


NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ALL RESISTORS ARE 1/4W, ±5%
2. PIN 7 IS GRD & PIN 14 IS +5V FOR ALL 14 PIN INTEGRATED CIRCUIT PACKAGES.
 PIN 12 IS GRD & PIN 24 IS +5V FOR ALL 24 PIN INTEGRATED CIRCUIT PACKAGES.
 PIN 8 IS GRD & PIN 16 IS +5V FOR ALL 16 PIN INTEGRATED CIRCUIT PACKAGES EXCEPT AT LOCATIONS LISTED BELOW.
 AT U4, W4, Y4 & Z4 PIN 5 IS +5V & PIN 12 IS GRD
3. THIS DRAWING CONSISTS OF THE FOLLOWING SHEETS:
 1.0, 2.0, 2.1, 3.0, 4.0, 5.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 18.1, 18.2, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 43.1, 44.0, 45.0, 46.0, 47.0, 48.0, 48.1, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0, 101.0, 102.0, ~~103.0~~, 104.0, 105.0, 106.0, 107.0, 108.0, 109.0, 110.0, 111.0, 112.0, 113.0, 114.0, 115.0, 116.0, 117.0, 118.0, 119.0, 120.0
4. ALL CAPACITOR VALUES ARE .01 μf

REFERENCE DESIGNATIONS	
LAST USED	NOT USED
C53	C23, 47, 51
R44	R7, 35, 36, 37
Y1	
L1	
P1	
J6	J1

REFERENCE DRAWINGS	
44E0614	ACTUAL BOARD
44P0614	PANEL
40E0524	R.W. BOARD
97E0749	ACTUAL BOARD
97E0750	SOLDER MASK
97E0751	SILKSCREEN

DR		 varian data machines / a varian subsidiary 2722 michelson drive / irvine / california / 92614			
CHK					
DSGN		TITLE LOGIC DIAGRAM, PROCESSOR BOARD, DM53			
ENGR					
APPD		CODE IDENT NO.	SIZE	DWG NO	REV
APPD		21101	B	91B0378	AT
THIS DOCUMENT MAY CONTAIN PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE OR USED TO PRODUCE THE ARTICLE OR SUBJECT, WITHOUT WRITTEN PERMISSION FROM VDM		SCALE	SHEET 1.0		

		REVISIONS			
CODE	SYM	ZONE	DESCRIPTION	APPROVED	DATE
	X		PILOT RELEASE EN 80761	<i>[Signature]</i>	<i>[Date]</i>
	X ²		REVISED PER EN 80929	<i>[Signature]</i>	<i>[Date]</i>
	A		PRODUCTION RELEASE PER EN 80993	<i>[Signature]</i>	<i>[Date]</i>
	B		REVISED PER EN 81067	<i>[Signature]</i>	<i>[Date]</i>
	C	GR-	REVISED PER EN 81143	<i>[Signature]</i>	<i>[Date]</i>
	D		REVISED PER EN 81231	<i>[Signature]</i>	<i>[Date]</i>
	E		REVISED PER EN 81289	<i>[Signature]</i>	<i>[Date]</i>
	F		REVISED PER EN 81321	<i>[Signature]</i>	<i>[Date]</i>
	G		REVISED PER EN 81348	<i>[Signature]</i>	<i>[Date]</i>
	H		REVISED PER EN 81428	<i>[Signature]</i>	<i>[Date]</i>
	J		REVISED PER EN 81481	<i>[Signature]</i>	<i>[Date]</i>
	K		REVISED PER EN 81534	<i>[Signature]</i>	<i>[Date]</i>
	L	CW	REVISED PER EN 81638	<i>[Signature]</i>	<i>[Date]</i>
	M	CW	REVISED PER EN 81749	<i>[Signature]</i>	<i>[Date]</i>
	N	CW	REVISED PER EN 81750	<i>[Signature]</i>	<i>[Date]</i>
	P	CW	UPDATED FORMAT PER EN 81778	<i>[Signature]</i>	<i>[Date]</i>
	R		REVISED PER EN 81876	<i>[Signature]</i>	<i>[Date]</i>
	-	CW	REVISED PER EN 81933	<i>[Signature]</i>	<i>[Date]</i>
	-	CW	REVISED PER EN 81934	<i>[Signature]</i>	<i>[Date]</i>
	S		REVISED PER EN 82103	<i>[Signature]</i>	<i>[Date]</i>
	T		REVISED PER EN 82136	<i>[Signature]</i>	<i>[Date]</i>
	V		REVISED PER EN 82225	<i>[Signature]</i>	<i>[Date]</i>
	W		REVISED PER EN 82249	<i>[Signature]</i>	<i>[Date]</i>
	-	AL	REVISED PER EN 82408	<i>[Signature]</i>	<i>[Date]</i>
1	Y	PH	REVISED SHT 1, 9, 92, 97 PER EN 82425	<i>[Signature]</i>	<i>[Date]</i>
1	Z	PSH	REVISED SHT 3.0, 95.0 PER EN 82556	<i>[Signature]</i>	<i>[Date]</i>
1	AA	PSH	REVISED SHTS 1.0, 3.0, 4.0, 5.0, 43.0 & 92.0 PER EN 82648	<i>[Signature]</i>	<i>[Date]</i>
1	AB	PSH	REVISED SHTS 3.0, 39.0, 45.0, 93.0, 97.0, 98.0, 99.0, 120.0 PER EN 82649	<i>[Signature]</i>	<i>[Date]</i>
1	AC	PSH	REVISED SHTS 73.0, 74.0, & 120.0 PER EN 82650	<i>[Signature]</i>	<i>[Date]</i>
3	-	PSH	REVISED SHTS 90.0, 97.0 PER EN 82668	<i>[Signature]</i>	<i>[Date]</i>
2	AD	PSH	REVISED SHTS 42.0 AND 89.0 PER EN 82700.	<i>[Signature]</i>	<i>[Date]</i>
1	AE		REVISED SHT 46.0 PER EN 82777	<i>[Signature]</i>	<i>[Date]</i>
2	AF		SH 5.0, LOCATION M9 WAS: 74151 PER EN 82855	<i>[Signature]</i>	<i>[Date]</i>
1	AG		REVISED SHEETS 119.0 & 120.0 PER EN 82994.	<i>[Signature]</i>	<i>[Date]</i>

CODE IDENT NO.	SIZE	DWG NO	REV
21101	8	9180378	AT
SCALE		SHEET 2.0 OF	

2

1

D

C

B

A

REVISIONS					
CODE	QTY	ZONE	DESCRIPTION	APPROVED	DATE
1	AH	WG	REVISED SHTS 3.0, 2.0 & 9.0 PER EN 83302	W. Brown	7/1/74
3	AJ	WG	REVISED SHTS 3.0, 5.0, 7.0 - 13.0, 16.0, 17.0 - 18.2, 26.0, 33.0 - 41.0, 43.1, 44.0, 46.0, 48.0, 48.1, 51.0, 52.0, 57.0 - 60.0, 65.0, 73.0, 74.0, 76.0 - 79.0, 87.0, 88.0, 90.0, 92.0, 94.0 - 97.0, 99.0, 101.0, 102.0, 117.0 - 119.0 PER EN 83303	W. Brown	8/19/74
3	AK	WG	REVISED SHT. 9.0 PER EN 83304	W. Brown	8/10/74
1	AL	WG	REVISED SHT. 2.0 PER EN 83305	W. Brown	7/1/74
1	AM	J.Z.	REVISED SHT. 92.0 & 96.0 PER EN 83430	W. Brown	1/27/75
1	AN	J.Z.	REVISED SHT. 12.0 PER EN 83431	W. Brown	1/27/75
1	AP	GRL	SHEET S.O LOCATION KB WAS 74404 PER EN 83584	W. Brown	5-1-75
1	AR	GRL	REVISED SH 93.0, 95.0 AND 120.0 PER EN 83668	W. Brown	5-1-75
1	AS	GRL	REVISED SH 95.0 PER EN 83718	W. Brown	5-1-75
3	AT	GRL	ADDED NOTE 1 TO SH 4.0 LOCATIONS AI, CI, DI, EI, HI, JI, KI, MI, L4, M4, S4 AND T4 PER EN 83793	W. Brown	5-1-75


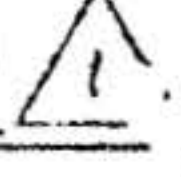

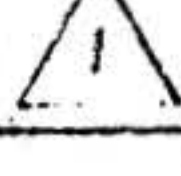
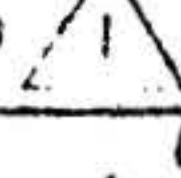
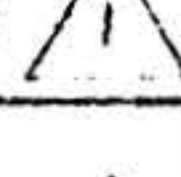
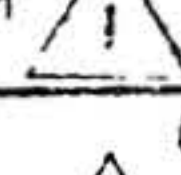
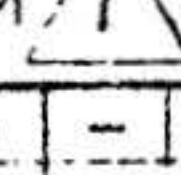
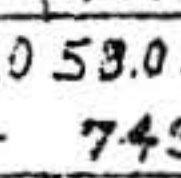
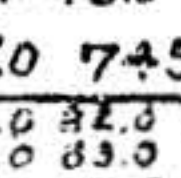

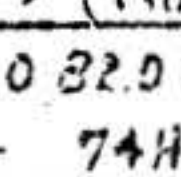
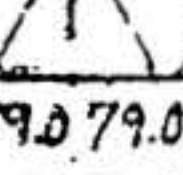
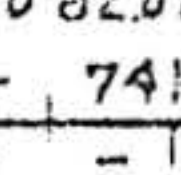
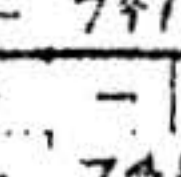
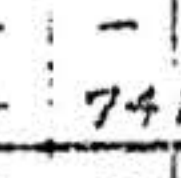
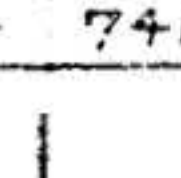


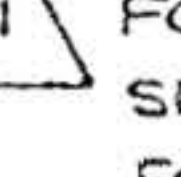
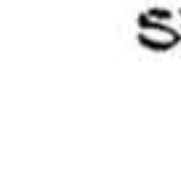


CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	9180378	AT
SCALE ~		SHEET 2.1 OF	

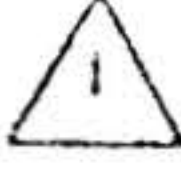
13 14 15 16 17

A	14.0 18.0 13.2 13.2	92.0 97.0 97.0 -	96.0 75.0 96.0 96.0	91.0 97.0	
B	25.0 90.0 74504	- - 74510	97.0	74504	128-001 SEL 7433
C	14.0 - - -	90.0 90.0 92.0 95.0	92.0 99.0 100.0 -	92.0	- -
D	- - 3101A	- - 3001	- -	74511	- - 74H21
E	12.0 13.2 13.2 25.0	41.0 97.0 - -	91.0 91.0 - -	91.0 92.0 - -	- -
F	- - 74H01	- - 74S74	- - 74S74	- - 74S112	- -
G	14.0 90.0 97.0 -	92.0 92.0 92.0 92.0	90.0 91.0 - -	91.0 91.0 - -	- -
H	(2 spares) 925-005 (1302)	- - 74500	- - 745112	- - 74H50	- -
I	14.0 - - -	92.0 92.0 - -	90.0 90.0 90.0 91.0	90.0 90.0 - -	- -
J	- - 3101A	- - 745114	74504	- - 74S74	- -
K	19.0 19.0 24.0 24.0	97.0 - - -	13.0 91.0 97.0 95.0	90.0 90.0 - -	- -
L	- - 74H01	- - 74S64	- - 3002	- - 74H74	- -
M	14.0 - - -	98.0 97.0 97.0 100.0	52.0 90.0 94.0 95.0	94.0 94.0 94.0 94.0	128-001 SEL 7433
N	- - 3101A	- - 74500	- - 74500	- -	- -
O	20.0 20.0 23.0 23.0	90.0 95.0 97.0 -	97.0 - - -	94.0 94.0 94.0 94.0	- -
P	- - 74H01	- - 74510	- - 74H101	- - 74H00	- -
Q	14.0 - - -	90.0 97.0 97.0 -	97.0 - - -	93.0 94.0 - -	- -
R	(4 spares) 925-005 (1302)	- - 74511	- - 74H101	- - 74S74	- -
S	14.0 45.0 - -	95.0 95.0 95.0 95.0	94.0 95.0 96.0 97.0	52.0 95.0 95.0 95.0	- -
T	- - 3101A	- - 74500	99.0 102.0 74504	- - 3001	- -
U	21.0 21.0 22.0 22.0	102.0 - - -	102.0 - - -	95.0 - - -	92.0 95.0 - -
V	- - 74H01	- - 3404	- - 3404	- - 74H55	- - 74511
W	104.0 104.0 106.0 106.0	101.0 - - -	101.0 - - -	95.0 95.0 43.0 -	91.0 91.0 92.0 95.0
X	25.0 7.0 74H04	- - 3404	- - 3404	- - 74510	- - 74300
Y	104.0 - - -	102.0 - - -	102.0 - - -	101.0 - - -	92.0 92.0 92.0 92.0
Z	- - 74S153	- - 3404	- - 3404	- - 3404	92.0 92.0 74504
A	106.0 - - -	100.0 100.0 100.0 100.0	98.0 - - -	101.0 - - -	92.0 92.0 92.0 92.0
B	- - 74S153	- - 128-001 SEL 7433	- - 74153	- - 3404	92.0 92.0 74504
C	107.0 - - -	100.0 - - -	99.0 - - -	98.0 99.0 - -	93.0 93.0 - -
D	- - 74S153	- - 74157	- - 74153	- - 3404	- - 7485
E	106.0 - - -	100.0 100.0 100.0 100.0	98.0 - - -	98.0 98.0 93.0 98.0	93.0 93.0 - -
F	- - 74S153	- - 128-001 SEL 7433	- - 74153	- - 128-001 SEL 7433	- - 7485
G	104.0 104.0 105.0 106.0	100.0 - - -	99.0 - - -	98.0 99.0 99.0 99.0	93.0 96.0 - -
H	106.0 107.0 74H04	- - 74157	- - 74153	- - 128-001 SEL 7433	- - 74H40
I	105.0 - - -	100.0 100.0 100.0 100.0	98.0 - - -	98.0 99.0 - -	93.0 93.0 - -
J	- - 74S153	- - 128-001 SEL 7433	- - 74153	- - 3404	- - 7485
K	107.0 - - -	100.0 - - -	99.0 - - -	98.0 99.0 99.0 99.0	96.0 96.0 96.0 96.0
L	- - 74S153	- - 74157	- - 74153	- - 128-001 SEL 7433	- - 128-001 SEL 7433
M	105.0 - - -	100.0 100.0 100.0 100.0	98.0 - - -	96.0 93.0 99.0 -	93.0 93.0 - -
N	- - 74S153	- - 128-001 SEL 7433	- - 74153	- - 3404	- - 7485
O	107.0 - - -	100.0 - - -	99.0 - - -	96.0 98.0 98.0 97.0	96.0 - - -
P	- - 74S153	- - 74157	- - 74153	- - 128-001 SEL 7433	- - DM9551

13 14 15 16 17

LOW PART NO.	REV	QTY	REV
21101	B	9180378	AT
SCALE	SHEET 3 OF 7		

	1	2	3	4	5	6
A	35.0	9.0	-	9.0	34.0	85.0
B	PROM 	-	93H72	-	74S64	74S00
C	55.0	9.0	74.0 87.0	57.0	16.1 49.1 73.0 73.0	9.0 18.1 40.0 40.0
D	PROM 	-	93H72	74H74	74S64	74H00
E	56.0	9.0	10.0	11.0 57.9 65.0	34.0	18.1 40.0 42.1 48.0
F	PROM 	-	93H72	93H72	74S11	74S64
G	56.0	10.0	65.0 65.0 75.0 86.0	57.0 65.0 65.0	57.0 57.0 65.0 65.0	11.0
H	PROM 	-	93H72	3001	74S10	74S00
I	56.0	65.0	65.0 65.0 65.0 75.0 75.0 75.0	57.0 61.0 65.0 65.0	76.0 86.0 86.0	16.1
J	PROM 	-	74S00	74S00	65.0 75.0 74S04	74H11
K	54.0	64.0	48.1 75.0 75.0	75.0 75.0 87.0 89.0	57.0 65.0 75.0 75.0	48.0
L	PROM 	-	93H72	74S11	3001	75.0 75.0 74S04
M	54.0	64.0	71.0 71.0 74.0 74.0	66.0 67.0 71.0 71.0	75.0 75.0 75.0	11.0 11.0 11.0 11.0
N	PROM 	-	93H72	87.0 87.0 74S04	3001	74S11
O	54.0	63.0	63.0	74.0 75.0 75.0 75.0	76.0 76.0 84.0	49.0 49.0
P	PROM 	-	93H72	93H72	87.0 88.0 74S04	74S11
Q	53.0	62.0	65.0 87.0 87.0	76.0 86.0 86.0 89.0	76.0 76.0 76.0	49.0 49.0
R	PROM 	-	93H72	74S10	3001	74S11
S	53.0	61.0	62.0	74.0	72.0 89.0 89.0	49.0 49.0
T	PROM 	-	93H72	93H72	PROM 	74S10
U	53.0	87.0	87.0 88.0	74.0	89.0 89.0	49.0 49.0
V	PROM 	-	74S64	74H74	PROM 	74S20
W	61.0	58.0	78.0	77.0 79.0 79.0 79.0	89.0 89.0	50.0
X	PROM 	-	93H72	74S65	74S65	74H74
Y	58.0 58.0 58.0 58.0	59.0	78.0	58.0 74.0 78.0 79.0	88.0 88.0 88.0 88.0	50.0 50.0
Z	PROM 	-	74S65	74S65	(No Spares) 025-005 (330.2)	74H05
AA	50.0 62.0 72.0 78.0	59.0	77.0	77.0 79.0 79.0 79.0	78.0 79.0 79.0 79.0	27.0
AB	PROM 	-	74S65	74S65	(No Spares) 025-005 (330.2)	74S03
AC	80.0 81.0 82.0 83.0	60.0	77.0	73.0	76.0 76.0 76.0 76.0	28.0
AD	PROM 	-	74S65	74S65	PROM 	74S00
AE	80.0 81.0 82.0 83.0	72.0	72.0	67.0	50.0	28.0
AF	PROM 	-	74H01	74I51	74I51	74S64
AG	83.0	71.0	71.0	67.0	53.0	27.0
AH	PROM 	-	74I51	74I51	74I51	74S64
AI	82.0	70.0	70.0	51.0	15.0	27.0
AJ	PROM 	-	74I51	74I51	74H30	(No Spares) 025-005 (330.2)
AK	81.0	69.0	69.0	66.0	50.0 75.0 87.0	26.0
AL	PROM 	-	74I51	74I51	74I51	74S00
AM	80.0	68.0	68.0	66.0	44.0	26.0
AN	PROM 	-	74I51	74I51	74I51	DM9551

 FOR PROM PART NO. USED ON 44P0614-000
 SEE PARTS LIST 44P0614
 FOR PROM PART NO. USED ON 44P0614-001
 SEE OPTION DWG U1A1331.

ORDER NO.	REV	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 4.0 OF		

	7	8	9	10	11	12
A	420 480 48.1 740 430 - - - 420 480 - - 3001 - - 3001 - - 3002 - - 74564 - - 74564					
B	12.0 430 430 - - 10.0 10.0 12.0 13.1 13.1 740 - - 730 730 - - 18.0 - - 25.0 - - 74503 43.0 43.0 74504 - - 74520 - - 74H74 - - 74H54 - - 74H54					
C	18.2 - - - 18.1 43.0 - - 18.1 18.1 13.1 13.1 16.0 41.0 - - 19.0 - - 24.0 - - 745151 - - 745112 - - 74500 - - 74520 - - 74H54 - - 74H54					
D	18.2 - - - 10.0 10.0 - - 10.0 10.0 - - 16.0 16.0 16.0 16.0 19.0 - - 24.0 - - 745157 - - 745114 - - 745114 16.0 16.0 74H04 - - 74H54 - - 74H54					
E	44.0 - - - 10.0 43.0 67.0 - 10.0 10.0 10.0 13.1 12.0 12.0 - - 19.0 19.0 20.0 21.0 23.0 - - - 74157 - - 74511 33.0 86.0 74504 - - 74540 21.0 23.0 74504 - - 74H54					
F	41.0 43.0 - - 11.0 17.0 17.0 17.0 12.0 16.0 16.0 16.0 45.0 - - - 20.0 - - - 20.0 22.0 22.0 23.0 - - - 74H74 - - 3001 - - 74500 - - 93516 - - 74H54 24.0 24.0 74504					
H	41.0 43.0 52.0 76.0 16.0 16.1 41.0 48.1 16.0 16.0 79.0 - 45.0 - - - 20.0 - - - 23.0 - - - 74500 89.0 89.0 74504 - - 74510 - - 93516 - - 74H54 - - 74H54					
J	16.1 49.0 52.0 - 16.0 17.0 - - 16.0 16.0 17.0 17.0 45.0 - - - 21.0 - - - 22.0 - - - 74511 - - 745139 - - 3002 - - 93516 - - 74H54 - - 74H54					
K	52.0 - - - 17.0 17.0 17.0 17.0 41.0 44.0 - - 45.0 - - - 21.0 - - - 22.0 - - - 745151 17.0 41.0 74504 - - 74H51 - - 93516 - - 74H54 - - 74H54					
L	52.0 - - - 10.0 10.0 41.0 43.0 51.0 - - - 39.0 - - - 32.0 - - - 745151 52.0 76.0 74504 - - 74175 - - 096-001 74181 PC - - 096-001 74181 PC					
M	19.1 52.0 - - 13.0 - - - 48.1 - - - 39.0 - - - 38.0 - - - 74574 - - 745158 - - 745151 - - 096-001 74181 PC - - 096-001 74181 PC					
N	52.0 52.0 - - 52.0 - - - 41.0 41.0 - - 52.0 52.0 - - 41.0 41.0 - - 39.0 - - - 38.0 - - - 74574 (8 spores) 025-005 (3302) - - 74153 - - 096-001 74181 PC - - 096-001 74181 PC					
P	50.0 - - - 43.0 50.0 - - 42.0 - - - 41.0 - - - 39.0 - - - 104.0 104.0 106.0 106.0 - - - 745158 - - 74H21 - - 74194 - - 3404 - - 74182 - - 123-001 123-001 123-001 123-001					
R	33.0 - - - 15.0 - - - 47.0 47.0 47.0 47.0 37.0 - - - 35.0 - - - 108.0 - - - 74H54 - - 3101A - - 3002 - - 74151 - - 74151 - - 74194					
S	33.0 - - - 28.0 29.0 29.0 32.0 42.0 - - - 37.0 - - - 35.0 - - - 104.0 104.0 106.0 106.0 - - - 74H54 33.0 33.0 74504 - - 74194 - - 74151 - - 74151 - - 128-001 128-001 128-001 128-001					
T	32.0 - - - 15.0 - - - 47.0 - - - 37.0 - - - 35.0 - - - 108.0 - - - 74H54 - - 3101A - - 74H30 - - 74151 - - 74151 - - 74194					
U	32.0 - - - 38.0 42.0 42.0 - 46.0 - - - 37.0 - - - 35.0 - - - 103.0 105.0 107.0 107.0 - - - 74H54 - - 74511 - - AM74161 - - 74151 - - 74151 - - 128-001 128-001 128-001 128-001					
W	31.0 - - - 27.0 23.0 31.0 32.0 42.0 - - - 36.0 - - - 34.0 - - - 108.0 - - - 74H54 43.0 51.0 74504 - - 74194 - - 74151 - - 74151 - - 74194					
X	31.0 - - - 15.0 - - - 47.0 47.0 47.0 47.0 36.0 - - - 34.0 - - - 105.0 105.0 105.0 107.0 - - - 74H54 - - 3101A - - 3002 - - 74151 - - 74151 - - 107.0 107.0 74H04					
Y	30.0 - - - 26.0 26.0 27.0 30.0 42.0 - - - 34.0 - - - 34.0 - - - 105.0 105.0 107.0 107.0 - - - 74H54 30.0 31.0 74504 - - 74194 - - 74151 - - 74151 - - 128-001 128-001 128-001 128-001					
Z	30.0 - - - 15.0 - - - 46.0 - - - 36.0 - - - 34.0 - - - 108.0 - - - 74H54 - - 3101A - - AM74161 - - 74151 - - 74151 - - 74194					

CODE POINT NO.	SIZE	DATE	BY
21101	B	9/18/03	378
SCALE	SHEET 5 OF 5		

2

1

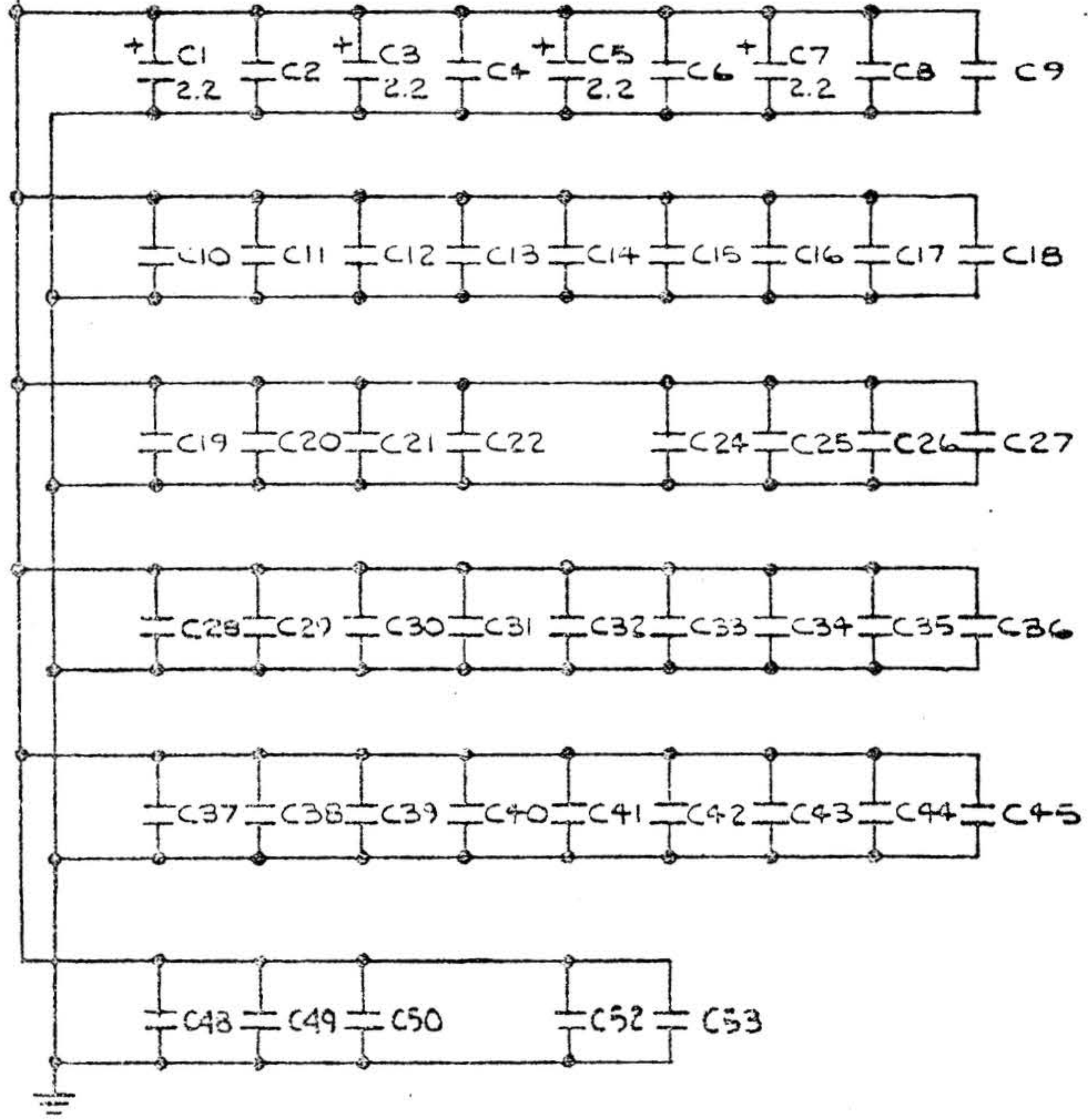
D

C

B

A

+5V



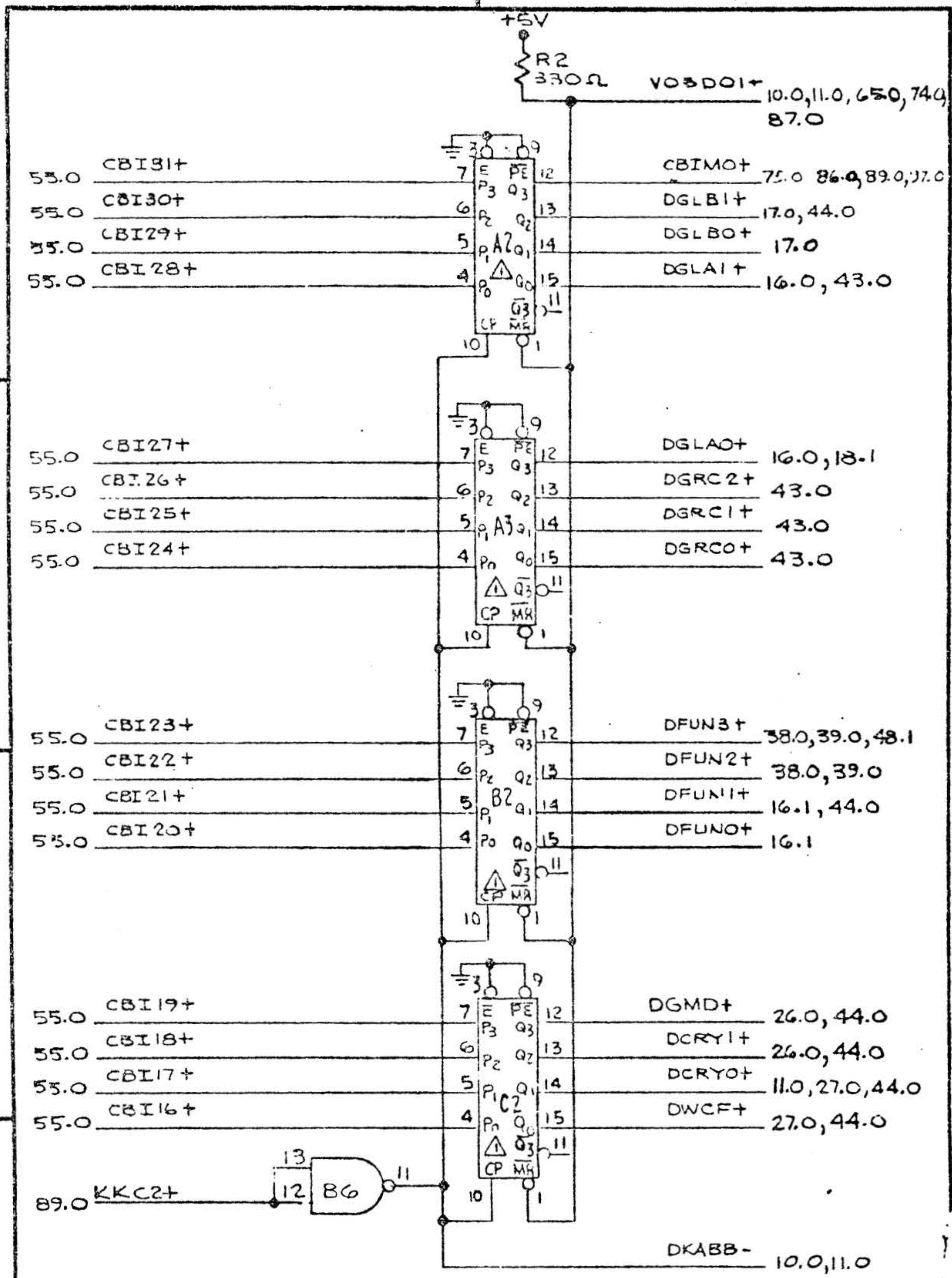
REV. NO.	REV.	DATE	BY
31101	B	91B0378	AT
SCALE	SHEET 8 OF 9		

D

C

B

A



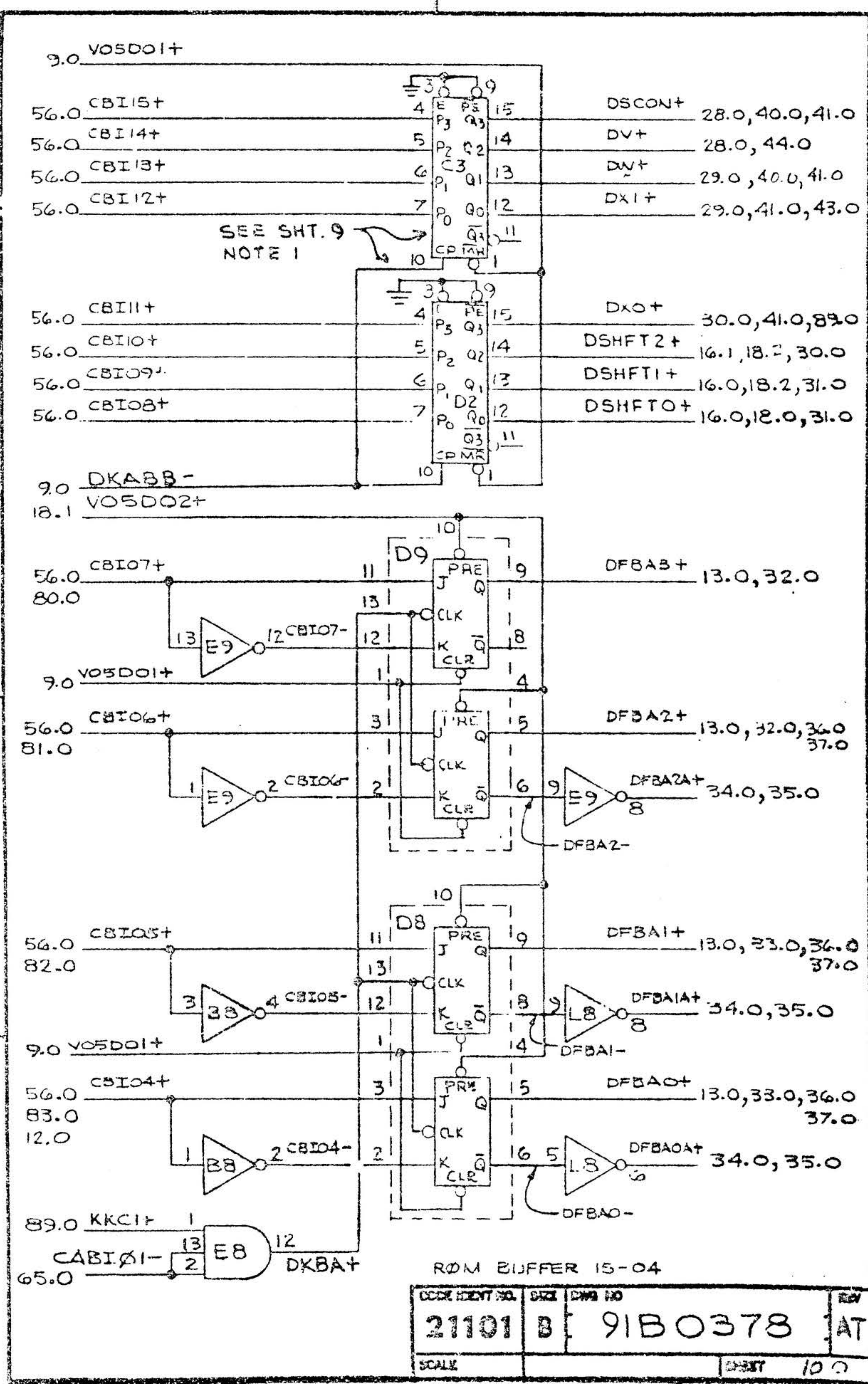
△ A2, A3, B2 & C2 ARE 4 BIT SHIFT REG.

RPM BUFFER 31-16

CODE IDENT NO.	SIZE	DWG NO	BY
21101	B	91B0378	AT
SCALE	SHEET		9.0

2

1



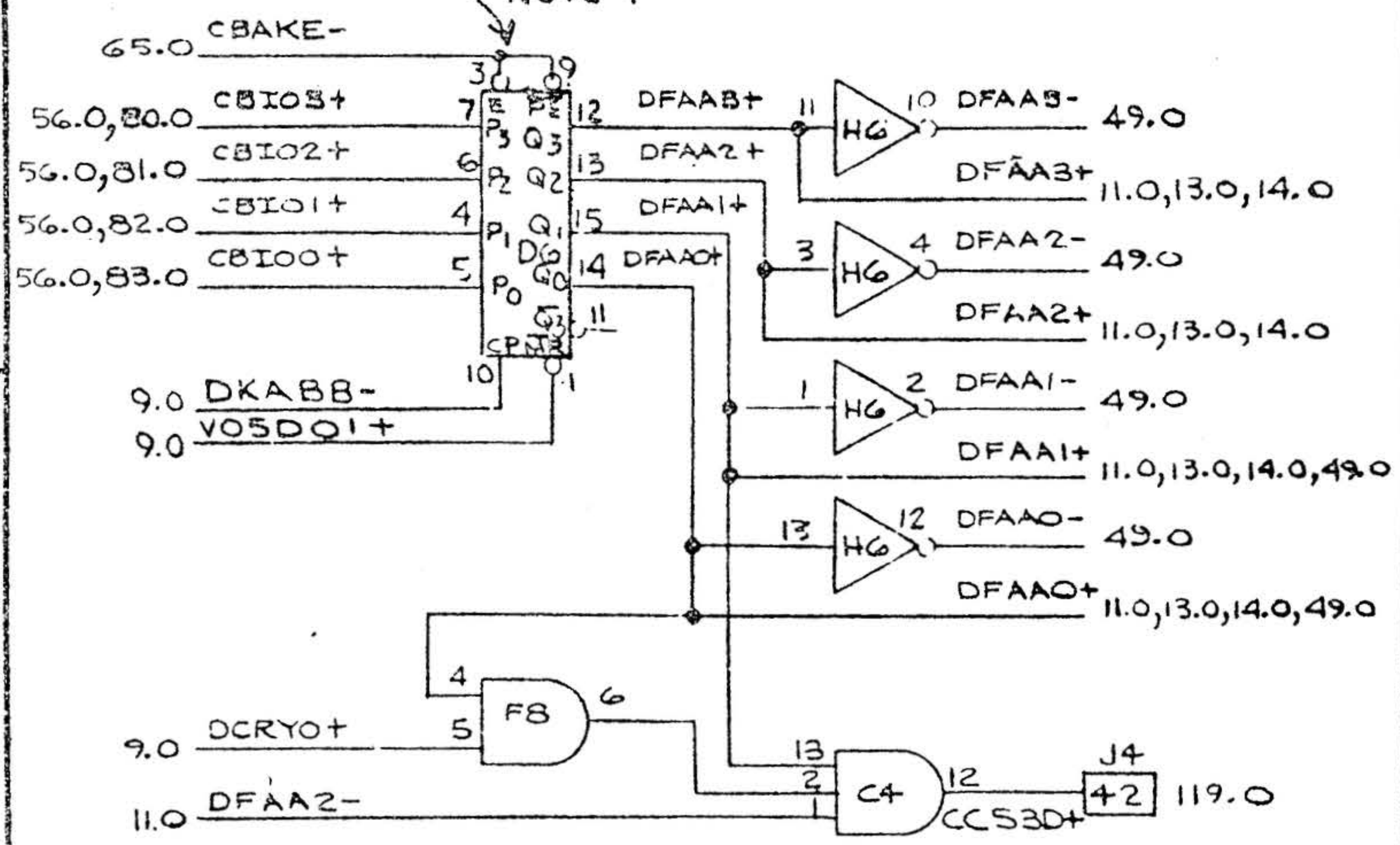
D

C

B

A

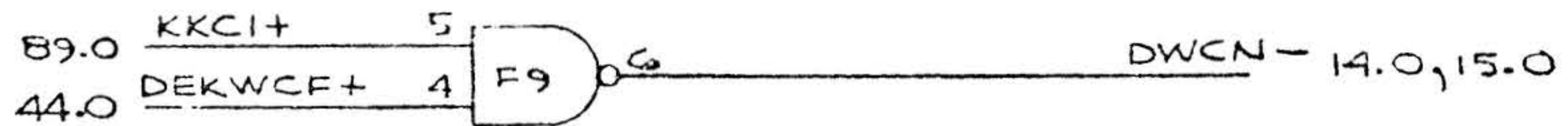
SEE SHT 9
NOTE 1



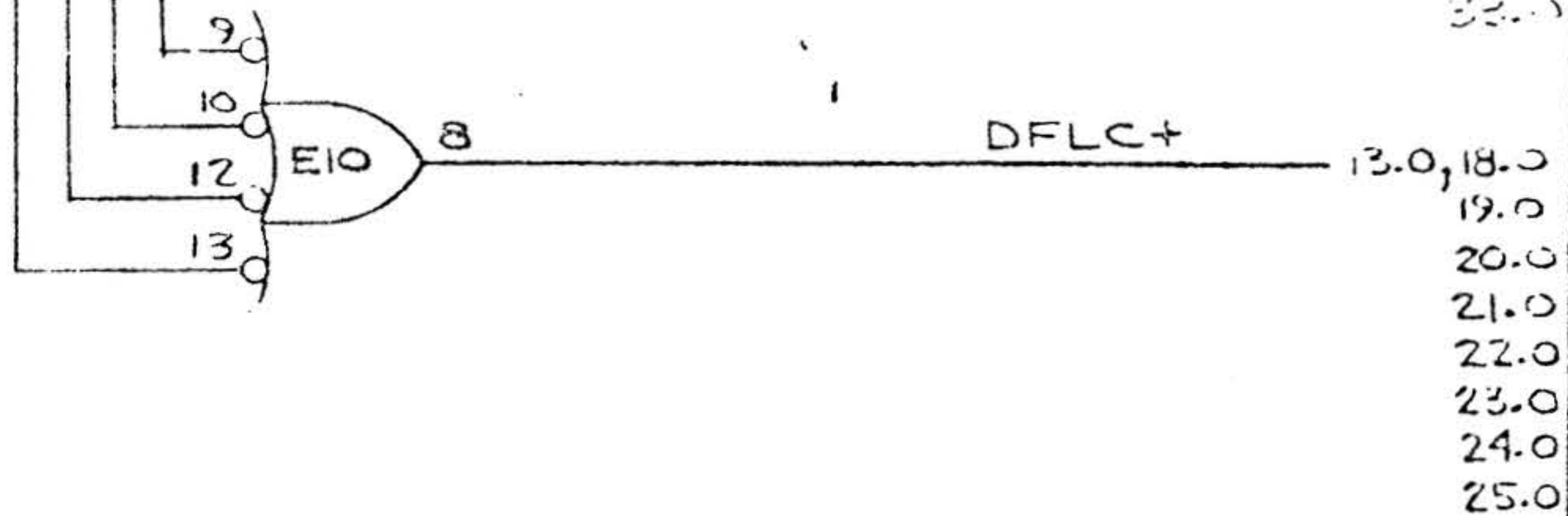
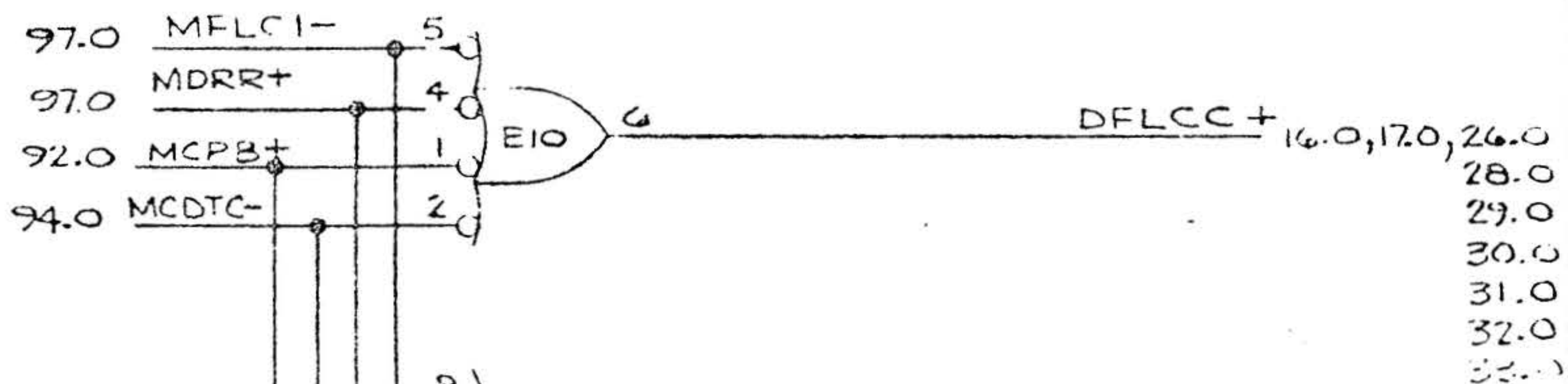
ROM BUFFER OB-00

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 11.0	

D



C



B

A

FILE CONTROL

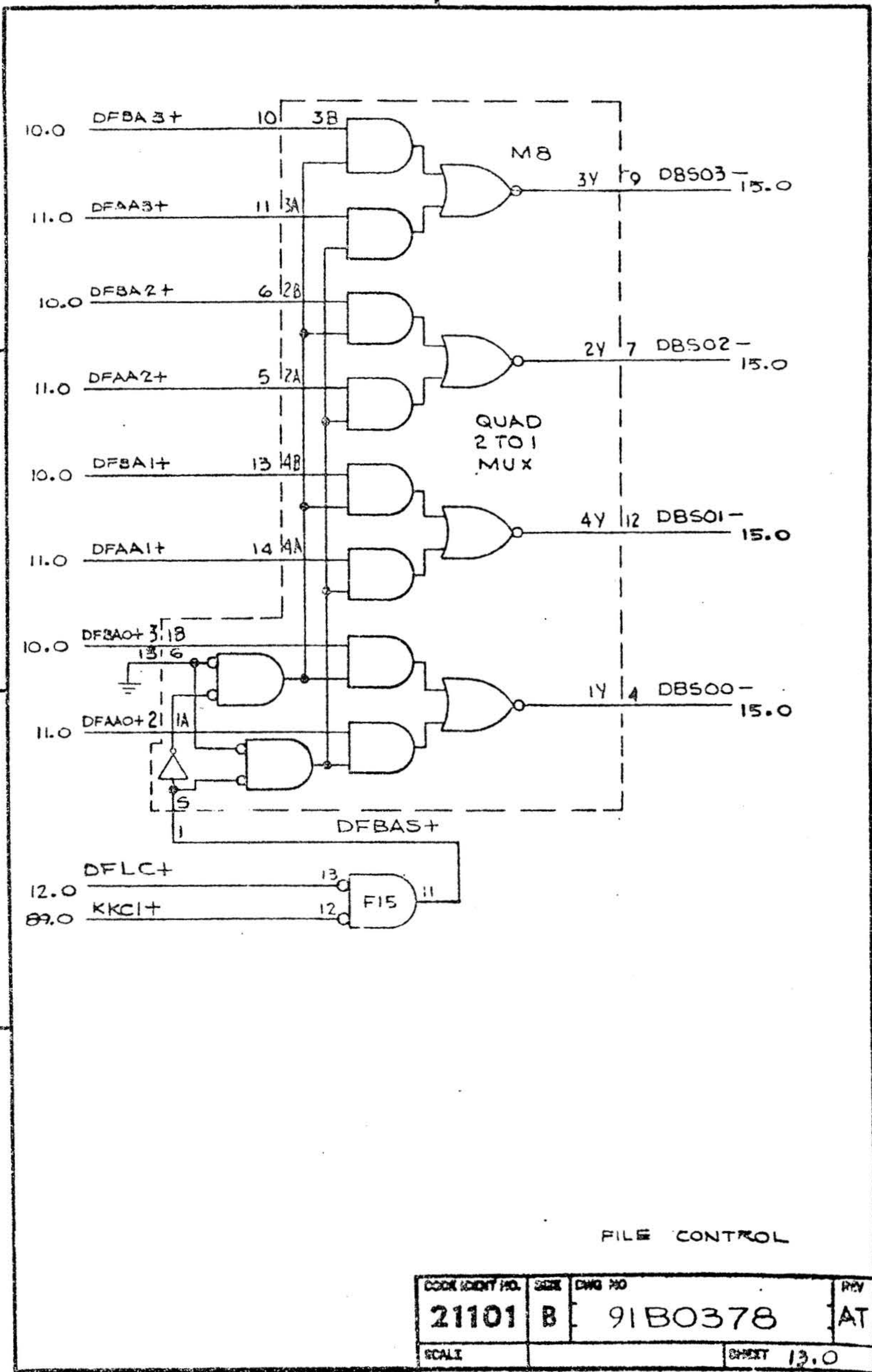
CODE IDENT NO.	SIZE	DATE NO	REV
21101	B	91B0378	AT
SCALE		SHEET	12.0

D

C

B

A



FILE CONTROL

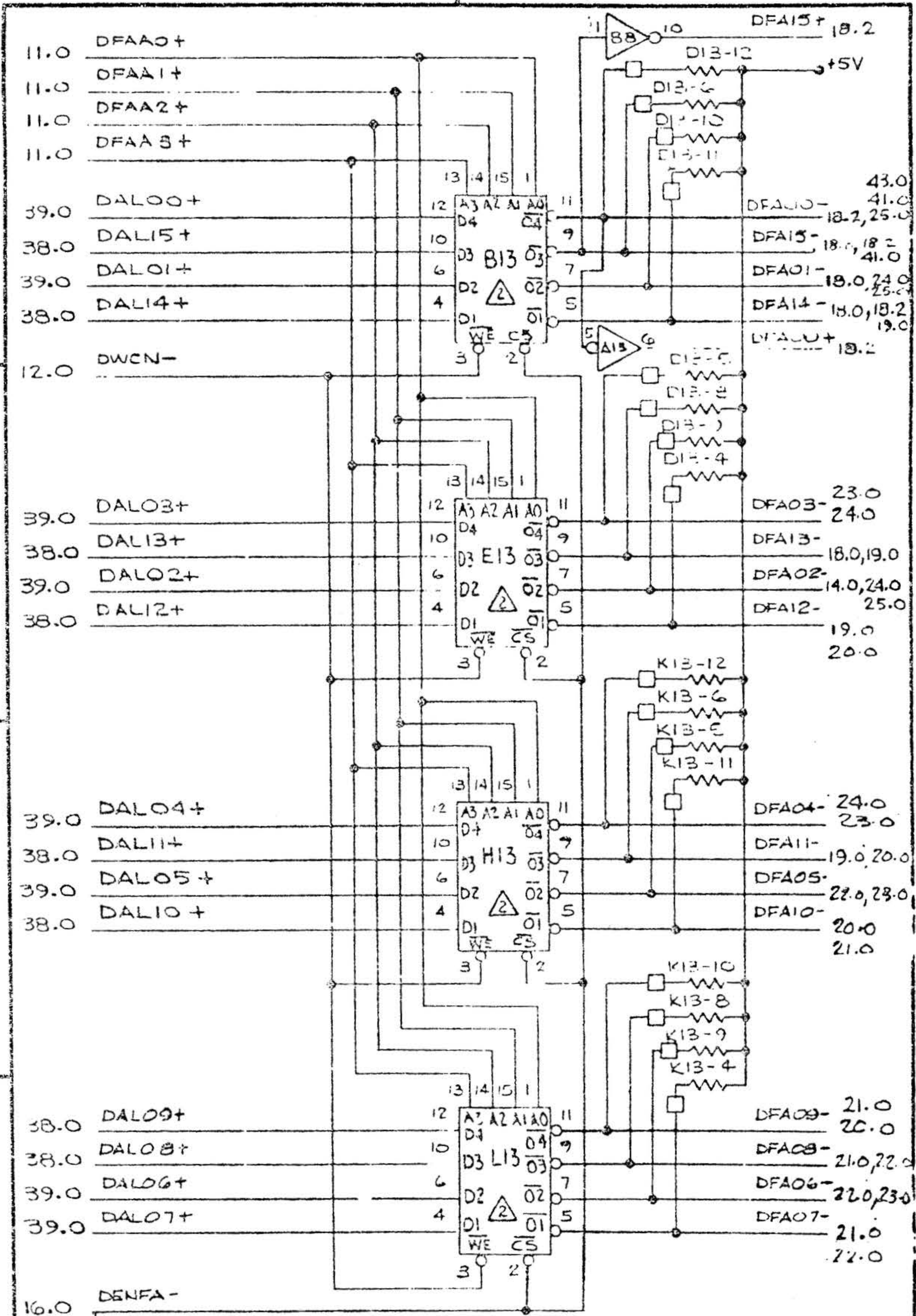
CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 13.0	

D

C

B

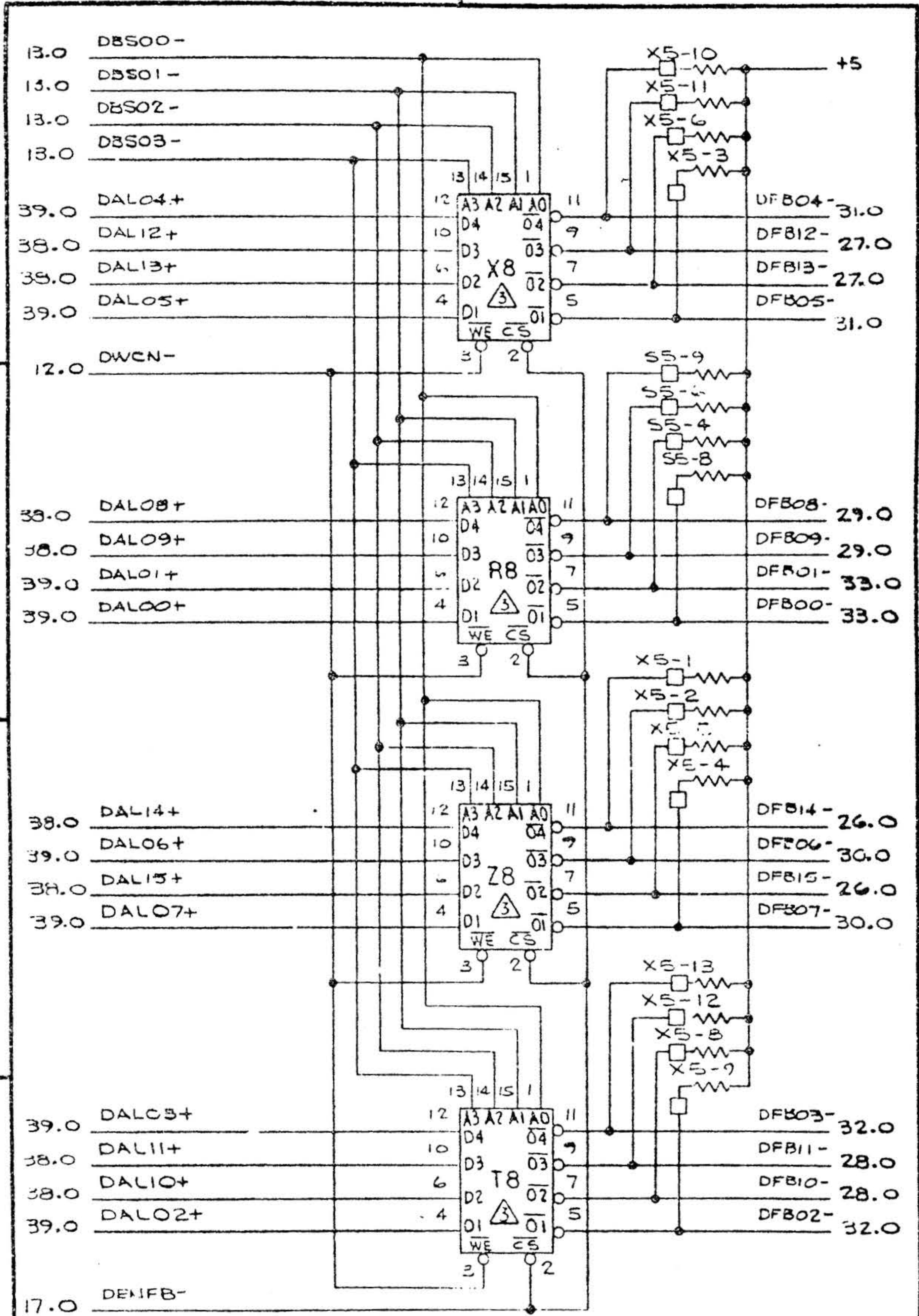
A



△ B13, E13, H13, L13 ARE
64 BIT RAM

COMPONENT NO.	SIZE	DRWG NO	REV
21101	B	91B0378	AT
SCALE	INCHES 14.0		

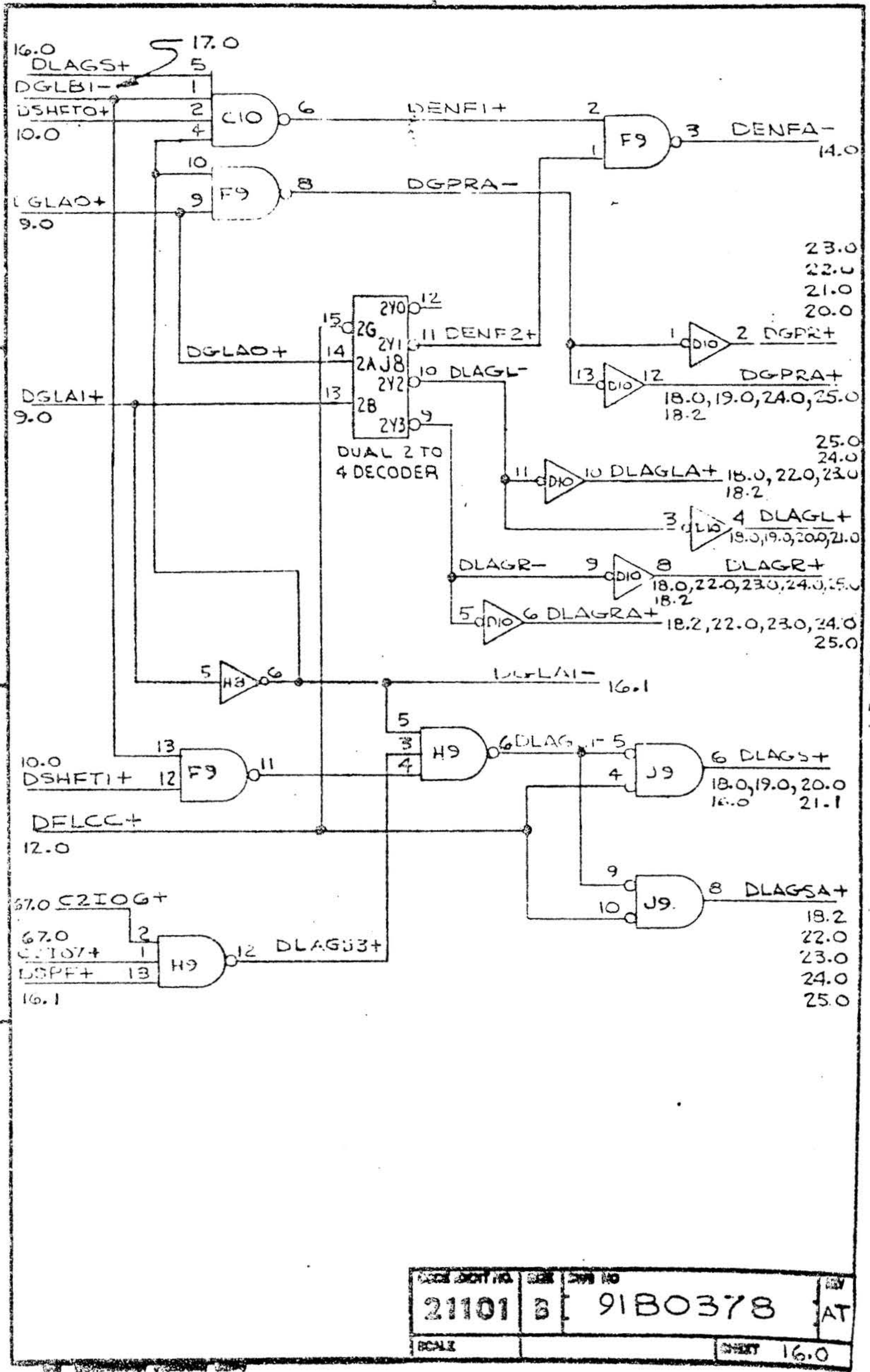
D
C
B
A



△ X8, R8, Z8, T8 ARE 64 BIT RAM

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 15.0		

D
C
B
A



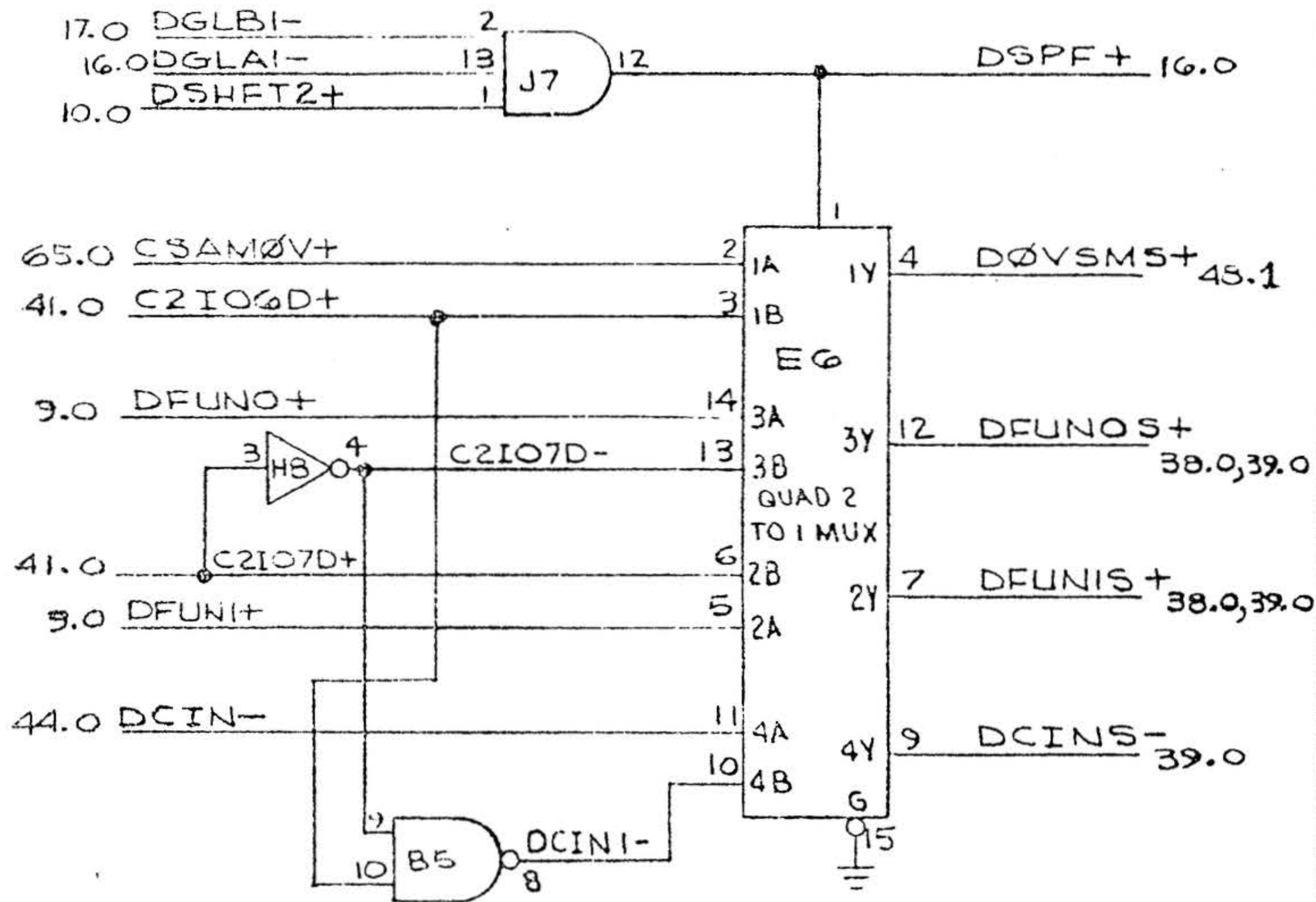
DATE	21101	REV	3	DWG NO	91B0378	BY	AT
SCALE		SHEET	16.0				

D

C

B

A



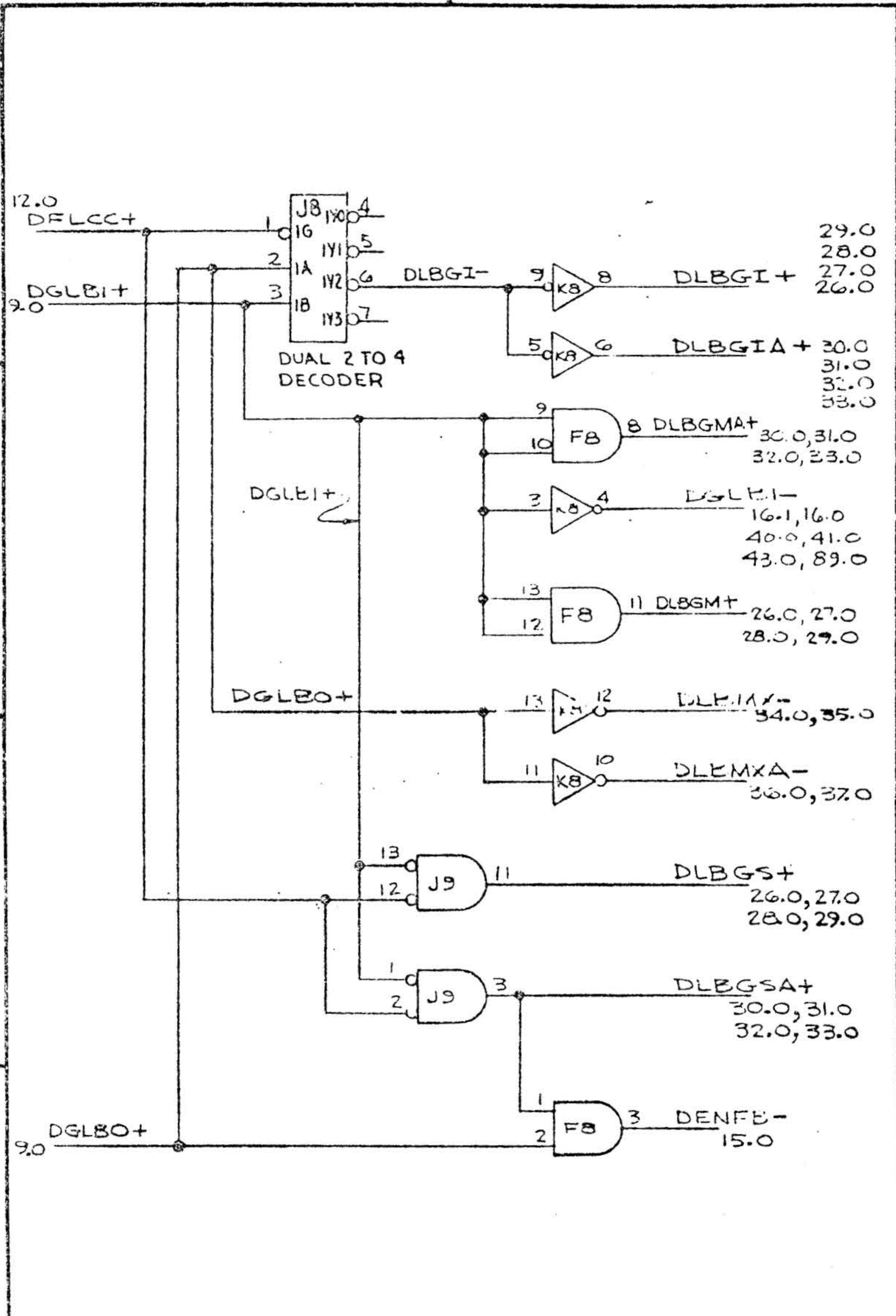
CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 16.1	

