

Revisions				216323	D
LAL	Rev.	Description	Chk	Date	Approved
	A	ENGRG RELEASE	<i>RF</i>	3-4-76	<i>RF</i>
	B	REVISED	<i>BN</i>	6-16-76	<i>RF</i>
	C	M/L ITEM 45 WAS 10K P/N 116447-103. SH 9 R1 WAS 10K.	<i>BN</i>	7-28-76	<i>RF</i>
X	D	M/L ITEM 20 P/N 74S86 WAS 7486, ITEM 37 2200 pF P/N DC-222K WAS 820 pF, P/N DC821. ADDED ITEM 45, 50, & 51. ITEM 57 P/N 514-AG11D WAS 514-AG10D, ITEM 58 P/N 516-AG11D WAS 516-AG10D. SH 9 REVISED LOGIC DIAGRAM. SH 2 ADDED NOTE 3.	<i>BN</i>	3-8-77	<i>RF</i>

**ENGINEERING
RELEASE**

THIS DOCUMENT CONTAINS 23 SHEETS.

Dist Code ALT

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- Notes Unless Specified
1. Tolerances
.XX ±.03 Angular
.XXX ±.010 ±1/2°
 2. Break All Sharp Edges
.010 Approx.
 3. Mach. Surfaces
 4. All Dim. in Inches

Drawn *McLennan* 3-3-76
 Check *K. J. ...* 2-3-76
 Appr. *A. J. ...* 3-3-76
 Material

Xerox Corporation
 El Segundo, California

XEROX

Title
 ALTO II
 ASSEMBLY, PRINTED WIRING-
 ETHERNET

Model No. ALTO II
 First Use EWO7YF92

Next Assy. First Use 216302

Finish

Code Ident. **18338**

Size **A**

Dwg. No. 216323

Change Letter **D**

Scale - Do Not Scale Drawing Sheet 1

NOTES: UNLESS OTHERWISE SPECIFIED

1. THE FOLLOWING MODIFICATIONS HAVE TO BE MADE TO THIS ASSEMBLY USING "B" REVISION PRINTED WIRING BOARDS:

CUT ETCH BETWEEN

- 1) A47-12 AND A50-2
- 2) A50-2 AND A60-5
- 3) A50-13 AND A54-6

ADD WIRE FROM

- 1) A47-4 TO A60-5
- 2) A54-6 TO A60-5
- 3) A50-2 TO A64-6
- 4) A64-4 TO A77-7
- 5) A64-5 TO A75-6
- 6) A50-13 TO EC PIN 76

2. ASSEMBLE PER ALTO II MODULE ASSEMBLY SPECIFICATION, DWG NO. 216207.

3. THE FOLLOWING MODIFICATIONS ARE REQUIRED ON THIS ASSEMBLY USING "B" REVISION PRINTED WIRING BOARDS:

- 1) CUT ETCH BETWEEN C104 AND FEED THRU (COMPONENT SIDE) (CONNECTS TO A67-3).
- 2) ADD 10 Ω RESISTOR (R18) FROM C104 TO FEED THRU (CONNECTS TO A67-3).
- 3) ADD 470 Ω RESISTOR (R19) FROM C104 TO END OF R13.

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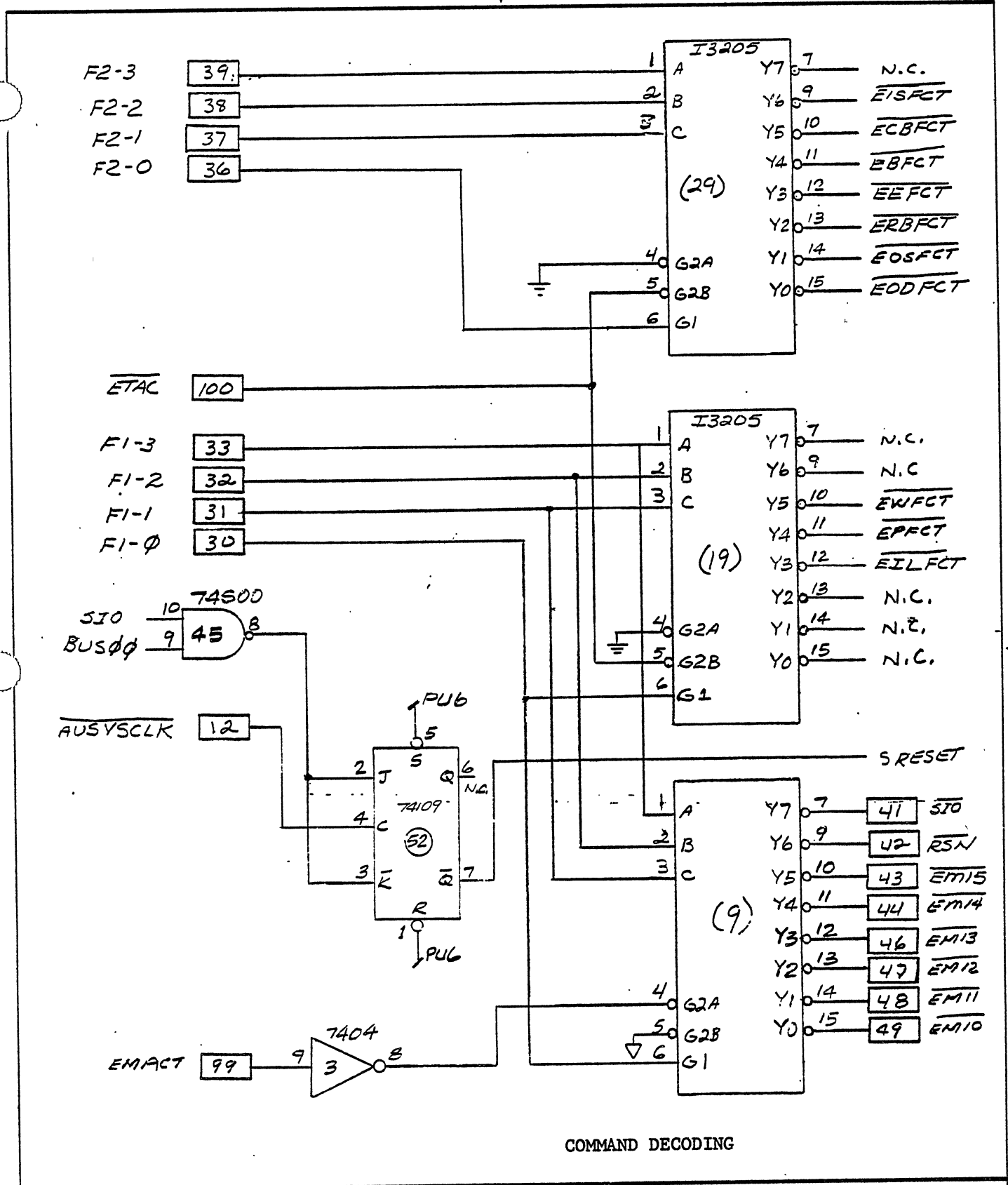
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Material List

ML	Drawing No. 216323	Rev. D
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Drawing No. 216323	ML	Drawing Title		These drawings and specifications, and the data contained therein, are the exclusive property of Xerox Corporation and/or Rank Xerox, Ltd. issued in strict confidence and shall not, without the prior written permission of Xerox Corporation or Rank Xerox, Ltd., be reproduced, copied or used for any purpose whatsoever, except the manufacture of articles for Xerox Corporation or Rank Xerox, Ltd.		
		ALTO II ASSEMBLY, PRINTED WIRING- ETHERNET		Model No. EWO 7YF92	Date 3-3-76	Sheet 4 of
		Item No.	Drawing Title	Drawing No.	No. Req.	Remarks
		1	Board, P.W. Ethernet	216325	1	
		2	Procedure, Test	216324	REF	
		3	Spec, Module Assembly	216207	REF	
		4	Microcircuit, 74H21		2	A1, 39
		5	7408		3	A63,64,68
		6	7404		3	A3, 44, 55
		7	74H01		1	A30
		8				
		9	7437		1	A73
		10	74LS298		4	A13,17,23,27
		11	7400		2	A20,46
		12	74164		2	A33,37
		13	74165		2	A34,36
		14	7402		2	A40,72
		15	74174		1	A43
		16	74157		2	A48,54
		17	74123		2	A50,60
		18	7410		2	A56,74
		19	74161		2	A58,59
		20	74S86		1	A67
		21	74S08		1	A2
		22	7438		8	A5,6,14,15,16,24,25,26
		23	74S37		1	A11
		24	74S00		3	A45,75,66
		25	74S157		1	A76
		26	898-1-R1.0K Beckman		3	A4,32,38
		27	I3205 Intel		3	A9,19,29
		28	I3101A Intel		4	A12,18,22,28
		29	P3601 M.I.L. OR TN473		3	A41,42,49
		30	Microcircuit, 9401 Fairchild		1	A53
		31	Microcircuit, 74109		13	A10,21,31,35,47,51, 52,61,62,65,69,70,77



