REFERENCE DESIGNATIONS ARE ABBREVIATED, PREFIX THE DESIGNATION WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH. (MIL. STD. 16B)

NOTES:
1. REV. LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING.
2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.

REVISION INDEX

PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG
1	A	8	A	15	A	22	A	29	A				
2	A	9	A	16	A	23	A	30	A				
3	A	10	A	17	A	24	A	31	A				
4	A	11	A	18	A	25	A	32	A				
5	A	12	A	19	A	26	A	33	A				
6	A	13	A	20	A	27	A	34	A				
7	A	14	A	21	A	28	A	35	A				

MODULE LIST

ITEM	DESCRIPTION	MODEL	QTY
1	SIGNAL AMPLIFIER	AH10	5
2	CABLE DRIVER	AX14	5
3	CABLE DRIVER CONTROLLED RISE & FALL	AX16	2
4	AND/OR BUFFER AMP.	BH10	10
5	D.C. FLIP FLOP	FH19	5
6	BASIC FLIP FLOP	FH20	13
7	BASIC FLIP FLOP	FH21	1
8	DIODE, GATE	GK51	19
9	AND/OR INVERTER	IH10	2
10	AND GATE/INVERTER	IH14	8
11	RELAY MODULE	KX12	1
12	ONE SHOT MULTIVIBRATOR	OX12	1
13	PRIMARY POWER DETECTOR	SK60	2

REPLACEMENT PARTS LIST

ITEM	DESCRIPTION	DESIGNATORS	QTY	SUPPLIER AND PART NO.	ZIP
1	CONNECTOR, SOLDER TAIL 47 CONTACT #7008-47	A,B,C,D 26 THRU 45	80	ELCO CORP. 7008-047-000-502	19090
2	DIODE, SILICON SWITCHING	CR1, CR2 P160 CR1 THRU CR3 P159 CR4 THRU CR11 P157 CR1 THRU CR20 P161 CR1 THRU CR27 P155	2 3 11 20 27	CONT. DEVICES IN914A OR IN3064 FAIRCHILD IN914A OR IN3064 GENERAL ELECTRIC IN914A OR IN3064 HUGHES IN914A OR IN3064 ITT SEMICONDUCTOR IN914A OR IN3064 TEXAS INST. IN914A OR IN3064	90250 94041 42302 92663 01841 75222
3	RESISTOR, 1/2W. ± 2% FIXED FILM	R1 THRU R40 P159 R1 THRU R28 P157 R29 P157 R30 THRU R32 P157 R1 THRU R20 P161 R4 THRU R30 P155	40 28 1 3 20 27	AMPEREX E009 SERIES CORNING C-20 INT. RES. CO. MDA, MEA TEXAS INST. GP 1/2 WELWYN F-20	11802 16701 52602 75222 44091
4	RESISTOR, 1/2W, ± 2% FIXED FILM	R41 THRU R43 P159 R33 THRU R43 P157 R20 THRU R39 P161 R4 THRU R30 P155	3 11 20 27	AMPEREX E009 SERIES CORNING C-20 INT. RES. CO. MDA, MEA TEXAS INST. GP 1/2 WELWYN F-20	11802 16701 52602 75222 44091
5	INDUCTOR, MOLDED .75 TO 10000 MICROHENRY	L1 THRU L40 P159 L1 THRU L28 P157 L29 P157 L30 THRU L32 P157 L1 THRU L20 P161 L1 THRU L3 P-155	40 28 1 3 20 3	BELEVAN ELECT. 1537 SERIES 085 J.W. MILLER CO. 9310 SERIES 085 NYTRONICS INC. DD OR WEE 035 STANWYCK WINDING 20,000 SERIES 085	14052 90003 07922 12551

PAGE 1

REV	DESCRIPTION	CHG	DATE	APPROVED
A	RELEASED TO MFG.			

131820

DRAWING NO 131564
MODEL NO 9367
SHEET ASSY 7
DRAWN
CHECK
MATERIAL LIST
DESCRIPTION
REFERENCE DESIGNATION
NOTES UNLESS SPECIFIED
SCALE
SIZE D
DWG NO 131820
DO NOT SCALE DRAWING
SHEET 1
TITLE DIAGRAM, LOGIC, CONTROLLER
SDS

109

DIRECTORY

REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

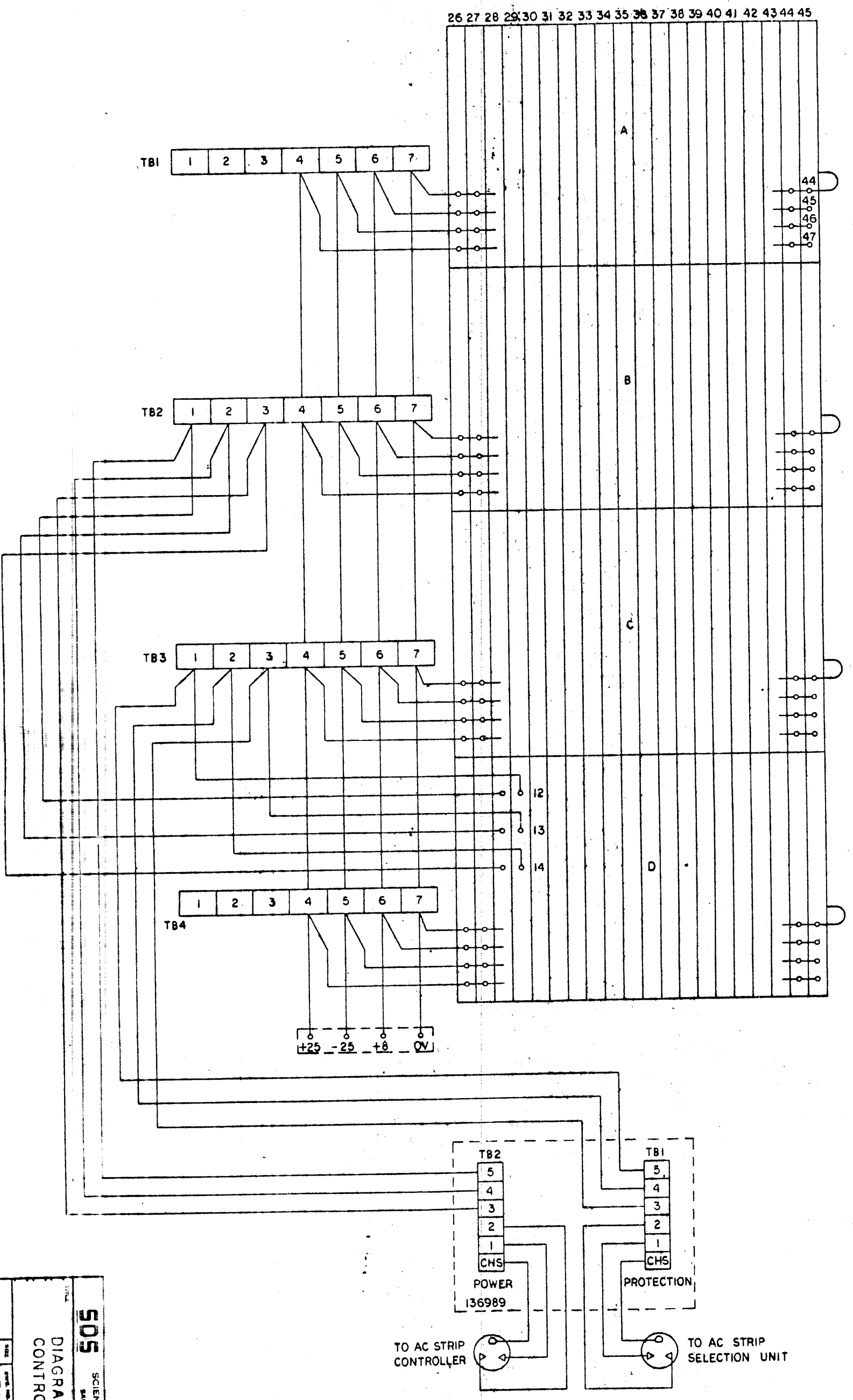
131820

SDS SCIENTIFIC DATA SYSTEMS
SANTA MONICA, CALIFORNIA

TITLE: DIAGRAM, LOGIC, CONTROLLER

SIZE D | DWG NO 131820 | REVISION LETTER A | SHEET 2 OF

DO NOT SCALE DRAWING | SCALE —— | Not to Scale



PAGE 3

REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			131820 A

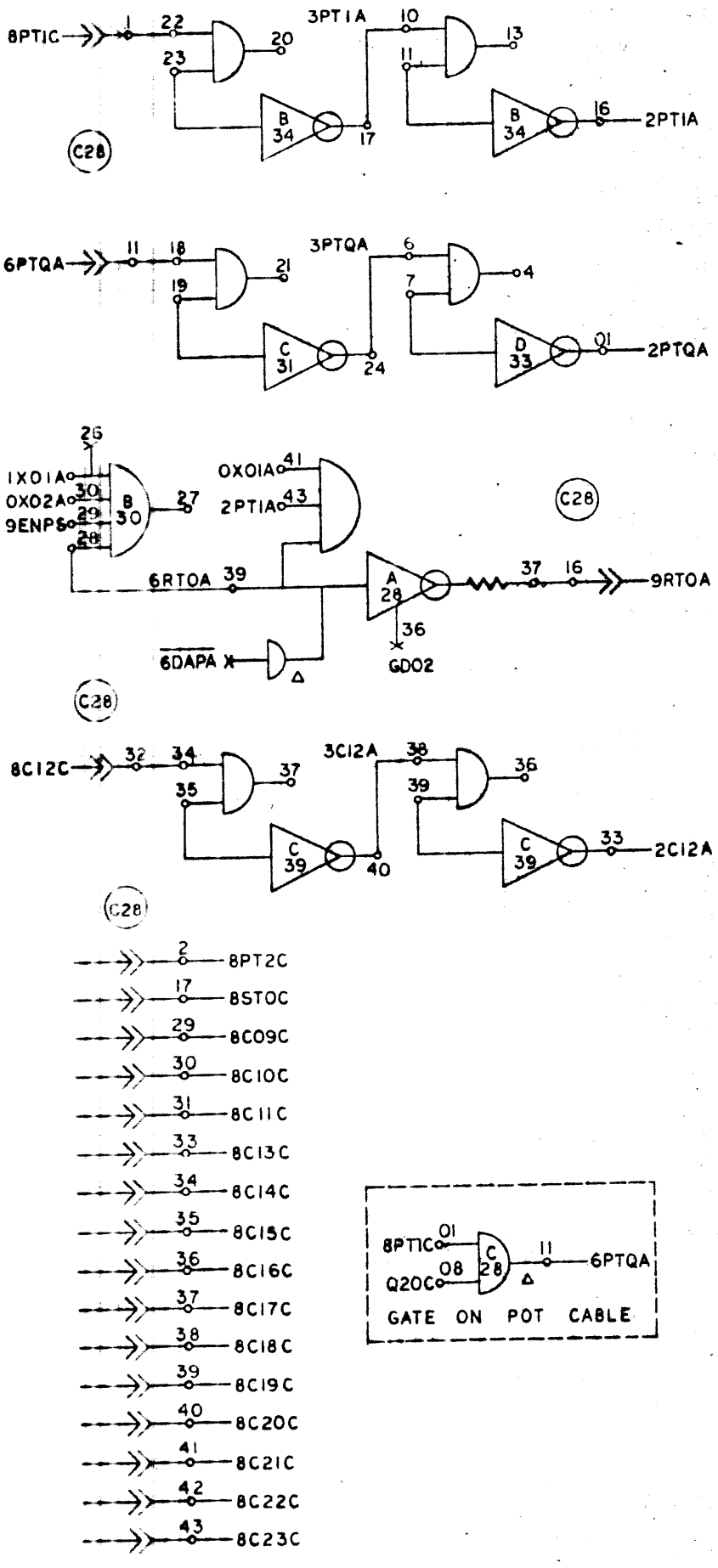
SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

TITLE: DIAGRAM, LOGIC, CONTROLLER

SIZE D | PART NO. 131820 | CONTROL LETTER A

SCALE | DO NOT SCALE DRAWING | SHEET 3 OF 35

POT. UNIT SELECT, X-Y SELECT, INTERRUPT



PAGE 5

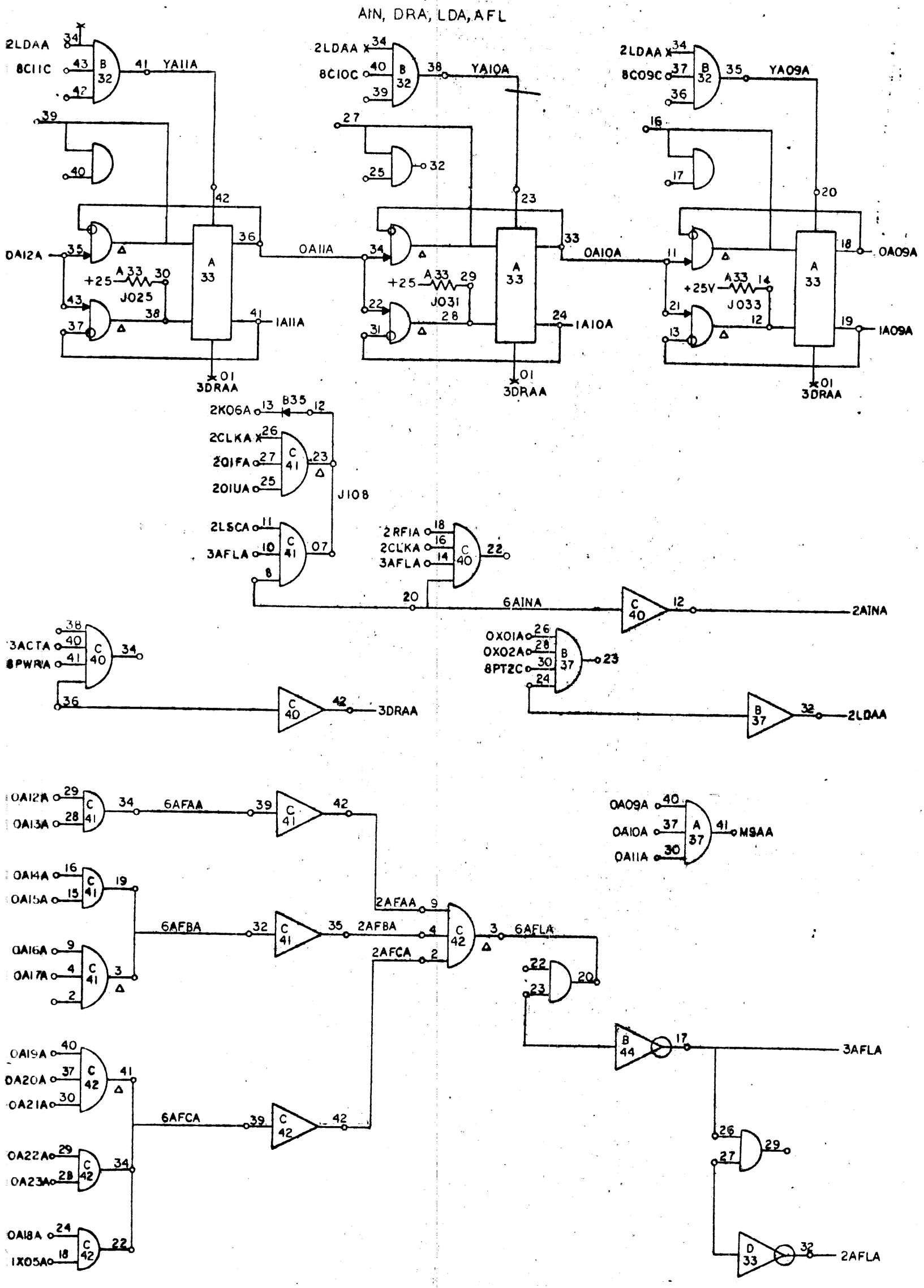
REV	DESCRIPTION	CHK	DATE	APPROVED	
A	MFG RELEASE				A

SCALE				
DO NOT SCALE DRAWING	SIZE D	DWG NO. 13820		REV A
	SHEET 5 OF 35			

TITLE: DIAGRAM, LOGIC, CONTROLLER

SDS

ADDRESS REGISTER
AQ9 → AII
AIN, DRA, LDA, AFL

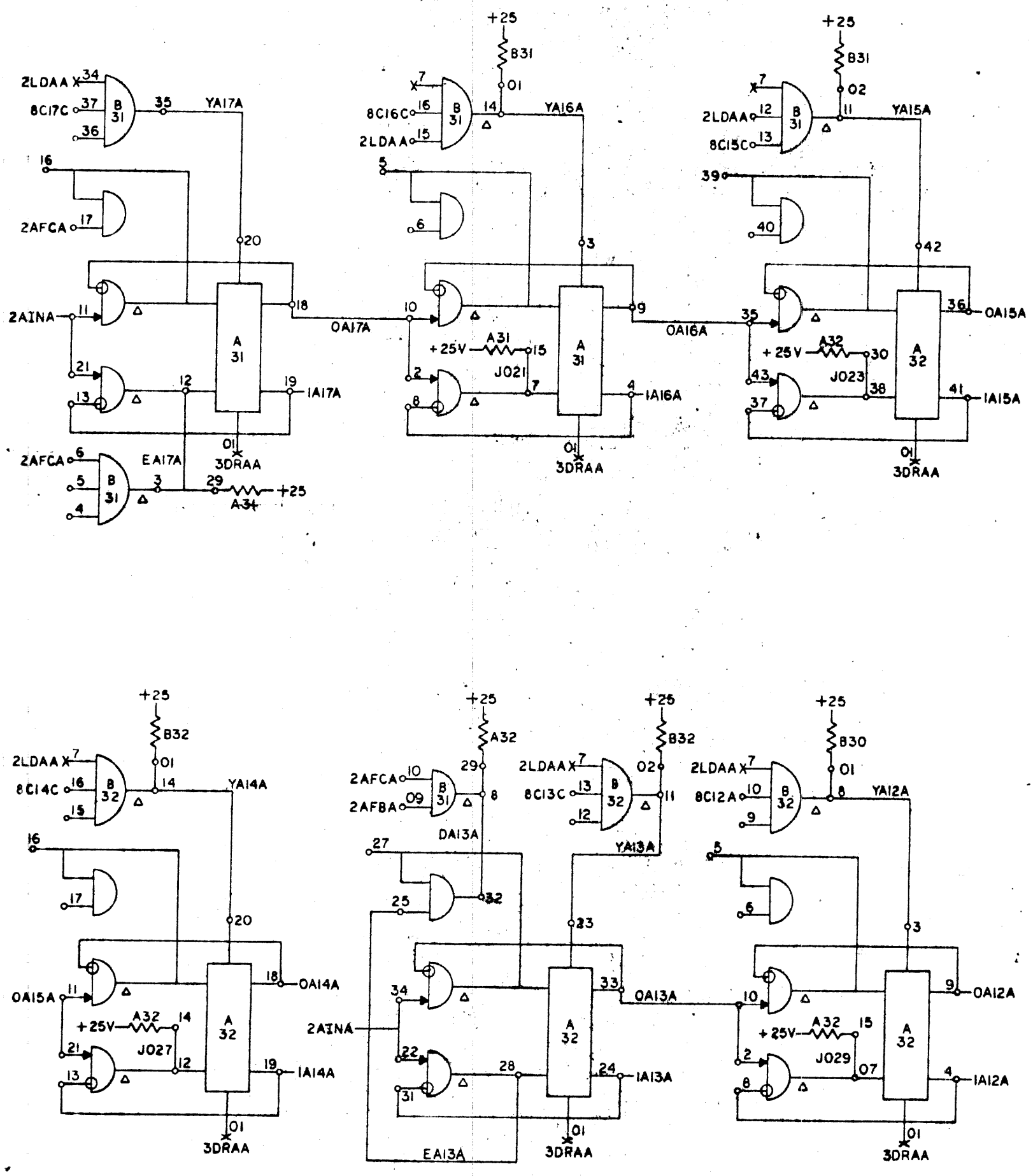


PAGE 6

DIAGRAM, LOGIC, CONTROLLER	SIZE D	DWG NO 13320	REV A
SDS	SCALE NONE	SHEET 6 OF 35	

REVISIONS: REV A — DESCRIPTION: MFG RELEASE — CHK — DATE 3-20 — APPROVED

ADDRESS REGISTER
A12 ⟶ A17



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REVISIONS					
REV	DESCRIPTION	CHK	DATE	APPROVED	
A	MFG RELEASE				A

