

REV	DESCRIPTION	DATE	BY	CHKD	APPD
A	RELEASED PER EO 5133	11/17/87	WJ	JK	AT
B	REVISED PER EO 5133	11/17/87	WJ	JK	AT
C	REVISED PER EO 5163	11/17/87	WJ	JK	AT
D	REVISED PER EO 5165	11/17/87	WJ	JK	AT
E	REVISED PER EO 51757	11/17/87	WJ	JK	AT
F	REVISED PER EO 51810	11/17/87	WJ	JK	AT
G	REVISED PER EO 51820	11/17/87	WJ	JK	AT
H	REVISED PER EO 51919	11/17/87	WJ	JK	AT
J	REVISED PER EO 52155	11/17/87	WJ	JK	AT
K	USED IN THE FIELD ONLY	11/17/87	WJ	JK	AT
L	REVISED PER EO 52159	11/17/87	WJ	JK	AT

REF. DES. TABLE					
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				REF. DES.	VALUE
IC					PAGE
U1	744029	19	7		17
U2	74469 BA	24	12	C17	.1
U3	555	8	1		3
U4	74ALS00	19	7		2,18
U5	8742	10	20	C37	.1
U6	74ALS175	16	8	C40	.01
U7	7407	19	7		5,5,18
U8	74ALS245	20	10	C50	.01
U9	74ALS271	20	10	C51	.01
U10	74ALS274	20	10	C52	.01
U11	8254	28	14	C63	.1
U12	8254	28	14	C63	.1
U13	74ALS241	20	10	C171	.01
U14	74ALS08	19	7	C54	.01
U15	74ALS74	19	7	C55	.01
U16	74ALS245	20	10	C64	.01
U17	74ALS245	20	10	C65	.01
U18	74ALS28	6	8		4
U19	74F20	19	7	C67	.01
U20	74ALS0	19	7		11,15,18
U21	74ALS30	19	7		1,17,18
U22	8254-2	24	12	C69	.1
U23	74F74	19	7		2,7
U24	74F00	19	7	C70	.01
U25	74ALS271	20	10	C78	.01
U26	74ALS271	20	10	C80	.01
U27	74ALS245	20	10	C81	.01
U28	74ALS244	20	10	C71	.01
U29	6332B1A	20	10	C72	.01
U30	74ALS271	20	10	C79	.01
U31	74ALS00	19	7	C74	.01
U32	74ALS244	20	10	C75	.01
U33	74ALS09	19	7		18,19,17
U34	74F00	19	7	C76	.01
U35	74ALS175	16	8		17
U36	74ALS09	19	7		17
U37	74ALS245	20	10	C82	.01
U38	74ALS12	10	20	C86	.1
U39	74ALS245	20	10	C87	.01
U40	8237A-5	31	10	C89	.1
U41	8237A-5	31	10	C90	.1
U42	74F112	16	8		17
U43	74ALS74	19	7		17
U44	74ALS32	19	7		8,18
U45	74ALS74	19	7		12
U46	74ALS00	19	7		2,8,12
U47	74ALS64	24	12	C83	.1
U48	80288	10,12	15,22	C85,184	.1
U49	80287	9	10,22	C38	.1
U50	82288-9	20	10	C97	.01

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				REF. DES.	VALUE
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U53	6350B1	16	8	C100	.01
U54	74ALS158	16	8	C91	.01
U55	74ALS158	16	8	C92	.01
U56	74ALS245	20	10	C101	.01
U57	74ALS245	20	10	C93	.01
U58	74ALS295	20	10	C102	.1
U59	74F257	16	8	C95	.01
U60	161.3	20	10		5
U61	27256-20	28	14	C96	.1
U62	74ALS10	19	7		2,12
U63	74ALS20	19	7	C107	.01
U64	74ALS20	19	7	C108	.1
U65				C109	
U66				C110	
U67				C111	
U68				C112	
U69				C113	
U70				C114	
U71				C115	
U72	27256-20	28	14	C116	.1
U73	27256-20	28	14	C103	.1
U74	74ALS104	19	7	C104	.01
U75	74ALS00	19	7	C105	.01
U76	74ALS185	19	7		5,6,19
U77	74ALS74	19	7	C106	.01
U78	74F74	19	7		9,10
U79	74F74	19	7		6,17
U80	74ALS02	19	7		7,8
U81	74ALS74	19	7		9
U82	74ALS20	19	7	C124	.01
U83	74ALS20	19	7	C125	.1
U84				C126	
U85				C127	
U86				C128	
U87				C129	
U88				C130	
U89				C131	
U90				C132	
U91	27256-20	28	14	C133	.1
U92	27256-20	28	14	C117	.1
U93	74ALS300	19	7	C118	.01
U94	82289-8	18	9	C119	.01
U95	74ALS74	19	7	C120	.01
U96	74ALS02	19	7		10,14,15
U97	74ALS08	19	7	C121	.01
U98	74ALS04	19	7		9,10,15,16
U99	74F175	16	8	C122	.01
U100	74F11	19	7	C123	.01

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U103				C141	
U104				C142	
U105				C143	
U106				C144	
U107				C145	
U108				C146	
U109				C147	
U110	41256-6	8	16	C148	.1
U111	27256-20	28	14	C139	.01
U112	74ALS74	19	7	C135	.01
U113	74ALS27	19	7		9
U114	74ALS74	19	7	C136	.01
U115	74F08	19	7		8,15
U116	74ALS00	19	7		2,15
U117	74ALS74	19	7		8,15
U118	74F174	16	8	C137	.01
U119	74ALS74	16	8	C138	.01
U120	41256-15	8	16	C138	.1
U121				C159	
U122				C160	
U123				C161	
U124				C162	
U125				C163	
U126				C164	
U127				C165	
U128	41256-15	8	16	C166	.1
U129	74ALS280	19	7	C172	.01
U130	74ALS280	19	7	C149	.01
U131	74ALS158	16	8	C150	.01
U132	74F112	16	8	C151	.01
U133	74F175	16	8	C152	.01
U134	74ALS08	19	7	C153	.01
U135	74ALS94	19	7		15
U136	74LS51	19	7		11,15
U137	PN16LBB	20	10	C158	.01
U138	74ALS75	16	8	C155	.01

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REF. DES. TABLE	
USED	NOT USED

4 OPTIONAL

1 NOTE U1 & U2 ARE ON SEPARATE VOLTAGE BUS

2 ALL CAPACITORS ARE IN MICROFARADS, 100% - 20%

1 ALL RESISTORS ARE IN OHMS, 1% 5%

NOTES UNLESS OTHERWISE SPECIFIED

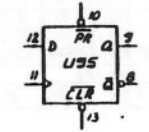
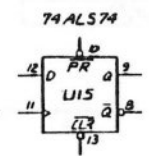
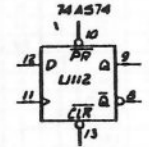
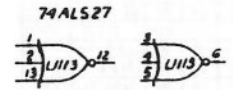
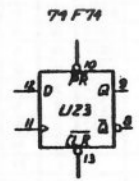
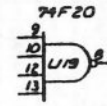
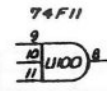
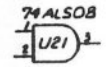
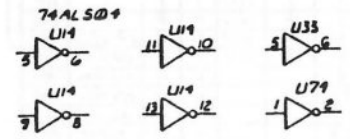
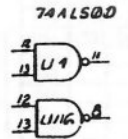
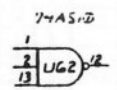
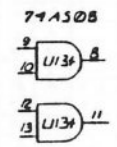
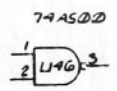
5 SW1 POS. 8
ON: FOR 256K X1 DRAM IN U64-72 AND U83- U91
OFF: FOR 64K

SW1 POS. 3
ON: FOR COLOR DISPLAY
OFF: FOR MONOCHROME

SW1 POS. 4
OFF: FOR NORMAL OPERATION.

<small>ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.</small> SIGNALS BY: <u>J. B. J.</u> DATE: 11/17/87 CHECKED BY: <u>J. B. J.</u> <small>IF THIS DRAWING IS TO BE USED IN ANOTHER PROJECT, THE USER MUST OBTAIN PERMISSION FROM THE ORIGINAL DESIGNER.</small>		Tandon CORPORATION TITLE SCHEMATIC, MAIN PROCESSOR, AT Dwg No: 189231-001 REV: L	
PAGE: 1	TOTAL: 1	DATE: 11/17/87	BY: <u>J. B. J.</u>

REVISIONS				
REV	DESCRIPTION	DATE	BY	APP



NOV. 17 '87

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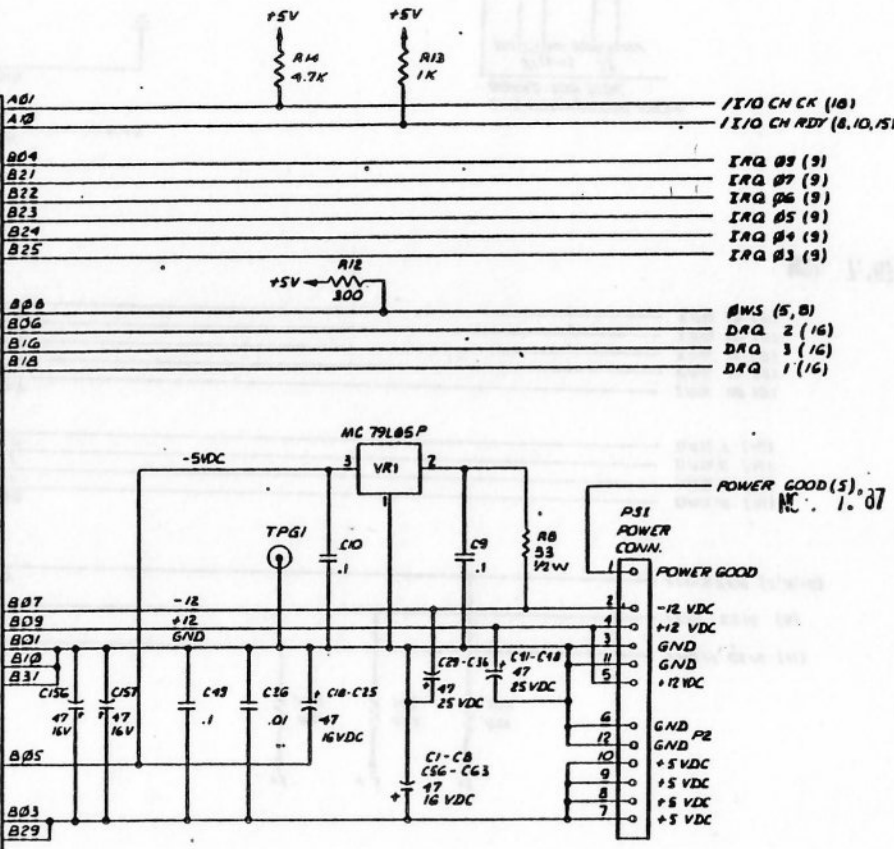
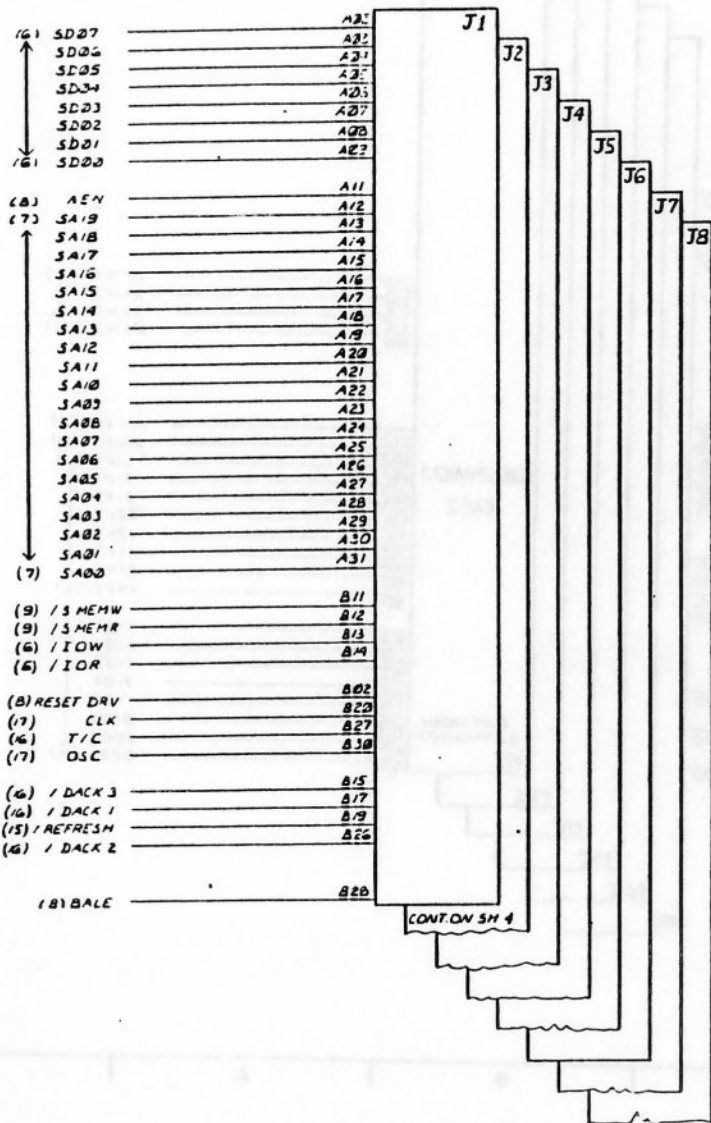
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REVISIONS				
NOV	DESCRIPTION	DATE	BY	CHK APPR



- (9) / S MEMW
- (9) / S MEMR
- (6) / IOW
- (6) / IOR
- (8) RESET DRV
- (7) CLK
- (6) T/C
- (7) OSC
- (6) / DACK 3
- (6) / DACK 1
- (5) / REFRESH
- (6) / DACK 2
- (8) BALE

