

REVISIONS

SYM	DESCRIPTION	APPROVED	DATE
A	PRODUCTION RELEASE PER EN81014	<i>[Signature]</i>	8/7/72
B	REVISED NOTE 3 PER EN 81352	<i>[Signature]</i>	12/6/72

DWG NO

44A0637

FOR PARTS LIST SEE 44P0637

DR	<i>MANCARELLI</i>	6-23-72
CHK	<i>[Signature]</i>	7/17/72
DSGN	—	—
ENGR	<i>[Signature]</i>	7-19-72
APPD	<i>[Signature]</i>	7/19/72
APPD	—	—



varian data machines / a varian subsidiary
2722 michelson drive / irvine / california / 92664

TITLE
PEC DISC CONTROLLER
MODIFICATION

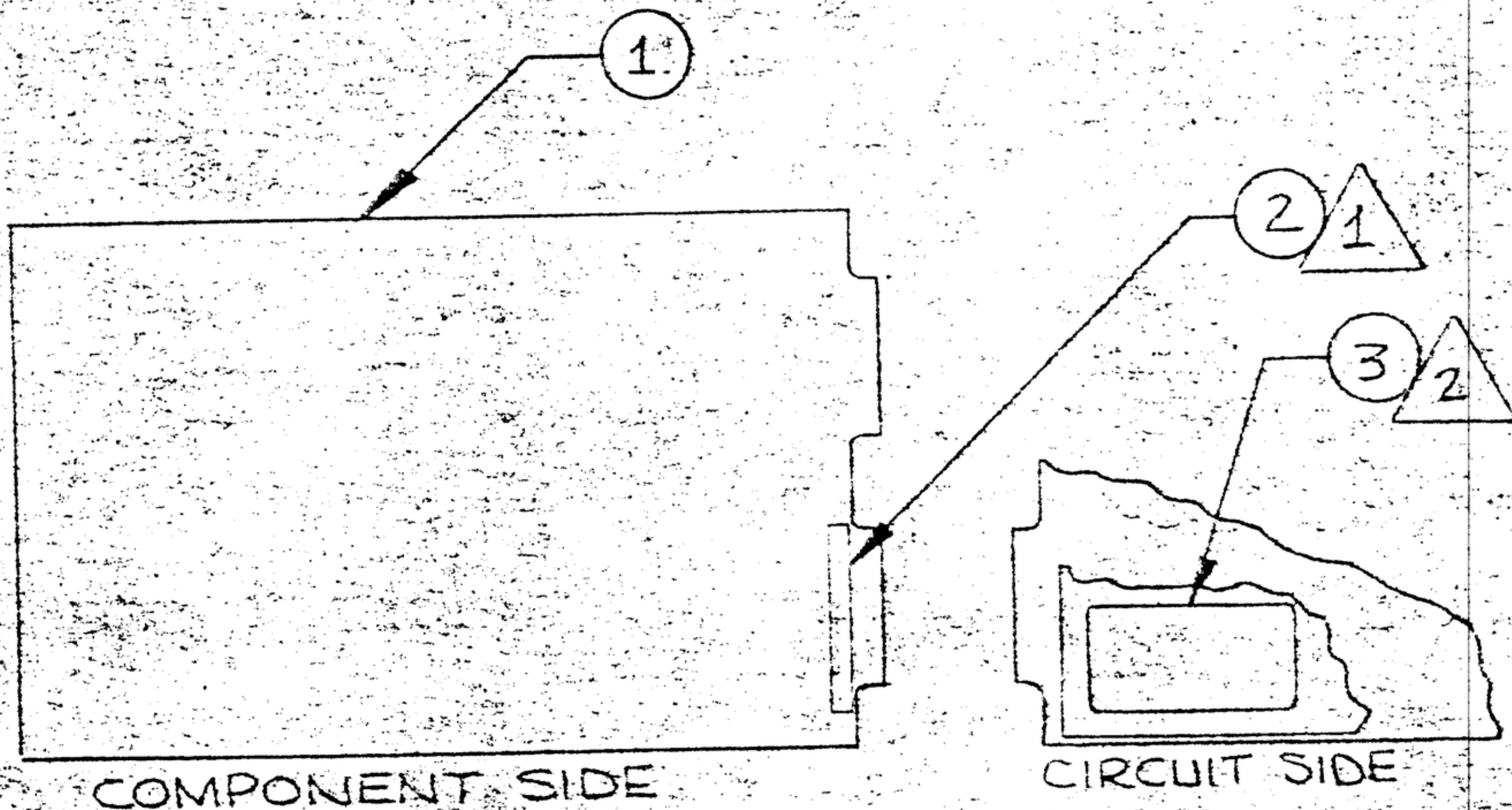
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CODE IDENT NO.	SIZE	DWG NO.	REV
21101	A	44A0637	B
SCALE	620-36	SHEET 1	OF 3

96A0153-000B

NOTES: UNLESS OTHERWISE SPECIFIED:

1. THIS DRAWING MODIFIES 44P0551-000 FOR USE AS A 620-36 PEC DISC CONTROLLER.
2. ADD AND DELETE WIRES PER WIRE LIST 95W0942.
3. ADD F/N 7 & 4 TO BOARD, AT POSITION A8.
4. REMOVE EXISTING LABEL IDENT. AND REPLACE WITH NEW LABEL IDENT. WHERE SHOWN BELOW.
5. ADD F/N 7 & 6 TO BOARD AT POSITION D5.
6. ADD F/N 8 & 7 TO BOARD AT POSITION S8.



MARK PART NO. 44P0637-000 AND THE REVISION LETTER OF THE PARTS LIST TO WHICH THE PART WAS MANUFACTURED ON LABEL (F/N 2) IDENTIFICATION TO BE .12 HIGH CHARACTERS AND PERMANENT.



varian data machines
a varian subsidiary

CODE
IDENT NO.

21101

44A0637

SH 2 OF 3

B

REV

2

MARK IN TITLE, PARTS LIST NO. 44P0637-000, WIRE LIST NO. 95W0942, LOGIC DIAGRAM NO. 91C0394 AND THE REVISION LETTERS TO WHICH THE PART WAS MANUFACTURED ON LABEL (F/N 3) IDENTIFICATION TO BE .12 HIGH CHARACTERS AND PERMANENT.



varian data machines
a varian subsidiary

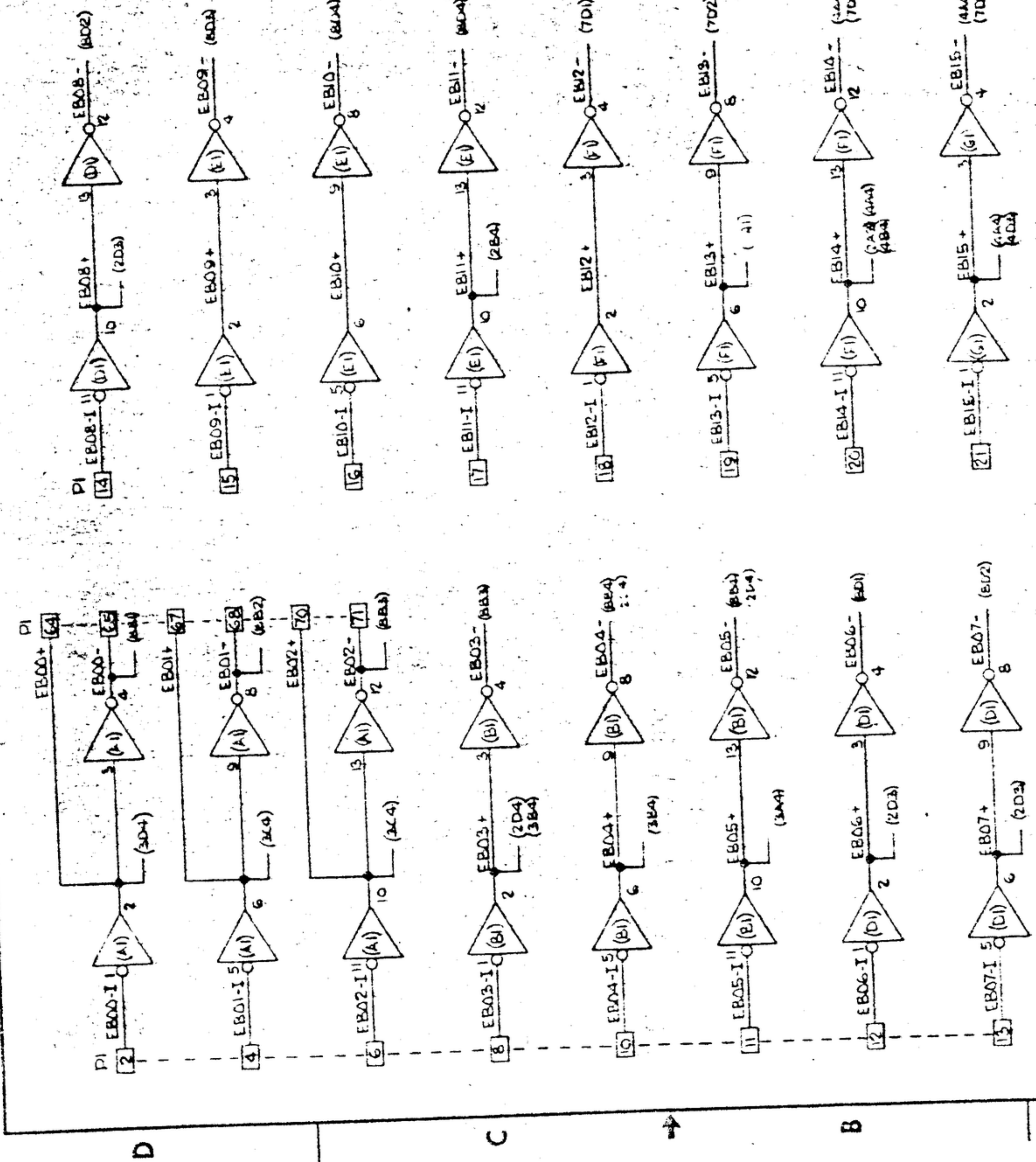
CODE
IDENT NO.

