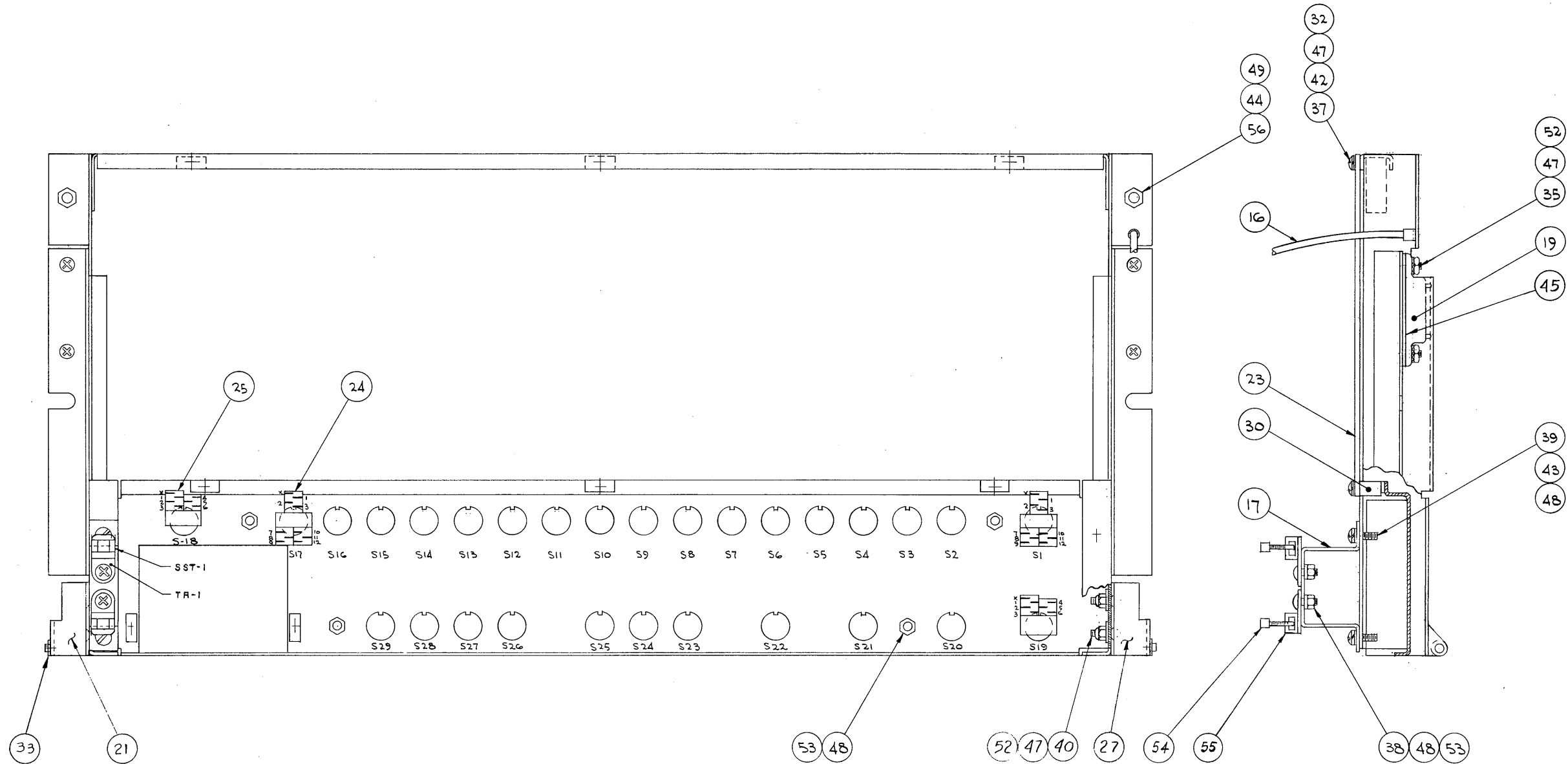
CODE IDENT NO. SIZE REV.
20886 D 15049 H

Scale: Full

NOTES:
1.

SIZE	D	REV.	H
REV.	DESCRIPTION	DATE	APPD
SEE SHEET 1 FOR REVISIONS			

REF. DESIG.	ITEM No
S 1	24
S 2	24
S 3	24
S 4	24
S 5	24
S 6	24
S 7	24
S 8	24
S 9	24
S 10	24
S 11	24
S 12	24
S 13	24
S 14	24
S 15	24
S 16	24
S 17	24
S 22	24
S 23	24
S 24	24
S 26	24
S 18	25
S 19	25
S 20	25
S 21	25
S 25	25
S 27	25
S 28	25
S 29	25



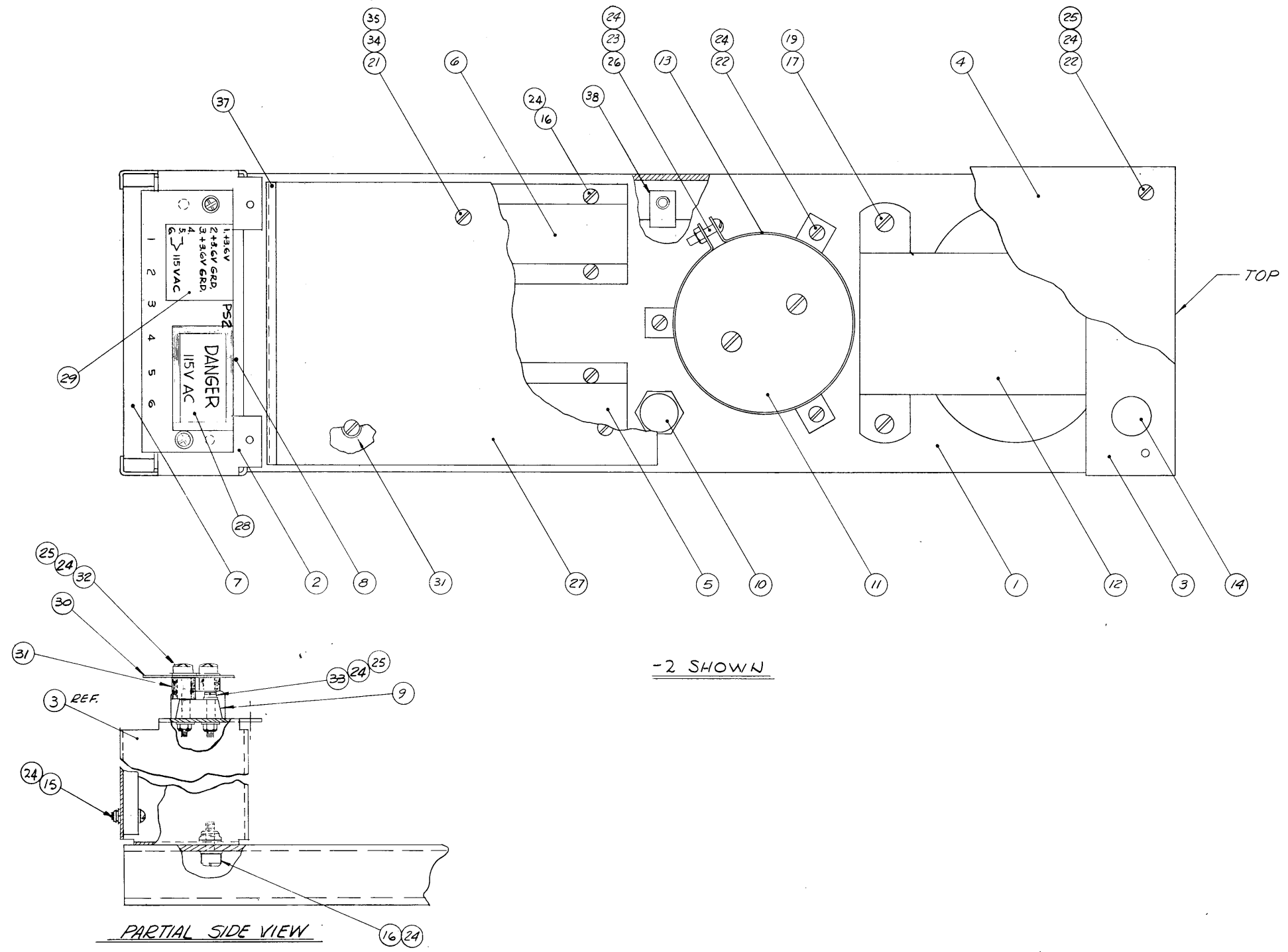
SCALE: FULL

ITEM	DWG. OR PART NO.	DESCRIPTION
Systems Engineering Laboratories		
6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DR	IGLEHEART	B-2-67
CHK	<i>G.W. ...</i>	8-25-67
ENGR	<i>G.W. ...</i>	8/28/67
PROJ	<i>...</i>	8/28/67
APPD	<i>...</i>	8-25-67
NEXT ASSY	D15600	

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	20886	D	H
	15049		

NOTES:
1.

SIZE	D	15513	REV	A
REV	A	DESCRIPTION	DATE	APP'D
		GT-555 DRAWING REVISED REFER TO SERIA. OF PREV. REV. IN FILE	12/1/67	[Signature]
		IGLEHEART 12-7-67	CRAWLEY	



-2 SHOWN

ITEM	QTY	DWG. OR PART NO.	DESCRIPTION
6	6	38 SL 211-3-1	CLIP NUT SHUR-LOK
1	1	37 GS-3	GROMMET STRIP 4 3/8" LG. ELECTROVET
REF	REF	36 D53041	WIRING DIAGRAM
3	3	35 MS15795-303	*4 FLAT WASHER SS
3	3	34 MS35337-40	*4 SPLIT LOCK WASHER SS
2	2	33 MS35216-27	*6-32 X 1/2 LG. PAN HD. SCR. SS
2	2	32 MS35216-32	*6-32 X 1/4 LG. PAN. HD. SCR. SS
2	2	31	SPACER-3/16 ID. X 1/2 WALL X 1/2 LG. GRAD. XXX
1	1	30 MS-6-141	MARKER STRIP, JONES
1	1	29 12015-99-103	SCOTCHCAL LABEL
1	1	28 13004-99	WARNING LABEL
1	1	27 B280-2	S & A 3.6V & 5V POWER SUPPLY
1	1	26 MS35216-28	*6-32 X 3/8 LG. PAN. HD. SCREW SS
8	4	25 MS35337-41	*6 LOCK WASHER SS
37	33	24 MS15795-305	*6 FLAT WASHER SS
1	1	23 MS20365-632	*6-ESNA-NUT
7	3	22 MS35216-24	*6-32 X 3/8 LG. PAN. HD. SCR. SS
3	3	21 MS35216-20	*4-40 X 1" LG PAN. HD. SCR. SS
		20	
8	8	19 MS15795-308	*10 FLAT WASHER SS
		18	
4	4	17 MS51958-61	*10-32 X 3/8 LG PAN. HD. SCR. SS
20	20	16 MS35216-25	*6-32 X 3/8 LG. PAN. HD. SCR. SS
4	4	15 MS35216-29	*6-32 X 3/4 LG. PAN. HD. SCR. SS
1	1	14 HKP	FUSE HOLDER BUSS
1	1	13 4586-2	CLAMP SPRAGUE
1	1	12 52963	TRANSFORMER
1	1	11 3608036015DC6B	CAPACITOR, SPRAGUE 80000 MFD 15V
1	1	10 MCE-1308-1	SILICON CONTROLLED RECTIFIER-MOTOROLA
1	1	9 6-142	TERMINAL BLOCK, JONES
1	1	8 747	FAN, ROTRON SENTINAL
1	1	7 C15284	FILTER ASS'Y.
1	1	6 C15284	HEAT SINK
1	1	5 C15283	HEAT SINK
1	1	4 C15283-101	COVER
1	1	3 C15286	BRACKET
1	1	2 C15285	BRACKET-FAN
1	1	1 D15235	CHASSIS
-2	-1	ITEM	DWG. OR PART NO.

SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA

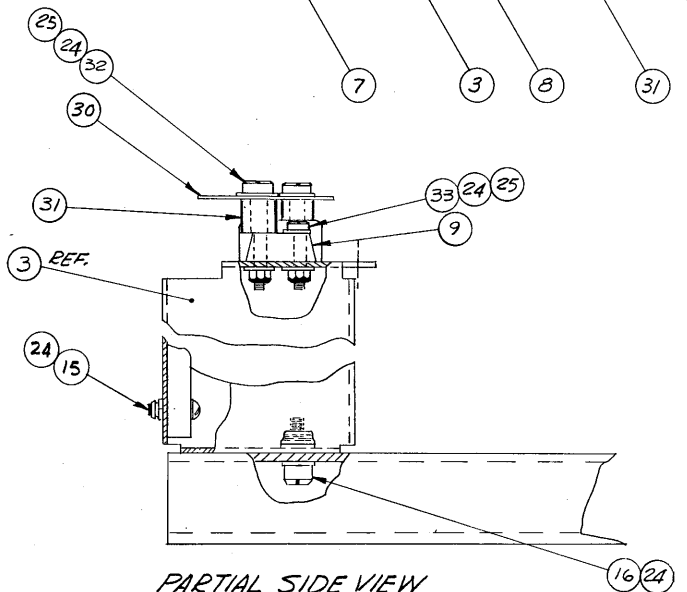
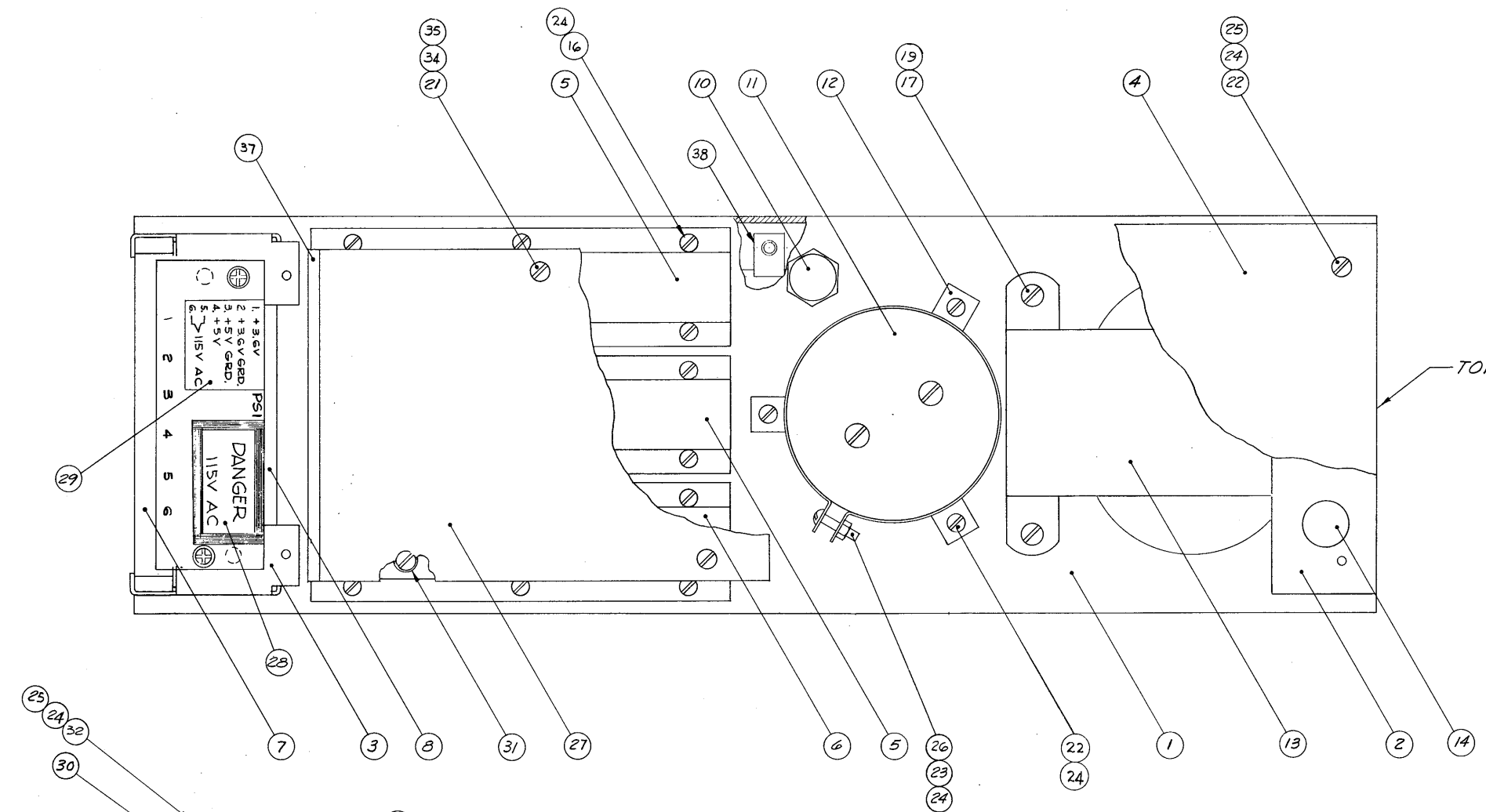
DR. E. LARSEN	3-28-67	ASSY. POWER SUPPLY (3.6 V.)
CHK. P. H. HAN	11/16/67	
ENG. [Signature]	8/22/67	
PROJ. [Signature]	8/22/67	
APP. [Signature]	8-22-67	

SIZE D 15513 REV A

NEXT ASS'Y D15517 SCALE: FULL

NOTES:
1.