CONT. ON SH 4

POWER GOOD (S) 1.07

NOTES UNLESS OTHERWISE SPECIFIED

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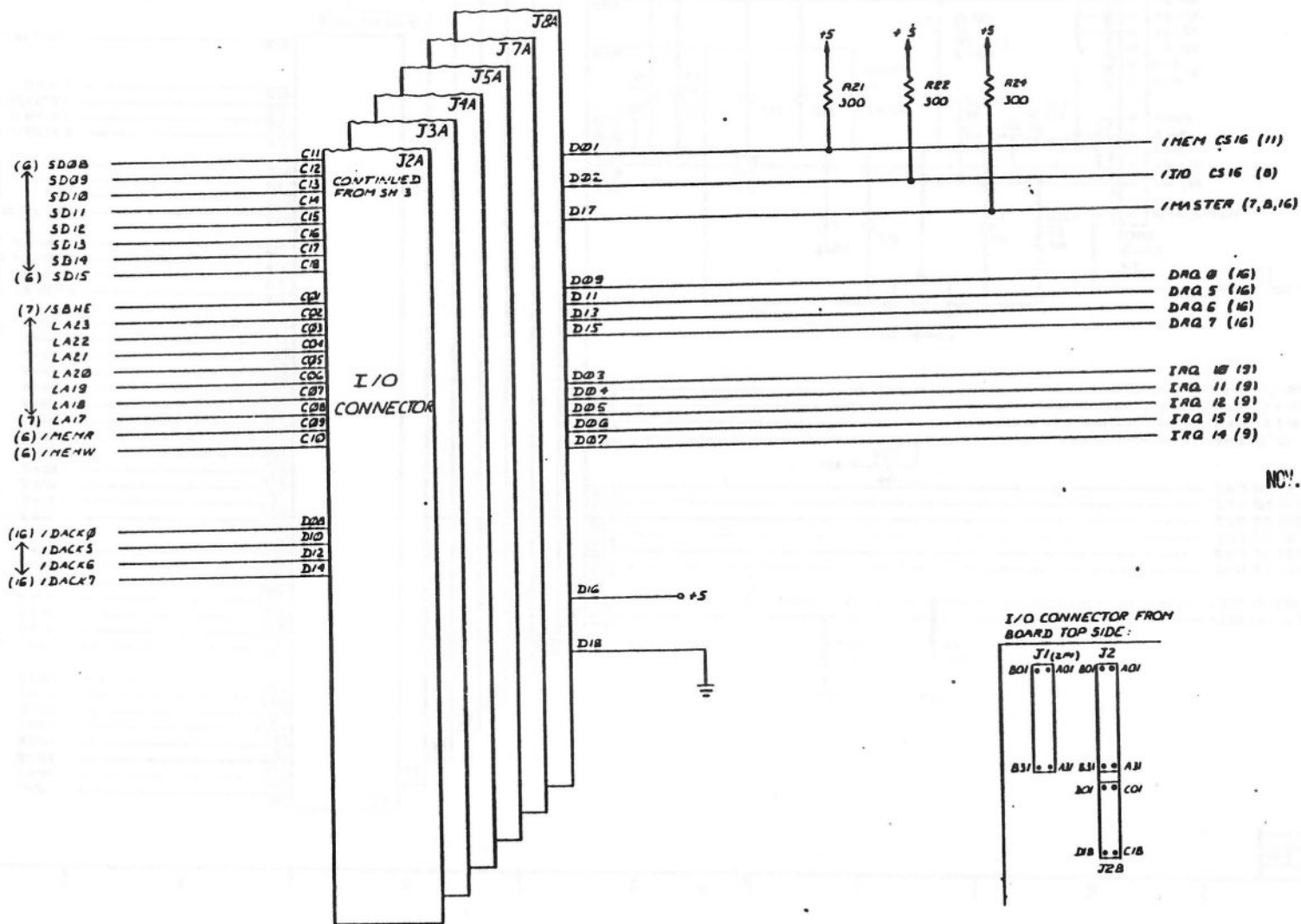
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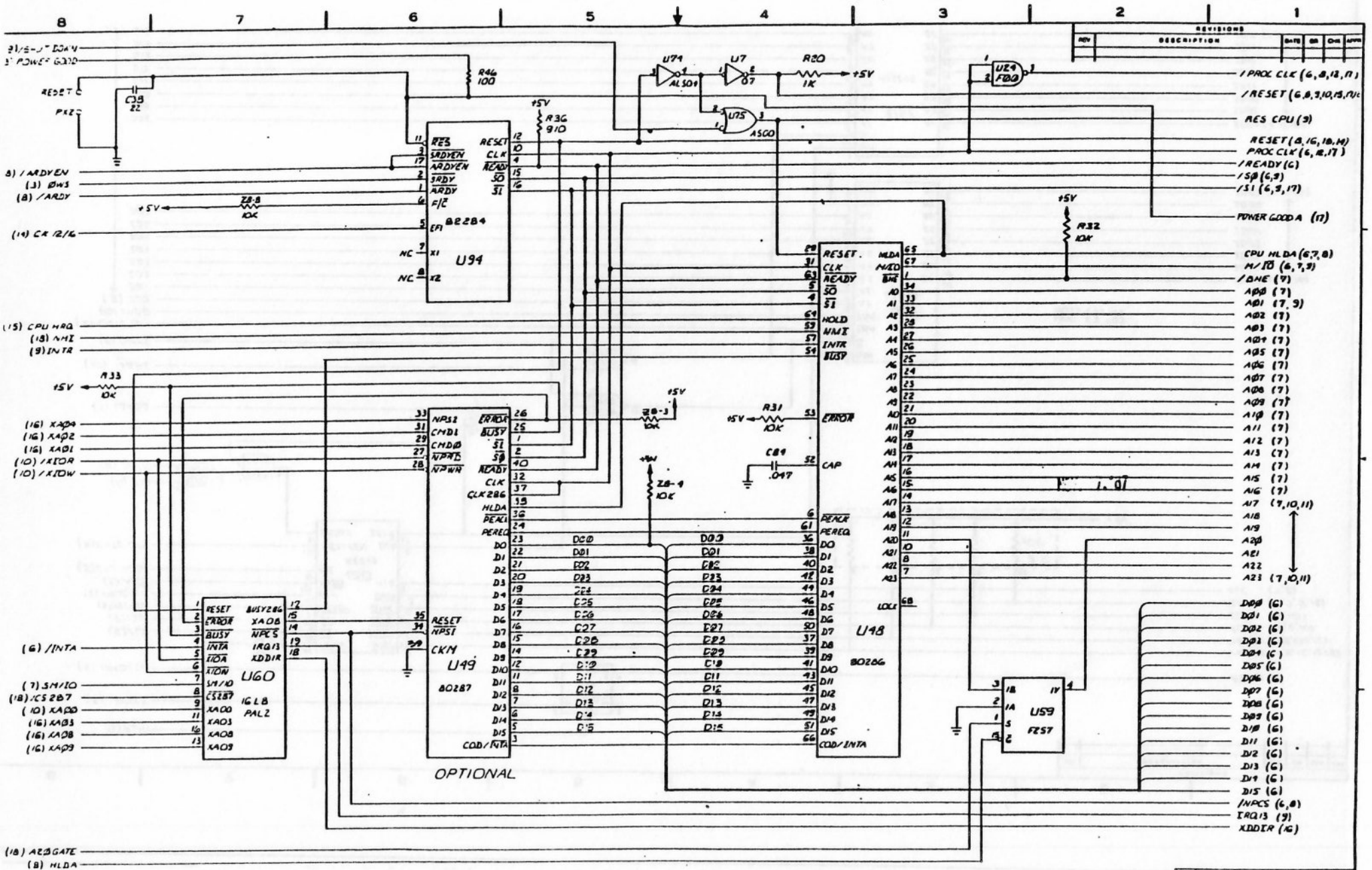
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REVISIONS				
REV	DESCRIPTION	DATE	DR	CHK APPR



NOV. 7 '87



REVISIONS				
REV	DESCRIPTION	DATE	BY	APPV
1	1 PROC CLK (6, 8, 12, 17)			
2	/RESET (6, 8, 10, 15, 16)			
3	RES CPU (9)			
4	RESET (8, 16, 18, 19)			
5	PROC CLK (6, 8, 17)			
6	/READY (6)			
7	/SB (6, 9)			
8	/S1 (6, 9, 17)			
9	POWER GOODA (17)			
10	CPU HLDA (6, 7, 8)			
11	M/IO (6, 7, 9)			
12	/DNE (7)			
13	A00 (7)			
14	A01 (7, 9)			
15	A02 (7)			
16	A03 (7)			
17	A04 (7)			
18	A05 (7)			
19	A06 (7)			
20	A07 (7)			
21	A08 (7)			
22	A09 (7)			
23	A10 (7)			
24	A11 (7)			
25	A12 (7)			
26	A13 (7)			
27	A14 (7)			
28	A15 (7)			
29	A16 (7)			
30	A17 (7, 10, 11)			
31	A18			
32	A19			
33	A20			
34	A21			
35	A22			
36	A23 (7, 10, 11)			
37	D00 (6)			
38	D01 (6)			
39	D02 (6)			
40	D03 (6)			
41	D04 (6)			
42	D05 (6)			
43	D06 (6)			
44	D07 (6)			
45	D08 (6)			
46	D09 (6)			
47	D10 (6)			
48	D11 (6)			
49	D12 (6)			
50	D13 (6)			
51	D14 (6)			
52	D15 (6)			
53	/NPCS (6, 8)			
54	/IRQ13 (9)			
55	XDDIR (6)			

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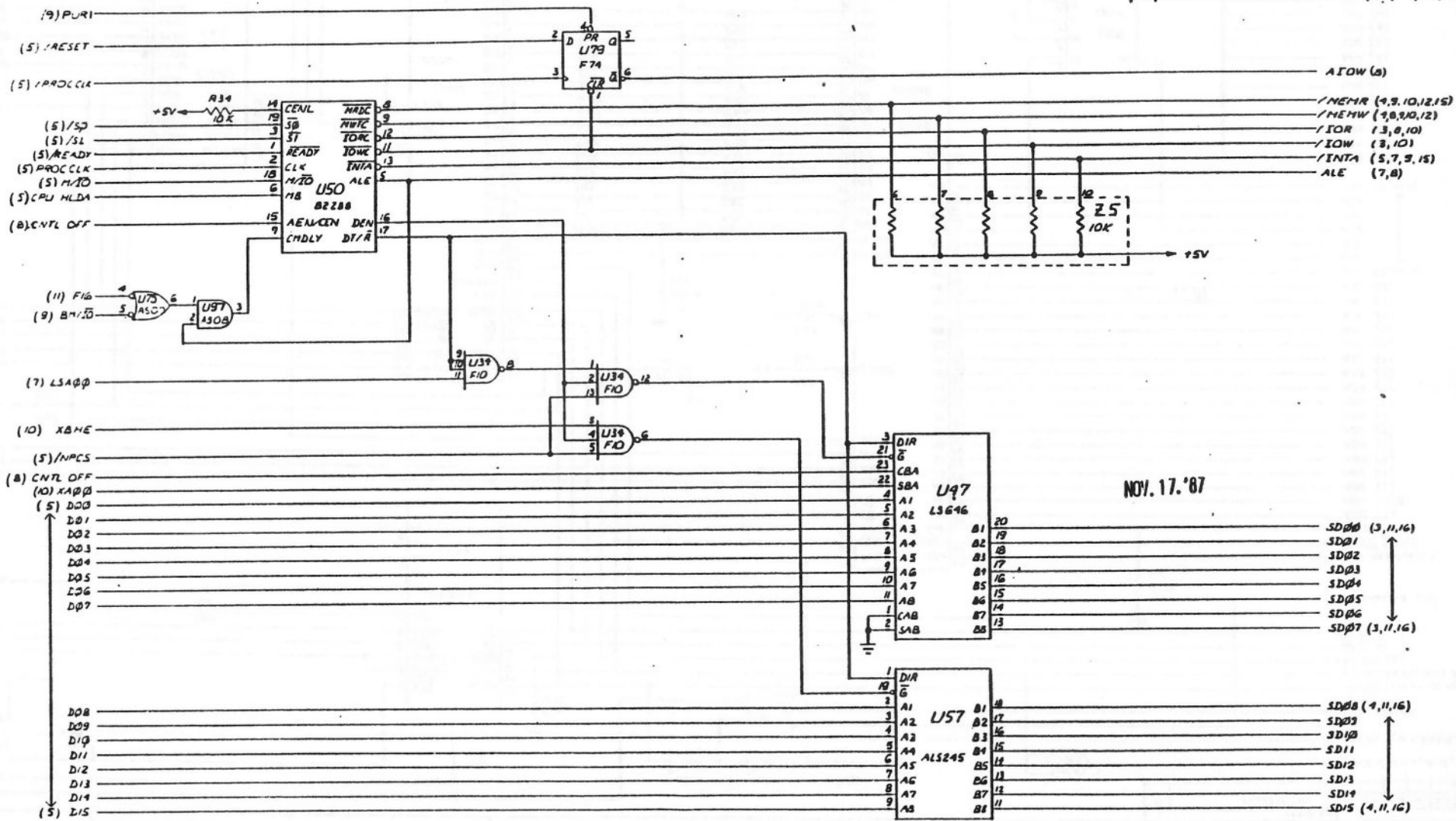
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REVISIONS				
REV	DESCRIPTION	DATE	BY	CHK APPR



NOTES UNLESS OTHERWISE SPECIFIED

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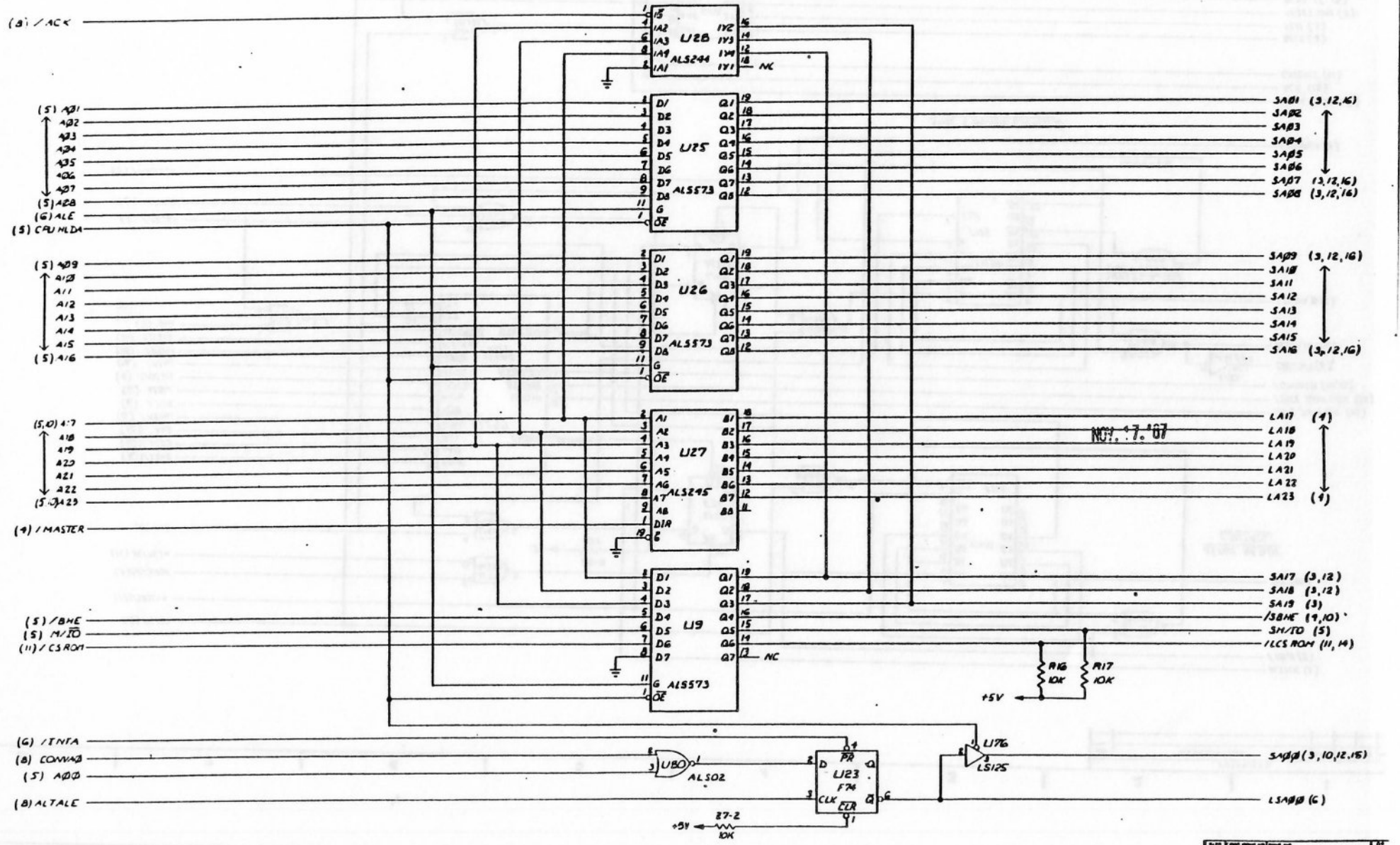
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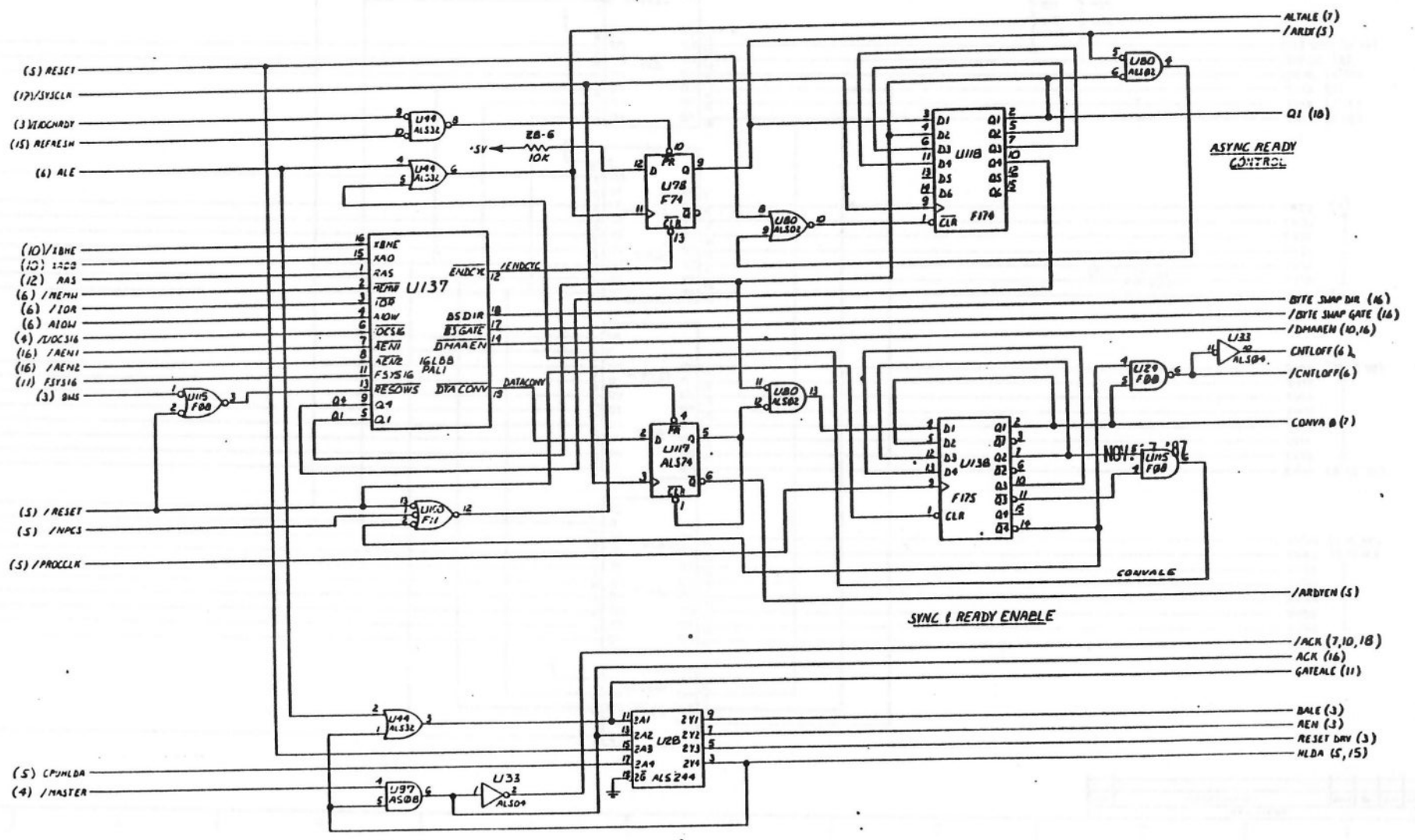
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REVISIONS			
REV	DESCRIPTION	DATE	CHK APP