D

C

B

A



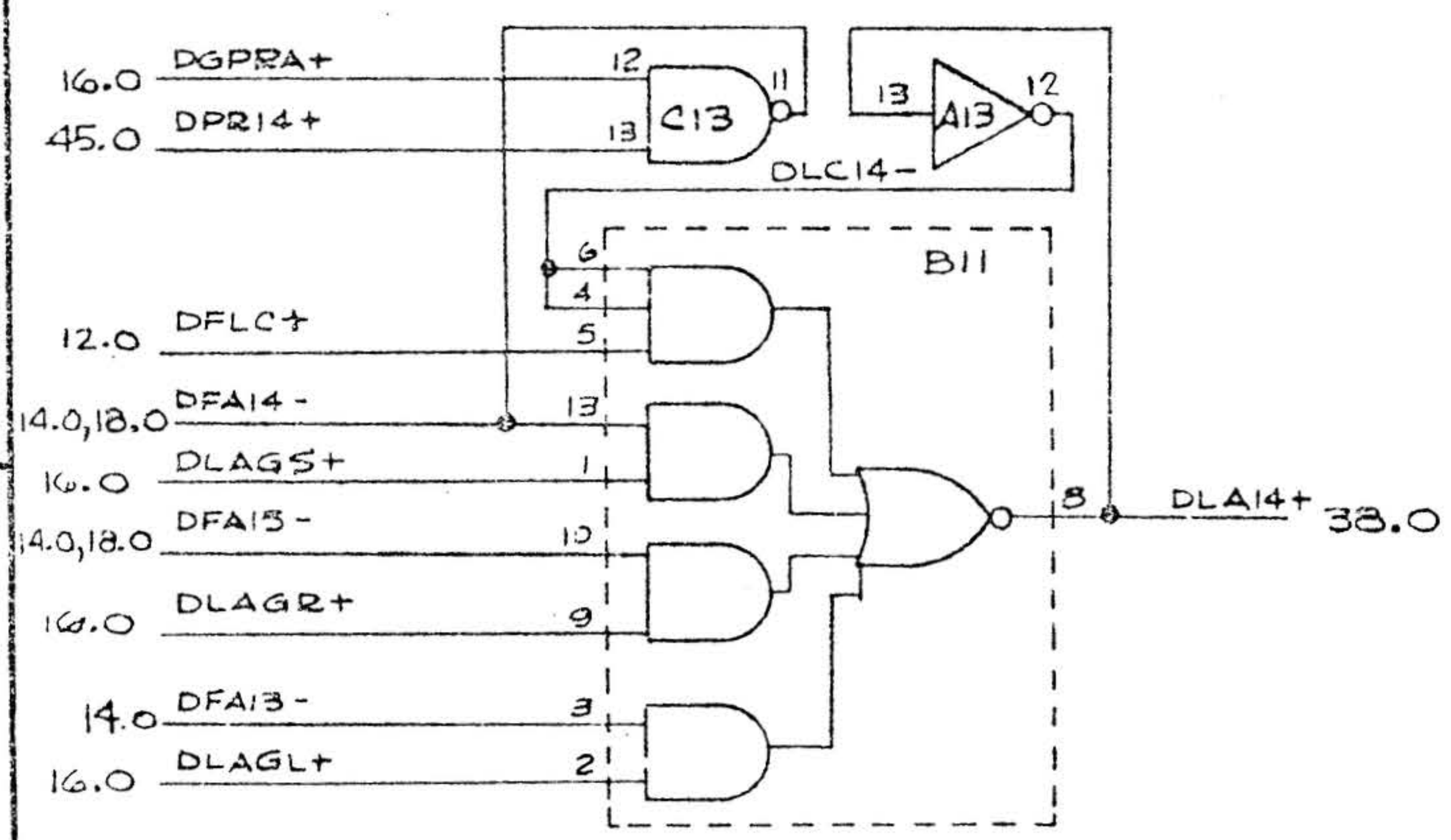
CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET		17.0

D

C

B

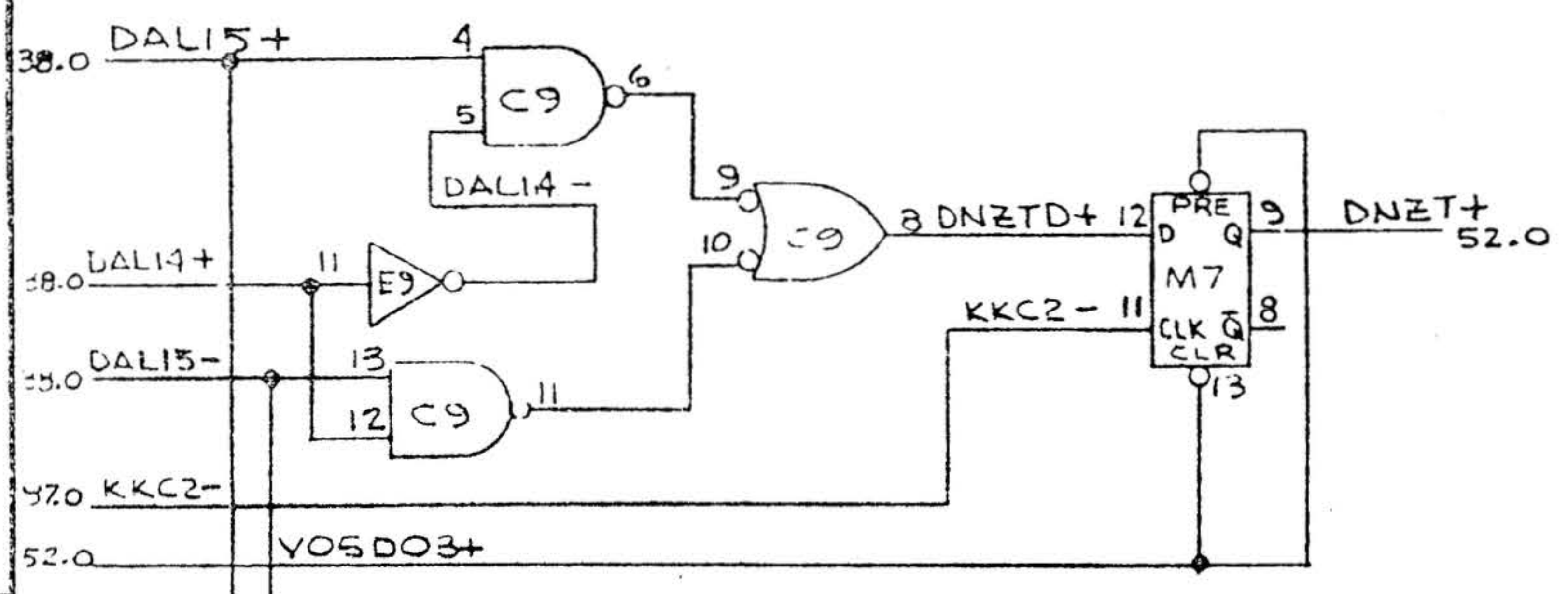
A



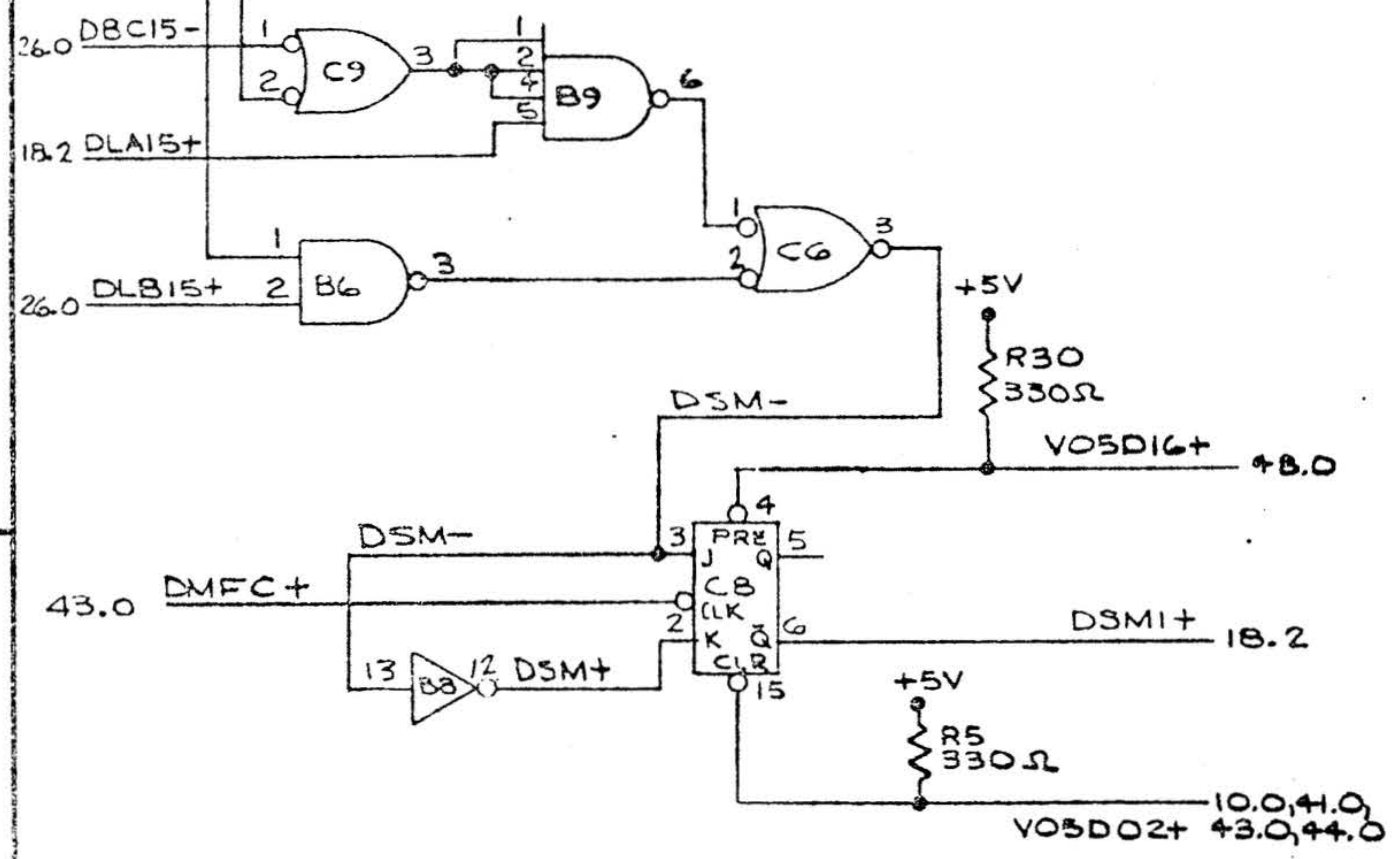
LATCH A 14

CODE IDENT NO.	SIZE	DRAW NO	REV
21101	B	91B0378	AT
SCALE	SHEET		18.0

D



C



B

A

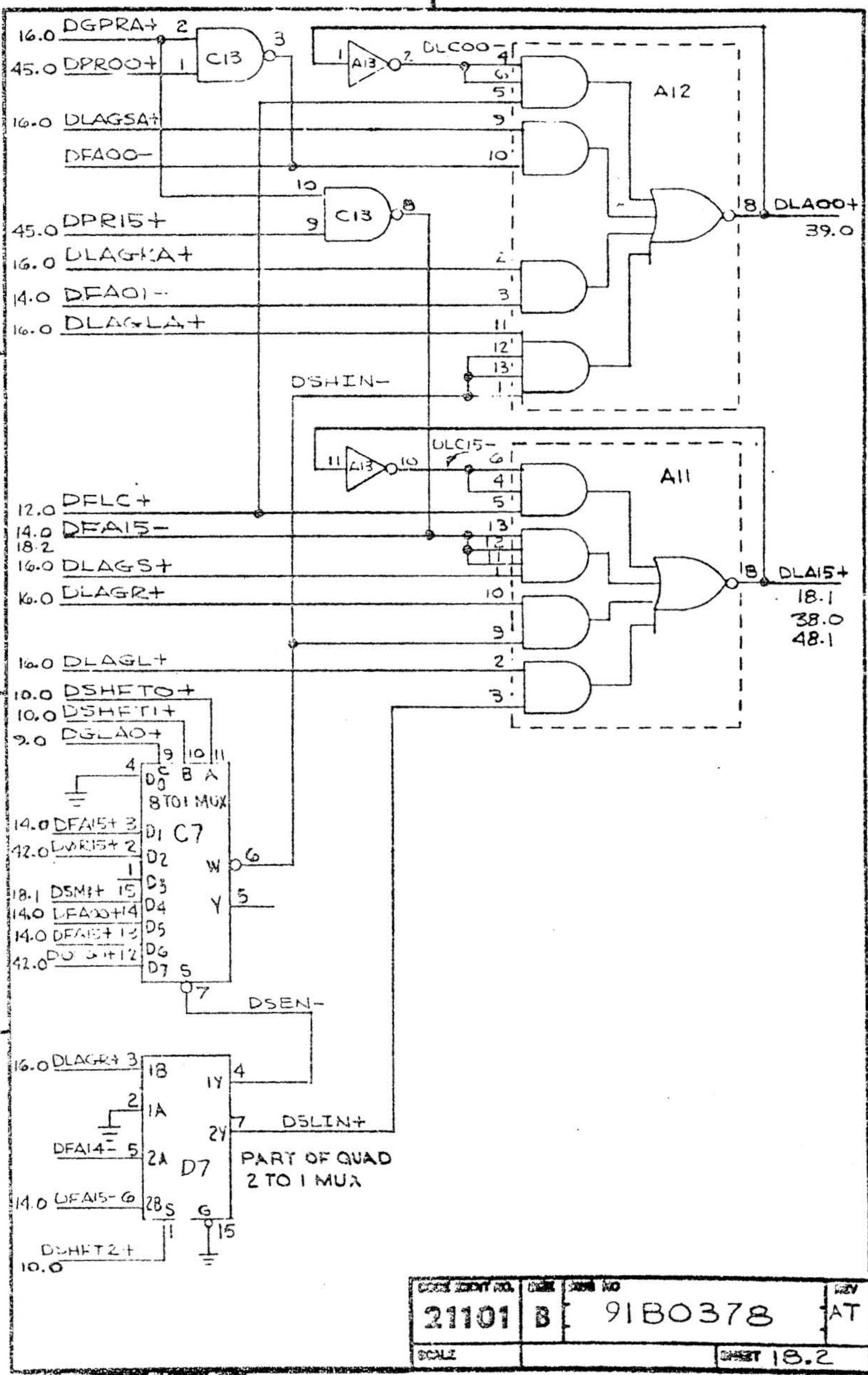
CODE IDENT NO.	SIZE	DRWG NO.	REV
21101	B	91B0378	AT
SCALE	SHEET 18.1		

D

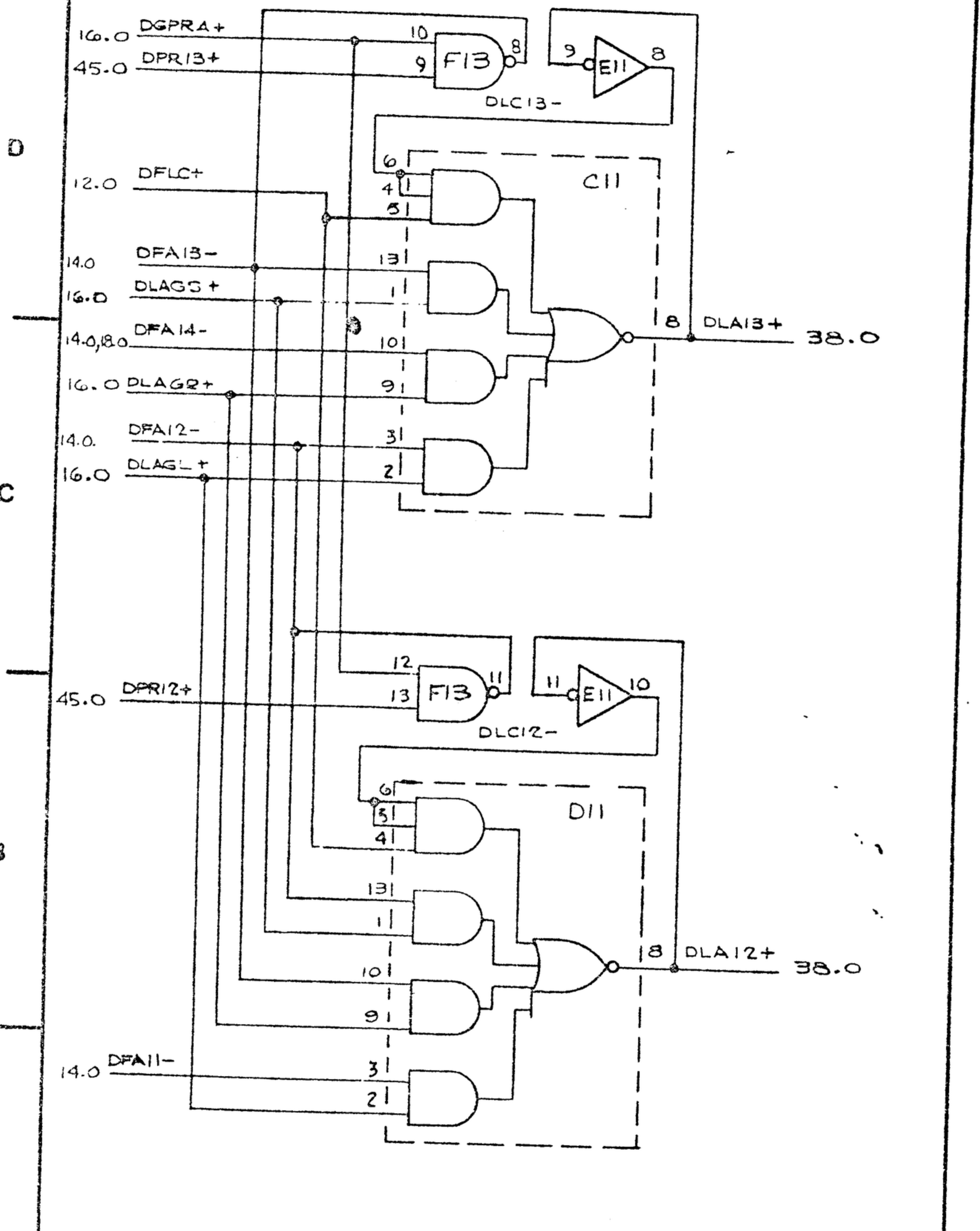
C

B

A

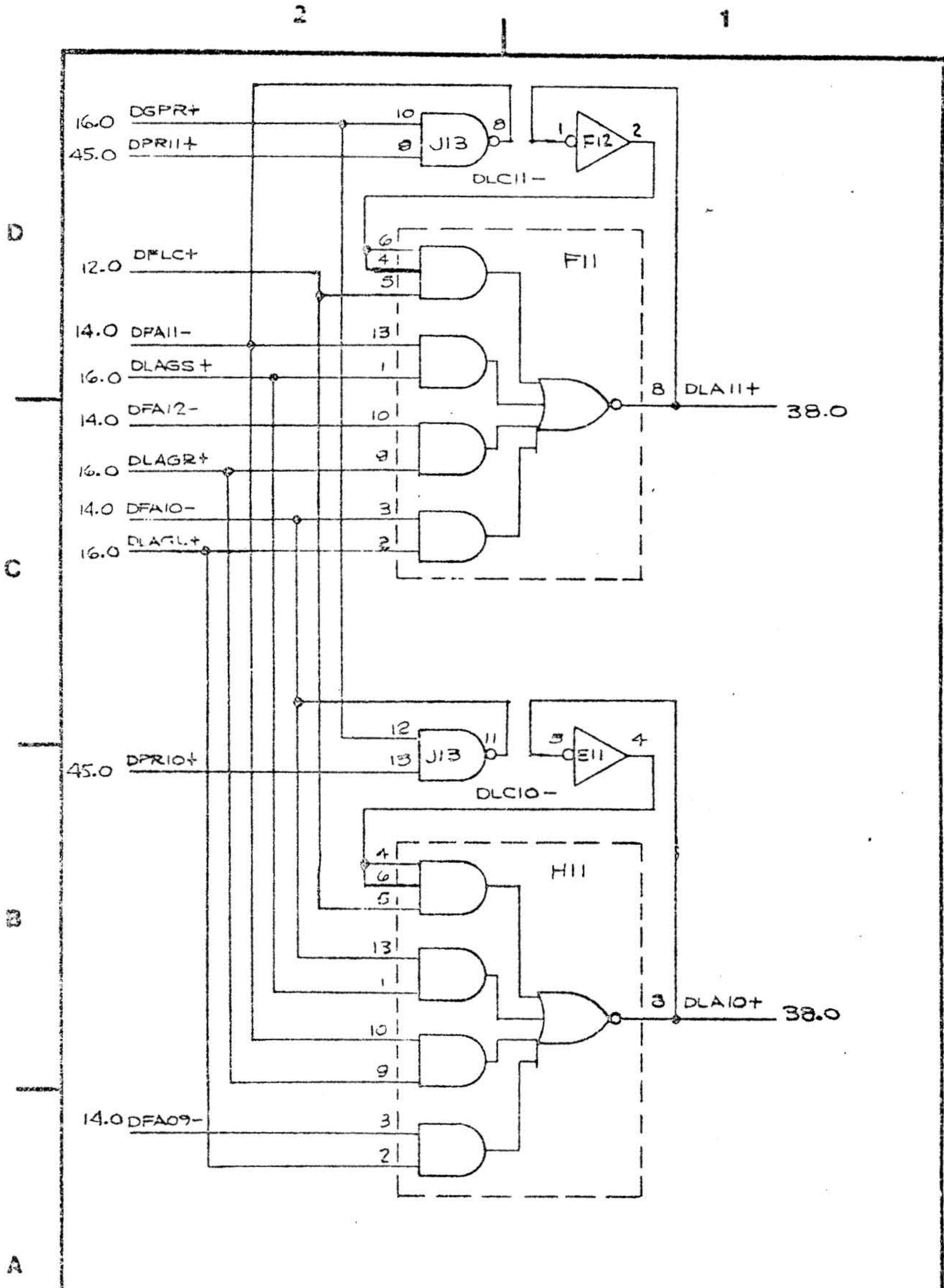


CODE IDENT NO.	REV	DATE	BY
21101	B	91B0378	AT
SCALE	SHEET 18.2		



LATCH A 13 AND 12

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 19.0		



LATCH A II AND IO

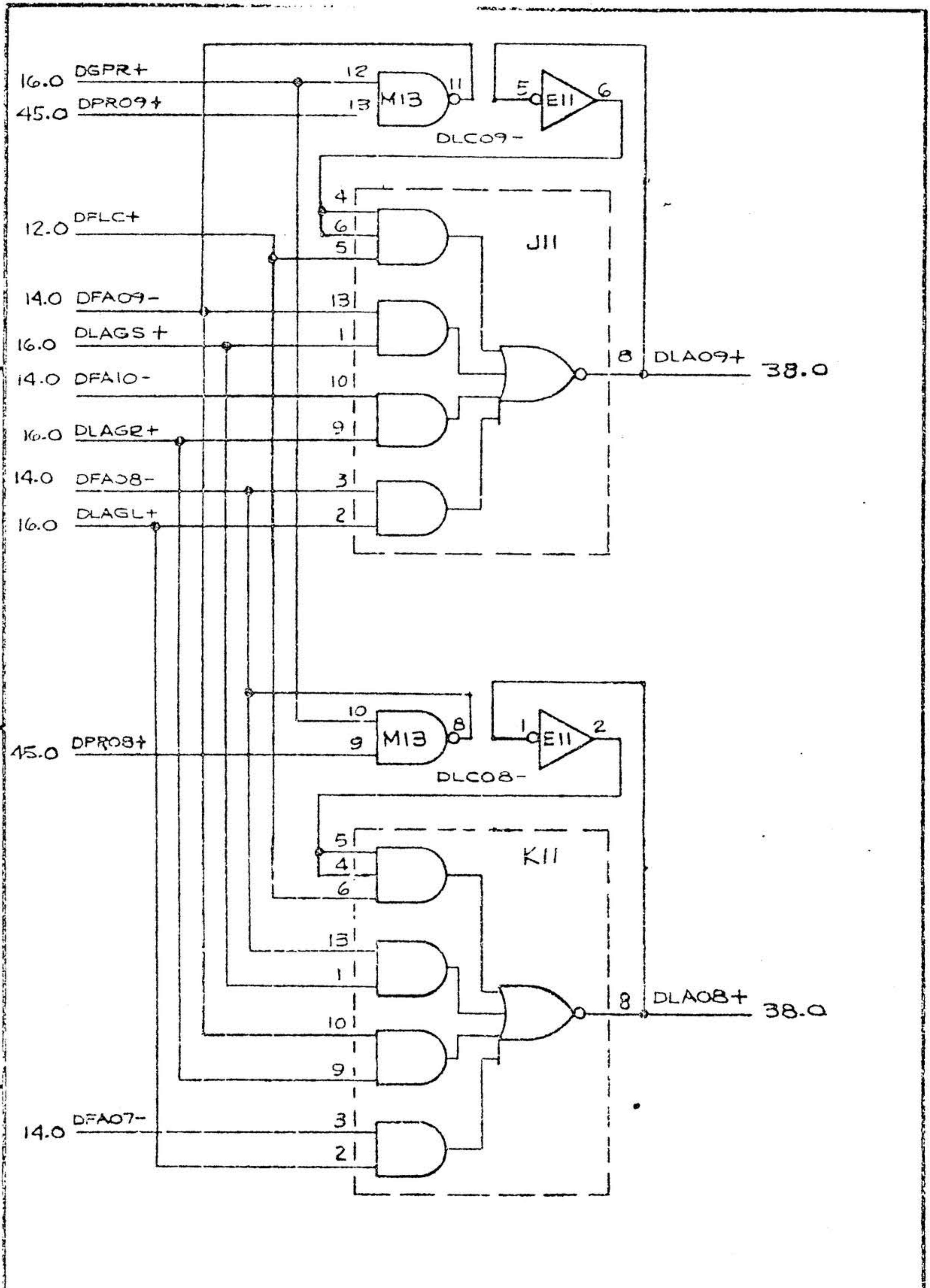
LOCK IDENT NO.	SIZE	CHG NO	REV
21101	B	91B0378	AT
SCALE	CHST 30.0		

D

C

B

A



LATCH A 09 AND 08

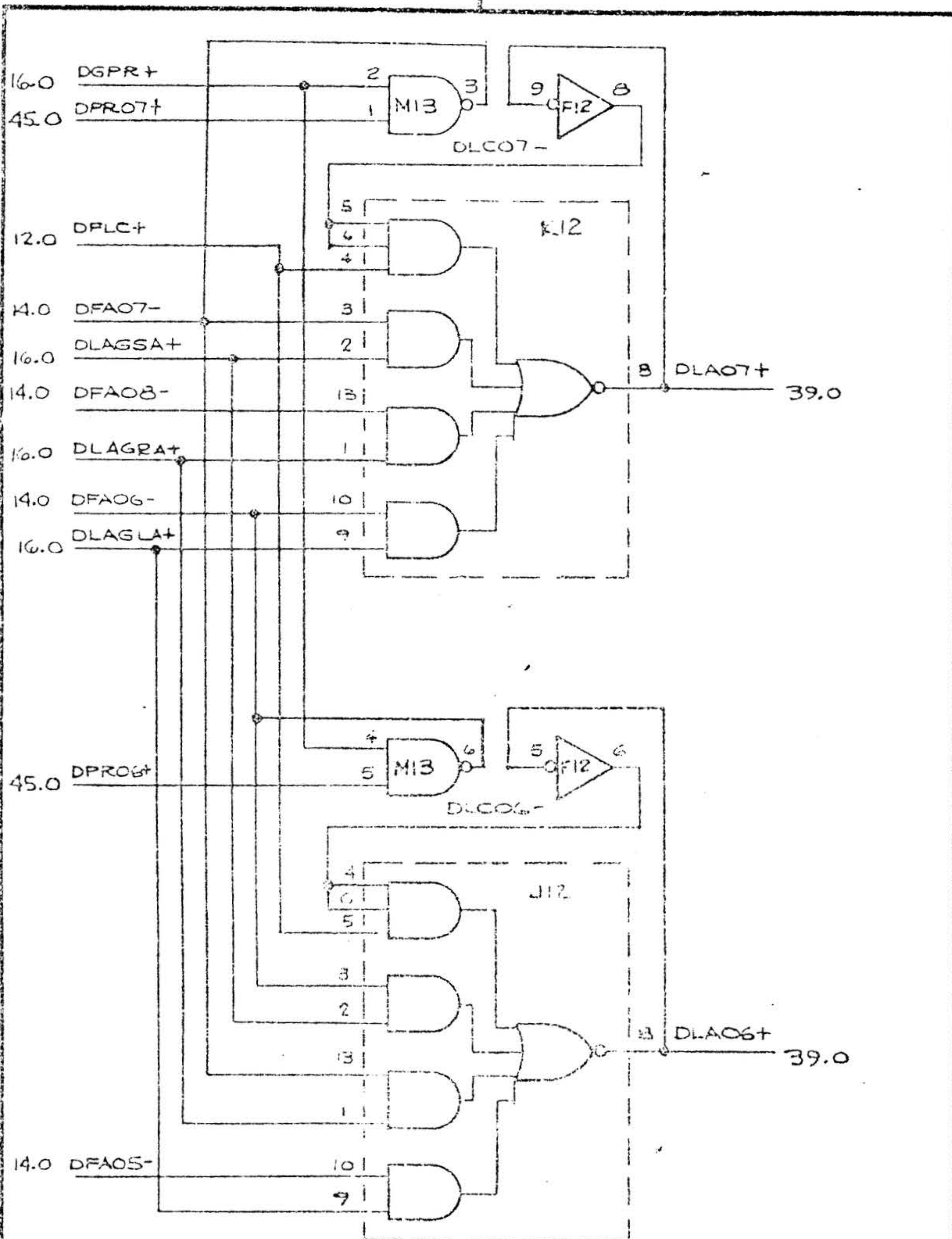
CODE IDENT NO.	SIZE	DRWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 21.0		

D

C

B

A



LATCH A 07 AND 06

CODE IDENTIFIER	DATE	DRAWING NO	REV
21101	B	91B0378	AT
SCALE	SHEET 22.0		

2

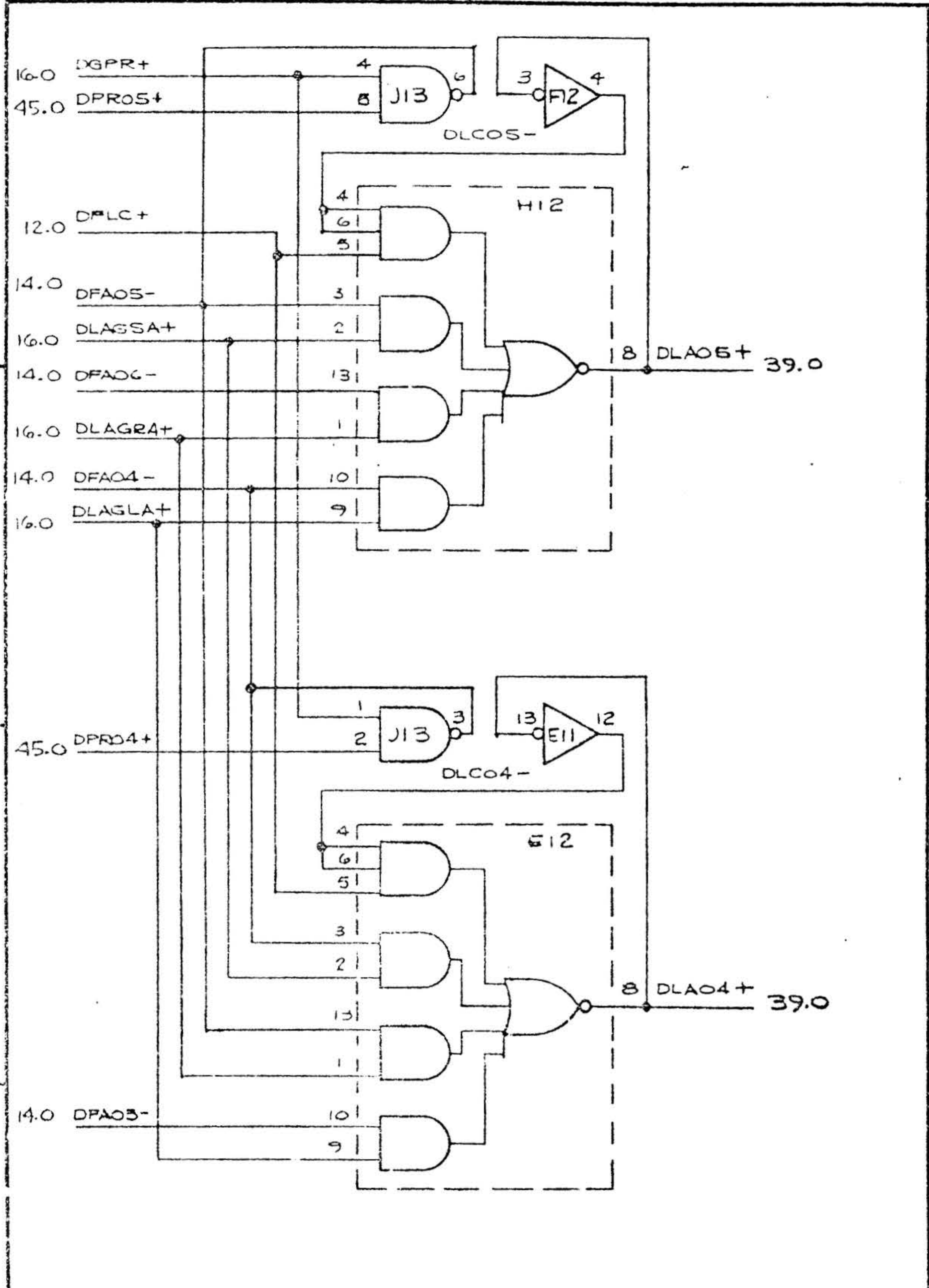
1

D

C

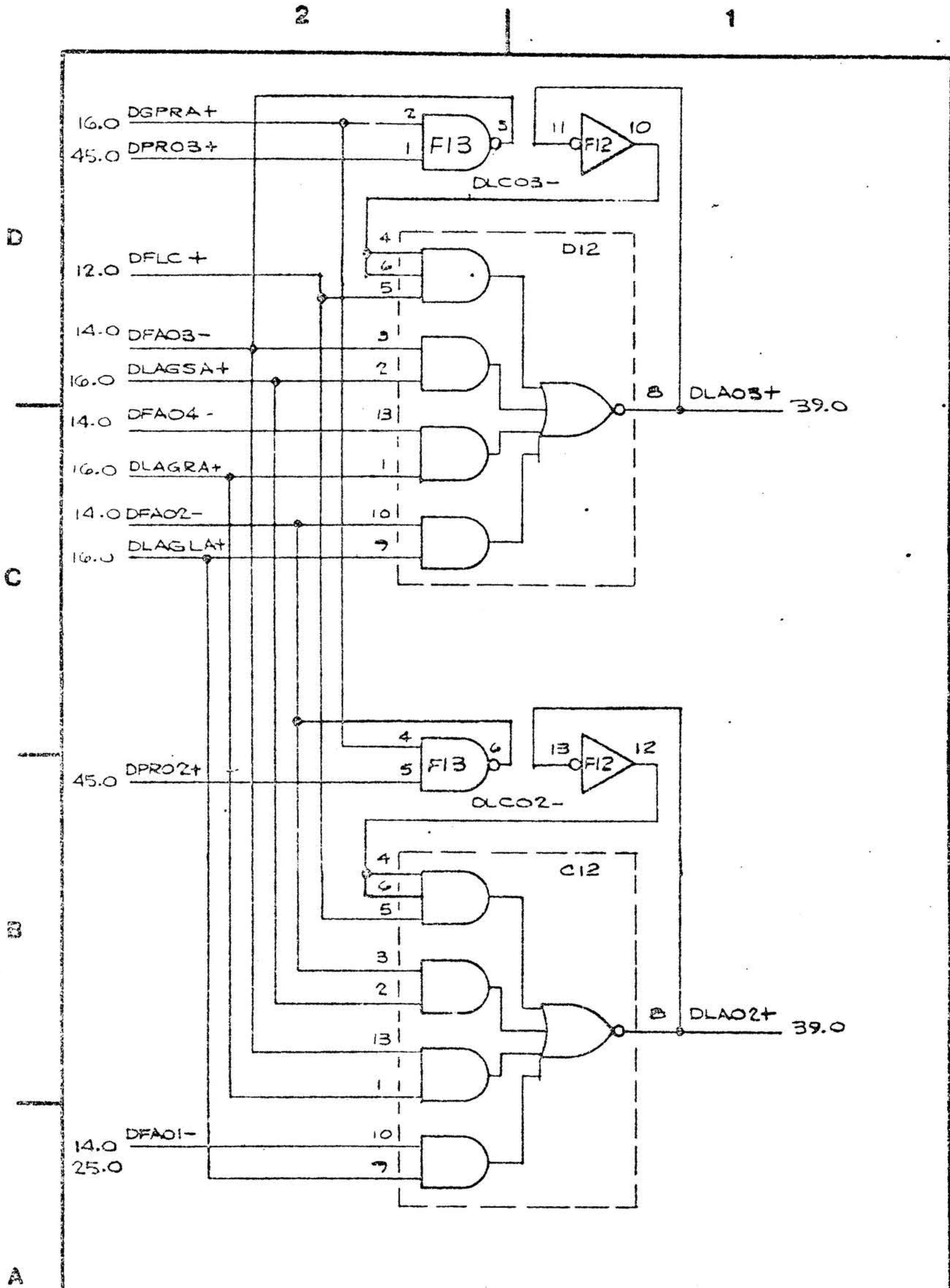
B

A



LATCH A 05 AND 04

CODE IDENT NO.	SIZE	CHG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 23.0		

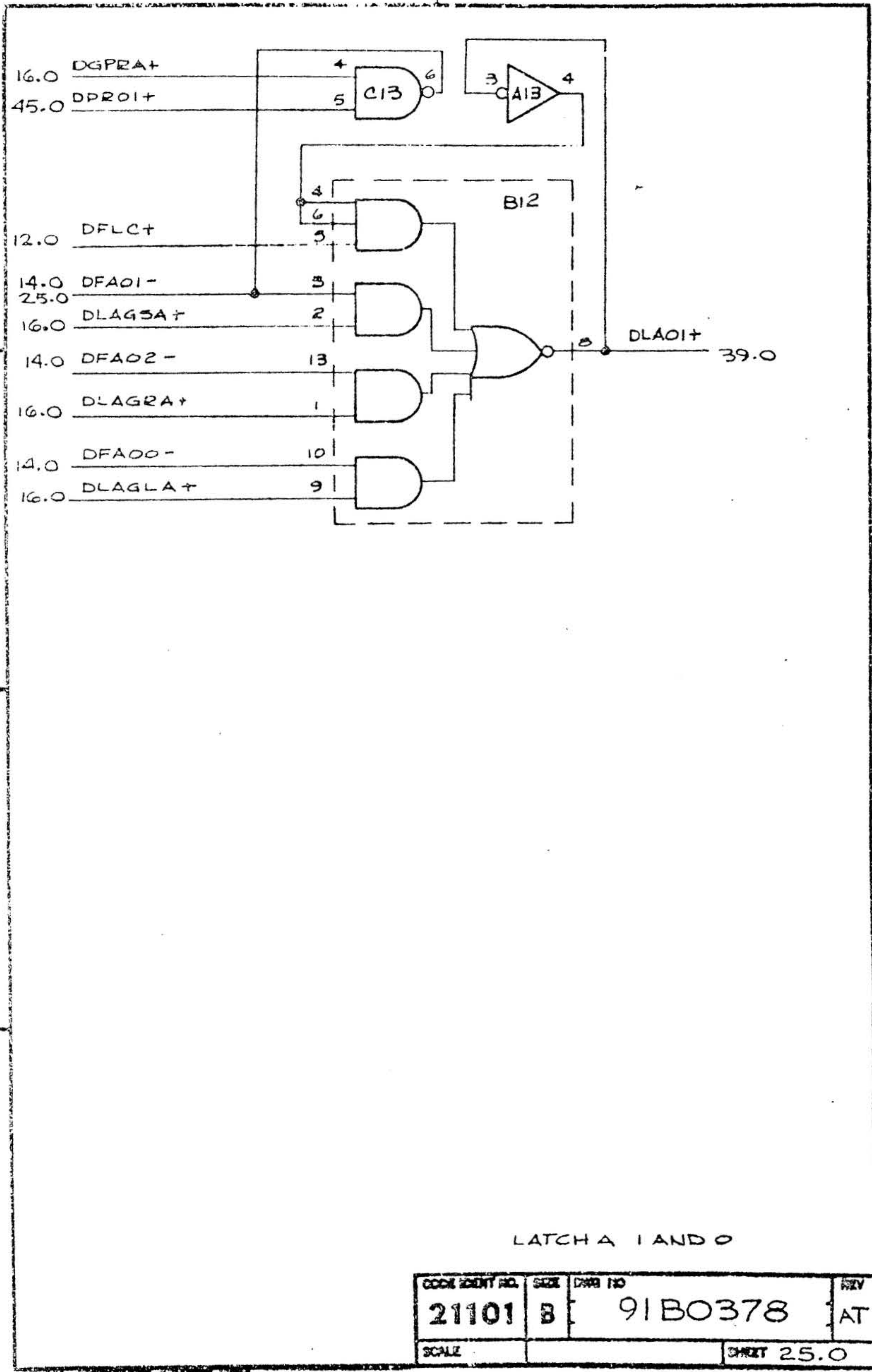


LATCH A 03 AND 02

CODE IDENT NO.	SIZE	DWG NO	REV
21101	3	91B0378	AT
SCALE	SHEET 24.0		

2

1



LATCH A 1 AND 0

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 25.0	

2

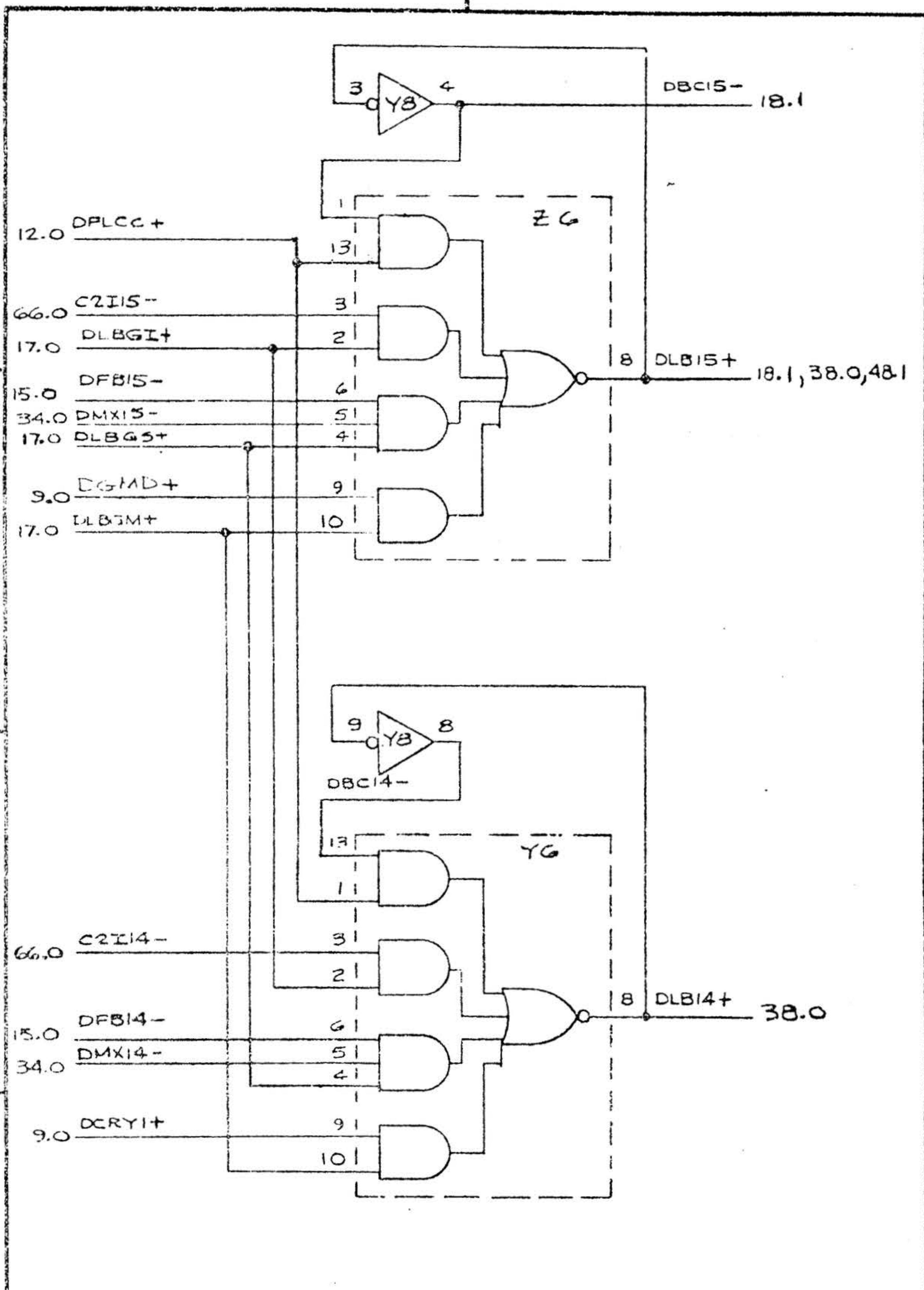
1

D

C

B

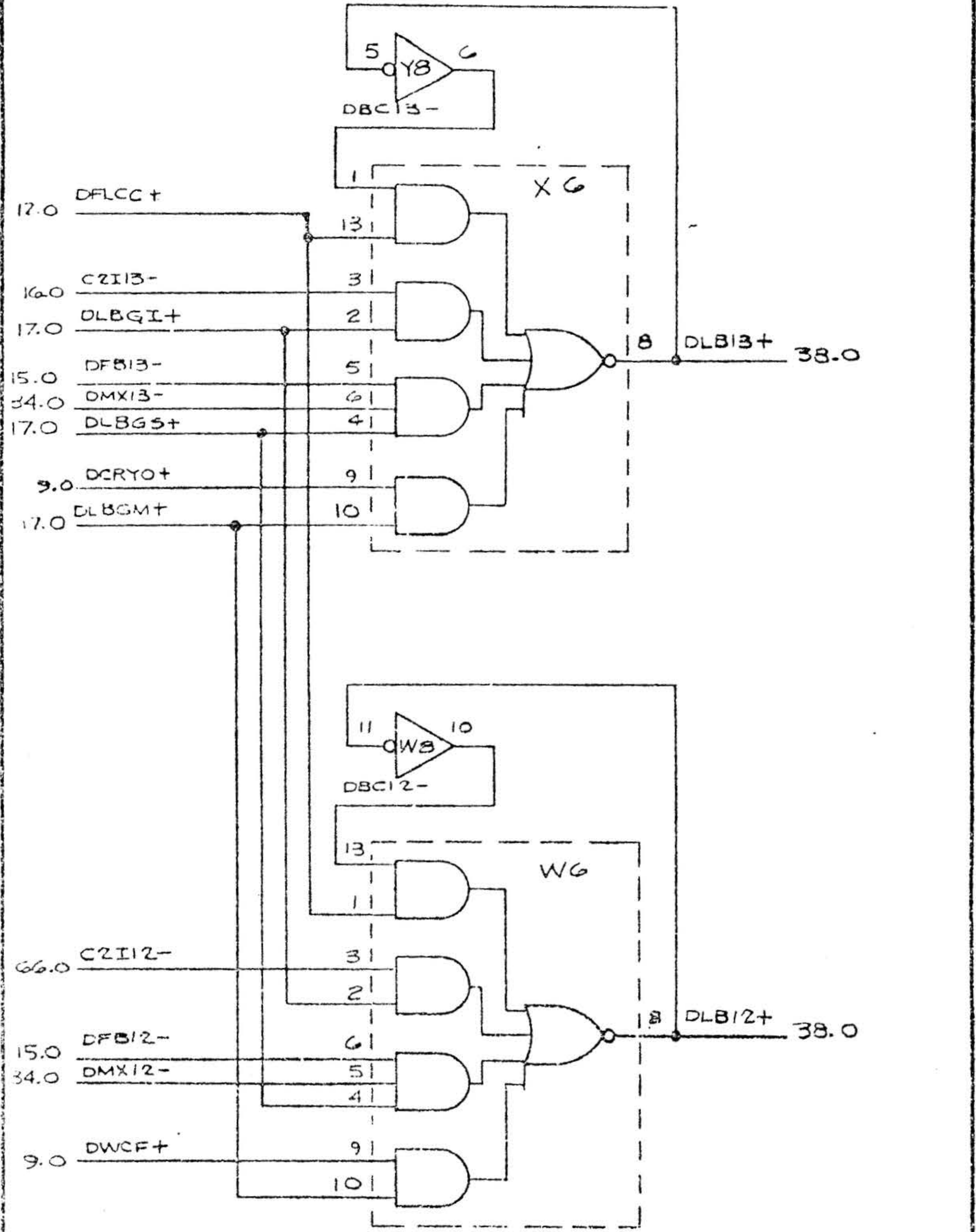
A



LATCH B 15 AND 14

CODE IDENT NO.	SIZE	DWG NO.	REV
21101	B	91B0378	AT
SCALE	SHEET 26.0		

D
C
B
A



LATCH B 13 AND 12

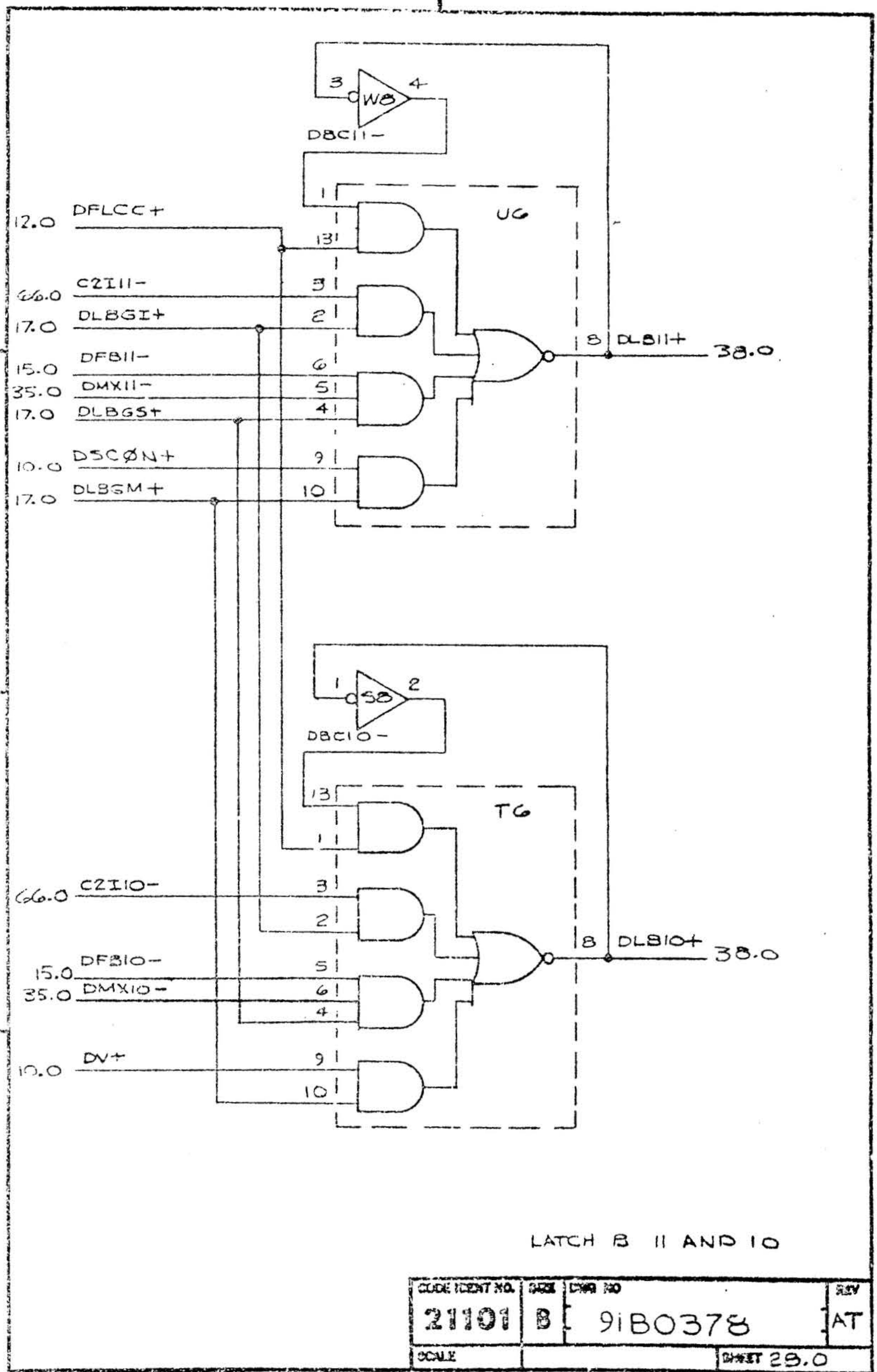
CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 27.0		

D

C

B

A



LATCH B 11 AND 10

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 29.0		

2

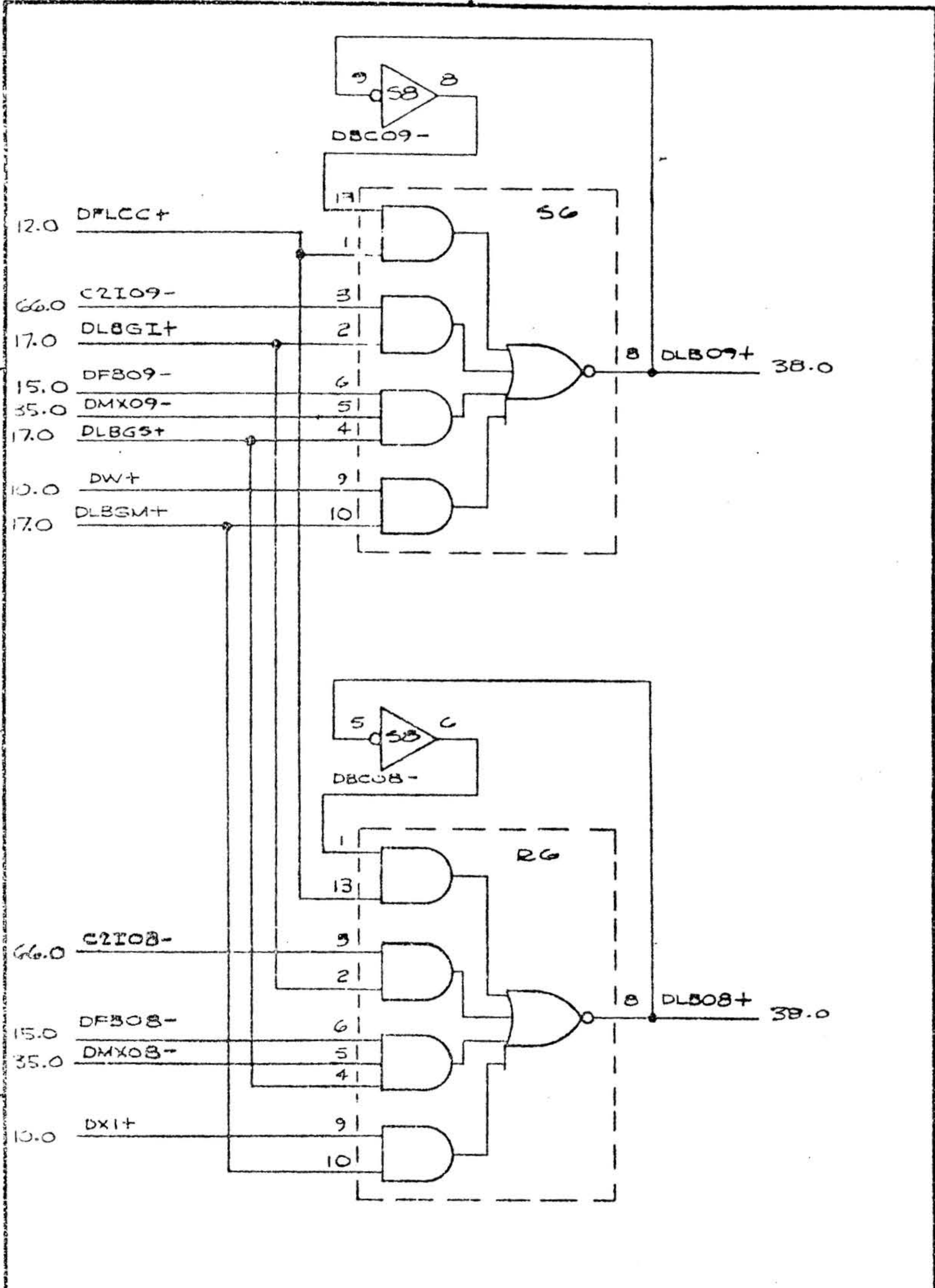
1

0

C

B

A



LATCH B 09 AND 08

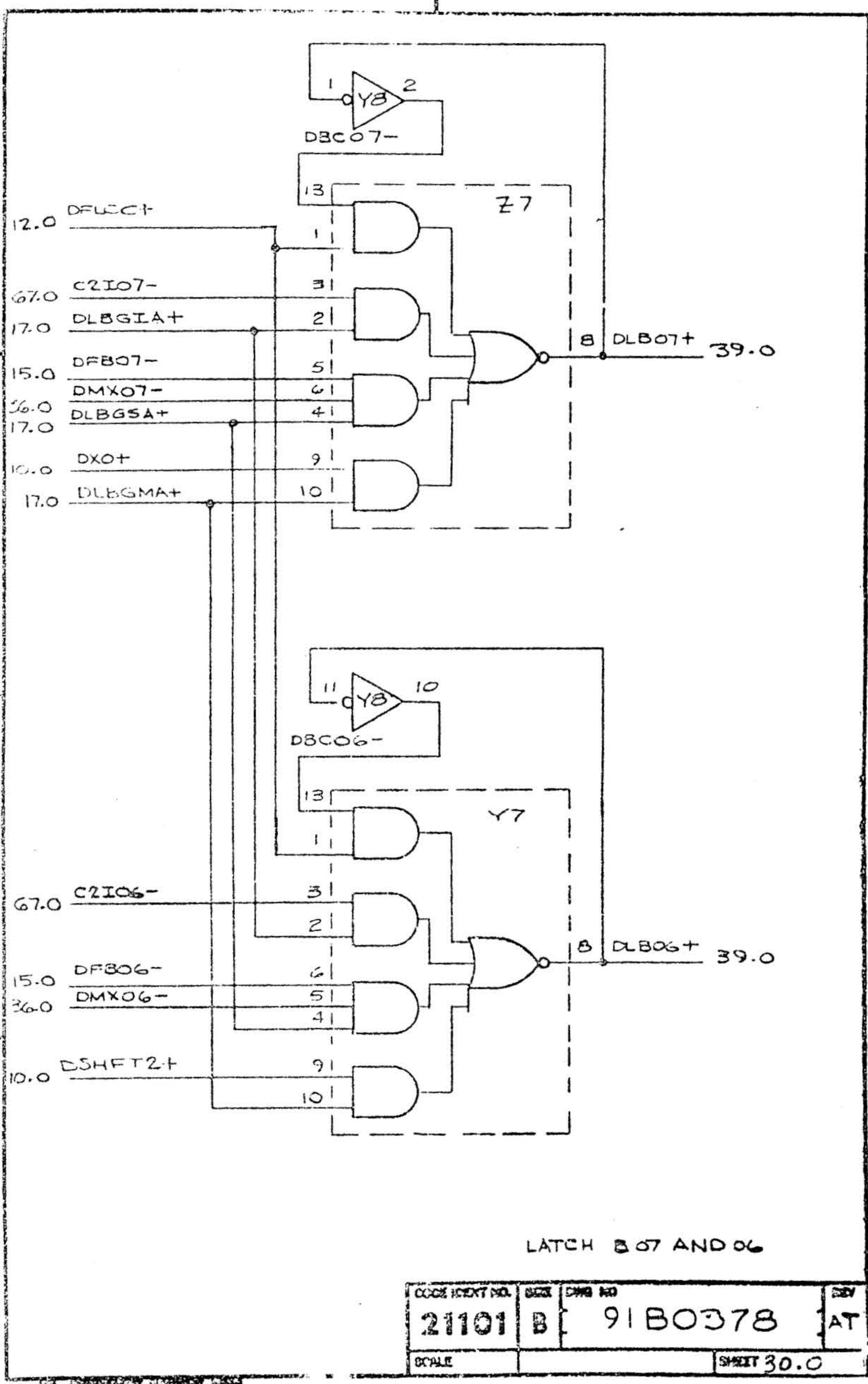
CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	ENST 290		

D

C

B

A



LATCH B 07 AND 06

CODE IDENT NO.	SIZE	DATE	REV
21101	B	91B0378	AT
SCALE	SHEET 30.0		

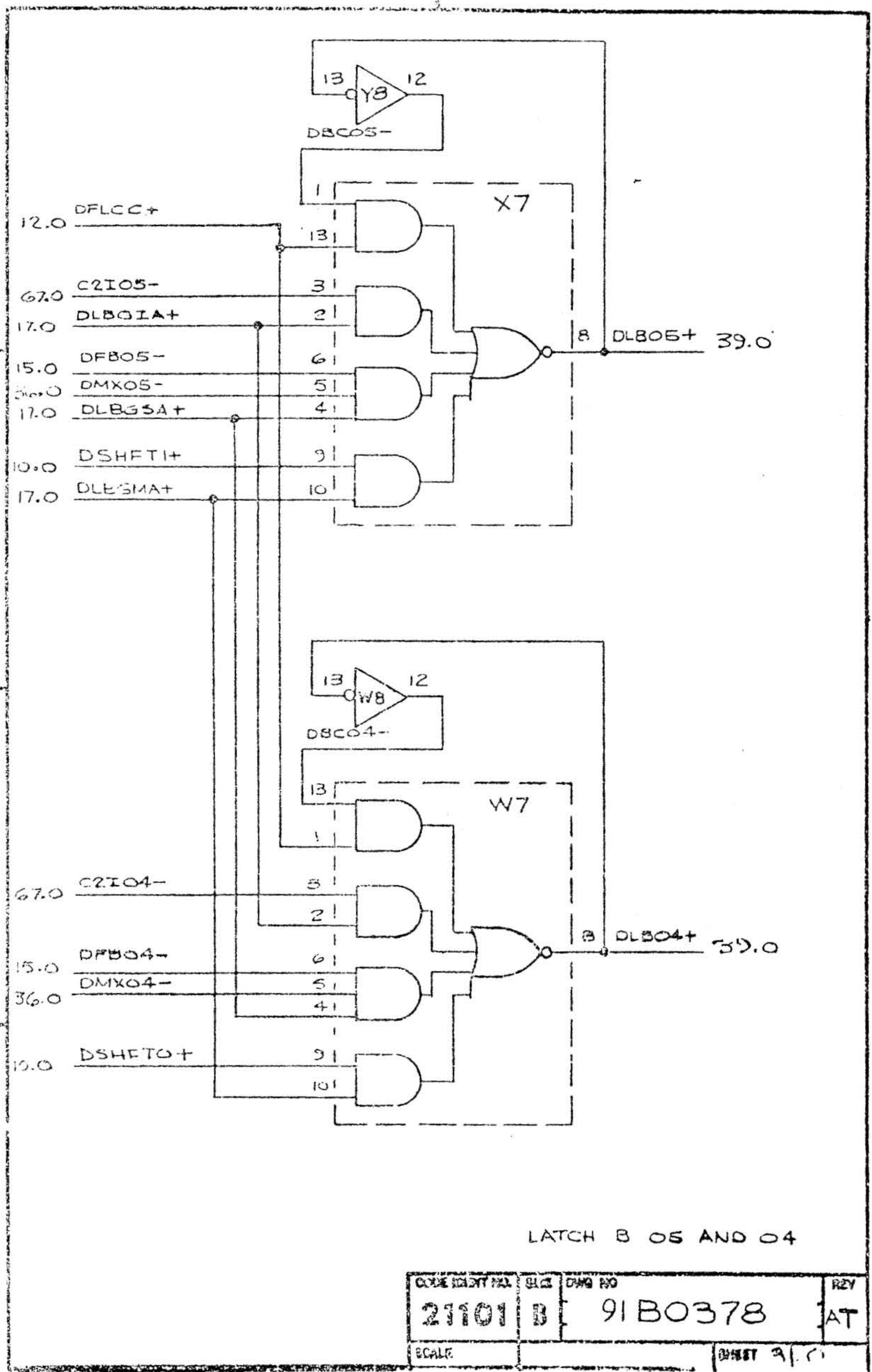
10/11/72

B

C

B

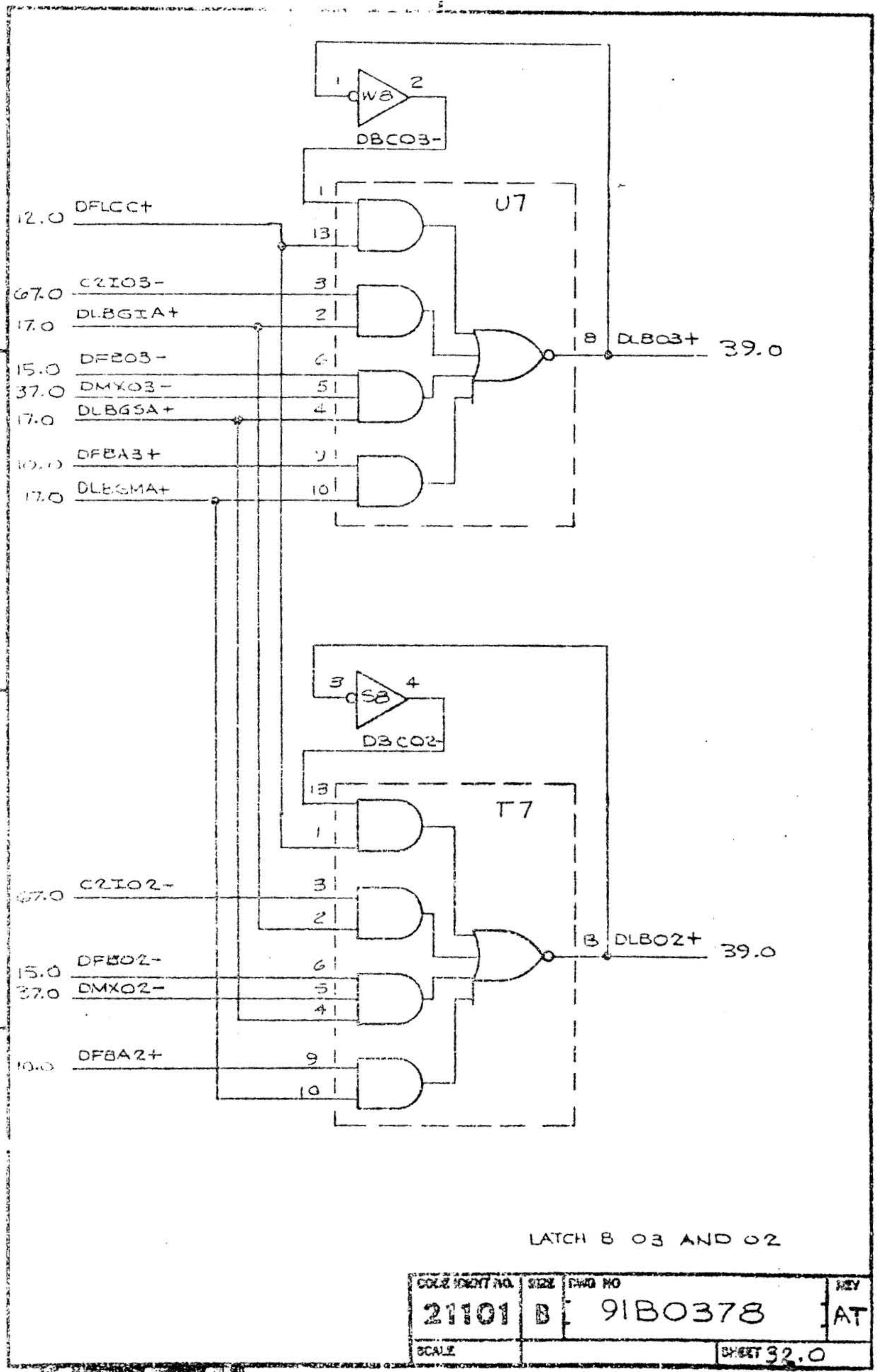
A



LATCH B 05 AND 04

CODE IDENT NO	SLC	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 3/3		

D
C
B
A



LATCH B 03 AND 02

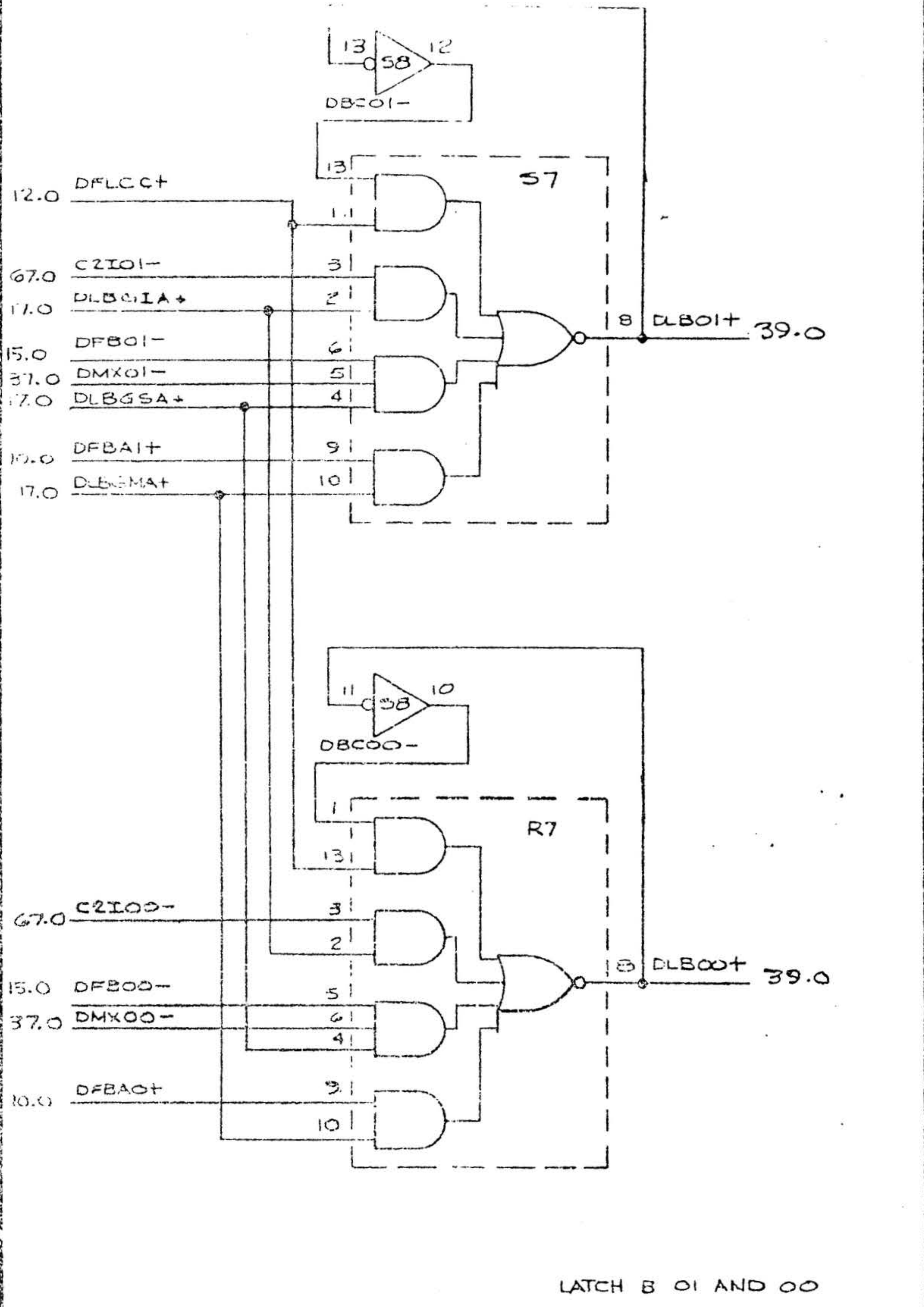
COGZ IDENT NO	SIZE	RAW NO	REV
21101	B	91B0378	AT
SCALE	SHEET 32.0		