COMMAND DECODING

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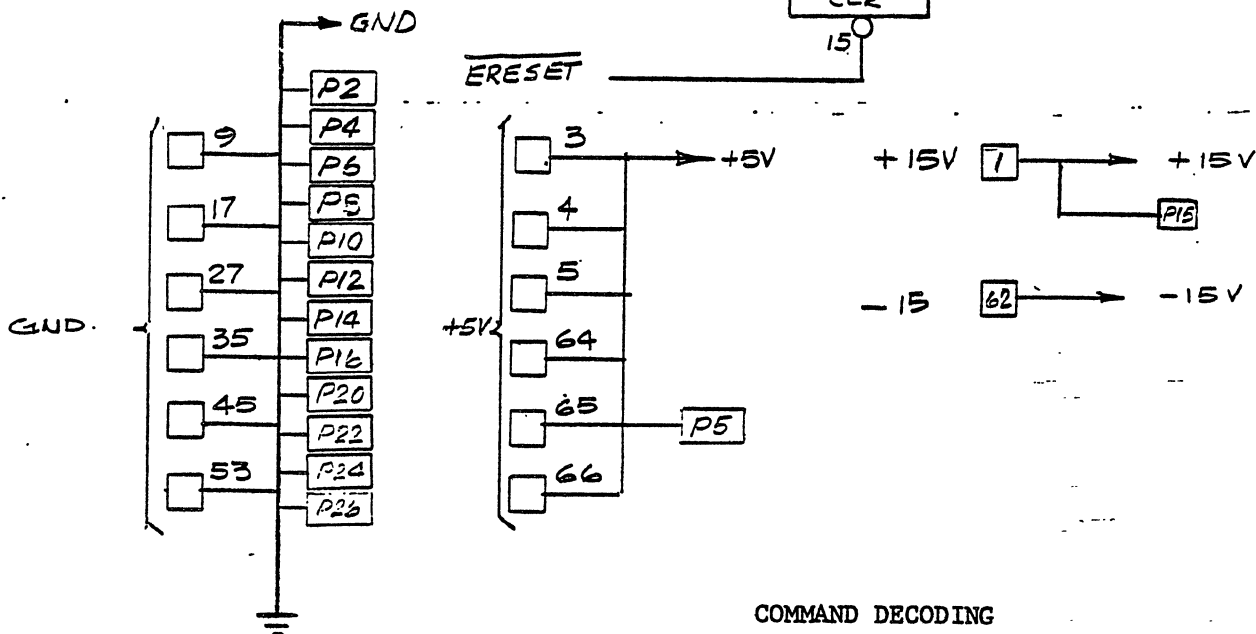
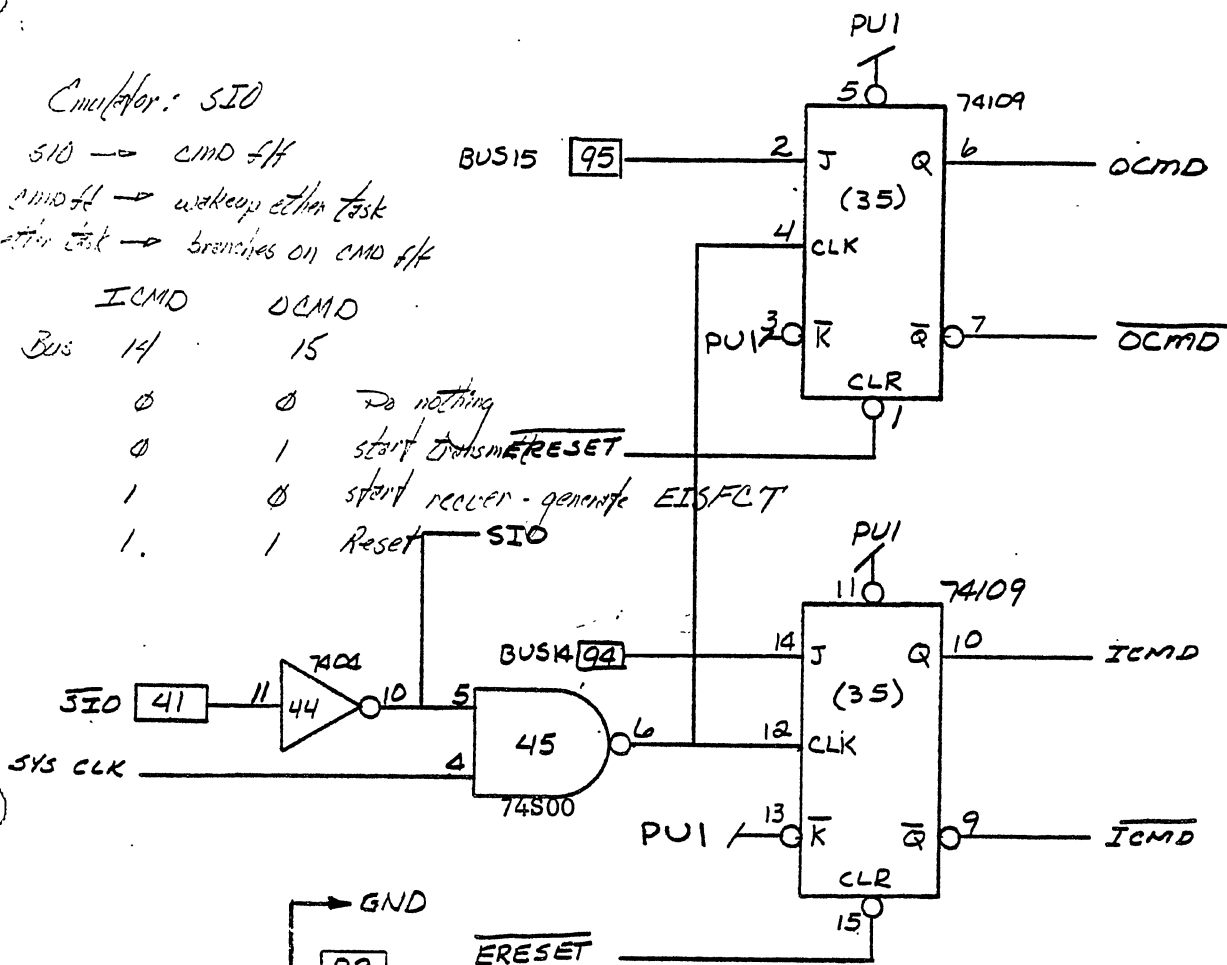
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Commander: SIO

SIO → CMD ff
 CMD ff → wakeup ether task
 ether task → branches on CMD ff

ICMD	OCMD	
Bus 14	15	
0	0	Do nothing
0	1	start transmitter
1	0	start receiver - generate EISFCIT
1	1	Reset