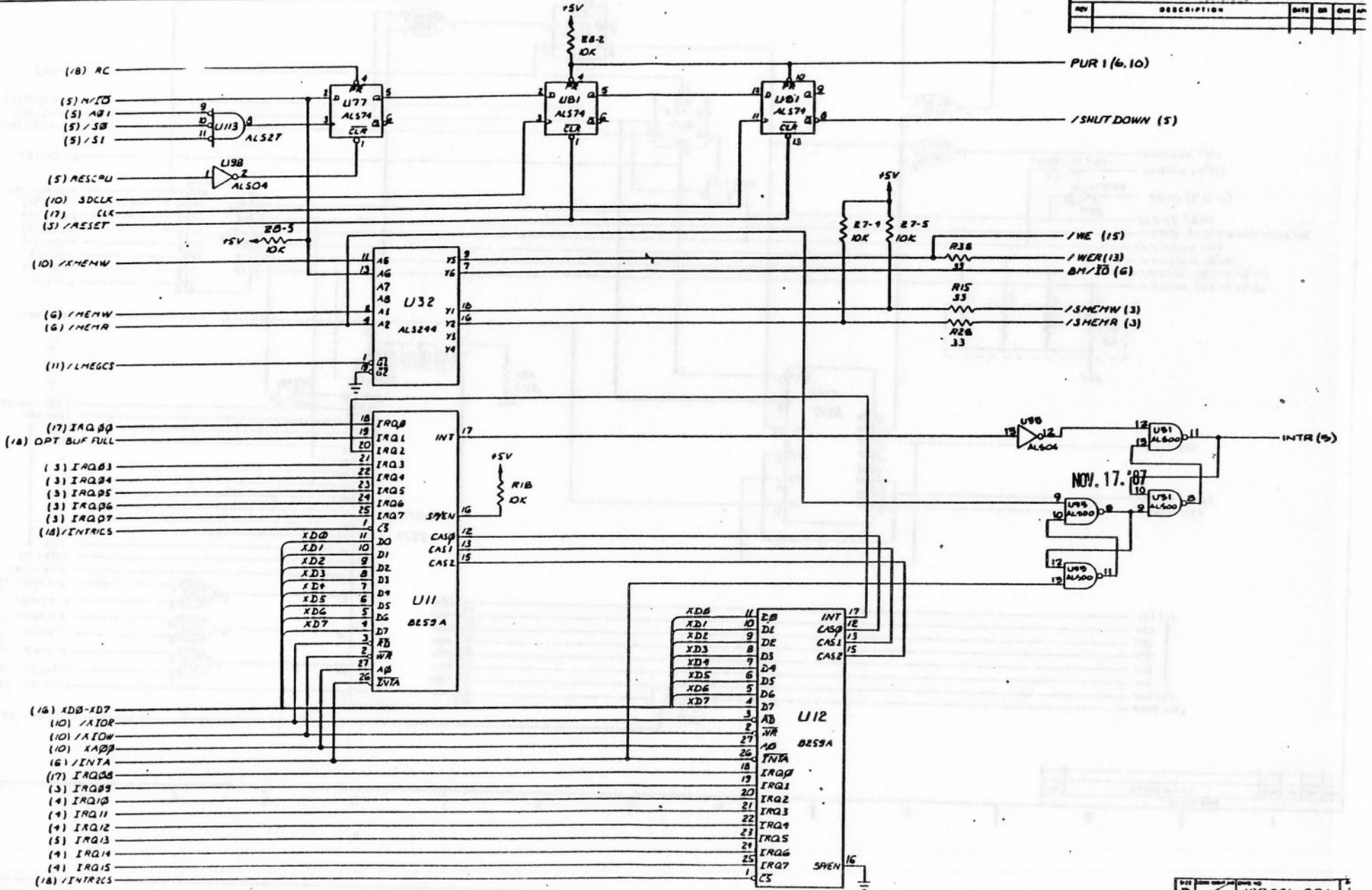


NOTES UNLESS OTHERWISE SPECIFIED



NOTES UNLESS OTHERWISE

REVISIONS			
REV	DESCRIPTION	DATE	BY



- (18) RC
- (5) N/IO
- (5) AB1
- (5) SB
- (5) SI
- (5) RESCPU
- (10) SDCLK
- (17) CLK
- (3) ASET
- (10) XMEMW
- (6) MEMW
- (6) MEMR
- (11) LMEGCS
- (17) IRQ0
- (18) OPT BUF FULL
- (3) IRQ1
- (3) IRQ2
- (3) IRQ3
- (3) IRQ4
- (3) IRQ5
- (3) IRQ6
- (3) IRQ7
- (18) INTRICS
- (16) XDB-XD7
- (10) INTA
- (10) INTB
- (10) INT
- (16) INTA
- (17) INTB
- (3) INT
- (4) INT
- (4) INT
- (5) INT
- (4) INT
- (4) INT
- (18) INTRICS

- PUR I (6.10)
- /SHUTDOWN (5)
- /ME (15)
- /WER (13)
- BM/IO (6)
- /SMEMW (3)
- /SMEMR (3)
- INTR (9)

NOTES UNLESS OTHERWISE SPECIFIED

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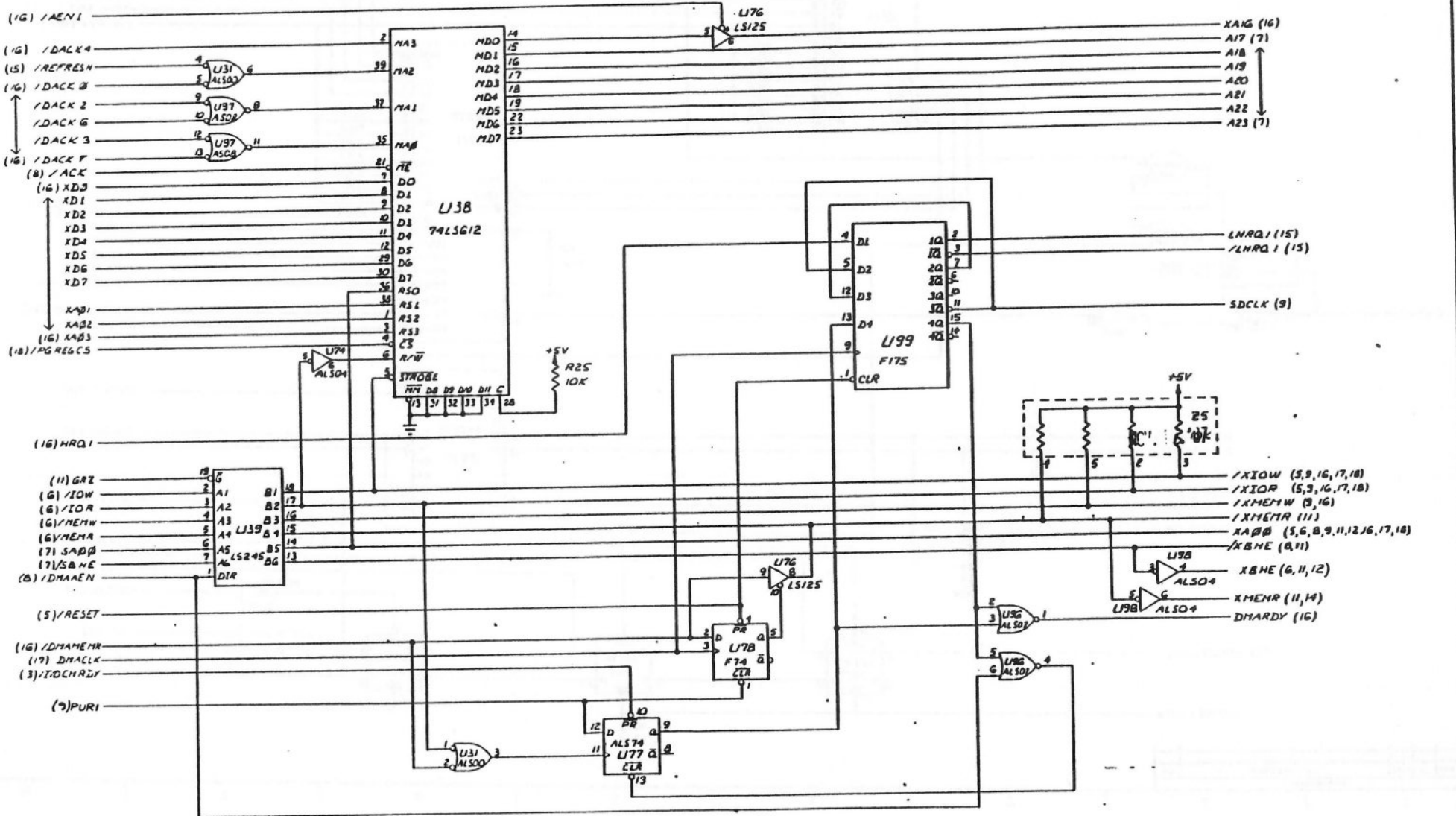
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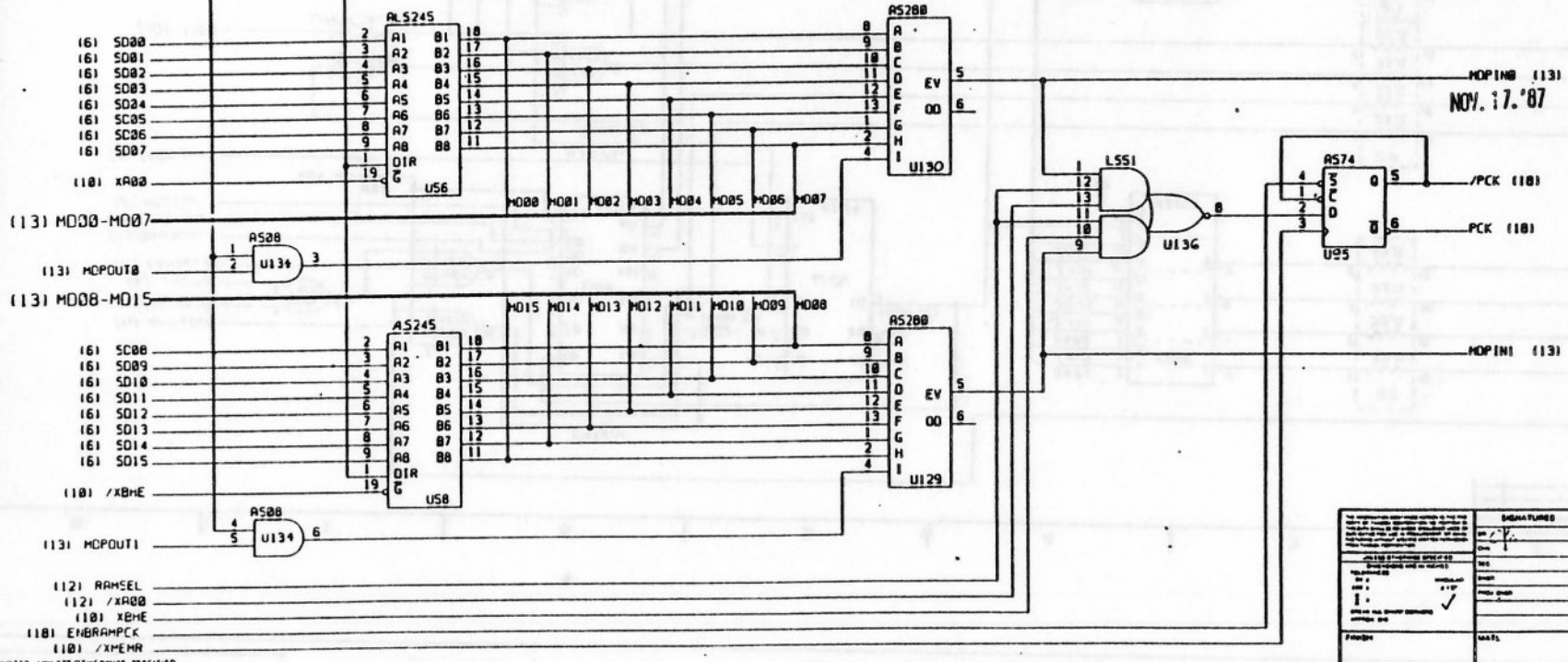
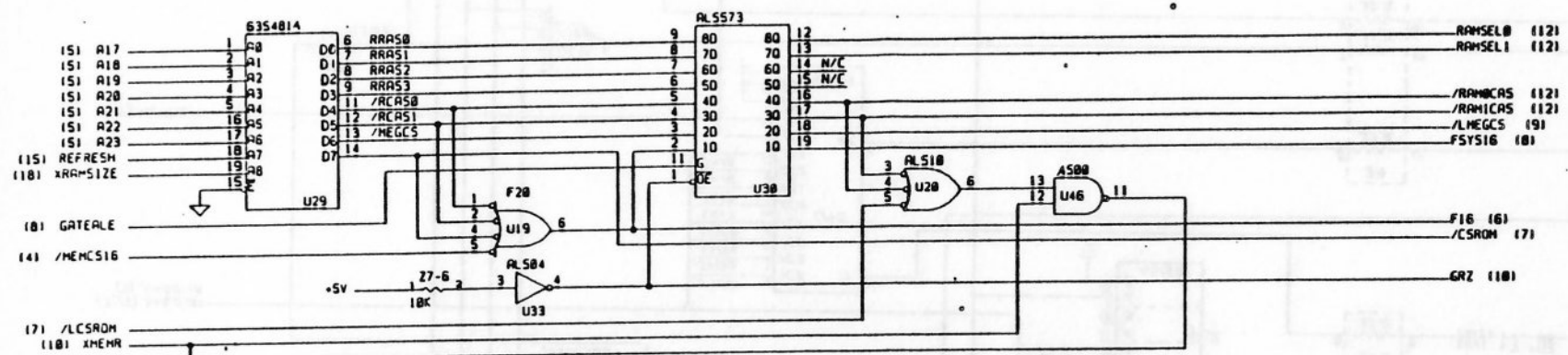
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REVISIONS				
REV	DESCRIPTION	DATE	DR	APPN



NOTES UNLESS OTHERWISE SPEC'

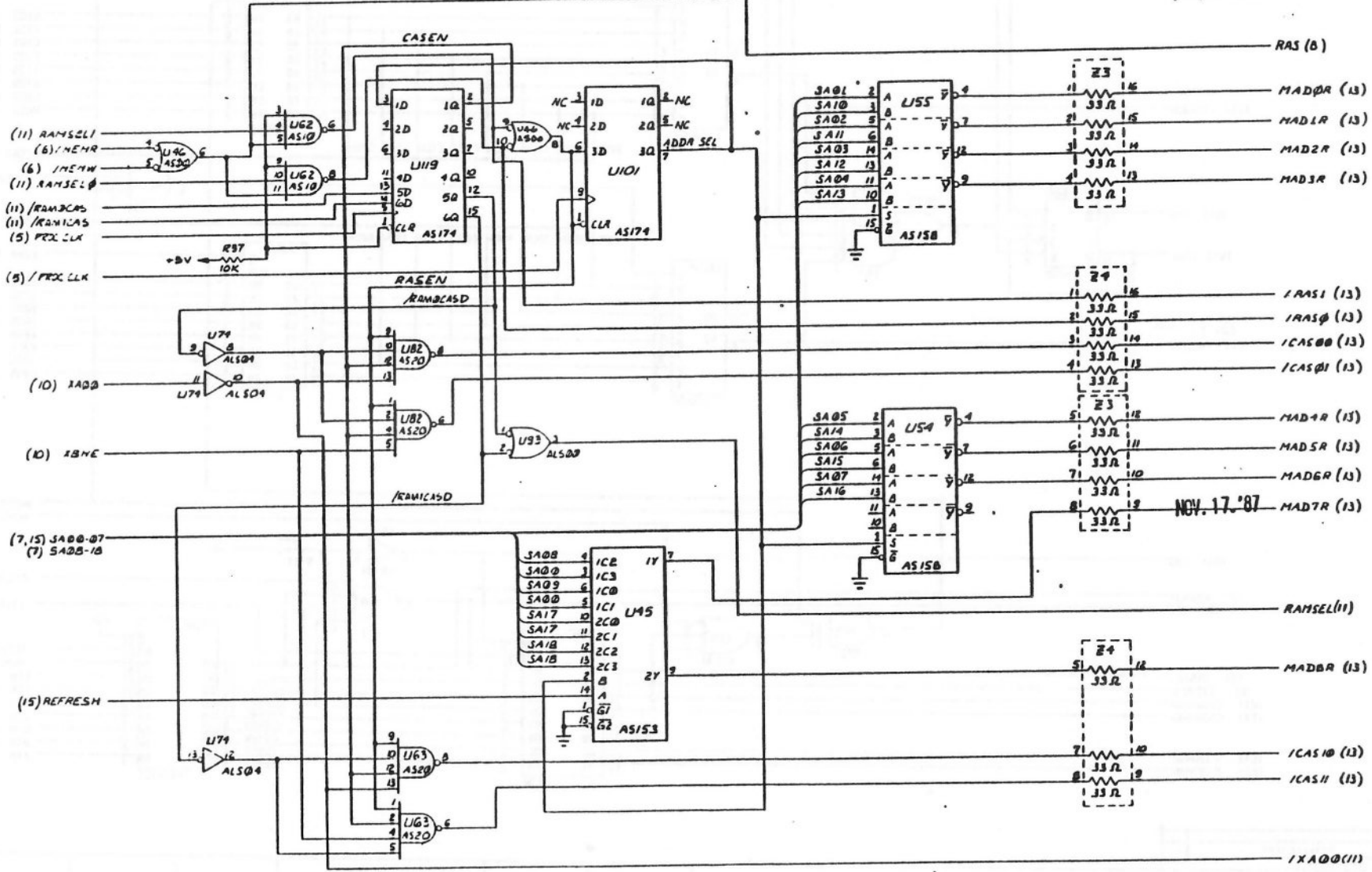
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REV	DESCRIPTION	DATE	BY	CHK