SIZE	D	15514	REV	A
REV	A	DESCRIPTION	DATE	APPD
		GT-555: DRAWING REVISED REFER TO SERIAL OF PREV. REV. IN FILE 10/16/67 12-7-67 CRAWLEY	12/1/67	JK



- 2 SHOWN

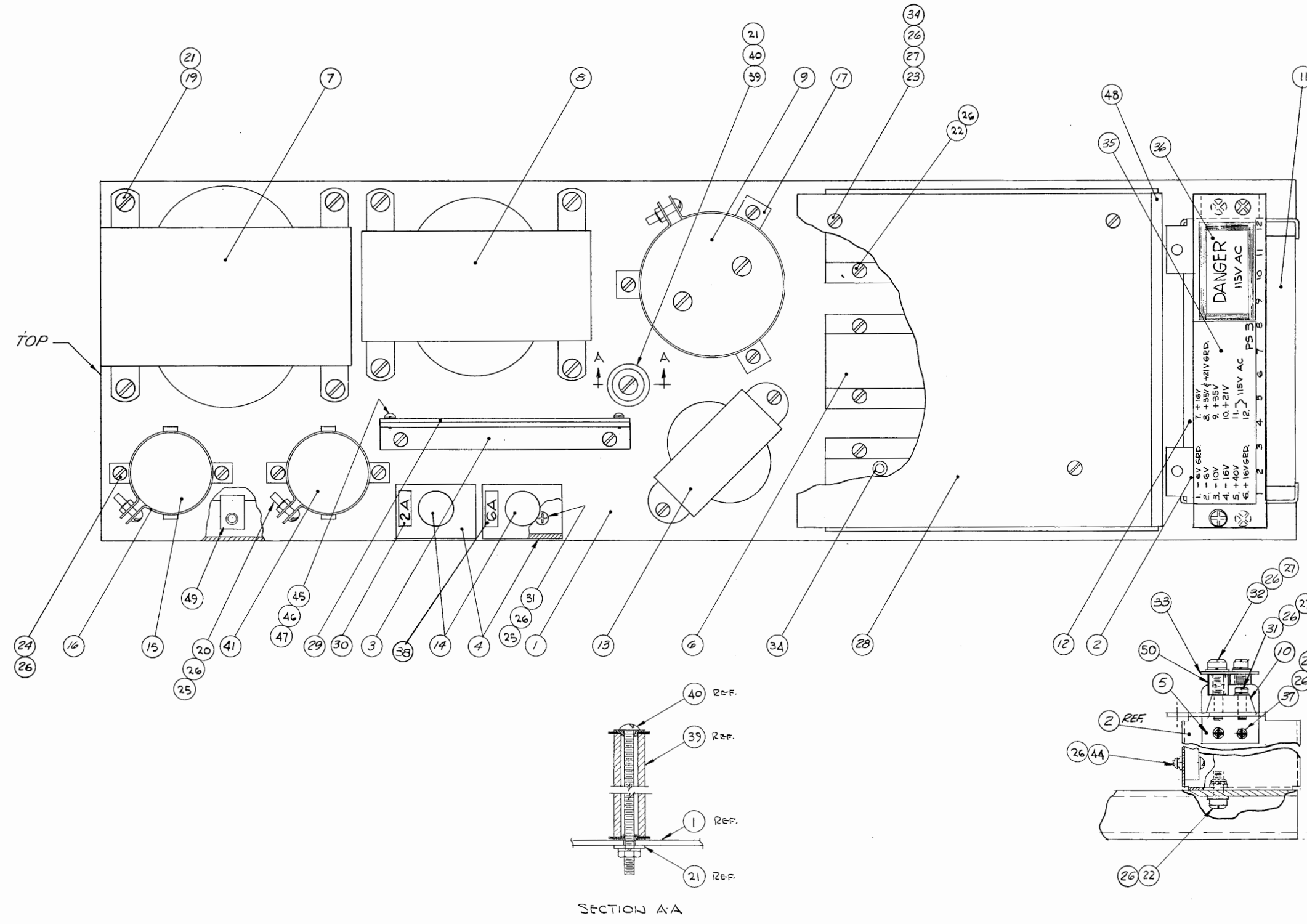
ITEM	DWG. OR PART NO.	DESCRIPTION
6	38	SL 2.11-3-1 CLIP NUT SHUR-LOK
1	37	GS-3 GROMMET STRIP-4 3/4" LG. ELECTROVOLT
REF	REF	D53039 WIRING DIAGRAM
3	35	MS 15795-303 #4 FLAT WASHER SS
3	34	MS 35337-40 #4 SPLIT LOCK WASHER SS
2	33	MS 35216-27 #6-32 X 1/2 LG. PAN HD. SCR. SS
2	32	MS 35216-32 #6-32 X 1 1/4 LG. PAN HD. SCR. SS
5	31	SPACER-3/16 I.D. X 1/8 WALL X 1/2 LG. GRAD EXX
1	30	MS-6-141 MARKER STRIP - "JONES"
1	29	12015-99-102 SCOTCHCAL LABEL
1	28	13004-99 WARNING LABEL
1	27	5280-1 5# A 3.6V # 5V POWER SUPPLY
1	26	MS 35216-28 #6-32 X 3/8 LG. PAN HD. SCR. SS
8	25	MS 35337-41 #6 LOCK WASHER SS
37	24	MS 15795-305 #6 FLAT WASHER SS
1	23	MS 20365-632 #6 ESNA - NUT
7	22	MS 35216-24 #6-32 X 1 1/2 LG. PAN HD. SCR. SS
3	21	MS 35216-20 #4-40 X 1" LG. PAN HD. SCR. SS
	20	
8	19	MS 15795-308 #10 FLAT WASHER SS
	18	
4	17	MS 51958-61 #10-32 X 3/8 LG. PAN HD. SCR. SS
20	16	MS 35216-25 #6-32 X 3/8 LG. PAN HD. SCR. SS
4	15	MS 35216-29 #6-32 X 3/4 LG. PAN HD. SCR. SS
1	14	HKP FUSE HOLDER BUSS
1	13	52963 TRANSFORMER
1	12	4586-2 CLAMP SPRAGUE
1	11	36DB036015DC6B CAPACITOR, SPRAGUE 50,000 MFD 15V.
1	10	MCR 1308-1 SILICON CONTROLLED RECTIFIER-MOTOROLA
1	9	6-142 TERMINAL BLOCK, JONES
1	8	747 FAN, ROTRON SENTINAL
1	7	C 15284 FILTER ASS'Y.
2	6	C 15284 HEAT SINK
1	5	C 15283 HEAT SINK
1	4	C 15288-102 COVER
1	3	C 15285 BRACKET, FAN
1	2	C 15286 BRACKET, END
1	1	D 15234 CHASSIS
-2	-1	ITEM DWG. OR PART NO. DESCRIPTION

		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR.	E. LARSEN	3-27-67	ASSY. POWER SUPPLY (3.6 & 5.0V)
CL.	R. K. KIRBY	10/10/67	
ENG.	1/22/67	8/22/67	
PROJ. APP.	1/22/67	8/22/67	
APP.	JK	8-22-67	SIZE
USED ON	D	15514	REV
			A

NEXT ASS'Y D15517 SCALE: FULL

NOTES:
1.

REV	DESCRIPTION	DATE	APP'D
A	67-306 ITEM 27 WAS FLAT HEAD SCREW, QTY ITEM 21 WAS (4), QTY ITEM 25 WAS (4.2) SL CHUMBLEY B-25-67 V.H.R.C. 8-28-67	8-28/1967	MG
B	67-436 ITEM 15 WAS (2) REQ'D. ITEM 21 WAS (1) REQ'D. ADDED ITEMS 39, 40, 41, 42 & 43. 10LH PART 10-18-67 V.H.R.C.	10/20/67	MG
C	67-475: ADDED 2 AMP FUSE TO ASSEMBLY ITEMS #4, 14 & 38 QTY WAS (1). ADDED ITEM #30. H.R. LAUCK 11-2-67 CRAWLEY	11/3/67	MG
D	67-555: DRAWING REVISED REFER TO SERIA OF PREV. REV. IN FILE. 10LH PART 11-7-67 CRAWLEY	12/1/67	MG
E	68-259: ADDED ITEM 34 TO P.C. BOARD. CALL-OUT. QTY ITEM 34 WAS 6. ADDED ITEM 50 TO #203 SPACER (H.H. SMITH) QTY 2. ITEM 50 CALL-OUT ON CROSS SECTION VIEW WAS 34. LAUCK 5-6-68 CRAWLEY	5/7/68	MG



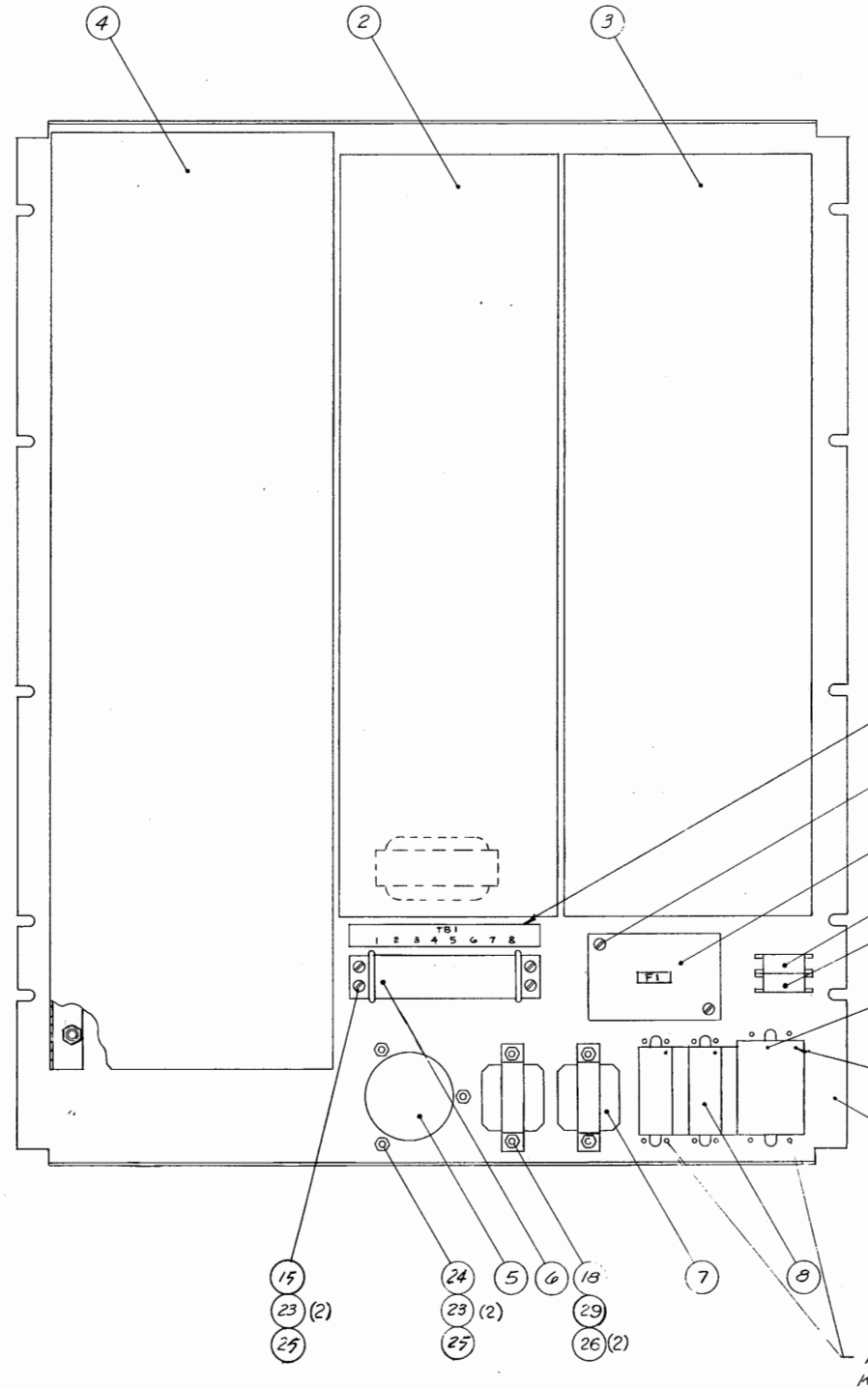
2	50	8503	SPACER	(H.H. SMITH)
6	49	SL 211-3-1	CLIP NUT	SHUR-LOK
1	48	G5-3	GROMMET STRIP-G.L.G. ELECTROVDET	
6	47	NAS 620C 4L	# 4 FLAT WASHER	SS
6	46	MS 35337-40	# 4 SPLIT LOCK WASHER	SS
2	45	MS 35216-10	# 4-40x 1/8 LG. PAN HD. SCR.	SS
4	44	MS 35216-29	# 6-32x 3/4 LG. PAN HD. SCR.	SS
REF.	43	D53040	WIRING DIAGRAM	
REF.	42	D53140	SCHEMATIC	
1	41	36D132F100AC6B	CAPACITOR, SPRAGUE, 1300MFD 100V	
1	40	7PA50	THROUGH BOLT ASSY	OHMITE
1	39	210-50-05 G3	RESISTOR, W/W	50.Ω 50W.-OHMITE
2	38	13246-99-19C	SCOTCHCAL	
4	37	MS 35216-23	#6-32x 1/4 LG. P/H PHILLIPS SC.	SS
1	36	13004-99	WARNING LABEL	
1	35	12015-99-101	SCOTCHCAL LABEL	
4	34		SPACER-3/16 I.D. x 1/8 WALL x 1/2 LG. GRABEXX	
1	33	MS 12-141	MAKER STRIP, JONES	
2	32	MS 35216-32	#6-32x 1/4 LG. PAN HD. SCR.	SS
6	31	MS 35216-27	#6-32x 1/2 LG. PAN HD. SCR.	SS
1	30	13246-99-20C	SCOTCHCAL	
1	29	8281	5#A MEMORY RECTIFIERS	
1	28	8279	5#A MEMORY	
8	27	MS 35337-41	#6 LOCK WASHER	SS
59	26	MS 15795-305	#6 FLAT WASHER	SS
7	25	MS 20365-632	#6 ESNA-NUT	
11	24	MS 35216-24	#6-32x 1/2 LG. PAN HD. SCR.	SS
4	23	MS 35216-20	#4-40x 1/8 LG. PAN HD. SCR.	SS
20	22	MS 35216-25	#6-32x 3/8 LG. PAN HD. SCR.	SS
9	21	MS 15795-308	#10 FLAT WASHER	SS
3	20	MS 35216-28	#6-32x 3/8 LG. PAN HD. SCR.	SS
8	19	MS 51958-61	#10-32x 3/8 LG. PAN HD. SCR.	SS
18				
1	17	4586-1	CLAMP SPRAGUE	
2	16	4586-97A	CLAMP SPRAGUE	
1	15	36D392G050AC6B	CAPACITOR, SPRAGUE 3900MFD 50V.	
2	14	HKP	FUSE HOLDER BUSS	
1	13	P-8130	TRANSFORMER	
1	12	747	FAN, ROTRON SENTINAL	
1	11	C15284	FILTER ASS'Y.	
1	10	12-141	TERMINAL BLOCK, JONES	
1	9	36D113F075CD6B	CAPACITOR, SPRAGUE 11000MFD 75V.	
1	8	52964	TRANSFORMER	
1	7	52965	TRANSFORMER	
3	6	C15284	HEAT SINK	
2	5	B15437	BRACKET-TERMINAL STRIP	
2	4	B15410	BRACKET-FUSE	
1	3	B15430	BRACKET-P.C. BOARD	
1	2	C15285	BRACKET-FAN	
1	1	D15236	CHASSIS	

QTY.	ITEM	DWG. OR PART NO.	DESCRIPTION				
SEL							
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA							
DR.	E. LARSEN	3-29-67	ASSEMBLY MEMORY POWER SUPPLY				
CK.	P. G. Smith	11/22/67					
ENG.	W. J. Smith	11/22/67					
PROJ. APP.	W. J. Smith	11/22/67					
APP.	MG	8-22-67					
USED ON			SIZE	D	15515	REV	E

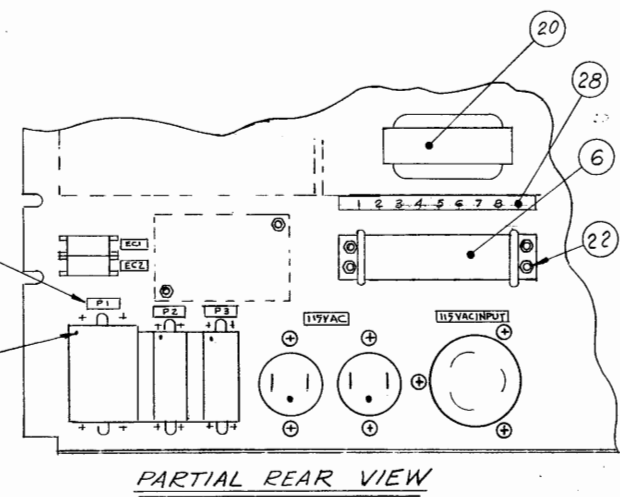
NEXT ASS'Y D15517 SCALE: FULL

NOTES:
1. TB2 #T1 USED WITH 60 HZ
CLOCK OPTION.

REV	DESCRIPTION	DATE	APP'D
D	15517		C
A	67-324: REVISED MTL LIST TO CONFORM TO INFO SUPPLIED BY MFG. J. H. LAUCK-9-7-67 CRAWLEY	9-8-67	
B	68-33 - DELETED ITEMS 16, 20, 21 & 22. LAUCK 1-25-68 CRAWLEY	1/29/68	
C	68-97 - ADDED ITEMS 6, 20, 22 & 28 TO REAR VIEW. ADDED DASH NO CHART. #2 QTY COLUMN TO LOM. ADDED NOTE 1. LAUCK 2-22-68 CRAWLEY	2/23/68	



DASH NO CHART	
DASH NO.	DESCRIPTION
-1	STANDARD
-2	WITH 60 HZ CLOCK



4	4	29		#8 FLAT WASHER 4/p
A/R	AR	28	12013-99-102	SCOTCHCAL LABEL
A/R	AR	27	12013-99-101	SCOTCHCAL LABEL
8	8	26		NYLON SHOULDER WASHER 5/16 I.D. X 3/8 O.D.
13	13	25		#6-32 ESNA
3	3	24		#6-32 X 3/8 LG PAN HD SCR. SS
26	26	23		#6 FLAT WASHER 55 5/p
2	2	22		#6-32 X 1 PAN HD PHIL HD SCR. 55
		21		
1	1	20	P-8130	TRANSFORMER 12VAC.
		19		
4	4	18		#8-32 X 3/8 LG. PAN HD. SCR. 55
2	2	17		#6-32 X 1 1/2 LG. PAN HD. SCR. 55
		16		
4	4	15		#6-32 X 5/8 LG PAN HD SCR. 55
1	1	12	5355	LINE FILTER SPACE MAGNET
1	1	11	#60-6701-3218-20182	RECEPTICAL, RED (ELCO)
1	1	10	#60-6701-3218	RECEPTICAL, NATURAL (ELCO)
1	1	9	201037-1	104 PIN AMP CONNECTOR
2	2	8	200277-2	50 PIN AMP CONNECTOR
2	2	7	5294	CONVENIENCE OUTLET (HUBBLE)
2	1	6	8-141	JONES STRIP
1	1	5	7327	TWIST LOCK CONNECTOR (HUBBLE)
1	1	4	D15515	ASSY. - MEMORY P/S
1	1	3	D15514	ASSY. -(3.6 & 5.0V.) P/S
1	1	2	D15513	ASSY. -(3.6V.) P/S
1	1	1	D15233	PANEL

QTY	QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
-2	-1			

SEL
SYSTEMS ENGINEERING
LABORATORIES INCORPORATED
FORT LAUDERDALE, FLORIDA

DR. E. LARSEN	4-4-67		
CE. P. Helton	13/10/67		
ENG. J. B. ...	8/22/67		
PROJ. MGR. ...	8/22/67		
APP. ...	8/22/67		
USED ON 8/26			

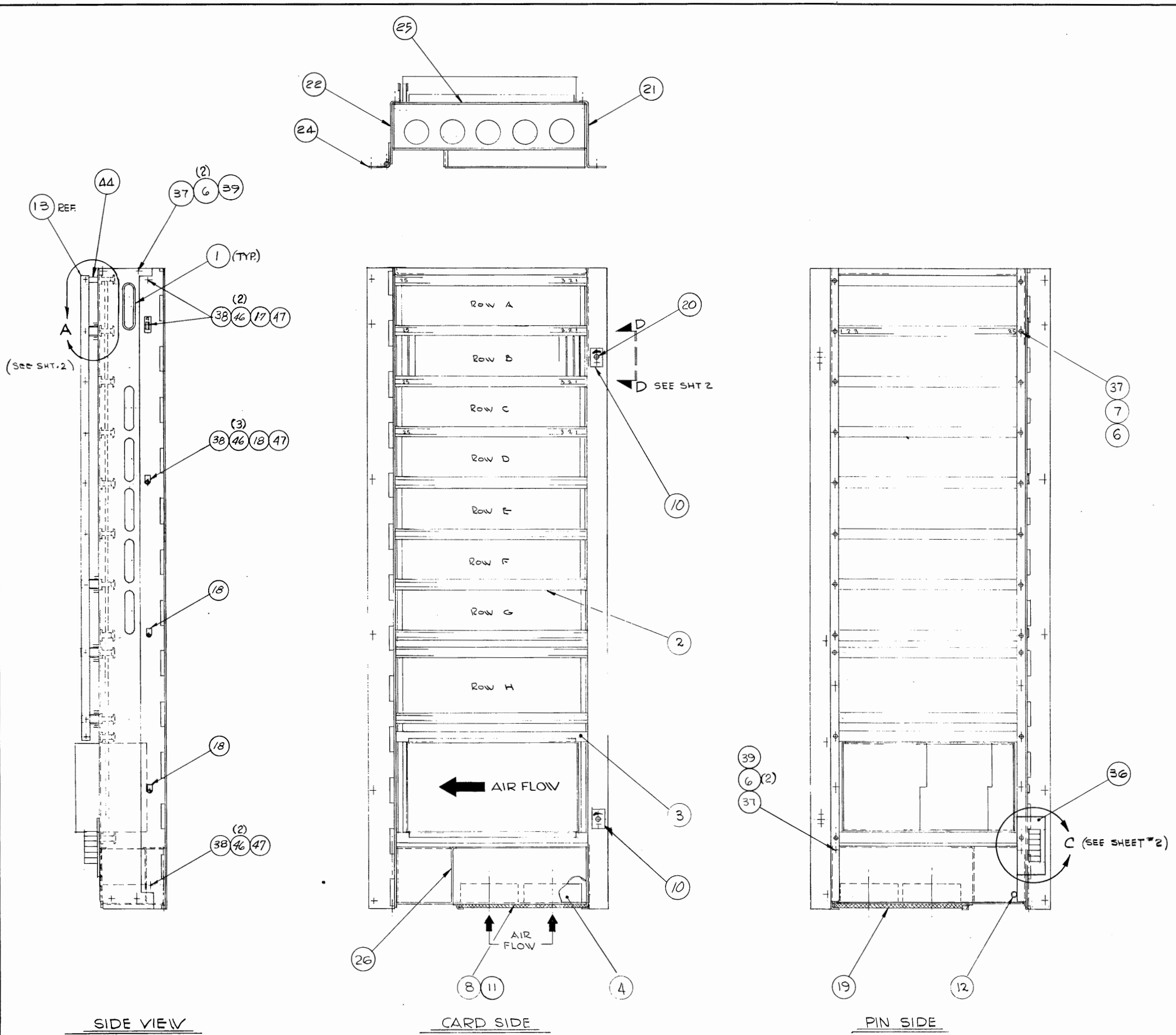
**ASSEMBLY,
POWER SUPPLY PANEL,
AC-D.C. DISTRIBUTION**

REV	DESCRIPTION	DATE	APP'D
D	15517		C

NEXT ASS'Y D15600 SCALE: 1/2" = 1"

NOTES:
1.