D

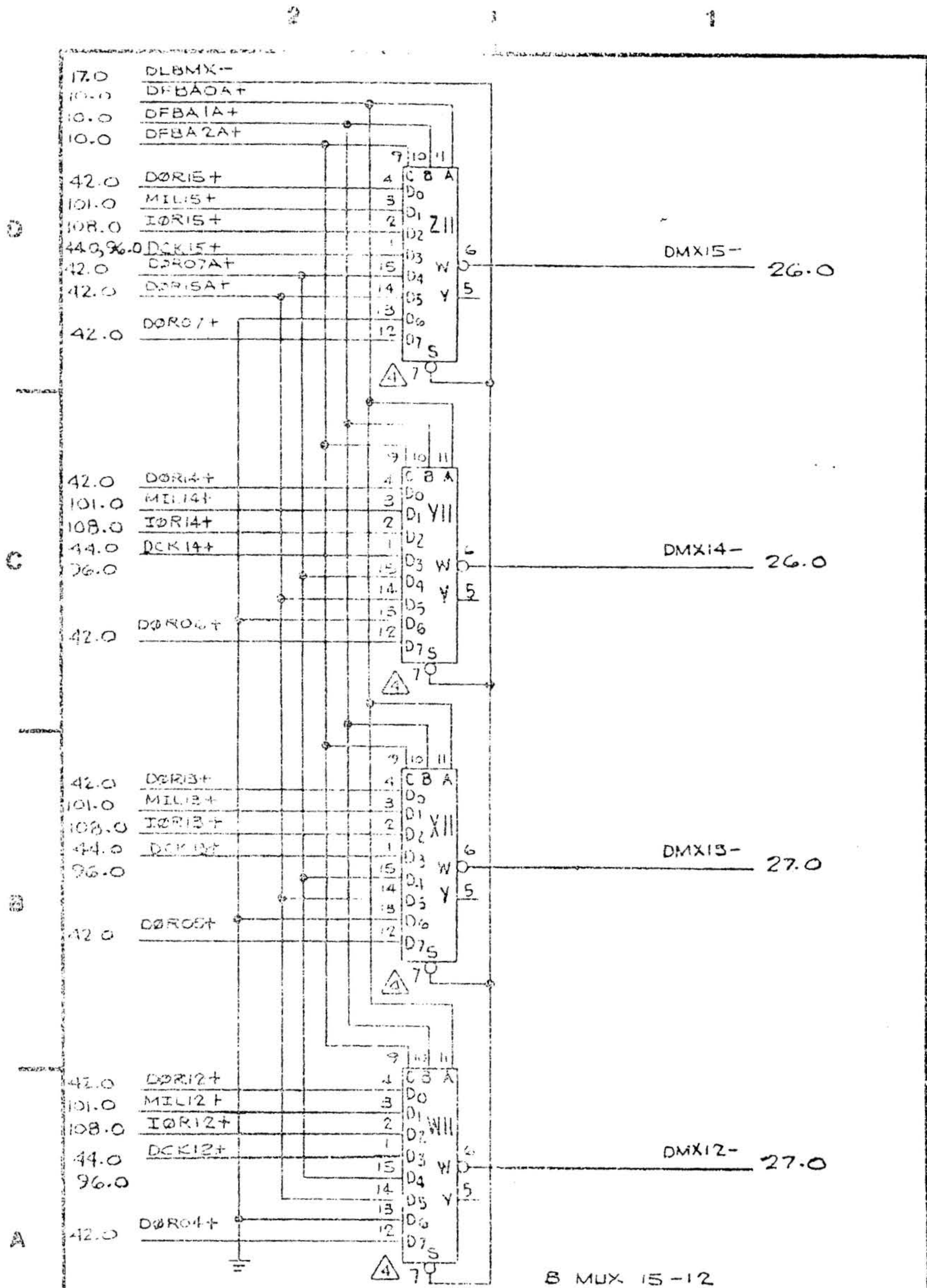
C

B

A



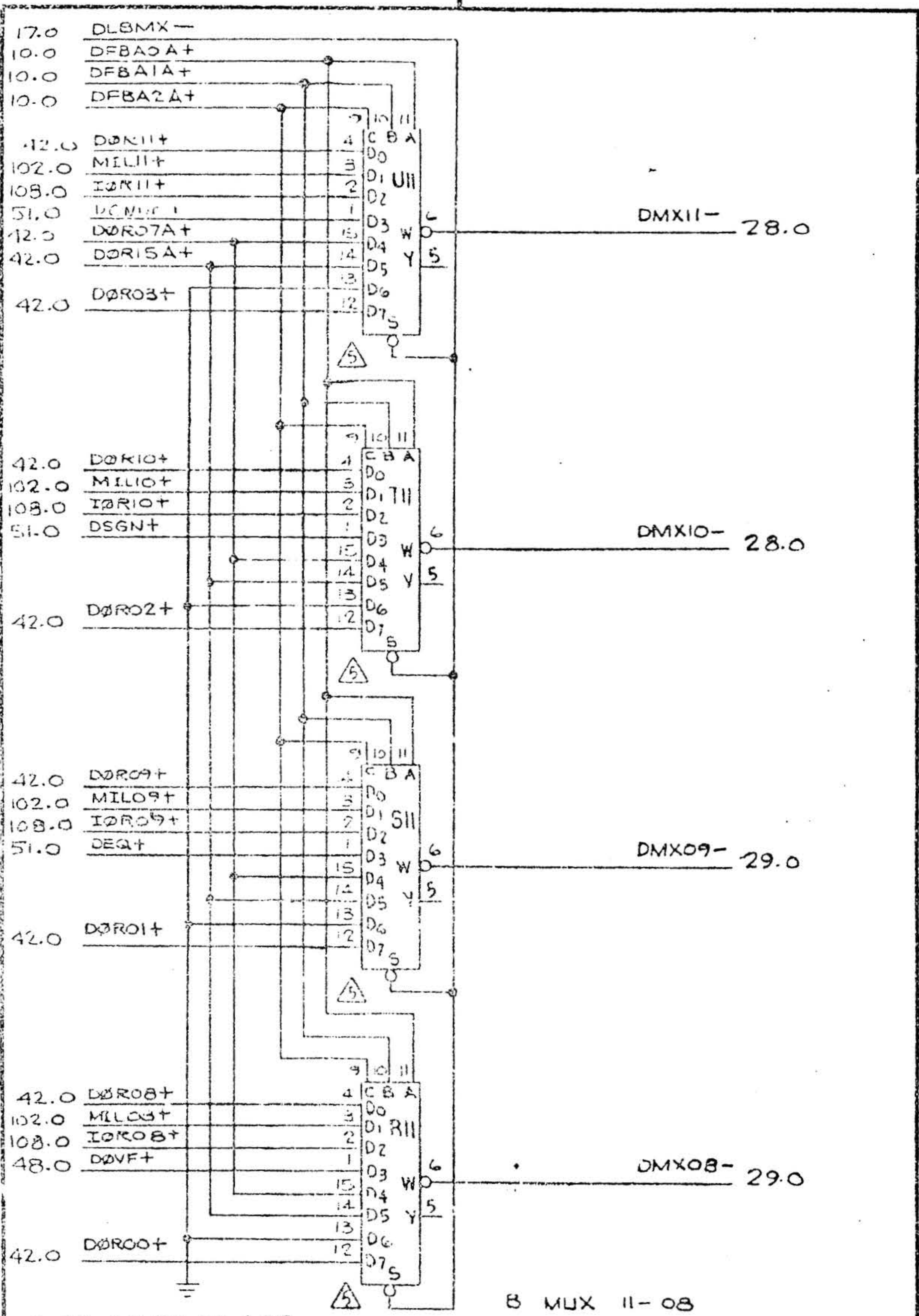
DOOR IDENT NO.	SIZE	OFFG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 33.0		



△ ZII, YII, XII, VII ARE 10F8 MUX

CODE IDENT NO.	REV	DWG NO	REV
21101 8		91B0378	AT
SCALE	SHEET 34.0		

D
C
B
A



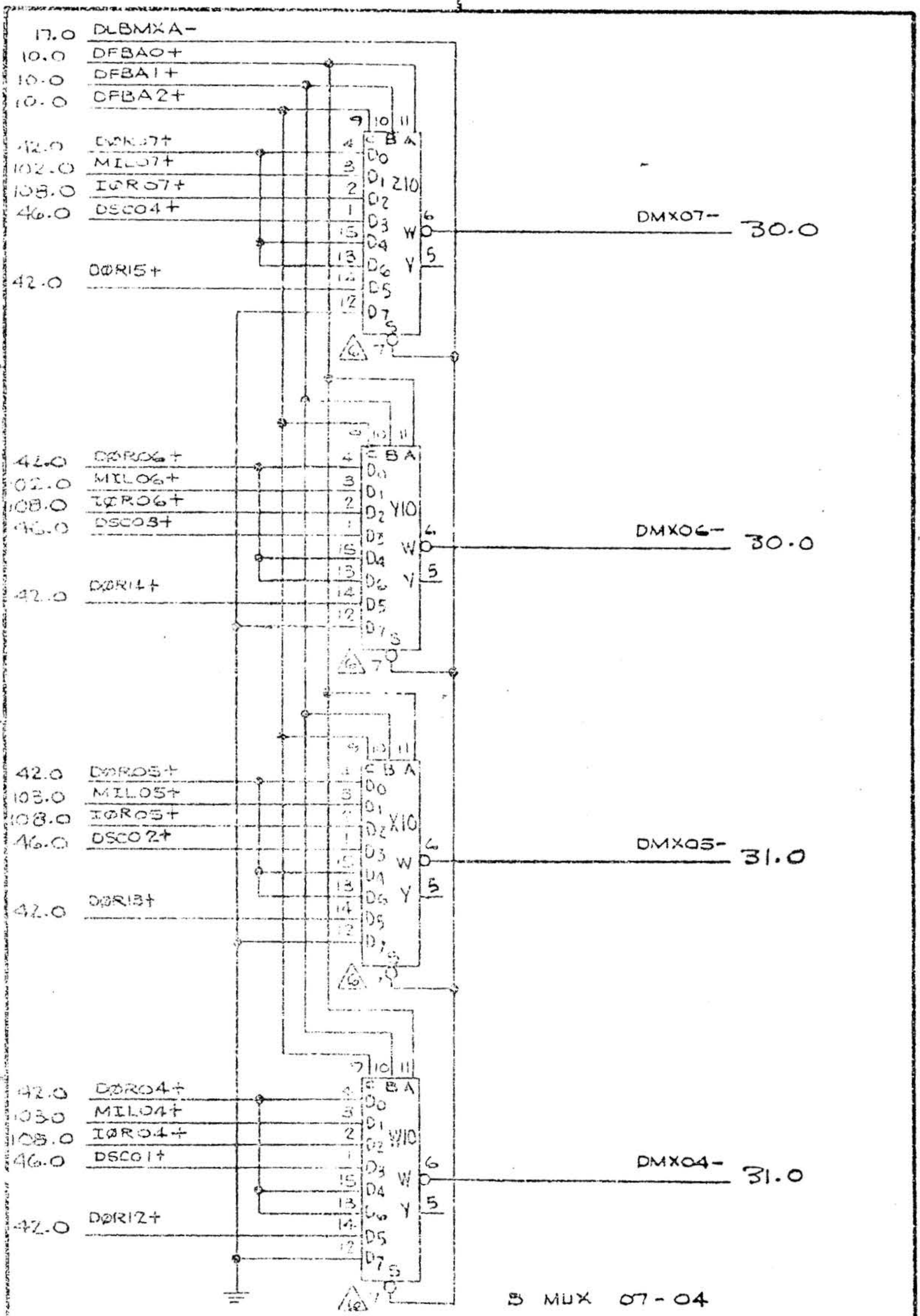
CONFIDENTIAL	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	DIMENSIONS		

D

C

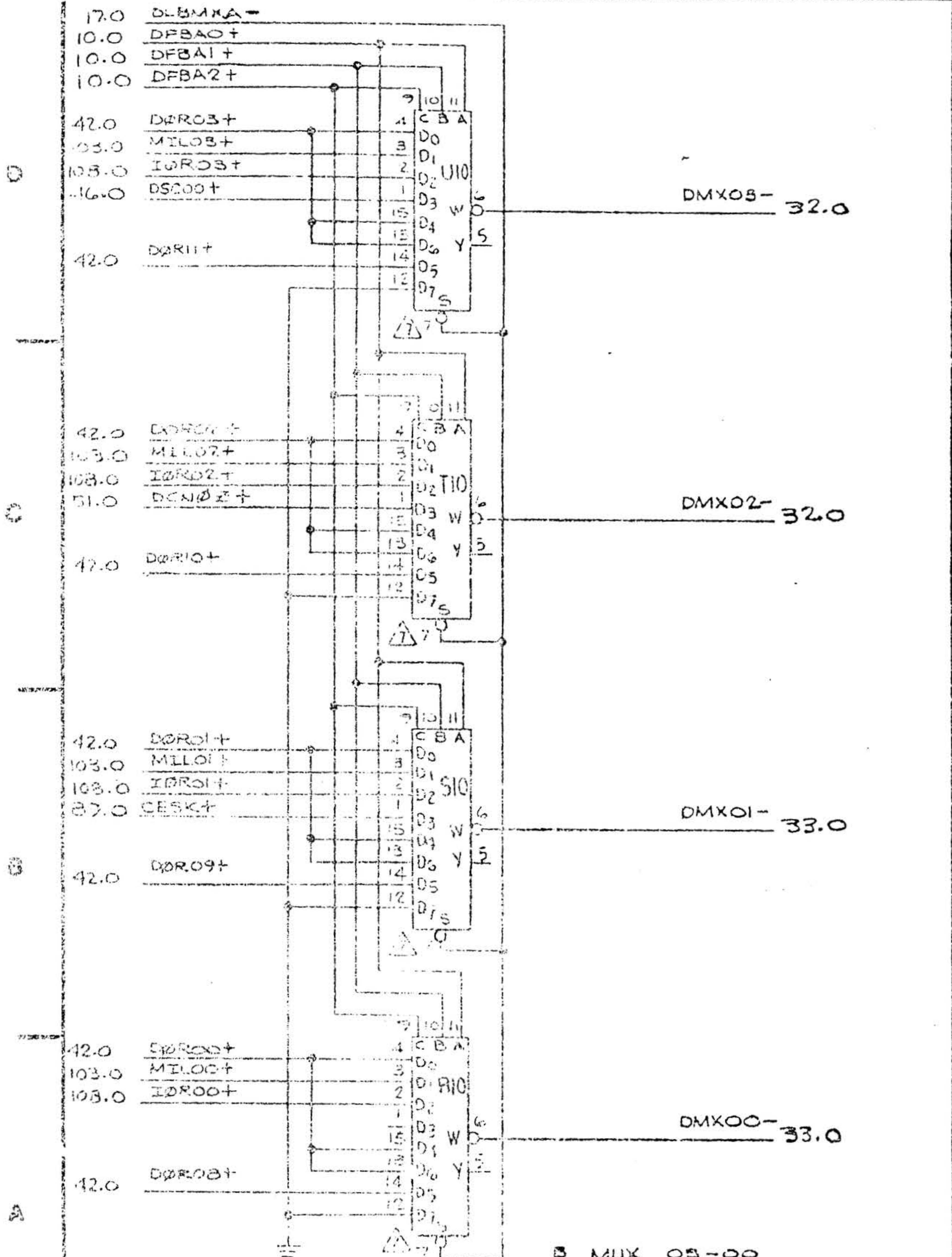
B

A



W10, X10, Y10, Z10, ARE
1 OF B MUX

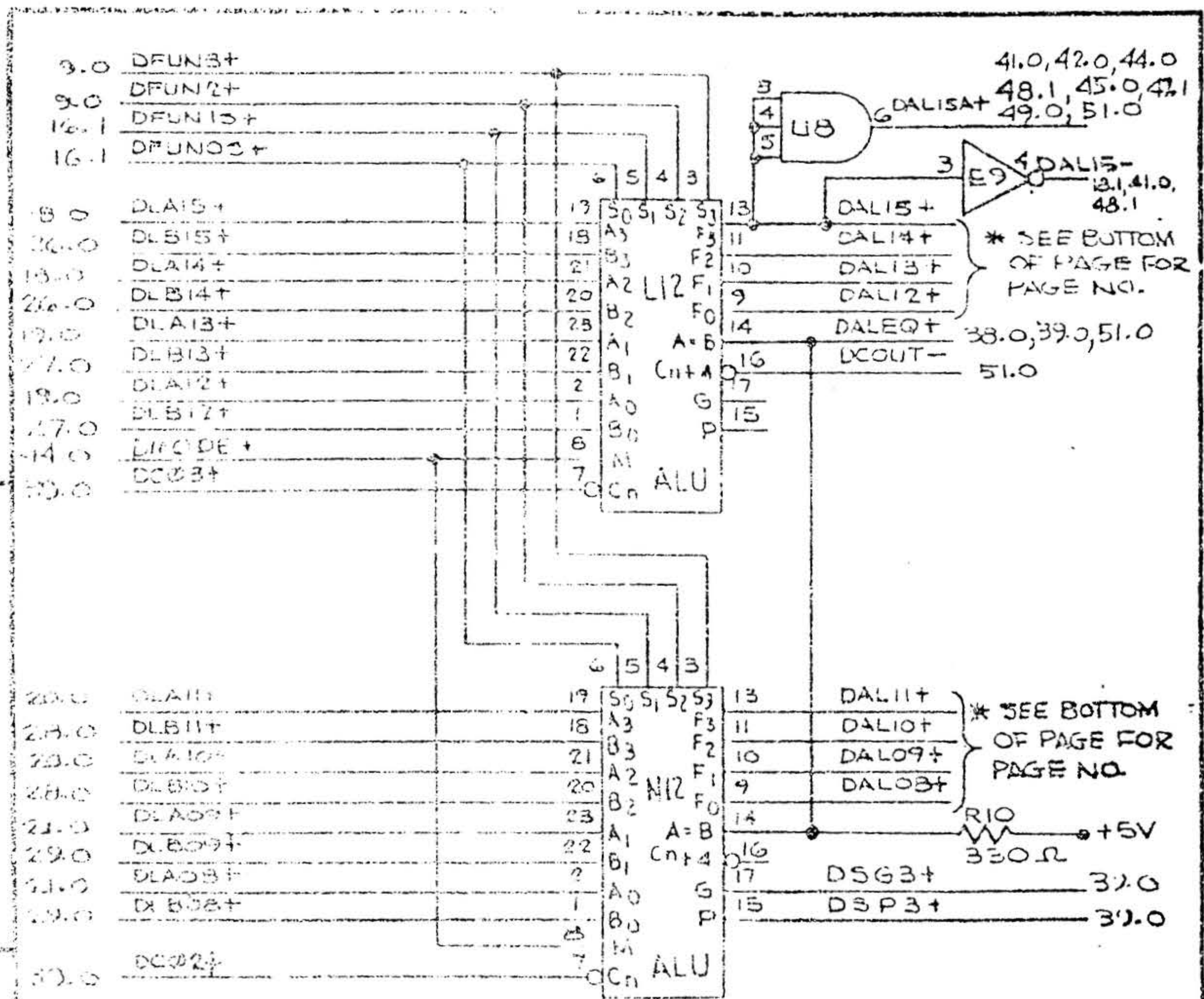
CODE IDENT NO.	SCALE	DATE PD	REV
21101	B	91B0378	AT
SCALE		SHEET 36.0	



△ RID, SID, RIO, UIO ARE
1 OF 8 MUX

8 MUX 03-00

CODE IDENT	SIZE	DATE NO	REV
21101	B	91B0378	AT
SCALE		SHEET 37.0	



- * DALI5+ ... 14.0, 15.0, 18.1, 41.0, 42.0, 44.0, 45.0, 47.0, 96.0, 99.0, 100.0, 107.0
- * DALI4+ ... 14.0, 15.0, 18.1, 42.0, 44.0, 45.0, 47.0, 96.0, 99.0, 100.0, 107.0
- * DALI3+ ... 14.0, 15.0, 42.0, 44.0, 45.0, 47.0, 96.0, 99.0, 100.0, 107.0
- * DALI2+ ... 14.0, 15.0, 42.0, 44.0, 45.0, 47.0, 96.0, 99.0, 100.0, 107.0

- * DALI1+
 - * DALI0+
 - * DALO9+
 - * DALO8+
- ... 14.0, 15.0, 42.0, 45.0, 47.0, 99.0, 100.0, 106.0

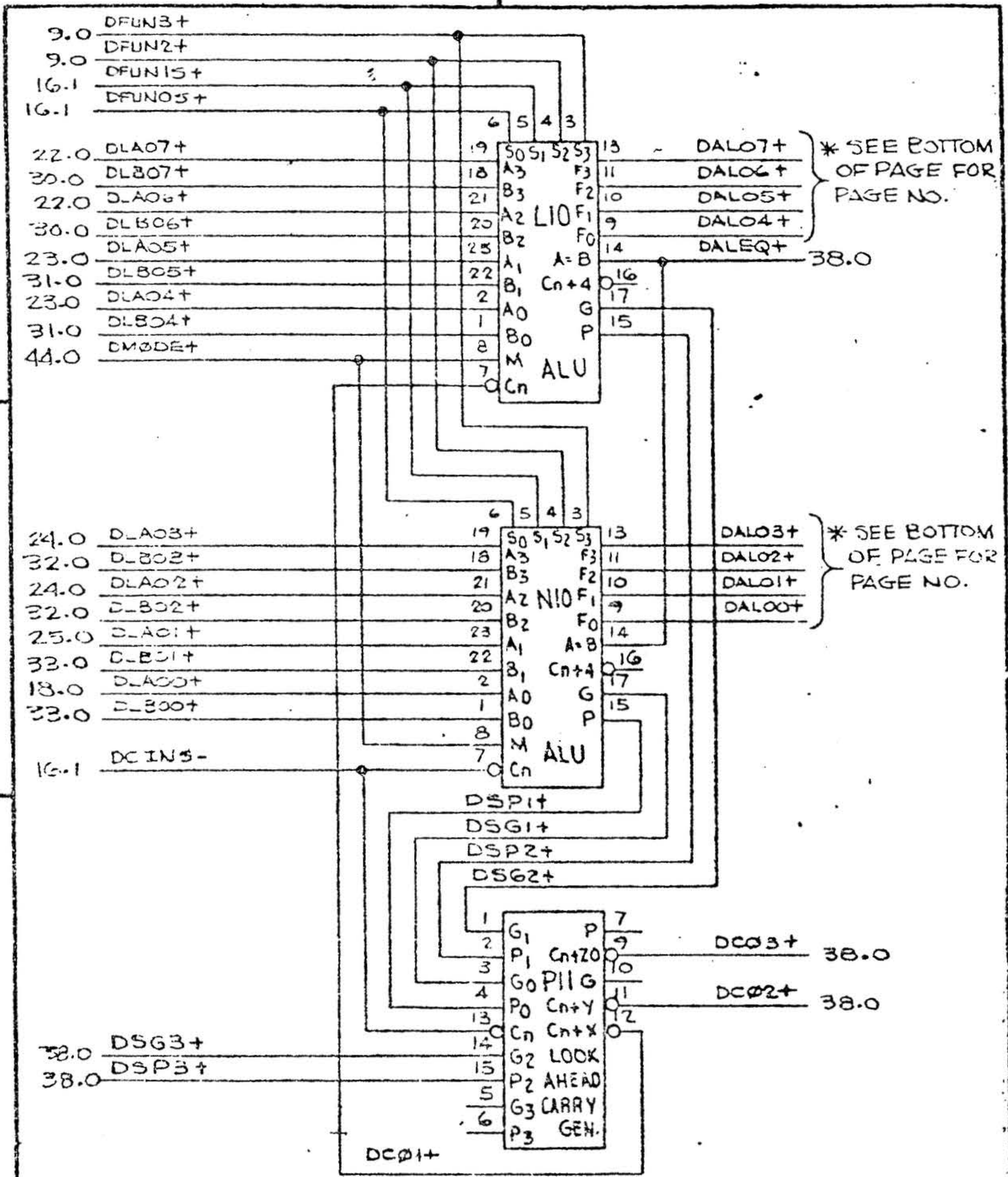
DATE	REV	REV
21101	B	91B0378
SCALE	SHEET 33.0	

D

C

B

A



* SEE BOTTOM OF PAGE FOR PAGE NO.

* SEE BOTTOM OF PAGE FOR PAGE NO.

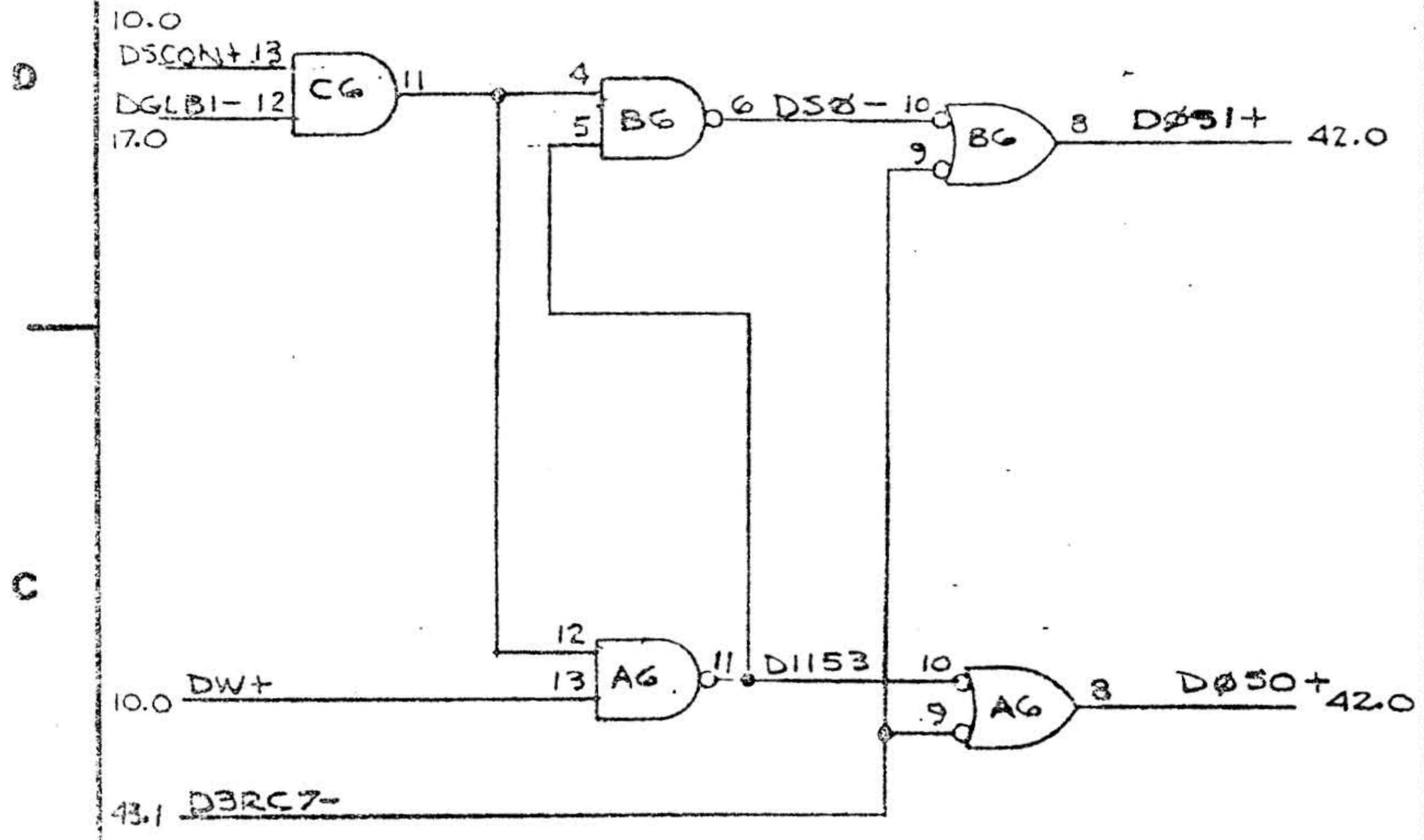
* DALO7+ }
 * DALO6+ } 14.0, 15.0, 42.0, 45.0, 46.0, 47.0, 98.0, 100.0, 105.0
 * DALO5+ }
 * DALO4+ }

* DALO3+ }
 * DALO2+ } 14.0, 15.0, 42.0, 45.0, 46.0, 47.0, 98.0, 100.0, 104.0
 * DALO1+ }
 * DALO0+ }

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91 B0378	AT
SCALE	SHEET 39.0		

2

1



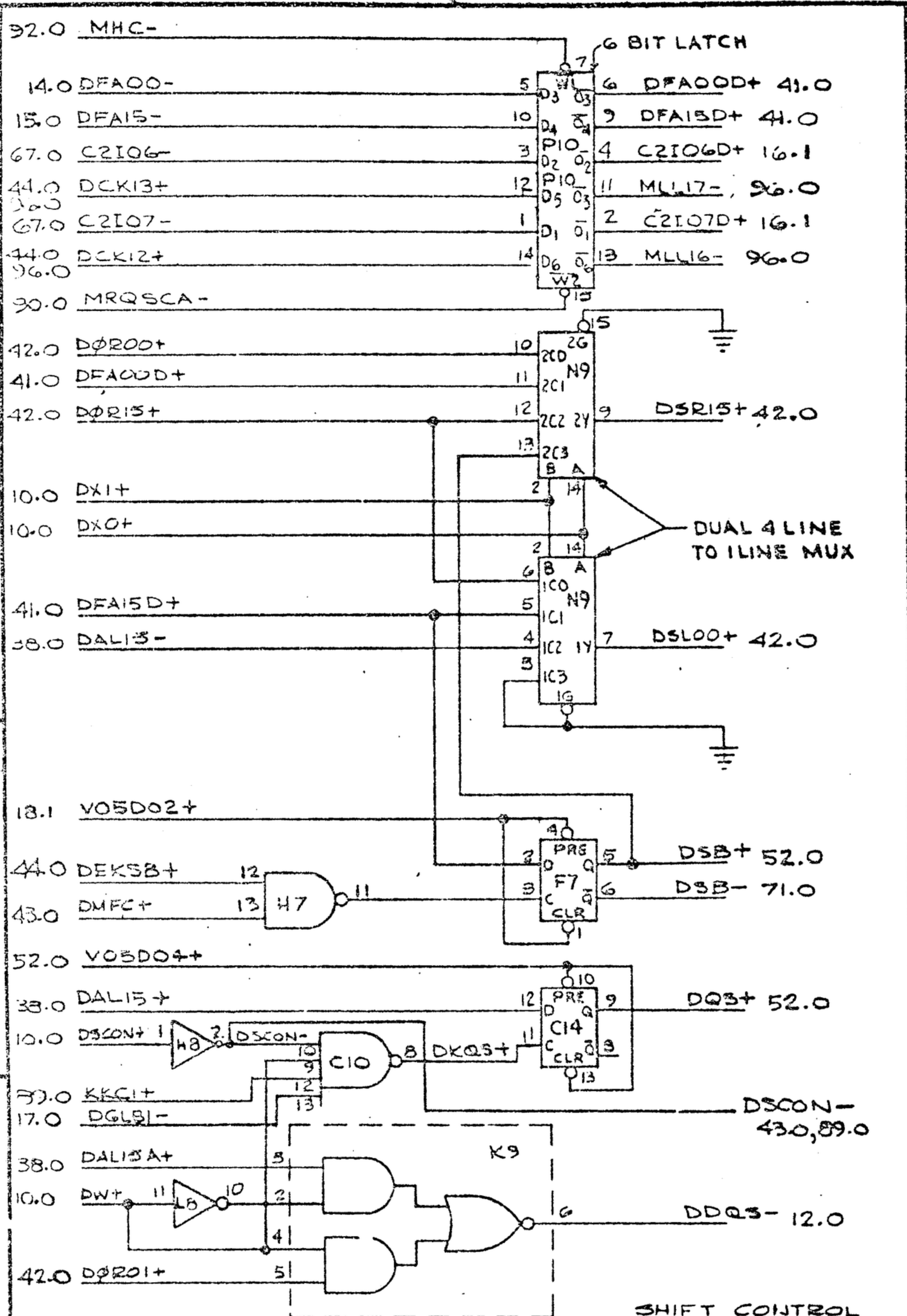
COMPONENTS	REV	DATE	BY
21101	B	9180378	AT
SCALE	SET 40.0		

D

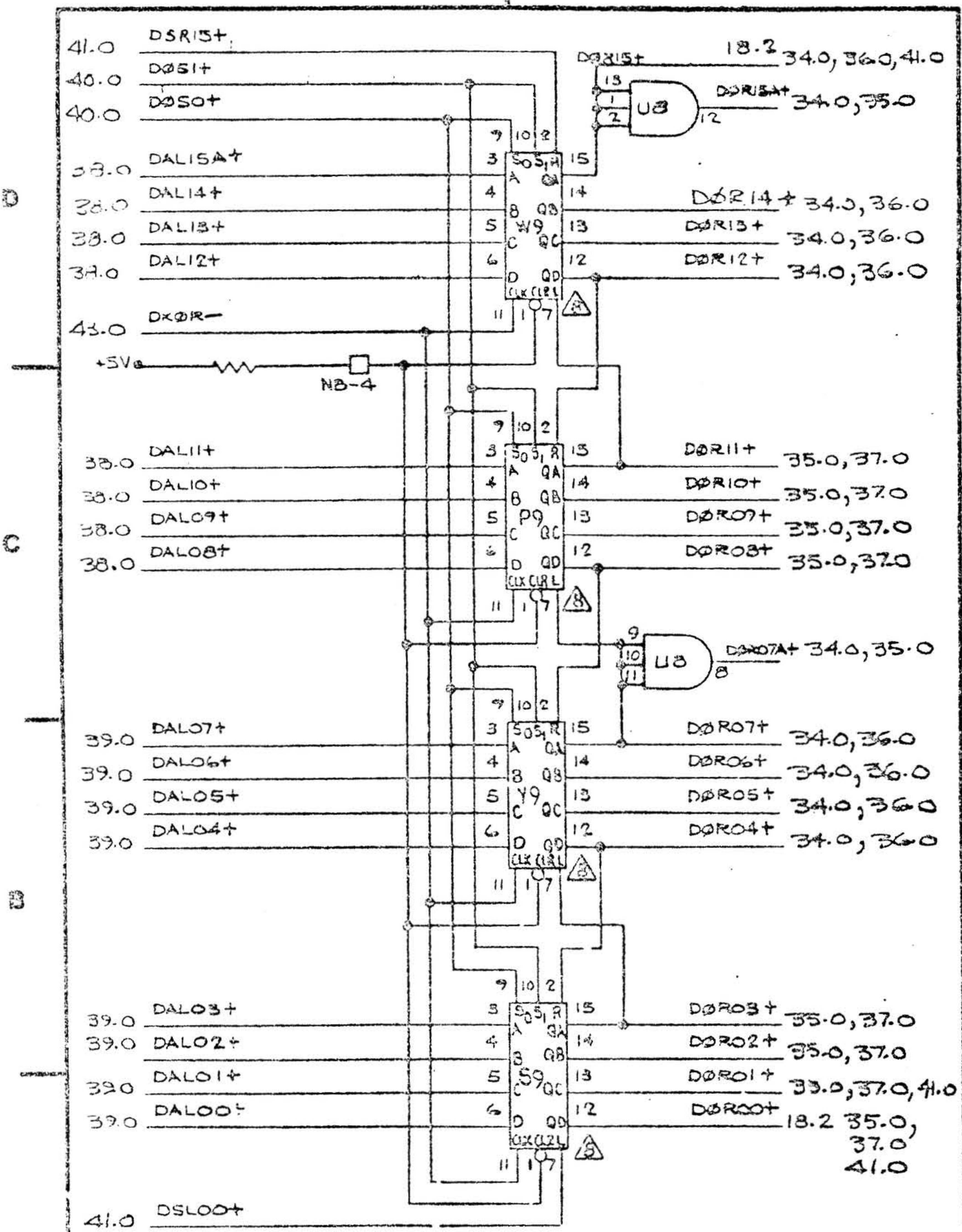
C

B

A



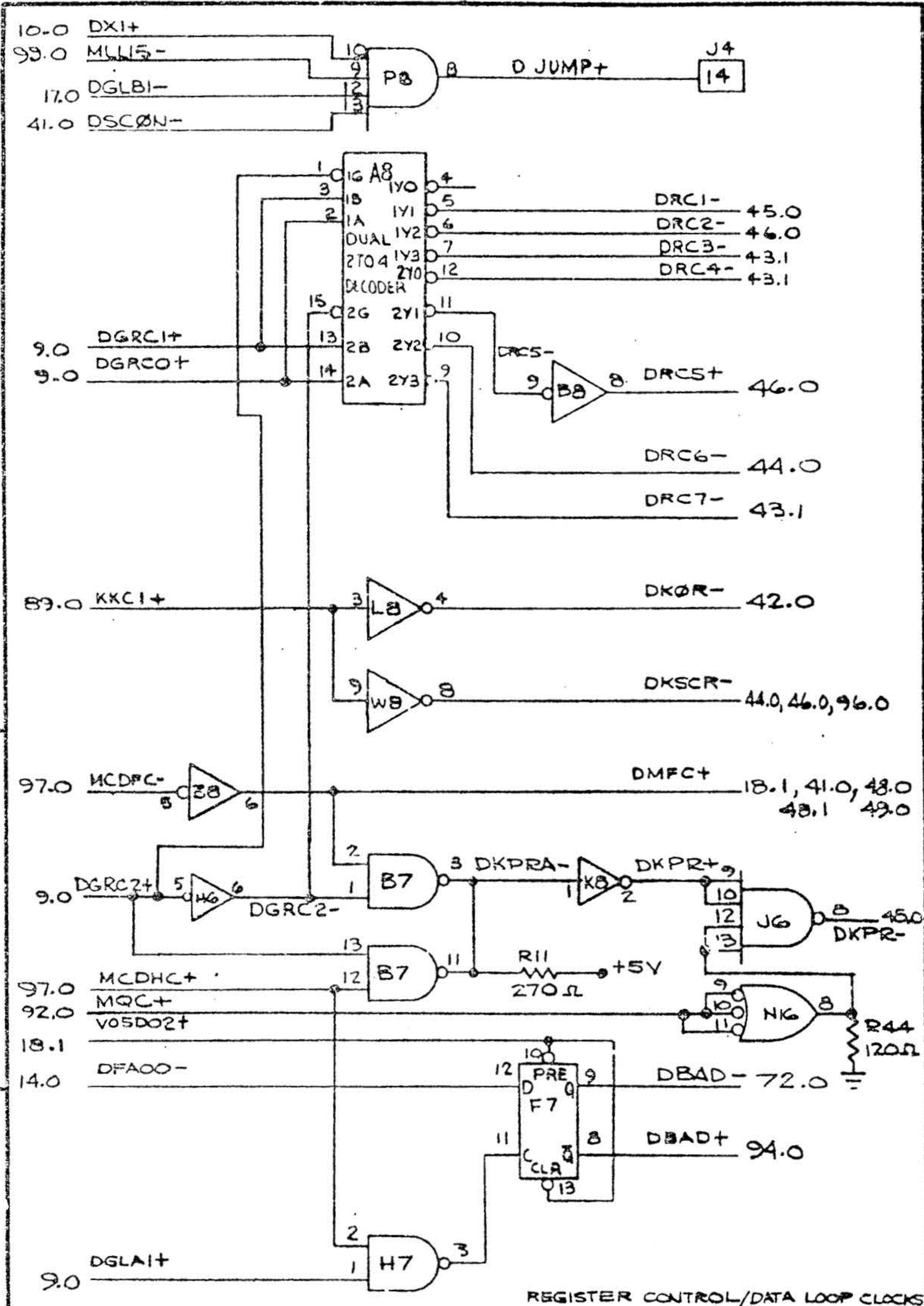
21101	B	91B0378	AT
21101		41.0	



⚠ W9, P9, Y9, S9 ARE
4-BIT SHIFT REG.

Ø REG 15-00

DATE	REV	BY
21101	3	91B0378
SCALE	UNIT 2.0	



REGISTER CONTROL/DATA LOOP CLOCKS

CODE IDENT NO.	SIZE	DATE NO	REV
21101	B	91B0378	AT
SCALE		SHEET 43	

D



C



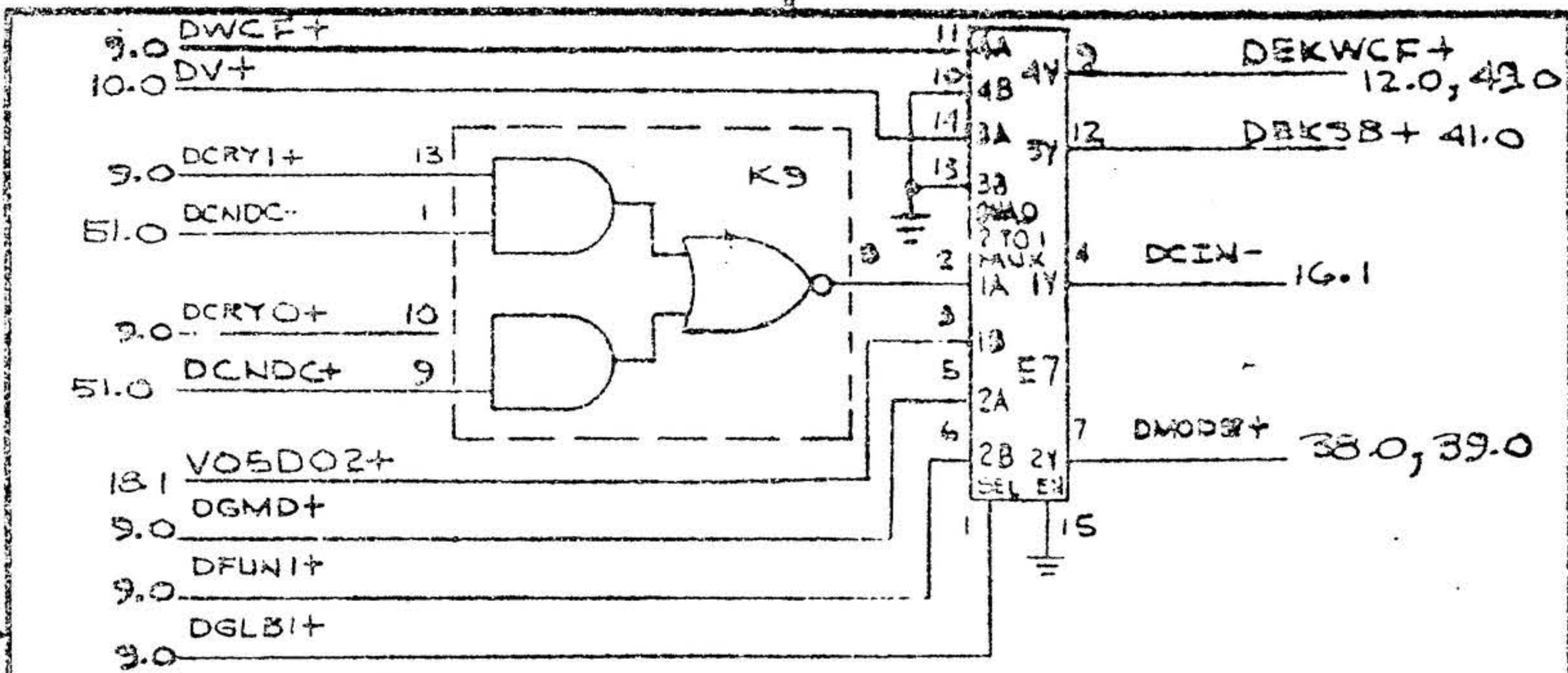
B

A

21101	8	91B0378	AT
SCALE		SHEET 43.1	

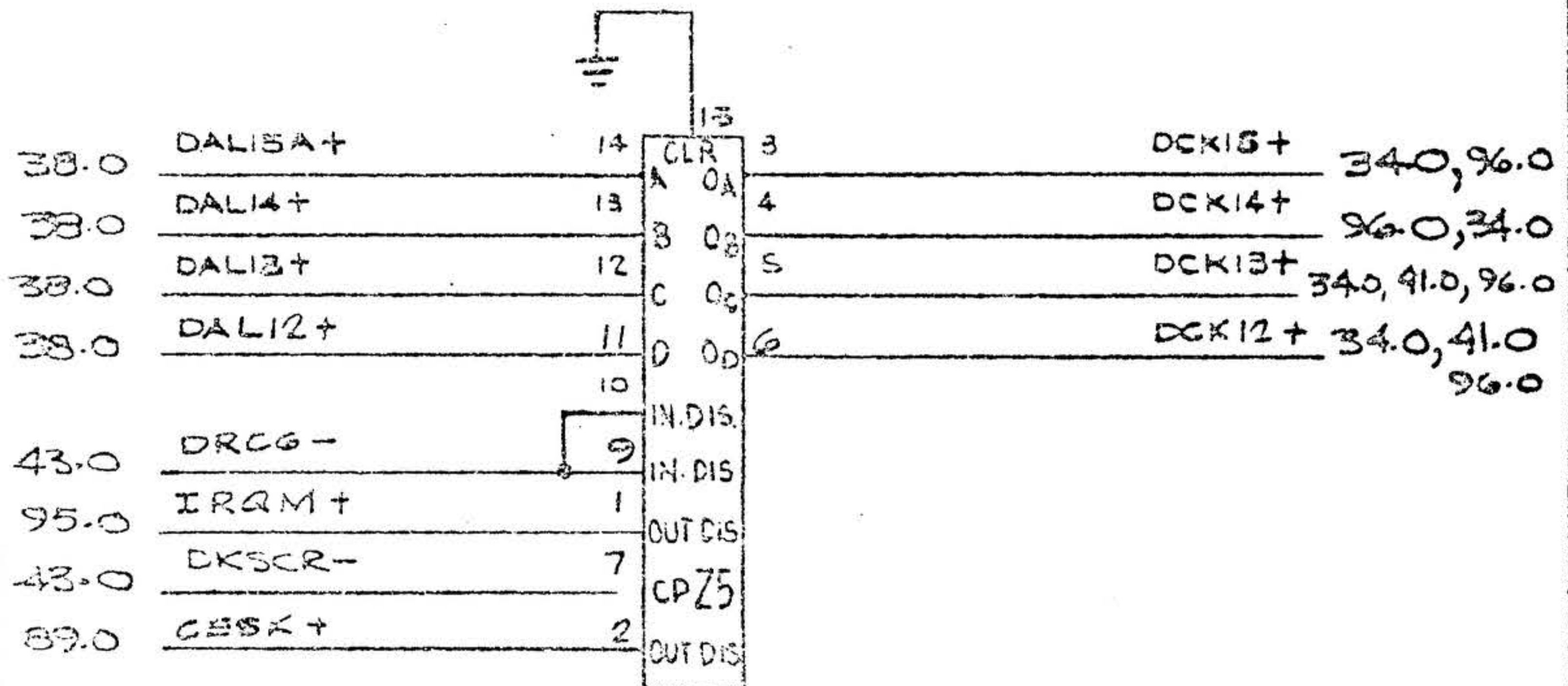
2

1



D

C



BUS "OR"-ABLE QUAD D FLIP-FLOP

A

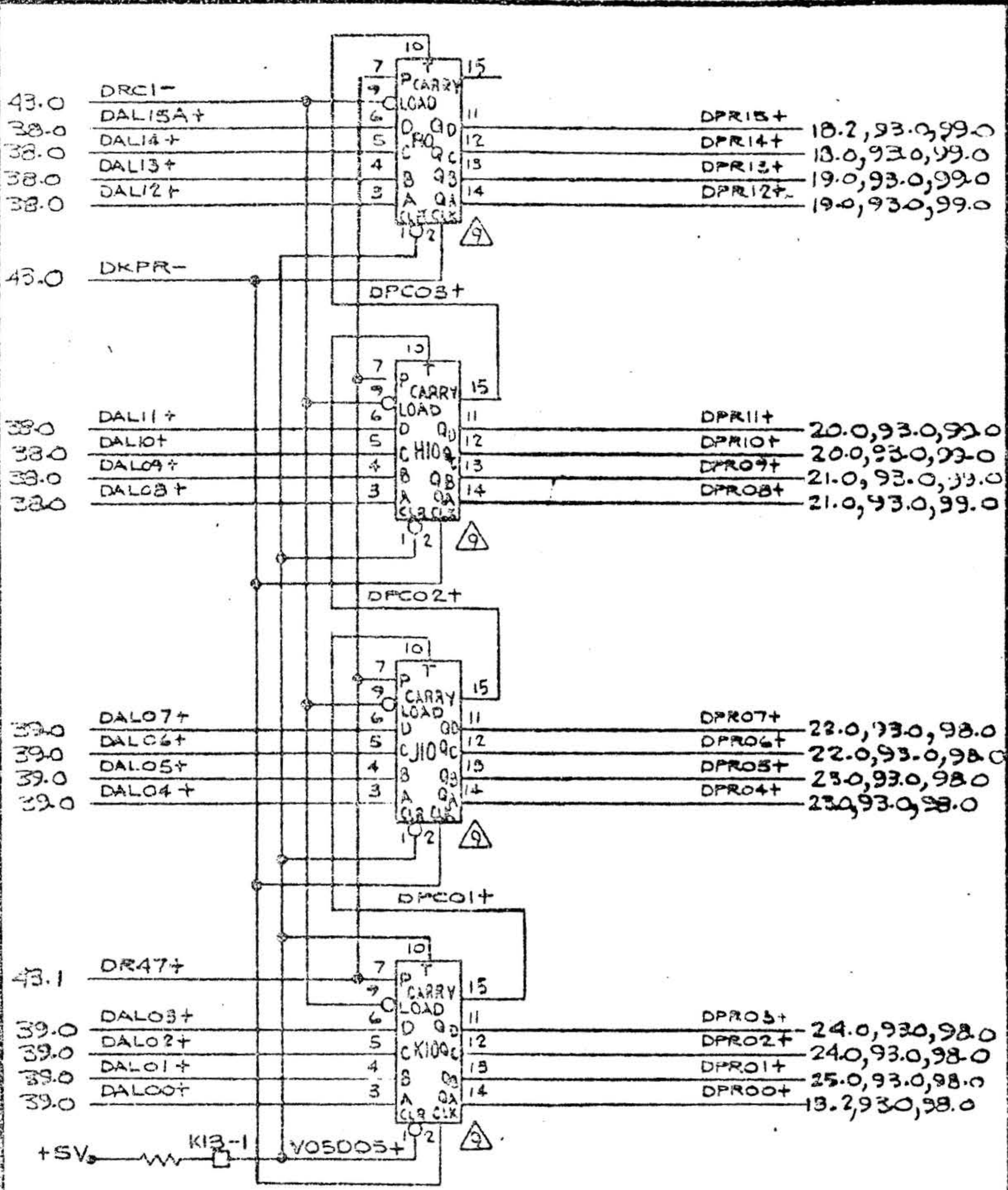
21101	B	91B0378	AT
			44.0

D

C

B

A



△ F10, J10, H10, K10, U9, Z9
 SYNC. 4 BIT BINARY
 COUNTER

REGISTER 15-0

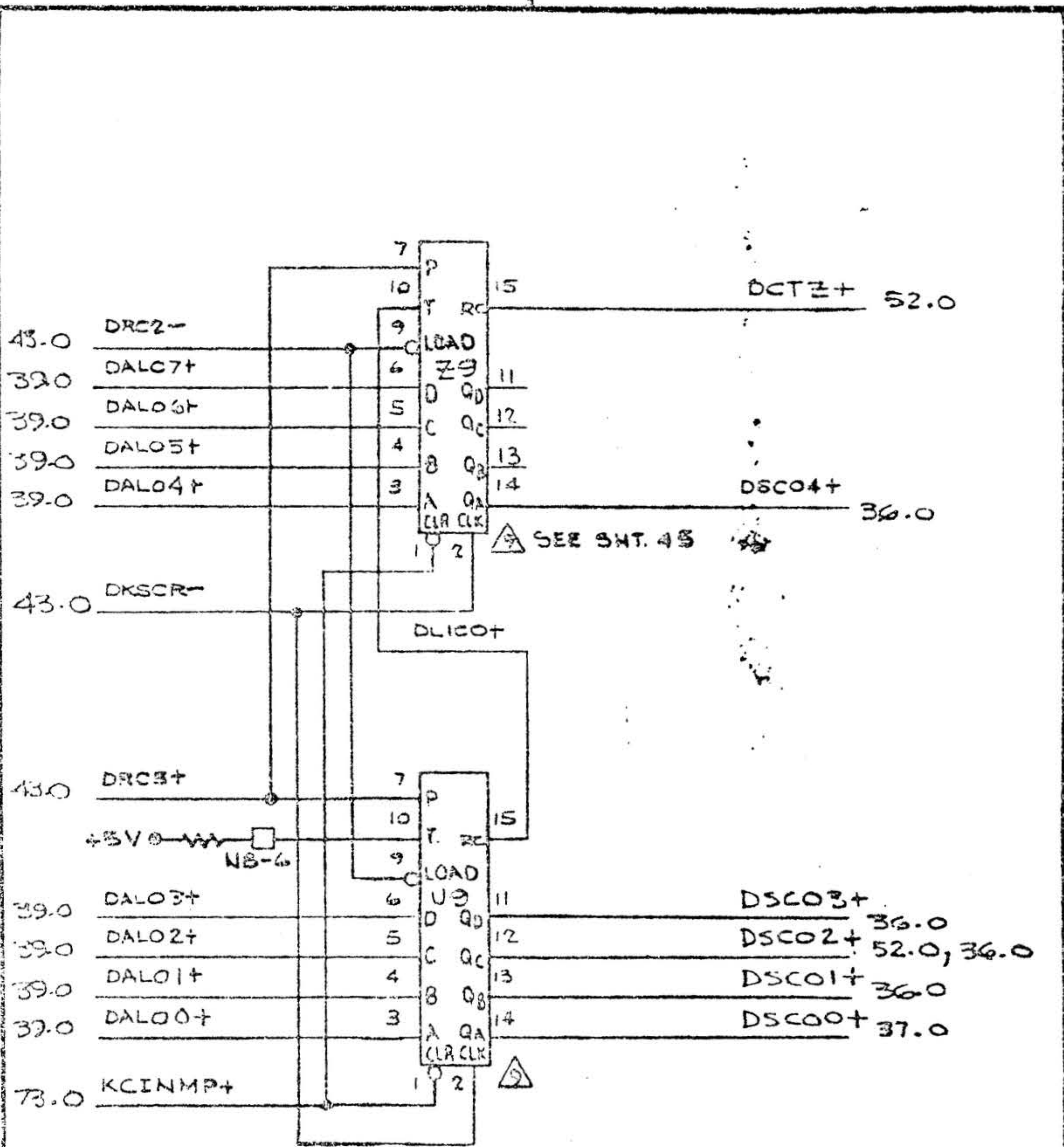
DATE	REV	ISS NO	BY
21101	B	91B0378	AT
SCALE	PRINT 4.5"		

D

C

B

A



SHIFT COUNT REGISTER 04-00

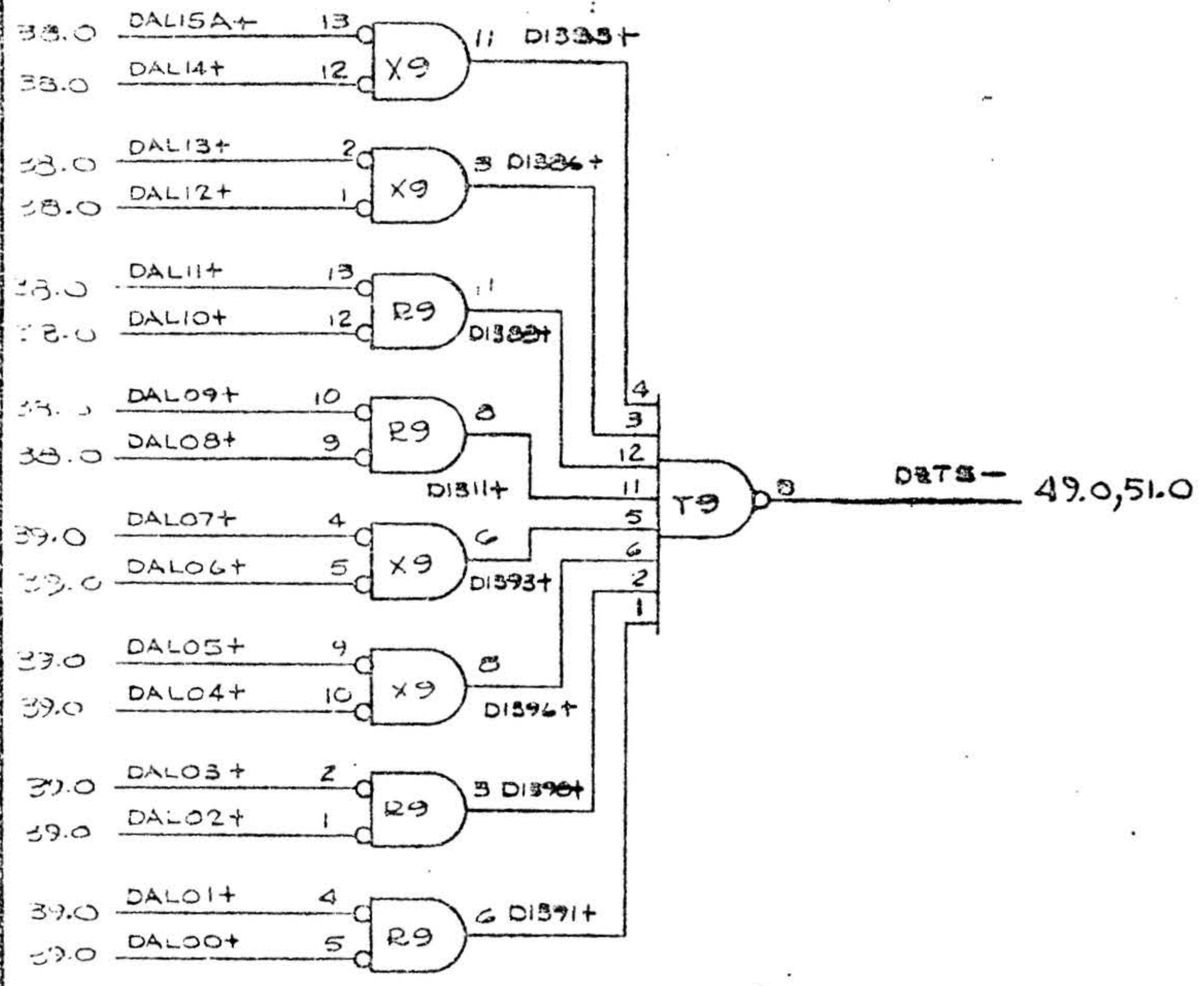
REV	REV	REV	REV
21101	B	91B0378	AT
SCALE		SHIFT 45.0	

D

C

B

A



TEST ZERO

21101	B	91B0378	AT
SCALE		TEST 47...	

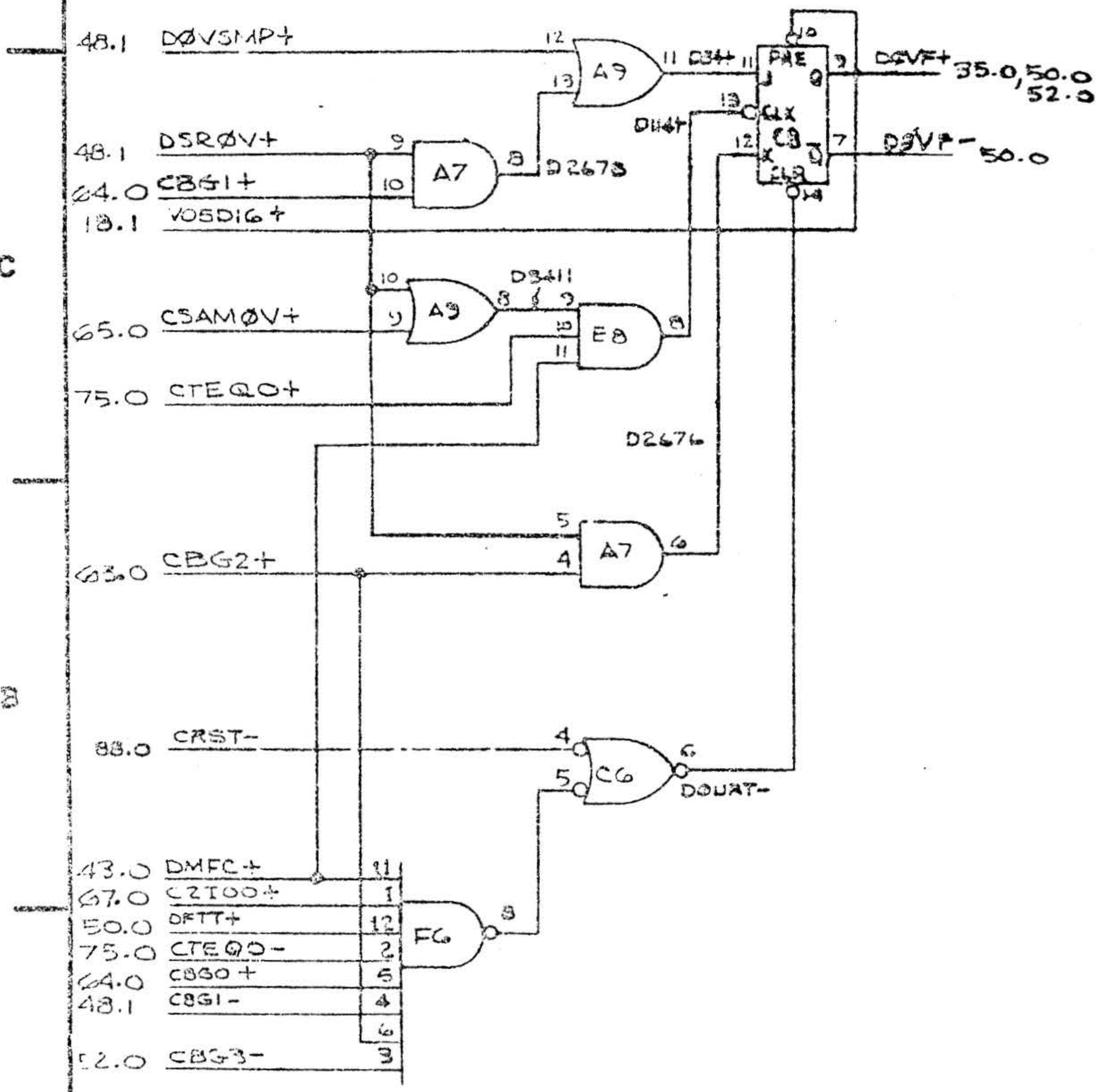
47

D

C

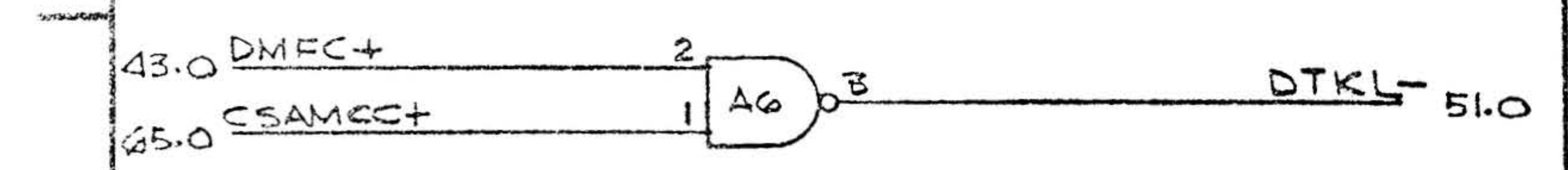
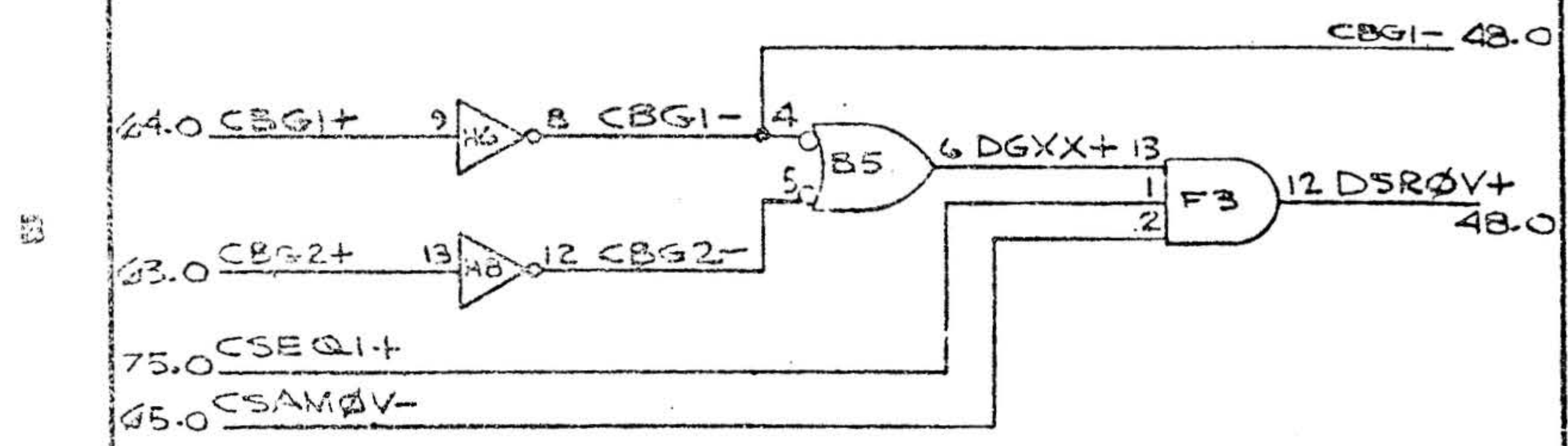
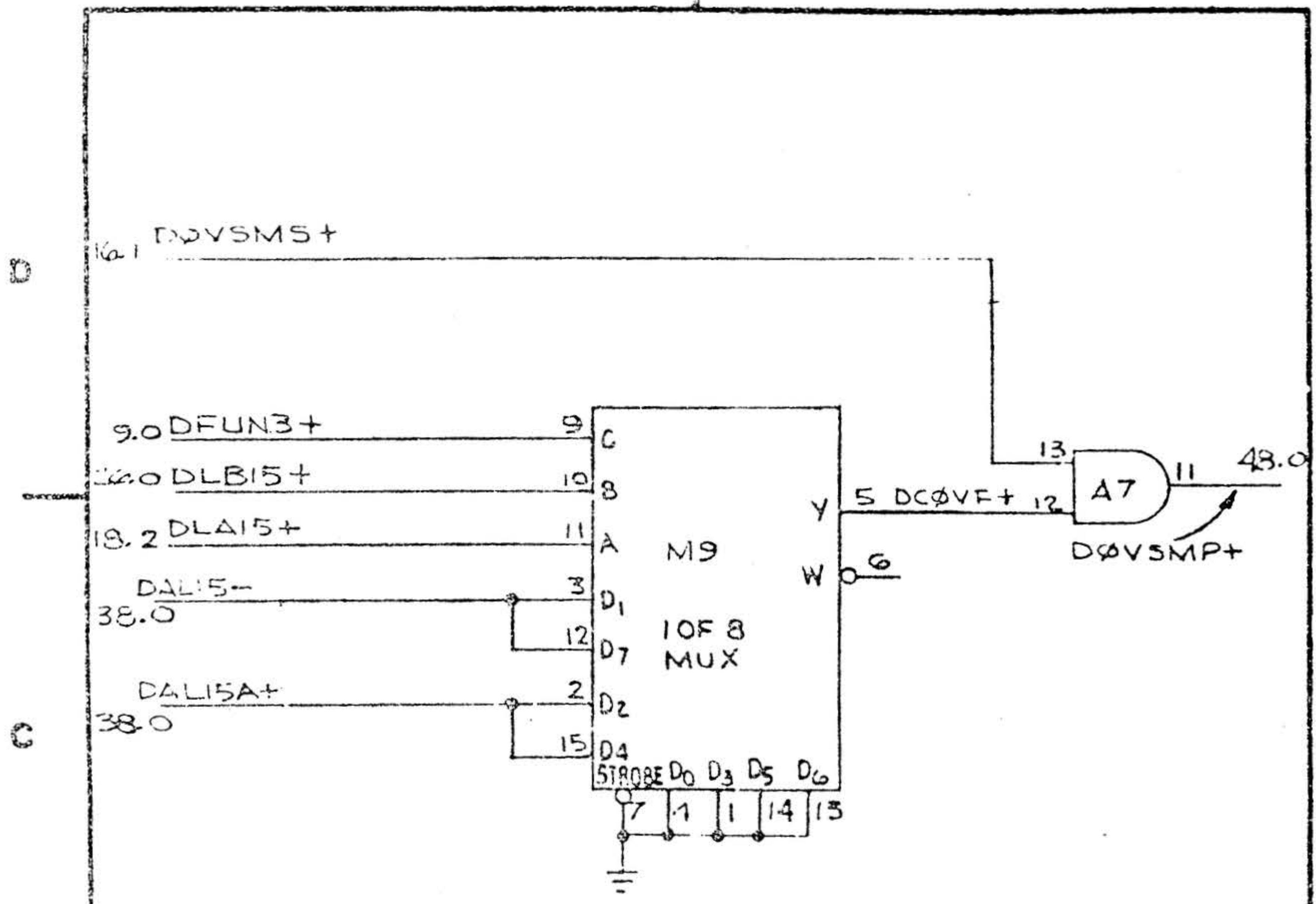
B