NOV. 17 '87

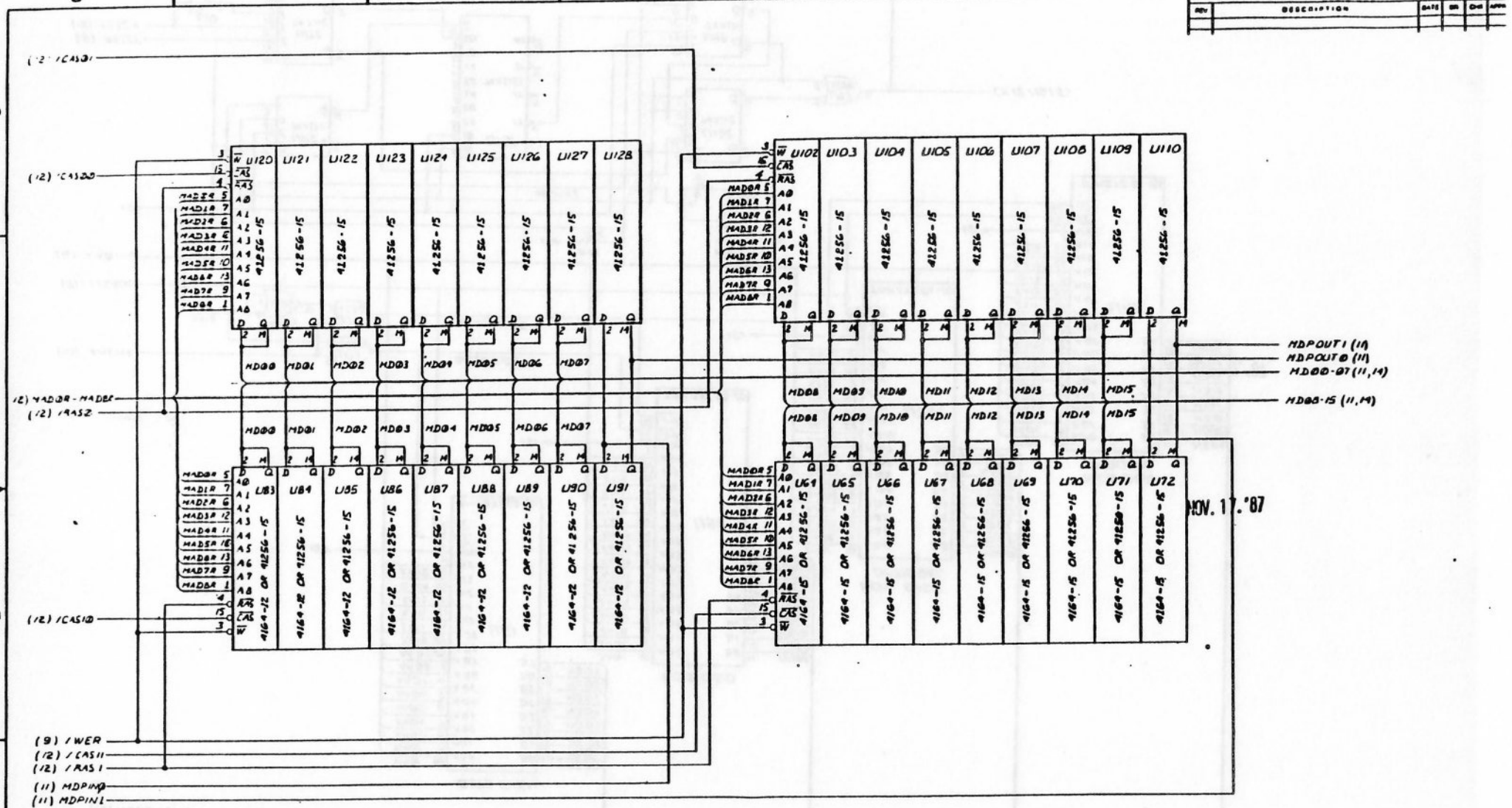
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TITLE: SCHEMATIC, MAIN PROCESSOR, AT		DRAWING NO: 189231-001	
SCALE:		SHEET NO: 11 OF 12	

NOTES UNLESS OTHERWISE SPECIFIED



NOV. 17 '87

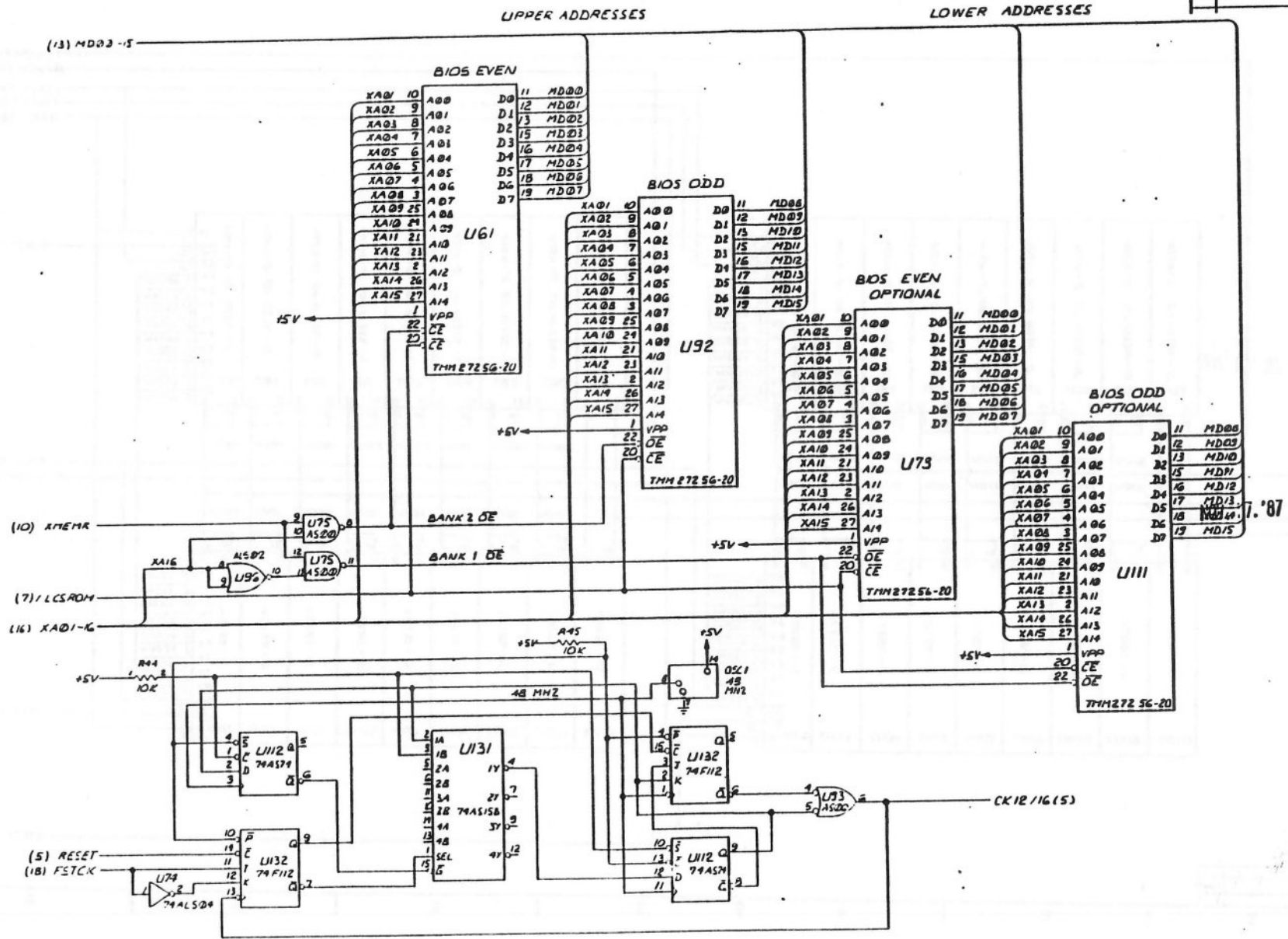
REVISIONS			
REV	DESCRIPTION	DATE	BY



NOTES UNLESS OTHERWISE SPECIFIED

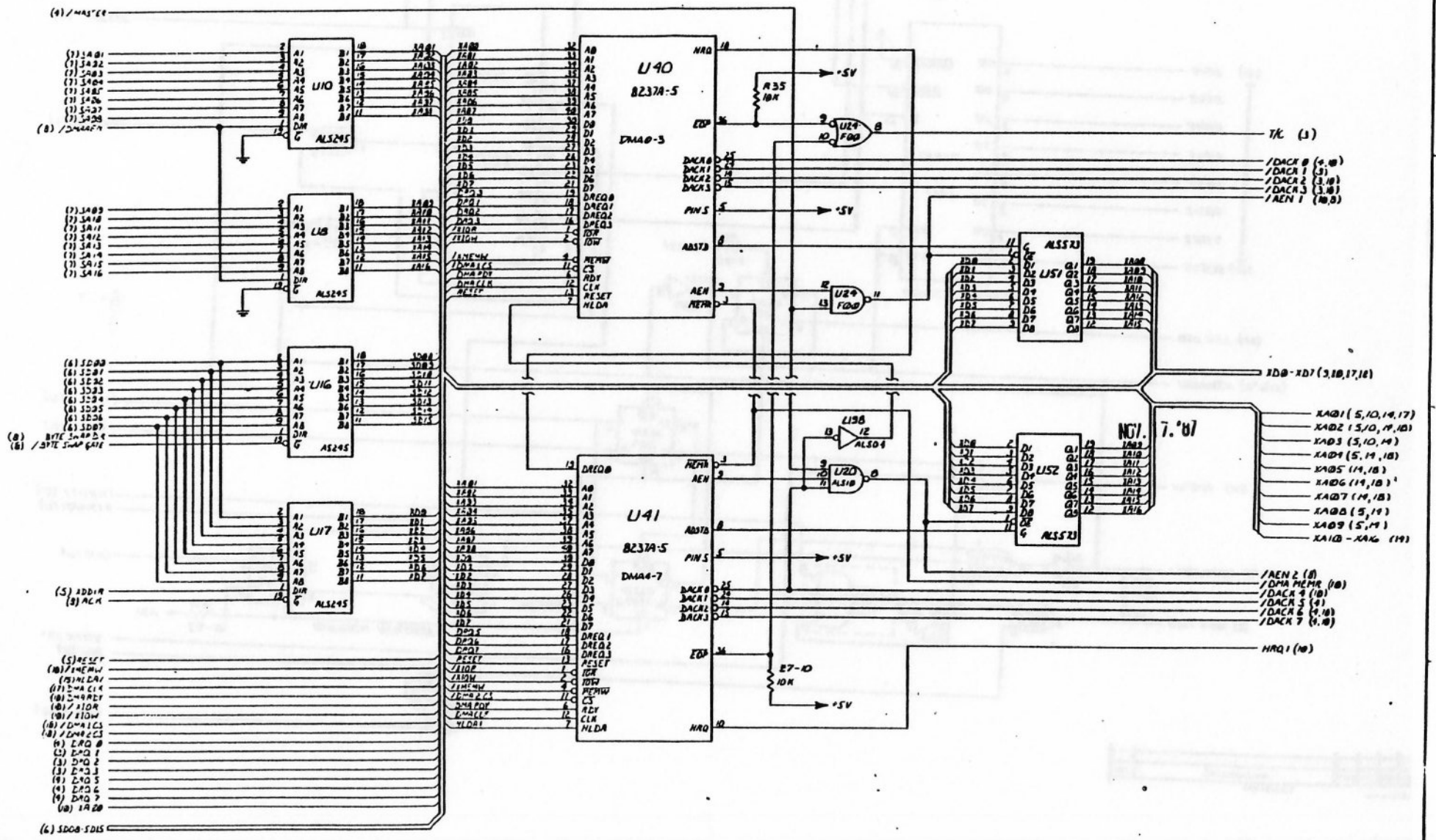
DATE: 189231-001
 SCALE: AS SHOWN
 DO NOT SCALE DIMS
 SHEET 13 OF 13