21101

44A0637 B

SH 3 OF 3 REV

REVISIONS		DATE	
SYM	ZONE	DESCRIPTION	APPROVED
X		MODIFIED FOR MODEL 620-36 SHITS 2,515	[Signature]
A		PRODUCTION RELEASE PER EN 81014 3/1/74	[Signature]
B		REVISED PER EN 81552	[Signature]
C		REVISED PER EN 81527	[Signature]
D		REVISED PER EN 82237	[Signature]

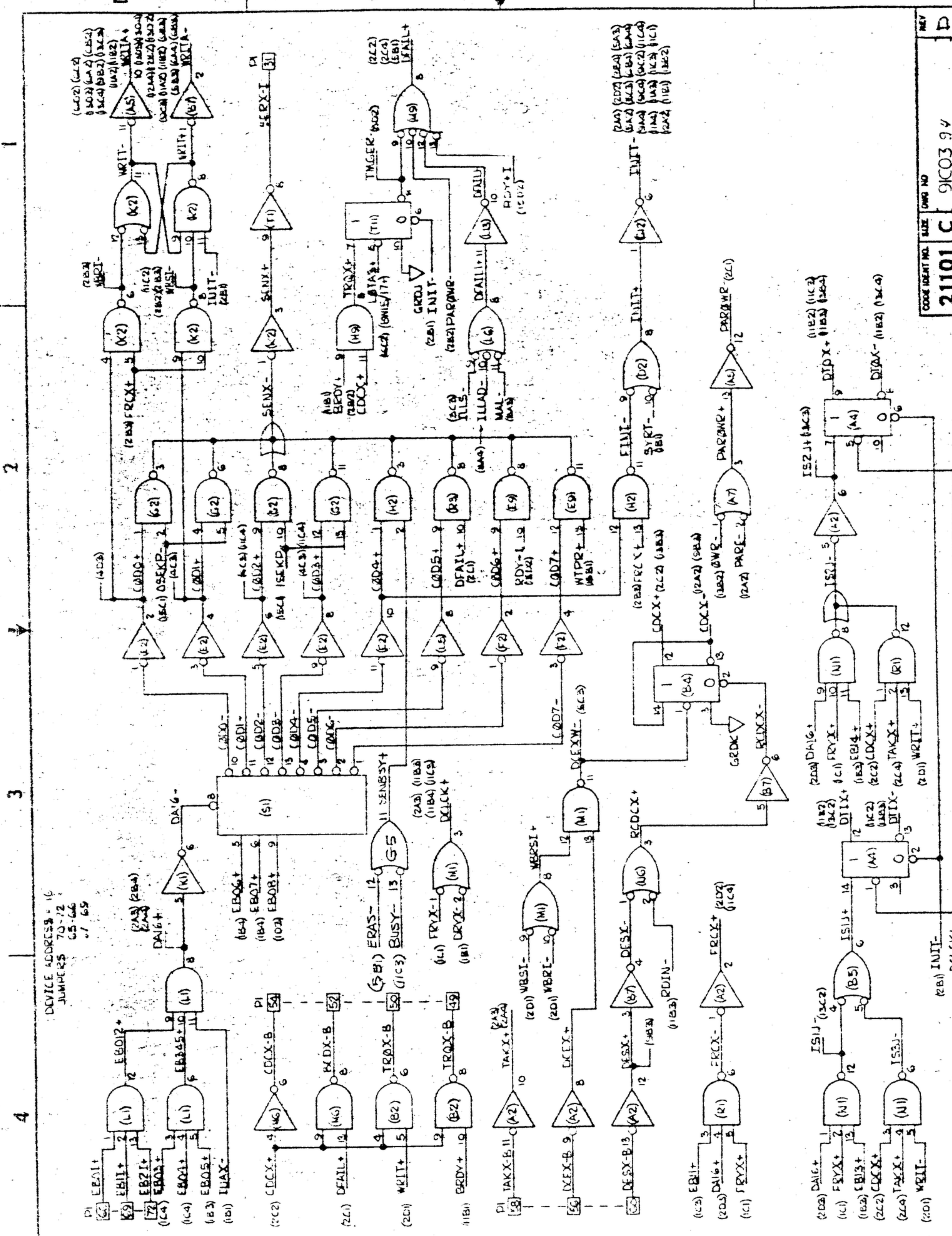


VIA VALIAN DATA MACHINES a valian subsidiary 212 Michigan Drive, Irvine, California, 92714		REV	D
TITLE DISC CONTROLLER		CODE IDENT NO.	91C0394
MODEL 620-36		SIZE	DWG NO
SCALE		21101 C	91C0394
SHEET 1		OF 16	

DIMENSIONS ARE IN INCHES AND AFTER FINISHING
 TOLERANCES UNLESS OTHERWISE SPECIFIED
 X ± .1
 XX ± .05
 XXX ± .010
 ANGLES ± .05°
 BREAK ALL SHARP EDGES .010 R APPROX
 DO NOT SCALE DRAWING

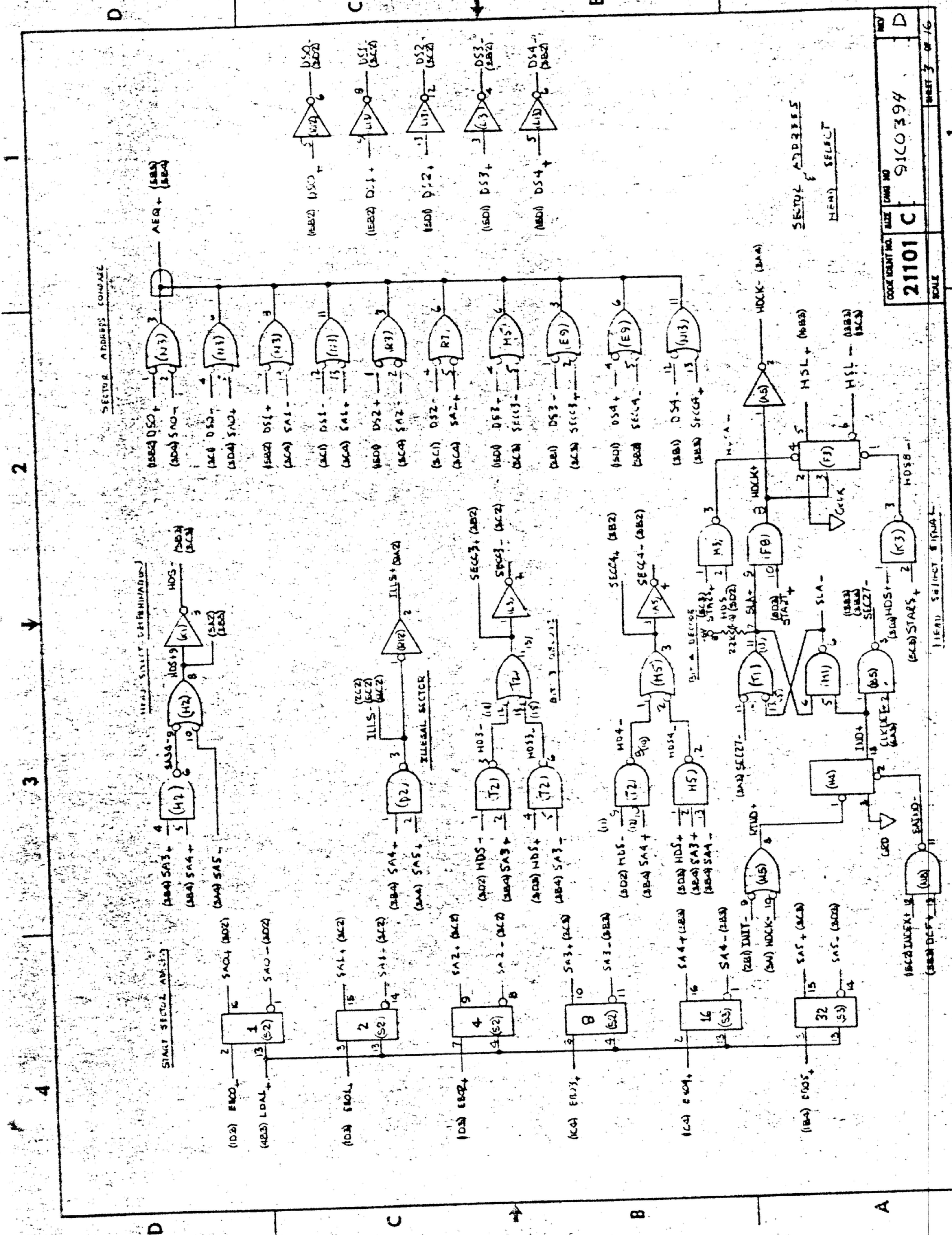
MODEL NO.	620-36
NEXT ASSY	
MATERIAL	
FINISH	

NOTES: (UNLESS OTHERWISE SPECIFIED)