A

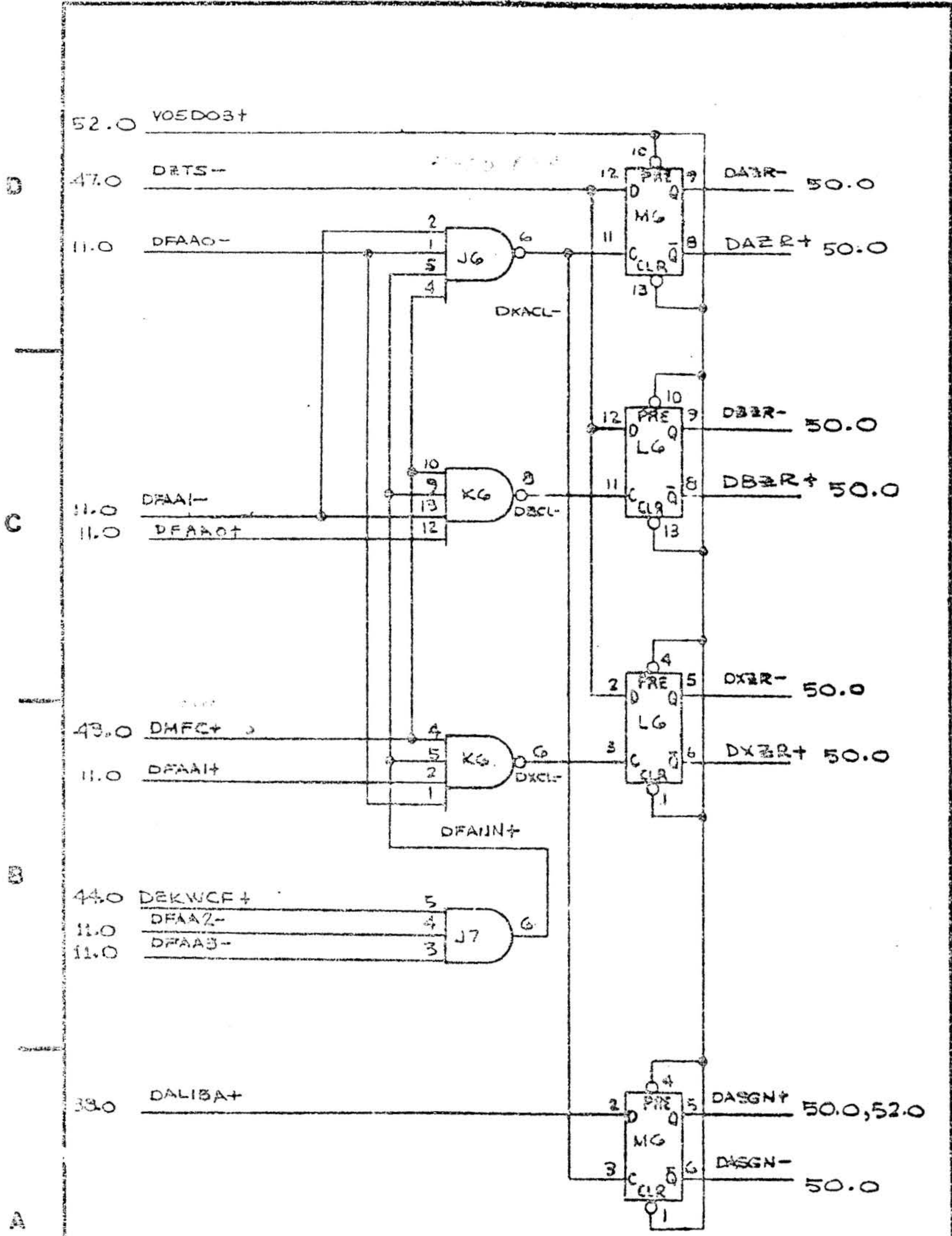


TEST LOGIC OVERFLOW

21101	3	9180378	AT
SCALE		UNIT 48.0	



DATE	REV	DESIGN NO	BY
21101	B	91B0378	AT
SCALE	SHEET 48.1		

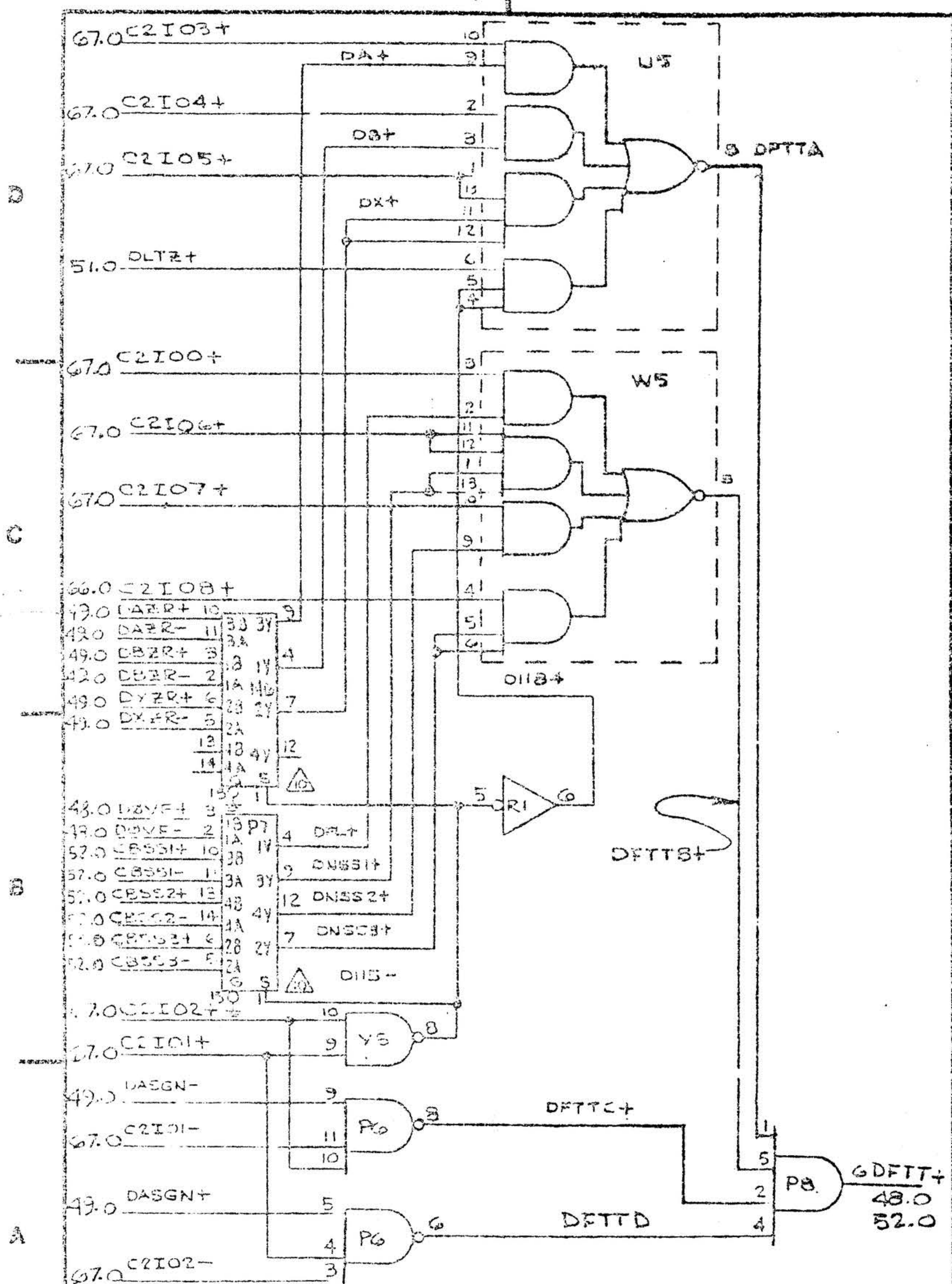


620F TEST

REVISED NO.	REV	FIG NO	REV
21101	B	91B0378	AT
SCALE	DWT 49.0		

2

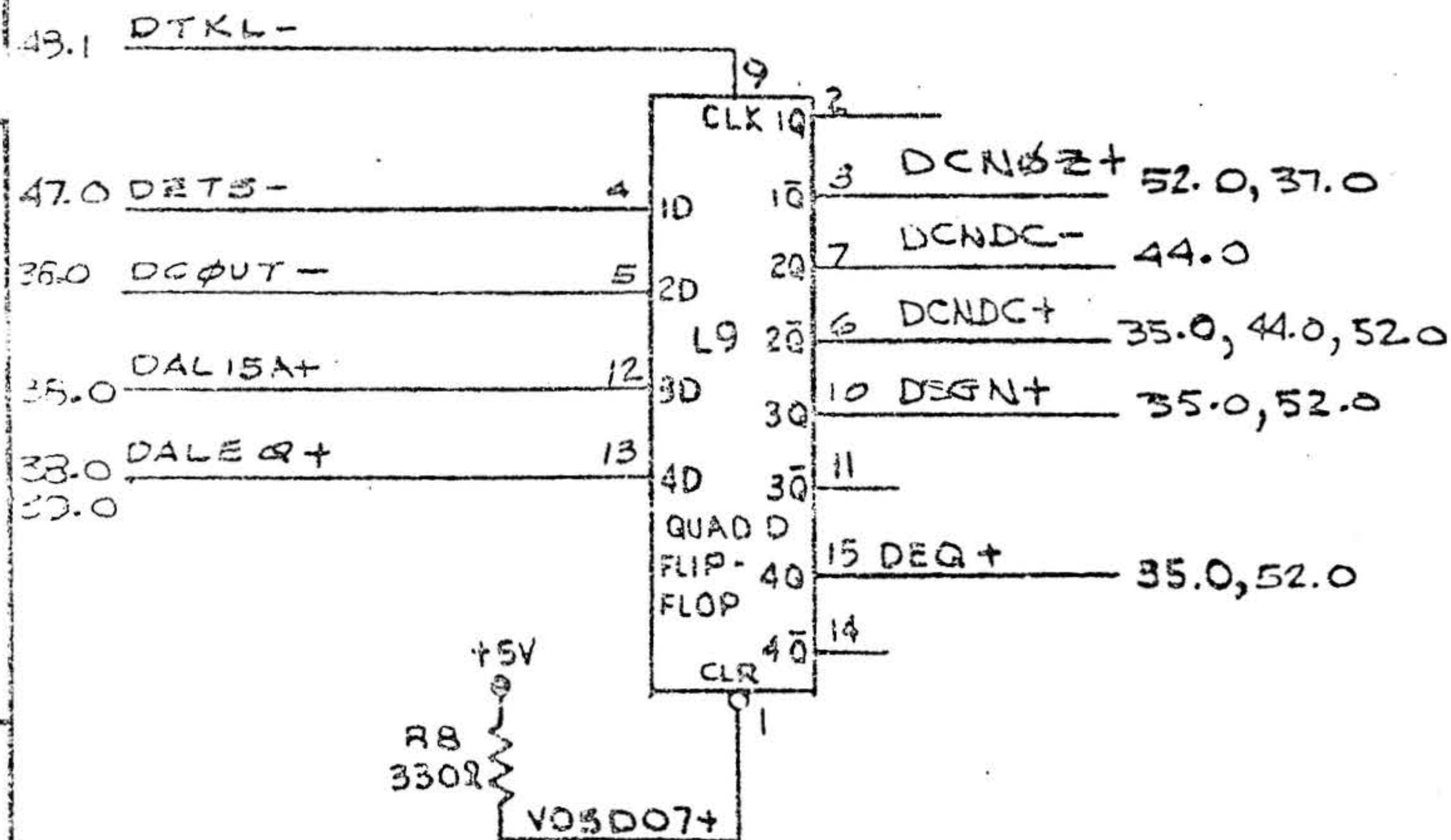
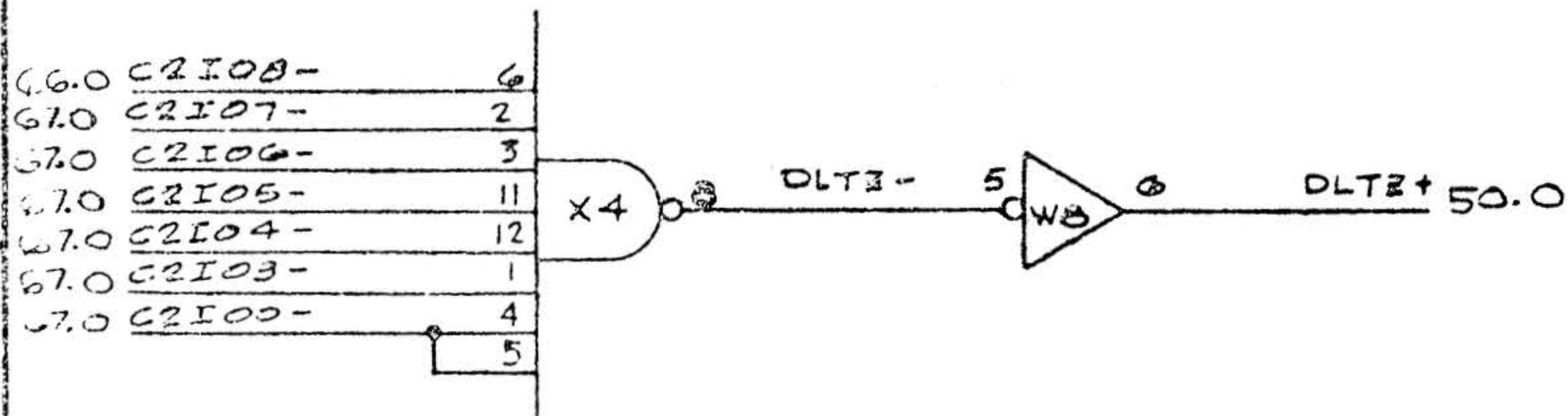
1



△ NG, P7 ARE,
QUAD Z TO 1 MUX

620F TEST

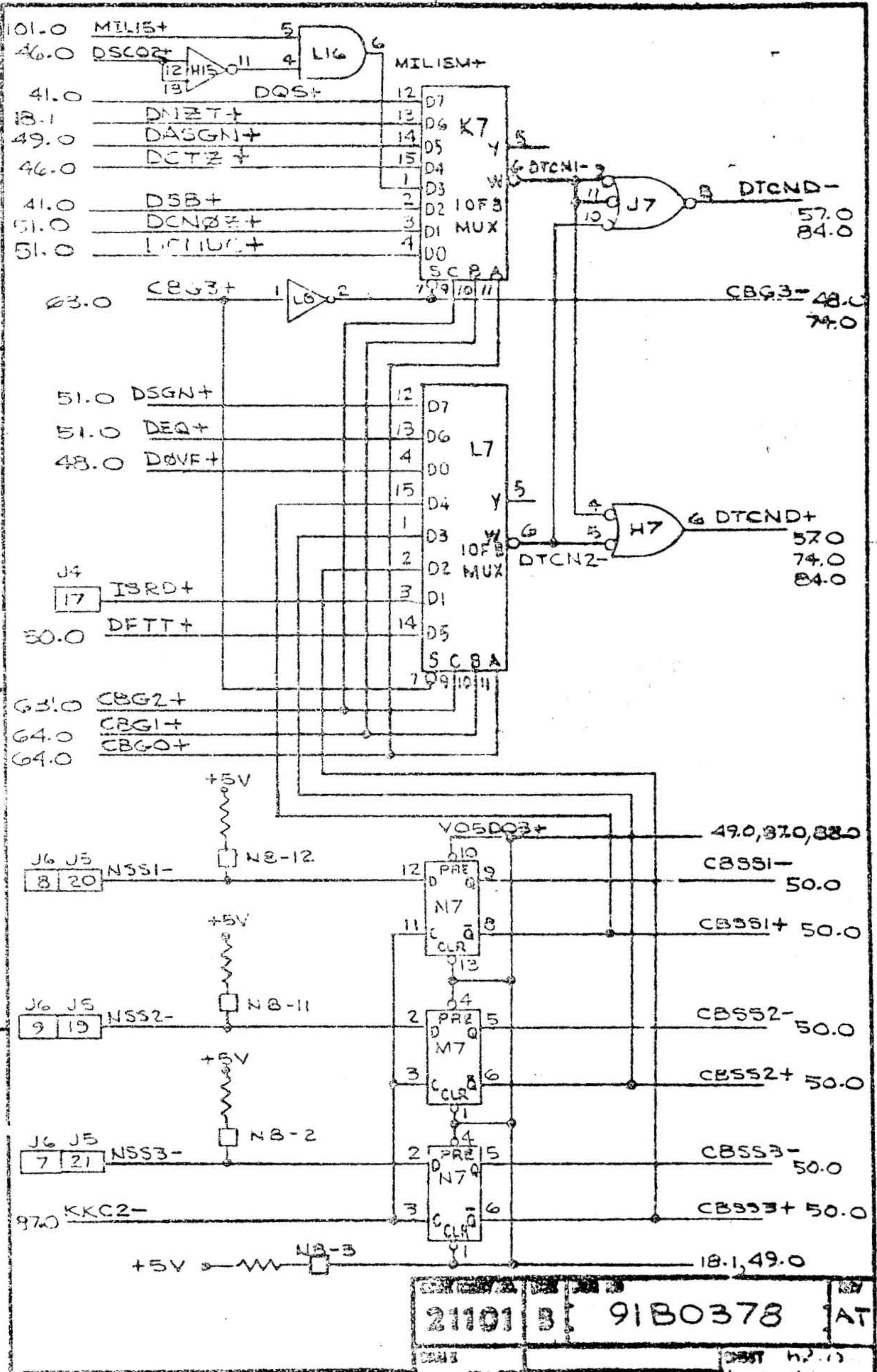
21101	B	9180378	AT
50.0			



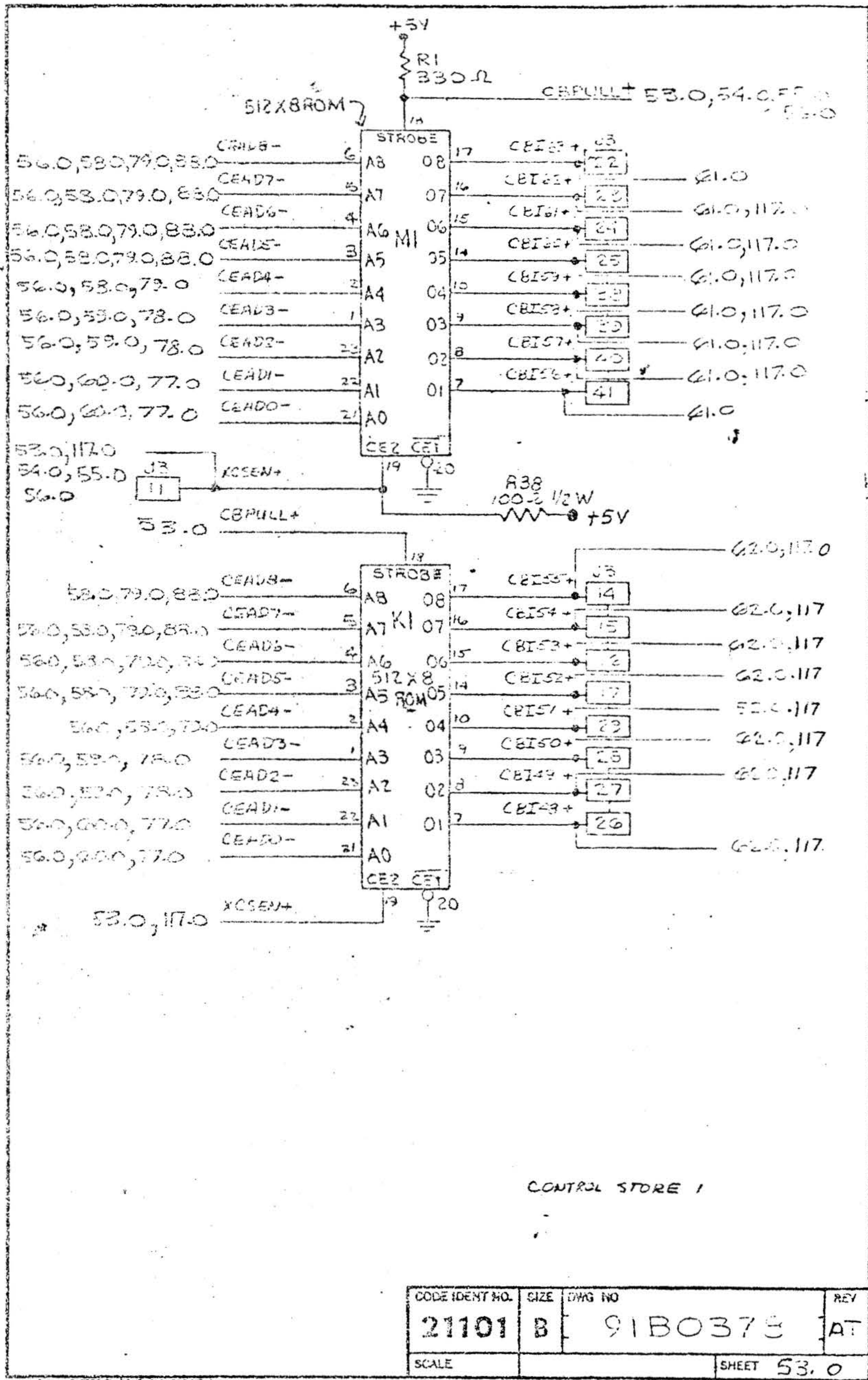
21101	B	9180378	AT
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2

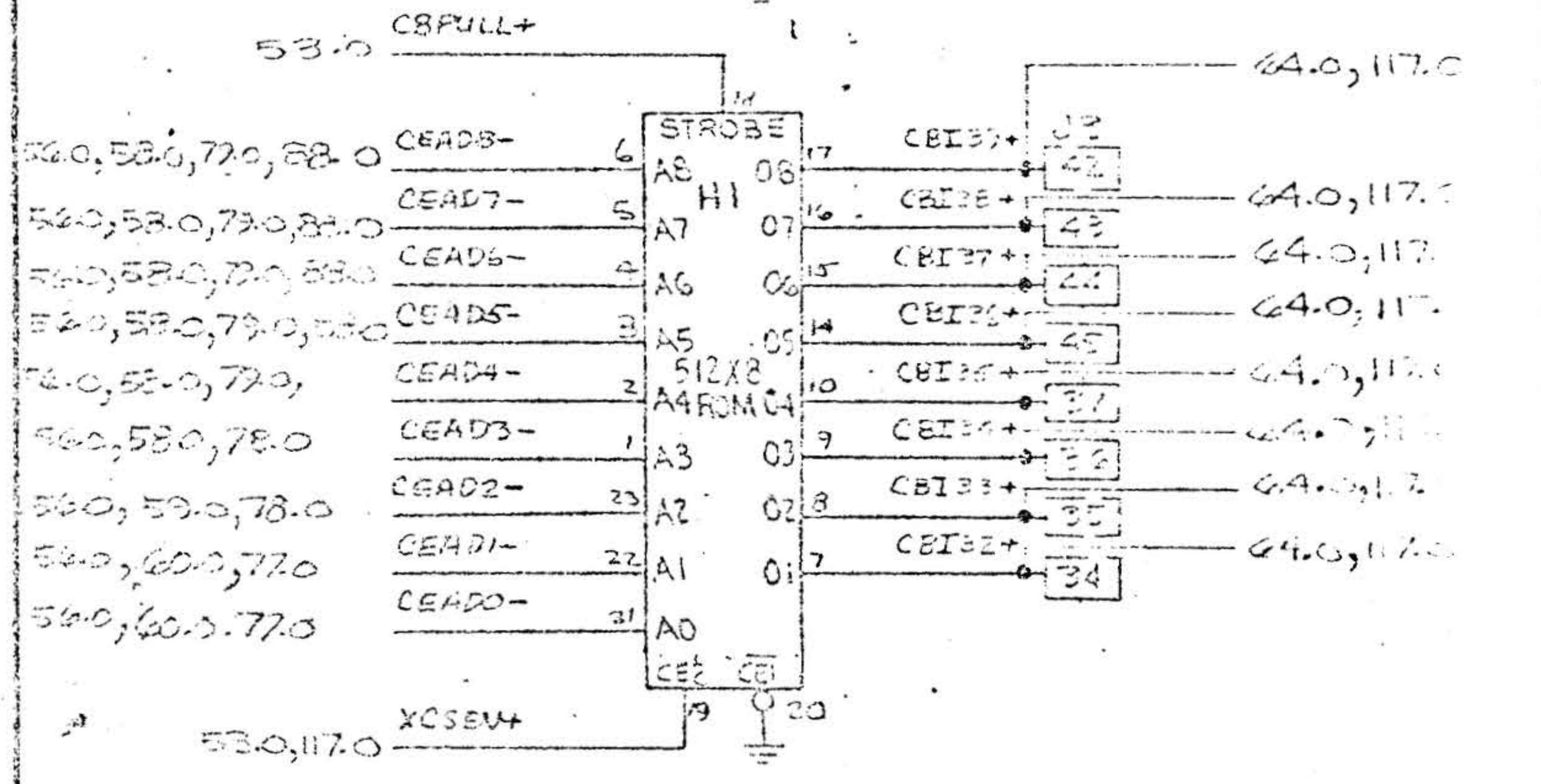
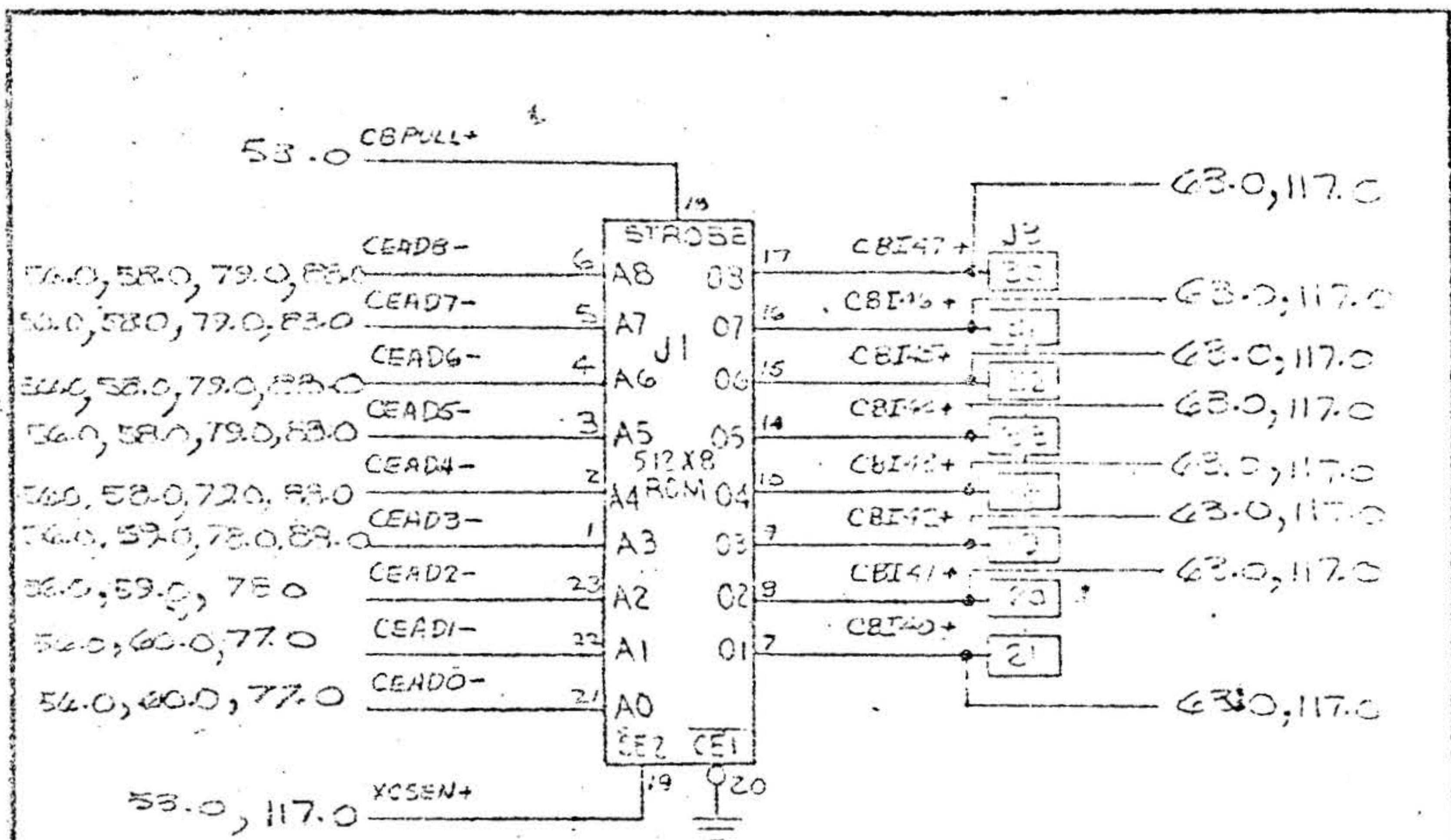
1



21101 B 9180378 AT

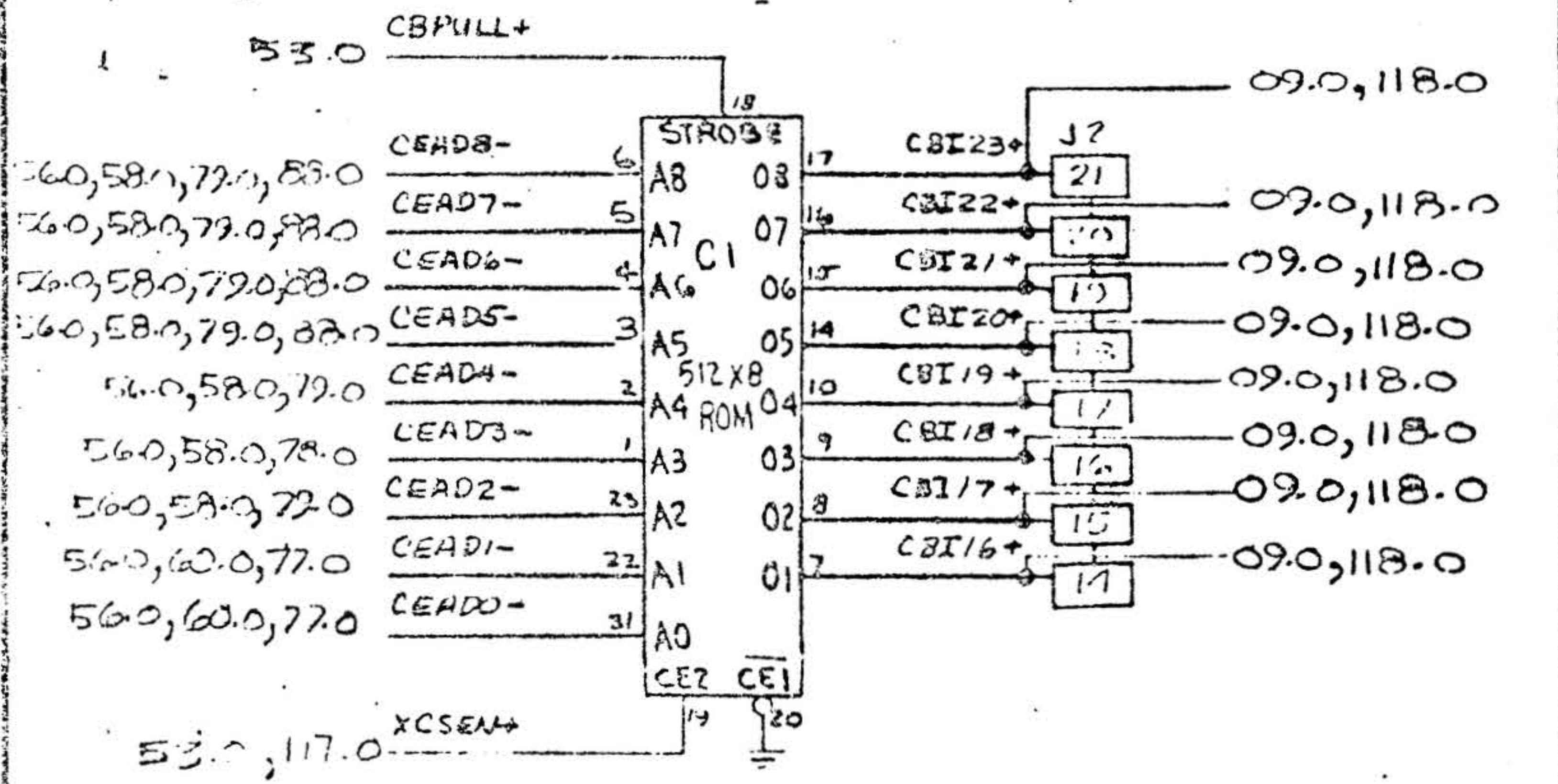
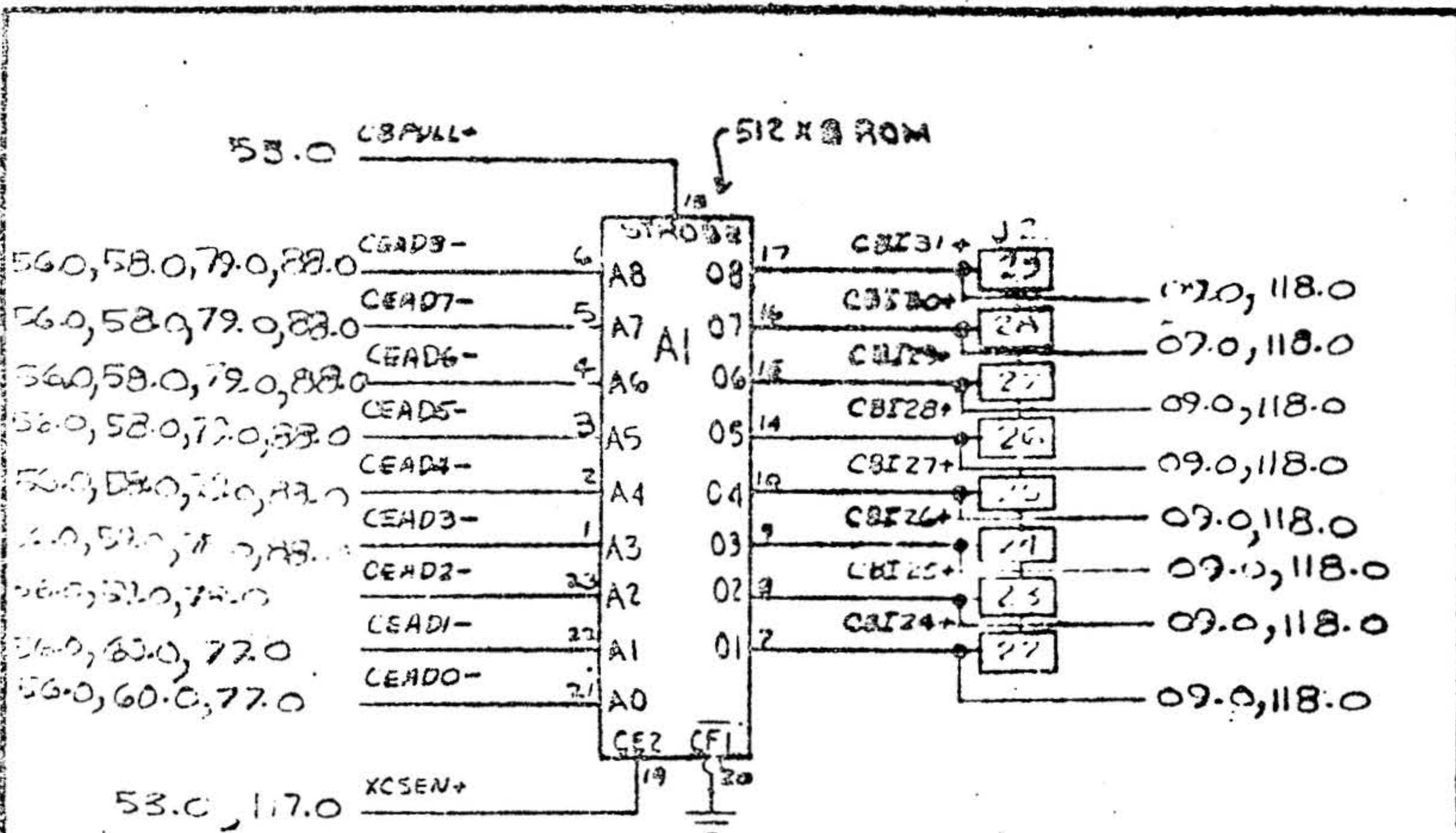


CODE IDENT NO.	SIZE	DMG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 53.0	



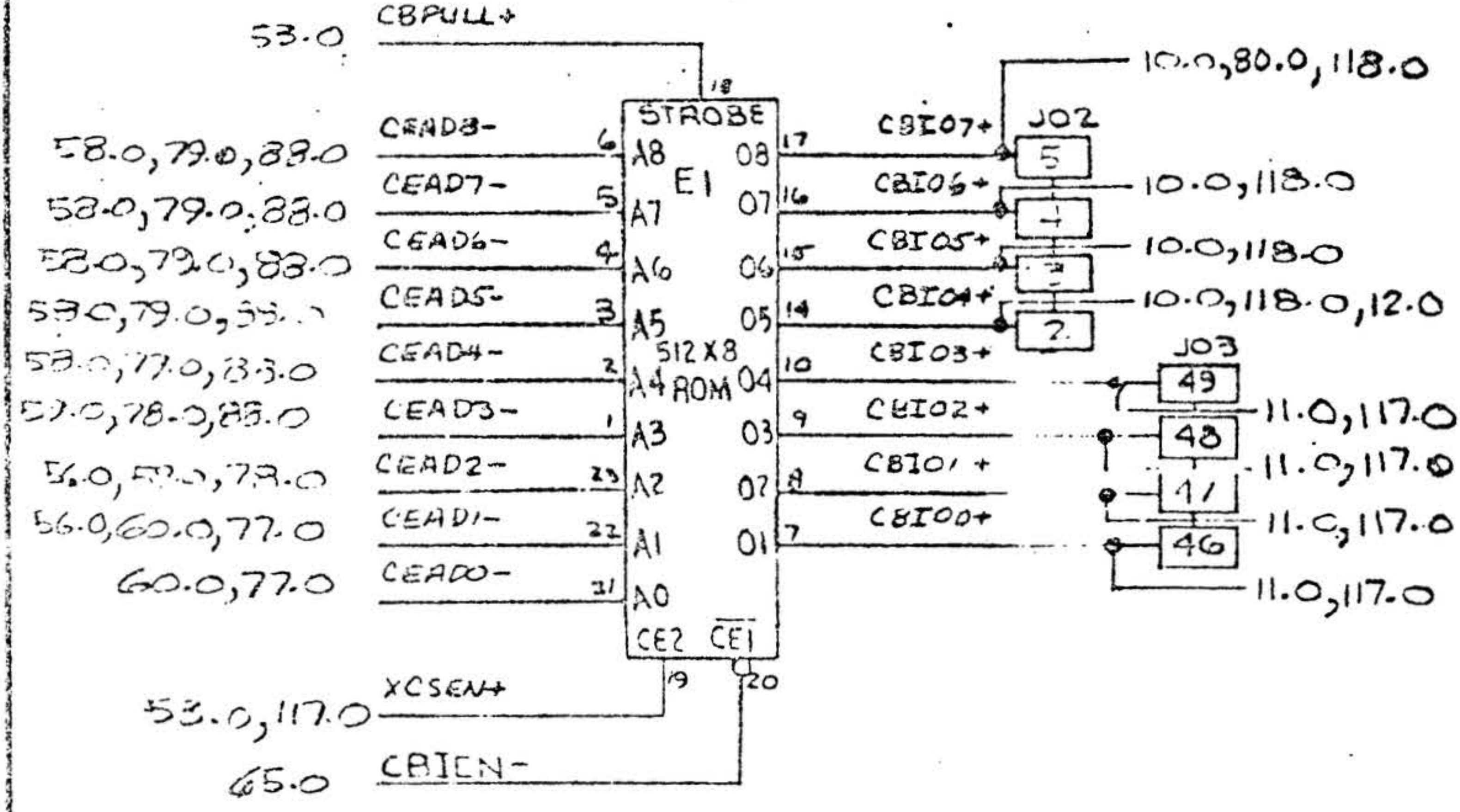
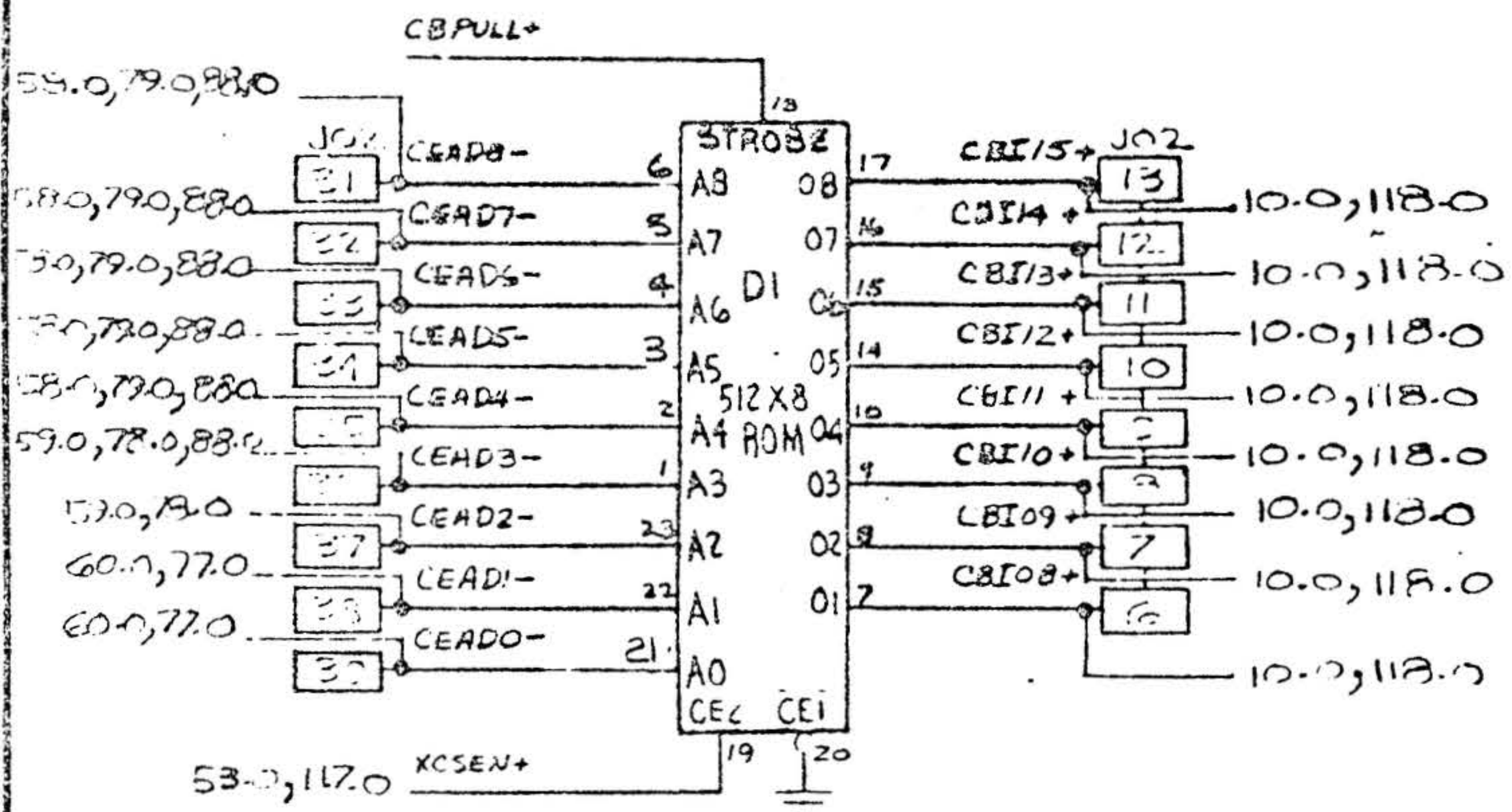
CONTROL STORE 2

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	21BC378	1
SCALE		SHEET 54.0	



CONTROL STORE 3

21101	B	91B0378	AT
FORM 1		REV 55.0	



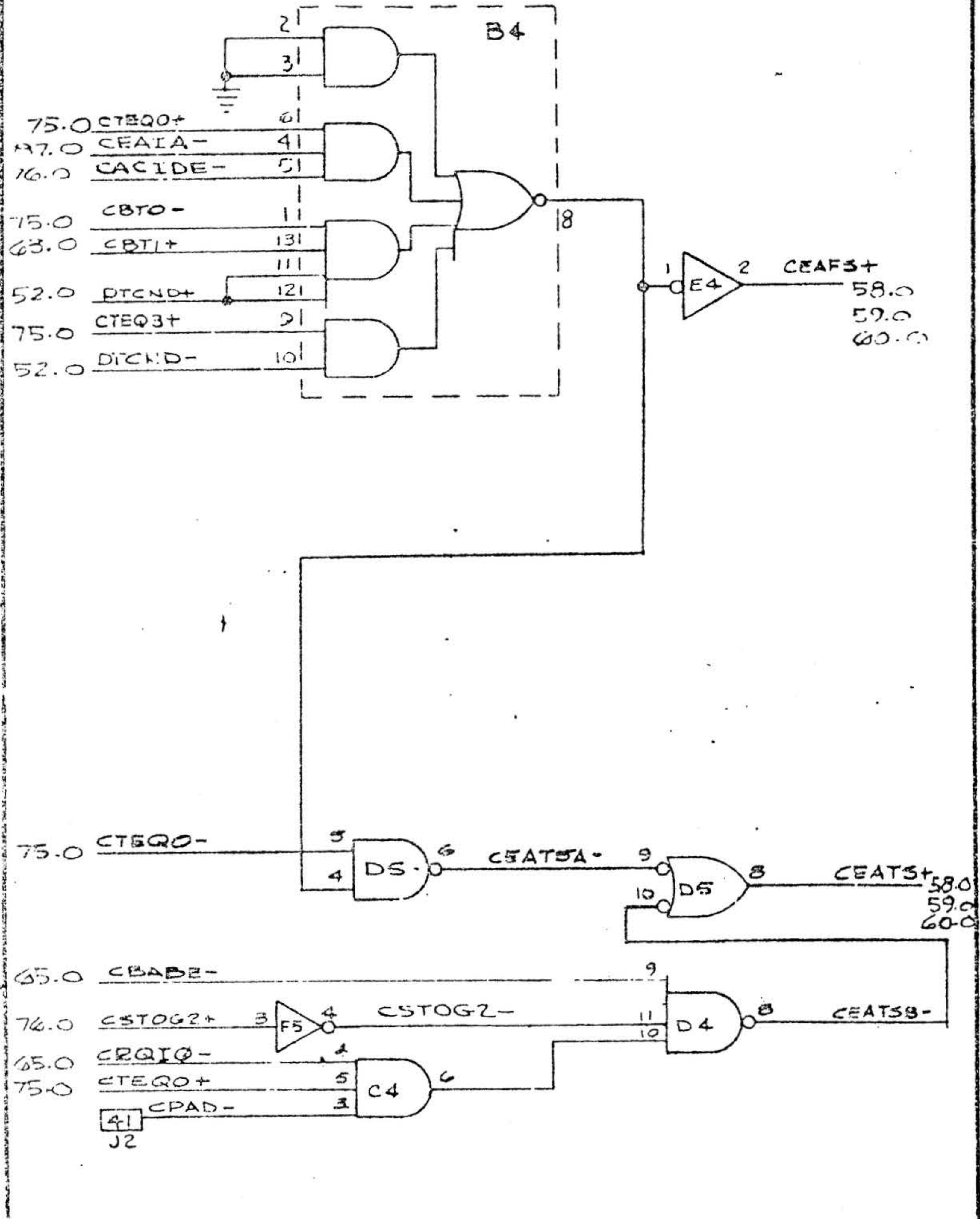
CONTROL STORE 4

CODE IDENT NO.	SIZE	DATE NO	REV
21101	B	91B0378	AT
PCAL		20756.0	

D

C

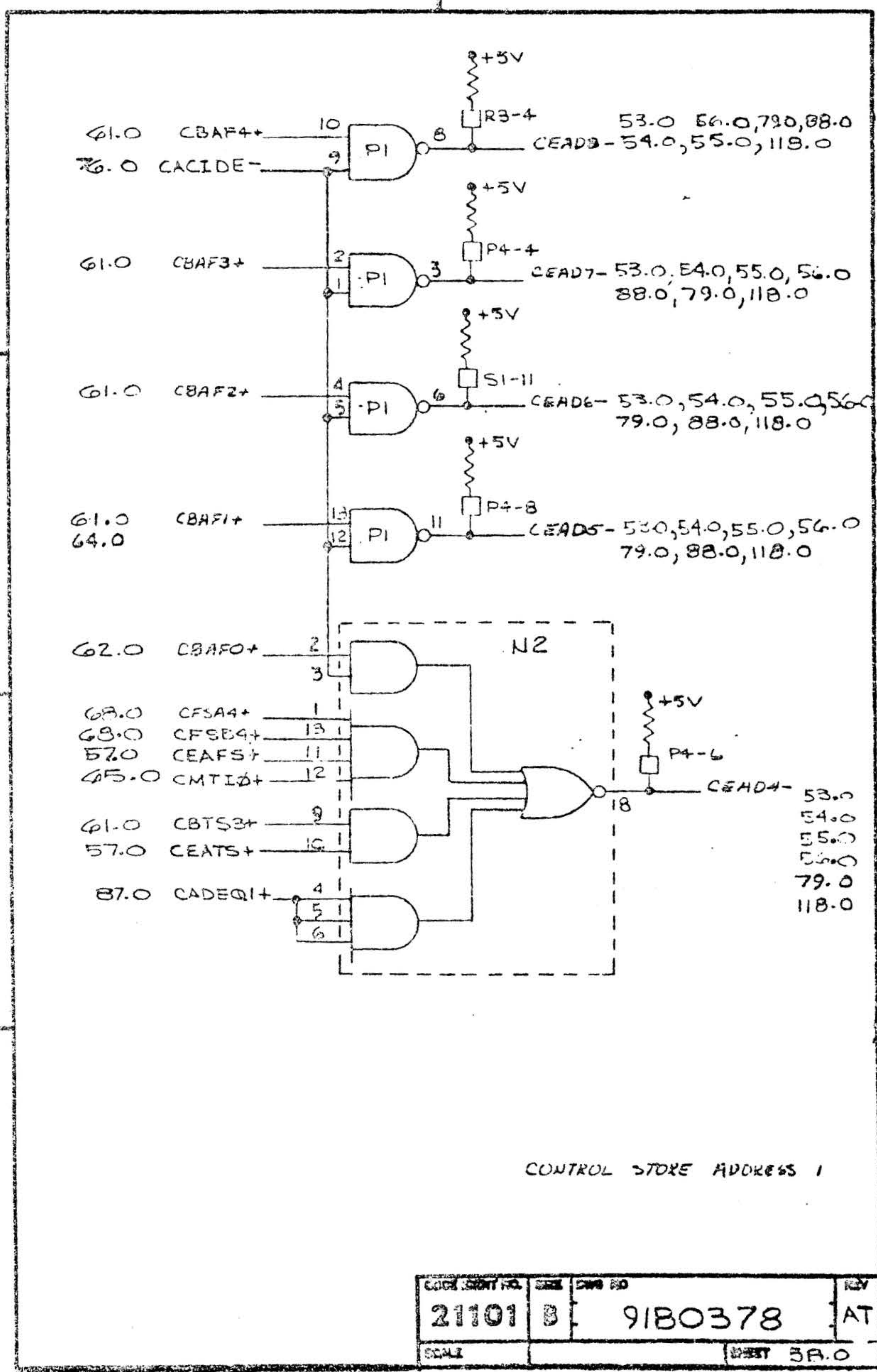
A



CONTROL STORE ADDRESS CONTROL

CODE IDENT NO.	SIZE	DRWG NO	REV
21101	8	91B0378	AT
SCALE	SHEET 57.0		

D
C
B
A



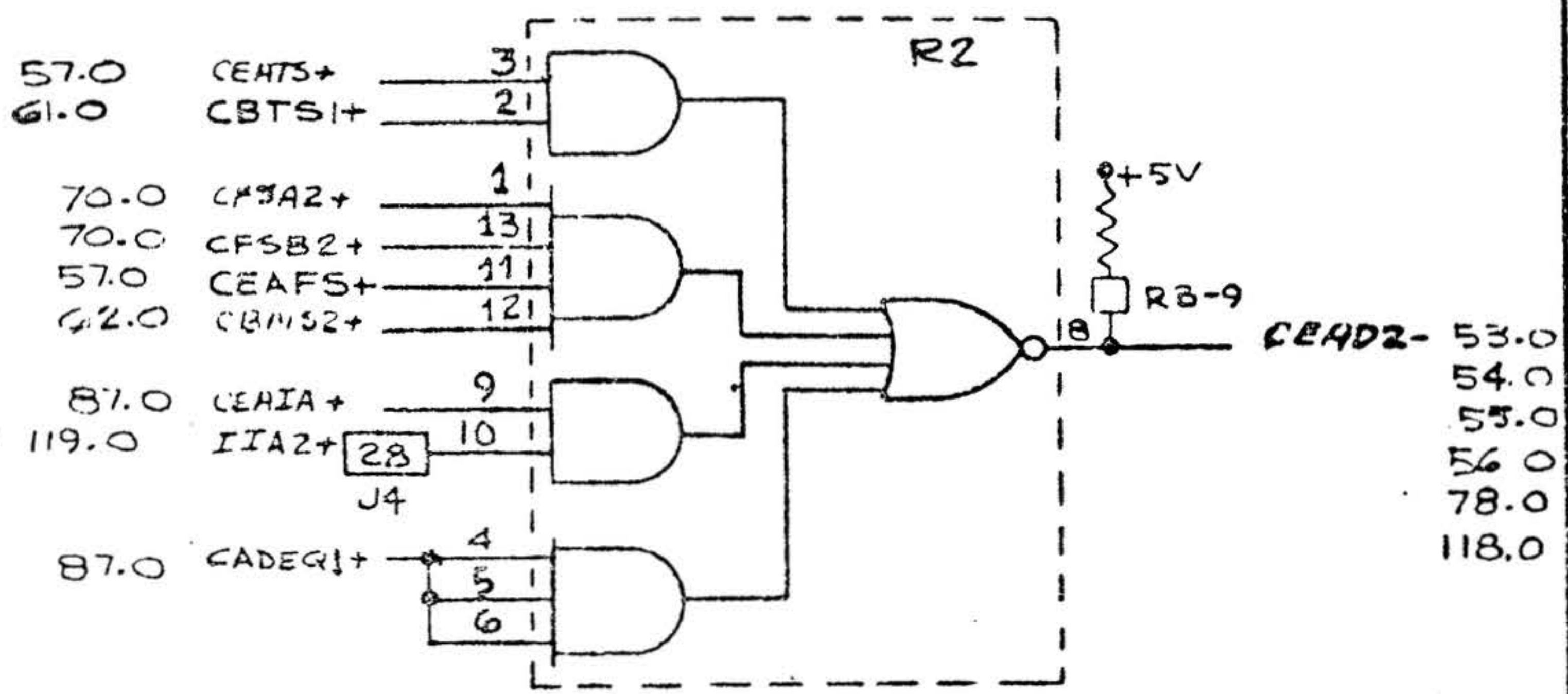
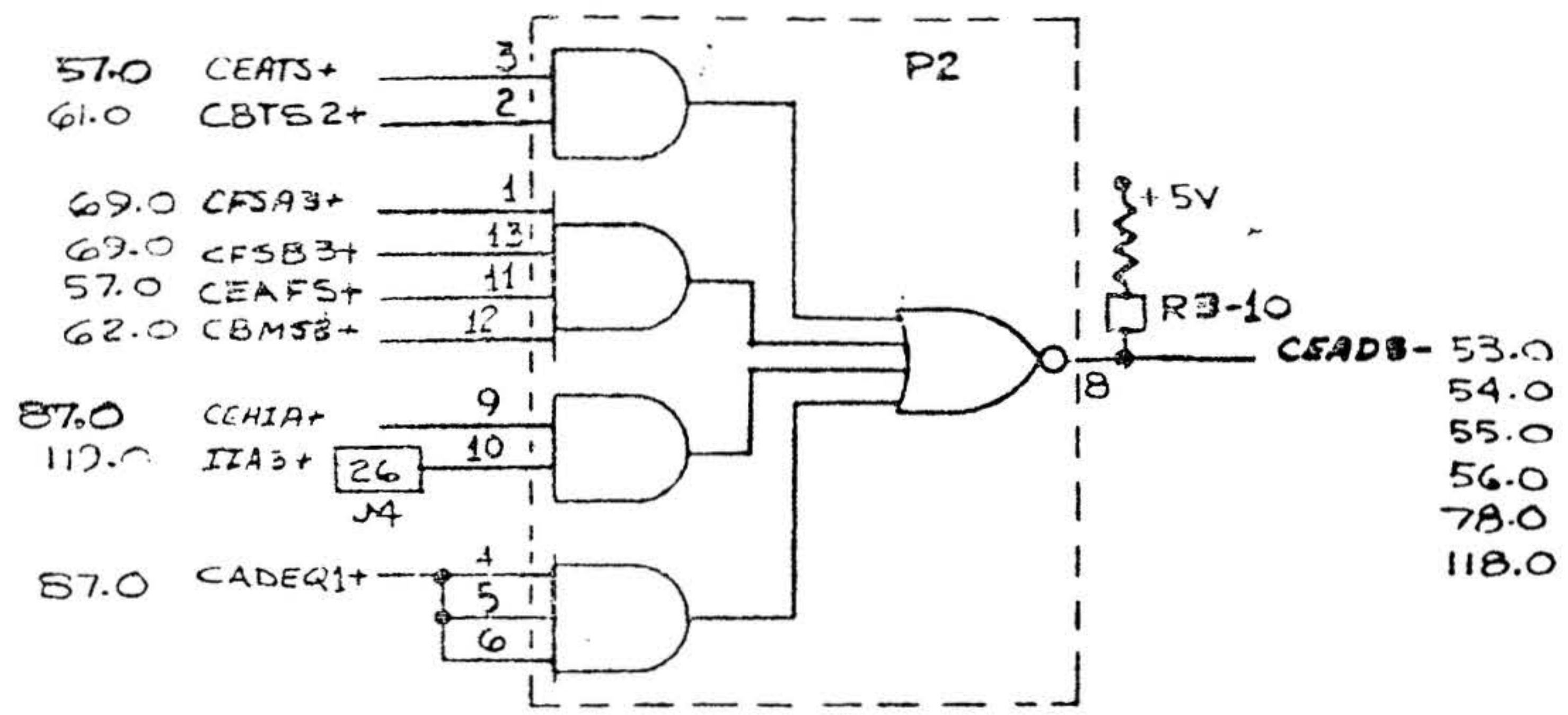
CODE IDENT NO.	SIZE	DWG NO.	REV
21101	B	9180378	AT
SCALE	SHEET 3A.0		

D

C

B

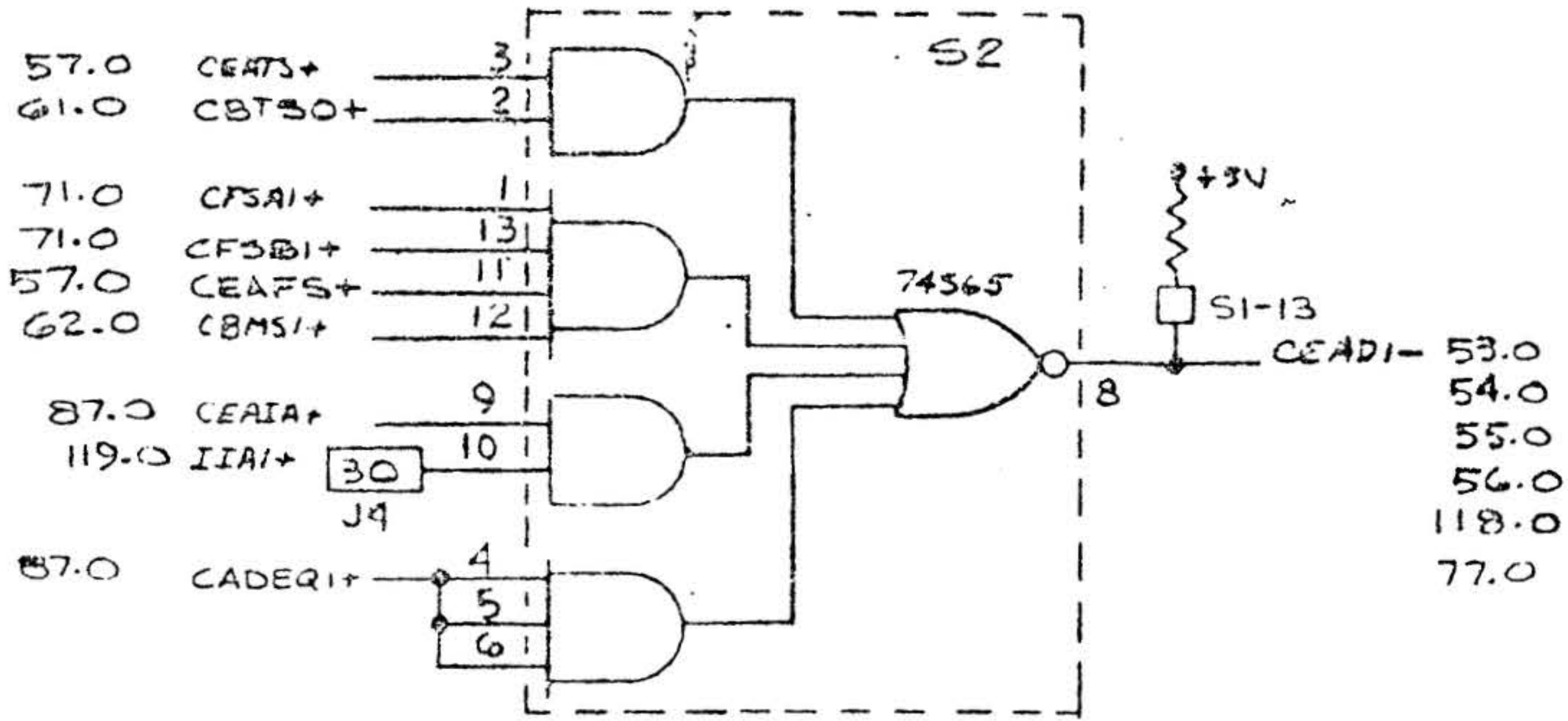
A



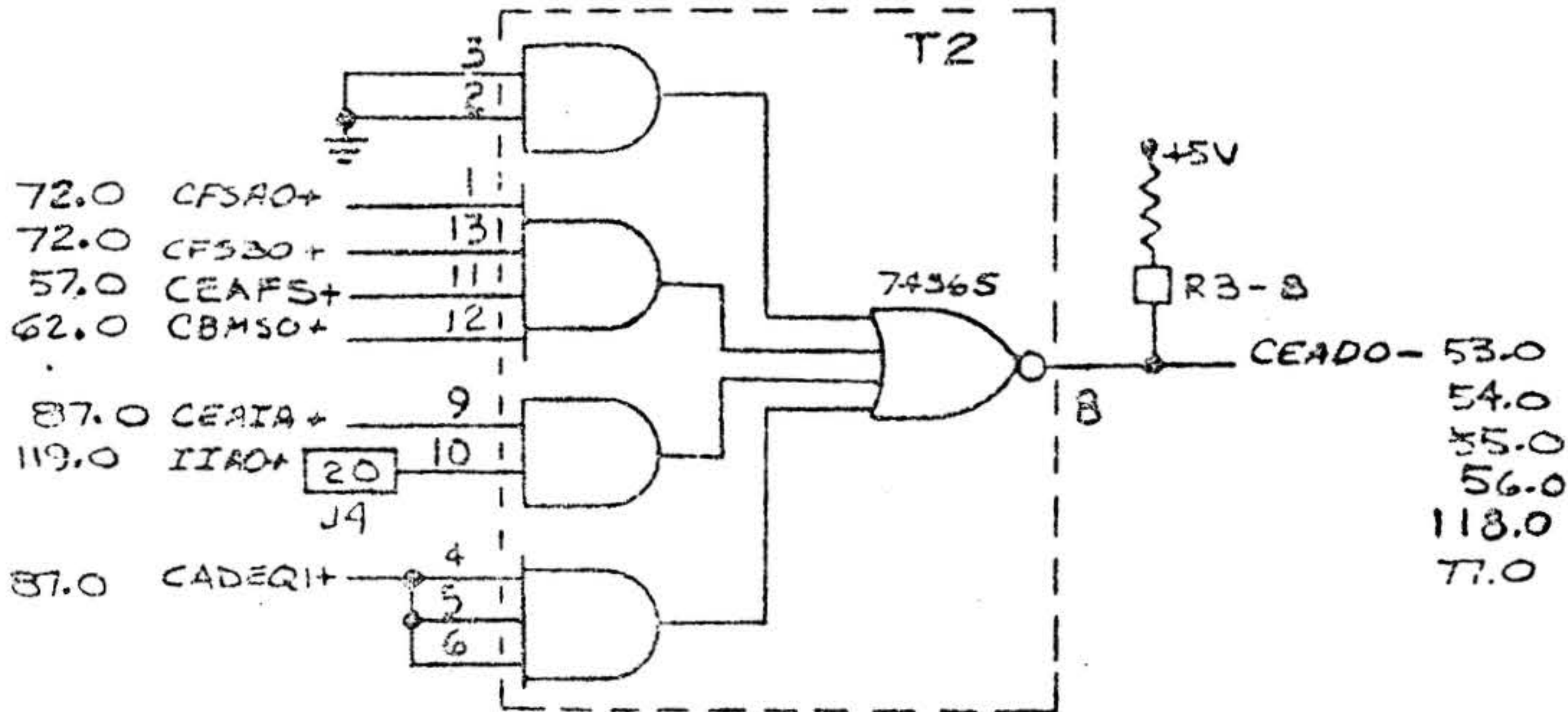
CONTROL STORE ADDRESS 2

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET	59.0

D



C



B

CONTROL STORE ADDRESS B

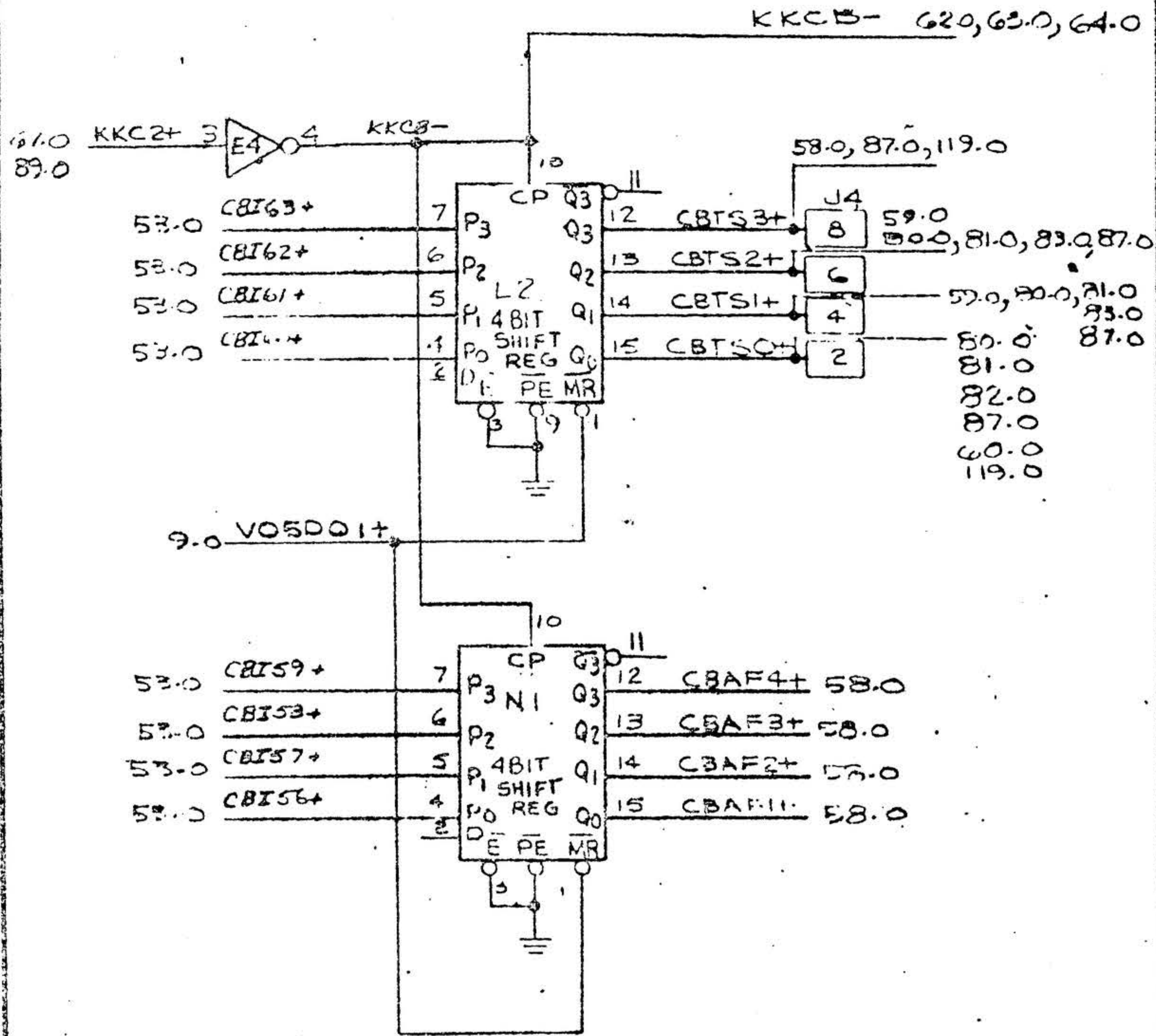
A

COORDINATE NO.	SCALE	CHART NO.	REV.
21101	B	91B0378	AT
SCALE	CHART NO. 60.0		

D

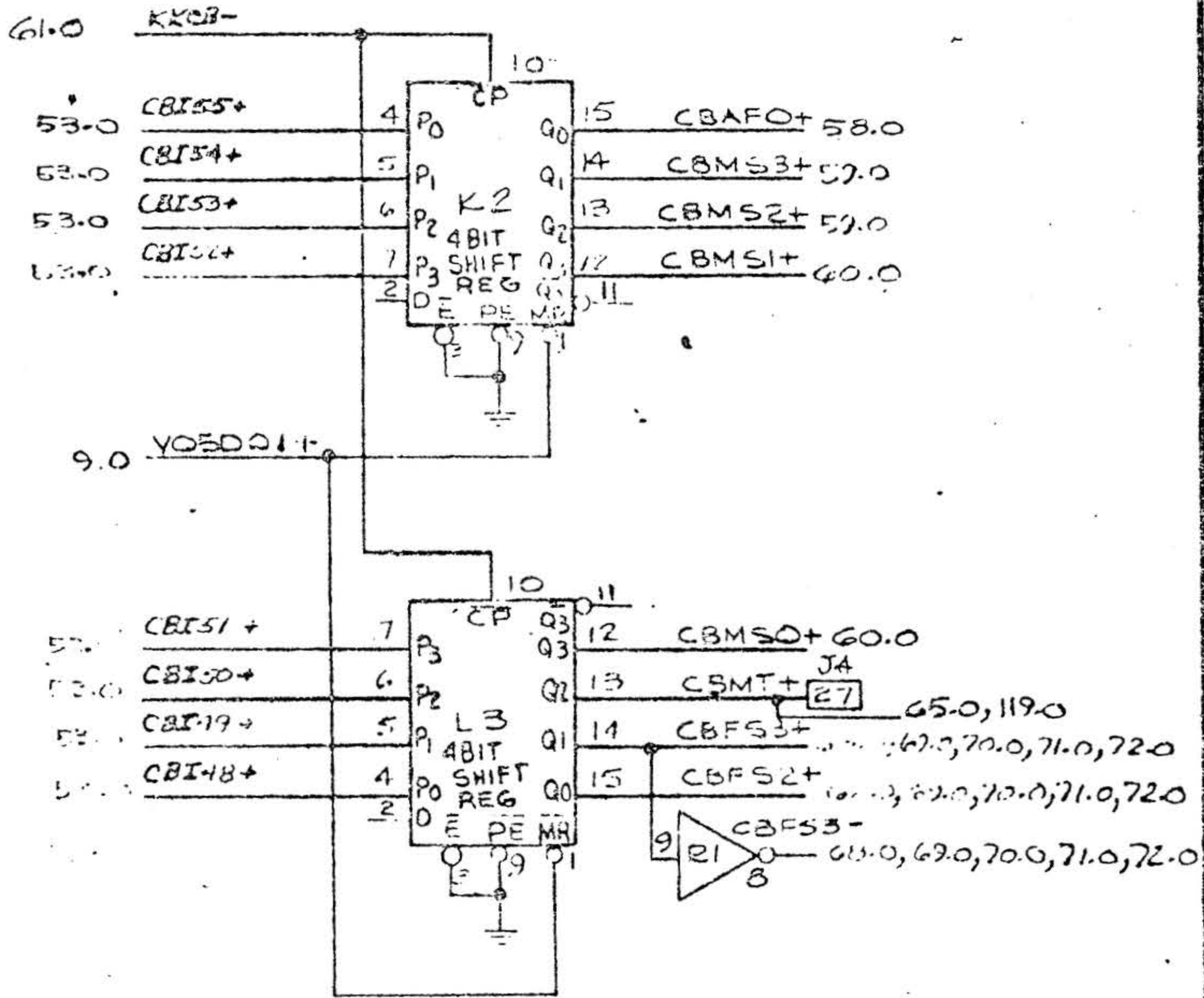
C

A 2



CONTROL BUFFER 1

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 6/9		



CONTROL BUFFER 2

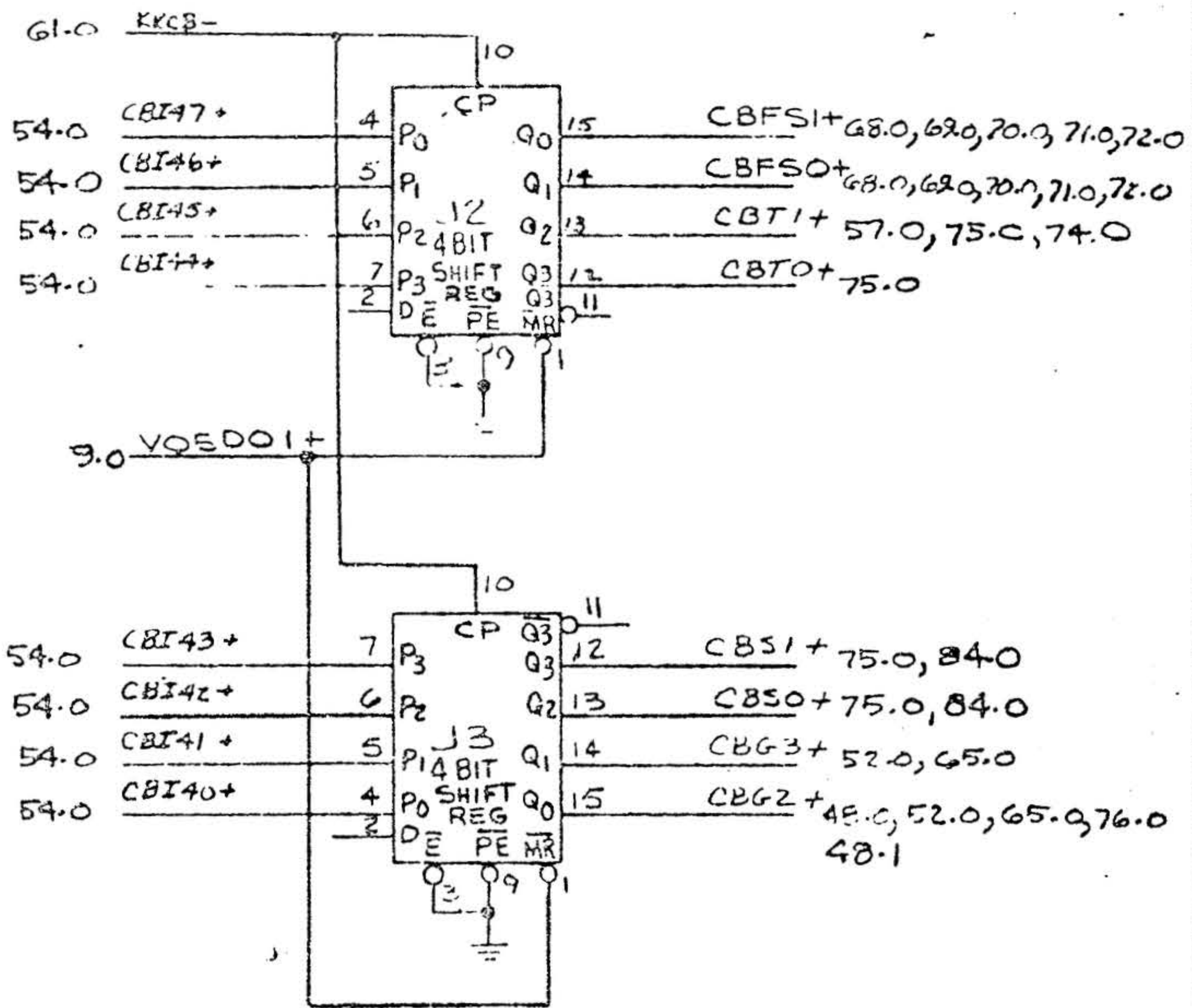
21101	B	91B0378	AT
ROLE		POST 62.C.	