SDS

TITLE: DIAGRAM, LOGIC, CONTROLLER

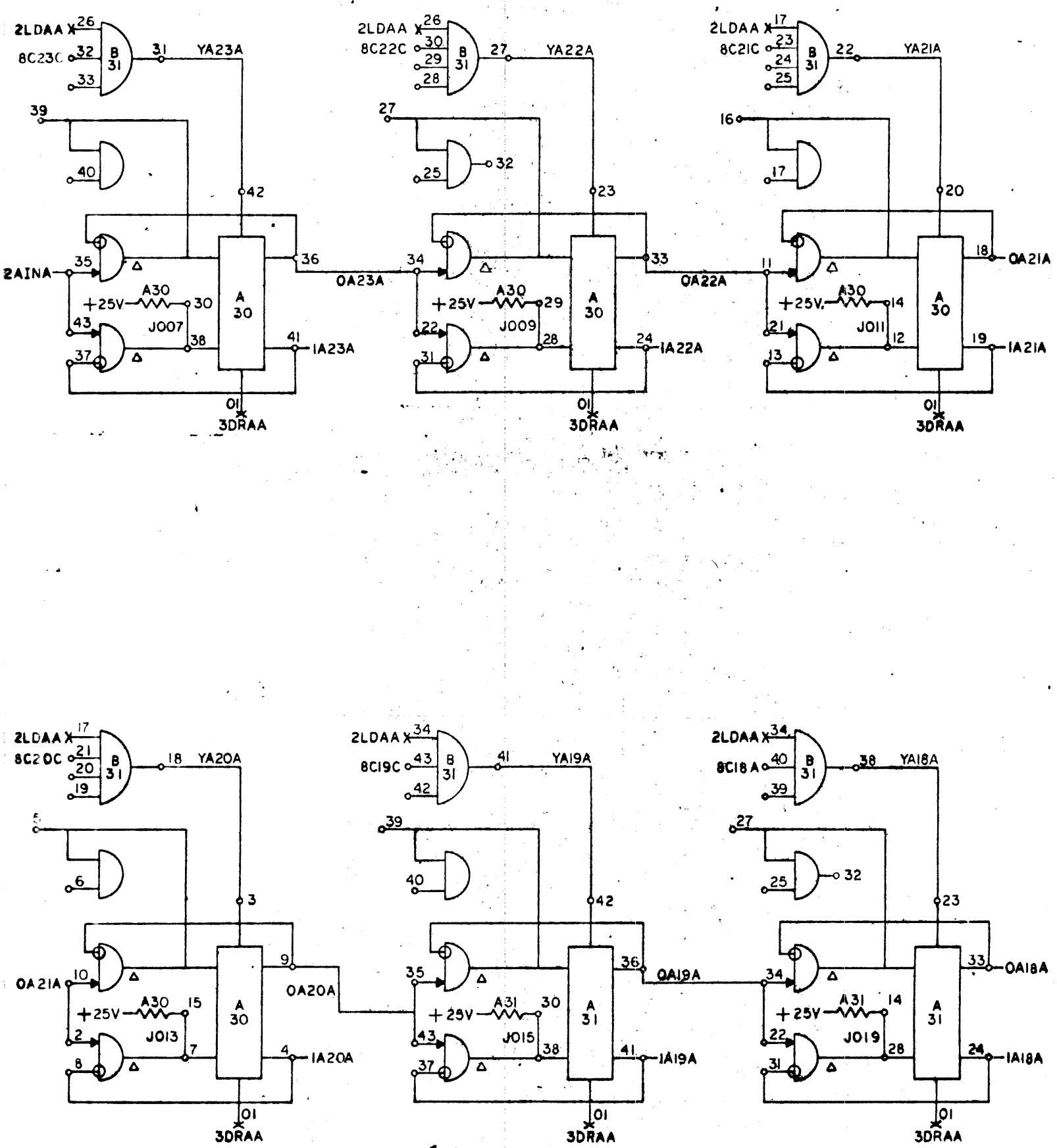
SIZE: D | DWG NO: 13820 | REVISION LETTER: A

SCALE: DO NOT SCALE DRAWING | SHEET: 7 OF 35

3920

3777
1001

ADDRESS REGISTER
A18 → A23



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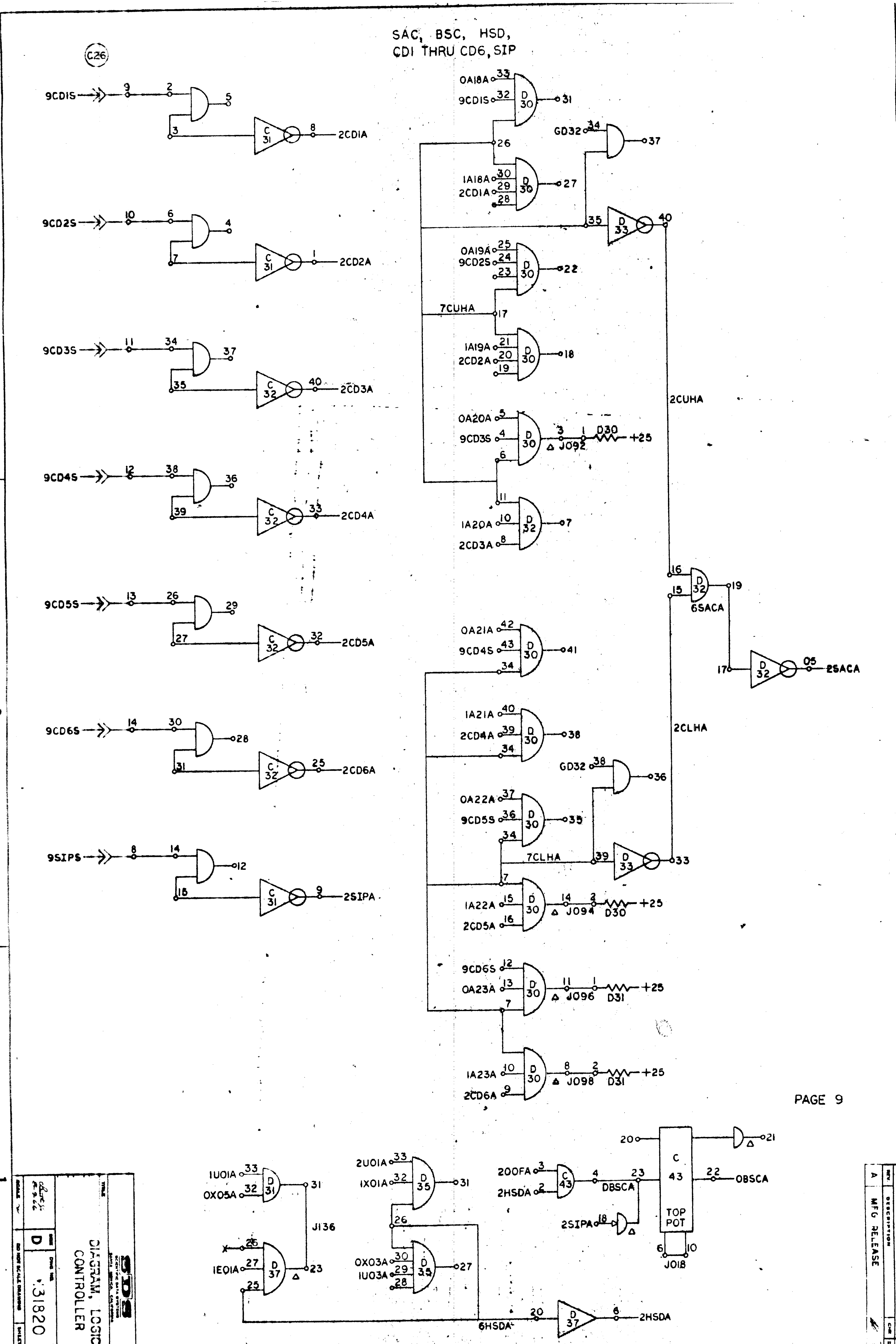
REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

SCALE	SIZE D	DWG NO 131820	REV A
DO NOT SCALE PRINTING	SHEET 8 OF 35		

TITLE: DIAGRAM LOGIC, CONTROLLER

1 0 0 0 0 0 0 0 0 1
12 13 14 15 16 17 18 19 20 21 22 23



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SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

TITLE DIAGRAM, LOGIC, CONTROLLER

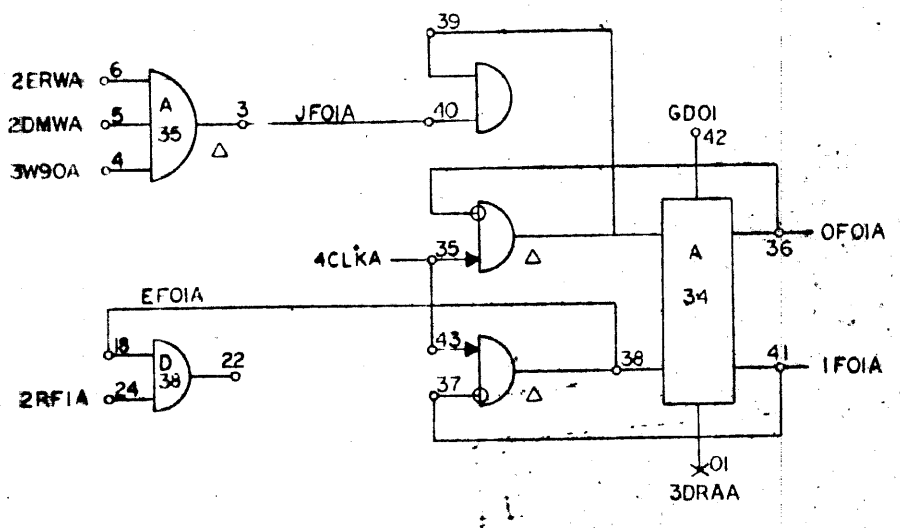
SIZE D | DWG NO. 131820 | CHANGE LETTER A

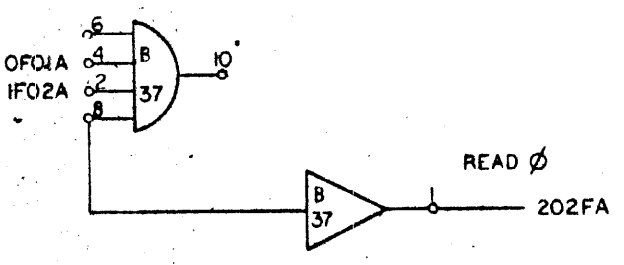
SCALE | DO NOT SCALE DRAWING | SHEET 9 OF 35

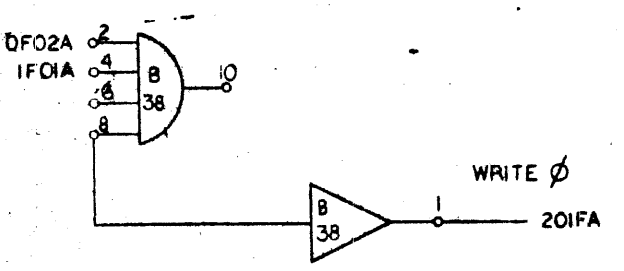
REVISIONS

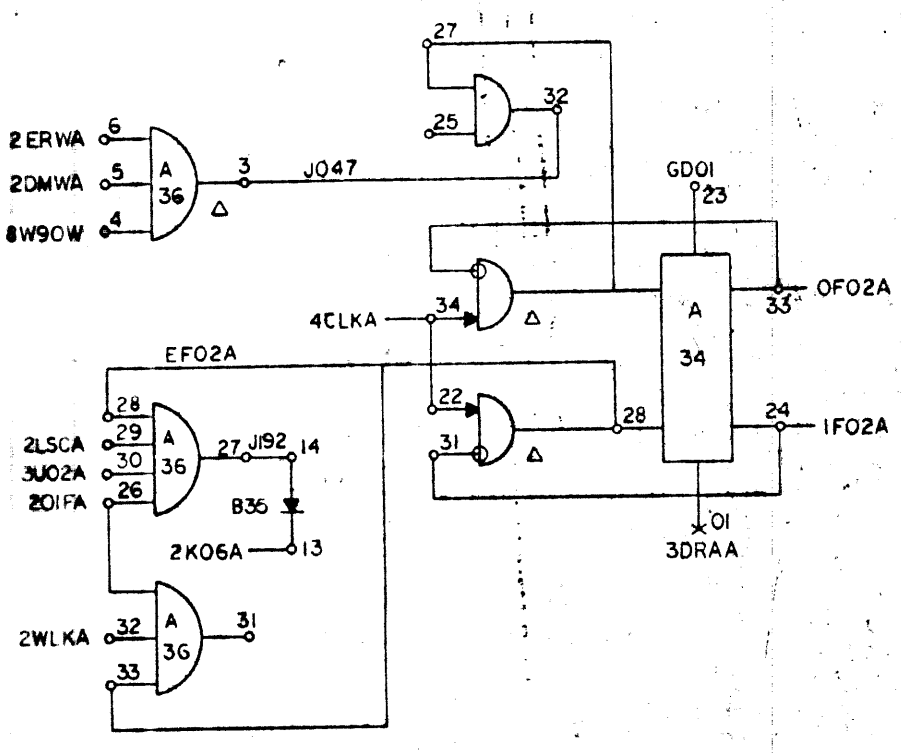
REV.	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		3-3-20	

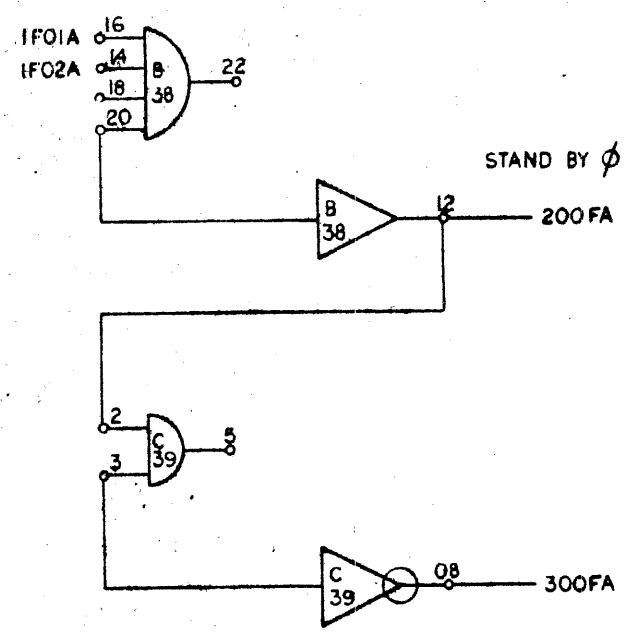
PHASE REGISTER
F01 . F02 , 00F, 01F
ERW, WLK

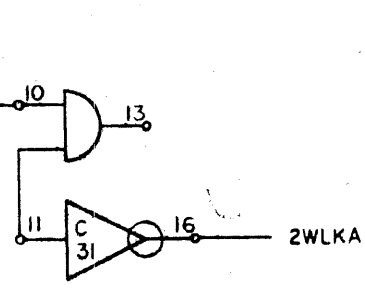


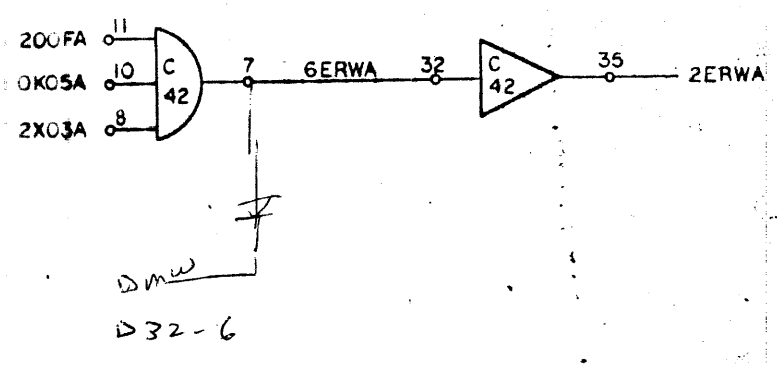












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DIAGRAM, LOGIC, CONTROLLER			
SCALE —	DATE 6-13-66	DWG NO. 131820	REV A
DO NOT SCALE DRAWING	SIZE D	SHEET 10 OF 35	