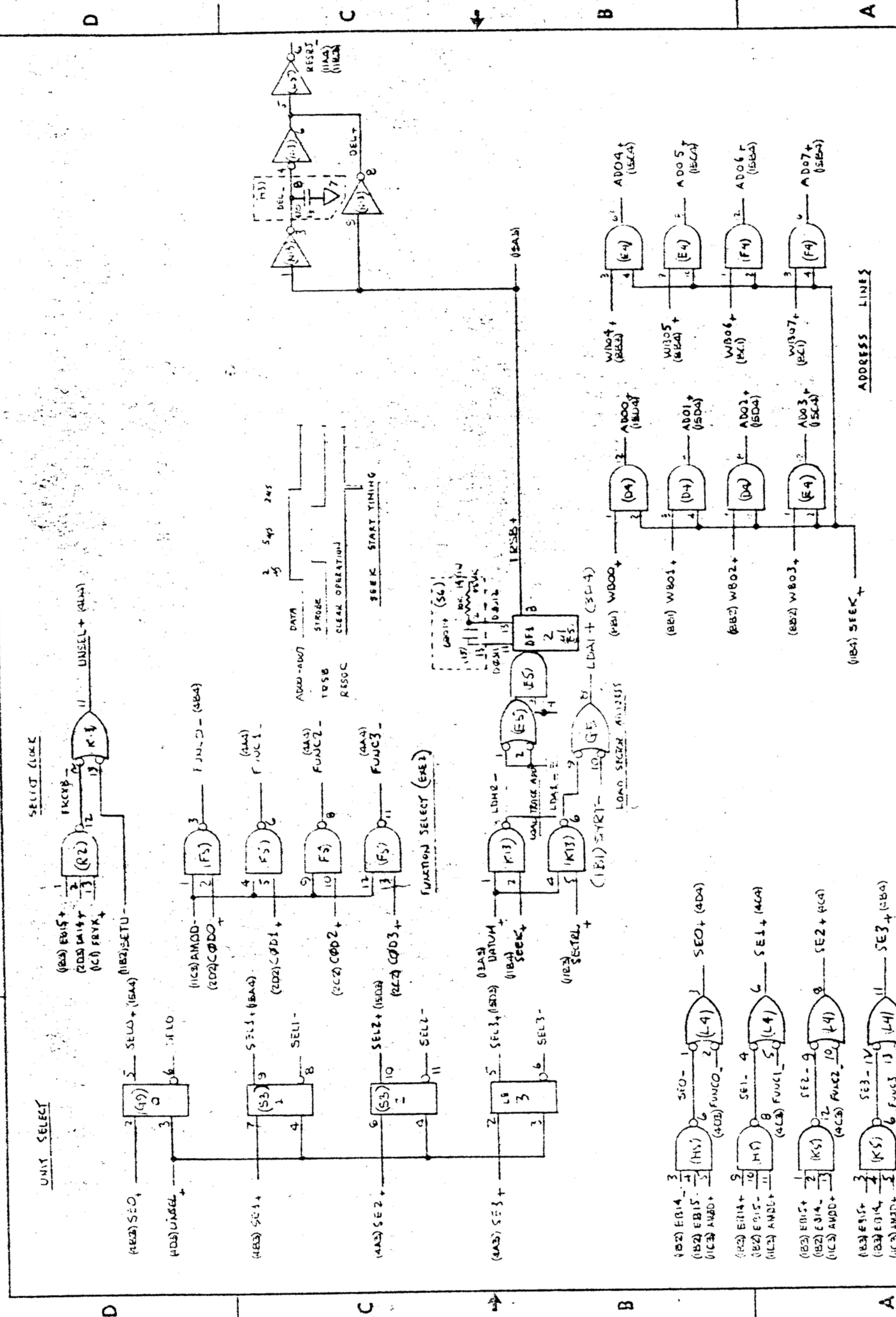


DEVICE ADDRESS = 16
 JUMPERS 70-72
 65-66
 67-68

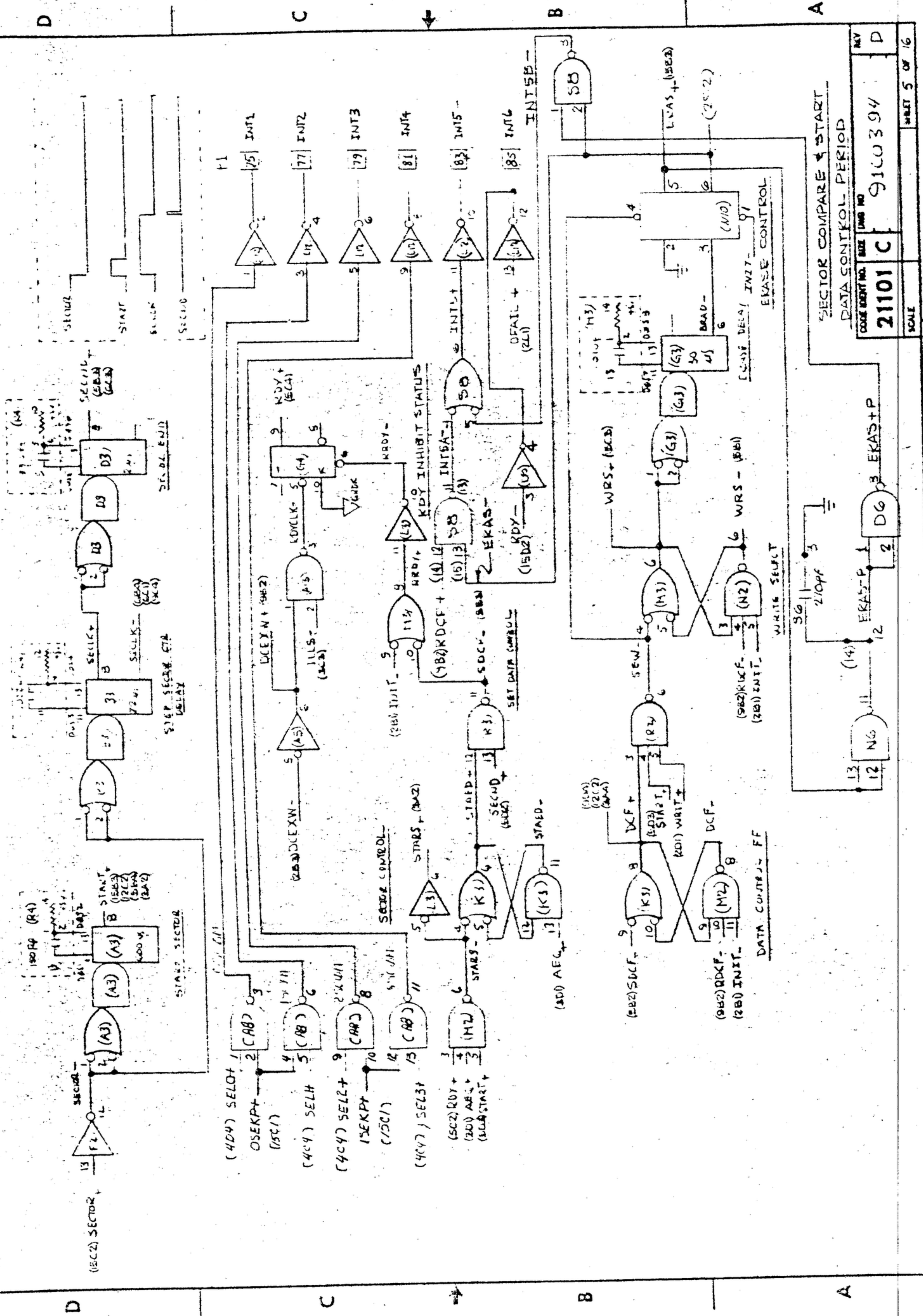
CODE IDENT NO.	21101
SIZE	C
DWG NO.	91C03 94
REV	D
SHEET 2 OF 16	



CODE IDENT NO.	DATE	CHG NO.	REV.
21101 C		910394	D
SCALE			SHEET 3 OF 16



SECTOR CONTROL LOGIC



D

C

B

A

1

2

3

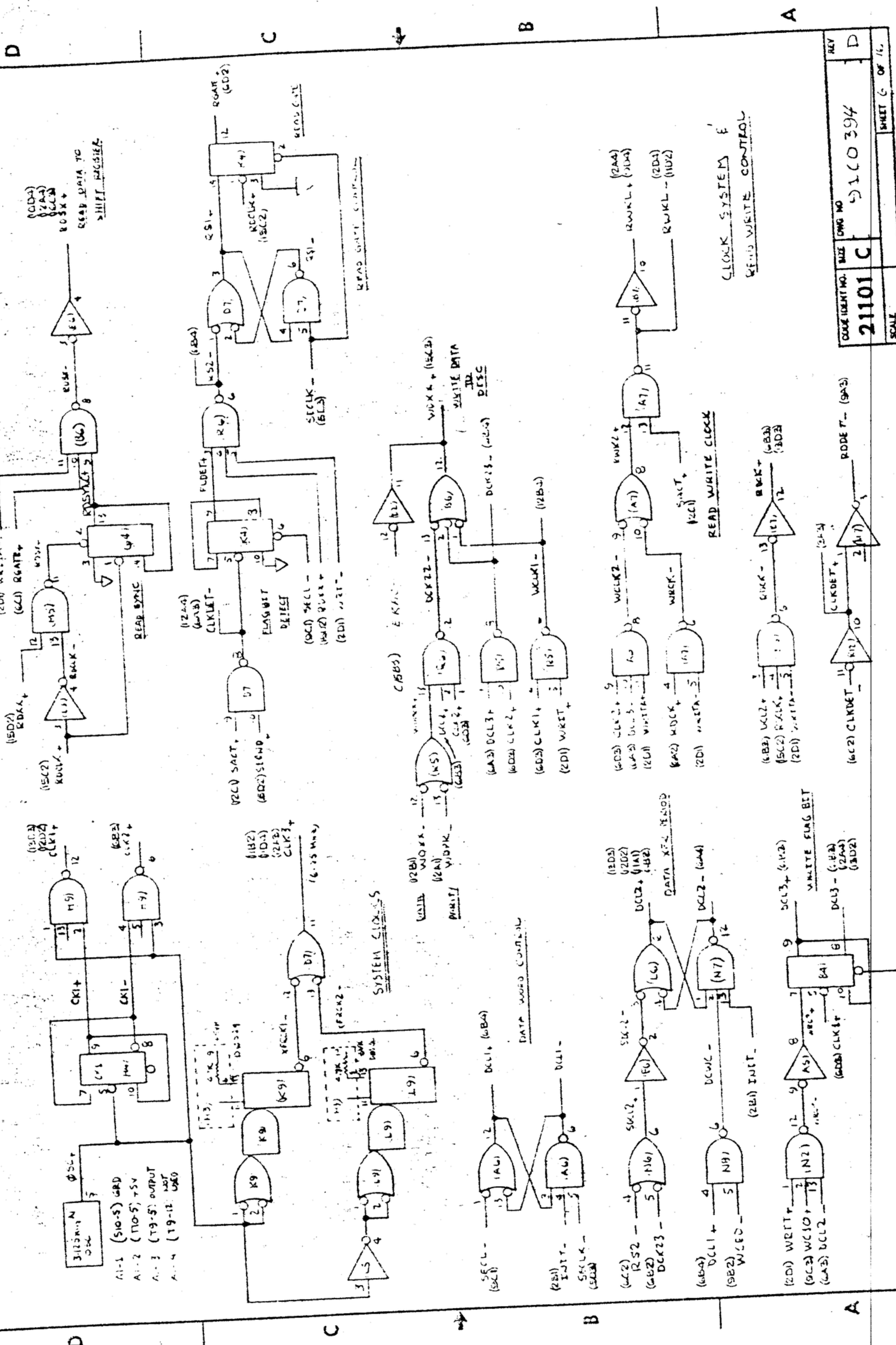
4

1

2

3

4



READ DATA TO
SHIFT REGISTER

READ WRITE CONTROL

CLOCK SYSTEM

READ WRITE CONTROL

DATA WORD CONTROL

WRITE DATA TO
SHIFT REGISTER

READ WRITE CONTROL

3125N1A
OSC

A1-1 (S10-S) GARD
A1-2 (T10-S) +5V
A1-3 (T9-S) OUTPUT
A1-4 (T9-12) NOT

16-25 MHz

DATA WORD CONTROL

CLOCK SYSTEM

WRITE DATA TO
SHIFT REGISTER

READ WRITE CONTROL

READ DATA TO
SHIFT REGISTER

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CLOCK SYSTEM

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WRITE DATA TO
SHIFT REGISTER