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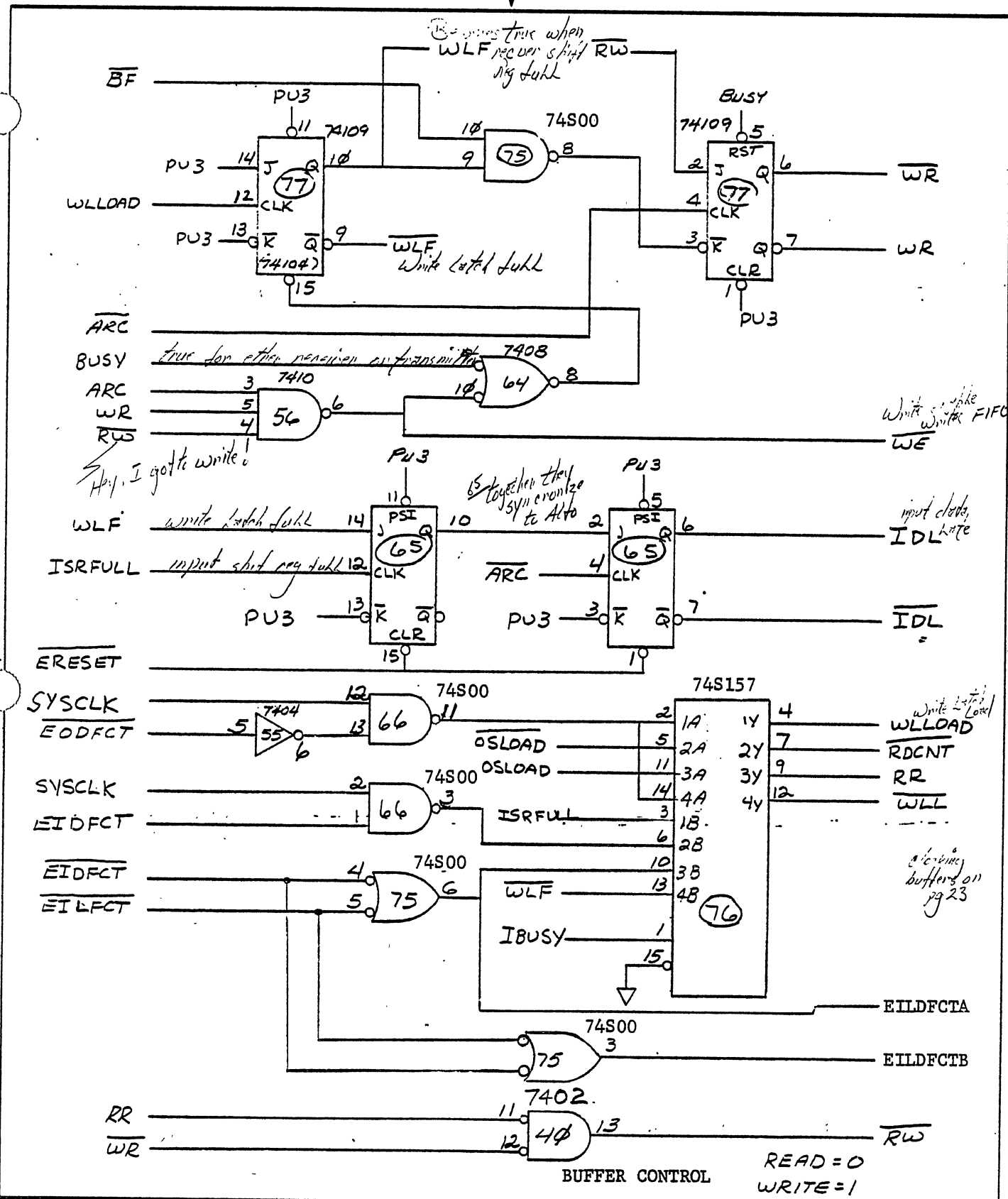
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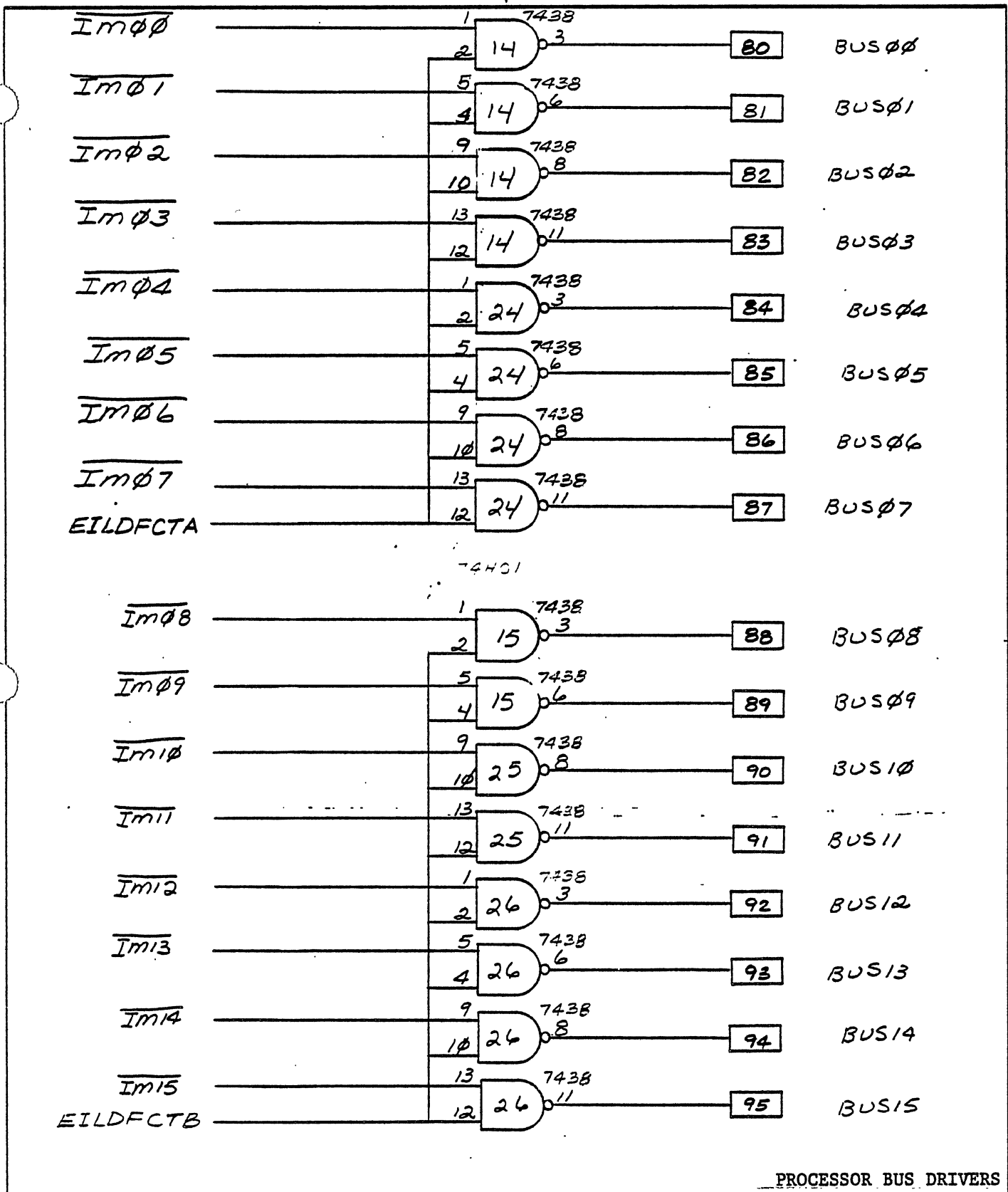


BUFFER CONTROL
 READ = 0
 WRITE = 1

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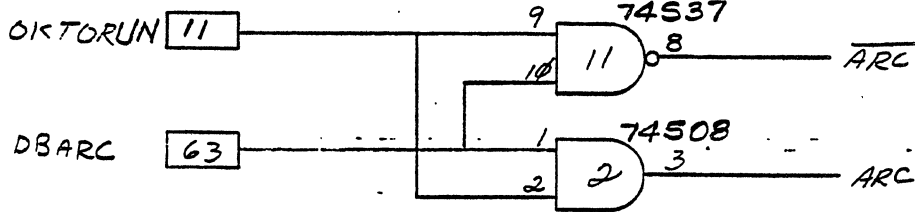
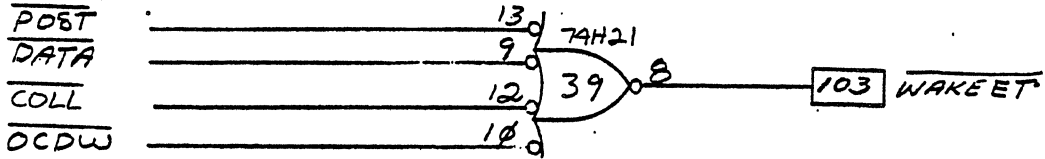
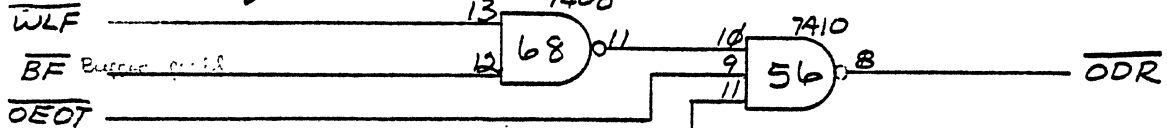
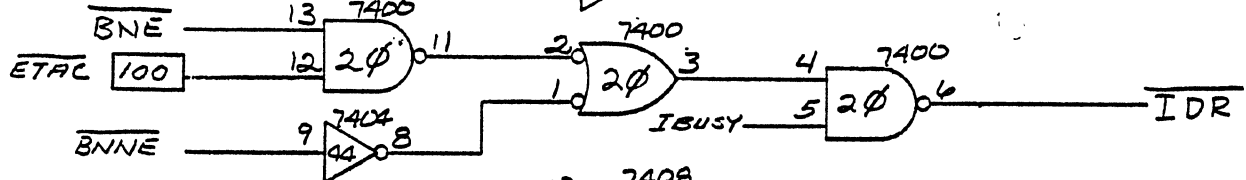
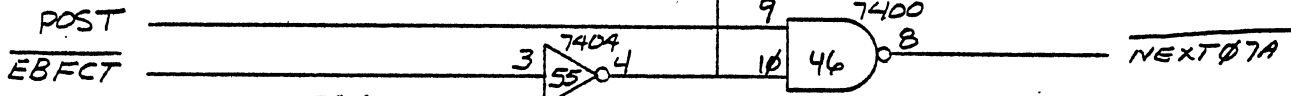
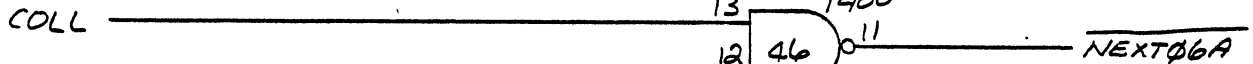
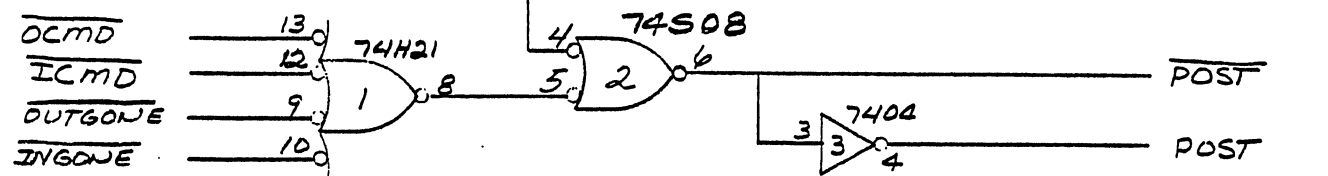
PROCESSOR BUS DRIVERS