REV	DESCRIPTION	DATE	APP'D
D	15595		
A	ADDED ITEM 10 N.H.K. 8-16-67 J.R.M. 6-5-17-67		
B	67-324; REVISED MTL LIST IN ACCORDANCE WITH INFO SUPPLIED BY MFG H.R.L. 9-7-67/H.R.C. 9-7-67	9/18/67	R
C	67-429 REVISED DETAIL "C" IN ACCORDANCE WITH INFO. SUPPLIED BY ENG. ECO. H.R.C. 10-16-67. M.E.E. 10-18-67	10/19/67	R
D	67-443 REVISED DETAIL "A", ADDED ITEM'S. CRAWLEY 10-25-67 M.E.E. 10/25	10/26/67	R



6	47		*10 ESNA NUT
36	46		*10 FLAT WASHER
1	44	B15496	BUS EXTENSION RETAINER
9	43		1/2 DIA. X 7/8 LG "R.V.C."
4	42		*4 ESNA NUT
8	41		*4 FLAT WASHER L/P
4	40		*4-40 X 3/8 SS SCREW P/H PHILLIPS
12	39		*8-ESNA NUT
3	38		*10-32 X 1/2 SS SCREW P/H PHILLIPS
46	37		*8-32 X 7/8 SS SCREW P/H PHILLIPS
1	36	B15652	6501 "ELCO" CONN. RETAINER
6	35	*60-6501-3418-00174 *60-6501-3318-00172	LOCKING INSERT-YELLOW (ELCO)
1	34	*60-6501-3318-00174	PLUG - BLUE (ELCO)
1	33	*60-6501-3318-00130	PLUG - BLACK (ELCO)
1	32	*60-6501-3318-00169	PLUG - RED (ELCO)
3	31	*60-6501-3318-00172	PLUG - WHITE (ELCO)
1	30	*60-6501-3318-00172	RECEPTICAL - BLUE (ELCO)
1	29	*60-6501-3318-00130	RECEPTICAL - BLACK (ELCO)
1	28	*60-6501-3318-00169	RECEPTICAL - RED (ELCO)
3	27	*60-6501-3318-00172	RECEPTICAL - WHITE (ELCO)
1	26	D15255	CHASSIS-FAN
1	25	D15206	TOP-CHANNEL CHASSIS
1	24	D15181	HINGE
1	23	*12019-99	SCOTCHCAL ARTWORK
1	22	D15254	SIDE CHASSIS (HINGE SIDE)
1	21	D14857	SIDE CHASSIS (LATCH SIDE)
2	20	*43-1-3-0	LATCH - SOUTHCO (R.H.)
1	19	C15260	FILTER
3	18		ANCHOR - SMALL STAY STRAP
1	17		ANCHOR - LARGE STAY STRAP
9	16		*6-32 X 3/8 PAN HD MS SS
16	15		*6 NYLON MACH SCR. INSULATOR
10	14		MOLDED NYLON WASHER .191 I.D. X .500 O.D. X .125 THICK
2	13	D15417-101	BUS BAR EXTENSION
1	12	SB 500	HEYCO-SNAP BUSHING
17	11		*6 ESNA-NUT
2	10	C15936	LABEL-LATCH RELEASE
18	9		*6 FLAT WASHER
8	8		*6-32 X 1 3/4 MACHINE SCREW F/H
22	7		*8 LOCK WASHER
42	6		*8 FLAT WASHER
2	5		MOLDED NYLON WASHER .07 I.D. X .437 O.D. X .062 THK.
2	4	*747	ROTRON - SENTINEL FAN
1	3	D15598	MEMORY MODULE ASSY.
1	2	D15597-101	PRIMARY MODULE ASSY.
A/R	1	*GS-3	GROMMET STRIP ELECTROVERT

QTY.	ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA			
DR.	IGLEHART	3-15-67	PRIMARY PLANE ASSEMBLY
CL.	P. Carter	12/24/67	
ENG.	W. C. Carter	8/13/67	
PROJ. APP.	W. C. Carter	8-22-67	
USED ON	9126		

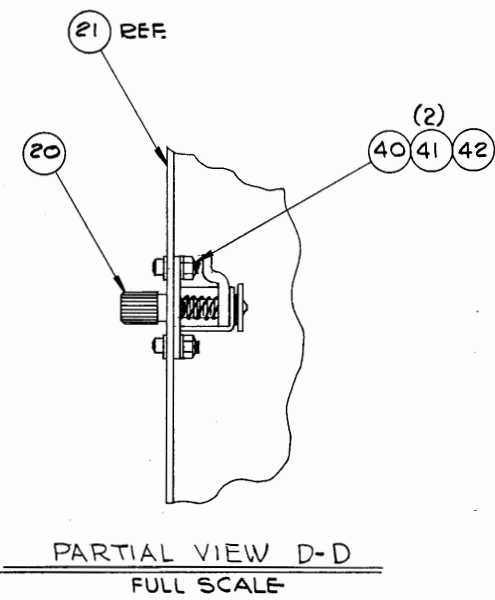
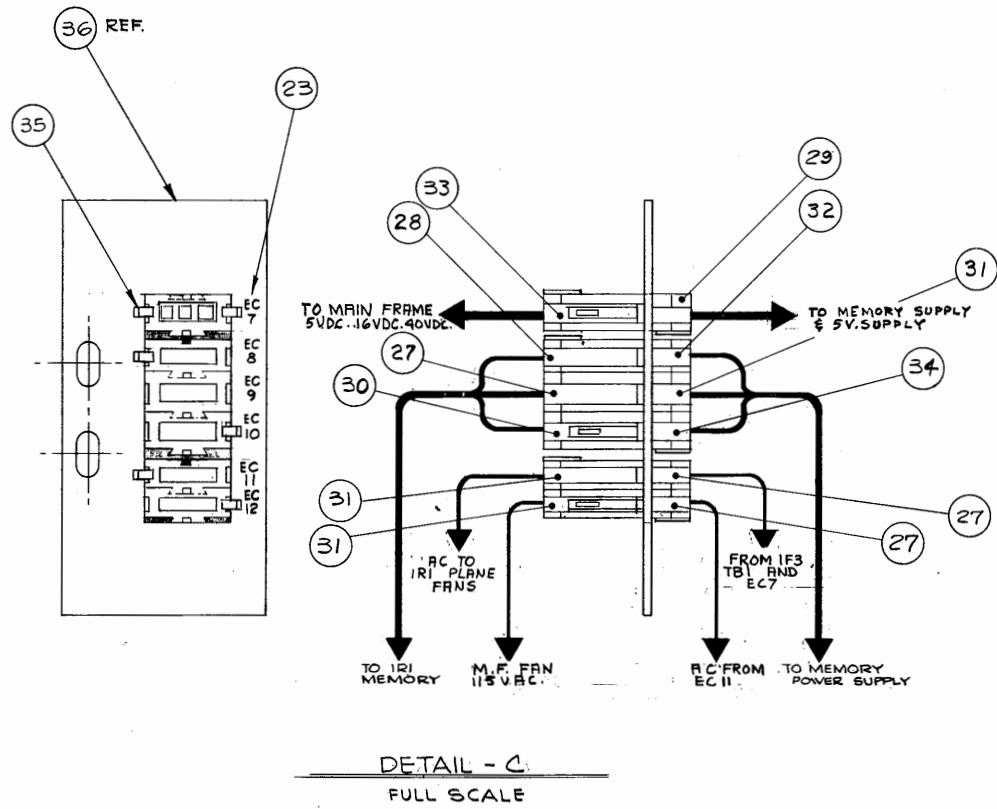
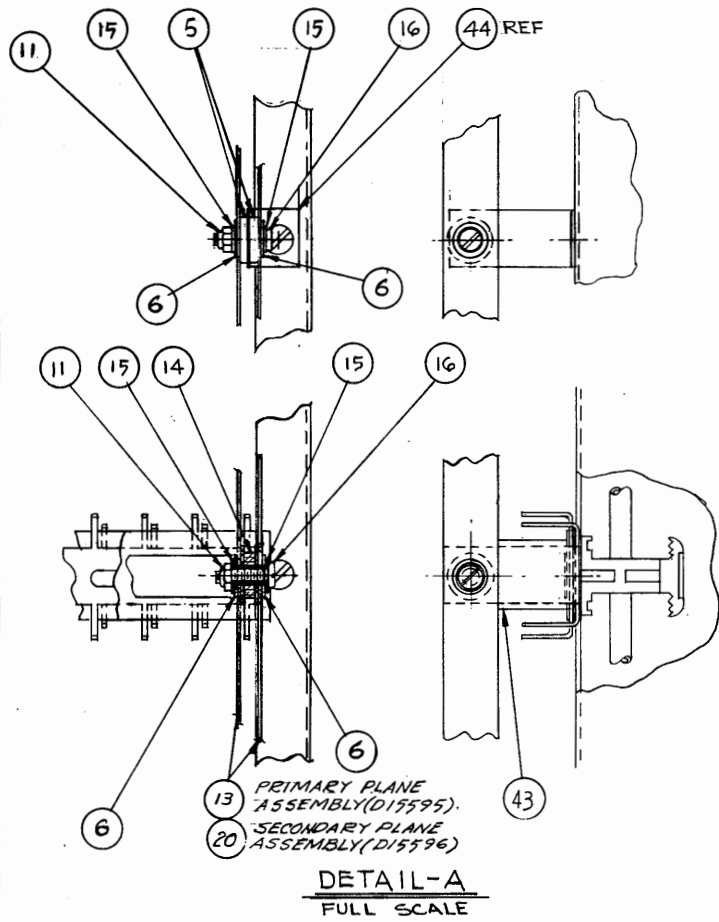
NEXT ASS'Y D15600

SCALE: 1/4" = 1"

REV	D	15595	D
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NOTES:
1.

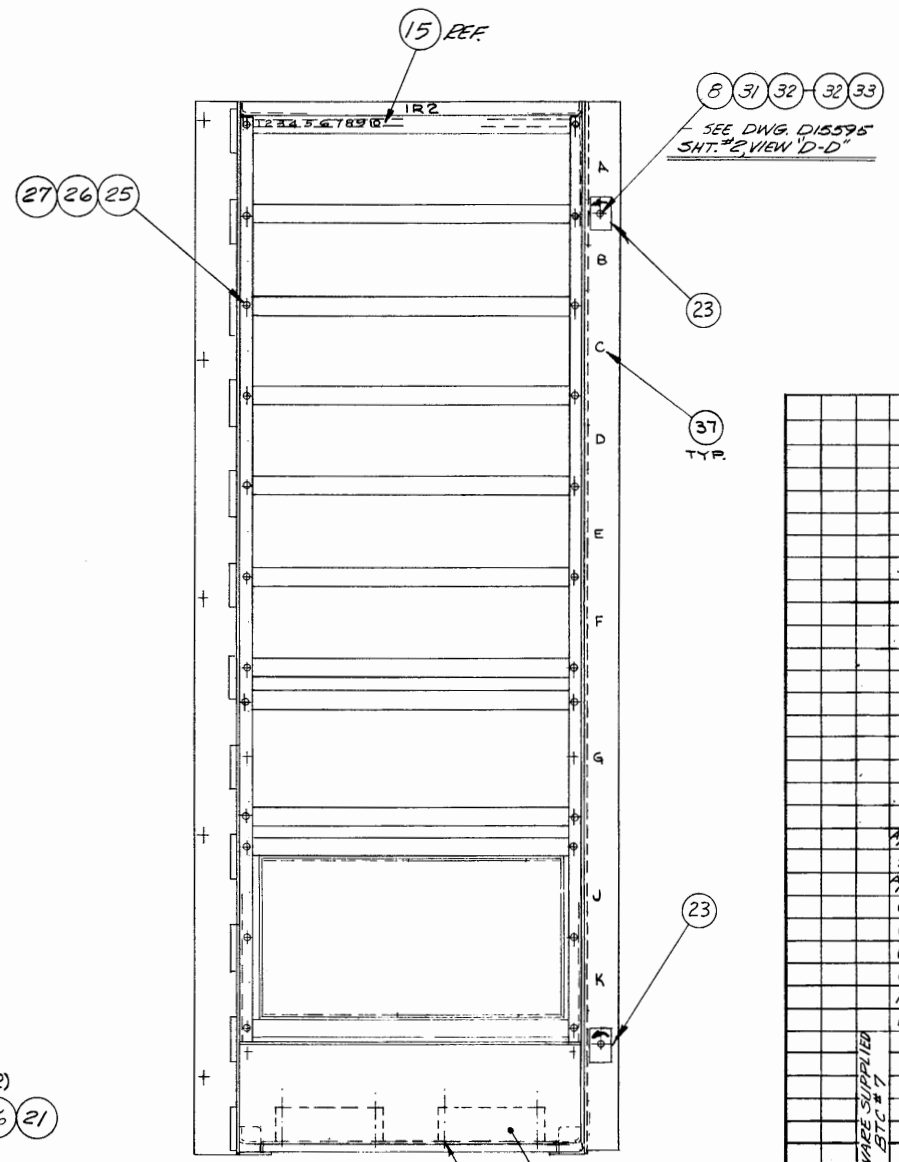
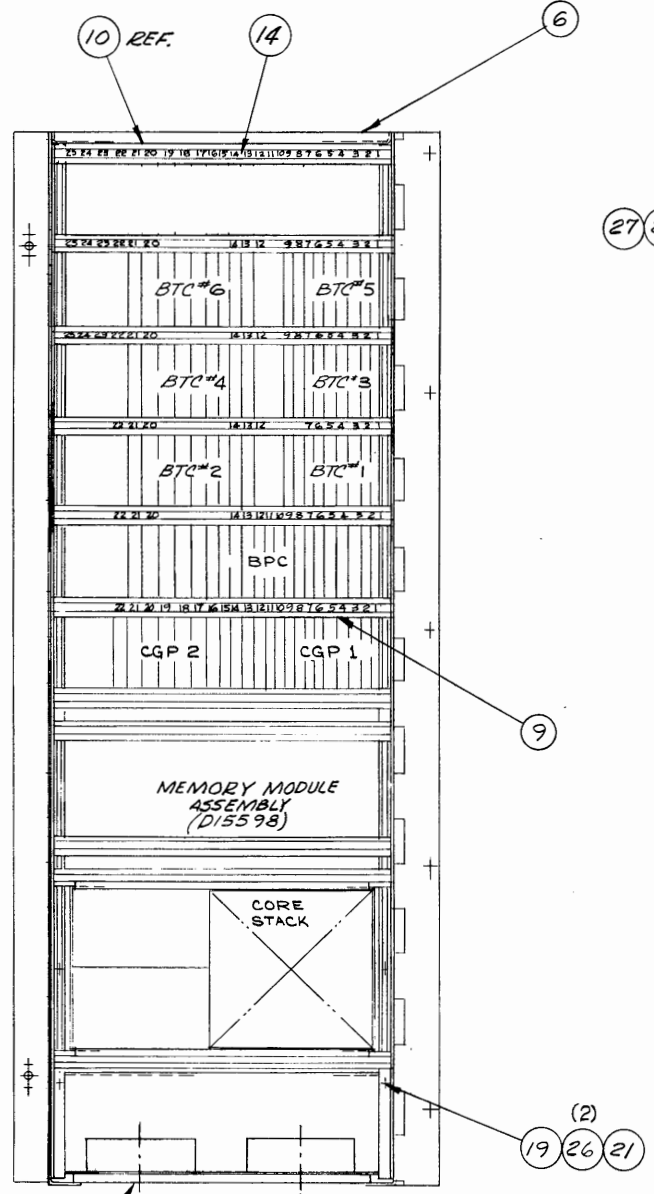
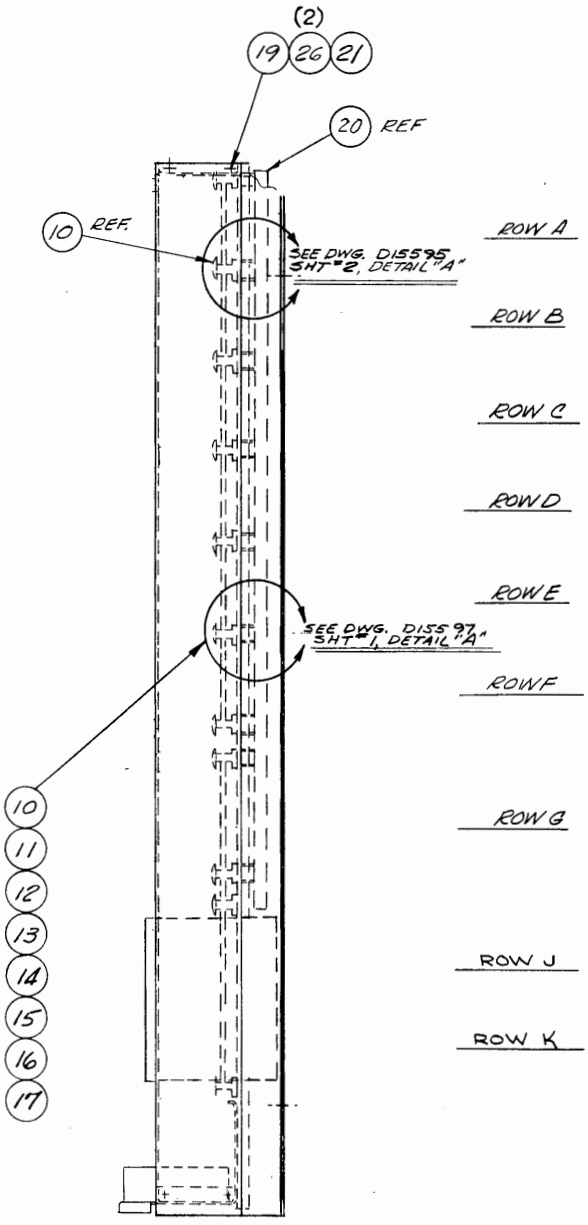
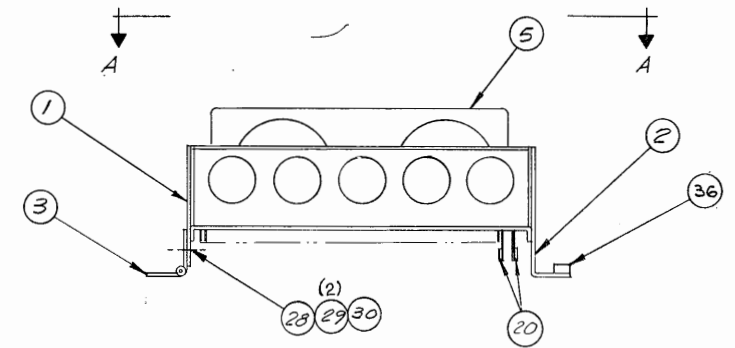
REV	D	15595	DATE	APP'D
REV		DESCRIPTION	DATE	APP'D
		SEE SHEET #1 FOR REV.		



ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	IGLEHART 4-13-67	PRIMARY PLANE ASSEMBLY
CK	A. Keston 12/20/67	
ENG.	W. C. ... 8/23/67	
PROJ. MGR.	W. C. ... 8/23/67	
APP.	W. C. ... 8-23-67	
USED ON	9120	
SIZE	D	15595
REV	D	

NOTES:
1.