REV.	DESCRIPTION	CHK	DATE	APPROVED
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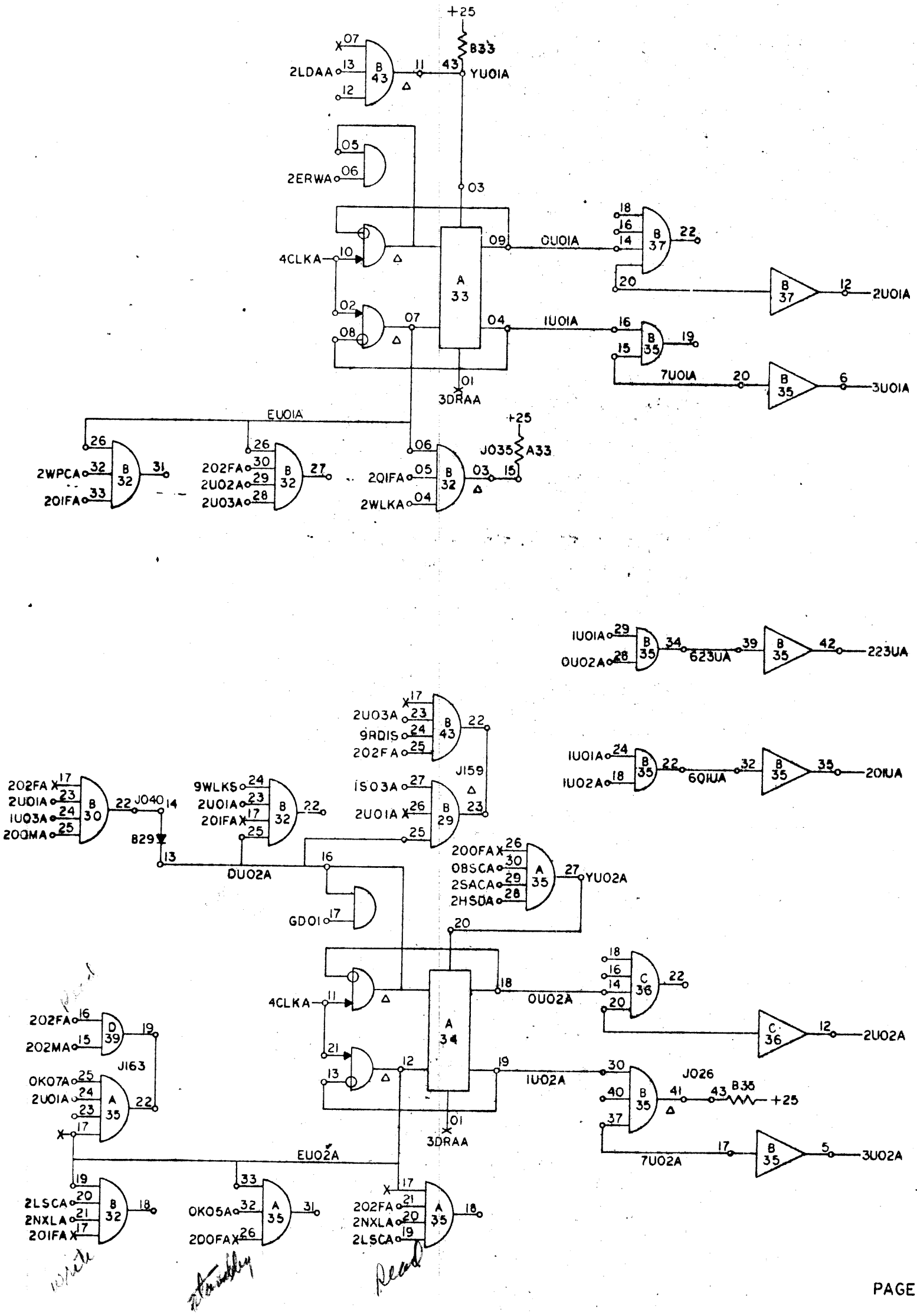

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SCALE ~	SIZE D	DWG NO. 131820	REV A
DO NOT SCALE DRAWING		SHEET 11 OF 35	

TITLE: DIAGRAM, LOGIC, CONTROLLER

SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

REV	DESCRIPTION	CHK	DATE	APPROVED
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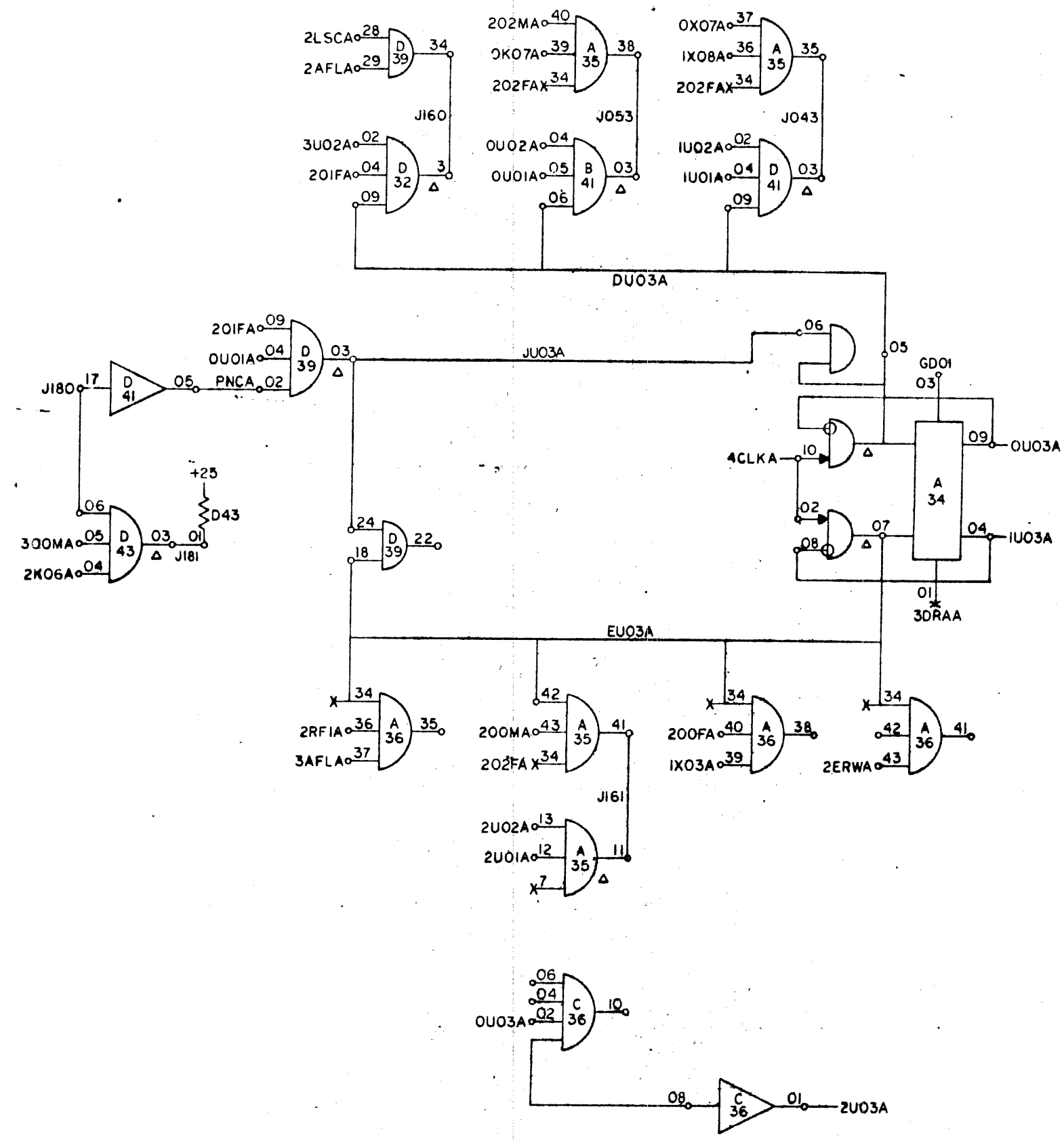


REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

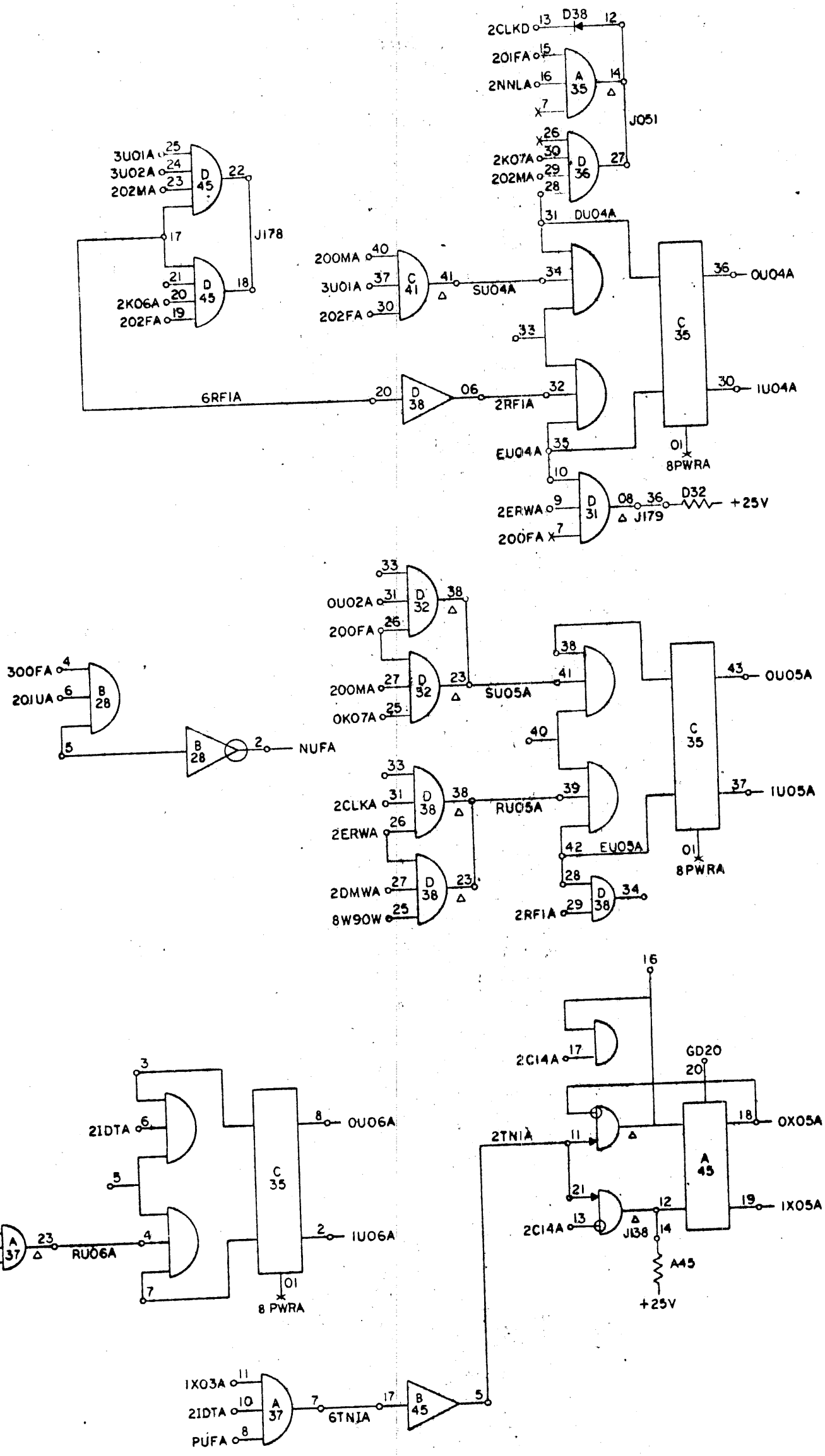
320 A

SDS
SCIENTIFIC DATA SYSTEMS

DIAGRAM, LOGIC, CONTROLLER

SIZE D | DWG NO. 131820 | REVISION LETTER A

SCALE NONE | DO NOT SCALE DRAWING | SHEET 12 OF 35



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REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		3/1/20	

SIZE D | DWG NO. 31020 | REV A | SHEET 13 OF 35

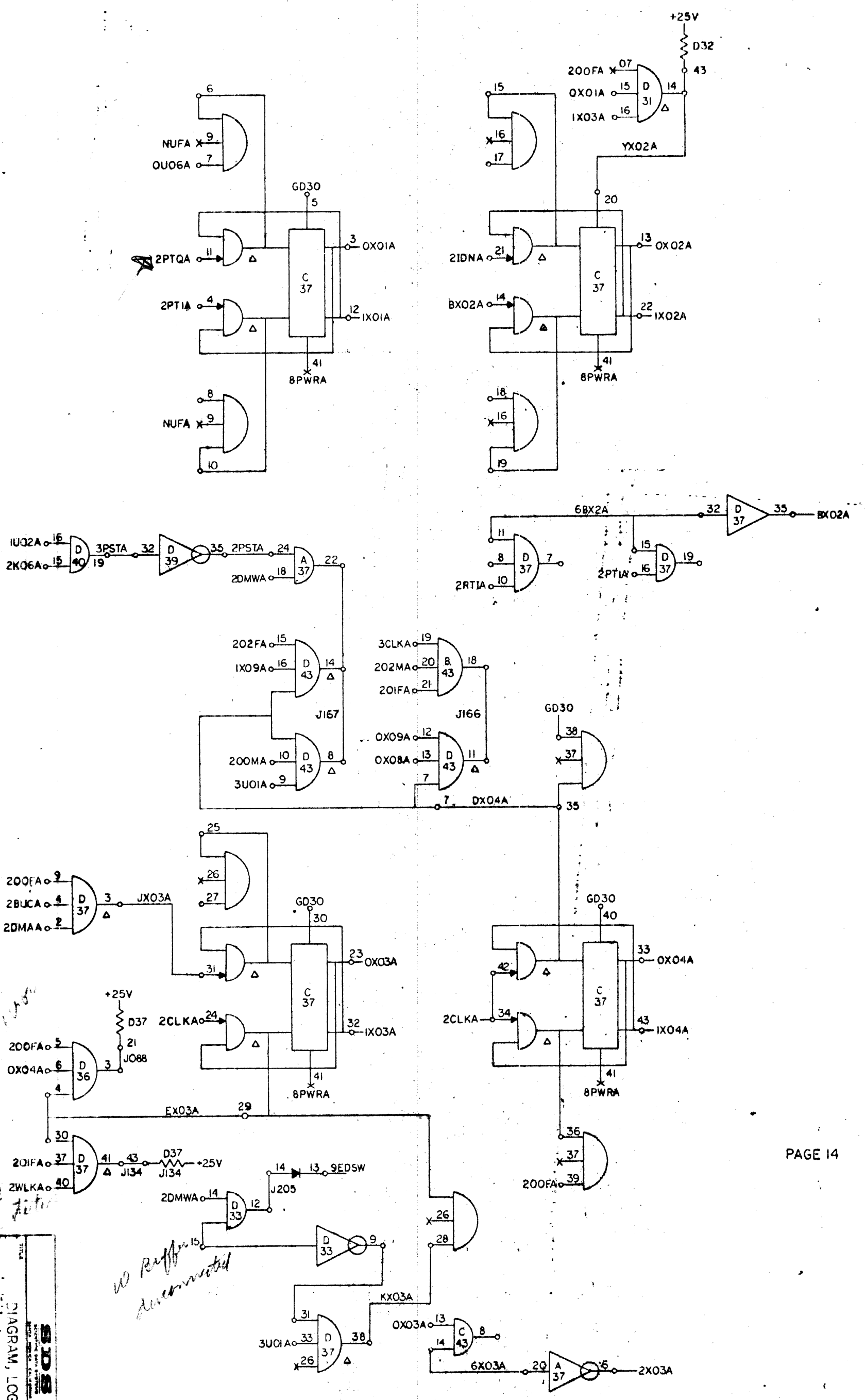
TITLE: DIAGRAM, LOGIC, CONTROLLER

SCALE —

DO NOT SCALE DRAWING

SDS SYSTEMS DATA SYSTEMS

XO1 THRU XO4



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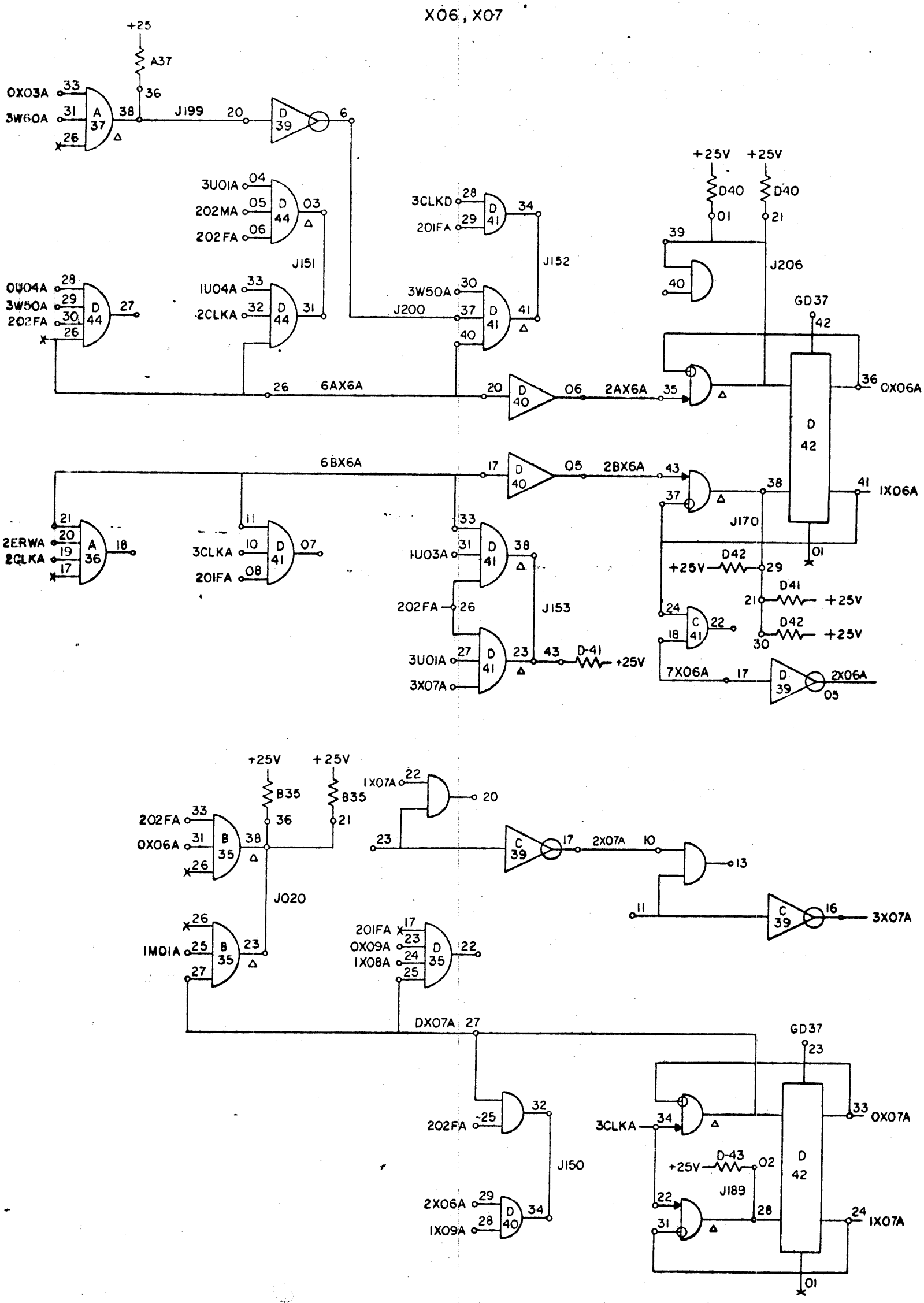
	D	131820		REV A: VFG RELEASE
DO NOT SCALE DRAWING			SHEET 14	CHG
	A			DATE
				APPROVED

DIAGRAM, LOGIC, CONTROLLER

SDS

131820 A

X06, X07



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REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