D

C

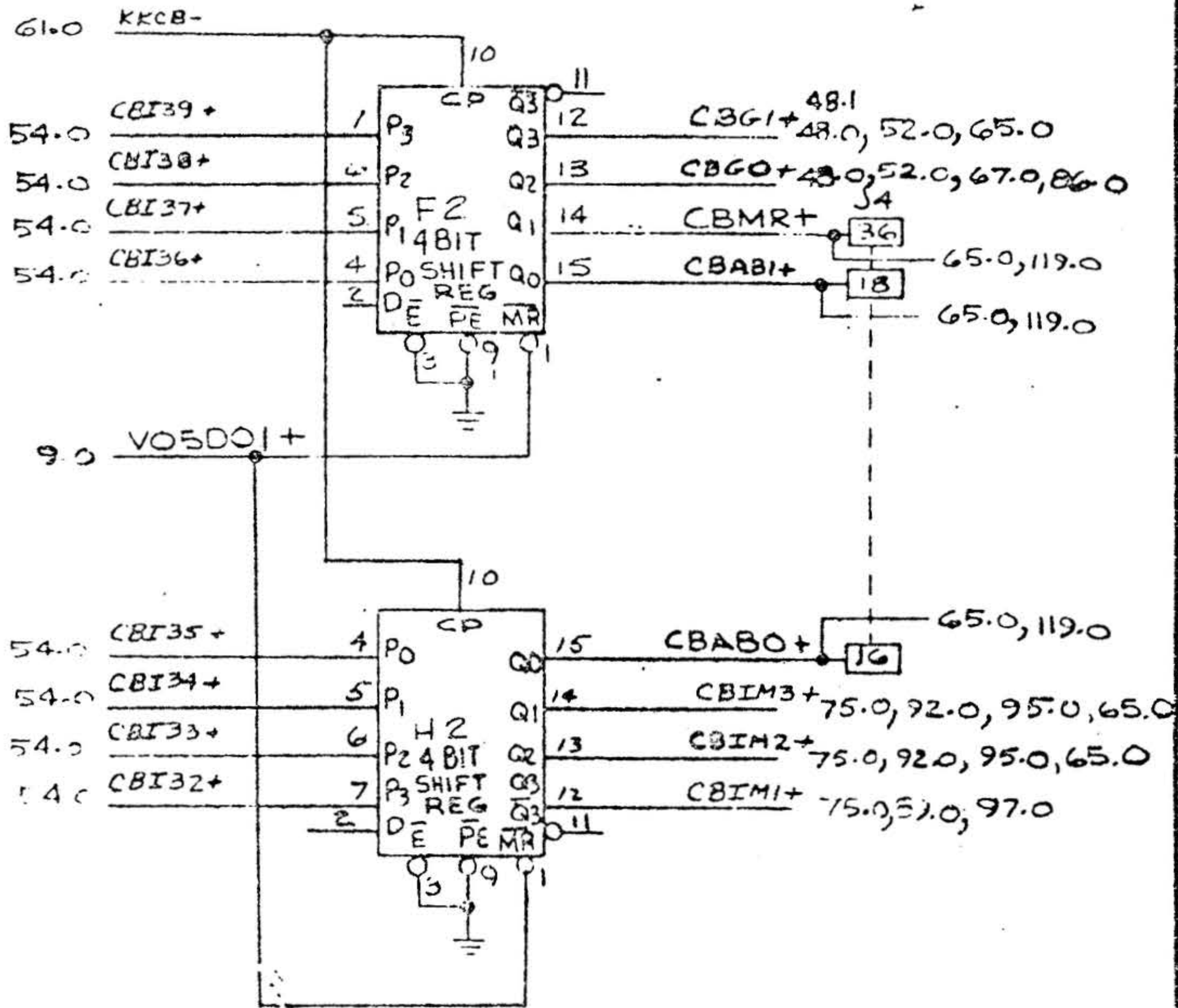
B

A



CONTROL BUFFER 3

CODE SHEET NO.	SIZE	DWG NO.	REV.
21101	B	91B0378	AT
SCALE	SHEET 63.		



CONTROL BUFFER 4

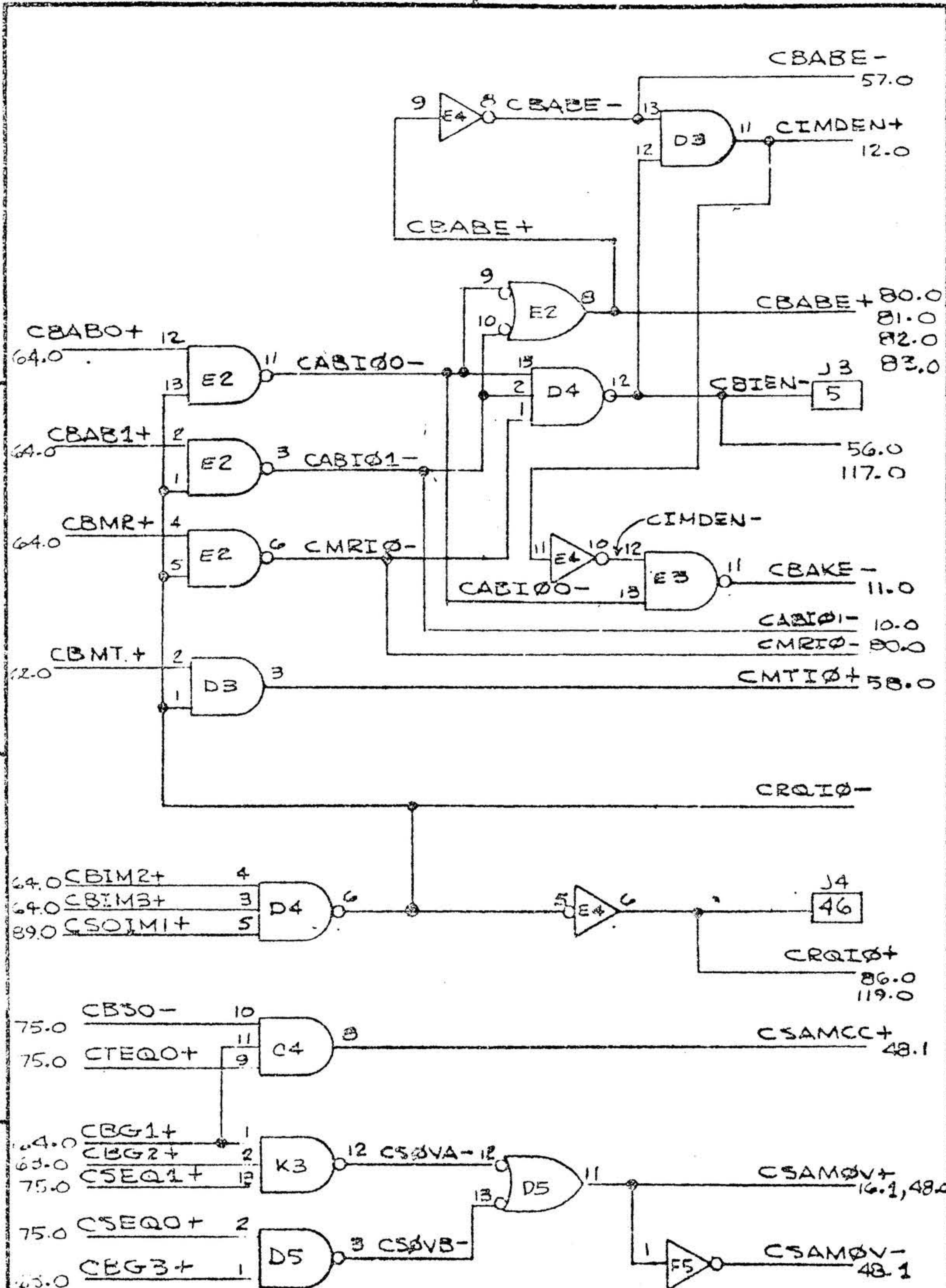
CODE SHEET NO.	DATE	DRWG NO.	REV.
21101	B	91B0378	AT
SCALE			

D

C

B

A



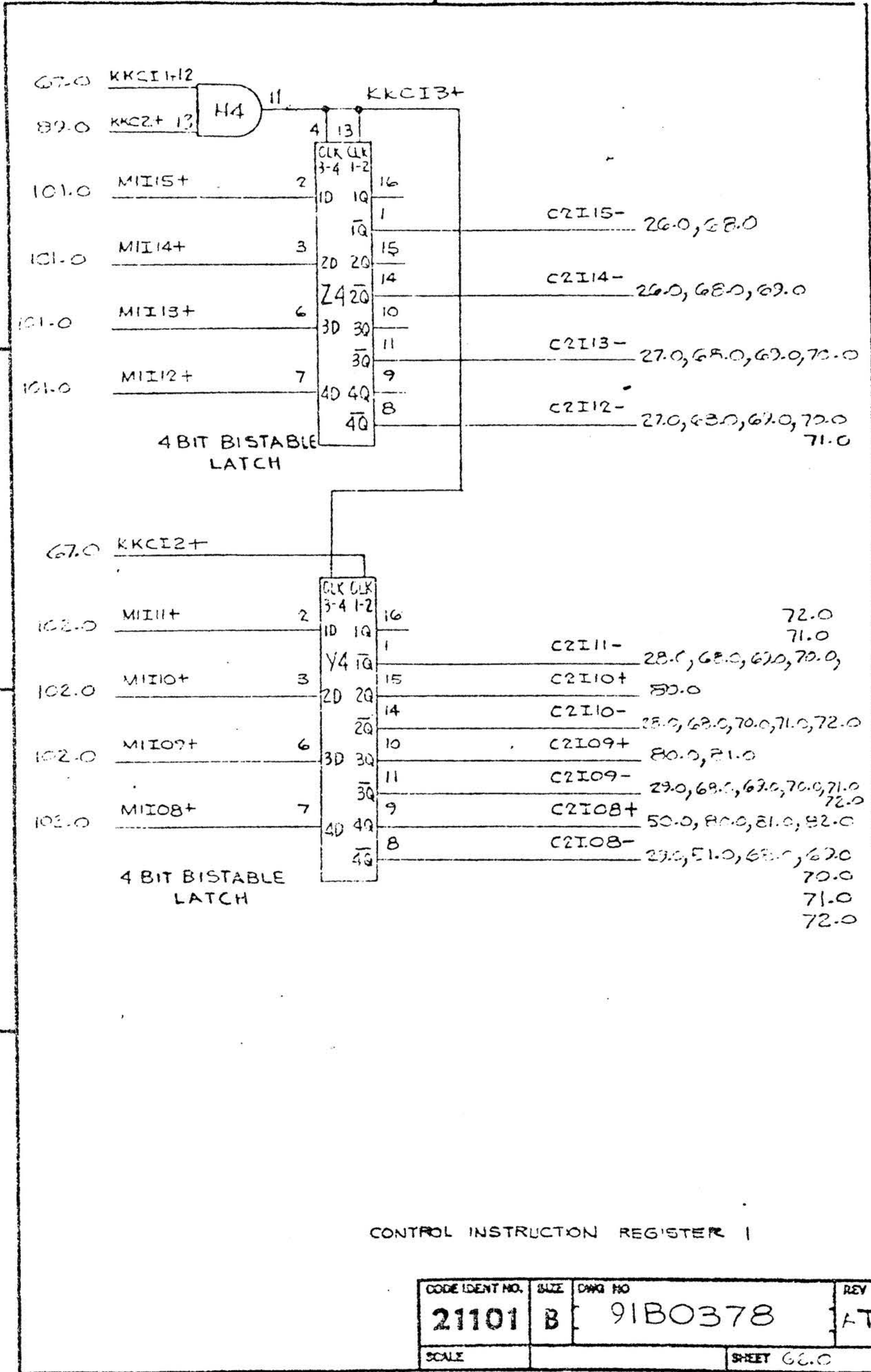
CODE IDENT NO.	REV	CHG NO.	REV
21101	B	91B0378	AT
SCALE	SHEET 65.0		

D

C

B

A

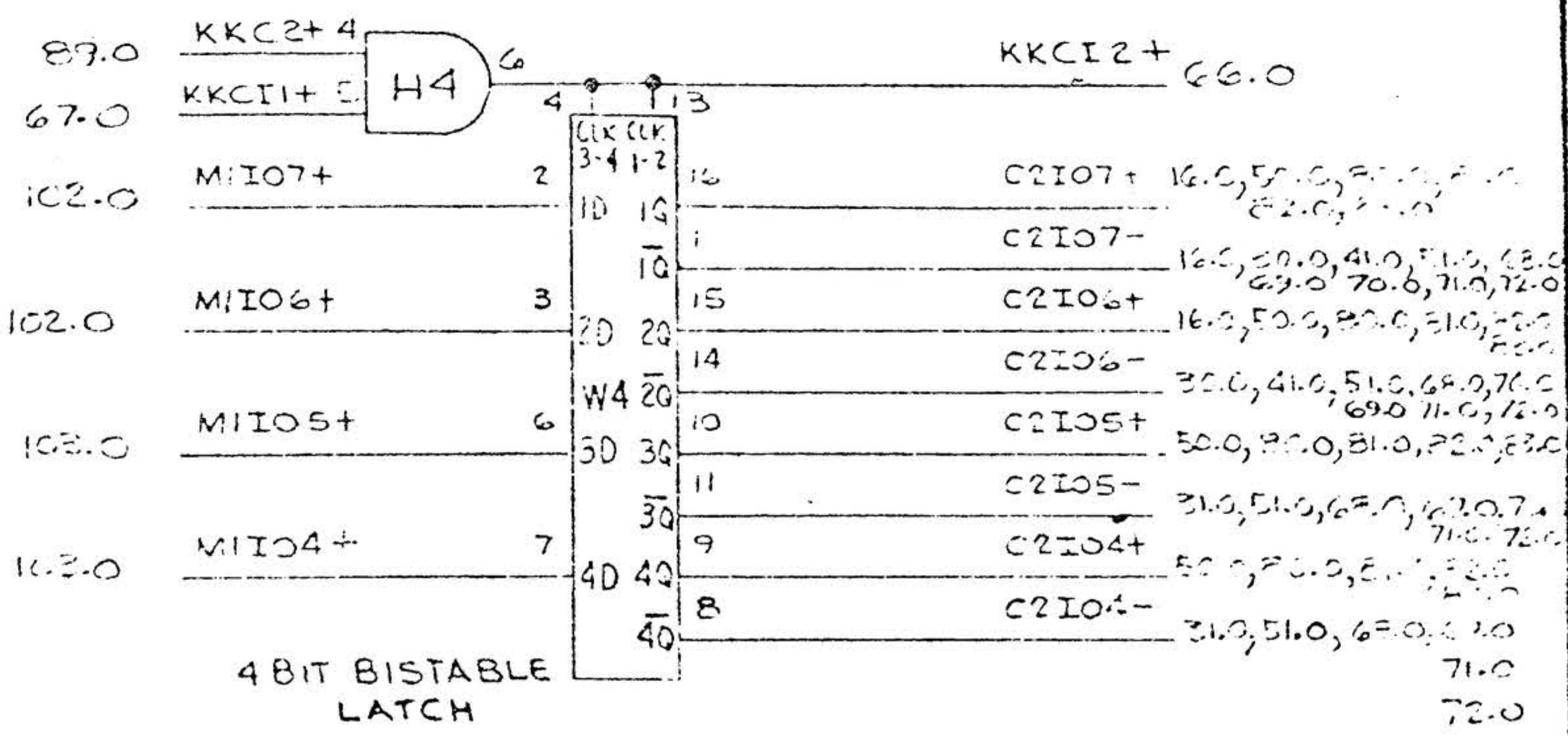


CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 62.0	

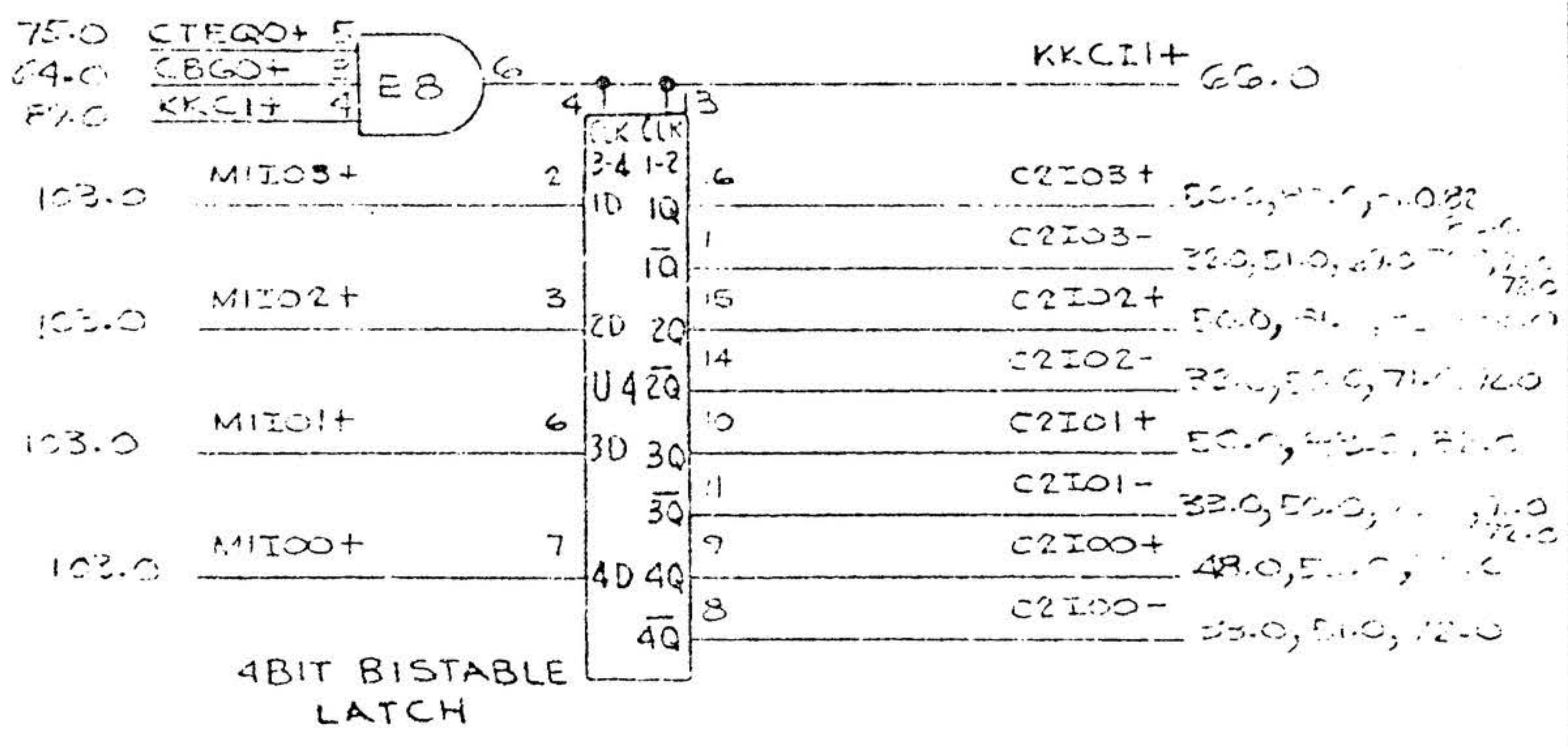
2

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CONTROL INSTRUCTION REGISTER 2

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 67.0		

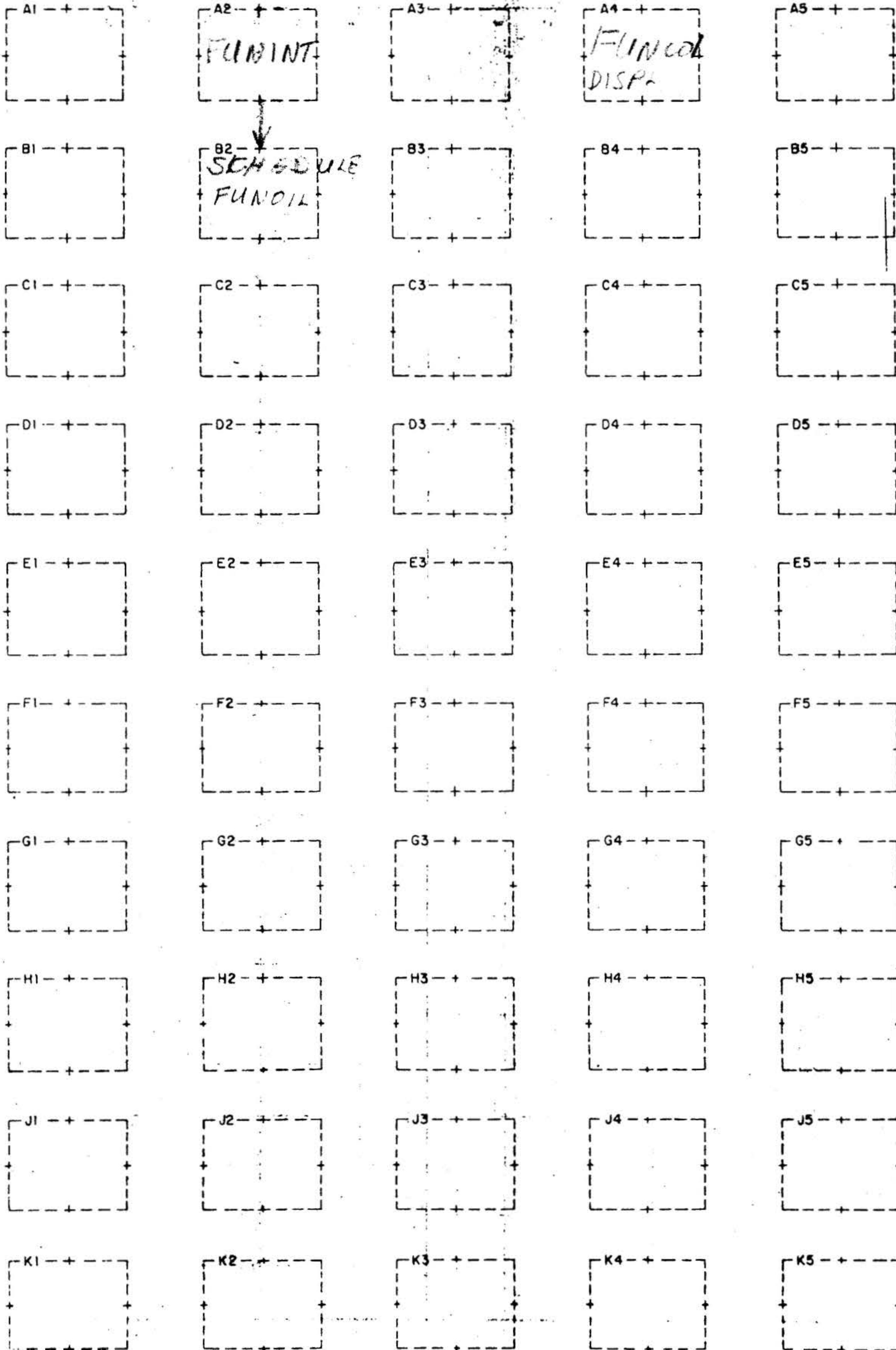
IBM Flowcharting Worksheet

Printed in U.S.A.
© 1964 IBM Corp.
Revised 5/75

Programmer: _____ Program No.: _____ Date: _____ Page: _____
Chart ID: _____ Chart Name: _____ Program Name: _____

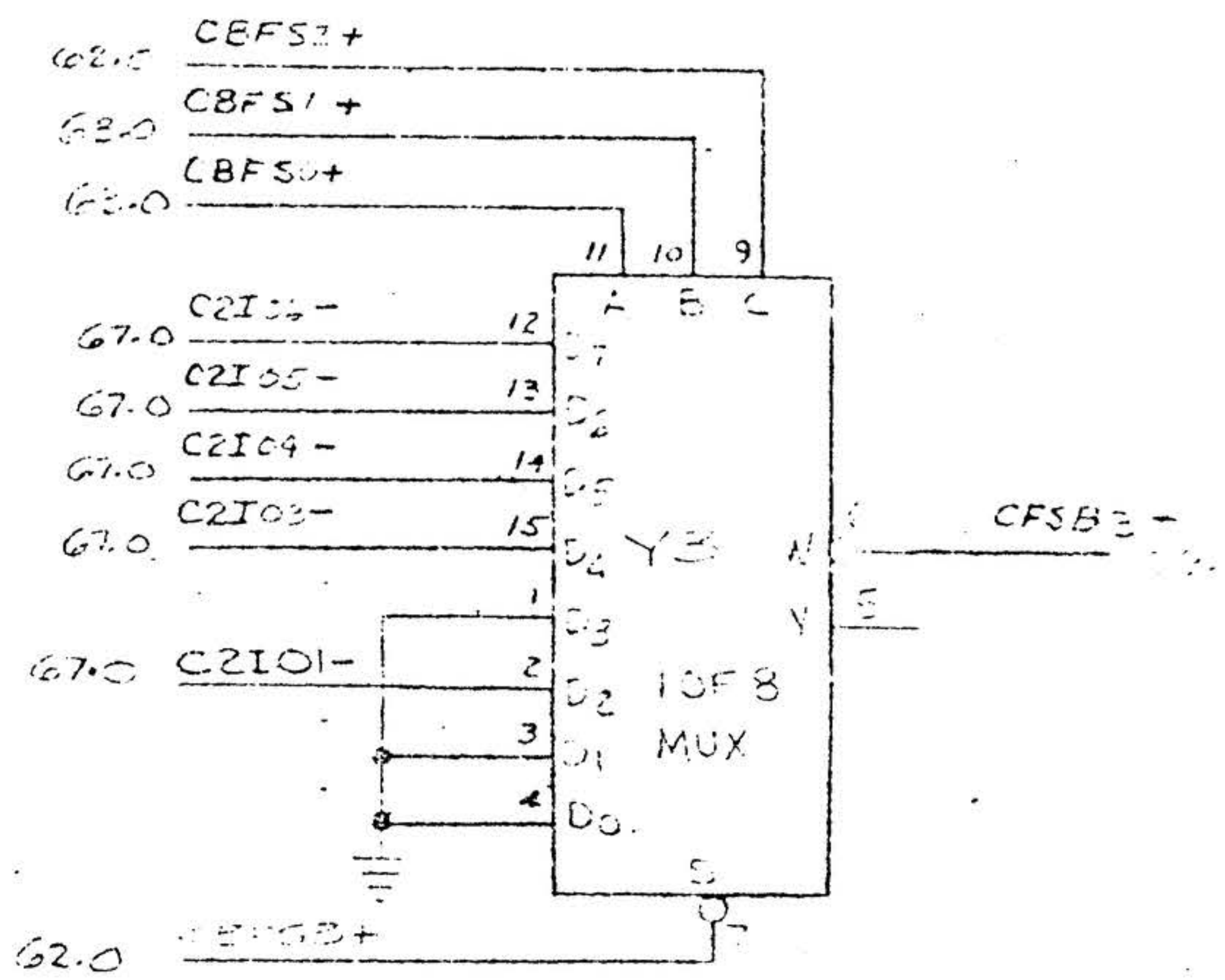
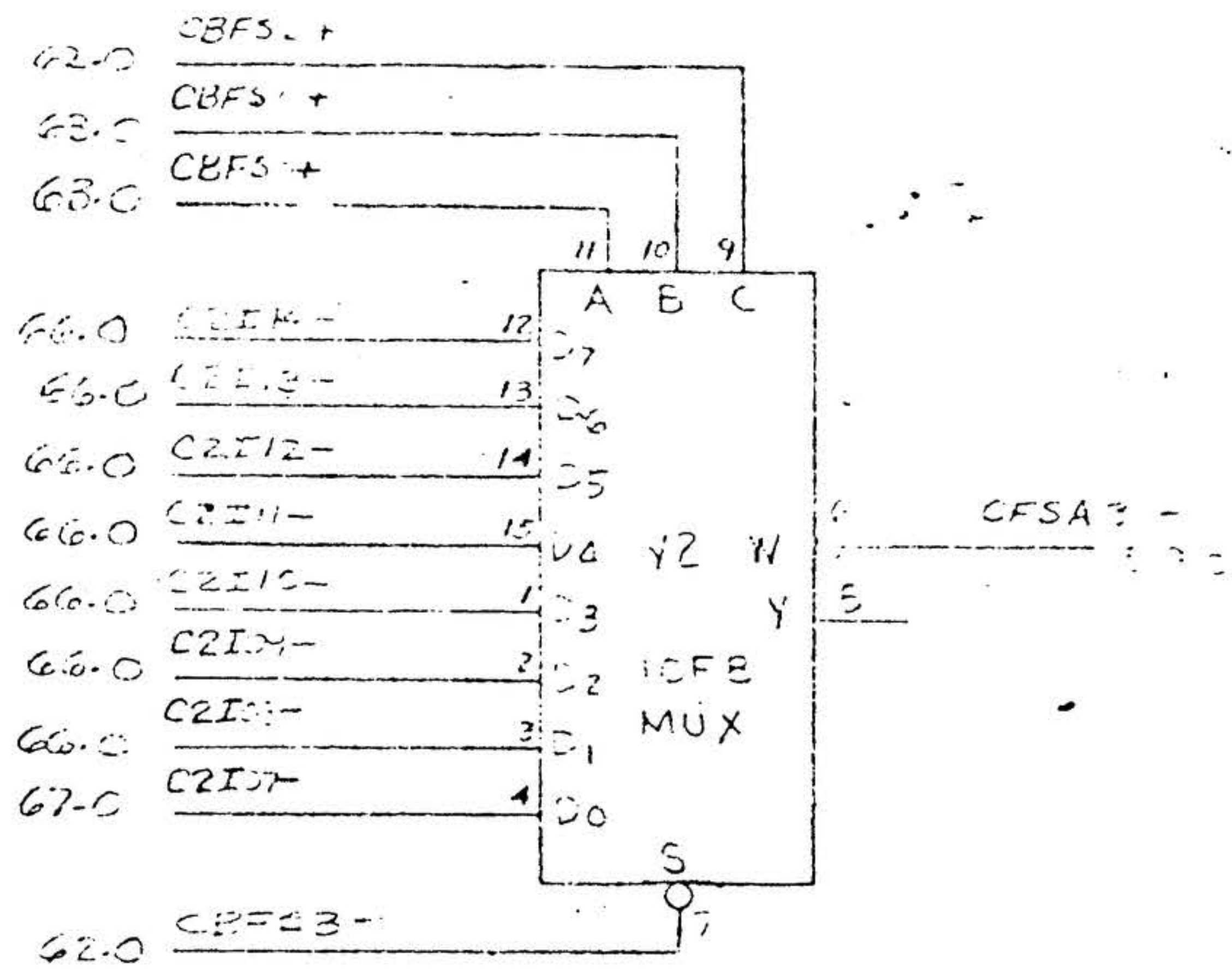
Fold to here.

Fold to here.



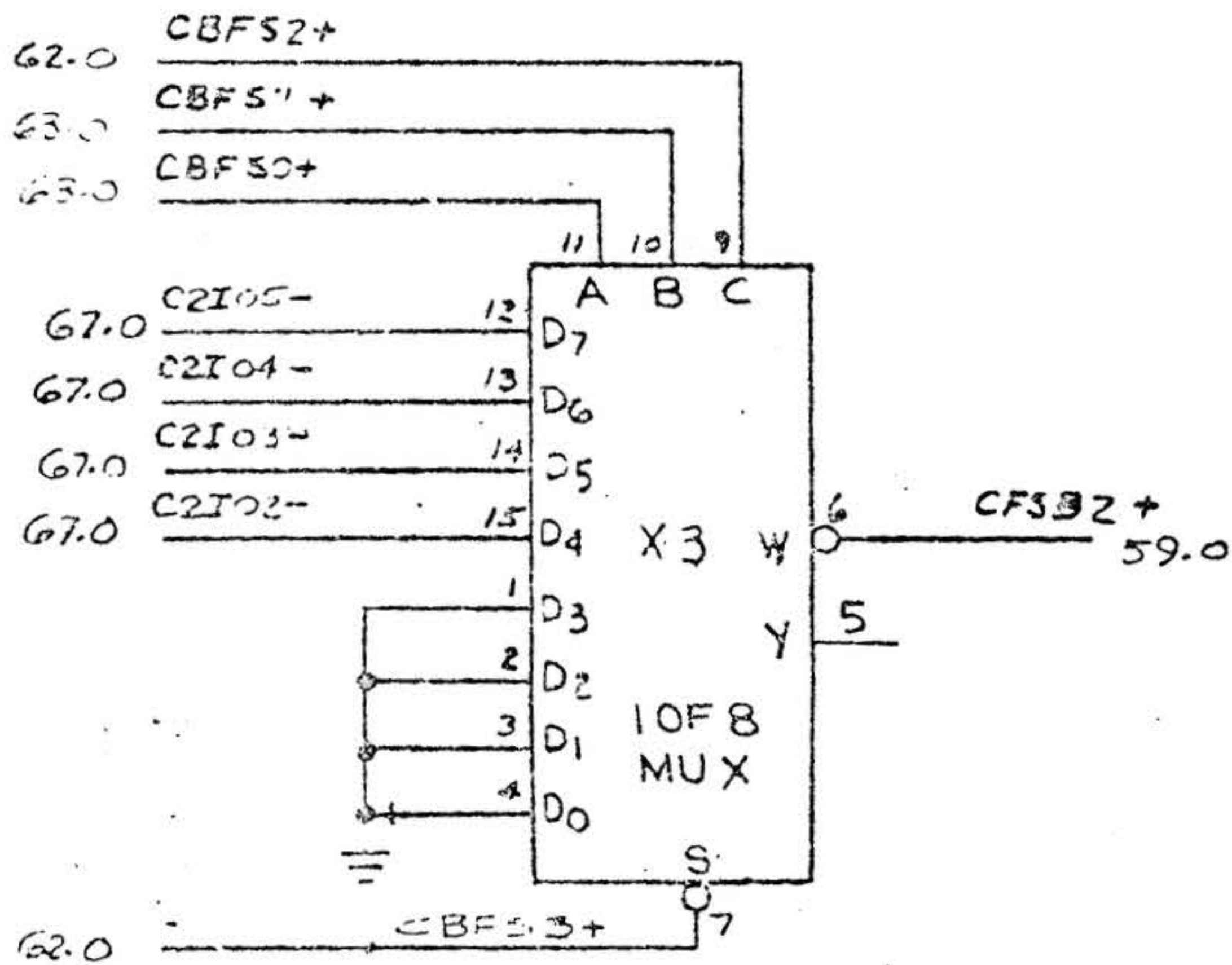
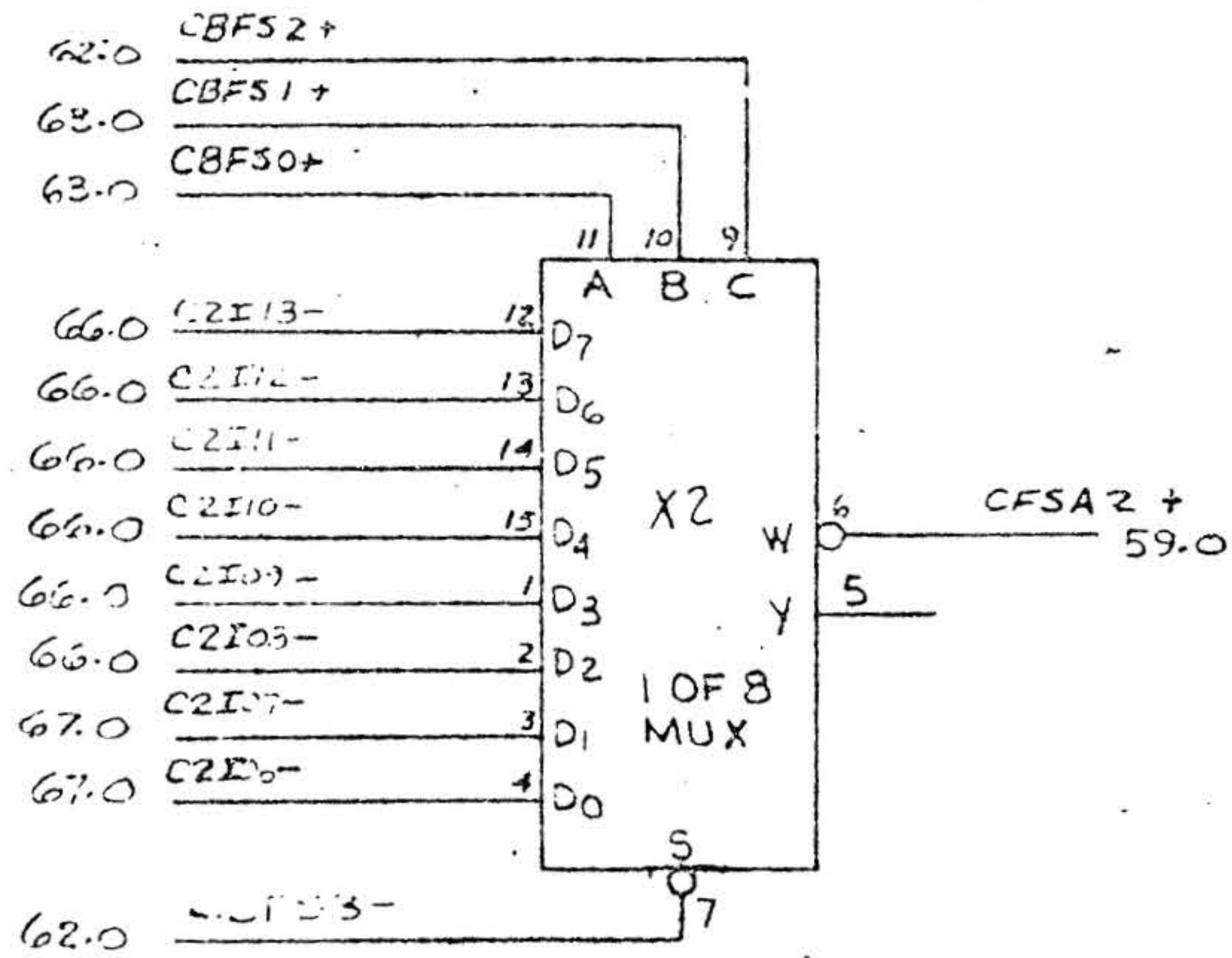
Fold under at dotted line.

Fold under at dotted line.



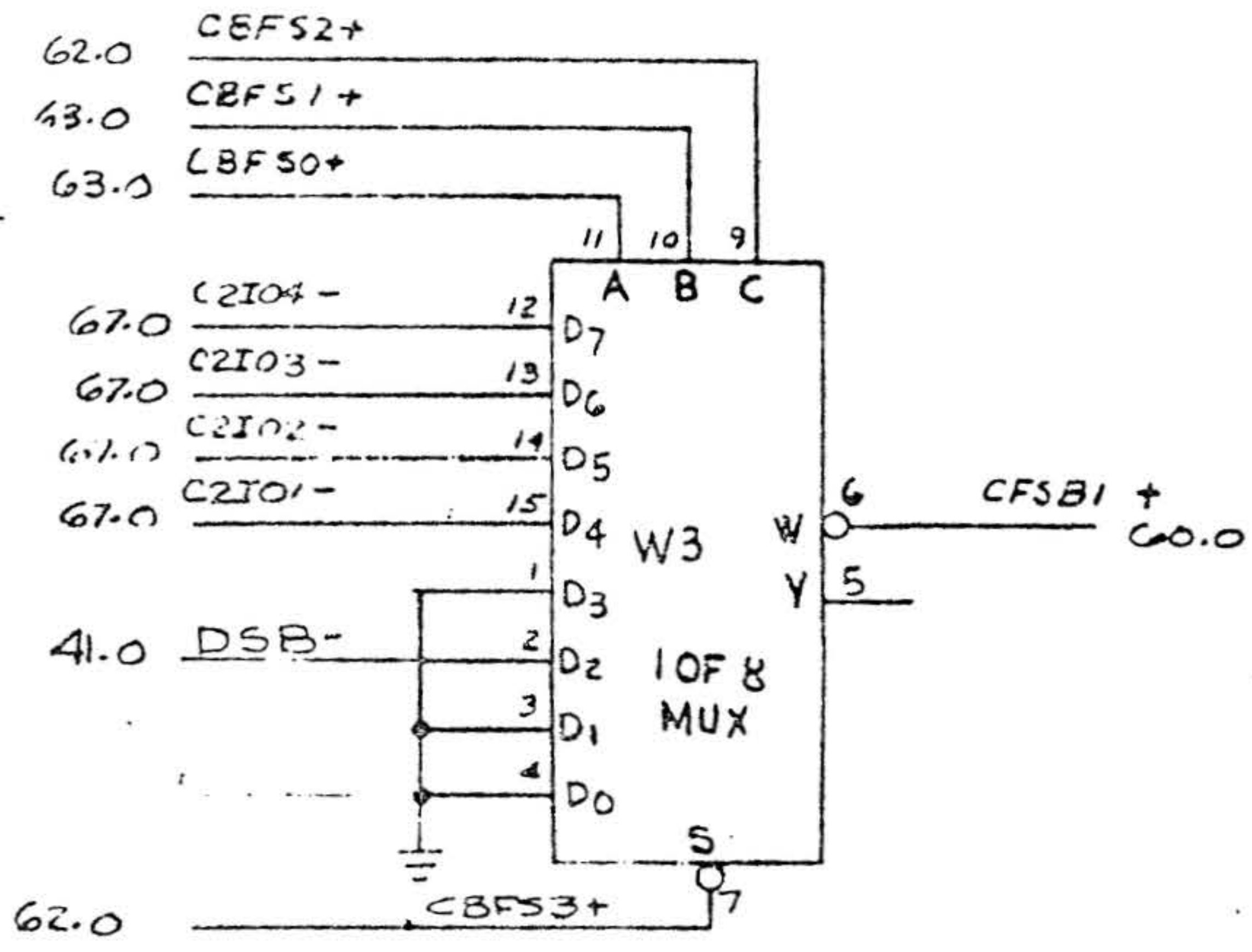
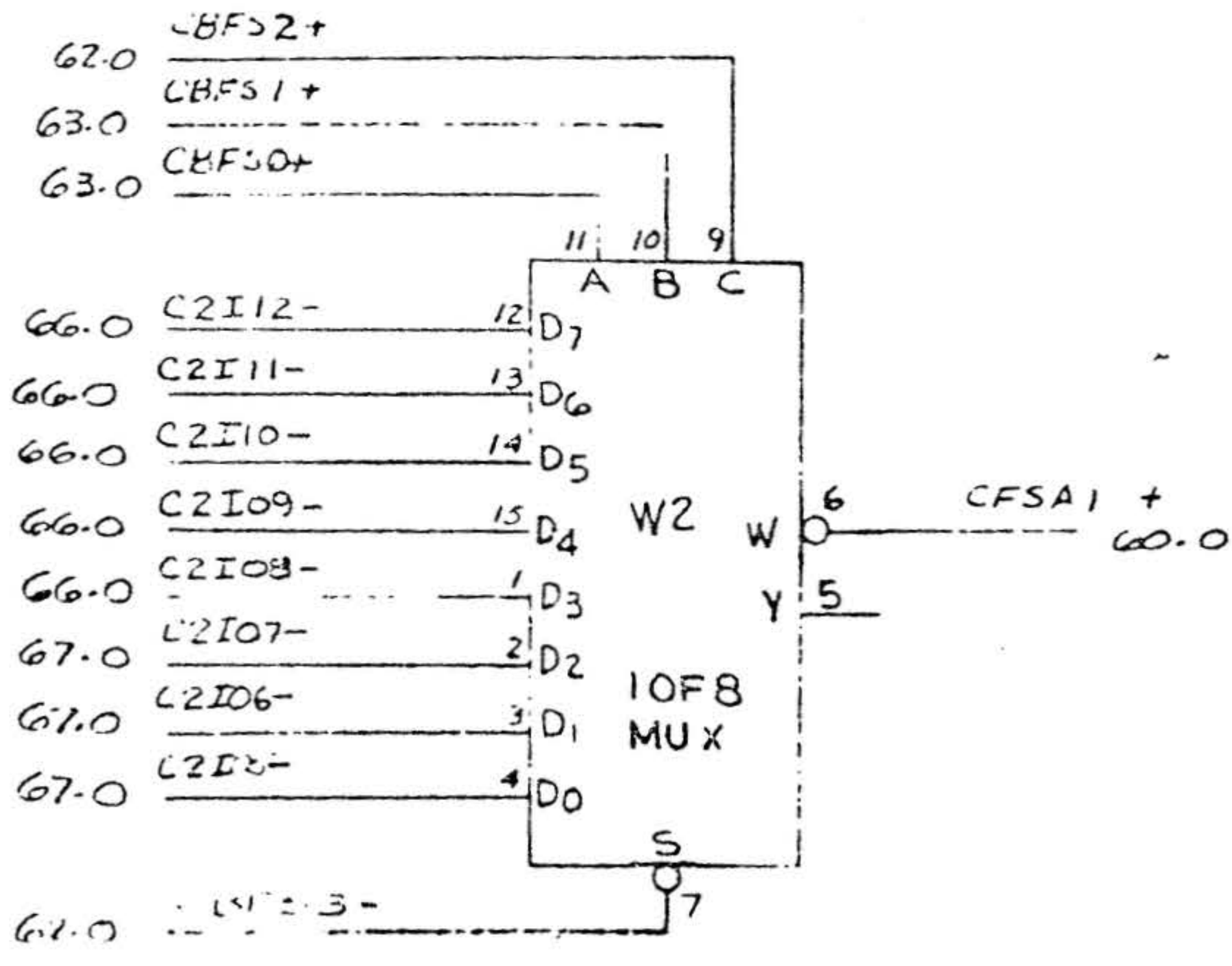
INSTRUCTION FIELD SELECT

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91E0378	AT
SCALE		SHEET	



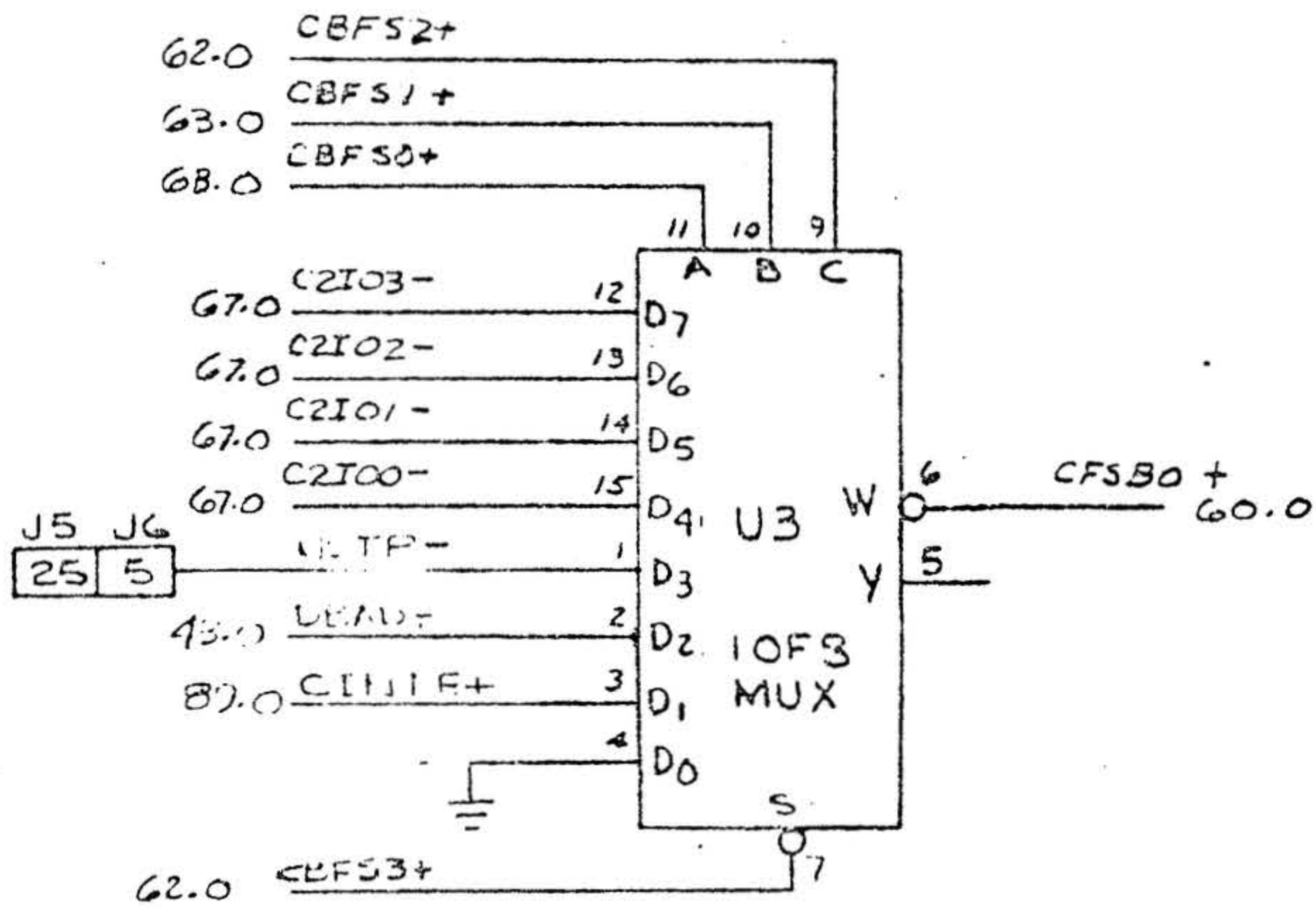
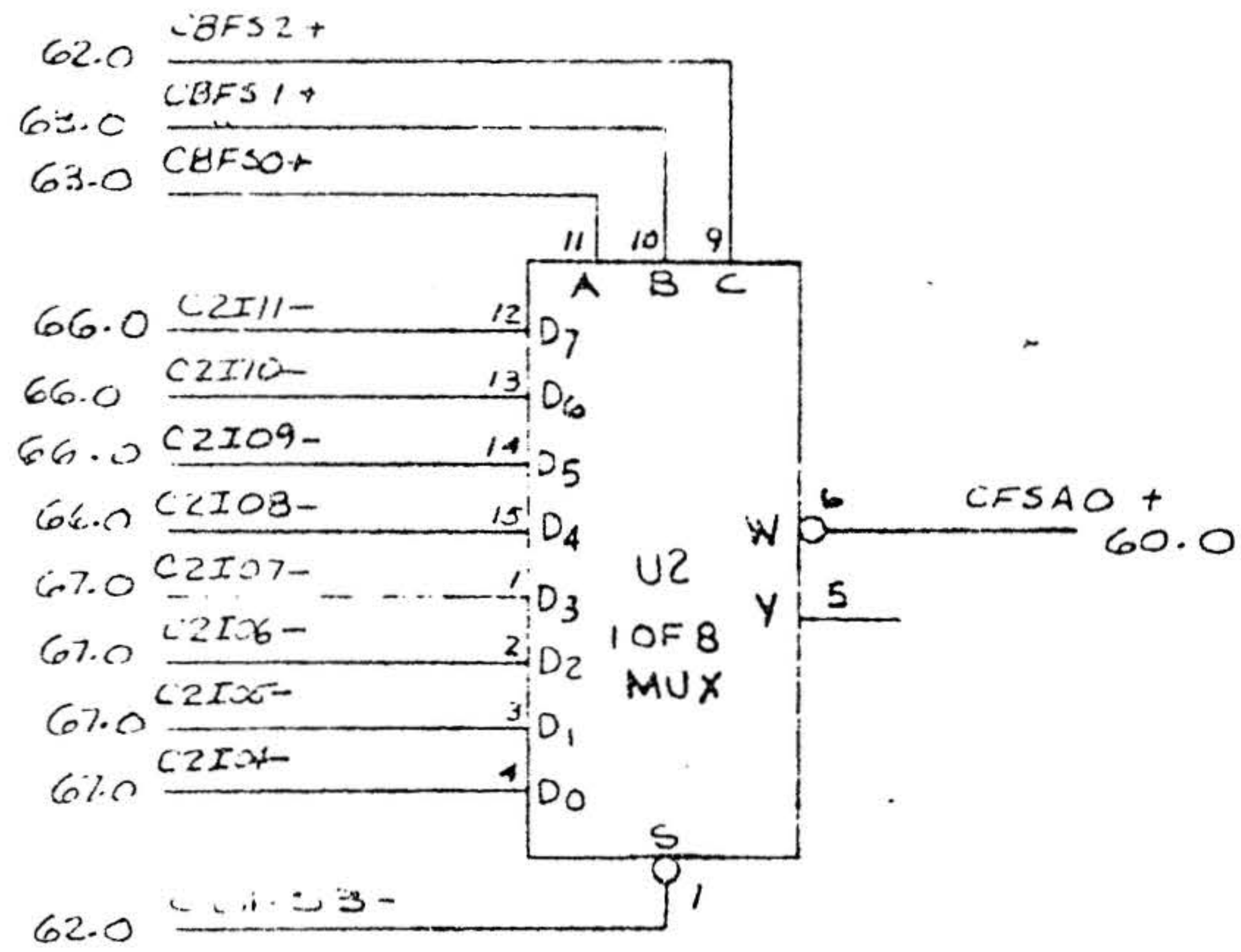
INSTRUCTION FIELD SELECT 3

CODE IDENT NO.	SIZE	QWR NO.	REV
21101	8	91B0378	AT
SCALE	UNIT 70.		