REV	DESCRIPTION	DATE	APP'D
D	15596		
A	ADDED ITEM 23 N.M.K. 8-16-67 ✓ R.M.G.-R-17-67		
B	67-324: REVISED MTL LIST IN ACCORDANCE WITH INFO SUPPLIED BY MFG. HRL. 9-5-67 ✓ HRC 9-7-67	9/8/67	R
C	67-315 ITEM 11, DESCR. WAS STRIP (CONNECTOR LOCATING), ADDED ITEMS 34 & 35; E: OPTIONS FOR 810A TO TITLE BLK. LAUCK 11-17-67 CRAWLEY	11/19/67	R
D	68-314: REVISED MODULE LOCATIONS, ADDED ITEMS 36-37. R.B. C-7-68 CRAWLEY	6/2/68	R



QTY	ITEM	DWG. OR PART NO.	DESCRIPTION			
A/R 37	C16046		LABEL (BRADY MARKER)			
A/R 36	ST 401		SPRING TAPE RHPAC			
A/R 35	7001-29		ELCO CONNECTOR			
A/R 34	D12716-101		STRIP-CONNECTOR LOC.			
4	33		*4 ESNA-NUT			
8	32		*4 FLATWASHER SS L/P			
4	31		*4-40 X 7/8 SCREW SS P/H PHILLIPS			
5	30		*10 ESNA-NUT, SS			
10	29		*10 FLATWASHER			
5	28		*10-32 X 1/8 SCREW SS P/H PHILLIPS			
8	14	27	*8 LOCKWASHER, SPLIT			
8	34	26	*8 FLATWASHER L/P			
8	14	25	*8-32 X 1/16 SCREW SS P/H PHILLIPS			
8	8	24	*6 ESNA-NUT			
2	23	C15936	LABEL-LATCH RELEASE			
8	22		*6-32 X 1 1/4 MACHINE SCREW P/H			
10	21		*8 ESNA NUT			
2	20	D15417-102	BUSS BAR EXTENSION			
10	19		*8-32 X 1/8 SCREW SS P/H PHILLIPS			
A/R 18	B15496		BUSS EXTENSION RETAINER			
5	4	3	2	17		RV.C. 1/2 DIA. X 7/8 LG.
A/R 16				16		SCOTCH BRAND ELEC. TAPE (1/2" WID)
6	5	4	3	15	D13246-99-1	TEE CAP (SCOTCHCAL) NO. STRIP
6	5	4	3	14	D13246-99-4	TEE CAP (SCOTCHCAL) NO. STRIP
6	5	4	3	13	D15416-101	BUSS BAR
6	5	4	3	12	D15416-102	BUSS BAR
10	8	6	4	11	D12105-101	TEE BAR
6	5	4	3	10	D12108-101	TEE CAP (MODULE ASS'Y)
1	9	D15597-102	SECONDARY MODULE ASS'Y			
2	8	43-1-3-0	LATCH - SOUTH CO (EH)			
2	7	747	ROTRON - SENTINEL FAN			
1	6	D15206	TOP-CHANNEL CHASSIS			
1	5	D15261	FILTER			
1	4	D15256	CHASSIS-FAN			
1	3	D15182	HINGE			
1	2	D15166	SIDE CHASSIS (LATCH SIDE)			
1	1	D15165	SIDE CHASSIS (HINGE SIDE)			

SIDE VIEW

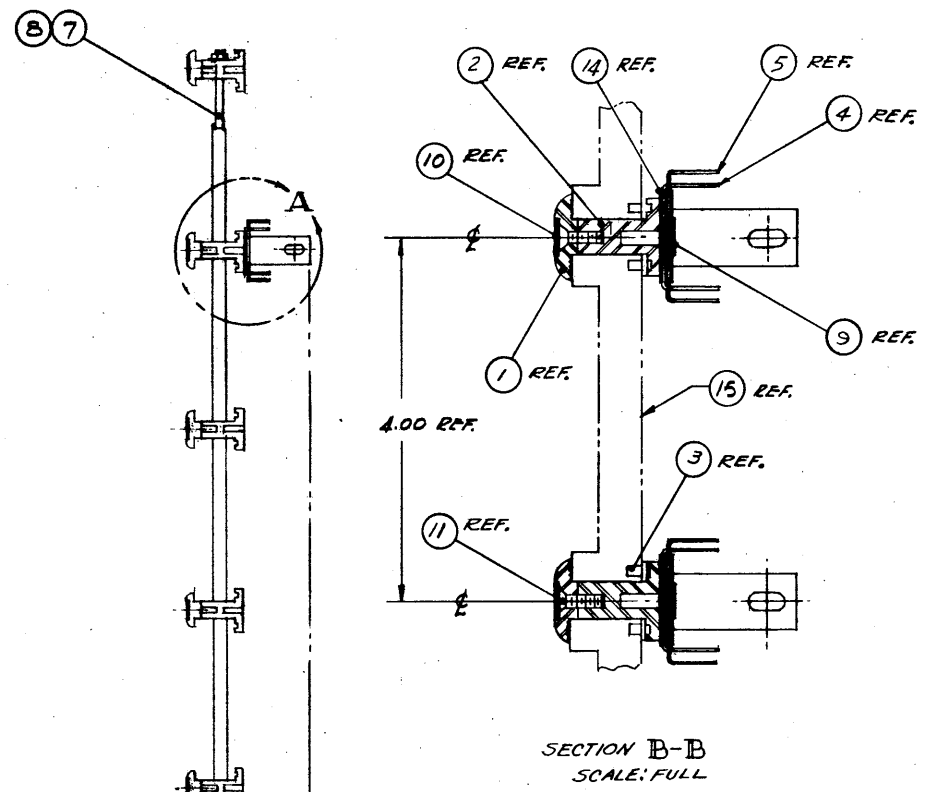
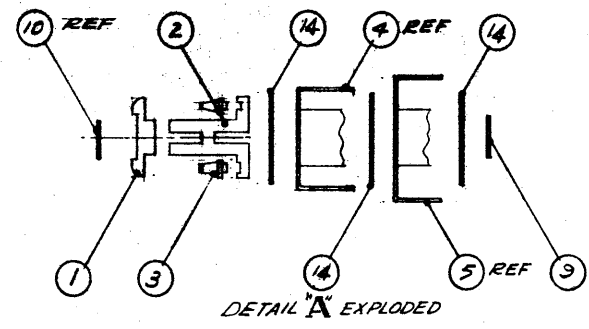
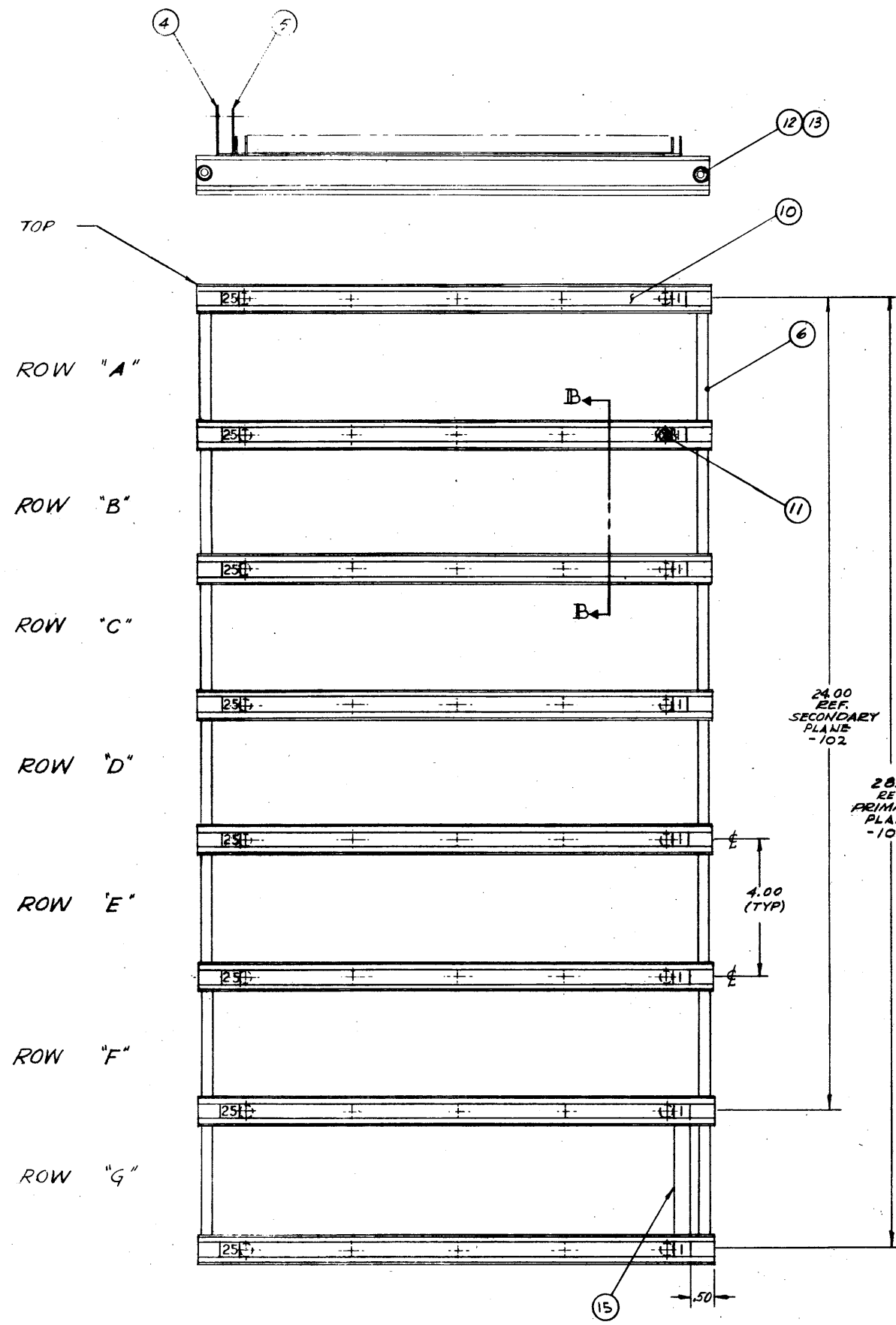
VIEW A-A
CARD VIEW

PIN SIDE

NEXT ASS'Y D15600 SCALE: 1/4"=1"

<p>DR. IGLHEART 3-16-67</p> <p>CL. P. HARTON 8-11-67</p> <p>ENG. W. L. LORAN 6/12/67</p> <p>PROJ. APP. 1/22/67</p> <p>APP. 1/22/67</p>		<p>SYSTEMS ENGINEERING LABORATORIES, INCORPORATED FORT LAUDERDALE, FLORIDA</p> <p>SECONDARY PLANE ASSEMBLY OPTIONS FOR 810A</p>
<p>ITEM DWG. OR PART NO.</p> <p>DESCRIPTION</p>	<p>SIZE</p> <p>D 15596</p>	<p>REV</p> <p>D</p>

NOTES:
 1. CARD LOCATION DWG. # D
 2.
 3. DO NOT SCALE THIS DWG. USE DIMENSIONS ONLY.



QTY	QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
	15	7001-29		CONNECTOR - "ELCO"
A/R	A/R	14		SCOTCHBRAND ELEC. TAPE No. 21 (1/2")
4	4	13		#10 FLATWASHER L.P. SS
4	4	12		#10 ESNA - NUT
	40	11		#8-32 X 1/2 FIN PHILLIPS, SS
A/R	8	10	D13246-99-1A	TEE CAP (SCOTCHCAL) NO. STRIP
A/R	8	9	D13246-99-1	TEE CAP (SCOTCHCAL) NO. STRIP
2		8	D12104-108	THREADED ROD
	2	7	D12104-109	THREADED ROD
12	14	6	D12103	SPACER
A/R	7	5	D15416-101	BUSS BAR (WIDE)
A/R	7	4	D15416-102	BUSS BAR (NARROW)
A/R	14	3	C12716	STRIP (CONNECTOR LOCATING)
7	8	2	D12105-101	TEE BAR
A/R	8	1	D12108-101	TEE CAP

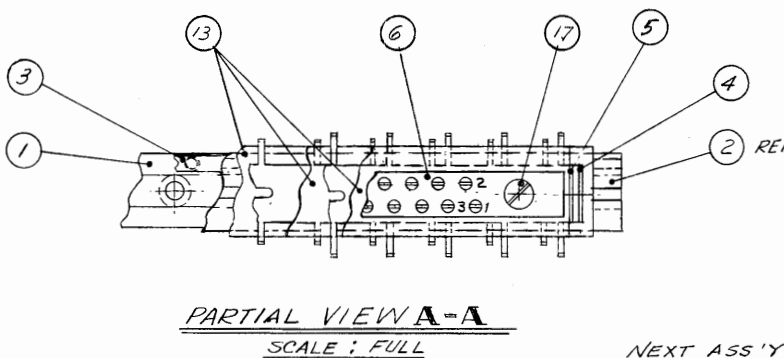
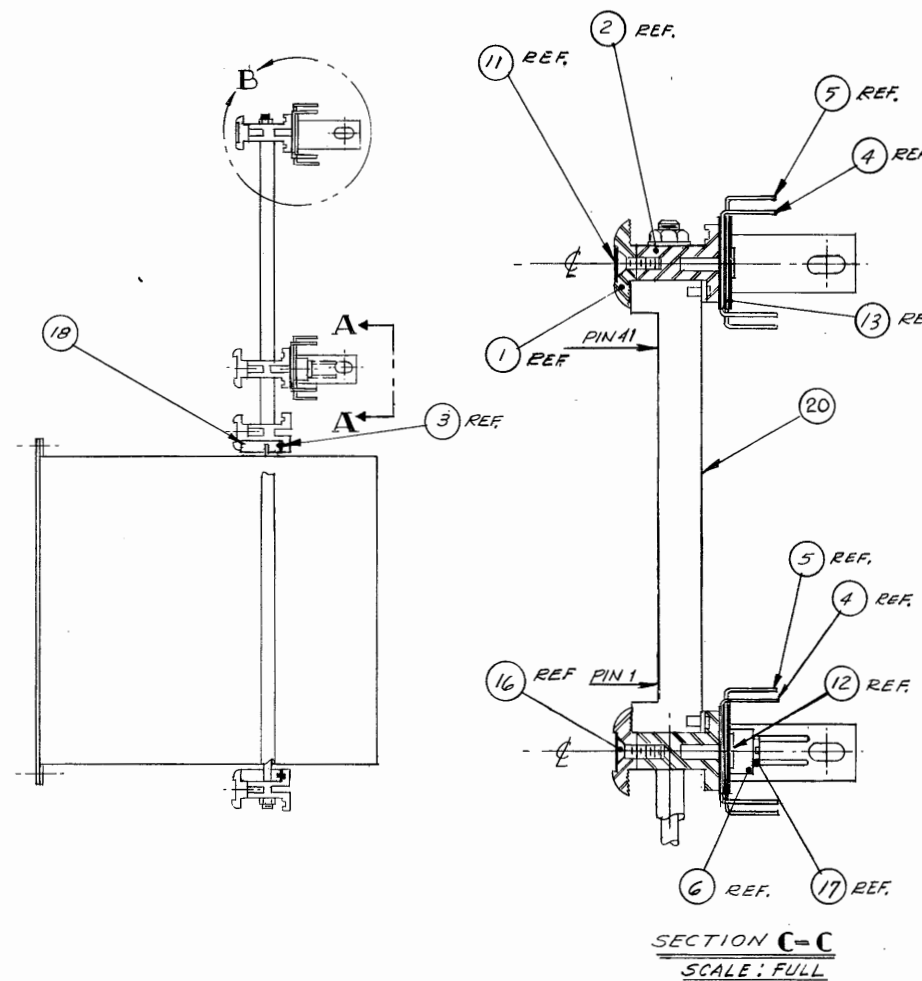
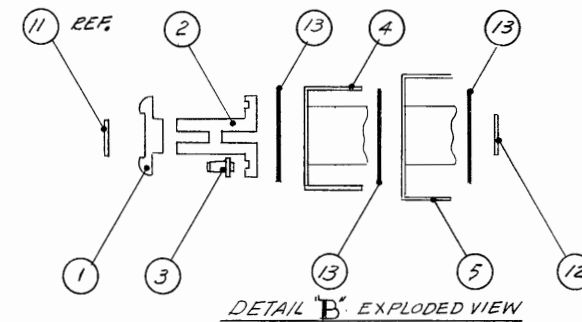
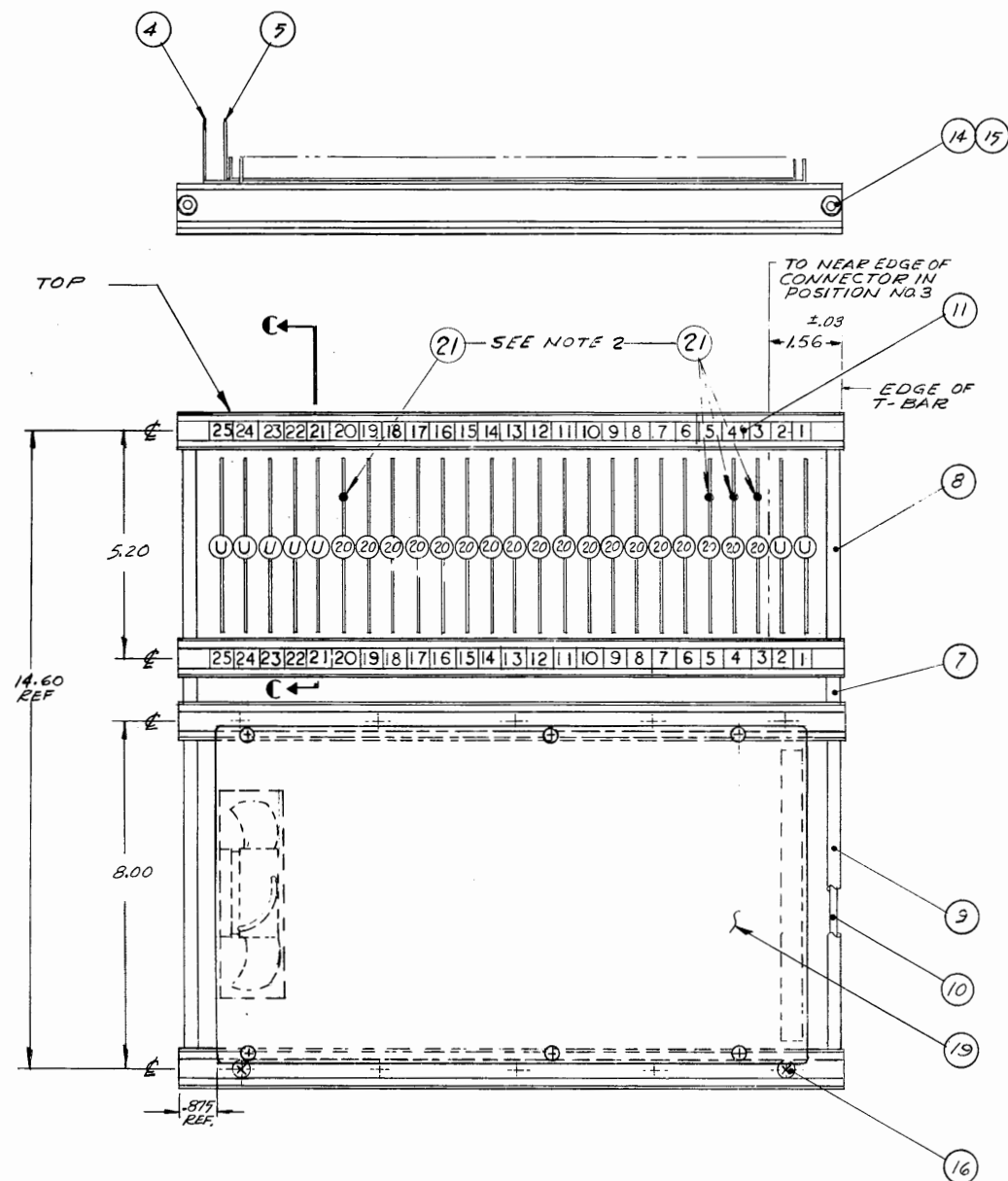
NEXT ASSEMBLY:
 PRIMARY PLANE D15595
 SECONDARY PLANE D15596

SCALE: 1/2"=1"

SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DATE: 3-14-67 BY: [Signature] CHK: [Signature] APP: [Signature] REV: [Signature]	DESCRIPTION: PRIMARY & SECONDARY MODULE ASSEMBLY
DATE: 8-22-67	DWG. NO: 15597
REV: 9126	

NOTES:
 1. DO NOT SCALE THIS DWG. USE DIMENSIONS ONLY.
 2. CEMENT (USING ITEM 22) PIN (ITEM 21) IN HOLE NO. 31 OF CONNECTORS (ITEM NO. 20) IN POSITION 3, 4, 5 & 20

REV	DESCRIPTION	DATE	APP'D
D	15598		B
A	67-348: MOVED ITEM #27 (41 PIN CON) FROM SLOTS 20, 21, 22 TO SLOTS 3, 4, 5. DATA SAVER FROM SLOT 23 TO SLOT 20. ADDED ITEM #26 TO L.O.P. B. LAUCK 9-12-67 CRAWLEY	9/13/67	
B	68-276: DELETED ITEM 20 THRU 28, 19126 FROM USED ON BOX. ITEM IS WAS MEMOY ASSY. (8K X 18), TITLE WAS MEMOY MODULE ASSY (8K X 18). ADDED ITEMS 20 & 21, 22, 23 & 24. ADDED NOTE NO. 2. LAUCK 5/22/68 CRAWLEY	5/22/68	



QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
	28		
	27		
	26		
	25		
REF	24	53111	LOGIC DIAGRAM
REF	23	53103	LOGIC DIAGRAM
A/R	22	2101	CEMENT TRA-BOND TRA-CON
4	21	60-7001-4012	PIN, POLARIZING ELCO
1	19	D15459	MEMOY CHASSIS ASSY
2	18	C12888-106	BETAINDER (12" LG)
2	17		#8-32 X 3/4 SCREW B/H SLOTTED (MOLDED NYLON)
20	16		#8-32 X 1/2 SCREW F/H PHILLIPS SS
4	15		#10 FLATWASHER LP SS
4	14		#10 ESNA-NUT
A/R	13		SCOTCH BRAND ELEC TAPE NO. 21 (1" WIDE)
2	12	D13246-99-1	TEE CAP (SCOTCHCAL) NO. 5 STRIP
2	11	D13246-99-1A	TEE CAP (SCOTCHCAL) NO. 5 STRIP
2	10	D12104-107	THREADED ROD
2	9	B15446-103	SPACER
2	8	B15446-102	SPACER
2	7	B15446-101	SPACER
1	6	B14872	GROUND BLOCK
2	5	D15416-101	BUSS BAR
2	4	D15416-102	BUSS BAR
4	3	C12716	STRIP (CONN. LOCATING)
4	2	D12105-101	TEE BAR (MODULE ASSY)
4	1	D12108-101	TEE CAP (MODULE ASSY)

LEGEND

- (C/10) CONNECTOR - 104 PIN "AMP" CONNECTOR OCCUPYING CARD POSITION
- (C/50) CONNECTOR - 50 PIN "AMP" CONNECTOR OCCUPYING CARD POSITION
- (N/C) NO CARD - "ELCO" CONNECTOR PRESENT AS SPARE FOR FUTURE CARD EXPANSION
- (U) UN-OCCUPIED, NO CARD OR "ELCO" CONNECTOR PRESENT
- (S) SETBACK - CARD & CONNECTOR REMOVED FOR CLEARANCE OF FRONT PANEL COMPONENTS

DR	DATE	REV	DESCRIPTION
DR	3-16-67		
CK	13/6/67		
ENG	8/21/67		
PROJ. APP.	8/21/67		
APP.	8/22/67		
USED ON			

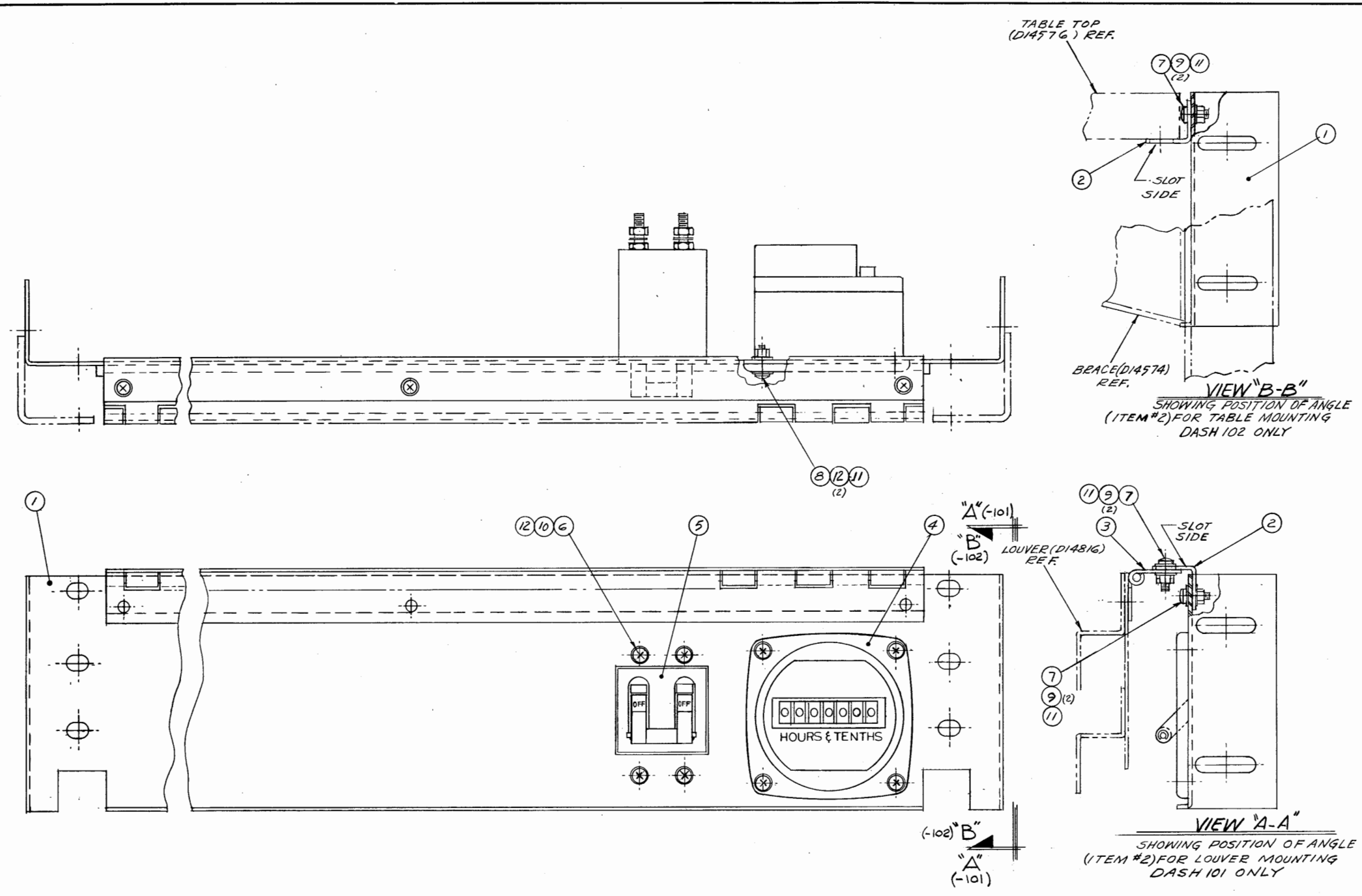
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA

MEMORY MODULE ASSEMBLY
(4K x 18a) & (8K x 18a)

SIZE: D 15598 SHEET: B

NOTES:
1.

REV	DESCRIPTION	DATE	APP'D
D	15599		
A	67-324: ADDED DT. NOS TO DRAWING ITEM 12, ITEM 9 WAS (1A) FOR -101 (U) FOR -102 EWR 9/5/67 HRC 9-7-67	9/18/67	
B	68-29: PART NO. ITEM 12 WAS M15795-805, 11 WAS 22NM107-62, 10 WAS AN995-C6, 9 WAS AN960-C6 LAUCK 1-24-68	1/29/68	
C	68-91 RELEASED TO PRODUCTION R3 2-20-68 CRAWLEY	2/20/68	



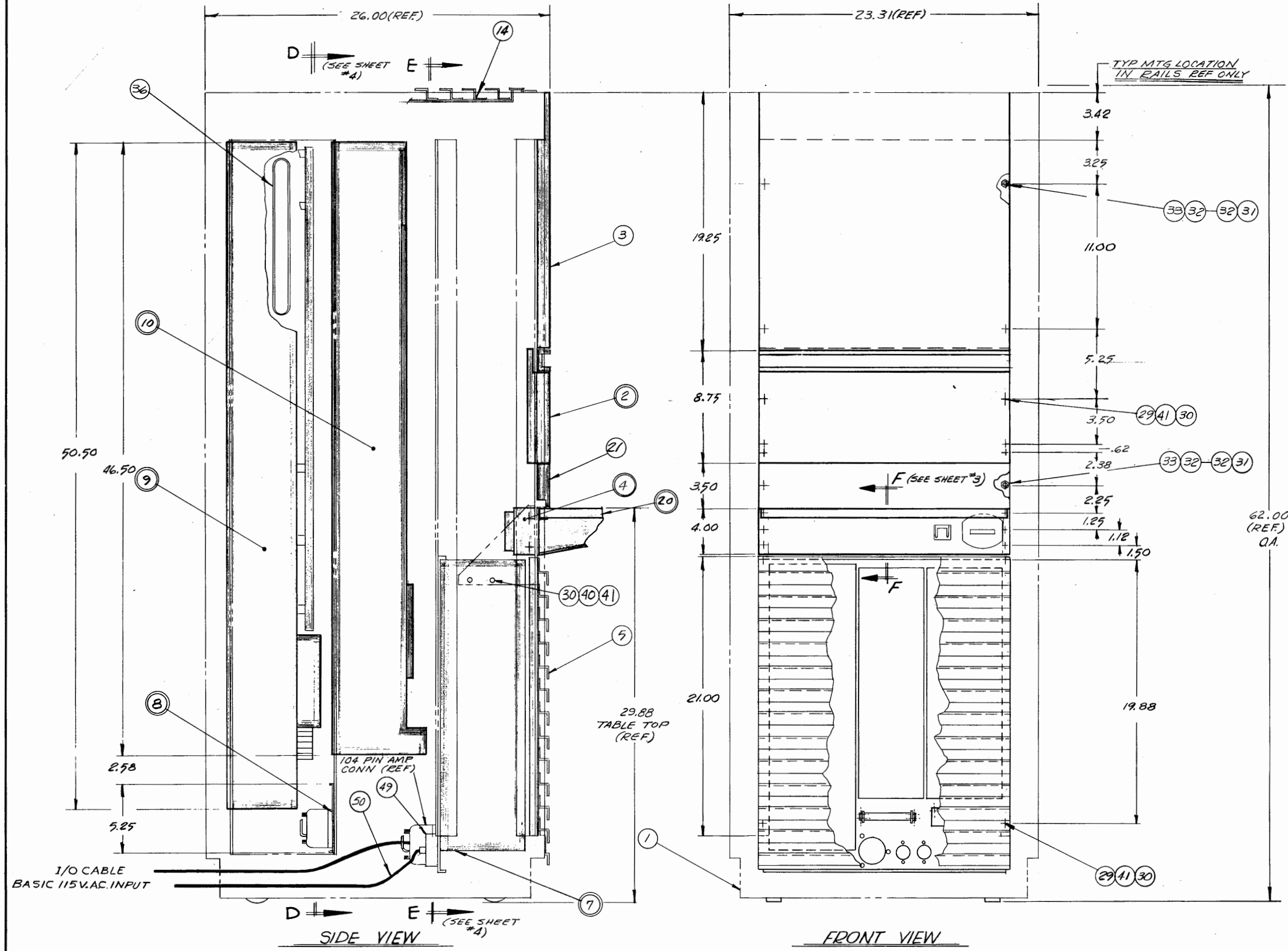
QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
12	12	NRS 620-6L	#6 S/P FLAT WASHER
7	10	MS 21044-N06	#6-32 NUT - SELF LOCK
4	A	MS 35338-136	#6 SPLIT LOCK WASHER
6	12	MS 15795-805	#6 1/4" FLAT WASHER
4	A	MS 35216-27	#6-32X1/2 P/H SCREW PHILLIPS
3	6	MS 35216-26	#6-32X1/4 P/H SCREW PHILLIPS
4	A	MS 35216-24	#6-32X3/16 P/H SCREW PHILLIPS
1	1	AM33MG6	CIRCUIT BREAKER, HEINEMANN
1	1	K42203-P4	METER, HAYDON
1	1	C15193	HINGE, LOUVER
1	1	C15192	ANGLE, HINGED LOUVER
1	1	D15191	PANEL, METER & CIR. BREAKER

SIT DOWN MODEL -102		STANDUP MODEL -101	
DR.	E. W. ...	3-23-67	
CL.	P. ...	12/24/67	
ENG.	W. ...	9/23/67	
PROJ. APP.	W. ...	9/23/67	
APP.	M. ...	8-22-67	
USED ON	V 9126	SIZE	D 15599

NEXT ASS'Y D15600 SCALE: FULL

NOTES:
1. DO NOT SCALE THIS DWG.
USE DIMENSIONS ONLY

REV	DESCRIPTION	DATE	APP'D
D	15600		F
FOR REV SEE 'SHT #1			



4	55	AN935-C10	#10 LOCK WASHER
4	54	510K-120	#10-32 RIVNUT
	53		
	52		
3	51	M535216-26	#6-32 X 7/16 SCREW, P/H PHILLIPS
	50	01912	1TT COMM POWER CORD
	49	7313	HUBBLE TWIST LOCK CONN
	48		
1	47	D15763-102	SUPPORT-TABLE REINFORCEMENT
1	46	D15763-101	SUPPORT-TABLE REINFORCEMENT
	45		
	44		
1	43	58-750-10	BUSHING HEYCO
8	42	22NM2234-02	#10 ESNA NUT
62	41	AN960-C10L	#10 FLAT WASHER L/P
12	40	M535216-57	#10-32 X 3/4 SCREW P/H PHILLIPS
2	39	AN960-C8	#8 FLAT WASHER
2	38	AN935-C8	#8 LOCK WASHER
2	37	M535216-44	#8-32 X 3/4 SCREW P/H PHILLIPS
3	36	203580	BLK BASKET WEAVE PLASTIC TRIM - 26' L
2	35	AN505-C1012	#10-32 X 3/4 SCREW FL HD. FILL
	34		
6	33	P-116-499-1224	BALL STUD (TINNERMAN)
12	32	AN960-C6	#6 FLAT WASHER L/P
6	31	#22NM107-62	#6 ESNA NUT
32	30	SL211-3-1	CLIP NUT #10 SHUR-LOK
28	29	M535216-56	#10-32 X 5/8 SCREW P/H PHILLIPS
39	28		1/4 FLAT WASHER
39	27		1/4 LOCK WASHER "STAR"
39	26		1/4-20 X 5/8 HEX HD. M.S.
39	25		1/4-20 SPEED NUT - "J"
1	24		1/4-20 HEX NUT CES CAD PLATE
	23		
	22		
1	21	D15026-101	PANEL - BLANK 3/8"
1	20	D15602	TABLE TOP ASSEMBLY
	19		
	18		
	17		
	16		
	15		
1	14	D14818	TOP - LOUVERED
1	13	D15179	CHANNEL-RAIL MTG - HINGE SIDE
1	12	D15180	CHANNEL-RAIL MTG - LATCH SIDE
1	11		
1	10	D15596	SECONDARY PLANE ASSY.
1	9	D15595	PRIMARY PLANE ASSY.
1	8	D15601	1/0 CONN. PANEL
1	7	D15517	ASSEMBLY, P/S PANEL
	6		
1	5	D14815-101	PANEL - LOUVERED 21"
1	4	D15599-102	TIME METER & CIRCUIT BREAKER ASSY
1	3	D14655-101	PANEL - BLANK 19 1/4"
1	2	D15049	CONTROL PANEL ASSEMBLY
1	1	D15122	CABINET-VENDOR CONT. DWG.

SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED
FORT LAUDERDALE, FLORIDA