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SHIFT REGISTER

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CLOCK SYSTEM

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CLOCK SYSTEM

READ WRITE CONTROL

DATA WORD CONTROL

WRITE DATA TO
SHIFT REGISTER

READ WRITE CONTROL

READ DATA TO
SHIFT REGISTER

READ WRITE CONTROL

CLOCK SYSTEM

READ WRITE CONTROL

DATA WORD CONTROL

WRITE DATA TO
SHIFT REGISTER

READ WRITE CONTROL

1 2 3 4

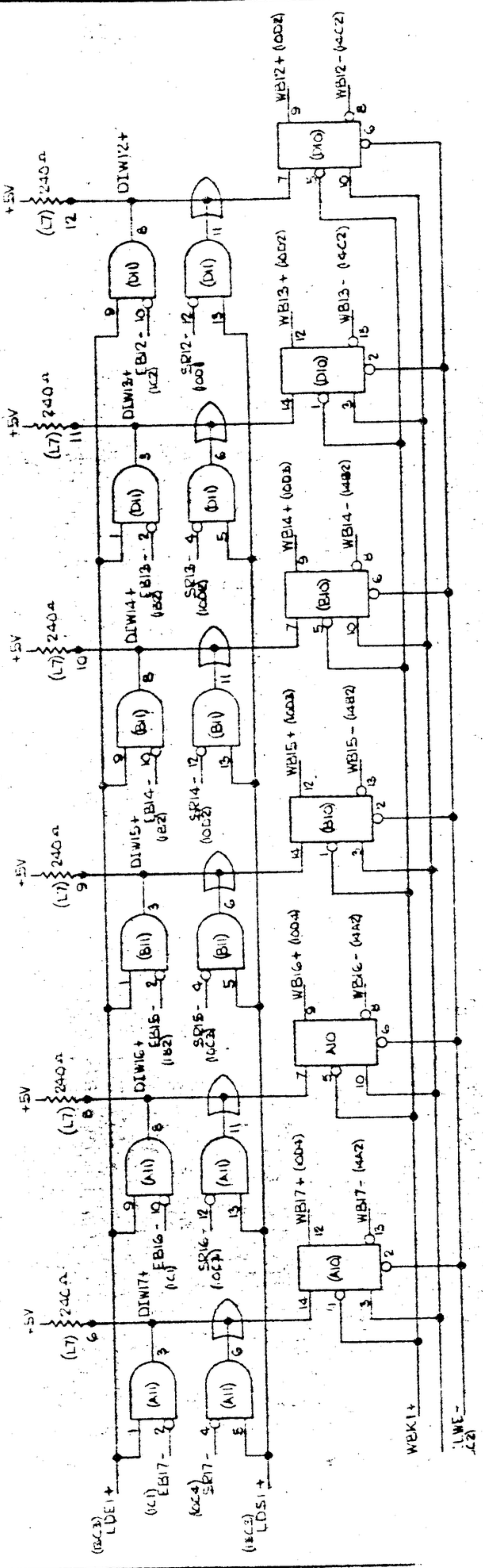
CODE IDENT NO.	SIZE	DWG NO.	REV
21101 C		5100394	D
SCALE			SHEET 6 OF 16

1

2

3

4



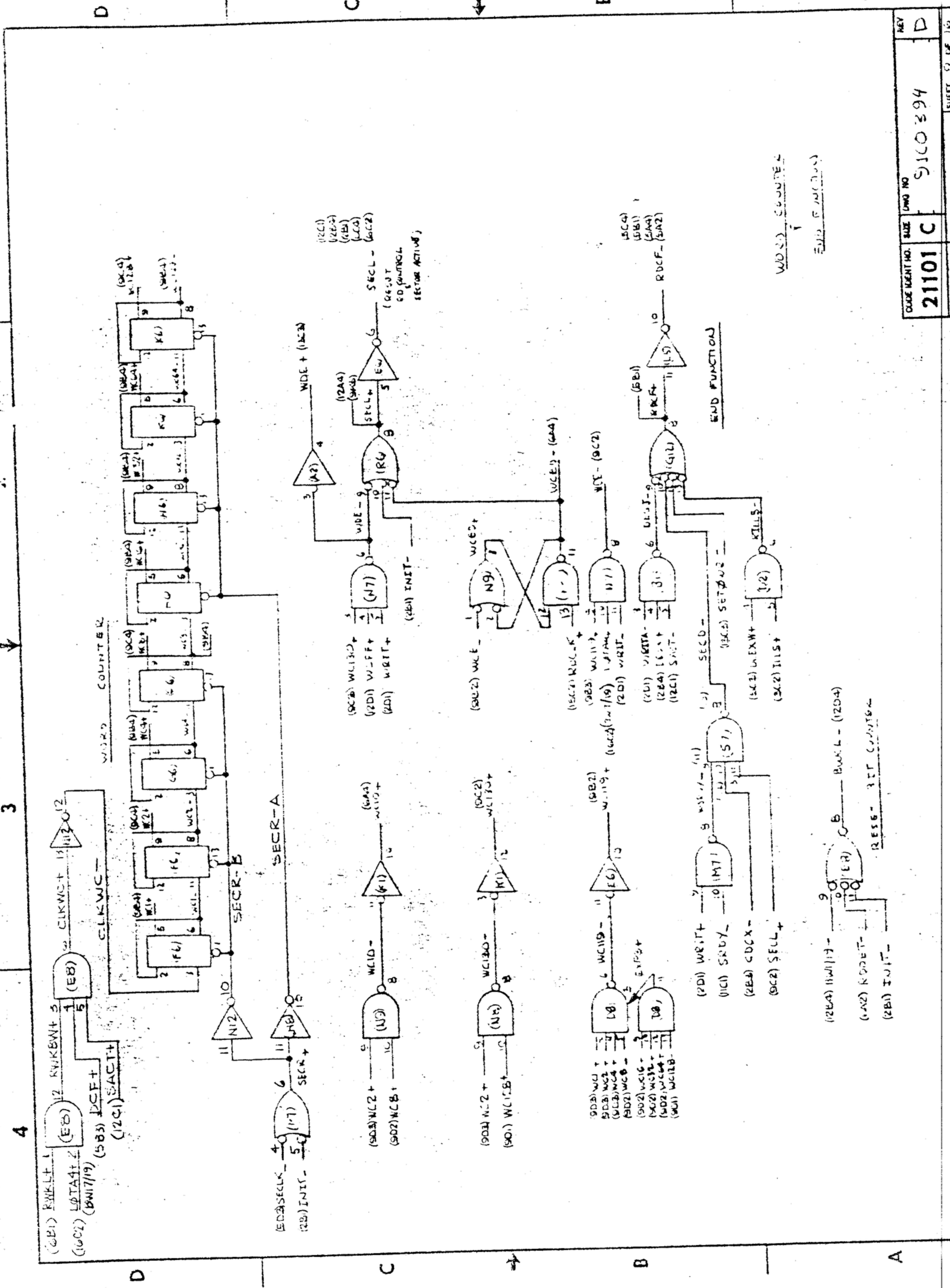
CODE SHEET NO.	SIZE	DWG NO.	REV.
21101 C		91C0394	D
SCALE			SHEET 7 OF 16

1

2

3

4



WORD COUNTER
SECRET

(908) WCL17+
(907) WCL16+
(906) WCL15+
(905) WCL14+
(904) WCL13+
(903) WCL12+
(902) WCL11+
(901) WCL10+
RESB - SET COUNTER

(908) WCL17+
(907) WCL16+
(906) WCL15+
(905) WCL14+
(904) WCL13+
(903) WCL12+
(902) WCL11+
(901) WCL10+
SECRET

(903) WCL12+
(902) WCL11+
(901) WCL10+
SECRET

(903) WCL12+
(902) WCL11+
(901) WCL10+
SECRET

(6B1) RWKLT+
(6C2) WATA+
(5B5) PCF+
(2C4) SACT+
CLKWCT+
CLKWC+
SECR-A
SECR-B
SECR-C

(8C1) WCL13+
(8D1) W-FF+
(2D1) WRT+
(8C4) WCL12+
(8C3) WCL11+
(8C2) WCL10+
(8C1) WCL9+
(8C0) WCL8+
WIDE+ (8C3)
SECR - (8C2)
(8C1) WCL8+
SECT CD (8C1)
SECT CD (8C1)
SECT CD (8C1)
SECRET ACTIVE

(8B2) WCL10+
(8B1) WCL9+
(8B0) WCL8+
WIDE+ (8B3)
WCL9 - (8B2)
WCL8 - (8B1)
WCL7 - (8A0)
WCL6 - (8A1)
WCL5 - (8A2)
WCL4 - (8A3)
WCL3 - (8A4)
WCL2 - (8A5)
WCL1 - (8A6)
WCL0 - (8A7)
WCL15 - (8B1)
WCL14 - (8B2)
WCL13 - (8B3)
WCL12 - (8B4)
WCL11 - (8B5)
WCL10 - (8B6)
WCL9 - (8B7)
WCL8 - (8B8)
WCL7 - (8B9)
WCL6 - (8B0)
WCL5 - (8B1)
WCL4 - (8B2)
WCL3 - (8B3)
WCL2 - (8B4)
WCL1 - (8B5)
WCL0 - (8B6)

