Century Data Systems
A Xerox Company

Trident

Maintenance Diagrams
for
MODELS T25/T50/T80

Part No. 76205-701

Maintenance Diagrams
for
MODELS T25/T50/T80

March 1981

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RECORD OF REVISIONS	76205-7XX
REVISION	NOTES
0	ORIGINAL ISSUE - December 1980
-1	Add new Read/Write Matrix and Read Limiter/Amdet/
	R/W Protect schematics

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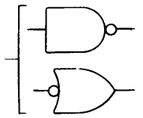
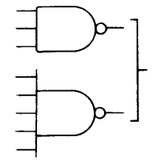
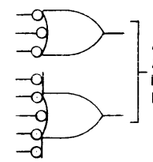
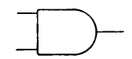
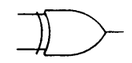
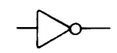
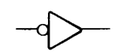
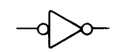
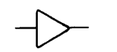
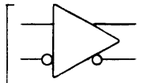
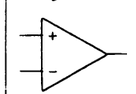
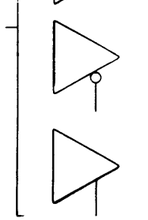
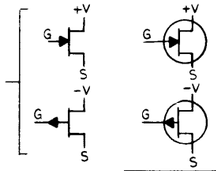
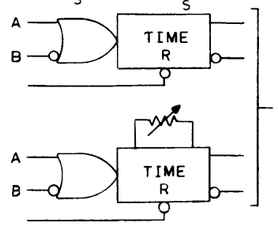
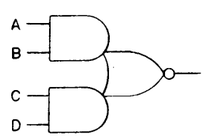
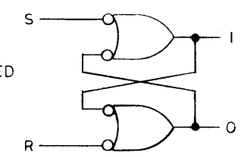
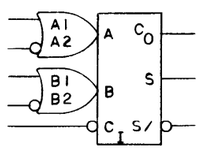
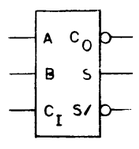
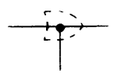
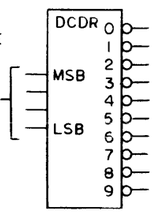
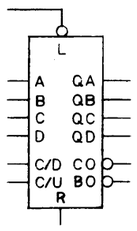
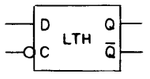
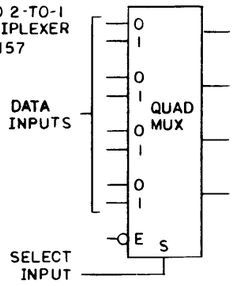
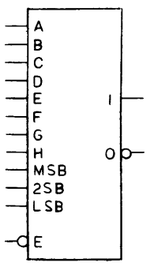
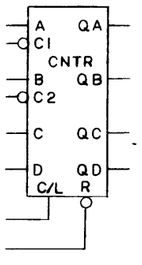
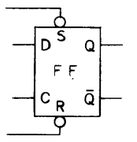
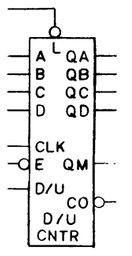
*22985-001 USED ON T25 UNITS
22985-002 USED ON T50 UNITS

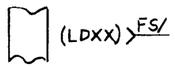
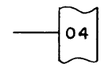
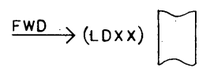
LOGIC FUNCTION	LOGIC SYMBOL	DEFINITION
INVERTER NAT DM936		HIGH IN, LOW OUT LOW IN, HIGH OUT
3-INPUT NAND GATE (AND FUNCTION) 7410 MULTIPLE-INPUT 7420 7430		ALL HIGHS IN, LOW OUT ANY LOW IN, HIGH OUT PERFORMS AND FUNCTION
3-INPUT NAND GATE (OR FUNCTION) 7410 MULTIPLE-INPUT 7420 7430		ANY LOW IN, HIGH OUT ALL HIGHS IN, LOW OUT PERFORMS OR FUNCTION
2-INPUT OR GATE 7432		EITHER INPUT HIGH, OUTPUT HIGH
2-INPUT NAND GATE 7400		BOTH INPUTS HIGH OUTPUT LOW
2-INPUT AND GATE 7408		BOTH INPUTS HIGH, OUTPUT HIGH
EXCLUSIVE OR GATE 7486		INPUTS NOT IDENTICAL, HIGH OUTPUT. INPUTS IDENTICAL, LOW OUTPUT
LINE RECEIVERS 7404		HIGH IN, LOW OUT
LINE DRIVERS 7404		LOW IN, HIGH OUT
RELAY DRIVERS		LOW IN, LOW OUT
LAMP DRIVERS 7407		HIGH IN, HIGH OUT
MOT MC1733		DIFFERENTIAL
LM324 LM339		OPERATIONAL OR SCHMITT TRIGGER COMPARATOR
AMPLIFIERS		LOW ENABLE HIGH ENABLE

LOGIC FUNCTION	LOGIC SYMBOL	DEFINITION
FETS		
ONE-SHOTS (OUTPUT PULSE DURATION DETERMINED BY EXTERNAL R/C) MOT MC8602		IC ONE-SHOT A INPUT LOW, OUTPUT PULSE TRIGGERED BY NEGATIVE-GOING B INPUT. B INPUT HIGH, OUTPUT PULSE TRIGGERED BY POSITIVE-GOING A INPUT LOW RESET INTERRUPTS TIMING CYCLE
AND-NOR GATE 7451		HIGH A AND B OR HIGH C AND D, LOW OUT LOW A OR B AND LOW C OR D, HIGH OUT
CROSS-COUPLED LATCH		SET INPUT LOW, LATCH SETS SET AND RESET INPUT LOW, BOTH OUTPUTS HIGH RESET INPUT LOW, LATCH RESETS
J-K FLIP-FLOP 74107		J INPUT HIGH AND K INPUT LOW, I OUTPUT GOES HIGH WHEN CLOCK GOES LOW. J INPUT LOW AND K INPUT HIGH, I OUTPUT GOES LOW WHEN CLOCK GOES LOW. O OUTPUT COMPLEMENTS I OUTPUT. J AND K INPUTS BOTH HIGH, FLIP-FLOP TOGGLES WHEN CLOCK GOES LOW. DIRECT RESET INPUT LOW, FLIP-FLOP RESETS WITHOUT CLOCK
FULL ADDERS MOT MC8304		INPUTS OR OUTPUTS THRU O'S ARE LOW ACTIVE, INPUTS ARE A B AND C_I (CARRY IN). OUTPUTS ARE S (S/ IS INVERSE OF S) AND C_O (CARRY OUT)
		INPUTS ACTIVE: NONE — OUTPUTS ACTIVE: NONE ANY 1 OR 3 — S ANY 2 OR 3 — C_O

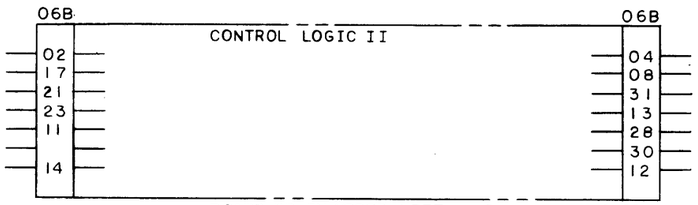
LOGIC FUNCTION	LOGIC SYMBOL	DEFINITION
ANALOG SUMMING POINT		ARROW IN; O VGS TURNS ON
WIRED OR FUNCTION		ARROW OUT; O VGS TURNS ON
DECODER, 4-TO-10 LINE 7442 7445 SELECT INPUTS		CAN BE USED AS EITHER 4-TO-10 LINE OR 3-TO-8 LINE DECODER. BINARY CONFIGURATION OF SELECT INPUTS DETERMINES WHICH OUTPUT GOES LOW. USING MSB AS LOW ENABLE INPUT CONVERTS FUNCTION TO 3-TO-8 LINE DECODER
COUNTER 74193		IF THE LOAD INPUT IS HIGH, THE COUNTER INCREMENTS WITH A POSITIVE TRANSITION AT THE C/U INPUT AND IT DECREMENTS WITH A POSITIVE TRANSITION AT THE C/D INPUT. THE OUTPUTS ARE SET TO THE DATA INPUTS WHEN THE LOAD IS LOW. THE COUNTER IS CLEARED WHEN THE R INPUT IS HIGH. THE CARRY OUT IS LOW ACTIVE WHEN THE COUNTER IS COUNTING UP AND THE DATA OUTPUTS ARE ALL HIGH AND THE C/U INPUT IS LOW. THE BORROW OUTPUT IS LOW ACTIVE WHEN THE DATA OUTPUTS ARE ALL LOW AND THE C/D INPUT IS LOW.
QUAD LATCH 7475		CLOCK INPUT HIGH, Q OUTPUT FOLLOWS D INPUT
QUAD 2-TO-1 MULTIPLEXER 74157		WITH ENABLE INPUT LOW, OUTPUTS CONNECT TO O DATA INPUTS WHEN S IS LOW, AND TO I DATA INPUTS WHEN S IS HIGH

LOGIC FUNCTION	LOGIC SYMBOL	DEFINITION
ONE-OF-EIGHT DATA SELECTOR 74151A		BINARY ADDRESS INPUTS SELECT ONE OF EIGHT DATA INPUTS WHEN E IS LOW. SELECTED DATA INPUT IS AVAILABLE AT I OUTPUT AND COMPLEMENT IS AVAILABLE AT O OUTPUT. WHEN E IS HIGH I OUTPUT IS LOW AND O OUTPUT IS HIGH.
ANALOG SWITCH		A INPUT HIGH, B INPUT LOW, SWITCH ON CONDITION
COUNTER 74197		OPERATES AS A 4-BIT COUNTER WHEN A OUTPUT CONNECTED TO CLOCK C2 DATA INPUT. PRESETS COUNTER WHEN COUNT/LOAD INPUT GOES LOW, BINARY COUNT IS INCREMENTED EACH TIME CLOCK C1 GOES LOW. WITH COUNT/LOAD INPUT HIGH, ALL OUTPUTS GO LOW WHEN RESET GOES LOW REGARDLESS OF CLOCK INPUTS.
D FLIP-FLOP 7474		I OUTPUT FOLLOWS DATA INPUT WHEN CLOCK GOES LOW TO HIGH. O OUTPUT COMPLEMENTS I OUTPUT. DIRECT SET INPUT LOW, FLIP-FLOP SETS, DIRECT RESET INPUT LOW, FLIP-FLOP RESETS.
COUNTER 74191		THE COUNTER INCREMENTS OR DECREMENTS WITH A POSITIVE TRANSITION OF THE CLOCK INPUT IF THE ENABLE INPUT IS LOW. A HIGH AT THE ENABLE INPUT INHIBITS COUNTING. WHEN THE DOWN/UP INPUT IS LOW, THE COUNTER INCREMENTS. THE OUTPUTS ARE SET TO THE DATA INPUTS WHEN THE LOAD INPUT IS LOW. THE M OUTPUT IS HIGH WHEN ALL DATA OUTPUT ARE HIGH AND IN COUNT UP MODE OR WHEN ALL ARE LOW AND IN COUNT DOWN MODE. THE CARRY OUT IS LOW ACTIVE WHEN ALL DATA OUTPUTS ARE HIGH AND THE CLOCK IS LOW AND IN UP COUNT MODE. THE CARRY OUT IS ALSO LOW ACTIVE WHEN ALL DATA OUTPUTS ARE LOW AND THE CLOCK IS LOW AND IN DOWN COUNT MODE.

LOGIC SYMBOLOGY (SHT 1)

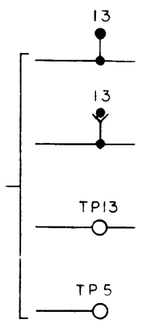
LOGIC FUNCTION	LOGIC SYMBOL	DEFINITION
ON-PAGE SIGNAL (SCHEMATICS ONLY)		SHORT LEADER LINES INDICATE NUMBER AND DIRECTION IN WHICH CORRESPONDING SIGNALS ARE LOCATED. TOTAL NUMBER OF CORRESPONDING-SIGNAL LEADER LINES APPEAR AT SOURCE ONLY.
TERMINATOR		TERMINATING RESISTOR
PULL-UP		PULL-UP RESISTOR
PULL-DOWN		PULL-DOWN RESISTOR
FILTER		R-C NETWORK
INPUT SIGNALS (LDXX) SELHDL FROM LOGIC DIAGRAM PAGE XX THROUGH CONNECTOR PIN		 INPUT SIGNAL FROM SAME BOARD SHOWN. ON SEPARATE LOGIC DIAGRAM PAGE XX
OUTPUT SIGNALS TO LOGIC DIAGRAM XX THRUGH CONNECTOR PIN	 SLOW (LDXX)	 OUTPUT SIGNAL TO SAME BOARD SHOWN ON SEPARATE LOGIC DIAGRAM PAGE XX

IDENTIFICATION (USED WHERE PRACTICAL)



BOARD ID IN UPPER LEFT HAND CORNER. BOARD LOCATION LOCATED ABOVE CONNECTOR STRIPS.

TEST POINTS



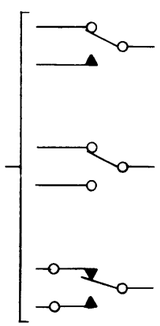
CONNECTOR END (WIRE-WRAP) PIN USED AS TEST POINT

NODE TEST POINTS (NOT LABELED ON PCB)

TEST POINT PINS (LABELED ON PCB)

CONTACTS

ALL CONTACTS SHOWN IN THE NORMALLY CLOSED POSITION

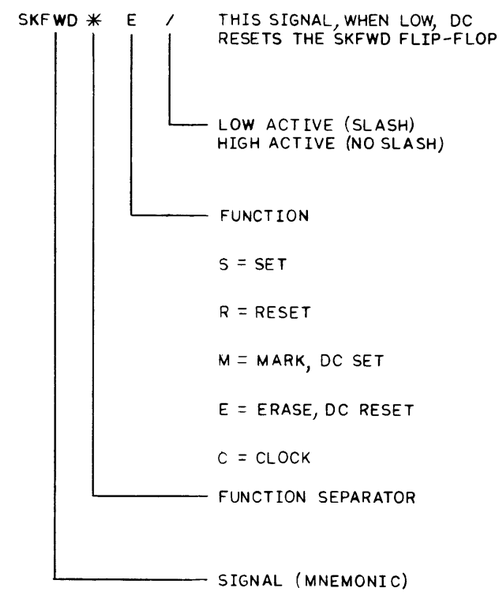


SPRING-LOADED, MOMENTARY CONTACT (MICROSWITCHES, ETC.)

LOCKING CONTACT (TOGGLE, ETC.)

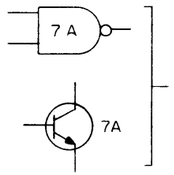
RELAYS

REFERENCE SYMBOLS



WRENA; 01

REPOWERING NOTATION: TWO OR MORE SIGNALS GENERATED IN PARALLEL FOR LOADING



7A REPRESENTS LOCATION ON PCB

LETTER COMBINATIONS USED WITHIN IC SYMBOLS

A,B,C,D	DATA INPUTS
BO	COUNTER BORROW OUT
C OR CL	CLOCK
C/D	DOWN CLOCK COUNTER INPUT
C/L	COUNT/LOAD
CO	COUNTER CARRY OUT
C/U	UP CLOCK COUNTER INPUT
D	DATA INPUT TO REGISTER, D FLIP-FLOP, OR QUAD LATCH
E	ENABLE
J	SET INPUT TO J-K FLIP-FLOP
K	RESET INPUT TO J-K FLIP-FLOP
L OR LD	LOAD ENABLE
LSB	LEAST SIGNIFICANT BIT
MSB	MOST SIGNIFICANT BIT
1 OR Q	SET OUTPUT OF FLIP-FLOP
0 OR $\overline{Q}$	COMPLIMENT OF SET OUTPUT OF FLIP-FLOP
QA,QB,QC,QD	DATA OUTPUTS
QM	COUNTER FULL/EMPTY OUTPUT
R	DIRECT RESET INPUT TO FLIP-FLOP
S	DIRECT SET INPUT TO FLIP-FLOP
S/L	SHIFT/LOAD
U/D	UP/DOWN CONTROL

LOGIC DIAGRAM INDEX AND REVISION CONTROL

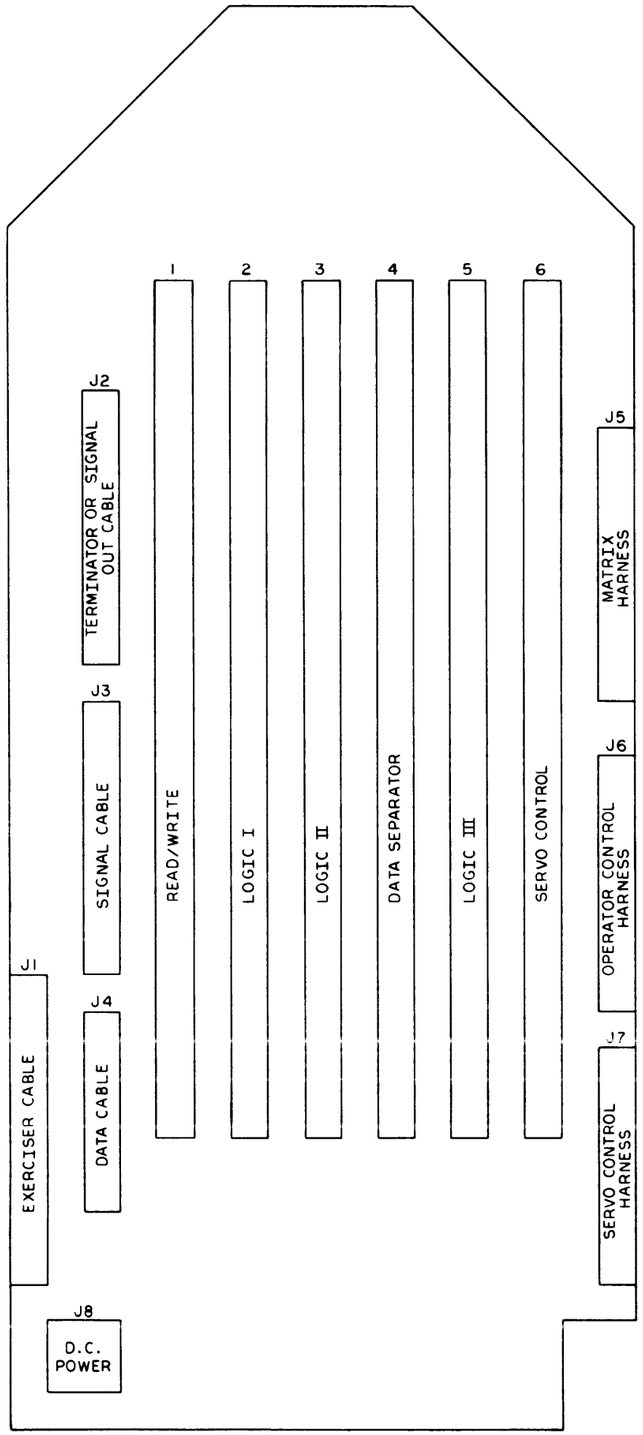
SH	DIAGRAM INDEX		REV
5	LD1.0	EXERCISER INTERFACE	C
6	LD1.1	INPUT INTERFACE AND DEGATE	T
7	LD1.2	INPUT INTERFACE	E
8	LD1.3	BUS/ TAG DECODE	G
9	LD2.0	SWITCHES AND INTERLOCKS	T
10	LD2.1	SEQUENCE OSCILLATOR COUNTER	G
11	LD2.2	PACK ON AND SEQUENCE LOGIC	V
12	LD2.3	SEQUENCE LOGIC AND RELAY DRIVERS	P
13	LD2.4	AC CONTROL AND DISTRIBUTION	P
14	LD2.5	SPEED DETECTION	V
15	LD3.0	SERVO CONTROL	T
16	LD3.1	SERVO CONTROL LOGIC	G
17	LD3.2	SERVO CONTROL AND READY	F
18	LD3.3	HDLD AND HDLDDY, DIFF. CLOCK AND UTH	T
19	LD3.4.0	SUBTRACTOR CONTROL AND ILLCYL LOGIC T50,T80	F
20	LD3.4.1	SUBTRACTOR CONTROL AND ILLCYL LOGIC T25	F
21	LD3.5.0	CAR AND SUBTRACTOR T50 ,T80	T
22	LD3.5.1	CAR AND SUBTRACTOR T25	T
23	LD3.6.0	DIFFERENCE COUNTER T50 ,T80	E
24	LD3.6.1	DIFFERENCE COUNTER T25	C
25	LD3.7	D/A CONVERTER AND AMPLIFIER DRIVER	C
26	LD3.8	POWER AMP AND LINEAR MOTOR	F
27	LD4.0	SERVO HEAD PREAMP AND POWER ON/	T
28	LD4.1	PLO T25,T50	T
29	LD4.1.1	PLO T80	T
30	LD4.2	POSITION, UTH * HDLD, AGC, GAPCLK	T
31	LD5.0	READY INDICATOR AND READ ONLY	T
32	LD5.1	INDEX AND SECTOR	C
33	LD6.0	R/W MATRIX T25,T50	T
34	LD6.0.1	R/W MATRIX T80	K
34.1	LD6.0.2	R/W MATRIX POWER T25,T50	S
34.2	LD6.0.3	R/W MATRIX POWER T80	S
35	LD6.1	READ AMP, C.O.D AND HEADS UNSAFE T25,T50	E
36	LD6.1.1	READ AMP, C.O.D AND HEADS UNSAFE T80	K
37	LD6.2	DATA SEPARATOR T25,T50	P
38	LD6.2.1	DATA SEPARATOR T80	U
39	LD6.3	DATA SEPARATOR DATA AND CLOCKS T25,T50	U
39.1	LD6.3.1	DATA AND CLOCKS T80	U
40	LD6.4	DATA SEPARATOR FAST LOCK AND ADMK CONTROL T25,T50	F
41	LD6.4.1	ADMK CONTROL AND PHASE SYNC T80	U
42	LD6.5	DATA SEPARATOR-WRITE ENCODE T25,T50	F
43	LD6.5.1	WRITE ENCODE T80	U
43.1	LD6.5.2	WRITE ENCODE T80	U
43.2	LD6.5.3	WRITE ENCODE T80	U
44	LD7.0	ERROR DETECTION	T
45	LD7.1	DCUSF EMERGENCY RETRACT AND MODULE IN INTERLOCK	T
46	LD7.2	SEEK INCOMPLETE	T
47	LD8.0	ATTENTION AND EOC	C
48	LD8.1	OUTPUT INTERFACE	P
49	LD9.0.1	POWER SUPPLY TRIDENT	V
50	LD9.1	POWER SUPPLY 5V REGULATOR	V

REVISIONS

REV	ZONE	DESCRIPTION	INC BY	APPROVAL & DATE
E		REVISED AND REDRAWN, EXTENSIVE CHANGES	G.G.D.	J.P. Duke 12/17/75
F		REVISED AND REDRAWN, EXTENSIVE CHANGES, SEE REV E FOR WAS CONDITION	G.G.D. 4-7-76	
FI		PRODUCTION RELEASE PER ECN 11552	G.H.D. 4-7-76	
G		REVISED PER ECO 12512 R WILSEY		MOORTZ FEB 24 77
H		REVISED PER ECO 12514 R WILSEY		MOORTZ FEB 24 77
J		REV. PER ECO 12905 Revised 7/6/77	PH	7/14/77
K		REV PER ECO 12959	SK	9-16-77
L		CHGD SIG NAME AT 3A/B-B40 ON SH 31 WAS: DCUSF/ (LD1.3) PER ECO 13293.	SK	10-3-77
M		SHT 4, LOGIC III, P/N T-25, T-50 T80 WAS 12348-001 PER ECO 13484	K.L. 11-30-77	12/5/77
N		REVISED PER ECO 13543	K.L. 12-30-77	12/19/77
P		REVISED PER ECO 13737		4/18/78
R		REVISED PER ECO 14541	J.G. 3-28-79	
S		REVISED PER ECO 14449	A. VAN VL 7/26-79	W. J. Sander 9-11-79
T		REVISED PER ECO 14432	A. VAN VL 7/26-79	W. J. Sander 9-11-79
U		REVISED PER ECO 14707	A. VAN VL 7/26-79	W. J. Sander 9-11-79
V		REVISED PER ECO 13442-V Revised 4-22-80	ILE Hughes	

MODEL NO. FIRST USE T50		NEXT ASSY FIRST USE
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON DECIMALS XX ± —, XXX ± —; ANGLES ± —	DRAWN J. DREWRY 11-25-75; CHECK; APPD; APPD; FINISH; MATERIAL; SURFACE ROUGHNESS PER MIL-STD-10	CALIFORNIA COMPUTER PRODUCTS INC.
		TRIDENT T25/T50/T80 LOGIC — C.C.
		SCALE: NONE; SIZE D; DWG NO. 13442-001; REV V
	DO NOT SCALE THIS DRAWING	WEIGHT; SHEET 1 OF 50

DWG NO. 13442-001 REV. V



MODULE NAME	PART NUMBER		
	T-25	T-50	T-80
LOGIC I	18099-001	12342-001	12342-001
LOGIC II	15847-001	15847-001	15847-001
LOGIC III	19508-001	19508-001	19508-001
READ/WRITE	18465-001	12336-001	17771-001
DATA SEPARATOR	14440-001	14440-001	17530-001
SERVO CONTROL	14556-001	14556-001	18752-001
R/W MATRIX	18406-001	15141-001	17589-001
SERVO PREAMP	14912-001	14912-001	14912-001

Century Data — ANAHEIM, CALIFORNIA

MODULE LOCATION CHART

DRAWN	L. Salisbury	8-4-75	SIZE D	13442-001	REV M
CHECK					
APPD					
SCALE:			SHEET 4 OF 1		

DWG NO. 13442-001 REV. M

F4800-141 (8/73)

FROM
EXERCISER

J1

01	EOFFSET
02	EDCUSF
03	GND
04	EEMRET
05	ESKENA
06	EDEVCKR/W
07	EHDEXT
08	EWRTRDY
09	EOSERR
10	EDRVMTR
11	ESKINC
12	EBRUSHEXT
13	EFWD
14	EWRTUTH
15	ETRKFL
16	EWRT
17	EXERIN/
18	ERDY
19	
20	
21	EWRDONLY
22	EREAD
23	ELDSP
24	ESCILLOS
25	ET25/
26	ELIDCLSD
27	EBRAKE
28	ESCRDY
29	ERETHD
30	ESPEED
31	EWRTOS
32	ESKINCENA
33	EHDLD
34	EBUS8/
35	EBUS6/
36	
37	EBUS7/
38	EHAR4/
39	EHAR2/
40	EHARI/
41	EBUS9/
42	ET80/
43	EBUS4/
44	EBUS1/
45	EBUS2/
46	EBUS5/
47	EBUS3/
48	ESETCYLTAG/
49	EBUS0/
50	EWRT*C/
51	EIDX
52	DEGATE/
53	ECONTROLTAG/
54	
55	ESETHDTAG/
56	
57	GND
58	
59	+5V
60	+5V

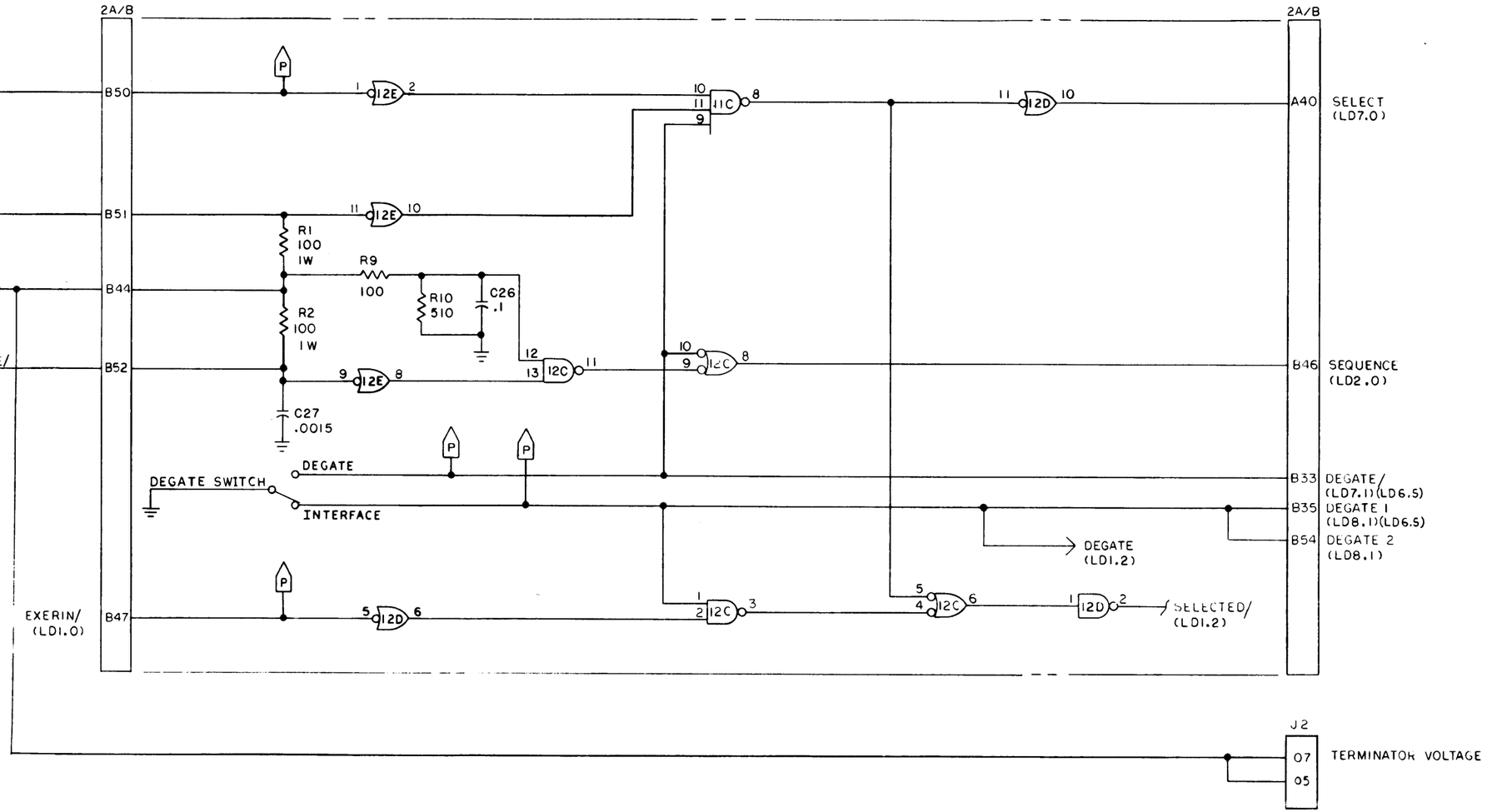
DWG. NO. 13442-001 REV. C

Century Data — ANAHEIM, CALIFORNIA

EXERCISER INTERFACE LDI.O

DRAWN	S. Salisbury	3-26-75	SIZE D	13442-001	REV C
CHECK					
APPD					
SCALE: ———			SHEET 5 OF		

F4000-141 (5/73)



CENTURY DATA SYSTEMS, INC. ANAHEIM, CALIFORNIA					
INPUT INTERFACE AND DEGATE LD1.1					
DRAWN	L Reeney	12-13-74	SIZE	13442-001	REV T
CHECK					
APPD					
SCALE: ——			SHEET 6 OF		

DWG NO. 13442-001 REV. T

J3

20 IBUS0/ — B08
EBUS0/ (LDI.0) — B39
22 IBUS1/ — B06
EBUS1/ (LDI.0) — B32
24 IBUS2/ — B04
EBUS2/ (LDI.0) — B34
26 IBUS3/ — B05
EBUS3/ (LDI.0) — B38
28 IBUS4/ — B07
EBUS4/ (LDI.0) — B30
30 IBUS5/ — B10
EBUS5/ (LDI.0) — B36
32 IBUS6/ — B09
EBUS6/ (LDI.0) — B23
34 IBUS7/ — B12
EBUS7/ (LDI.0) — B26
36 IBUS8/ — B13
EBUS8/ (LDI.0) — B21
38 IBUS9/ — B15
EBUS9/ (LDI.0) — B28
40 ISETHDTAG/ — B17
ESETHDTAG/ (LDI.0) — B41
39 ISETCYLTAG/ — B49
ESETCYLTAG/ (LDI.0) — B40
37 ICONTROLTAG/ — B48
ECONTROLTAG/ (LDI.0) — B42

2A/B

7E, 11E, 9E, 8E, 12E, 10E, 12D, 1A

7D QUAD MUX
9D QUAD MUX
8D QUAD MUX
11D QUAD MUX

BUS 0 (LDI.3,3.5)
BUS 1 (LDI.3,3.5)
BUS 2 (LDI.3,3.5)
BUS 2/ (LD3.1)
BUS 3 (LDI.3,3.5)
BUS 4 (LDI.3,3.5)
BUS 5 (LDI.3,3.5)
BUS 6 (LDI.3,3.5)
BUS 7 (LDI.3,3.5)
BUS 8 (LDI.3,3.5)
BUS 9 (LDI.3,3.5)
HAR*S/ (LDI.3,3.1)
SETCYLTAG (LD3.1)
CONTROLTAG (LDI.3)

SELECTED/ (LDI.1)
DEGATE (LDI.1)

2A/B

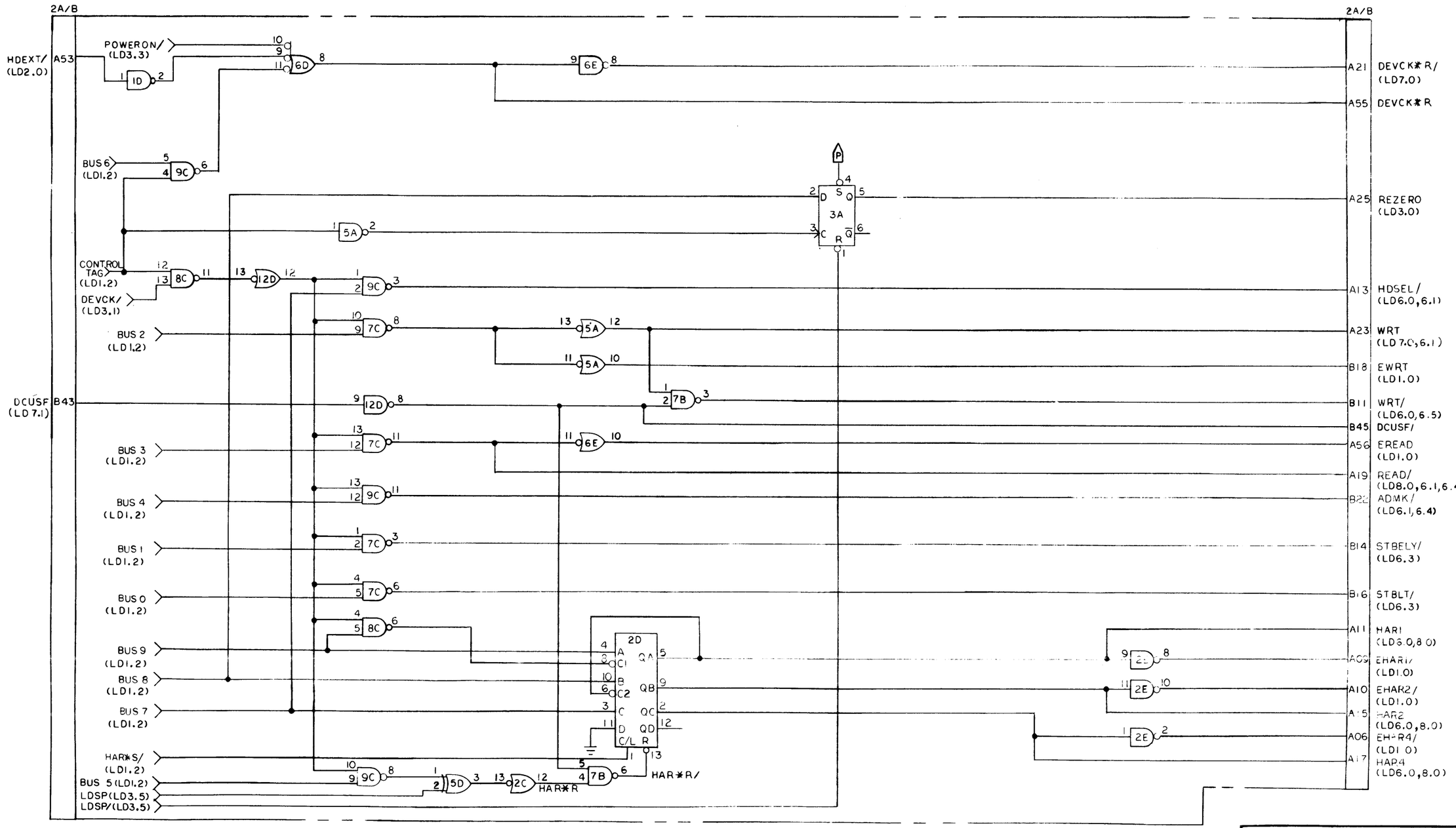
A33 BUS 2 (LD3.2)
A31 BUS 3 (LD3.2)
A35 HAR*S (LD7.0)
A38 SETCYLTAG (LD7.0)

CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

INPUT INTERFACE LDI.2

DRAWN			SIZE	REV
CHECK			13442-001	E
APPD				
SCALE:			SHEET 7 OF	

13442-001 E

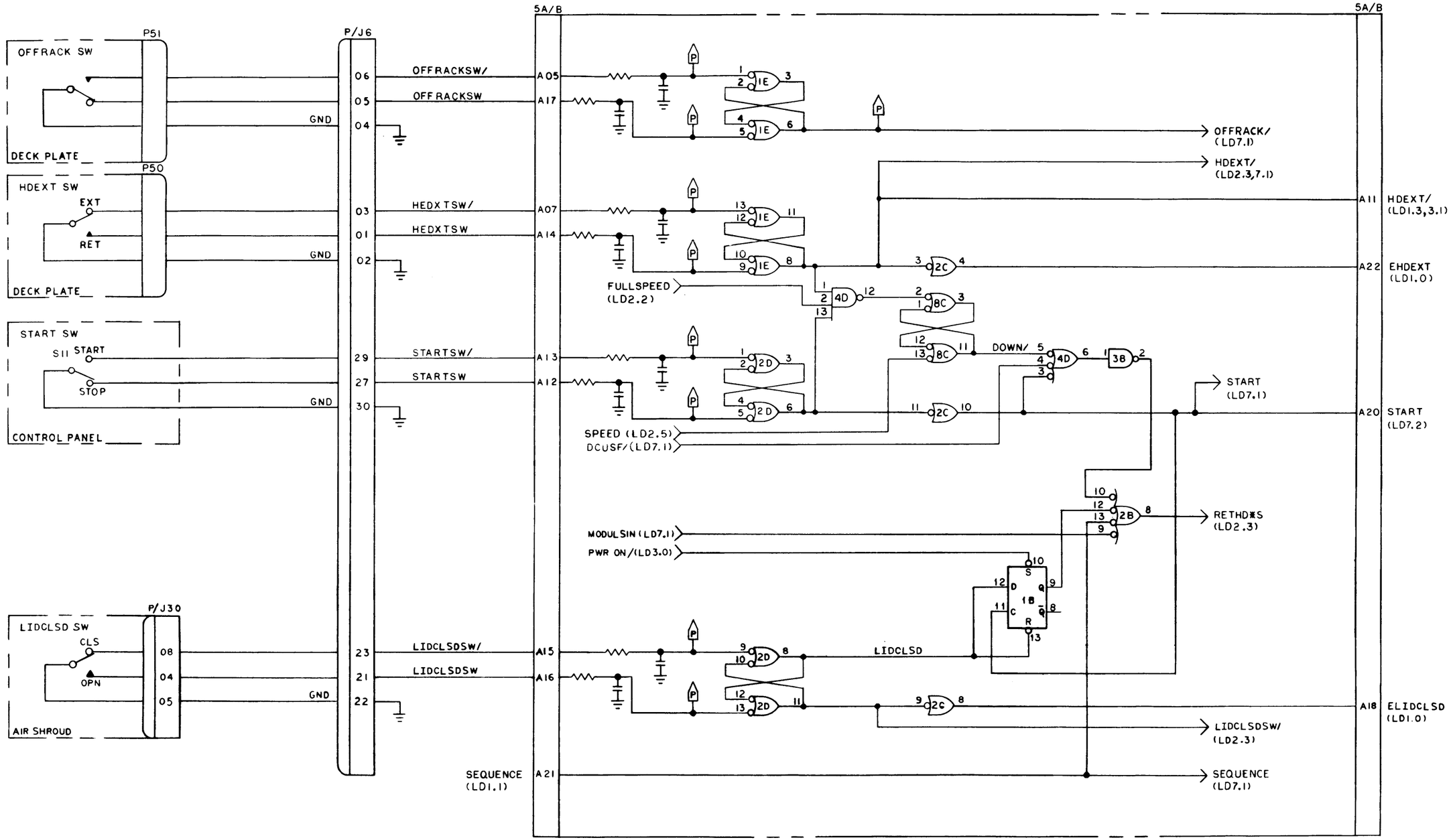


CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

BUS/TAG DECODE LD1.3

DRAWN	G. Deeney	2-16-75	SIZE	REV
CHECK			13442-001	G
APPD				
SCALE:			SHEET 8 OF	

13442-001 G

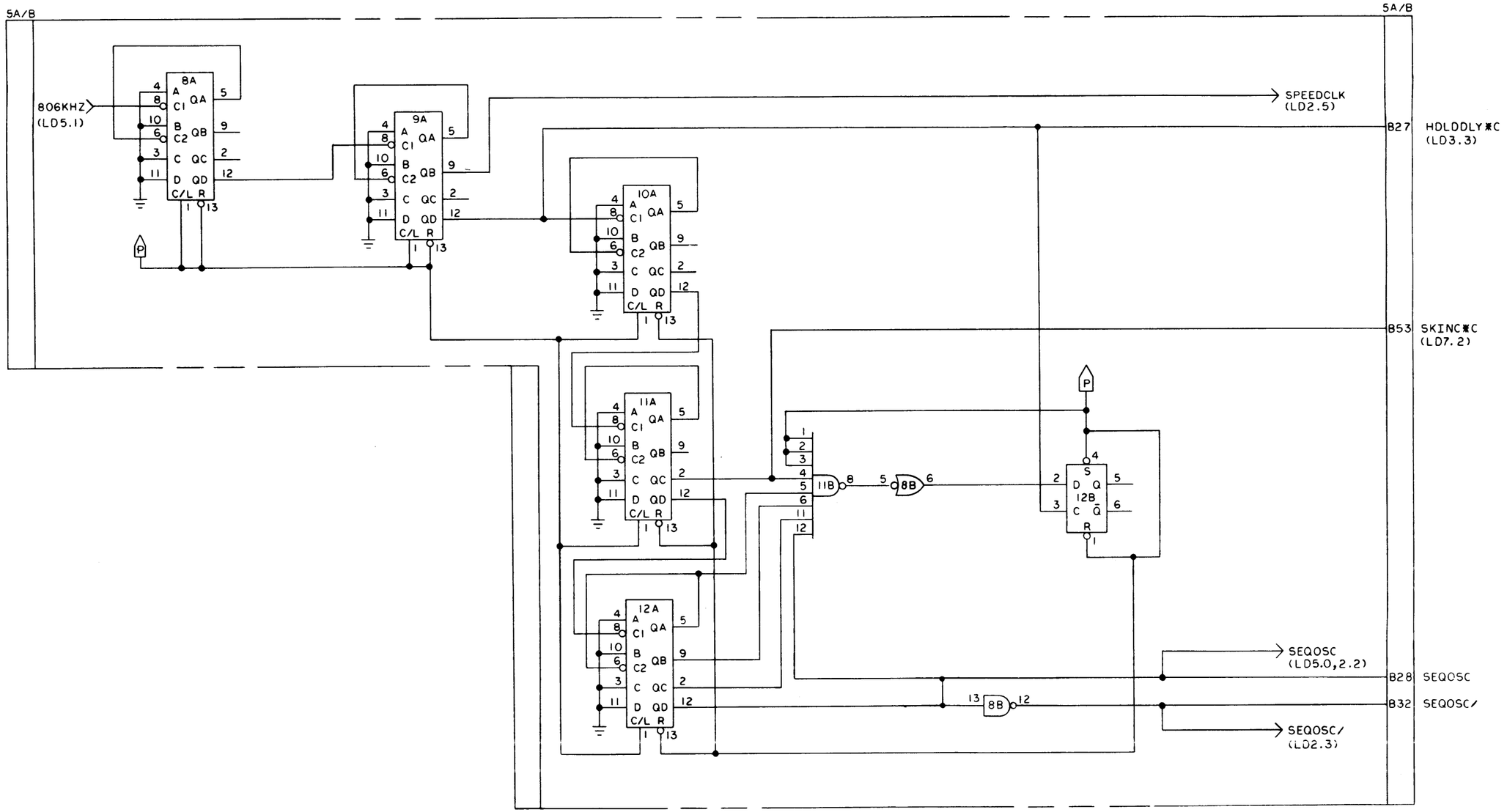


Century Data — ANAHEIM, CALIFORNIA

SWITCHES AND INTERLOCKS
LD2.0

DRAWN		10-27-4	SIZE D	13442-001 REV T
CHECK				
APPD				
SCALE:			SHEET 9 OF	

DWG NO. 13442-001 REV. T

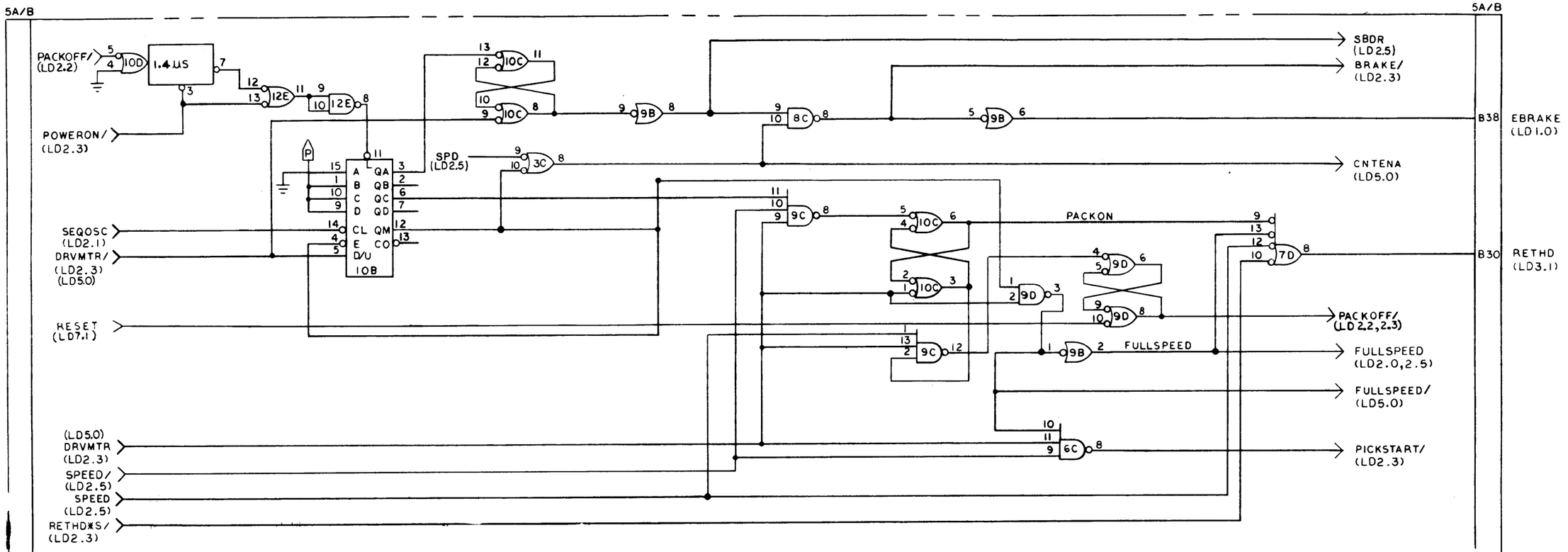


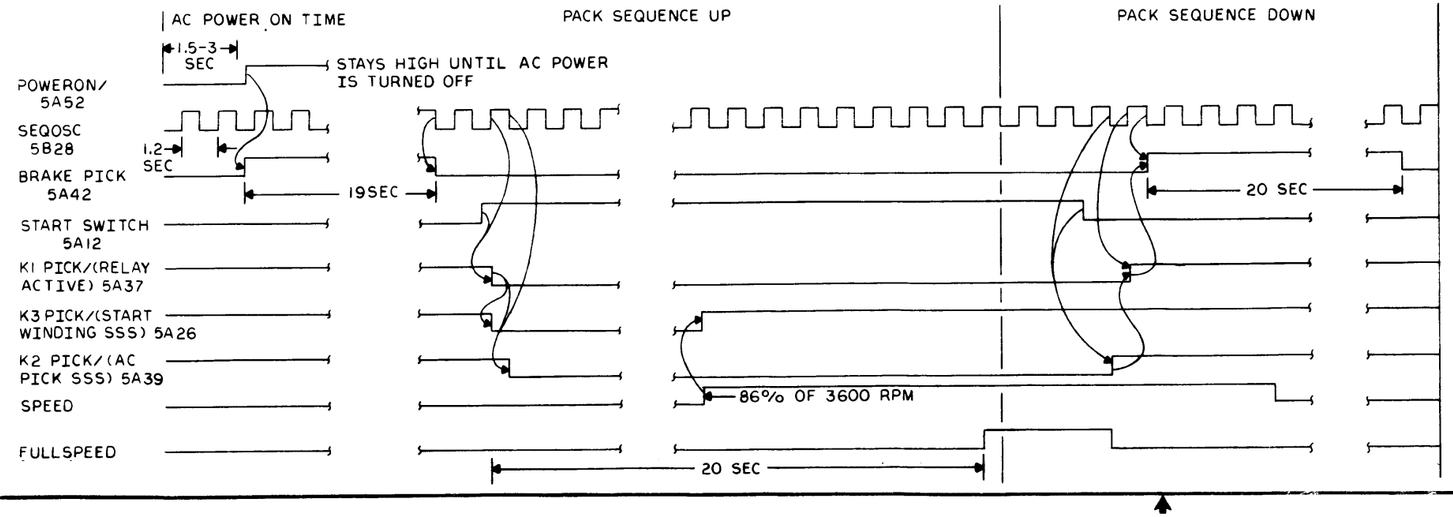
CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

SEQUENCE OSCILLATOR
COUNTER (LD2.1)

DRAWN	L Salisbury	12-3-74	SIZE	13442-001	REV
CHECK			D		G
APPD					
SCALE:			SHEET 10 OF		

DWG NO 13442-001 REV G





THE FOLLOWING CONDITIONS MUST BE MET TO INITIATE PACK SEQUENCE UP.