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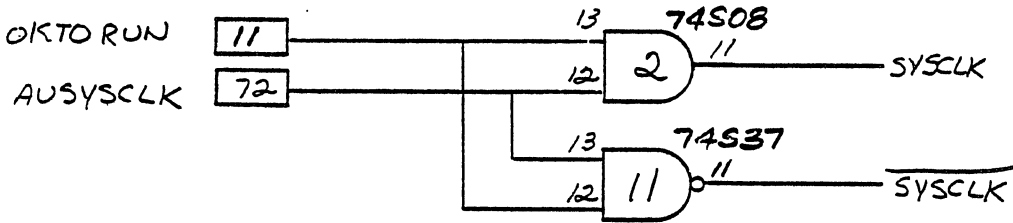
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IDL



NEXT 67	WAKEUP TYPE
00	DATA (CDW)
01	POST
10	COLL
11	POST



ALTO INTERFACE

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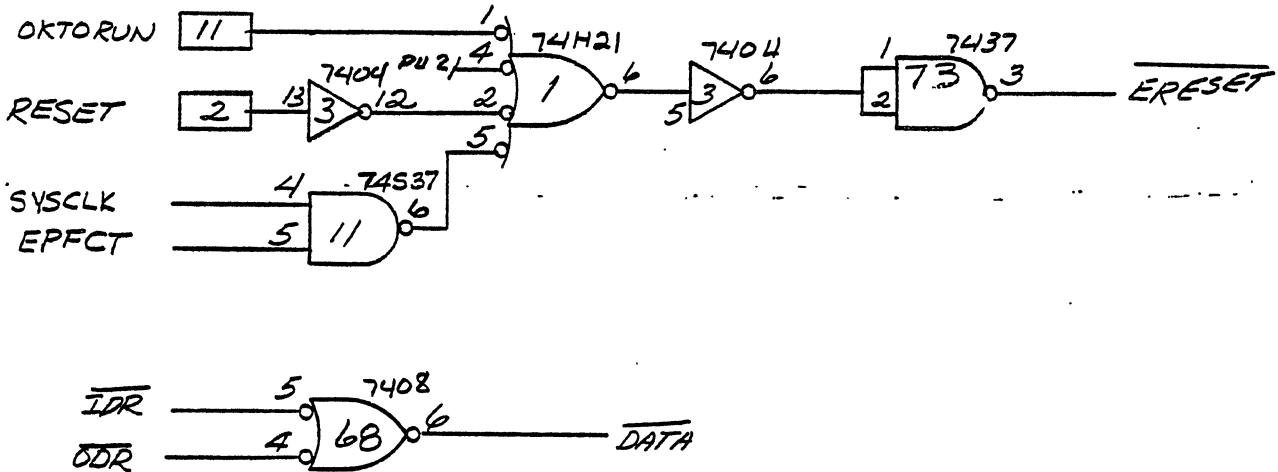
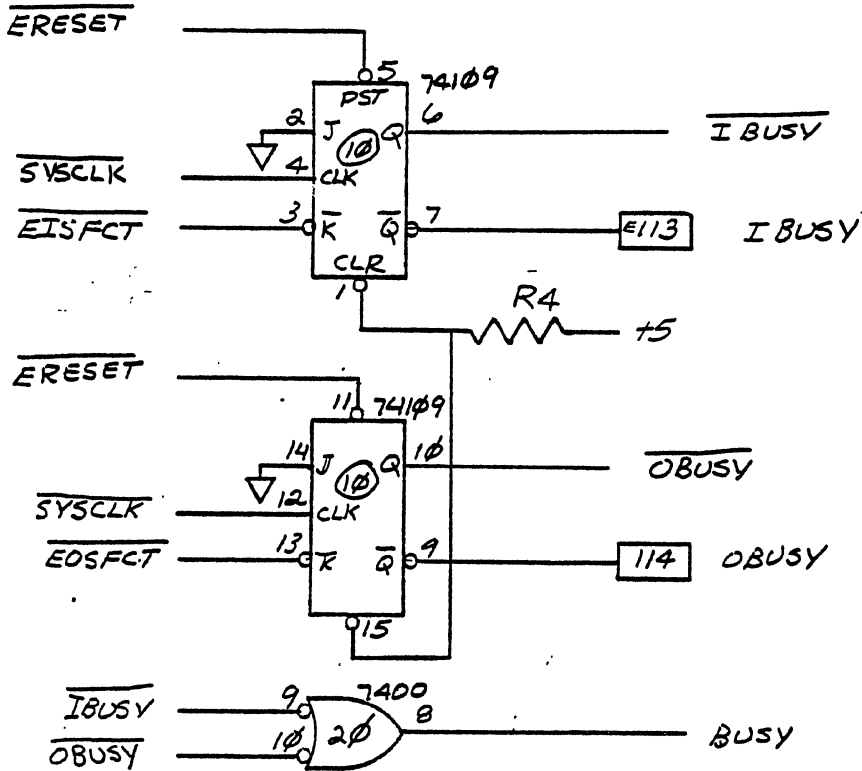