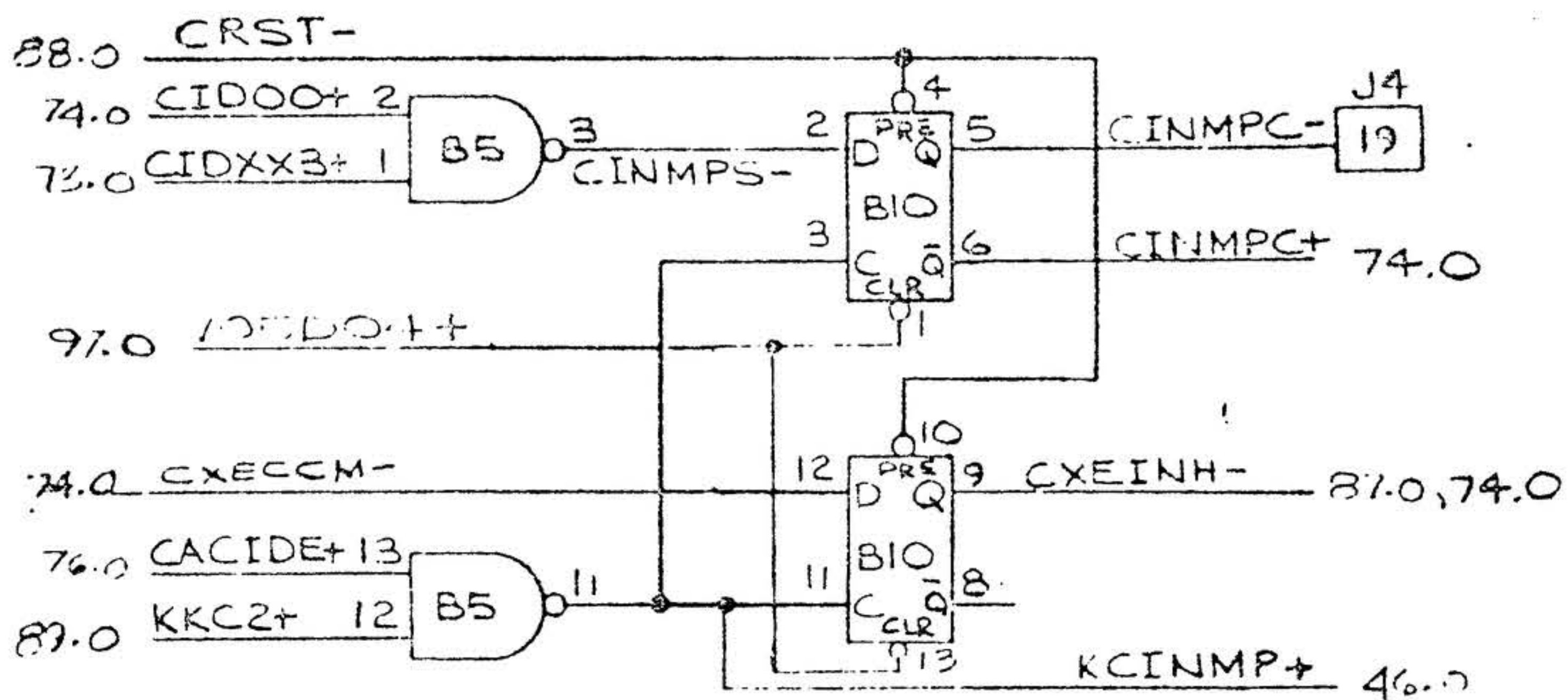
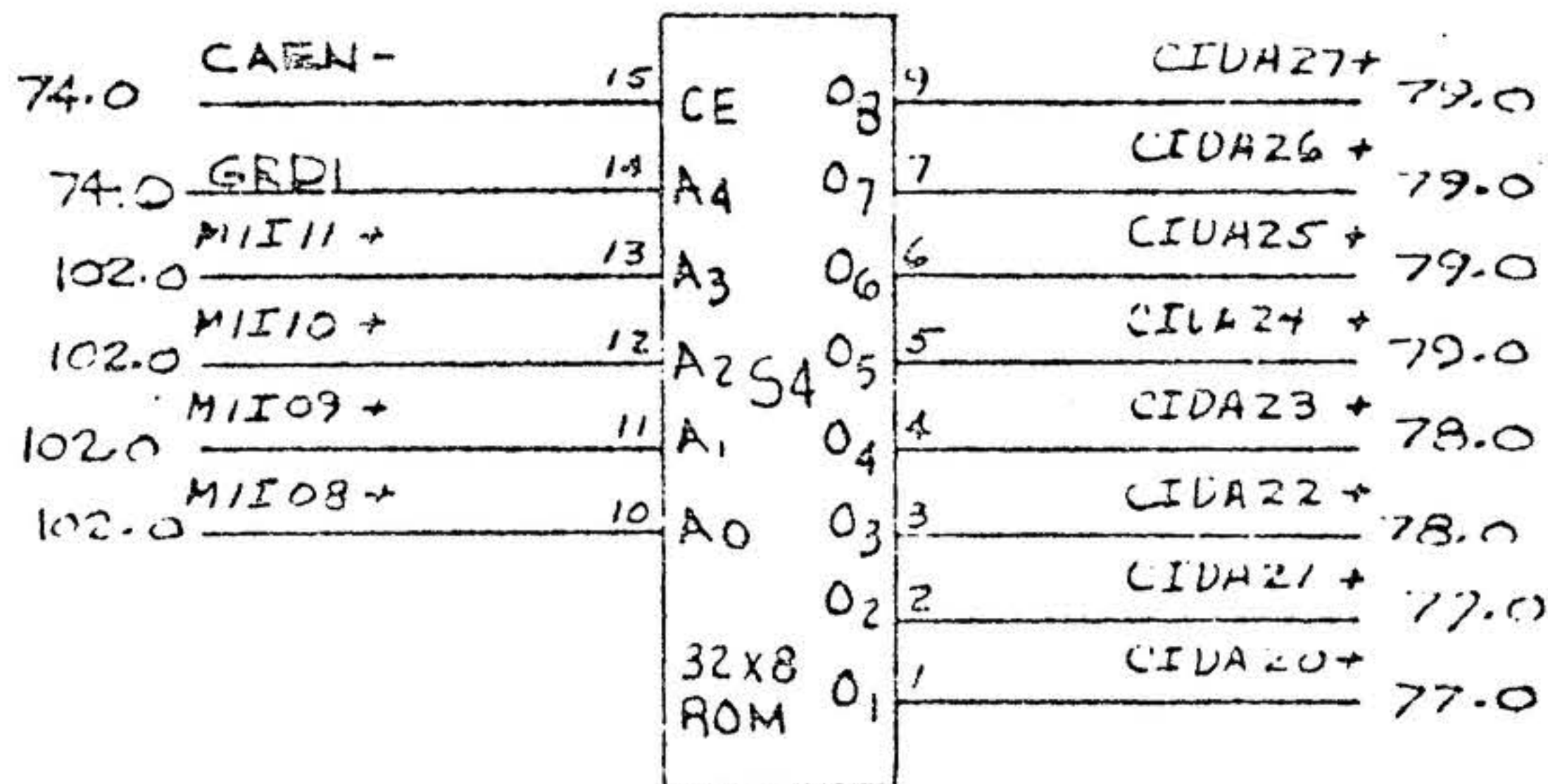
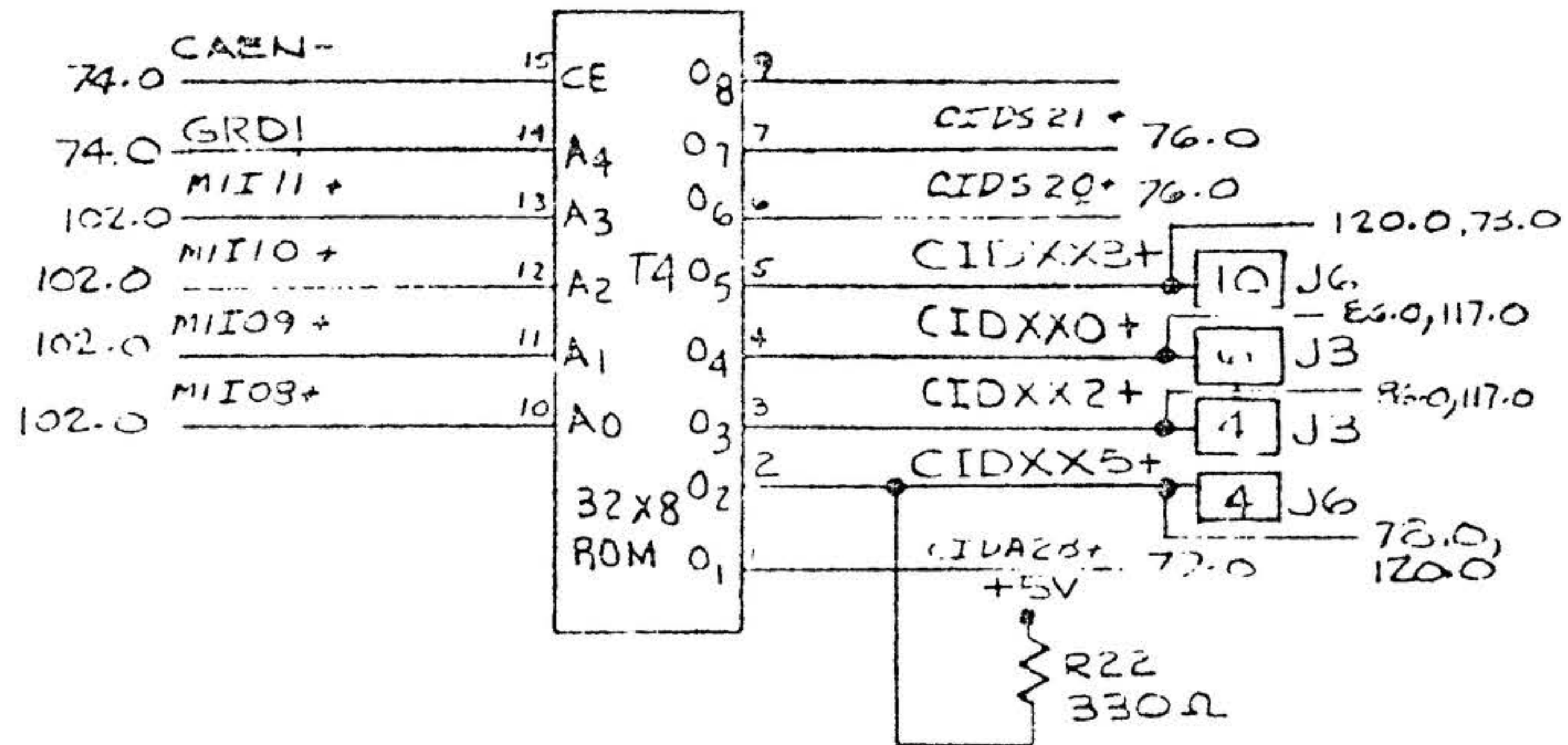
INSTRUCTION FIELD SELECT 4

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 71.0		



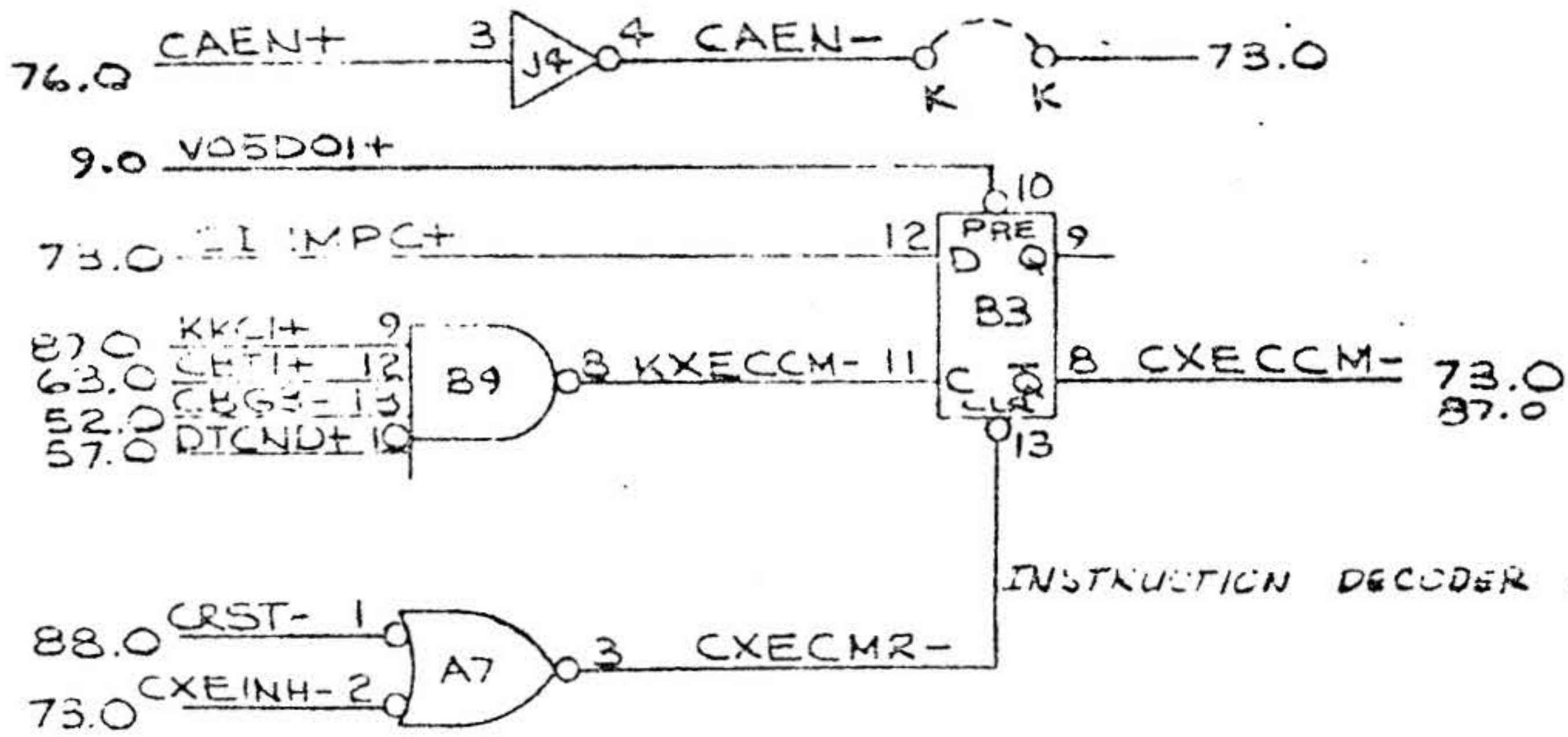
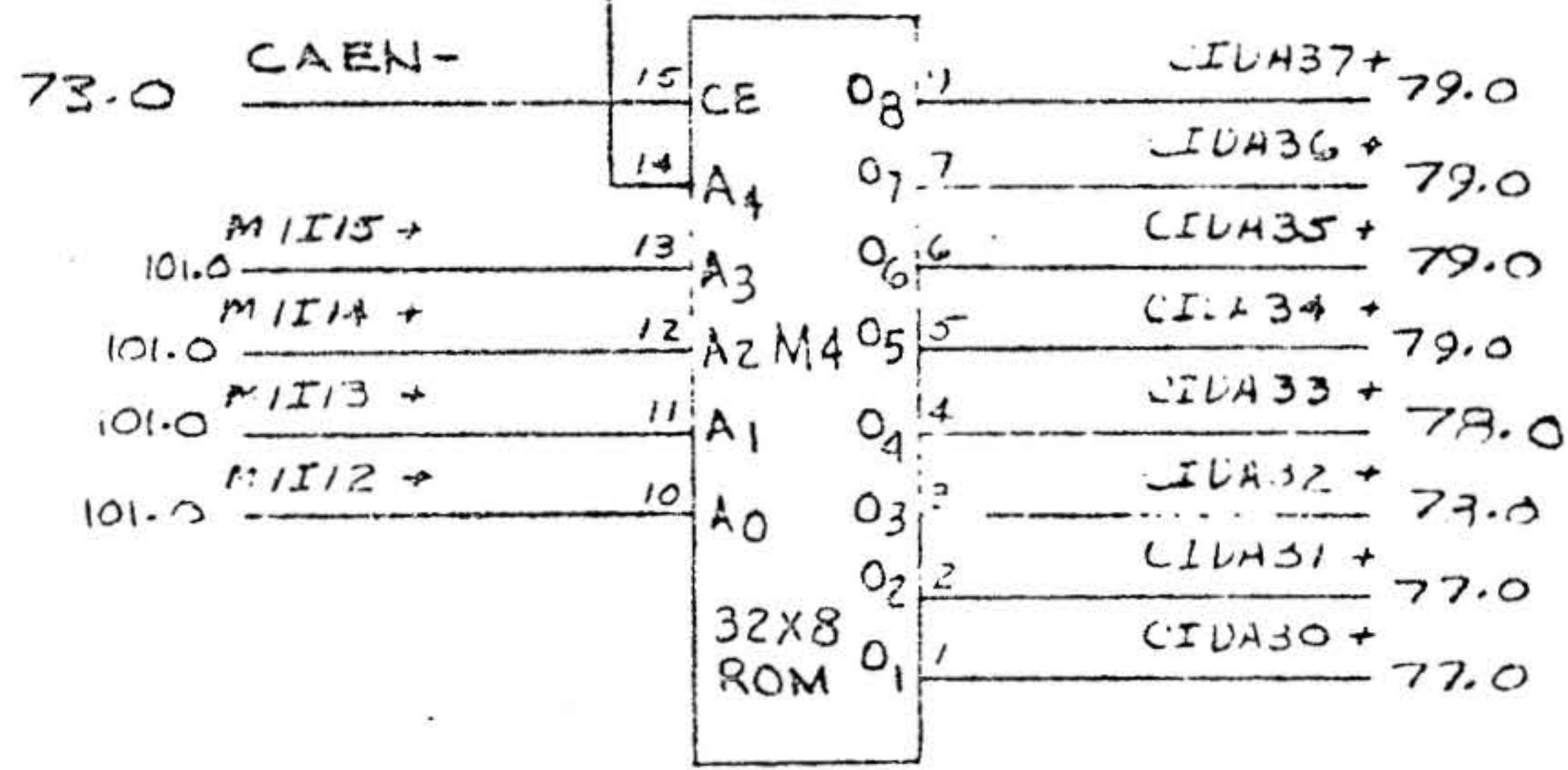
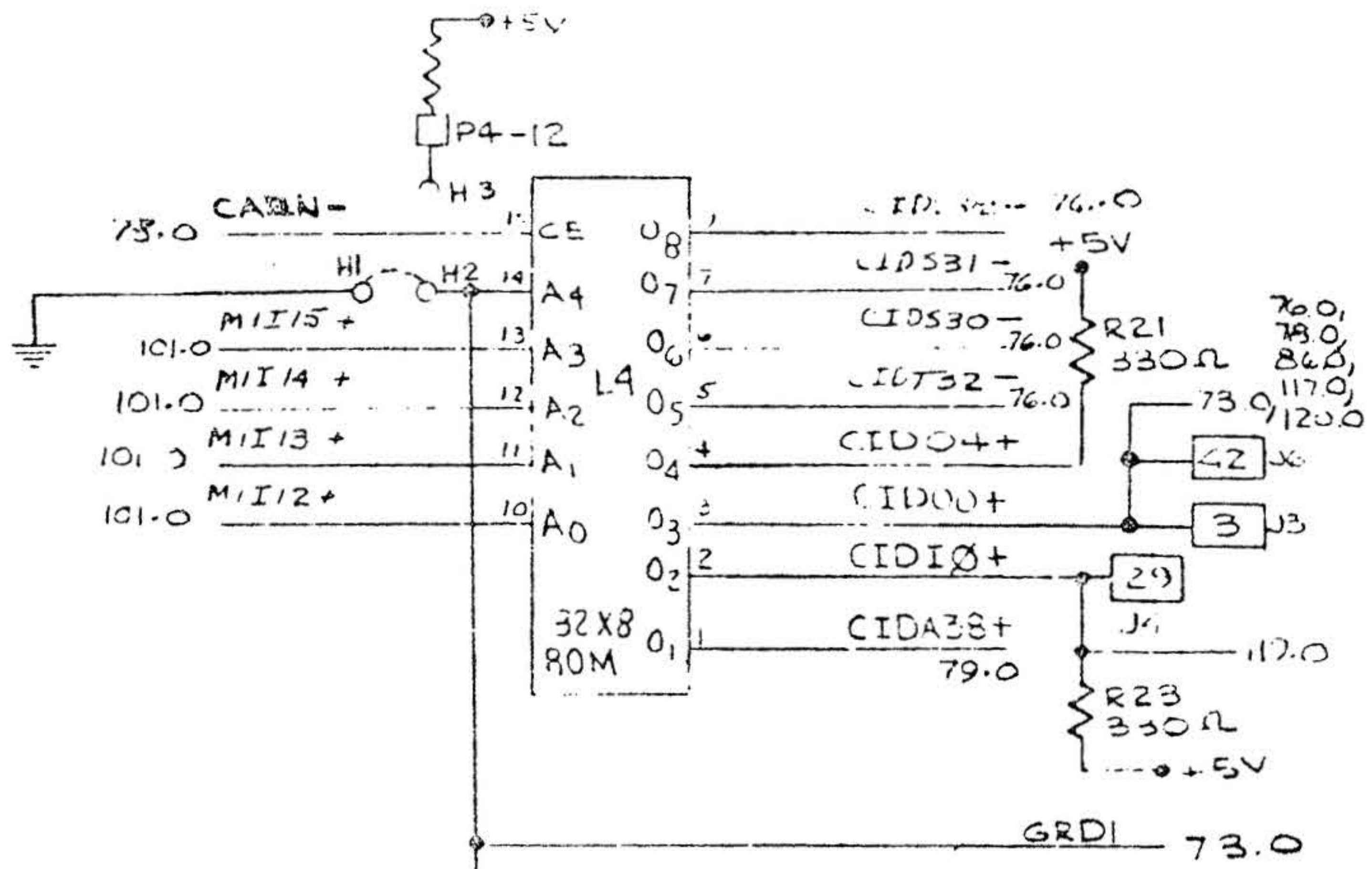
INSTRUCTION FIELD SELECT 5

CODE IDENT NO.	SIZE	DWG NO.	REV
21101	B	91B0378	AT
SCALE		SHEET 72	



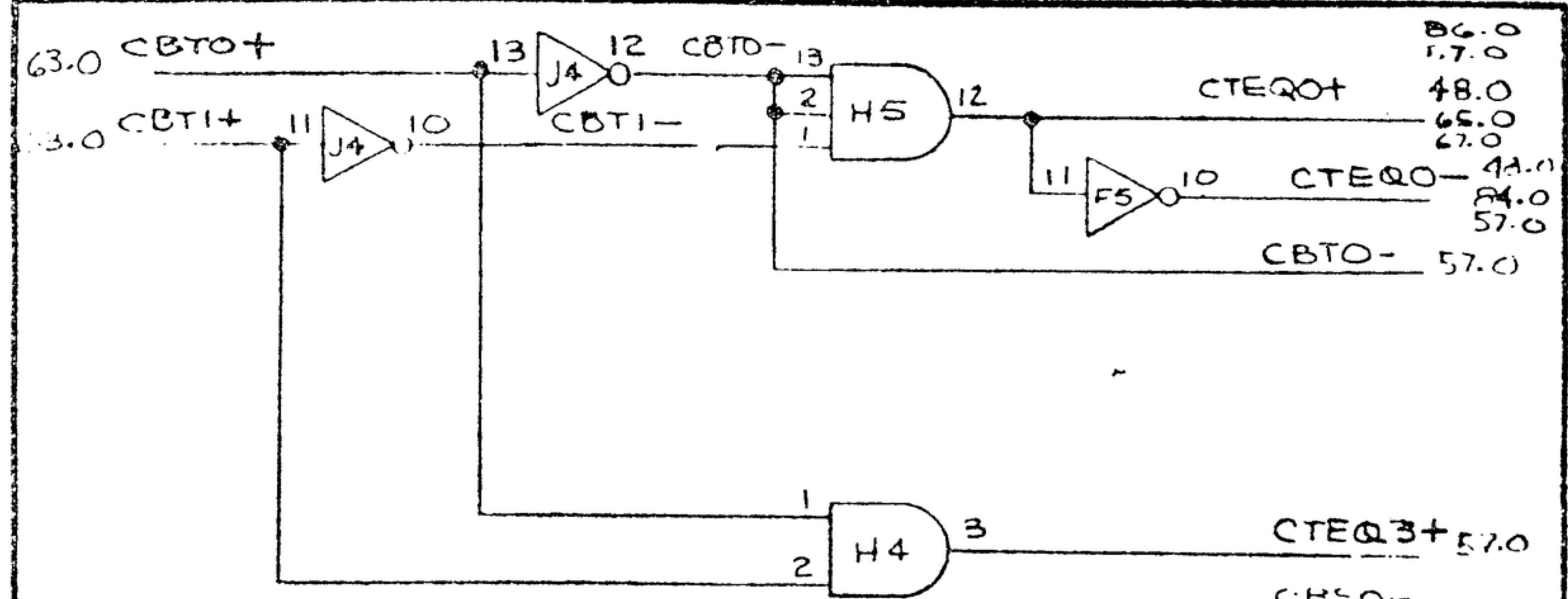
INSTRUCTION DECODER 11-8

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE			SHEET 73.0

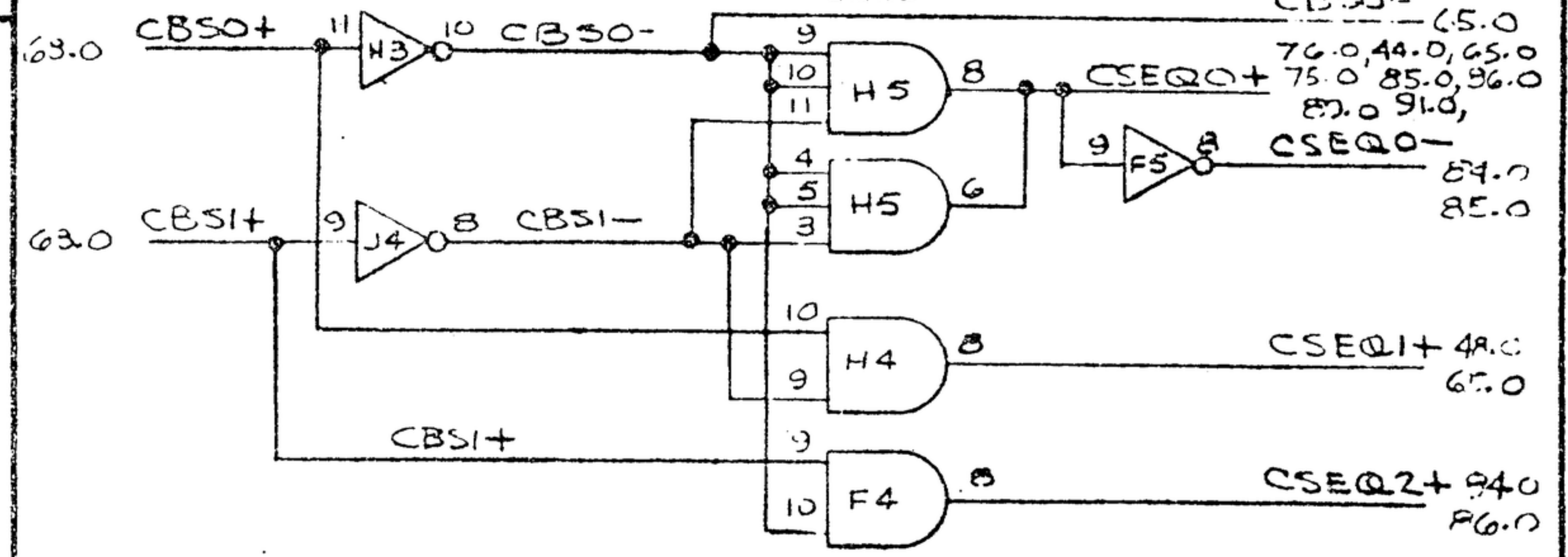


CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	DATE 7-1-7		

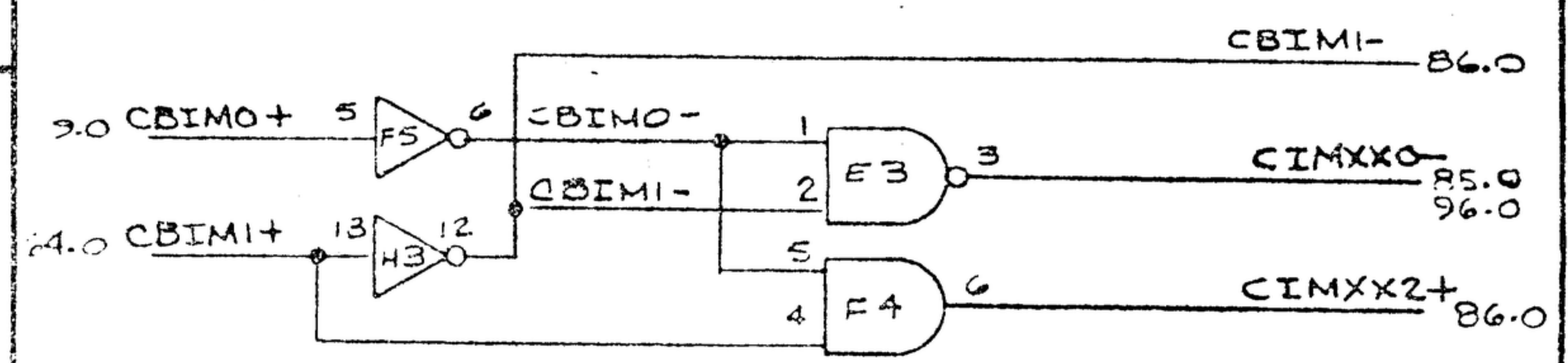
D



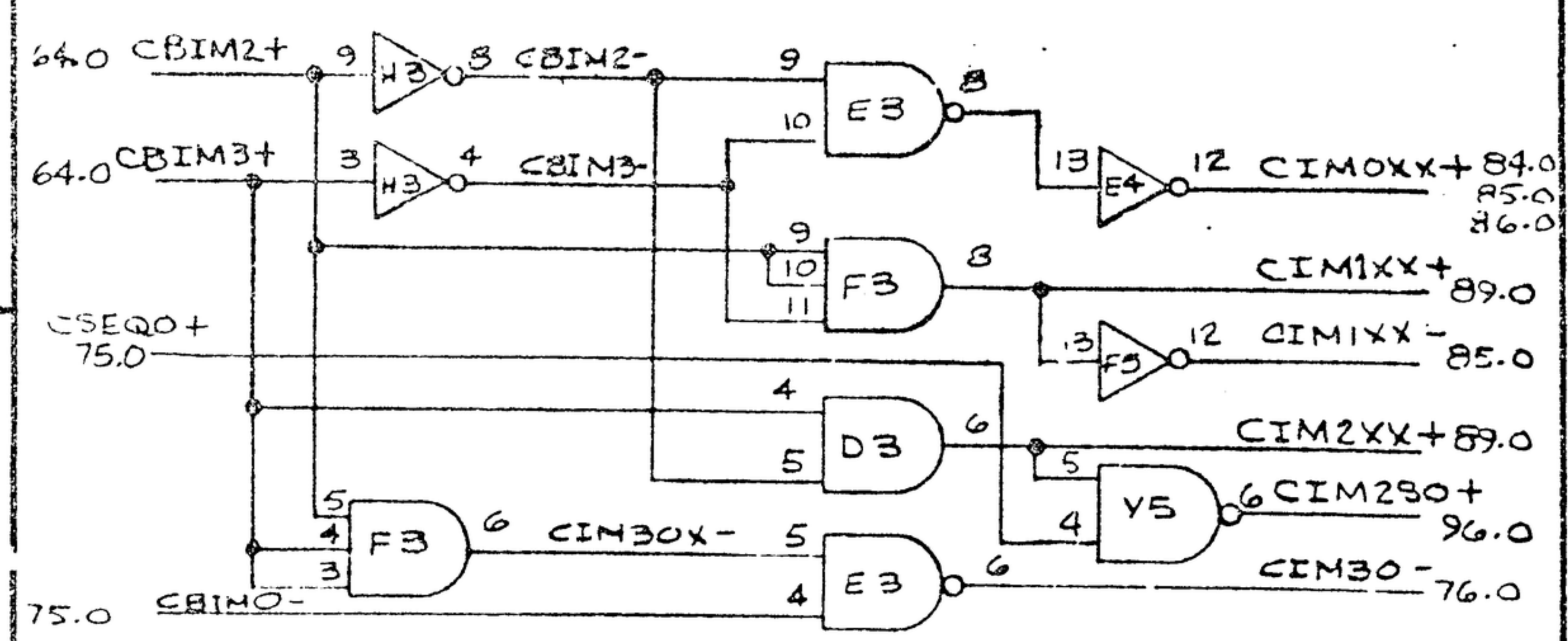
C



B



A

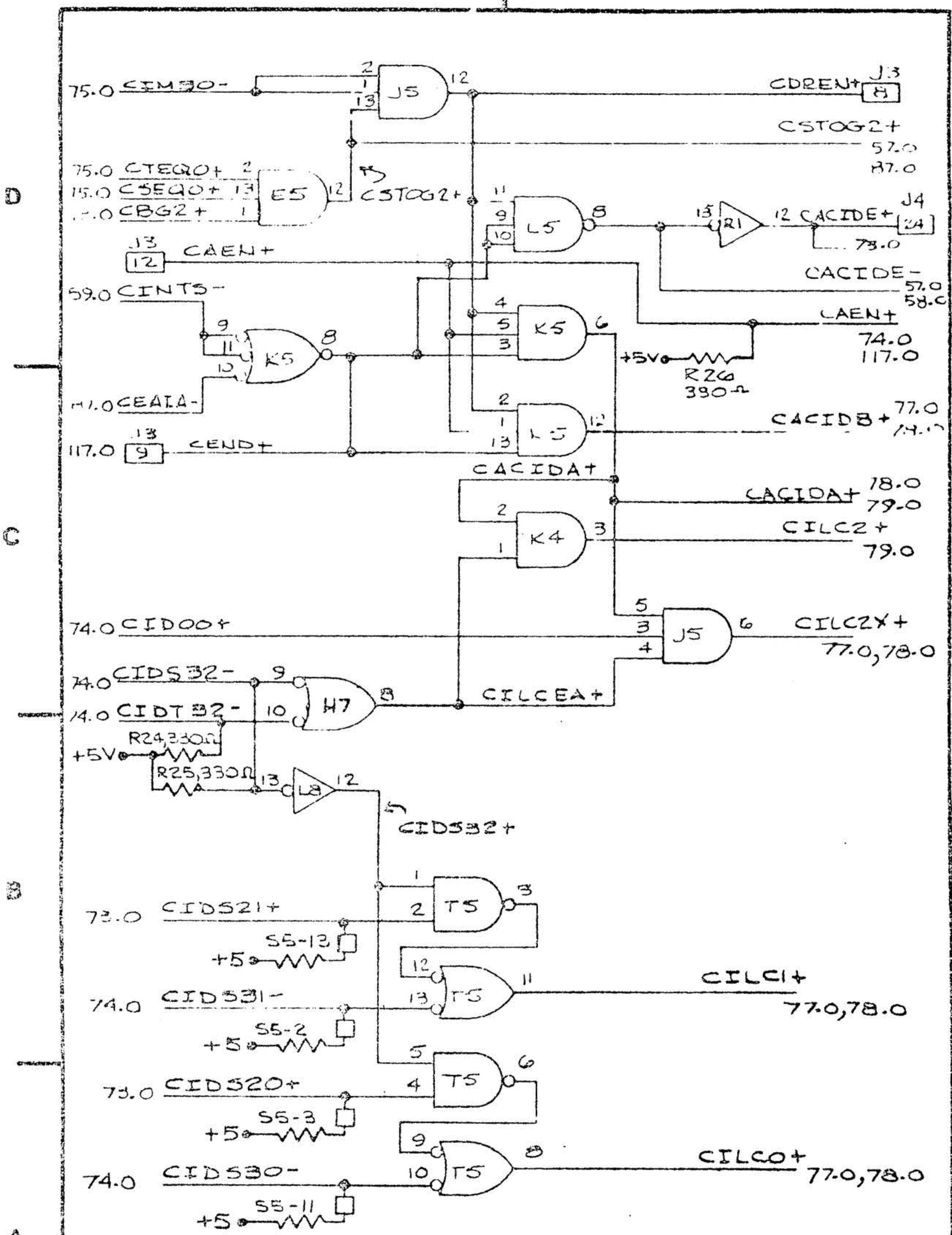


CONTROL LOGIC

CODE IDENT NO.	SIZE	DATE NO.	REV
21101	B	91B0378	AT
SCALE	SHEET 73.0		

2

1



INSTRUCTION DECODE LOGIC

COIL IDENT NO.	USE	DRW NO	REV
21101	B	91B0378	AT
SCALE	SHEET 76.0		

2

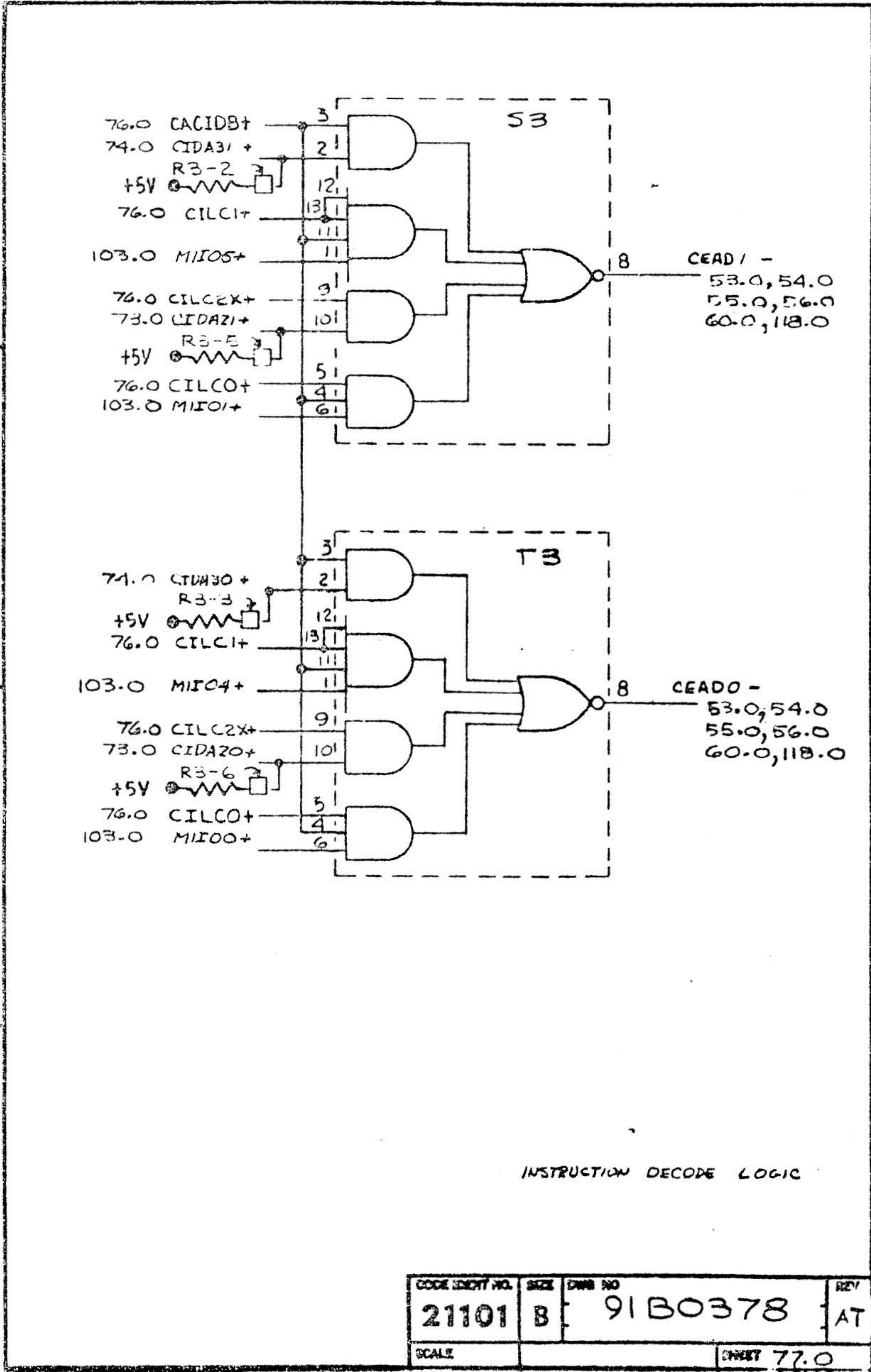
1

D

C

B

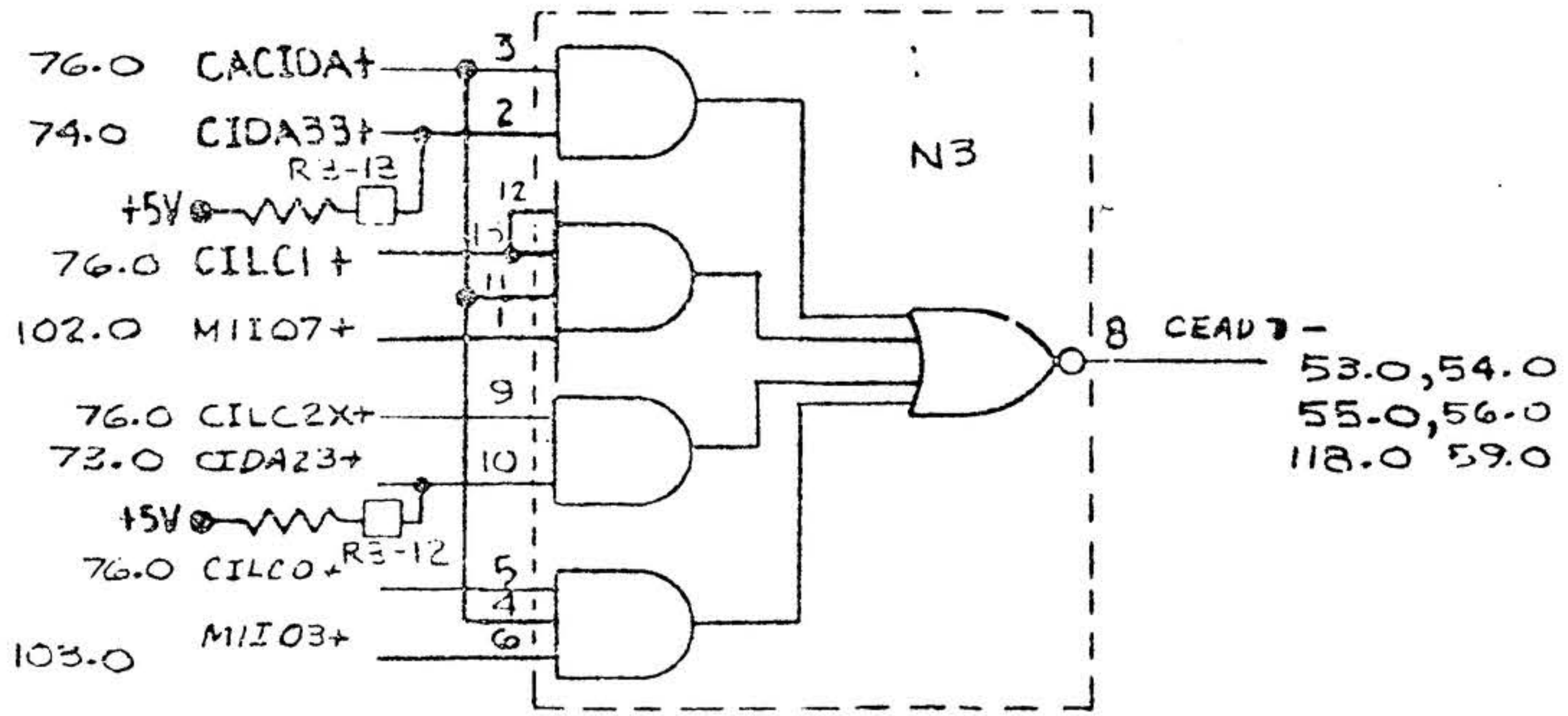
A



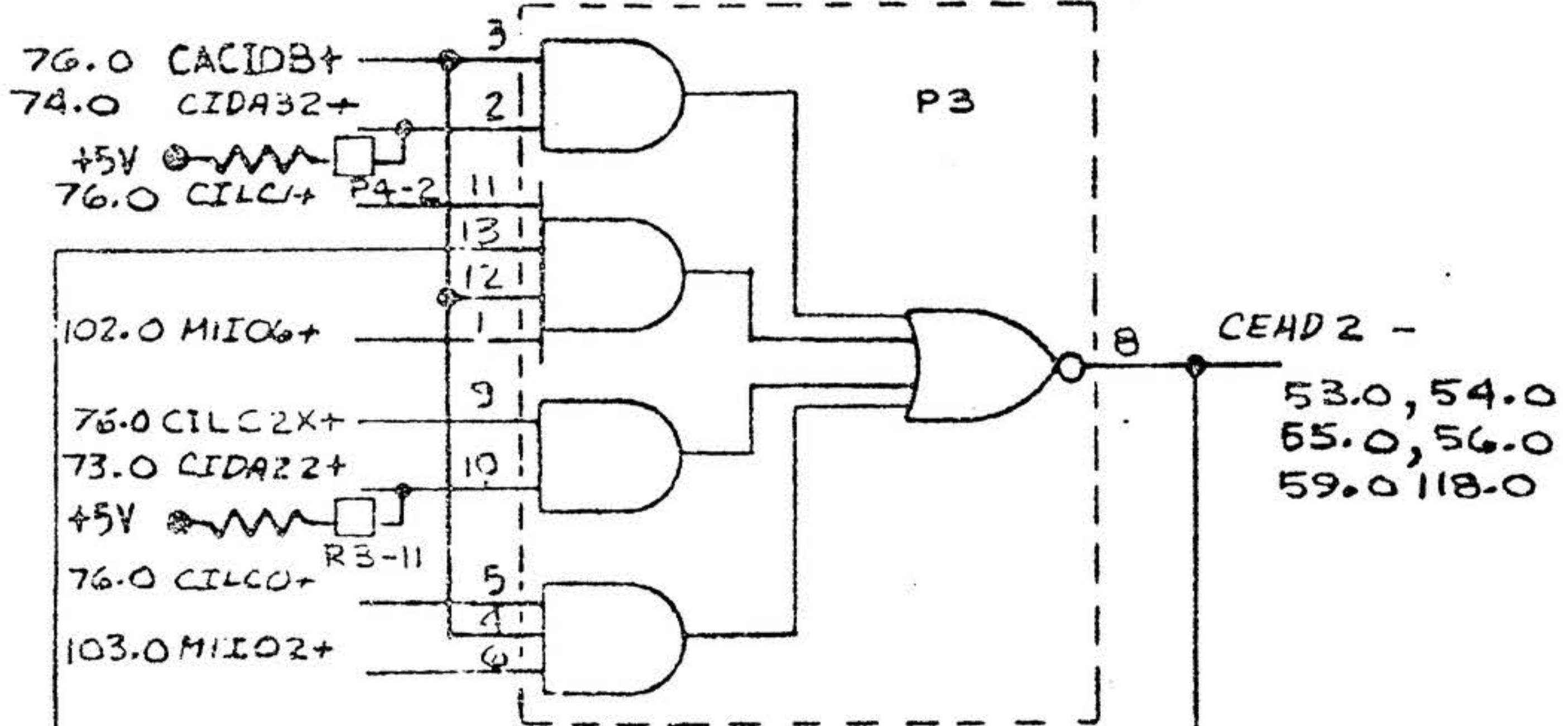
INSTRUCTION DECODE LOGIC

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 77.0		

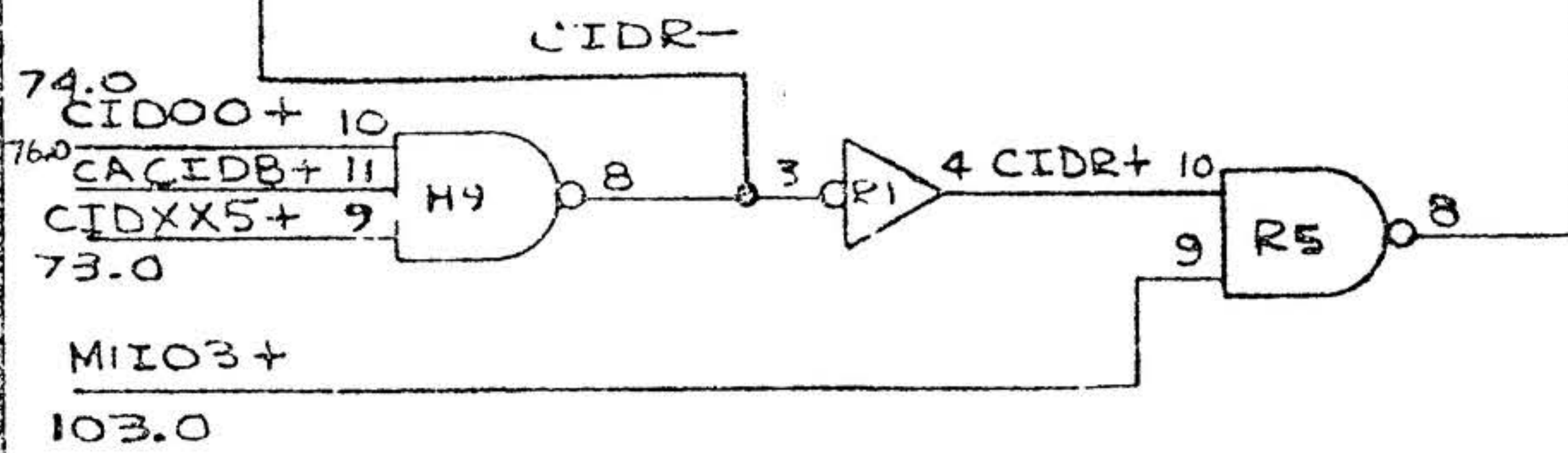
D



C



B



A

INSTRUCTION DECODE LOGIC

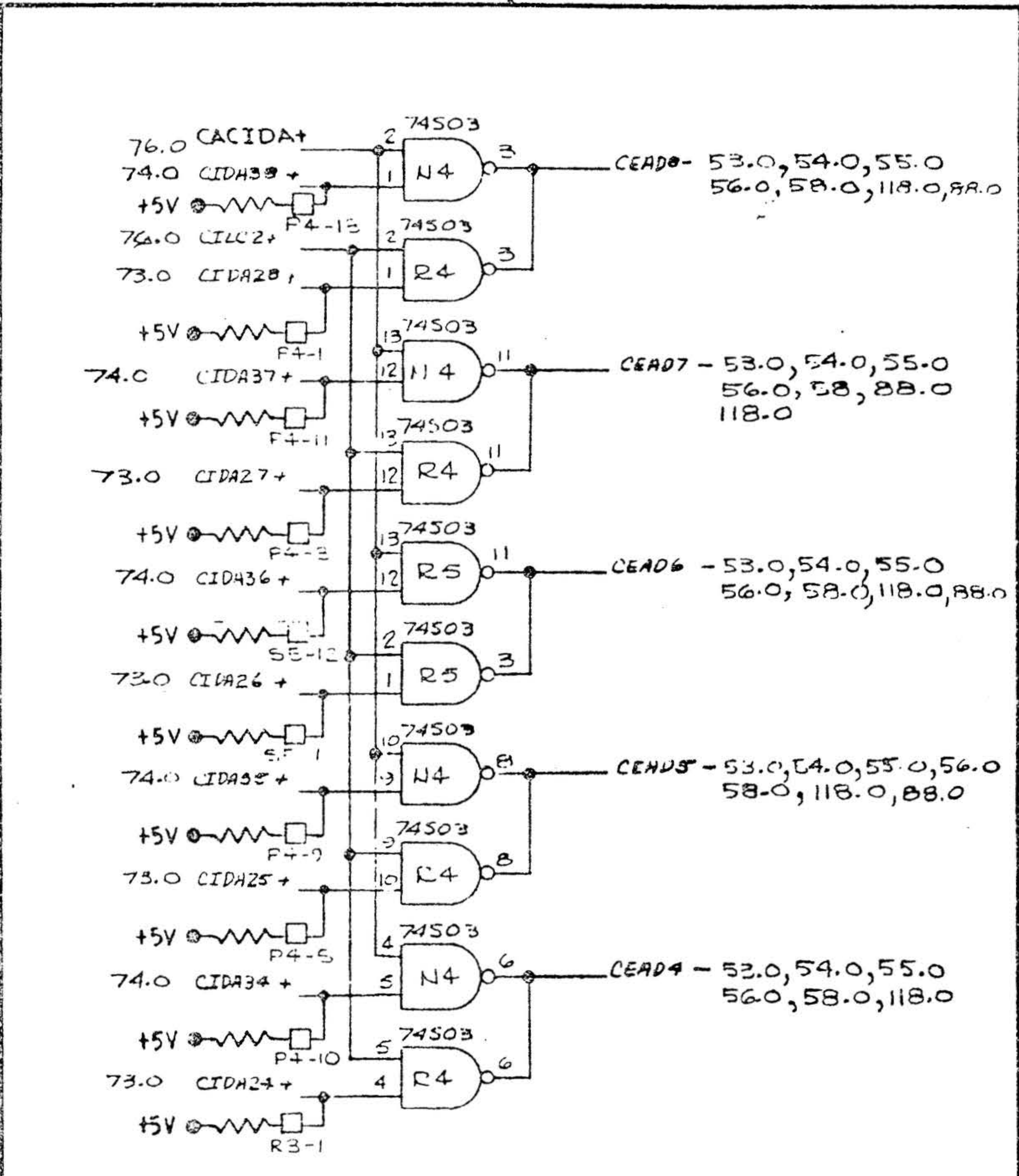
CODE EDIT NO.	SIZE	DATE NO.	REV
21101	B	91B0378	AT
SCALE	SHEET 78.0		

D

C

B

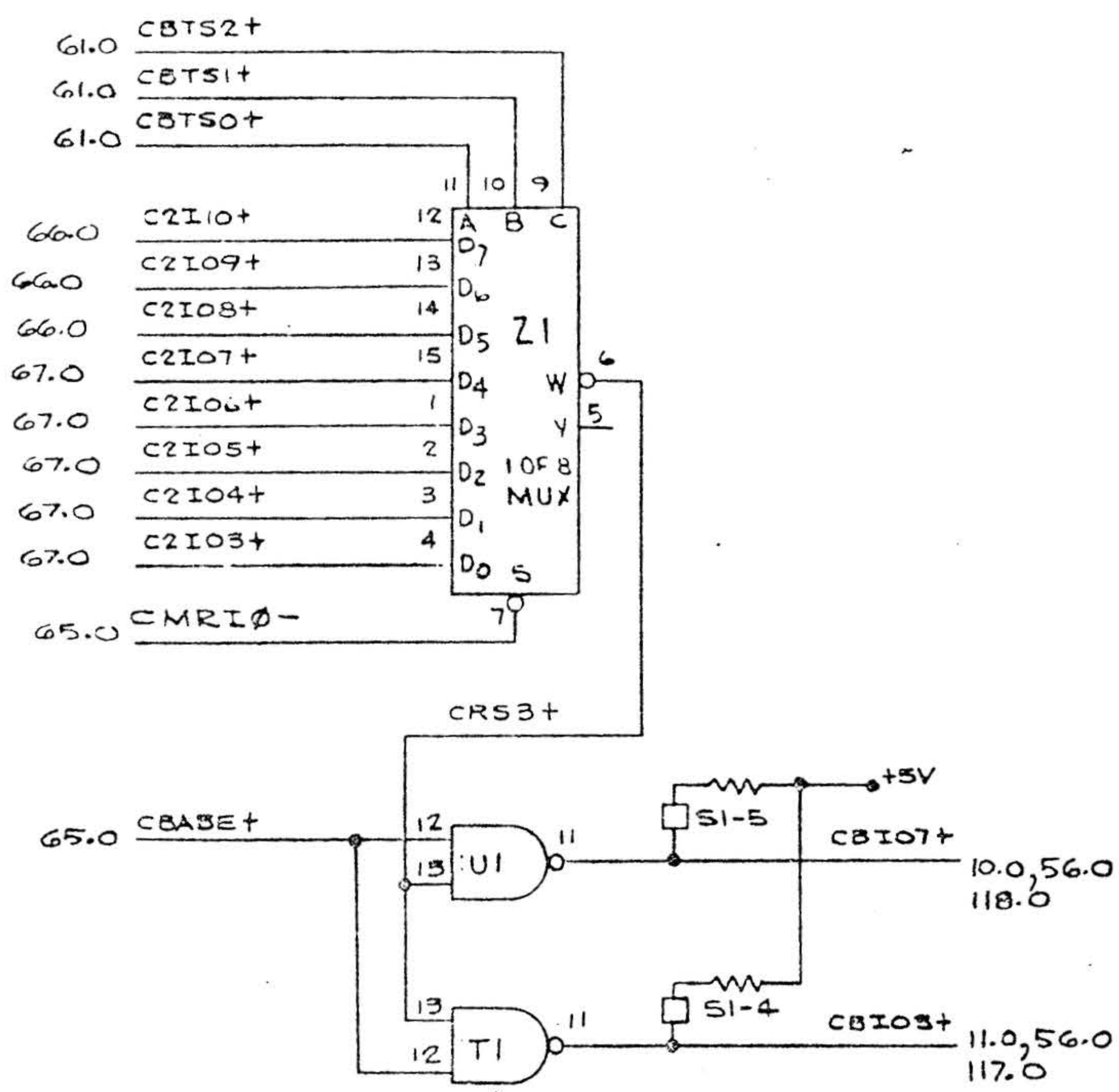
A



INSTRUCTION DECODE LOGIC

CODE IDENT NO.	DATE	DATE NO	REV
21101	B	91B0378	AT
SCALE		DRIFT 770	

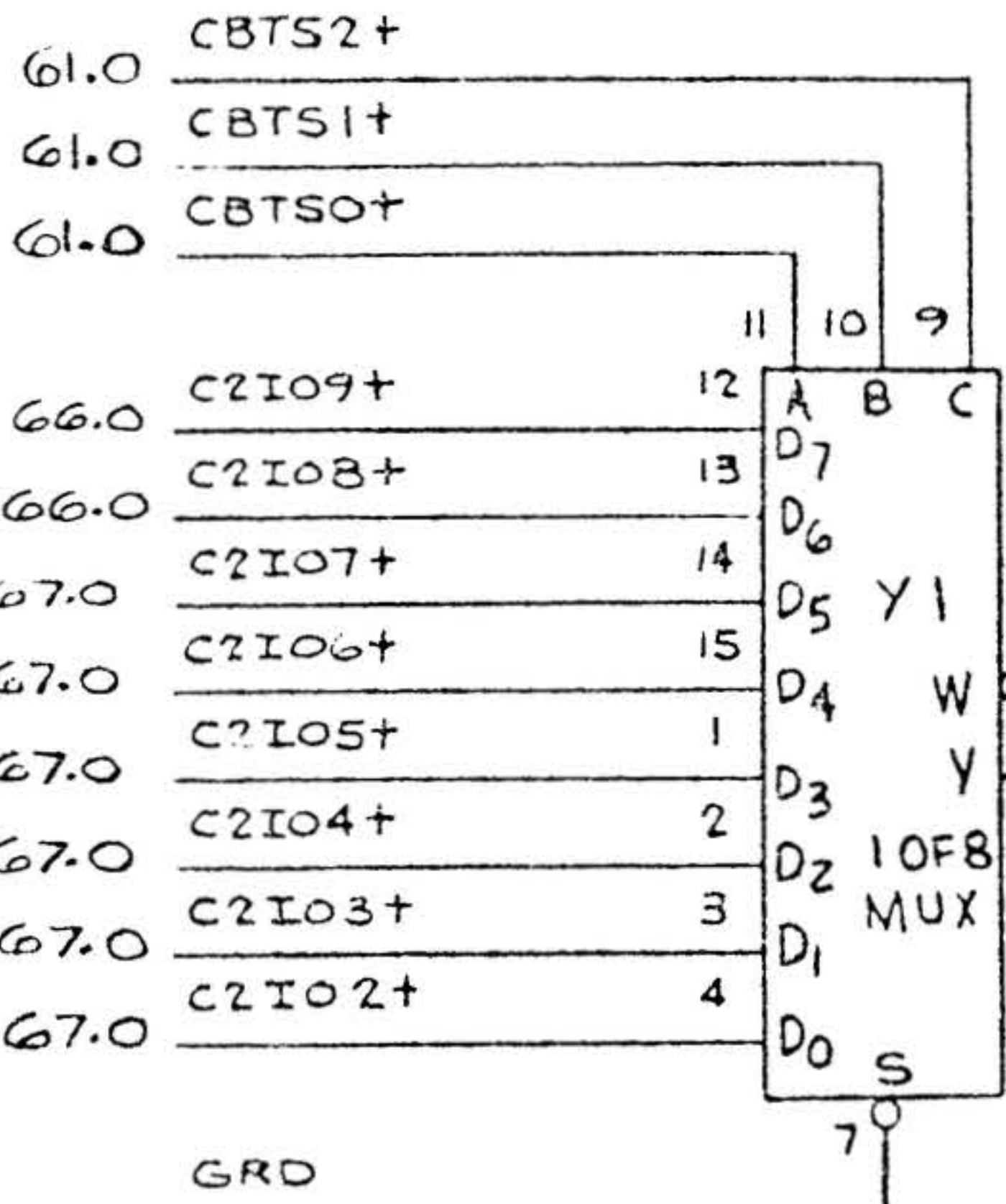
D
C
B
A



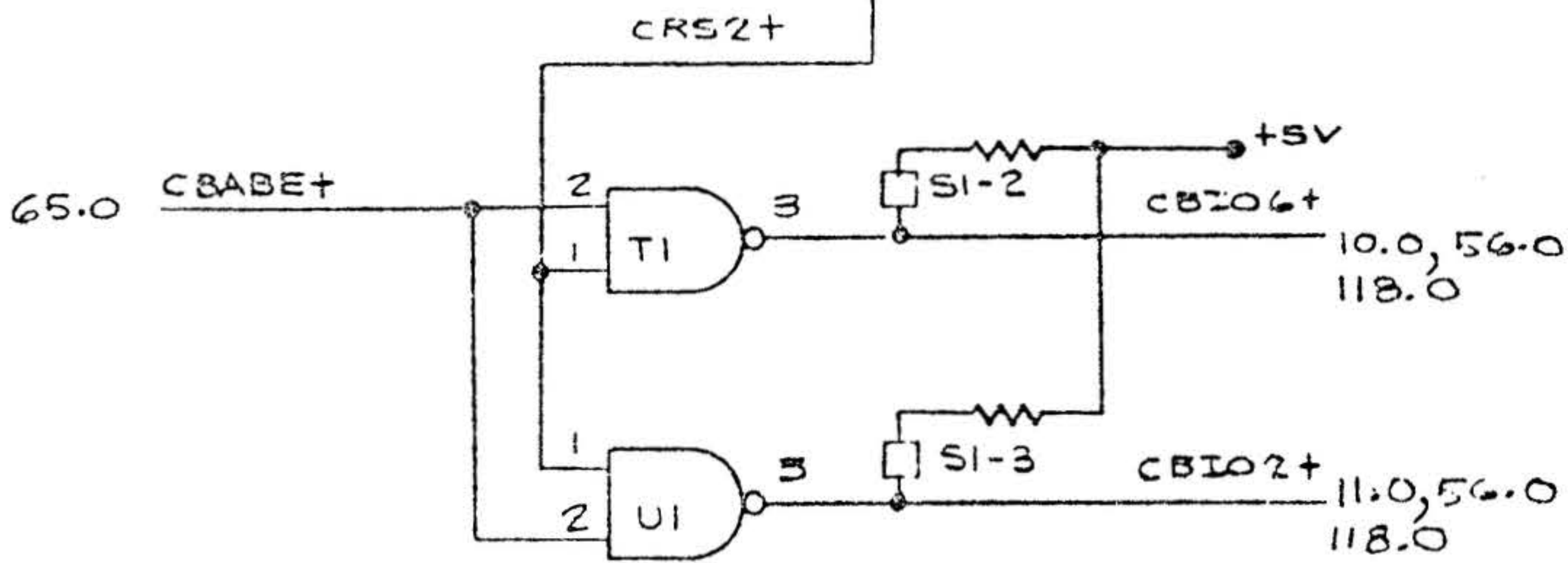
REGISTER FIELD SELECT 1

CODE IDENT NO.	SIZE	DATE NO	REV
21101	B	91B0378	AT
SCALE	SHEET 80.C		

D



C



B

A

REGISTER FIELD SELECT 2

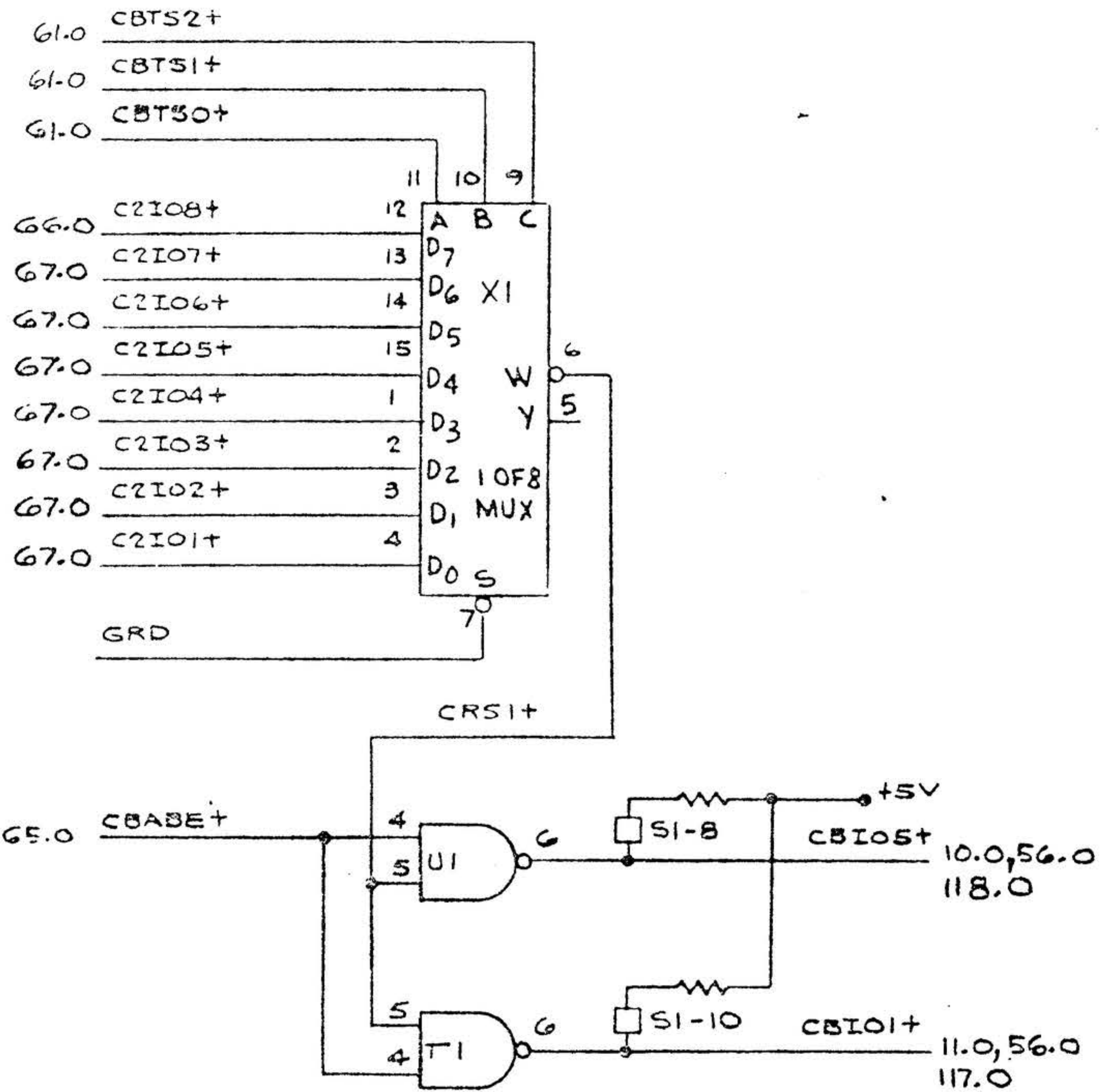
CODE IDENT NO.	SIZE	CHG NO	REV
21101	B	91B0378	AT
SCALE			DRY 81.0

D

C

B

A



REGISTER FIELD SELECT 3

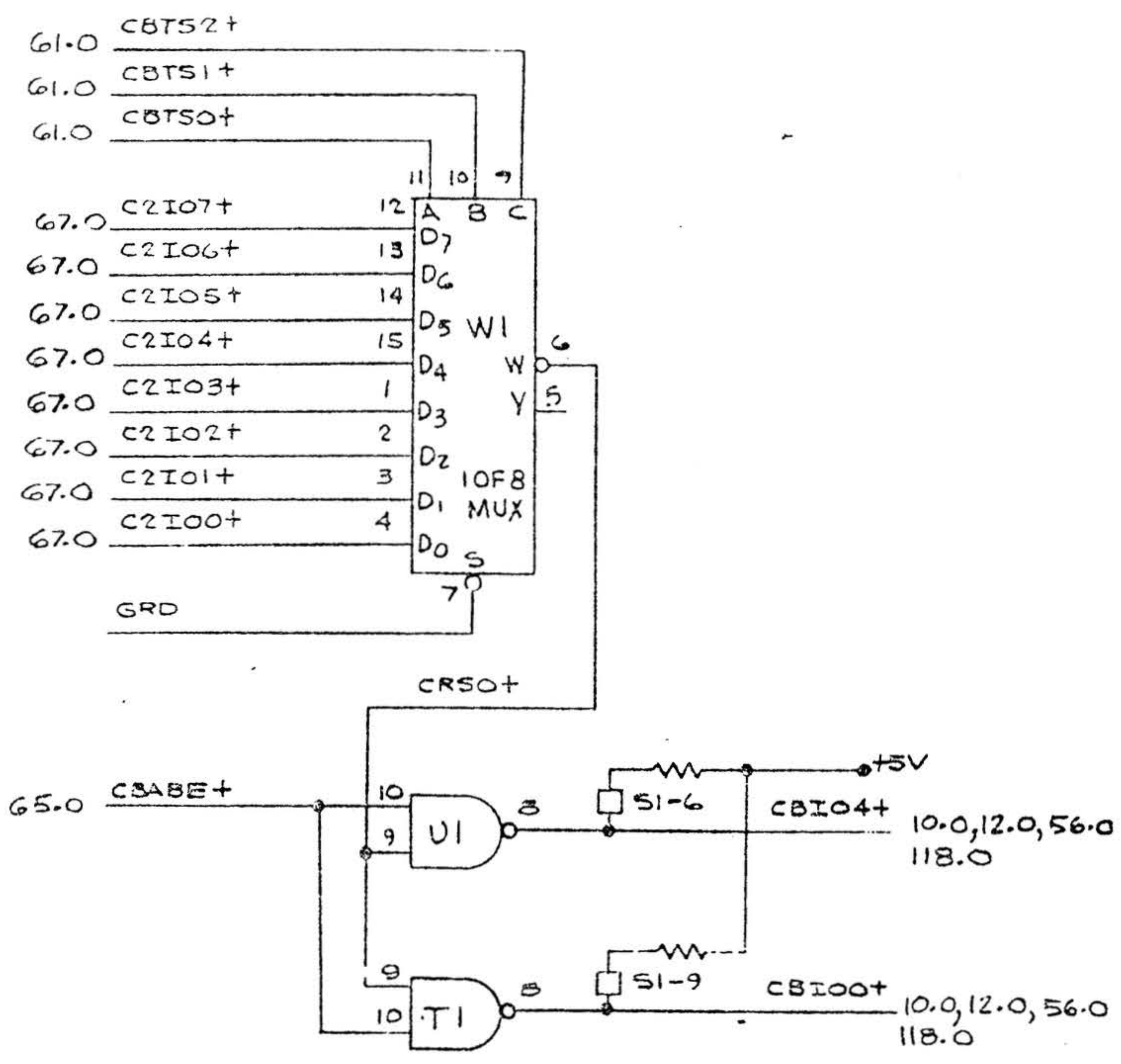
CODE IDENT NO.	REV	DWG NO.	REV
21101	B	91B0378	AT
SCALE			CHIT B2.0