	TERM	BACK PANEL PIN NO.	SIGNAL LEVEL
1	MODULSIN/	5A09	L
2	SEQUENCE	5A21	H
3	LIDCLSDSW	5A16	H
4	DCUSF	5A29	L
5	BRAKE/		H
6	HDEXT/	5A11	H
7	START	3B19	H

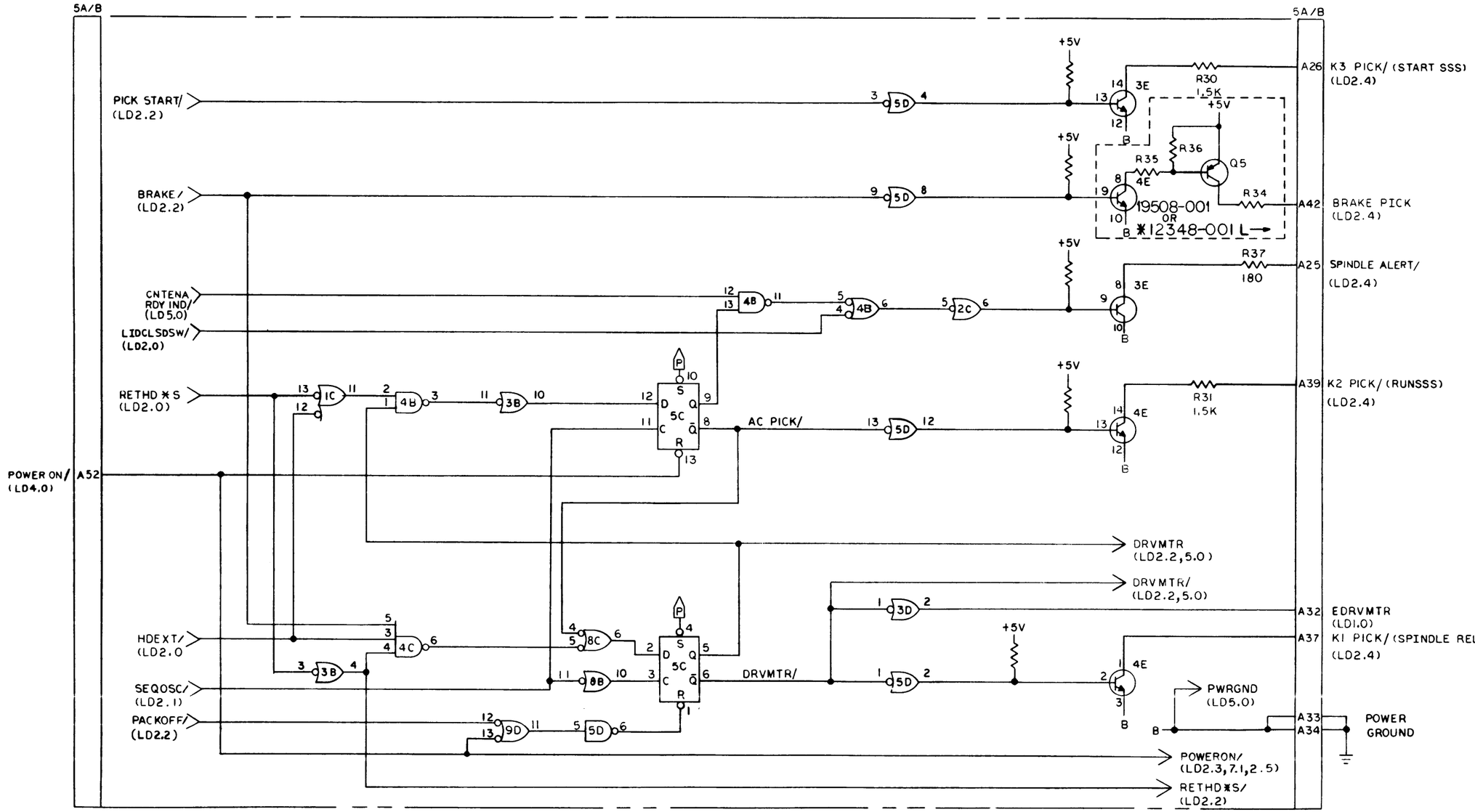
THE FOLLOWING CONDITIONS MUST BE MET TO INITIATE PACK SEQUENCE DOWN.

	TERM	BACK PANEL PIN NO.	SIGNAL LEVEL
1	START	3B19	L
2	HDEXT/	5A11	H
3	RETHD*S		H

Century Data — ANAHEIM, CALIFORNIA

PACK ON AND SEQUENCE LOGIC (LD2.2)

DRAWN	C. Brewer	10-18-74	SIZE D	REV V
CHECK			DWG NO. 13442-001	
APPD				
SCALE:			SHEET 11 OF	

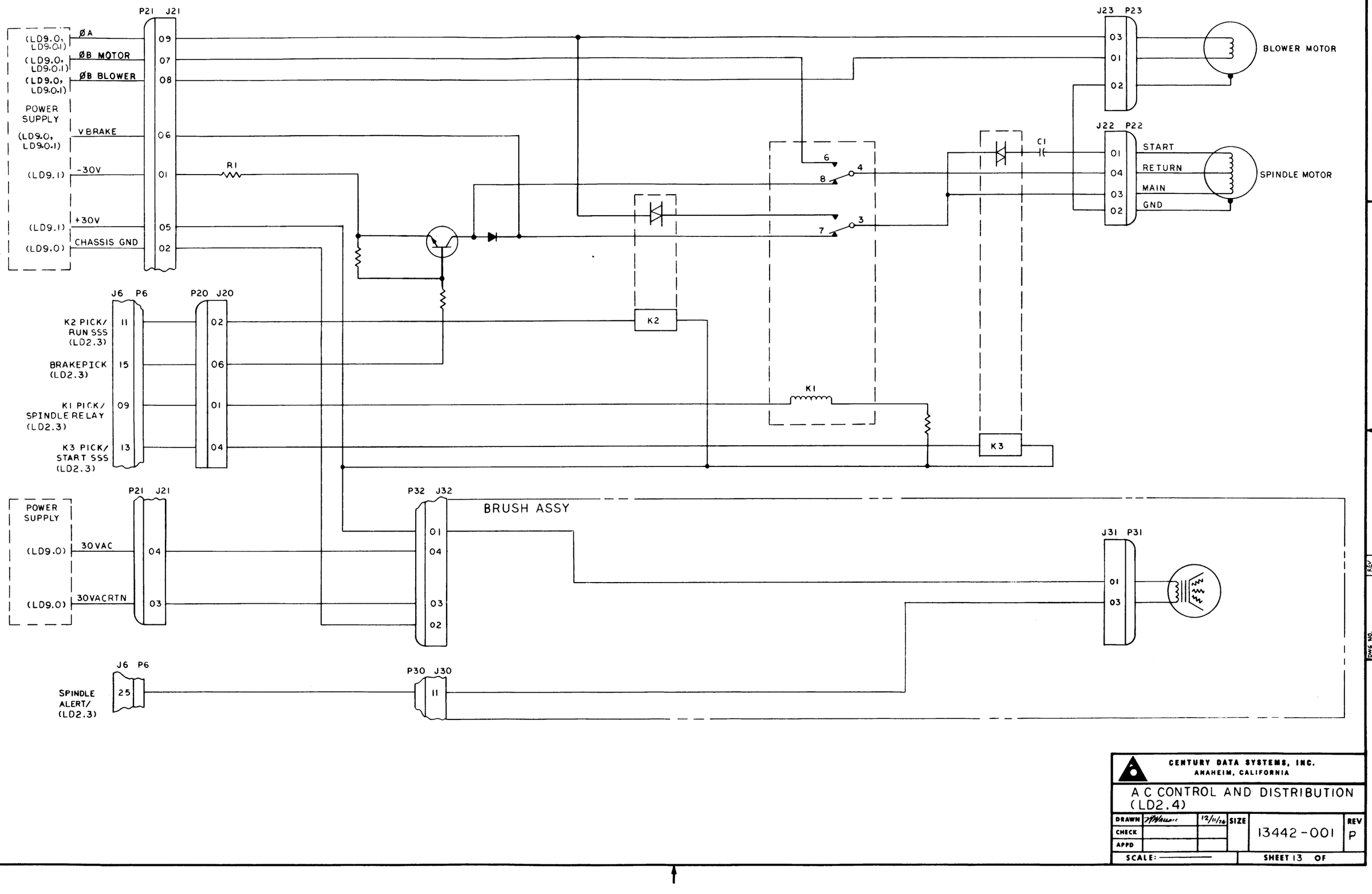


CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

SEQUENCE LOGIC AND RELAY DRIVERS (LD2.3)

DRAWN	C. Brung	12-16-74	SIZE	13442-001	REV P
CHECK					
APPD					
SCALE:			SHEET 12 OF		

DWG NO. 13442-001 REV. P



CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

A C CONTROL AND DISTRIBUTION (LD2.4)

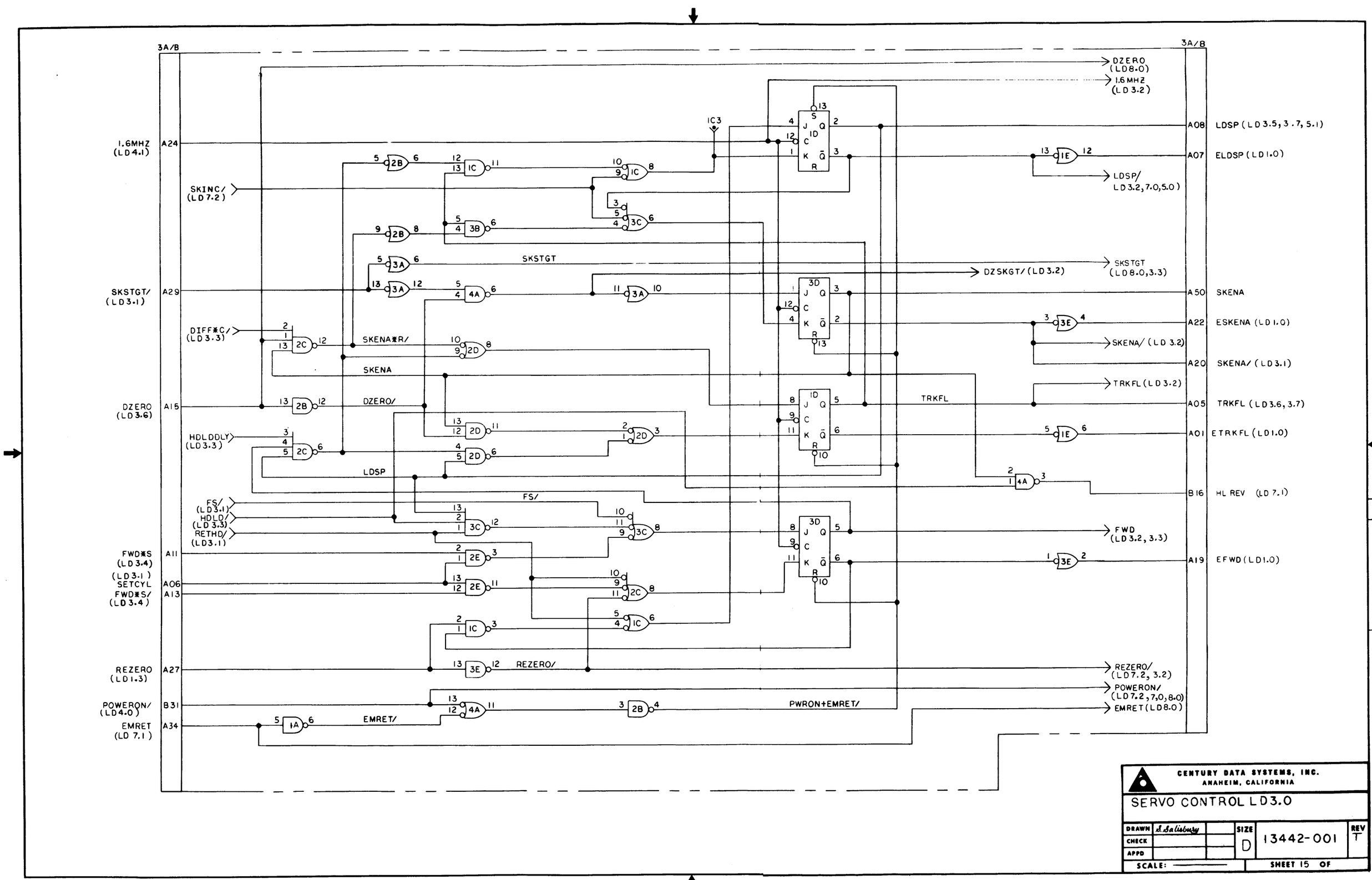
DRAWN		12/11/76	SIZE	13442-001	REV P
CHECK					
APPD					
SCALE:			SHEET 13 OF		

DWG NO. 13442-001 REV P

TRANSDUCER
JP/40
01
03
P/J06
07
08
RELXDUCER
GA/B
B13
A24
Q10
6A/B
B14
SPEEDIN
5A/B
B08
R200
1K
C75
.01
FULL/
8D
8E
POWERON/
(LD2.3)
+5V
R32
C39
CR2
30MS
SBDR
(LD2.2)
SPD
(LD2.2)
SPEED
(LD2.0,2.1,2.2)
SPEED/
(LD2.2)
10D
9C
9B
7E
B22
ESPEED (LD1.0)
5A/B
806KHZ
(LD5.1)
SPEEDCLK
(LD2.1)
12E
12C
12D
11C
11D
12B
FULLSPEED
(LD2.2)

CENTURY DATA SYSTEMS, INC. ANAHEIM, CALIFORNIA				
SPEED DETECTION (LD2.5)				
DRAWN C. Rheaume 11-12-74	SIZE D	13442-001	REV V
CHECK			
APPD			
SCALE: ——	SHEET 14 OF		

DWG NO 13442-001 REV V

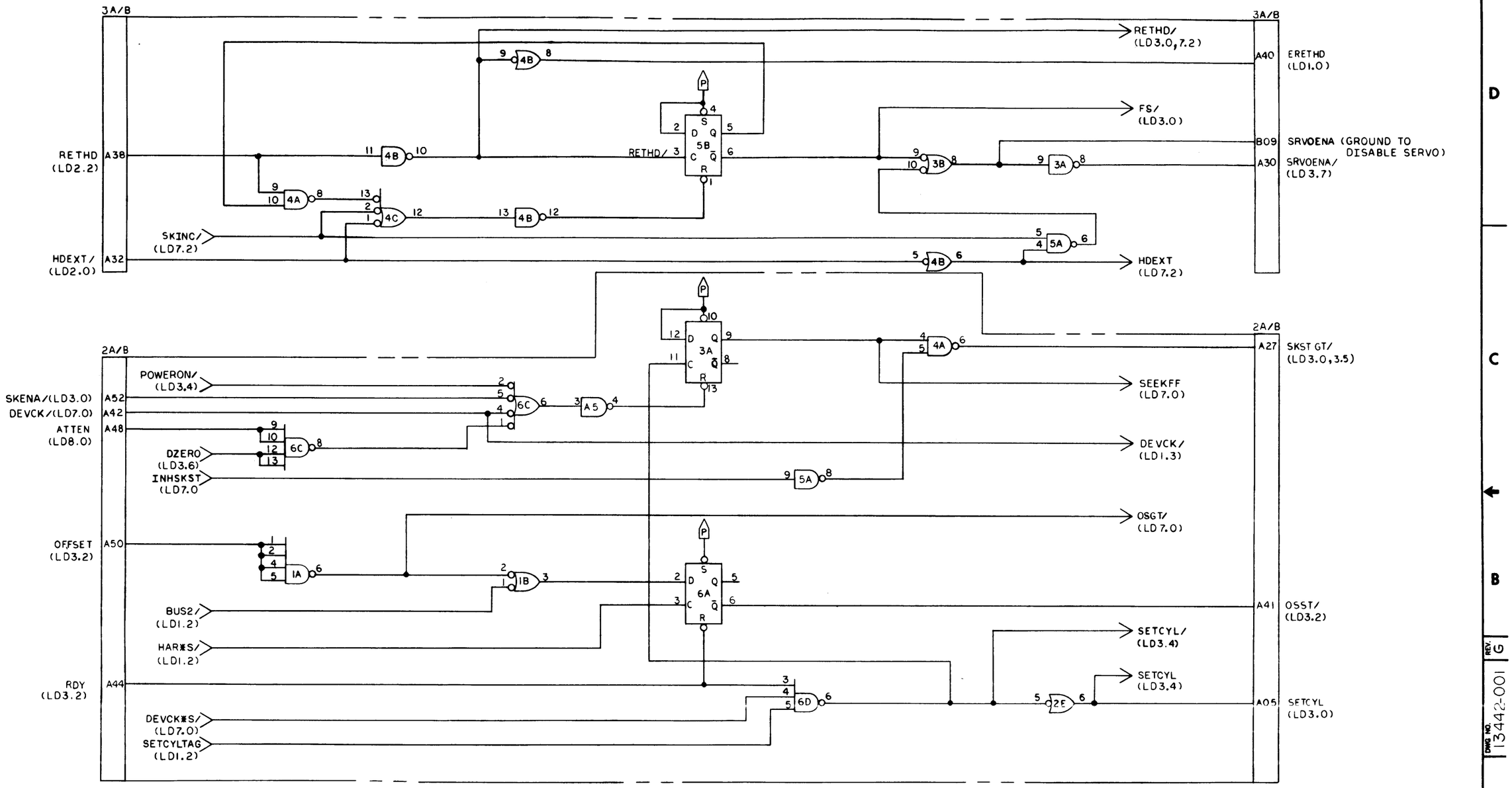


CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

SERVO CONTROL LD3.0

DRAWN	L. Salisbury		SIZE	13442-001	REV T
CHECK			D		
APPD					
SCALE:			SHEET 15 OF		

13442-001



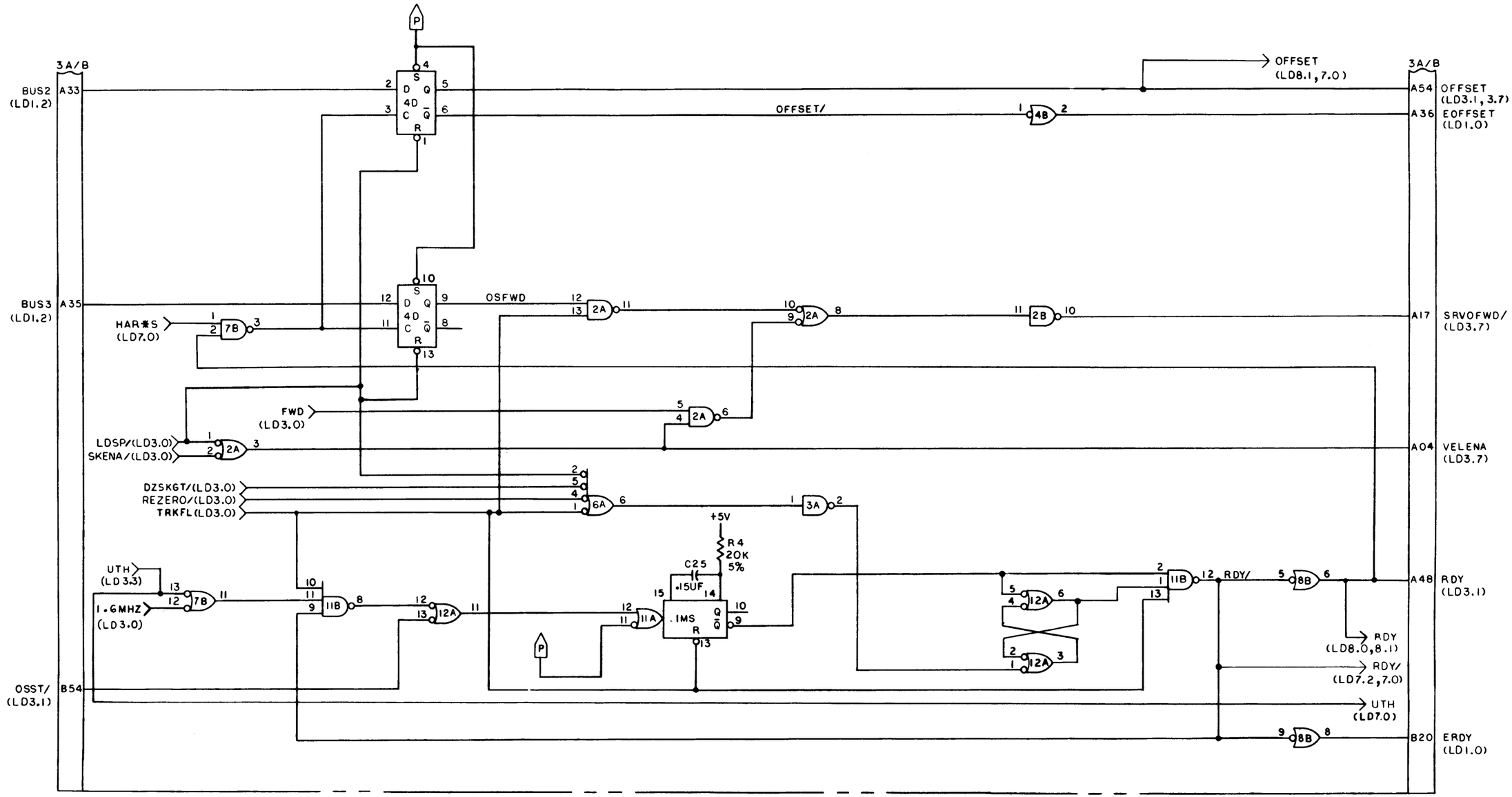
Century Data — ANAHEIM, CALIFORNIA

SERVO CONTROL LOGIC LD3.1

DRAWN	E. Drawup	10-31-78	SIZE D	13442-001	REV G
CHECK					
APPD					
SCALE:			SHEET 16 OF		

DWG NO. 13442-001 REV. G

F-6000-141 (8/79)

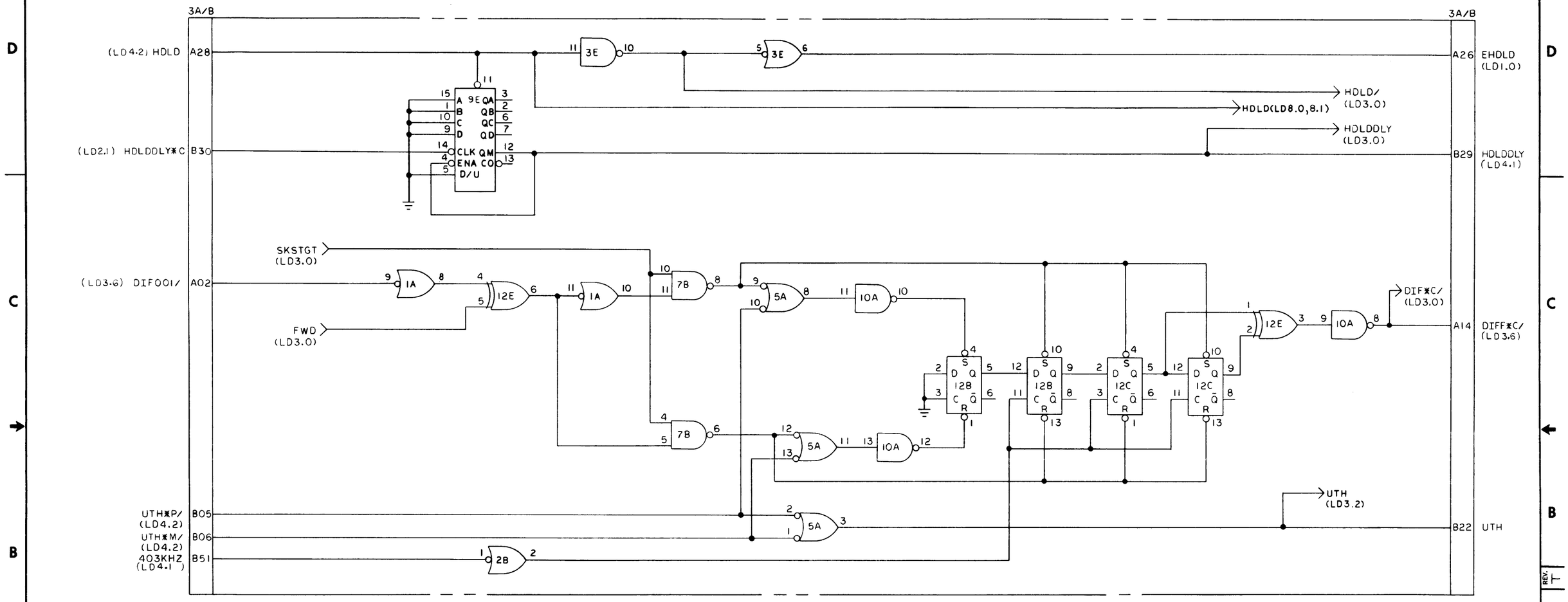


Century Data — Anaheim, California

SERVO CONTROL AND READY
LD3.2

DRAWN	C. Ramsey	10-22-79	SIZE	13442-001	REV
CHECK			D		F
APPD					
SCALE:			SHEET 17 OF		

REV. F
DWG NO. 13442-001



Century Data			ANAHEIM, CALIFORNIA		
HDLD AND HDLDDLY, DIFF. CLOCK AND UTH				LD3.3	
DRAWN	S. Salisbury	3-11-75	SIZE D	13442 001	REV T
CHECK					
APPD					
SCALE:			SHEET 18 OF		

REV. T

DWG NO. 13442-001

F4800-141 (8/73)

2A/B

+5V

R8

C25

SETCYL
(LD3.1)

2A

350NS

DIF*S/

DIF*S/
(LD3.6)

CAR*S
(LD3.5)

CAR*S/
(LD3.5)

CO512
(LD3.5)

SETCYL/
(LD3.1)

11C

11C

1D

A12 FWD*S
(LD3.0)

A14 FWD*S/
(LD3.0)

FWD*S/
(LD3.5)

FWD*S
(LD3.5)

POWERON/B31
(LD4.0)

POWERON/
(LD1.3, 3.1)

CAR001
CAR002 (LD3.5)
CAR004 (LD3.5)
CAR008 (LD3.5)

1A

CAR016/ (LD3.5)

1B

CAR032 (LD3.5)
CAR064/ (LD3.5)

1C

CAR128/ (LD3.5)
CAR256 (LD3.5)
CAR512 (LD3.5)

1C

1C

ILLCYL/
(LD7.0)

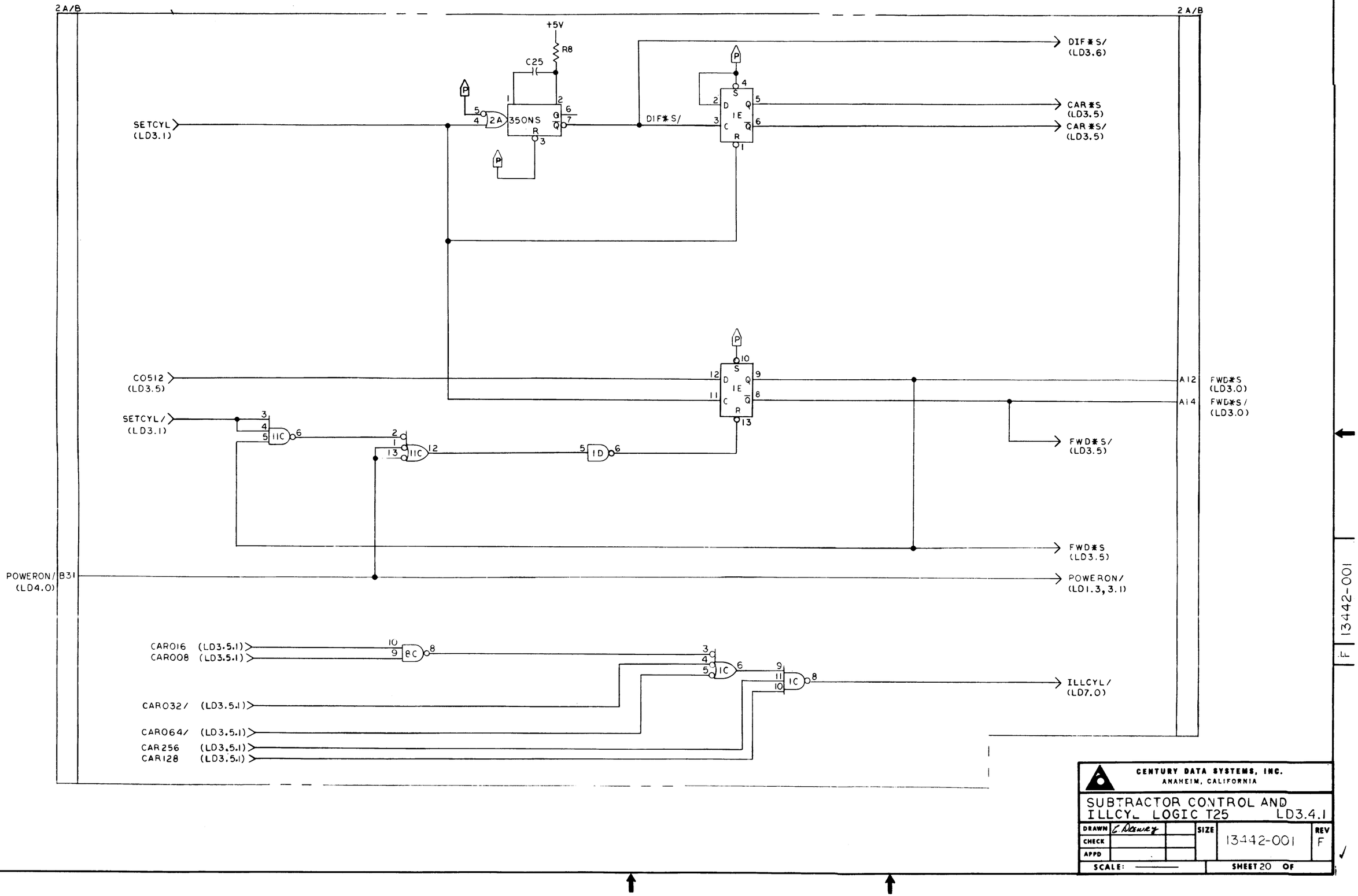
2A/B

F 13442-001

CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

SUBTRACTOR CONTROL AND
ILLCYL LOGIC-T50,T80 LD3.4.0

DRAWN			SIZE	13442-001	REV
CHECK			D		F
APPD					
SCALE:			SHEET 19 OF		

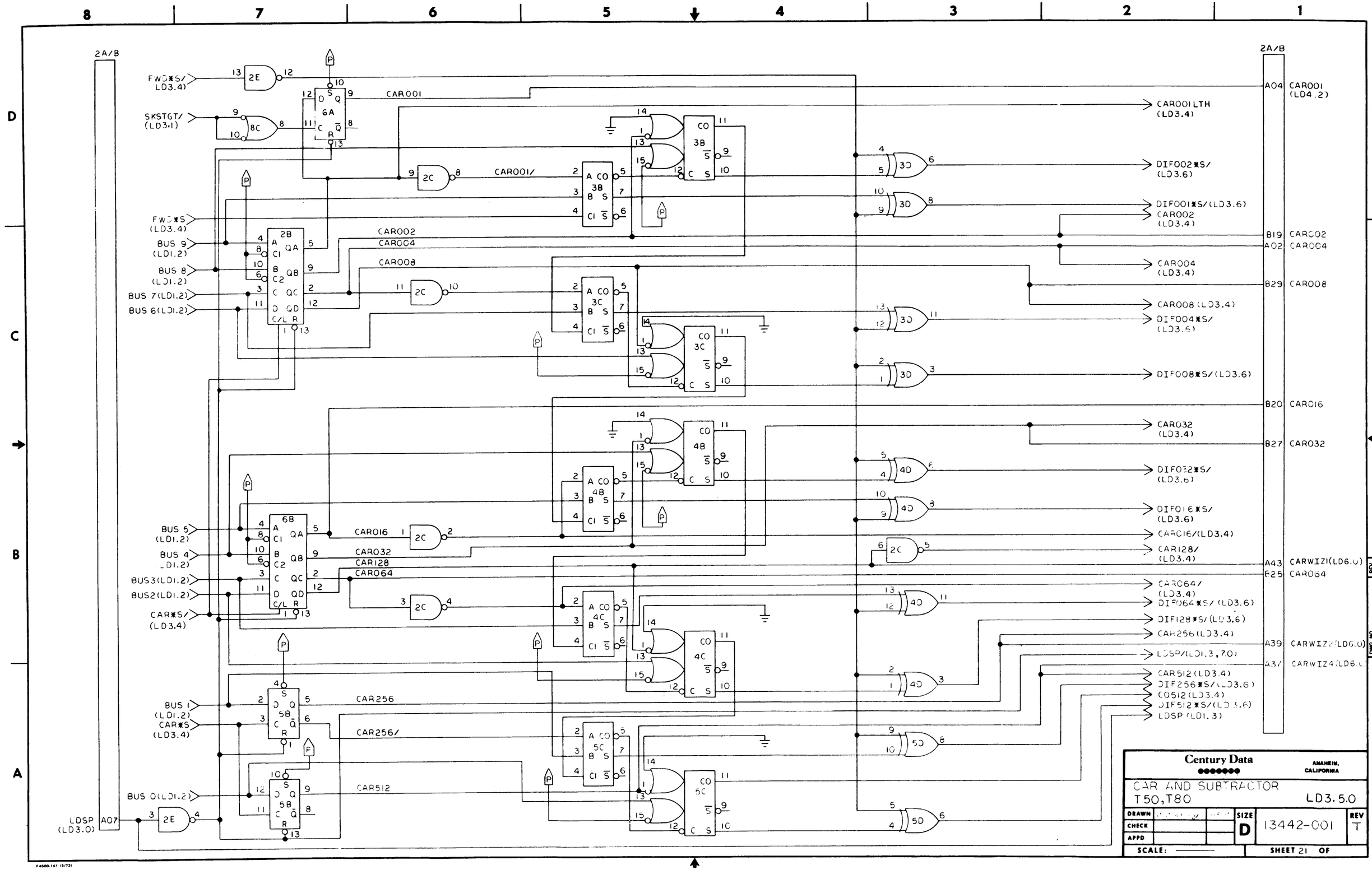


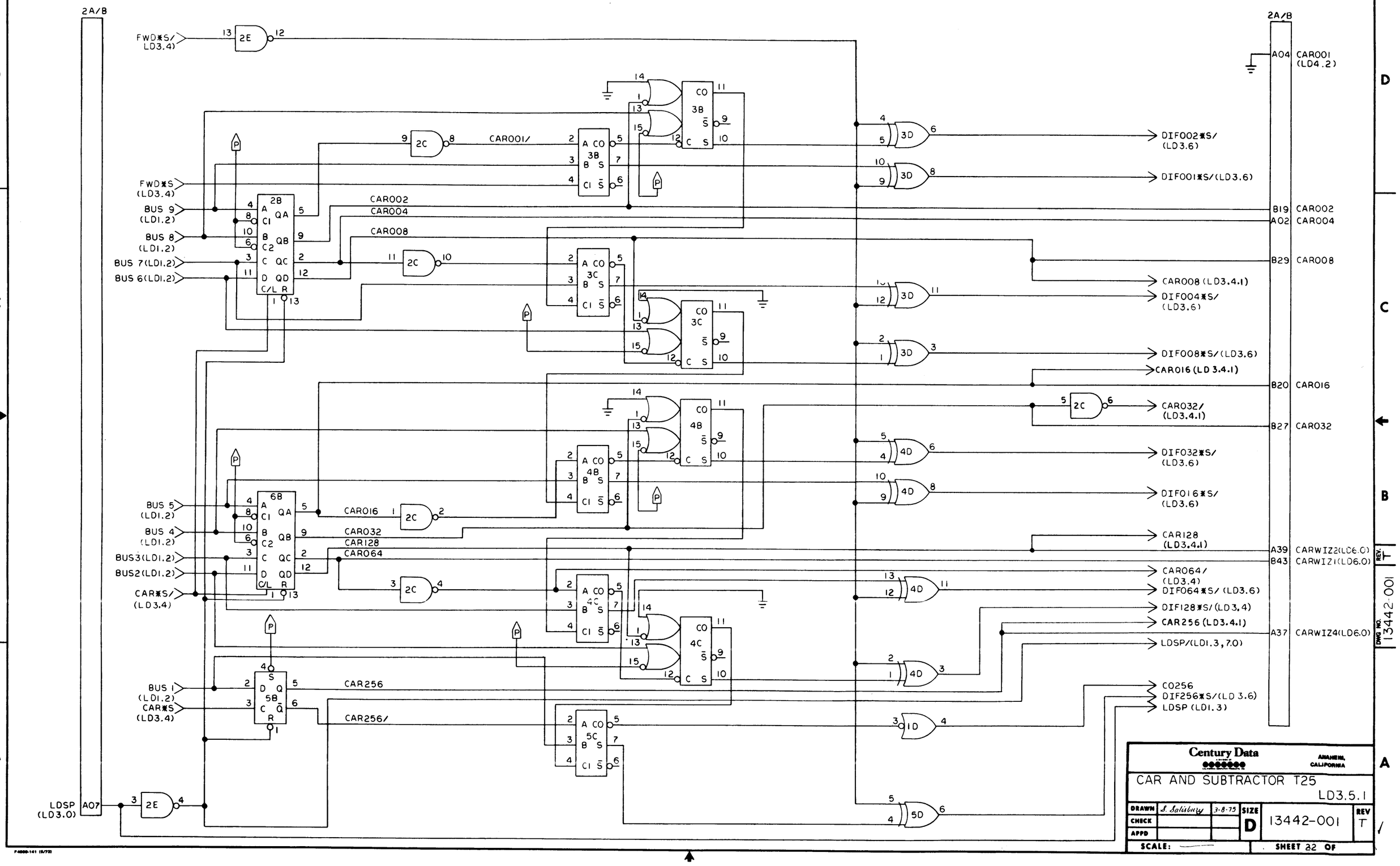
CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

SUBTRACTOR CONTROL AND ILLCYL LOGIC T25 LD3.4.1

DRAWN	C Dewey		SIZE	REV
CHECK			13442-001	F
APPD				
SCALE:			SHEET 20 OF	

13442-001
F


8
7
6
5
4
3
2
1
D
C
B
A
2A/B
FWD*S/ LD3.4)
SKSTGT/ (LD3.1)
2E
8C
6A
CAR001
2C
CAR001/
3B
FWD*S (LD3.4)
BUS 9 (LDI.2)
BUS 8 (LDI.2)
BUS 7(LDI.2)
BUS 6(LDI.2)
2B
CAR002
CAR004
CAR008
3C
BUS 5 (LDI.2)
BUS 4 (LDI.2)
BUS3(LDI.2)
BUS2(LDI.2)
CAR*S/ (LD3.4)
6B
CAR016
CAR032
CAR128
CAR064
4B
4C
BUS 1 (LDI.2)
CAR*S (LD3.4)
5B
CAR256
CAR256/
BUS 0(LDI.2)
CAR512
5C
LDSP (LD3.0)
A07
3D
4D
5D
CAR001LTH (LD3.4)
DIF002*S/ (LD3.6)
DIF001*S/(LD3.6)
CAR002 (LD3.4)
CAR004 (LD3.4)
CAR008 (LD3.4)
DIF004*S/ (LD3.6)
DIF008*S/(LD3.6)
CAR032 (LD3.4)
DIF032*S/ (LD3.6)
DIF016*S/ (LD3.6)
CAR016/(LD3.4)
CAR128/ (LD3.4)
CAR064/ (LD3.4)
DIF064*S/ (LD3.6)
DIF128*S/(LD3.6)
CAR256(LD3.4)
LDSP/(LDI.3,7.0)
CAR512(LD3.4)
DIF256*S/(LD3.6)
CO512(LD3.4)
DIF512*S/(LD3.6)
LDSP (LDI.3)
A04 CAR001 (LD4.2)
B19 CAR002
A02 CAR004
B29 CAR008
B20 CAR016
B27 CAR032
A43 CARWIZI(LD6.0)
F25 CAR064
A39 CARWIZ2(LD6.0)
A37 CARWIZ4(LD6.0)
Century Data
ANAHEIM, CALIFORNIA
CAR AND SUBTRACTOR
T50,T80
LD3.5.0
DRAWN
CHECK
APPD
SIZE D
13442-001
REV T
SCALE:
SHEET 21 OF
DWG NO. 13442-001
REV. T
F4500-141 (5/73)



Century Data — ANAHEIM, CALIFORNIA

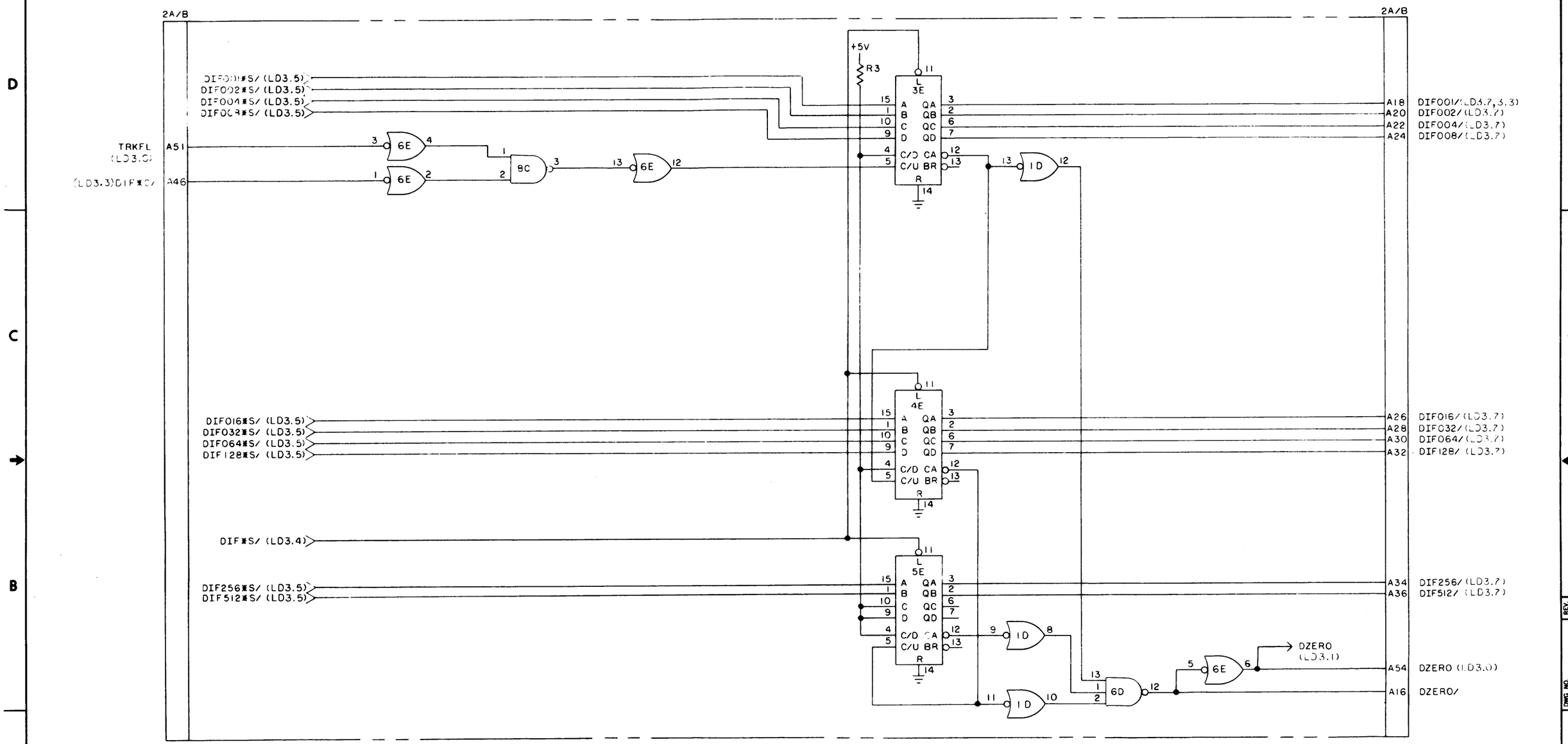
CAR AND SUBTRACTOR T25

LD3.5.1

DRAWN	J. Salisbury	3-8-75	SIZE D	13442-001	REV T
CHECK					
APPD					
SCALE:			SHEET 22 OF		

DWG NO. 13442-001 REV. T

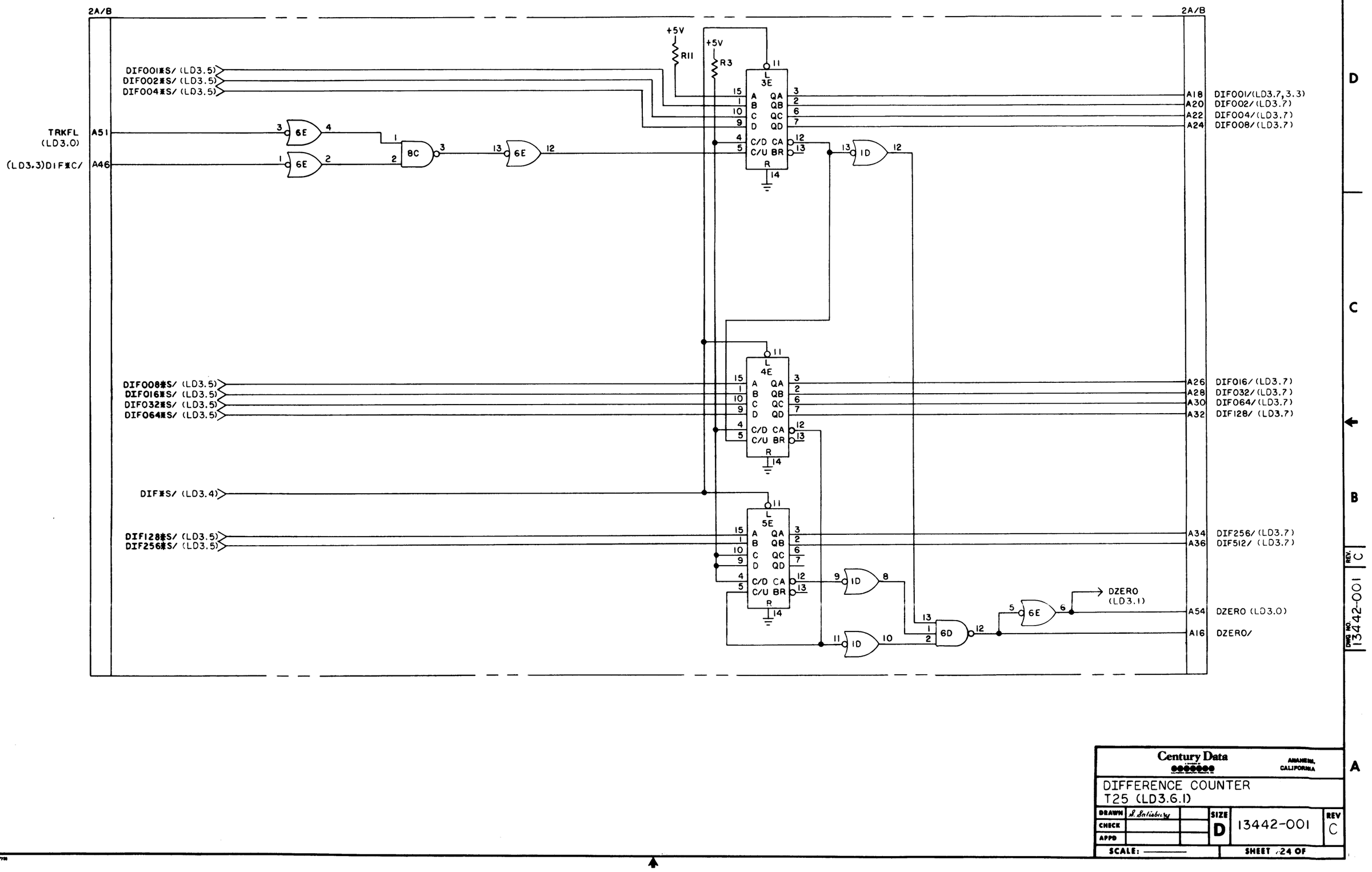
F4000-141 (5/73)



Century Data	ANAHEIM, CALIFORNIA
DIFFERENCE COUNTER LD3.6.0 T50,T80	
DRAWN	
CHECK	
APPD	
SIZE D	13442-001
REV E	
SCALE:	SHEET 23 OF

REV. E
DWG NO. 13442-001

F-6800-141 (8/73)