SDS

TITLE: DIAGRAM, LOGIC, CONTROLLER

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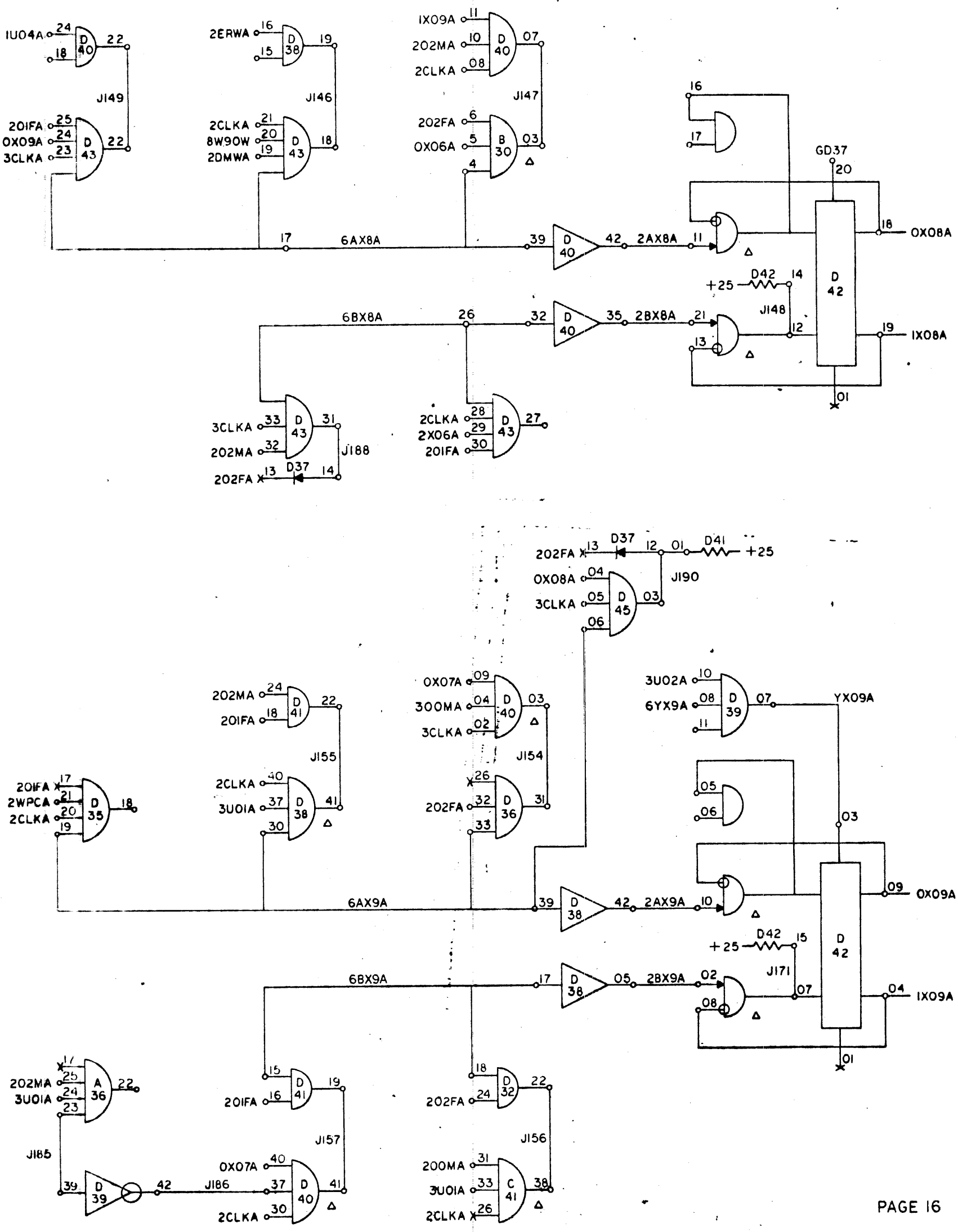
SCALE — | DO NOT SCALE DRAWING | SHEET 15 OF 35

X08, X09



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REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		3.320	

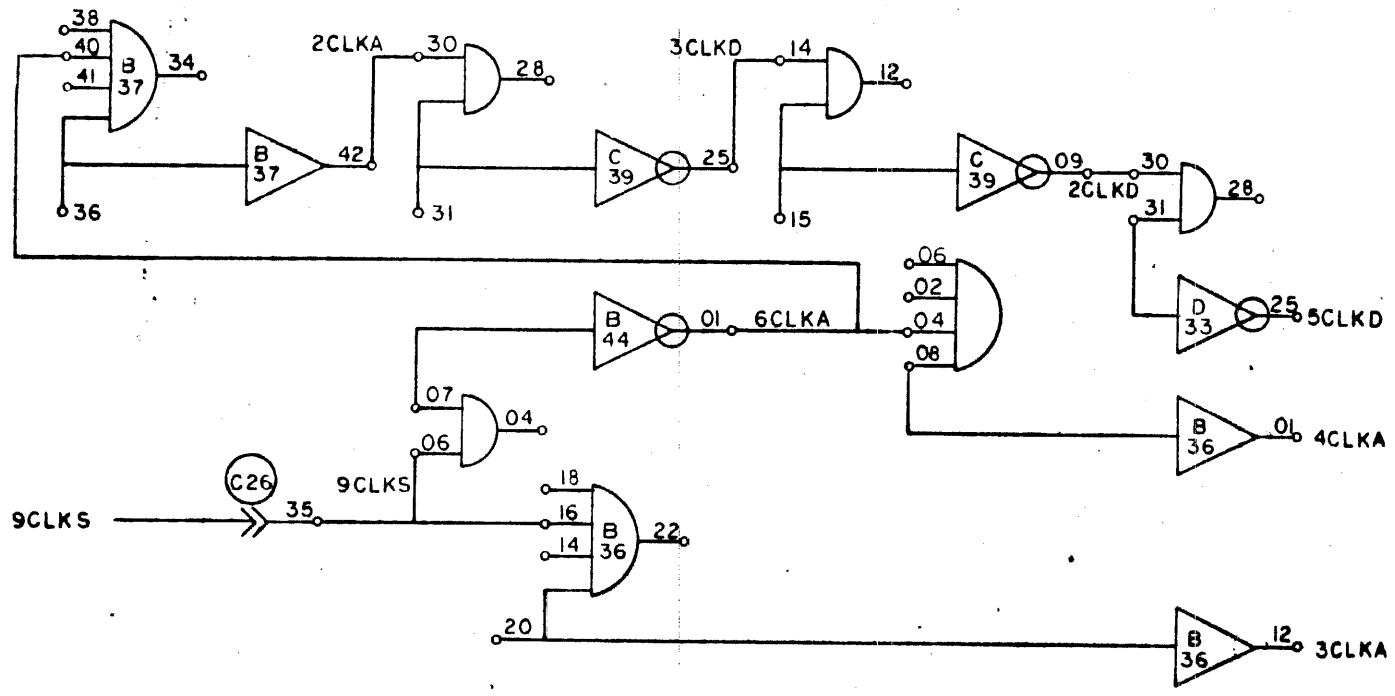
SIZE D | DWG NO. 131820 | REV A | SHEET 6 OF 35

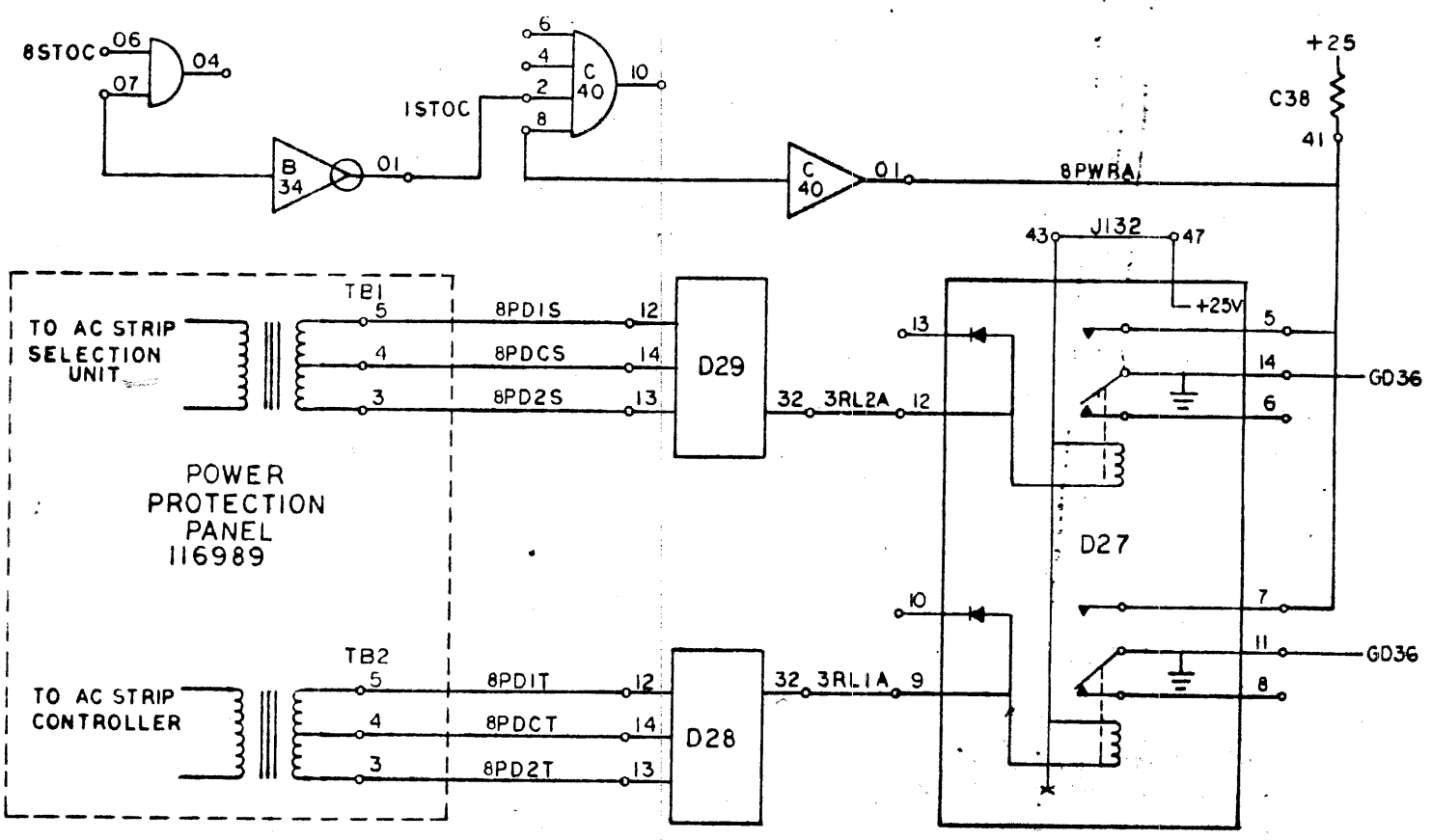
DIAGRAM, LOGIC, CONTROLLER

SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

DO NOT SCALE DRAWING

CLOCK, POWER FAIL





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SCALE	SIZE D	DWG NO. 131820	REV A
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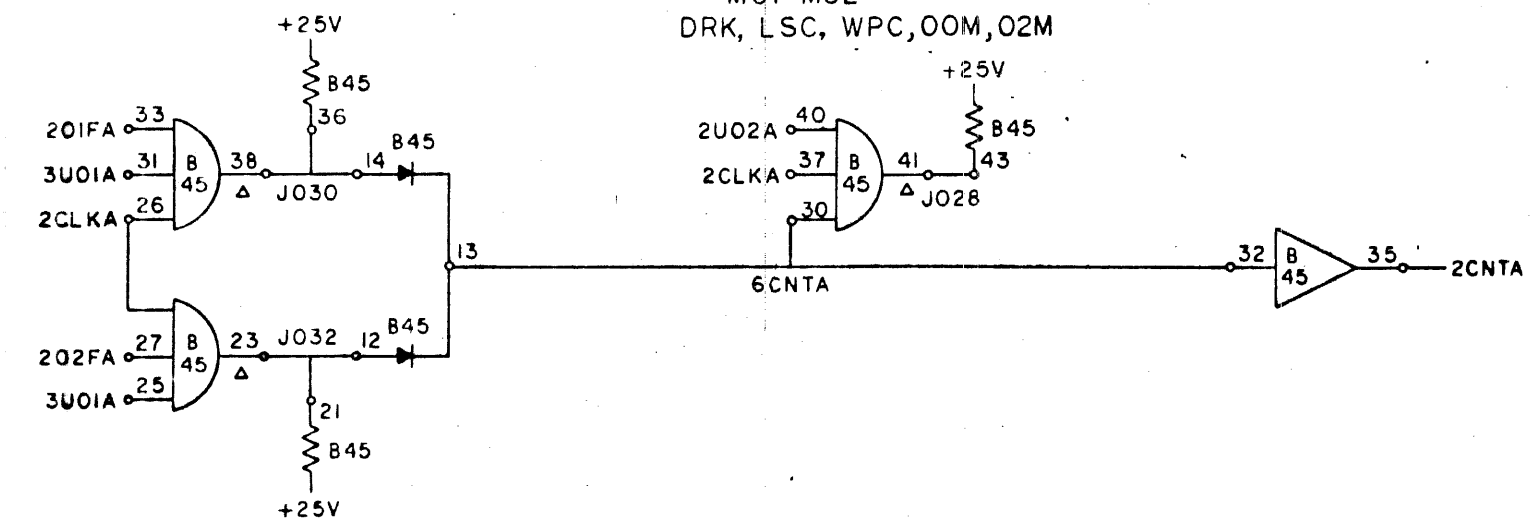
DIAGRAM, LOGIC, CONTROLLER

SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	RELEASE			131820 A

MODULO THREE COUNT
M01–M02
DRK, LSC, WPC, 00M, 02M



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REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		3 320	A

TITLE: DIAGRAM, LOGIC, CONTROLLER

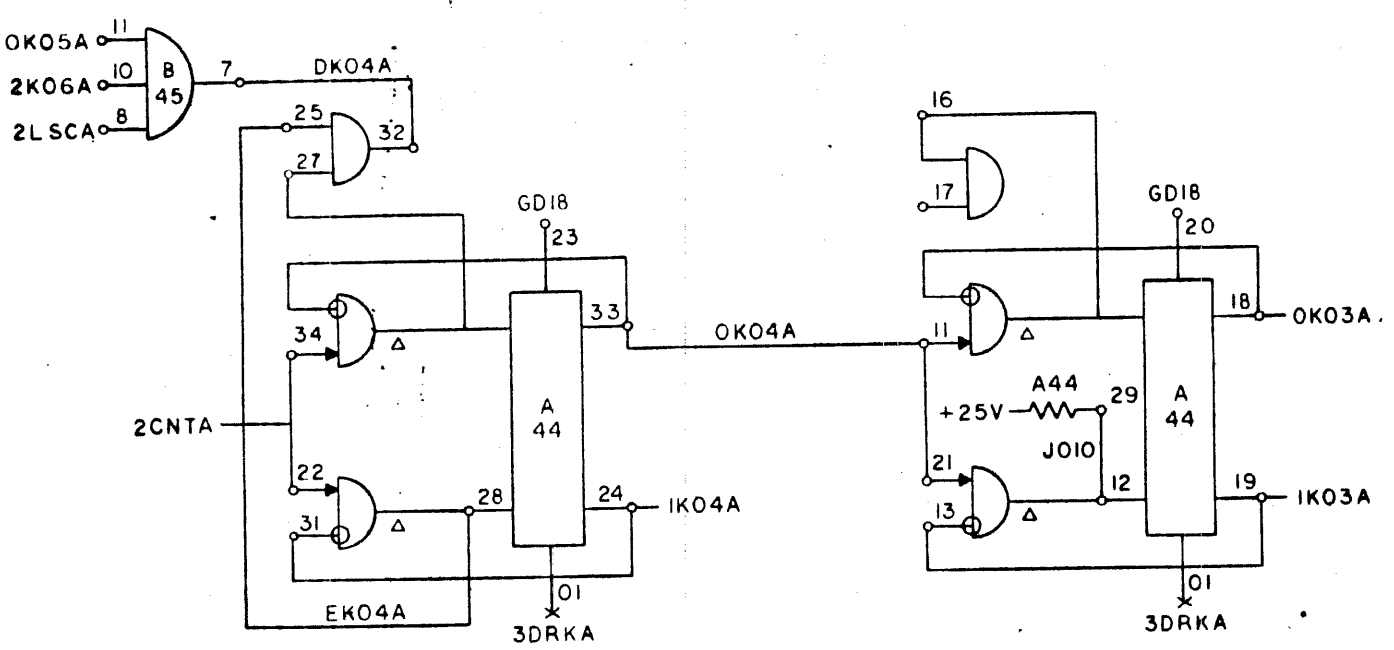
SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