DR. CHUMLEY 5-23-67
CL. R. Hutton 8 JUN 67
ENG. J. C. ... 8/22/67
PROJ. APP. ... 8/22/67
APP. ... 8/22/67

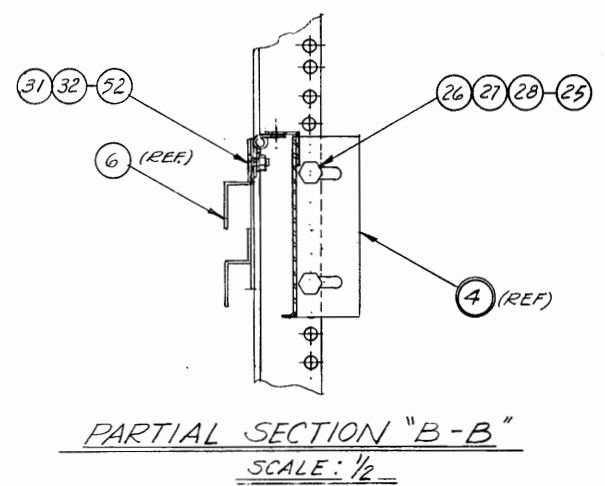
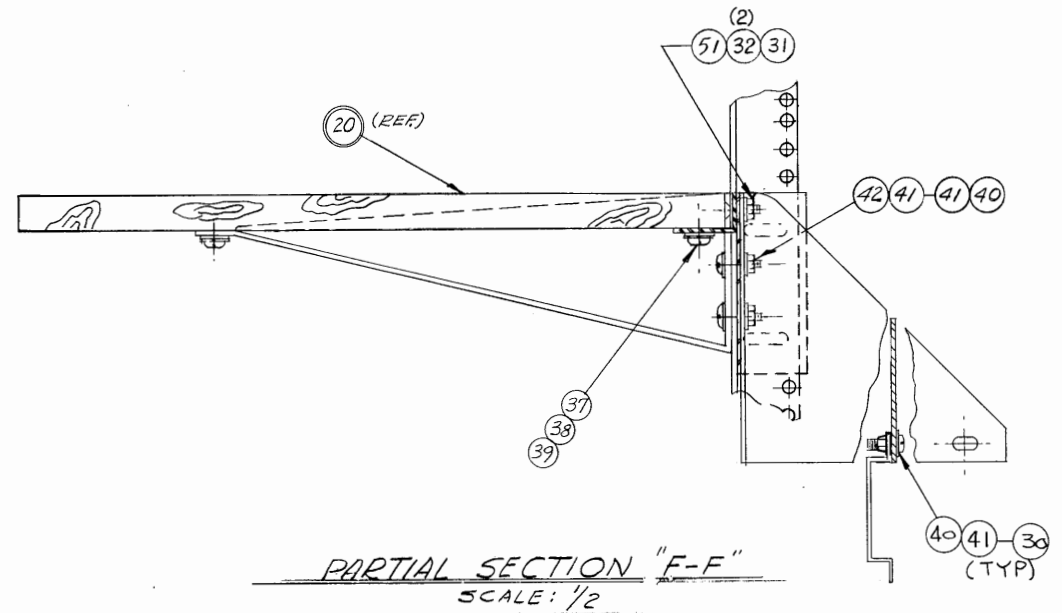
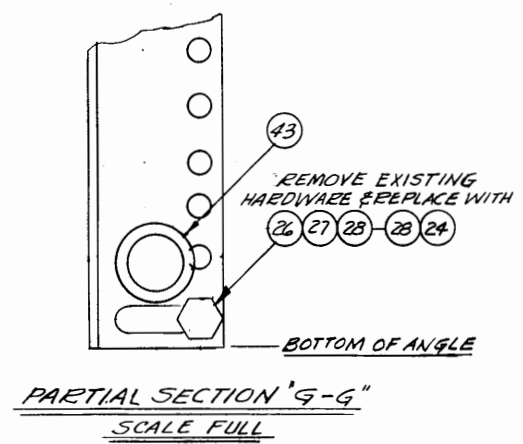
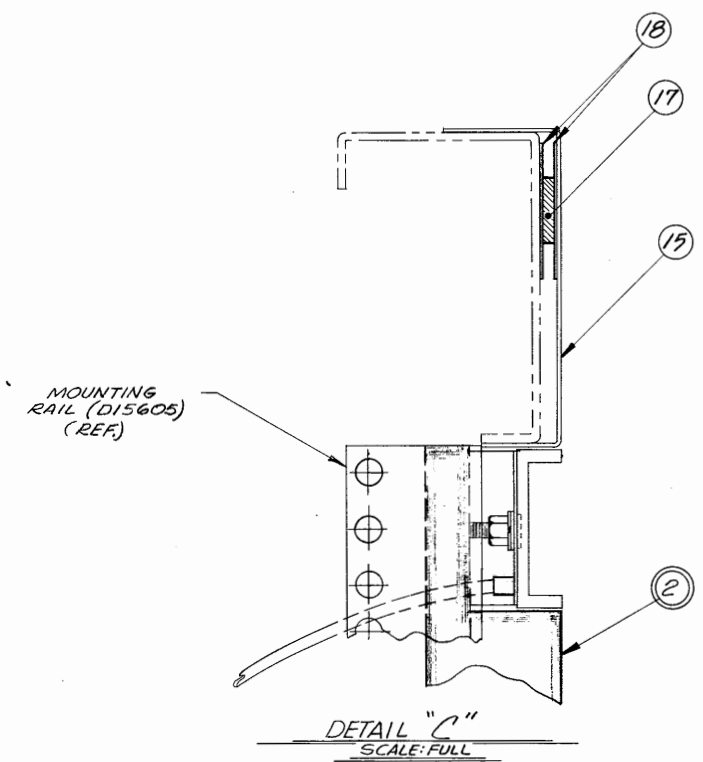
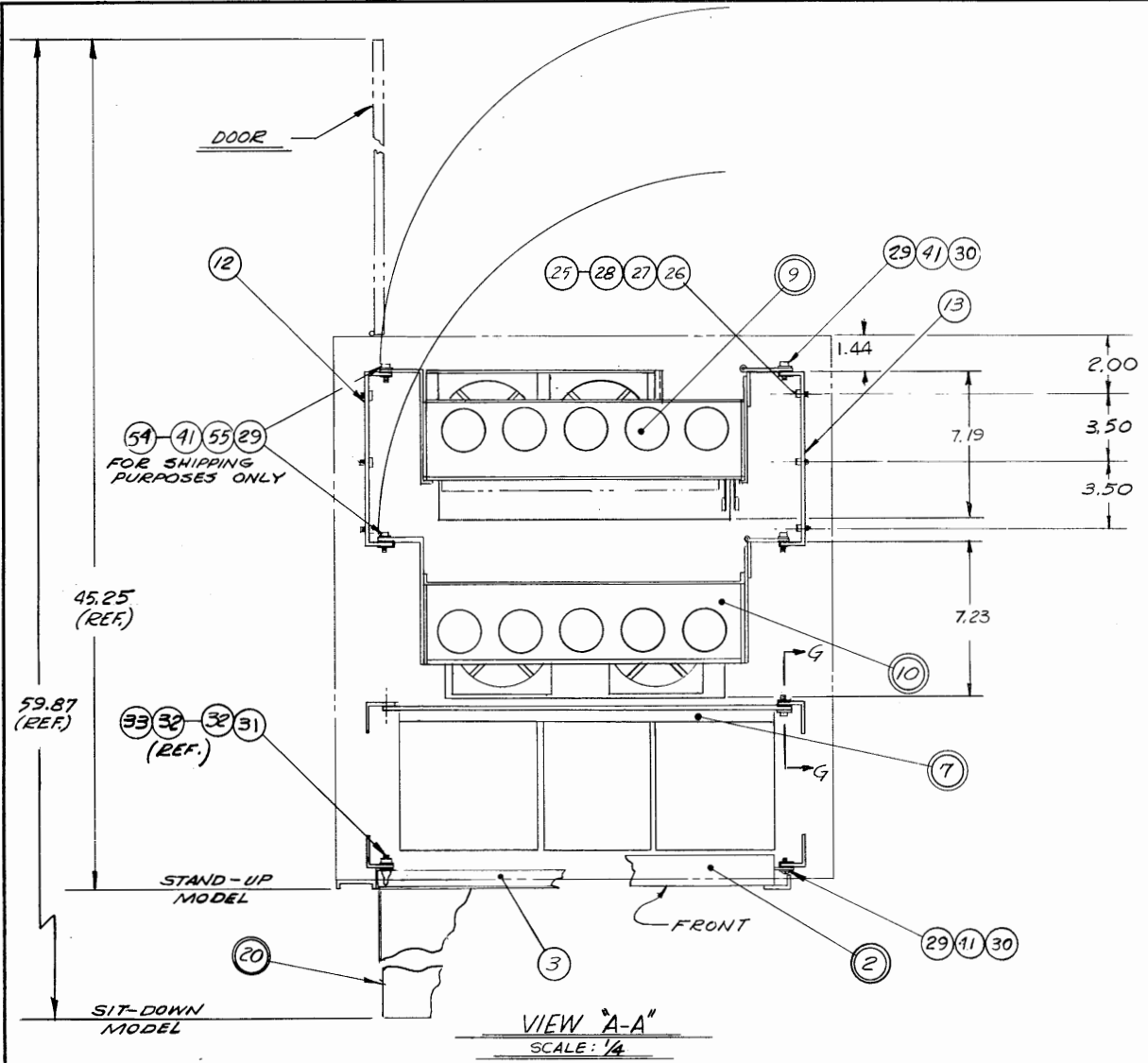
FINAL ASSEMBLY
8102 COMPUTER
(517-DOWN MODEL)

SCALE: 1/4" = 1"
USED ON 9166

REV	DESCRIPTION	DATE	APP'D
D	15600		F

NOTES:
1. ALL DIMENSIONS SHOWN ARE FOR REFERENCE PURPOSES ONLY.

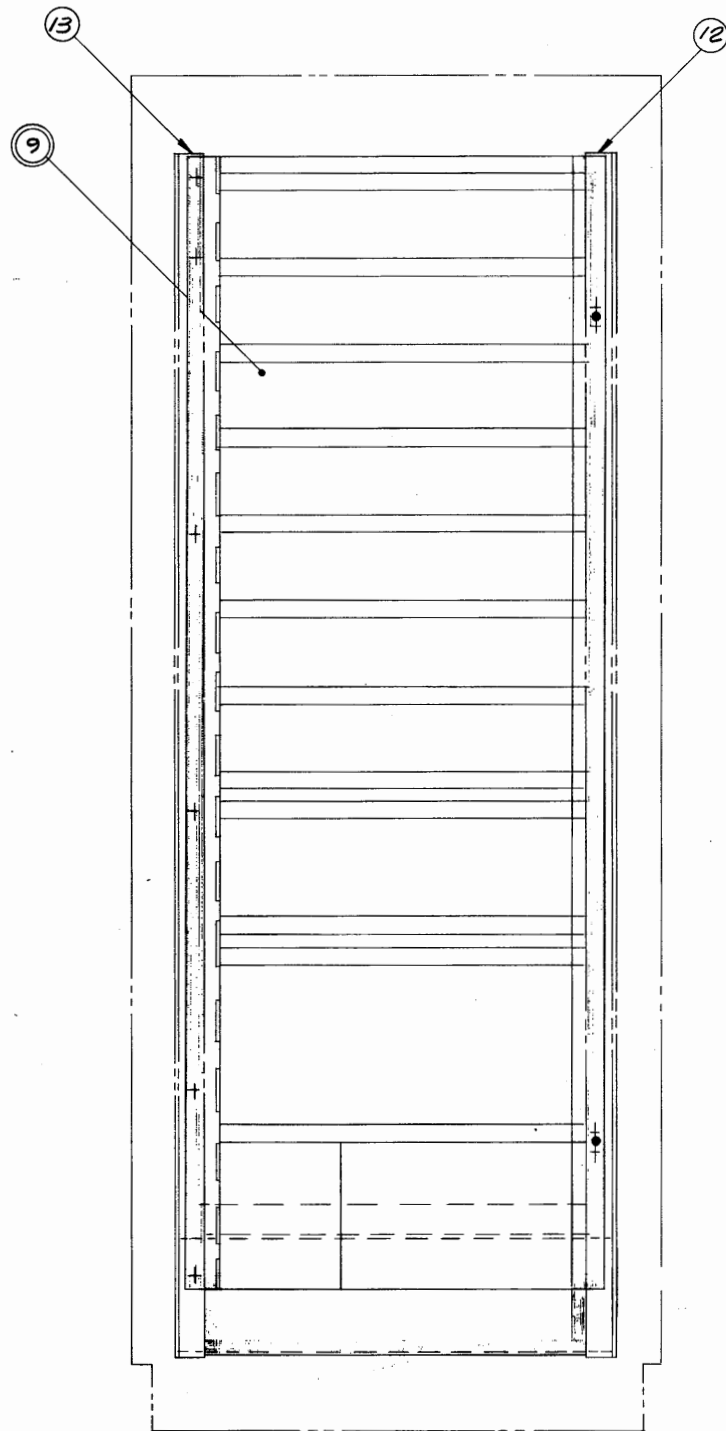
REV	DESCRIPTION	DATE	APP'D
D	15600		
	FOR REV. SEE SHT #1.		



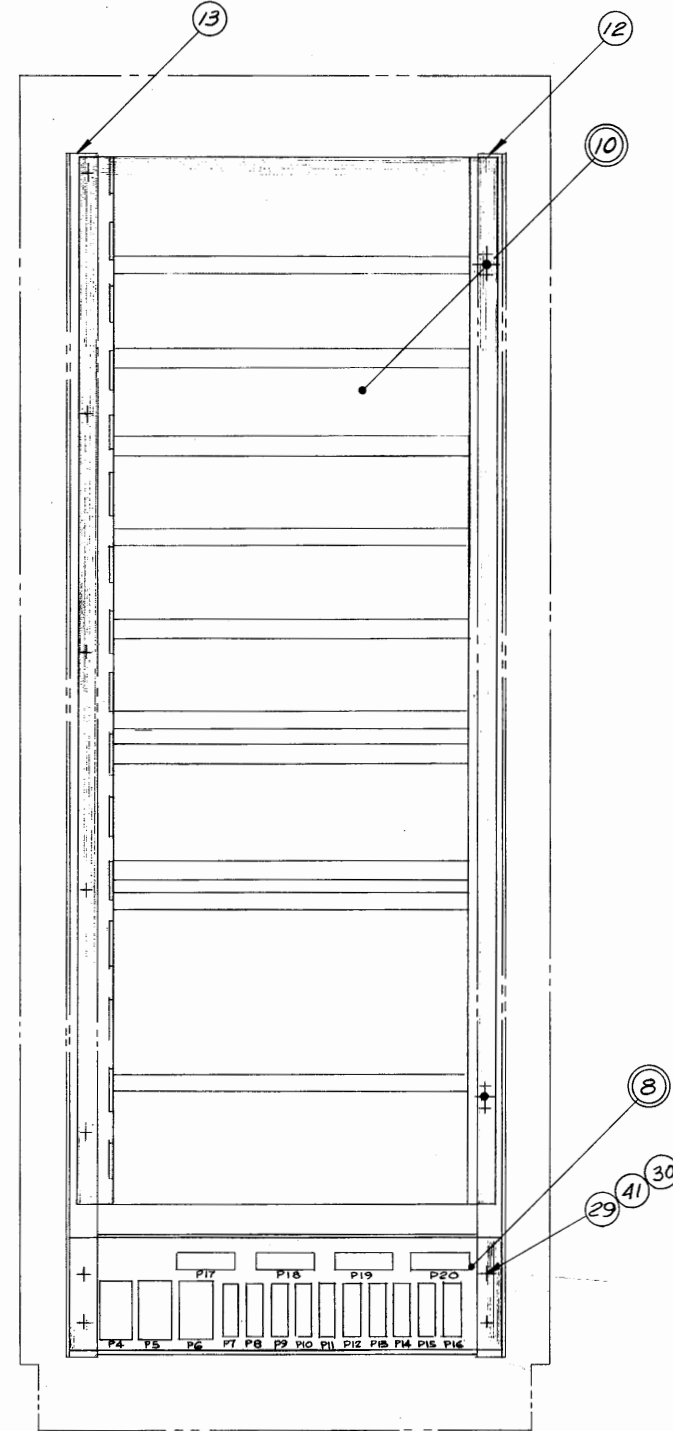
ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR. CHUMLEY	5-23-67	FINAL ASSEMBLY 810 & COMPUTER (STAND-UP & SIT-DOWN) MODELS
CK. P. Patton	12/24/67	
ENG. [Signature]	8/22/67	
APP. [Signature]	8/22/67	
APP. [Signature]	8-22-67	
USED ON	9126	SIZE
		D
		15600
		F

NOTES:
1.

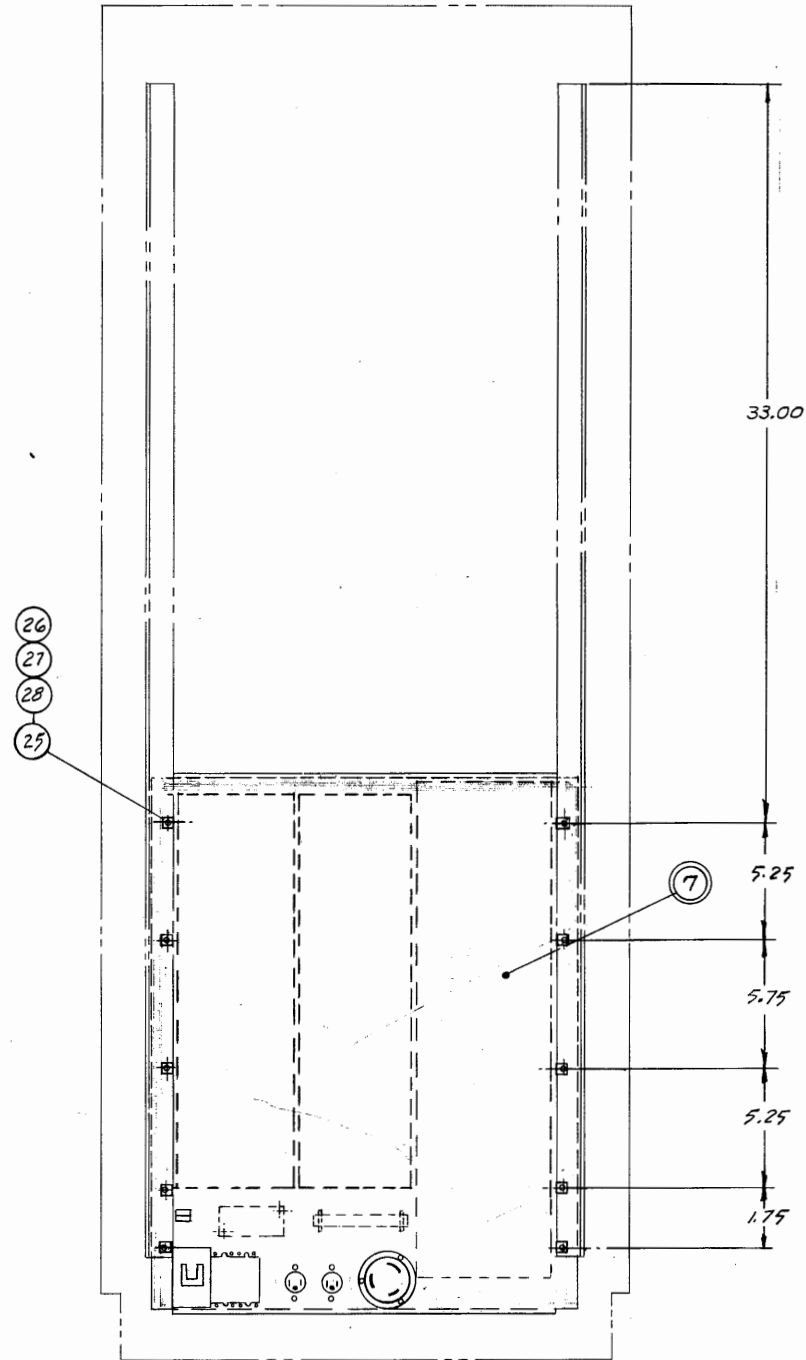
REV	D	15600	REV	F
DESCRIPTION			DATE	APP'D
FOR REV SEE SHT #1				



REAR VIEW
SCALE: 1/4"



SECTION "D-D"
SCALE: 1/4"

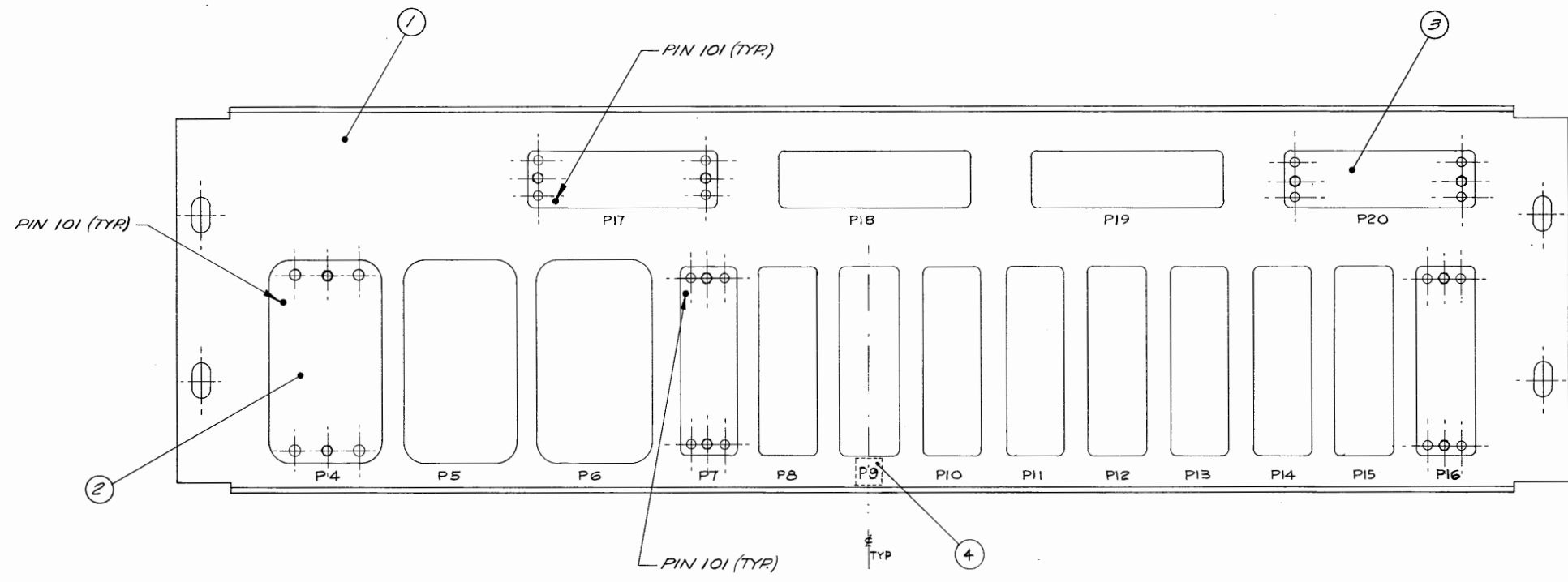


SECTION "E-E"
SCALE: 1/4"

ITEM	DWG. OR PART NO.	DESCRIPTION
SEL SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR. CHUMLEY	5-23-67	FINAL ASSEMBLY 810 & COMPUTER (STAND-UP & SIT-DOWN) MODEL
CE. P. Kelton	12-21-67	
ENG. W. Conner	8-21-67	
PROJ. W. Conner	8-22-67	
APP. M. B.	8-22-67	
USED ON	9126	SIZE D 15600 REV F

NOTES:
1.