D

C

B

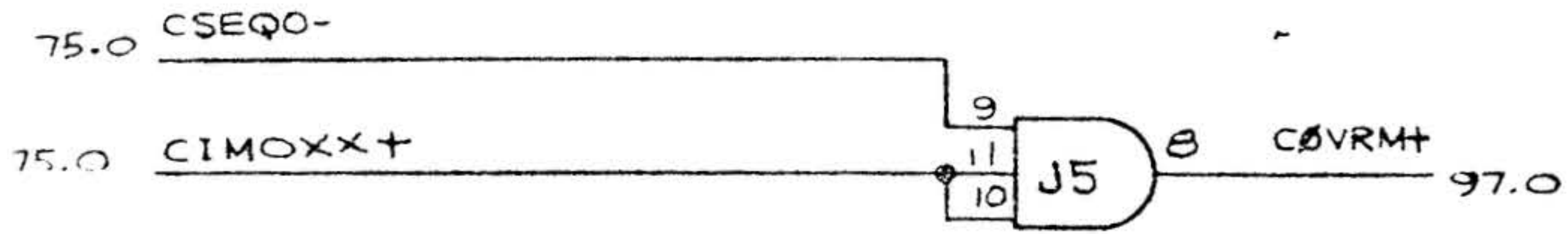
A



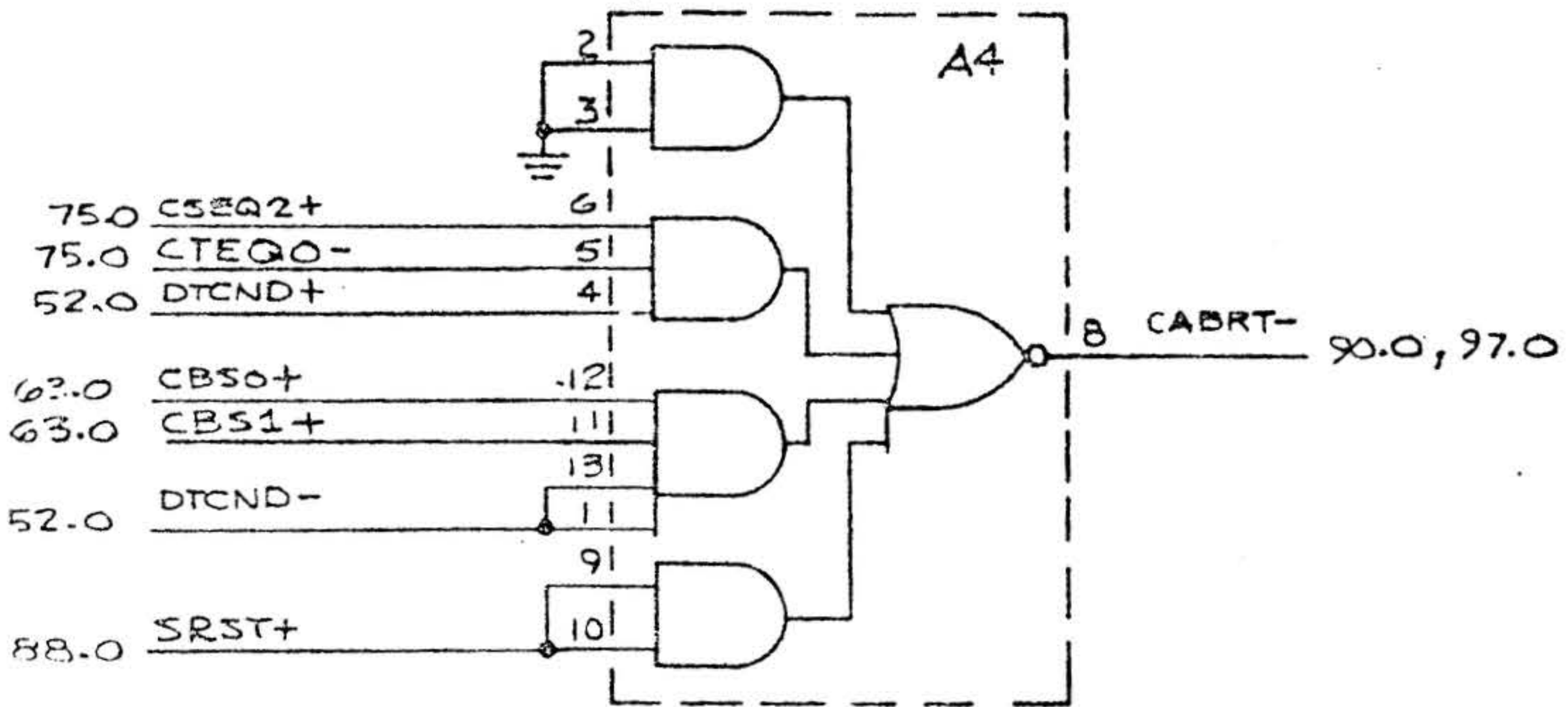
REGISTER FIELD SELECT 4

DOC# 21101	REV B	DATE 9/80	BY AT
SCALE		SHEET 83.0	

D



C



B

A

CONTROL MEMORY INTERFACE

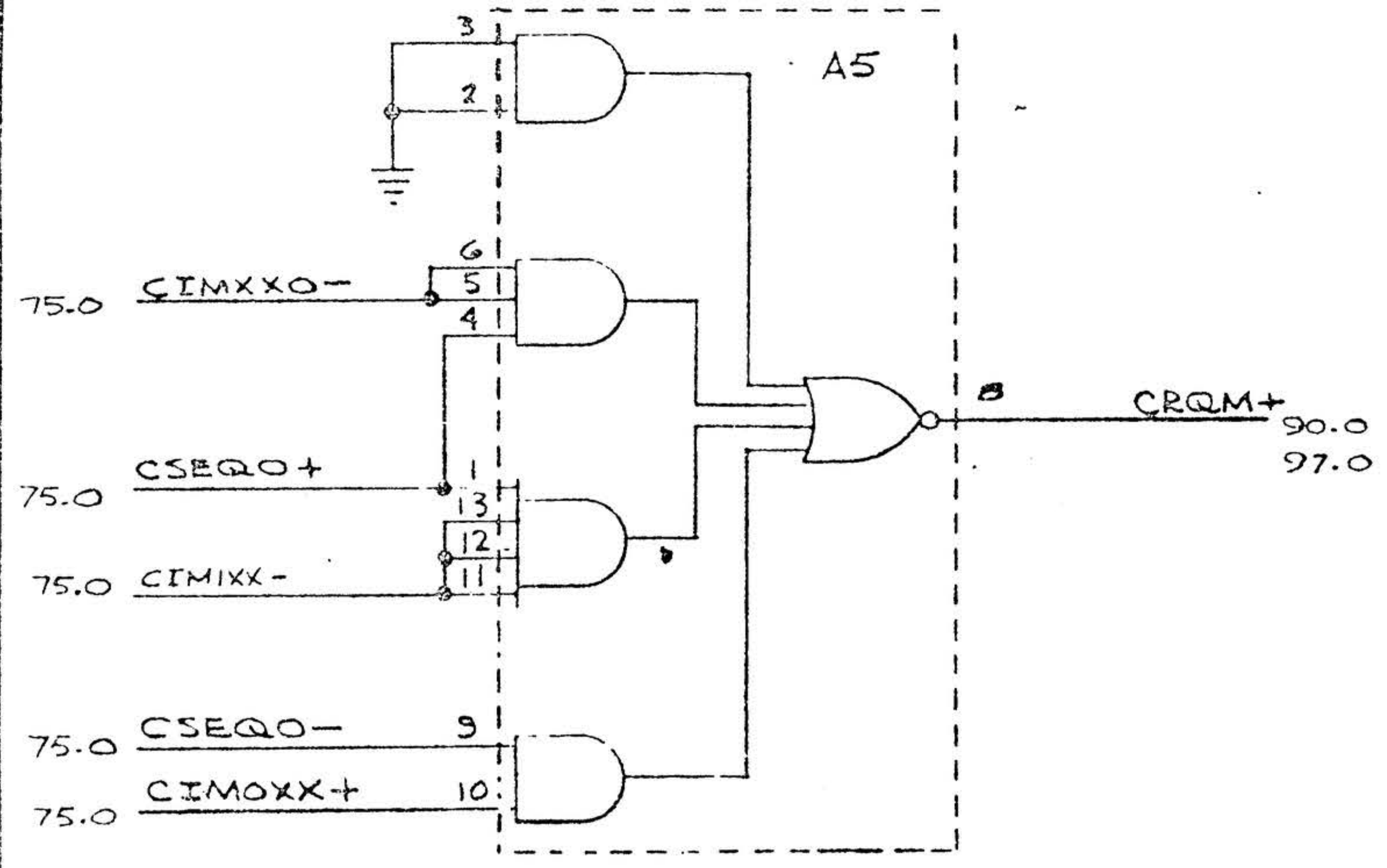
CODE IDENT NO.	REV	DATE NO	REV
21101	B	91B0378	AT
SCALE	SHEET 84.0		

D

C

B

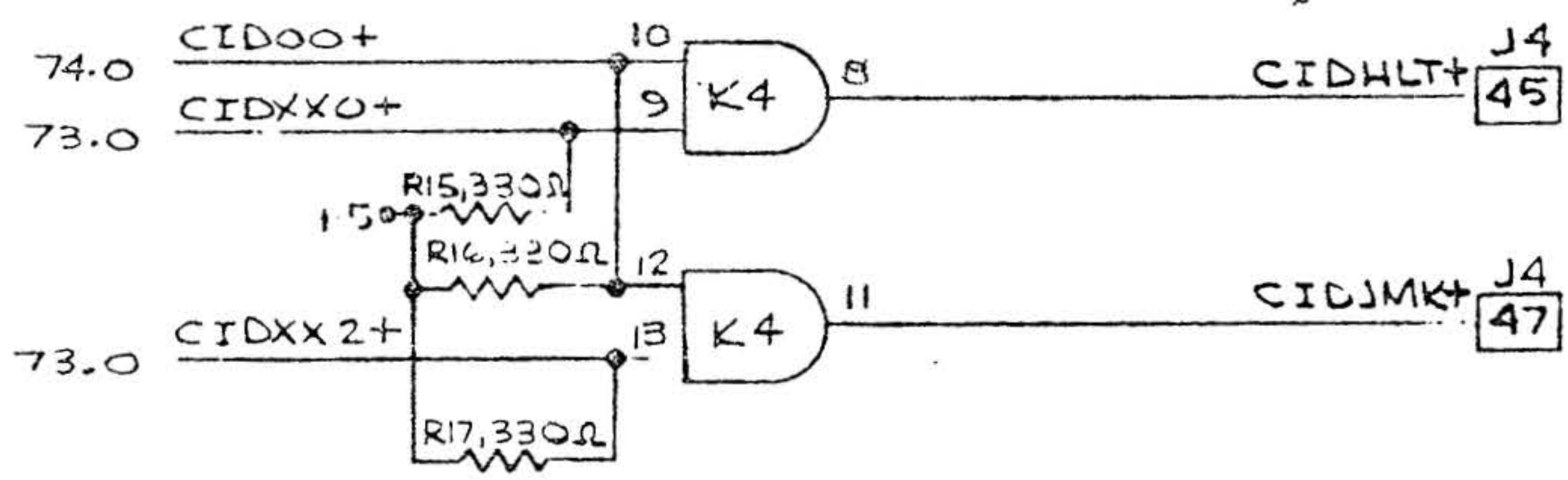
A



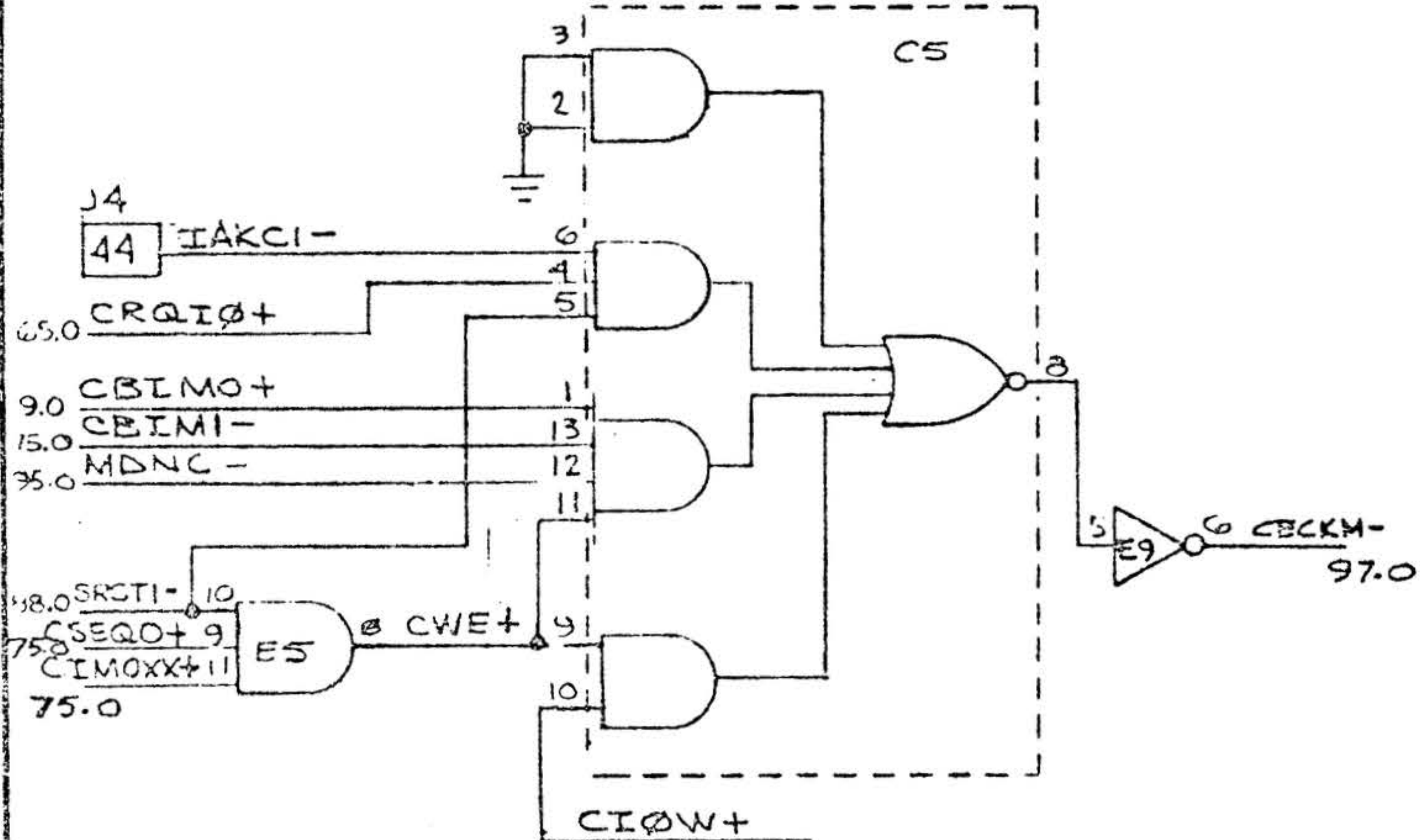
CONTROL/MEMORY INTERFACE

CODE IDENT NO.	REV	DATE	BY
21101	B	91B0378	AT
SCALE	SHEET 85.0		

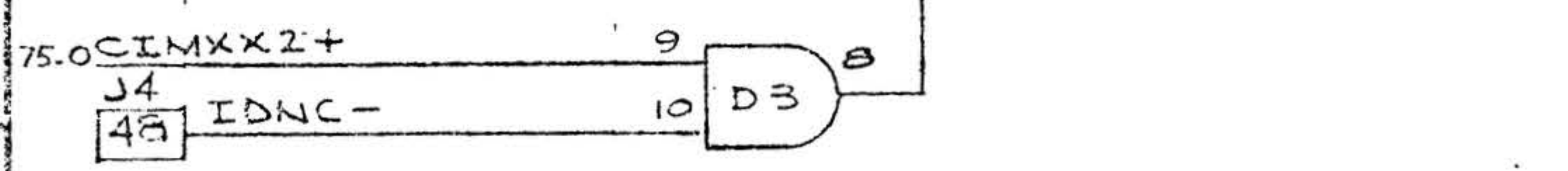
D



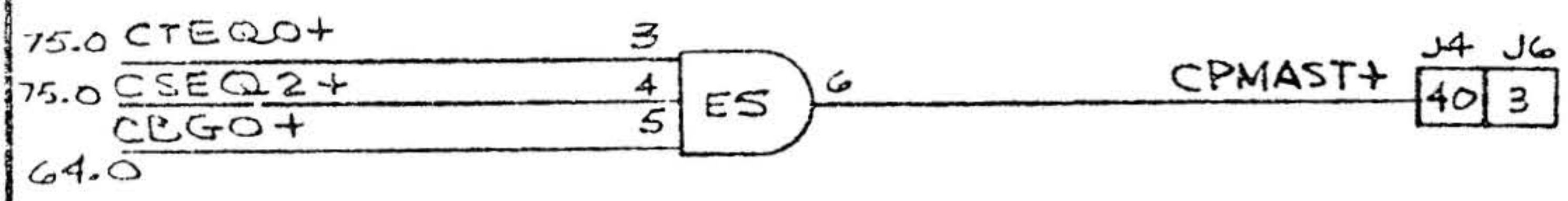
C



B

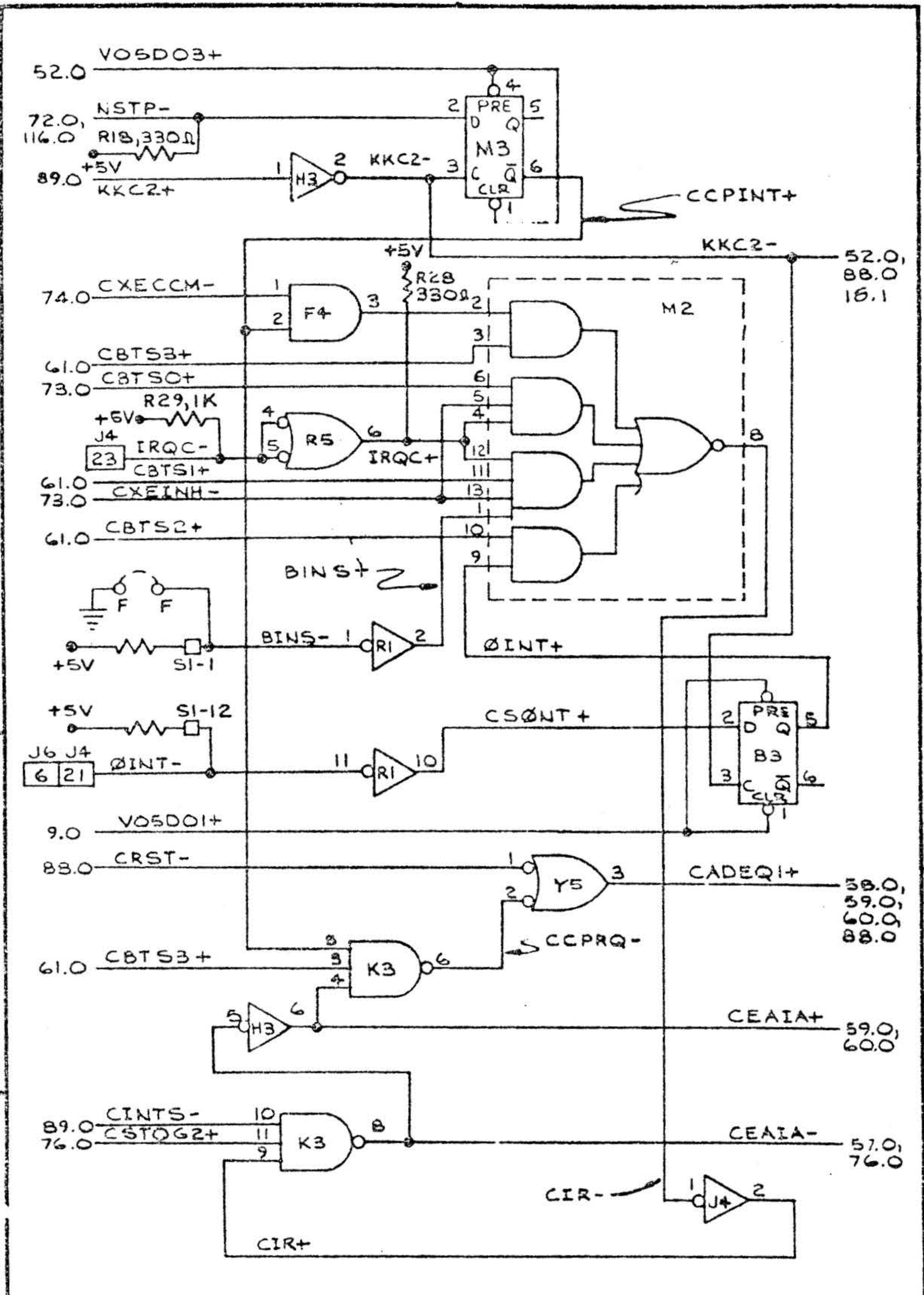


A



CONTROL/MEMORY INTERFACE

CODE IDENT NO.	REV	DATE	BY
21101	B	91B0378	AT
SCALE		SHEET 86.0	



INTERRUPT LOGIC

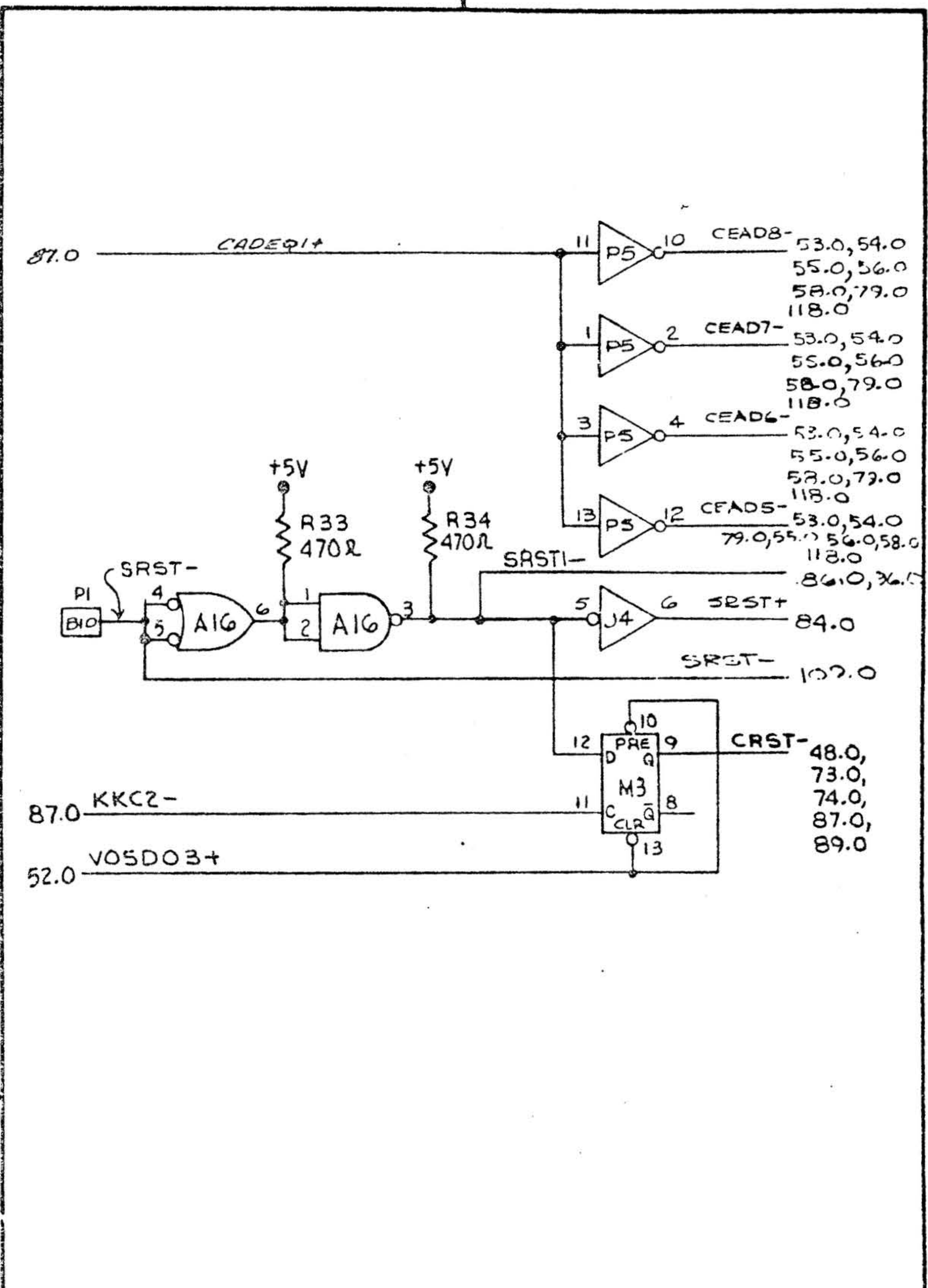
DATE	REV	DWG NO	REV
21101	3	91B0378	AT
SCALE	SHEET 87.0		

D

C

B

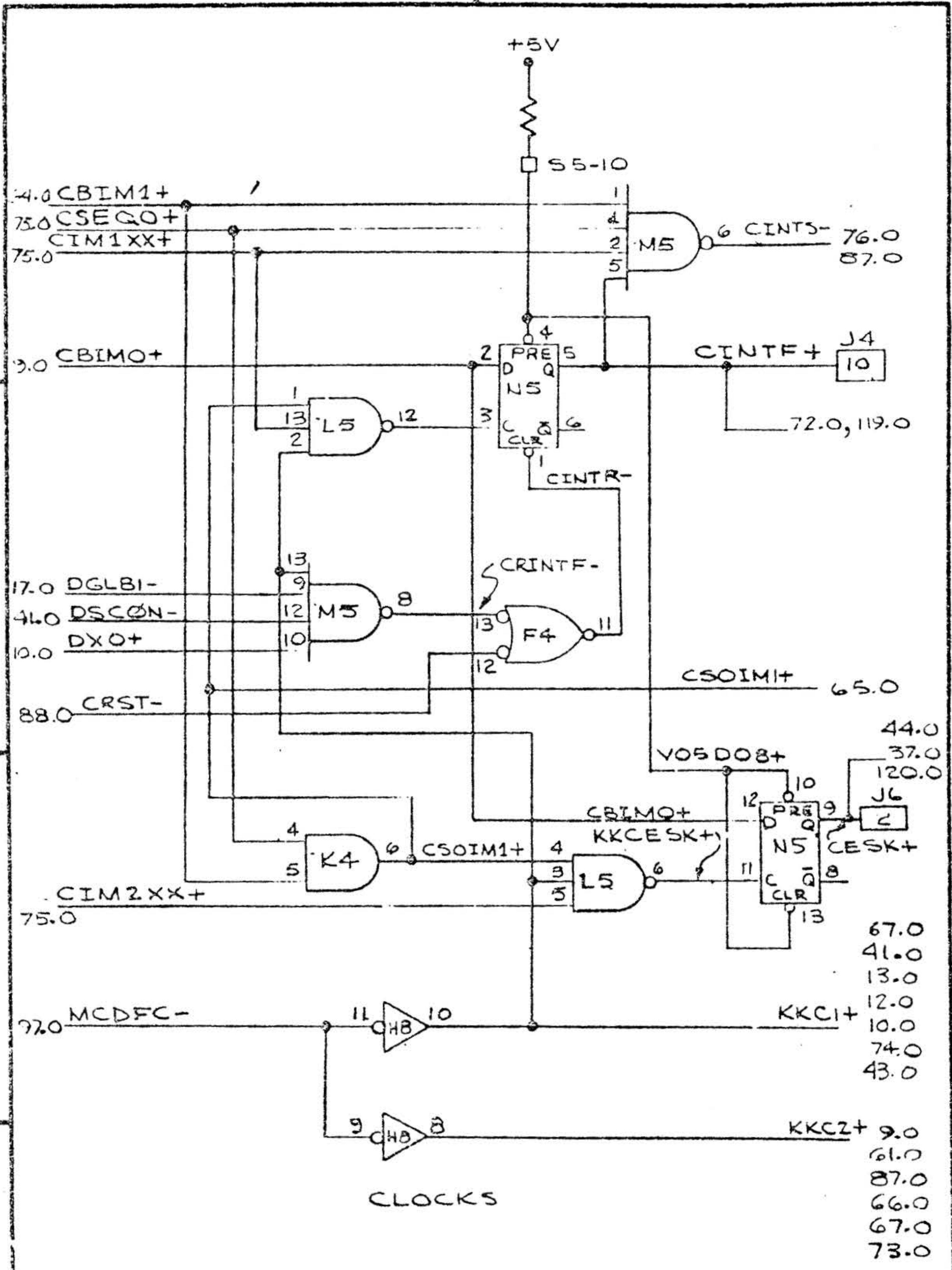
A



RESET LOGIC

DATE	REV	BY	BY
21101	3	91B0378	AT
SCALE			SHEET 88.0

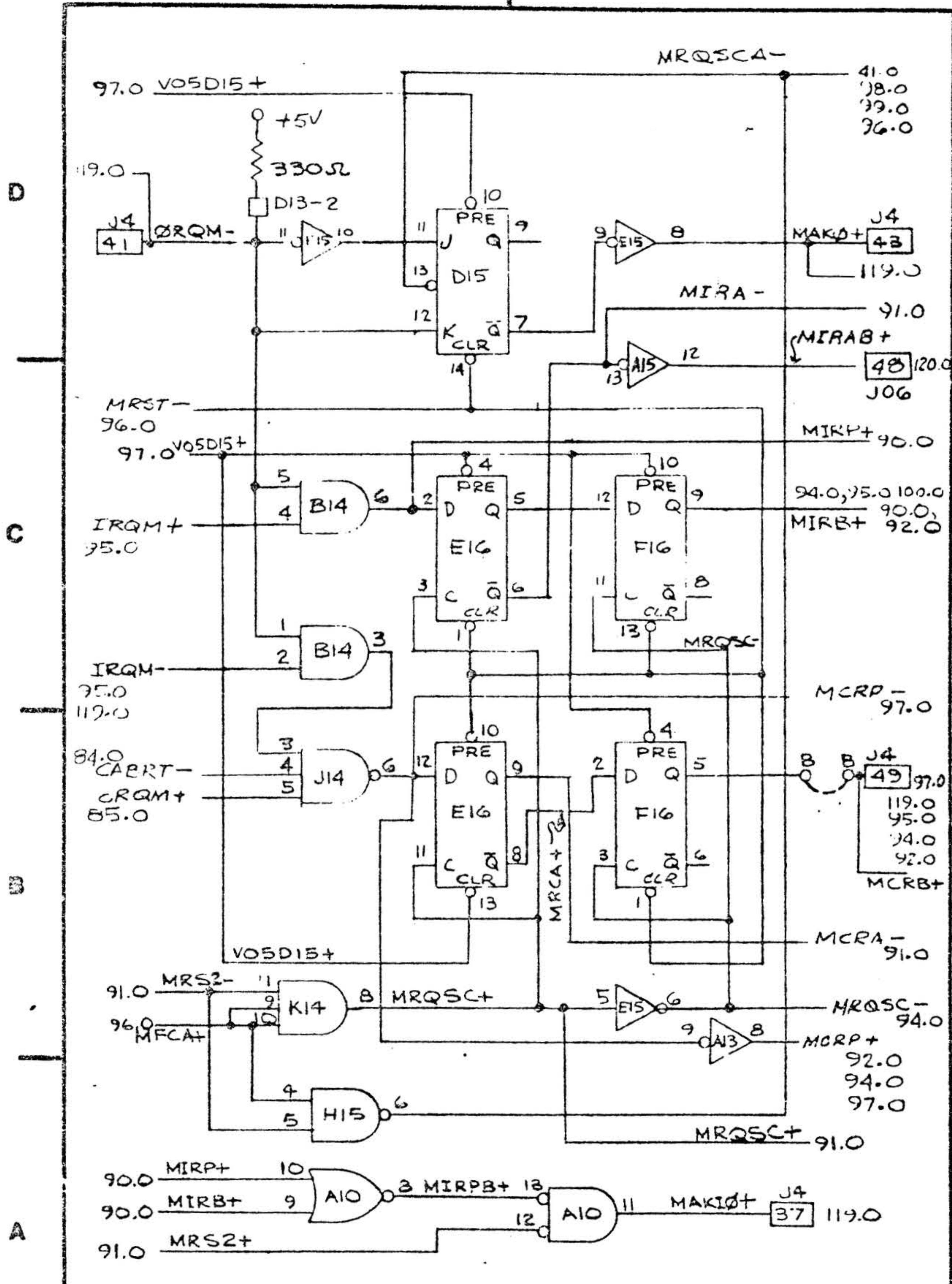
D
C
B
A



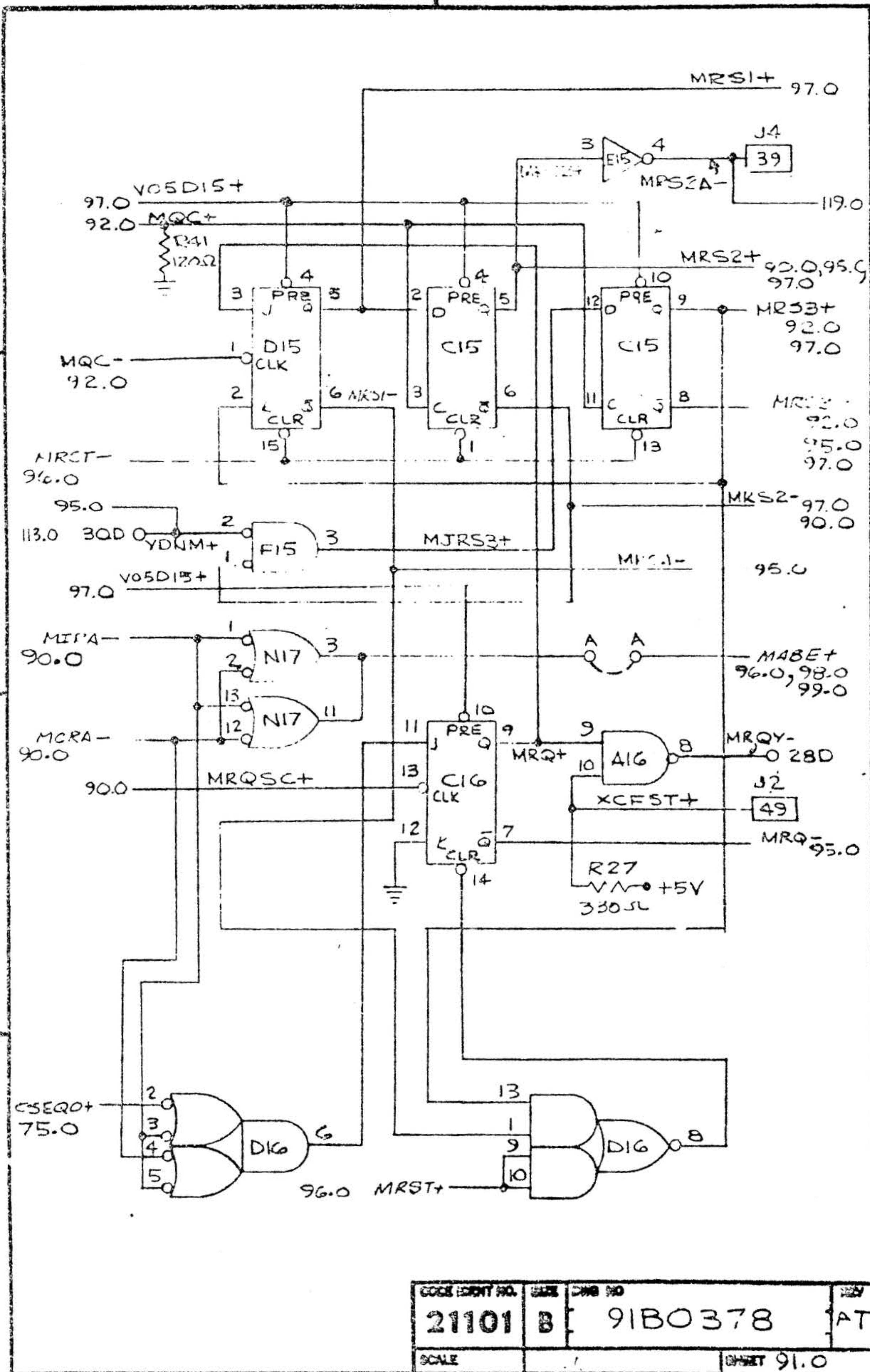
CODE IDENT NO	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 23.0		

2

1



CODE	REV. NO.	DATE	DRW. NO.	
21101	B		91B0378	AT
SCALE				SHEET 90.0



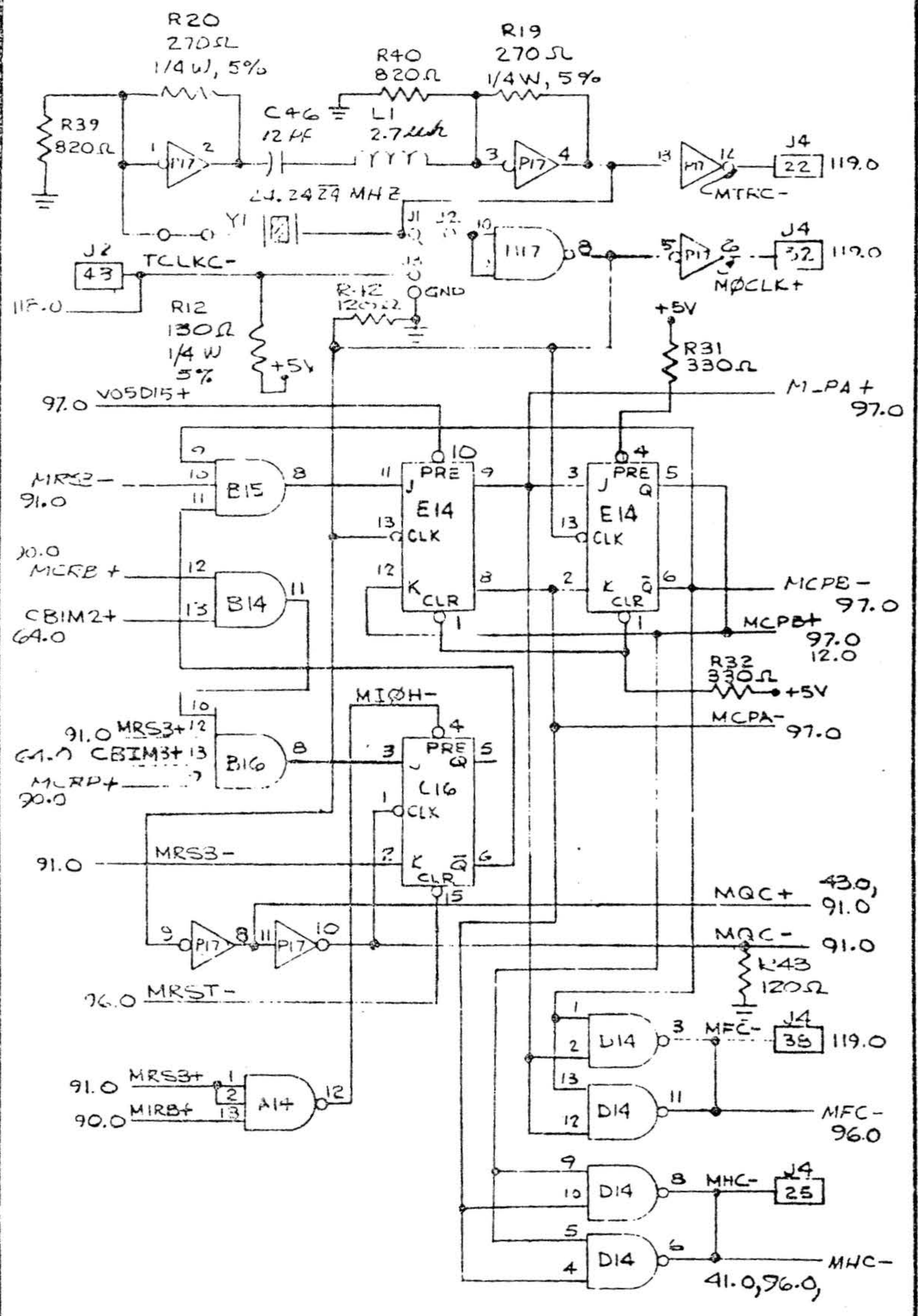
CODE IDENT NO.	REV	DATE	DESIGN NO.	REV
21101	B		91B0378	AT
SCALE				SHEET 91.0

D

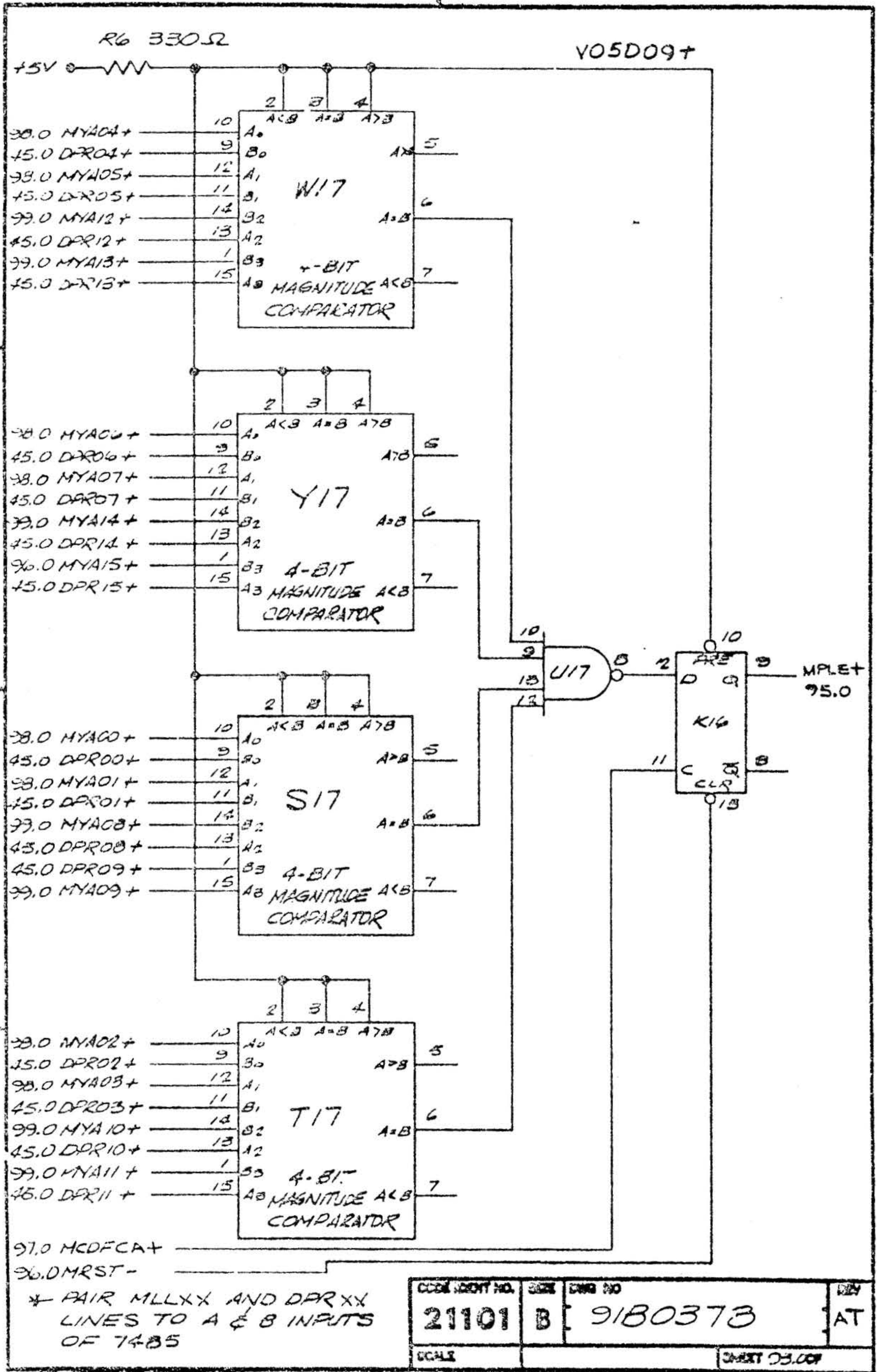
C

B

A



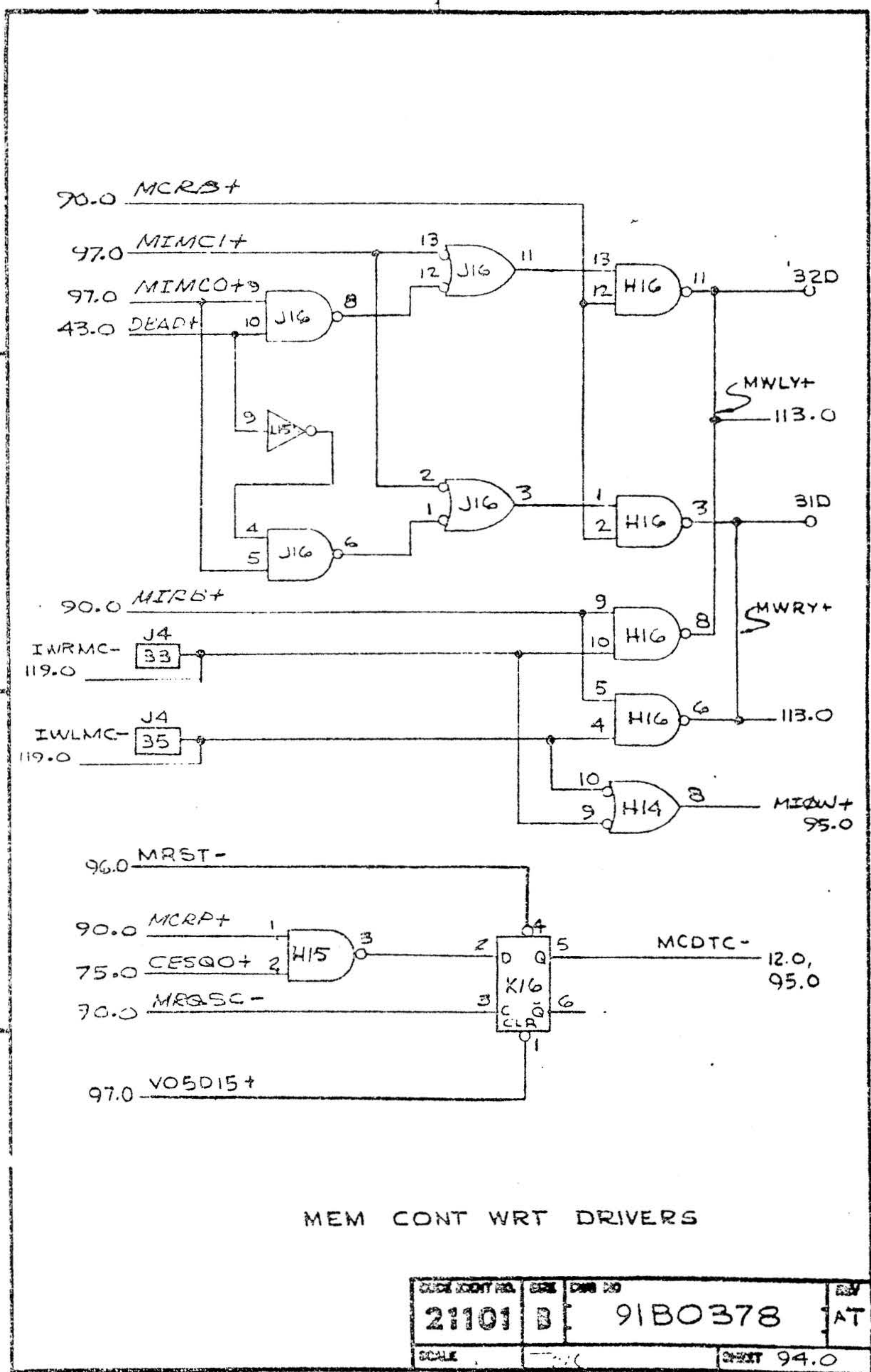
DOC# IDENT NO.	SIZE	DWG NO.	REV
21101	B	91B0378	AT
SCALE		SHEET	92.0



* PAIR MLLXX AND DPRXX LINES TO A & B INPUTS OF 7485

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	9180373	AT
SCALE	SHEET 23.007		

D
C
B
A



MEM CONT WRT DRIVERS

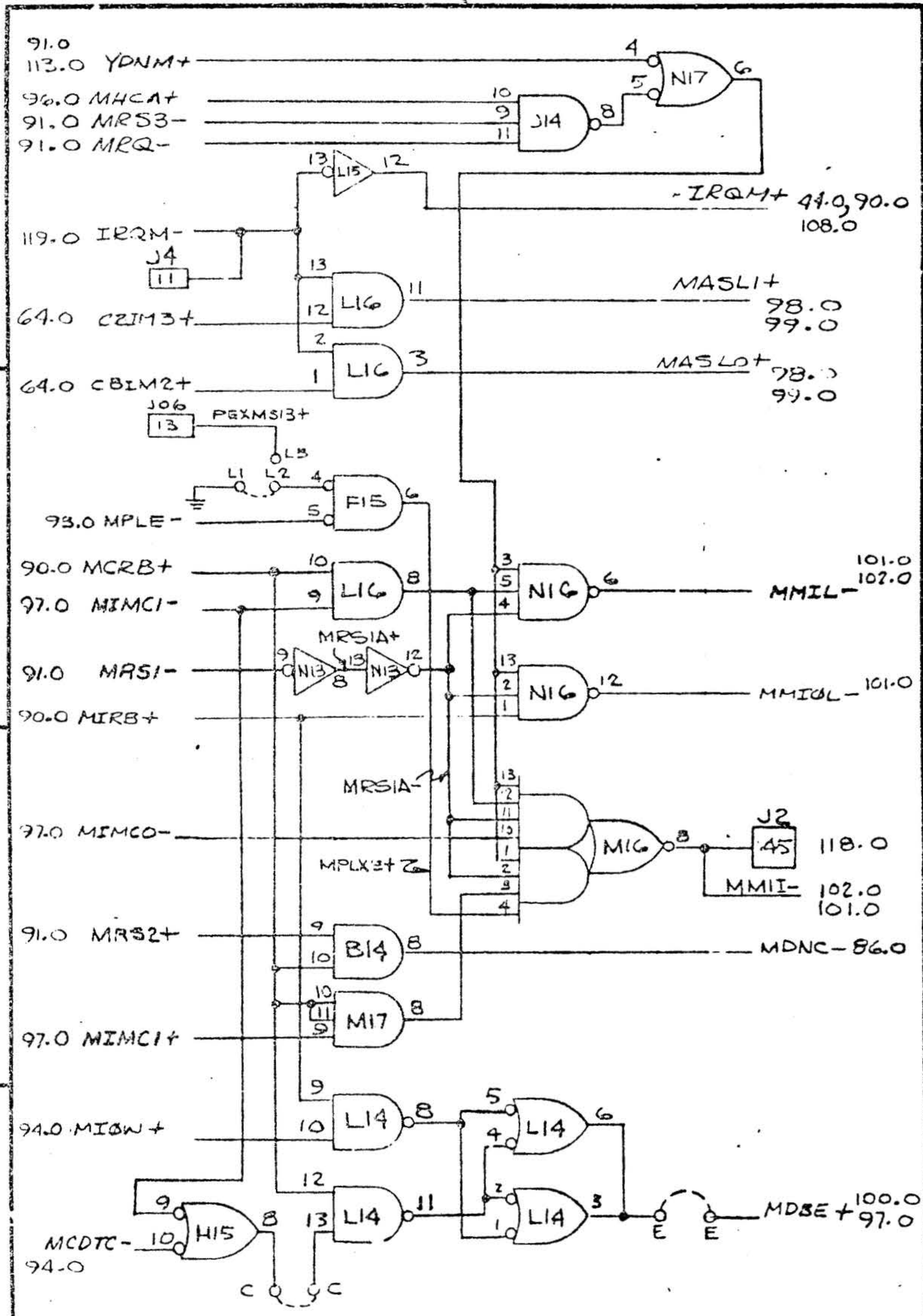
21101	B	91B0378	AT
SCALE		SHEET 94.0	

D

C

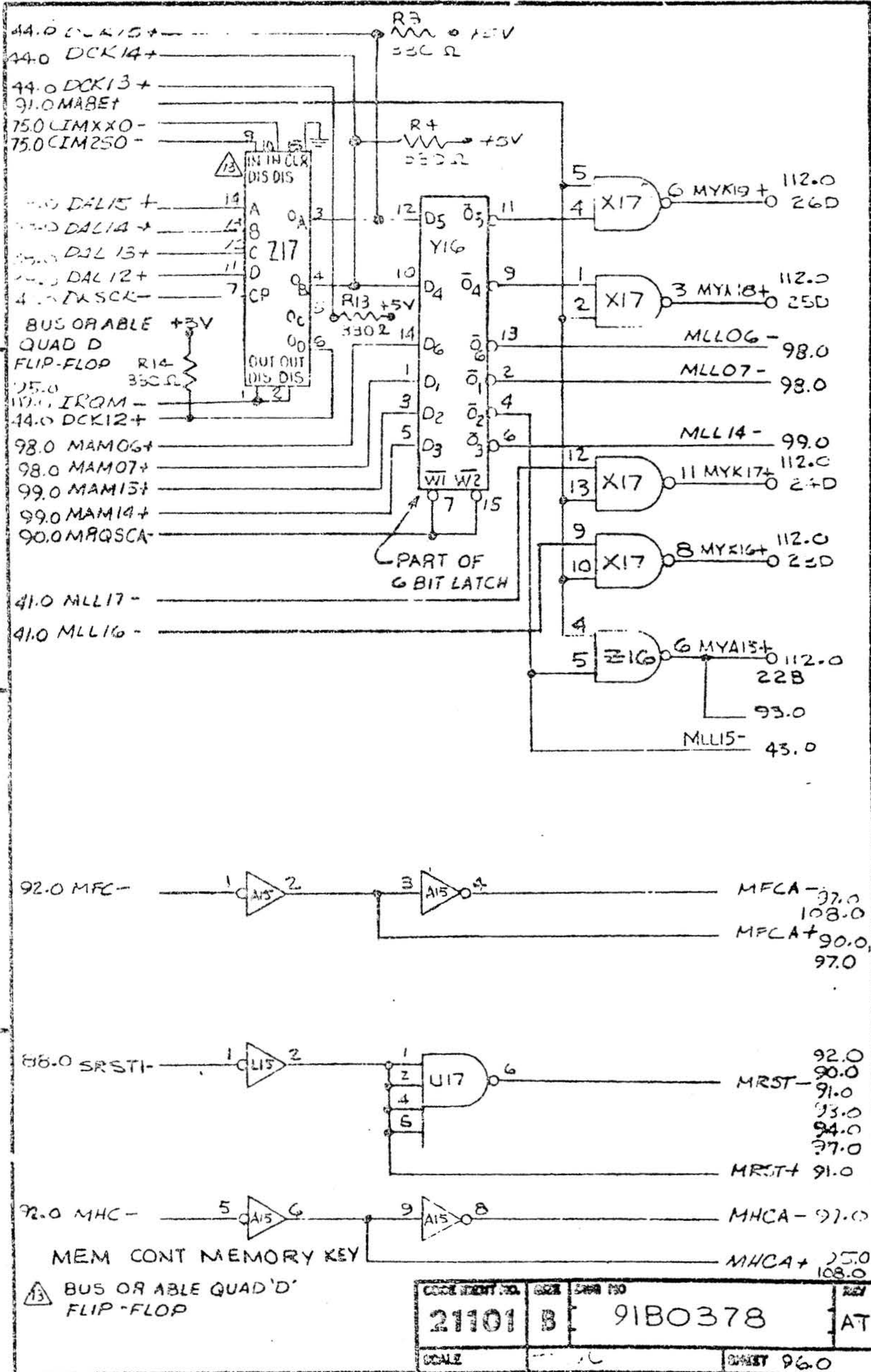
B

A

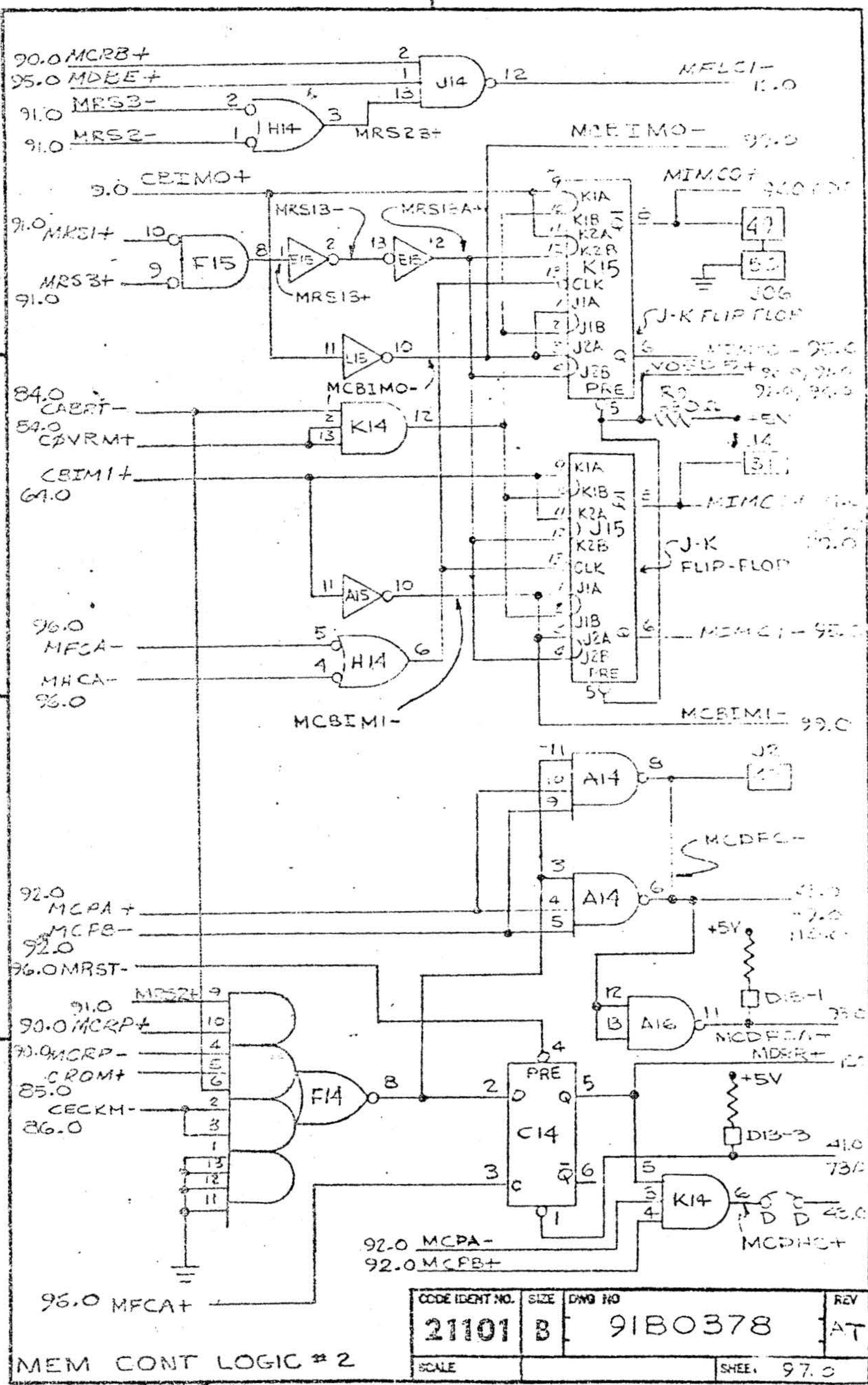


MEM CONT LOGIC #1

LOGIC IDENT NO	BASE	FORM NO	REV
21101	B	91B0378	AT
SCALE	1/8" = 1"	SHEET 95.0	



D
C
B
A



MEM CONT LOGIC # 2

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET	97.0

2

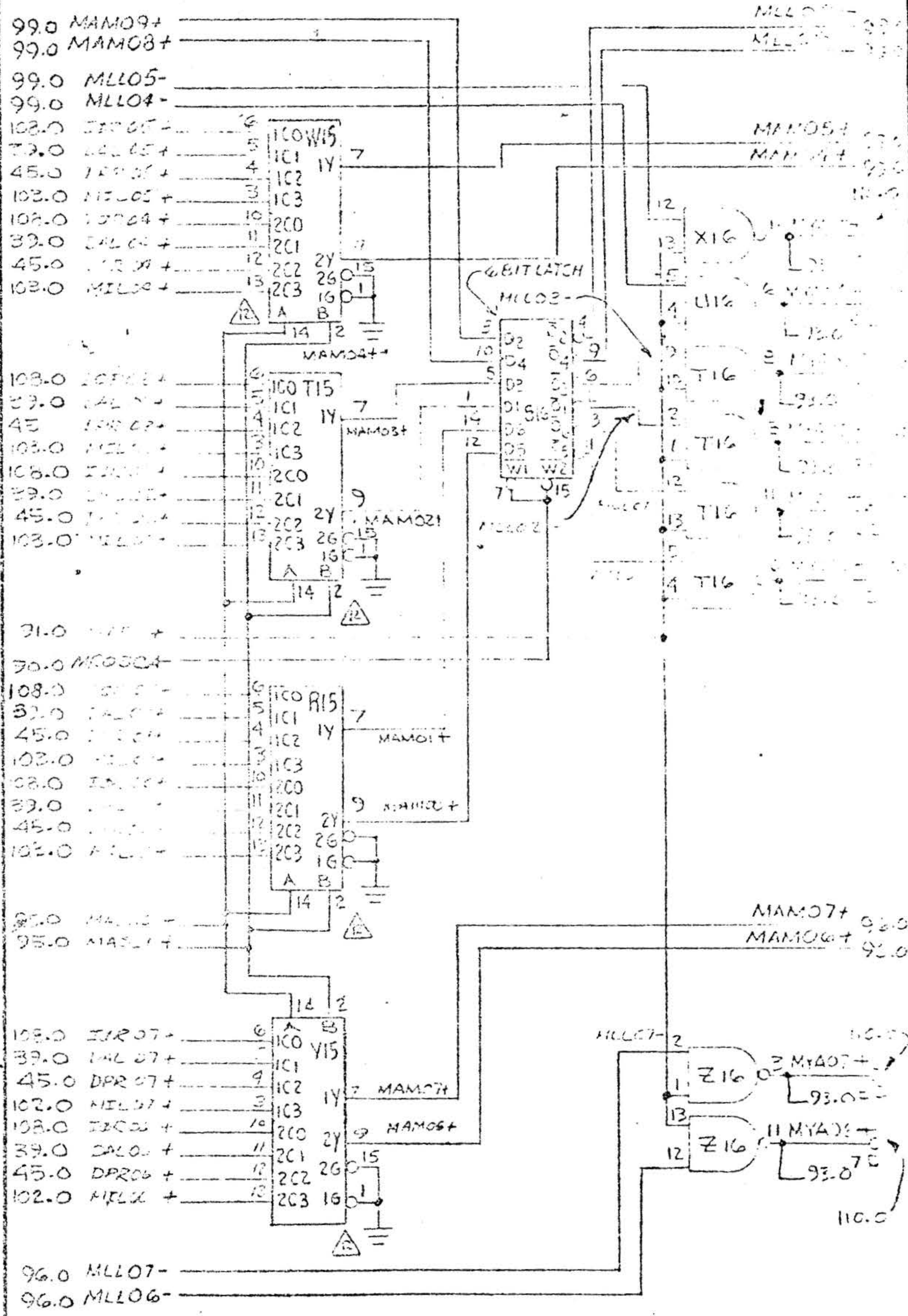
1

D

C

B

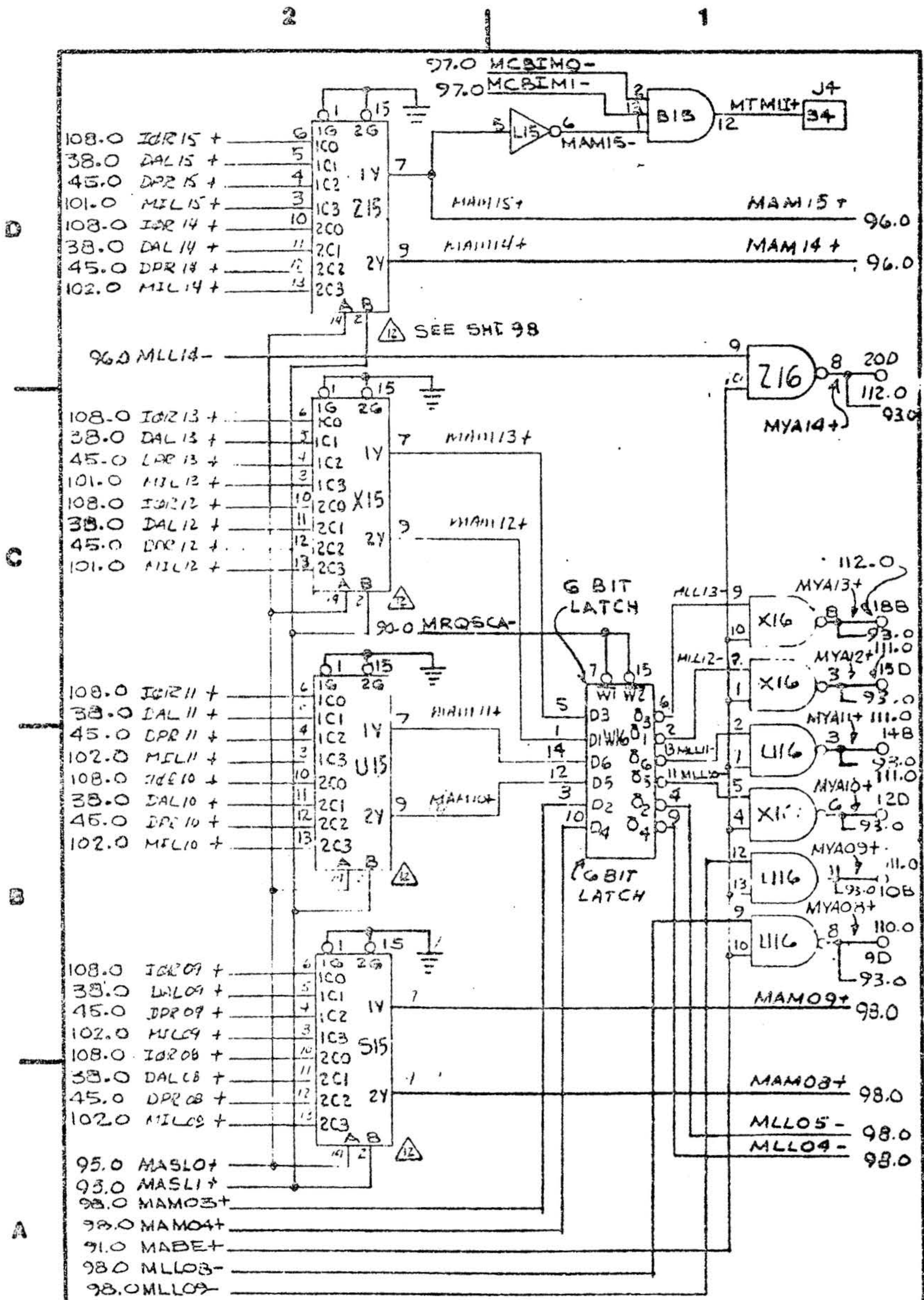
A



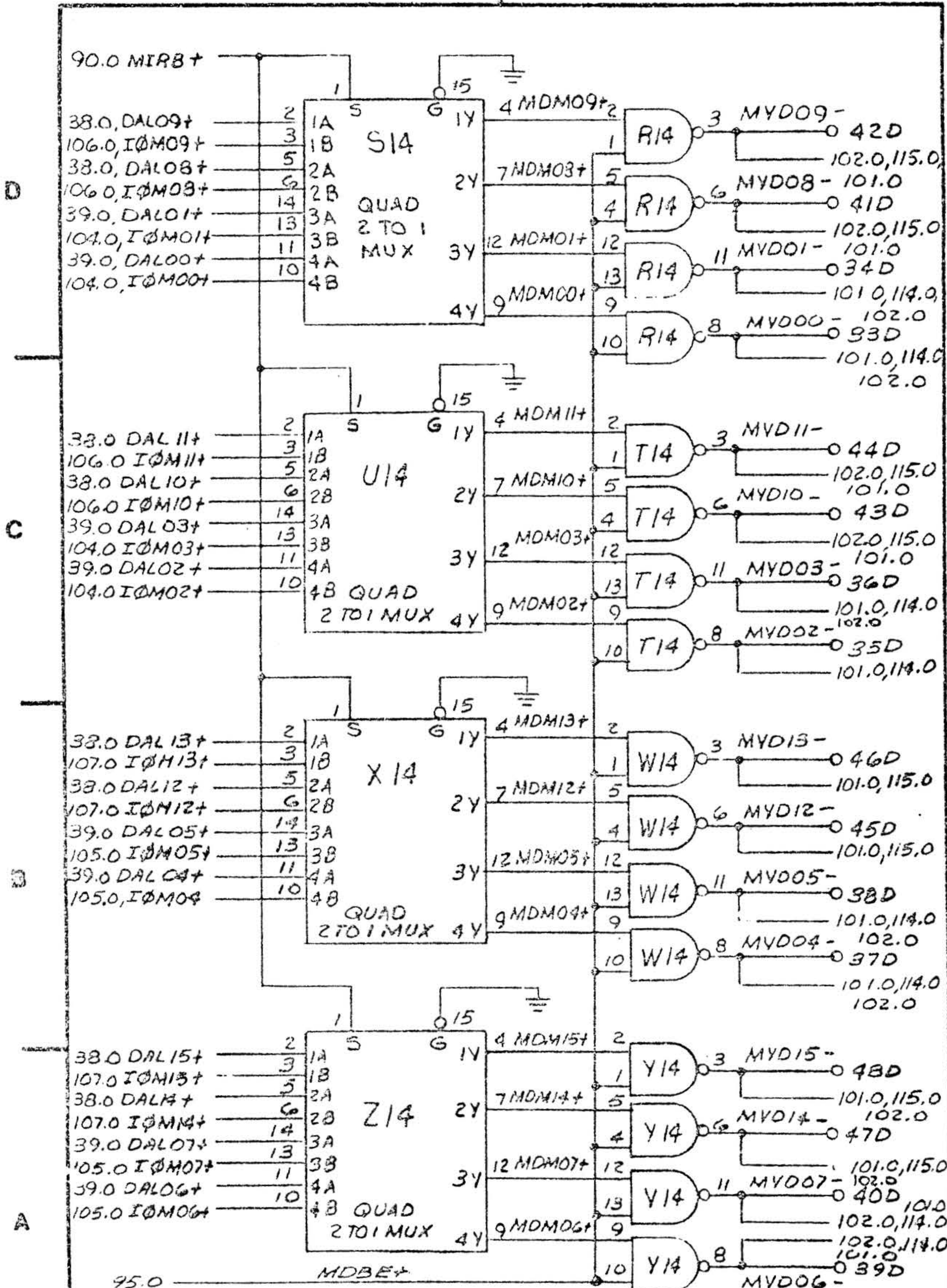
MEM CONT

△ Y15, R15, T15, W15
 S15, U15, X15, Z15 ARE
 DUAL 4 TO 1 MUX

CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	91B0378	AT
SCALE 1:1	SHEET 93.0		