Tirkell 8-16-66

SCALE —— SIZE D DWG NO. 131820 REVISION A

DO NOT SCALE DRAWING SHEET 18 OF 35

CHARACTER COUNT REGISTER
KOI THRU KO4, NXL, NNL



SCALE NONE	DWG NO. 131820	REV D	CHANGE LETTER A
DO NOT SCALE DRAWING	SHEET 19 OF 35		

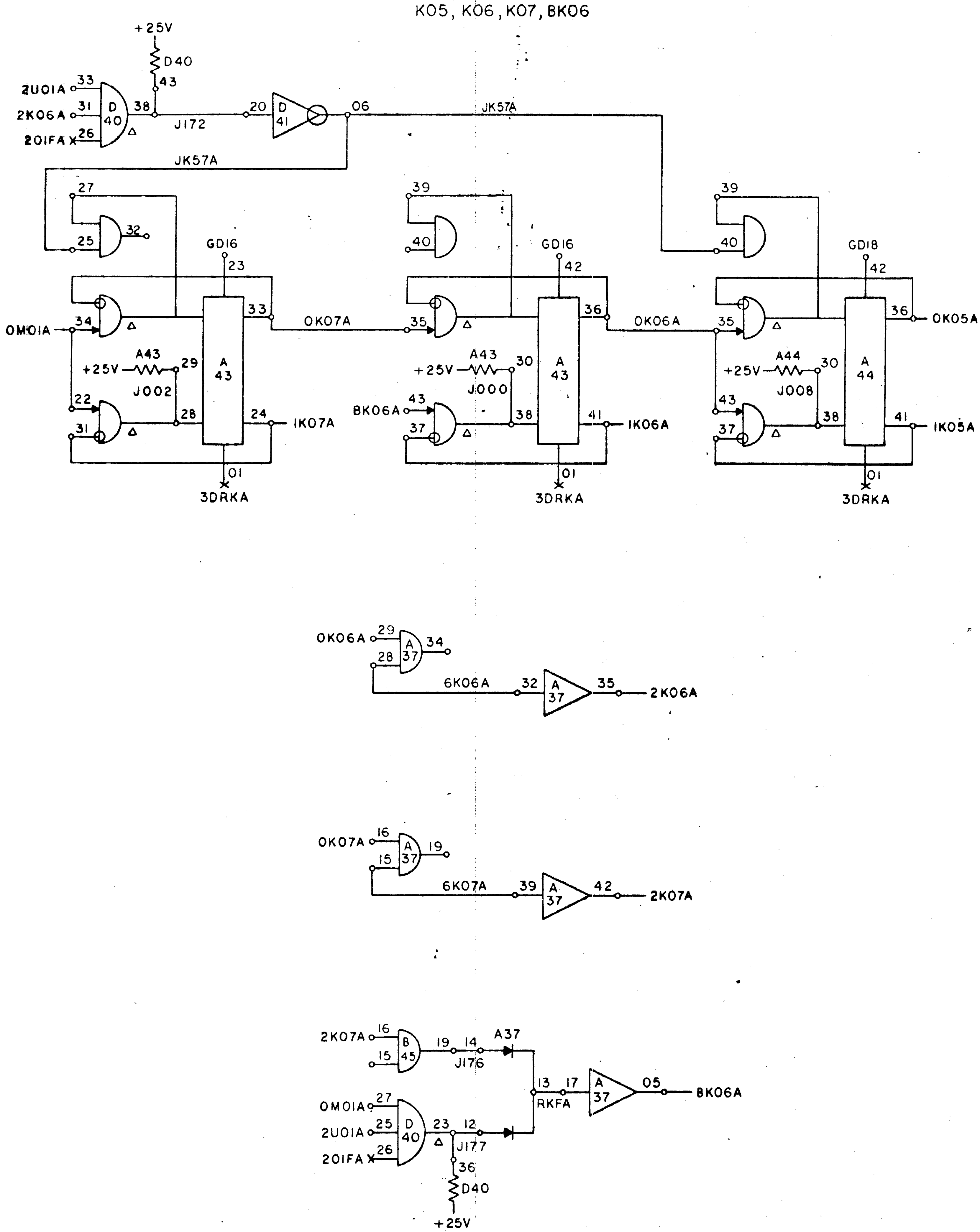
TITLE: DIAGRAM, LOGIC, CONTROLLER

SDS

REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

131820 A

CHARACTER COUNT REGISTER
K05, K06, K07, BK06



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DIAGRAM, LOGIC, CONTROLLER

SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

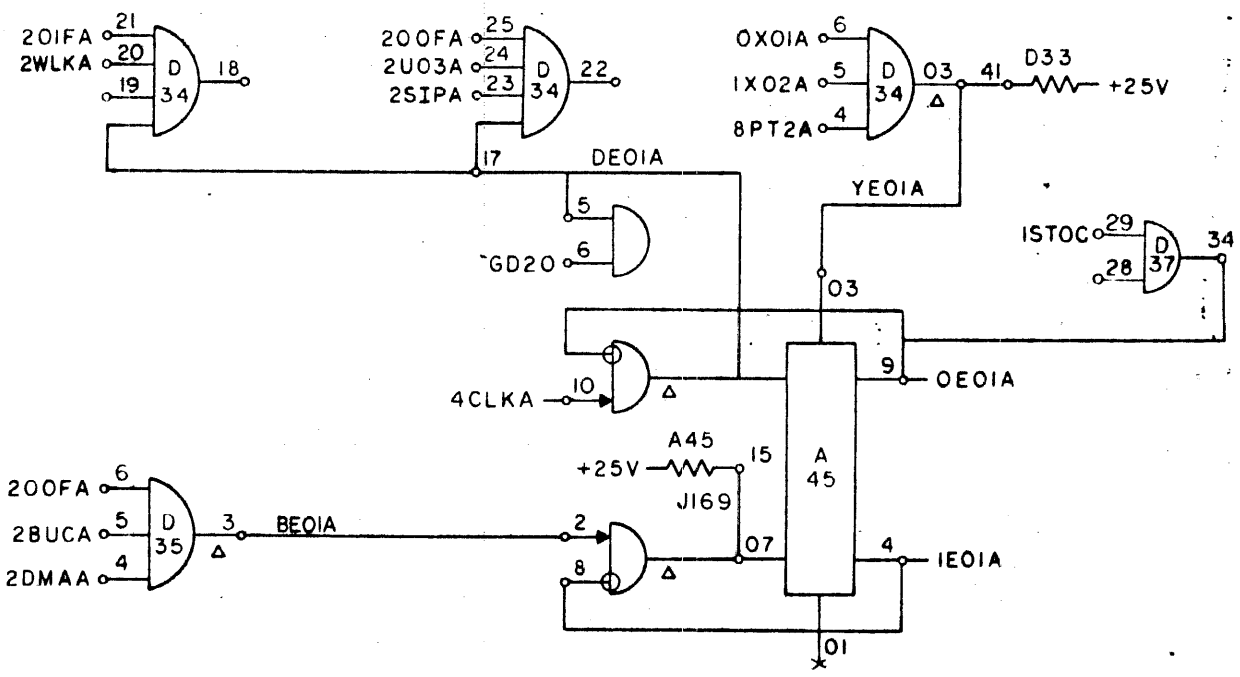
SIZE D | DWG NO. 131820 | CHANGE LETTER A

SHEET 20 OF 35

5-16-66

REVISIONS: A | MFG RELEASE

E01
TEST POINTS



TEST POINTS
D26

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2	0A10A
3	0A11A
4	0A12A
5	0A13A
6	0A14A
7	0A15A
8	0A16A
9	0A17A
10	0A18A
11	0A19A
12	0A20A
13	0A21A
14	0A22A
15	0A23A
16	0X03A
17	0F01A
18	0F02A
19	0V01A
20	0V02A
21	0V03A
22	0V04A
23	0V05A
24	0V06A
25	0V07A
26	0V08A
27	0V09A
28	0V10A
29	0V11A
30	0V12A
31	0P06A
32	0E01A

DIAGRAM, LOGIC,
CONTROLLER

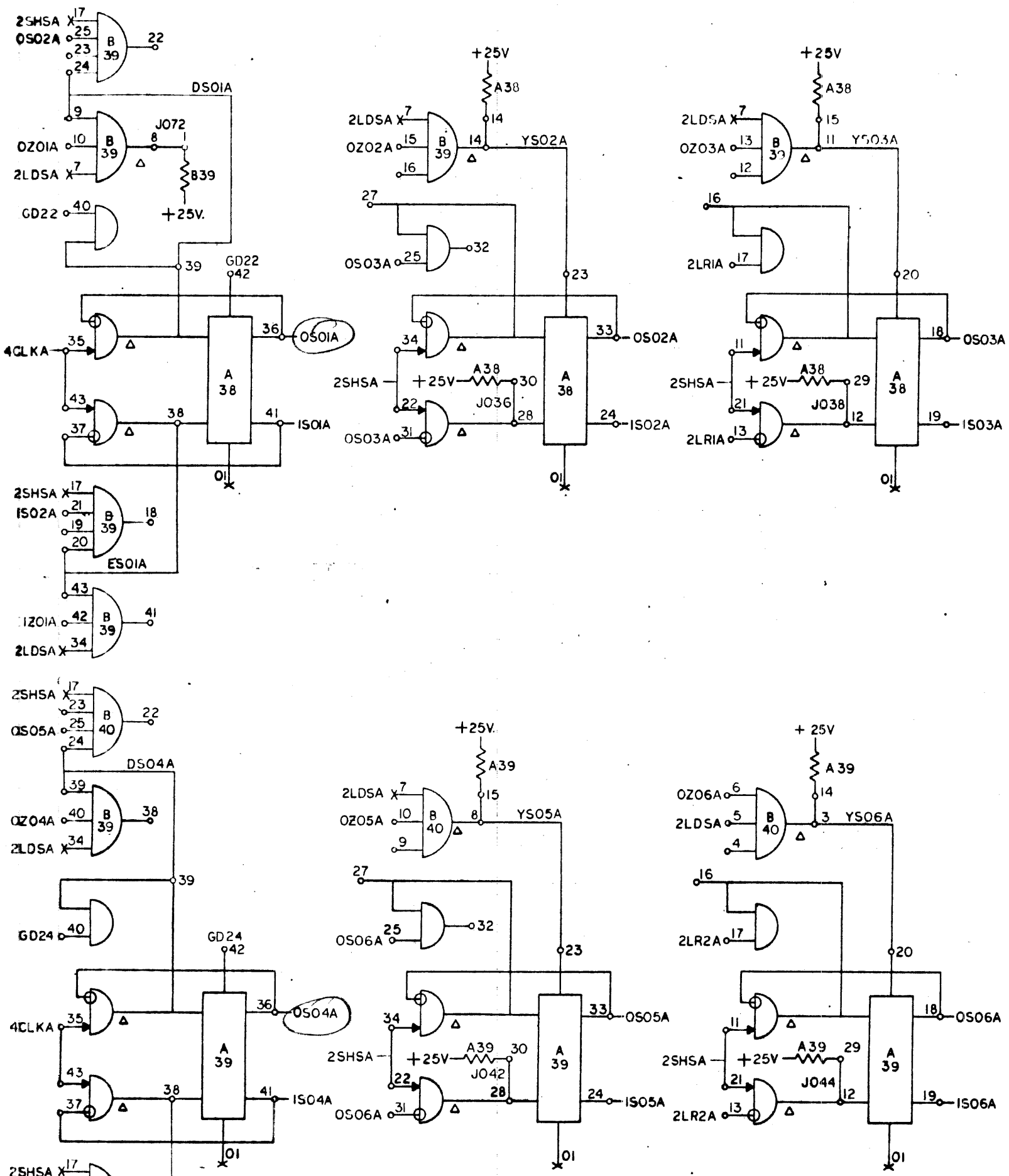
SDS

8-17-66 | D | 3320 | A

REVISIONS

REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

SHIFT REGISTER
S01 → S06



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REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
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131820 A

SDS

TITLE: DIAGRAM, LOGIC, CONTROLLER

SCALE: as shown

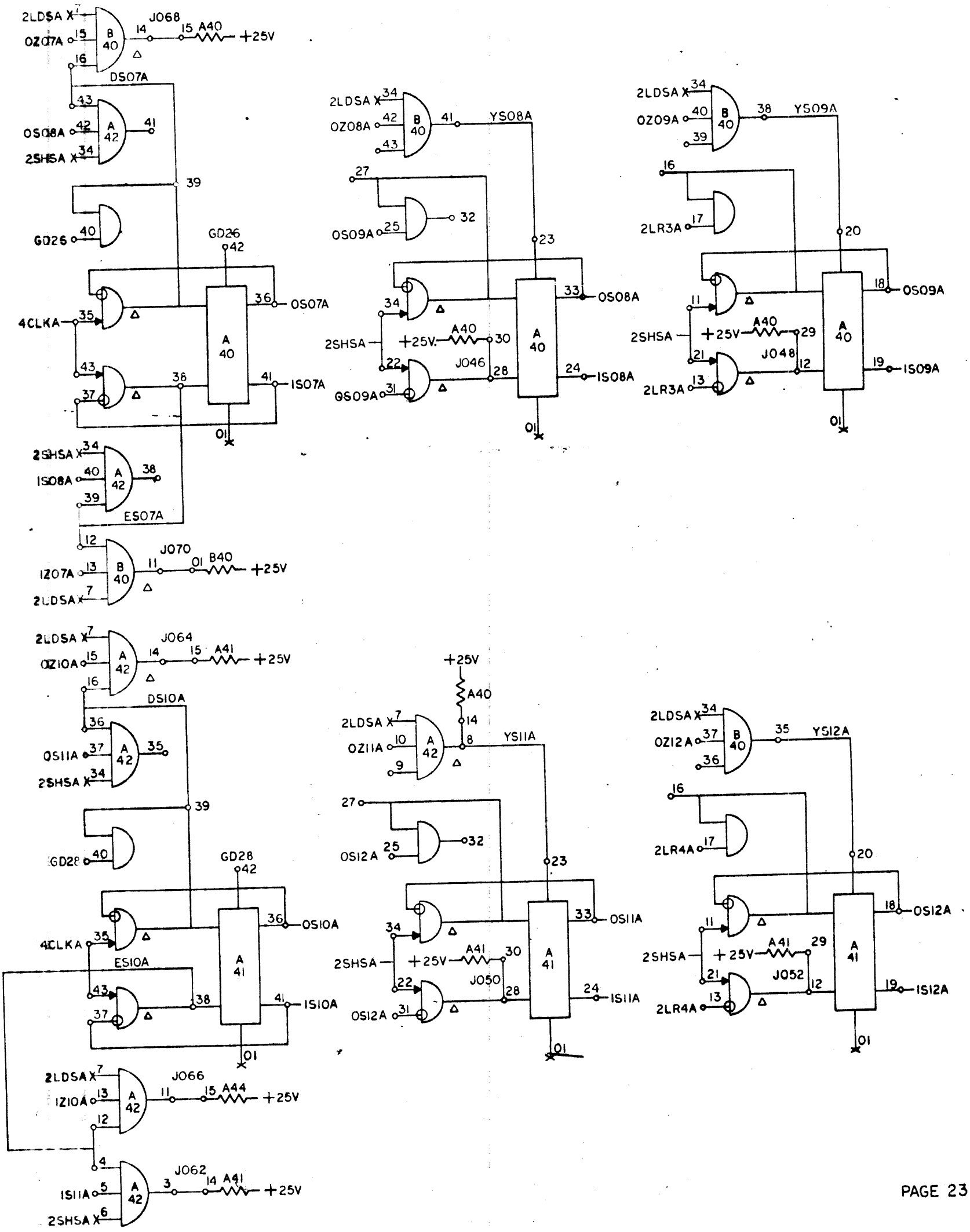
DO NOT SCALE DRAWING

DWG NO. 131820

SHEET 22 OF 22

REVISION LETTER A

SHIFT REGISTER
S07 → S12



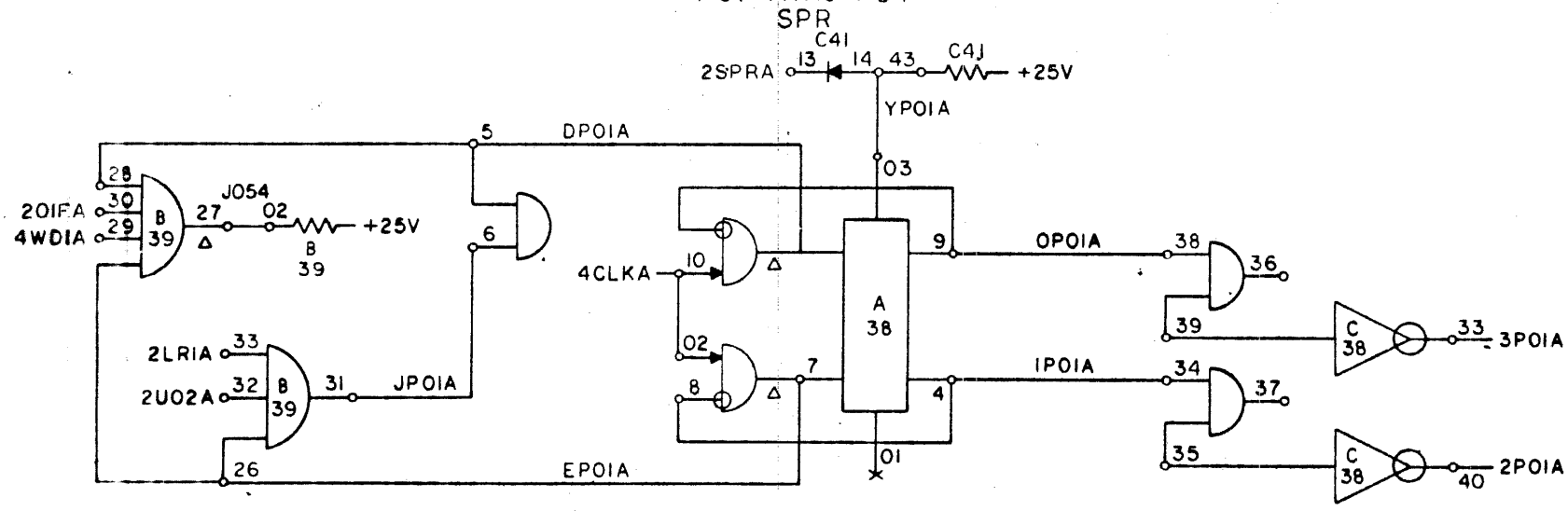
SCALE —	SIZE D	DWG NO 131820	REV A
DO NOT SCALE DRAWING	SHEET 23 OF 35	CONTROLLER	

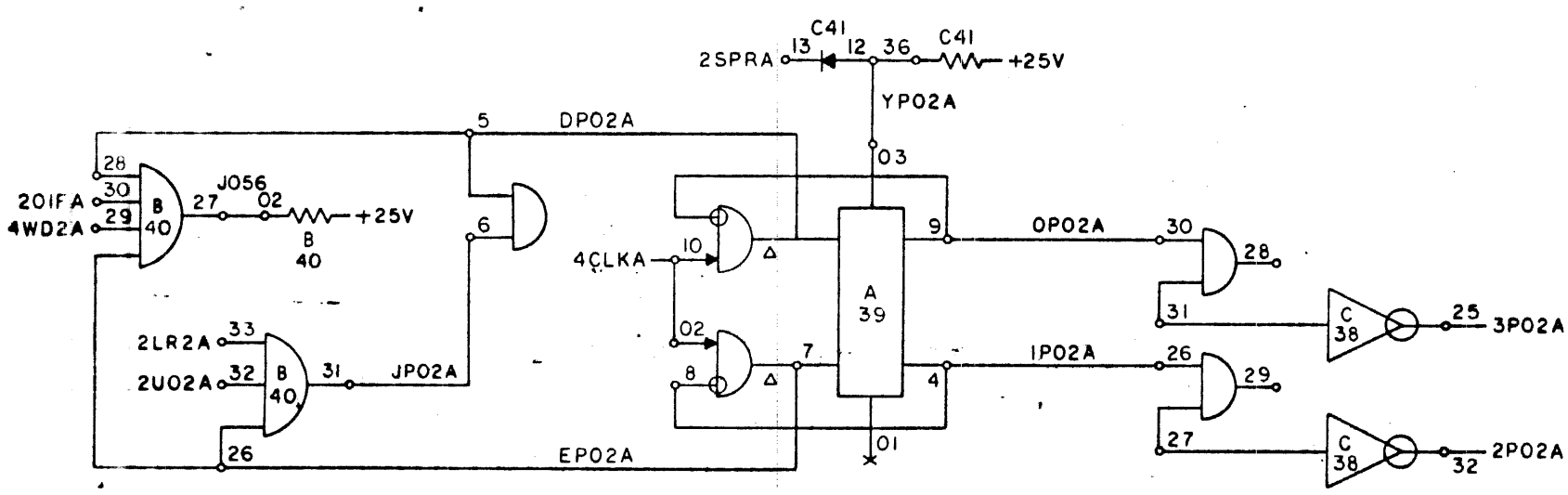
DIAGRAM, LOGIC,

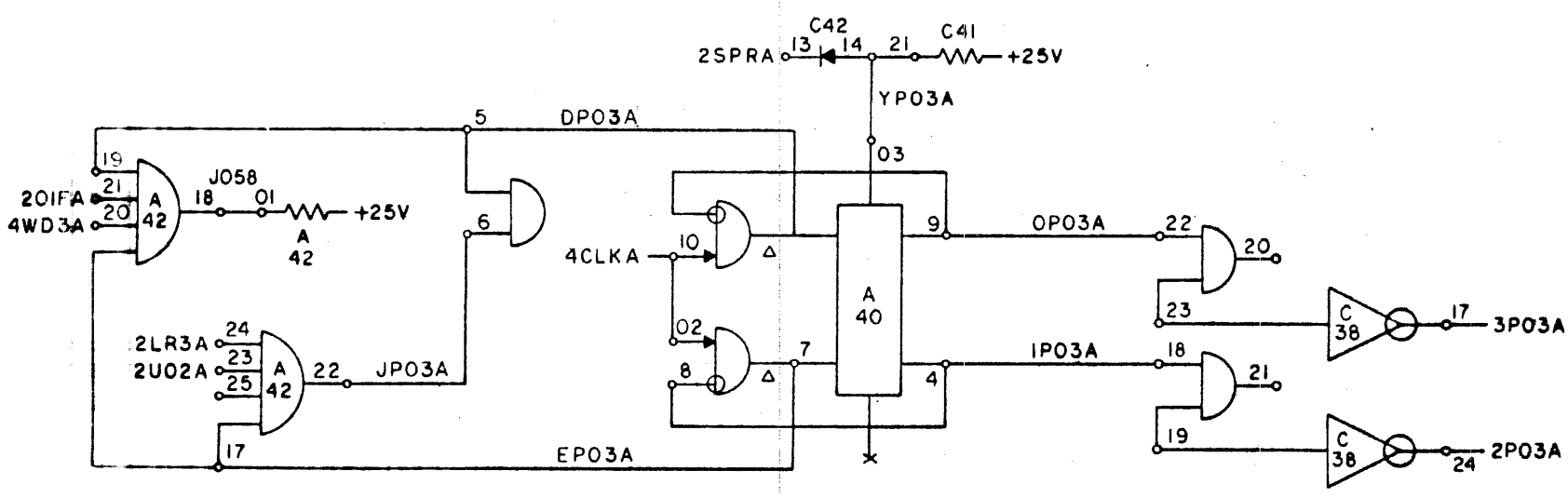
REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