SIZE	D	15601	REV	A
REV	A	DESCRIPTION	DATE	APP'D
		GT-324, ITEM 4 WAS D1230102	9-8-67	
		EMP: 9-5-67	VERMULLY	



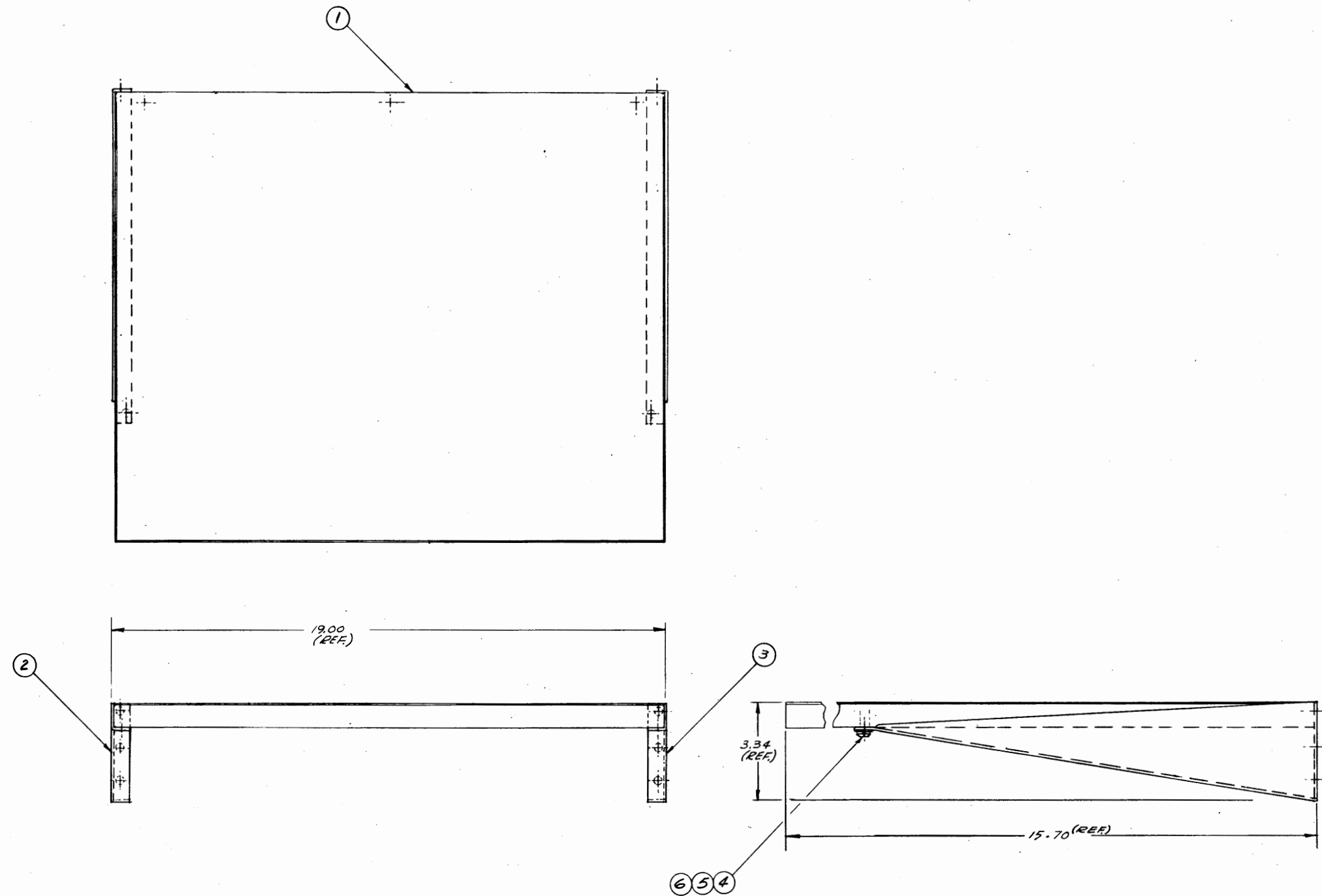
QTY.	ITEM	DWG. OR PART NO.	DESCRIPTION
1	4	C16046	LABEL
14	3	200277-2	50 PIN CONNECTOR (FEMALE)AMP
3	2	201037-1	104 PIN CONNECTOR (FEMALE)AMP
1	1	D14566	PANEL-1/0 CONNECTOR

SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR. CHUMLEY	5-22-67	ASSEMBLY 1/0 CONNECTOR PANEL	
CL. P. KELTON	12 NOV 67		
ENG. WILSON	8/22/67		
PROJ. APP. WILSON	8/22/67		
APP. MKZ	8-22-67		
USED ON	9126	SIZE	D

NEXT ASSY DIS600 SCALE: FULL

NOTES:
1.

REV	D	15602	DATE	APP'D
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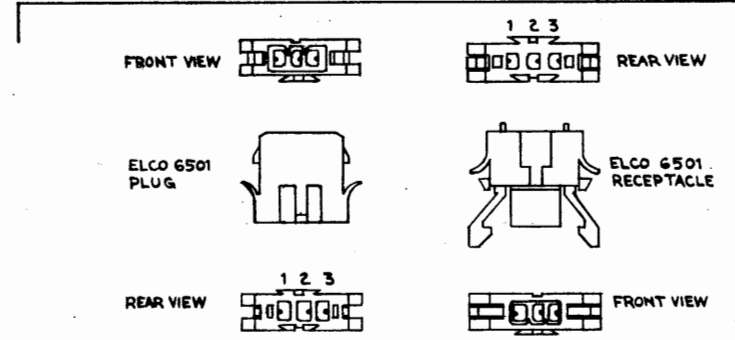
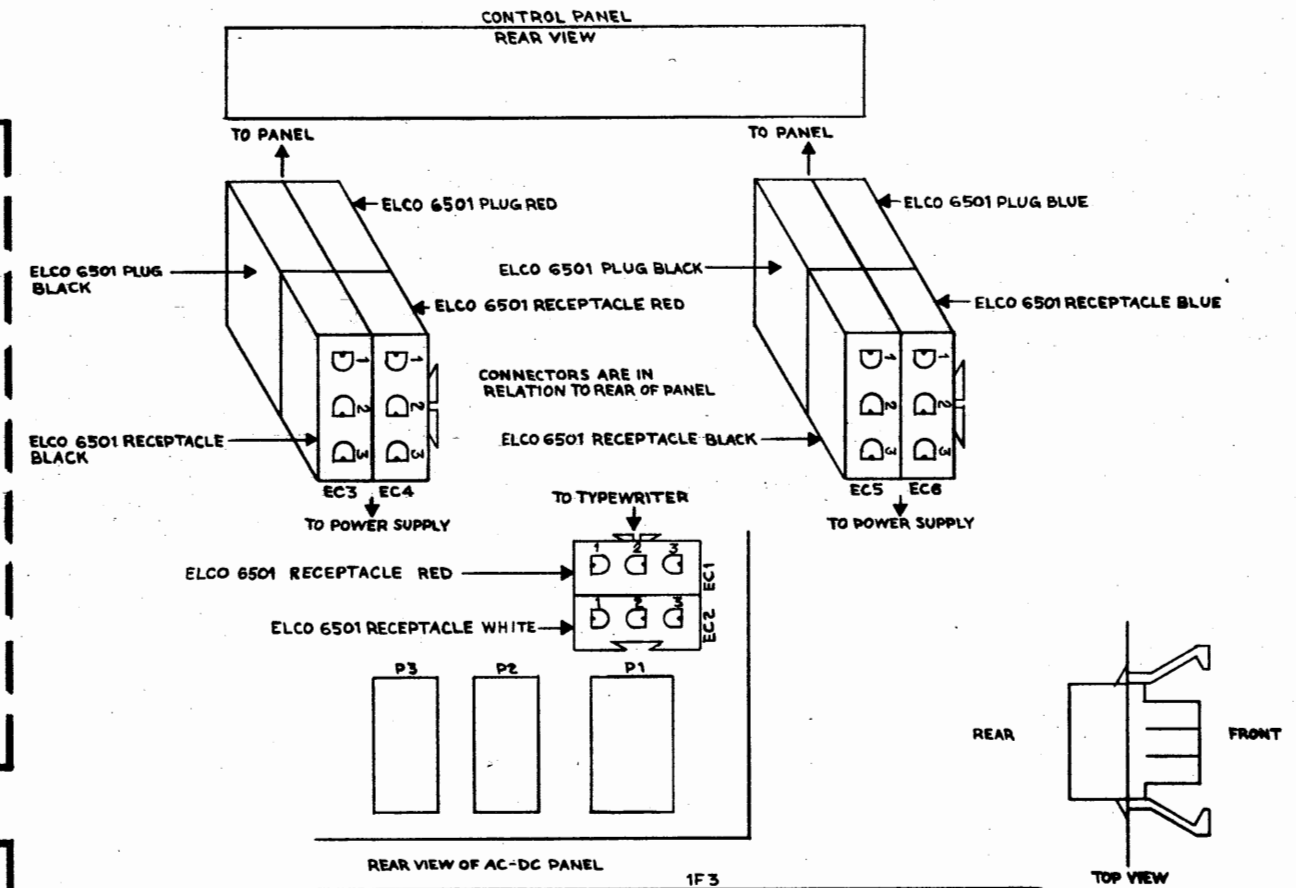
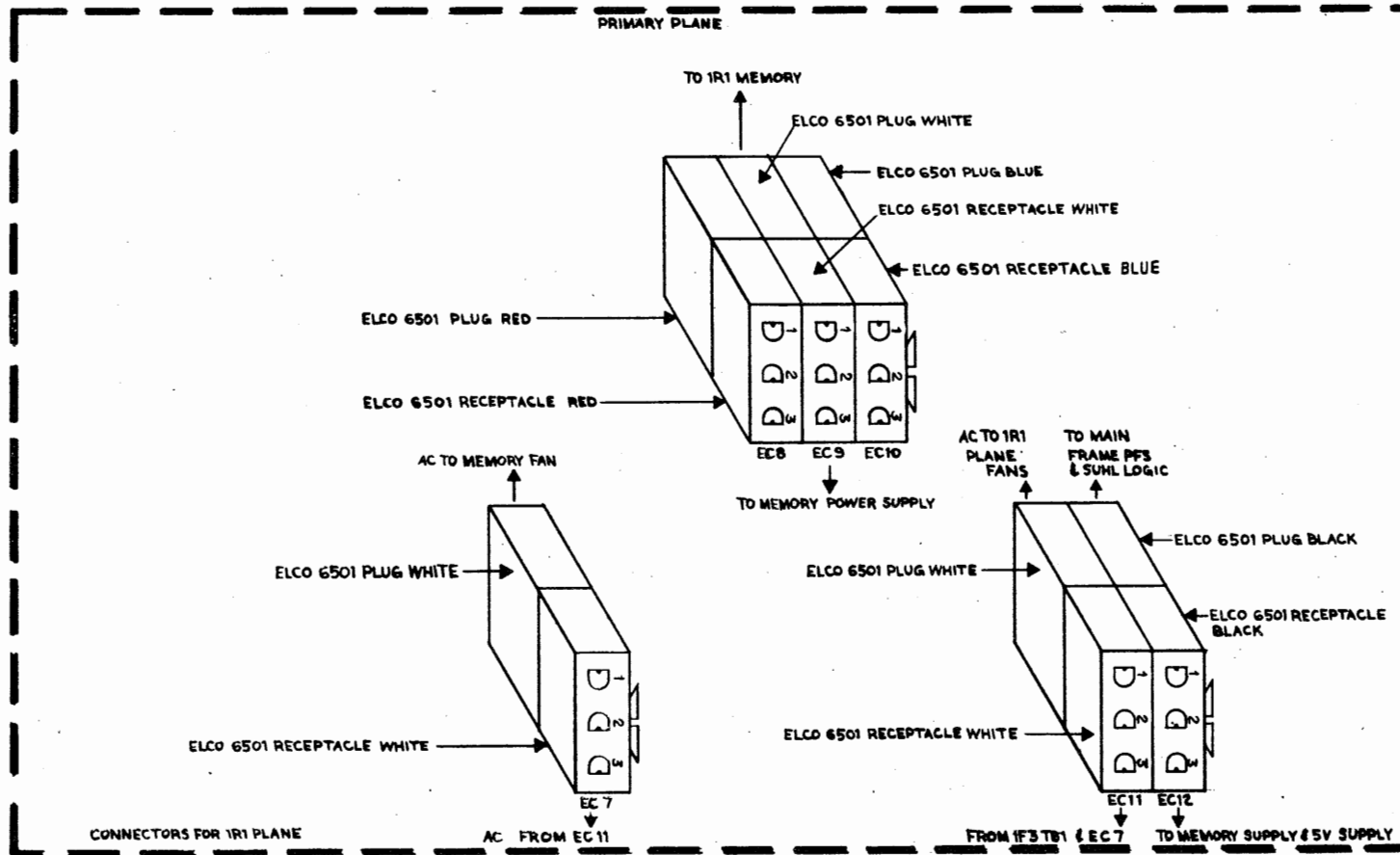
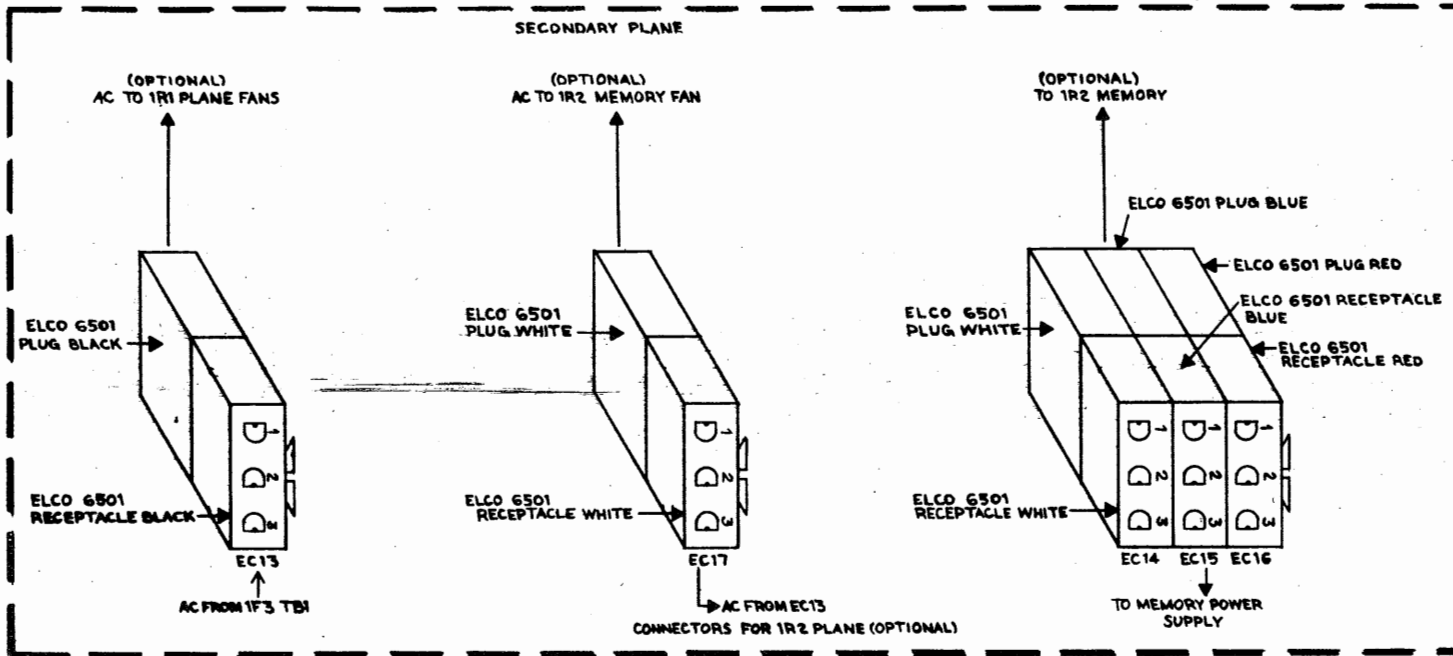
QTY	ITEM	DWG. OR PART NO.	DESCRIPTION
2	6		#8 FLATWASHER
2	5		#8 LOCKWASHER
2	4		#8-32 X 1/4 SCREW SS P/H PHILLIPS
1	3	D14574-102	BRACE-TABLE TOP
1	2	D14574-101	BRACE-TABLE TOP
1	1	D14576	TABLE TOP

SEL		SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA	
DR.	<i>W. J. [unclear]</i>	4-14-67	TABLE TOP ASSEMBLY
CL.	<i>J. [unclear]</i>	8-22-67	
ENGR.	<i>W. J. [unclear]</i>	8-22-67	
PROJ. MGR.	<i>W. J. [unclear]</i>	8-22-67	
REV.	1/8	8-22-67	REV
USED ON	9126		REV