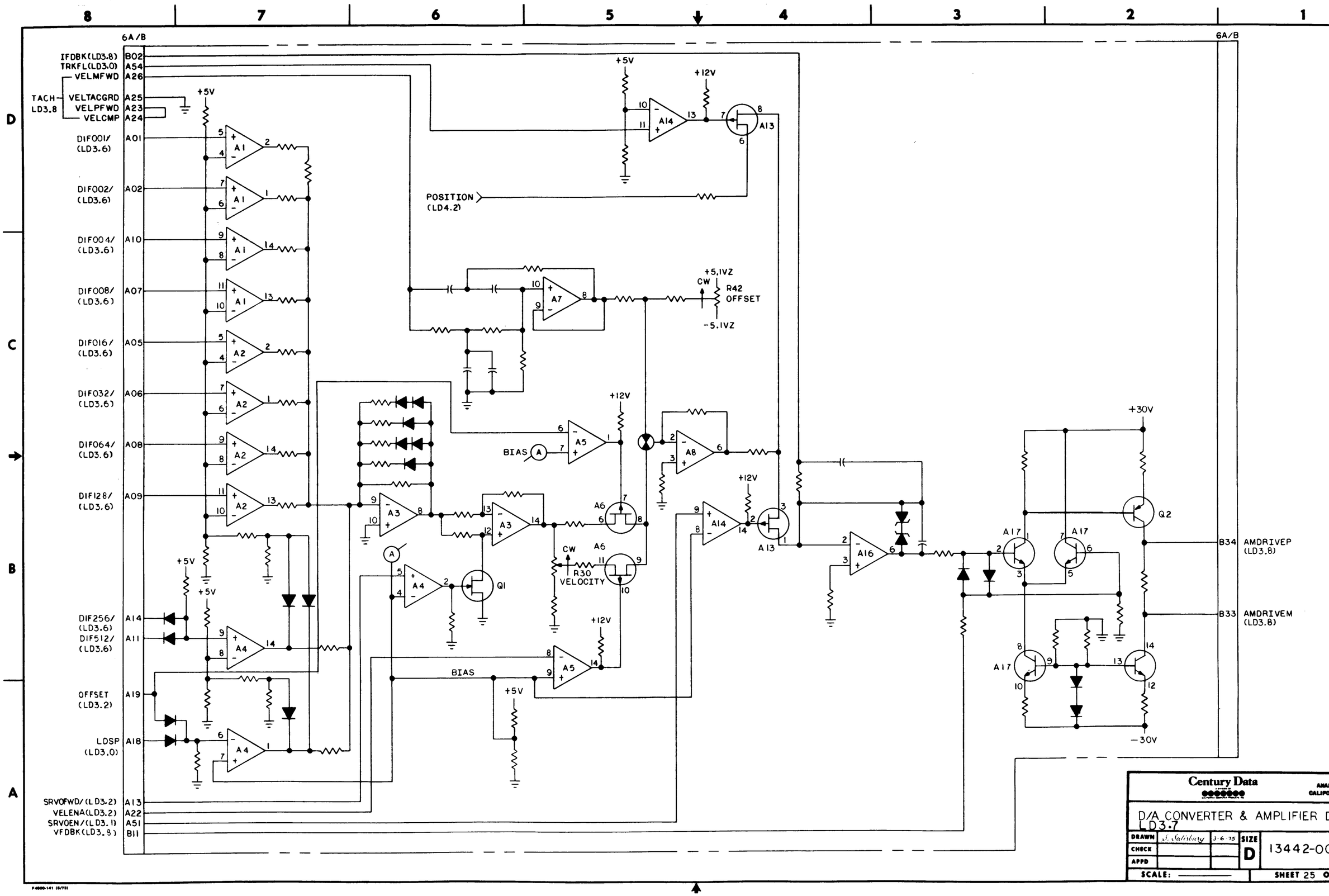
Century Data — ANAHEIM, CALIFORNIA

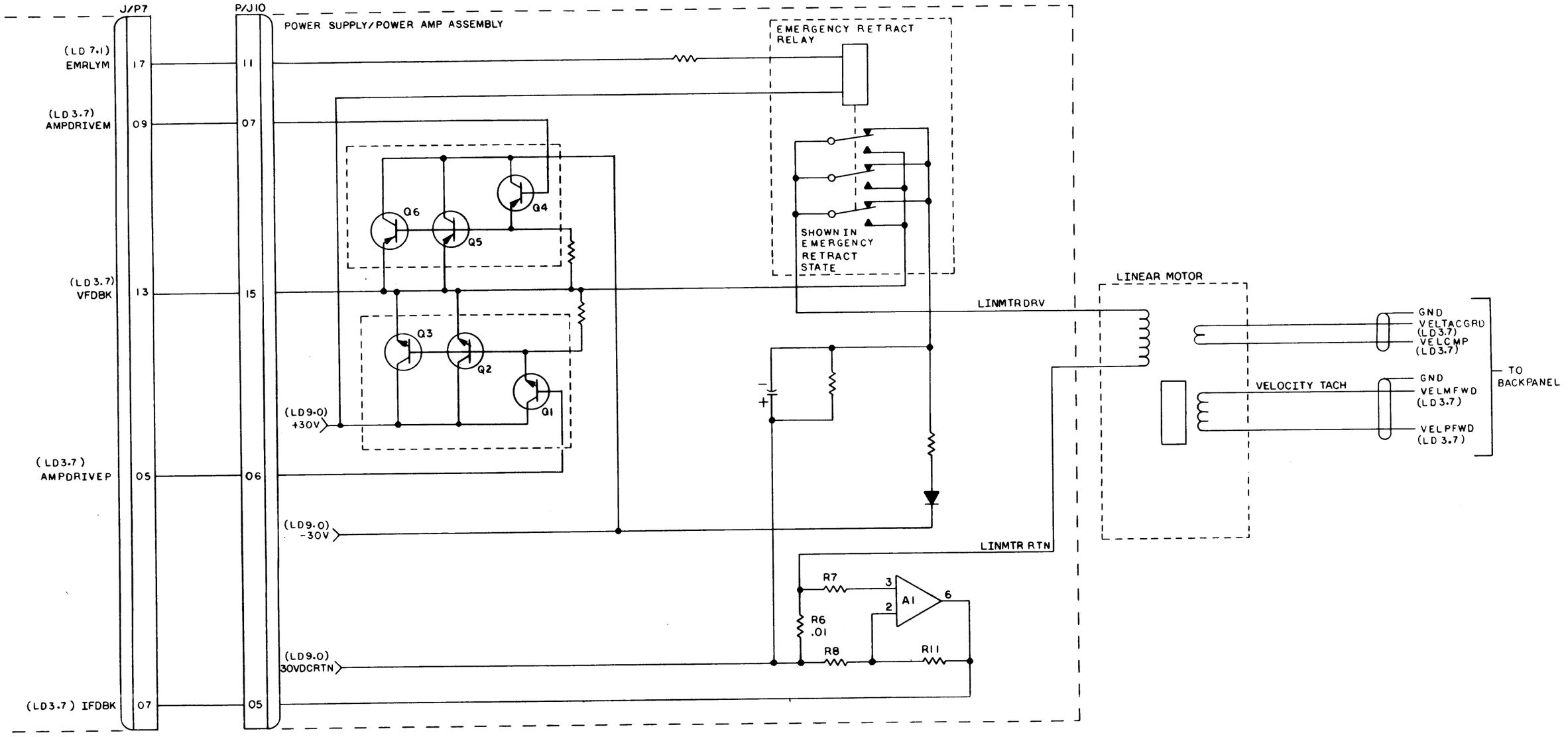
DIFFERENCE COUNTER
T25 (LD3.6.1)

DRAWN	L Latisbury	SIZE	13442-001	REV
CHECK		D		C
APPD				

SCALE: —— SHEET 24 OF

DWG NO. 13442-001 REV. C

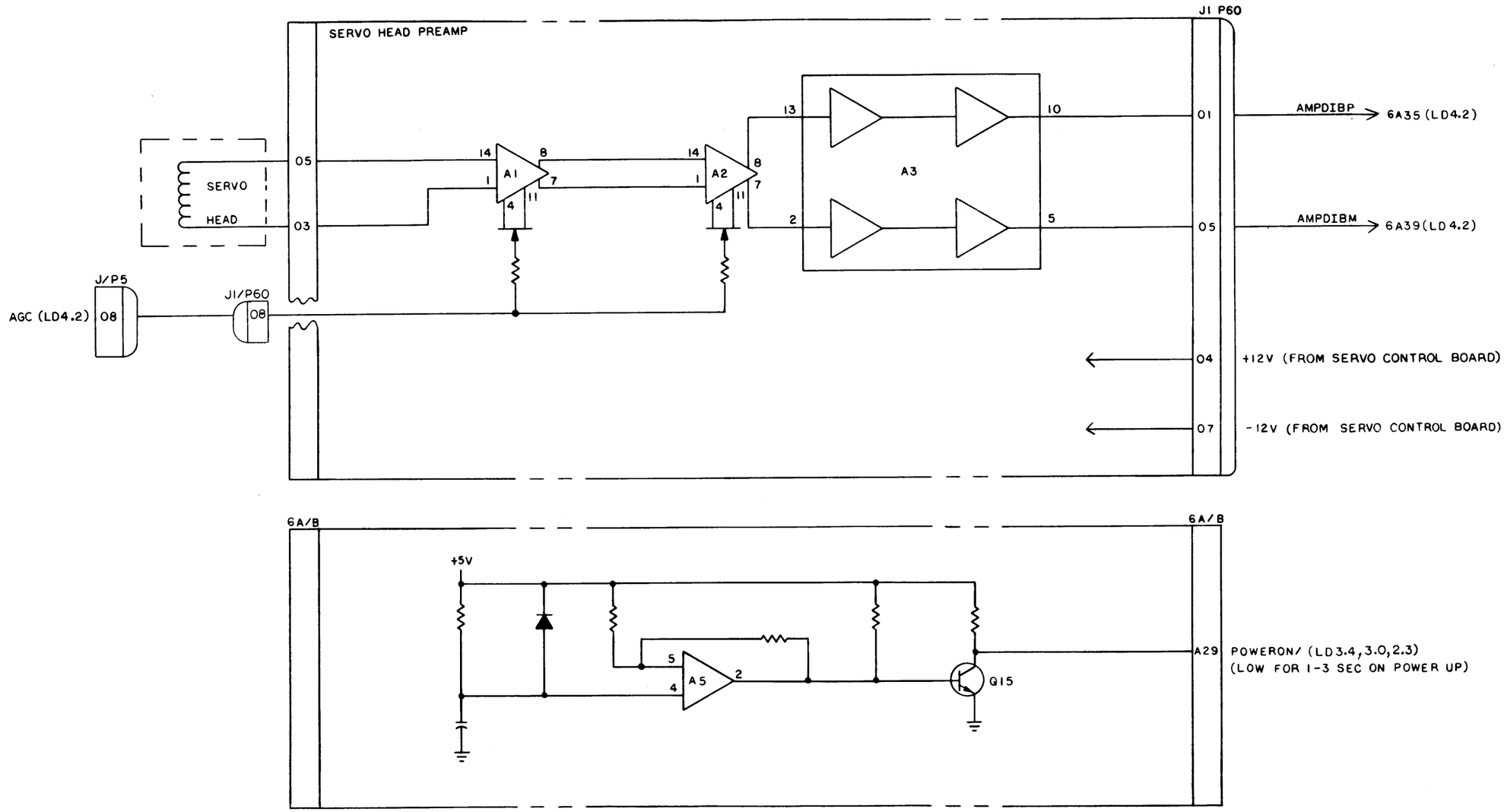

6A/B
IFDBK(LD3.8) B02
TRKFL(LD3.0) A54
VELMFWD A26
TACH LD3.8
VELTACGRD A25
VELPFWD A23
VELCMP A24
DIF001/ (LD3.6) A01
DIF002/ (LD3.6) A02
DIF004/ (LD3.6) A10
DIF008/ (LD3.6) A07
DIF016/ (LD3.6) A05
DIF032/ (LD3.6) A06
DIF064/ (LD3.6) A08
DIF128/ (LD3.6) A09
DIF256/ (LD3.6) A14
DIF512/ (LD3.6) A11
OFFSET (LD3.2) A19
LDSP (LD3.0) A18
SRVOFWD/(LD3.2) A13
VELENA(LD3.2) A22
SRVOEN/(LD3.1) A51
VFDBK(LD3.8) B11
+5V
+12V
POSITION (LD4.2)
A1
A2
A3
A4
A5
A6
A7
A8
A13
A14
A16
A17
Q1
Q2
BIAS
CW
R30 VELOCITY
R42 OFFSET
+5.1VZ
-5.1VZ
+30V
-30V
B34 AMDRIVEP (LD3.8)
B33 AMDRIVEM (LD3.8)
Century Data
ANAHEIM, CALIFORNIA
D/A CONVERTER & AMPLIFIER DRIVER LD3.7
DRAWN S. Salisbury 3-6-75
CHECK
APPD
SIZE D
13442-001
REV C
SCALE:
SHEET 25 OF



Century Data, Anaheim, California					
POWER AMP AND LINEAR MOTOR LD 3.8					
DRAWN	J. Salisbury	3-4-75	SIZE D	13442-001	REV F
CHECK					
APPD					
SCALE:			SHEET 26 OF		

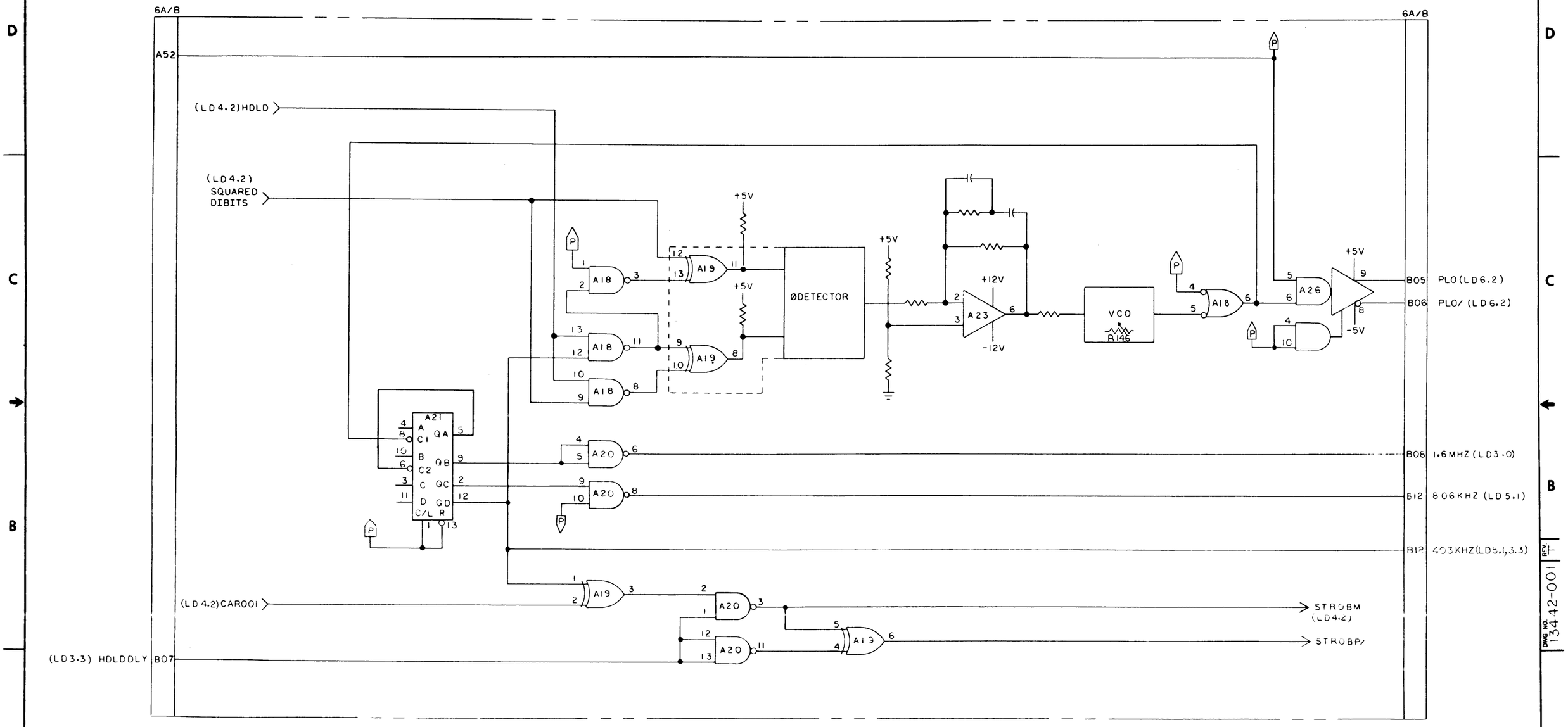
DWG NO. 13442-001 REV. F

F4800-141 (8/73)



Century Data			ANAHEIM, CALIFORNIA		
SERVO HEAD PREAMP AND POWER ON/ LD 4.0					
DRAWN	S. Salisbury	3-10-75	SIZE D	13442-001	REV T
CHECK					
APPD					
SCALE:			SHEET 27 OF		

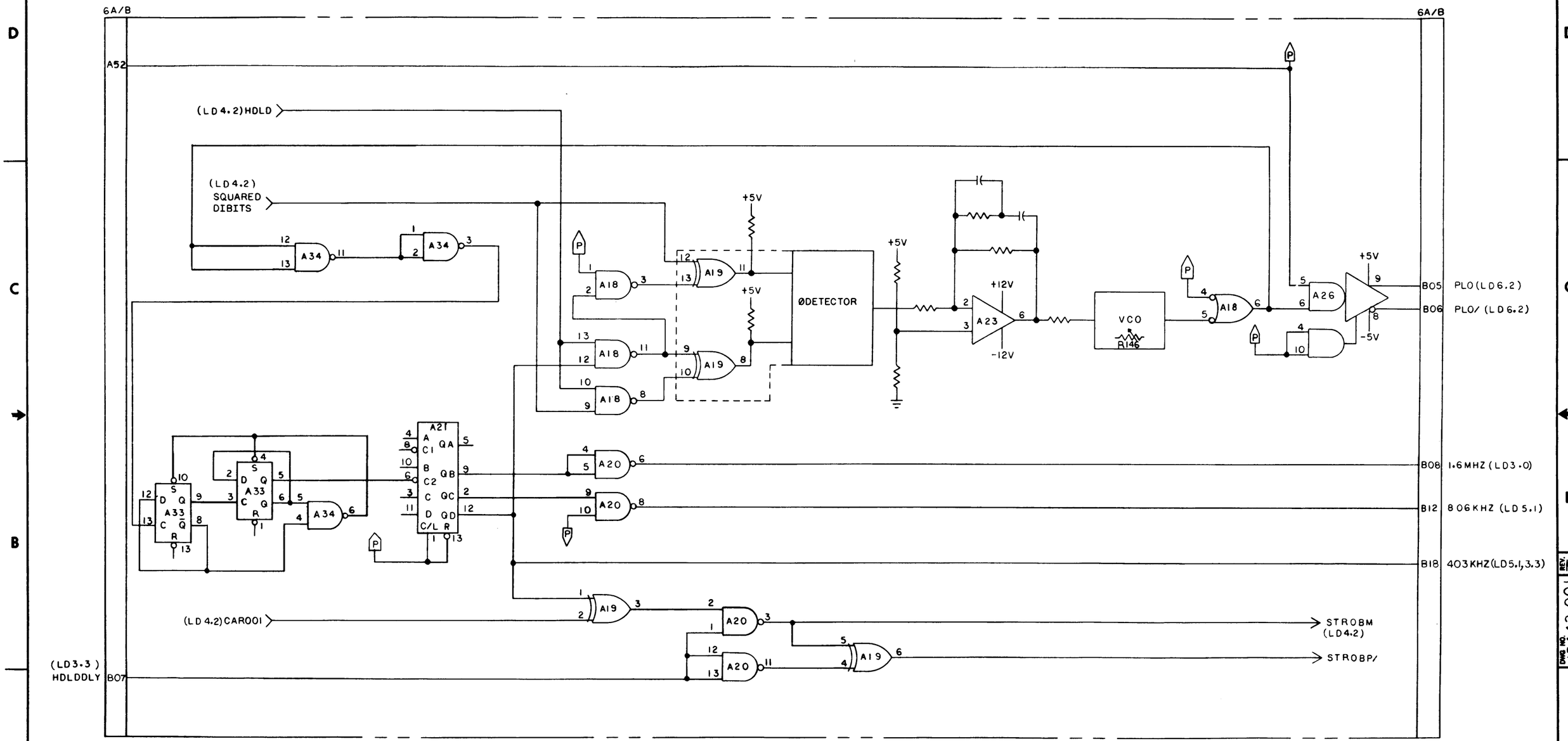
DWG NO. 13442-001 REV. T



Century Data ●●●●●●●			ANAHEIM, CALIFORNIA		
PLC T25,T5C				LD4.1	
DRAWN		2-27-75	SIZE D	13442-001	REV T
CHECK					
APPD					
SCALE: ———			SHEET 28 OF		

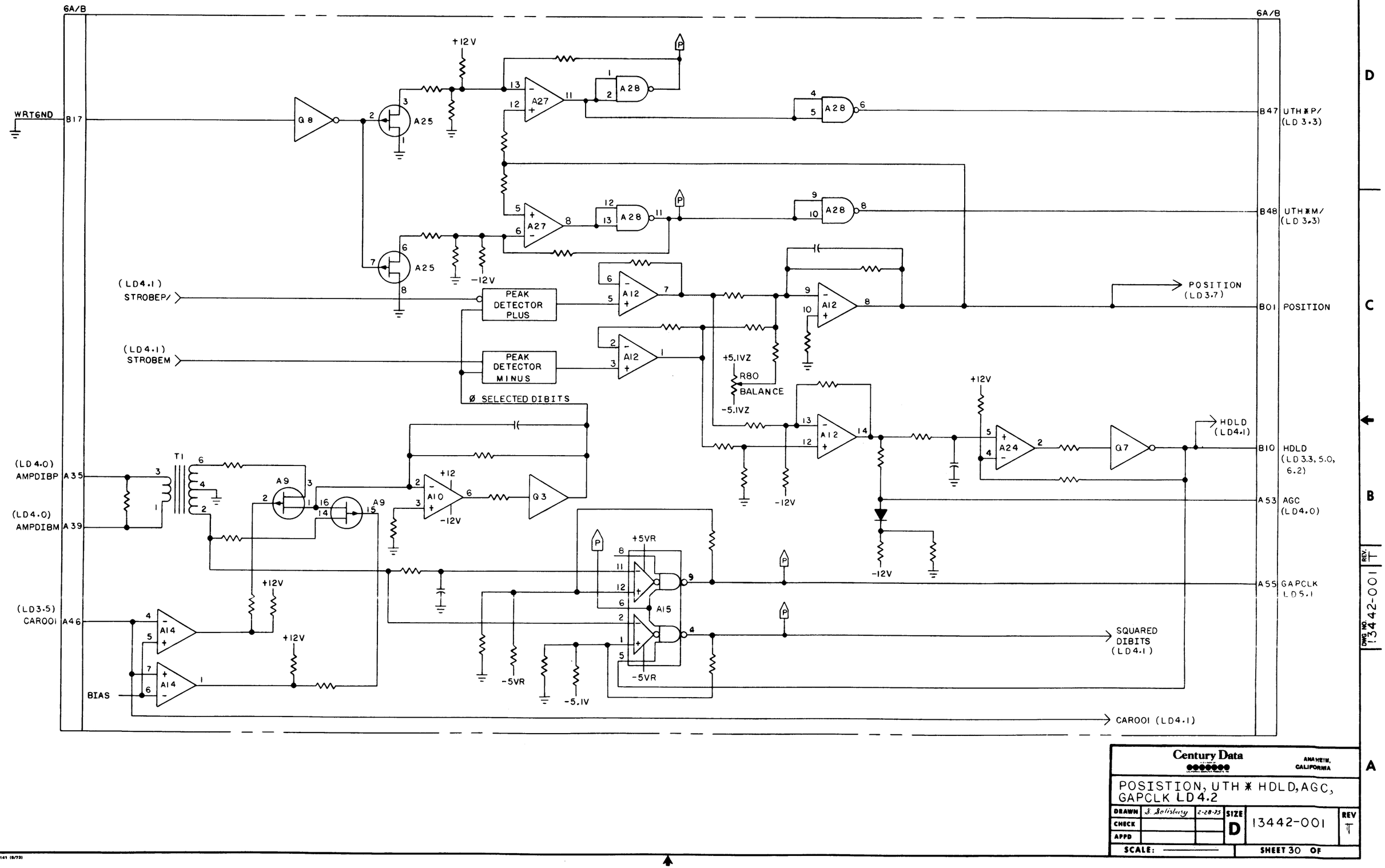
DWG NO. 13442-001 REV T

F4800-141 (8/73)



Century Data					ANAHEIM, CALIFORNIA
PLO T80					LD4.1.1
DRAWN	E. Basuny	11-25-75	SIZE D	13442-001	REV T
CHECK					
APPD					
SCALE:			SHEET 29 OF		

DWG NO 13442-001 REV T



Century Data — ANAHEIM, CALIFORNIA

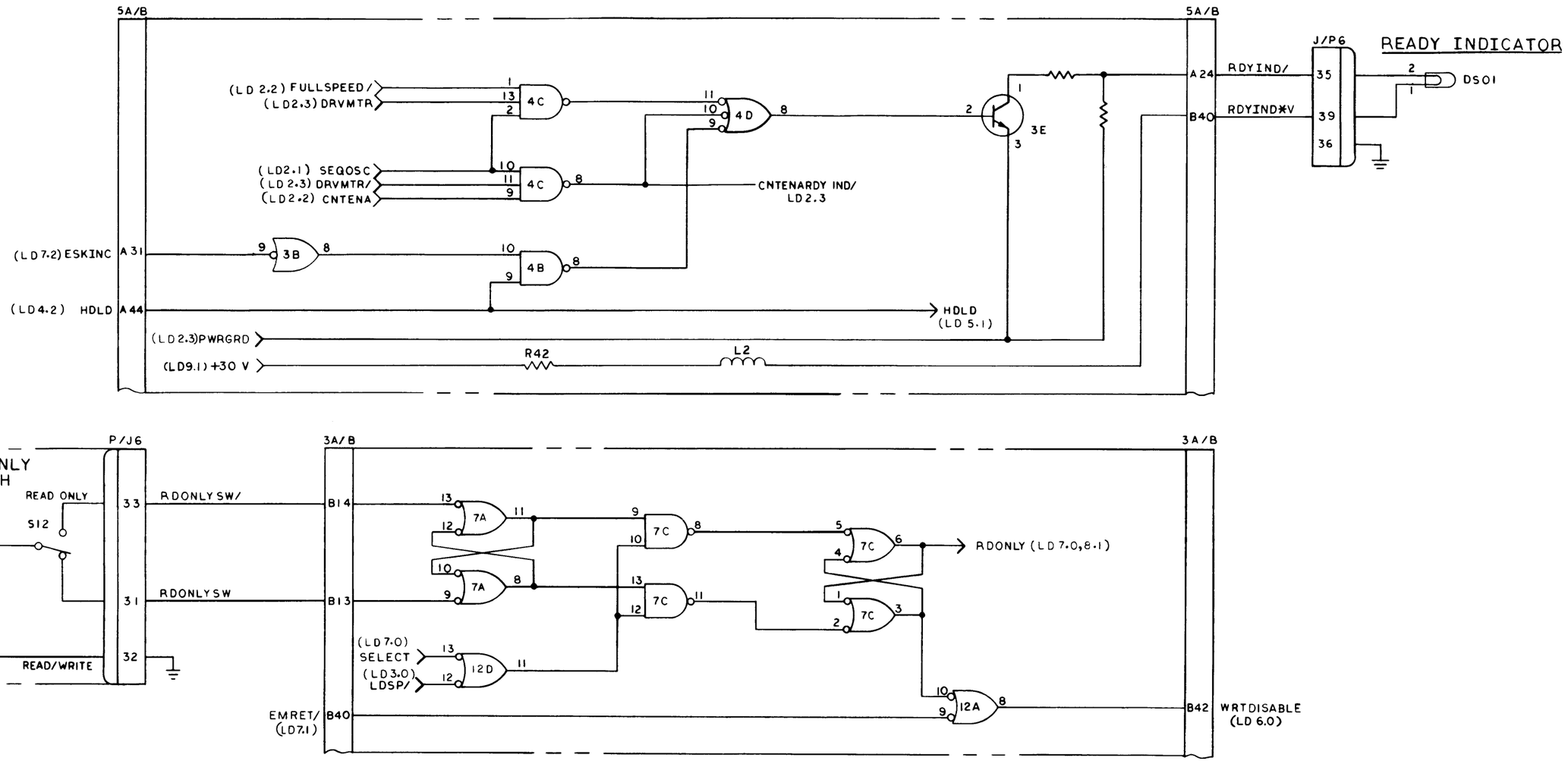
POSISTION, UTH * HDLD, AGC, GAPCLK LD4.2

DRAWN	J. Salisbury	2-28-75	SIZE D	13442-001 REV T
CHECK				
APPD				

SCALE: —— SHEET 30 OF

DWG NO 13442-001 REV T

P4000-141 (9/73)



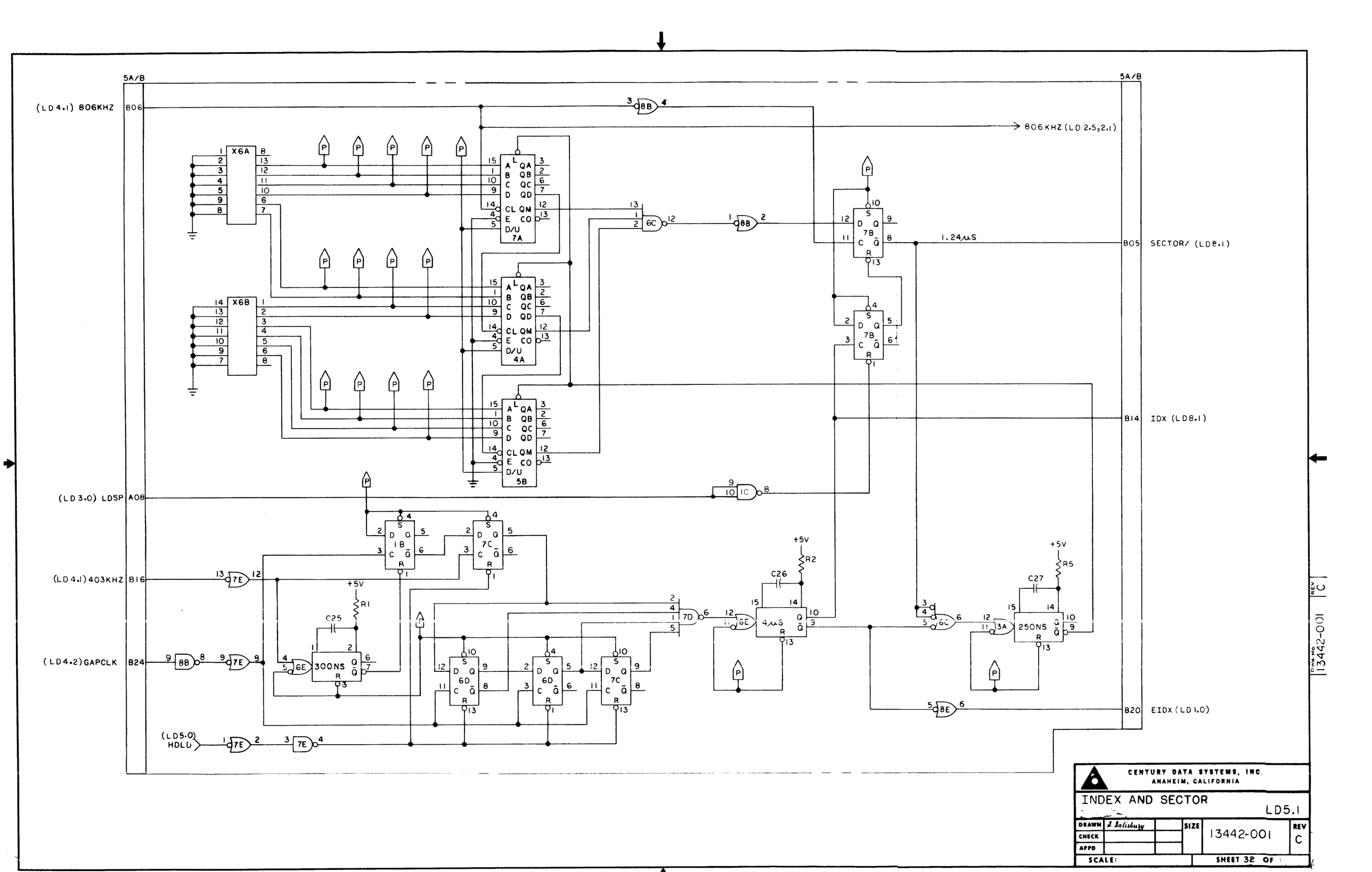
Century Data — ANAHEIM, CALIFORNIA

READY INDICATOR AND READ ONLY LD 5.0

DRAWN	L. Drury	2-21-75	SIZE D	13442-001	REV T
CHECK					
APPD					
SCALE:			SHEET 31 OF		

DWG NO. 13442-001 REV. T

F4888-161 (8/73)

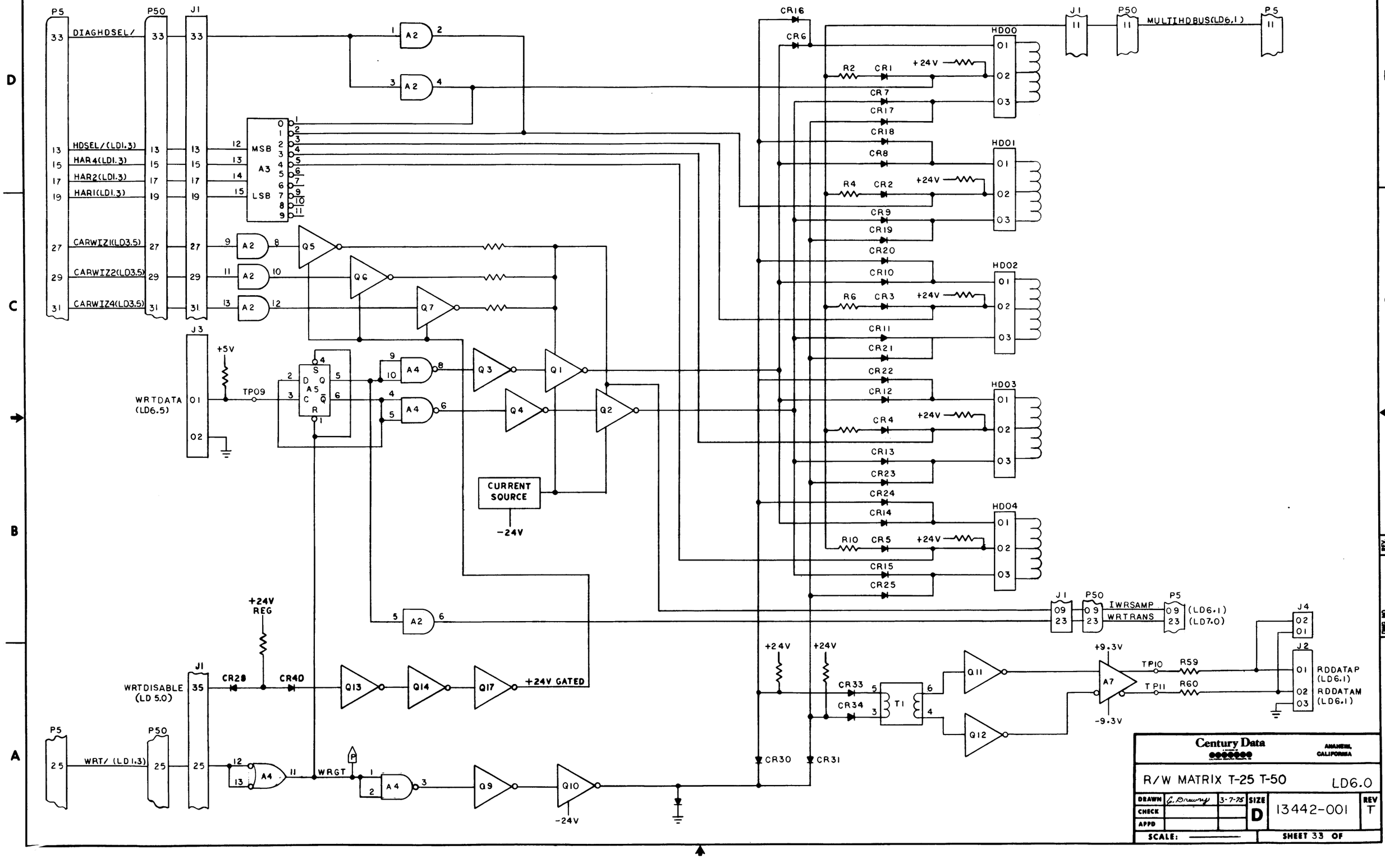


CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

INDEX AND SECTOR

LD5.1

DRAWN	J. Salisbury		SIZE	13442-001	REV C
CHECK					
APPD					
SCALE:			SHEET 32 OF		



Century Data — ANAHEIM, CALIFORNIA

R/W MATRIX T-25 T-50 LD6.0

DRAWN	G. Drawing	3-7-75	SIZE D	13442-001 REV T
CHECK				
APPD				
SCALE:			SHEET 33 OF	

DWG NO. 13442-001 REV. T

8 7 6 5 4 3 2 1

P5 P50 J1

33 DIAGHSEL/ — 33 — 33

13 HDSEL/ (LD1.3) — 13 — 13
15 HAR 4 (LD1.3) — 15 — 15
17 HAR 2 (LD1.3) — 17 — 17
19 HAR 1 (LD1.3) — 19 — 19

27 CARWIZ 1 (LD 3.5) — 27 — 27
29 CARWIZ 2 (LD 3.5) — 29 — 29
31 CARWIZ 4 (LD 3.5) — 31 — 31

A1 A1 A1

12 MSB
13
14 A3
15 LSB

TP10 TP8

+24V

CR29 CR30

A2 A2 A2

Q5 Q6 Q7

+5V

J3
WRT DATA (LD 6.5.1)
01
02
TP01

A5 (S D Q C R)

A4 A4

Q3 Q4

TP04 TP05

Q2A Q2B

CURRENT SOURCE

−24V

+5V

A2

+24V REG

+24V REG

J1
WRTDISABLE (LD 5.0)
35

CR38 CR39

Q24 Q25 Q26

+24V GATED

CR33

CR32 CR34

CR31 CR35

CR36 CR37

P5 25 WRT/ (LD1.3)
P50 25
25

A4 WRGT

A2

A2

Q10

CR16 CR6

TP02 TP03

HD00 HD01 HD02 HD03 HD04
01 02 03

R2 CR1 +24V
CR7 CR17
CR18 CR8
R4 CR2 +24V
CR9 CR19
CR24 CR14
R10 CR5 +24V
CR15 CR25
CR20 CR10
R6 CR3 +24V
CR11 CR21
CR22 CR12
R8 CR4 +24V
CR13 CR23

J1 11 — P50 11 — MULTIHDBUS (LD 6.1.1) — P5 11

J1 09 23 — P50 09 23 IWRSAMP WRTRANS — P5 09 23 (LD 6.1.1) (LD 2.0)

J4 02 01

J2 01 RDDATAP
02 03 RDDATAM (LD 6.1.1)

Q12 AMP Q13
Q14 AMP Q15
Q16 AMP Q17
Q18 AMP Q19
Q20 AMP Q21
Q22 AMP Q23

TP06 TP07

D C B A

REV. K
DWG NO. 13442-001

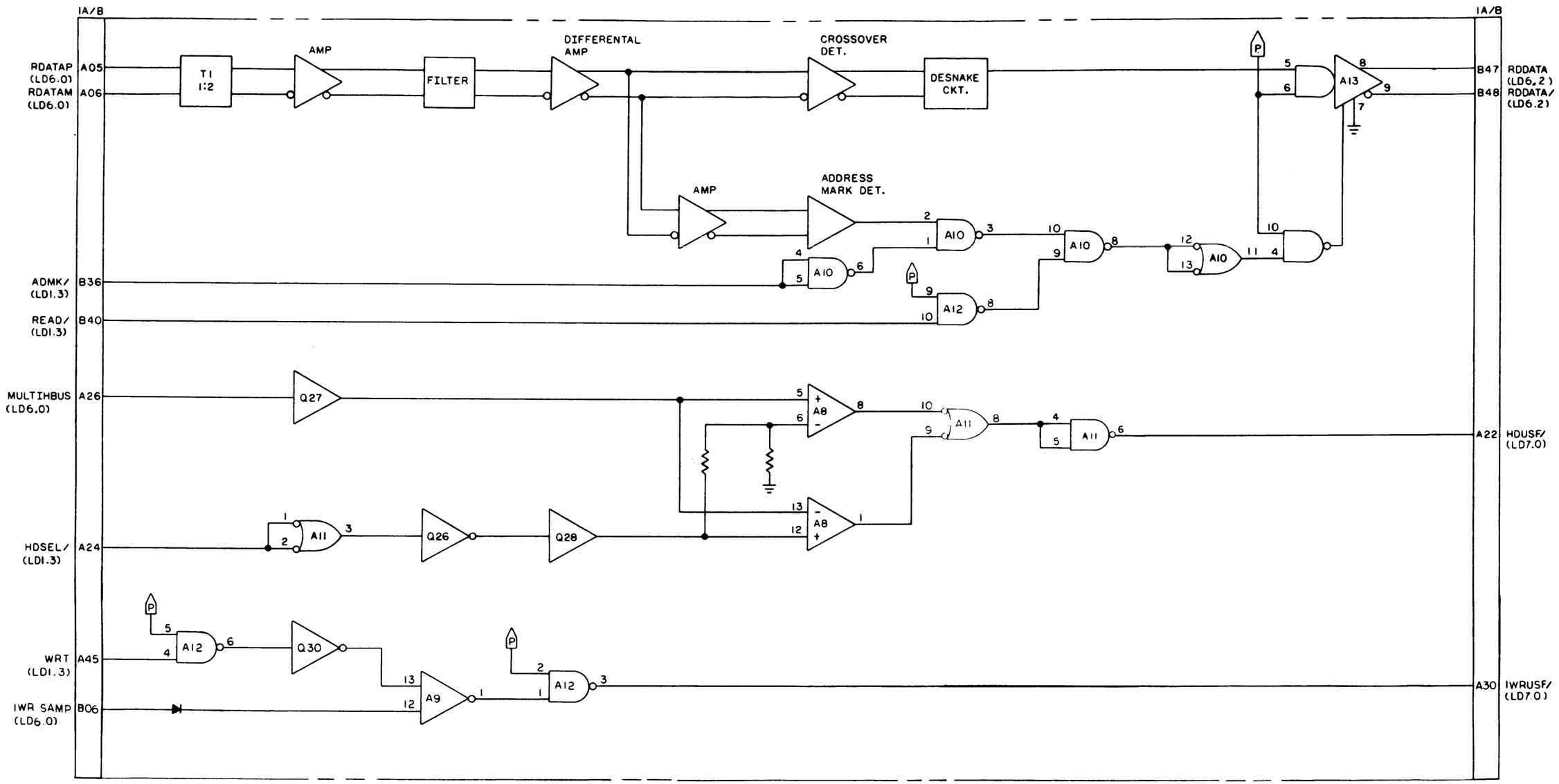
Century Data — ANAHEIM, CALIFORNIA

R/W MATRIX T80 — LD 6.0.1

DRAWN	TANZO	9/5/76	SIZE		REV
CHECK			D	13442-001	K
APPD					

SCALE: NONE — SHEET 34 OF

F4000-141 (5/73)



Century Data — ANAHEIM, CALIFORNIA

READ AMP, COD AND HEADS UNSAFE T25, T50 — LD6.1

DRAWN	J Bolisbury		SIZE D	13442-001 REV E
CHECK				
APPD				
SCALE:			SHEET 35 OF	

F4000-141 (8/72)

REVISIONS			
REV	ZONE	DESCRIPTION	DATE & APPROVAL

1A/B

RDATAP (LD6.0.1) A05
RDATAM (LD6.0.1) A06

RCVR
AMP
LOW PASS FILTER
DIFFERENTIATOR
LOW PASS FILTER
BUFFER AMP
CASCODE AMP
BUFFER AMP
1
2

1
2
CROSS-OVER DET
A2
A3
DELAY
A2
12 D A4 C 11
Q 9
Q 8
A5
A5
LINE DRIVER
B47 RDDATA (LD6.2.1)
B48 RDDATA/ (LD6.2.1)

AMP
FULL WAVE RECT
FILTER
AMP & VOLTAGE XLTR
AMP
L.P.
COMPARATOR
A10
B08 AMRW

AMMODE/ B10
READ/ (LD1.3) B40
A11
+5V
A11
A10
A10

MULTIHBUS (LD6.0.1) A26
HDSEL/ (LD1.3) A24
Q23
TP8
A13
A12
Q24
TP7
A13
A22 HDUSF/ (LD7.0)

WRT (LD1.3) A45
A12
A14
+5V
A14
A14
A30 IWRUSF/ (LD7.0)

IWR SAMP (LD6.0.1) B06
Q25
A13
A14

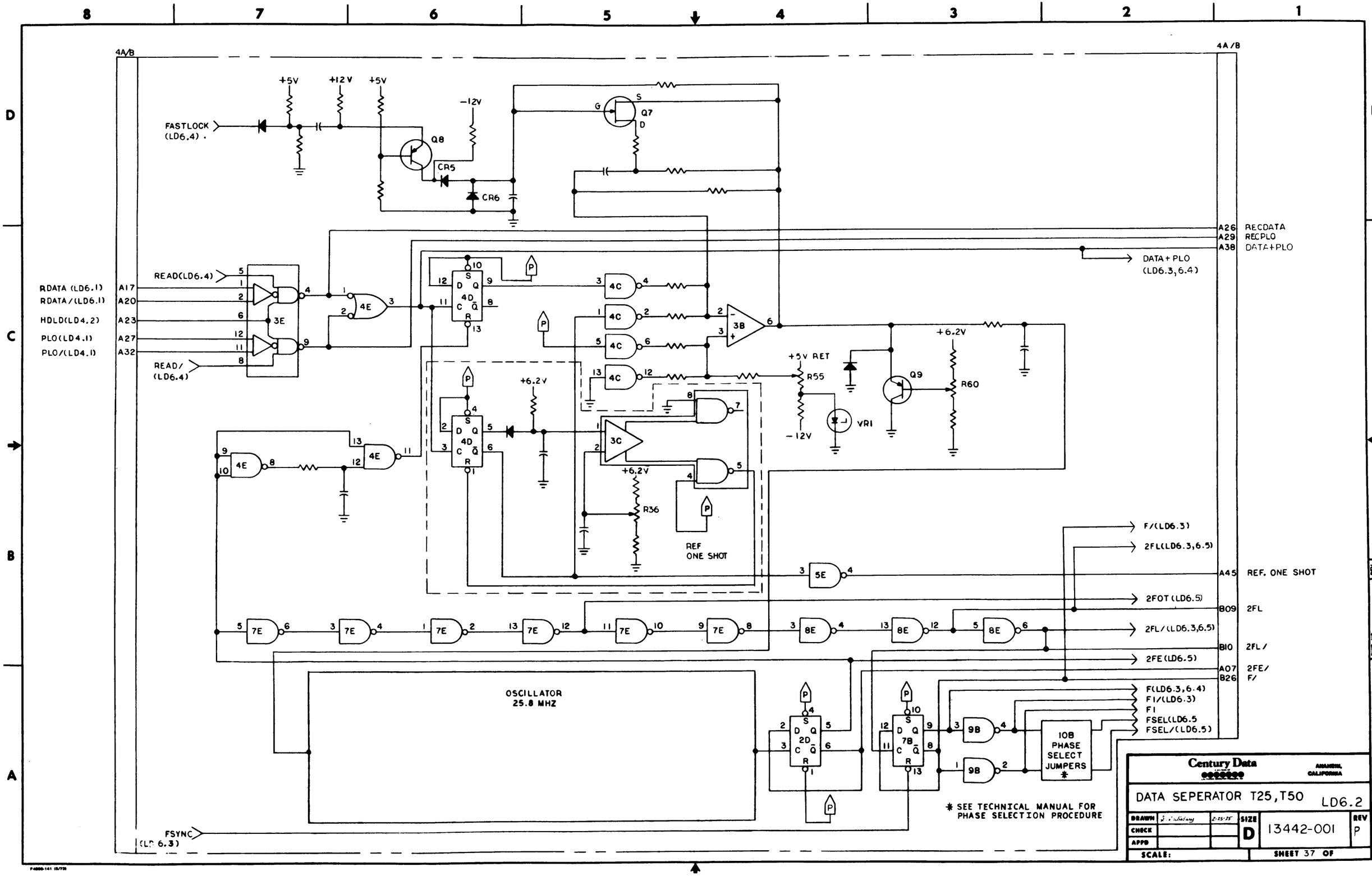
CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92805
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

READ AMP, C.O.D. AND HEADS UNSAFE T80
LD6.1.1

SCALE:	SIZE		REV
—	D	13442-001	K

SHEET 36 OF

K | 13442-001


4A/B
+5V
+12V
+5V
-12V
FASTLOCK (LD6.4)
Q8
CR5
CR6
Q7
A26 RECDATA
A29 RECPLO
A38 DATA+PLO
DATA+PLO (LD6.3,6.4)
RDATA (LD6.1)
RDATA/(LD6.1)
HDLD(LD4.2)
PLO(LD4.1)
PLO/(LD4.1)
A17
A20
A23
A27
A32
READ(LD6.4)
READ/ (LD6.4)
3E
4E
4D
4C
3B
+6.2V
+5V RET
R55
R60
Q9
VR1
-12V
3C
R36
REF ONE SHOT
5E
A45 REF. ONE SHOT
2FOT (LD6.5)
B09 2FL
2FL/(LD6.3,6.5)
B10 2FL/
2FE(LD6.5)
A07 2FE/
B26 F/
F/(LD6.3)
2FL(LD6.3,6.5)
7E
8E
OSCILLATOR 25.8 MHZ
2D
7B
9B
10B PHASE SELECT JUMPERS *
F(LD6.3,6.4)
FI/(LD6.3)
FI
FSEL(LD6.5
FSEL/(LD6.5)
* SEE TECHNICAL MANUAL FOR PHASE SELECTION PROCEDURE
FSYNC (LD 6.3)
Century Data
ANAHEIM, CALIFORNIA
DATA SEPERATOR T25,T50 LD6.2
DRAWN
CHECK
APPD
SIZE D
13442-001
REV P
SCALE:
SHEET 37 OF
DWG NO. 13442-001
REV. P