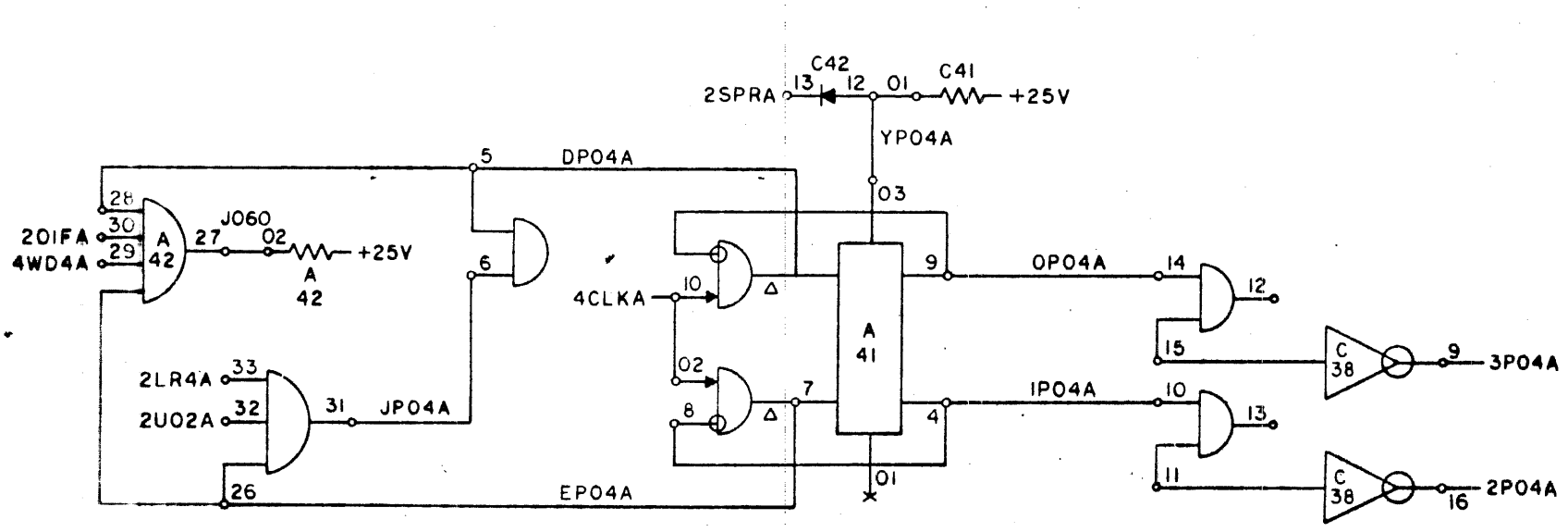
131820 A

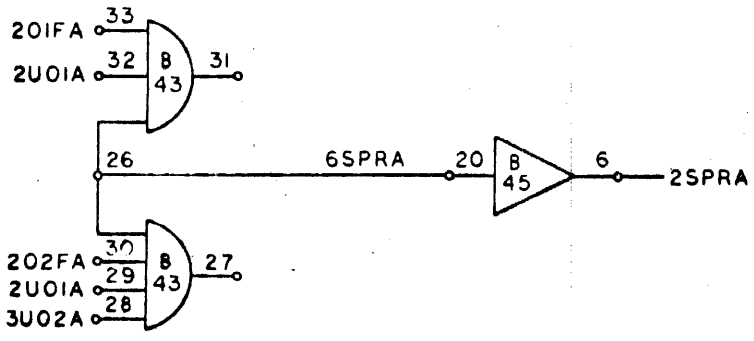
PARITY REGISTER
P01 THRU P04
SPR











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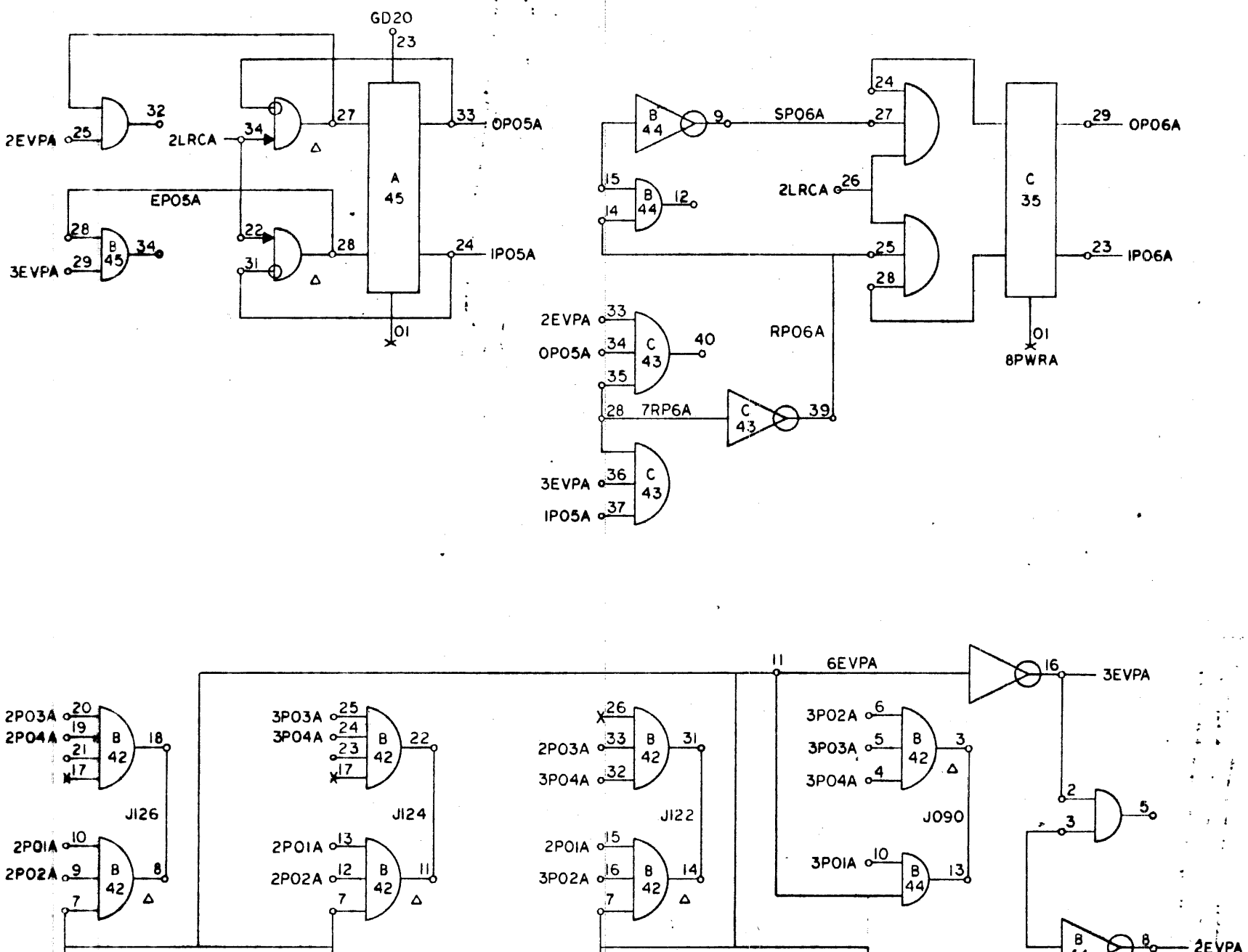
SCALE	SIZE D	DWG NO. 131820	REV A
DO NOT SCALE DRAWING		SHEET 24 OF 35	

DIAGRAM, LOGIC, CONTROLLER

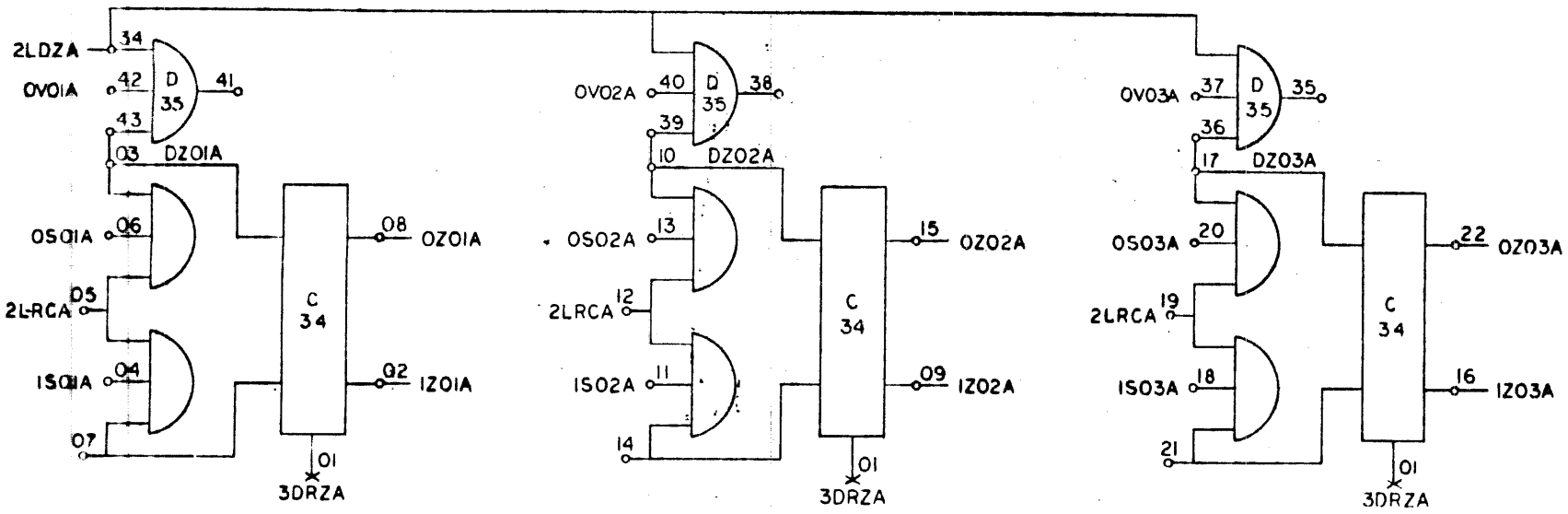
SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

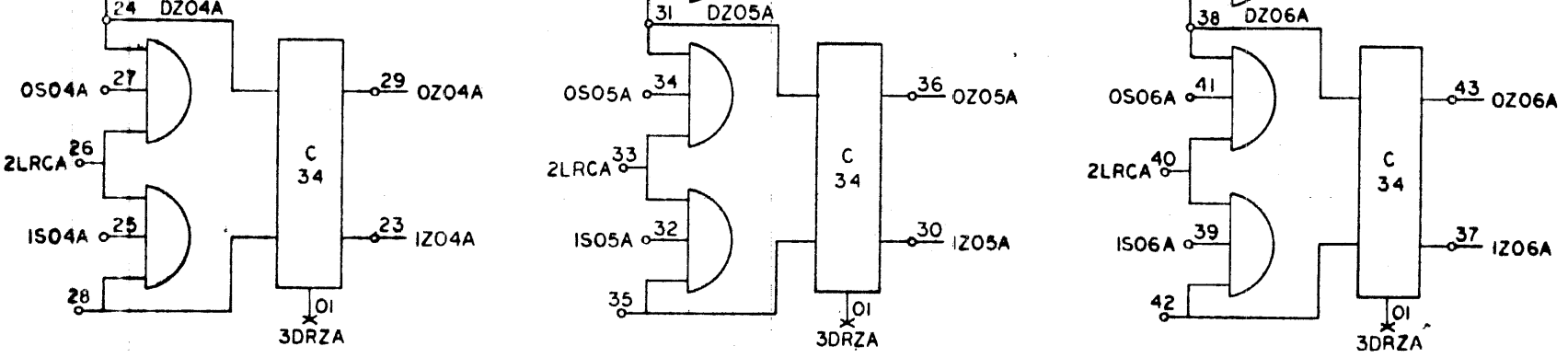
REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		3-3-70	