DESIGN NO.	21101 C
REV	D
SCALE	
SHEET	9 OF 10

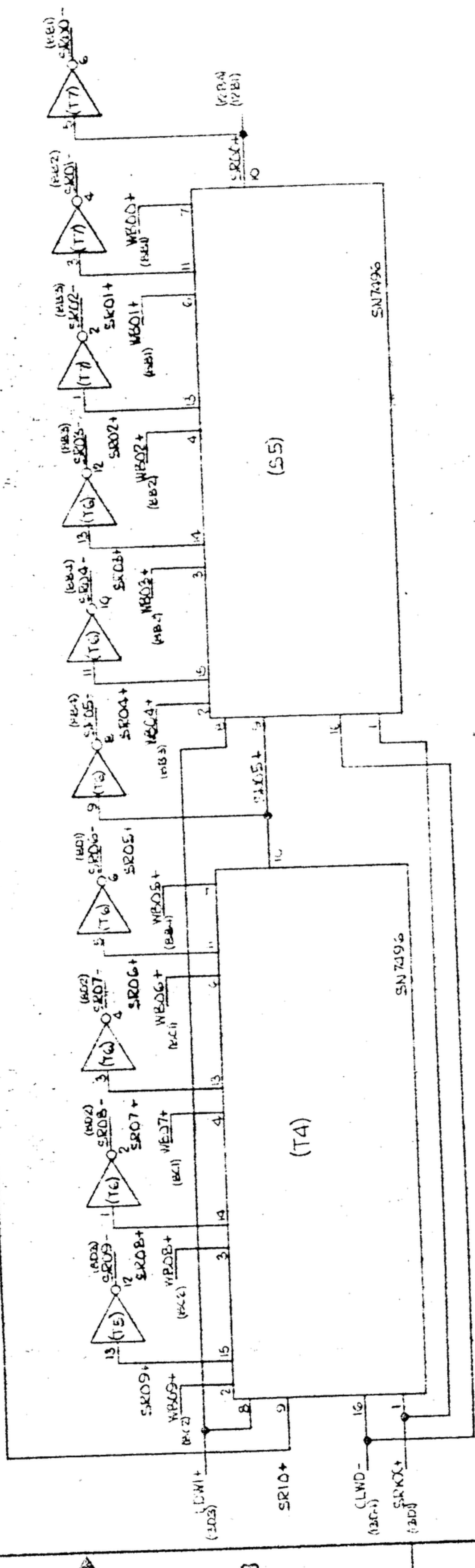
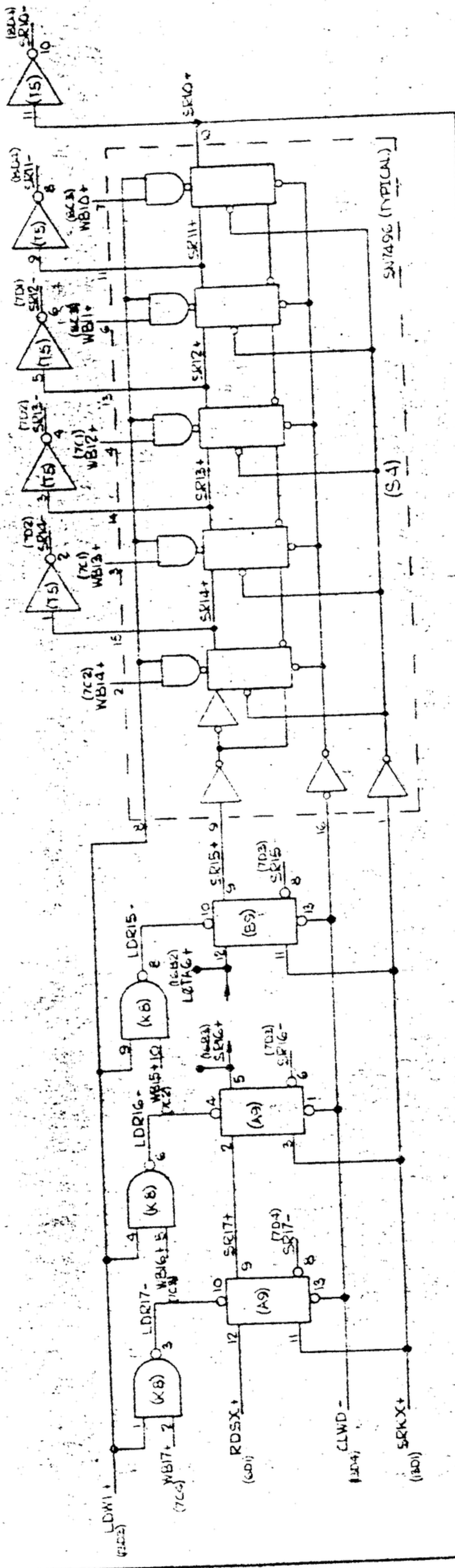
SICO 394