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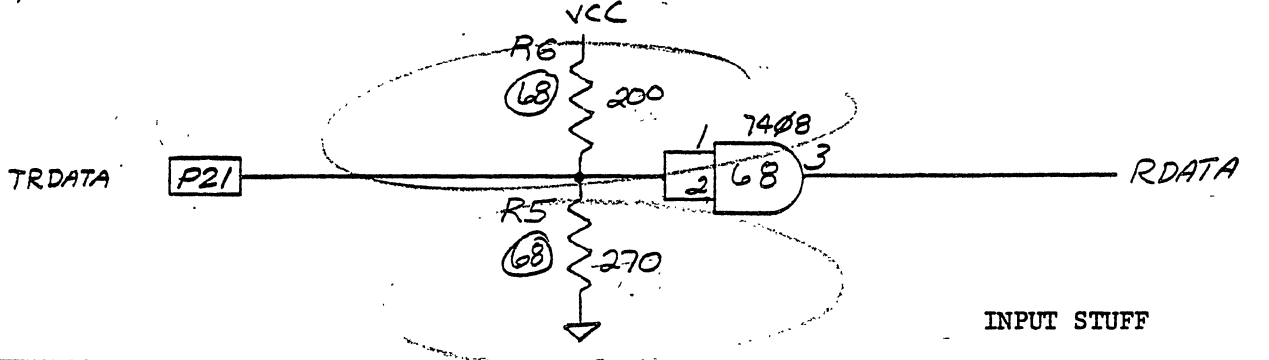
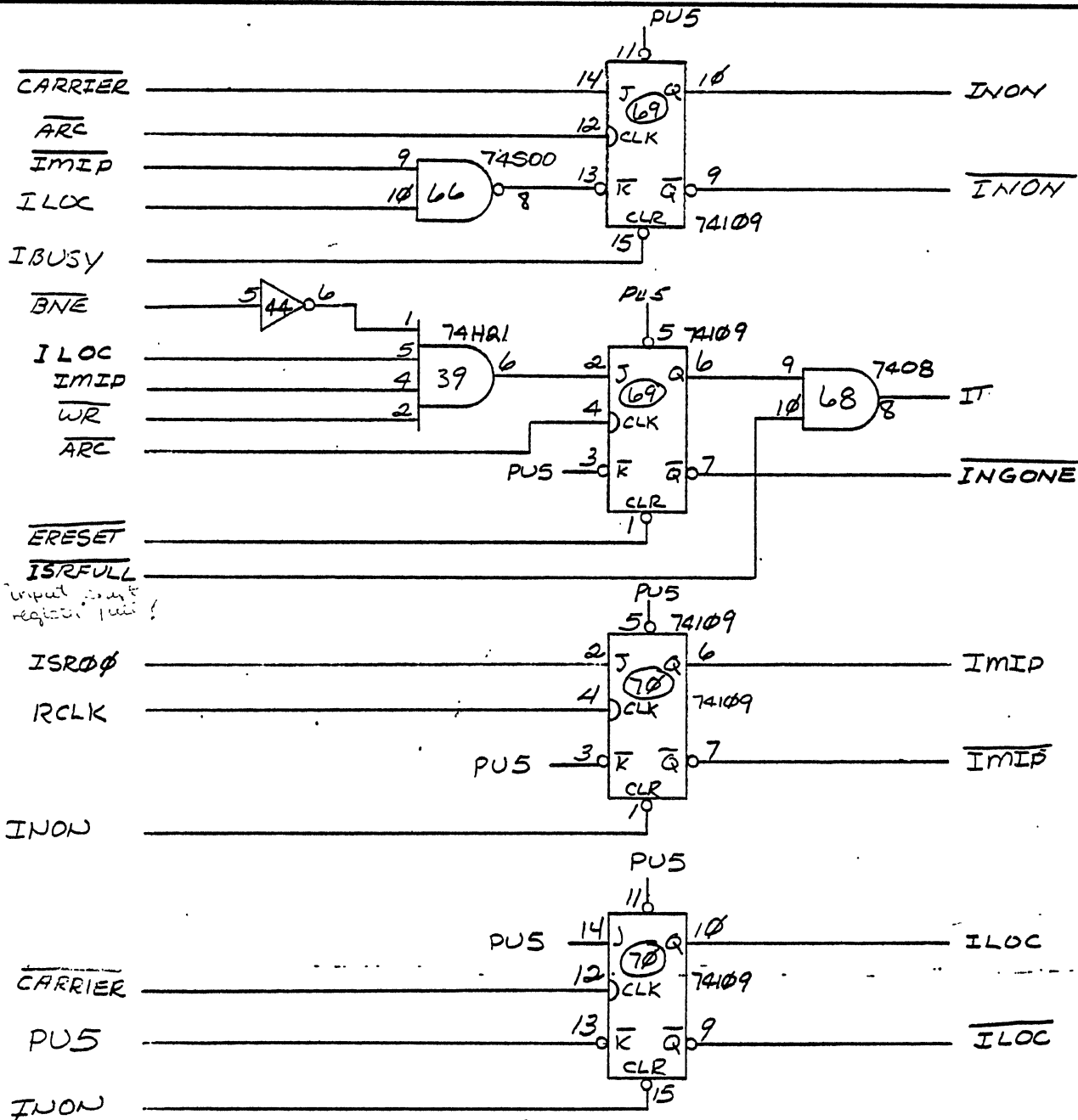
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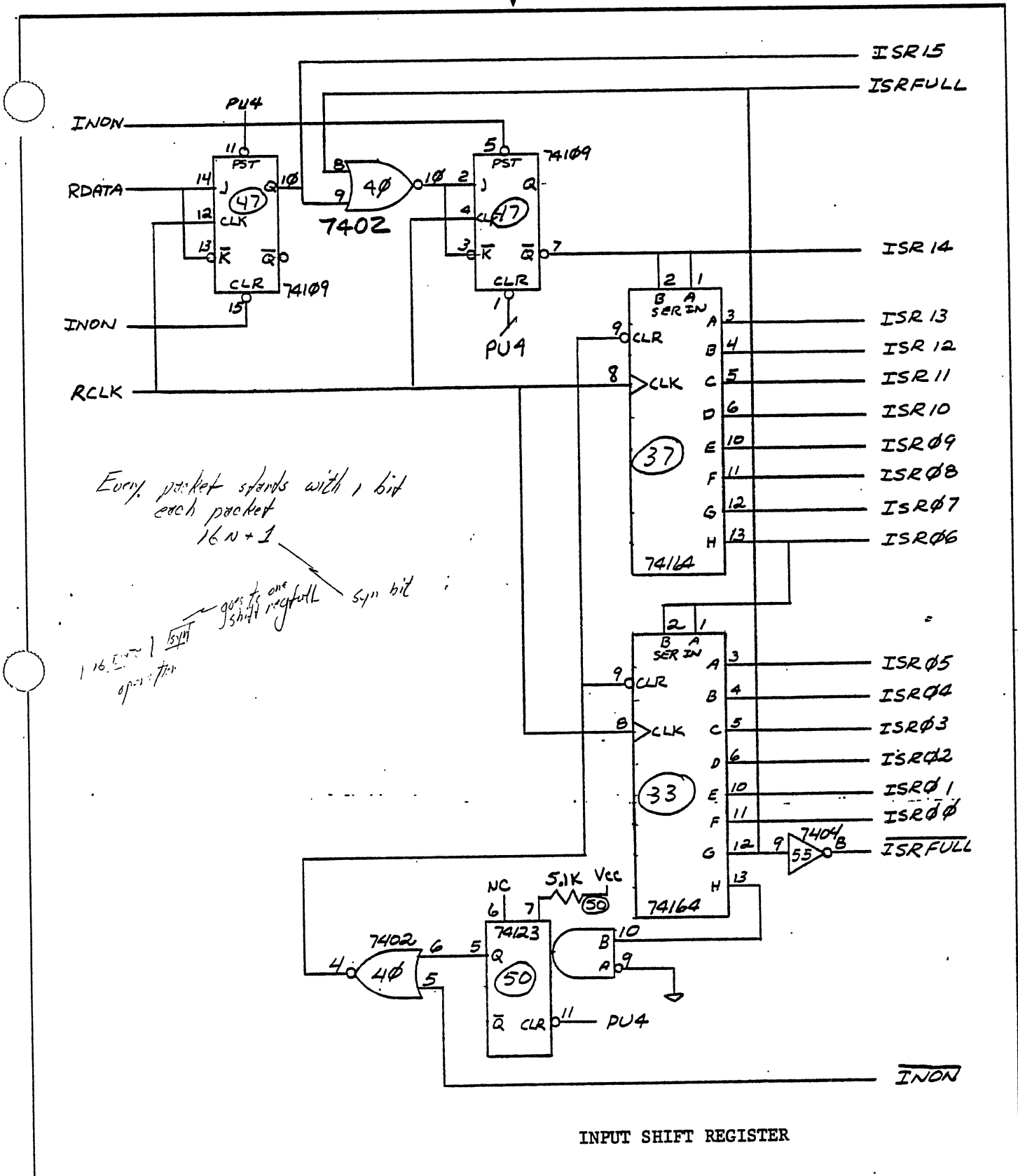
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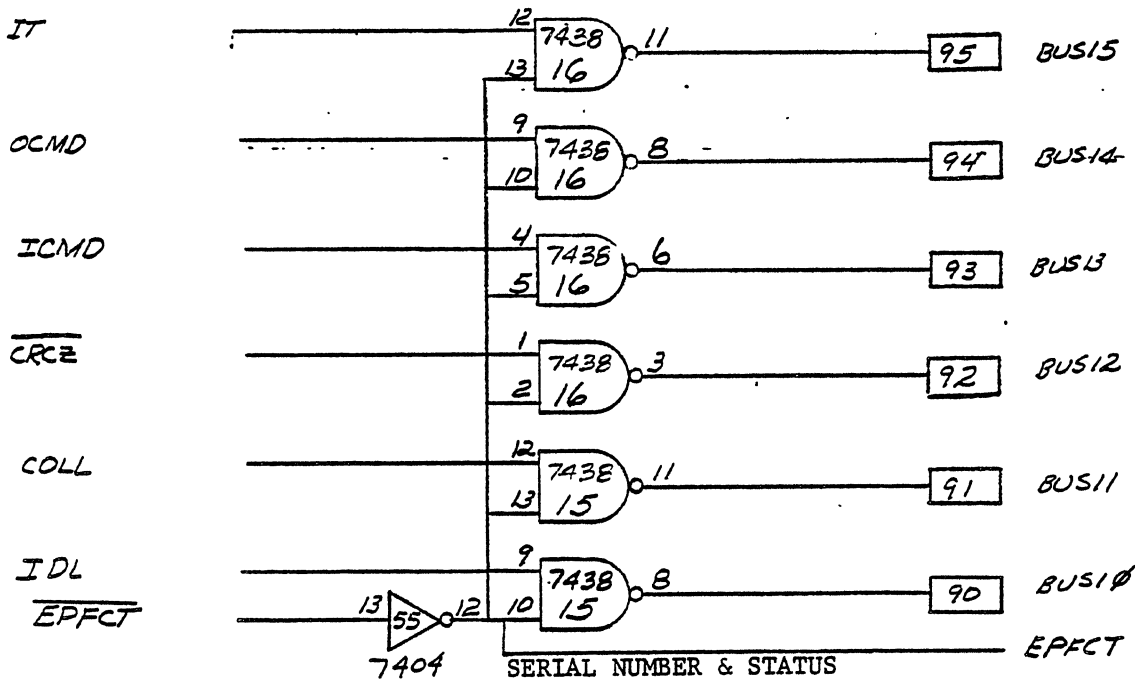
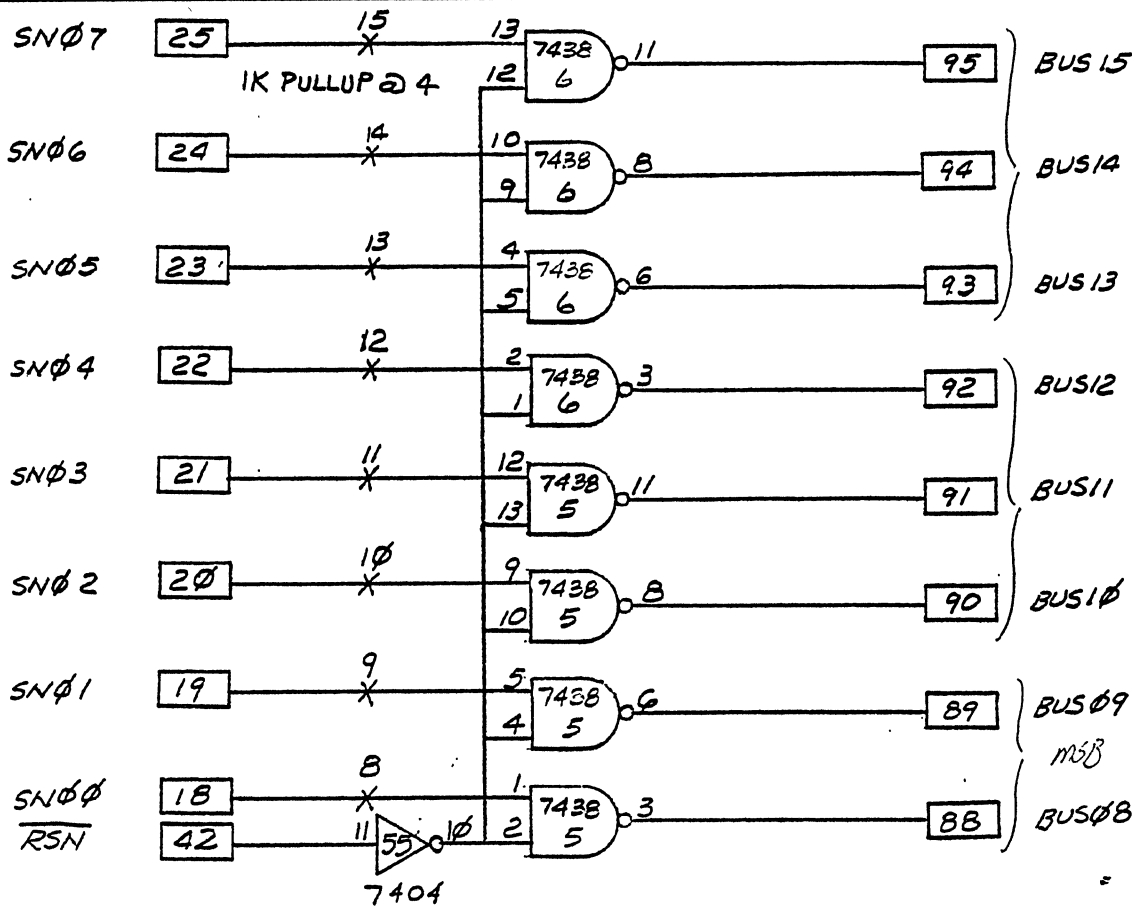