REVISIONS				
REV	DESCRIPTION	DATE	BY	APP

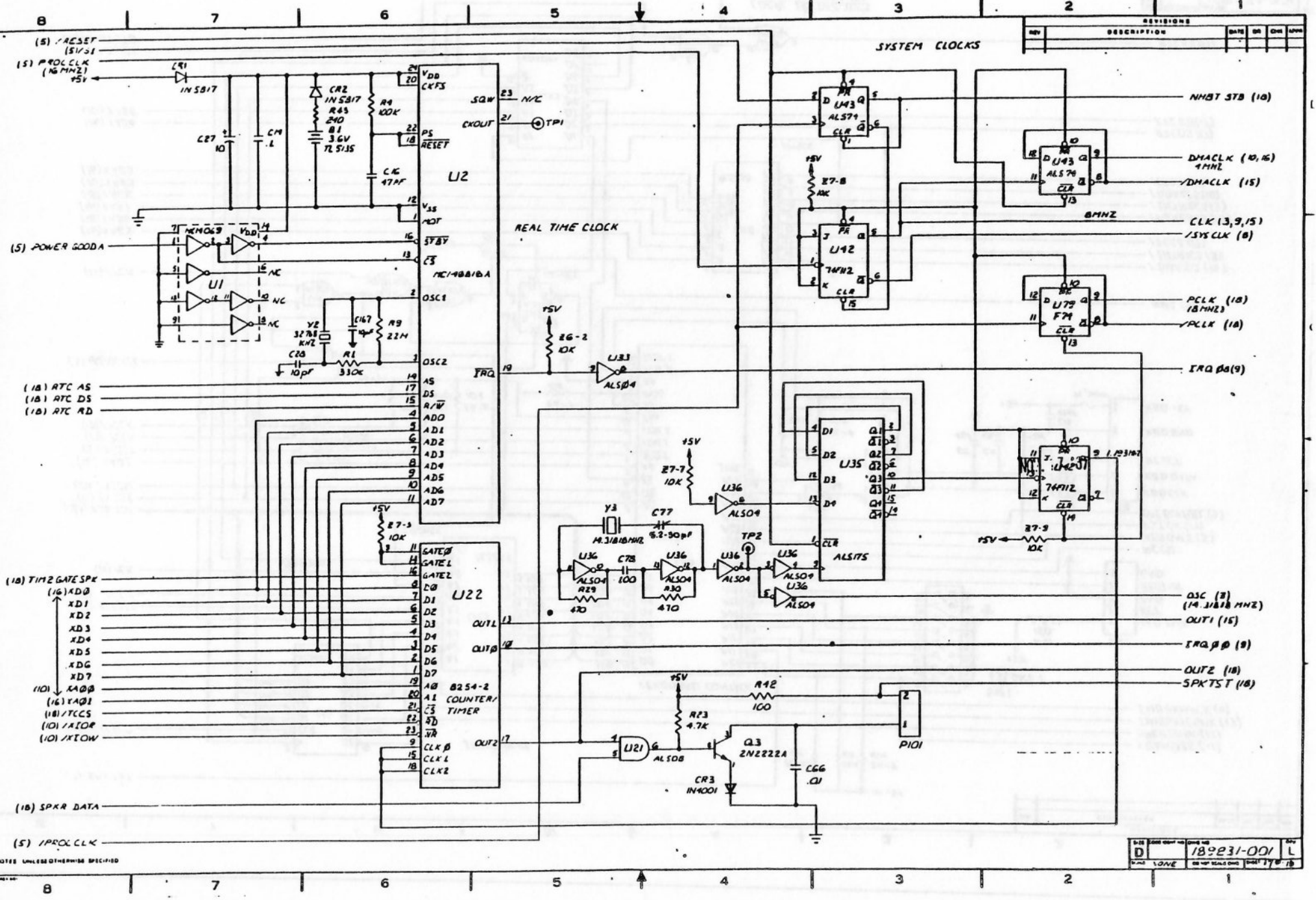


NOTES UNLESS OTHERWISE

REVISIONS				
REV	DESCRIPTION	DATE	BY	CHK APPR



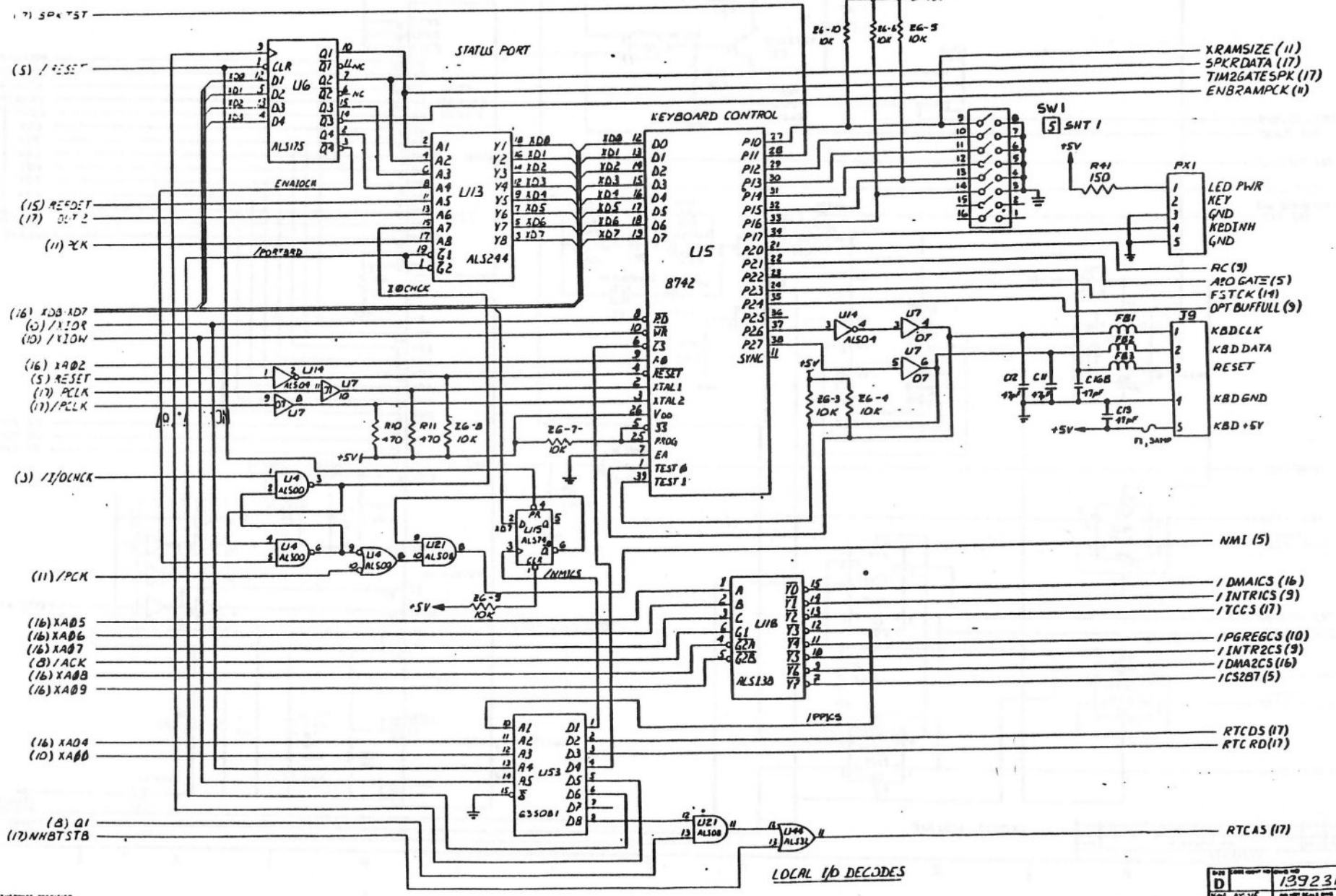
NOTES UNLESS OTHERWISE SPECIFIED:



NOTES UNLESS OTHERWISE SPECIFIED

REV	DESCRIPTION	DATE	BY	CHK	APP
D	189231-001				
LOVE					

REVISIONS		DATE	BY	CHK	APPV
REV	DESCRIPTION				



NOTES UNLESS OTHERWISE SPECIFIED

LOCAL I/O DECODES

DATE	139231-001	REV	L
BY	AD/VE	CHK	TS

REVISIONS						
REV	DESCRIPTION	DATES	BY	CHKD	APP'D	DATE
A	RELEASED PER E.O. 82288	1/12/7	DD	JR	DD	
B	REVISED PER E.O. 82283	2/24/7	DD	JR	DD	
C	REVISED PER E.O. 82482	4/18/7	DD	JR	DD	
D	REVISED PER E.O. 82418	4/18/7	DD	JR	DD	
E	REVISED PER E.O. 82488	8/8/7	DD	JR	DD	

REFERENCE DESIGNATOR TABLE						
INTEGRATED CIRCUIT			CAP			
REF	TYPE	VCC	GND	REF	VAL	PAGE
U81	74LS125	14	7	C801	0.01	2,13
U82	189194-083	13	12	C802	0.10	5,6
	BUSCTL	32	31	C126	0.10	
	GATE ARRAY	42				
		54	53	C127	0.10	
		64				
		73	72	C128	0.10	
U83	88287	9	18	C803	0.10	5
		38				
U84	88286-8	38	9	C804	0.10	5
		62	35	C129	0.10	
		68				
U85	74RS257	16	8	C805	0.01	5
U86	74LS84	14	7			5,10 8,11
U87	74LS244	28	18	C807	0.01	5,6
U88	74LS573	28	18			5
U89	74LS573	28	18	C809	0.01	5
U10	74LS245	28	18	C810	0.01	5
U11	74LS573	28	18	C811	0.01	5
U12	8259A	28	14	C812	0.10	6
U13	8259A	28	14	C813	0.10	6
U14	74LS646	24	12	C814	0.01	6
U15	74LS245	28	18	C815	0.01	6
U16	74LS245	28	18	C816	0.01	6
U17	74RS244	28	18	C817	0.01	6
U18	189194-083	13	12	C818	0.10	7
	MEMCTL	32	31	C138	0.10	
	GATE ARRAY	54	53	C131	0.10	
		58				
		46	47	C181	0.10	
		57	68	C182	0.10	
		73	72	C132	0.10	
U19	NOT USED	14	7	C819		
U20	MC14869	14	7	C820	0.10	2,10
U21	74LS245	28	18	C821	0.01	7
U22	74RS288	14	7	C822	0.01	7
U23	74RS288	14	7	C823	0.01	7
U24	74LS245	28	18			7
U25	74RS88	14	7	C825	0.01	8,7
U26	41256-15	8	16	C826	0.10	8
U27	41256-15	8	16	C827	0.10	8
U28	41256-15	8	16	C828	0.10	8
U29	41256-15	8	16	C829	0.10	8
U30	48PHZ OSC	14	7	C838	0.01	5

REFERENCE DESIGNATOR TABLE						
INTEGRATED CIRCUIT			CAP			
REF	TYPE	VCC	GND	REF	VAL	PAGE
U31	74LS84	14	7			2,10 7,12
U32	74RS158	16	8	C832	0.01	7
U33	74RS158	16	8	C833	0.01	7
U34	41256-15	8	16	C834	0.10	8
U35	41256-15	8	16	C835	0.10	8
U36	41256-15	8	16	C836	0.10	8
U37	41256-15	8	16	C837	0.10	8
U38	41256-15	8	16	C838	0.10	8
U39	74RS153	16	8	C839	0.01	7
U40	7487	14	7	C840	0.01	12,18 2,7
U41	NOT USED	14	7			
U42	8742	48	28	C842	0.10	12
U43	41256-15	8	16	C843	0.10	8
U44	41256-15	8	16	C844	0.10	8
U45	41256-15	8	16	C845	0.10	8
U46	41256-15	8	16	C846	0.10	8
U47	41256-15	8	16	C847	0.10	8
U48	8254A-5	24	12	C848	0.10	12
U49	189196-001	48	15	C849	0.10	12
	PP10CTL	91	66	C133	0.10	13
U50	74RS18	14	7	C850	0.10	7,11 13
U51	74F88	14	7	C851	0.01	18,11
U52	74LS573	28	18	C852	0.01	11
U53	41256-15	8	16	C853	0.10	8
U54	41256-15	8	16	C854	0.10	8
U55	41256-15	8	16	C855	0.10	8
U56	41256-15	8	16	C856	0.10	8
U57	74LS573	28	18	C857	0.01	11
U58	8237A-5	31	28	C858	0.10	11
U59	8237A-5	31	28	C859	0.10	11
U60	74LS245	28	18	C860	0.01	11
U61	74LS245	28	18	C861	0.01	11
U62	27256-28	28	14	C862	0.10	10
U63	27256-28	28	14	C863	0.10	10
U64	27256-28	28	14	C864	0.10	10
U65	27256-28	28	14	C865	0.10	10
U66	MC146818A	24	12	C866	0.10	10
U67	41256-15	8	16	C867	0.10	9
U68	41256-15	8	16	C868	0.10	9
U69	41256-15	8	16	C869	0.10	9

REFERENCE DESIGNATOR TABLE						
INTEGRATED CIRCUIT			CAP			
REF	TYPE	VCC	GND	REF	VAL	PAGE
U70	41256-15	8	16	C870	0.10	9
U71	41256-15	8	16	C871	0.10	9
U72	41256-15	8	16	C872	0.10	9
U73	41256-15	8	16	C873	0.10	9
U74	41256-15	8	16	C874	0.10	9
U75	41256-15	8	16	C875	0.10	9
U76	41256-15	8	16	C876	0.10	9
U77	41256-15	8	16	C877	0.10	9
U78	41256-15	8	16	C878	0.10	9
U79	41256-15	8	16	C879	0.10	9
U80	41256-15	8	16	C880	0.10	9
U81	41256-15	8	16	C881	0.10	9
U82	41256-15	8	16	C882	0.10	9
U83	74LS84	14	7	C883	0.01	13
U84	41256-15	8	16	C884	0.10	9
U85	41256-15	8	16	C885	0.10	9
U86	74LS248	28	18	C886	0.01	13
U87	16458	48	28	C887	0.10	13
U88	74LS85	14	7			2,13
U89	1489	14	7	C889	0.01	13
U90	1489	14	7	C890	0.01	2,13
U91	1488	-12V -14V -12V -1V	7	C891	0.01	2,13
U92	74LS245	28	18	C892	0.01	11
U93	74LS245	28	18	C893	0.01	11
U94	74LS244	28	18	C894	0.01	13
U95	1.8432 OSC	14	7	C895	0.01	13
U96	74RS74	14	7	C896	0.01	2,13
U97	74LS14	14	7	C897	0.01	2,8

- 10 DELETED IF 189194-083 OR LATER MEMORY CONTROL IC IS USED.
- 9 DELETE IF SERIAL/PARALLEL OPTION NOT INCLUDED.
- 8 EITHER 4164'S OR 41256'S MAY BE INSTALLED IN THESE LOCATIONS, HOWEVER, THEY MUST ALL MATCH.
- 7 PINS MARKED "N/C" HAVE NO CONNECTION.
- 6 NUMBERS IN PARENTHESES REFER TO SIGNAL SOURCE/DESTINATION SHEET(S).
- 5 PINS LISTED IN "VCC" COLUMN ARE CONNECTED TO +5V.
- 4 SPARE INPUTS ON U20 ARE GROUNDED VIA TRACES ON SOLDER SIDE.
- 3 NOTE: U20 AND U66 ARE ON SEPARATE VOLTAGE BUS.
- 2 ALL CAPACITORS ARE IN MICROFARADS.
- 1 ALL RESISTORS ARE IN OHMS, 1/4W, 5%.
NOTES: UNLESS OTHERWISE SPECIFIED

REV STATUS	REV	A	A												
OF SHEETS	SHEET	12	13	14	15	16	17	18	19	20	21	22			
REV STATUS	REV	E	A	B	B	E	E	A	A	A	A	A			
OF SHEETS	SHEET	1	2	3	4	5	6	7	8	9	10	11			

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SIGNATURES: DR V.H.V., CWK J. REEVES, DES, ENGR V.H.V., PROJ, KNSA

DATE: _____

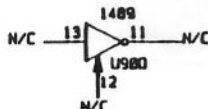
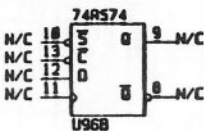
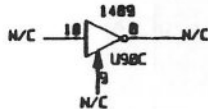
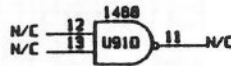
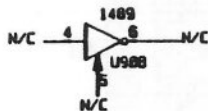
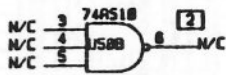
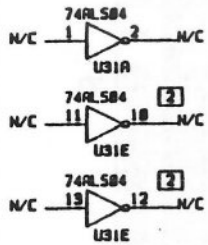
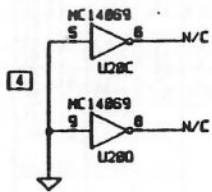
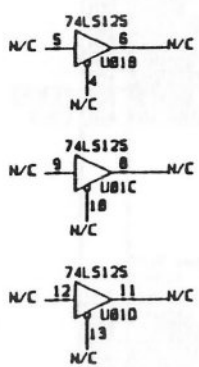
TITLE: SCHEMATIC, INTEGRATED AT PROCESSOR

SIZE: DWG NO. 189371-084

REV: E

COOR: SHEET 1 OF 13

SPARES



RESISTOR PACKS

8 RESISTOR PACK PAGE NUMBERS

P/N	A	B	C	D	E	F	G	H	
RP3	6	6	6	7	7	7	7	7	33 OHM
RP4	7	7	7	7	7	7	7	7	33 OHM
RP7	19	19	19	19	19	19	19	19	33 OHM

9 RESISTOR PACK PAGE NUMBERS

P/N	A	B	C	D	E	F	G	H	I	
RP1	5	5	5	5	5	5	13	7	3	10K OHM
RP2	12	6	6	6	6	6	6	12	10	10K
RP5	13	13	13	13	13	13	13	13	13	4.7K
RP6	7	13	13	13	12	12	13	13	3	4.7K
RP8	12	13	6	12	11	11	N/C	11	13	10K

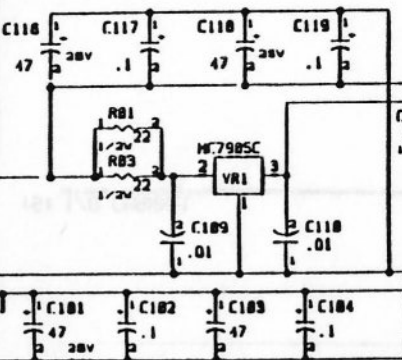
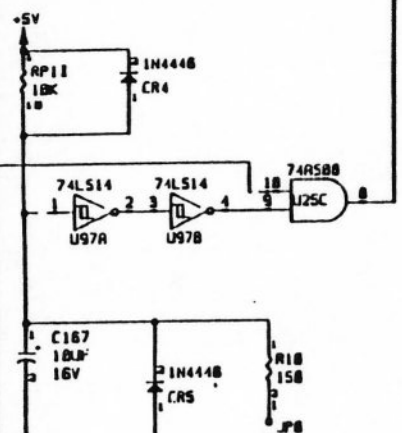
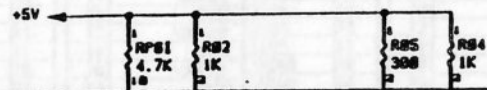


2 ITEMS U31E, U31F, AND U508 MAY HAVE RESIDUAL TRACES, AND CONNECTIONS USED IN -001 VERSION.

1 ITEMS U83A, U909, U90C, U90B, AND U91D ARE DELETED IF SERIAL/PAF OPTION NOT INCLUDED.

(15) I/O CHANNEL

PCDA (18)
POWERGOOD (15)

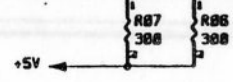
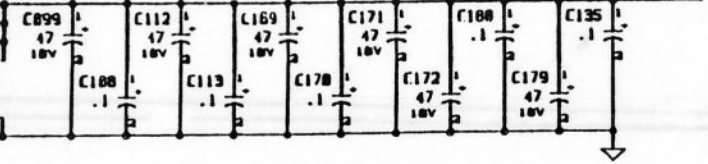