REVISIONS			
REV	ZONE	DESCRIPTION	DATE & APPROVAL

4A/B

(LD6.4.1) READ
(LD6.4.1) AMMODE/
(LD4,2) HOLD A23
(LD 6.1.1) RDATA/ A17
(LD6,1,1) RDATA A20
(LD 4,1,1) PLOP A27
(LD4.1.1) PLOM A 32
3E-7 (LD 6.4.1)
6A-8(LD6,5,3)
2F
2F/ (LD 6,5,1)
2F (LD 6,5,1)
5C-11 (LD 6,5,1)
7B-8 (LD 6,5,1)
F/ (LD6,5,2, 6,3,1, 6,5,1)
6C-8 (LD6,5,1)
F/
(LD 6,5,1) D
10B-6 (LD 6,5,1)
CLOCK/ (LD6,5,3)
WRTAM/ (LD6,5,2)
(LD6,5,2)WRITE
DEGATE/ (LD6,3,1)
(L D 6,5,1) 8C-14
(L D 6,5,1) 8C-13
(LD6,5,1) 8C-12
B24 WRITDATA (LD 6.0.1)
EXWRDATA/ B21
FILTER
3A
OSC
DL140NS
4A/B

CALIFORNIA COMPUTER PRODUCTS INC.
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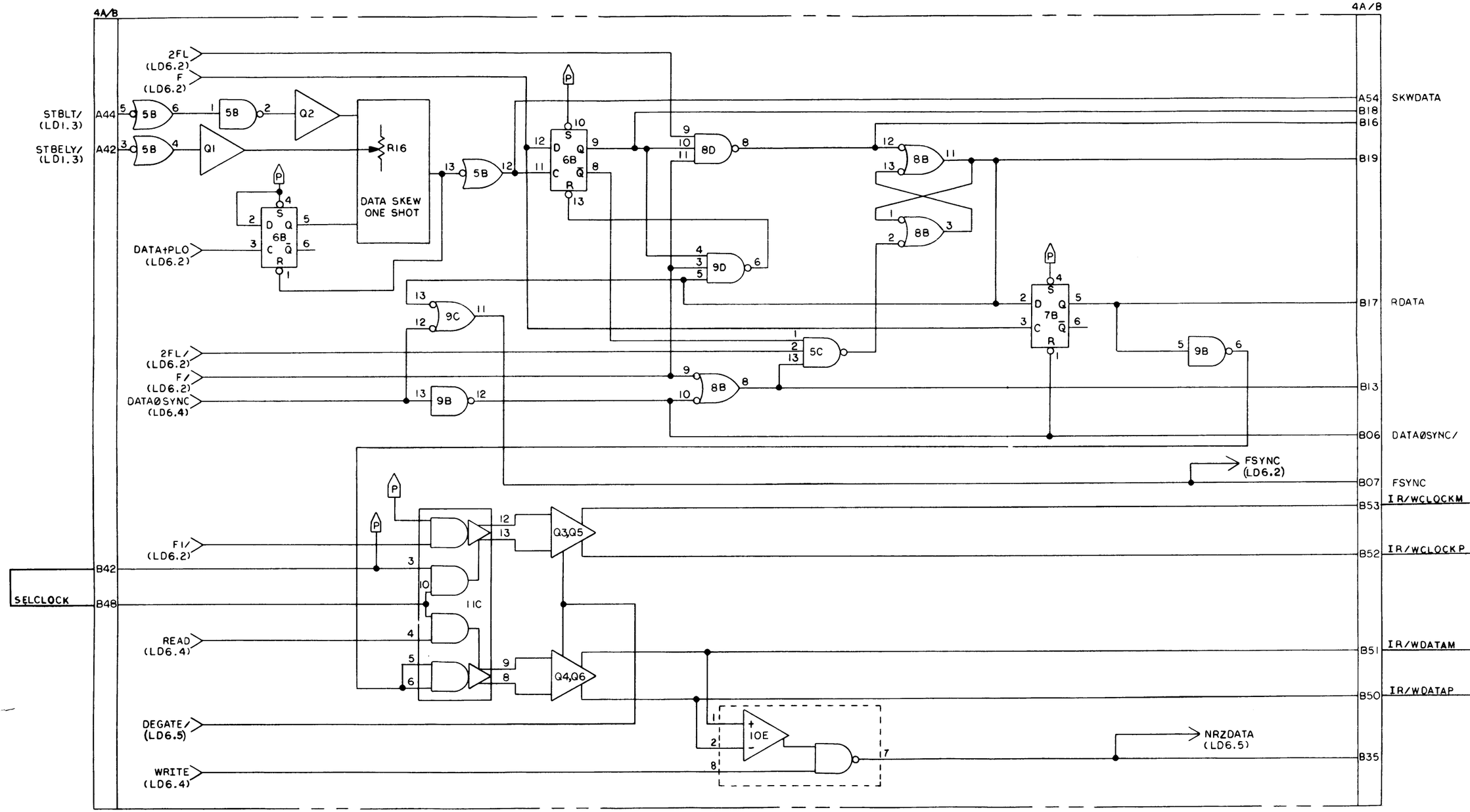
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

DATA SEPARATOR T80

LD6.2.1

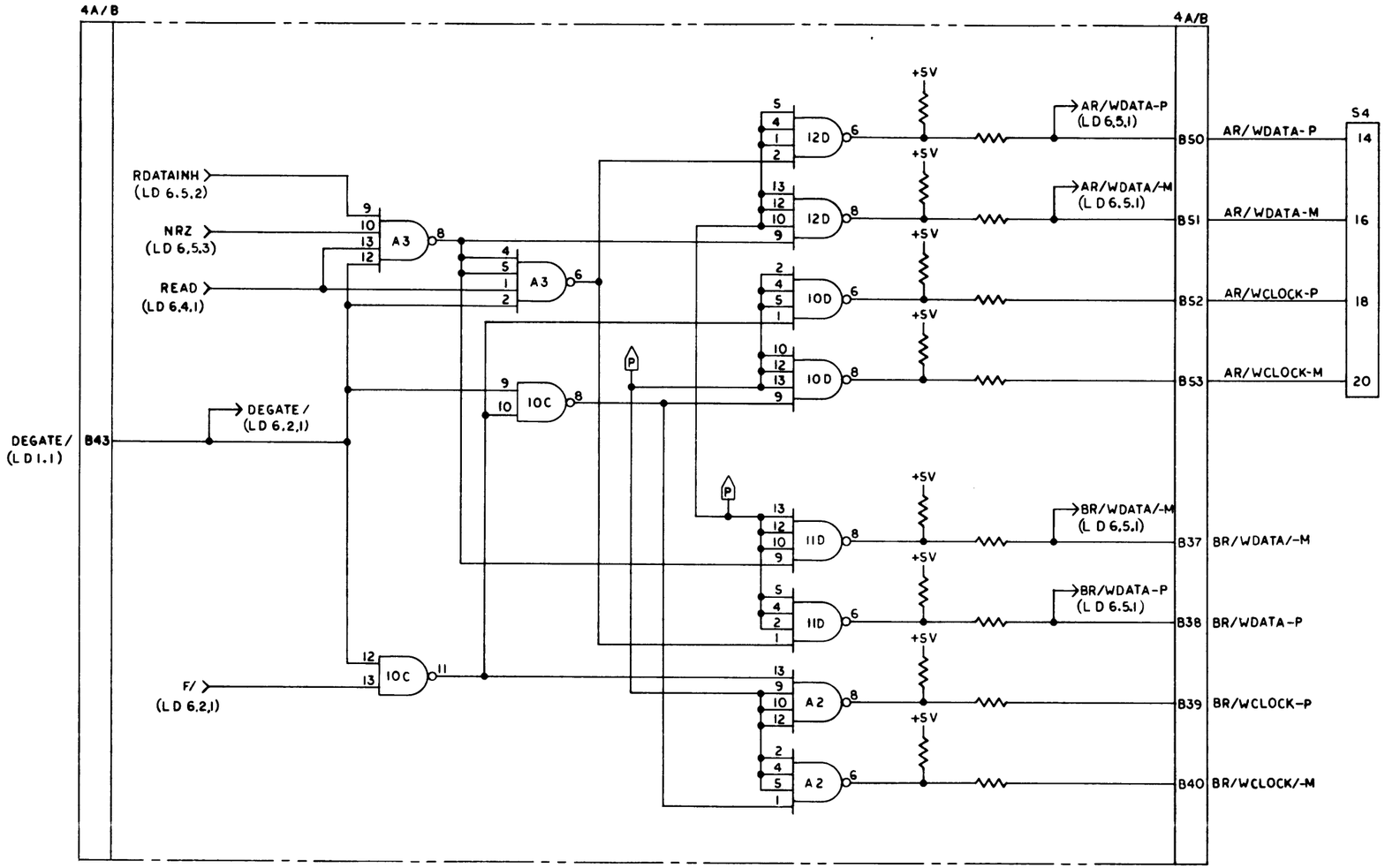
SCALE:	SIZE		
	D	13442-001	U
		SHEET 38	

13442 001 U

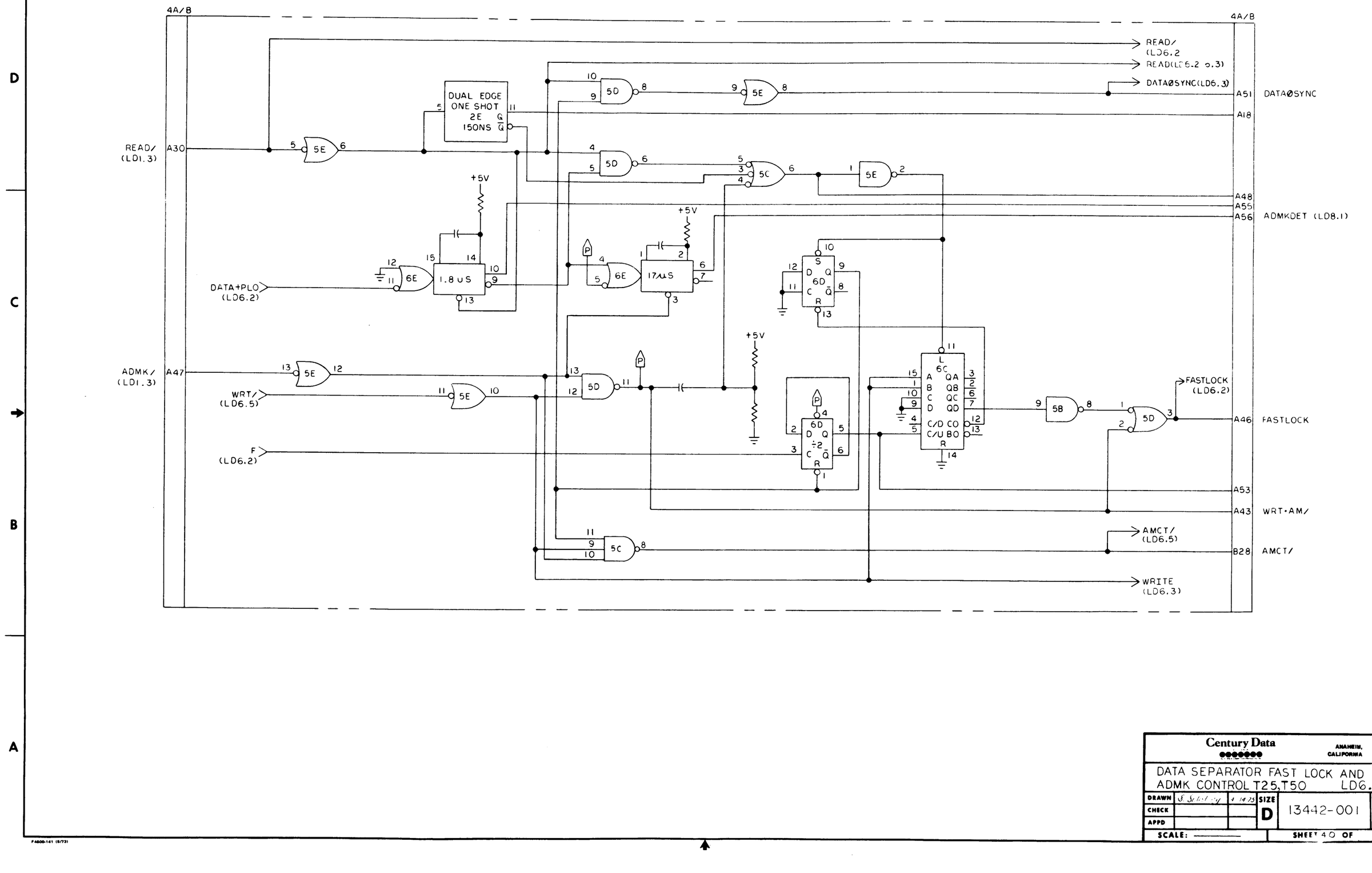


Century Data				ANAHEIM, CALIFORNIA	
DATA SEPARATOR DATA AND CLOCKS T25,T50				LD6.3	
DRAWN	S. Salisbury	3-28-75	SIZE D	13442 001	REV U
CHECK					
APPD					
SCALE:				SHEET 39 OF	

DWG NO. 13442 001 REV. U



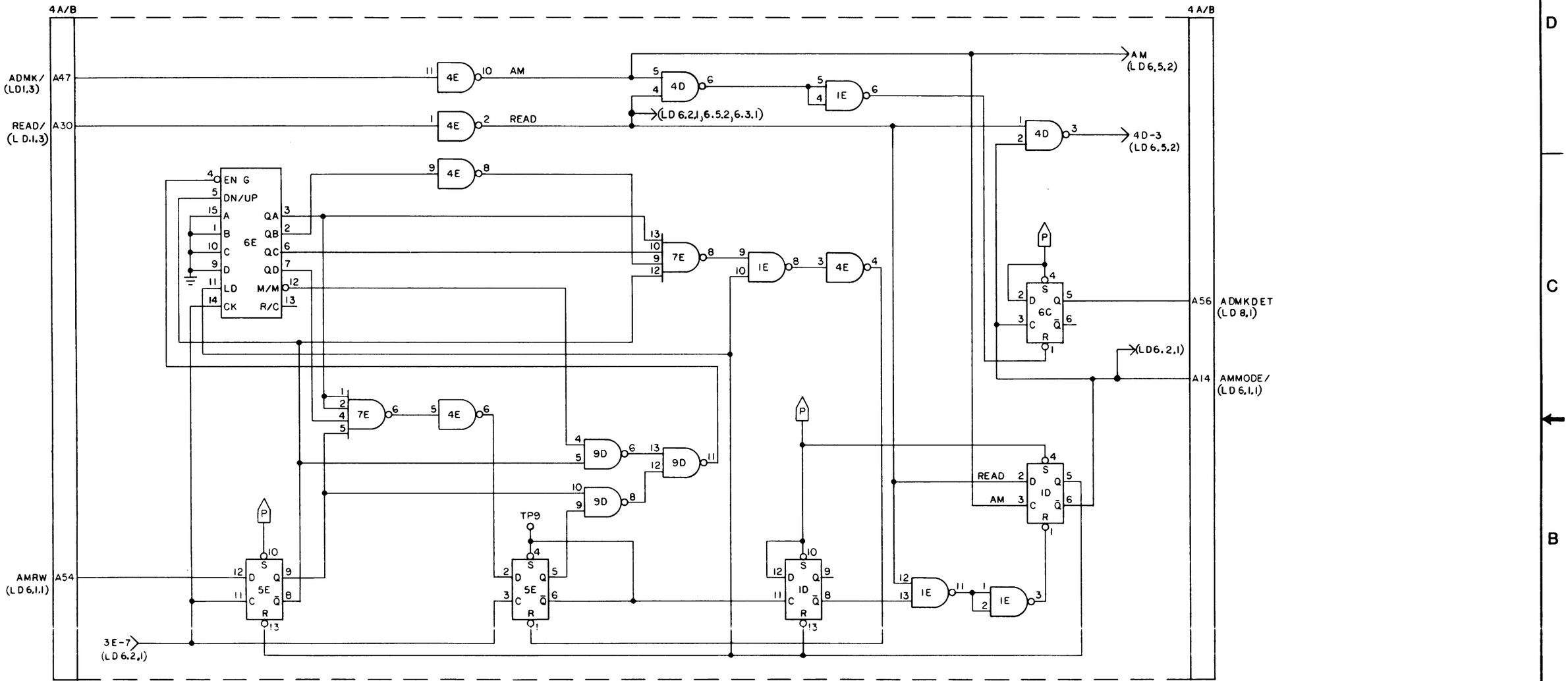
Century Data Systems, Inc. 1270 N. Kraemer, Anaheim, Ca. 92806	
DATA AND CLOCKS, T80 LD 6.3.1	
DRAWN	SIZE D
CHECK	13442-001
APP'D	REV U
SCALE: —	SHEET 39 10F



Century Data	ANAHEIM, CALIFORNIA
DATA SEPARATOR FAST LOCK AND ADMK CONTROL T25,T50	LD6.4
DRAWN	SIZE D
CHECK	13442-001
APPD	REV F
SCALE:	SHEET 40 OF

DWG NO. 13442-001 REV. F

F4600-141 (8/73)

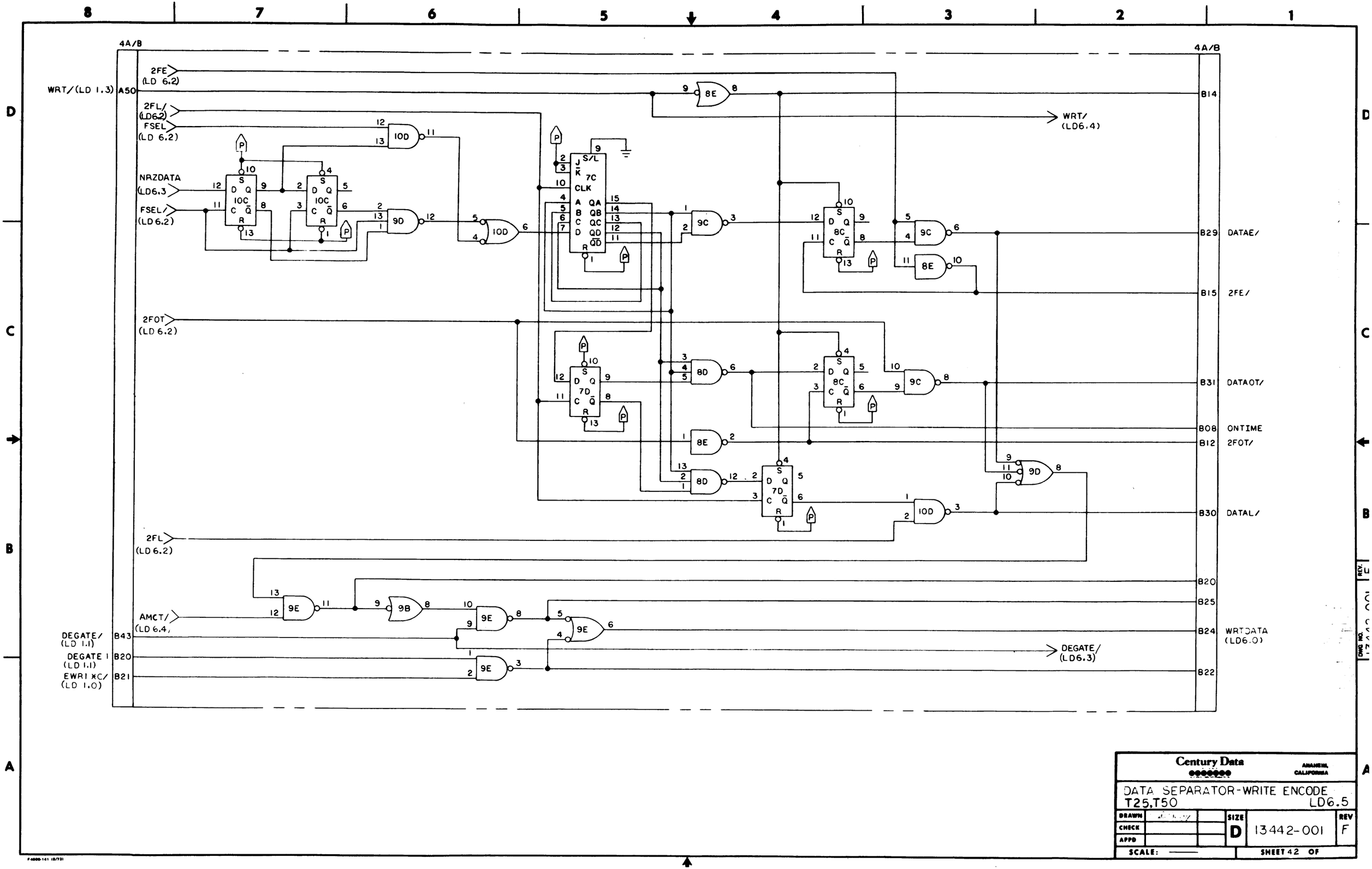


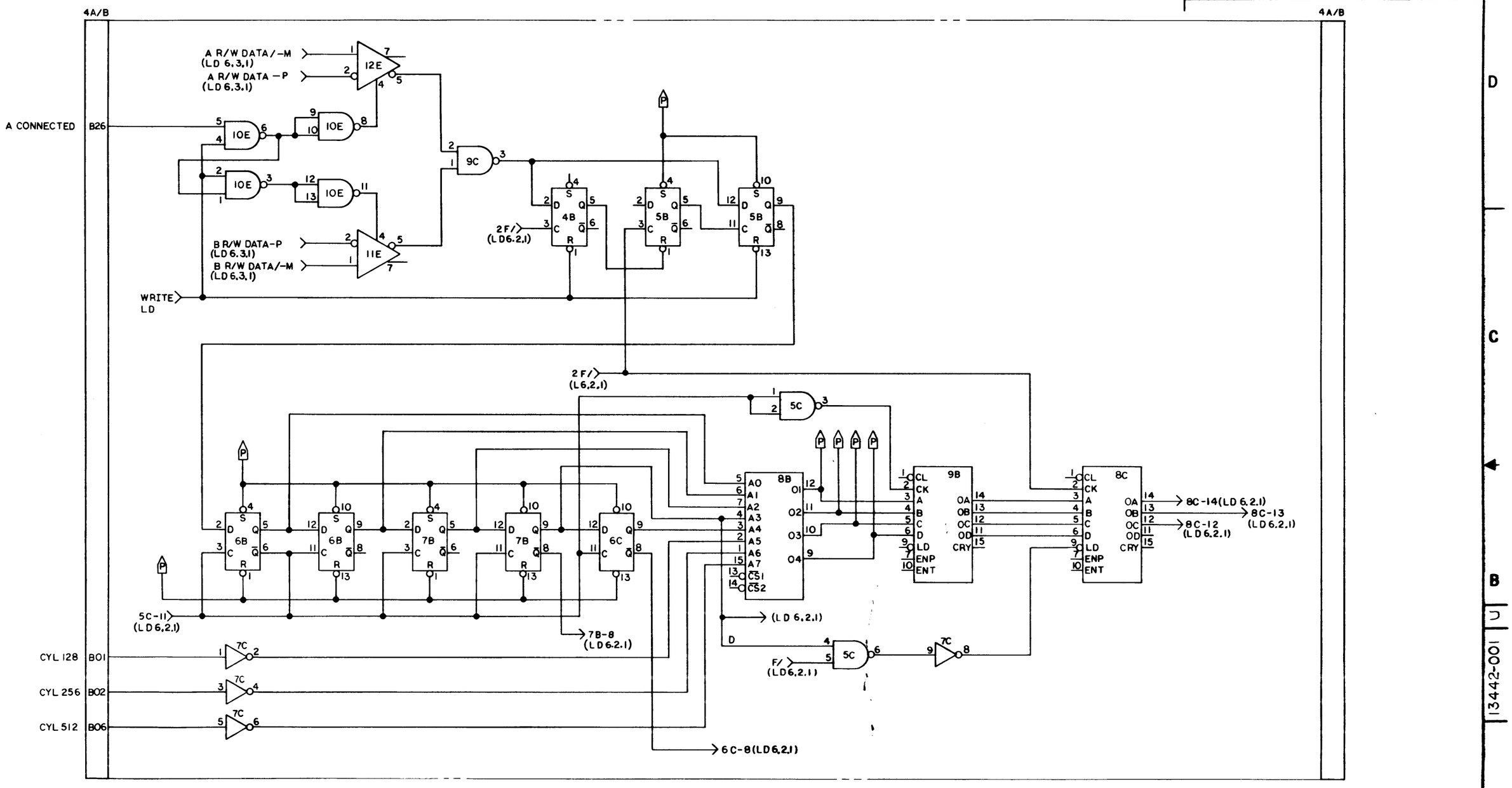
Century Data Systems, Inc.
1270 N. Kraemer, Anaheim, Ca. 92806

ADMK CONTROL AND
PHASE SYNC T80

LD 6.4.1

DRAWN	W2o	7/7/78	SIZE D	REV U
CHECK			13442-001	
APP'D				
SCALE:			SHEET 41 OF	


4A/B
WRT/(LD 1.3) A50
2FE (LD 6.2)
2FL/ (LD6.2)
FSEL (LD 6.2)
NRZDATA (LD6.3
FSEL/ (LD6.2)
2FOT (LD 6.2)
2FL (LD 6.2)
AMCT/ (LD 6.4,
DEGATE/ (LD 1.1) B43
DEGATE I (LD 1.1) B20
EWRI XC/ (LD 1.0) B21
WRT/ (LD6.4)
DEGATE/ (LD6.3)
B14
B29 DATAE/
B15 2FE/
B31 DATAOT/
B08 ONTIME
B12 2FOT/
B30 DATAL/
B20
B25
B24 WRTDATA (LD6.0)
B22
8E
10D
10C
9C
8C
7C
8D
7D
9D
9E
9B
S/L
Century Data
ANAHEIM, CALIFORNIA
DATA SEPARATOR-WRITE ENCODE
T25,T50
LD6.5
DRAWN
CHECK
APPD
SIZE D
13442-001
REV F
SCALE:
SHEET 42 OF



REVISIONS			
REV	ZONE	DESCRIPTION	DATE & APPROVAL

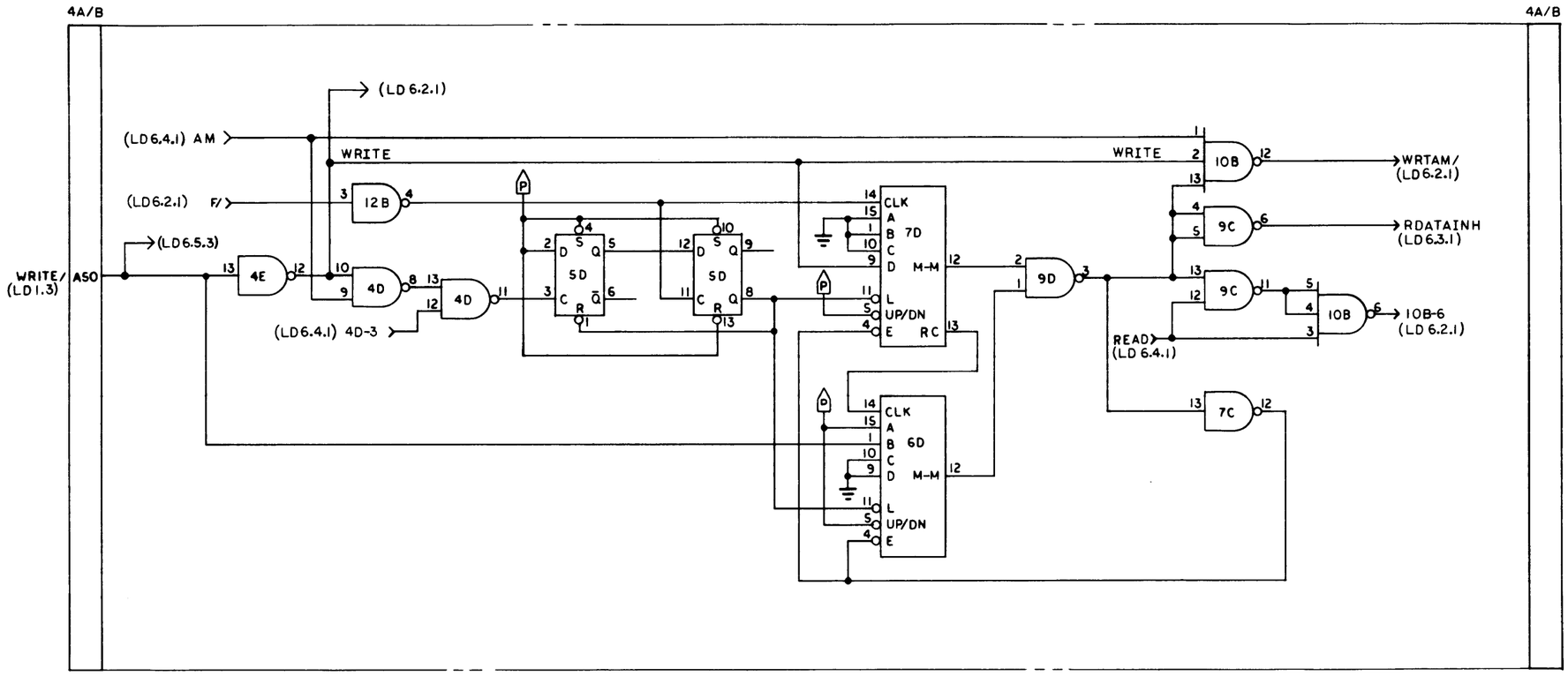
CALIFORNIA COMPUTER PRODUCTS INC.
1278 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92805
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

WRITE ENCODE T80

LD 6.5.1

SCALE:	SIZE		
	D	13442-001	U
		SHEET 43	

13442-001 U



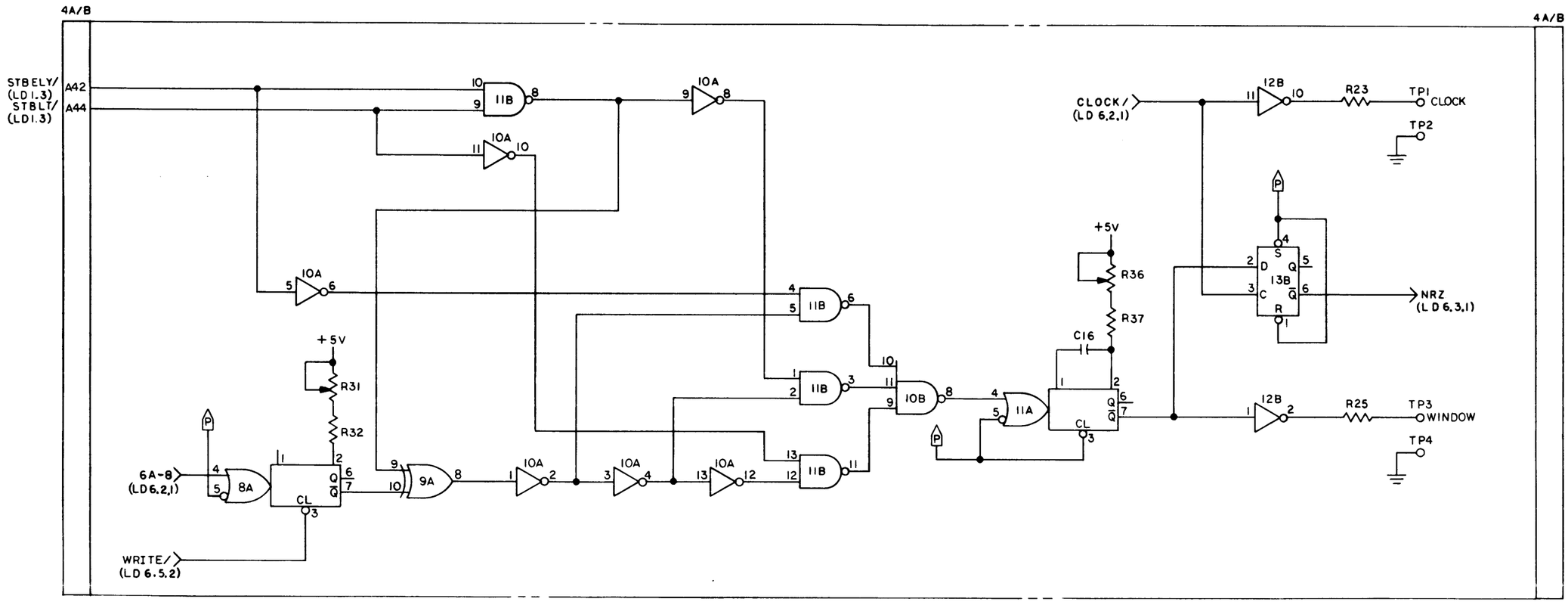
Century Data Systems, Inc.
1270 N. Kraemer, Anaheim, Ca. 92806

WRITE ENCODE T80

LD 6.5.2

DRAWN	A. Hamm	7/12/79	SIZE D	REV U
CHECK			13442-001	
APP'D				
SCALE:			SHEET 43.1	

REVISIONS			
REV	ZONE	DESCRIPTION	DATE & APPROVAL



CALIFORNIA COMPUTER PRODUCTS INC.
☐ 1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
☐ 2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

WRITE ENCODE T80

LD6.5.3

SCALE:	SIZE		
	D	13442-001	U
	by W. Elkins	SHEET 43, 2	

13442-001 S

ERROR DETECTION

(LD1.2) SETCYLTAG A42
(LD3.2) RDY/
(LD1.1) SELECT A44
(LD3.0) LDSP/
(LD1.2) HAR*S A37
(LD1.3) DEVCK*R/ A23
(LD1.3) WRT A25
(LD3.2) OFFSET
(LD5.0) RDONLY
(LD3.2) UTH
(LD6.1) HDUSF/ B48
IWRUSF/ B47
(LD6.1)
WRTRANS (LD6.0) B53
POWERON/ (LD 3.0)
DEVCK*S/ A31

SELECT (LD8.1, 5.0)
HAR*S (LD3.2)
DEVCK (LD8.1)

3A/B
B49 ESCRDY (LD 1.0)
B43 EOSERR (LD1.0)
B27 EWRTRDY (LD 1.0)
B26 EWRTOS (LD 1.0)
B25 EWRDONLY (LD 1.0)
B24 EWRTUTH (LD 1.0)
A46 DEVCK/ (LD 3.1)
B37 DEVCK
B45 EDEVCKRW (LD1.0)
B23 ESCILLOS (LD1.0)

5A/B
A45
5D
PWRGND
+30V (LD9.1)
4E 7
R21
L1
R41
A38 DEVCKIND/
B36 DVCIND*
J/P6 37 38
D302
DEVICK CHECK INDICATOR

2A/B
A29 DEVCK*S/
(LD3.1) SEEKFF
LDSP/ (LD3.5)
ILLCYL/ (LD3.4)
OSGT/ (LD3.1)
DEVCK*S/ (LD3.1)
INHSKST (LD3.1)

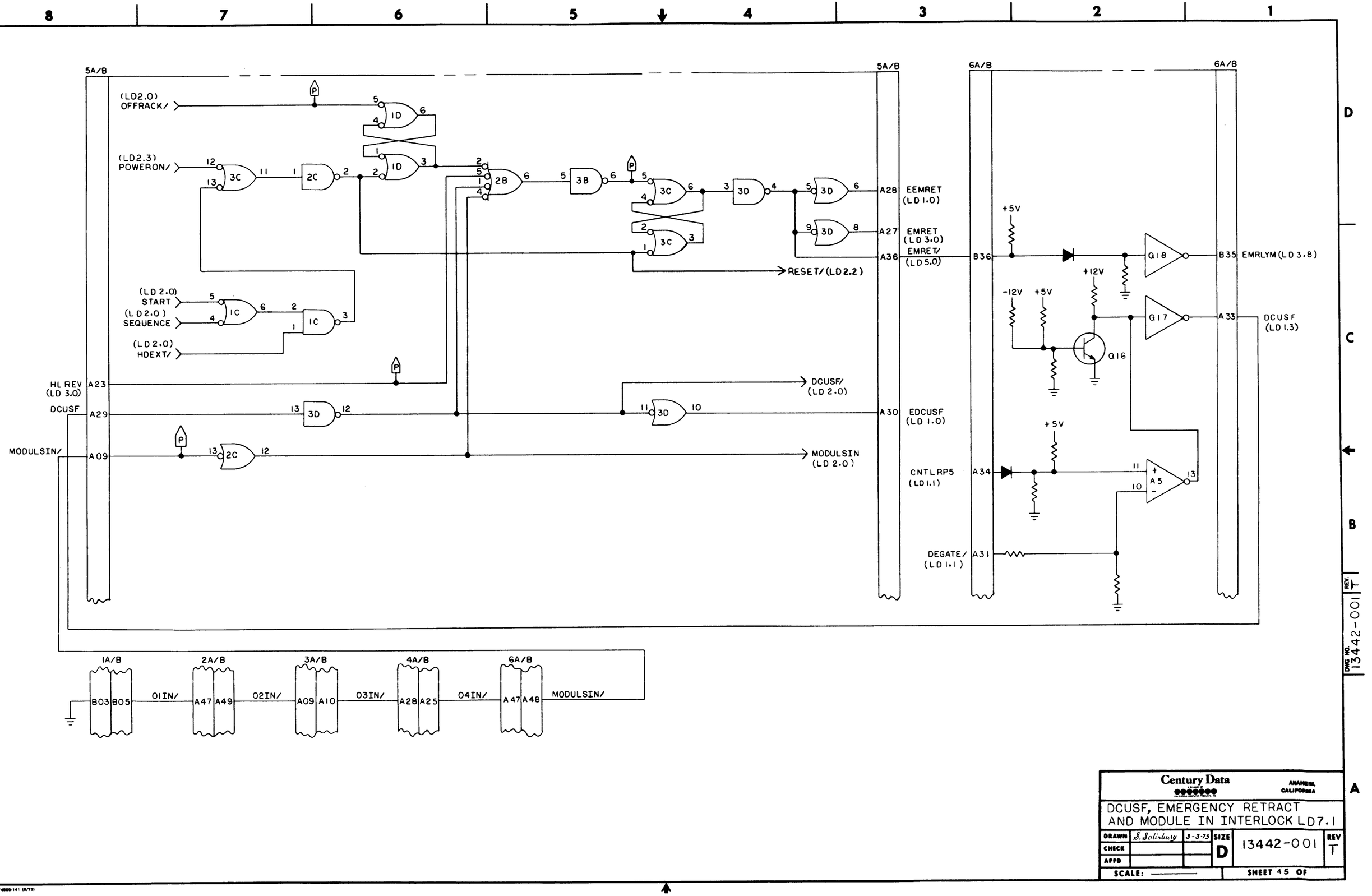
+5V R8
C29
C30 .0047
R9 10K±5%
3µS
25µS
10E

CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

ERROR DETECTION LD7.0

DRAWN		12/16/74	SIZE		REV
CHECK			D	13442-001	T
APPD					
SCALE:			SHEET 44 OF		

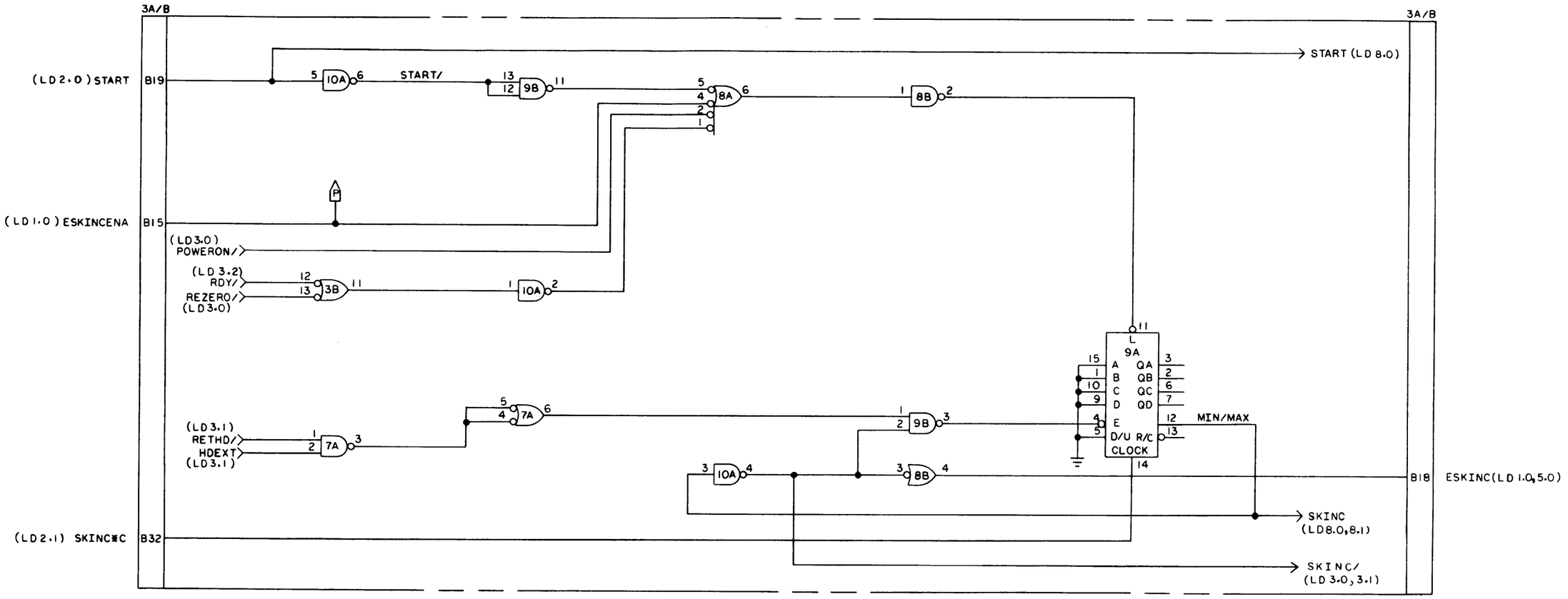
DWG NO. 13442-001 REV T



Century Data, ANAHEIM, CALIFORNIA					
DCUSF, EMERGENCY RETRACT AND MODULE IN INTERLOCK LD7.1					
DRAWN	J. Salisbury	3-3-75	SIZE D	13442-001	REV T
CHECK					
APPD					
SCALE:			SHEET 45 OF		

DWG NO. 13442-001 REV. T

P-6809-141 (6/73)

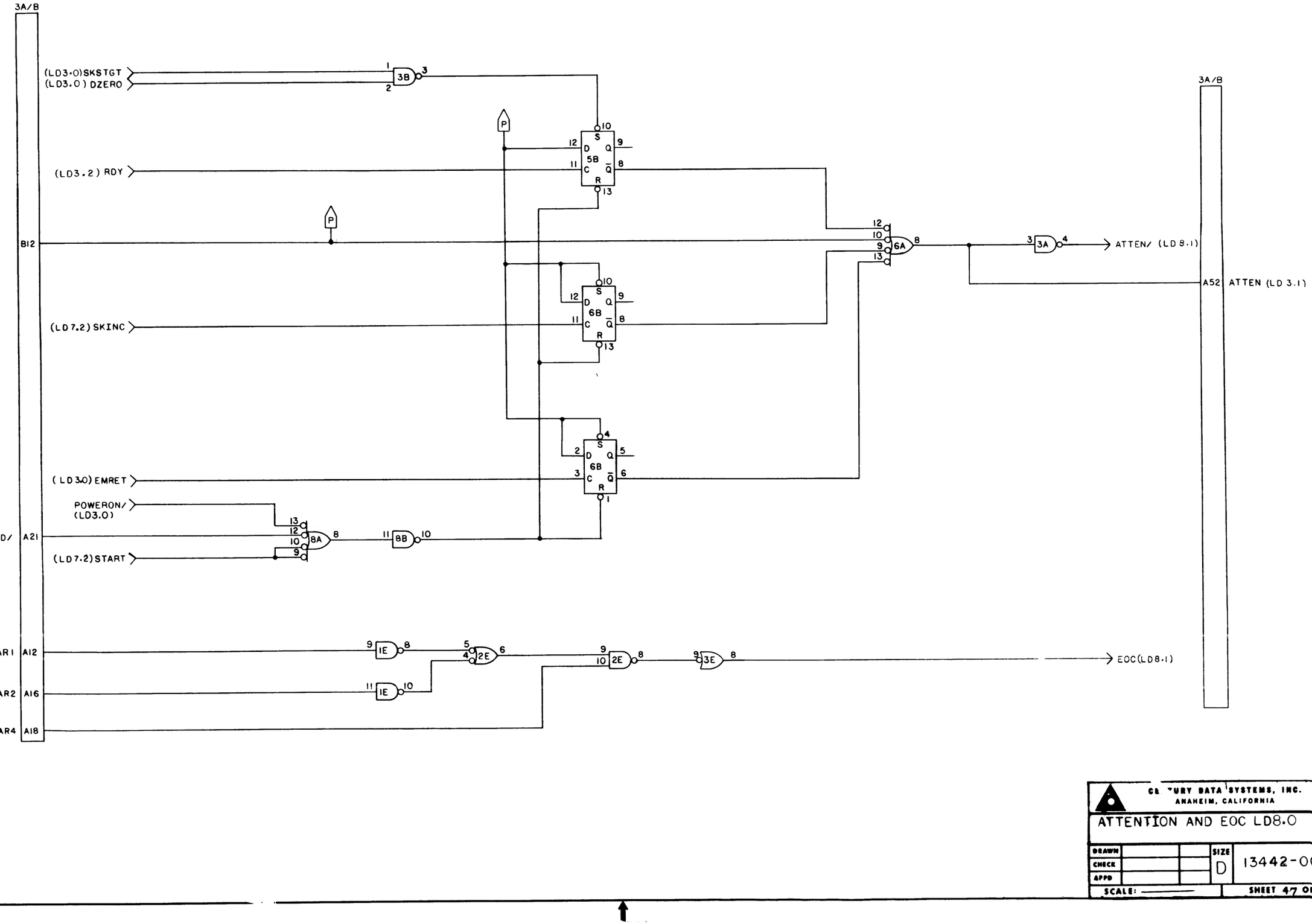


CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

SEEK INCOMPLETE LD7.2

DRAWN	S Salisbury	12-4-74	SIZE	13442-001	REV
CHECK			D		T
APPD					
SCALE: ——			SHEET 46 OF		

13442-001

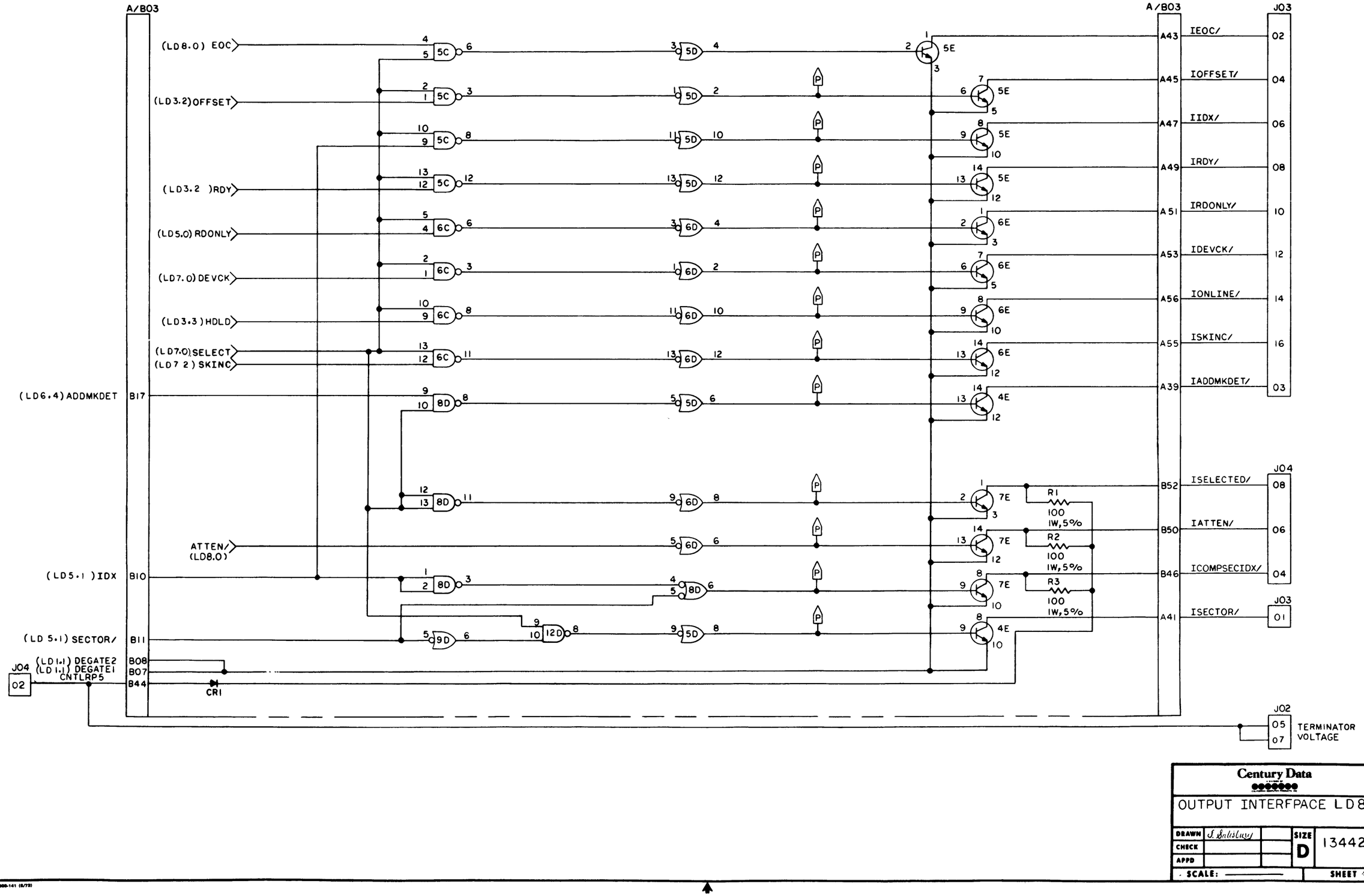


CENTURY DATA SYSTEMS, INC.
ANAHEIM, CALIFORNIA

ATTENTION AND EOC LD8.0

DRAWN			SIZE	13442-001	REV
CHECK			D		C
APPD					
SCALE:			SHEET 47 OF		

13442-001 C



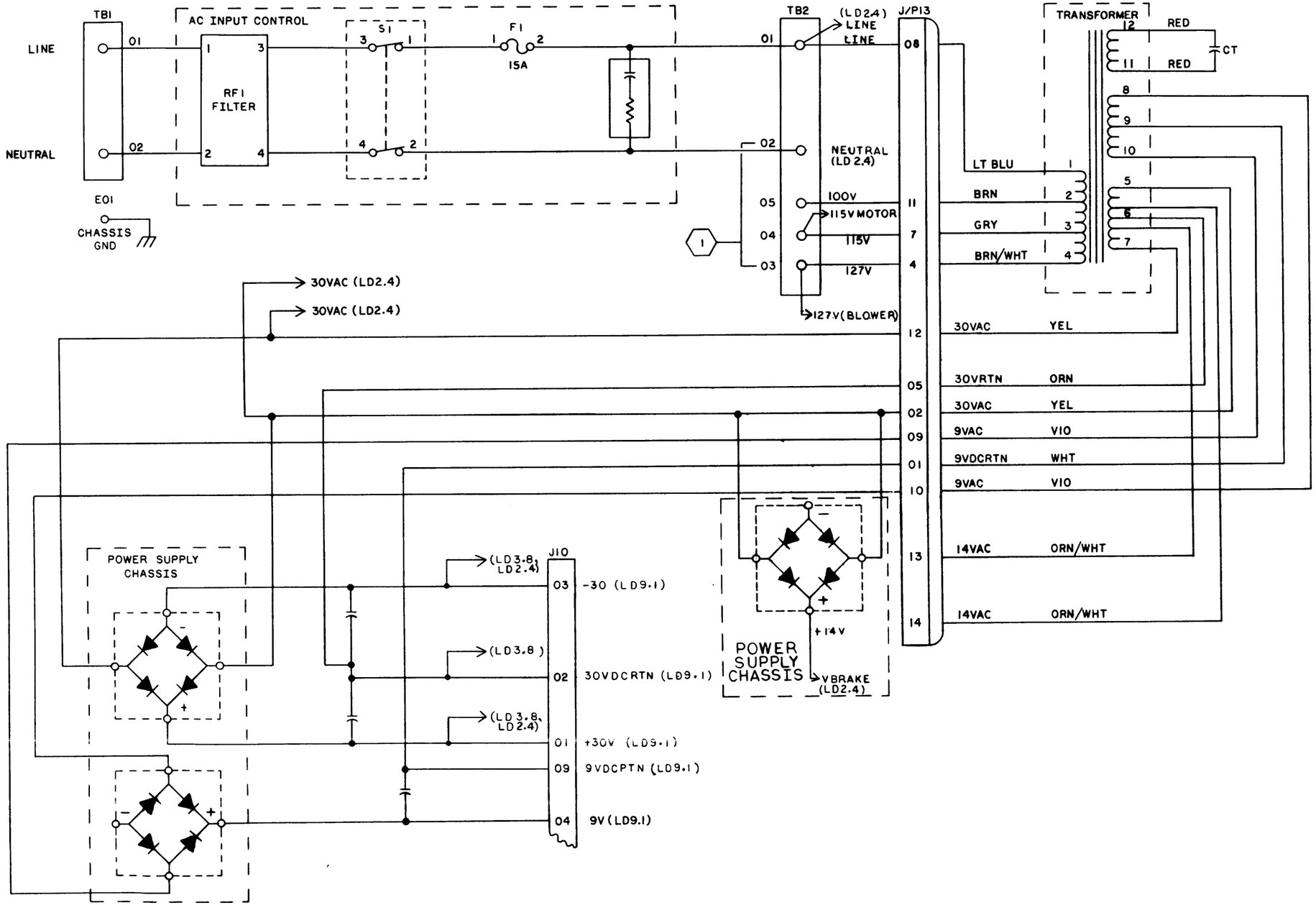
Century Data — ANAHEIM, CALIFORNIA

OUTPUT INTERFPACE LD8.1

DRAWN	S. Salisbury		SIZE D	13442-001 REV P
CHECK				
APPD				
SCALE:			SHEET 48 OF	

DWG NO. 13442-001 REV. P

F-6000-141 (8/73)