INPUT SHIFT REGISTER

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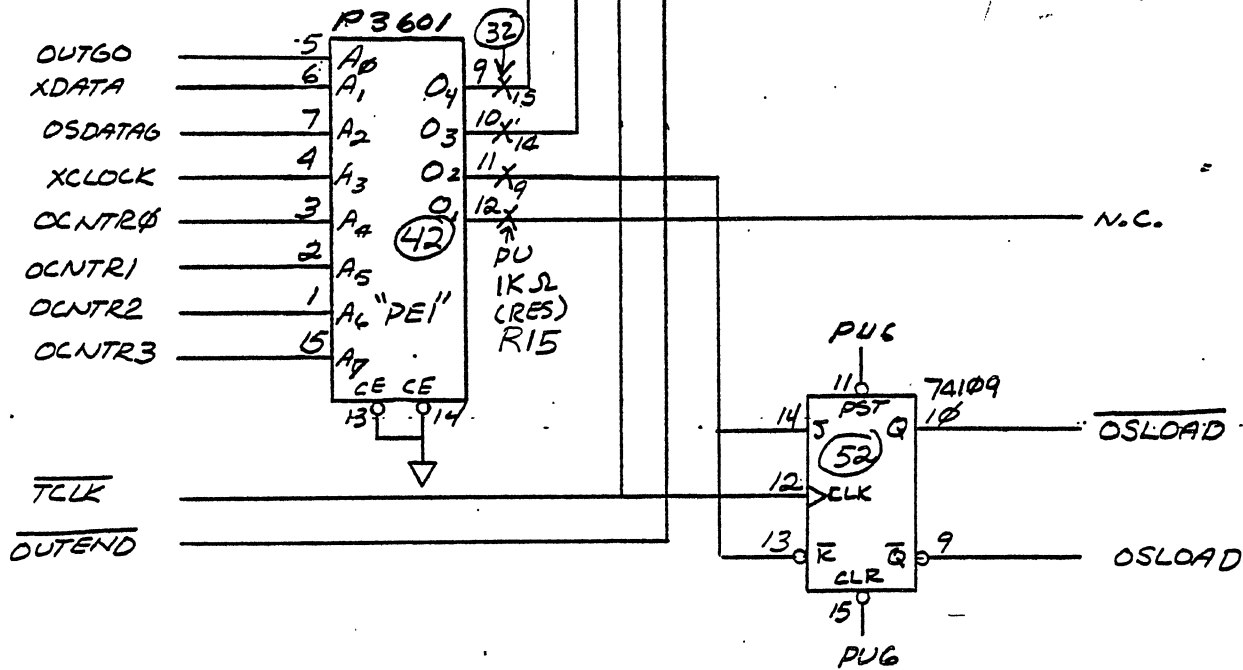
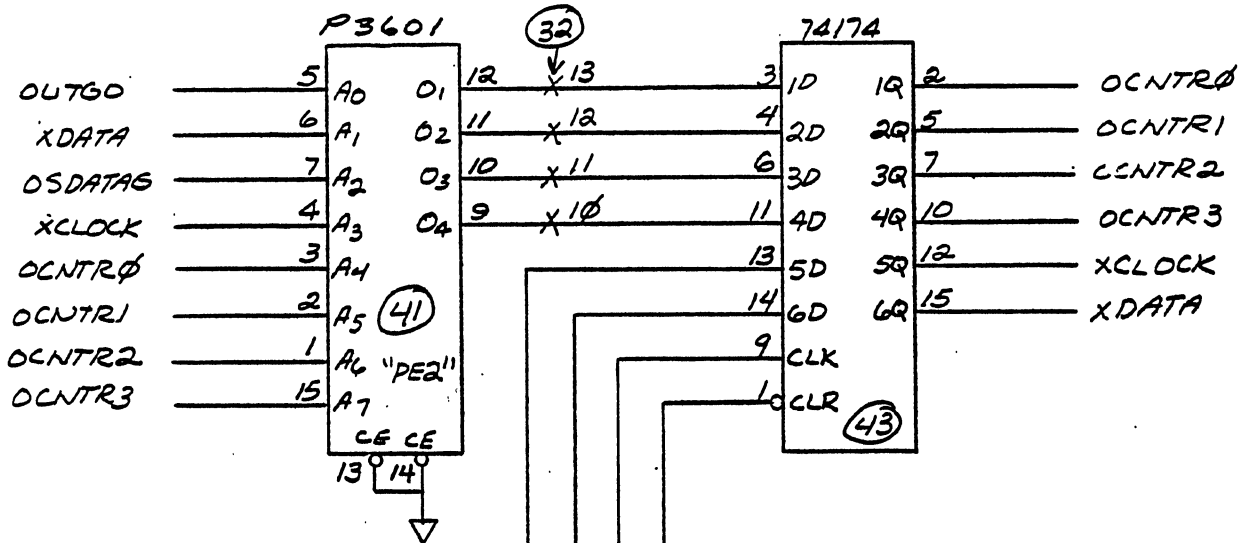
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ETHERNET & PHASE ENCODER

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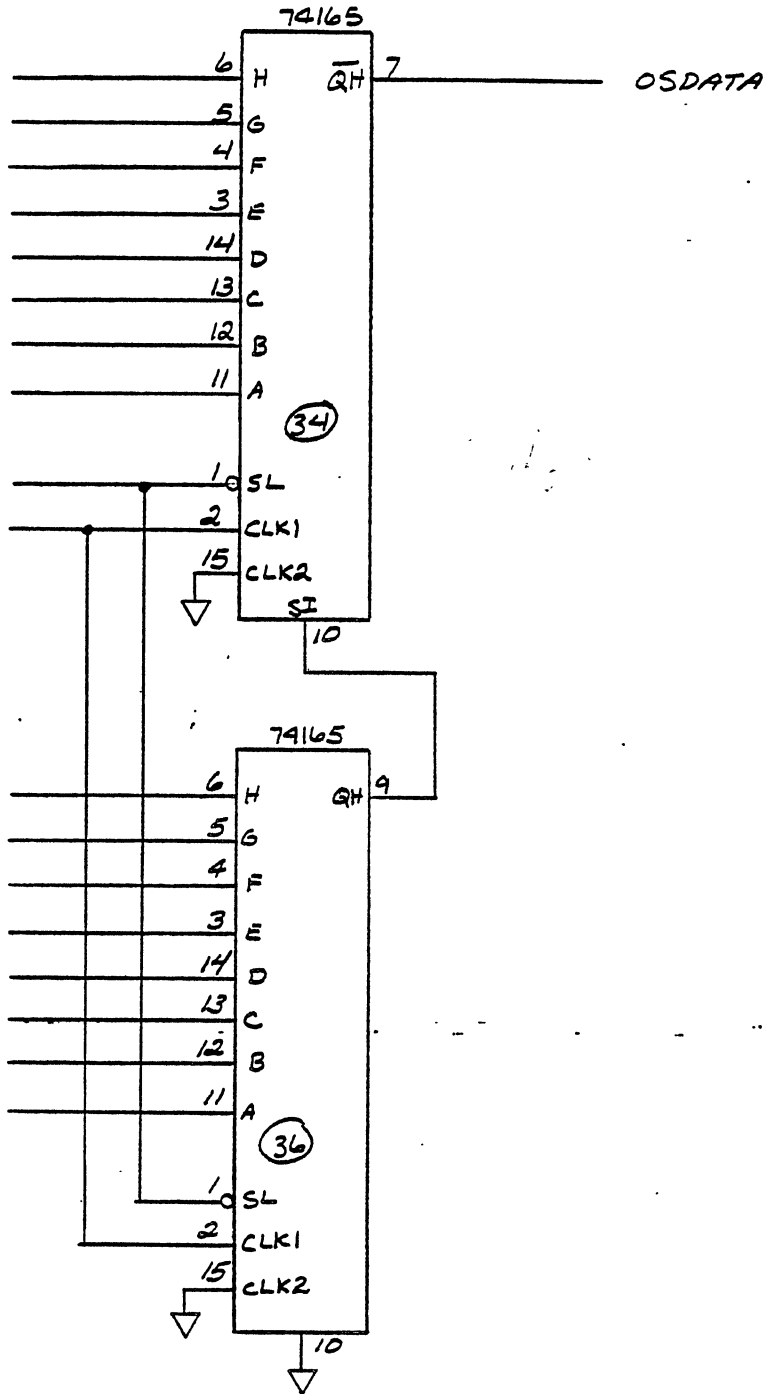
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IM00
IM01
IM02
IM03
IM04
IM05
IM06
IM07