J1A	J1B		J2A	J2B	
/TOCHCK 01	01	GND	/TOCHCK 01	01	GND
S087 02	02	RESETRV	S087 02	02	RESETRV
S086 03	03	+5V	S086 03	03	+5V
S085 04	04	IR089	S085 04	04	IR089
S084 05	05	-5V	S084 05	05	-5V
S083 06	06	DR02	S083 06	06	DR02
S082 07	07	-12V	S082 07	07	-12V
S081 08	08	0V5	S081 08	08	0V5
S080 09	09	+12V	S080 09	09	+12V
TOCHROY 10	10	GND	TOCHROY 10	10	GND
REN 11	11	/SHEHV	REN 11	11	/SHEHV
SA19 12	12	/SHEHR	SA19 12	12	/SHEHR
SA18 13	13	/IOV	SA18 13	13	/IOV
SA17 14	14	/IOA	SA17 14	14	/IOA
SA16 15	15	/DACK3	SA16 15	15	/DACK3
SA15 16	16	DR03	SA15 16	16	DR03
SA14 17	17	/DACK1	SA14 17	17	/DACK1
SA13 18	18	DR01	SA13 18	18	DR01
SA12 19	19	/REFRESH	SA12 19	19	/REFRESH
SA11 20	20	BSYSCLK	SA11 20	20	BSYSCLK
SA10 21	21	IR087	SA10 21	21	IR087
SA09 22	22	IR086	SA09 22	22	IR086
SA08 23	23	IR085	SA08 23	23	IR085
SA07 24	24	IR084	SA07 24	24	IR084
SA06 25	25	IR083	SA06 25	25	IR083
SA05 26	26	/DACK2	SA05 26	26	/DACK2
SA04 27	27	TERMCNT	SA04 27	27	TERMCNT
SA03 28	28	BALE	SA03 28	28	BALE
SA02 29	29	+5V	SA02 29	29	+5V
SA01 30	30	14.31810MHz	SA01 30	30	14.31810MHz
SA00 31	31	GND	SA00 31	31	GND

J2C	J2D		J3C	J3D	
/S0HE 01	01		/S0HE 01	01	
LA23 02	02	/MEMS16	LA23 02	02	/MEMS16
LA22 03	03	/IOCS16	LA22 03	03	/IOCS16
LA21 04	04	IR018	LA21 04	04	IR018
LA20 05	05	IR012	LA20 05	05	IR012
LA19 06	06	IR015	LA19 06	06	IR015
LA18 07	07	IR014	LA18 07	07	IR014
LA17 08	08	/DACK8	LA17 08	08	/DACK8
LA16 09	09	DR08	LA16 09	09	DR08
/MEHR 10	10	/MEHV	/MEHR 10	10	/MEHV
S088 11	11	DR05	S088 11	11	DR05
S089 12	12	/DACK6	S089 12	12	/DACK6
S010 13	13	DR06	S010 13	13	DR06
S011 14	14	/DACK7	S011 14	14	/DACK7
S012 15	15	DR07	S012 15	15	DR07
S013 16	16	+5V	S013 16	16	+5V
S014 17	17	/MASTER	S014 17	17	/MASTER
S015 18	18	GND	S015 18	18	GND

J4C	J4D		J5C	J5D	
/S0HE 01	01		/S0HE 01	01	
LA23 02	02	/MEMS16	LA23 02	02	/MEMS16
LA22 03	03	/IOCS16	LA22 03	03	/IOCS16
LA21 04	04	IR018	LA21 04	04	IR018
LA20 05	05	IR012	LA20 05	05	IR012
LA19 06	06	IR015	LA19 06	06	IR015
LA18 07	07	IR014	LA18 07	07	IR014
LA17 08	08	/DACK8	LA17 08	08	/DACK8
LA16 09	09	DR08	LA16 09	09	DR08
/MEHR 10	10	/MEHV	/MEHR 10	10	/MEHV
S088 11	11	DR05	S088 11	11	DR05
S089 12	12	/DACK6	S089 12	12	/DACK6
S010 13	13	DR06	S010 13	13	DR06
S011 14	14	/DACK7	S011 14	14	/DACK7
S012 15	15	DR07	S012 15	15	DR07
S013 16	16	+5V	S013 16	16	+5V
S014 17	17	/MASTER	S014 17	17	/MASTER
S015 18	18	GND	S015 18	18	GND

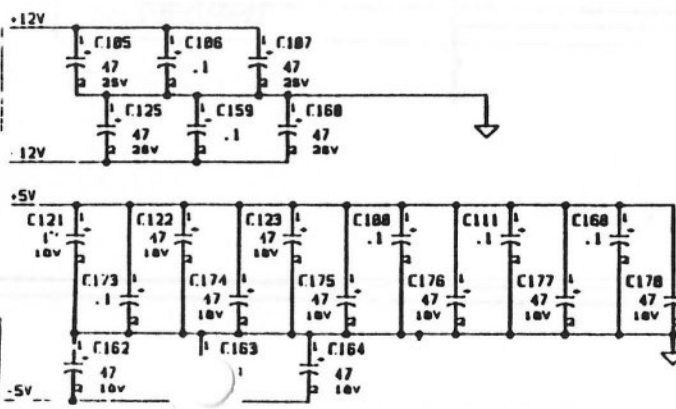
J4C	J4D		J5C	J5D	
/S0HE 01	01		/S0HE 01	01	
LA23 02	02	/MEMS16	LA23 02	02	/MEMS16
LA22 03	03	/IOCS16	LA22 03	03	/IOCS16
LA21 04	04	IR018	LA21 04	04	IR018
LA20 05	05	IR012	LA20 05	05	IR012
LA19 06	06	IR015	LA19 06	06	IR015
LA18 07	07	IR014	LA18 07	07	IR014
LA17 08	08	/DACK8	LA17 08	08	/DACK8
LA16 09	09	DR08	LA16 09	09	DR08
/MEHR 10	10	/MEHV	/MEHR 10	10	/MEHV
S088 11	11	DR05	S088 11	11	DR05
S089 12	12	/DACK6	S089 12	12	/DACK6
S010 13	13	DR06	S010 13	13	DR06
S011 14	14	/DACK7	S011 14	14	/DACK7
S012 15	15	DR07	S012 15	15	DR07
S013 16	16	+5V	S013 16	16	+5V
S014 17	17	/MASTER	S014 17	17	/MASTER
S015 18	18	GND	S015 18	18	GND

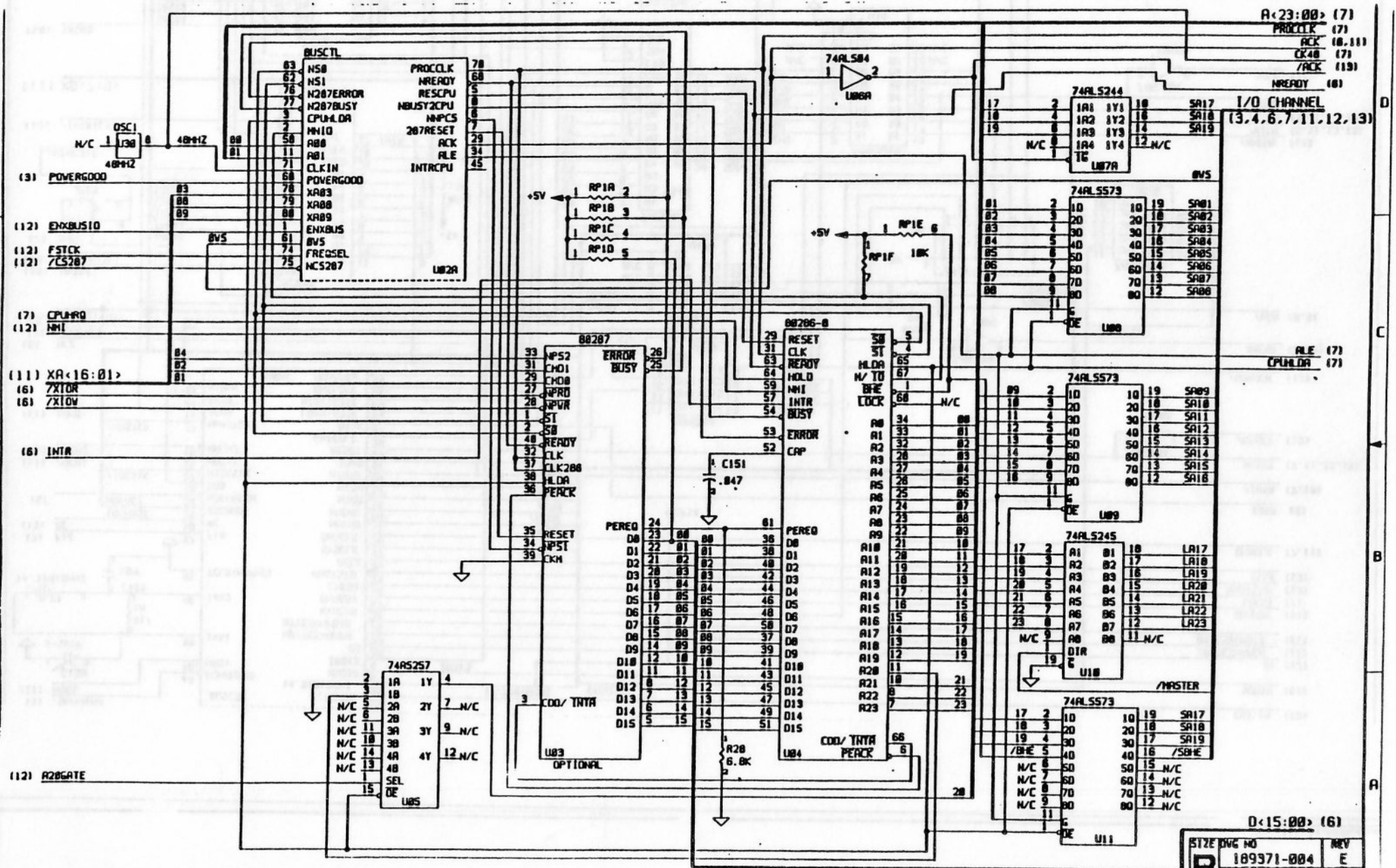


(5) I/O CHANNEL

J5A		J5B		J6A		J6B		J7A		J7B		J8A		J8B	
/IOCHCK	01	01	GND	/IOCHCK	01	01	GND	/IOCHCK	01	01	GND	/IOCHCK	01	01	GND
S007	02	02	RESETDRY	S007	02	02	RESETDRY	S007	02	02	RESETDRY	S007	02	02	RESETDRY
S006	03	03	+5V	S006	03	03	+5V	S006	03	03	+5V	S006	03	03	+5V
S005	04	04	IR009	S005	04	04	IR009	S005	04	04	IR009	S005	04	04	IR009
S004	05	05	-5V	S004	05	05	-5V	S004	05	05	-5V	S004	05	05	-5V
S003	06	06	DR02	S003	06	06	DR02	S003	06	06	DR02	S003	06	06	DR02
S002	07	07	-12V	S002	07	07	-12V	S002	07	07	-12V	S002	07	07	-12V
S001	08	08	0VS	S001	08	08	0VS	S001	08	08	0VS	S001	08	08	0VS
S000	09	09	+12V	S000	09	09	+12V	S000	09	09	+12V	S000	09	09	+12V
TOCHR0Y	10	10	GND	TOCHR0Y	10	10	GND	TOCHR0Y	10	10	GND	TOCHR0Y	10	10	GND
REN	11	11	/SHEHV	REN	11	11	/SHEHV	REN	11	11	/SHEHV	REN	11	11	/SHEHV
SA19	12	12	/SHEHR	SA19	12	12	/SHEHR	SA19	12	12	/SHEHR	SA19	12	12	/SHEHR
SA10	13	13	/I0V	SA10	13	13	/I0V	SA10	13	13	/I0V	SA10	13	13	/I0V
SA17	14	14	/I0R	SA17	14	14	/I0R	SA17	14	14	/I0R	SA17	14	14	/I0R
SA16	15	15	/DACK3	SA16	15	15	/DACK3	SA16	15	15	/DACK3	SA16	15	15	/DACK3
SA15	16	16	DR03	SA15	16	16	DR03	SA15	16	16	DR03	SA15	16	16	DR03
SA14	17	17	/DACK1	SA14	17	17	/DACK1	SA14	17	17	/DACK1	SA14	17	17	/DACK1
SA13	18	18	DR01	SA13	18	18	DR01	SA13	18	18	DR01	SA13	18	18	DR01
SA12	19	19	/REFRESH	SA12	19	19	/REFRESH	SA12	19	19	/REFRESH	SA12	19	19	/REFRESH
SA11	20	20	BSYSCLK	SA11	20	20	BSYSCLK	SA11	20	20	BSYSCLK	SA11	20	20	BSYSCLK
SA10	21	21	IR007	SA10	21	21	IR007	SA10	21	21	IR007	SA10	21	21	IR007
SA09	22	22	IR008	SA09	22	22	IR008	SA09	22	22	IR008	SA09	22	22	IR008
SA08	23	23	IR005	SA08	23	23	IR005	SA08	23	23	IR005	SA08	23	23	IR005
SA07	24	24	IR004	SA07	24	24	IR004	SA07	24	24	IR004	SA07	24	24	IR004
SA06	25	25	IR003	SA06	25	25	IR003	SA06	25	25	IR003	SA06	25	25	IR003
SA05	26	26	/DACK2	SA05	26	26	/DACK2	SA05	26	26	/DACK2	SA05	26	26	/DACK2
SA04	27	27	TERMCNT	SA04	27	27	TERMCNT	SA04	27	27	TERMCNT	SA04	27	27	TERMCNT
SA03	28	28	BALE	SA03	28	28	BALE	SA03	28	28	BALE	SA03	28	28	BALE
SA02	29	29	+5V	SA02	29	29	+5V	SA02	29	29	+5V	SA02	29	29	+5V
SA01	30	30	14.3101MHz	SA01	30	30	14.3101MHz	SA01	30	30	14.3101MHz	SA01	30	30	14.3101MHz
SA00	31	31	GND	SA00	31	31	GND	SA00	31	31	GND	SA00	31	31	GND

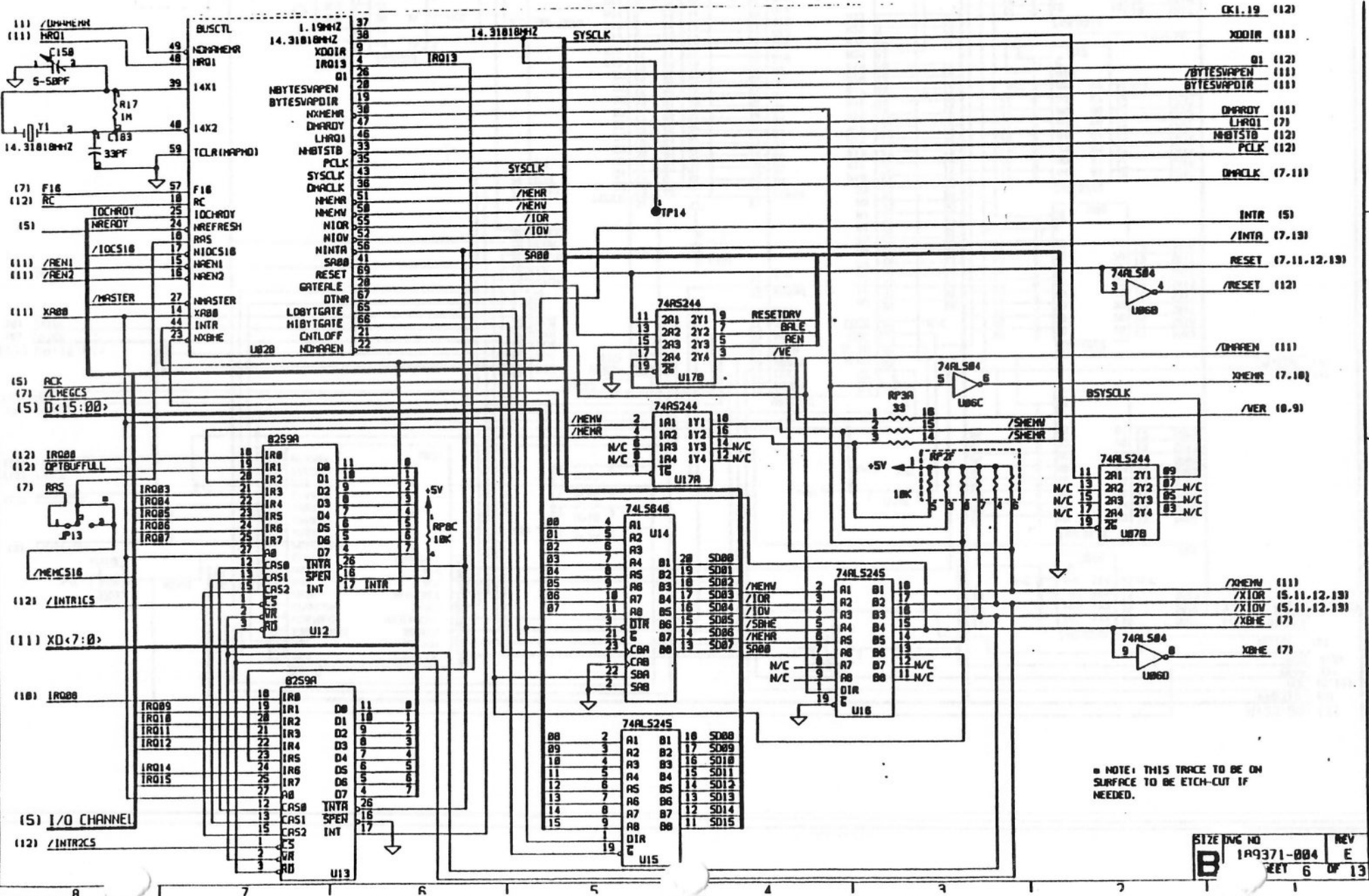
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LA23	02	02	/I0CS16	LA23	02	02	/I0CS16	LA23	02	02	/I0CS16	LA23	02	02	/I0CS16
LA22	03	03	IR010	LA22	03	03	IR010	LA22	03	03	IR010	LA22	03	03	IR010
LA21	04	04	IR011	LA21	04	04	IR011	LA21	04	04	IR011	LA21	04	04	IR011
LA20	05	05	IR012	LA20	05	05	IR012	LA20	05	05	IR012	LA20	05	05	IR012
LA19	06	06	IR015	LA19	06	06	IR015	LA19	06	06	IR015	LA19	06	06	IR015
LA18	07	07	IR014	LA18	07	07	IR014	LA18	07	07	IR014	LA18	07	07	IR014
LA17	08	08	/DACK0	LA17	08	08	/DACK0	LA17	08	08	/DACK0	LA17	08	08	/DACK0
/SHEHR	09	09	DR00	/SHEHR	09	09	DR00	/SHEHR	09	09	DR00	/SHEHR	09	09	DR00
/SHEHV	10	10	/DACK5	/SHEHV	10	10	/DACK5	/SHEHV	10	10	/DACK5	/SHEHV	10	10	/DACK5
S000	11	11	DR05	S000	11	11	DR05	S000	11	11	DR05	S000	11	11	DR05
S009	12	12	/DACK6	S009	12	12	/DACK6	S009	12	12	/DACK6	S009	12	12	/DACK6
S010	13	13	DR06	S010	13	13	DR06	S010	13	13	DR06	S010	13	13	DR06
S011	14	14	/DACK7	S011	14	14	/DACK7	S011	14	14	/DACK7	S011	14	14	/DACK7
S012	15	15	DR07	S012	15	15	DR07	S012	15	15	DR07	S012	15	15	DR07
S013	16	16	+5V	S013	16	16	+5V	S013	16	16	+5V	S013	16	16	+5V
S014	17	17	/MASTER	S014	17	17	/MASTER	S014	17	17	/MASTER	S014	17	17	/MASTER
S015	18	18	GND	S015	18	18	GND	S015	18	18	GND	S015	18	18	GND