1

2

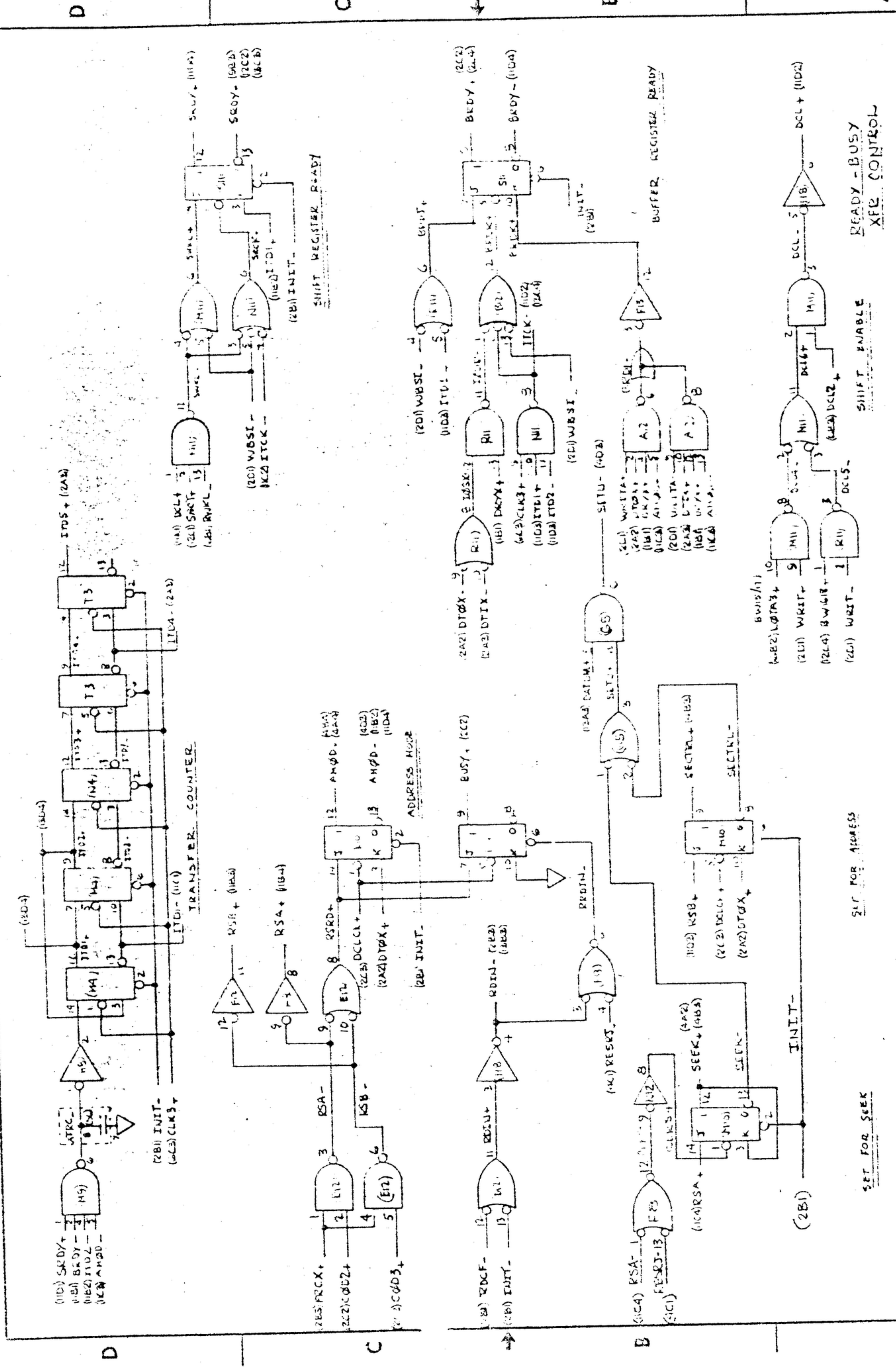
3

4

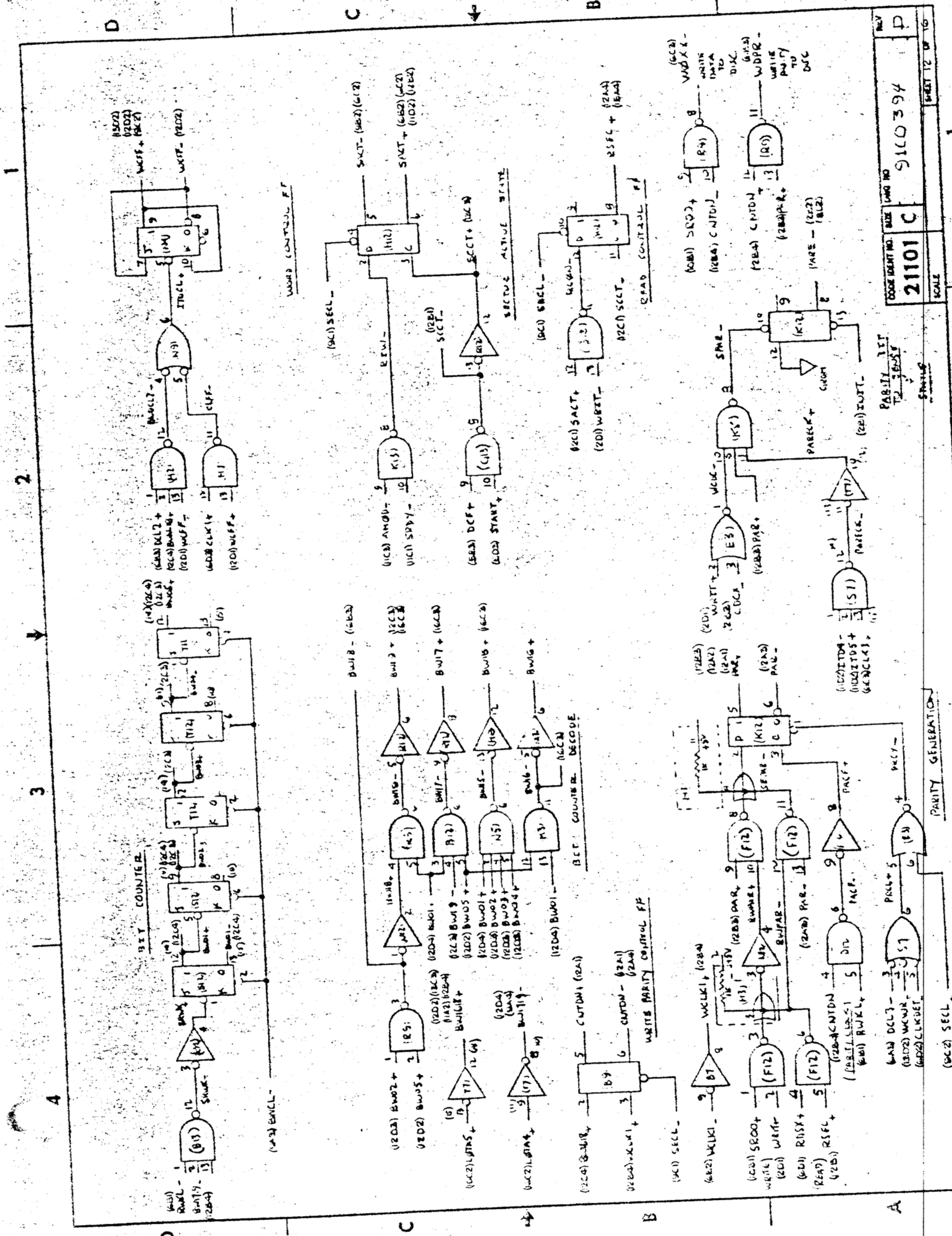


18 BIT DATA SHIFT REGISTER

KEY	D
DATE IDENT NO.	21101 C
SIZE	91C0394
UNW NO.	
SCALE	
SHEET 10 OF 16	



CODE ELEMENT NO.	21101	C	DWG NO.	9103094	REV	D
SCALE					SHEET 11	OF 16



D

C

B

A

3 BIT COUNTER

WORD CONTROL FF

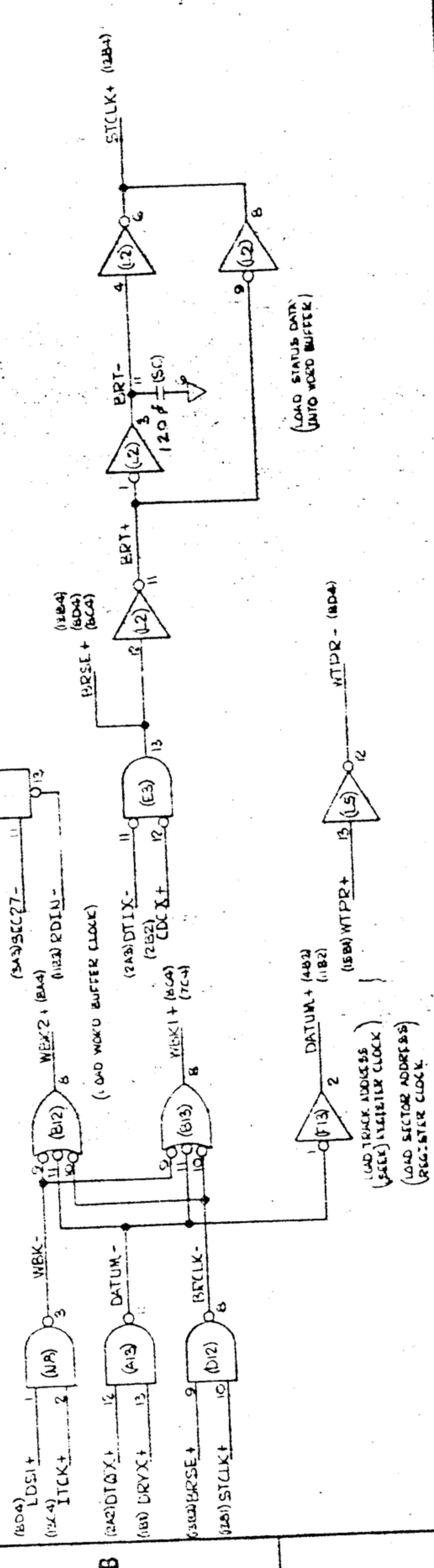
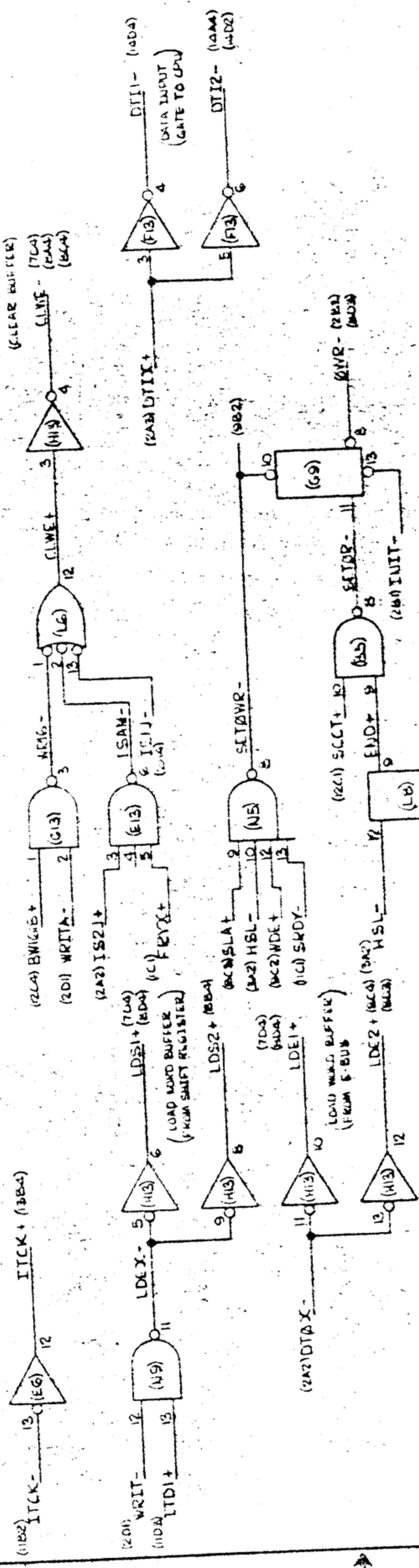
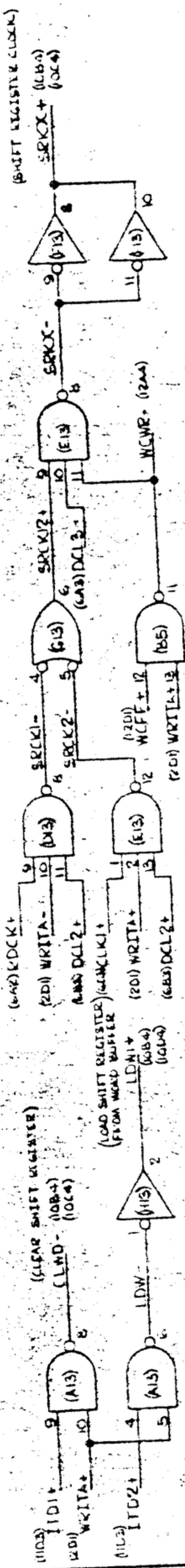
SECTOR ACTIVE STATE