CODE IDENT NO.	REV	DWG NO	REV
21101 B		91B0378	AT
SCALE		SHEET	99.0



MEM CONT

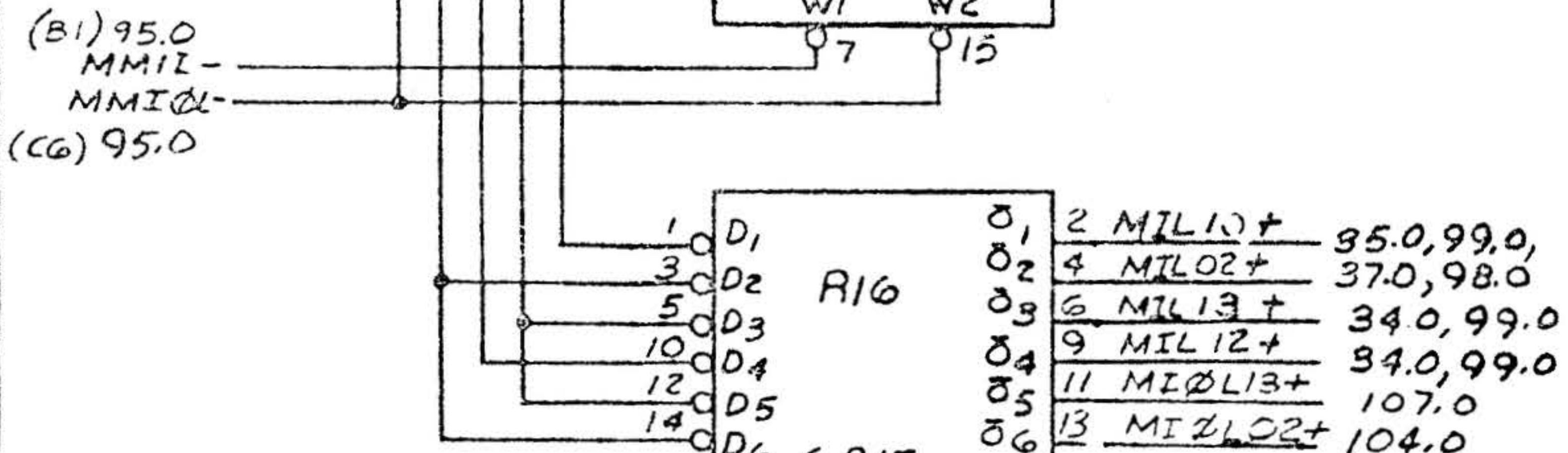
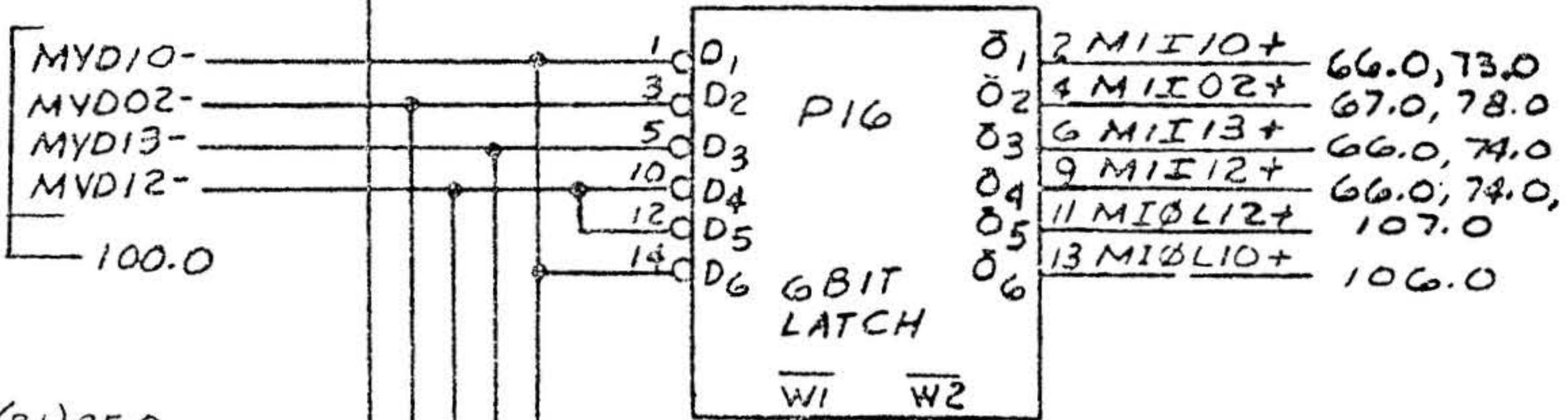
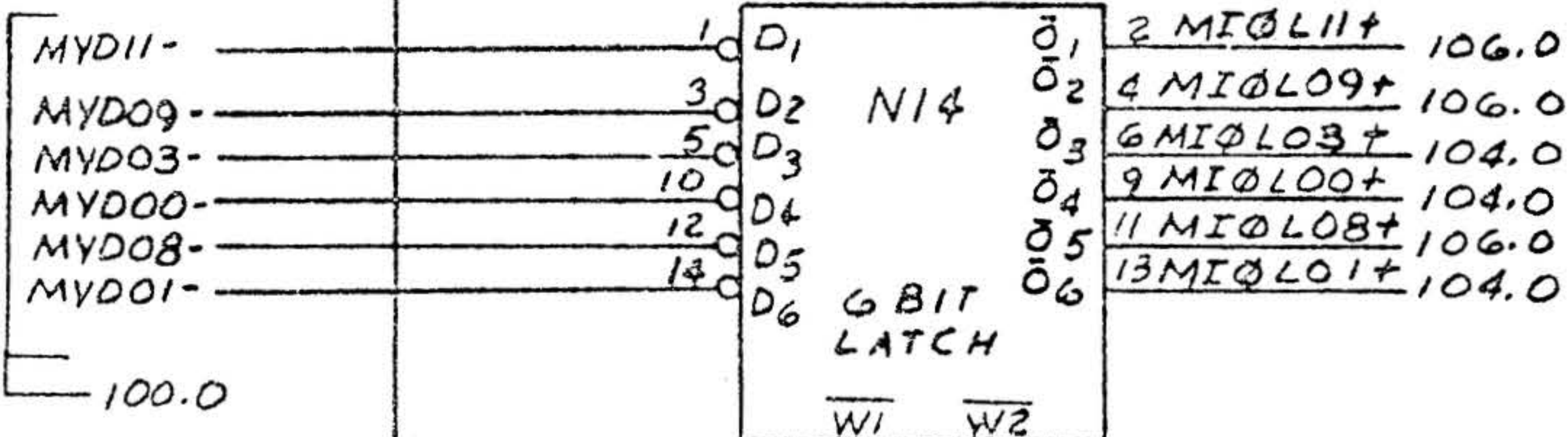
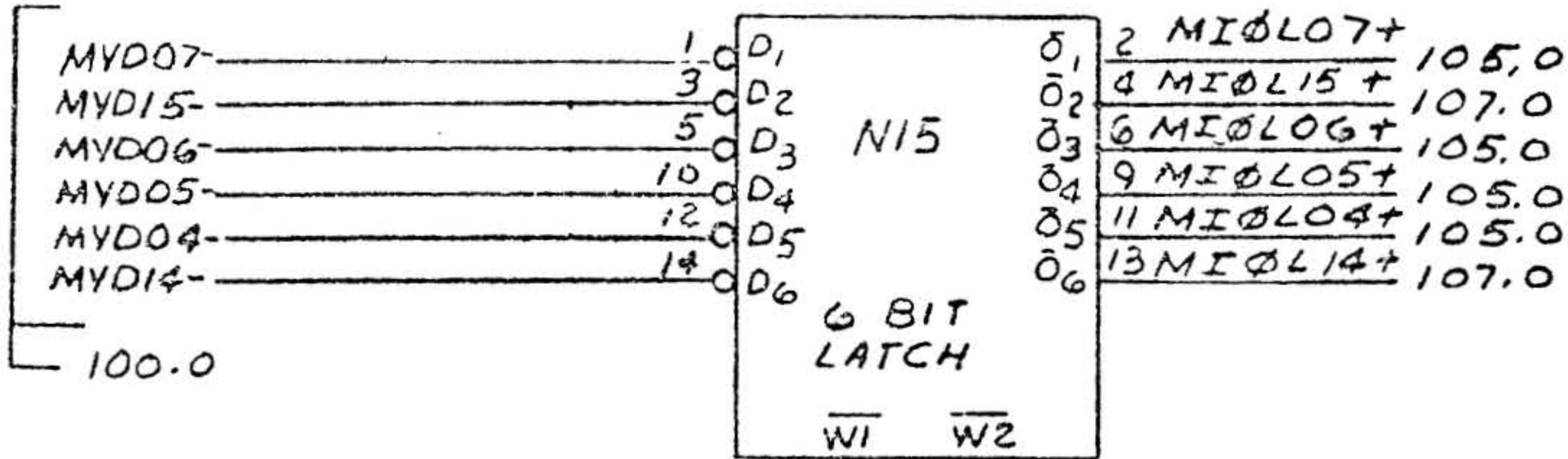
CODE IDENT NO.	SIZE	DWG NO	REV
21101	B	9180378	AT
SCALE	SHEET 100.0		

D

C

B

A



(C6) 95.0 MMIL-
 (C6) 95.0 MMIØL-

MEM CONT

CODE IDENT NO	SIZE	DRWG NO	REV
21101	B	91B0378	AT
SCALE	SHEET 101.0		

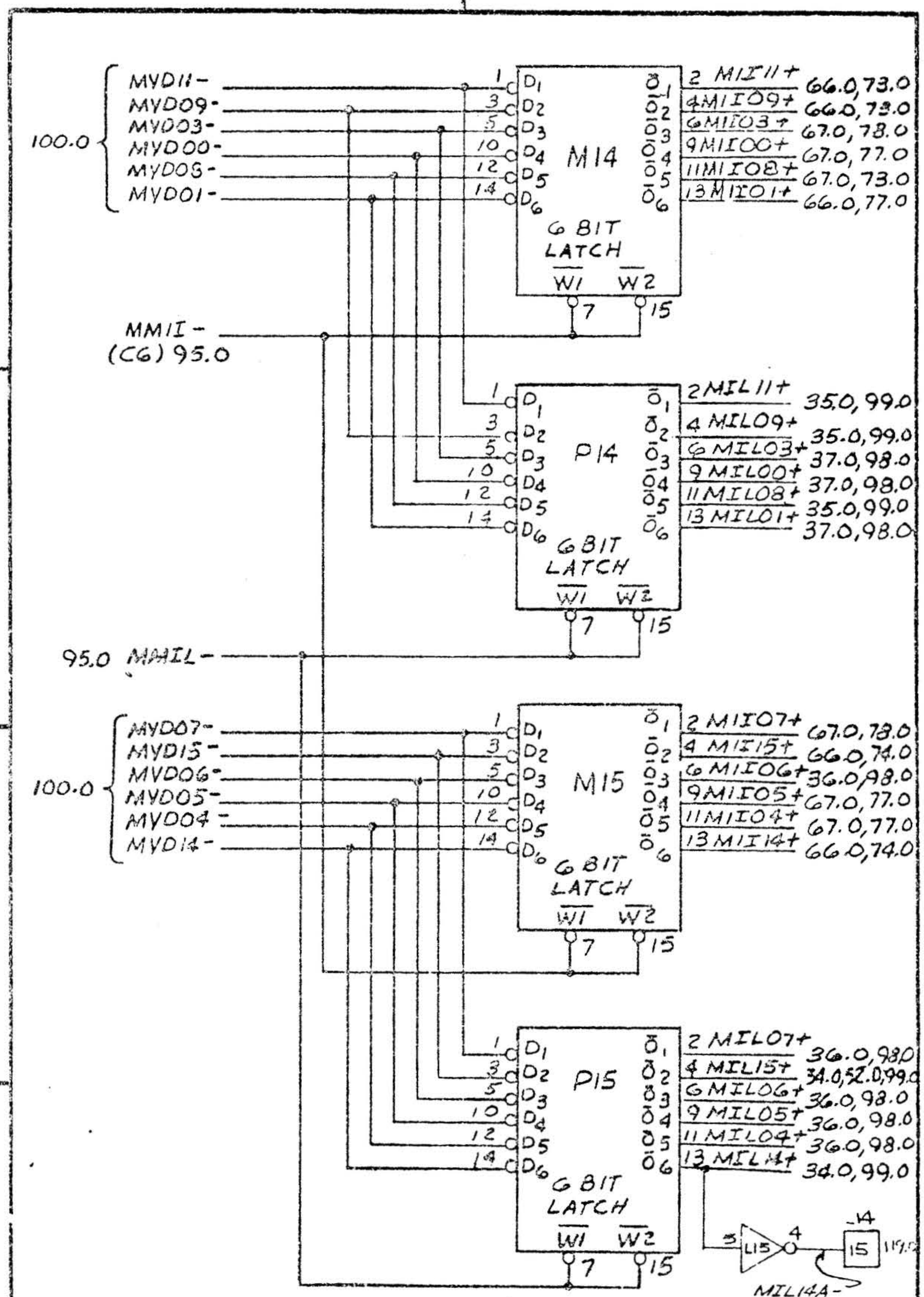
2 1

D

C

B

A



DESIGN NO.	REV	DATE	BY
21101	B	91B0378	AT

2

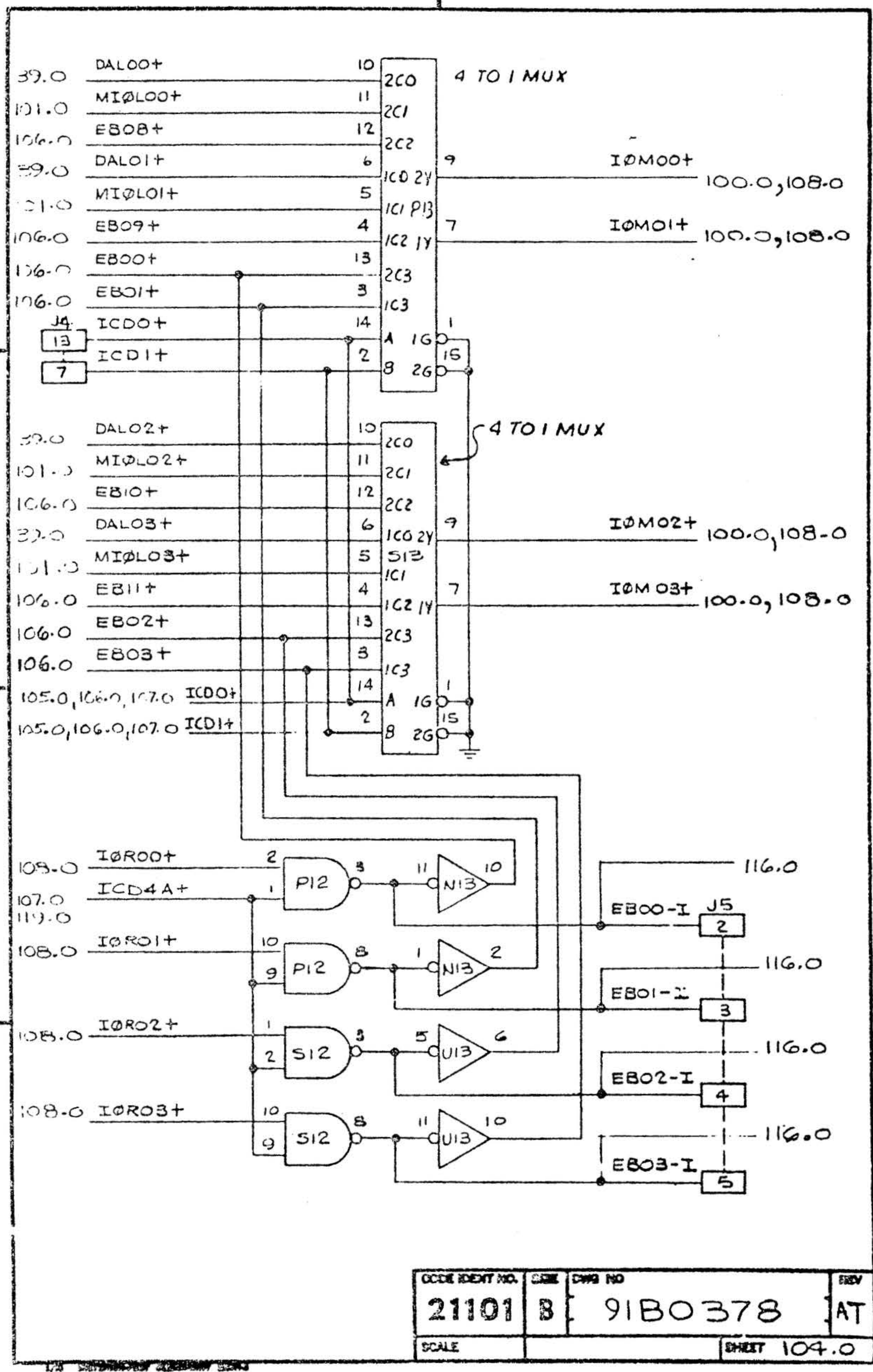
1

D

C

B

A



2

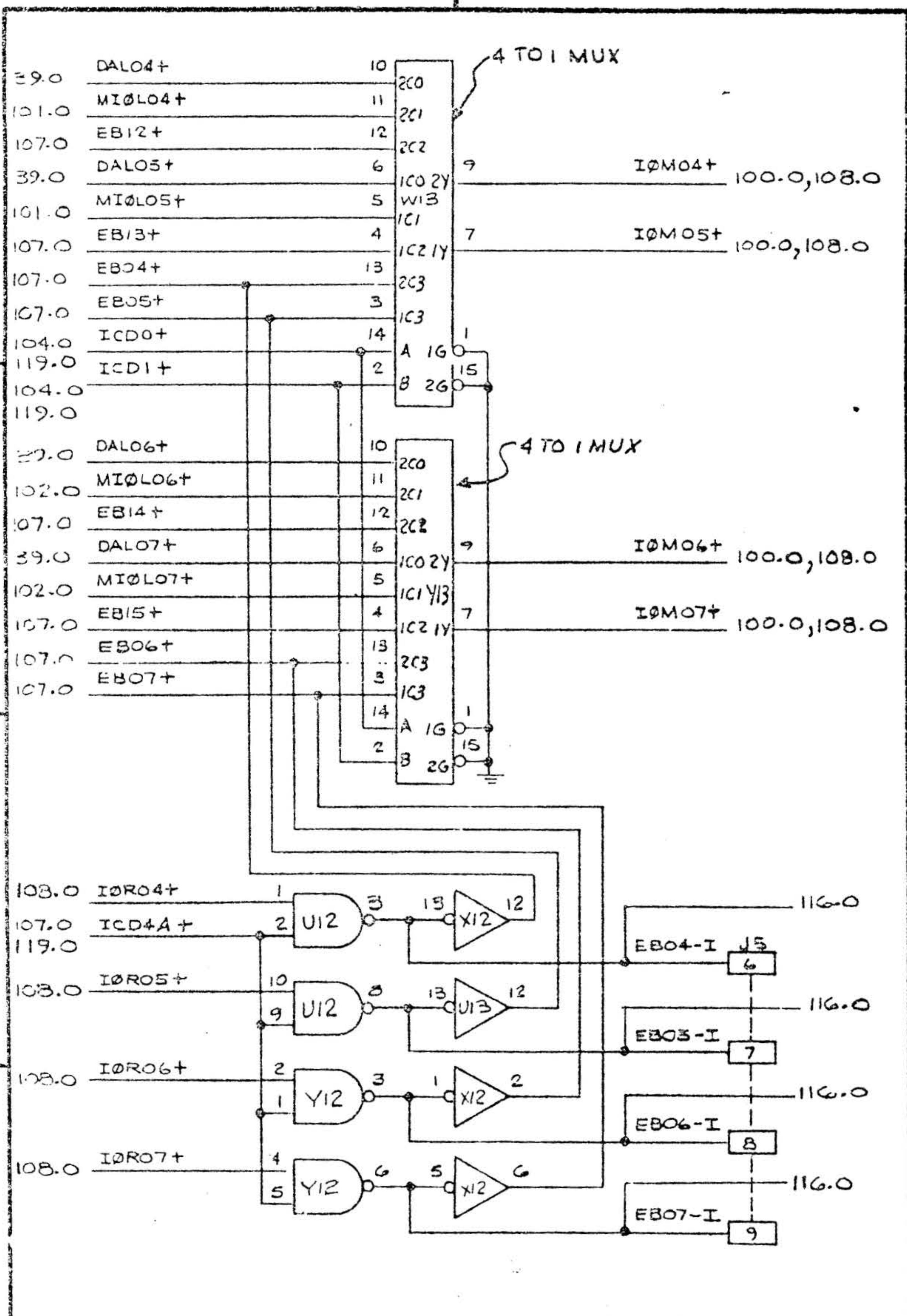
1

D

C

B

A



CCDC IDENT NO.	SIZE	DRWG NO.	REV
21101	B	91B0378	AT
SCALE		ISSUE	1 OF 0

2

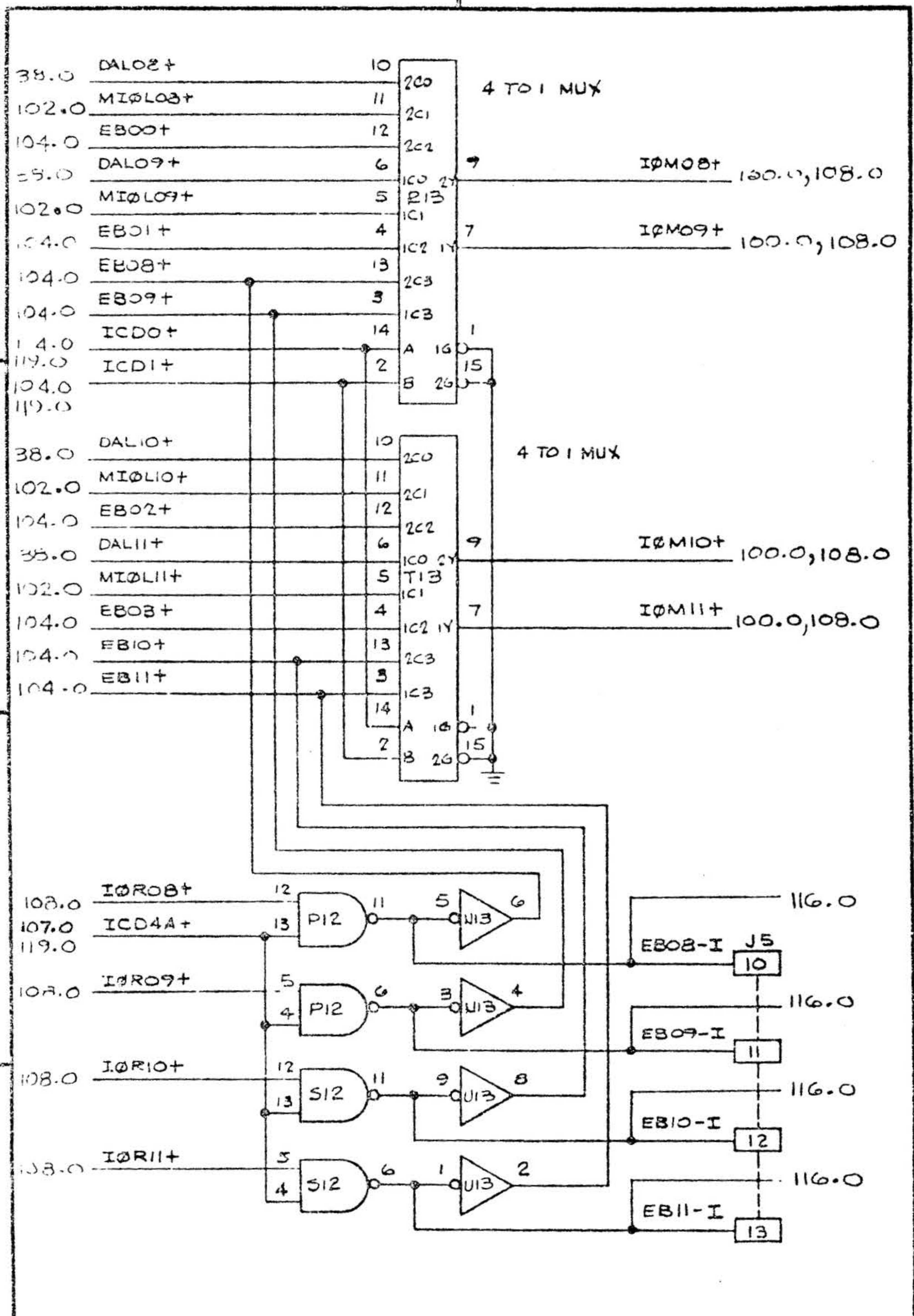
1

D

C

B

A



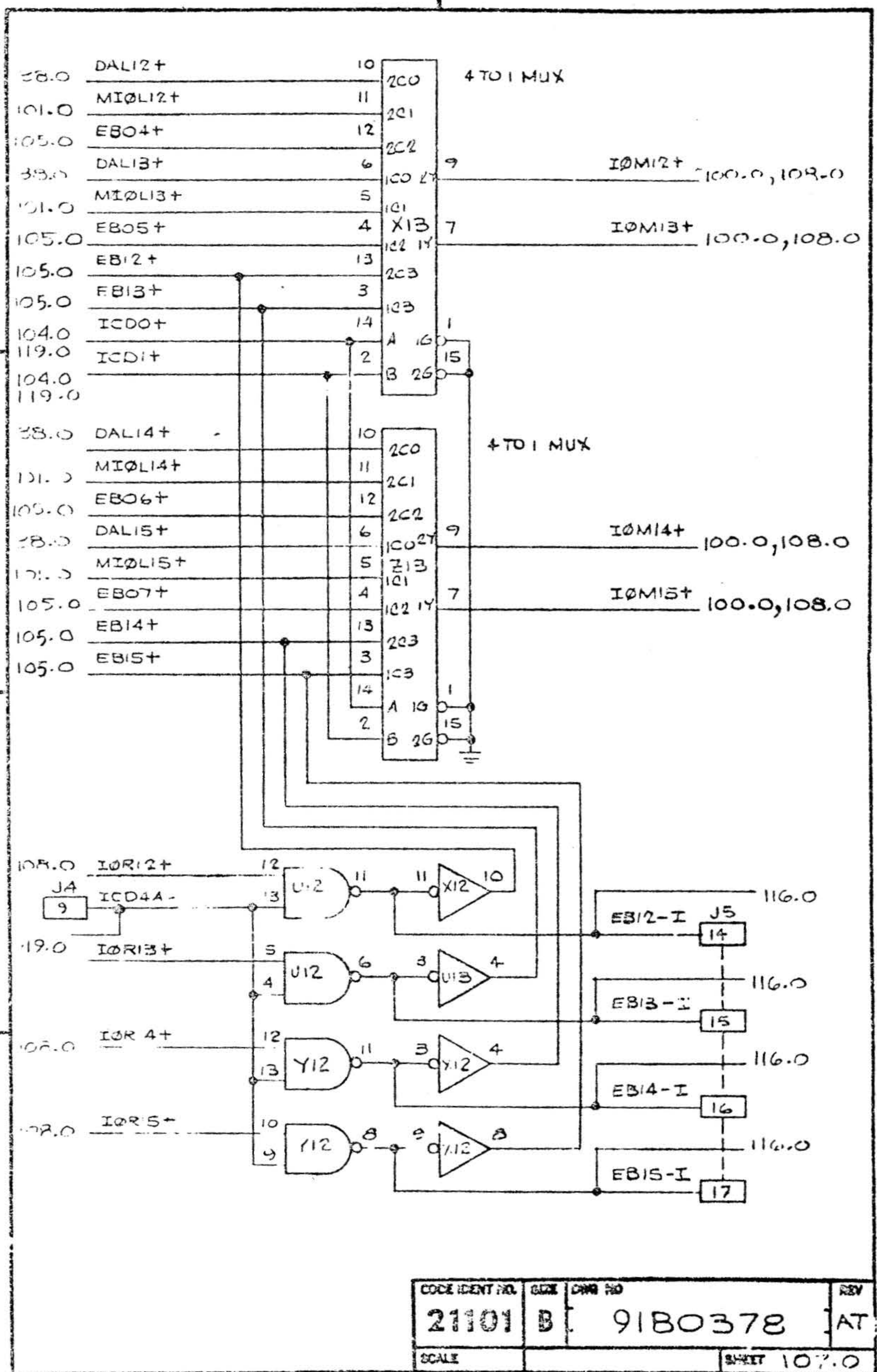
ECR CODE NO.	REV	DWG NO.	REV
21101	B	91B0378	AT
SCALE		SHEET 106.0	

D

C

B

A



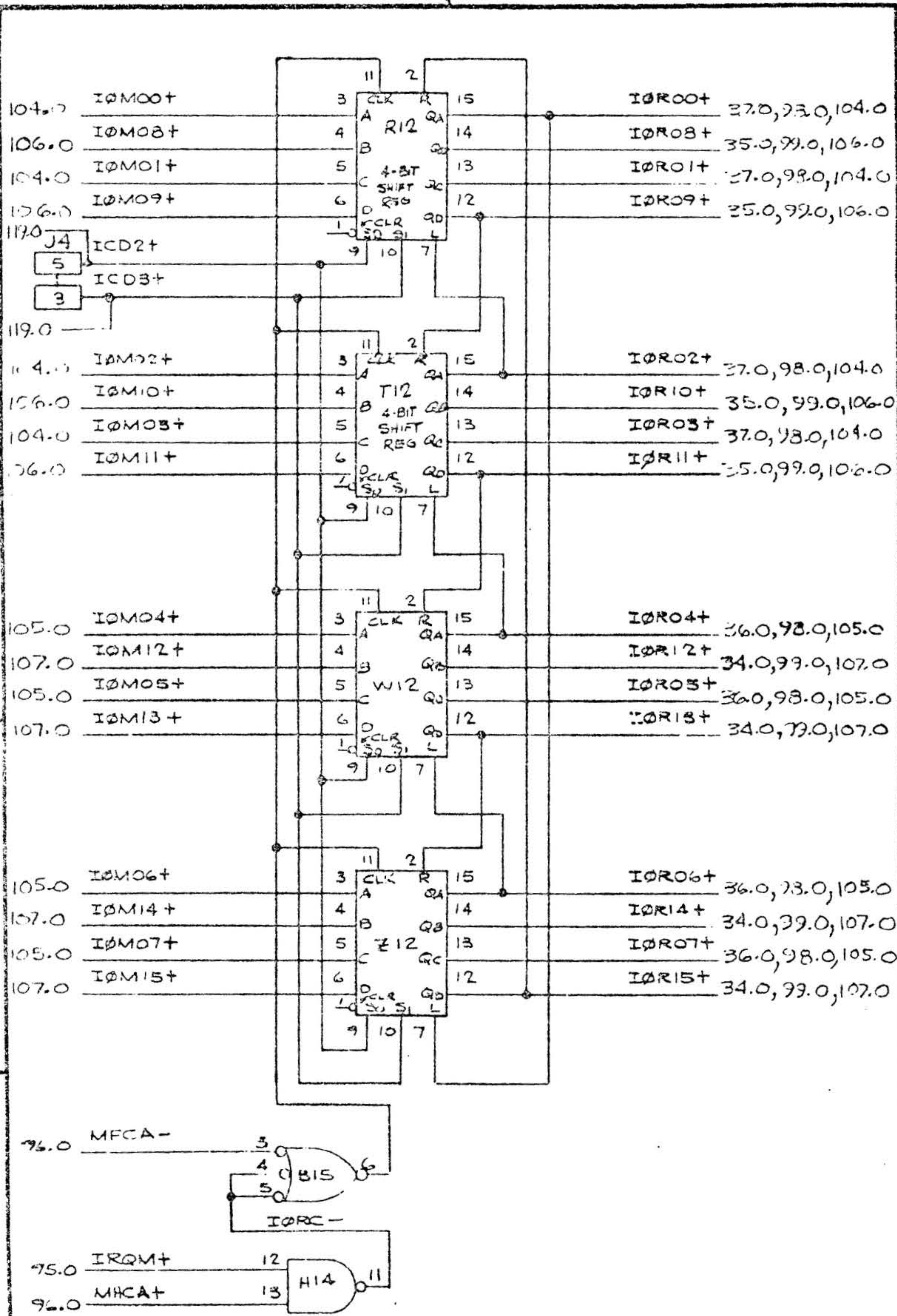
CODE IDENT NO.	SIZE	QWR NO	REV
21101	B	9180378	AT
SCALE		SHEET 107.0	

D

C

B

A



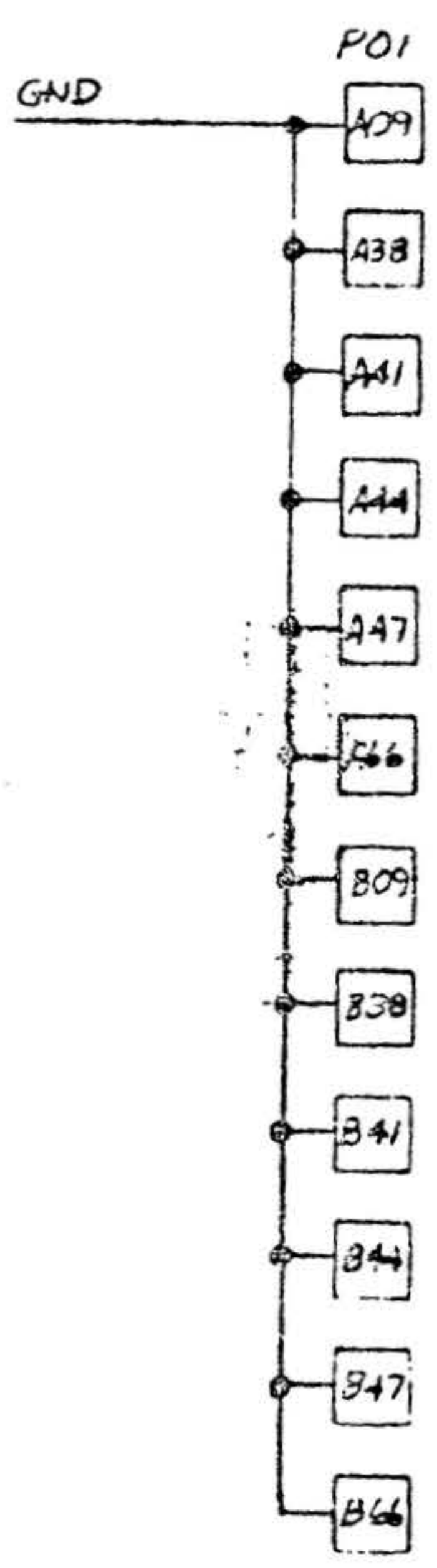
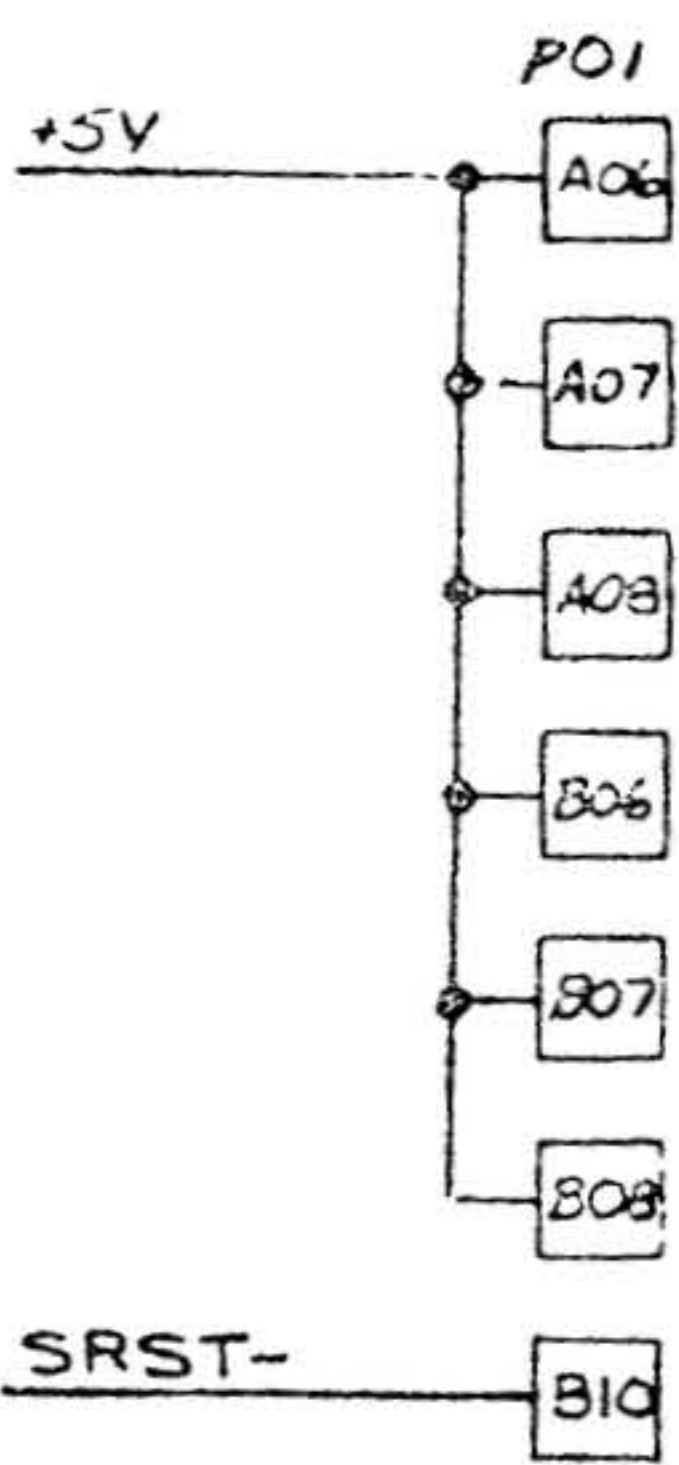
21101	B	9180378	AT
SCALE		SHEET 109.0	

D

C

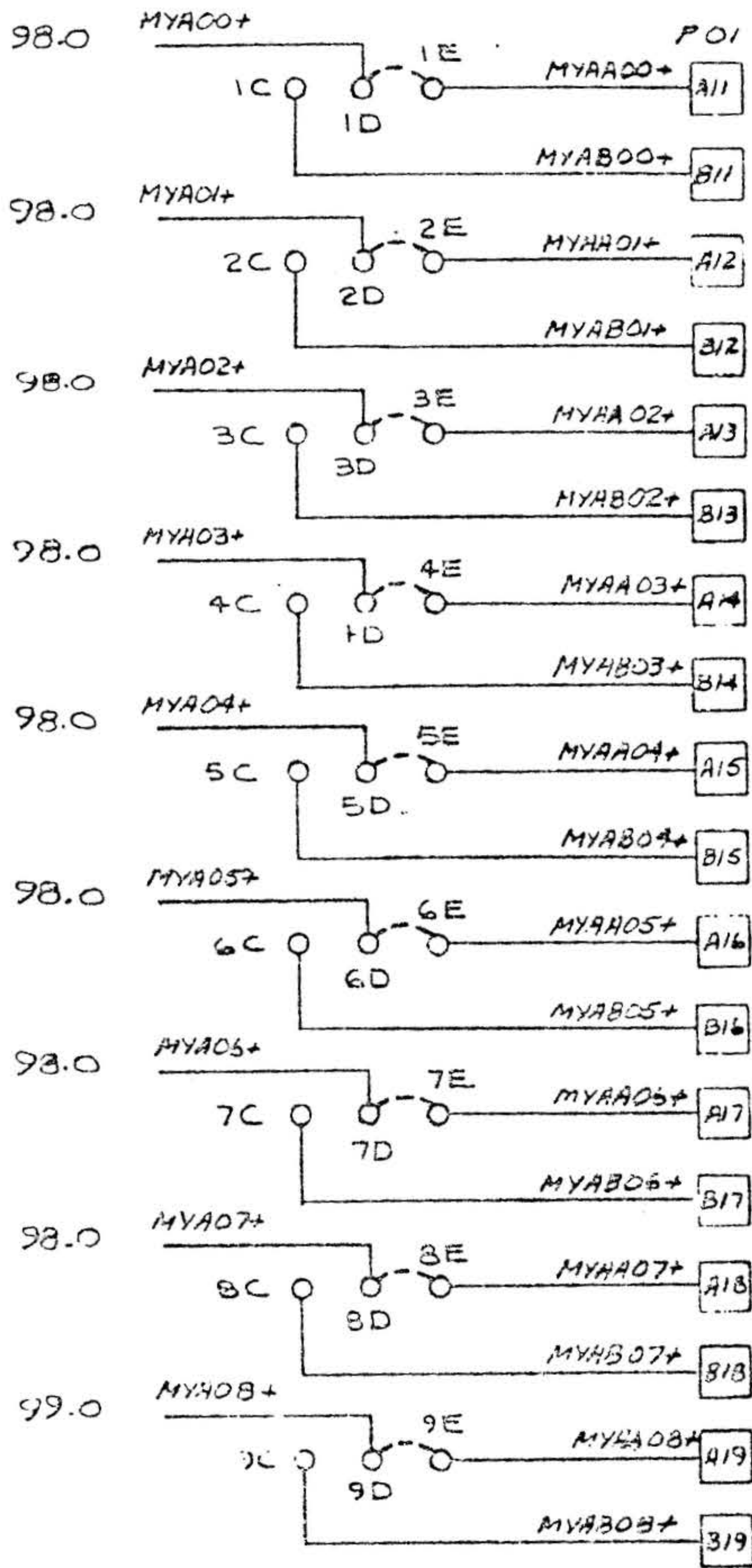
B

A



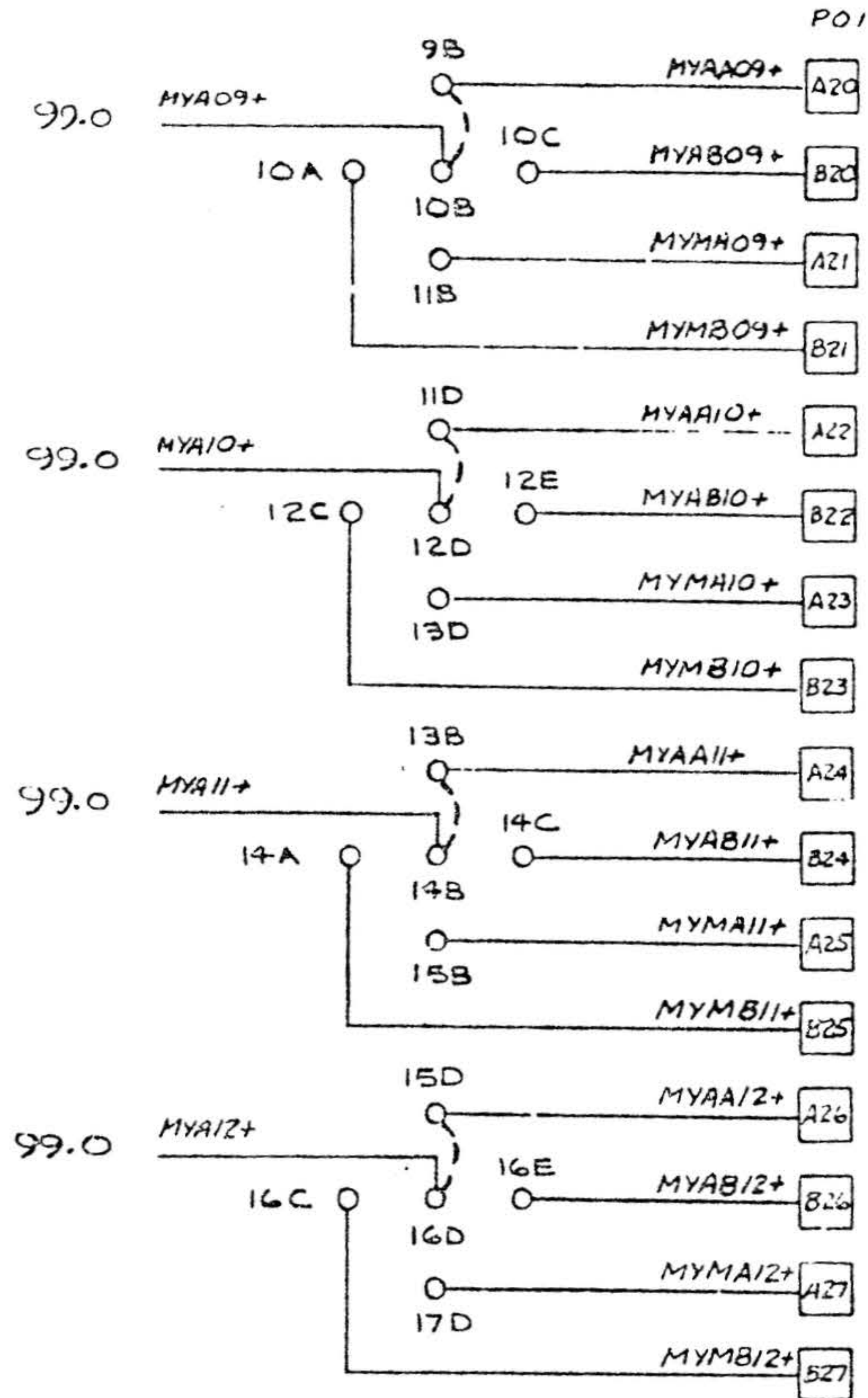
POWER & GND INPUTS

CODE IDENT NO.	SIZE	QWG NO	REV
21101	B	91B0378	AT
SCALE		SHEET 109.0	



MEMORY ADDRESS OUTPUTS 1

COCK PART NO.	SCALE	DATE	REV
21101	B	9180378	AT
SCALE	SHEET 110 OF		



MEMORY ADDRESS OUTPUTS 2

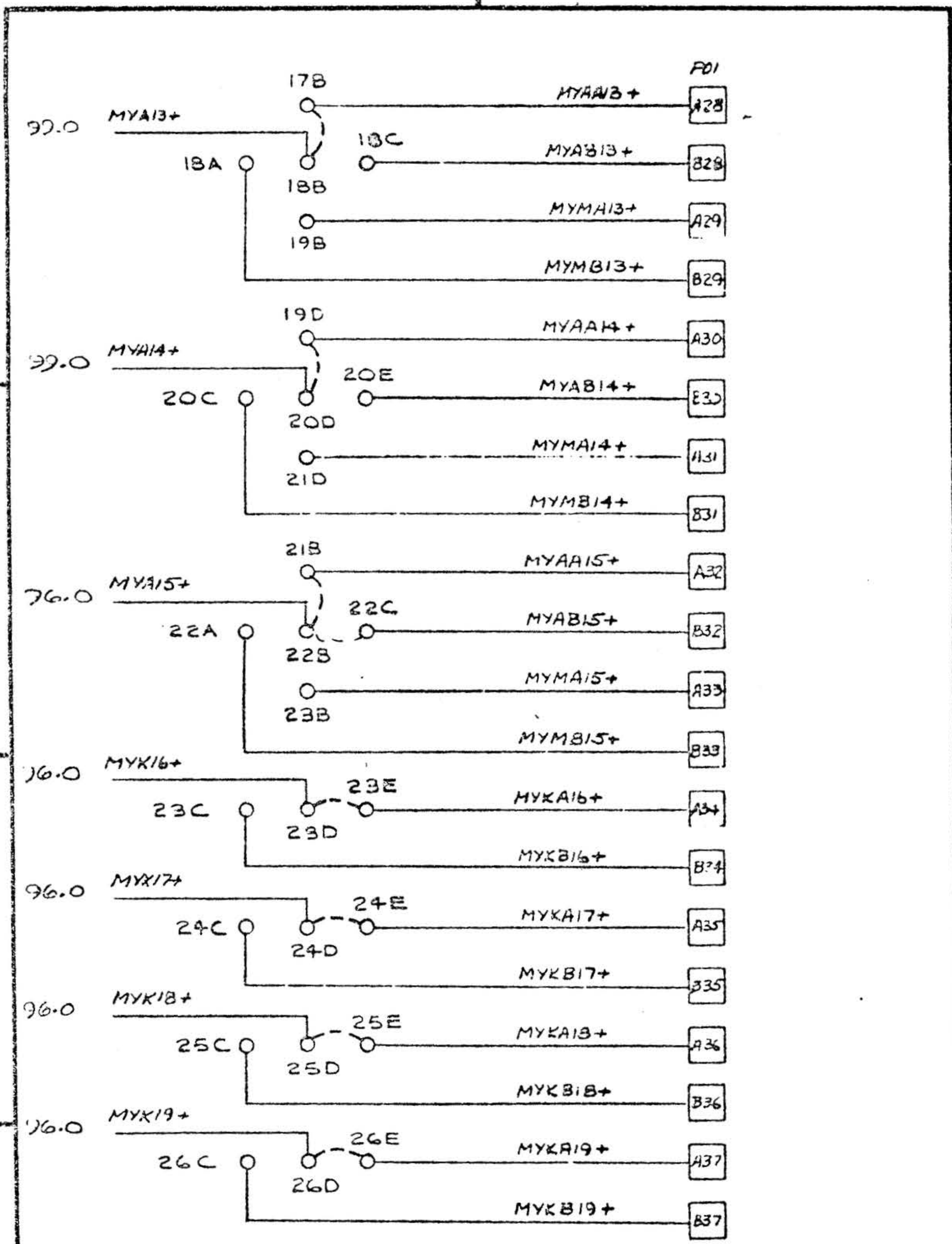
CODE IDENT. NO.	SIZE	ORIG. NO.	REV.
21101	B	91B0378	AT
SCALE	SHEET III.0		

D

C

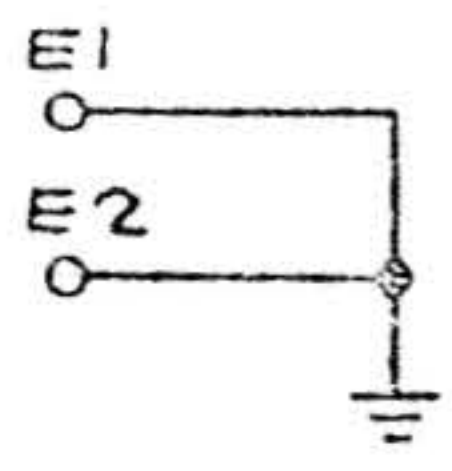
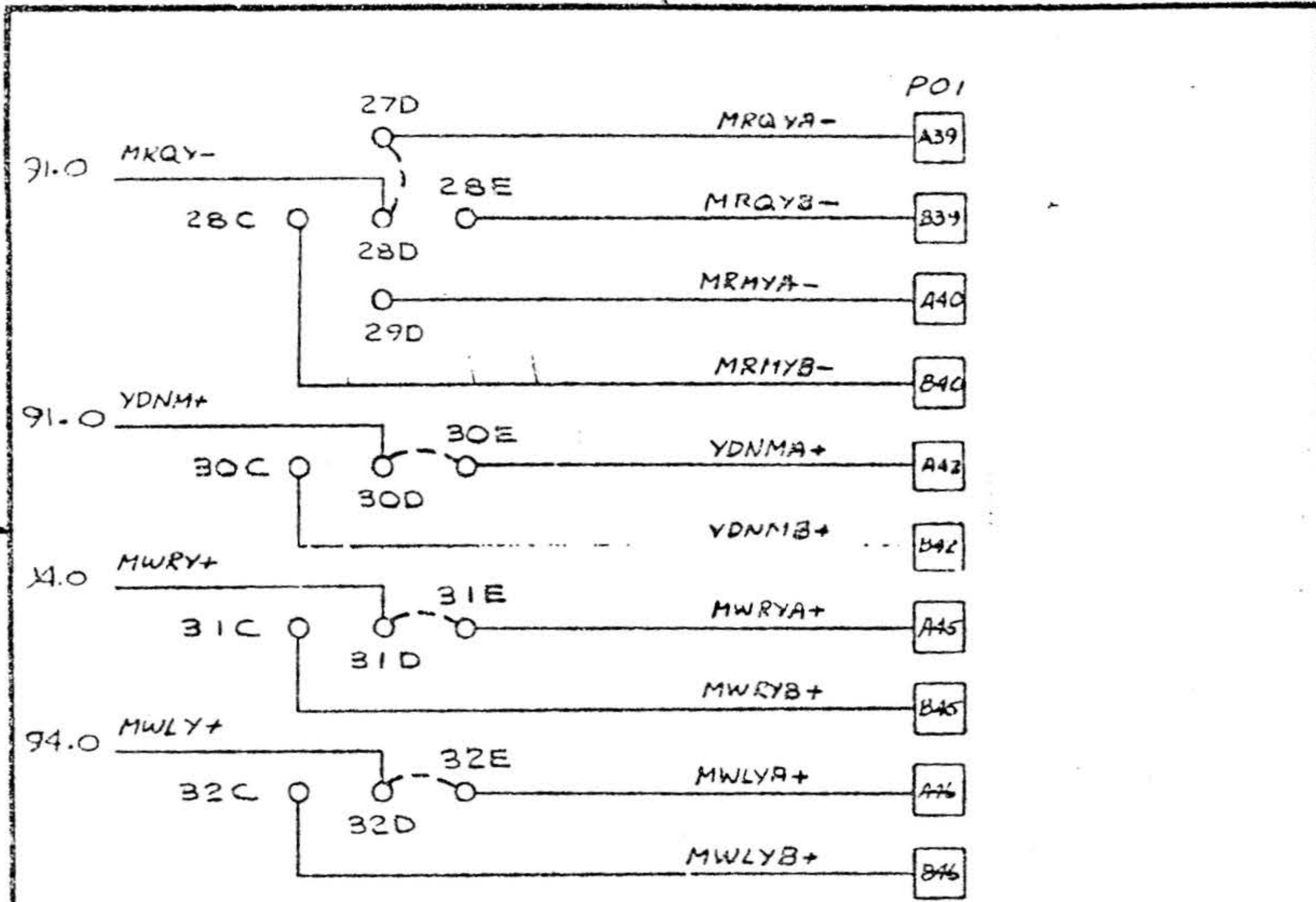
B

A



MEMORY ADDRESS OUTPUTS 3

21101	B	91B0378	AT
2112		2112.0	



MEMORY CONTROL INTERFACE

CONFIDENTIAL	REV	DATE	BY
21101	B	91B0378	AT
8011	CHG 113.0		

2

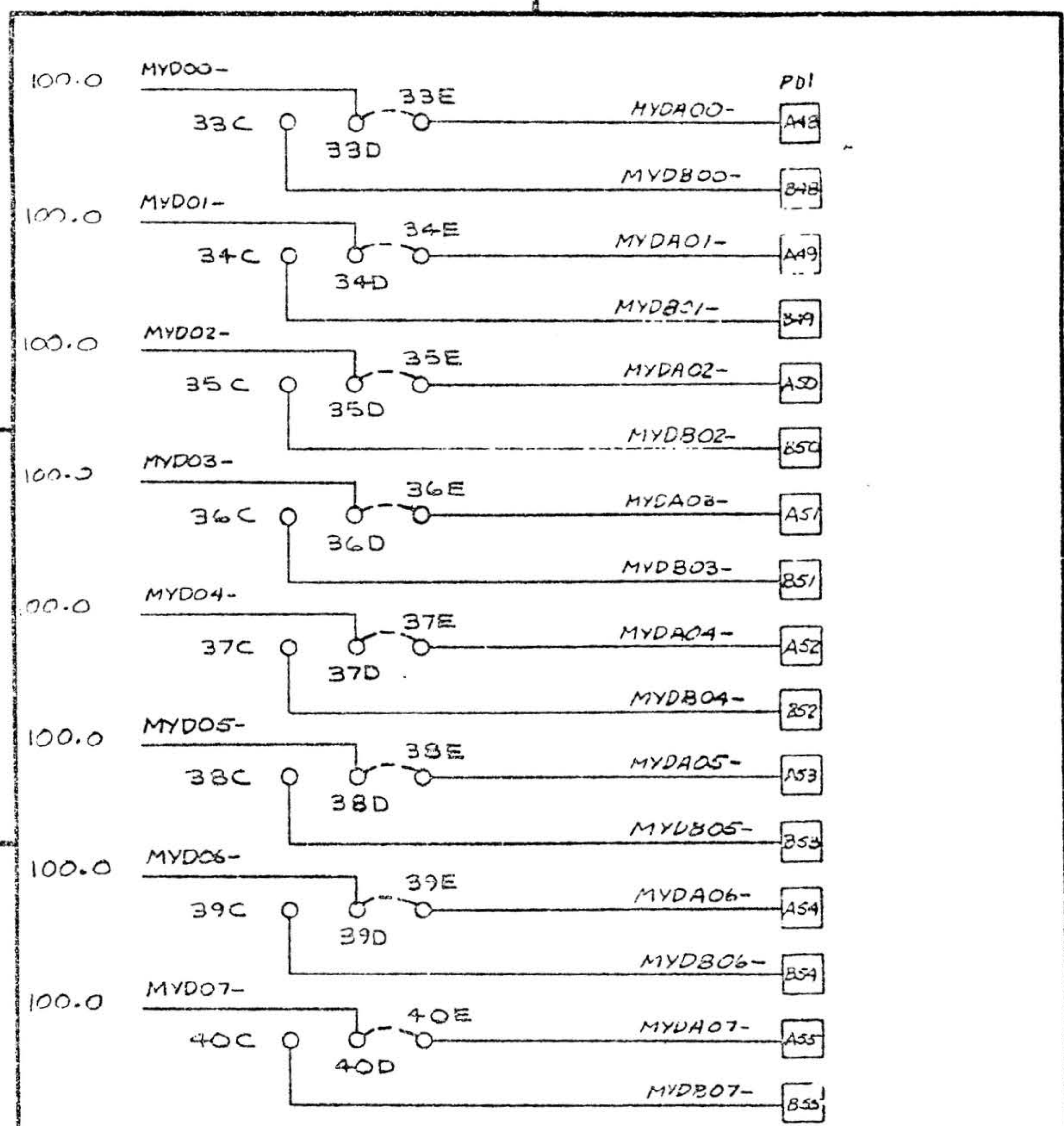
1

D

C

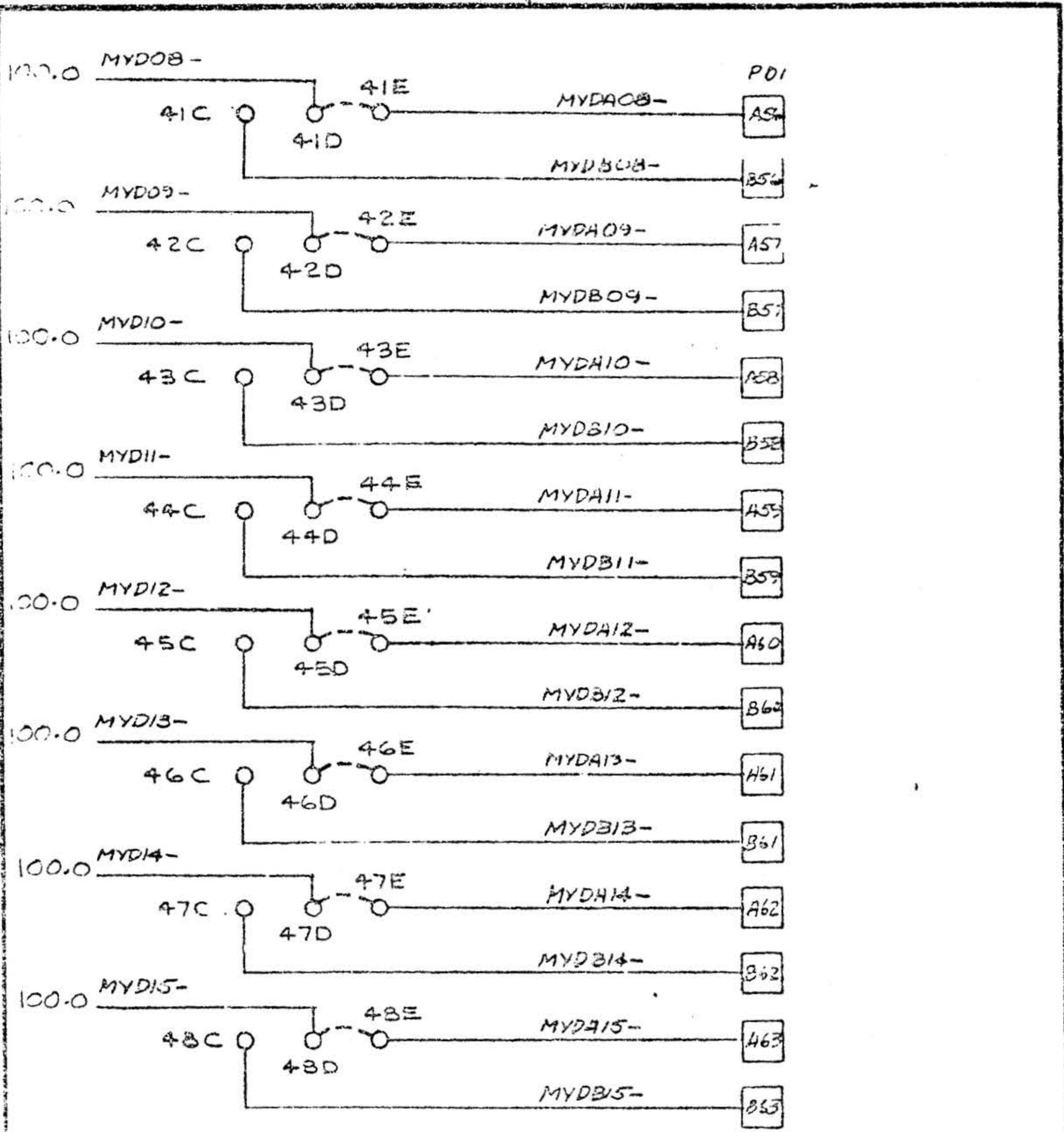
B

A



MEMORY DATA 1

LOCK IDENT NO.	SCALE	DATE	REV
21101	B	91B0378	AT
SCALE		SHEET 114.0	



MEMORY DATA 2

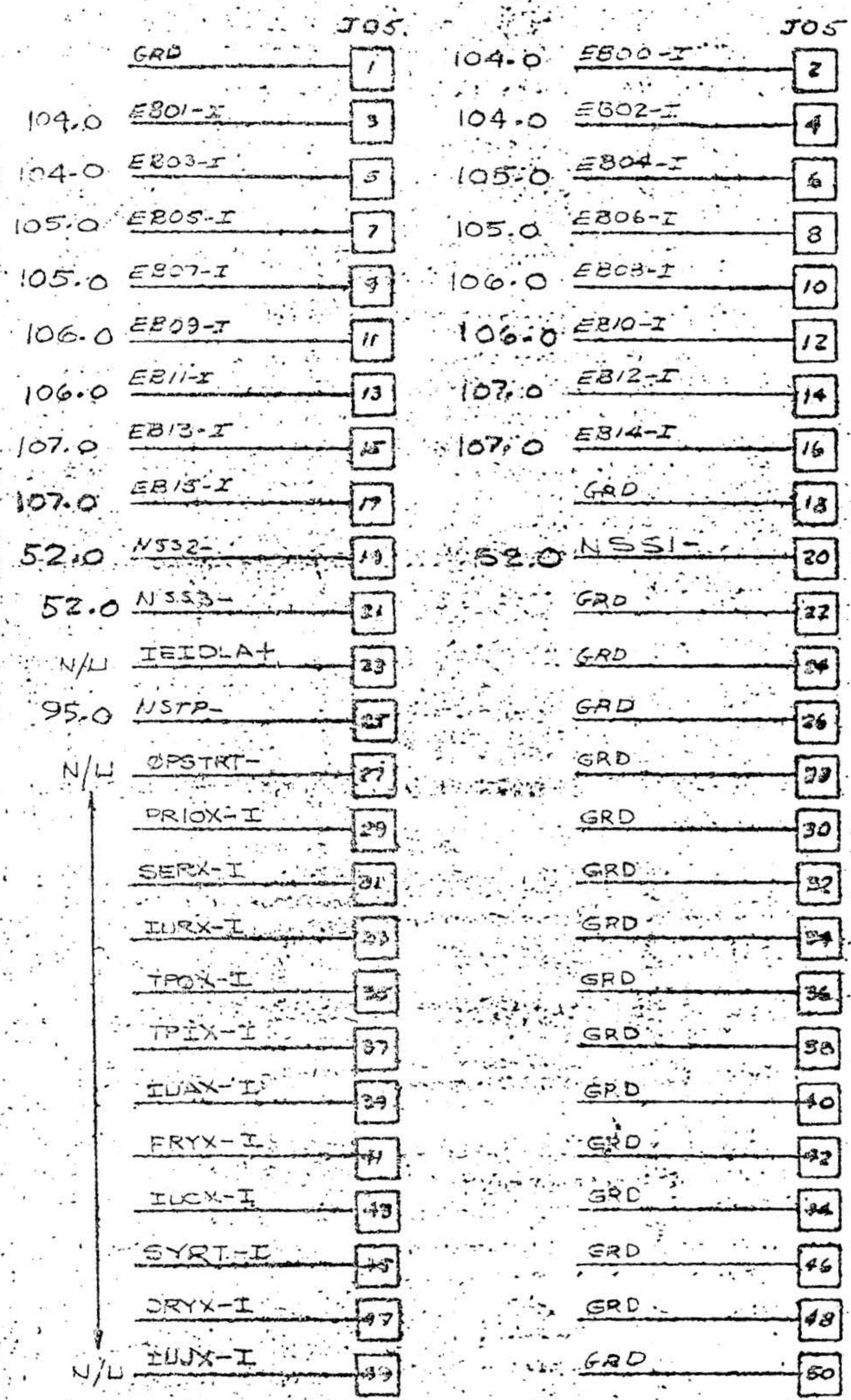
CODE IDENT NO.	REV	DATE	BY
21101	3	91B0378	AT
SCALE	SHEET 115.0		

D

C

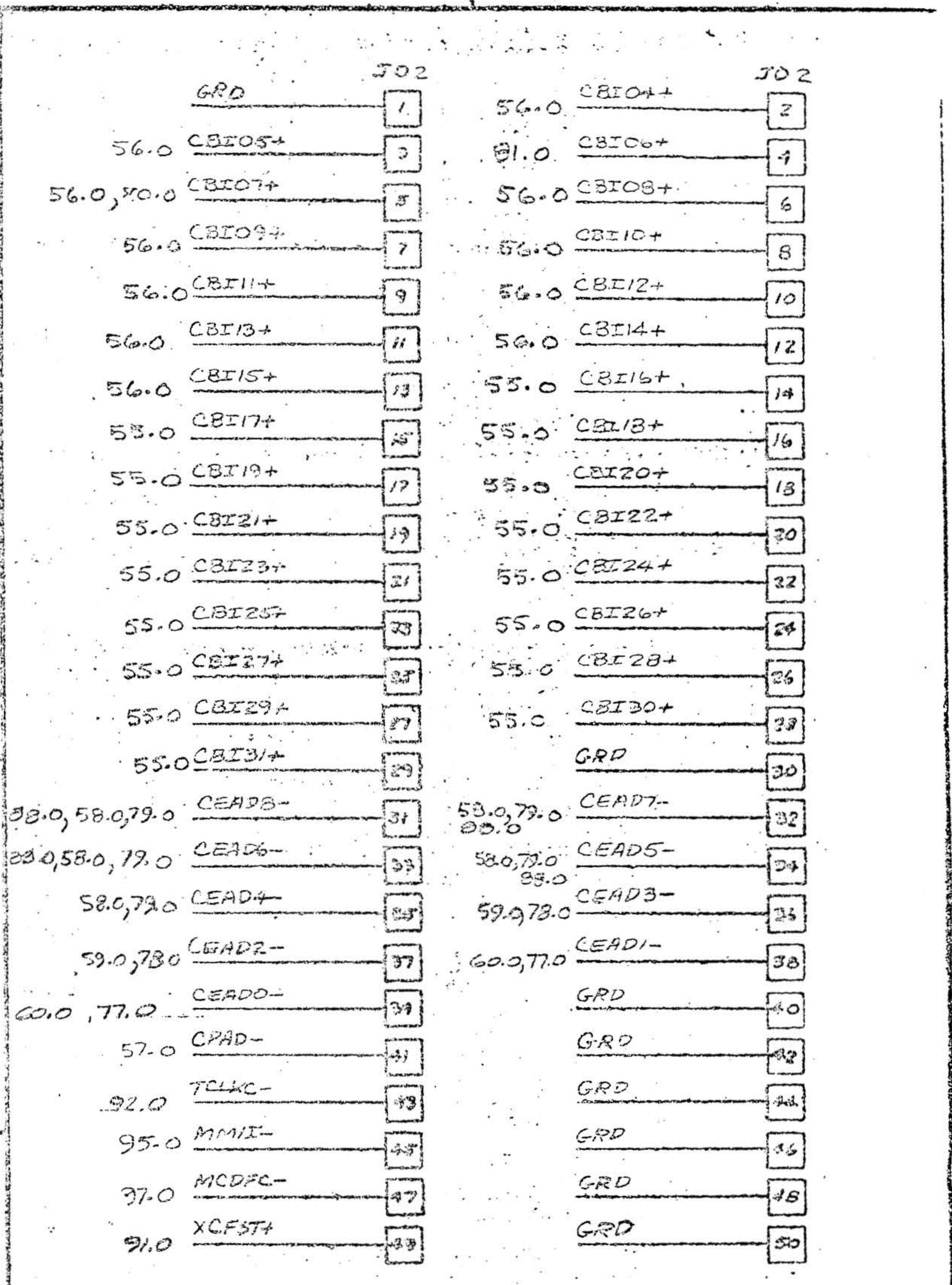
B

A



N/U INDICATES SIGNAL IS NOT USED ON PROCESSOR BOARD

21101	B	91B0378	REV
DATE		DRYTT 115	DT



IDENT NO.	SIZE	DATE	REV
21101	B	91B0378	1T
SCALE		SHEET 118.2	

D

C

B

A

	J04
GRD	1
108.0 ICD3+	3
108.0 ICD2+	5
104.0 ICD1+	7
107.0 ICD4H+	9
95.0 IRQM-	11
104.0 ICDD+	13
102.0 MILKA-	15
52.0 ISRD+	17
73.0 CINMPC-	19
87.0 QINT-	21
87.0 IRQC-	23
92.0 MHC-	25
62.0 CBMT+	27
74.0 CIDID+	29
97.0 MIMCI+	31
94.0 IWRMC-	33
94.0 IWLMC-	35
90.0 MAKID+	37
91.0 MRSZA-	39
90.0 QRQM-	41
90.0 MAXD+	43
86.0 CIDHLT+	45
86.0 CIDJMK+	47
90.0 MCRB+	49

	J04
61.0 CBTN+	2
61.0 CBTB-	4
61.0 CBTG+	6
61.0 CBTSTB+	8
89.0 CINTT+	10
N/U PRIX-I	12
43.0 DJUMPT+	14
64.0 CBABO+	16
64.0 CBABI+	18
60.0 IIAO+	20
MTRC-	22
76.0 CACIDE+	24
59.0 IIA3+	26
59.0 IIA2+	28
60.0 IIA1+	30
92.0 MDCCLK+	32
99.0 MTMII+	34
64.0 CBMR+	36
92.0 MFC-	38
86.0 CPMAS+	40
11.0 CCS3D+	42
86.0 IAKCI-	44
65.0 CRQID+	46
86.0 IDMC-	48
GRD	50

21101	B	91B0378	AT
			119.0