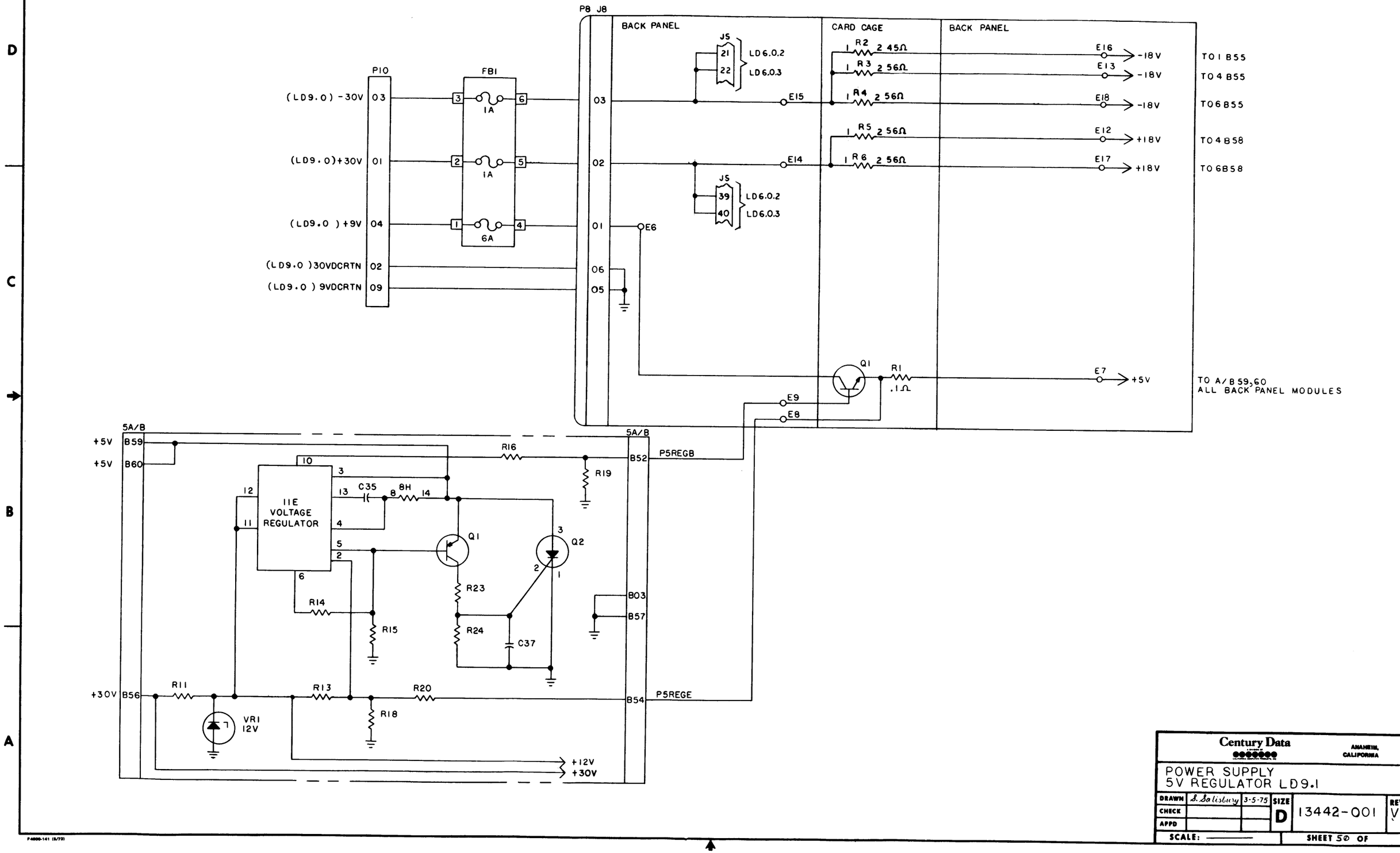
(1) TB2-2 IS JUMPERED TO TB2-3,(127VAC), TO TB2-4,(115V),OR TO TB2-5,(100VAC).

NOTES:

Century Data	ANAHEIM, CALIFORNIA
POWER SUPPLY(LD9.0.1) TRIDENT	
DRAWN: L DREWEY 12-6-75	SIZE: D
CHECK:	13442-001
APPD:	REV V
SCALE:	SHEET 49 OF

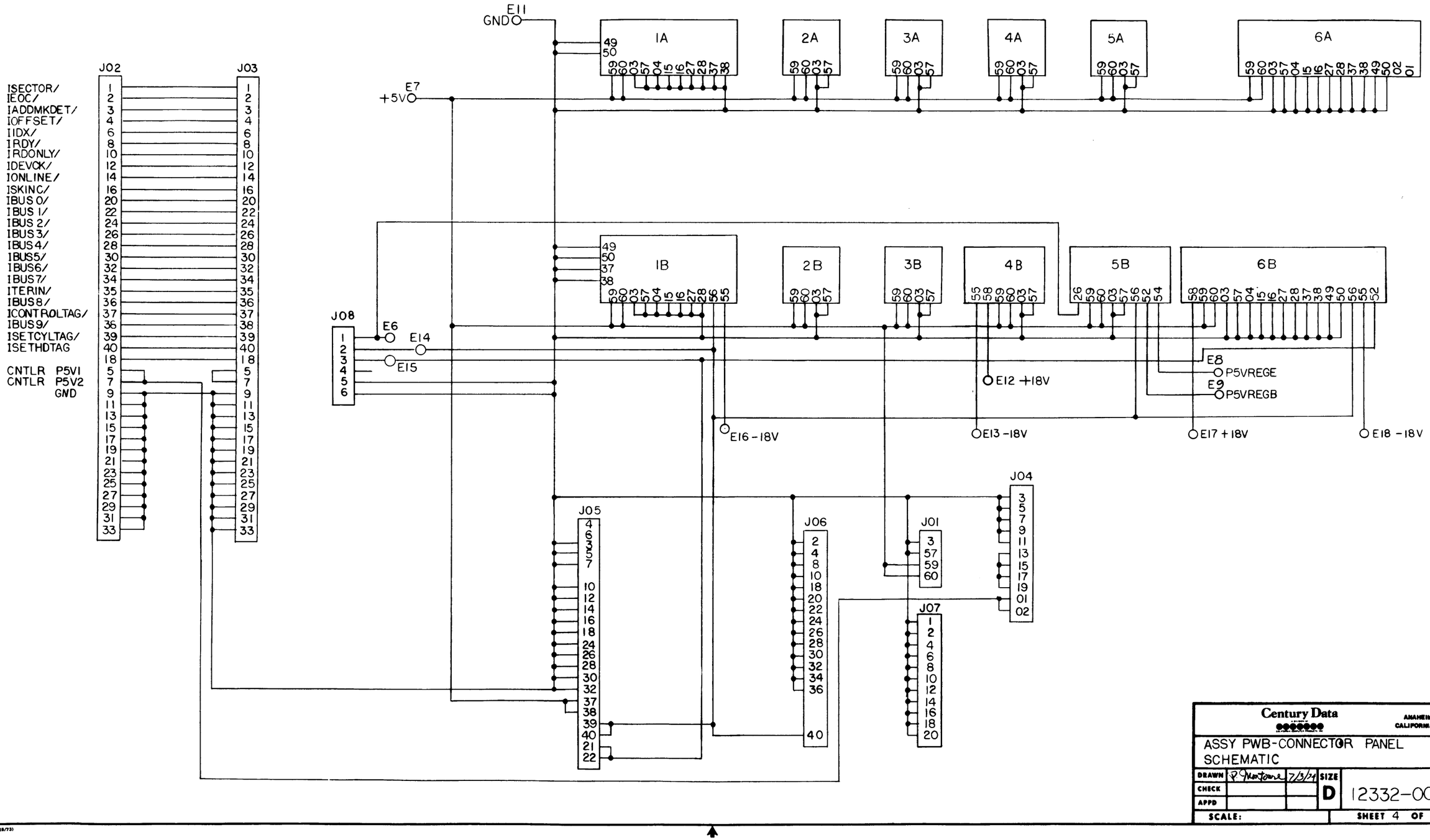
DWG NO. 13442-001 REV. V

F4000-141 (8/73)



Century Data				ANAHEIM, CALIFORNIA	
POWER SUPPLY 5V REGULATOR LD9.1					
DRAWN	S. Salisbury	3-5-75	SIZE D	13442-001	REV V
CHECK					
APPD					
SCALE: ———			SHEET 5Ø OF		

P4000-141 (8/73)



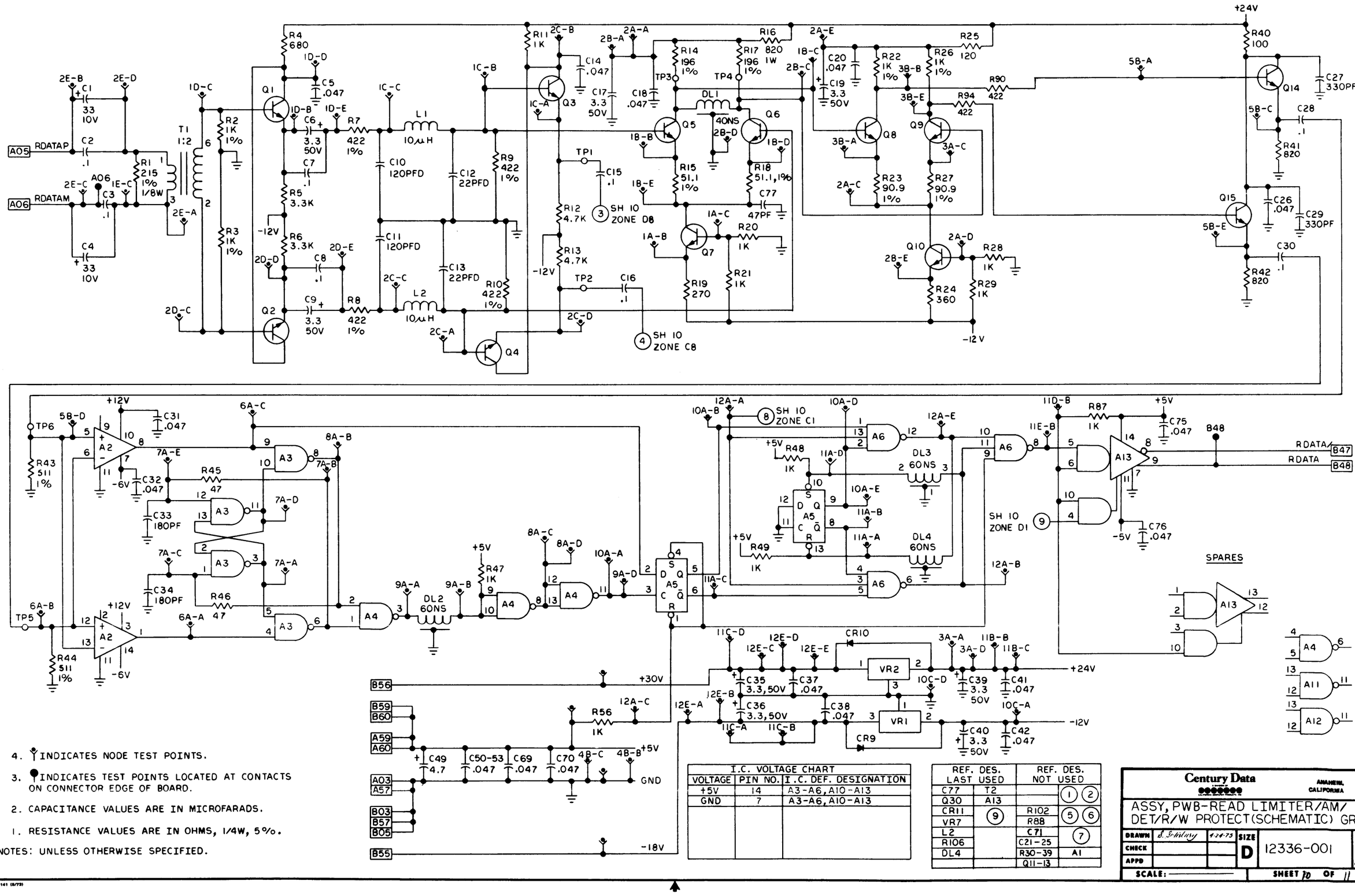
Century Data — ANAHEIM, CALIFORNIA

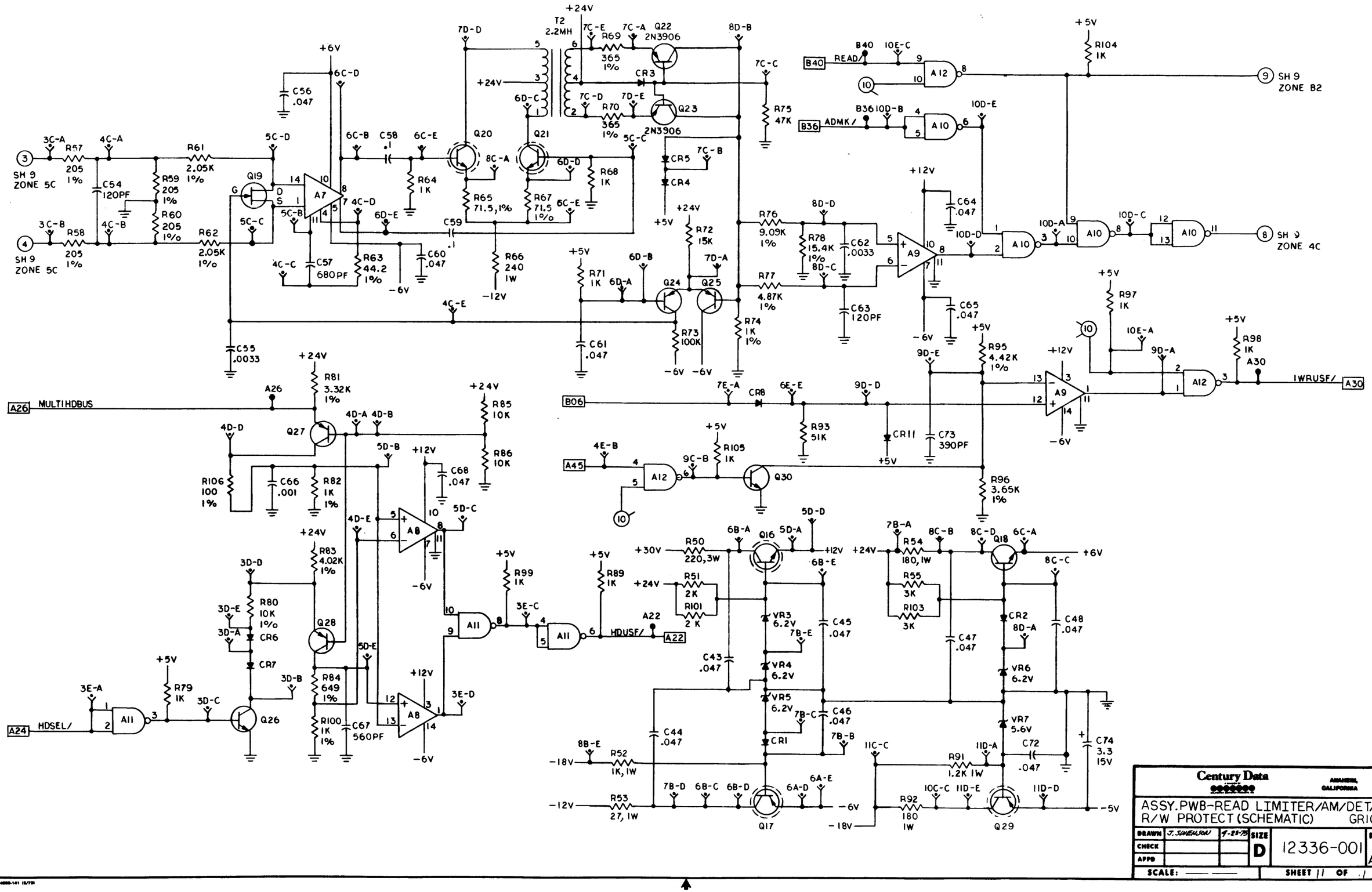
ASSY PWB-CONNECTOR PANEL
SCHEMATIC

DRAWN	P Martone 7/3/74	SIZE		REV
CHECK		D	12332-001	M
APPD				
SCALE:		SHEET 4 OF 4		

DWG. NO. 12332-001 REV. M

F4800-141 (8/73)


8
7
6
5
4
3
2
1
D
C
B
A
+24V
R40 100
Q14
C27 330PF
5B-C
C28 .1
R41 820
Q15
C26 .047
C29 330PF
5B-E
C30 .1
R42 820
5B-A
R90 422
R94 422
R25 120
R22 1K 1%
R26 1K 1%
3B-B
3B-E
3B-A
Q8
Q9
3A-C
R23 90.9 1%
R27 90.9 1%
2A-C
C20 .047
C19 3.3 50V
2B-C
1B-C
2A-E
R16 820 1W
R17 196 1%
TP4
R14 196 1%
TP3
C18 .047
C17 3.3 50V
C14 .047
2B-A
2A-A
DL1 40NS
2B-D
Q5
Q6
1B-B
1B-D
R15 51.1 1%
R18 51.1,1%
C77 47PF
1B-E
SH 10 ZONE D8
TP1
C15 .1
R12 4.7K
R13 4.7K
TP2
C16 .1
SH 10 ZONE C8
2C-D
2C-C
2C-A
Q4
Q3
2C-B
IC-A
IC-B
R11 1K
R9 422 1%
C12 22PFD
C13 22PFD
R10 422 1%
L1 10μH
L2 10μH
C10 120PFD
C11 120PFD
IC-C
Q1
Q2
1D-B
1D-C
1D-D
1D-E
C5 .047
C6 3.3 50V
C7 .1
C8 .1
C9 3.3 50V
R7 422 1%
R8 422 1%
R5 3.3K
R6 3.3K
2D-D
2D-E
2D-C
-12V
R4 680
R2 1K 1%
R3 1K 1%
T1 1:2
R1 215 1% 1/8W
C1 33 10V
C2 .1
C3 .1
C4 33 10V
2E-B
2E-D
2E-C
2E-A
1E-C
AO5 RDATAP
AO6 RDATAM
AO6
Q7
Q10
Q11
1A-B
1A-C
R20 1K
R21 1K
R19 270
R24 360
R28 1K
R29 1K
2A-D
2B-E
-12V
SH 10 ZONE C1
SH 10 ZONE D1
12A-A
12A-B
12A-E
10A-B
10A-D
10A-E
11A-A
11A-B
11A-C
11A-D
A5
A6
DL3 60NS
DL4 60NS
R48 1K
R49 1K
+5V
11D-B
11E-B
R87 1K
C75 .047
C76 .047
-5V
A13
B48
RDATA B47
RDATA B48
SPARES
A4
A11
A12
+12V
TP6
5B-D
R43 511 1%
A2
C31 .047
C32 .047
-6V
6A-C
8A-B
7A-E
7A-B
7A-D
A3
R45 47
C33 180PF
7A-C
7A-A
C34 180PF
R46 47
6A-A
6A-B
TP5
R44 511 1%
8A-C
8A-D
10A-A
9A-A
9A-B
9A-D
DL2 60NS
R47 1K
A4
+30V
-18V
GND
+5V
B56
B59
B60
A59
A60
A03
A57
B03
B57
B05
B55
R56 1K
12A-C
C49 4.7
C50-53 .047
C69 .047
C70 .047
4B-C
4B-B
11C-D
12E-D
12E-C
12E-E
CR10
VR2
VR1
CR9
C35 3.3,50V
C37 .047
C36 3.3,50V
C38 .047
C39 3.3 50V
C40 3.3 50V
C41 .047
C42 .047
3A-A
3A-D
11B-B
11B-C
10C-D
10C-A
12E-A
12E-B
11C-A
11C-B
+24V
-12V
I.C. VOLTAGE CHART
VOLTAGE | PIN NO. | I.C. DEF. DESIGNATION
+5V | 14 | A3-A6, A10-A13
GND | 7 | A3-A6, A10-A13
REF. DES. LAST USED
C77 T2
Q30 A13
CR11 9
VR7
L2
R106
DL4
REF. DES. NOT USED
R102
R88
C71
C21-25
R30-39
Q11-13
1 2 5 6 7 A1
4. INDICATES NODE TEST POINTS.
3. INDICATES TEST POINTS LOCATED AT CONTACTS ON CONNECTOR EDGE OF BOARD.
2. CAPACITANCE VALUES ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.
NOTES: UNLESS OTHERWISE SPECIFIED.
Century Data
ANAHEIM, CALIFORNIA
ASSY, PWB-READ LIMITER/AM/ DET/R/W PROTECT(SCHEMATIC) GRIO
DRAWN
CHECK
APPD
4-24-75
SIZE D
12336-001
REV AA1
SCALE:
SHEET 10 OF 11
DWG NO. 12336-001
REV AA1


+24V
T2
2.2MH
7D-D
7C-E
R69
365
1%
7C-A
Q22
2N3906
8D-B
CR3
7C-C
R75
47K
+5V
R104
1K
B40
READ
10E-C
A12
9
SH 9
ZONE B2
B36
ADMK/
10D-B
A10
10D-E
+6V
C56
.047
6C-D
+24V
6D-C
7C-D
7D-E
R70
365
1%
Q23
2N3906
5C-C
3C-A
R57
205
1%
4C-A
R61
2.05K
1%
5C-D
6C-B
C58
.1
6C-E
Q20
Q21
8C-A
6D-D
R68
1K
7C-B
CR5
CR4
3
SH 9
ZONE 5C
C54
120PF
R59
205
1%
R60
205
1%
Q19
A7
4C-D
6D-E
R64
1K
R65
71.5,1%
R67
71.5
1%
6C-E
+12V
C64
.047
3C-B
R58
205
1%
4C-B
R62
2.05K
1%
5C-B
4
SH 9
ZONE 5C
4C-C
C57
680PF
R63
44.2
1%
-6V
C60
.047
C59
.1
R66
240
1W
-12V
+24V
R72
15K
7D-A
+5V
R71
1K
6D-A
6D-B
Q24
Q25
8D-D
R76
9.09K
1%
R78
15.4K
1%
8D-C
C62
.0033
A9
10D-D
A10
10D-A
A10
10D-C
A10
8
SH 9
ZONE 4C
R77
4.87K
1%
C63
120PF
C65
.047
-6V
4C-E
C55
.0033
C61
.047
R73
100K
-6V -6V
R74
1K
1%
+5V
R97
1K
+5V
R95
4.42K
1%
9D-E
+12V
10E-A
9D-A
A12
+5V
R98
1K
A30
IWRUSF/
A30
A26
MULTIHDBUS
+24V
R81
3.32K
1%
A26
4D-A 4D-B
+24V
R85
10K
R86
10K
4D-D
Q27
5D-B
+12V
C68
.047
R106
100
1%
C66
.001
R82
1K
1%
4D-E
A8
5D-C
-6V
+24V
R83
4.02K
1%
3D-D
3D-E
R80
10K
1%
3D-A
CR6
CR7
Q28
5D-E
3D-B
R84
649
1%
R100
1K
1%
C67
560PF
+12V
3E-D
A8
+5V
R99
1K
3E-C
A11
A11
3E-A
+5V
R79
1K
3D-C
A24
HDSEL/
A11
Q26
B06
7E-A
CR8
6E-E
9D-D
CR11
C73
390PF
+5V
R93
51K
4E-B
A45
A12
9C-B
+5V
R105
1K
Q30
10
R96
3.65K
1%
+5V
R89
1K
+24V
R51
2K
R101
2 K
A22
HDUSF/
A22
+30V
R50
220,3W
6B-A
Q16
5D-A
+12V
6B-E
VR3
6.2V
7B-E
VR4
6.2V
VR5
6.2V
7B-C
C45
.047
C43
.047
C46
.047
7B-B
CR1
C44
.047
8B-E
-18V
R52
1K, 1W
-12V
R53
27, 1W
7B-D
6B-C
6B-D
Q17
6A-D
6A-E
-6V
-18V
7B-A
R54
180, IW
8C-B
8C-D
Q18
6C-A
+24V
+6V
8C-C
R55
3K
R103
3K
C47
.047
CR2
8D-A
VR6
6.2V
VR7
5.6V
C48
.047
11C-C
R91
1.2K 1W
11D-A
C72
.047
C74
3.3
15V
R92
180
1W
10C-C
11D-E
Q29
11D-D
-5V
Century Data
ANAHEIM, CALIFORNIA
ASSY.PWB-READ LIMITER/AM/DET/
R/W PROTECT (SCHEMATIC)
GRIO
DRAWN J. SWENSON 9-28-73
CHECK
APPD
SIZE D
12336-001
REV AA
SCALE:
SHEET 11 OF 11
DWG NO. 12336-001
REV AA1

LINE RECEIVERS

B08 IBUS0/ — B39 EBUS0/ — B06 IBUS1/ — B32 EBUS1/ — B04 IBUS2/ — B34 EBUS2/ — B05 IBUS3/ — B38 EBUS3/ — B07 IBUS4/ — B30 EBUS4/ — B10 IBUS5/ — B36 EBUS5/ — B09 IBUS6/ — B23 EBUS6/ — B12 IBUS7/ — B26 EBUS7/ — B47 EXERIN/

7E, 11E, 9E, 8E, 12D

7D QUAD MUX → BUS0 (1) SH 7,8 ZONE B8; BUS1 (2) SH 7 ZONE C8 / SH 8 ZONE B8; BUS2 (3) SH 7,8 ZONE C8; BUS2/ (4) SH 7 ZONE C4; BUS3 A31; BUS3 (9) SH 7,8 ZONE C8

9D QUAD MUX → BUS4 (5) SH 8 ZONE C8; BUS5 (6) SH 7 ZONE B8 / SH 8 ZONE C8; BUS6 (7) SH 7,8 ZONE D8; BUS7 (8) SH 7 ZONE B8 / SH 8 ZONE D8

12C, 12C, 12D, 1B, 12C

SELECT/

B47 EXERIN/ — 10D 1K (8) — 12D-B — 12D (5,6)

SPARES

10D: 1K ×8 (9, 11, 6, 5, 4, 3, 2, 10) to +5V (14)

INTEGRATED CIRCUIT VOLTAGE CHART

VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	1A,3A-6A,1B,2B,5B-7B,1C,2C,6C-9C,11C,12C,1D-6D,10D,12D,1E,2E,6E-12E
+5V	16	2A,3B,4B,3C-5C,7D-9D,11D,3E-5E
GND	7	1A,3A-6A,1B,2B,5B-7B,1C,2C,6C-9C,11C,12C,1D-6D,12D,1E,2E,6E-9E,11E,12E
GND	8	2A,3B,4B,3C-5C,7D-9D,11D,3E-5E

REF DES LAST USED		REF DES NOT USED	
6A			
7B			
12C		10C	
12D			
12E			
R10	(48)	(58)	(60)
C28	51		

3. INDICATES NODE TEST POINTS.
2. CAPACITANCE VALUES ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 2%.

NOTE: UNLESS OTHERWISE SPECIFIED.

A59, A60, B59, B60, A03, A57, B03, B57 — C1-C24 .047 — +5V / GND

LINE RECEIVERS

B13 IBUS8/ — B21 EBUS8/ — B15 IBUS9/ — B28 EBUS9/ — B17 ISETHDTAG/ — B41 ESETHDTAG/ — B49 ISETCYLTAG/ — B40 ESETCYLTAG/ — B48 ICONTROLTAG/ — B42 ECONTROLTAG/

8E, 11E, 12E

8D QUAD MUX → BUS8 (10) SH 7 ZONE B8 / SH 8 ZONE D8; BUS9 (11) SH 7 ZONE B8 / SH 8 ZONE D8; HAR*S/ (12) SH 7 ZONE C5; HAR*S A35

11D QUAD MUX → SETCYLTAG A38 (45) SH 7 ZONE C4; CONTROLTAG (13) SH 7 ZONE D8

SELECT

S1; 10D 1K ×2; 11C-C → DEGATE/ B33; DEGATE1 B35; DEGATE2 B54; SELECT A40

SEQUENCE

B50 ITERIN/ — 10D-B — 12E — 11C-D — 11C — 12D-C — 12D

B51 ISELECT/ — 12E-E — 12E — 12E-D — 12E — 12C-E

B44 CNTLRP5 — C28 4.7 — R1 100 1W5% — R9 100 — R10 510 — C26 .1 — 12C — 12C — 12C-D — 12C-C → SEQUENCE B46

B52 ISEQUENLE/ — R2 100 1W5% — 12E — C27 .0015

SPARES

2A; 7B; 7B; 12E; 5D; 1D

DRAWN	G Drewry 3-16-74
CHECK	R Purdy 7-22-74
APPD	
SCALE: —	SIZE D — 12342-001 — REV M
	SHEET 6 OF 8

Century Data SYSTEMS, INC. ANAHEIM, CALIFORNIA

ASSY, PWB - LOGIC I (SCHEMATIC) GL1Q

DWG NO. 12342-001 REV. M

BUS DECODE

HEAD ADDRESS REGISTER

DIFFERENCE COUNTER

DIFFERENCE COUNTER

Century Data SYSTEMS, INC.	ANAHEIM, CALIFORNIA
ASSY, PWB-LOGIC I (SCHEMATIC)	GLIO
DRAWN L. Drury 3-16-74	SIZE D
CHECK R. Pauly 3-29-74	12342-001
APPD	REV M
SCALE: ——	SHEET 7 OF 8

DWG NO. 12342-001 REV M

6683CDT50

CYLINDER ADDRESS REGISTER

SUBTRACTOR

DIFFERENCE INPUT CONTROL

SUBTRACTOR TIMING CONTROL

ILLEGAL CYLINDER

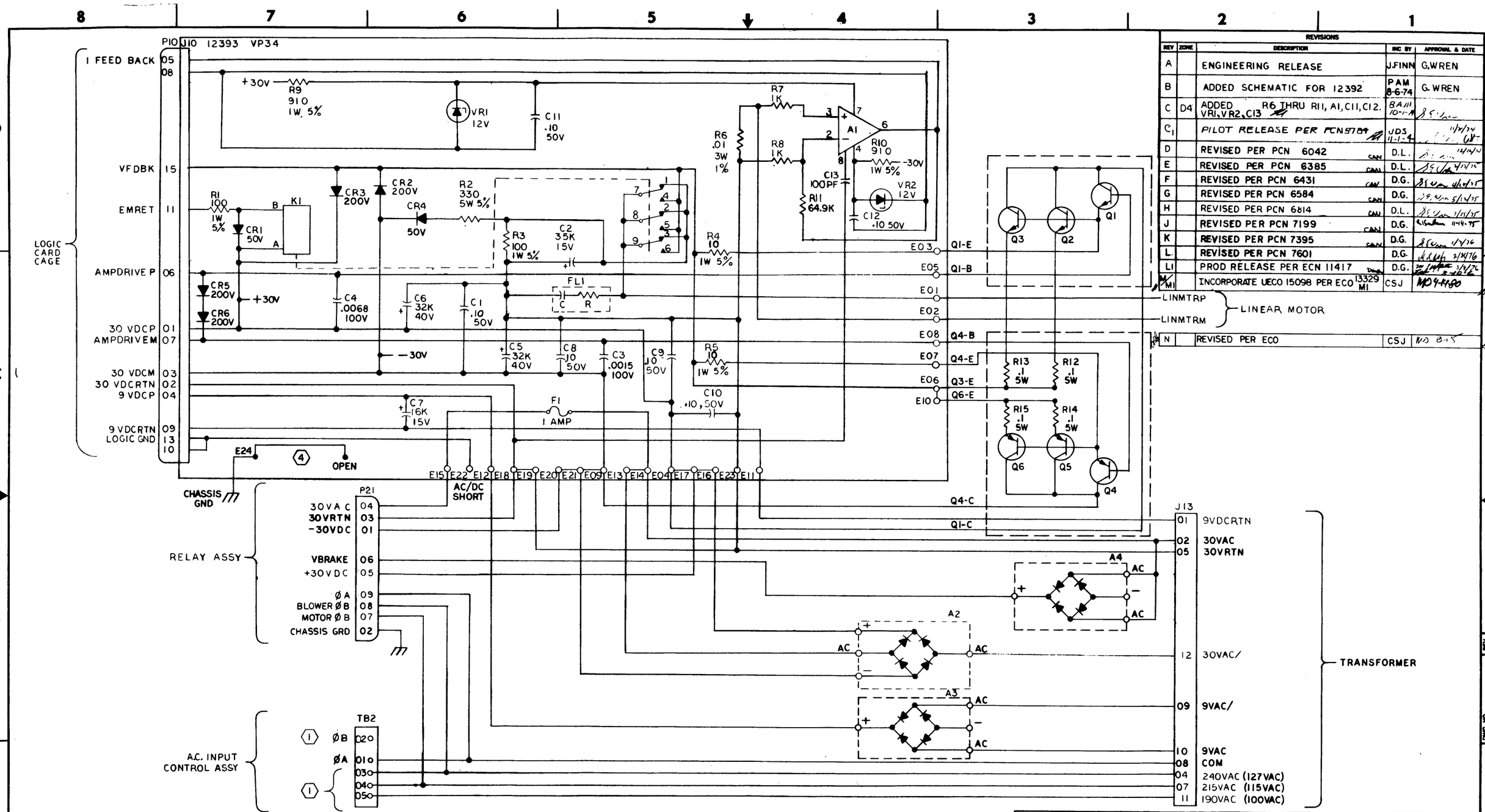
Century Data SYSTEMS, INC. ANAHEIM, CALIFORNIA

ASSY, PWB-LOGIC I
(SCHEMATIC) GL 10

DRAWN	L. Downey	3-16-71	SIZE	12342-001	REV
CHECK		7-22-71	D		M
APPD					
SCALE: ——			SHEET 8 OF 8		

DWG NO. 12342-001 REV. M

12/71 DIETERICH-POST CLEARPRINT 3000 P-4000-141



REV	ZONE	DESCRIPTION	INC BY	APPROVAL & DATE
A		ENGINEERING RELEASE	J.FINN	G.WREN
B		ADDED SCHEMATIC FOR 12392	PAM 8-6-74	G. WREN
C	D4	ADDED R6 THRU R11, A1, C11, C12. VR1, VR2, C13	BA III 10-1-74	
C1		PILOT RELEASE PER PCN 5784	JDS 11-1-74	11/1/74
D		REVISED PER PCN 6042 CAN	D.L.	12/4/74
E		REVISED PER PCN 6385 CAN	D.L.	4/17/75
F		REVISED PER PCN 6431 CAN	D.G.	4/24/75
G		REVISED PER PCN 6584 CAN	D.G.	5/14/75
H		REVISED PER PCN 6814 CAN	D.L.	7/15/75
J		REVISED PER PCN 7199 CAN	D.G.	11-19-75
K		REVISED PER PCN 7395 CAN	D.G.	1/9/76
L		REVISED PER PCN 7601	D.G.	2/19/76
L1		PROD RELEASE PER ECN 11417 Dup	D.G.	3/26/76
M/M1		INCORPORATE UECO 15098 PER ECO 13329 M1	CSJ	MD 4-1-80
N		REVISED PER ECO	CSJ	MD 8-15

REF DES LAST USED		REF DES NOT USED	
C13	E23	J1-J9	
CR4	J13	J11, J12	
R11	VR2		
K1	A2, A4	P1-P9	
FL1	P21	P11-P20	
F1	TB2	TB1	

4. MOVE JUMPER FROM "OPEN" TERMINAL TO "AC/DC SHORT" FOR OFF LINE OPERATION.
3. CAPACITANCE VALUES ARE IN MICROFARADS
2. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5 %.

1. TB2-2(ØB) IS JUMPERED TO TB2-3 (240VAC/127VAC), TB2-4 (215VAC/115VAC) OR TB2-5(190VAC/100VAC) DEPENDING ON LINE VOLTAGE.

NOTES: UNLESS OTHERWISE SPECIFIED.

MODEL NO. FIRST USE T-50			NEXT ASSY FIRST USE 12449 -
UNLESS OTHERWISE SPECIFIED	DRAWN	J. FINN	6/74
DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS .XX ± .XXX ± ANGLES ±	CHECK	ADDIS	8-22-74
	APPD		
	APPD		5-9-75
	FINISH		
	MATERIAL		
	SURFACE ROUGHNESS PER MIL-STD-10		

Century Data SYSTEMS, INC. ANAHEIM, CALIFORNIA

PWR SUPPLY AND AMPLIFIER (SCHEMATIC) VP34

C.C.

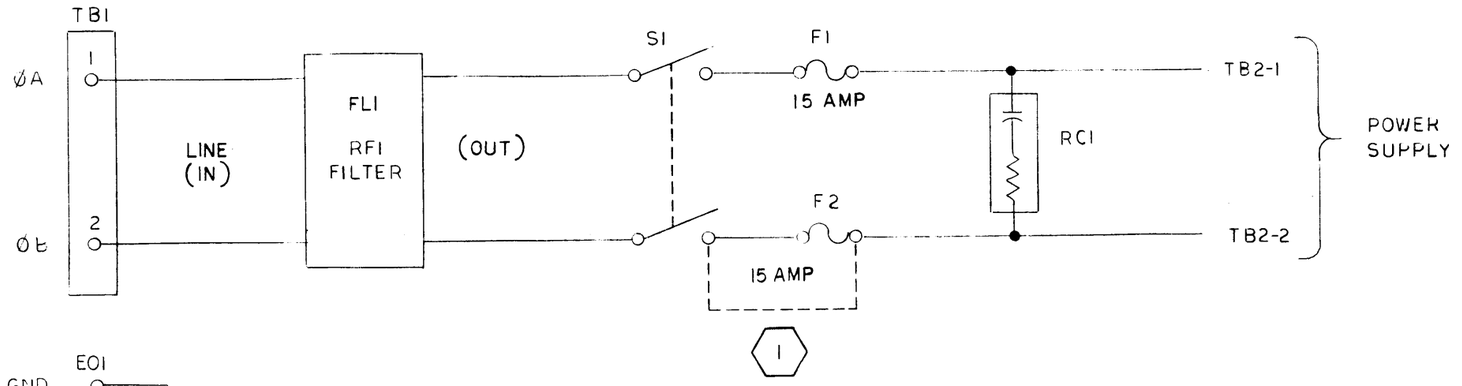
SCALE: —— SIZE D DWG NO. 13329-001 REV N1

DO NOT SCALE THIS DRAWING WEIGHT —— SHEET 1 OF 1

DWG NO. 13329-00 REV N

12/71 DIETERICH-POST CLEARPRINT 3020 F4000-149

REVISIONS				
REV	ZONE	DESCRIPTION	INC BY	APPROVAL & DATE
A		ENGINEERING RELEASE	JFINN 6/74	6/74
B		ADDED 15 AMP CALLOUT TO F1,F2; ADDED FL1, LINE (IN) & (OUT) CALLOUT TO RFI FILTER; ADDED NOTE (1); NEXT ASSY WAS, 12449 001.	D.L.	1/8/75
B1		PROD RELEASE PER ECN 10654	D.L. 9/14/5	9/14/75



(1) F1, F2 FOR LINE TO LINE 13372-001 F1 ONLY FOR [illegible] TO NEUTRAL 13372-002.

MODEL NO. FIRST USE T-50			NEXT ASSY FIRST USE 13372
UNLESS OTHERWISE SPECIFIED	DRAWN	J FINN	6/74
DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS .XX ± .XXX ± ANGLES ±	CHECK		
	APPD	[illegible]	8/11/74
	APPD	[signature]	8/11/74
	FINISH		
	MATERIAL		
	SURFACE ROUGHNESS PER MIL-STD-10 ———		

Century Data SYSTEMS, INC. ANAHEIM, CALIFORNIA

A.C. INPUT CONTROL (SCHEMATIC)

C.C.

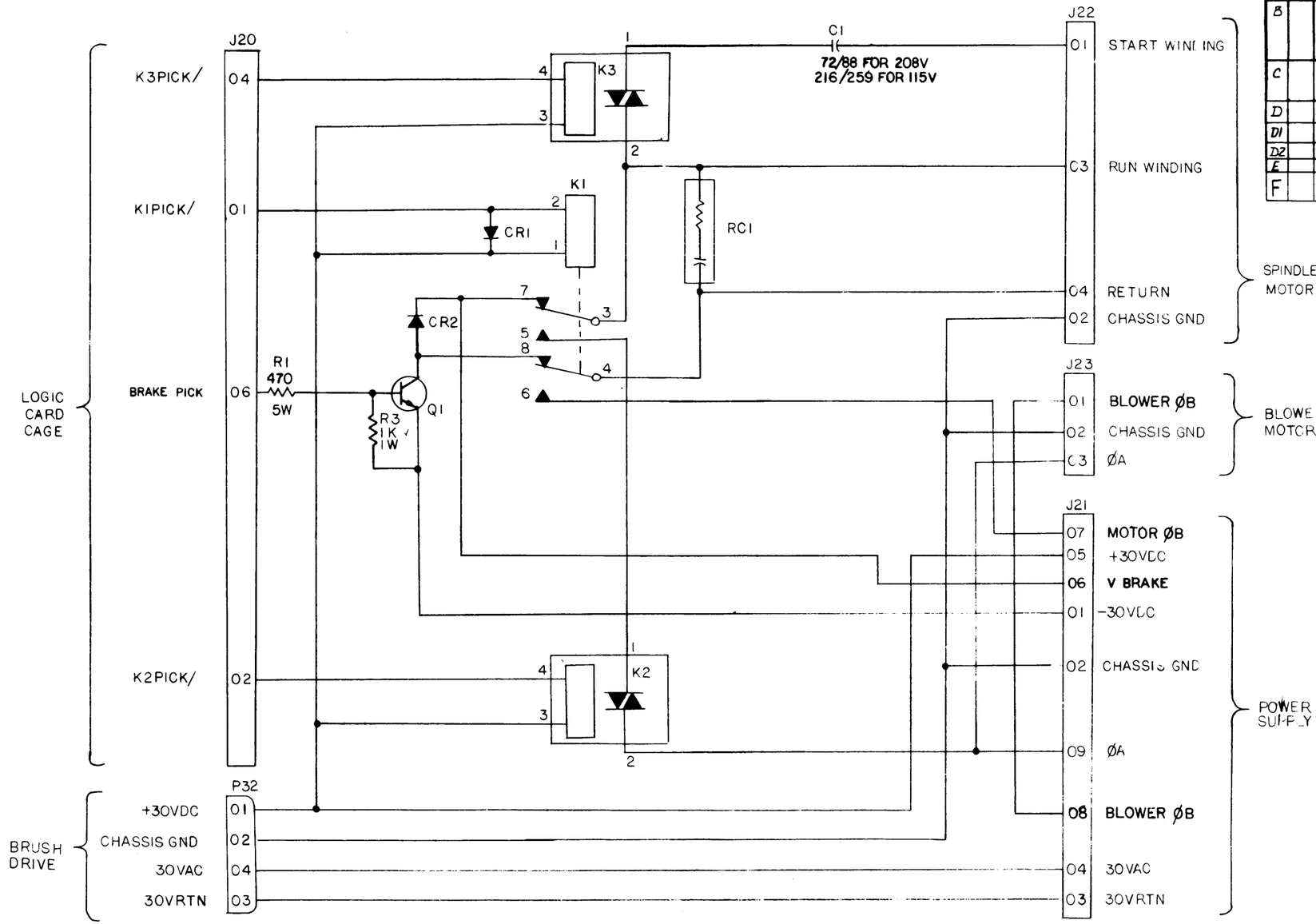
SCALE:	SIZE	DWG NO.	REV
———	C	13343-001	B1
DO NOT SCALE THIS DRAWING	WEIGHT ———	SHEET 1 OF 1	

REV B1

DWG NO. 13343-001

CDS 4500-13

REVISIONS				
REV	ZONE	DESCRIPTION	INC BY	APPROVAL & DATE
A		ENGINEERING RELEASE	B. Mooney 8/28/74	B. Mooney 10/7/74
B		DELETED R1,200 & R2,200; P32, 01 WAS P32,06 N/A WAS: 13391-001 ADDED RC2 & RC3 ADDED R1,2K,1W	11/19/15	11/9/75
C		IS: J20-06 BRAKE PICK, CAN WAS: J20-06 BRAKE	D.L.	2/19/75
D		J23-01 TO J21-08 WAS TO J21-07	D.L.	D. Lee 4/14/75
D1		PROD RELEASE PER ECN 10654	D.L.	D. Lee 6/11/75
D2		REV PER RECORD CHG ECN 11126	JCN	J. Cutter 8/5/75
E		REVISED PER ECO 12077	GSK	G. Cutter 10/17/75
F		Changed wattage of R3 from ¼W to 1W per ECO 13577	DK3	B. Kimbrough 1/16/76



REF DES LAST USED		REF DES NOT USED	
C1	P32	J1-J19	
CR2	R3	P1-P31	
J23	RC1	R2	
K3			

3. RELAY CONTACTS ARE SHOWN IN THE DE-ENERGIZED POSITION.
2. CAPACITANCE VALUE ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, ¼W, 5%.

NOTE: UNLESS OTHERWISE SPECIFIED.

MODEL NO. FIRST USE T-50			NEXT ASSY FIRST USE 12452
UNLESS OTHERWISE SPECIFIED	DRAWN	B. Mooney	8/28/74
DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS XX ± —— ANGLES ± —— XXX ± ——	CHECK	D. Ermine	9/6/74
	APPD	[illegible]	[illegible]
	APPD	[illegible]	11/19/75
	FINISH	——	
	MATERIAL	——	
	SURFACE ROUGHNESS PER MIL-STD-10	——	

Century Data SYSTEMS, INC. ANAHEIM, CALIFORNIA

SCHEMATIC-RELAY ASSY.

C.C.