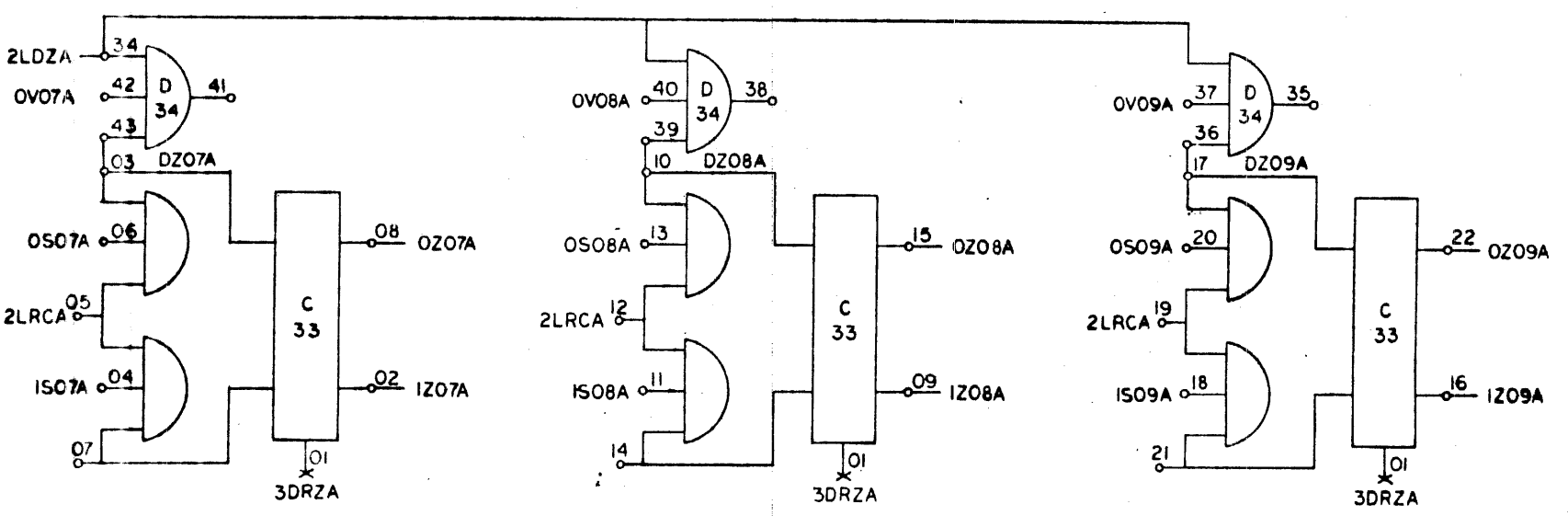
PARITY.
P05, P06
EVP, PCP

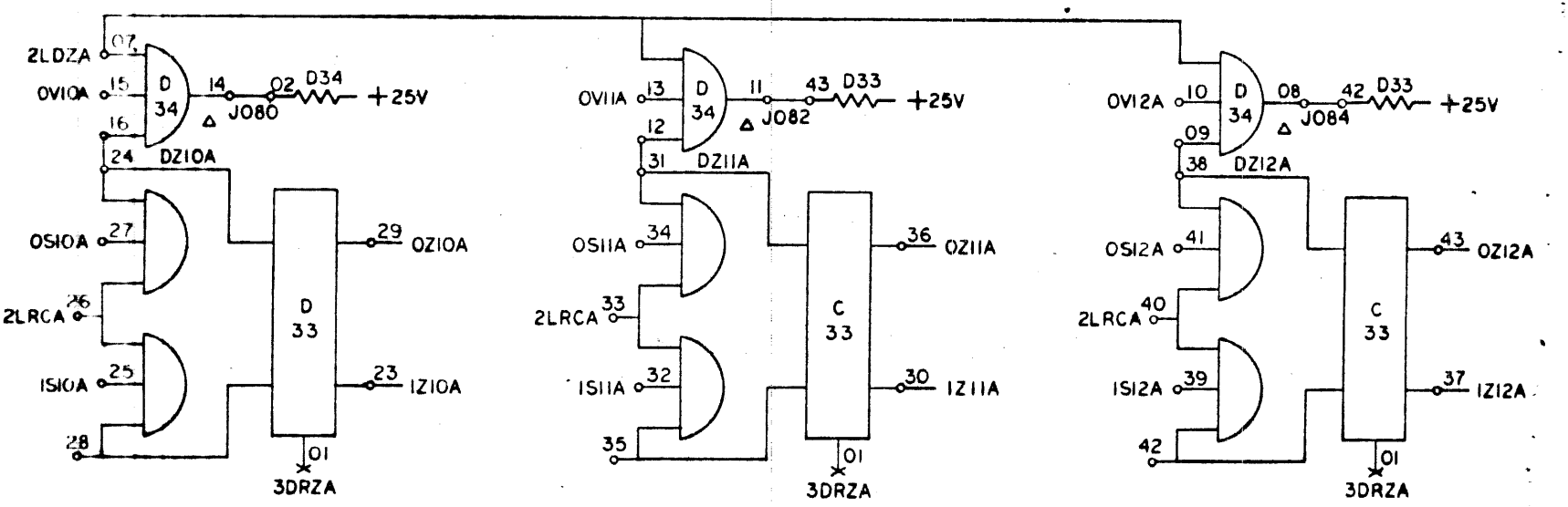


Z REGISTER









DIAGRAM, LOGIC, CONTROLLER

SDS

SIZE D | DWG NO 31320 | SHEET 26 OF 35 | STANDARD LETTER A

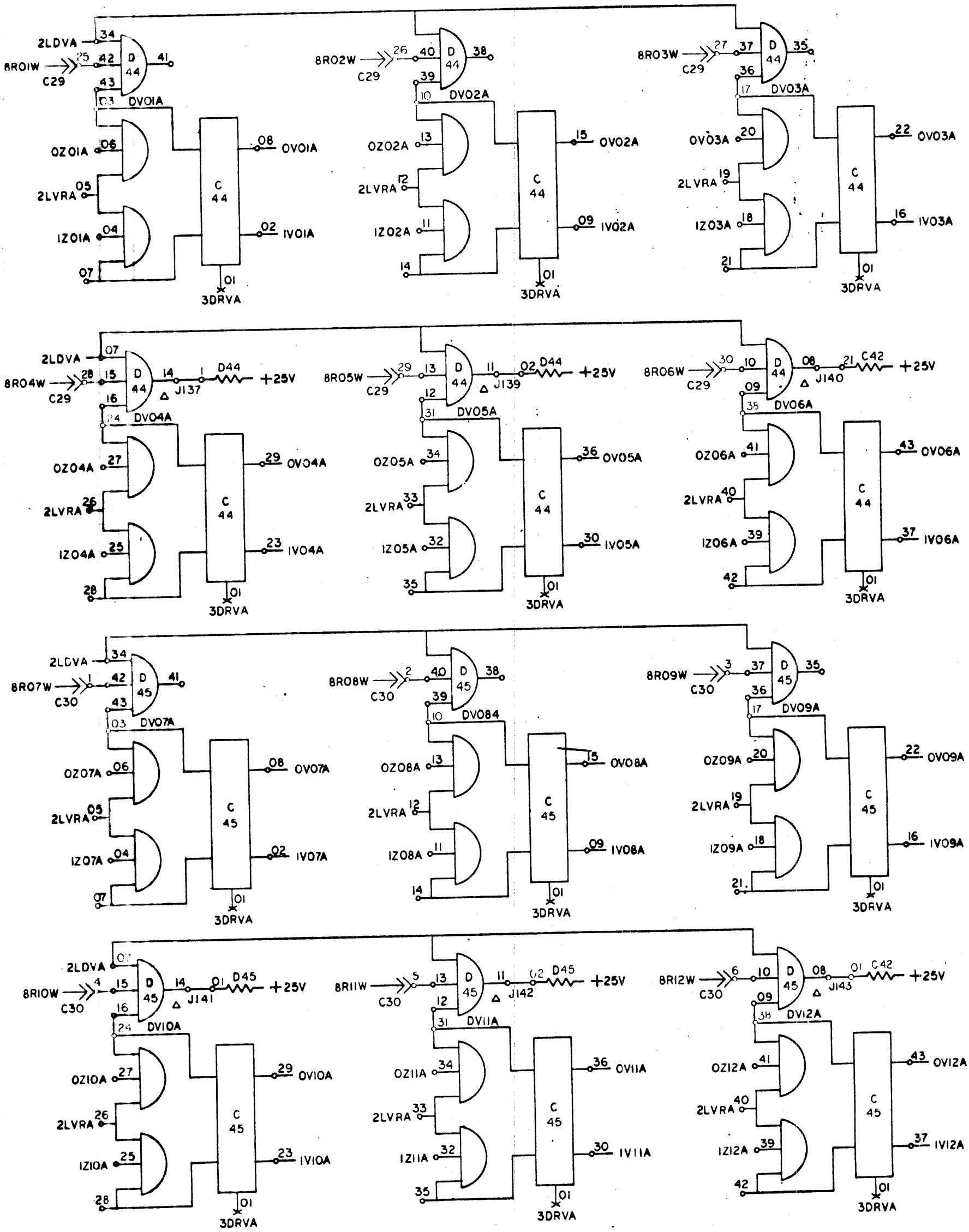
SCALE —

DO NOT SCALE DRAWING

REVISIONS

REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		1220	

V REGISTER



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SCALE ——	SIZE D	DWG NO. 131820	REV A
DO NOT SCALE DRAWING	SHEET 27 OF		

DIAGRAM LOGIC, CONTROLLER

SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

REVISIONS				
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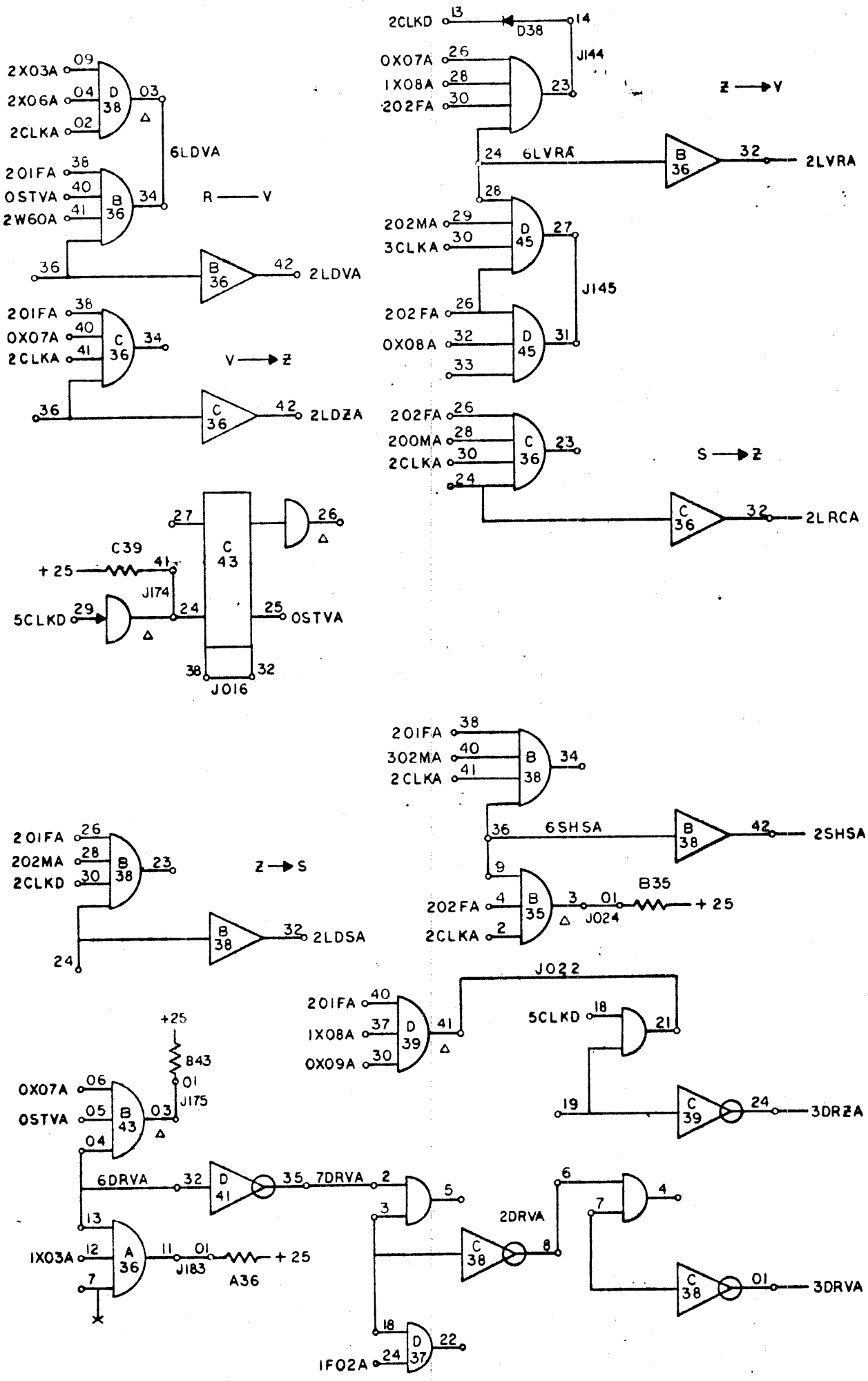
A	MFG. RELEASE		131820	A

V, Z, S REGISTER LOAD AND SHIFT SIGNALS
LDV, LDZ, LDS, LVR, LRC, SHS, DRV, DRZ, STV



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REVISIONS				
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE		3 320	A

DIAGRAM, LOGIC, CONTROLLER

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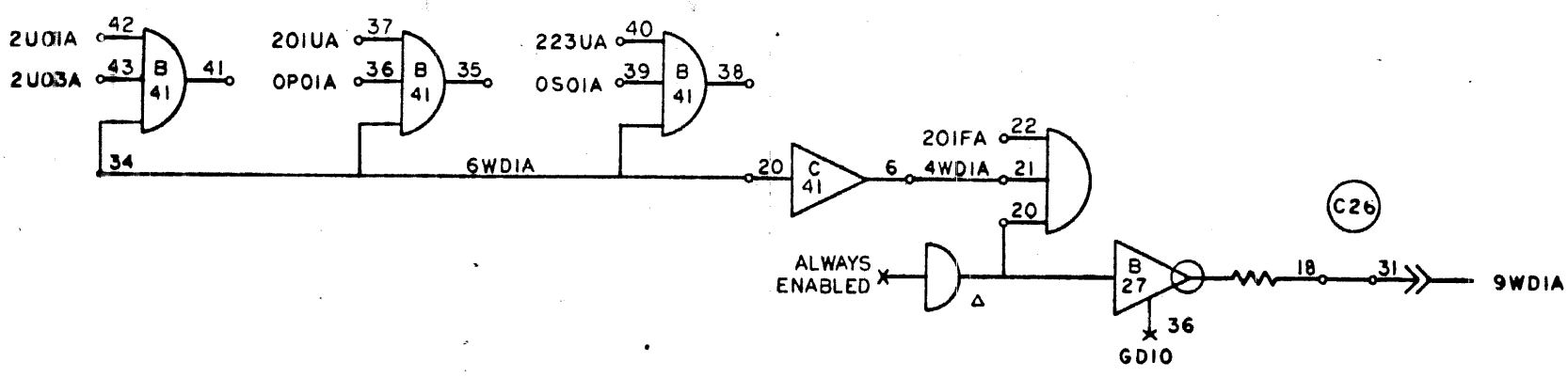
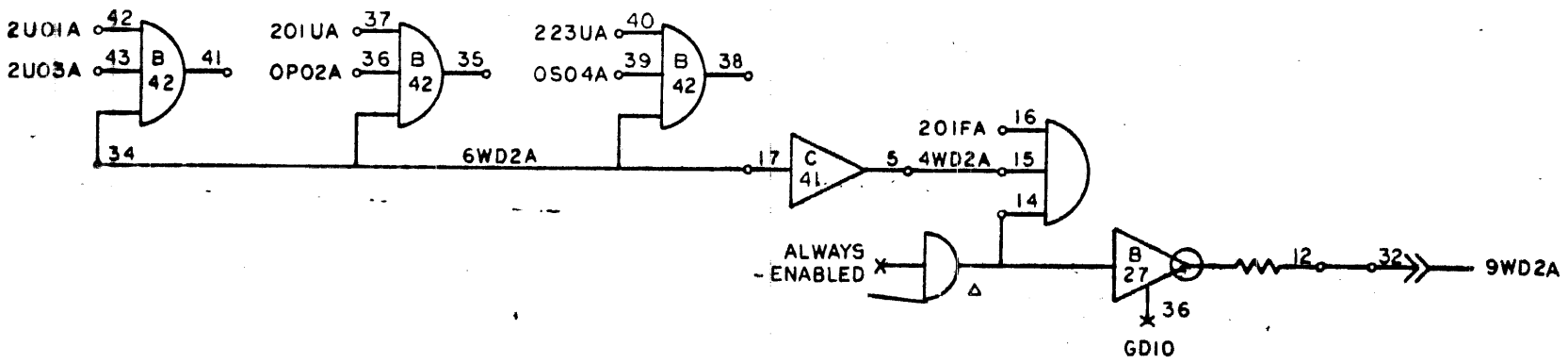
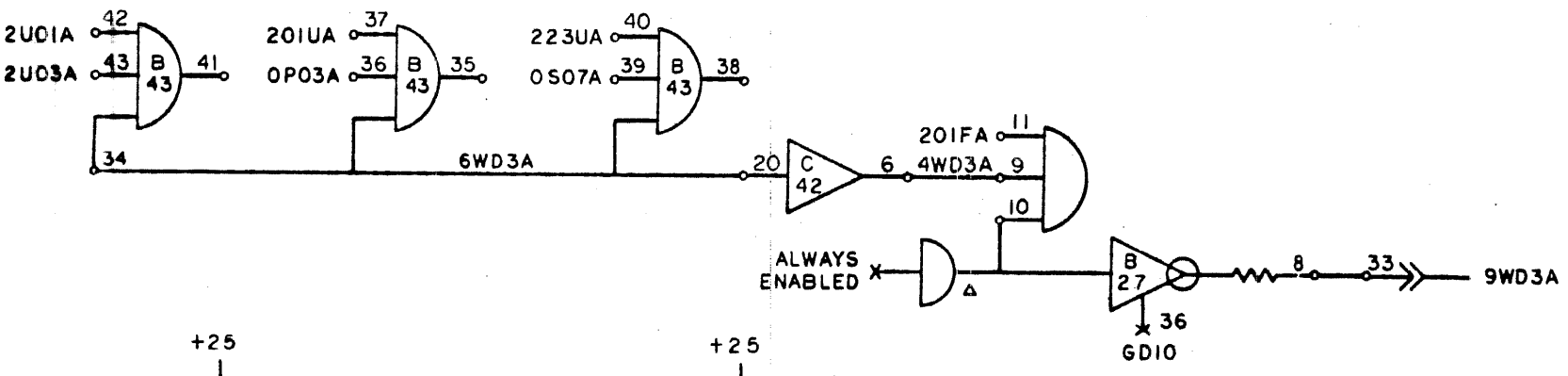
SCALE — | DO NOT SCALE DRAWING

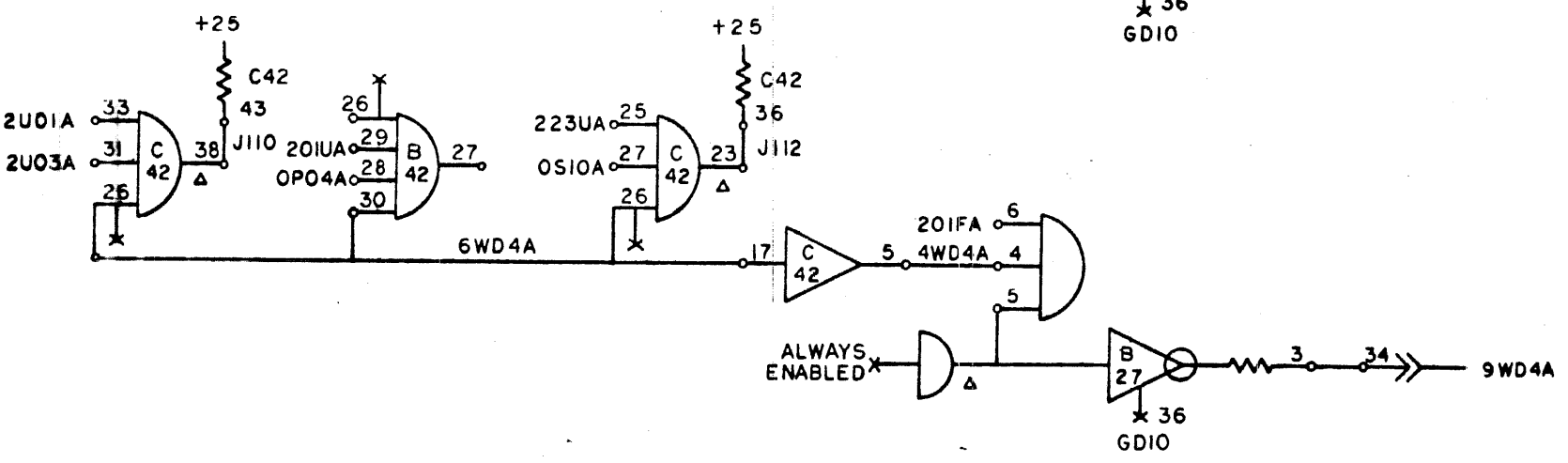
SDS

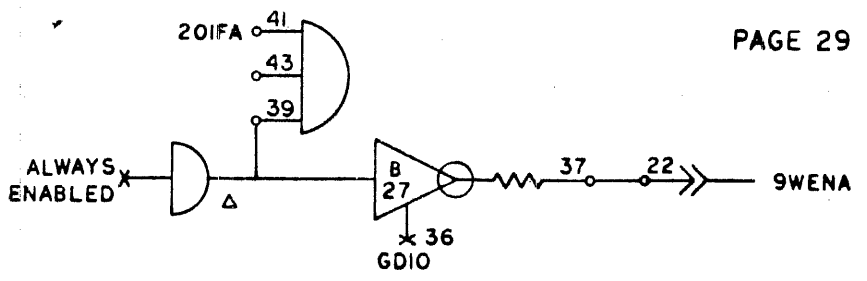
CONTROLLER / SELECTION UNIT
WRITE DATA, WDI → 4, WEN.