OSLOAD
XCLOCK

IM08
IM09
IM10
IM11
IM12
IM13
IM14
IM15



OUTPUT S.R. & PHASE ENCODER

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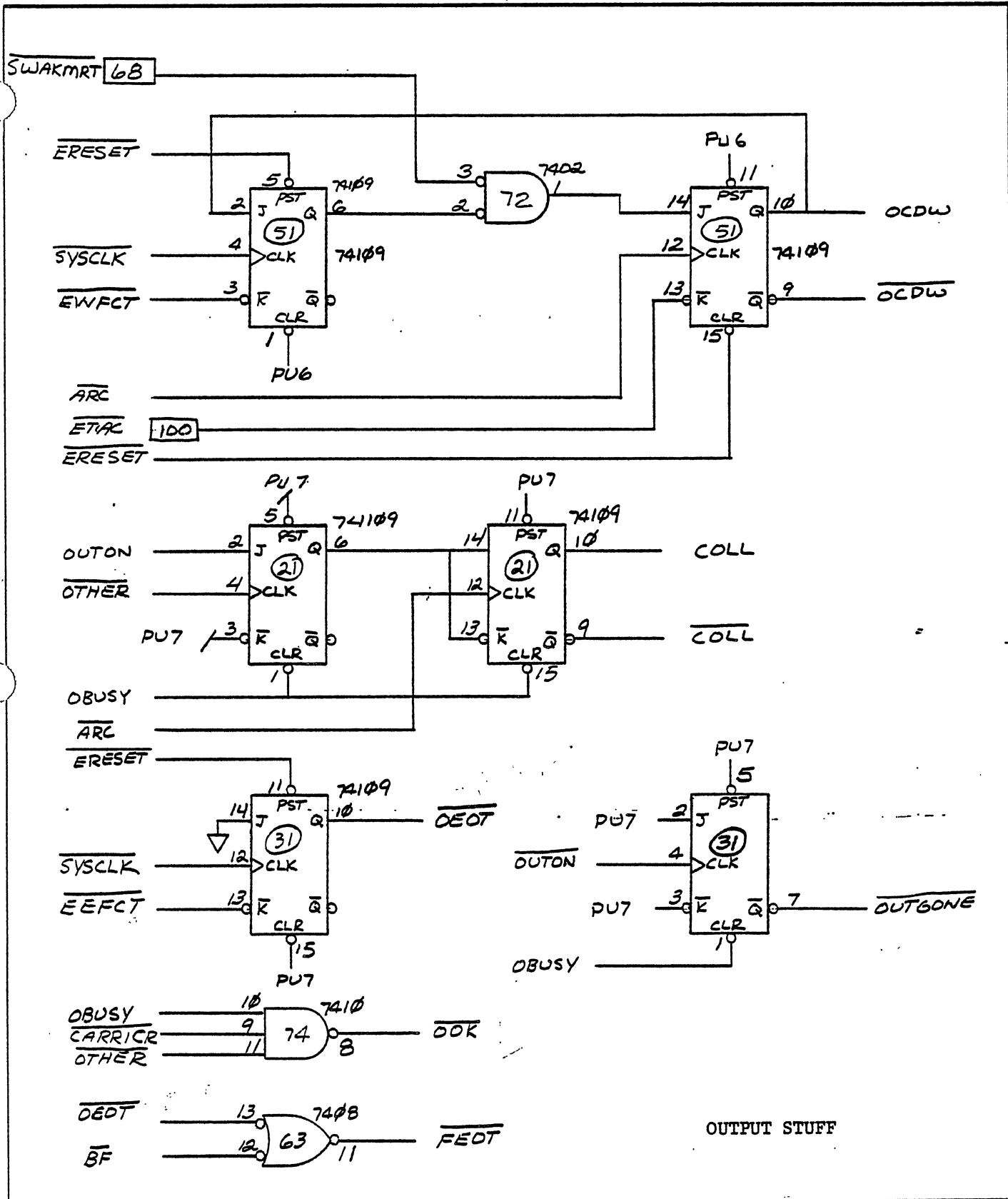
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OUTPUT STUFF

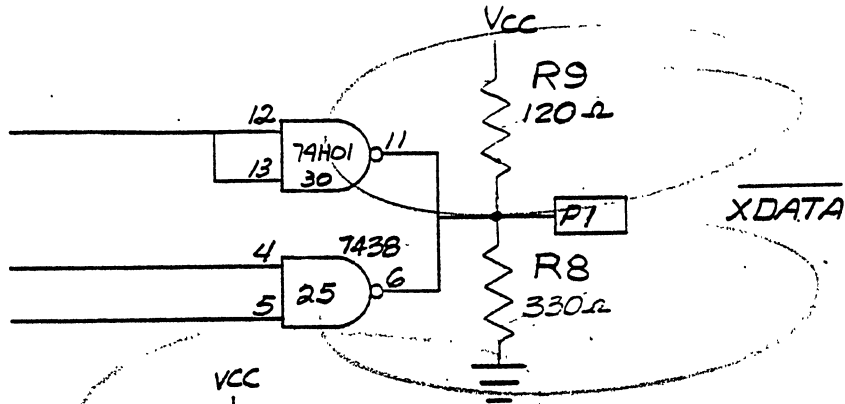
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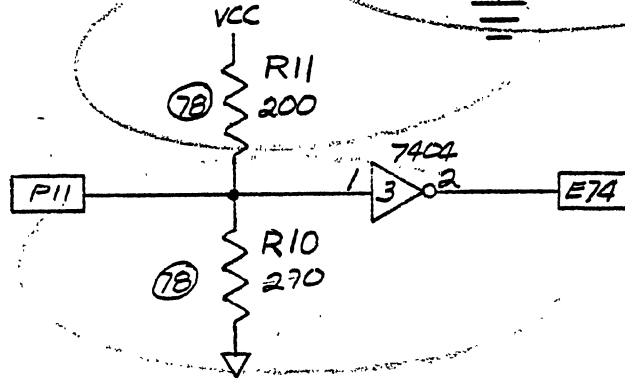
COLL

XDATA
COLL



TROTHER

OTHER

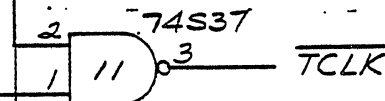
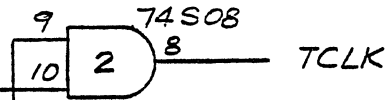