SCALE: ——

SIZE D

DWG NO. 13394-001

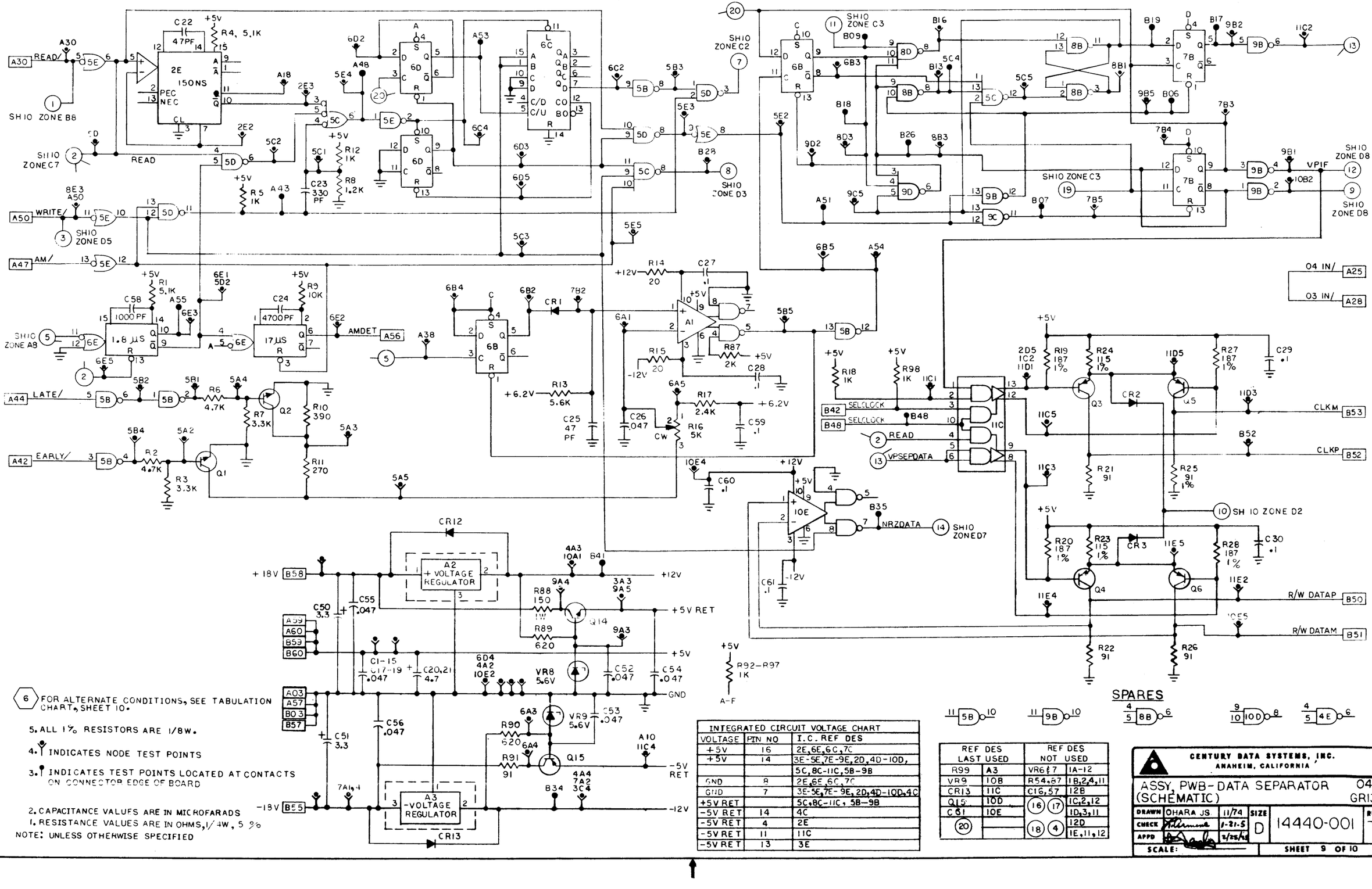
REV F

DO NOT SCALE THIS DRAWING

WEIGHT —— SHEET 1 OF 1

REV. F

DWG NO. 13394-001



6 FOR ALTERNATE CONDITIONS, SEE TABULATION CHART, SHEET 10.

5. ALL 1% RESISTORS ARE 1/8W.

4. ◆ INDICATES NODE TEST POINTS

3. ● INDICATES TEST POINTS LOCATED AT CONTACTS ON CONNECTOR EDGE OF BOARD

2. CAPACITANCE VALUES ARE IN MICROFARADS

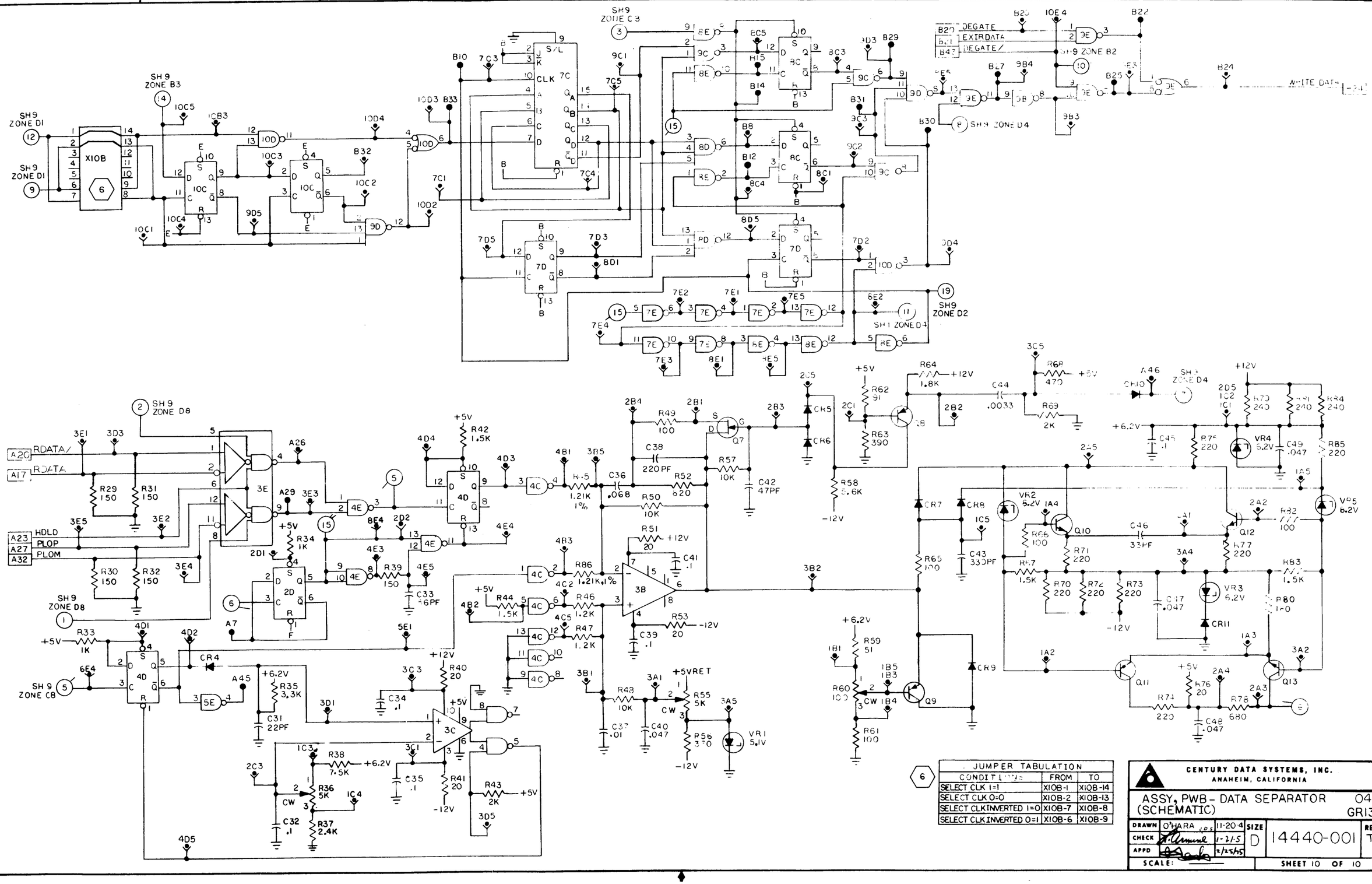
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5 %

NOTE: UNLESS OTHERWISE SPECIFIED

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO	I.C. REF DES
+5V	16	2E, 6E, 6C, 7C
+5V	14	3E-5E, 7E-9E, 2D, 4D-10D, 5C, 8C-11C, 5B-9B
GND	8	2E, 6E, 6C, 7C
GND	7	3E-5E, 7E-9E, 2D, 4D-10D, 4C, 5C, 8C-11C, 5B-9B
+5V RET		
-5V RET	14	4C
-5V RET	4	2E
-5V RET	11	11C
-5V RET	13	3E

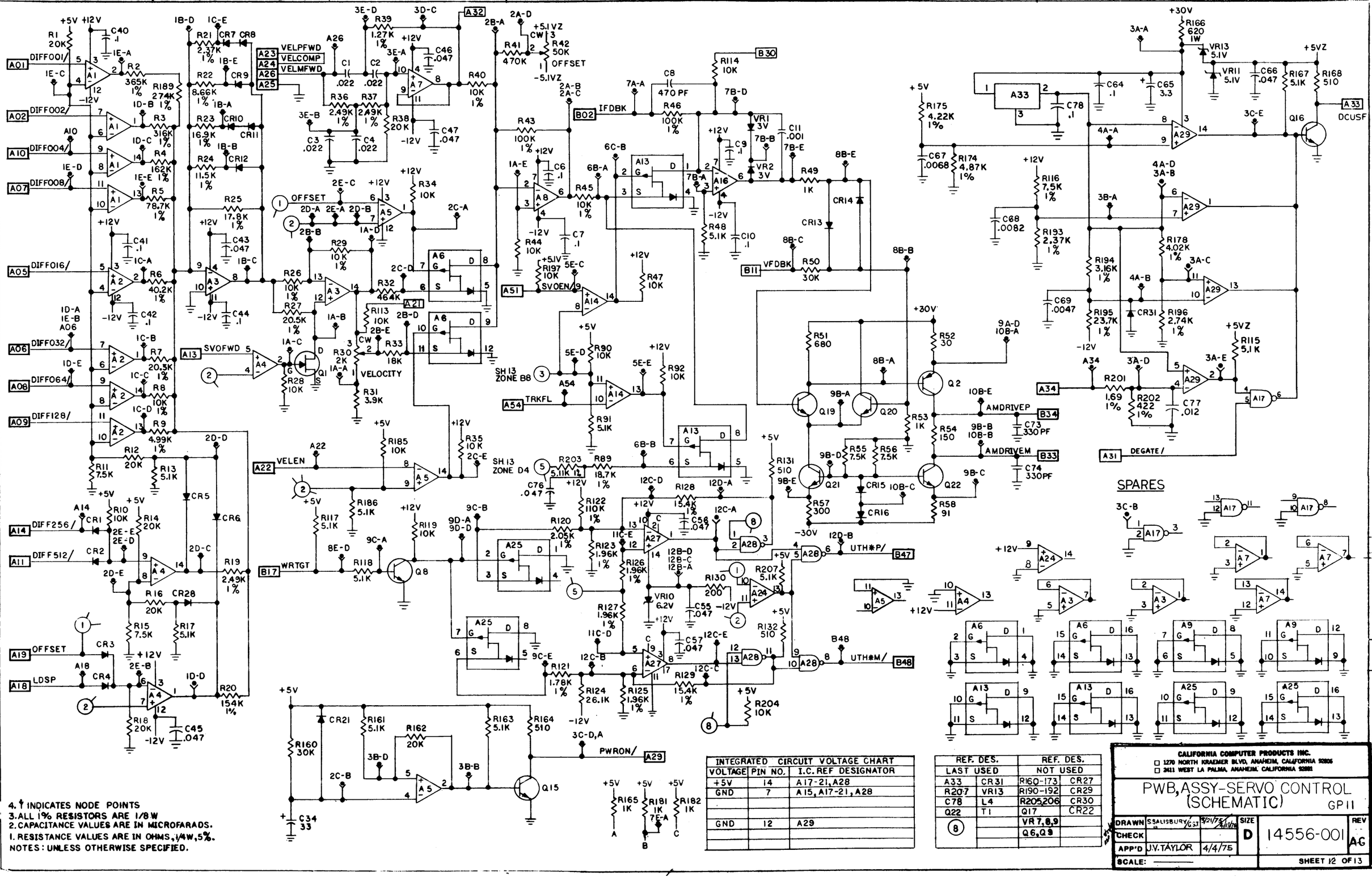
REF DES LAST USED		REF DES NOT USED	
R99	A3	VR6 & 7	1A-12
VR9	10B	R54, 87	1B, 2, 4, 11
CR13	11C	C16, 57	12B
Q15	10D	(16) (17)	1C, 2, 12
C61	10E		1D, 3, 11
(20)		(18) (4)	12D
			1E, 11, 12

DRAWN	OHARA JS 11/74
CHECK	1-21-5
APPD	2/25/75
SCALE:	
SIZE	D
14440-001	REV T
SHEET 9 OF 10	



JUMPER TABULATION		
CONDITIONS	FROM	TO
SELECT CLK 1=1	X10B-1	X10B-14
SELECT CLK 0=0	X10B-2	X10B-13
SELECT CLK INVERTED 1=0	X10B-7	X10B-8
SELECT CLK INVERTED 0=1	X10B-6	X10B-9

DRAWN	O'HARA	11-20-74	SIZE	14440-001	REV
CHECK		1-21-75	D		T
APPD		2/25/75			
SCALE:			SHEET 10 OF 10		



4. † INDICATES NODE POINTS
3. ALL 1% RESISTORS ARE 1/8 W
2. CAPACITANCE VALUES ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.
NOTES: UNLESS OTHERWISE SPECIFIED.

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	A17-21, A28
GND	7	A15, A17-21, A28
GND	12	A29

REF. DES. LAST USED		REF. DES. NOT USED	
A33	CR31	R160-173	CR27
R207	VR13	R190-192	CR29
C78	L4	R205,206	CR30
Q22	T1	Q17	CR22
(8)		VR7,8,9	
		Q6,Q9	

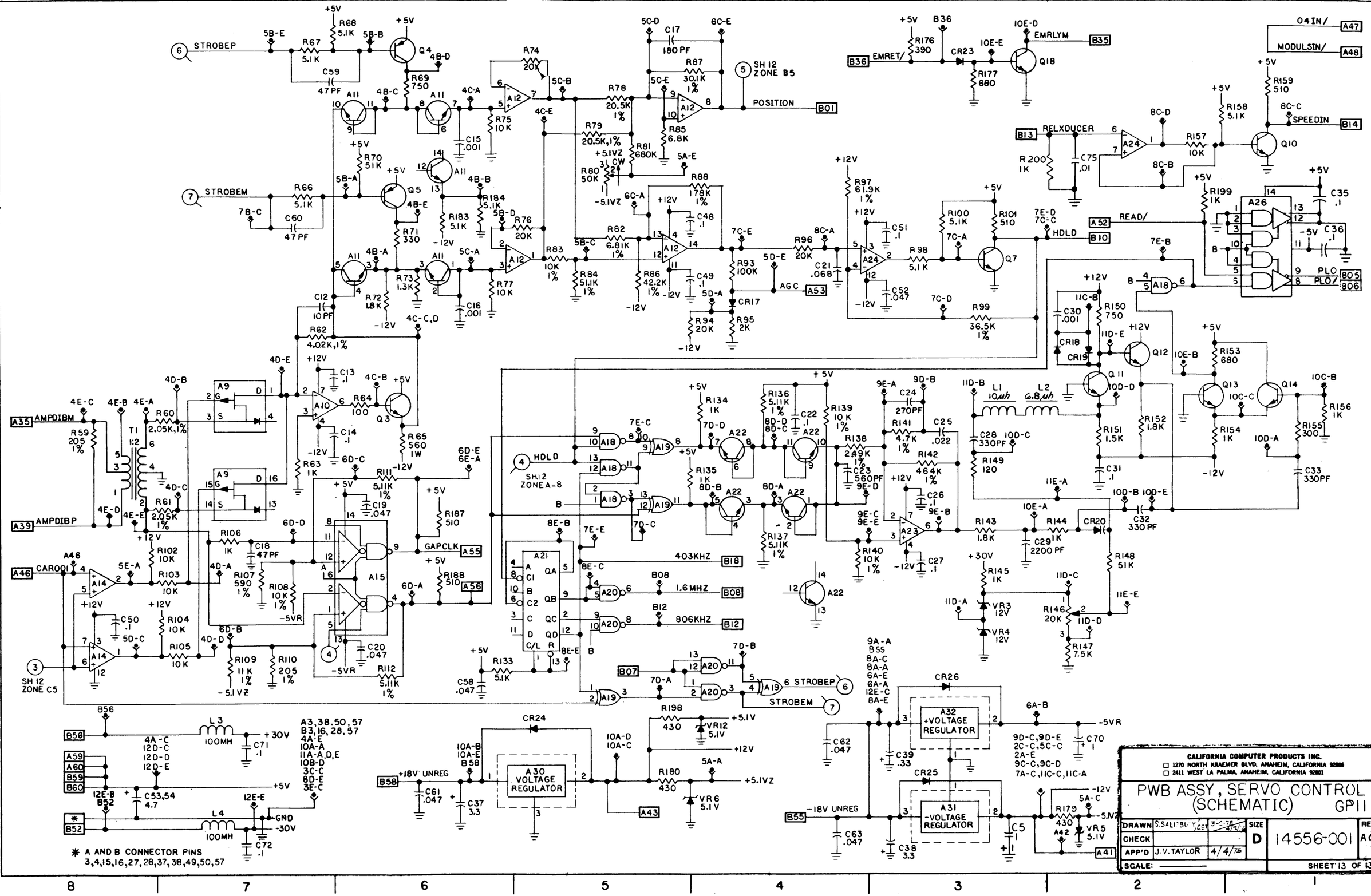
CALIFORNIA COMPUTER PRODUCTS INC.
□ 1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
□ 2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

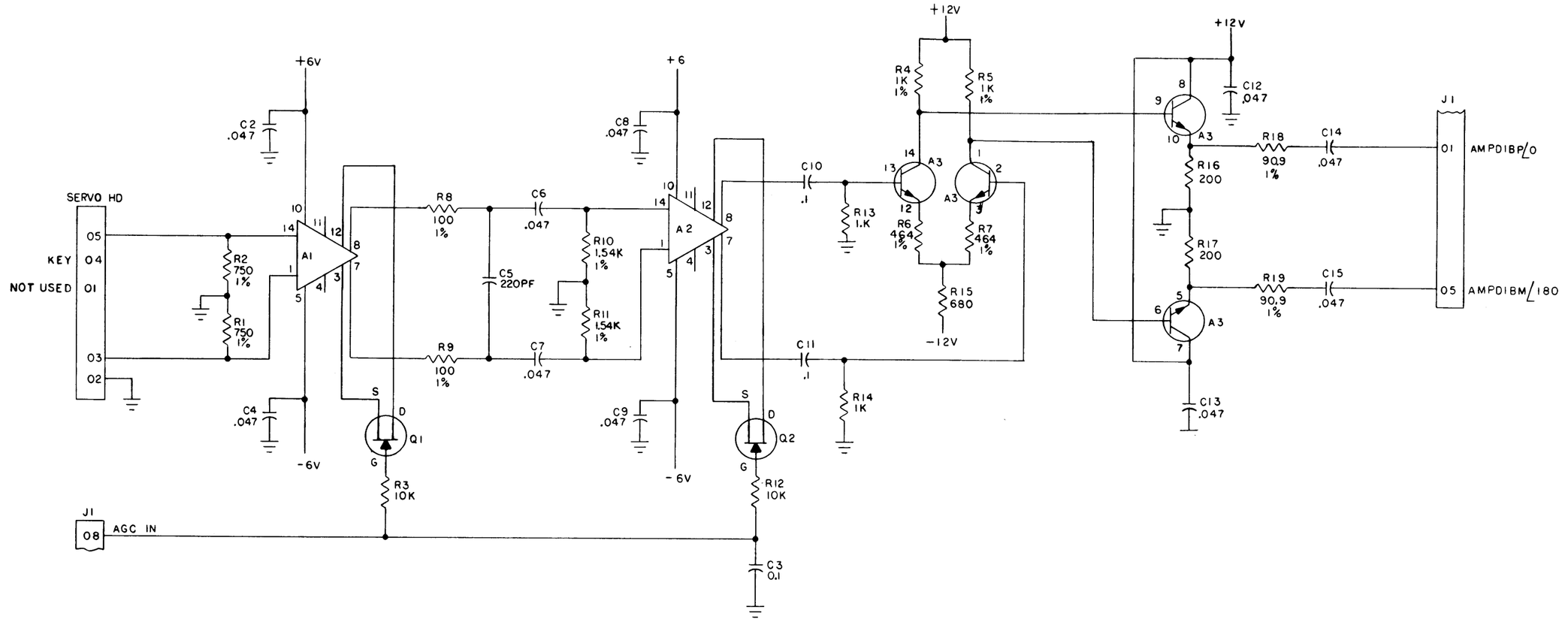
PWB, ASSY-SERVO CONTROL (SCHEMATIC) GP11

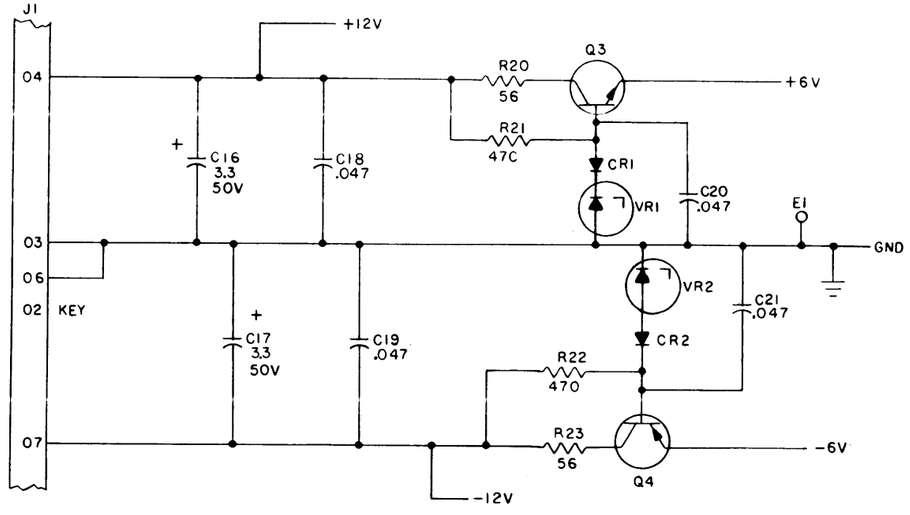
DRAWN	S SALISBURY	5/21/75	4/19/76
CHECK			
APP'D	J.V. TAYLOR	4/4/75	
SCALE:			

SIZE D | 14556-001 | REV AG

SHEET 12 OF 13


STROBEP
STROBEM
SH12 ZONE B5
POSITION
B01
EMRET/
EMRLYM
B35
04IN/
A47
MODULSIN/
A48
RELXDUCER
B13
SPEEDIN
B14
READ/
A52
HDLD
B10
AGC
A53
PLO
B05
PLO/
B06
AMPDIBM
A35
AMPDIBP
A39
CAROOI
A46
SH12 ZONE A-8
403KHZ
B18
1.6MHZ
B08
806KHZ
B12
STROBEP
STROBEM
GAPCLK
A55
SH12 ZONE C5
+18V UNREG
-18V UNREG
-5VR
A43
A41
A42
A56
B56
B58
B55
B52
B59
B60
A59
A60
A3,38,50,57
B3,16,28,57
4A-E
10A-A
11A-A,D,E
10B-D
3C-C
8D-E
3E-C
* A AND B CONNECTOR PINS
3,4,15,16,27,28,37,38,49,50,57
A30 VOLTAGE REGULATOR
A31 -VOLTAGE REGULATOR
A32 +VOLTAGE REGULATOR
9D-C,9D-E
2C-C,5C-C
2A-E
9C-C,9C-D
7A-C,11C-C,11C-A
CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801
PWB ASSY, SERVO CONTROL (SCHEMATIC) GPII
DRAWN S.SALISBURY 3-5-75
CHECK
APP'D J.V.TAYLOR 4/4/75
SIZE D
14556-001
REV A6
SCALE:
SHEET 13 OF 13
14556-001 A6





3. ALL 1% RESISTORS ARE 1/8W

2. CAPACITANCE VALUES ARE IN MICROFARADS

1. RESISTANCE VALUES ARE IN OHMS, 1/4W ± 5%

NOTES: UNLESS OTHERWISE SPECIFIED.

REF DES LAST USED		REF DES NOT USED	
A3	CR2	C1	
C21			
Q4			
R23			
VR2			
HD01			
J1			

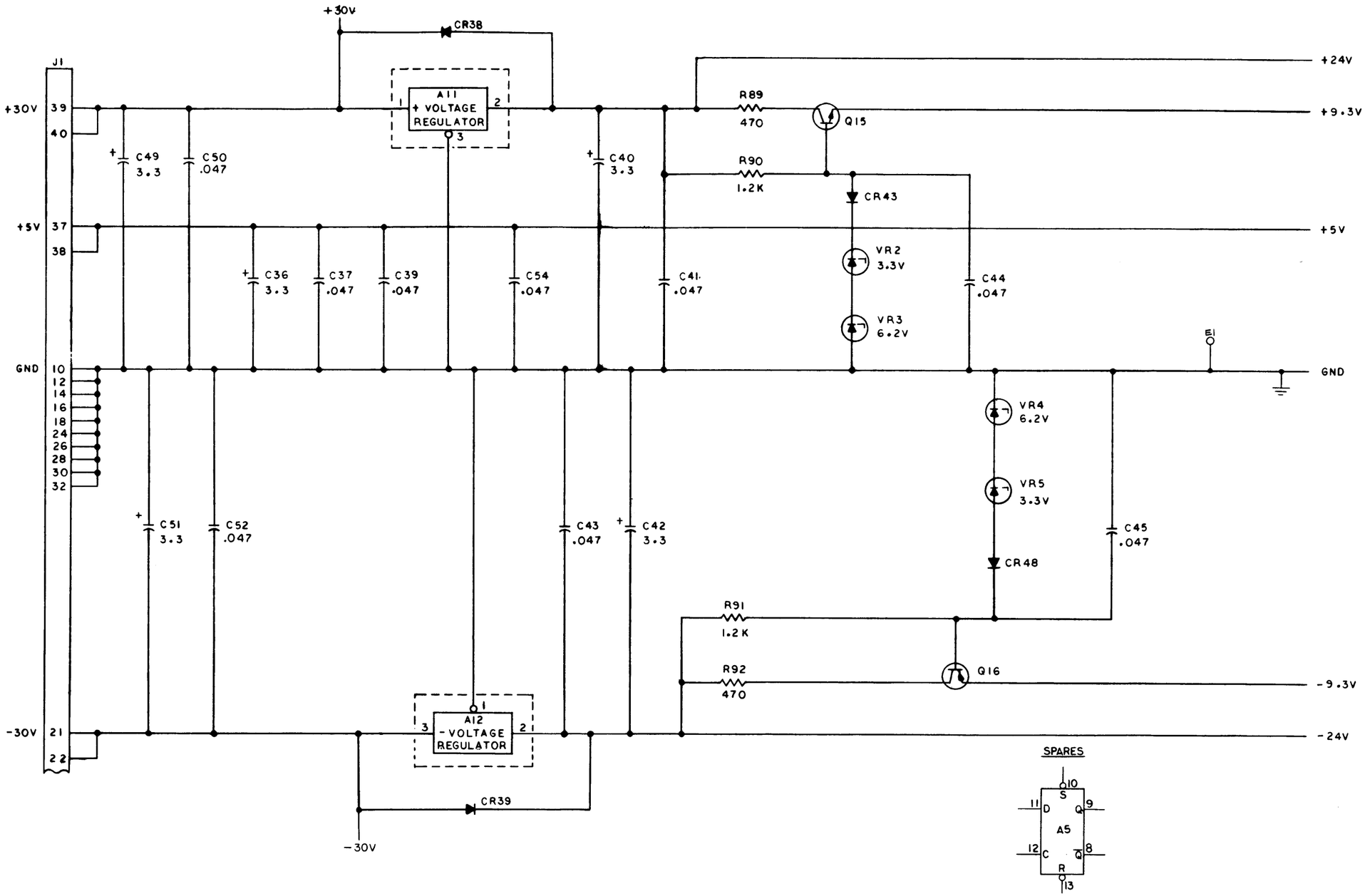
Century Data — ANAHEIM, CALIFORNIA

PWB, ASSY-SERVO PREAMP (SCEMATIC) VR61

DRAWN	WEAVER	12-20-75	SIZE D	14912-001 REV N
CHECK				
APPD		6/11/75		
SCALE:			SHEET 6 OF 6	

DWG NO. 14912 001 REV. N

P4000-141 (8/73)



NOTES: UNLESS OTHERWISE SPECIFIED.

1. RESITANCE VALUES ARE IN OHMS, 1/4W 5%.
2. CAPACITANCE VALUES ARE IN MICROFARADS.
3. ALL 1% AND 0.1% RESISTORS ARE 1/8W.

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	A2, A4, A5
+5V	16	A3
GND	7	A2, A4, A5
GND	8	A3

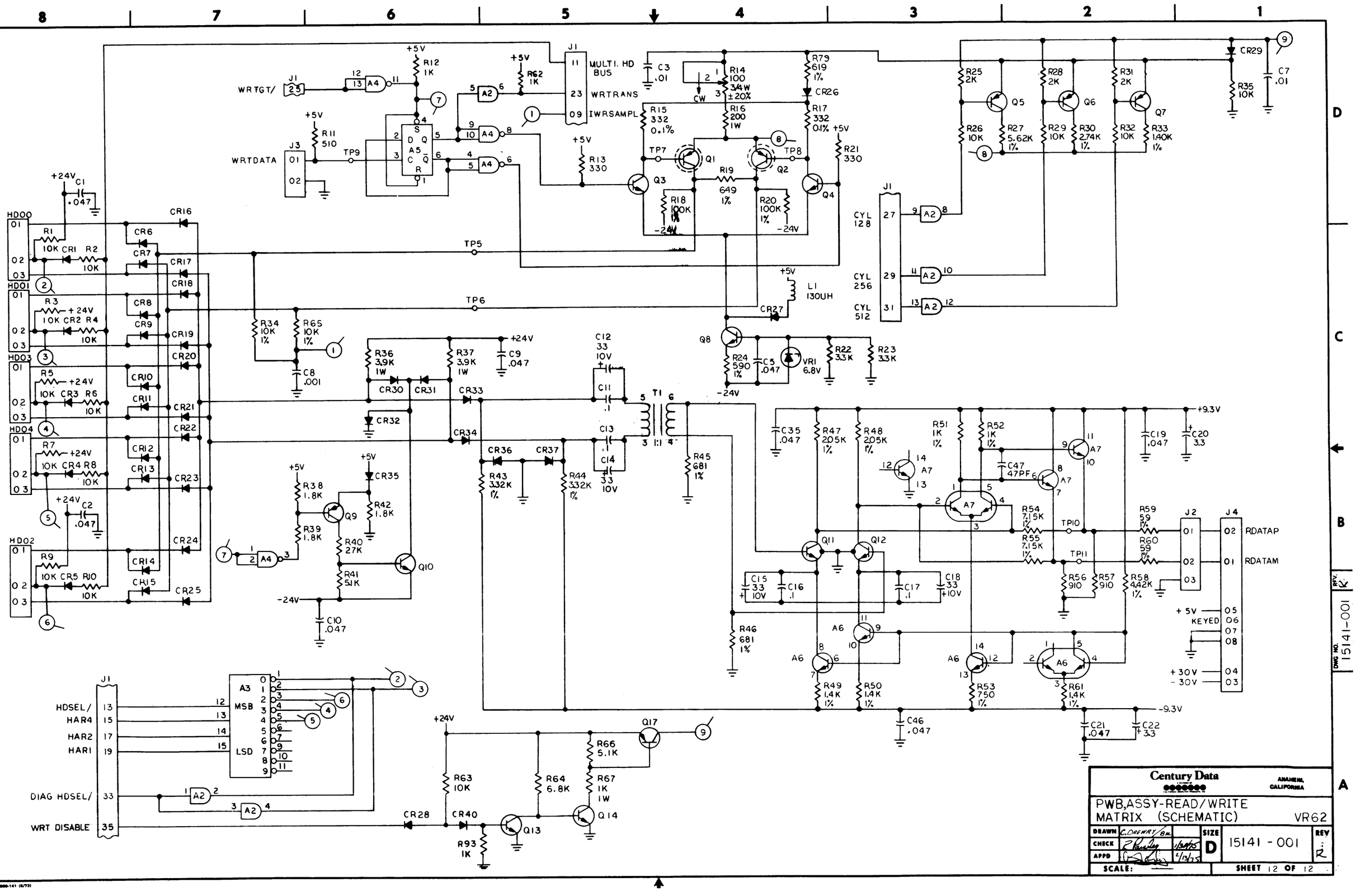
REF DES LAST USED		REF DES NOT USED	
R93	HD04	TP1-4	C4,C6
C54	TP11	R68-R78	A1
CR48	J4	CR41-CR42	A8
Q17	VR5		A9
L1	T1	CR44-CR47	A10
A12	E1	C23-C34,C38	C48,C53
(9)		R80-R88	

Century Data — ANAHEIM, CALIFORNIA

PWB ASSY READ/WRITE MATRIX (SCHEMATIC) VR62

DRAWN	C. Dewey	1-20-75	SIZE D	15141-001 REV R
CHECK	R. Bailey	1/24/75		
APPD		1/25/75		
SCALE:			SHEET 11 OF 12	

F4000-141 (8/73)


8
7
6
5
4
3
2
1
D
C
B
A
+5V
+24V
-24V
-9.3V
+9.3V
+30V
-30V
WRTGT/
WRTDATA
WRTRANS
IWRSAMPL
MULTI. HD BUS
HDOO
HDO1
HDO2
HDO3
HDO4
HDSEL/
HAR4
HAR2
HAR1
DIAG HDSEL/
WRT DISABLE
MSB
LSD
CYL 128
CYL 256
CYL 512
RDATAP
RDATAM
+5V KEYED
Century Data
ANAHEIM, CALIFORNIA
PWB,ASSY-READ/WRITE MATRIX (SCHEMATIC)
VR62
DRAWN C.DREWRY/B.M.
CHECK
APPD
SIZE D
15141 - 001
REV R
SCALE:
SHEET 12 OF 12
DWG NO. 15141-001
REV. R

LINE DRIVERS

EOC (2) → 5C → 5D → 5E-A → IEOC/ A43

OFFSET (9) ← SH 6 ZONE C1 → 5C → 5D → 5E-B → IOFFSET/ A45

IDX (1) → 5C → 5D → 5E-C → IIDX/ A47

RDY (8) ← SH 6 ZONE D1 → 5C → 5D → 5E-E → IRDY/ A49

RDONLY (3) → 6C → 6D → 6E-A → IRDONLY/ A51

DEVCK (32) ← SH 8 ZONE A3 → 6C → 6D → 6E-B → IDEVCK/ A53

HDLD (26) ← SH 7 ZONE C3 → 6C → 6D → 6E-C → IONLINE/ A56

SKINC (6) ← SH 6 ZONE A5 → 6C → 6D → 6E-E → ISKINC/ A55

SECTOR/ B11 → 9D → 12D → 5D → 4E-C → ISECTOR/ A41

SELECT

SH 7 ZONE D5 (18) LDSP/ → 12D

+5V → 7D 470 2% pull-ups

LINE DRIVERS

ADDMKDET B17 → 8D → 5D → 4E-E → IADDMKDET/ A39

SH 8 ZONE D8 (28) SELECT → 8D → 6D → B52 → ISELECTED/ B52

ATTEN/ (5) ← SH 6 ZONE D4 → 6D → 7E-E → IATTEN/ B50

IDX B10 (1) → 8D → 8D → 7E-C → ICOMPSECIDX/ B46

DEGATE1 B07 → C31 .1 100V

DEGATE2 B08 → CNTLRP5 B44 via CR1

R1 100 1W, R2 100 1W, R3 100 1W

END OF CYLINDER

HAR1 A12, HAR2 A16, HAR4 A18 → 1E → 2E → 2E → 3E → EOC (2)

A18 → B-40

DCUSF B40

READ ONLY LATCH

RDONLYSW/ B14, RDONLYSW B13 → 7A → 7C → 12A → WRTDISABLE B42

RDONLY (3) ← SH 8 ZONE B8

12D-D

SPARES

11A, 1A, 1A, 11D, 8B, 4B, 12E, 12E, 10E

+5V → 8C 1K 2% pull-ups

A59 A60 B59 B60 → +5V

A03 A57 B03 B57 → C1-C24 .047 → GND

A59, A60, B59, B60

A03, A57, B03, B57

3. ⚲ INDICATES NODE TEST POINTS.

2. CAPACITANCE VALUES ARE IN MICROFARADS.

1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.

NOTES: UNLESS OTHERWISE SPECIFIED.

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	16	9A, 11A, 9E, 11E
+5V	14	1A-8A, 10A, 12A, 2B-12B, 1C-7C, 9C-12C, 1E-3E, 10E, 12E, 1D-6D, 8D-12D
GND	8	9A, 11A, 9E, 11E
GND	7	1A-8A, 10A, 12A, 2B-12B, 1C-7C, 9C-12C, 1D-6D, 8D-12D, 1E-3E, 10E, 12E

REF. DES LAST USED	REF. DES NOT USED
12A	
12B	1B
12C	C26-28
12D	8E
12E	R5-7
C31	(10)
R9, CR1	
(36)	

CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92805
2611 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

PWB, ASSY-LOGIC II (SCHEMATIC) GL17

DRAWN	C. DREWRY C.G. TANZO	5-15-75 7-8-76	SIZE D	REV M
CHECK			15847-001	
APP'D				
SCALE:			SHEET 5 OF 8	

15847-001 M

INTERRUPT

SH 7 ZONE B6 (15) SKSTGT → 3B pin 1
SH 7 ZONE C8 (12) DZERO → 3B pin 2
3B pin 3 → 5B-D
+5V → 8C 1K 2% (14, 4) → 5B-E
5B-C → 5B pin 12
5B pin 10 → 6A pin 12
5B pin 9 → 6A pin 10
5B pin 8 → 6A pin 9
5B pin 13 → 6A pin 13
6A pin 8 → 6A-C
ATTEN 3 → 3A pin 4 → 3A-A → ATTEN/ (5) SH 5 ZONE C4
6A-C → ATTEN → A52

+5V → 8C 1K 2% (14, 6)
B12 → B12
B12 → RDY

SH 7 ZONE D5 (19) TRKFL

5B pin 10 → 6B pin 12
6B pin 9 → 6B pin 11
6B pin 8 → 6B-C
6B pin 13 → SKINC

SH 7 ZONE A8 (16) EMRET → 6B pin 3
6B pin 6 → 6B-B
6B pin 1 → 6B-E

SH 7 ZONE A5 (25) POWERON/ → 8A pin 13
8A pin 12 → 8A-C
8A pin 10 → 8A-E
A21 READ/ → 8A pin 9
8A pin 8 → 8B pin 11
8B pin 10 → 10A pin 5
B19 START → 8A-D → 10A pin 6 START/
10A pin 6 → 9B-E → 9B pin 13
9B pin 12 → 9B pin 12
9B pin 11 → 9B-D → 8A pin 5
8A pin 6 → 8A-B → 8B pin 1
8B pin 2 → 8B-A
+5V → 8C 1K 2% (14, 1)
B15 ESKINCENA → 8A-A → 8A pin 4
(25) POWERON/ → 8A pin 2
(31) RDY/ → 3B pin 12
3B pin 13 → SH 7 ZONE D6 (11) REZERO/
3B pin 11 → 3B-E → 10A pin 1
10A pin 2 → 10A-B

SH 7 ZONE D3 (23) RETHD/ → 7A pin 1
SH 7 ZONE C1 (24) HDEXT → 7A pin 2
7A pin 3 → 7A-A → 7A pin 5
7A pin 4 → 7A pin 6
B32 SKINC#C → B32

SH 6 ZONE B6 (14) → 6A pin 1
6A pin 6 → 6A-B → 3A pin 1
3A pin 2 → 12A-A → 12A pin 1
12A pin 3 → 12A pin 2
12A pin 4 → 12A pin 5
12A pin 6 → 12A-B → 11B pin 13
11B pin 12 → RDY/ → 8B pin 5
8B pin 6 → 8B-B → (8) SH 5 ZONE C8 RDY → A48
11B-E → 8B pin 9
8B pin 8 → B20 → ERDY → B20

READY

B54 OSST/ → 12A-E → 11B pin 12
SH 7 ZONE A3 (7) UTH → 7B pin 13
SH 7 ZONE D8 (4) 1.6MHZ → 7B pin 12
7B pin 11 → 7B-E → 11B pin 11
11B pin 10 → 11B pin 9
11B pin 8 → 11B-C → 12A pin 13
12A pin 11 → 11A-D → 11A pin 12
11A pin 11 → 11A-C → 2MS pin 15
+5V → R4 20K → 2MS pin 14
C25 .15UF → 2MS pin 14
2MS pin 10 → 12A-D
2MS pin 13 → 11A-E
+5V → 8C 1K 2% (14, 12)
(31) SH 8 ZONE D8

OFFSET

+5V → 8C 1K 2% (14, 7)
A33 BUS2 → 4E-A → 4D pin 2
4D pin 5 → A54 → (9) SH 5 ZONE D8 SH 8 ZONE C8 OFFSET → A54
4D pin 6 → OFFSET/ → 4B pin 1
4B pin 2 → 4B-A → EOFFSET → A36
4D-E → 4D pin 10
A35 BUS3 → 7B-A → 7B pin 3 HAR*S/
SH 8 ZONE D8 (29) HAR*S → 7B pin 1
4D pin 12 → 4D pin 9 → OSFWD → 4D-C
4D pin 11 → 4D pin 8
4D pin 13 → SH 7 ZONE D5 (18)

LDSP/ → 2A pin 1
SH 7 ZONE B5 (20) SKENA/ → 2A pin 2
2A pin 3 → 2A-A → A04 VELENA
2A pin 4 → 2A pin 5
2A pin 6 → 2A-C → 2A pin 9
2A pin 10 → 2A pin 8
2A pin 11 → 2B-E → 2B pin 12
2B pin 10 → 2B-D → SRVOFWD/ → A17
SH 7 ZONE B4 (21) FWD → 2A pin 12
2A pin 13 → 2A-D → 2A pin 11
TRKFL

A09 02IN/ → A10 → 03IN/ → A10

6C-E → 9A EN G, DN/UP, A, B, C, D, LD, CK
9A QA, QB, QC, QD, M/M, R/C → SKINC
(6) SH 5 ZONE B8 → 10A pin 3
10A pin 4 → 10A-A → 9B pin 2
7A-B → 9B pin 1
9B pin 3 → 9B-A → (34) SH 7 ZONE D7 → 8B pin 3
SKINC/ → 8B pin 4 → 8B-D → ESKINC → B18

CALIFORNIA COMPUTER PRODUCTS INC.
☒ 1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
☐ 2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

PWB, ASSY-LOGIC II
(SCHEMATIC) GL17

DRAWN	C. DREWRY	5-12-75	SIZE	15847-001	REV
CHECK	C.J. TANZI	7-3-75	D		M
APP'D					
SCALE:			SHEET 6 OF 8		

15847-001 M

SERVO CONTROL

A24 1.6 MHZ — SH 6 ZONE D4 (4)
A27 REZERO
(23) RETHD/
(22) FWD/
1C, 1C, 1C
IC-A, IC-B, IC-C
3E-E, 2C-D
3E — REZERO/ (11) SH 6 ZONE A8
1D J Q C K Q̄ R — 3D-E, 2D-C, 12D-E, 1D-A, 13
LDSP/ — 1E — IE-E
LDSP A08
ELDSP A07
(17)
(18) SH 5 ZONE A5; SH 6 ZONE B4; SH 8 ZONE D8

SH 6 ZONE A3 (34) SKINC/
1C, 1C — IC-D, 2B-B
(19) SH 6 ZONE D5
1D J Q C K Q̄ R — IC-E, 1D-B, 1D-C, 1D-D
TRKFL A05
TRKFL/ — 1E — IE-B
ETRKFL A01

(35)
A14 DIF*C/
2B, 2C, 2D, 2D — 2D-D, 2D-E, 2B-C, 2D-A
A15 DZERO — SH 6 ZONE D8 (12)
SKENA*R/ (13)
DZERO/
SKENA

(36) HDLDDLY
2C, 2C, 2D, 2D, 4A, 3A, 3A, 3A — 2C-B, 2D-B, 3A-C, 3C-B, 3A-E, 4A-B, 3A-D, 3A-B
LDSP (17)
A29 SKSTGT/
(14) SH 6 ZONE C5
SKSTGT (15) SH 6 ZONE D8

3D J Q C K Q̄ R — 3D-B, 3E-D, 3E-A
A50 SKENA
2A-E, 3E — A22 ESKENA
SKENA/ A20
(20) SH 6 ZONE B4
FWD (21) SH 6 ZONE B3
EFWD A19
FWD/ (22)

FWD
SKINC/
(18) LDSP/
(13) SKENA*R/
2B, 3B, 3C — 3B-B
(19) TRKFL
(33) FS/
3C, 3C, 3C — 3D-C, 3C-D
(27) HDLD/
(23) RETHD/
A11 FWD*S
2E, 2E — 2E-A, 3C-C
A06 SETCYL
A13 FWD*S/
2E, 2C — 2C-C, 3D-D
RETHD/
(11) REZERO/
(25) SH 6 ZONE C8; SH 8 ZONE D3

B31 POWERON/
SH 6 ZONE C8 (16) A34 EMRET
1A, 4A, 2B — 11E-E, 4A-D, 1D-E
6 EMRET/
PWRON+EMRET/

A02 DIF001/
(21) FWD
1A, 12E, 1A — 1A-D, 1A-E
7B, 7B
(15) SKSTGT
B05 UTH*P/
B06 UTH*M/
5A, 5A, 10A — 5A-D, 5A-E, 8B-E
UTH B22
(7) SH 6 ZONE D4; SH 8 ZONE B8

FS
A38 RETHD
4A, 4B, 4B — 4A-C, 4B-C
ERETHD A40
+5V, 14, 8C, 1K, 5% — 5B-B
5B — 5B-A, 3B-C
(33) FS/
RETHD/ — SH 6 ZONE A8 (23)
3B, 3A — 3B-A, A30
SRVOENA/ A30
SRVOENA B09

4C, 4B, 4B — 4C-E, 4B-E
A32 HDEXT/
4B, 5A — 4B-B, 5A-B
HDEXT (24) SH 6 ZONE A8
SKINC/
A28 HDLD — SH 5 ZONE B8 (26)
(27)
3E, 3E — A26
HDLD/ — EHDLD A26
4A — 4A-A, B16
HL REV B16

B30 HDLDDLY*C
9E — ENG, DN/UP, A, B, C, D, LD, CK; QA, QB, QC, QD, M/M, R/C — 9E-E, 9E-D
(36) HDLDDLY B29
(35)
12C-B
12E, 10A — 8 DIF*C/
12C-C

5A, 10A — 5A-C, 10A-C
12B, 12B, 12C, 12C — 12B-B, 12B-C
B51 403KHZ
2B — 2B-A, 12B-D
12B-A
5A, 10A — 8B-E

CALIFORNIA COMPUTER PRODUCTS INC.
☒ 1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
☐ 2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

PWB, ASSY-LOGIC II (SCHEMATIC) SL17

DRAWN	C. DREWRY	7-17-76	SIZE	15847-001	REV
CHECK			D		M
APP'D					
SCALE:			SHEET 7 OF 9		

15847-001 M1

ERROR DETECTION

A42 SETCYLTAG
SH 6 ZONE D3 (31) RDY/
SH 6 ZONE D5 (28)
A44 SELECT
SH 7 ZONE D5 (18) LDSP/
SH 6 ZONE B5 (29)
A37 HAR*S
A23 DEVCK*R/
(30) WRT
SH 6 ZONE C1 (9) OFFSET
SH 5 ZONE B1 (3) RDONLY
A25 WRT
SH 7 ZONE A3 (7) UTH
A31 DEVCK*S/

B53 WRTRANS
SH 7 ZONE A5 (25) POWERON/
(30) WRT
B47 WICOR
B48 MULTIHD/

+5V
R8 20K
C29 470PF
3US
R9 16.2K 1%, 1/8W
C30 .0047
25US
8C 1K 2%
10E

B49 ESCRDY
B43 EOSERR
DEVCK*R/
B27 EWRTRDY/
B26 EWRTOS
B25 EWRDONLY
B24 EWRTUTH
(32) SH 5 ZONE B8
A46 DEVCK/
B37 DEVCK
B23 ESCILLOS
B45 EDEVCKRW
DEVCKRW*S/

CALIFORNIA COMPUTER PRODUCTS INC.	
☒ 1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806	
☐ 2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801	
PWB, ASSY-LOGIC II (SCHEMATIC)	GL 17
DRAWN C.DREWRY 5-16-75 / C.G.TANZO 7-8-75	SIZE D
CHECK	15847-001
APP'D	REV M
SCALE:	SHEET 8 OF 8

15847-001 M

SAMPLE WIDTH

SH 9 ZONE B5 PLL

NRZ DATA — SH 9 ZONE B1

WRITE — SH 9 ZONE D5

WRTAM/ WRITE — SH 9 ZONE D4

SH 9 ZONE B4

SH 9 ZONE B6

SH 9 ZONE D8

SH 9 ZONE D4

SH 9 ZONE D1

WRT DATA

PULL UP

SPARES

JPR1 7 7B-E

JPR2 7

JPR3 7

JPR4 6

(7) JPR 1,2,3 (90759-022), ITEM B5, TO BE INSTALLED DURING MODULE TEST.

(6) JPR 4 JUMPER LOCATION TO BE SELECTED AND INSTALLED DURING MODULE TEST.