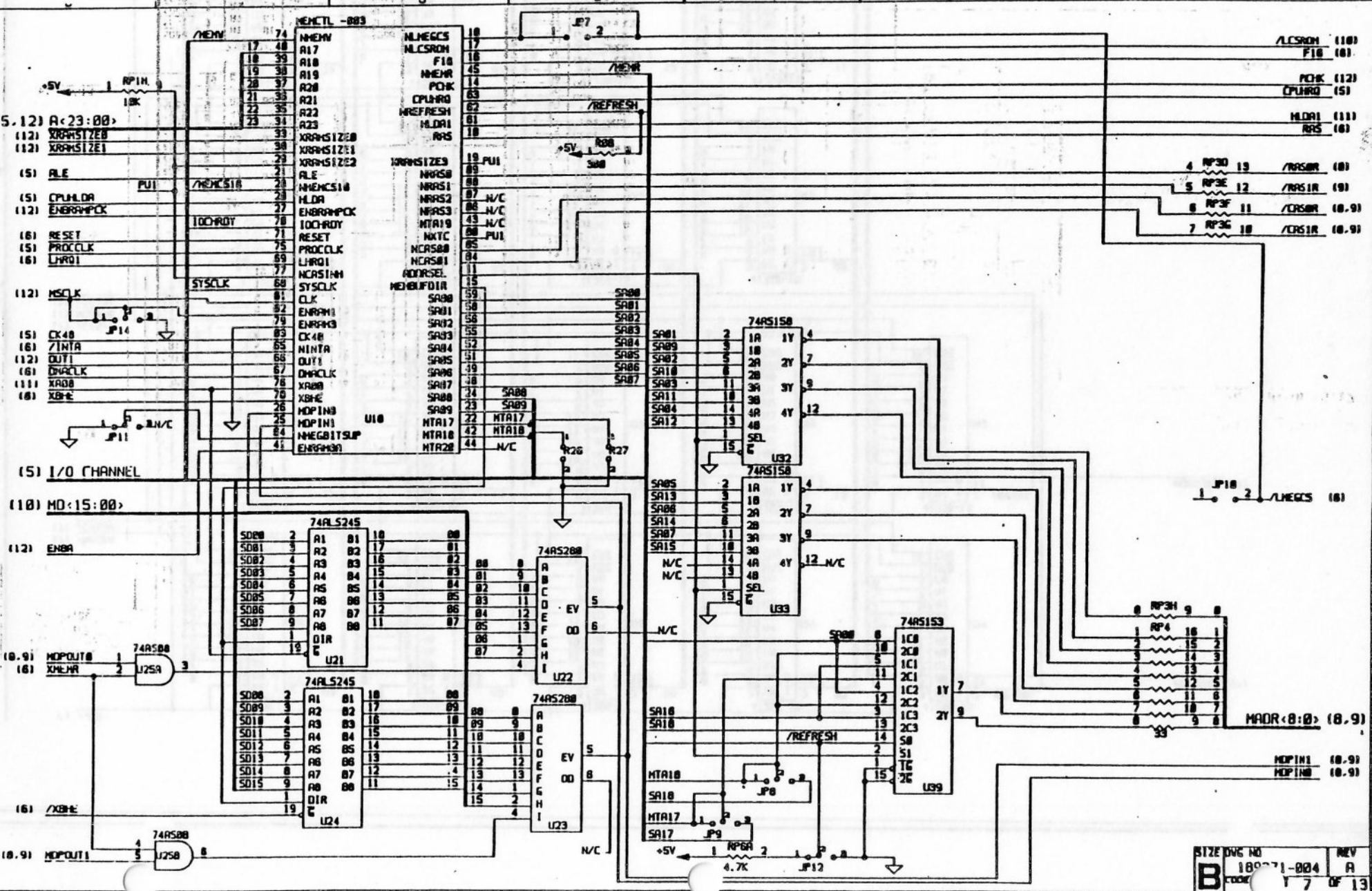
- (13) PVERGOOD
- (12) ENXBUSIO
- (12) FSTCK
- (12) /CS207
- (17) CPUHRQ
- (12) NHI
- (11) XA<16:0>
- (16) /XTOR
- (16) /XIDV
- (16) INTR
- (12) A20GATE

- A<23:00> (7)
- PROCLCK (7)
- ACK (8,11)
- CR40 (17)
- /ACK (13)
- NREADY (8)
- I/O CHANNEL (3,4,6,7,11,12,13)
- ALE (17)
- CPUHDA (17)
- D<15:00> (6)



- OKI.19 (112)
- XODIR (111)
- B1 (112)
- /BYTESWAPEN (111)
- BYTESWAPDIR (111)
- DMRDY (111)
- LHRQ1 (7)
- NBTSTB (112)
- PCLK (112)
- DMACK (17.111)
- INTR (5)
- /INTA (7.13)
- RESET (17.11.12.13)
- /RESET (112)
- /DMRREN (111)
- XMEMR (7.10)
- /VER (8.9)
- /XMEMV (111)
- /XTOR (5.11.12.13)
- /XTOW (5.11.12.13)
- /XBE (7)

NOTE: THIS TRACE TO BE ON SURFACE TO BE ETCH-CUT IF NEEDED.