DBARC

CKTORUN

63

11



OUTPUT STUFF

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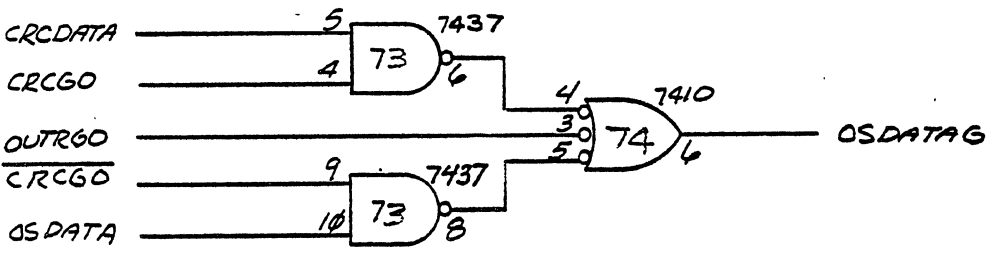
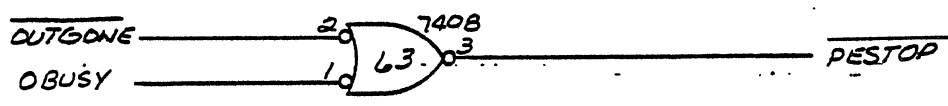
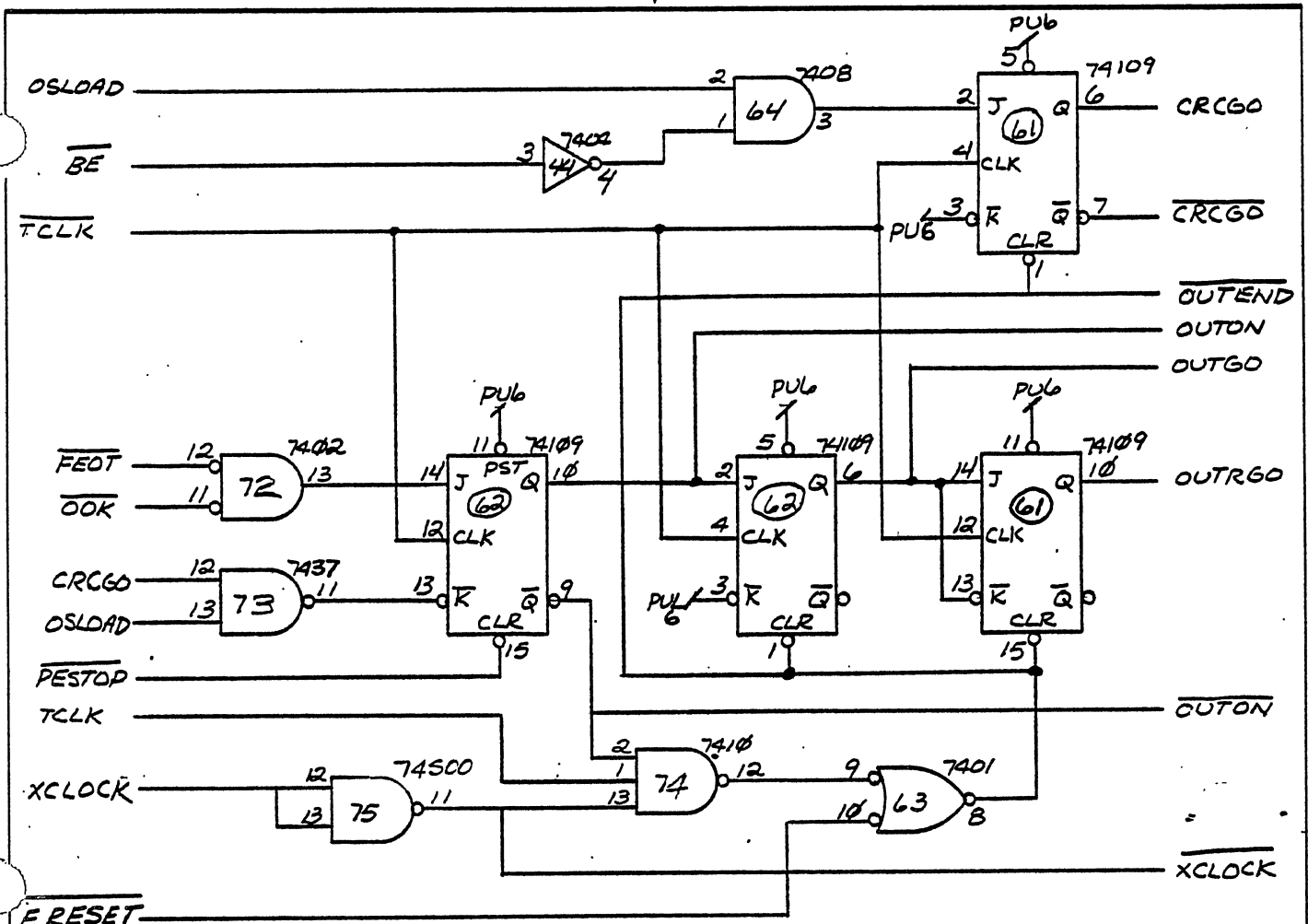
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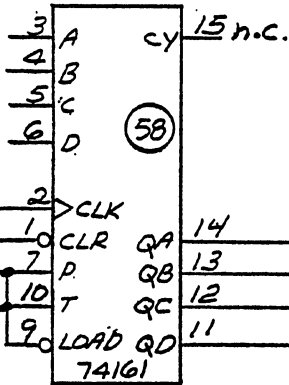


PHASE ENCODER CONTROL

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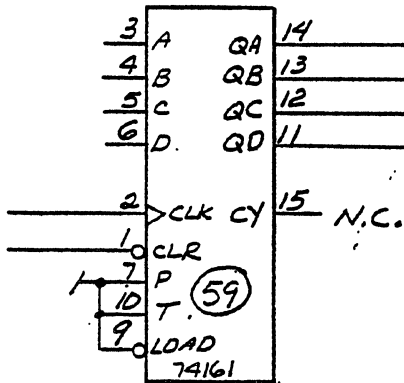
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n.c.
n.c.
n.c.

RDCNT
BUSY
PU4



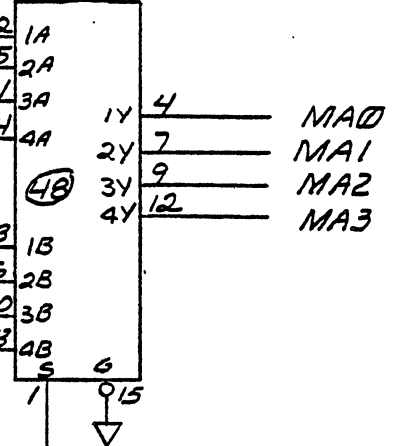
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WE
BUSY
PU4

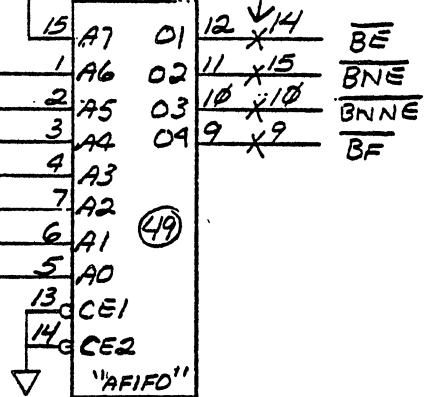


RW

74157



P3601



HALF DUPLEX BUFFER

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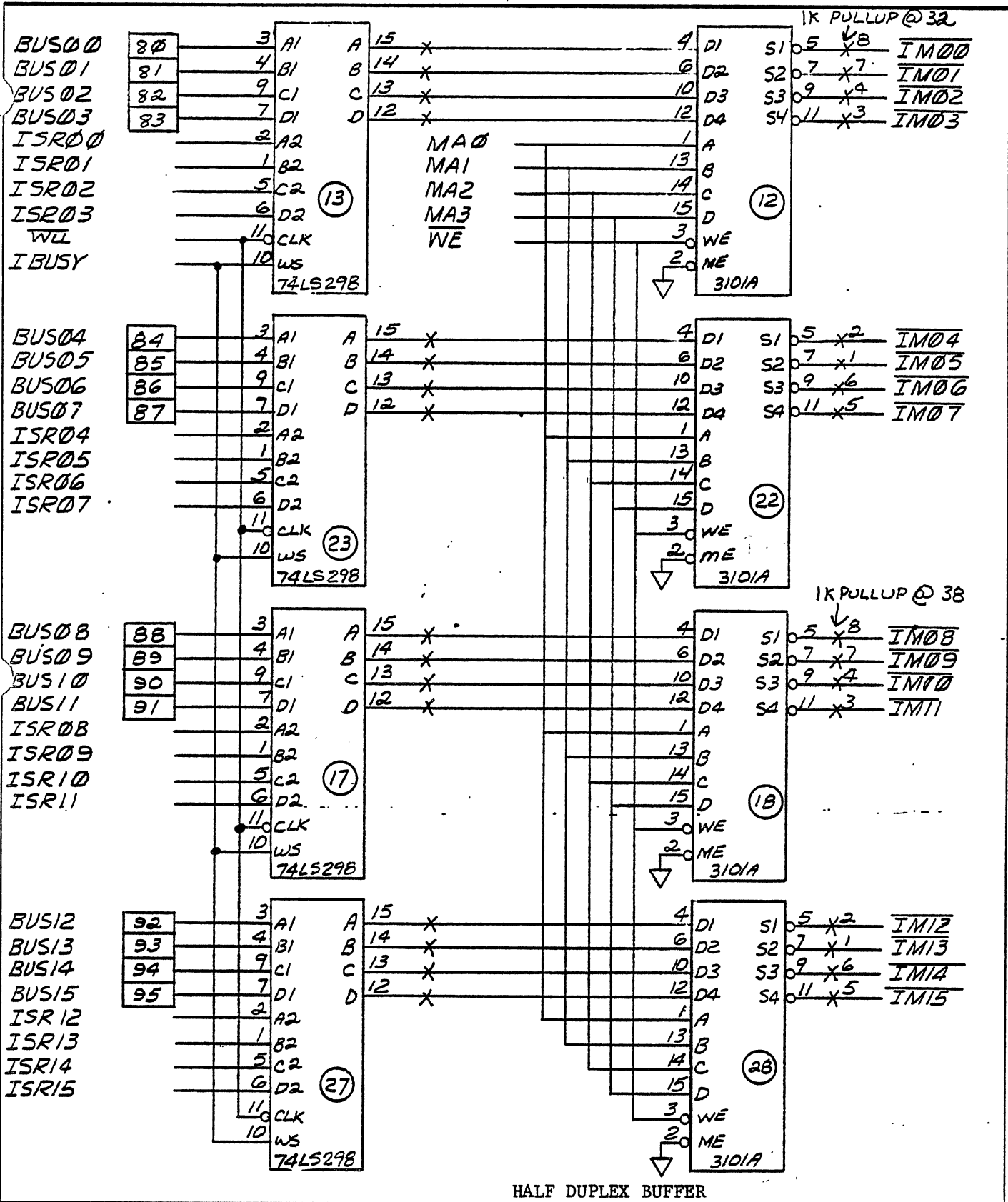
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