5. ALL 1% RESISTORS ARE 1/8W.

4. ▼ INDICATES NODE TEST POINTS.

3. ● INDICATES TEST POINTS LOCATED AT CONTACTS ON CONNECTOR EDGE OF BOARD.

2. CAPACITANCE VALUES ARE IN MICROFARADS.

1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.

NOTES: UNLESS OTHERWISE SPECIFIED.

INTEGRATED CIRCUIT VOLTAGE CHART

VOLTAGE	PIN NO.	I.C. REF DES
+5V	8	A1
+5V	14	6A, 7A, 9A, 10A, 1B, 3B-7B, 10B-13B, 1C, 4C-7C, 9C, 10C, 1D, 2D, 4D, 5D, 9D-12D, 1E, 4E, 5E, 7E-10E, A2, A3.
+5V	16	4A, 8A, 11A, 8B, 9B, 2C, 3C, 8C, 6D-8D, 6E
GND	4	A1
GND	7	6A, 7A, 9A, 10A, 1B, 3B-7B, 10B-13B, 1C, 4C-7C, 9C, 10C, 1D, 2D, 4D, 5D, 9D-12D, 1E, 4E, 5E, 7E-10E, A2, A3
GND	8	4A, 8A, 11A, 8B, 9B, 2C, 3C, 8C, 6D-8D, 6E

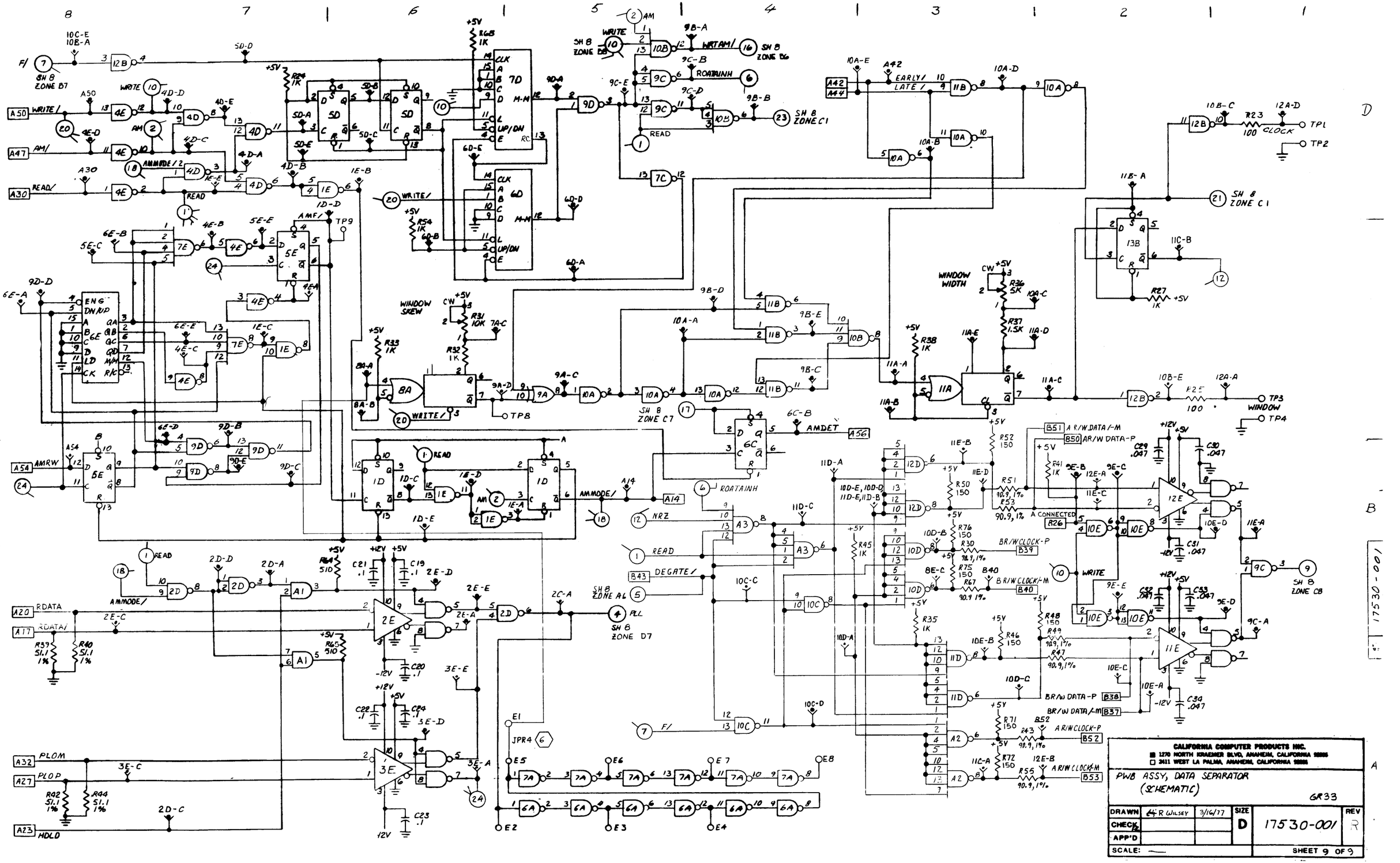
REF DES LAST USED		REF DES NOT USED	
11A	D1	1A, 2A	R63
13B	CR7	5A, 3D	R34,56
10C	E8	2B	C3,16
12D	C111		R66
12E	R76		R28
A6	TP9	14	R15
L2	24	19	CR5,6
JPR3			R41,46-53
			C 26-28, 35-39, 45, 63, 66-73, 76, 84, 87-97

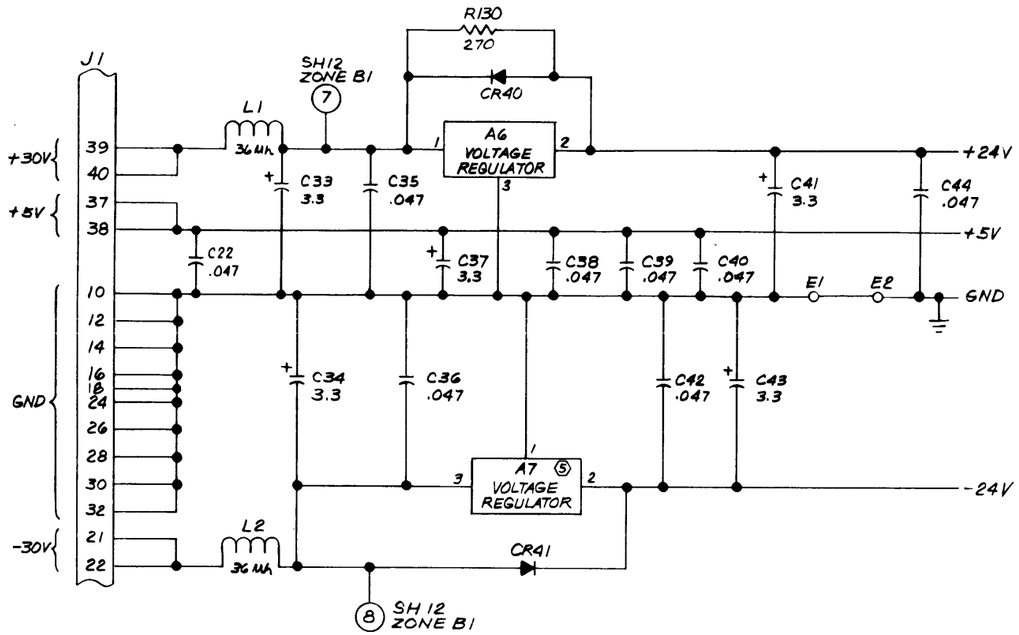
CALIFORNIA COMPUTER PRODUCTS INC.
2129 NORTH BROADWAY BLVD, ANAHEIM, CALIFORNIA 92806
2461 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

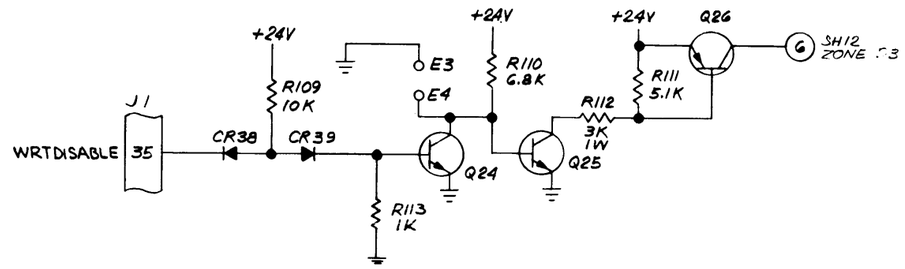
FWB ASSY, DATA SEPARATOR (SCHEMATIC)

GR 33

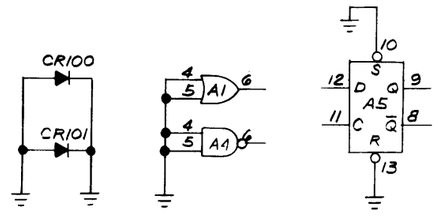
DRAWN	G.C. TANDO	2-6-77	SIZE D	17530-001 REV P
CHECK				
APP'D				
SCALE:			SHEET 8 OF 9	


8
7
6
5
4
3
2
1
A
B
C
D
+5V
+12V
-12V
SD
5D
6D
7D
1D
2D
5E
6E
7E
1E
2E
3E
4E
8A
9A
9C
9D
10A
10B
10C
10D
10E
11A
11B
11C
11D
11E
12B
12D
12E
13B
ENG DN/UP
6C
7C
A1
A2
A3
12A
RAM
1D-C
1E-D
1E-A
2D-D
2D-A
2E-D
2E-E
2E-A
2E-C
3E-E
3E-D
3E-A
3E-C
4E-E
4E-D
4E-C
4D-E
4D-D
4D-C
4D-A
4D-B
5E-E
5E-C
6E-E
6E-D
6E-C
6E-B
6E-A
7E-B
7A-C
8A-A
8A-B
9A-A
9A-B
9A-C
9A-D
9B-A
9B-B
9B-C
9B-D
9B-E
9C-B
9C-C
9C-D
9C-E
9D-D
9D-B
9D-C
9D-E
10A-A
10A-B
10A-C
10A-D
10A-E
10B-C
10B-E
10C-B
10C-C
10C-D
10D-A
10D-B
10D-C
10E-B
10E-C
10E-D
10E-A
11A-A
11A-B
11A-C
11A-D
11A-E
11B-A
11B-D
11C-B
11D-A
11D-C
11E-B
11E-C
11E-D
11E-A
12A-D
12A-A
12B-C
12B-E
12E-A
12E-B
6C-B
9E-B
9E-C
9E-D
9E-E
10E-E
11C-A
11E-E
WRITE
READ
AM
AMMODE/2
AMMODE/
AMDET
AMRW
AMF/
ROATAINH
WINDOW SKEW
WINDOW WIDTH
WRTAM/
EARLY/ LATE/
RDATA
RDATA/
NRZ
DEGATE/
PLL
PLOM
PLOP
HOLD
A/R W DATA/-M
A/R W DATA-P
BR/W DATA-P
BR/W DATA/-M
BR/W CLOCK-P
BR/W CLOCK/-M
A/R W CLOCK-P
A/R W CLOCK-M
CLOCK
WINDOW
A CONNECTED
R23 100
R24 1K
R25 100
R26 5K
R27 1K
R30 90.9, 1%
R31 10K
R32 1K
R33 1K
R34 510
R35 1K
R36 5K
R37 1.5K
R38 1K
R39 51.1 1%
R40 51.1 1%
R41 1K
R42 51.1 1%
R43 90.9, 1%
R44 51.1 1%
R45 1K
R46 150
R47 90.9, 1%
R48 150
R49 90.9, 1%
R50 150
R51 90.9, 1%
R52 150
R53 90.9, 1%
R54 1K
R55 90.9, 1%
R56 90.9, 1%
R65 510
R71 150
R72 150
R75 150
R76 150
C19 .1
C20 .1
C21 .1
C22 .1
C23 .1
C24 .1
C29 .047
C30 .047
C31 .047
C32 .047
C33 .047
C34 .047
TP1
TP2
TP3 WINDOW
TP4
TP8
TP9
JPR4
E1
E2
E3
E4
E5
E6
E7
E8
SH B ZONE B7
SH B ZONE D6
SH B ZONE C1
SH B ZONE C7
SH B ZONE A6
SH B ZONE D7
SH B ZONE C8
SH B ZONE C6
A50
A47
A30
A54
A20
A17
A32
A27
A23
A42
A44
A56
B51
B50
B39
B40
B38
B37
B52
B53
CW
RC
M-M
CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92805
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92806
PWB ASSY, DATA SEPARATOR
(SCHEMATIC)
GR33
DRAWN R WILSEY 3/16/77
CHECK
APP'D
SCALE:
SIZE D
17530-001
REV R
SHEET 9 OF 9
17530-001





SPARES



⑤ VALUE TO BE SELECTED IN TEST FROM 2.61K (90361-243), 3.65K (90367-292), 5.62K (90367-355), 11.5K (90367-125) OR OMIT. SELECT R129 FOR A HEAD WRITE CURRENT OF 84 MA. MIN., 89.2 MA. MAX. FLAT-TO-FLAT AT CYL 814. IF A7 (ITEM 12) IS REPLACED, CHECK HEAD WRITE CURRENT AND RESELECT R129 IF REQUIRED.

④ DIODES CR16-26, 29-31, 35-37 TO BE BATCH MATCHED, ΔV_f = 10MV. FOR FIELD REPLACEMENT OF MATCHED DIODES, ITEMS 26 & 27, USE SPARE DIODES CR100 OR CR101, ITEM 29, FROM THE SAME PWB ASSY. WHEN CR100 AND CR101 ARE USED UP, FURTHER FIELD REPLACEMENT REQUIRES REPLACEMENT OF ALL DIODES, ITEMS 26, 27, 28 & 29 TO MAINTAIN MATCHING OF THE DIODES ON A GIVEN PWB ASSY.

3. ALL 1% RESISTOR ARE 1/8 W.
2. CAPACITANCE VALUES ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, 1/4 W, 5%

NOTES: UNLESS OTHERWISE SPECIFIED.

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF. DESIGNATOR
+5V	14	A1, A2, A4, A5
+5V	16	A3
GND	7	A1, A2, A4, A5
GND	8	A3

REF. DES. LAST USED		REF. DES. NOT USED	
A7	R131		
C47	TP11	CR28	
CR101	HD04	Q1, 8, 11	
E4	L2	CR42-99	
J4	(8)		
Q26			

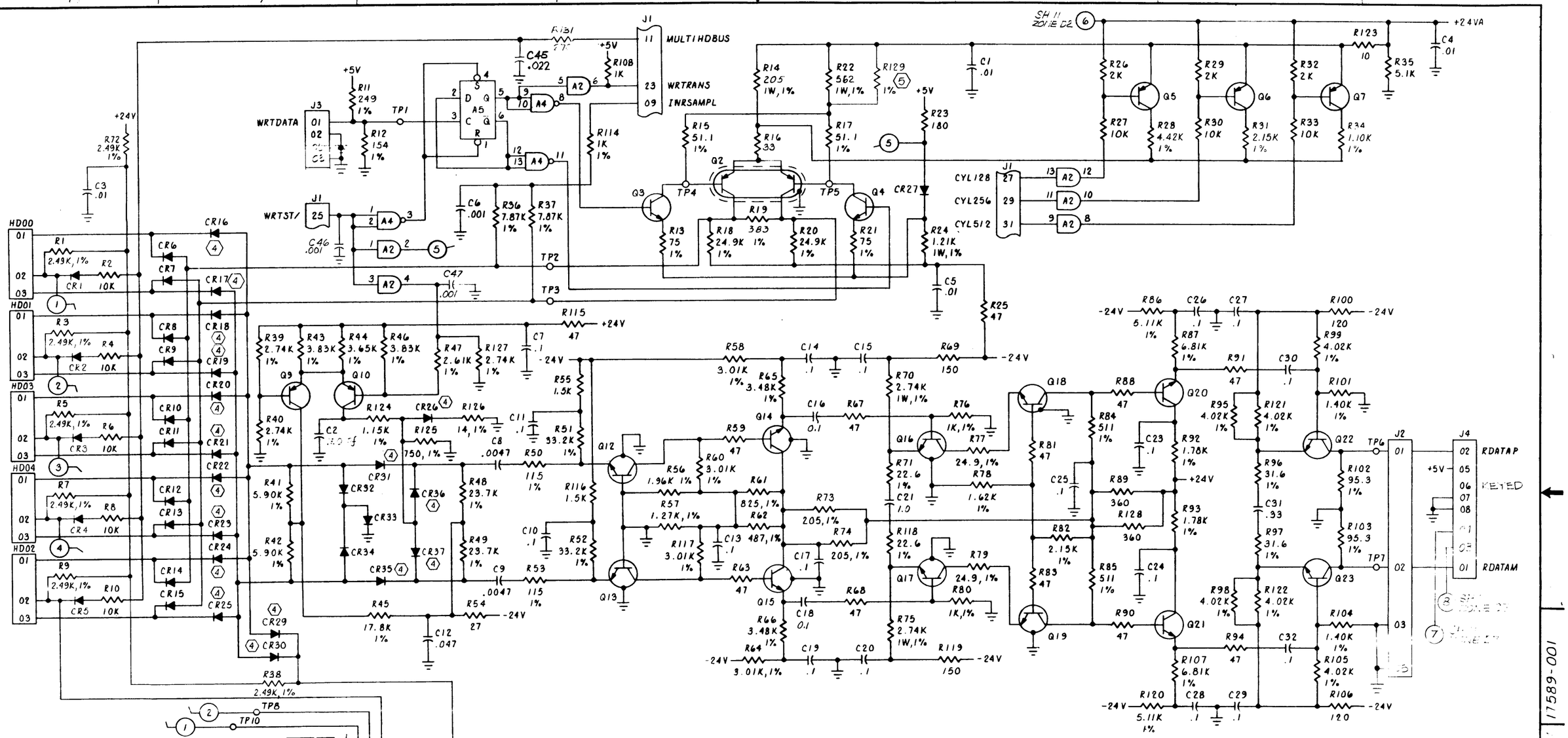
REVISIONS

REV	ZONE	DESCRIPTION	DATE & APPROVAL

CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92805
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

PWB ASSY, READ/WRITE MATRIX (SCHEMATIC) VR89

SCALE:	SIZE		
	D	17589-001	M
	C.G. TANZO 5/20/77	SHEET 11 of 12	


MULTIHDBUS
WRTRANS
INRSAMPL
WRTDATA
WRTST/
CYL128
CYL256
CYL512
HD00
HD01
HD02
HD03
HD04
HAR4
HAR2
HDSEL/
HAR1
MSB
LSB
RDATAP
KEYED
RDATAM
+24V
+5V
-24V
+24VA
SH 11 ZONE D2
CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801
PWB ASSY, READ/WRITE MATRIX (SCHEMATIC) VR89
SCALE: NONE
SIZE D
17589-001
SHEET 12 of 12
17589-001

8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

D

C

B

A

(6) CONNECTED TO -30 VDC THRU DROPPING RESISTOR.

(5) FOR RESISTOR SELECTION PROCESS SEE SPEC 19507 START SELECTION PROCESS WITH NO RESISTOR AND PROCEED THRU DECREASING RESISTANCE VALUES. IF A6 IS REPLACED ENTIRE SELECTION PROCESS MUST BE REPEATED. VALUE TO BE SELECTED IN TEST FROM 1K (90367-103), 562 (90367-354), 365 (90367-291), 274 (90367-249), 205 (90367-207), 169 (90367-179), 133 (90367-144), 110 (90367-116), 95.3 (90367-429) & 78.7 (90367-402).

4. Y INDICATES NODE TEST POINT.

3. ALL 1% RESISTORS ARE 1/8W.

2. CAPACITANCE VALUES ARE IN MICROFARADS.

1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.

NOTE: UNLESS OTHERWISE SPECIFIED

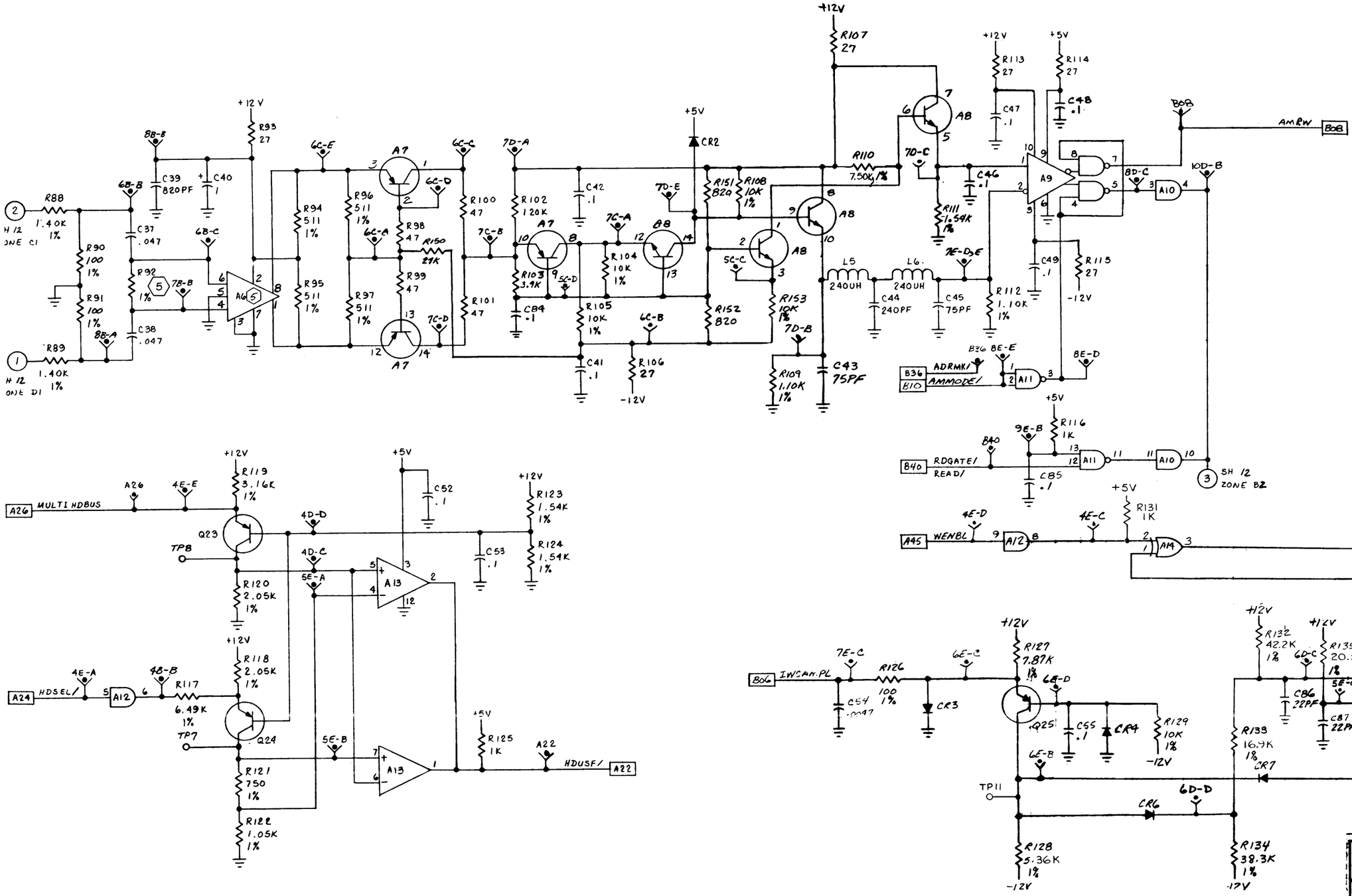
I C VOLTAGE CHART		
VOLTAGE	PIN NO.	I C REF DESIGNATION
+5V	14	A2, 3, 4, 5, 10, 11, 12, 14
GND	7	A2, 3, 4, 5, 10, 11, 12, 14

REF DES LAST USED		REF DES NOT USED	
C89	R153	C5, 20	CR1
Q25	DL2	C50-51	R87
GRN	A17	CR8	R144
AG		Q21, 22	R145
TP11	(3)	CR5	R130

CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD. ANAHEIM, CALIFORNIA 92806
3611 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

PWB ASSY, READ LIMITER / AMDET / R/W PROTECT (SCHEMATIC) GR38

DRAWN			SIZE	17771-001	REV
CHECK			D		N
APP'D					
SCALE:			SHEET 12 OF		



CALIFORNIA COMPUTER PRODUCTS INC.
2378 NORTH ROSEMEAD BLVD. ANAHEIM, CALIFORNIA 92806
2681 WEST LA PALMA, ANAHEIM, CALIFORNIA 92806

PWB ASSY, READ LIMITER/AMDET/ R/W PROTECT (SCHEMATIC) GR38

DRAWN	9 Jn. 76	SIZE D	17771-001	REV N
CHECK				
APP'D				
SCALE:			SHEET 3 OF	

LINE RECEIVERS

B08 IBUS0/ — +5V 10E 1K — EBUS0/ B39 — 10E-A — 7E-D
B06 IBUS1/ — +5V 10E 1K — EBUS1/ B32 — 7E-B
B04 IBUS2/ — +5V 10E 1K — EBUS2/ B34 — 9E-C — 7E-A
B05 IBUS3/ — +5V 10E 1K — EBUS3/ B38 — 10E-E — 7E-E — 11E-A
B07 IBUS4/ — +5V 10E 1K — EBUS4/ B30 — 9E-E — 8E-B
B10 IBUS5/ — +5V 10E 1K — EBUS5/ B36 — 7E-C
B09 IBUS6/ — +5V 10E 1K — EBUS6/ B23 — 9E-B
B12 IBUS7/ — +5V 10E 1K — EBUS7/ B26 — 10E-B
B47 EXERIN/ — +5V 10D 1K — 12D-B

7E, 9E, 11E, 8E, 12D

7D QUAD MUX:
- BUS0 (1) — SH 7 ZONE B8
- BUS1 (2) — SH 7,8 ZONE B8
- BUS2 (3) — SH 7,8 ZONE C8 — A33
- BUS2/ (4) — SH 7 ZONE C4
- BUS3 — A31
- BUS3 (9) — SH 7 ZONE C8

9D QUAD MUX:
- BUS4 (5) — SH 7,8 ZONE C8 — SH 8 ZONE C8
- BUS5 (6) — SH 7 ZONE B8 — SH 8 ZONE C8
- BUS6 (7) — SH 7,8 ZONE D8
- BUS7 (8) — SH 7 ZONE B8 — SH 8 ZONE D8

12C, 12C, 12D

SELECT/

3B-E R5 1K 5% A
1E-A R6 1K 5% B
5E-C R3 1K 5% C
2B-C R7 1K 5% D

SPARES

+5V 10D 1K 10D 1K — 1-6 9-11

3. ⏚ INDICATES NODE TEST POINTS.
2. CAPACITANCE VALUES ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 2%.

NOTE: UNLESS OTHERWISE SPECIFIED.

A59 A60 B59 B60 A03 A57 B03 B57 — C1-C24 .047 — +5V — GND

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	1A,3A-6A,1B,2B,5B,6B,1C,2C,6C-9C,11C,12C,1D-6D,10D,12D,1E,2E,6E-12E
+5V	16	2A,3B,4B,3C-5C,7D-9D,11D,3E-5E
GND	7	1A,3A-6A,1B,2B,5B,6B,1C,2C,6C-9C,11C,12C,1D-6D,12D,1E,2E,6E-9E,11E,12E
GND	8	2A,3B,4B,3C-5C,7D-9D,11D,3E-5E

REF DES LAST USED		REF DES NOT USED	
6A			
6B			
12C		10C	
12D			
12E	(47)	(38)	(40)
R11			
C28	S1		

LINE RECEIVERS

B13 IBUS8/ — +5V 8E-C 10E 1K — EBUS8/ B21 — 8E-E
B15 IBUS9/ — +5V 8B 10E 1K — EBUS9/ B28 — 8E-D
B17 ISETHDTAG/ — +5V 11E-D 10E 1K — ESETHDTAG/ B41 — 12E-A
B49 ISETCYLTAG/ — +5V B40 10E 1K — ESETCYLTAG/ B40 — B48
B48 ICONTROLTAG/ — +5V 11E-C 10E 1K — B42 ECONTROLTAG/

8E, 9E, 11E, 12E

8D QUAD MUX:
- BUS8 (10) — SH 7 ZONE B8 — SH 8 ZONE D8
- BUS9 (11) — SH 7 ZONE B8 — SH 8 ZONE D8
- 12D — 6A-A — HAR*S/ (12) — SH 7 ZONE C5
- HAR*S — A35

11D QUAD MUX:
- A38 — SETCYLTAG (45) — SH 7 ZONE C4
- 11D-C — CONTROLTAG (13) — SH 7 ZONE D8

ET25/ B24

SELECT

+5V 10D 1K — S1 — 11C-C
- DEGATE/ B33
- DEGATE1 B35
- DEGATE2 B54
- SELECT A40

B50 ITERIN/ — +5V 10D 1K — 10D-B — 11C-D — 12D-D
B51 ISELECT/ — 12E-E — 12E-D — 12C-E
B44 CNTLRP5 — C28 4.7 — B44 — R1 100 1W5% — R9 100 — R10 510 — C26 .1
B52 ISEQUENLE/ — B52 — R2 100 1W5% — C27 .0015

12E, 11C, 12D, 12C, 12C

SEQUENCE — 12C-D — 12C-C — SEQUENCE B46

SPARES

6A — 2A — 1A

5B — 5C — 5D — 5D-C

Century Data SYSTEMS, INC.	ANAHEIM, CALIFORNIA
ASSY, PWB - LOGIC I (SCHEMATIC)	
DRAWN: G.D. Swing 1/1/74	SIZE: D
CHECK: R. Varley	18099-001
APPD	REV: J
SCALE: —	SHEET 6 OF 8

6682CDT50

8 7 6 5 4 3 2 1

D C B A

BUS DECODE

SH 8 ZONE B2
(35) POWER ON/
7D-E
A53 HDEXT/ 1 11D 2
6D-A
10 9 11 6D 8
6D-C
9 6E 8
6E-C
DEVCK*R/ A21
DEVCK*R A55

SH 6 ZONE C5
(7) BUS6 5
SH 6 ZONE C1
(13) 4 9C 6
CONTROL TAG 1 5A 2
10 BUS8 2 3A-A 3A
B 4 D S Q 5 3A-B REZERO A25
3 C R Q 6 3A-C REZERO/ B37
1 LDSP/ (21) SH 8 ZONE A6
9C-A
12 8C 11 8C-D 13 12D 12 9C-E 1
(39) DEVCK/ 13
9C 3 HDSEL/ A13
5A-D
2 10 7C 8 7C-C 11 5A 10 5A-E EWRT B18
9 13 5A 12 WRT A23
4 1B 6 WRT/ B11
5 6E-D EREAD A56
SH 6 ZONE D5 (3) BUS2
SH 6 ZONE C5 (5) BUS4
SH 6 ZONE D5 (2) BUS1
SH 6 ZONE D5 (1) BUS0
SH 6 ZONE D1 (11) BUS9
SH 6 ZONE D1 (10) BUS8
SH 6 ZONE C5 (8) BUS7
SH 6 ZONE C5 (6) BUS5
7C-D (47)
13 7C 11 11 6E 10
9C-D
13 9C 11 7C-B B16
1 7C 3
2 4 7C 6
5
12 13 8C 11 8C-B HDADV/
4 5 8C 6
SH 8 ZONE B8 (37) LDSP
10 9C 8 9C-C 1 2 5D 3 5A-A
11
READ/ A19
ADMK/ B22
STBELY/ B14
DCUSF/ B45
STBLT/ B16

HEAD ADDRESS REGISTER

4 A 8 C1 B 10 C2 6 C 3 D 11 A Q A 5 B Q B 9 C Q C 2 D Q D 12 C/D CA C/U BO R 14 2D
2D-B 2E-C
9 2E 8 EHAR1/ A09
2D-C HAR1 A11
11 2E 10 A10 EHAR2/ A10
2D-A HAR2 A15
A06
1 2E 2 EHAR4/ A06
HAR4 A17
2C-E
13 2C 12 HAR*R
12D-C
B43 DCUSF 9 12D 8 DCUSF/ 47
1C-A
1 2 1C 12 HAR*R/
2D-E
HAR*S/

DIFFERENCE COUNTER

SH 8 ZONE D1 (25) DIFO01*S/
SH 8 ZONE D1 (26) DIFO02*S/
SH 8 ZONE D1 (28) DIFO04*S/
+5V
R11 1K
11 L 3E 15 A QA 3 A18 DIF001/ A18
1 B QB 2 3E-E DIF002/ A20
10 C QC 6 A22
9 D QD 7 DIF004/ A22
4 C 3E-C
C/D CA 12 DIF008/ A24
C/U BO 13
R 14

A46 DIF*C/ A46
6E-A
A51 TRKFL 3 6E 4 8C-E 1
A47 01IN/ 02IN/ A49
1 6E 2 8C-C 2 8C 3 8C-A 13 6E 12 6E-F

3E-D

SH 8 ZONE B3
(41) SETCYL/
SH 8 ZONE A1
(36) ILLCYL/ 9 1B 8 1B-C 9 5A 8 5A-C
10
6C-B
A52 SKENA/ 2 5 6C 4 1 5A-A 6 3 5A 4 3A-E
A42
6C-C
A42 DEVCK/ 39
6C-A
A48 ATTEN 9 10 12 13 6C 8
42 DZERO

B 3A D S Q C R Q 3A
12 10 9 4A-E 4 4A 5 6 4A-B SKSTGT/ A27
11 8 13

4A-A 2 1 4A 3 4A-D 12 13 4A 11 5 5A 6 5A-B DEVCK*S/ A29
10 4A 8
21 LDSP/ 9

+5V
6A-E R4 1K 5%
1B-A
A50 1 2 3 1A 6 1A-B 2 1B 3
A50 OFFSET
SH 6 ZONE D1 (12) HAR*S/
SH 6 ZONE D5 (4) BUS2/
SH 6 ZONE C1 (45) SETCYL1AG
A44 RDY
6A D S Q 5 C R Q 6 6A
6A-B
6A-D
4 3 5 6D 6 6D-B 5 2E 6 2E-B SETCYL A05
OSST/ A41
(24) SH 8 ZONE A6

DIFFERENCE COUNTER

SH 8 ZONE C1 (30) DIF016*S/
SH 8 ZONE C2 (31) DIF032*S/
SH 8 ZONE C1 (27) DIF064*S/
SH 8 ZONE D1 (29) DIF128*S/
11 L 4E 15 A QA 3 4E-A A26 DIF016/ A26
1 B QB 2 DIF032/ A28
10 C QC 6 A30
9 D QD 7 DIF064/ A30
4E-B
4 C C/D CA 12 DIF128/ A32
5 C/U BO 13
R 14
4E-D
11 1D 10
DIF*S/
SH 8 ZONE C2 (32) DIF128*S/
11 L 5E 15 A QA 3 A34 DIF256/ A34
1 B QB 2 5E-E DIF512/ A36
10 C QC 6 1D-C
9 D QD 7 1D-D
4 C C/D CA 12 4D-E
5 C/U BO 13 6D-E
R 14 A54 DZERO/ A16
DZERO A54
5 6E 6
1D-E
13 1D 12
SH 8 ZONE C2 (33) DIF256*S/
SH 8 ZONE A7 (46)

Century Data SYSTEMS, INC.	ANAHEIM, CALIFORNIA
ASSY, PWB-LOGIC I (SCHEMATIC)	CL18
DRAWN / CHECK / APPD	SIZE D
18099-001	REV J
SCALE: ——	SHEET 7 OF 8

DWG NO 18099-001 REV J

12/71 DIETERICH-POST CLEARPRINT 1020 F4500-141

6683CDT50

CYLINDER ADDRESS REGISTER

SUBTRACTOR

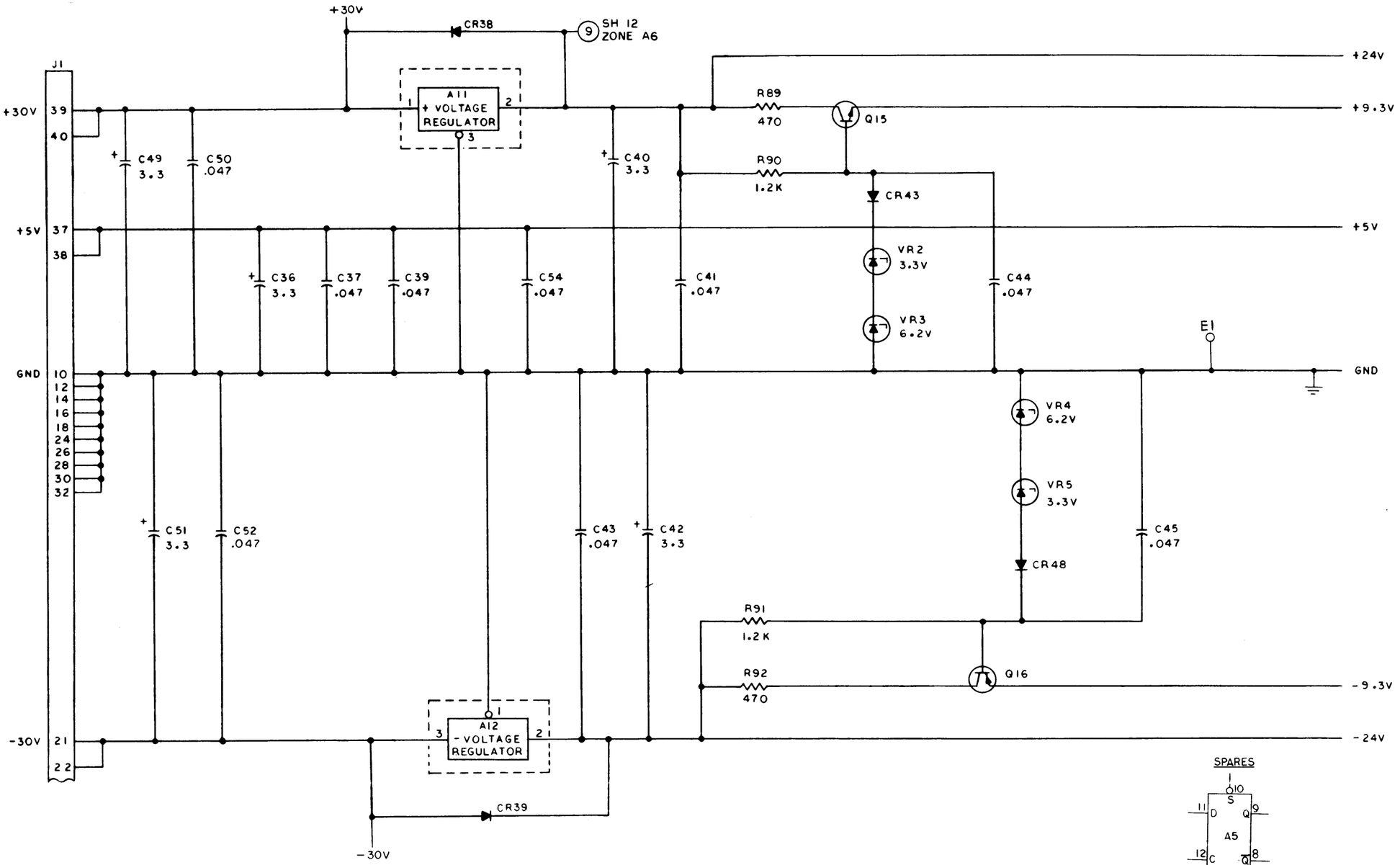
DIFFERENCE INPUT CONTROL

SUBTRACTOR TIMING CONTROL

ILLEGAL CYLINDER

Century Data SYSTEMS, INC.	ANAHEIM, CALIFORNIA
ASSY, PWB – LOGIC I (SCHEMATIC)	GL18
DRAWN / CHECK / APPD	SIZE D — 18099-001 — REV J
SCALE:	SHEET 8 OF 8

12/71 DIETERICH-POST CLEARPRINT 1020 F4080-141



4. -o- INDICATES TURRET TERMINAL TEST POINT.

3. ALL 1% AND 0.1% RESISTORS ARE 1/8W.

2. CAPACITANCE VALUES ARE IN MICROFARADS.

1. RESITANCE VALUES ARE IN OHMS, 1/4W 5%.

NOTES: UNLESS OTHERWISE SPECIFIED.

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	A2, A4, A5
+5V	16	A3
GND	7	A2, A4, A5
GND	8	A3

REF DES LAST USED		REF DES NOT USED	
R93	HD04	C38	C4, C6
C54	TP11	R68-R78	A1
CR48	J4	CR41, CR42	A8
Q17	VR5		A9
L1	T1	CR44-CR47	A10
A12	E1	C23-C34	C48, C53
		R80-R88	
		TP1-TP4	

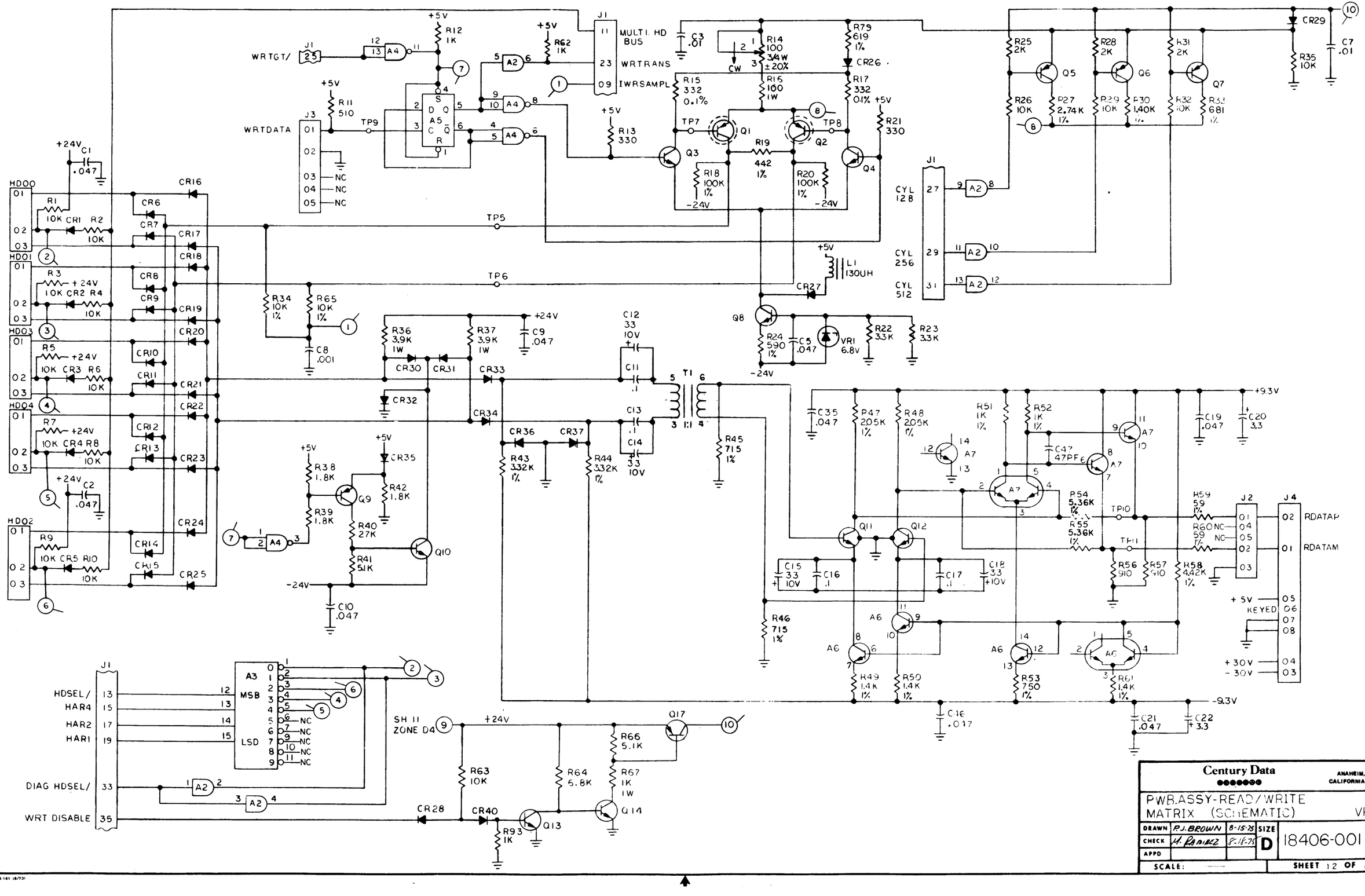
Century Data — ANAHEIM, CALIFORNIA

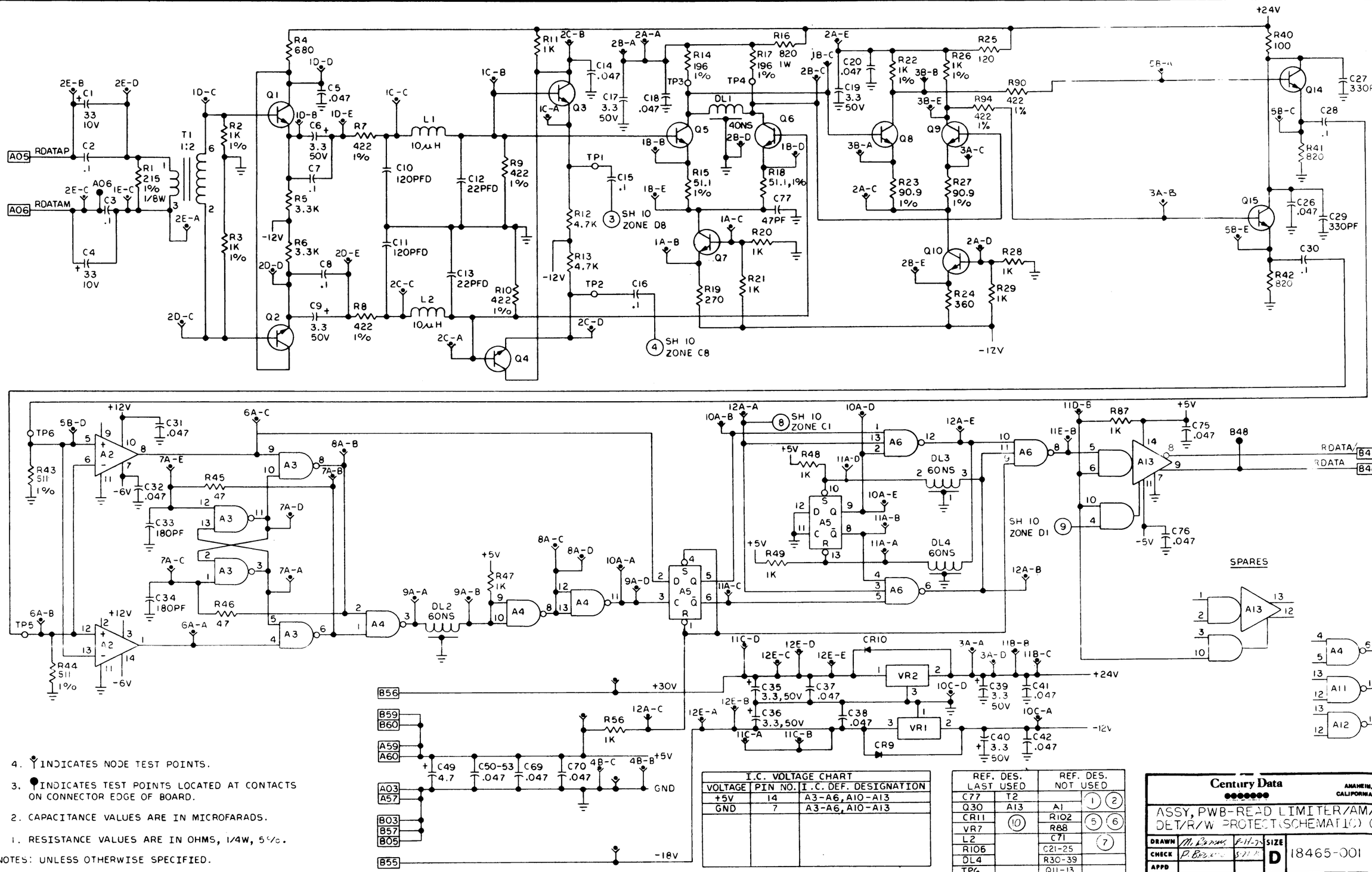
PWB ASSY-READ/WRITE MATRIX (SCHEMATIC) VR75

DRAWN	P.J BROWN	8-15-75	SIZE D	18406-001 REV J
CHECK	M. Ramirez	8/15/75		
APPD				
SCALE:			SHEET 11 OF 12	

DWG NO 18406-001 REV J

P-6000-141 (8/73)


WRTGT/
WRTDATA
WRTRANS
IWRSAMPL
MULTI. HD BUS
+5V
+24V
-24V
-9.3V
+30V
-30V
TP5
TP6
TP7
TP8
TP9
TP10
TP11
HDSEL/
HAR4
HAR2
HAR1
DIAG HDSEL/
WRT DISABLE
SH 11
ZONE D4
CYL 128
CYL 256
CYL 512
RDATAP
RDATAM
KEYED
NC
CW
Century Data
ANAHEIM, CALIFORNIA
PWB.ASSY-READ/WRITE MATRIX (SCHEMATIC)
VR75
DRAWN P.J. BROWN 8-15-75
CHECK M. RAMIREZ 8-14-75
APPD
SIZE D
18406-001
REV J
SCALE:
SHEET 12 OF 12
F4800.141 (8/73)



4. INDICATES NODE TEST POINTS.

3. INDICATES TEST POINTS LOCATED AT CONTACTS ON CONNECTOR EDGE OF BOARD.

2. CAPACITANCE VALUES ARE IN MICROFARADS.

1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.

NOTES: UNLESS OTHERWISE SPECIFIED.