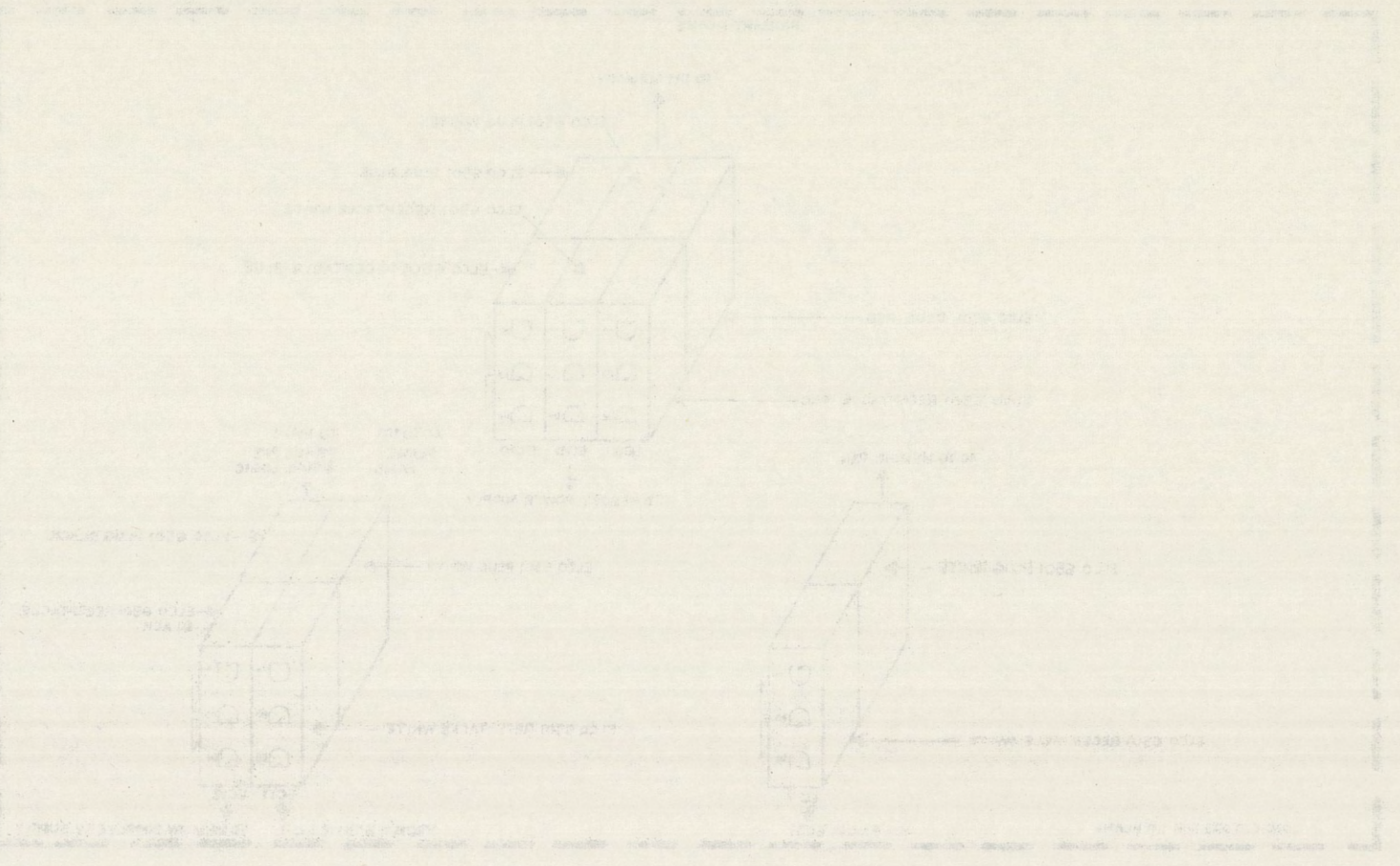
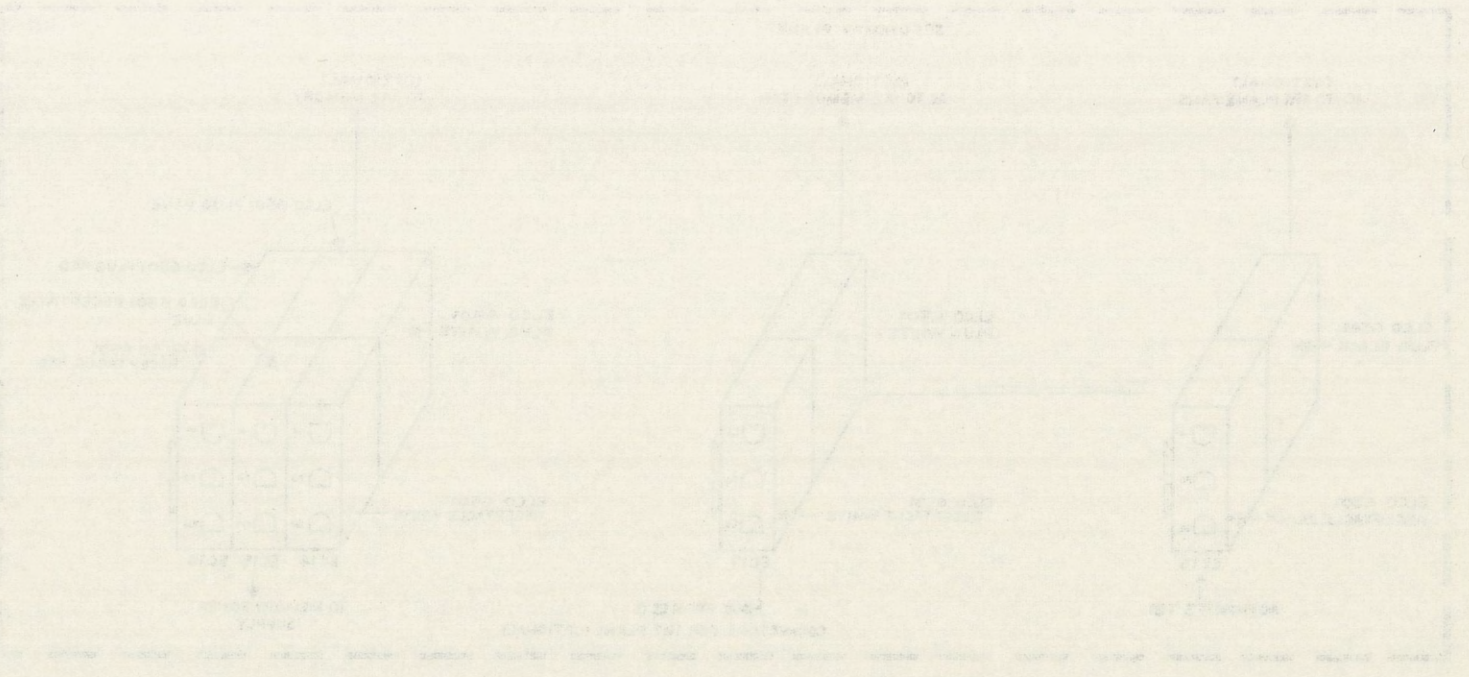
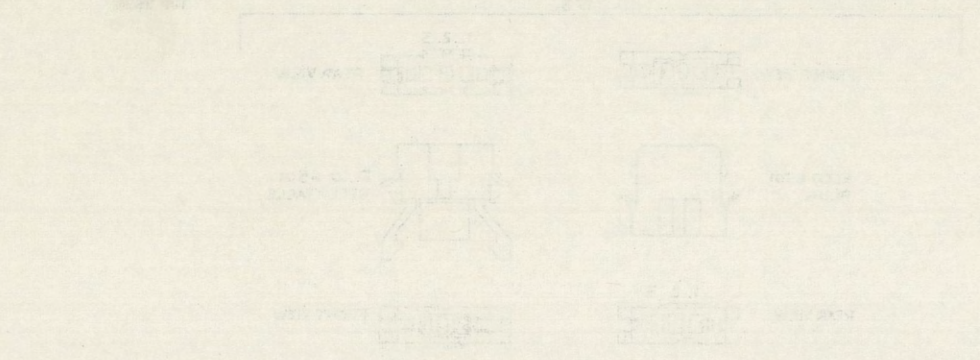
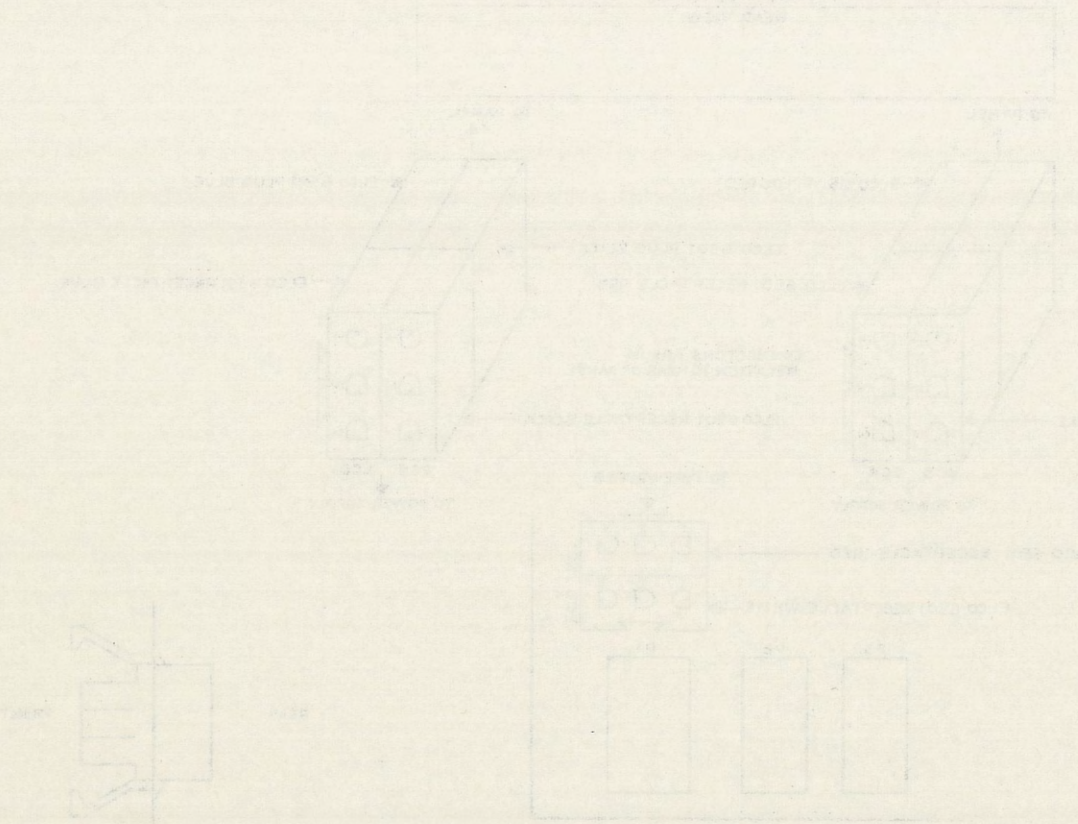
NEXT ASS'Y D15600 SCALE: 1/2" = 1"

NOTES
1. ALL 6501 RECEPTACLES MUST AT LEAST USE 2 LOCKING INSERTS.

SIZE	D	53065	REV.	
REV.		DESCRIPTION	DATE	APPD



ITEM	DWG. OR PART NO.	DESCRIPTION
Systems Engineering Laboratories		
6901 West Sunrise Blvd., Fort Lauderdale, Florida 33310		
DR D. LLOYD	5-2567	ELCO 6501 ASSEMBLY CONNECTORS
CHK		
ENGR <i>W. H. ...</i>	6/22/67	
PROJ <i>...</i>	6/22/67	
APPD		
NEXT ASSY		
CODE IDENT NO.	SIZE	REV.
20886	D 53065	



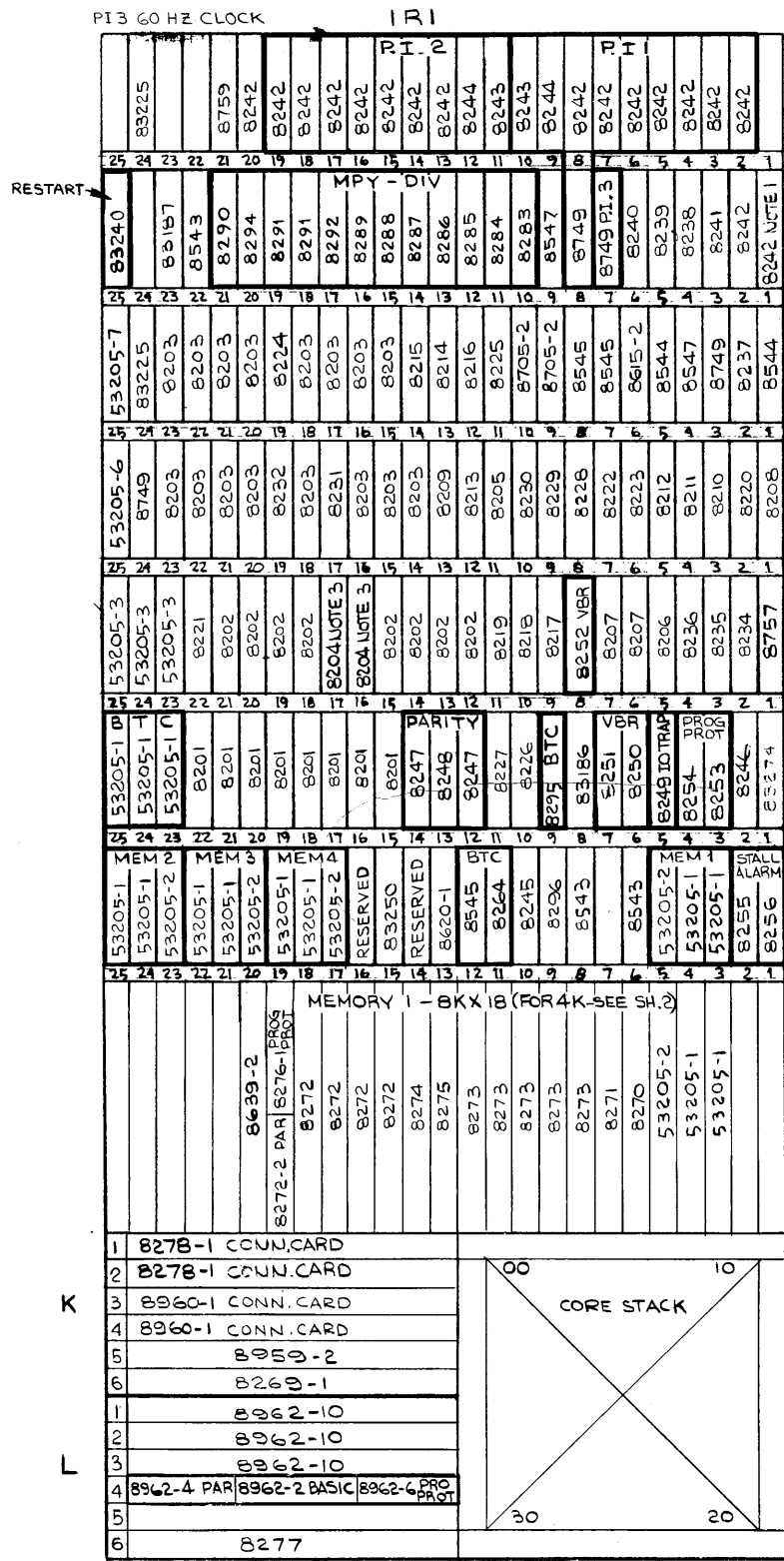
REV. 10/68	D	25002
DATE	DESIGNER	CHECKER
10/68	J. D. [unclear]	[unclear]
SYSTEMS DIVISION AIR FORCE SYSTEMS COMMAND WASHINGTON, D.C. 20330		

VBR Variable Base Register

NOTES:
 1.- REMOVE 1B WHEN P.I. ADDED.
 2.- ADD FOR 5TH BTC.
 3.- REPLACE 16E & (17E)(8297) WITH 8204 - WHEN MPY-DIV INSTALLED.

MEMORY #1
 4.- BASIC ONLY
 5.- P.P. ONLY
 6.- PARITY ONLY

REV	D	52992	DATE	APPD	C
DESCRIPTION	68-199; UPDATED TO LATEST CHANGES		4/19/68		
BY	Michael		4-19-68	RKM	



A
B
C
D
E
F
G
H

NOTE 3

NOTE 1

NOTE 3

ITEM	NO.	DESCRIPTION	LOCATION
1	83187	MISC BUFFER	23B
1	83186	AUGMENTED CONTROL	8F
1	53205-2	RIBBON CABLE CONN.	5G
2	53205-1	RIBBON CABLE CONN.	3,4G
1	83225	IR CLEAR GATE	24C
1	83274	CLOCK CONTROL #4	1F
8	8201	RTL MEMORY INTERFACE	15-22F
8	8202	RTL-T & INS REGISTER BIT SLICE	18-19E
16	8203	RTL-A & B ACCUMULATOR BIT SLICE	14,15,16,17E
2	8204	RTL-EIGHT BIT FULL ADDER	16E,17E
1	8205	RTL-OPERATION DECODER	11D
1	8206	RTL-AUGMENTED OPERATION DEC.#1	5E
2	8207	RTL-AUGMENTED OPERATION DEC.#2	7E,6E
1	8208	RTL-CONTROL CYCLE GENERATOR	1D
1	8209	RTL-SHIFT COUNTER	13D
1	8210	RTL-T OUTPUT GATE CONTROL	3D
1	8211	RTL-B OUTPUT GATE CONTROL	4D
1	8212	RTL-A OUTPUT GATE CONTROL	5D
1	8213	RTL-B & T REGISTER STROBE	12D
1	8214	RTL-A REGISTER STROBE	13C
1	8215	RTL-CARRY LOGIC	14C
1	8216	RTL-INPUT/OUTPUT INSTRUCTION DECODE	12C
1	8217	RTL-PROGRAM REGISTER BITS 1-5	9E
1	8218	RTL-PROGRAM REGISTER BITS 6-11	10E
1	8219	RTL-PROGRAM REGISTER BITS 12-15	11E
1	8220	RTL-SHIFT CONTROL	2D
1	8221	RTL-SENSE SWITCH DECODE	22E
1	8222	RTL-OVERFLOW & A SIGN STROBE	7D
1	8223	RTL-INDIRECT-2	6D
1	8224	RTL-'B' FULL CODE DETECTOR	19C
1	8225	RTL-INPUT/OUTPUT INST.TIMING	11C
1	8226	RTL-MEMORY DATA REGISTER LOAD	10F
1	8227	RTL-ADDER TO MEM CONT. & ADD REG. STROBE	11F
1	8228	RTL-PROGRAM REGISTER ADVANCE I	8D
1	8229	RTL-PROGRAM REGISTER ADVANCE II	9D
1	8230	RTL-PROGRAM REGISTER ADVANCE III	10D
1	8231	RTL-ADDER ZERO DETECTOR	17D
1	8232	RTL-'A' ZERO DETECTOR	19D
1	8234	RTL- CLOCK CONTROL I	2E
1	8235	RTL- CLOCK CONTROL II	3E
1	8236	RTL- CLOCK CONTROL III	4E
1	8237	RTL-LOAD/DISP MEM STEP CONTROL	2C
1	8238	RTL-PRIORITY INTERRUPT LATCH	4B
1	8239	RTL-PRIORITY INT. T.O.I & DISABLE	5B
1	8240	RTL-PRIORITY INT.GROUP DECODE MATRIX	6B
1	8241	RTL-PRIORITY INT.ADDRESS AND GATES	3B
2	8242	RTL-DUAL PRIORITY INTERRUPT	2B,1B
1	8246	MEMORY MODULE SELECT	2F
1	8245	RTL-POWER FAILURE CONTROL	10G
1	8296	POWER FAIL SAFE	9G
2	8297	TI BIT FULL ADDER	16E-17E
1	8298	SPB MAP STORE GATES	7G
1	8282	CONTROL PANEL	
1	83250	ICB VOLTAGE REGULATOR	15G
3	8543-1	2UOR	6G,8G,22B
2	8544-1	3NOR	5C,1C
2	8545-1	1INVERTER	7C,8C
2	8547-1	4NOR	9B,4C
1	8615-2	CABLE TERMINATOR	6C
1	8620-1	OSCILLATOR 10MC	13G
2	8705-2	GATED CABLE DRIVER	9C,10C
2	8749-1	12 CIRCUIT DIGITAL BUFFER	3C,24D
1	8757-1	CLOCK (SHUL)	1E

ITEM	NO.	DESCRIPTION	LOCATION
1	8295	MEMORY ACCESS CONTROL	9F
1	8264	CLOCK BUFFERS	11G
1	8545	INVERTER	12G
3	53205-1	RIBBON CABLE CONNECTOR	23,24,25F
1	8962-2	MA SENSE AMP	4L
1	8962-4	MA SENSE AMP	4L
1	8962-6	MA SENSE AMP	4L
2	8960-1	CONNECTOR CARD	3K,4K
1	8272-2	QUAD DATA REG & INHIBIT DR.	19H
1	8283	MPY DIV CONTROL #1	10B
1	8284	" " " #2	11B
1	8285	" " " #3 (SHUL)	12B
1	8286	" " " #4	13B
1	8287	" " " #5	14B
1	8288	" " " #6 (SHUL)	15B
1	8289	" " " #7	16B
1	8290	T x 2 GATES	21B
2	8291	SHIFTED ADDER GATES	18B,19B
1	8292	MPY DIV CONTROL #8	17B
1	8294	EXTENDED ADDER (SHUL)	20B
2	8247	PARITY GENERATOR - CHECKER	12F,14F
1	8248	PARITY CONTROL	13F
1	8250	VBR CONTROL	6F
1	8251	VBR REGISTER	7F
1	8252	VBR DISPLAY GATES	8E
1	8249	INSTRUCTION TRAP	5F
6	8242	DUAL P.I.	2-8A
1	8243	UNITARY-BINARY-MSB'S	10A
1	8244	UNITARY-BINARY-LSB'S	9A
1	8749	12 CIRCUIT DIGITAL BUFFER	8B
1	8255	STALL ALARM CONTROL	2G
1	8256	STALL ALARM COUNTER	1G
1	8543	RTL-2 NOR	1F
1	8253	PP LOGIC 1	3F
1	8254	PP LOGIC 2	4F
1	8759	SCHMITT TRIGGER #2	21A
1	8269-1	LINE DR. CURRENT DR & INHIBIT DR.	6K
1	8270-1	RTL- MEMORY TIMING #1	6H
1	8271-1	RTL- MEMORY TIMING #2	7H
4	8272-1	RTL- QUAD DATA REG & INHIBIT DR.	15-18H
5	8273-1	RTL-READ/WRITE MATRIX & LINE DR. SW.	8-12H
1	8274-1	RTL- 8 BIT MEMORY ADDRESS REG.	14H
1	8275-1	RTL- 5 BIT MEM. ADDRESS REG. & SK CONTROL	13H
1	8276-1	RTL-MEM PAR & PROTECT BIT DA. REG. & INH. DR.	19H
1	8277-1	+12V & THRESHOLD REGULATOR	6L
2	8278-1	CONNECTOR & RESISTOR CARD	1K, 2K
1	8639-2	DATA SAVER	20H
1	8959-2	DUAL CURRENT DRIVER	5K
3	8962-10	MA SENSE AMPLIFIER NO. 3	1,2,3L
1	83240	RESTART RELAY	25B

NOTE 4
NOTE 6
NOTE 5
NOTE 6

NOTE 6

ITEM	DWG. OR PART NO.	DESCRIPTION
SEL		
SYSTEMS ENGINEERING LABORATORIES INCORPORATED FORT LAUDERDALE, FLORIDA		
DR	J. PINEDO	810 a CARD LAYOUT
CC	C. Williams	10-31-67
ENGR	W. Conrad	9-17-67
INSTR	J. Conrad	9-12-67
APP	J. Manly	10-31
UNDO CH		
REV	D	52992
APPD		C