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TITLE	DIAGRAM, LOGIC, CONTROLLER
SIZE	D
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SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

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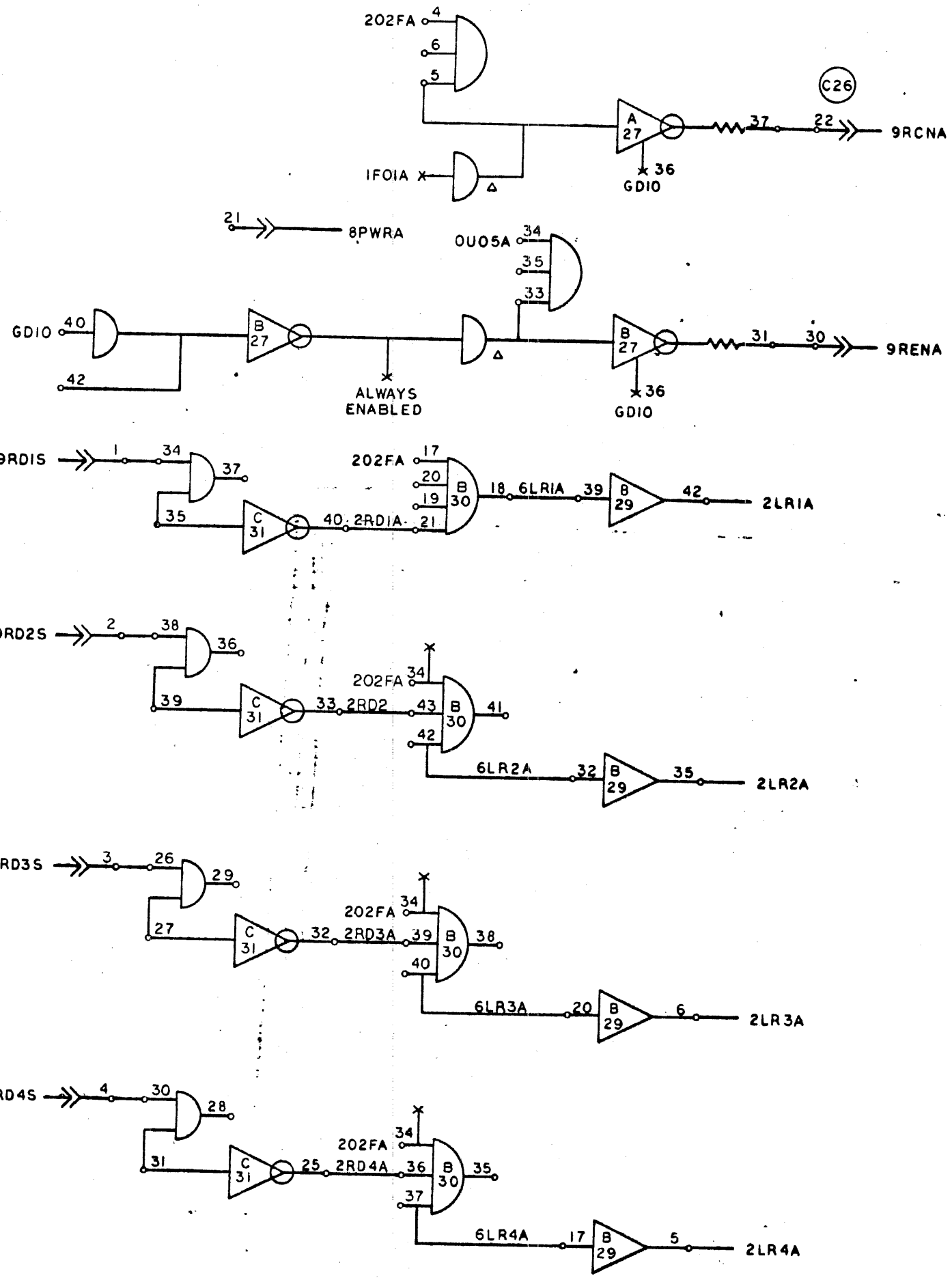
REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

131820 A

CONTROLLER / SELECTION UNIT
READ — DATA, CLOCKS, ENABLES
RDI → 4, LRI → 4: RCN, REN



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SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA, CALIFORNIA

DIAGRAM, LOGIC, CONTROLLER

SIZE D | DWG NO 131820 | REV A | SHEET 30 OF

DO NOT SCALE DRAWING

REV	DESCRIPTION	CHK	DATE
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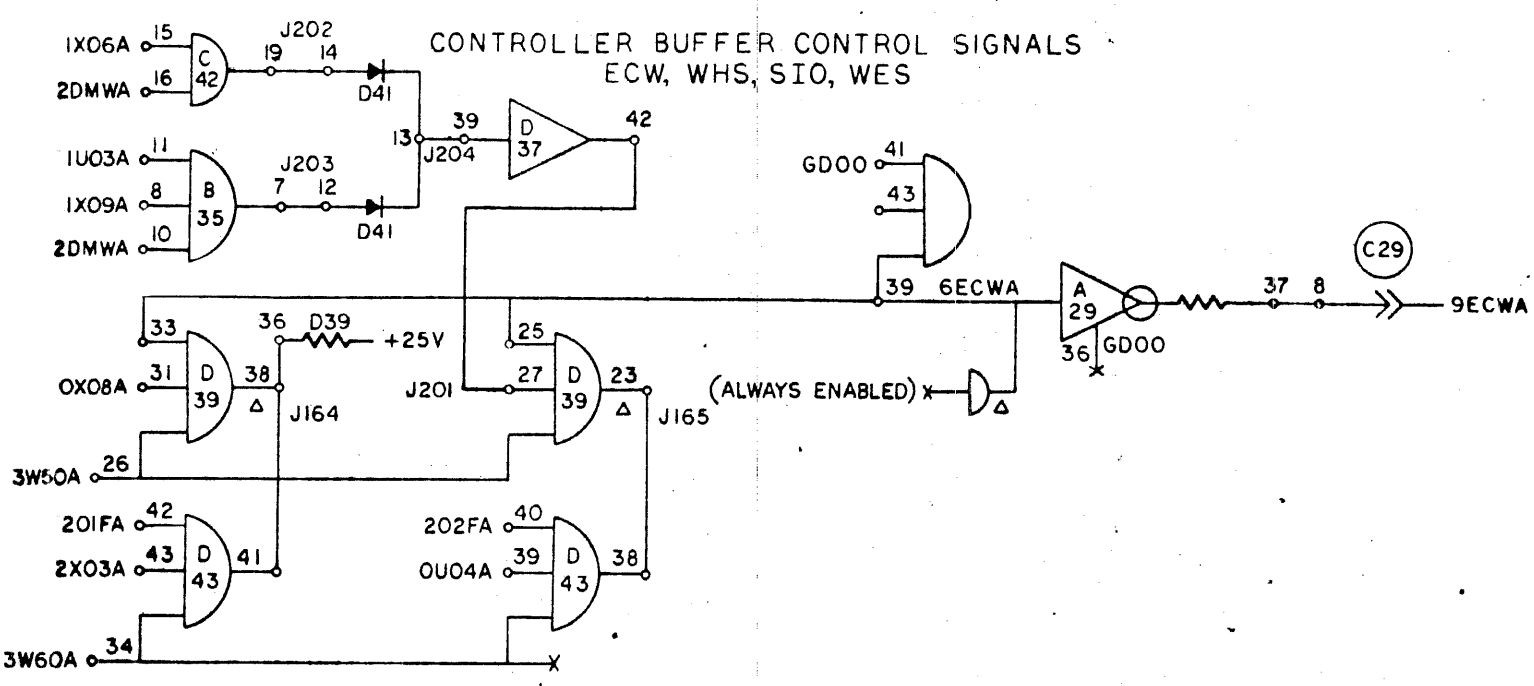
CONTROLLER BUFFER CONTROL SIGNALS
ECW, WHS, SIO, WES



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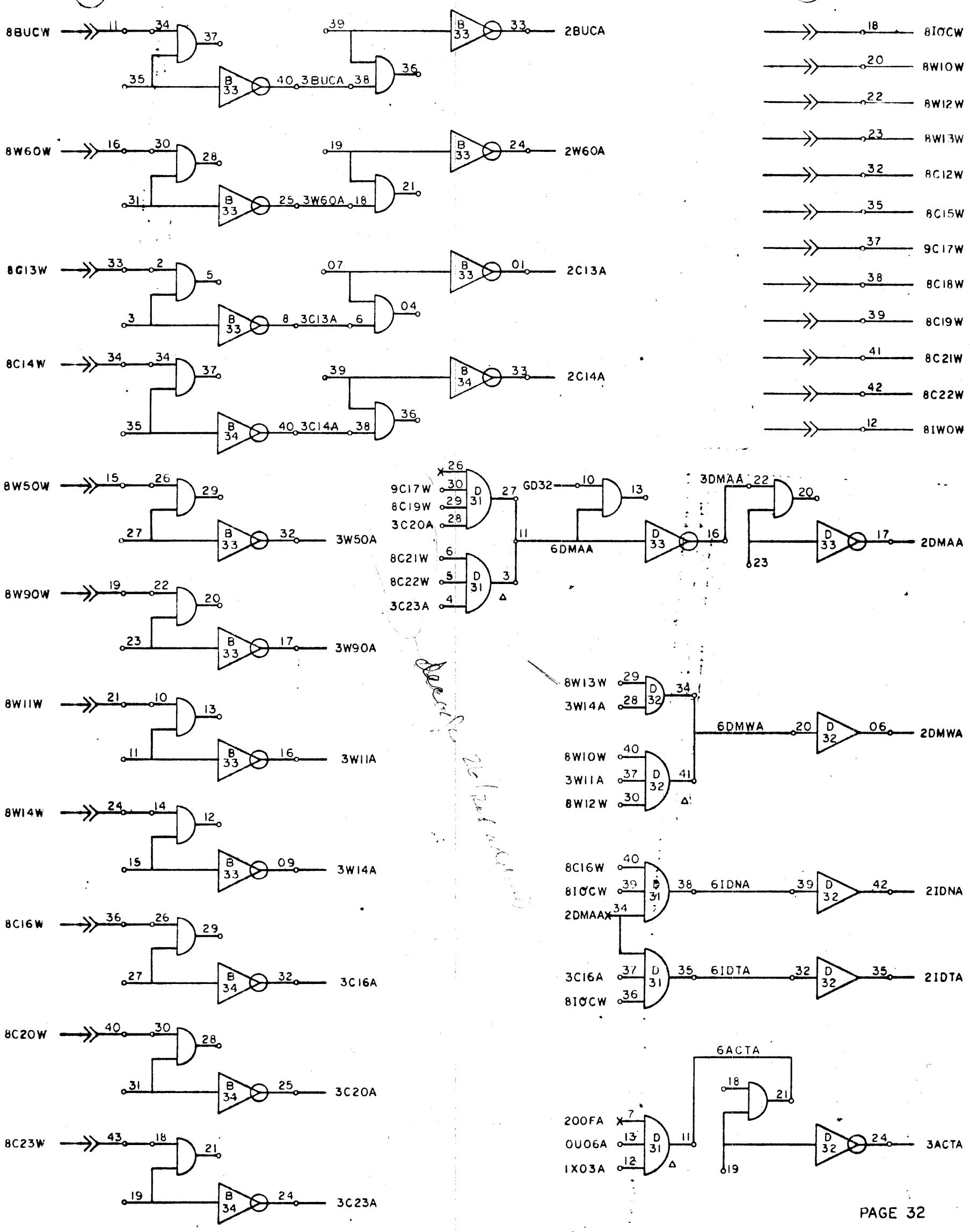
SCALE	SIZE	DWG NO.	REV
	D	131820	A
DO NOT SCALE DRAWING		SHEET 3 OF 35	

TITLE: DIAGRAM, LOGIC, CONTROLLER

SDS

REV	DESCRIPTION	C'NG	DATE	APPROVED
A	MFG RELEASE		3-20	A

BUFFER TIMING AND SELECT SIGNALS



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SIZE D	DWG NO. 131820	REV A
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DIAGRAM, LOGIC, CONTROLLER

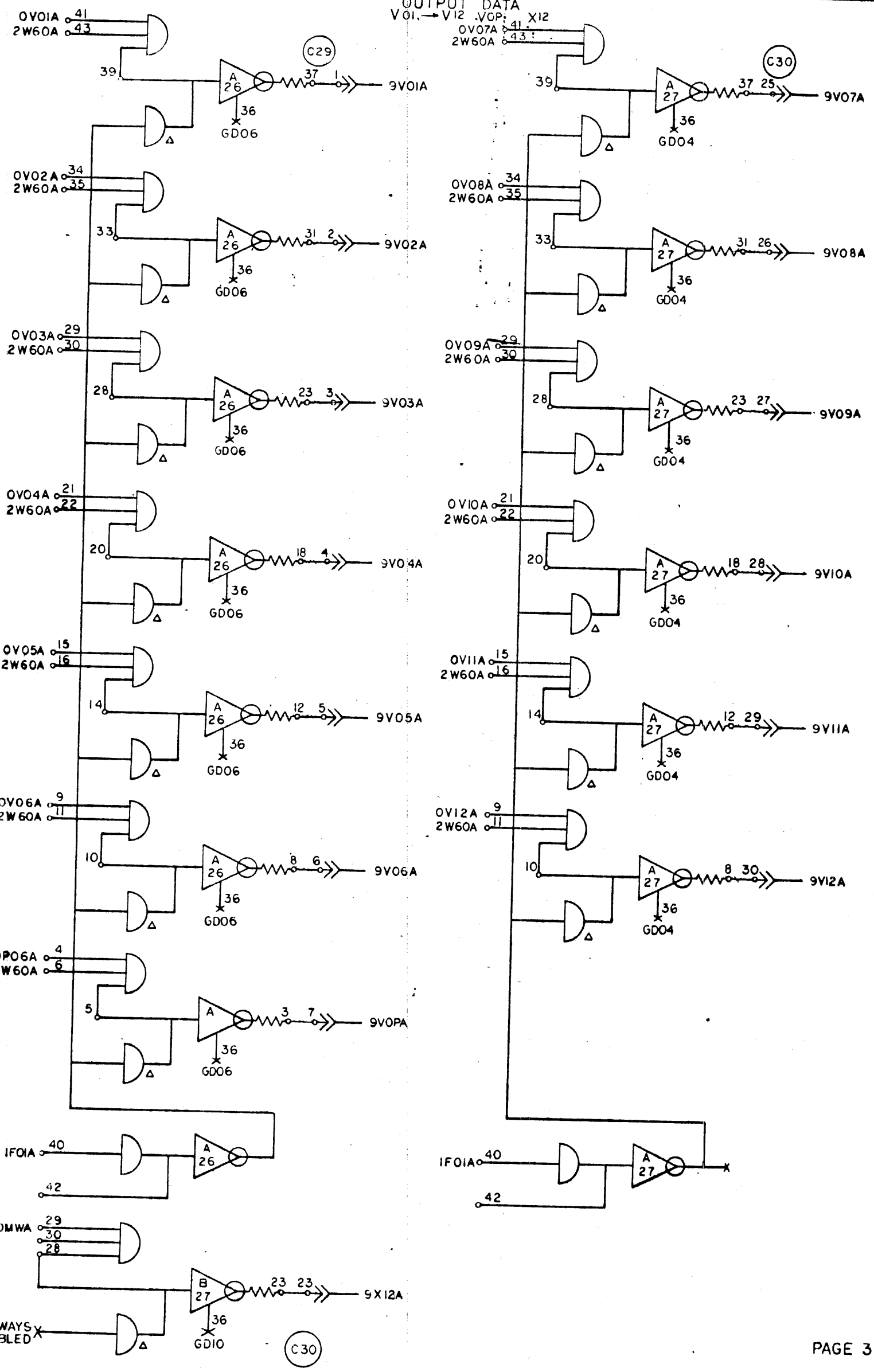
SIDE

REV	DESCRIPTION	CHK	DATE	APPROVED
A	MFG RELEASE			

9 10 11 12 13 14

10 / 10

OUTPUT DATA
V01 → V12 .VOP: X12



DIAGRAM, LOGIC, CONTROLLER

SDS SCIENTIFIC DATA SYSTEMS SANTA MONICA CALIFORNIA

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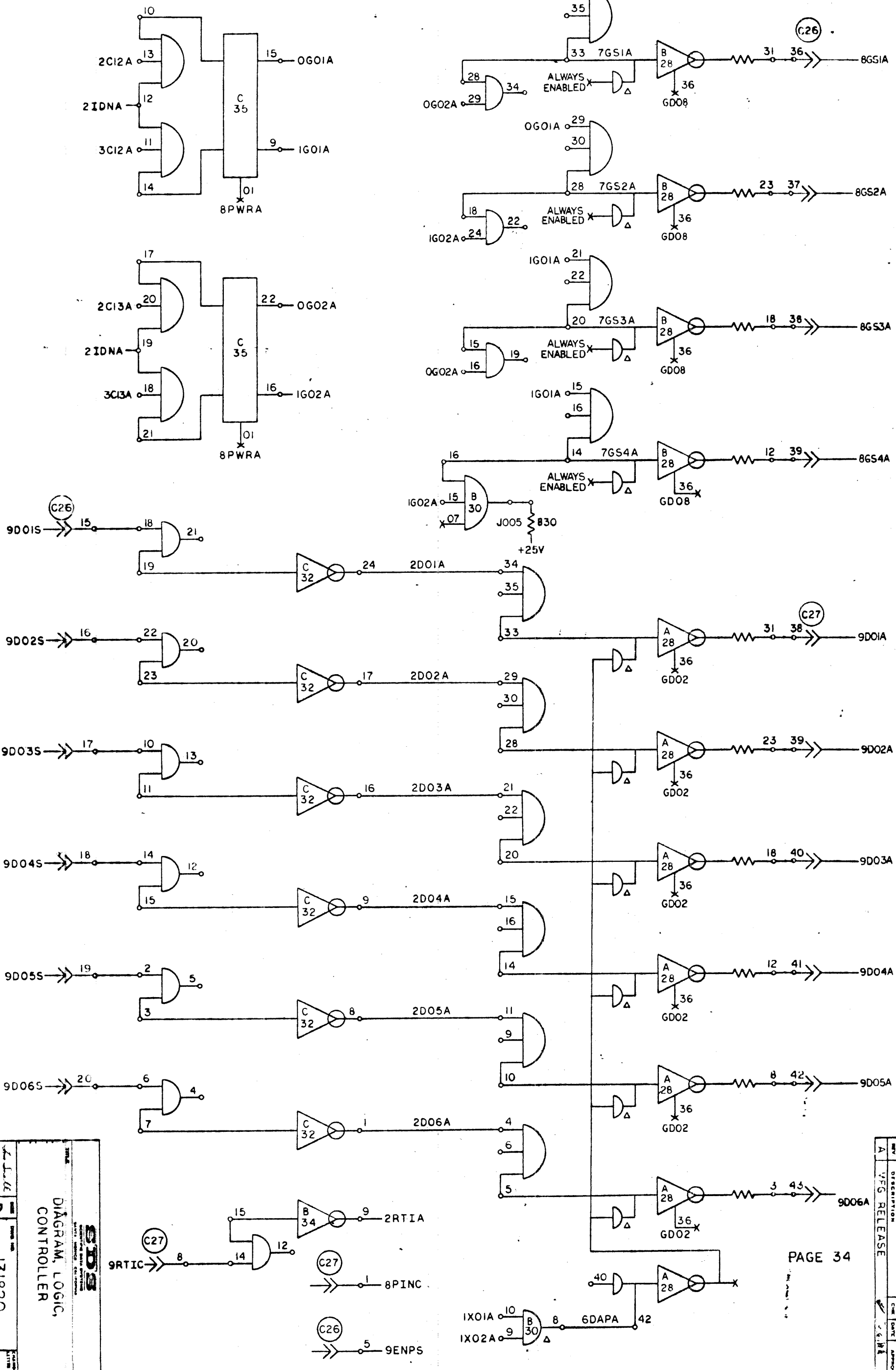
SCALE

REV	DESCRIPTION	CHK	DATE	APPROVED
A	F3 RELEASE		31320	


PIN
10
2CI2A 13
2IDNA 12
3CI2A 11
14
C 35
15 OGOIA
9 IGOIA
01
8PWRA
17
2CI3A 20
2IDNA 19
3CI3A 18
21
C 35
22 OGO2A
16 IGO2A
01
8PWRA
OGOIA 34
35
33 7GSIA
28
OGO2A 29
34
ALWAYS ENABLED
B 28
36
GDO8
31 36 8GSIA
C26
OGOIA 29
30
28 7GS2A
18
IGO2A 24
22
ALWAYS ENABLED
B 28
36
GDO8
23 37 8GS2A
IGOIA 21
22
20 7GS3A
15
OGO2A 16
19
ALWAYS ENABLED
B 28
36
GDO8
18 38 8GS3A
IGOIA 15
16
14 7GS4A
16
IGO2A 15
07
B 30
J005 830
+25V
ALWAYS ENABLED
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36
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12 39 8GS4A
C26
9DOIS 15
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C 32
24 2DOIA
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33
A 28
36
GDO2
C27
31 38 9DOIA
9D02S 16
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C 32
17 2D02A
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30
28
A 28
36
GDO2
23 39 9D02A
9D03S 17
10
13
11
C 32
16 2D03A
21
22
20
A 28
36
GDO2
18 40 9D03A
9D04S 18
14
12
15
C 32
9 2D04A
15
16
14
A 28
36
GDO2
12 41 9D04A
9D05S 19
2
5
3
C 32
8 2D05A
11
9
10
A 28
36
GDO2
8 42 9D05A
9D06S 20
6
4
7
C 32
1 2D06A
4
6
5
A 28
36
GDO2
3 43 9D06A
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B 34
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C27
9RTIC 8
14
12
C27
1 8PINC
C26
5 9ENPS
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A 28
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B 30
8 6DAPA 42
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