I.C. VOLTAGE CHART

VOLTAGE	PIN NO.	I.C. DEF. DESIGNATION
+5V	14	A3-A6, A10-A13
GND	7	A3-A6, A10-A13

REF. DES. LAST USED		REF. DES. NOT USED	
C77	T2		1 2
Q30	A13	A1	
CR11	10	R102	5 6
VR7		R88	
L2		C71	7
R106		C21-25	
DL4		R30-39	
TP6		Q11-13	

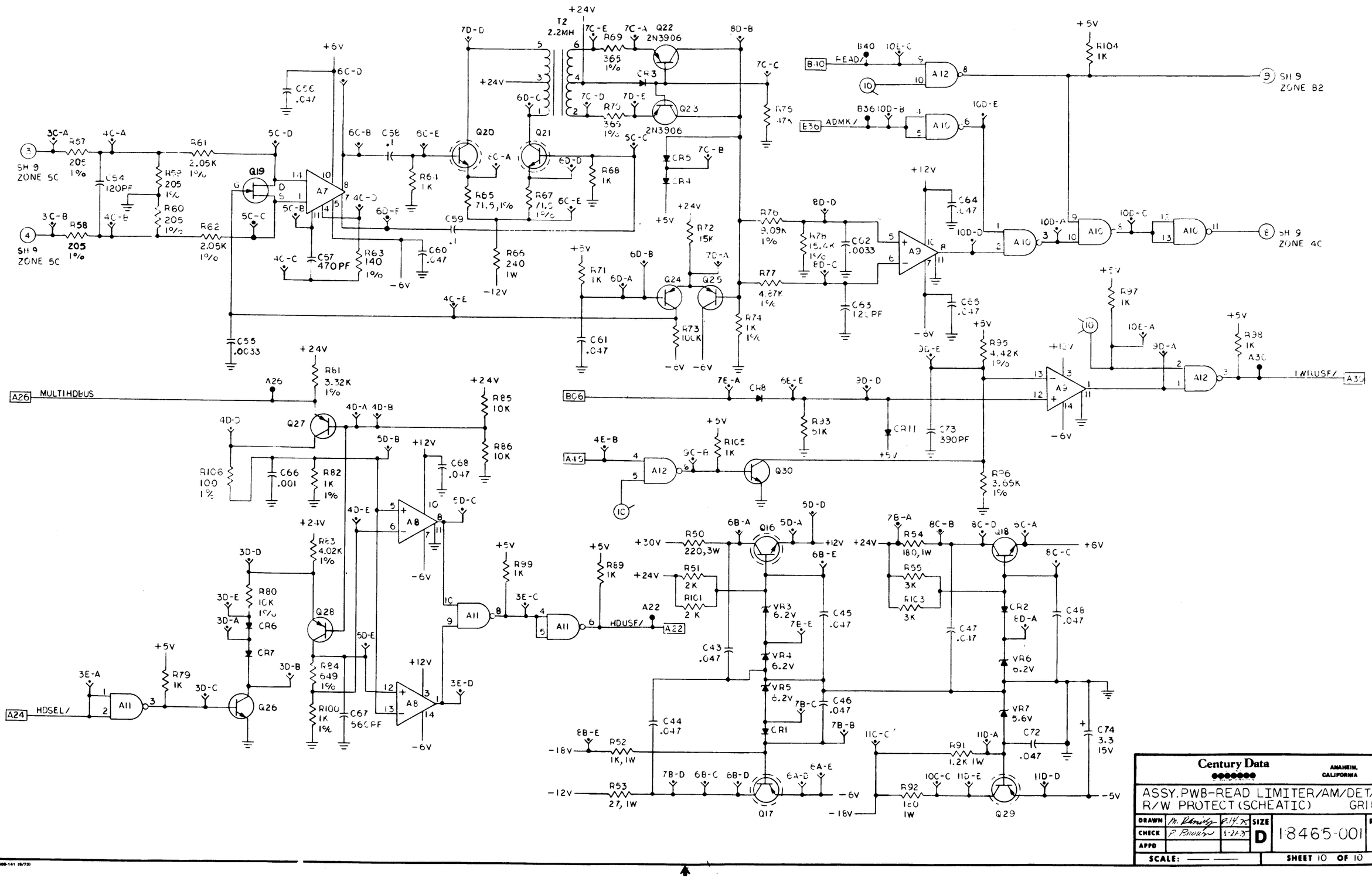
Century Data — ANAHEIM, CALIFORNIA

ASSY, PWB-READ LIMITER/AM/ DET/R/W PROTECT(SCHEMATIC) GR18

DRAWN	M. Barnes	8-11-75	SIZE D	REV K
CHECK	P. Barnes	8-27-75	18465-001	
APPD				
SCALE:			SHEET 9 OF 10	

DWG NO 18465-001 REV K

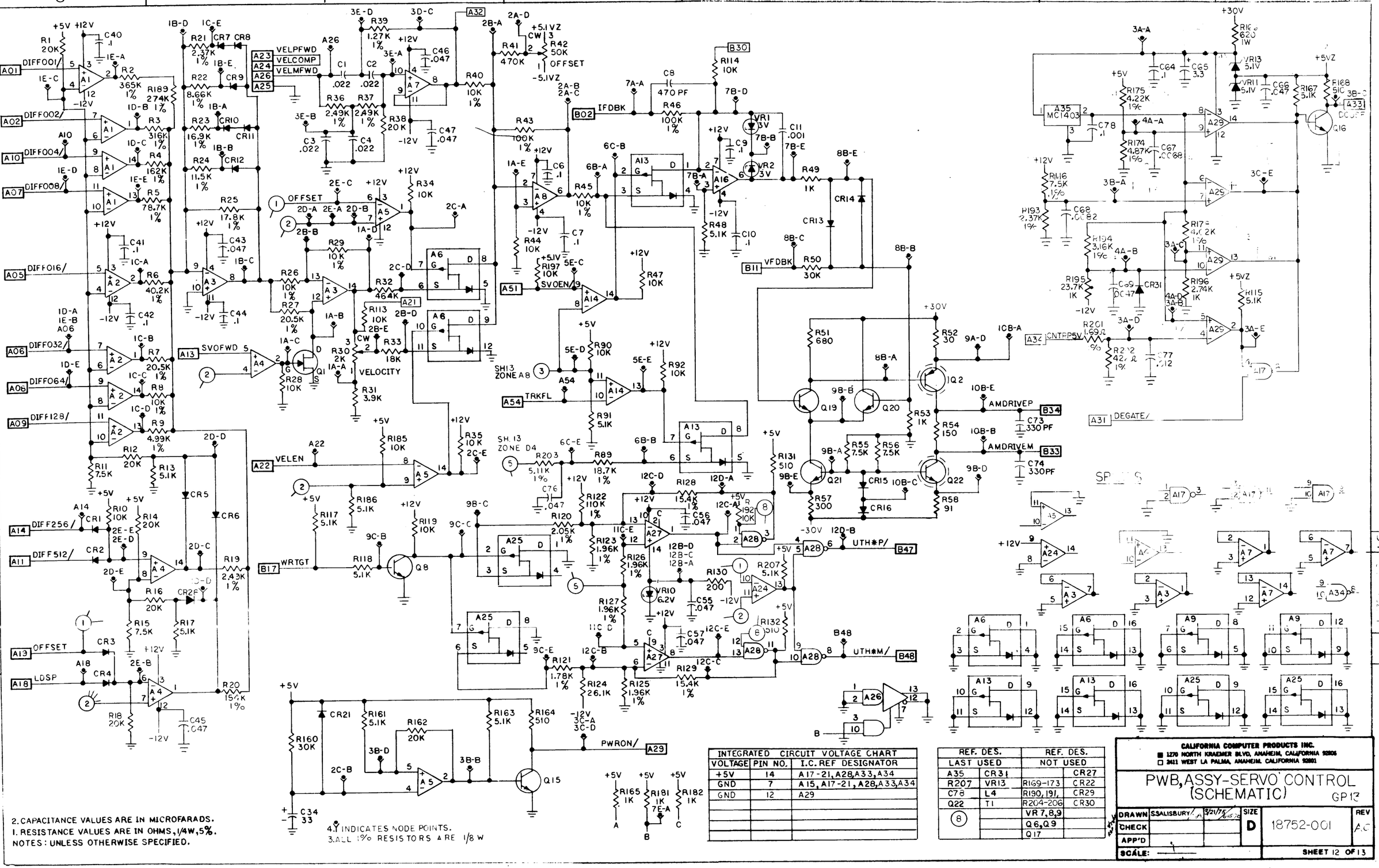
F4600-141 (8/73)



Century Data		ANAHEIM, CALIFORNIA	
ASSY. PWB-READ LIMITER/AM/DET/ R/W PROTECT (SCHEATIC)		GRIE	
DRAWN	M. Rainey	7.14.75	SIZE D
CHECK	P. Rouzer	5-21-73	18465-001
APPD			REV K1
SCALE: —— ——		SHEET 10 OF 10	

DWG NO 18465-001 REV K1

F 6008-141 (5/73)



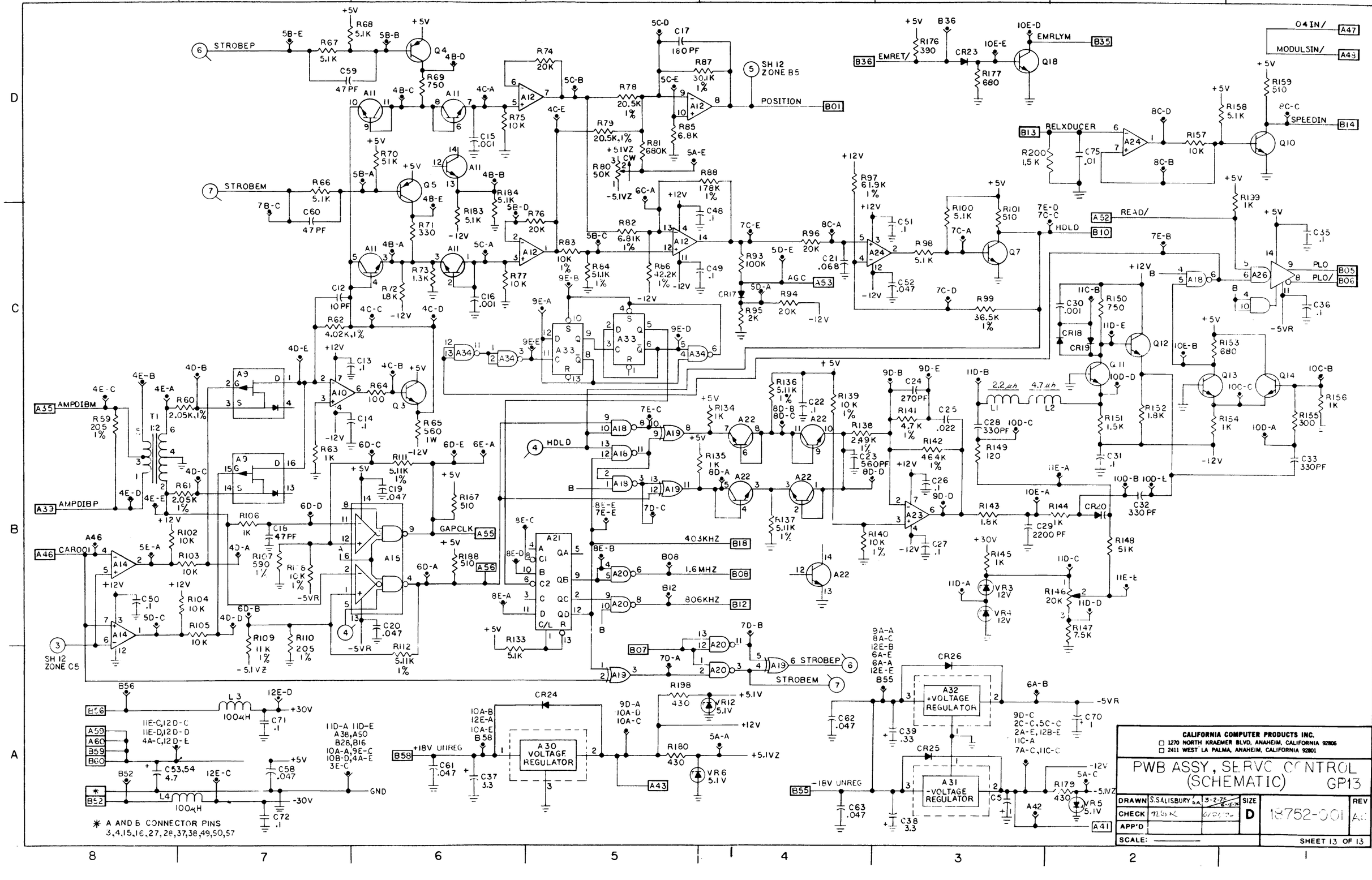
INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	A17-21, A28, A33, A34
GND	7	A15, A17-21, A28, A33, A34
GND	12	A29

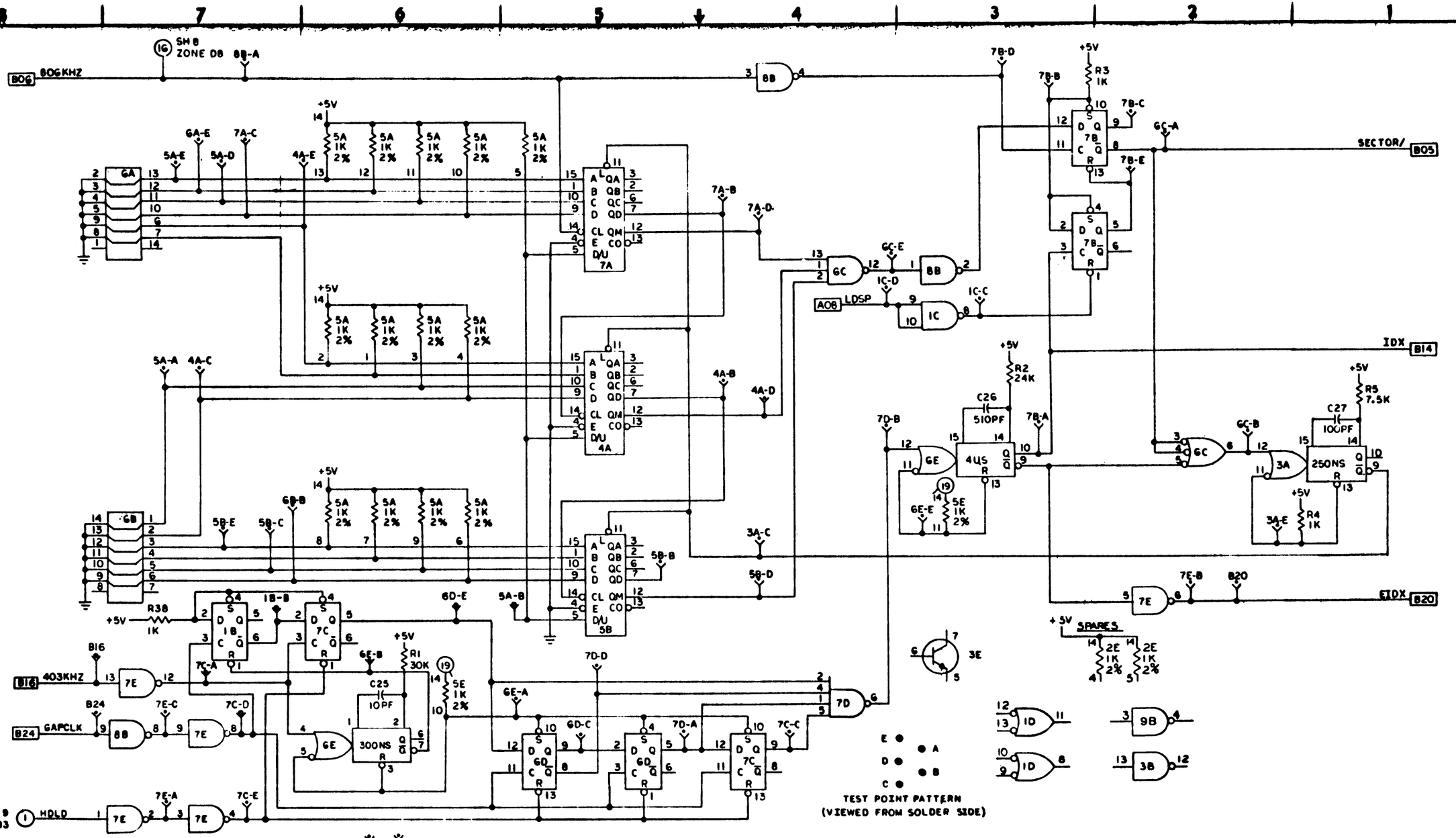
REF. DES. LAST USED		REF. DES. NOT USED	
A35	CR31		CR27
R207	VR13	R169-173	CR22
C78	L4	R190, 191,	CR29
Q22	T1	R204-206	CR30
(8)		VR 7,8,9	
		Q6,Q9	
		Q17	

CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801

PWB, ASSY-SERVO CONTROL (SCHEMATIC) GP13

DRAWN	S SALISBURY	3/21/75	SIZE D	REV A.C
CHECK			18752-001	
APP'D				
SCALE:			SHEET 12 OF 13	


STROBEP
STROBEM
AMPDIAM
AMPDIBM
CAROOI
SH 12 ZONE C5
SH 12 ZONE B5
POSITION B01
HDLD
403KHZ B18
1.6 MHZ B08
806KHZ B12
AGC A53
GAPCLK A55
6 STROBEP
STROBEM 7
EMRET/ B36
EMRLYM B35
O4IN/ A47
MODULSIN/ A43
RELXDUCER B13
SPEEDIN B14
READ/ A52
HOLD B10
PLO B05
PLO/ B06
-5VR
+18V UNREG B58
-18V UNREG B55
GND
* A AND B CONNECTOR PINS
3,4,15,16,27,28,37,38,49,50,57
CALIFORNIA COMPUTER PRODUCTS INC.
1270 NORTH KRAEMER BLVD, ANAHEIM, CALIFORNIA 92806
2411 WEST LA PALMA, ANAHEIM, CALIFORNIA 92801
PWB ASSY, SERVO CONTROL (SCHEMATIC) GP13
DRAWN S.SALISBURY 3-2-76
CHECK
APP'D
SIZE D
18752-001 REV A
SCALE:
SHEET 13 OF 13



4. ALL 196 RESISTORS ARE 1/8W
3. ⚲ INDICATES NODE TEST POINTS
2. CAPACITANCE VALUES ARE IN MICROFARADS
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%

NOTE: UNLESS OTHERWISE SPECIFIED

INTEGRATED CIRCUIT VOLTAGE CHART

VOLTAGE	PIN NO	I.C. REF DESIGNATOR
+5V	14	6A-12A-1B-4B-7B-9B-11B-12B-1C-12C-1D-9D-
		11D-12D-1E-7E-8E- 11E-12E.
+5V	16	3A-4A-7A-5B-10B-10D-6E
GND	1	6A-12A-1B-4B-7B-9B-11B-12B-1C-12C-1D-9D-
		11D-12D-1E-7E-8E- 12E.
GND	8	3A-4A-7A-5B-10B-10D-6E

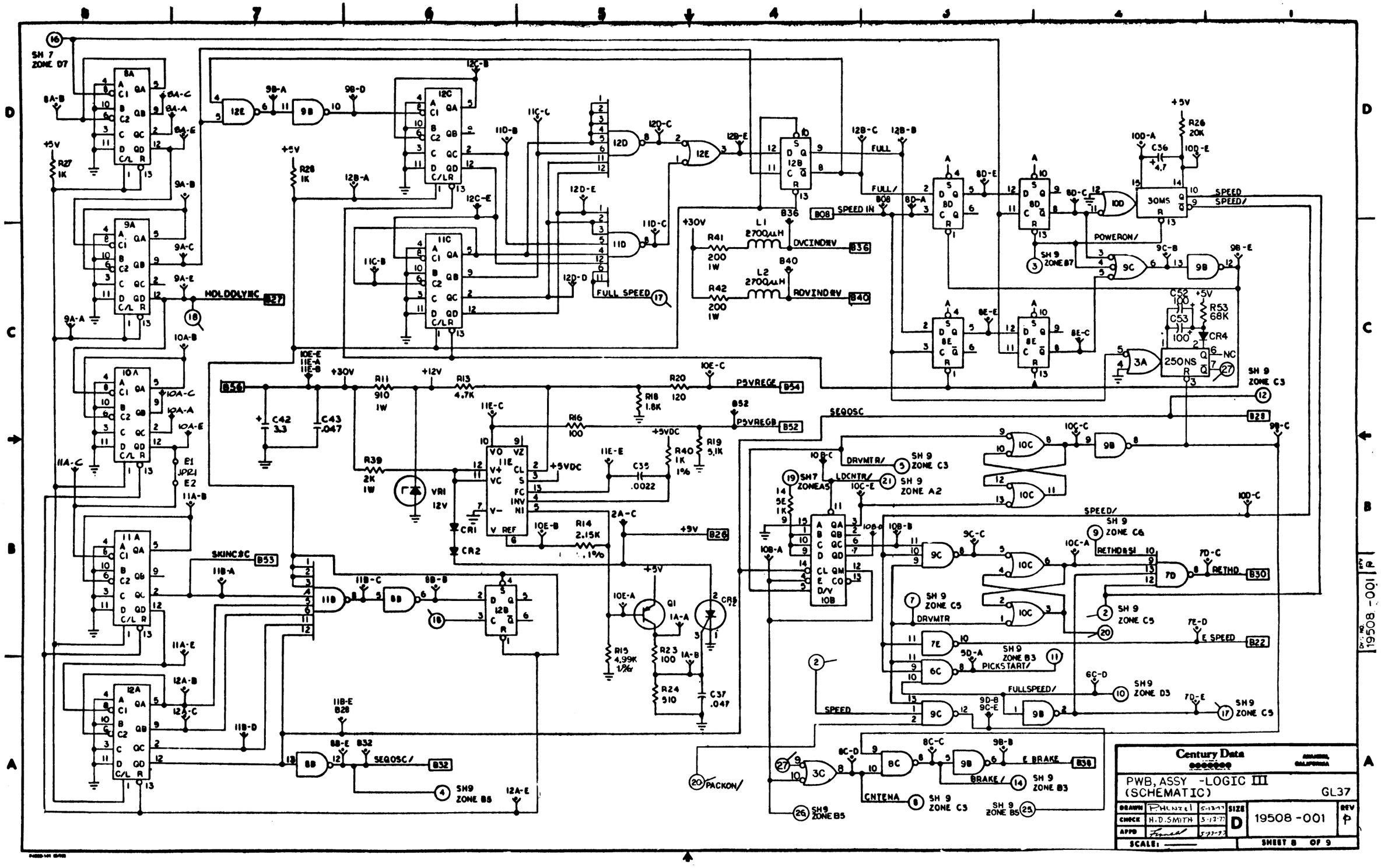
REF DES LAST USED		REF DES NOT USED	
C53	12E	1A-2A	C28-34
R53	Q5	9E.	
12A	VR1	R6-10	10E
12B	CR5	R12	Q3-Q4
12C	L2	R17	Q2
12D	(27)	R25	
JPR1			
E2			

Century Data — ANAHEIM, CALIFORNIA

PWB, ASSY - LOGIC III (SCHEMATIC) GL37

DRAWN	T. Wenzel	5-15-71	SIZE D	19508-001 REV !P
CHECK	H.D SMITH	5-18-71		
APPD				
SCALE: ——			SHEET 7 OF 9	

DRC K 19508-001 !P

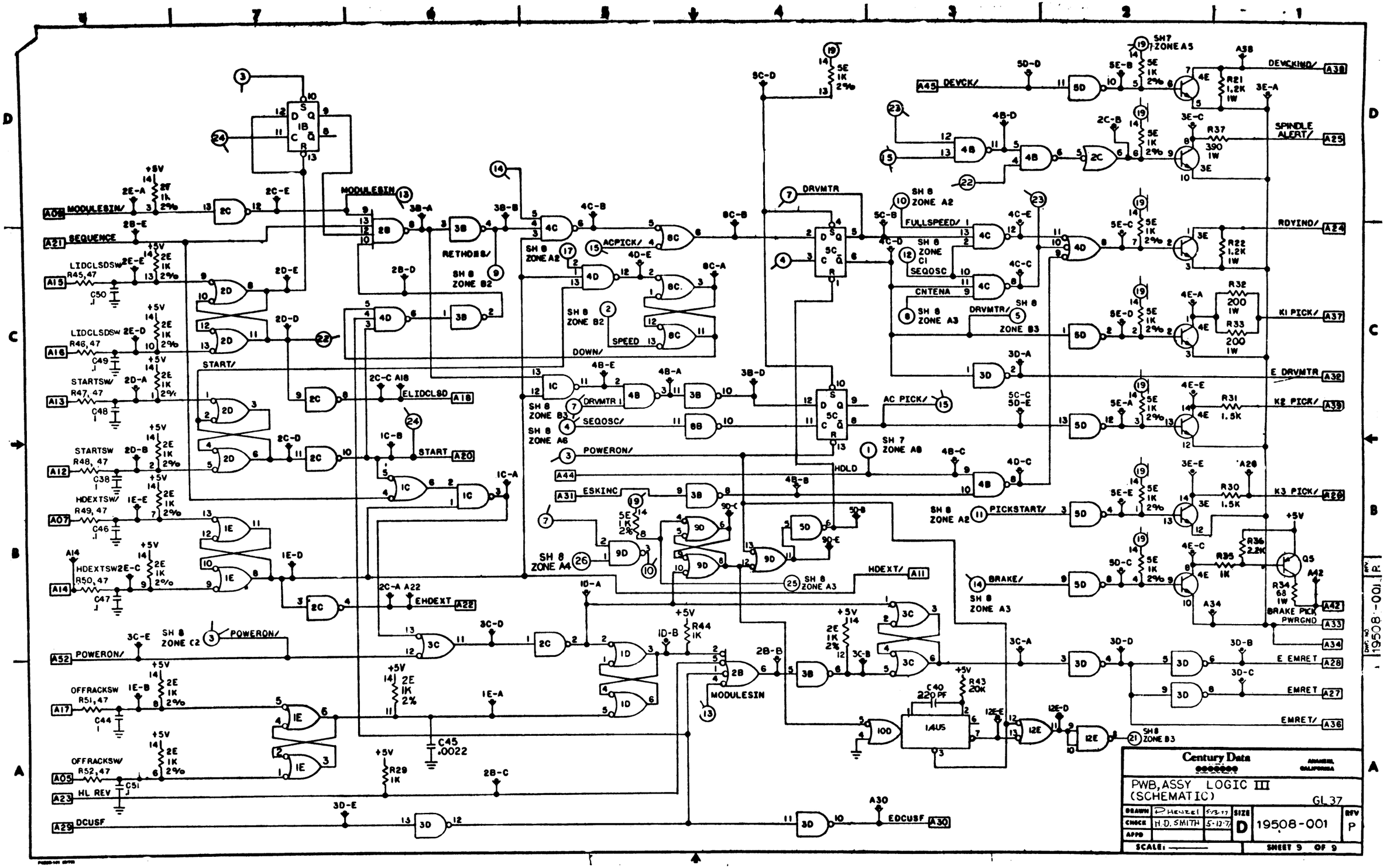


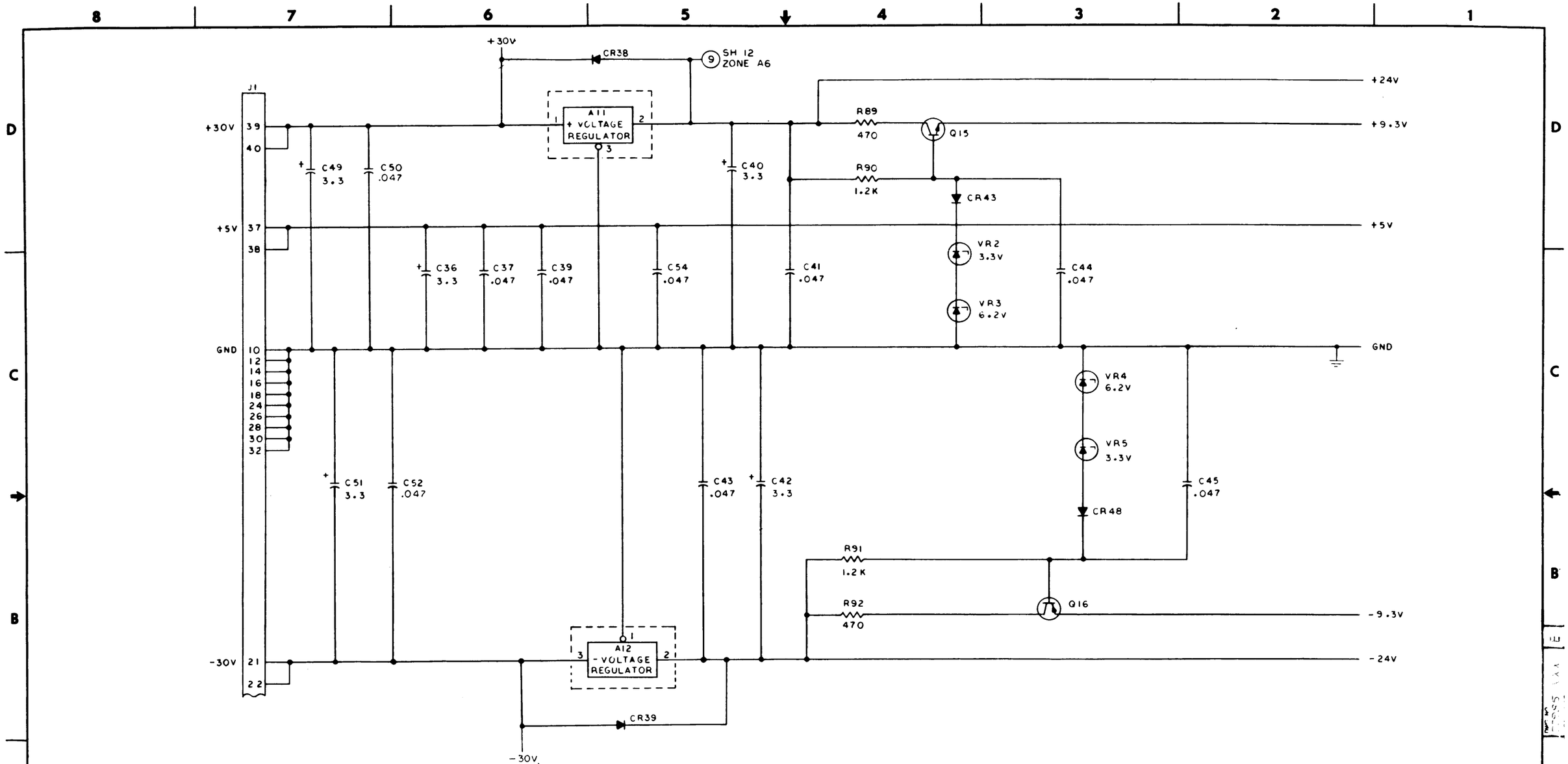
Century Data — SAN DIEGO, CALIFORNIA

PWB, ASSY -LOGIC III
(SCHEMATIC) GL37

DRAWN	PHUNZEL	5-12-77	SIZE D	19508-001 REV P
CHECK	H.D.SMITH	5-12-77		
APPD		5-12-77		
SCALE:			SHEET 8 OF 9	

19508-001 REV P


MODULESIN/
SEQUENCE
LIDCLSDSW
STARTSW/
STARTSW
HDEXTSW/
HDEXTSW
OFFRACKSW
OFFRACKSW/
HL REV
DCUSF
POWERON/
START/
DOWN/
SPEED
RETHDBS/
ACPICK/
DRVMTR
SEQOSC/
ESKINC
HDLD
AC PICK/
MODULESIN
ELIDCLSD
START
EHDEXT
EDCUSF
DEVCK/
FULLSPEED/
CNTENA
PICKSTART/
BRAKE/
HDEXT/
DEVCKIND/
SPINDLE ALERT/
RDYIND/
KI PICK/
E DRVMTR
K2 PICK/
K3 PICK/
BRAKE PICK
E EMRET
EMRET
EMRET/
PWRGND
Century Data
PWB, ASSY LOGIC III
(SCHEMATIC)
GL 37
DRAWN P. HEINZEL 5-3-77
CHECK N.D. SMITH 5-12-77
APPD
SIZE D
19508-001
REV P
SCALE:
SHEET 9 OF 9
REV A 100-80591
DWG NO



5 FOR COMPONENT VALUE SEE TABULATION BLOCK

4. ⊙ INDICATES TURRET TERMINAL TEST POINT.

3. ALL 1% AND 0.1% RESISTORS ARE 1/8W.

2. CAPACITANCE VALUES ARE IN MICROFARADS.

1. RESITANCE VALUES ARE IN OHMS, 1/4W 5%.

NOTES: UNLESS OTHERWISE SPECIFIED.

⑤

REF DES	001	002
R16	100Ω,1W	200Ω,1W
R19	442Ω,1%	649Ω,1%
R45	715Ω,1%	681Ω,1%
R46	715Ω,1%	681Ω,1%
R54	5.36K,1%	5.11K,1%
R55	5.36K,1%	5.11K,1%

INTEGRATED CIRCUIT VOLTAGE CHART		
VOLTAGE	PIN NO.	I.C. REF DESIGNATOR
+5V	14	A2, A4, A5
+5V	16	A3
GND	7	A2, A4, A5
GND	8	A3

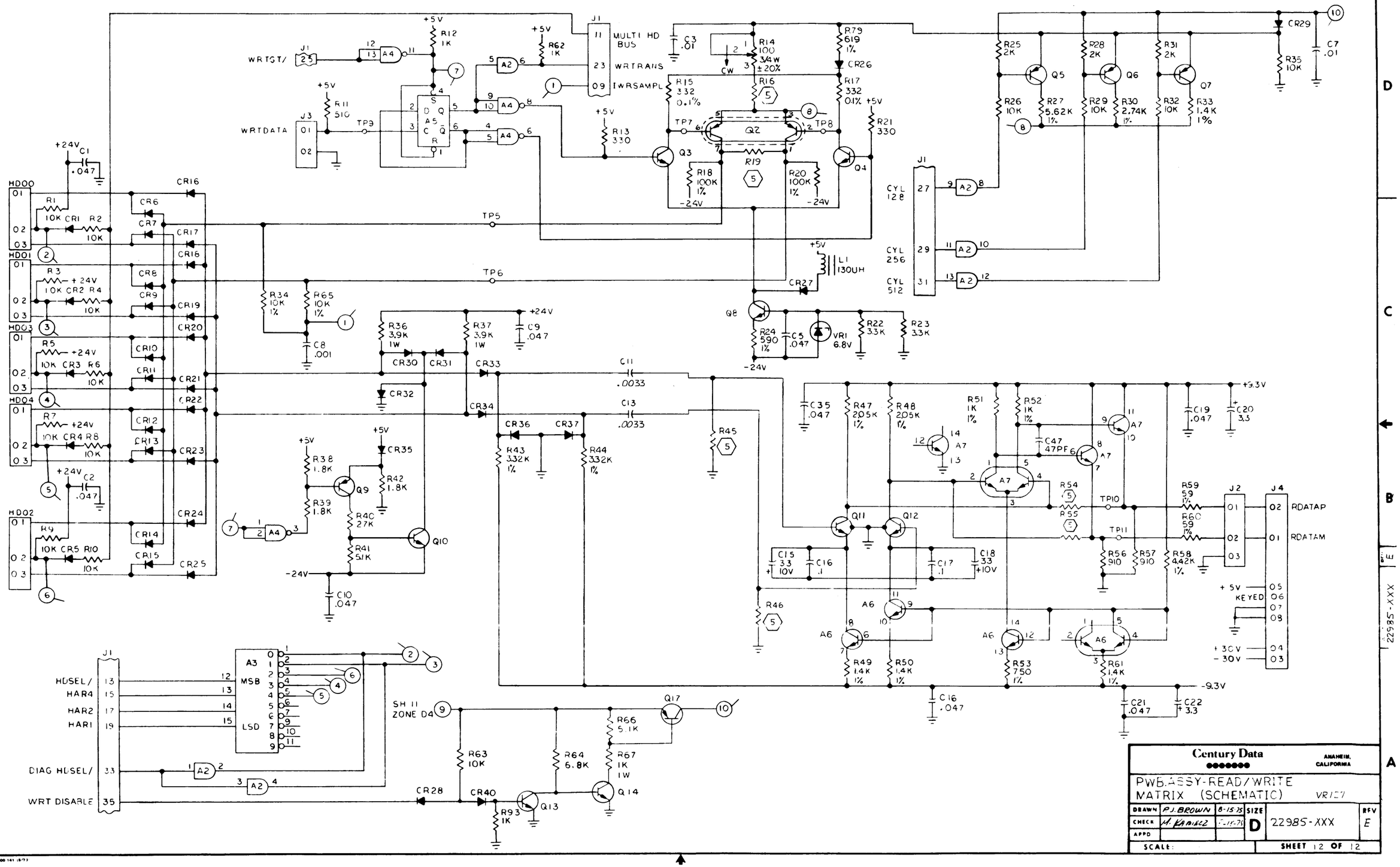
REF DES LAST USED		REF DES NOT USED	
R93	HD04		C4, C6
C54	TP11	R68-R78	A1
CR48	J4	CR41, CR42	A8
U17	VR5		A9
L1		CR44-CR47	A10
A12		C23-C34	C48, C53
		R80-R88	Q1
			C12, 14

Century Data — ANAHEIM, CALIFORNIA

PWB ASSY-READ/WRITE MATRIX (SCHEMATIC) VR127

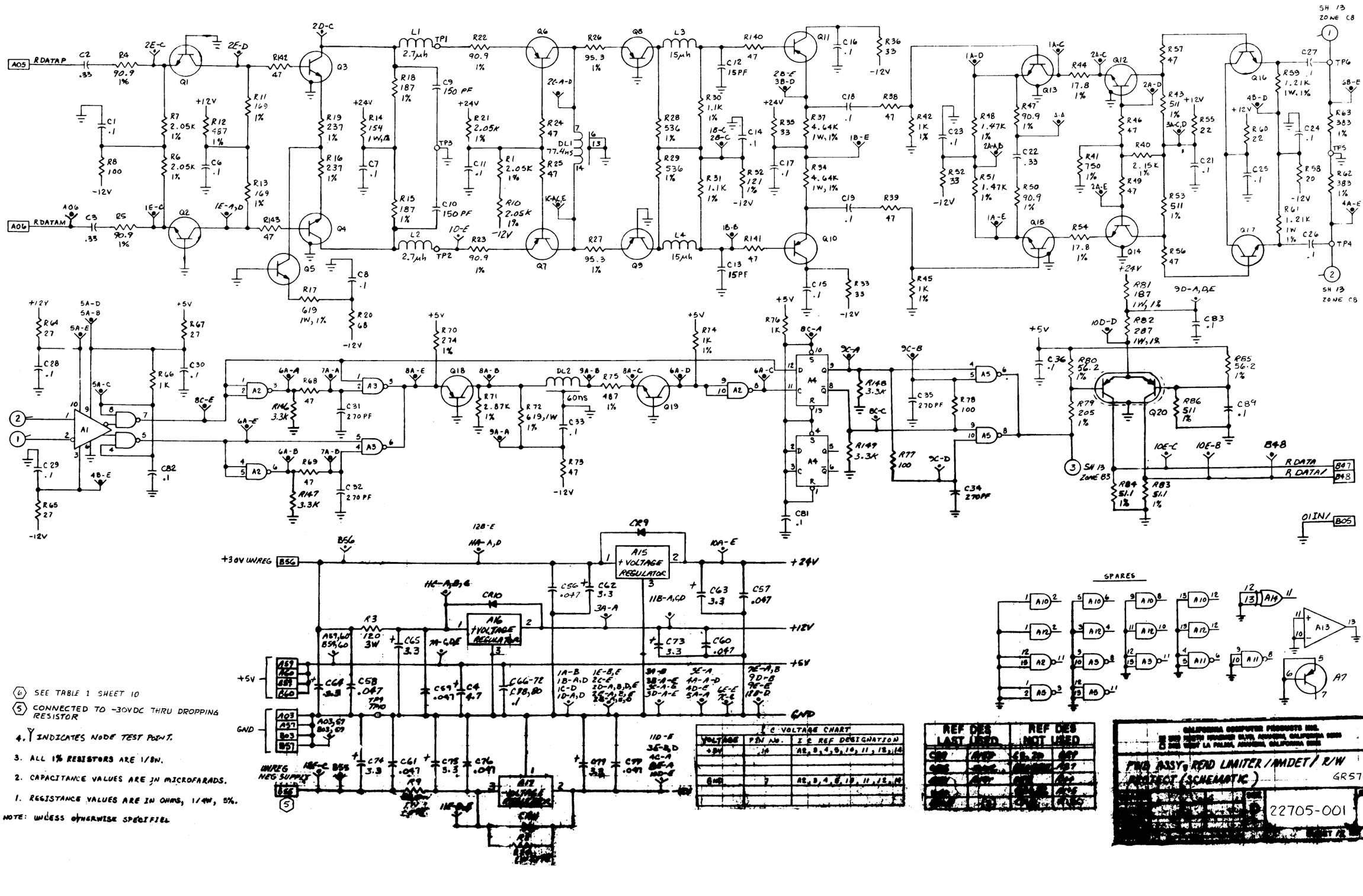
DRAWN	P. BROWN		SIZE D	22985-XXX
CHECK	M. RAMIREZ	5/5/7		REV E
APPD				

SCALE: —— SHEET 11 OF 12



Century Data	ANAHEIM, CALIFORNIA
PWB ASSY-READ/WRITE MATRIX (SCHEMATIC) VR127	
DRAWN P.J. BROWN 8-15-75	SIZE D 22985-XXX REV E
CHECK H. KAISER 9-19-75	
APPD	
SCALE:	SHEET 12 OF 12

22985-XXX


RDATAP
RDATAM
A05
A06
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q20
L1 2.7µh
L2 2.7µh
L3 15µh
L4 15µh
DL1 77.4ns
DL2 60ns
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15 +VOLTAGE REGULATOR
A16 +VOLTAGE REGULATOR
A17 +VOLTAGE REGULATOR
+30V UNREG
UNREG NEG SUPPLY
+24V
+12V
+5V
GND
-12V
-30V
R1 2.05K 1%
R2 2.05K 1%
R3 120 3W
R4 90.9 1%
R5 90.9 1%
R6 2.05K 1%
R7 2.05K 1%
R8 100
R9 2.05K 1%
R10 2.05K 1%
R11 169 1%
R12 487 1%
R13 169 1%
R14 154 1W,1%
R15 187 1%
R16 237 1%
R17 619 1W,1%
R18 187 1%
R19 237 1%
R20 68
R21 2.05K 1%
R22 90.9 1%
R23 90.9 1%
R24 47
R25 47
R26 95.3 1%
R27 95.3 1%
R28 536 1%
R29 536 1%
R30 1.1K 1%
R31 1.1K 1%
R32 121 1%
R33 33
R34 4.64K 1W,1%
R35 33
R36 33
R37 4.64K 1W,1%
R38 47
R39 47
R40 2.15K 1%
R41 750 1%
R42 1K 1%
R43 511 1%
R44 17.8 1%
R45 1K 1%
R46 47
R47 90.9 1%
R48 1.47K 1%
R49 47
R50 90.9 1%
R51 1.47K 1%
R52 33
R53 511 1%
R54 17.8 1%
R55 22
R56 47
R57 47
R58 20
R59 1.21K 1W,1%
R60 22
R61 1.21K 1W 1%
R62 383 1%
R63 383 1%
R64 27
R65 27
R66 1K
R67 27
R68 47
R69 47
R70 274 1%
R71 2.87K 1%
R72 619,1W 1%
R73 47
R74 1K 1%
R75 487 1%
R76 1K
R77 100
R78 100
R79 205 1%
R80 56.2 1%
R81 187 1W,1%
R82 287 1W,1%
R83 511 1%
R84 511 1%
R85 56.2 1%
R86 511 1%
R140 47
R141 47
R142 47
R143 47
R144 3.3K
R145 3.3K
R146 3.3K
R147 3.3K
R148 3.3K
R149 3.3K
C1 .1
C2 .33
C3 .33
C4 4.7
C5 3.3
C6 .1
C7 .1
C8 .1
C9 150 PF
C10 150 PF
C11 .1
C12 15PF
C13 15PF
C14 .1
C15 .1
C16 .1
C17 .1
C18 .1
C19 .1
C20 .1
C21 .1
C22 .33
C23 .1
C24 .1
C25 .1
C26 .1
C27 .1
C28 .1
C29 .1
C30 .1
C31 270 PF
C32 270 PF
C33 .1
C34 270PF
C35 270PF
C36 .1
C37 .047
C38 .047
C39 .047
C40 .047
C41 .047
C42 3.3
C43 3.3
C44 3.3
C45 3.3
C46 3.3
C47 .047
C48 .047
C49 .047
C50 .047
C51 .047
C52 .047
C53 .047
C54 .047
C55 .047
C56 .047
C57 .047
C58 .047
C59 .047
C60 .047
C61 .047
C62 3.3
C63 3.3
C64 3.3
C65 3.3
C66-72 .1
C73 3.3
C74 3.3
C75 3.3
C76 .047
C77 3.3
C78,80 .1
C79 .047
C81 .1
C82 .1
C83 .1
C84 .1
C85 .1
C86 .1
C87 .1
C88 .1
C89 .1
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
DL1
DL2
CR9
CR10
CR11
CR12
SPARES
SH 13 ZONE C8
SH 13 ZONE B3
SEE TABLE 1 SHEET 10
CONNECTED TO -30VDC THRU DROPPING RESISTOR
4. Y INDICATES NODE TEST POINT.
3. ALL 1% RESISTORS ARE 1/8W.
2. CAPACITANCE VALUES ARE IN MICROFARADS.
1. RESISTANCE VALUES ARE IN OHMS, 1/4W, 5%.
NOTE: UNLESS OTHERWISE SPECIFIED
I C VOLTAGE CHART
VOLTAGE
PIN NO.
I C REF DESIGNATION
+5V
16
A2, 3, 4, 5, 10, 11, 12, 14
GND
7
A2, 3, 4, 5, 10, 11, 12, 14
REF DES LAST USED
REF DES NOT USED
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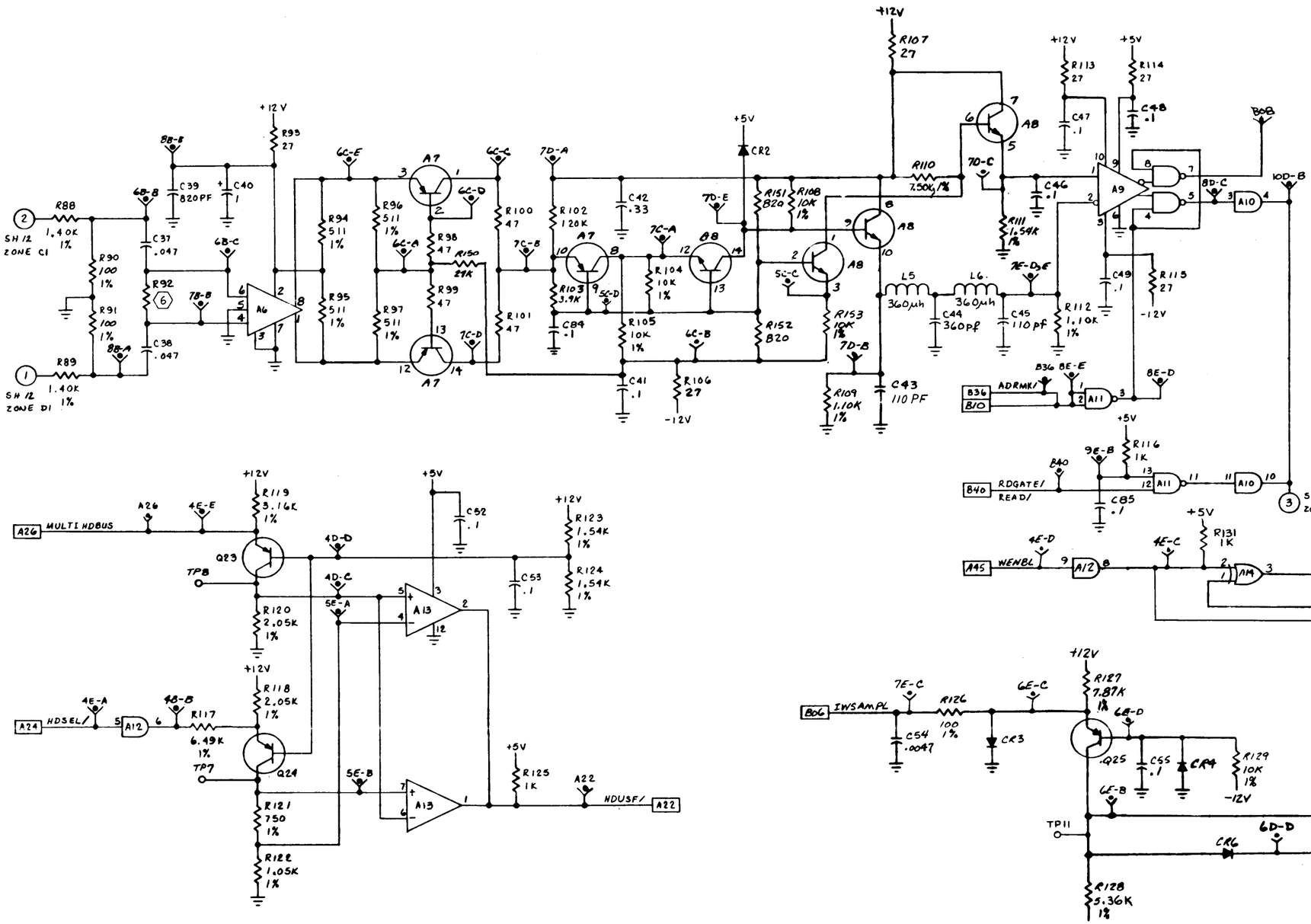
FWD ASSY, READ LIMITER / AMDET / R/W
PROTECT (SCHEMATIC)
GR57
22705-001



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PWB ASSY, READ LIMITER/AMDET/R/W PROTECT (SCHEMATIC) GR57

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