WRITE PARITY CONTROL FF

PARITY GENERATION

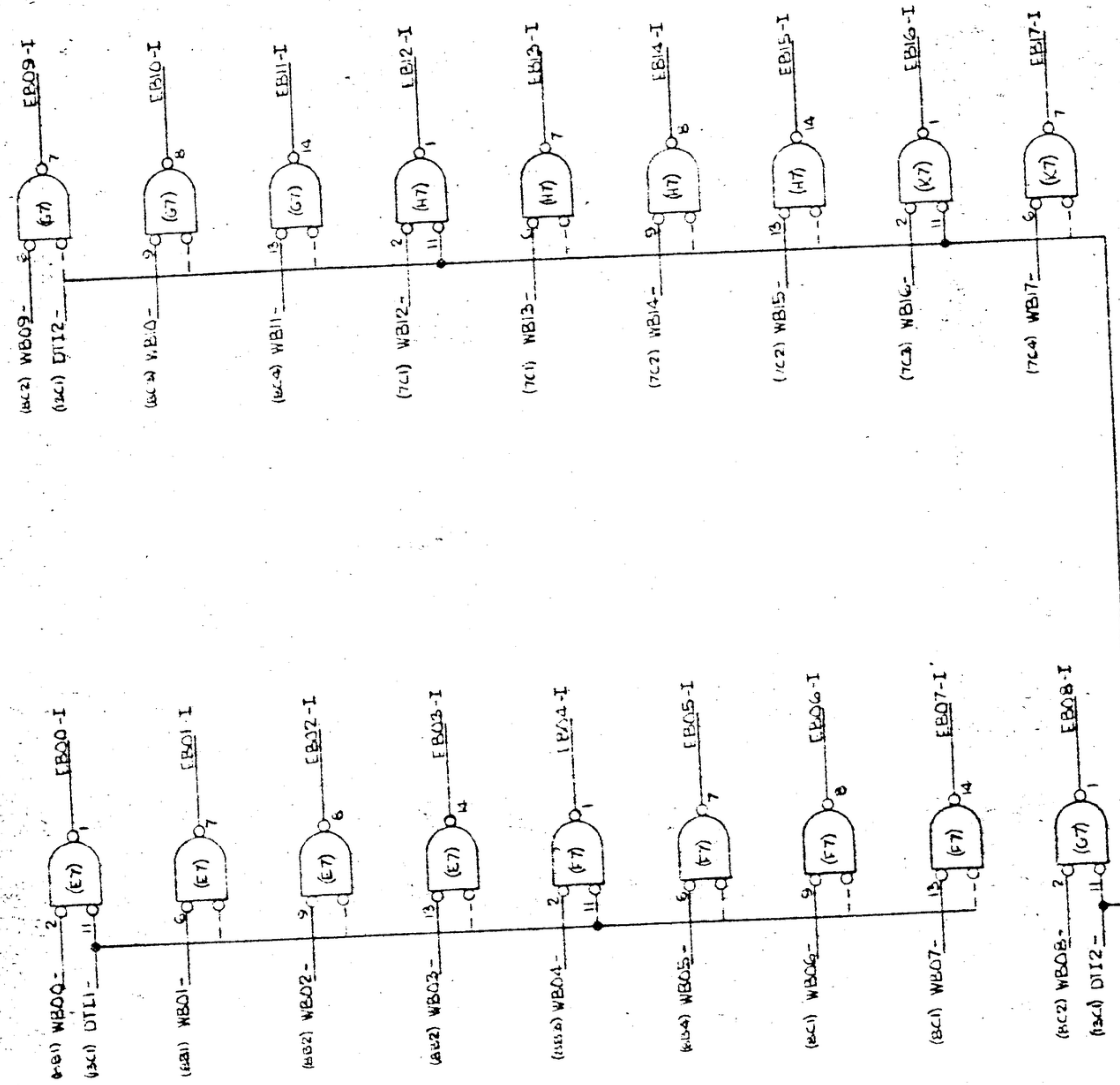
PARITY TEST

CODE IDENT NO.	SIZE	UNIT NO.	REV
21101 C		9100394	P
SCALE			PAGE 12 OF 10



1 2 3 4

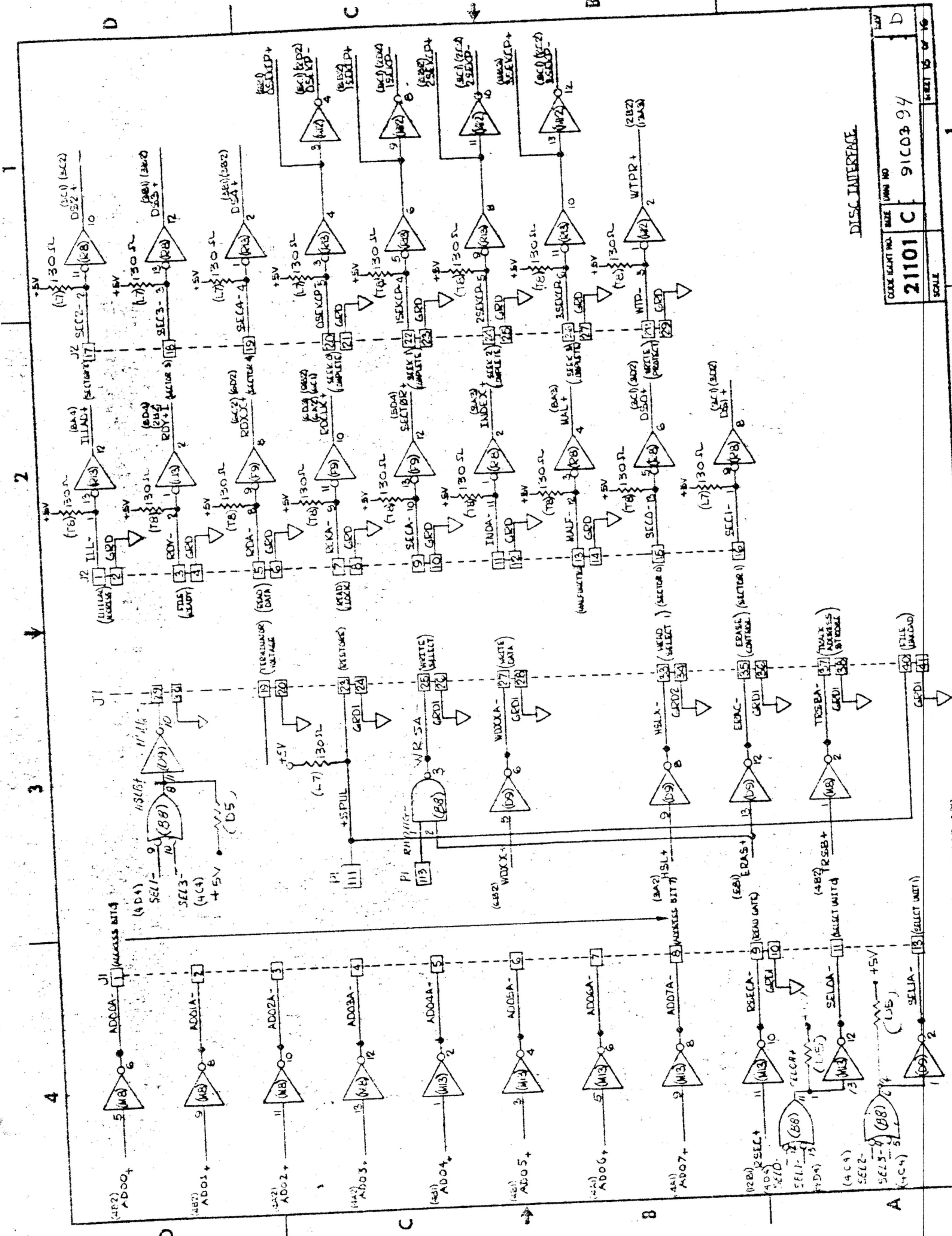
D C B A



DATA TO CPU

CODE IDENT NO.	SIZE	DATE NO	REV
21101	C	910394	D
SCALE			SHEET 14 OF 16

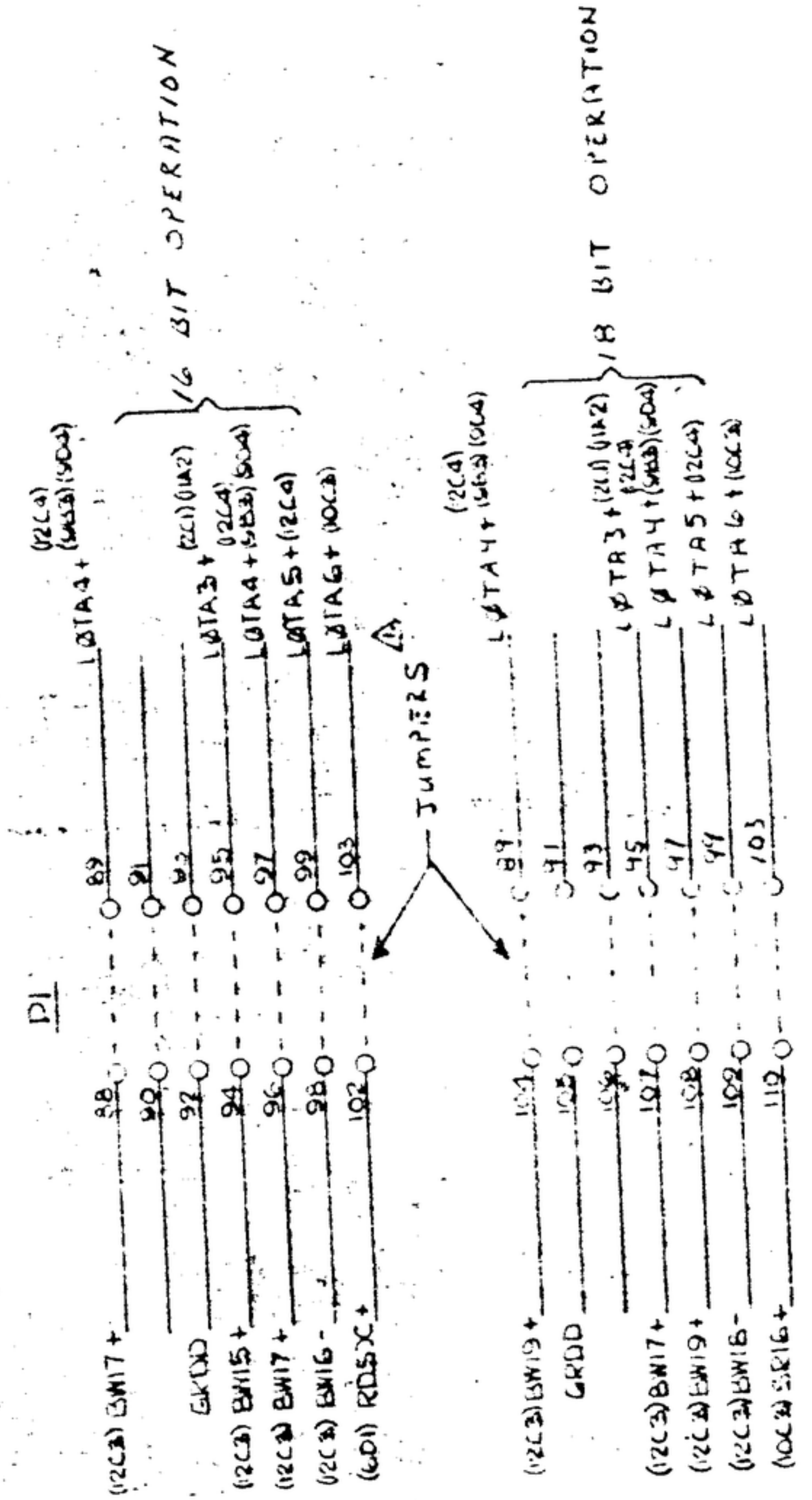
1. BUS TIE POINTS ON SHEET 1
 GROUND IS ON PINS 10, 15 ON FB1-4 AND 13 ON PIN 5
 PIN 11 IS COMMON TO ALL GATES ON CHIP
 NOTE: IC'S ARE MC4042P (OR GATES)



DISC INTERFACE

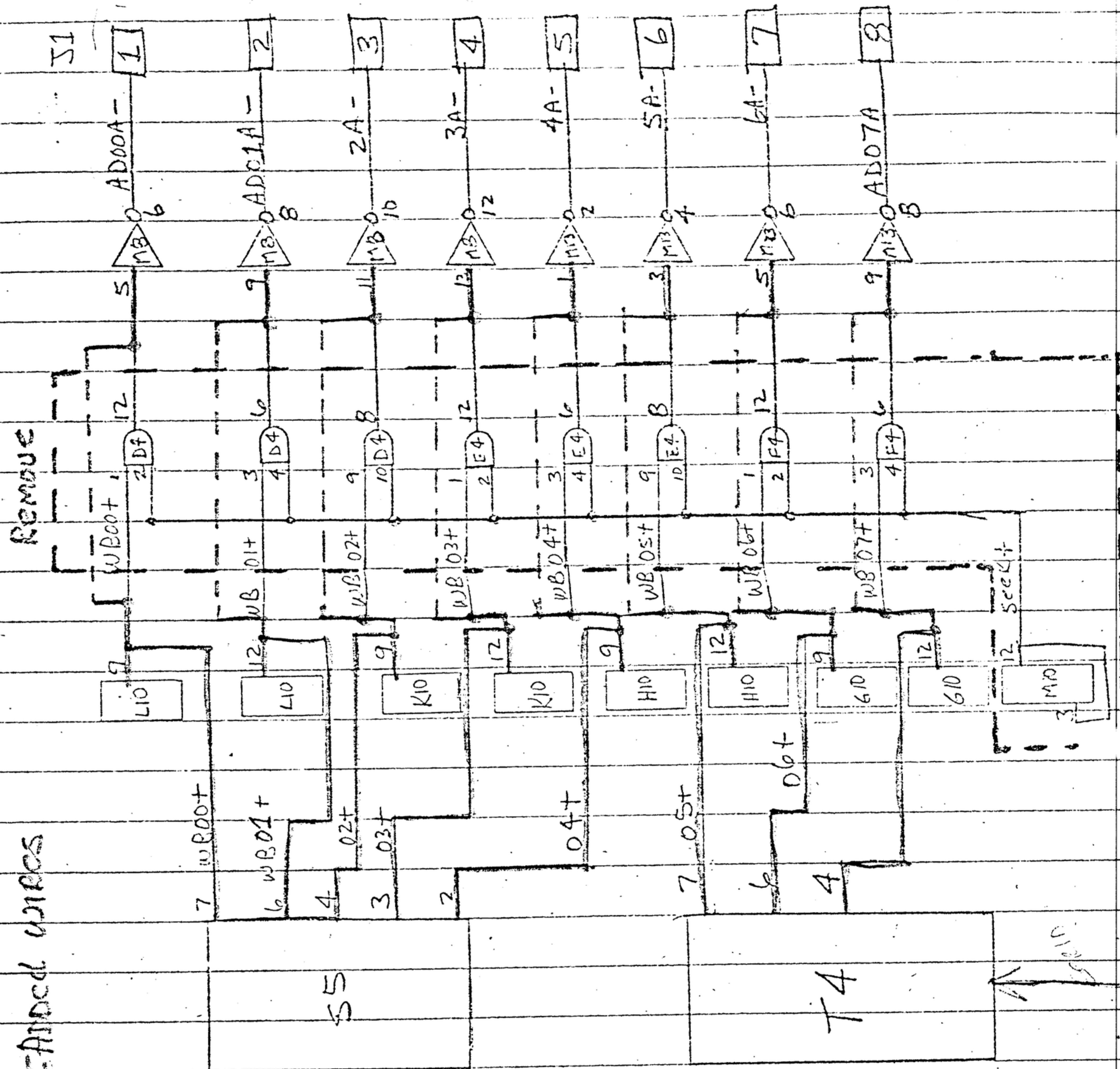
CODE SCANT NO.	21101 C
DATE	91C03 94
SCALE	
PAGE NO.	1