(5.12) A<23:00>

(12) XRAMSIZE0

(5) ALE

(12) CPUHDA

(12) ENBRAMPCK

(12) MCLK

(15) CK40

(16) ZINTA

(12) OUT1

(16) DRACLK

(11) XA00

(16) XA0E

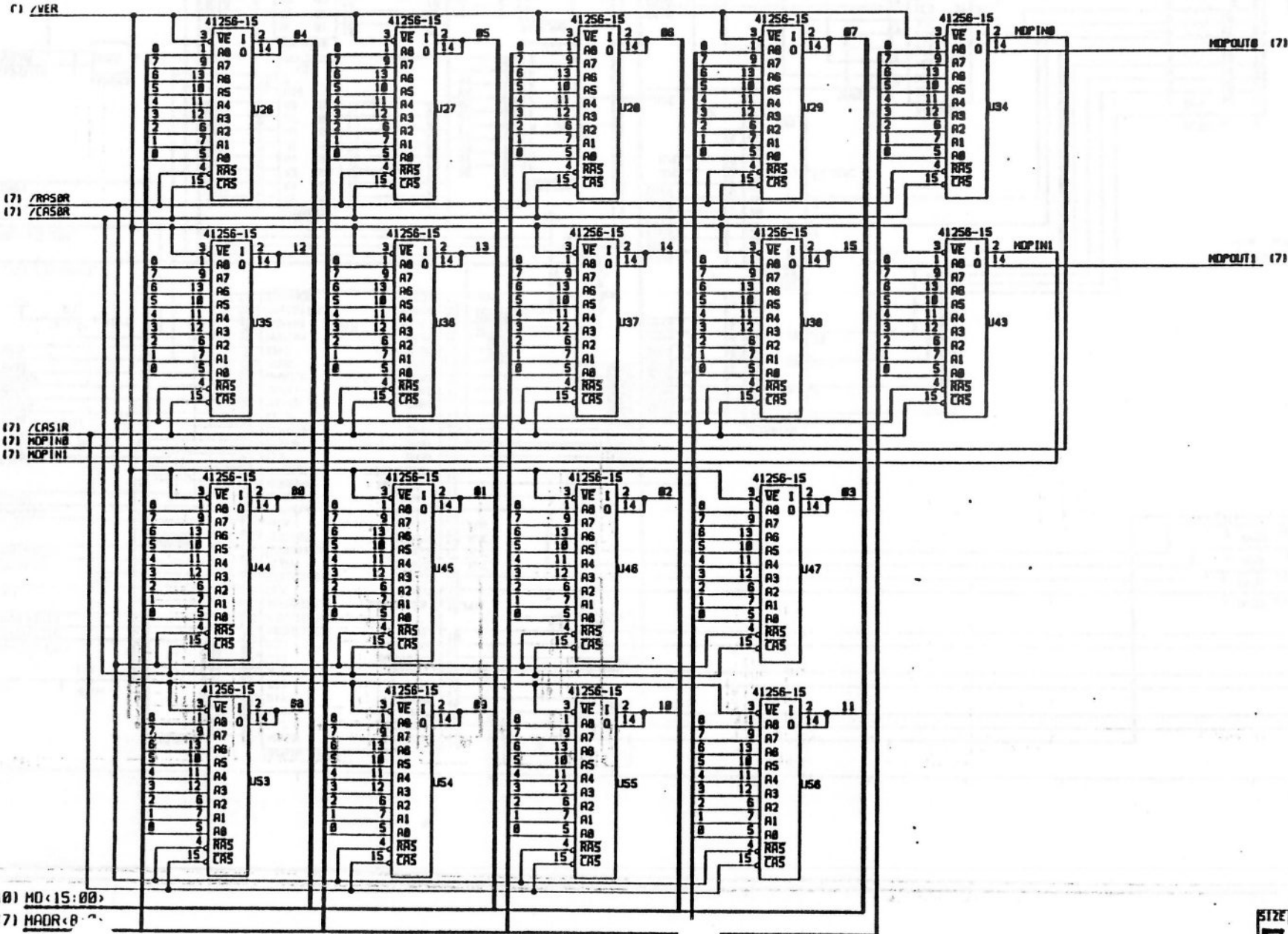
(10.9) MPOUT0

(16) XA0E

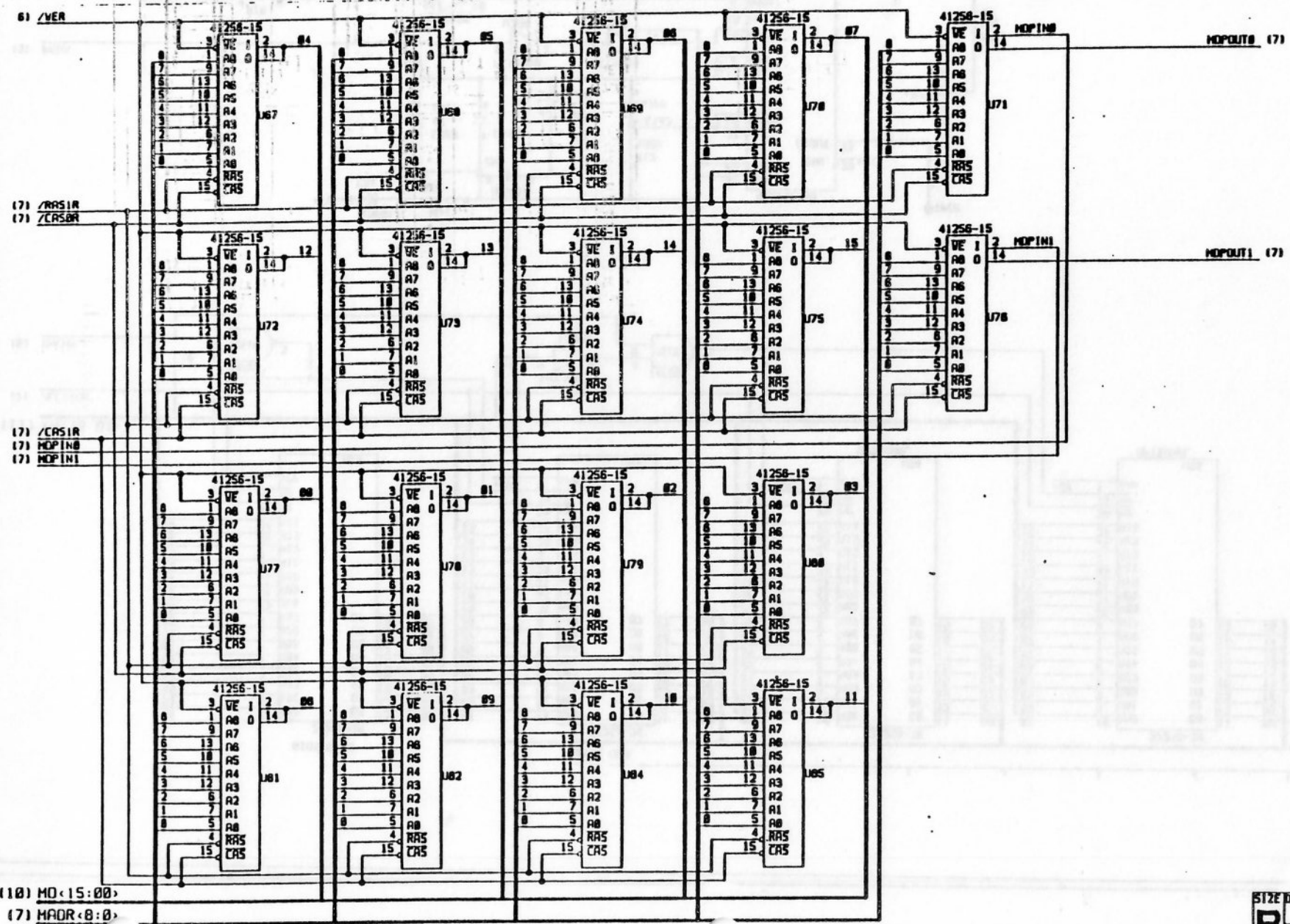
(16) XA0E

(16) XA0E

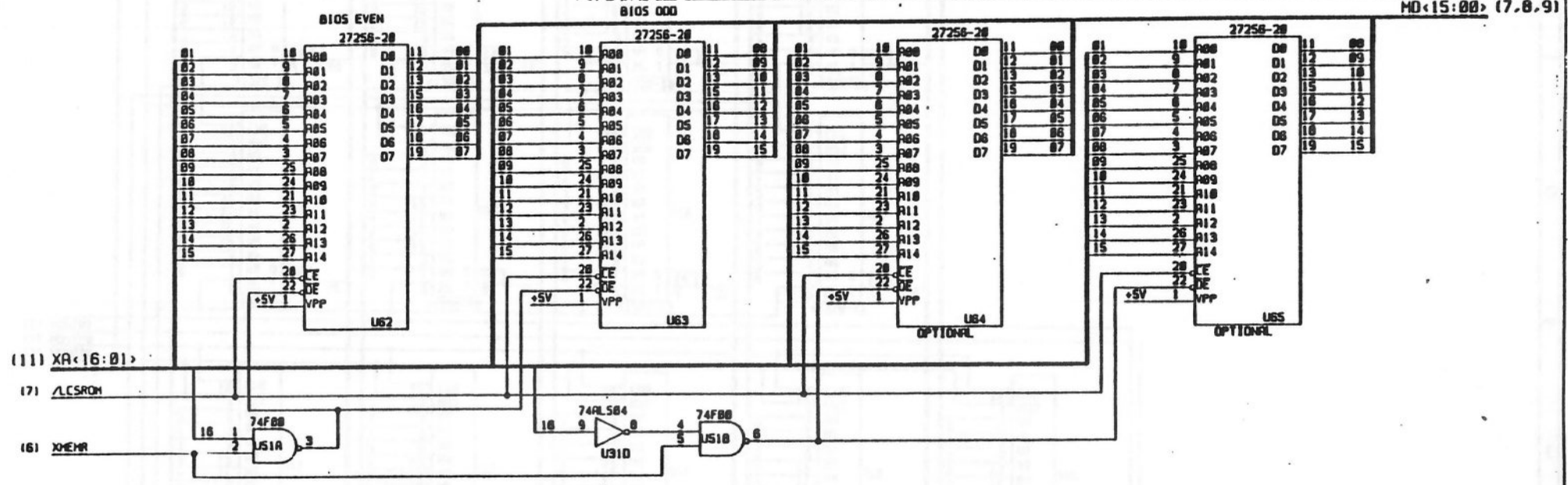
(10.9) MPOUT1



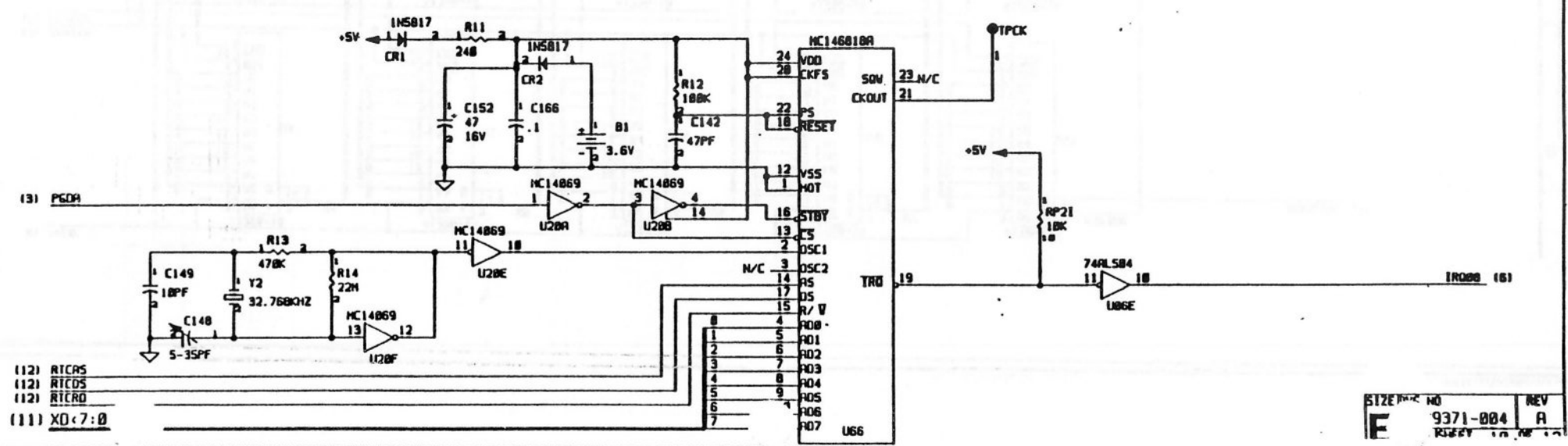
(10) MD<15:00>
 (17) MDR<0>



(10) MO<15:00>
 (7) MAOR<8:0>



(111) XA<16:01>
 (17) /LCSROM
 (16) XOEHR



(112) RTCRS
 (112) RTCDS
 (112) RTCRD
 (111) XD<7:0>

5) I/O CHANNEL

- (18) RESET
- (12) /DMR1CS
- (16) /DMRDY
- (16) /DMACK
- (16) /XMEMV
- (16) /X1OR
- (16) /X1OV

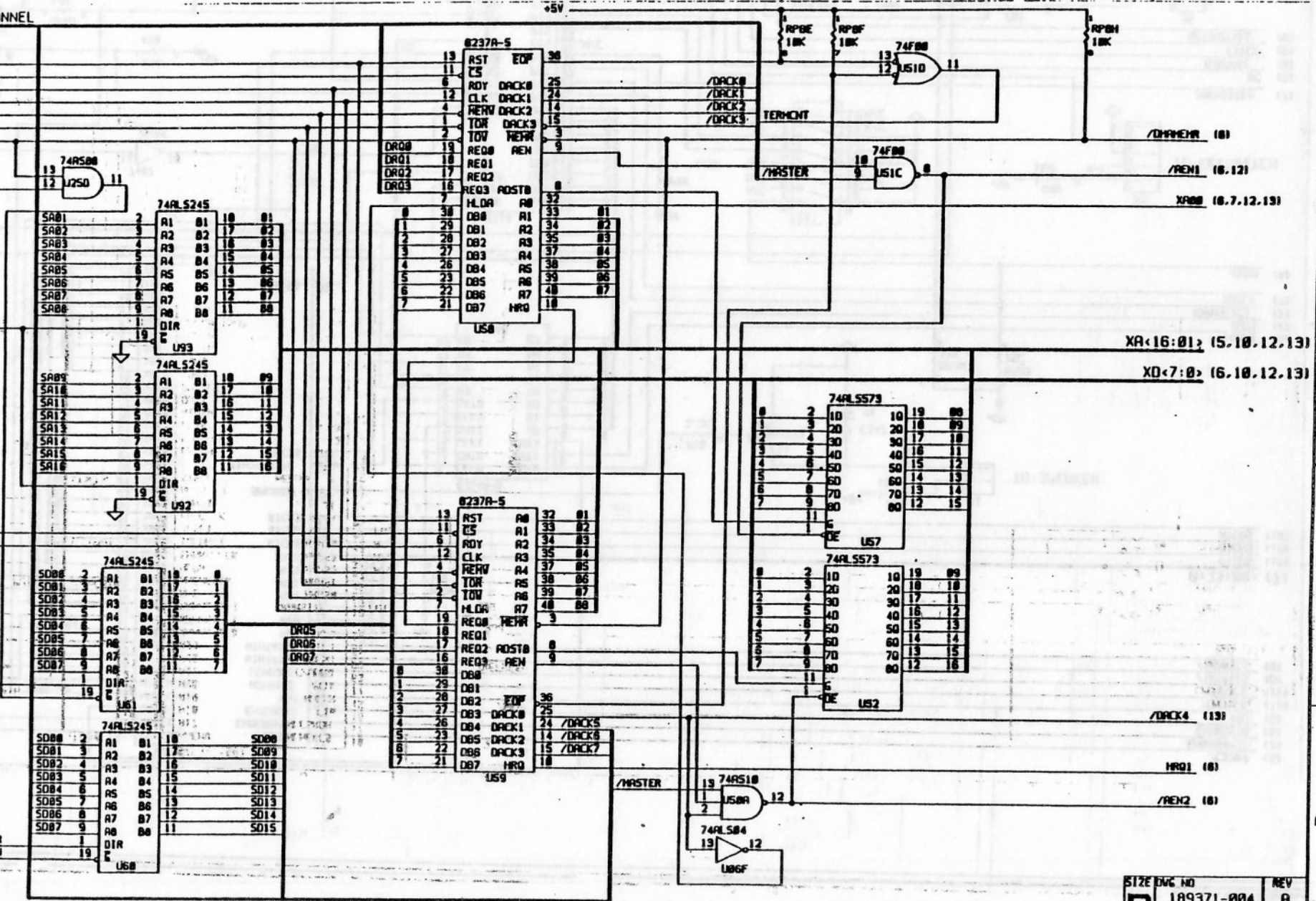
- (15) ACK

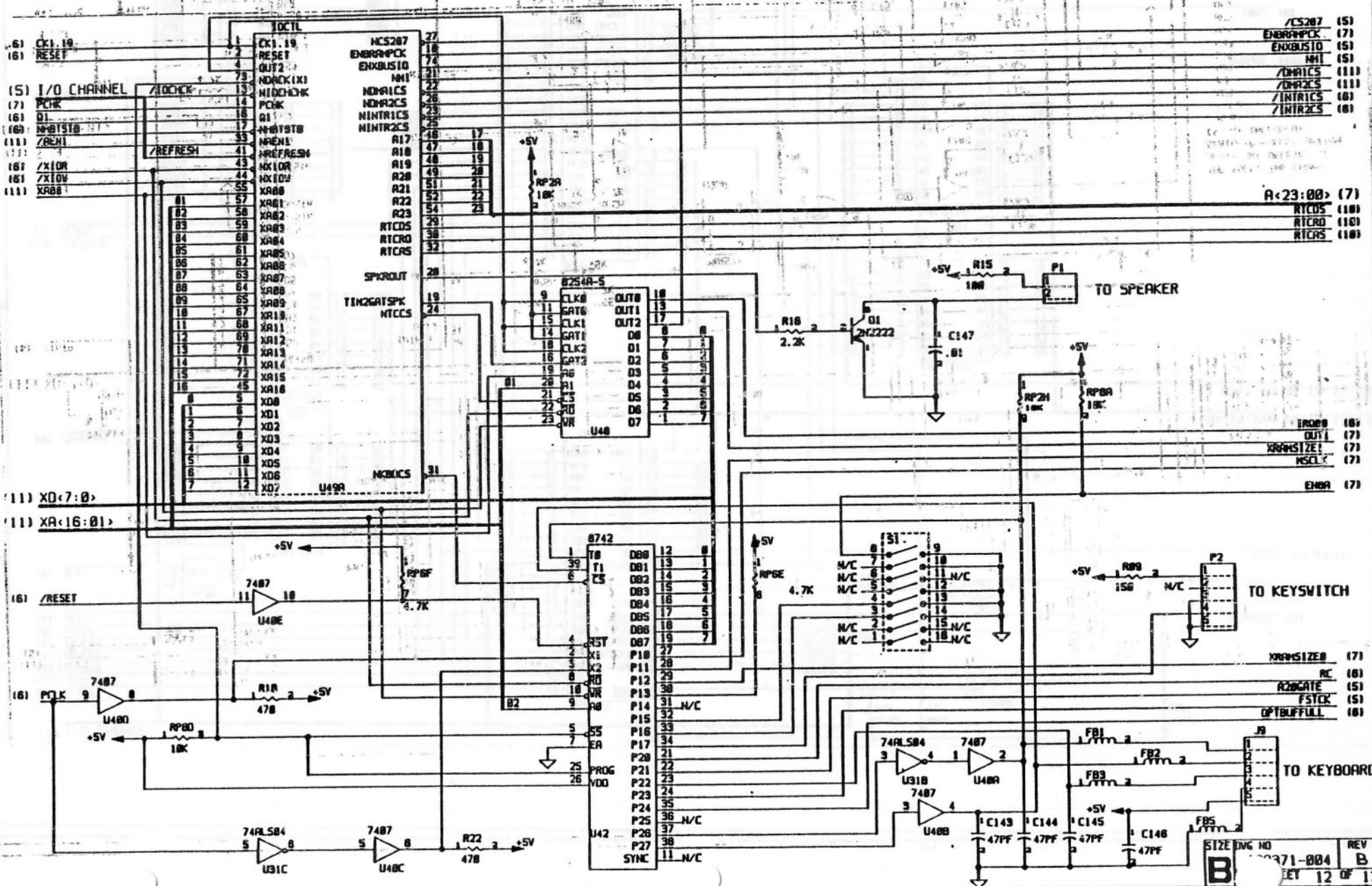
- (16) /DMRREN

- (12) /DMR2CS
- (7) HLD1

- (18) XDD1R

- (16) BYTESWAPDIR
- (16) /BYTESWAPEN





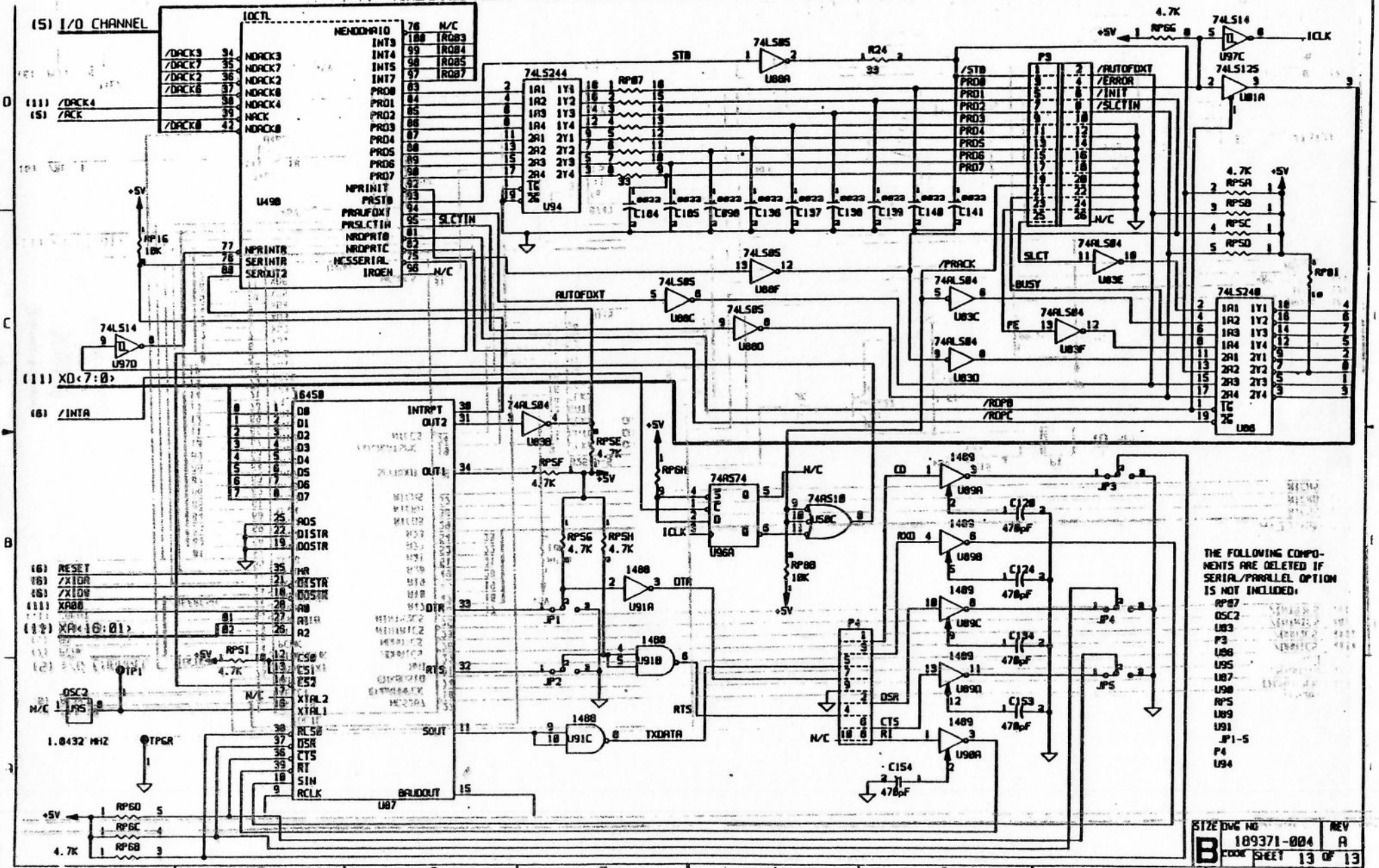
- (61) CK1.19
- (161) RESET
- (51) I/O CHANNEL
- (171) PC/K
- (161) D1
- (169) NPBTSTB
- (111) /REN1
- (171) /X10R
- (161) /X10W
- (111) XA8B1

- (111) XD<7:0>
- (111) XA<16:01>

- (161) /RESET
- (161) PC/K

27	CK1.19
18	RESET
74	OUT2
31	NDACK(X)
22	NDACK(X)
26	NDACK(X)
25	NDACK(X)
25	NDACK(X)
48	A17
47	A18
48	A19
49	A20
51	A21
52	A22
54	A23
29	ATCDS
30	ATCRS
32	ATCRS
28	SPKR/OUT
19	TIN/GAT/SPK
24	NTCCS
31	NR/DCS

- /CS207 (51)
- ENBR/PCK (71)
- ENXBUSIO (51)
- NH1 (51)
- /DNR1CS (111)
- /DNR2CS (111)
- /INTR1CS (161)
- /INTR2CS (161)
- A<23:00> (71)
- ATCDS (110)
- ATCRD (110)
- ATCRS (110)
- INRDB (161)
- OUT1 (71)
- XRHSIZE1 (71)
- NSCLC (71)
- ENBR (71)
- XRHSIZE0 (171)
- RC (161)
- ADDGATE (151)
- FSYCK (151)
- OPTBLUFULL (161)



THE FOLLOWING COMPONENTS ARE DELETED IF SERIAL/PARALLEL OPTION IS NOT INCLUDED:

- RP87
- OSC2
- U83
- P3
- U86
- U95
- U87
- U98
- RP5
- U89
- U91
- JP1-5
- P4
- U94