16 OR 18 BIT WORD SELECTION



△ JUMPERS ADDED IN TEST H. REQUIRED PER CIRCUY

① Red indicates pre-aided wires

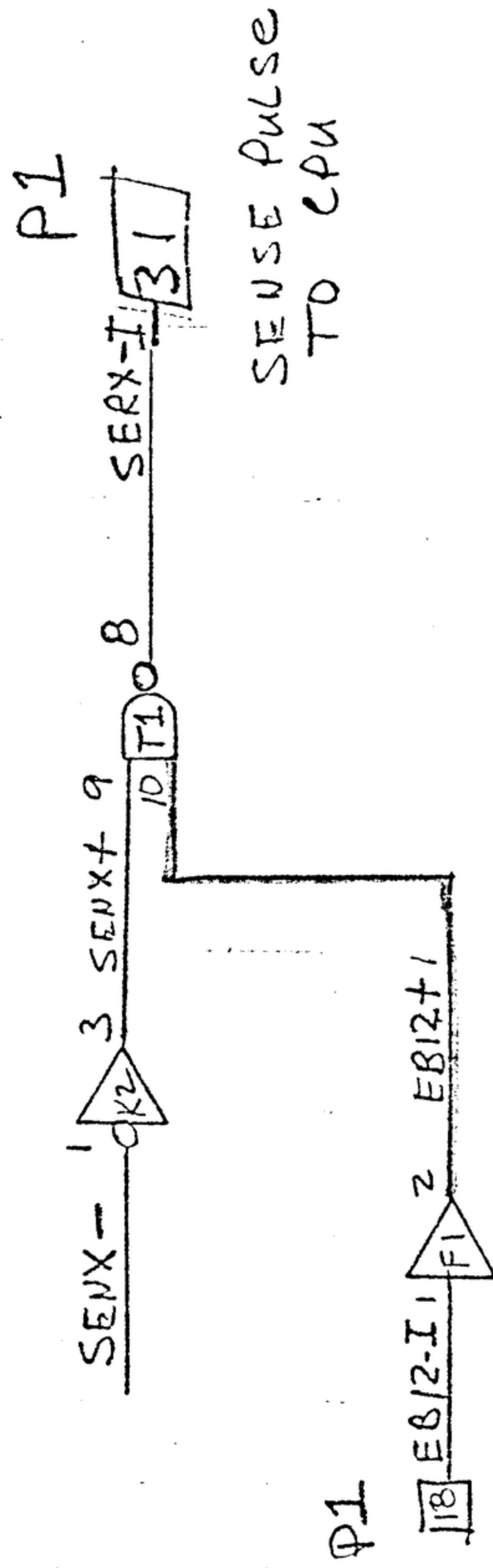


S5

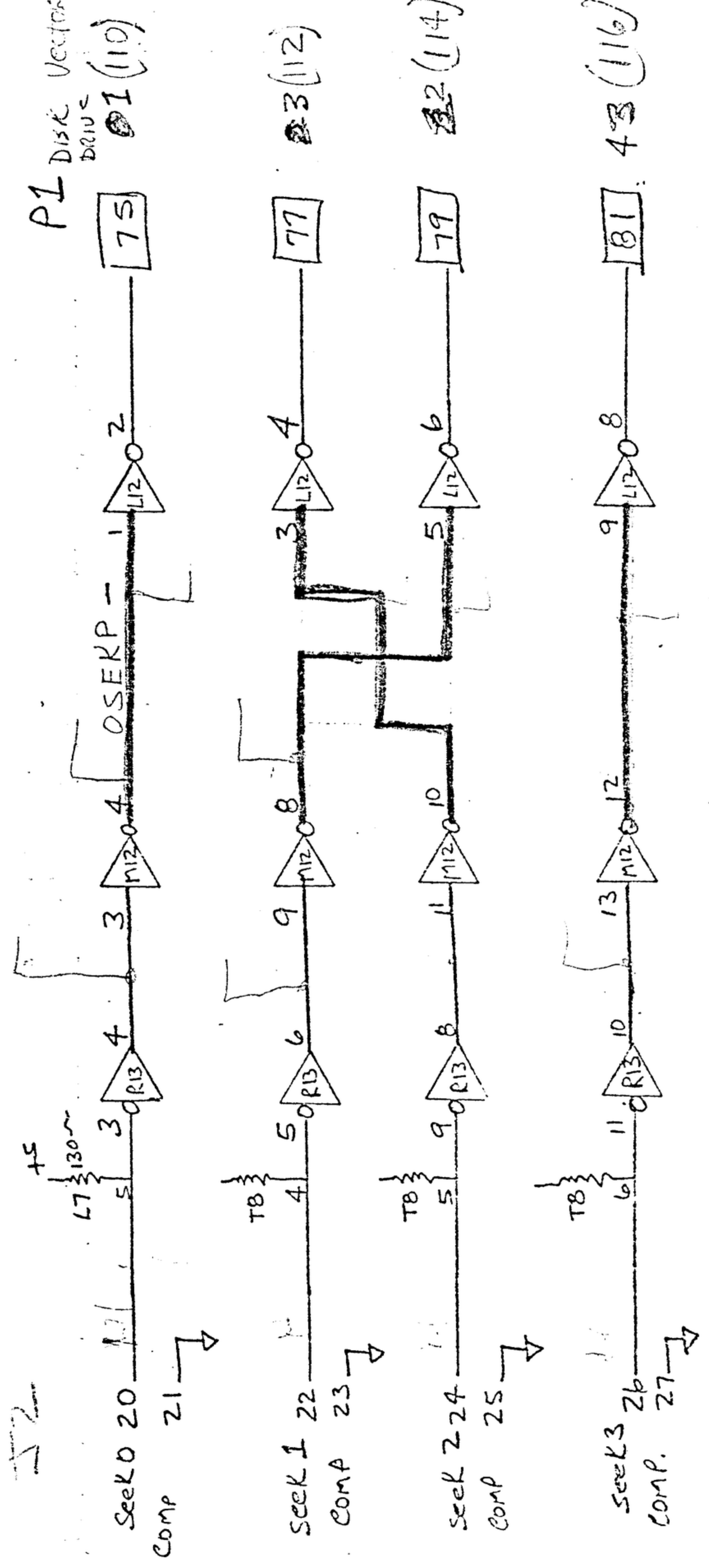
T4

10

(D) Red indicates Added wires



2001
Disk
23
Disk
212

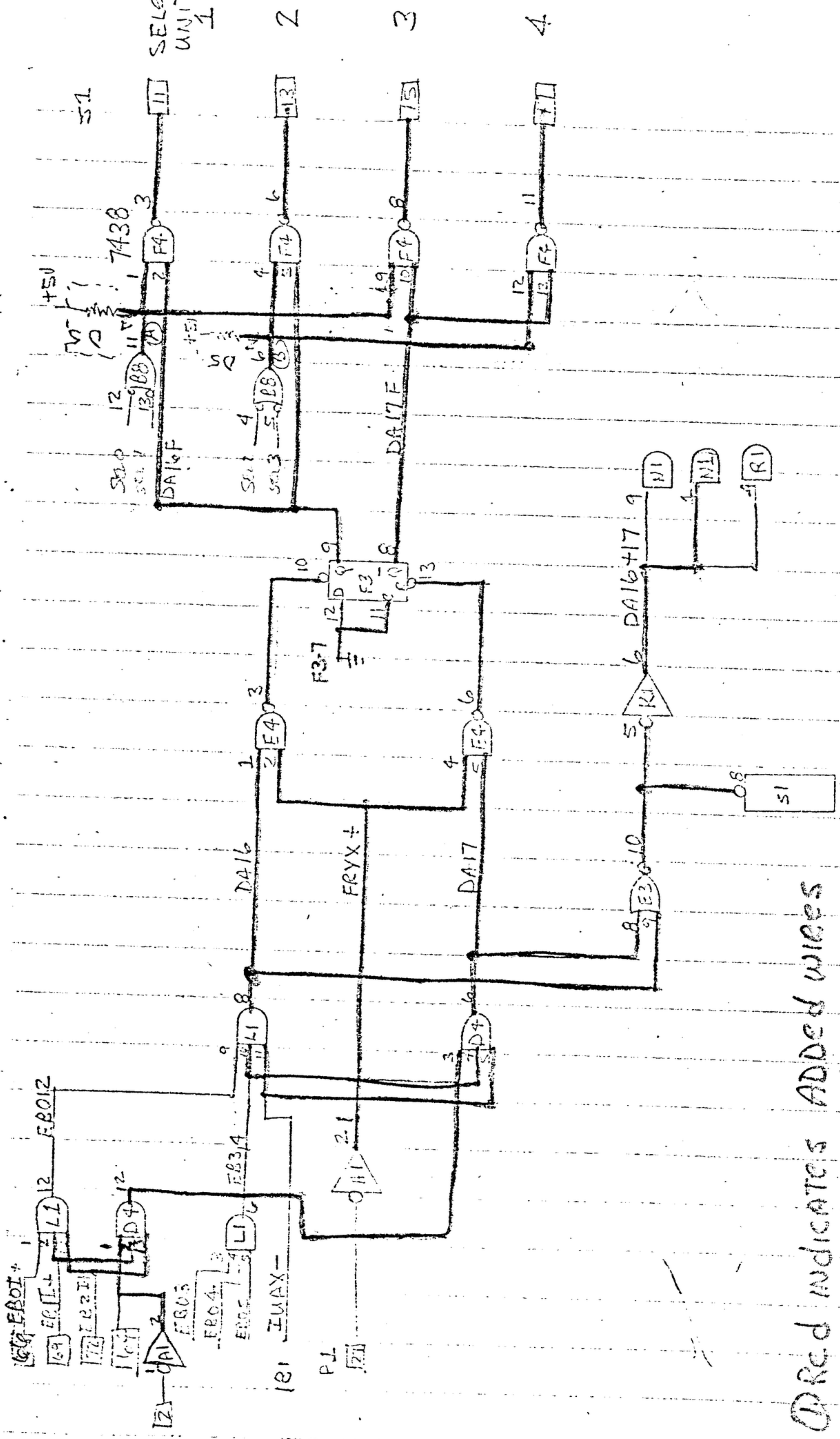


SEEK COMPLETE

MOD

① Red indicates added wires

PT



RED INDICATES ADDED WIRES

UNIT SELECT 1700